



Utah Transit Authority

Board of Trustees

REGULAR MEETING AGENDA

669 West 200 South
Salt Lake City, UT 84101

Wednesday, October 9, 2024

9:00 AM

FrontLines Headquarters

The UTA Board of Trustees will meet in person at UTA FrontLines Headquarters (FLHQ) 669 W. 200 S., Salt Lake City, Utah.

For remote viewing, public comment, and special accommodations instructions, please see the meeting information following this agenda.

1. **Call to Order and Opening Remarks** Chair Carlton Christensen
2. **Pledge of Allegiance** Chair Carlton Christensen
3. **Safety First Minute** Heather Barnum
4. **Public Comment** Chair Carlton Christensen
5. **Consent** Chair Carlton Christensen
 - a. Approval of September 25, 2024 Board Meeting Minutes
6. **Reports**
 - a. Executive Director Report Jay Fox
 - Sales Tax Revenue Refunding Bonds Issuance
 - b. Strategic Plan Minute: Generating Critical Economic Return - Finance School Jay Fox
 - c. Financial Report - August 2024 Viola Miller
Brad Armstrong
Greg Andrews
7. **Resolutions**
 - a. R2024-10-01 - Resolution Authorizing Execution of an Interlocal Cooperation Agreement with Salt Lake County for Evidence Management Services Jason Petersen
8. **Contracts, Disbursements and Grants**
 - a. Contract: Police Vehicle Replacements (Young Chevrolet, Inc.) Jason Petersen

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- | | | |
|------------|--|---|
| b. | Contract: Police Vehicle Upfitting (Vehicle Lighting Solutions) | Jason Petersen |
| c. | Contract: Lehi Pedestrian Bridge and Mainline Path Repairs (Granite Construction Company) | Grey Turner |
| d. | Contract: TRAX and FrontRunner Rail Platform Real Time Digital Signage Equipment (International Display Systems, Inc.) | Kyle Brimley
Marci Warren |
| e. | Contract: Cohesity Backup and Recovery System Support Annual Subscription (CVE Technologies Group, Inc.) | Kyle Brimley
Tom Smith |
| f. | Contract: Automatic Passenger Counting (APC) System Upgrade for Bus and Rail (Urban Transportation Associates, Inc.) | Kyle Brimley |
| g. | Contract: Procurement Consulting Services (Concordant, LLC) | Todd Mills |
| h. | Contract: Critical Connections Study Funding Agreement (UDOT) | Patti Garver |
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| 9. | Budget and Other Approvals | |
| a. | TBA2024-10-01 - Technical Budget Adjustment - 2024 Capital Program | Daniel Hofer
Greg Andrews |
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| 10. | Discussion Items | |
| a. | 2024-2025 UTA Insurance Program and Renewals | Dave Pitcher |
| b. | 2025-2029 Five Year Service Plan | Nichol Bourdeaux
Megan Waters
Eric Callison |
| c. | TechLink TRAX Study Update and Locally Preferred Alternative Recommendation | Patti Garver
Alex Beim |
| d. | UTA Economic Value Study | Alex Beim
Dede Murrery |
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 | | |
| 11. | Other Business | Chair Carlton Christensen |
| a. | Next Meeting: Wednesday, October 23rd, 2024 at 9:00 a.m. | |
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 | | |
| 12. | Adjourn | Chair Carlton Christensen |
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Meeting Information:

- Special Accommodation: Information related to this meeting is available in alternate format upon request by contacting adacompliance@rideuta.com or (801) 287-3536. Request for accommodations should be made at least two business days in advance of the scheduled meeting.
- Meeting proceedings may be viewed remotely by following the meeting portal link on the UTA Public Meeting Portal - <https://rideuta.legistar.com/Calendar.aspx>
- In the event of technical difficulties with the remote connection or live-stream, the meeting will proceed in person and in compliance with the Open and Public Meetings Act.
- Public Comment may be given live during the meeting by attending in person at the meeting location OR by joining the remote Zoom meeting below.
 - o Use this link https://rideuta.zoom.us/webinar/register/WN_2iV_PX3VR00j-kZbXKm3wQ and follow the instructions to register for the meeting (you will need to provide your name and email address).
 - o Sign on to the Zoom meeting through the URL provided after registering
 - o Sign on 5 minutes prior to the meeting start time.
 - o Use the "raise hand" function in Zoom to indicate you would like to make a comment.
 - o Comments are limited to 3 minutes per commenter.
- Public Comment may also be given through alternate means. See instructions below.
 - o Comment online at <https://www.rideuta.com/Board-of-Trustees>
 - o Comment via email at boardoftrustees@rideuta.com
 - o Comment by telephone at 801-743-3882 option 5 (801-RideUTA option 5) – specify that your comment is for the board meeting.
 - o Comments submitted before 2:00 p.m. on Tuesday, October 22nd will be distributed to board members prior to the meeting.
- Meetings are audio and video recorded and live-streamed
- Members of the Board of Trustees and meeting presenters will participate in person, however trustees may join electronically as needed with 24 hours advance notice.
- Motions, including final actions, may be taken in relation to any topic listed on the agenda.



U T A

Utah Transit Authority

669 West 200 South
Salt Lake City, UT 84101

MEETING MEMO

Board of Trustees

Date: 10/9/2024

TO: Board of Trustees
THROUGH: Jana Ostler, Board Manager
FROM: Jana Ostler, Board Manager

TITLE:

Approval of September 25, 2024 Board Meeting Minutes

AGENDA ITEM TYPE:

Minutes

RECOMMENDATION:

Approve the minutes of the September 25, 2024, Board of Trustees meeting

BACKGROUND:

A meeting of the UTA Board of Trustees was held in person at UTA Frontlines Headquarters and broadcast live via the UTA Board Meetings page on Wednesday September 25, 2024 at 9:00 a.m. Minutes from the meeting document the actions of the Board and summarize the discussion that took place in the meeting. A full audio recording of the meeting is available on the [Utah Public Notice Website <https://www.utah.gov/pmn/sitemap/notice/941641.html>](https://www.utah.gov/pmn/sitemap/notice/941641.html) and video feed is available through the [UTA Public Meetings Portal <https://rideuta.legistar.com/Calendar.aspx>](https://rideuta.legistar.com/Calendar.aspx).

ATTACHMENTS:

1. 2024-09-25_BOT_Minutes_unapproved



Utah Transit Authority

Board of Trustees

MEETING MINUTES - Draft

669 West 200 South
Salt Lake City, UT 84101

Wednesday, September 25, 2024

9:00 AM

FrontLines Headquarters

Present: Chair Carlton Christensen
Trustee Beth Holbrook
Trustee Jeff Acerson

Also attending were UTA staff and interested community members.

1. Call to Order and Opening Remarks

Chair Carlton Christensen welcomed attendees and called the meeting to order at 9:01 a.m.

2. Pledge of Allegiance

Attendees recited the Pledge of Allegiance.

3. Safety First Minute

Jeff Acerson, UTA Trustee, delivered a brief safety message.

4. Public Comment

In Person/Virtual Comment

No in person or virtual comment was given.

Online Comment

Online comments received were distributed to the board for review prior to the meeting and are included in Appendix A to these minutes.

5. Consent

a. Approval of September 11, 2024 Board Meeting Minutes

A motion was made by Trustee Holbrook, and seconded by Trustee Acerson, to approve the consent agenda. The motion carried by a unanimous vote.

6. Reports

a. Executive Director Report

- Executive Director Team Award - Video Security

Jay Fox, UTA Executive Director, was joined by Travis King, UTA Director of Safety & Security, and Cody Steffensen, UTA Video Security Supervisor.

King and Steffensen presented the UTA video security surveillance team with the Executive Director Team Award for their efforts in the identification and apprehension of a serial bike thief.

b. Strategic Plan Minute: Moving Utahns to a Better Quality of Life - Ridership

Jay Fox reported UTA has experienced an 18.6% increase in ridership year-to-date.

7. Resolutions

a. R2024-09-02 - Resolution Adopting the Murray North Station Area Plan

Paul Drake, UTA Director of Real Estate & Transit-Oriented Development, summarized the resolution, which adopts the Murray North Station Area Plan (SAP).

A motion was made by Trustee Acerson, and seconded by Trustee Holbrook, that this resolution be approved. The motion carried by the following vote:

Aye: Chair Christensen, Trustee Holbrook, and Trustee Acerson

b. R2024-09-03 - Resolution Adopting the Clearfield Station Area Plan

Paul Drake outlined the resolution, which adopts the Clearfield SAP. (Note: Drake corrected an error in the presentation reflecting the plan was approved by Murray City. The plan was actually approved by Clearfield City.)

Discussion ensued. A question on the financing progress for projects at the site was posed by the board and answered by Drake.

A motion was made by Trustee Holbrook, and seconded by Trustee Acerson, that this resolution be approved. The motion carried by the following vote:

Aye: Chair Christensen, Trustee Holbrook, and Trustee Acerson

**c. R2024-09-04 - Resolution Adopting Revised Board Policy
- Board Policy 3.2 - Service Planning**

Annette Royle, UTA Director of Board Governance, was joined Neiuifi longi, UTA Public Policy Analyst.

longi summarized the resolution, which adopts a revised Board Policy 3.2 - Service Planning. Specifically, key revisions to the policy:

- Clarify terminology, definitions, and processes
- Define the approved service planning process
- Add requirements for service design standards and the UTA Long-Range Transit Plan (LRTP)
- Add requirements for board and UTA Local Advisory Council consultation during

the service planning process

- Enhance community engagement
- Add criteria for related UTA policy
- Clarify that UTA does not provide charter service

A motion was made by Trustee Acerson, and seconded by Trustee Holbrook, that this resolution be approved. The motion carried by the following vote:

Aye: Chair Christensen, Trustee Holbrook, and Trustee Acerson

d. R2024-09-05 - Resolution Adopting the Capital Project Plan for the S-Line Streetcar Extension and Double Tracking Project

Marcus Bennett, UTA Project Manager III, was joined by Ethan Ray, UTA Project Manager II.

Staff outlined the resolution, which adopts the capital project plan for the S-Line streetcar extension and double tracking project. The plan reflects the locally preferred alternative for the extension along Simpson Avenue to Highland Drive and the installation of double track between 500 East and 700 East. UTA will manage the project and the Utah Department of Transportation (UDOT) will have oversight. The anticipated project cost is \$21.9 million and the project is funded with local monies (i.e., \$12 million legislative appropriation and \$9.9 million from the Transit Transportation Investment Fund).

Discussion ensued. Questions on location of the end of line station as well as project control and oversight were posed by the board and answered by staff.

A motion was made by Trustee Holbrook, and seconded by Trustee Acerson, that this resolution be approved. The motion carried by the following vote:

Aye: Chair Christensen, Trustee Holbrook, and Trustee Acerson

e. R2024-09-06 - Resolution Adopting the Authority's Tentative 2025 Budget

Viola Miller, UTA Chief Financial Officer, summarized the resolution, which adopts the agency's tentative 2025 budget.

Miller provided an operations and capital budget overview, then reviewed the operating budget (including expenses by category, office, mode, and full-time equivalents by office and mode) and the capital budget summary. She concluded by discussing the next steps in the budget approval process.

Discussion ensued. A question on the source of the revenue change in the operations and capital budget overview was posed by the board and answered by Miller.

A motion was made by Trustee Acerson, and seconded by Trustee Holbrook, that this resolution be approved. The motion carried by the following vote:

- Aye: Chair Christensen, Trustee Holbrook, and Trustee Acerson
- f. **R2024-09-07 - Resolution Authorizing Execution of Addendum 8 to the Salt Lake City Transit Master Plan Interlocal Agreement for 2024-2025 Frequent Transit Network Routes**

Nichol Bourdeaux, UTA Chief Planning & Engagement Officer, described the resolution, which authorizes the execution of Addendum 8 to the Salt Lake City Transit Master Plan Interlocal Agreement for 2024-2025 frequent transit network routes. The addendum has a value of \$6,310,853. Bourdeaux also discussed the purpose of the Salt Lake City Transit Master Plan Interlocal Agreement and implementation progress to date.

Discussion ensued. Questions on the rate calculation, agreement term, and electrification plans were posed by the board and answered by Bourdeaux.

A motion was made by Trustee Holbrook, and seconded by Trustee Acerson, that this resolution be approved. The motion carried by the following vote:

- Aye: Chair Christensen, Trustee Holbrook, and Trustee Acerson
- g. **R2024-09-08 - Resolution Authorizing the Handling of Funds, and the Investment and Disbursement of Monies**

Brian Reeves, UTA Associate Chief Financial Officer, was joined by Rob Lamph, UTA Comptroller.

Reeves summarized the resolution, which authorizes the handling of funds and the investment disbursement of monies. The resolution also updates the positions authorized to invest or reinvest and create accounts with financial institutions and the positions authorized to sign checks.

A motion was made by Trustee Acerson, and seconded by Trustee Holbrook, that this resolution be approved. The motion carried by the following vote:

- Aye: Chair Christensen, Trustee Holbrook, and Trustee Acerson
- h. **R2024-09-09 - Resolution Designating Authorized Users for the Authority's Utah Public Treasurers' Investment Fund Accounts**

Brian Reeves was joined by Rob Lamph.

Reeves outlined the resolution, which authorizes users for the agency's Utah Public Treasurers' Investment Fund (PTIF) accounts.

A motion was made by Trustee Holbrook, and seconded by Trustee Acerson, that this resolution be approved. The motion carried by the following vote:

- Aye: Chair Christensen, Trustee Holbrook, and Trustee Acerson

8. Contracts, Disbursements and Grants**a. Contract: S-Line Extension Phase 1 Pre-Construction Design Services (Kiewit Infrastructure West Corporation)**

Marcus Bennett was joined by Ethan Ray.

Ray requested the board approve a not-to-exceed \$1,937,772 contract with Kiewit Infrastructure West Corporation for pre-construction design services on the S-Line extension.

Discussion ensued. Questions on the progressive design-build process and project oversight were posed by the board and answered by staff.

A motion was made by Trustee Acerson, and seconded by Trustee Holbrook, that this contract be approved. The motion carried by a unanimous vote.

b. Contract: Drug and Alcohol Third Party Administrator (WorkforceQA, LLC.)

Lorin Simpson, UTA Drug & Alcohol Program Manager, was joined by M.J. Rosner, UTA Total Rewards Program Administrator.

Simpson requested the board approve a contract with WorkforceQA, LLC for administration of the required testing and services associated with UTA's drug and alcohol program. The contract has a five-year base term plus five one-year options. The total contract value of the base term is \$706,000. Exercise of the contract options will require additional board approval.

Discussion ensued. Questions on UTA's history with the provider and the procurement process were posed by the board and answered by Simpson.

A motion was made by Trustee Holbrook, and seconded by Trustee Acerson, that this contract be approved. The motion carried by a unanimous vote.

c. Contract: Occupational Medical Services (Intermountain WorkMed, LLC./IHC Health Services, Inc.)

Lorin Simpson was joined by M.J. Rosner.

Simpson requested the board approve a contract with Intermountain WorkMed, LLC./IHC Health Services, Inc. for occupational medical services. The contract has a five-year base term plus five one-year options. The total contract value of the base term is \$1,113,250. Exercise of the contract options will require additional board approval.

Discussion ensued. A question on the contract term was posed by the board and answered by Simpson.

A motion was made by Trustee Acerson, and seconded by Trustee Holbrook, that this

- contract be approved. The motion carried by a unanimous vote.
- d. **Contract: Information Technology Research and Advisory Services (Info-Tech Research Group, Inc.)**
- Edison Pascacio, UTA Director of Data Strategy, requested the board approve a contract with Info-Tech Research Group, Inc. for information technology research and advisory consulting services. The contract has a three-year base term plus two one-year options, with a not-to-exceed value of \$688,175.72 over the five-year term.

Discussion ensued. Questions on services provided by the consultant were posed by the board and answered by Pascacio.

A motion was made by Trustee Holbrook, and seconded by Trustee Acerson, that this contract be approved. The motion carried by a unanimous vote.

- e. **Contract: Timpanogos Bus Facility Used Oil and Coolant Tanks (Spackman Enterprises, L.C.)**
- Kevin Anderson, UTA Director of Maintenance Support, requested the board approve a \$258,400 contract with Spackman Enterprises, L.C. for the removal and disposal of two fuel oil tanks and replacement with one double-compartment fuel oil tank at the Timpanogos bus facility.

Discussion ensued. Questions on the condition of other agency-owned oil tanks, new tank location, and environmental concerns were posed by the board and answered by Anderson.

A motion was made by Trustee Acerson, and seconded by Trustee Holbrook, that this contract be approved. The motion carried by a unanimous vote.

9. Budget and Other Approvals

- a. **2024 Transit Asset Management Plan and Group Sponsor Transit Asset Management Plan**

Pam Thrasher, UTA Manager of State of Good Repair, was joined by Daniel Hofer, UTA Director of Capital Programs & Support.

Thrasher requested the board approve the 2024 Transit Asset Management (TAM) Plan and the Group Sponsor Transit Asset Management Plan.

A motion was made by Trustee Holbrook, and seconded by Trustee Acerson, that these plans be approved. The motion carried by a unanimous vote.

Chair Christensen called for a recess at 10:17 a.m.

The meeting reconvened at 10:23 a.m.

10. Discussion Items**a. Next Generation Fare Collection System Update**

Brian Reeves was joined by Kensey Kunkel, UTA Special Project Manager - Fares.

Kunkel provided an update on the next generation fare collection project, including the project phases, timeline, and overall objectives.

Extensive discussion ensued and centered on the following topics:

- Customer interface on the ticket vending machines (TVMs)
- Validator usage (particularly as it relates to customer experience)
- Communications plan
- Fare media
- Measures to ensure screen visibility
- Target date for system conversion
- Project budget
- Integration with open payment systems

Chair Christensen recommended having the TVM user experience tested by potential users prior to implementation. Trustee Acerson suggested considering the possibility of assigning each rider a unique identifier to make riding the system easier.

11. Other Business

- a. Next Meeting: Wednesday, October 9th, 2024 at 9:00 a.m.

12. Adjourn

A motion was made by Trustee Holbrook, and seconded by Trustee Acerson, to adjourn the meeting. The motion carried by a unanimous vote and the meeting adjourned at 10:54 a.m.

Transcribed by Cathie Griffiths
Executive Assistant to the Board Chair
Utah Transit Authority

This document is not intended to serve as a full transcript as additional discussion may have taken place; please refer to the meeting materials or audio located at <https://www.utah.gov/pm/sitemap/notice/941641.html> for entire content. Meeting materials, along with a time-stamped video recording, are also accessible at https://rideuta.granicus.com/player/clip/322?view_id=1&redirect=true.

This document along with the digital recording constitute the official minutes of this meeting.

Approved Date:

Carlton J. Christensen
Chair, Board of Trustees

Appendix A

Online Public Comment

(Note: Online public comment was received via email and the text is copied as submitted.)

From Philip Sauvageau:

For the next generation fare update discussion, it would be helpful to discuss how to validate passes that are part of virtual wallets (like U of U that tap on tap off as part of contract).



U T A

Utah Transit Authority

669 West 200 South
Salt Lake City, UT 84101

MEETING MEMO

Board of Trustees

Date: 10/9/2024

TO: Board of Trustees
FROM: Jay Fox, Executive Director
PRESENTER(S): Jay Fox, Executive Director

TITLE:

Executive Director Report
- **Sales Tax Revenue Refunding Bonds Issuance**

AGENDA ITEM TYPE:
Report

RECOMMENDATION:
Informational report for discussion

DISCUSSION:
Jay Fox, Executive Director, will provide the following:

- **Sales Tax Revenue Refunding Bonds Issuance (Jay Fox)**



Utah Transit Authority

MEETING MEMO

669 West 200 South
Salt Lake City, UT 84101

Board of Trustees

Date: 10/9/2024

TO: Board of Trustees
THROUGH: Jay Fox, Executive Director
FROM: Jay Fox, Executive Director
PRESENTER(S): Jay Fox, Executive Director

TITLE:

Strategic Plan Minute: Generating Critical Economic Return - Finance School

AGENDA ITEM TYPE:

Report

RECOMMENDATION:

Informational report for discussion

BACKGROUND:

At the end of 2022, UTA adopted its 2022-2030 Strategic Goals and Objectives. The strategic minute provides an update on one of the five UTA strategic priorities - Quality of Life, Customer Experience, Organizational Excellence, Community Support, and Economic Return.

DISCUSSION:

Our Generating Critical Economic Return priority focuses how UTA is an economic engine which positively impacts Utah's statewide economy. A key element in being part of that economic engine is fiscal responsibility by UTA's workforce. One of the goals for our Chief Finance Office this year was to improve financial stewardship and knowledge and understanding of UTA's finances. Our Finance team set a strategic initiative to develop a UTA finance school and deploy across the organization. This discussion will highlight the performance and impact of finance school at UTA.

ALTERNATIVES:

N/A

FISCAL IMPACT:

N/A

ATTACHMENTS:

None



Utah Transit Authority

MEETING MEMO

669 West 200 South
Salt Lake City, UT 84101

Board of Trustees

Date: 10/9/2024

TO: Board of Trustees
THROUGH: Jay Fox, Executive Director
FROM: Viola Miller, Chief Financial Officer
PRESENTER(S): Viola Miller, Chief Financial Officer

TITLE:

Financial Report - August 2024

AGENDA ITEM TYPE:

Report

RECOMMENDATION:

Informational report for discussion

BACKGROUND:

The Board of Trustees Policy No. 2.1, Financial Management, directs the Chief Financial Officer to present monthly financial statements stating the Authority's financial position, revenues, and expenses to the Board of Trustees as soon as practical with monthly and year-to-date budget versus actual report to be included in the monthly financial report. The August 2024 monthly financial statements have been prepared in accordance with the Financial Management Policy and are being presented to the Board. Also provided is the monthly board dashboard which summarizes key information from the August 2024 monthly financial statements.

DISCUSSION:

At the October 9, 2024, meeting, the chief Financial Officer will review the Board Dashboard key items, passenger revenues, sales tax collections and operating expense variances and receive questions from the Board of Trustees. There will also be a review of the status of capital projects and staff will receive questions from the Board.

ALTERNATIVES:

N/A

FISCAL IMPACT:

N/A

ATTACHMENTS:

- August 2024 Board Dashboard
- August 2024 Financial Statements

Utah Transit Authority

Board Dashboard: Aug 31, 2024

Financial Metrics	Aug Actual	Aug Budget	Fav / (Unfav)	%	YTD Actual	YTD Budget	Fav / (Unfav)	%
Sales Tax (Jul '24 mm \$)	\$ 39.9	\$ 38.6	\$ 1.35	● 3.5%	\$ 282.3	\$ 275.4	\$ 6.84	● 2.5%
Fare Revenue (mm)	\$ 3.0	\$ 3.5	\$ (0.48)	● -13.7%	\$ 26.4	\$ 24.0	\$ 2.41	● 10.0%
Operating Exp (mm)	\$ 31.4	\$ 35.2	\$ 3.75	● 10.7%	\$ 273.3	\$ 282.1	\$ 8.85	● 3.1%
Subsidy Per Rider (SPR)	\$ 8.20	\$ 10.56	\$ 2.36	● 22.3%	\$ 9.35	\$ 10.78	\$ 1.43	● 13.3%
UTA Diesel Price (\$/gal)	\$ 2.45	\$ 4.03	\$ 1.58	● 39.1%	\$ 2.64	\$ 4.03	\$ 1.39	● 34.4%
Operating Metrics	Aug Actual	Aug-23	F / (UF)	%	YTD Actual	YTD 2023	F / (UF)	%
Ridership (mm)	3.46	3.01	0.5	● 15.0%	26.39	22.35	4.0	● 18.1%
Energy Cost by Type (Monthly Avg YTD)								
	Diesel Bus (Cost per Mile)				\$ 0.52			
	Diesel CR (Cost per Mile)				\$ 4.45			
	Unleaded Gas (Cost per Mile)				\$ 0.35			
	CNG (Cost per Mile)				\$ 0.24			
	Bus Propulsion Power (Cost per Mile)				\$ 0.93			
	TRAX Propulsion Power (Cost per Mile)				\$ 0.82			

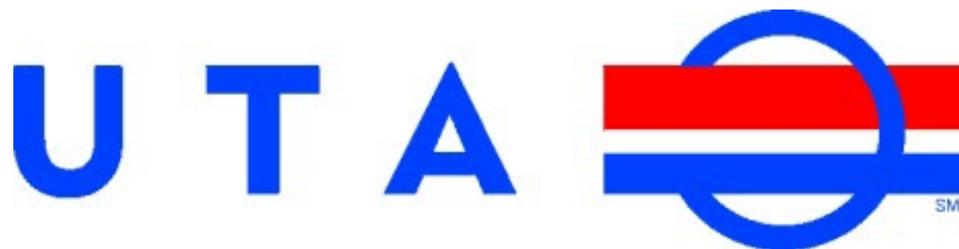
"Sales Tax" lists the amount of sales tax revenue received for the month listed in bold. All other data reflects the month listed in the table title.

Utah Transit Authority

Financial Statement

(Unaudited)

August 31, 2024



**KEY ITEM REPORT
(UNAUDITED)
As of August 31, 2024**

EXHIBIT 1-1

	2024 YTD ACTUAL	2024 YTD BUDGET	VARIANCE FAVORABLE (UNFAVORABLE)	% FAVORABLE (UNFAVORABLE)
1 Operating Revenue	\$ (27,820,886)	\$ (25,639,907)	\$ 2,180,980	9%
2 Operating Expenses	273,274,765	282,121,242	8,846,476	3%
3 Net Operating Income (Loss)	(245,453,879)	(256,481,335)	11,027,456	4%
4 Capital Revenue	(19,718,672)	(76,682,667)	(56,963,995)	-74%
5 Capital Expenses	89,582,056	163,061,333	73,479,277	45%
6 Net Capital Income (Loss)	(69,863,385)	(86,378,667)	16,515,282	19%
7 Sales Tax	(320,933,934)	(318,150,775)	2,783,159	1%
8 Other Revenue	(59,671,338)	(69,350,000)	(9,678,662)	-14%
9 Debt Service	58,771,057	55,583,556	(3,187,501)	-6%
10 Sale of Assets	(793,159)	-	793,159	
11 Net Non-Operating Income (Loss)	322,627,374	331,917,220	(9,289,845)	-3%
12 Contribution to Cash Balance	\$ 7,310,111	\$ (10,942,782)	\$ 18,252,892	-167%
13 Amortization	6,604,661			
14 Depreciation	98,144,817			
15 Total Non-cash Items	\$ 104,749,478			

STATISTICS

RIDERSHIP

	2023 Actual	Aug 2024	Aug 2023	Difference	2024 YTD	2023 YTD	Difference
16	32,238,735	3,462,627	3,010,434	452,193	26,393,469	35,059,930	(8,666,461)

OPERATING SUBSIDY PER RIDER -

	SPR
17 Net Operating Expense	\$ 273,274,765
18 Less: Passenger Revenue	- (26,445,553)
19 Subtotal	246,829,212
20 Divided by: Ridership	÷ 26,393,469
21 Subsidy per Rider	\$ 9.35

**SUMMARY FINANCIAL DATA
(UNAUDITED)
As of August 31, 2024**

EXHIBIT 1-2

BALANCE SHEET

	8/31/2024	8/31/2023	Change August
CURRENT ASSETS			
1 Cash	\$ 34,703,589	\$ 44,903,341	-23%
2 Investments (Unrestricted)	397,727,751	493,193,528	-19%
3 Investments (Restricted)	(179,167)	111,734,986	-100%
4 Receivables	109,480,629	102,612,024	7%
5 Receivables - Federal Grants	3,113,363	3,872,754	-20%
6 Inventories	47,566,893	42,013,133	13%
7 Prepaid Expenses	602,962	-	#DIV/0!
8 TOTAL CURRENT ASSETS	\$ 593,016,020	\$ 798,329,766	
9 Property, Plant & Equipment (Net)	2,894,693,637	2,930,309,086	-1%
10 Other Assets	3,191,813	194,229,119	-98%
11 TOTAL ASSETS	\$ 3,490,901,470	\$ 3,922,867,971	
12 Current Liabilities	4,482,883	54,295,975	-92%
14 Net Pension Liability	142,283,669	166,224,640	-14%
15 Outstanding Debt	2,245,564,873	2,331,634,595	-4%
16 Net Investment in Capital Assets	721,821,980	794,195,932	-9%
17 Restricted Net Position	89,140,499	82,959,225	7%
18 Unrestricted Net Position	287,607,566	493,557,604	-42%
19 TOTAL LIABILITIES & EQUITY	\$ 3,490,901,470	\$ 3,922,867,971	

RESTRICTED AND DESIGNATED CASH AND CASH EQUIVALENTS RECONCILIATION

RESTRICTED RESERVES			
20 2018 Bond Proceeds	65	\$ 31,610	-100%
21 2019 Bond Proceeds	711,197	676,632	5%
22 Debt Service Interest Payable	39,430,359	41,511,939	-5%
23 Risk Contingency Fund	8,271,244	8,573,021	-4%
24 Catastrophic Risk Reserve Fund	1,149,859	1,123,447	2%
25 Box Elder County ROW (sales tax)	3,278,330	3,537,261	-7%
26 Utah County 4th Qtr (sales tax)	21,814,182	13,470,414	62%
27 Amounts held in escrow	62,662,593	42,810,662	46%
28 TOTAL RESTRICTED RESERVES	\$ 137,317,830	\$ 111,734,986	
DESIGNATED GENERAL AND CAPITAL RESERVES			
29 General Reserves	72,100,000	72,100,000	
30 Service Sustainability Reserves	12,017,000	12,017,000	
31 Capital Reserve	46,541,000	46,541,000	
32 Debt Reduction Reserve	67,576	30,000,000	
33 TOTAL DESIGNATED GENERAL AND CAPITAL RESERVES	\$ 130,725,576	\$ 160,658,000	
34 TOTAL RESTRICTED AND DESIGNATED CASH AND EQUIVALENTS	\$ 268,043,406	\$ 272,392,986	

**SUMMARY FINANCIAL DATA
(UNAUDITED)**

EXHIBIT 1-3

As of August 31, 2024

REVENUE & EXPENSES

	ACTUAL Aug-24	ACTUAL Aug-23	YTD 2024	YTD 2023
OPERATING REVENUE				
1 Passenger Revenue	\$ (3,021,880)	\$ (2,788,034)	\$ (26,445,553)	\$ (23,773,299)
2 Advertising Revenue	(179,167)	(203,500)	(1,375,333)	(1,638,500)
3 TOTAL OPERATING REVENUE	\$ (3,201,046)	\$ (2,991,534)	\$ (27,820,886)	\$ (25,411,799)
OPERATING EXPENSE				
4 Bus Service	\$ 11,981,579	\$ 11,424,543	\$ 95,378,967	\$ 87,534,969
5 Commuter Rail	2,503,916	2,394,670	19,981,660	19,289,301
6 Light Rail	3,962,062	3,687,125	31,103,446	29,254,765
7 Maintenance of Way	1,325,616	1,787,961	14,137,488	13,522,691
8 Paratransit Service	3,191,813	2,460,948	20,276,191	18,241,531
9 RideShare/Van Pool Services	193,367	262,371	2,108,993	2,199,429
10 Microtransit	(334,730)	630,839	5,994,211	5,054,641
11 Operations Support	4,467,971	5,286,105	43,291,771	43,411,771
12 Administration	4,127,514	4,479,307	35,444,748	33,473,465
13 Non-Departmental	-	-	5,557,291	-
14 TOTAL OPERATING EXPENSE	\$ 31,419,108	\$ 32,413,869	\$ 273,274,765	\$ 251,982,563
15 NET OPERATING (INCOME) LOSS	\$ 28,218,062	\$ 29,422,335	\$ 245,453,879	\$ 226,570,764
NON-OPERATING EXPENSE (REVENUE)				
16 Investment Revenue	(934,825)	(3,097,257)	(48,135,245)	(23,825,634)
17 Sales Tax Revenue ¹	(36,277,149)	(42,615,294)	(320,933,934)	(315,926,410)
18 Other Revenue	(679,641)	(808,929)	(6,556,053)	(7,322,807)
19 Fed Operations/Preventative Maint. Revenue	(119,375)	(18,775,183)	(4,980,040)	(57,619,550)
20 Bond Interest	11,956,067	6,150,296	54,445,458	49,745,748
21 Bond Interest UTCT	148,357	148,358	1,186,857	1,186,857
22 Bond Cost of Issuance/Fees	999,776	36,000	1,083,076	89,250
23 Lease Interest	-	183,212	2,055,666	2,209,989
24 Sale of Assets	(1,754,526)	-	(793,159)	5,144,215
25 TOTAL NON-OPERATING EXPENSE (REVENUE)	\$ (26,661,317)	\$ (58,778,797)	\$ (322,627,374)	\$ (346,318,342)
26 CONTRIBUTION TO RESERVES	\$ (1,556,745)	\$ 29,356,462	\$ 77,173,495	\$ 119,747,578
OTHER EXPENSES (NON-CASH)				
27 Bond Premium/Discount Amortization	(344,047)	(334,645)	(2,752,374)	(2,737,640)
28 Bond Refunding Cost Amortization	1,102,053	14,242,598	8,816,426	22,940,787
29 Future Revenue Cost Amortization	67,576	67,576	540,609	540,609
30 Depreciation	12,410,779	11,418,427	98,144,817	92,216,667
31 NET OTHER EXPENSES (NON-CASH)	\$ 13,236,361	\$ 25,393,956	\$ 104,749,478	\$ 112,960,423

¹ Current Year Sales Taxes YTD Include Actuals Plus Two Prior Month Accruals

**BUDGET TO ACTUAL REPORT
(UNAUDITED)**

EXHIBIT 1-4

As of August 31, 2024

CURRENT MONTH

	ACTUAL	BUDGET	VARIANCE	%
	Aug-24	Aug-24	FAVORABLE (UNFAVORABLE)	FAVORABLE (UNFAVORABLE)
OPERATING REVENUE				
1 Passenger Revenue	\$ (3,021,880)	\$ (3,499,820)	\$ (477,941)	-14%
2 Advertising Revenue	(179,167)	(200,000)	(20,833)	-10%
3 TOTAL OPERATING REVENUE	<u>\$ (3,201,046)</u>	<u>\$ (3,699,820)</u>	<u>\$ (498,774)</u>	-13%
OPERATING EXPENSE				
4 Bus Service	\$ 11,981,579	12,190,567	\$ 208,988	2%
5 Commuter Rail	2,503,916	2,756,220	252,304	9%
6 Light Rail	3,962,062	4,067,855	105,793	3%
7 Maintenance of Way	1,325,616	1,783,666	458,050	26%
8 Paratransit Service	3,191,813	2,449,345	(742,468)	-30%
9 RideShare/Van Pool Services	193,367	334,294	140,927	42%
10 Microtransit	(334,730)	1,079,048	1,413,778	131%
11 Operations Support	4,467,971	5,382,910	914,940	17%
12 Administration	4,127,514	5,078,623	951,109	19%
13 Non-Departmental	-	45,500	45,500	100%
14 TOTAL OPERATING EXPENSE	<u>\$ 31,419,108</u>	<u>\$ 35,168,028</u>	<u>\$ 3,748,920</u>	11%
15 NET OPERATING (INCOME) LOSS	<u>\$ 28,218,062</u>	<u>\$ 31,468,208</u>	<u>\$ 3,250,146</u>	10%
NON-OPERATING EXPENSE (REVENUE)				
16 Investment Revenue	\$ (934,825)	\$ (468,750)	\$ 466,075	99%
17 Sales Tax Revenue	(36,277,149)	(42,704,400)	(6,427,250)	-15%
18 Other Revenue	(679,641)	(1,200,000)	(520,359)	-43%
19 Fed Operations/Preventative Maint. Revenue	(119,375)	(8,000,000)	(7,880,625)	-99%
20 Bond Interest	11,956,067	6,542,537	(5,413,529)	-83%
21 Bond Interest UTCT	148,357	144,141	(4,216)	-3%
22 Bond Cost of Issuance/Fees	999,776	4,000	(995,776)	-24894%
23 Lease Interest	-	237,592	237,592	100%
24 Sale of Assets	(1,754,526)	-	1,754,526	
25 TOTAL NON-OPERATING EXPENSE (REVENUE)	<u>\$ (26,661,317)</u>	<u>\$ (45,444,879)</u>	<u>\$ (18,783,562)</u>	-41%
26 CONTRIBUTION TO RESERVES	<u>\$ (1,556,745)</u>	<u>\$ 13,976,671</u>		

**BUDGET TO ACTUAL REPORT BY CHIEF
(UNAUDITED)
As of August 31, 2024**

EXHIBIT 1-4A

CURRENT MONTH

	ACTUAL	BUDGET	VARIANCE	%
	Aug-24	Aug-24	FAVORABLE (UNFAVORABLE)	FAVORABLE (UNFAVORABLE)
OPERATING EXPENSE				
1 Board of Trustees	\$ 221,170	\$ 280,866	\$ 59,696	21%
2 Executive Director	400,973	534,213	133,240	25%
3 Chief Communication Officer	228,859	330,058	101,199	31%
4 Chief Planning and Engagement Officer	319,084	1,931,730	1,612,646	83%
5 Chief Finance Officer	940,594	1,657,182	716,588	43%
6 Chief Operating Officer	25,664,605	26,801,938	1,137,333	4%
7 Chief People Officer	1,088,349	1,001,551	(86,798)	-9%
8 Chief Development Officer	398,892	629,196	230,304	37%
9 Chief Enterprise Strategy Officer	2,156,582	1,955,794	(200,788)	-10%
10 Non-Departmental	-	45,500	45,500	100%
11 TOTAL OPERATING EXPENSE	\$ 31,419,108	\$ 35,168,028	\$ 3,748,920	11%

YEAR TO DATE

	ACTUAL	BUDGET	VARIANCE	%
	Aug-24	Aug-24	FAVORABLE (UNFAVORABLE)	FAVORABLE (UNFAVORABLE)
OPERATING EXPENSE				
12 Board of Trustees	\$ 2,035,913	\$ 2,246,929	\$ 211,016	9%
13 Executive Director	4,443,012	4,275,214	(167,798)	-4%
14 Chief Communication Officer	1,778,897	2,799,346	1,020,449	36%
15 Chief Planning and Engagement Officer	12,362,954	15,409,592	3,046,638	20%
16 Chief Finance Officer	9,892,722	13,501,172	3,608,450	27%
17 Chief Operating Officer	208,060,450	212,357,847	4,297,397	2%
18 Chief People Officer	8,610,655	8,001,977	(608,678)	-8%
19 Chief Development Officer	4,349,262	5,026,113	676,851	13%
20 Chief Enterprise Strategy Officer	16,153,608	18,207,552	2,053,944	11%
21 Non-Departmental	5,557,291	5,852,791	295,500	5%
22 TOTAL OPERATING EXPENSE	\$ 273,244,764	\$ 287,678,533	\$ 14,433,769	5%

**BUDGET TO ACTUAL REPORT
(UNAUDITED)**

EXHIBIT 1-5

As of August 31, 2024

YEAR TO DATE

	ACTUAL	BUDGET	VARIANCE	%
	Aug-24	Aug-24	FAVORABLE (UNFAVORABLE)	FAVORABLE (UNFAVORABLE)
OPERATING REVENUE				
1 Passenger Revenue	\$ (26,445,553)	\$ (24,039,907)	\$ 2,405,646	10%
2 Advertising Revenue	(1,375,333)	(1,600,000)	(224,667)	-14%
3 TOTAL OPERATING REVENUE	<u>\$ (27,820,886)</u>	<u>\$ (25,639,907)</u>	<u>\$ 2,180,980</u>	9%
OPERATING EXPENSE				
4 Bus Service	\$ 95,378,967	\$ 95,482,878	\$ 103,911	0%
5 Commuter Rail	19,981,660	21,774,347	1,792,687	8%
6 Light Rail	31,103,446	32,213,446	1,110,000	3%
7 Maintenance of Way	14,137,488	14,279,053	141,564	1%
8 Paratransit Service	20,276,191	19,327,986	(948,205)	-5%
9 RideShare/Van Pool Services	2,108,993	2,674,361	565,368	21%
10 Microtransit	5,994,211	8,632,421	2,638,210	31%
11 Operations Support	43,291,771	42,917,704	(374,067)	-1%
12 Administration	35,444,748	44,523,546	9,078,798	20%
13 Non-Departmental	5,557,291	295,500	(5,261,791)	-1781%
14 TOTAL OPERATING EXPENSE	<u>\$ 273,274,765</u>	<u>\$ 282,121,242</u>	<u>\$ 8,846,476</u>	3%
15 NET OPERATING (INCOME) LOSS	<u>\$ 245,453,879</u>	<u>\$ 256,481,335</u>	<u>\$ 11,027,456</u>	4%
NON-OPERATING EXPENSE (REVENUE)				
16 Investment Revenue	\$ (48,135,245)	\$ (3,750,000)	\$ 44,385,245	1184%
17 Sales Tax Revenue	(320,933,934)	(318,150,775)	2,783,159	1%
18 Other Revenue	(6,556,053)	(9,600,000)	(3,043,947)	-32%
19 Fed Operations/Preventative Maint. Revenue	(4,980,040)	(56,000,000)	(51,019,960)	-91%
20 Bond Interest	54,445,458	52,484,439	(1,961,019)	-4%
21 Bond Interest UTCT	1,186,857	1,153,128	(33,729)	-3%
22 Bond Cost of Issuance/Fees	1,083,076	45,250	(1,037,826)	-2294%
23 Lease Interest	2,055,666	1,900,739	(154,928)	-8%
24 Sale of Assets	(793,159)	-	793,159	
25 TOTAL NON-OPERATING EXPENSE (REVENUE)	<u>\$ (322,627,374)</u>	<u>\$ (331,917,220)</u>	<u>\$ (9,289,845)</u>	-3%
26 CONTRIBUTION TO RESERVES	<u>\$ 77,173,495</u>	<u>\$ 75,435,885</u>		

**CAPITAL PROJECTS
(UNAUDITED)
As of August 31, 2024**

EXHIBIT 1-6

	2024 ACTUAL	ANNUAL BUDGET	PERCENT
EXPENSES			
1 REVENUE AND NON-REVENUE VEHICLES	31,827,901.43	\$ 56,950,000	55.9%
2 INFORMATION TECHNOLOGY	10,159,408.30	21,515,000	47.2%
3 FACILITIES, MAINTENANCE & ADMIN. EQUIP.	4,314,732.24	15,768,000	27.4%
4 CAPITAL PROJECTS	28,503,339.38	88,148,000	32.3%
5 STATE OF GOOD REPAIR	14,184,210.96	55,611,000	25.5%
6 DEPOT DISTRICT	67,389.33	1,000,000	6.7%
7 OGDEN/WEBER STATE BRT	2,340,249.97	5,600,000	41.8%
8 TIGER	(1,815,175.28)	0	0.0%
9 TOTAL	<u>\$ 89,582,056</u>	<u>\$ 244,592,000</u>	36.6%
REVENUES			
10 GRANT	\$ 10,890,457	\$ 59,152,000	18.4%
11 STATE CONTRIBUTION	8,155,170	13,447,000	60.6%
12 LEASES (PAID TO DATE)		27,234,000	0.0%
13 BONDS		6,330,000	0.0%
14 LOCAL PARTNERS	673,044.65	8,861,000	7.6%
15 UTA FUNDING	69,863,385	129,568,000	53.9%
16 TOTAL	<u>\$ 89,582,056</u>	<u>\$ 244,592,000</u>	36.6%

**FAREBOX RECOVERY & SPR
(UNAUDITED)**

EXHIBIT 1-7

As of August 31, 2024

BY SERVICE

	CURRENT MONTH		YEAR TO DATE	
	Aug-24	Aug-23	2024	2023
UTA				
Fully Allocated Costs	31,419,108	32,413,869	273,340,803	386,180,341
Passenger Farebox Revenue	3,021,879	2,788,036	26,445,553	35,418,226
Passengers	3,462,627	3,010,434	26,393,469	35,059,930
Farebox Recovery Ratio	9.6%	8.6%	9.7%	9.2%
Actual Subsidy per Rider	\$8.20	\$9.84	\$9.35	\$10.00
BUS SERVICE				
Fully Allocated Costs	16,267,351	16,196,151	137,609,187	191,924,477
Passenger Farebox Revenue	1,406,419	1,363,830	10,804,064	15,916,728
Passengers	1,685,120	1,532,549	12,838,555	17,945,987
Farebox Recovery Ratio	8.6%	8.4%	7.9%	8.3%
Actual Subsidy per Rider	\$8.82	\$9.68	\$9.88	\$9.81
LIGHT RAIL SERVICE				
Fully Allocated Costs	6,912,456	7,653,967	62,575,931	91,122,486
Passenger Farebox Revenue	786,760	730,892	5,622,990	7,745,167
Passengers	1,189,566	933,860	9,087,392	11,043,721
Farebox Recovery Ratio	11.4%	9.5%	9.0%	8.5%
Actual Subsidy per Rider	\$5.15	\$7.41	\$6.27	\$7.55
COMMUTER RAIL SERVICE				
Fully Allocated Costs	4,608,358	4,653,071	39,102,771	56,794,058
Passenger Farebox Revenue	419,069	476,741	3,682,475	5,139,238
Passengers	352,351	349,011	2,687,594	3,736,620
Farebox Recovery Ratio	9.1%	10.2%	9.4%	9.0%
Actual Subsidy per Rider	\$11.89	\$11.97	\$13.18	\$13.82
MICROTRANSIT				
Fully Allocated Costs	(229,186)	709,251	7,025,760	8,187,397
Passenger Farebox Revenue	48,516	45,669	366,669	524,266
Passengers	50,634	35,611	366,909	415,010
Farebox Recovery Ratio	-21.2%	6.4%	5.2%	6.4%
Actual Subsidy per Rider	(\$5.48)	\$18.63	\$18.15	\$18.46
PARATRANSIT				
Fully Allocated Costs	3,287,216	2,616,242	21,634,480	30,906,377
Passenger Farebox Revenue	(184,519)	(125,321)	3,363,218	2,368,852
Passengers	90,259	82,406	658,697	885,469
Farebox Recovery Ratio	-5.6%	-4.8%	15.5%	7.7%
Actual Subsidy per Rider	\$38.46	\$33.27	\$27.74	\$32.23
RIDESHARE				
Fully Allocated Costs	572,912	585,188	5,392,674	7,245,545
Passenger Farebox Revenue	545,635	296,225	2,606,137	3,723,975
Passengers	94,697	76,997	754,322	1,033,123
Farebox Recovery Ratio	95.2%	50.6%	48.3%	51.4%
Actual Subsidy per Rider	\$0.29	\$3.75	\$3.69	\$3.41

BY TYPE

	CURRENT MONTH		YEAR TO DATE	
	Aug-24	Aug-23	2024	2023
FULLY ALLOCATED COSTS				
Bus Service	\$16,267,351	\$16,196,151	\$137,609,187	\$191,924,477
Light Rail Service	\$6,912,456	\$7,653,967	\$62,575,931	\$91,122,486
Commuter Rail Service	\$4,608,358	\$4,653,071	\$39,102,771	\$56,794,058
Microtransit	-\$229,186	\$709,251	\$7,025,760	\$8,187,397
Paratransit	\$3,287,216	\$2,616,242	\$21,634,480	\$30,906,377
Rideshare	\$572,912	\$585,188	\$5,392,674	\$7,245,545
UTA	\$31,419,108	\$32,413,869	\$273,340,803	\$386,180,341
PASSENGER FAREBOX REVENUE				
Bus Service	\$1,406,419	\$1,363,830	\$10,804,064	\$15,916,728
Light Rail Service	\$786,760	\$730,892	\$5,622,990	\$7,745,167
Commuter Rail Service	\$419,069	\$476,741	\$3,682,475	\$5,139,238
Microtransit	\$48,516	\$45,669	\$366,669	\$524,266
Paratransit	(\$184,519)	(\$125,321)	\$3,363,218	\$2,368,852
Rideshare	\$545,635	\$296,225	\$2,606,137	\$3,723,975
UTA	\$3,021,879	\$2,788,036	\$26,445,553	\$35,418,226
PASSENGERS				
Bus Service	1,685,120	1,532,549	12,838,555	17,945,987
Light Rail Service	1,189,566	933,860	9,087,392	11,043,721
Commuter Rail Service	352,351	349,011	2,687,594	3,736,620
Microtransit	50,634	35,611	366,909	415,010
Paratransit	90,259	82,406	658,697	885,469
Rideshare	94,697	76,997	754,322	1,033,123
UTA	3,462,627	3,010,434	26,393,469	35,059,930
FAREBOX RECOVERY RATIO				
Bus Service	8.6%	8.4%	7.9%	8.3%
Light Rail Service	11.4%	9.5%	9.0%	8.5%
Commuter Rail Service	9.1%	10.2%	9.4%	9.0%
Microtransit	-21.2%	6.4%	5.2%	6.4%
Paratransit	-5.6%	-4.8%	15.5%	7.7%
Rideshare	95.2%	50.6%	48.3%	51.4%
UTA	9.6%	8.6%	9.7%	9.2%
ACTUAL SUBSIDY PER RIDER				
Bus Service	\$8.82	\$9.68	\$9.88	\$9.81
Light Rail Service	\$5.15	\$7.41	\$6.27	\$7.55
Commuter Rail Service	\$11.89	\$11.97	\$13.18	\$13.82
Microtransit	(\$5.48)	\$18.63	\$18.15	\$18.46
Paratransit	\$38.46	\$33.27	\$27.74	\$32.23
Rideshare	\$0.29	\$3.75	\$3.69	\$3.41
UTA	\$8.20	\$9.84	\$9.35	\$10.00

**SUMMARY OF ACCOUNTS RECEIVABLE
(UNAUDITED)**

EXHIBIT 1-9

As of August 31, 2024

Classification	Total	Current	31-60 Days	61-90 Days	90-120 Days	Over 120 Days
1 Federal Grants Government ¹	\$ 3,113,363	\$ 3,113,363	-	-	-	-
2 Sales Tax Contributions	78,804,634	39,460,517	\$ 39,344,117	-	-	-
3 Warranty Recovery	1,713,366	1,713,366	-	-	-	-
4 Build America Bond Subsidies	5,781,195	785,525	785,525	\$ 785,525	\$ 785,525	\$ 2,639,095
5 Product Sales and Development	2,633,812	1,432,802	22,620	17,399	14,766	1,146,225
6 Pass Sales	(25,316)	100,525	57,445	(2,210)	13,031	(194,108)
7 Property Management	1,662,733	9,091	1,503,228	132,046	5,916	12,451
8 Vanpool/Rideshare	143,668	74,415	52,130	3,138	4,567	9,418
9 Salt Lake City Agreement	579,623	579,623	-	-	-	-
10 Planning	-	-	-	-	-	-
11 Capital Development Agreements	13,388,092	234,981	-	-	-	13,153,111
12 Other	88,464,023	6,843	(292,404)	561	312	351,304
13 Total	\$ 196,259,192	\$ 47,511,051	\$ 41,472,662	\$ 936,460	\$ 824,117	\$ 17,117,496

Percentage Due by Aging

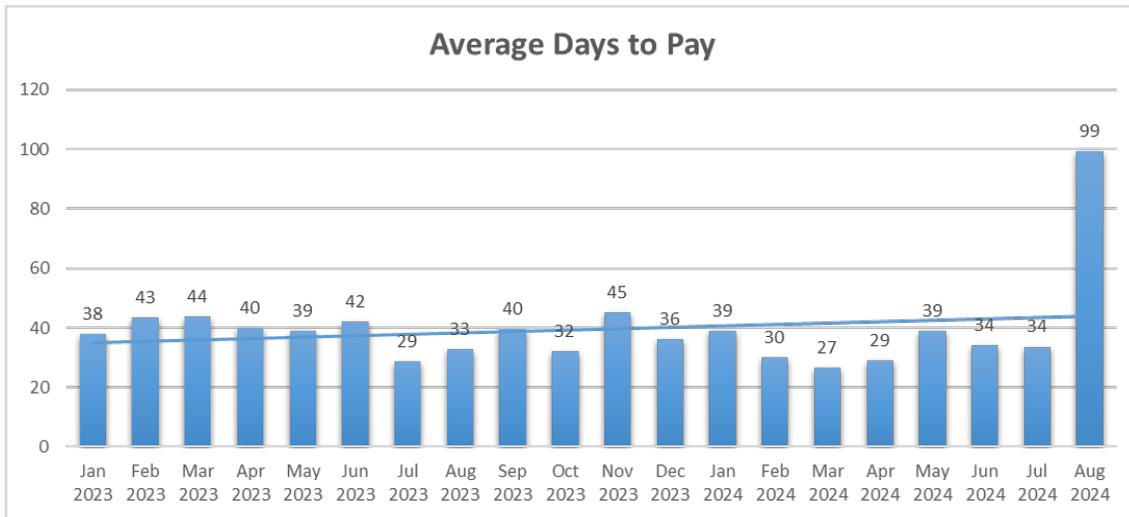
14 Federal Grants Government ¹	100.0%	0.0%	0.0%	0.0%	0.0%
15 Sales Tax Contributions	50.1%	49.9%	0.0%	0.0%	0.0%
16 Warranty Recovery	100.0%	0.0%	0.0%	0.0%	0.0%
17 Build America Bond Subsidies	13.6%	13.6%	13.6%	13.6%	45.6%
18 Product Sales and Development	54.4%	0.9%	0.7%	0.6%	43.5%
19 Pass Sales	-397.1%	-226.9%	8.7%	-51.5%	766.7%
20 Property Management	0.5%	90.4%	7.9%	0.4%	0.7%
21 Vanpool/Rideshare	51.8%	36.3%	2.2%	3.2%	6.6%
22 Salt Lake City Agreement	100.0%	0.0%	0.0%	0.0%	0.0%
23 Planning					
24 Capital Development Agreements	1.8%	0.0%	0.0%	0.0%	98.2%
25 Other	0.0%	-0.3%	0.0%	0.0%	0.4%
26 Total	24.2%	21.1%	0.5%	0.4%	8.7%

¹ Federal preventive maintenance funds and federal RideShare funds

**SUMMARY OF APPROVED DISBURSEMENTS OVER \$200,000
FROM Aug 1, 2024 THROUGH Aug 31, 2024
(UNAUDITED)**

EXHIBIT 1-10

Contract # and Description	Contract Date	Vendor	Check #	Date	Check Total
00223675	11/16/2023	Cache Valley Electric Company	900632	8/7/2024	220,900.39
01135025	6/9/2021	Stacy and Witbeck, Inc.	900635	8/7/2024	392,230.00
00203378	8/23/2021	C3M Power Systems LLC	900638	8/7/2024	308,663.42
00172226	3/4/2021	ROCKY MOUNTAIN SYSTEMS SERVICE	900639	8/7/2024	214,041.00
00203382	3/4/2021	ROCKY MOUNTAIN SYSTEMS SERVICE	900639	8/7/2024	370,000.00
00233797	4/25/2024	Calvin L Wadsworth Constr. Com	384534	8/7/2024	340,920.09
R2024-02-02	2/14/2024	Cambridge Associates, LLC.	384619	8/8/2024	1,280,060.37
R2024-02-02	2/14/2024	UTAH ST TAX (WITHHOLDING ONLY)	384648	8/8/2024	352,892.19
00243837	3/6/2024	Landmark Companies Inc	384686	8/14/2024	209,729.98
R2024-02-02	4/26/2023	ROCKY MOUNTAIN POWER	384687	8/14/2024	479,409.25
02003255	11/14/2023	Woojin Is America Inc	900710	8/14/2024	248,297.34
00172226	3/4/2021	ROCKY MOUNTAIN SYSTEMS SERVICE	900711	8/14/2024	452,277.00
00233786	6/9/2021	Stacy and Witbeck, Inc.	900712	8/14/2024	207,865.50
00233786	6/9/2021	Stacy and Witbeck, Inc.	900712	8/14/2024	245,605.00
00233786	6/9/2021	Stacy and Witbeck, Inc.	900712	8/14/2024	323,221.00
00233786	6/9/2021	Stacy and Witbeck, Inc.	900712	8/14/2024	1,661,170.00
OR-0000250	8/20/2024	William Rawlings & Associate	65871	8/21/2024	375,000.00
01903143	6/2/2020	UNITED WAY COMMUNITY SERV	900787	8/21/2024	201,607.09
02403819	5/8/2024	PAULSEN CONSTRUCTION, INC.	900788	8/21/2024	324,049.00
02003243	6/3/2020	MV PUBLIC TRANSPORTATION	900789	8/21/2024	269,691.98
R2024-02-02	4/26/2023	ROCKY MOUNTAIN POWER	384799	8/21/2024	224,555.20
R2024-02-02	2/14/2024	Cambridge Associates, LLC.	384886	8/22/2024	1,248,368.39
R2024-02-02	2/14/2024	UTAH ST TAX (WITHHOLDING ONLY)	384918	8/22/2024	339,309.84
00233797	4/25/2024	Calvin L Wadsworth Constr. Com	385053	8/28/2024	552,644.20



August Days to pay were subjected to an accounting error by a vendor. If that Vendor is removed the Days to pay returns to a normal value.





Utah Transit Authority

MEETING MEMO

669 West 200 South
Salt Lake City, UT 84101

Board of Trustees

Date: 10/9/2024

TO: Board of Trustees
THROUGH: Jay Fox, Executive Director
FROM: Jason Petersen, Captain
PRESENTER(S): Jason Petersen, Captain

TITLE:

R2024-10-01 - Resolution Authorizing Execution of an Interlocal Cooperation Agreement with Salt Lake County for Evidence Management Services

AGENDA ITEM TYPE:

Resolution

RECOMMENDATION:

We recommend that the Board approve Resolution R2024-10-01 to authorize this Interlocal Cooperation Agreement with Salt Lake County for evidence management services for a not-to-exceed amount of \$35,000 and a term to expire on December 31, 2028.

BACKGROUND:

The Utah Interlocal Cooperation Act (Utah Code § 11-1101, *et seq.*) empowers local governmental units to cooperate via agreement in a variety of areas via an Interlocal Cooperation Agreement ("ILA"). Legal counsel for each agency must review the proposed ILA for compliance with the law (*See Utah Code § 11-13-202.5(3)*). Further, the ILA must be approved by the governing body of the agency or political subdivision, such as the UTA Board of Trustees (*See Utah Code 11-13-202.5(1)*). The Utah Public Transit District Act empowers the UTA Board of Trustees with the authority to approve an ILA (*See Utah Code § 17B-2a-808.1(2)(d)*).

DISCUSSION:

The UTA Police Department has contracted for Evidence Services since 2006 in Salt Lake County. The original agreement was with Salt Lake County Sheriff's Office and switched to Unified Police when their agency split into two separate entities. With recent legislative changes disbanding the Unified PD, Salt Lake County now manages and stores our evidence. This agreement is merely an agency name switch (Unified PD to S.L. County) as the storage facility and staffing have remained the same (they currently store/manage over 900

cases of evidence).

Contracting this service saves UTA's Police Department a significant amount of money. If we were to take this service in-house, we would need a stand-alone storage building, with federally mandated security controls, climate controls, refrigeration, and staffing.

CONTRACT SUMMARY:

Contractor Name:	Salt Lake County
Contract Number:	24-P00366
Base Contract Effective Dates:	Upon signature date through December 31, 2025
Extended Contract Dates:	Three one-year options beginning 1/1/2026 and running through 12/31/2028 are included in this request for Board approval.
Existing Contract Value:	N/A
Amendment Amount:	N/A
New/Total Contract Value:	\$35,000 (Not-To-Exceed)
Procurement Method:	N/A
Budget Authority:	Approved 2024 Operating Budget

ALTERNATIVES:

An alternative to approving this ILA would be to bring the service in-house with a significant cost increase.

FISCAL IMPACT:

The ILA provides for a not to exceed expense to UTA of \$35,000 over the 4-year term of the agreement. The proposed agreement is accounted for within the approved Police Department 2024 operating budget.

ATTACHMENTS:

- Resolution R2024-10-01, including ILA as an exhibit

**RESOLUTION OF THE BOARD OF TRUSTEES OF THE UTAH TRANSIT AUTHORITY
AUTHORIZING EXECUTION OF AN INTERLOCAL COOPERATION AGREEMENT
WITH SALT LAKE COUNTY FOR EVIDENCE MANAGEMENT SERVICES**

R2024-10-01

October 9, 2024

WHEREAS, the Utah Transit Authority (the "Authority") is a large public transit district organized under the laws of the State of Utah and created to transact and exercise all of the powers provided for in the Utah Limited Purpose Special Government Entities - Special Districts Act and the Utah Public Transit District Act (collectively the "Act"); and

WHEREAS, the Utah Interlocal Cooperation Agreement Act, UTAH CODE § 11-13-101, *et seq.* enables components of government to execute a Interlocal Cooperation Agreement ("ILA") so both entities may obtain mutual advantage and economies of scale, among other things; and

WHEREAS, the Act empowers the Board of Trustees ("Board") of the Authority with the ability to execute ILAs on behalf of the Authority; and

WHEREAS, Salt Lake County under its Unified Police Department, since 2006 has provided evidence management services to the UTA Police Department ("UTAPD"); and

WHEREAS, these evidence management services provided by Salt Lake County are advantageous to the UTAPD in that it saves resources of the Authority; and

WHEREAS, recent legislative changes have disbanded the Unified Police Department, and evidence management services are now provided directly by Salt Lake County; and

WHEREAS, the name change brought on by recent legislative changes requires execution of a new ILA with Salt Lake County to continue the provision of evidence management services for the UTAPD; and

WHEREAS, a new ILA with Salt Lake County has been presented as Exhibit A, with a term to expire on December 31, 2028; and

WHEREAS, Board of the Authority recognizes the mutual advantage of this agreement, including the UTAPD leveraging the economies of scale of Salt Lake County in the provision of evidence management services for the Authority.

NOW, THEREFORE, BE IT RESOLVED by the Board:

1. That the Board hereby approves the Interlocal Cooperation Agreement with Salt Lake County for evidence management services in substantially the same form

R2024-10-01

1

as attached as Exhibit A.

2. That the Executive Director is authorized to execute the Interlocal Cooperation Agreement with Salt Lake County for evidence management services in substantially the same form as attached as Exhibit A.
3. That the Board hereby ratifies any and all actions previously taken by the Authority's management, staff, and counsel to The Interlocal Cooperation Agreement with Salt Lake County for evidence management services.
4. That the corporate seal shall be affixed hereto.

APPROVED AND ADOPTED this 9th day of October 2024.

Carlton Christensen, Chair
Board of Trustees

ATTEST:

Secretary of the Authority

(Corporate Seal)

Approved as to Form:

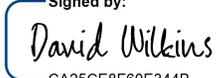
Signed by:

 CA25CE8F60E344B...
 Legal Counsel

EXHIBIT A
(Interlocal Cooperation Agreement
with Salt Lake County for Evidence Management Services)

An Interlocal Cooperative Agreement Between
Salt Lake County and
the Utah Transit Authority for
Evidence Services

This Agreement is between Salt Lake County, a body corporate and politic of the State of Utah (“County”), on behalf of its Sheriff’s Office (“Sheriff’s Office”), and the Utah Transit Authority, a public transit district of the State of Utah (“UTA”). County and UTA may be referred to as “the Parties.”

THEREFORE, the Parties agree as follows:

- A. County provides law enforcement services including the storage and management of evidence accumulated during criminal investigations.
- B. UTA is in need of storage and management services for the evidence accumulated during criminal investigations.
- C. The Parties are “public agencies” as defined by the Utah Interlocal Cooperation Act, Utah Code §§ 11-13-101 et seq. (the “Cooperation Act”), and, as such, are authorized by the Cooperation Act to enter into this Agreement to act jointly and cooperatively in a manner that will enable them to make the most efficient use of their resources and powers.

1. DESCRIPTION OF SERVICES

- 1.1. County shall provide storage and management of evidence (“Service(s)”) for cases investigated by UTA per case basis in accordance with current County evidence handling policies and procedures.
- 1.2. A “case” is defined as an incident having a specific case number.

2. CONSIDERATION/PAYMENT

- 2.1. UTA shall pay County \$25.00 per case evidence handling fee. This price shall include all the actual costs to provide Services including personnel and other associated costs.
- 2.2. If any call out or court appearance is required, UTA shall pay the greater of \$69.00 or the cost for the billed time for an evidence technician, measured in fifteen (15) minute increments rounding up, at \$23.00 per hour.
- 2.3. UTA shall pay for any marijuana testing at \$25.00 per case, and any related court appearance at the greater of \$60.00 or the cost for the billed time for an evidence technician, measured in fifteen (15) minute increments rounding up, at \$30.00 per hour.
- 2.4. County agrees to provide a minimum of two (2) months advance written notice to UTA for any anticipated price increase for Services provided under this Agreement.

2.5. The Sheriff’s Officed shall bill UTA on a monthly basis for Services rendered during the previous month. The Sheriff’s Office will submit the monthly billing to UTA within ten

1

Updated: January 11, 2024

(10) days after the end of each month during which any Services under this Agreement were provided. The billing shall cover all Services provided during the previous month. For all other services, County shall bill UTA quarterly or on an “as needed” basis.

2.6. UTA shall remit payment within twenty (20) days of the date of the bill to:

Sheriff’s Office: Salt Lake County Sheriff’s Office Fiscal
2001 South State Street, Suite S3-200
Salt Lake City, UT 84190

2.7. If the date a payment is due and payable is (i) a legal holiday, (ii) a Saturday, or (iii) a Sunday, then the payment shall be due and payable on the next day which is not one of the aforementioned days.

2.8. If any such payment is not remitted when due, County shall be entitled to recover interest thereon. Said interest shall be at the rate of one percent (1%) per calendar month and shall begin to accrue on the date remittance is due and payable.

3. EFFECTIVE DATE/TERM

3.1. This Agreement is effective upon the signature of the last Party to sign (as indicated by the date accompanying the authorized representative’s signature) (the “Effective Date”).

3.2. This Agreement will terminate on December 31, 2025 (“Term”), unless terminated sooner as provided in this Agreement or unless extended under Section 3.3.

3.3. This Agreement may be renewed for three (3) additional one (1) year periods under the same terms and conditions and will not extend beyond December 31, 2028. Extensions must be in writing and executed by both parties prior to the end of each Term.

4. AGENCY

No agent, employee, or servant of UTA or County is or shall be deemed to be an employee, agent, or servant of the other party. None of the benefits provided by each party to its employees including, but not limited to, workers’ compensation insurance, health insurance and unemployment insurance, are available to the employees, agents, or servants of the other party. UTA and County shall be entirely responsible for their acts and for the acts of their agents, employees, and servants during the performance of this Agreement.

5. NO THIRD-PARTY BENEFICIARIES

The Parties agree that this Agreement shall not confer any rights to third parties. The standards set forth in this Agreement shall not be construed to provide a cause of action to any citizen or third party based on the duties enumerated.

6. COUNTY REPRESENTATIVE

County will appoint a County Representative to assist in its administration of this Agreement and to coordinate performance of the services to be provided by UTA under this Agreement. The County Representative does not have authority to amend or alter this Agreement.

2

7. UTA REPRESENTATIVE

UTA shall designate an employee and make known to County the name and title of this employee within its organization who is authorized to act as UTA's representative in its performance of this Agreement. UTA Representative shall have the responsibility of working with County to coordinate the performance of its obligations under this Agreement.

8. STANDARD OF PERFORMANCE/PROFESSIONALISM

County agrees to perform its services under this Agreement with the highest level of professionalism observed by professionals in its industry.

9. INDEMNIFICATION

To the fullest extent allowable by law, UTA agrees to indemnify County, its officers, agents, and employees against any and all actual or threatened claims, losses, damages, injuries, and liabilities of, to, or by third parties, including UTA, its subcontractors, or the employees of either, including claims for personal injury, death, or damage to personal property or profits and liens of workmen and material men (suppliers), however allegedly caused, resulting directly or indirectly from, or arising out of, UTA's breach of this Agreement or any acts or omissions of or by UTA, its agents, representatives, officers, employees, or subcontractors in connection with the performance of this Agreement. UTA agrees that its duty to indemnify County under this agreement includes all litigation and court costs, expert witness fees, and any sums expended by or assessed against County for the defense of any claim or to satisfy any settlement, arbitration award or verdict paid or incurred by or on behalf of County.

10. GOVERNMENTAL IMMUNITY

County is a body corporate and politic of the State of Utah, subject to the Governmental Immunity Act of Utah (the "Act"), Utah Code §§ 63G-7-101 to -904. The Parties agree that County shall only be liable within the parameters of the Act. Nothing contained in this Agreement shall be construed to modify the limits of liability set forth in that Act or the basis for liability as established in the Act. Nothing in this Agreement or any act or forbearance in the course of performance shall be construed as a waiver of the Act.

11. CONFLICTS OF INTEREST

11.1. UTA, by signing this Agreement, represents that no County employee has or shall be given any pecuniary interest, direct or indirect, related to this Agreement and that none of UTA's owners, directors, officers, or employees serve on any Salt Lake County boards or committees or are County employees or relatives of a County employee. "County employee" includes any elected or appointed official of the County. A "relative" means parent, spouse, child, sibling, uncle, aunt, nephew, niece, first cousin, parent-in-law, child-in-law, sibling-in-law, or household member.

11.2. If any such potential conflict of interest exists, UTA shall immediately disclose to County the name of any individuals with a potential conflict of interest so County may review the potential conflict. This duty to disclose any potential conflicts shall continue throughout the Term of this Agreement and UTA shall advise County immediately if any potential conflict of interest is discovered or arises. UTA shall immediately remove the employee with the conflict from providing further services under the Agreement.

11.3. Any violation of this section may be deemed a material breach of the Agreement.

12. CAMPAIGN CONTRIBUTIONS

The Salt Lake County campaign finance disclosure ordinance limits campaign contributions by contractors to County candidates. Salt Lake County Code of Ordinances § 2.72A. UTA acknowledges and understands those limitations on campaign contributions mean that any person, business, corporation, or other entity that is engaged in any contract with County on the date of the contribution or has contracted with County at any time during a one-year period prior to the date of the contribution is prohibited from making campaign contributions in excess of \$100 to County candidates during the Term of the Agreement and during a single election cycle as defined in the ordinance.

13. EARLY TERMINATION

- 13.1. Termination for Breach. County may terminate this Agreement for breach by UTA, effective upon written notice to UTA stating County's intention to terminate this Agreement.
- 13.2. Force Majeure. Neither Party shall be liable or responsible to the other Party, nor be deemed to have defaulted under or breached this Agreement for any failure or delay in fulfilling or performing any Term of this Agreement when and to the extent such Party's (the "Impacted Party") failure or delay is caused by or results from the following unforeseen force majeure events ("Force Majeure Event(s)"): (a) acts of God; (b) flood, fire, earthquake, epidemics, pandemics (excepting COVID) or explosion; (c) war, invasion, hostilities (whether war is declared or not), terrorist threats or acts, riot or other civil unrest; (d) government order, law, or action; (e) embargoes or blockades in effect on or after the date of this Agreement; (f) national or regional emergency; (g) strikes, labor stoppages or slowdowns, or other industrial disturbances; and (h) other similar events beyond the reasonable control of the Impacted Party. The Impacted Party shall give notice within fifteen (15) days of the Force Majeure Event to the other Party, stating the period of time the occurrence is expected to continue. The Impacted Party shall use diligent efforts to end the failure or delay and ensure the effects of such Force Majeure Event are minimized. The Impacted Party shall resume the performance of its obligations as soon as reasonably practicable after the removal of the cause. In the event that the Impacted Party's failure or delay remains uncured for a period in excess of thirty (30) consecutive days following written notice given by it under this section, either Party may thereafter terminate this Agreement upon fifteen (15) days' written notice to the other party. Termination of the Agreement under this Force Majeure provision will be treated as a Termination for Convenience, consistent with Section 13.4, below.
- 13.3. Non-Funding Clause. The Parties acknowledge that funds are not presently available for the performance of this Agreement beyond the end of each Party's fiscal year. If funds are not available beyond the end of either Party's effective fiscal year during the Term of this Agreement, County's and UTA's obligations under this Agreement beyond that date shall be null and void. This Agreement shall create no obligation on County or UTA as to succeeding fiscal years and shall terminate and become null and void on the last day of the fiscal year for which funds were budgeted and appropriated, except as to those portions of payments agreed upon for which funds were appropriated and budgeted. Said termination shall not be construed as a breach of this Agreement or any event of default under this Agreement and said termination shall be without penalty, whatsoever, and no right of action for damages or other relief shall accrue to the benefit of either Party.

16. ENTIRE AGREEMENT

County and UTA agree that this Agreement constitutes the entire integrated understanding between County and UTA, and that there are no other terms, conditions, representations, or understanding, whether written or oral, concerning the rights and obligations of the Parties to this Agreement. This Agreement may not be enlarged, modified, or altered, except in writing, signed by the Parties. Only the Salt Lake County Mayor or designee by executive order (available on the County's website) can execute an amendment to this Agreement. The failure of County to insist, in any one or more instances, upon a strict performance of any term or provision of this Agreement shall not be construed as a waiver or relinquishment thereof, but the same shall continue and remain in full force and effect, unless expressly waived in a written and signed amendment.

17. GOVERNING LAW AND VENUE

This Agreement shall be governed by the laws of the State of Utah and the ordinances of Salt Lake County, both as to interpretation and performance, without regard to Utah's choice of law provisions. All actions, including but not limited to court proceedings, administrative proceedings, and mediation proceedings, shall be commenced, maintained, adjudicated, and resolved within the jurisdiction of the State of Utah, within Salt Lake City, in the Third Judicial District Court for Salt Lake County.

18. COUNTERPARTS

This Agreement may be executed in several counterparts.

19. SEVERABILITY

If any provision of this Agreement shall be invalid, prohibited or unenforceable under applicable law, such provision shall be ineffective to the extent of such invalidity or prohibition, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

20. ATTORNEY REPRESENTATION

UTA represents, acknowledges, and expressly agrees that UTA has either (i) consulted with an attorney regarding the terms of this Agreement and whether to enter into it and (ii) made an informed conscious decision to proceed without an attorney. UTA affirmatively represents to County that UTA understands all terms of the Agreement and that UTA signs the Agreement as UTA's own free act.

21. NOT TO EXCEED AMOUNT:

Payments by UTA under this agreement shall not exceed \$35,000.

IN WITNESS WHEREOF, the Parties execute this Agreement.

Salt Lake County

Signature:

Date: _____

Division Review

Signature:

Rosa Rivera
Digitally signed by Rosa Rivera
Date: 2024.09.12 16:36:52 -06'00'

Date: _____

Reviewed as to form and legality for Salt Lake County

Signature:

Jason S. Rose
Digitally signed by Jason S. Rose
Date: 2024.09.11 11:23:16 -06'00'

Date: _____

UTA

Signature:

Date: _____

2nd UTA Signature:

Date: _____

The individual signing above hereby represents and warrants that they are duly authorized to execute and deliver this Agreement on behalf of UTA by authority of law and that this Agreement is binding upon UTA. A person who makes a false representation of authority may be subject to criminal prosecution under Utah Code § 76-8-504.

UTA Legal Signature:

Michael L Bell
Digitally signed by Michael L Bell
Date: 2024.09.27 11:48:27 -06'00'

Date: _____



Utah Transit Authority

MEETING MEMO

669 West 200 South
Salt Lake City, UT 84101

Board of Trustees

Date: 10/9/2024

TO: Board of Trustees
THROUGH: Jay Fox, Executive Director
FROM: Patrick Preusser, Chief Operating Officer
PRESENTER(S): Jason Petersen, Captain

TITLE:

Contract: Police Vehicle Replacements (Young Chevrolet, Inc.)

AGENDA ITEM TYPE:

Procurement Contract/Change Order

RECOMMENDATION:

Approve and authorize the Executive Director to execute a contract and associated disbursements with Young Chevrolet under State Contract MA3799 to procure 17 new patrol vehicles at a cost of \$51,989 each for the total amount of \$883,813.00.

BACKGROUND:

The police department has a white fleet of 85 vehicles. Between 2017-2018 the PD added FTEs, but patrol vehicles were not budgeted at that time. This resulted in older vehicles (around 200k miles) being kept in service. This purchase of 17 vehicles will replace older vehicles that are past their useful life.. The vehicles will be upfitted through a separate contract #17308AB.

DISCUSSION:

UTA police vehicles are an integral part of the safety and security of the UTA system. They provide for quick officer response to lifesaving emergencies, criminal activity, accidents and other calls for service. This purchase of 17 Ford F-150 4x4 XLT SuperCrew vehicles will replace older vehicles that are past their useful life.

CONTRACT SUMMARY:

Contractor Name: Young Chevrolet, Inc.
Contract Number: PO-17307AB and State Contract MA3799

Base Contract Effective Dates:	10/09/2024
Extended Contract Dates:	N/A
Existing Contract Value:	N/A
Amendment Amount:	N/A
New/Total Contract Value:	\$883,813
Procurement Method:	State Contract
Budget Authority:	Approved 2024 Capital Budget

ALTERNATIVES:

Maintain older unreliable fleet vehicles with higher maintenance and fuel consumption costs. This could impact life safety situations where officers need to travel efficiently to an emergency.

FISCAL IMPACT:

The proposed purchase of \$883,813 will be funded by the approved 2024 Capital Budget, PO 17307 using project FMA543 - Police Vehicle Replacements approved budget. This project is being supplemented with grant funds, specifically Formula 5307 Grant Safety and Security Projects, Grant Number UT-2023-002-01.

Capital Project	FMA543	Total
2024 Approved Capital Budget		1,835,502
PO 17307 Vehicles (Young Chevrolet)	883,813	
PO 17308 Ancillaries: Lights, Radio, Sirens, etc.,	280,000	
Total POs	1,163,813	
Actual Project 2024 Expenses	596,344	
Total encumbrance		1,760,157
Net Project 2024 Availability		75,345

ATTACHMENTS:

UTA Purchase Order/Contract

State Contract Link:

https://utah-das-contract-searchsp.s3.amazonaws.com/full_contract_MA3799_YoungChevroletCompany.pdf

Young Chevrolet, Inc
PO BOX 684
Layton UT 84041



PURCHASE ORDER NUMBER OG		17307
PO Number Must Appear On All Invoices And Shipments		
VENDOR NUMBER	PO DATE	
1106390	7/8/2024	
ORDER TAKEN BY	FOB	
	Freight Pre-pay And Add	
BUYER	PAGE NUMBER	
Burton, Amanda	1 of 1	

Utah Transit Authority

An Equal Opportunity Employer

SEND INVOICE TO:	SHIP TO:
AP@RIDEUTA.COM	ATTENTION: RECEIVING
669 W 200 S	3600 S 700 W
SLC, UT 84101	Salt Lake City UT 84119

801-287-3008
www.rideuta.com

Confirmation: Do not Duplicate
Utah Transit Authority Is Tax Exempt Total PO Value: 883,813.00 Ship as soon as possible. Early Shipments Allowed

LINE #	REQ #	CONFIRMED DELIVERY DATE	QUANTITY	PART NUMBER ACCOUNT CODE	DESCRIPTION	UNIT PRICE	TOTAL PRICE
1	00013827	7/8/24	17 EA	40-1543.67000.7006	Police Fleet Vehicles	51989.0000	883,813.00

Per State Contract MA3799

DocuSigned by:

 70E33A415BA44F6...
 7/8/2024

Unless otherwise expressly agreed in a written document executed by Utah Transit Authority ("UTA"), this Purchase Order is subject to UTA's standard terms and conditions revision date: September 2020, effective as of the date of this Purchase Order. UTA's standard terms and conditions are found at https://rideuta.com/-/media/Files/Home/Terms_Conditions_UTAGeneralStandard7821.ashx. Vendor's acceptance of this Purchase Order is limited to the express terms of UTA's standard terms and conditions, without modification. Vendor's delivery of the Goods or commencement of performance of Services identified in this Purchase Order are effective modes of acceptance. Any proposal for additional or different terms or any attempt by Vendor to vary in any degree any of the terms of the Contract, are hereby objected to and rejected (and this Purchase Order shall be deemed accepted by Vendor without the additional or different terms).

If this Purchase order is purchased using a State Contract, then terms and conditions are pursuant to that State Contract.



Utah Transit Authority

MEETING MEMO

669 West 200 South
Salt Lake City, UT 84101

Board of Trustees

Date: 10/9/2024

TO: Board of Trustees
THROUGH: Jay Fox, Executive Director
FROM: Patrick Preusser, Chief Operating Officer
PRESENTER(S): Jason Petersen, Captain

TITLE:

Contract: Police Vehicle Upfitting (Vehicle Lighting Solutions)

AGENDA ITEM TYPE:

Procurement Contract/Change Order

RECOMMENDATION:

Approve purchase and authorize the Executive Director to execute the contract and associated disbursements with Vehicle Lighting Solutions for police vehicle upfittings in the amount of \$280,000.

BACKGROUND:

The police department has a white fleet of 85 vehicles. Between 2017-2018 the PD added FTEs, but patrol vehicles were not budgeted at that time. This resulted in vehicles beyond their useful life (around 200k miles) being kept in service. A separate board item was submitted for the purchase of 17 vehicles. This procurement is for the upfitting of those vehicles with specialized emergency equipment (lighting, sirens, radios, spotlights, secure storage, etc.) for use by the UTA police department. The vehicle purchase is a separate contract #17307AB.

DISCUSSION:

UTA Police vehicles are an integral part of the safety and security of the UTA system. These upfittings are necessary for police response to lifesaving emergencies, criminal activity, accidents and other calls for service.

CONTRACT SUMMARY:

Contractor Name: Vehicle Lighting Solutions
Contract Number: PO-17308AB

Base Contract Effective Dates: 10/09/2024
Extended Contract Dates: N/A
Existing Contract Value: N/A
Amendment Amount: N/A
New/Total Contract Value: \$280,000
Procurement Method: State Contract Purchase
Budget Authority: Approved 2024 Capital Budget

ALTERNATIVES:

Maintain older fleet vehicles with higher maintenance and fuel consumption costs.

FISCAL IMPACT:

The proposed purchase of \$280,000 will be funded by the approved 2024 Capital Budget. Funding source is Formula Grant 5307 Safety and Security Projects, grant number UT-2023-002-01

Capital Project	FMA543	Total
2024 Approved Capital Budget		1,835,502
PO 17307 Vehicles (Young Chevrolet)	883,813	
PO 17308 Ancillaries: Lights, Radio, Sirens, etc.,	280,000	
Total POs	1,163,813	
Actual Project 2024 Expenses	596,344	
Total Encumbrance		1,760,157
Net Project 2024 Availability		75,345

ATTACHMENTS:

UTA Purchase Order/Contract

State Contract Link:

[≤https://utah-das-contract-searchsp.s3.amazonaws.com/full_contract_MA4052_VehicleLightingSolutions.pdf≥](https://utah-das-contract-searchsp.s3.amazonaws.com/full_contract_MA4052_VehicleLightingSolutions.pdf)

VEHICLE LIGHTING SOLUTIONS INC.
668 W 9320 S Ste B
Sandy UT 84070



Utah Transit Authority

An Equal Opportunity Employer

PURCHASE ORDER NUMBER		OG	17308
PO Number Must Appear On All Invoices And Shipments			
VENDOR NUMBER		PO DATE	
1205545		7/8/2024	
ORDER TAKEN BY		FOB	
		*	
BUYER		PAGE NUMBER	
Burton, Amanda		1 of 1	

SEND INVOICE TO:	SHIP TO:
AP@RIDEUTA.COM	ATTENTION: RECEIVING
669 W 200 S	3600 S 700 W
SLC, UT 84101	Salt Lake City UT 84119

Confirmation: Do not Duplicate
Utah Transit Authority Is Tax Exempt Total PO Value: 280,000.00 Ship as soon as possible. Early Shipments Allowed

LINE #	REQ #	CONFIRMED DELIVERY DATE	QUANTITY	PART NUMBER ACCOUNT CODE	DESCRIPTION	UNIT PRICE	TOTAL PRICE
1	00013827	7/8/24	EA	40-1543.67000.7006	Police Truck Upfitting 24 Truck replacement Police	.0000	280,000.00

Per State Contract MA4052

DocuSigned by:

 70E33A415BA44F6...

9/11/2024

Unless otherwise expressly agreed in a written document executed by Utah Transit Authority ("UTA"), this Purchase Order is subject to UTA's standard terms and conditions revision date: September 2020, effective as of the date of this Purchase Order. UTA's standard terms and conditions are found at https://rideuta.com/-/media/Files/Home/Terms_Conditions_UTAGeneralStandard7821.ashx. Vendor's acceptance of this Purchase Order is limited to the express terms of UTA's standard terms and conditions, without modification. Vendor's delivery of the Goods or commencement of performance of Services identified in this Purchase Order are effective modes of acceptance. Any proposal for additional or different terms or any attempt by Vendor to vary in any degree any of the terms of the Contract, are hereby objected to and rejected (and this Purchase Order shall be deemed accepted by Vendor without the additional or different terms).

If this Purchase order is purchased using a State Contract, then terms and conditions are pursuant to that State Contract.



Utah Transit Authority

MEETING MEMO

669 West 200 South
Salt Lake City, UT 84101

Board of Trustees

Date: 10/9/2024

TO: Board of Trustees
THROUGH: Jay Fox, Executive Director
FROM: David Hancock, Chief Capital Service Officer
PRESENTER(S): Grey Turner, Manager of Civil Engineering & Design

TITLE:

Contract: Lehi Pedestrian Bridge and Mainline Path Repairs (Granite Construction Company)

AGENDA ITEM TYPE:

Procurement Contract/Change Order

RECOMMENDATION:

Authorize the Executive Director to execute sole-source contract no. 24-03882, and associated disbursements, with Granite Construction Company in the amount of \$799,273 to repair the damaged section of the Lehi Pedestrian Bridge and Mainline Path.

BACKGROUND:

Over the last several years, UTA has been engaged in the TIGER Program of projects to construct first and last mile improvements across the UTA service area.

The Lehi Pedestrian Bridge project was part of the TIGER Program and was completed in March 2022. At this time, Lehi City received the bill-of-sale from UTA to own, operate, and maintain the bridge and associated trail leading to the bridge. Part of this agreement included a 1-year warranty on the constructed improvements. In January 2023, the Lehi area received a significant amount of rain over several days and overwhelmed the drainage system associated with the bridge. As a result, some of the supporting approach fill was eroded away and created void areas under the south approach slab. In addition, the western portion of the pavement and embankment fill settled approximately 18 inches, creating a safety hazard to the bicyclists and pedestrians using the trail. These hazards were fixed temporarily to eliminate the immediate safety risk, however, there needs to be a permanent fix to this damaged part of the trail and bridge embankment.

DISCUSSION:

UTA Staff is requesting approval of sole-source contract #24-03882 with Granite Construction to complete the repairs needed to the Lehi Pedestrian Bridge project in the amount of \$799,273. The scope of this request includes all time, labor, materials, and other items needed to repair the existing embankment and asphalt path. These permanent repairs to the damaged bridge embankment and path will ensure the safety of the pedestrians using the bridge and fulfill UTA's obligation to Lehi City and the US Department of Transportation. The contract pricing has been determined to be fair and reasonable based on an independent cost estimate and schedule analysis.

CONTRACT SUMMARY:

Contractor Name:	Granite Construction Company
Contract Number:	24-03882
Base Contract Effective Dates:	Oct 09, 2024 to Jan 31, 2025
Extended Contract Dates:	N/A
Existing Contract Value:	N/A
Amendment Amount:	N/A
New/Total Contract Value:	\$799,273
Procurement Method:	Sole Source
Budget Authority:	Approved 2024 Capital Budget

ALTERNATIVES:

If the repairs to the Lehi Pedestrian Bridge are not made, there could be significant safety concerns for the pedestrians using the bridge/trail. This, in turn, could create liability issues for UTA.

UTA could advertise these repairs as a separate construction contract. However, this would add additional cost and time to the project. Granite Construction is already under contract with UTA and is familiar with the construction means and methods that were used in the original project.

FISCAL IMPACT:

The 2024 approved Capital budget includes funding to make repairs to the Lehi Ped Bridge. The total Lehi Pedestrian Bridge's Mainline Path repairs is estimated to be \$799,273. All funds will come from the approved 2024 Capital budget.

- 2024 Budgeted Total: \$800,000
 - MSP205 Tiger Project 2024 Capital Budget \$2,024,000
-

ATTACHMENTS:

Contract

CONSTRUCTION SERVICES AGREEMENT

24-03882VW

Construction services to repair/construct the south bridge abutment and adjoining trail on the Lehi Pedestrian Bridge due to a meteorological event.

This Construction Services Agreement is entered into and made effective as of the date of last signature below (the “Effective Date”) by and between UTAH TRANSIT AUTHORITY, a public transit district organized under the laws of the State of Utah (“UTA”), and Granite Construction Company (“Contractor”).

RECITALS

- A. UTA desires to hire Construction services to repair/construct the south bridge abutment and adjoining trail on the Lehi Pedestrian Bridge due to a meteorological event per the Specifications per Sole Source documents.
- B. On August 23, 2024, UTA issued a Sole Source Intent to Award to Granite Construction Company without Competition Notice on SciQuest.com.
- C. Contractor is qualified and willing to perform the Work as set forth in the Scope of Services.

AGREEMENT

NOW, THEREFORE, in accordance with the foregoing Recitals, which are incorporated herein by reference, and for and in consideration of the mutual covenants and agreements hereafter set forth, the mutual benefits to the parties to be derived herefrom, and for other valuable consideration, the receipt and sufficiency of which the parties acknowledge, it is hereby agreed as follows:

1. SERVICES TO BE PROVIDED

- a. Contractor shall perform all Work as set forth in the Scope of Services (Exhibit A). Except for items (if any) which this Contract specifically states will be UTA-provided, Contractor shall furnish all the labor, material and incidentals necessary for the Work.
- b. Contractor shall perform all Work under this Contract in a professional manner, using at least that standard of care, skill and judgment which can reasonably be expected from similarly situated professionals.
- c. All Work shall conform to generally accepted standards in the transit industry. Contractor shall perform all Work in compliance with applicable laws, regulations, rules, ordinances, permit constraints and other legal requirements including, without limitation, those related to safety

and environmental protection.

- d. Contractor shall furnish only qualified personnel and materials necessary for the performance of the Work.
- e. When performing Work on UTA property, Contractor shall comply with all UTA work site rules including, without limitation, those related to safety and environmental protection.

2. MANAGEMENT OF WORK

- a. Contractor's Project Manager will be the day-to-day contact person for Contractor and will be responsible for all Work, as well as the coordination of such Work with UTA.
- b. UTA's Project Manager will be the day-to-day contact person for UTA, and shall act as the liaison between UTA and Contractor with respect to the Work. UTA's Project Manager shall also coordinate any design reviews, approvals or other direction required from UTA with respect to the Work.

3. PROGRESS OF WORK

- a. Contractor shall prosecute the Work in a diligent and continuous manner and in accordance with all applicable notice to proceed, critical path schedule and guaranteed completion date requirements set forth in (or developed and agreed by the parties in accordance with) the Scope of Services.
- b. Contractor shall conduct regular meetings to update UTA's Project Manager regarding the progress of the Work including, but not limited to, any unusual conditions or critical path schedule items that could affect or delay the Work. Such meetings shall be held at intervals mutually agreed to between the parties.
- c. Contractor shall deliver monthly progress reports and provide all Contract submittals and other deliverables as specified in the Scope of Services.
- d. Any drawing or other submittal reviews to be performed by UTA in accordance with the Scope of Services are for the sole benefit of UTA, and shall not relieve Contractor of its responsibility to comply with the Contract requirements.
- e. UTA will have the right to inspect, monitor and review any Work performed by Contractor hereunder as deemed necessary by UTA to verify that such Work conforms to the Contract requirements. Any such inspection, monitoring and review performed by UTA is for the sole benefit of UTA, and shall not relieve Contractor of its responsibility to comply with the Contract requirements.
- f. UTA shall have the right to reject Work which fails to conform to the requirements of this Contract. Upon receipt of notice of rejection from UTA, Contractor shall (at its sole expense and without entitlement to equitable schedule relief) promptly re-perform, replace or re-execute the Work so as to conform to the Contract requirements.
- g. If Contractor fails to promptly remedy rejected Work as provided in Section 3.6, UTA may (without limiting or waiving any rights or remedies it may have) perform necessary corrective action using other contractors or UTA's own forces. Any costs reasonably incurred by UTA in such corrective action shall be chargeable to Contractor.

4. PERIOD OF PERFORMANCE

This Contract shall commence as of the Effective Date. This Contract shall remain in full force and effect until all Work is completed in accordance with this Contract, as reasonably determined by UTA. Contractor shall complete all Work no later than January 31, 2025. This guaranteed completion date may be extended if Contractor and UTA mutually agree to an extension evidenced by a written Change Order. The rights and obligations of UTA and Contractor under this Contract shall at all times be subject to and conditioned upon the provisions of this Contract.

5. COMPENSATION

- a. For the performance of the Work, UTA shall pay Contractor in accordance with the payments provisions described in Exhibit B. Payments shall be made in accordance with the milestones, progress billing, monthly billing, or other payment provisions detailed in Exhibit B. If Exhibit B does not specify any milestones or other payment provisions, then payment shall be made upon completion of all Work and final acceptance thereof by UTA.
- b. To the extent that Exhibit B or another provision of this Contract calls for any portion of the consideration to be paid on a cost-reimbursement basis, such costs shall only be reimbursable to the extent allowed under 2 CFR Part 200 Subpart E. Compliance with federal cost principles shall apply regardless of funding source for this Contract.
- c. To the extent that Exhibit B or another provision of this Contract calls for any portion of the consideration to be paid on a time and materials or labor hour basis, then Contractor must refer to the not-to-exceed amount, maximum Contract amount, Contract budget amount or similar designation (any of these generically referred to as the “Not to Exceed Amount”) specified in Exhibit B (as applicable). Unless and until UTA has notified Contractor by written instrument designated or indicated to be a Change Order that the Not to Exceed Amount has been increased (which notice shall specify a revised Not to Exceed Amount): (i) Contractor shall not be obligated to perform services or incur costs which would cause its total compensation under this Contract to exceed the Not to Exceed Amount; and (ii) UTA shall not be obligated to make payments which would cause the total compensation paid to Contractor to exceed the Not to Exceed Amount.
- d. UTA may withhold and/or offset from payment any amounts reasonably reflecting: (i) items of Work that have been rejected by UTA in accordance with this Contract; (ii) invoiced items that are not payable under this Contract; or (iii) amounts Contractor owes to UTA under this Contract.

6. INCORPORATED DOCUMENTS

- a. The following documents hereinafter listed in chronological order, with most recent document taking precedence over any conflicting provisions contained in prior documents (where applicable), are hereby incorporated into the Contract by reference and made a part hereof:
 - 1. The terms and conditions of this Construction Services Agreement
 - 2. The Addendum 1 Supplemental Terms and Conditions for Construction Services.

- (including any exhibits and attachments hereto).
3. Contractor's Proposal including, without limitation, all federal certifications (as applicable);
 4. UTA's IFB including, without limitation, all attached or incorporated terms, conditions, federal clauses (as applicable), drawings, plans, specifications and standards and other descriptions of the Construction Services;

b. The above-referenced documents are made as fully a part of the Contract as if hereto

7. ORDER OF PRECEDENCE

The Order of Precedence for this contract is as follows:

1. UTA Contract including all terms and conditions, exhibits, and attachments
2. Addendum 1 Supplemental Terms and Conditions for Construction Services
3. UTA Solicitation Terms
4. Contractor's Bid or Proposal including proposed terms or conditions

Any contractor proposed term or condition which is in conflict with a UTA contract or solicitation term or condition will be deemed null and void.

8. INVOICING PROCEDURES

- a. Contractor shall invoice UTA after achievement of contractual milestones or delivery of all Goods and satisfactory performance of all Services or in accordance with an approved progress or periodic billing schedule. Contractor shall submit invoices to Project Manager Grey Turner at gturner@rideuta.com for processing and payment. In order to timely process invoices, Contractor shall include the following information on each invoice:
 - i. Contractor Name
 - ii. Unique Invoice Number
 - iii. PO Number
 - iv. Invoice Date
 - v. Detailed Description of Charges
 - vi. Total Dollar Amount Due
- b. UTA shall have the right to disapprove (and withhold from payment) specific line items of each invoice to address non-conforming Software or Services. Approval by UTA shall not be unreasonably withheld. UTA shall also have the right to offset (against payments) amounts reasonably reflecting the value of any claim which UTA has against Contractor under the Contract. Payment for all invoice amounts not specifically disapproved or offset by UTA shall be provided to Contractor within thirty (30) calendar days of invoice submittal to Project Manager Grey Turner at gturner@rideuta.com. Invoices not submitted electronically will shall be paid thirty (30) calendar days from date of receipt by UTA's accounting department.

- c. Invoices must include a unique invoice number, UTA's Purchase Order number, a description of the Good or Service provided, line-item pricing, total amount due, and must be submitted electronically to Project Manager Grey Turner at gturner@rideuta.com.

9. OWNERSHIP OF DESIGNS, DRAWINGS, AND WORK PRODUCT

Any deliverables prepared or developed pursuant to the Contract including without limitation drawings, specifications, manuals, calculations, maps, sketches, designs, tracings, notes, reports, data, computer programs, models and samples, shall become the property of UTA when prepared, and, together with any documents or information furnished to Contractor and its employees or agents by UTA hereunder, shall be delivered to UTA upon request, and, in any event, upon termination or final acceptance of the Goods and Services. UTA shall have full rights and privileges to use and reproduce said items. To the extent that any deliverables include or incorporate preexisting intellectual property of Contractor, Contractor hereby grants UTA a fully paid, perpetual license to use such intellectual property for UTA's operation, maintenance, modification, improvement and replacement of UTA's assets. The scope of the license shall be to the fullest extent necessary to accomplish those purposes, including the right to share same with UTA's contractors, agent, officers, directors, employees, joint owners, affiliates and Contractors.

10. USE OF SUBCONTRACTORS

- a. Contractor shall give advance written notification to UTA of any proposed subcontract (not indicated in Contractor's Proposal) negotiated with respect to the Work. UTA shall have the right to approve all subcontractors, such approval not to be withheld unreasonably.
- b. No subsequent change, removal or substitution shall be made with respect to any such subcontractor without the prior written approval of UTA.
- c. Contractor shall be solely responsible for making payments to subcontractors, and such payments shall be made within thirty (30) days after Contractor receives corresponding payments from UTA.
- d. Contractor shall be responsible for and direct all Work performed by subcontractors.
- e. Contractor agrees that no subcontracts shall provide for payment on a cost-plus-percentage-of-cost basis. Contractor further agrees that all subcontracts shall comply with all applicable laws.

11. KEY PERSONNEL

Contractor shall provide the key personnel as indicated in Contractor's Proposal (or other applicable provisions of this Contract), and shall not change any of said key personnel without the express written consent of UTA.

12. INFORMATION, RECORDS and REPORTS; AUDIT RIGHTS

Contractor shall retain all books, papers, documents, accounting records and other evidence to support any cost-based billings allowable under Exhibit B (or any other provision of this Contract). Such records shall include, without limitation, time sheets and other cost documentation related to the performance of labor services, as well as subcontracts, purchase orders, other contract documents, invoices, receipts or other documentation supporting non-labor costs. Contractor shall also retain other books and records related to the performance, quality or management of this Contract and/or Contractor's compliance with

this Contract. Records shall be retained by Contractor for a period of at least six (6) years after completion of the Work, or until any audit initiated within that six-year period has been completed (whichever is later). During this six-year period, such records shall be made available at all reasonable times for audit and inspection by UTA and other authorized auditing parties including, but not limited to, the Federal Transit Administration. Copies of requested records shall be furnished to UTA or designated audit parties upon request. Contractor agrees that it shall flow-down (as a matter of written contract) these records requirements to all subcontractors utilized in the performance of the Work at any tier.

13. FINDINGS CONFIDENTIAL

Any documents, reports, information, or other data and materials delivered or made available to or prepared or assembled by Contractor or subcontractor under this Contract are considered confidential and shall not be made available to any person, organization,

or entity by Contractor without consent in writing from UTA. If confidential information is released to any third party without UTA’s written consent as described above, contractor shall notify UTA of the data breach within 10 days and provide its plan for immediate

mitigation of the breach for review and approval by UTA.

- a. It is hereby agreed that the following information is not considered to be confidential:
 - 1. Information already in the public domain.
 - 2. Information disclosed to Contractor by a third party who is not under a confidentiality obligation.
 - 3. Information developed by or in the custody of Contractor before entering into this Contract.
 - 4. Information developed by Contractor through its work with other clients; and
 - 5. Information required to be disclosed by law or regulation including, but not limited to, subpoena, court order or administrative order.

14. PUBLIC INFORMATION.

Contractor acknowledges that the Contract and related materials (invoices, orders, etc.) will be public documents under the Utah Government Records Access and Management Act (GRAMA). Contractor’s response to the solicitation for the Contract will also be a public document subject to GRAMA, except for legitimate trade secrets, so long as such trade secrets were properly designated in accordance with terms of the solicitation.

15. GENERAL INDEMNIFICATION – see Article 6 of Special Provisions

16. INSURANCE REQUIREMENTS – see Article 7 of Special Provisions

17. OTHER INDEMNITIES -see Article 6 of Special Provisions

18. INDEPENDENT CONTRACTOR

Contractor is an independent contractor and agrees that its personnel will not represent themselves as, nor claim to be, an officer or employee of UTA by reason of this Contract. Contractor is responsible to provide and pay the cost of all its employees' benefits.

19. PROHIBITED INTEREST

No member, officer, agent, or employee of UTA during his or her tenure or for one year thereafter shall have any interest, direct or indirect, including prospective employment by Contractor in this Contract or the proceeds thereof without specific written authorization by UTA.

20. CLAIMS/DISPUTE RESOLUTION - see Article 11 of Special Provisions

21. GOVERNING LAW

This Contract shall be interpreted in accordance with the substantive and procedural laws of the State of Utah. Any litigation between the parties arising out of or relating to this Contract will be conducted exclusively in federal or state courts in the State of Utah and Contractor consents to the jurisdiction of such courts.

22. ASSIGNMENT OF CONTRACT

Contractor shall not assign, sublet, sell, transfer, or otherwise dispose of any interest in this Contract without prior written approval of UTA, and any attempted transfer in violation of this restriction shall be void.

23. NONWAIVER

No failure or waiver or successive failures or waivers on the part of either party in the enforcement of any condition, covenant, or article of this Contract shall operate as a discharge of any such condition, covenant, or article nor render the same invalid, nor impair the right of either party to enforce the same in the event of any subsequent breaches by the other party.

24. NOTICES OR DEMANDS

Any formal notice or demand to be given by one party to the other shall be given in writing by one of the following methods: (i) hand delivered; (ii) deposited in the mail, properly stamped with the required postage; (iii) sent via registered or certified mail; or (iv) sent via recognized overnight courier service. All such notices shall be addressed as follows:

If to UTA:
Utah Transit Authority
ATTN: Vicki Woodward
669 West 200 South
Salt Lake City, UT 84101

With a required copy to:
Utah Transit Authority
ATTN: Legal Counsel
699 West 200 South
Salt Lake City, UT 84101

If to Contractor:

Granite Construction
1000 North Warm Springs Road
Salt Lake City Utah, 84116

- a. Any such notice shall be deemed to have been given, and shall be effective, on delivery to the notice address then applicable for the party to which the notice is directed; provided, however, that refusal to accept delivery of a notice or the inability to deliver a notice because of an address change which was not properly communicated shall not defeat or delay the giving of a notice. Either party may change the address at which such party desires to receive written notice by providing written notice of such change to any other party.
- b. Notwithstanding the above, the parties may, through mutual agreement, develop alternative communication protocols to address change notices, requests for information and similar categories of communications. Communications provided pursuant to such agreed means shall be recognized as valid notices under this Contract.

25. CONTRACT ADMINISTRATOR

UTA's Contract Administrator for this Contract is Vicki Woodward, or designee. All questions and correspondence relating to the contractual aspects of this Contract should be directed to said Contract Administrator, or designee.

26. INSURANCE COVERAGE REQUIREMENTS FOR CONTRACTOR EMPLOYEES – see Article 8 of Special Provision

27. COSTS AND ATTORNEYS FEES

If any party to this Agreement brings an action to enforce or defend its rights or obligations hereunder, the prevailing party shall be entitled to recover its costs and expenses, including mediation, arbitration, litigation, court costs and attorneys' fees, if any, incurred in connection with such suit, including on appeal

28. NO THIRD-PARTY BENEFICIARY

The parties enter into this Contract for the sole benefit of the parties, in exclusion of any third-party, and no third-party beneficiary is intended or created by the execution of this Contract.

29. FORCE MAJEURE

Neither party to the Contract will be held responsible for delay or default caused by fire, riot, acts of God and/or war which are beyond that party's reasonable control. UTA may terminate the Contract after determining such delay or default will reasonably prevent successful performance of the Contract.

30. SEVERABILITY

Any provision of this Contract prohibited or rendered unenforceable by operation of law shall be ineffective only to the extent of such prohibition or unenforceability without invalidating the remaining

provisions of this Contract.

31. UTAH ANTI-BOYCOTT OF ISRAEL ACT

Contractor agrees it will not engage in a boycott of the State of Israel for the duration of this contract.

32. ENTIRE AGREEMENT

This Contract shall constitute the entire agreement and understanding of the parties with respect to the subject matter hereof, and shall supersede all offers, negotiations and other agreements with respect thereto. The terms of the Contract supersede any additional or conflicting terms or provisions that may be preprinted on Vendor’s work plans, cost estimate forms, receiving tickets, invoices, or any other related standard forms or documents of Vendor that may subsequently be used to implement, record, or invoice Goods and/or Services hereunder from time to time, even if such standard forms or documents have been signed or initialed by a representative of UTA. The terms of the Contract prevail in any dispute between the terms of the Contract and the terms printed on any such standard forms or documents, and such standard forms or documents will not be considered written amendments of the Contract.

33. AMENDMENTS

Any amendment to this Contract must be in writing and executed by the authorized representatives of each party.

34. COUNTERPARTS

This Contract may be executed in any number of counterparts and by each of the parties hereto on separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute but one and the same instrument. Any signature page of the Contract may be detached from any counterpart and reattached to any other counterpart hereof. The electronic transmission of a signed original of the Contract or any counterpart hereof and the electronic retransmission of any signed copy hereof shall be the same as delivery of an original.

35. SURVIVAL

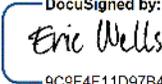
Provisions of this Contract intended by their nature and content to survive termination of this Contract shall so survive including, but not limited to, Articles 5, 7, 8, 10, 14, 15, 17, 18, 19, 20, 23, 29 and 30.

**UTAH TRANSIT AUTHORITY:
COMPANY:**

By:
Jay Fox
Executive Director

Date:

GRANITE CONSTRUCTION

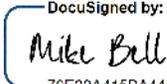
By: 
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Fed ID# 94-0519552

Date: 9/13/2024

By:
David Hancock
Chief Service Development Officer

Date:

Approved as to Content and Form

By: 
70E33A415BA44F6...
Mike Bell, AAG State of Utah
And UTA Legal Counsel

Date: 9/13/2024

Reviewed and Recommended

Grey Turner,
UTA Project Manager

Date:

Design and/or Construction Special Provisions

(To be used for RFPs and Contracts)

ARTICLE 1

General

- 1.1 **Cooperation.** UTA and Contractor commit at all times to cooperate fully with each other, and proceed on the basis of trust and good faith, so as to permit each party to realize the benefits afforded under the Contract Documents.
- 1.2 **Professional Standards.** Contractor shall perform the Work in a good and workmanlike manner, and shall use reasonable skill, care, and diligence. If the Work includes professional services, Contractor shall perform those services in a professional manner, using at least that standard of care, skill and judgment that can reasonably be expected from similarly situated professionals.
- 1.3 **Definitions.** Terms that are defined in the Agreement have the same definition in all the Contract Documents, including in these General Conditions. Unless expressly modified by the Agreement, the following definitions shall also apply to all Contract Documents:

“Agreement” means the document signed by Contractor and UTA to which these General Conditions are attached as an exhibit or into which these General Conditions are incorporated by reference.

“Application for Payment” shall mean an invoice for a progress or final payment made in accordance with the requirements of Article 4.

“Basis of Design Documents” means those preliminary drawings, concept design drawings, technical requirements, performance requirements, project criteria, or other documents that are (i) included in the Contract Documents, and (ii) serve as the basis or starting point for design services to be performed by Contractor, if any.

“Claim” has the meaning indicated in Section 8.1 of these General Conditions.

“Construction Documents” means the final drawings and specifications that set forth in detail the requirements for construction of the Project.

“Contract Documents” means those documents designated as Contract Documents in the Agreement.

“Contract Times” means the guaranteed dates for Substantial Completion, Final Completion (if applicable), and any other deadlines for completion of the Work, or a part thereof, all as set forth in the Agreement.

“Contractor” means the entity that has entered into a contract with UTA to perform construction and other services as detailed in the Contract Documents. The Contractor may be a Design-BUILDER, general contractor, Construction Manager/General Contractor, or other type of entity.

“Day” means a calendar day unless otherwise specifically noted in the Contract Documents.

“Differing Site Condition” has the meaning indicated in Section 3.2 of these General Conditions.

“Final Completion” has the meaning indicated in Section 4.7 of these General Conditions.

“Force Majeure Event” means a delay caused by any national or general strikes, fires, riots, acts of God, acts of the public enemy, floods, acts of terrorism, unavoidable transportation accidents or embargoes, or other events: (i) which are not reasonably foreseeable as of the date the Agreement was executed; (ii) which are attributable to a cause beyond the control and without the fault or negligence of the party incurring such delay; and (iii) the effects of which cannot be avoided or mitigated by the party claiming such Force Majeure Event through the use of commercially reasonable efforts. The term Force Majeure Event does not include a delay caused by seasonal weather conditions, inadequate construction forces, general economic conditions, changes in the costs of goods, or Contractor’s failure to place orders for equipment, materials, construction equipment or other items sufficiently in advance to ensure that the Work is completed in accordance with the Contract Documents.

“General Conditions” means this document.

“Legal Requirements” means all applicable federal, state, and local laws, codes, ordinances, rules, regulations, orders and decrees of any government or quasi-government entity having jurisdiction over the Project or Site, the practices involved in the Project or Site, or any Work including, without limitation, those related to safety and environmental protection. The terms Legal Requirements shall also include any requirements or conditions included in a permit required for, or issued in conjunction with, the Project.

“Potential Change Notice” has the meaning indicated in Section 7.3 of these General Conditions.

“Project” means the construction project described in the Agreement.

“Punchlist” means shall mean a schedule of Work items (developed in accordance with the procedures described in Article 4) which remain to be completed prior to Final Completion, but which do not adversely affect the performance, operability, capacity, efficiency, reliability, cost effectiveness, safety or use of the Project after Substantial Completion.

“Schedule of Values” means the detailed statement furnished by Contractor and approved by UTA in accordance with Section 4.1, which statement outlines the various components of the Contract Price and allocates values for all such components in a manner that can be used for preparing and reviewing invoices.

“Site” means the land or premises on which the Project is located, as more particularly defined and described in the Contract Documents.

“Subcontractor” means any person or entity (including subcontractors at any tier, design engineers, laborers and materials suppliers) retained by Contractor or any other Subcontractor to perform a portion of Contractor’s obligations under the Contract Documents.

“Substantial Completion” or “Substantially Complete” has the meaning indicated in Section 4.6 of these General Conditions.

“Work” means all obligations, duties, requirements, and responsibilities for the successful completion of the Project by Contractor, including furnishing of all services and/or equipment

(including obtaining all applicable licenses and permits to be acquired by Contractor) in accordance with the Contract Documents.

ARTICLE 2

Contractor's Services

2.1 General Services.

2.1.1 Contractor's Project Manager shall be reasonably available to UTA and shall have the necessary expertise and experience required to supervise the Work. Contractor's Project Manager shall communicate regularly with UTA and shall be vested with the authority to act on behalf of Contractor.

2.1.2 Contractor shall provide UTA with a monthly status report detailing the progress of the Work, including: (i) whether the Work is proceeding according to schedule; (ii) whether discrepancies, conflicts, or ambiguities exist in the Contract Documents that require resolution; (iii) whether unusual health and safety issues exist in connection with the Work; and (iv) other items that require resolution so as not to jeopardize Contractor's ability to complete the Work for the Contract Price and within the Contract Time(s).

2.1.3 Unless a schedule for the execution of the Work has been attached to the Agreement as an exhibit at the time the Agreement is executed, Contractor shall prepare and submit, within seven (7) Days of the execution of the Agreement, a schedule for the execution of the Work for UTA's review and response. The schedule must indicate the dates for the start and completion of the various stages of Work, including the required dates when UTA obligations must be completed to enable Contractor to achieve the Contract Time(s). Such UTA obligation dates may include (where contemplated in the Contract Documents): (i) Site availability requirements; and/or (ii) dates when UTA information or approvals are required. The schedule shall be revised as required by conditions and progress of the Work, but such revisions shall not relieve Contractor of its obligations to complete the Work within the Contract Time(s), as such dates may be adjusted in accordance with the Contract Documents. UTA's review of, and response to, the schedule shall not be construed as relieving Contractor of its complete and exclusive control over the means, methods, sequences and techniques for executing the Work.

2.2 Design Services. If the Work includes any design services, provisions 2.2.1 through 2.2.8 apply.

2.2.1 Contractor shall provide the necessary design services, including architectural, engineering and other design professional services, for the preparation of the required drawings, specifications and other design submittals to permit Contractor to complete the Work consistent with the Contract Documents. Contractor shall ensure that design services are performed by qualified, licensed design professionals employed by Contractor, or by qualified, independent licensed design contractors procured by Contractor.

2.2.2 Contractor and UTA shall, consistent with any applicable provision of the Contract Documents, agree upon any interim design submissions that UTA may wish to review, which interim design submissions may include design criteria, drawings, diagrams, and

specifications setting forth the Project requirements. Interim design submissions must be consistent with the Basis of Design Documents, as the Basis of Design Documents may have been changed through the design process set forth in this Section 2.2.2. On or about the time of the scheduled submissions, Contractor and UTA shall meet and confer about the submissions, with Contractor identifying during such meetings, among other things, the evolution of the design and any changes to the Basis of Design Documents, or, if applicable, previously submitted design submissions. Changes to the Basis of Design Documents shall be processed in accordance with Article 7. Minutes of the meetings, including a full listing of all changes, will be maintained by Contractor and provided to all attendees for review. Following the design review meeting, UTA will be entitled to at least ten (10) Days to review and approve the interim design submissions and meeting minutes.

- 2.2.3 To the extent not prohibited by the Contract Documents or Legal Requirements, and with the approval of UTA, Contractor may prepare interim design submissions and Construction Documents for a portion of the Work to permit construction to proceed on that portion of the Work prior to completion of the Construction Documents for the entire Work.
- 2.2.4 Contractor shall submit proposed Construction Documents to UTA, which must be consistent with the latest set of interim design submissions, as such submissions may have been modified in a design review meeting and recorded in the meeting minutes. The parties shall have a design review meeting to discuss, and UTA shall review and approve, the Construction Documents in accordance with the procedures set forth in Section 2.2.2 above. Contractor shall submit one set of approved Construction Documents to UTA prior to commencement of construction
- 2.2.5 UTA's review and approval of interim design submissions, meeting minutes, and Construction Documents is for the purpose of mutually establishing a conformed set of Contract Documents compatible with the requirements of the Work. Neither UTA's review nor approval of any interim design submissions, meeting minutes, and Construction Documents shall be deemed to: (i) relieve Contractor from its obligations to comply with the Contract Documents; (ii) relieve Contractor from its obligations with respect to the accuracy of the design submittals; or (iii) transfer any design liability from Contractor to UTA.
- 2.2.6 Upon completion of the Work, and as a condition to receiving final payment pursuant to Section 4.7, Contractor shall prepare and provide to UTA a final set of as-built drawings, depicting the Project as completed, including all changes to the Project made subsequent to the approval of the Construction Documents.
- 2.2.7 All drawings, specifications, interim design submissions, Construction Documents, and other documents furnished by Contractor to UTA pursuant to the Contract Documents (those documents, the "Work Product") are deemed to be instruments of service and Contractor shall retain the ownership and intellectual property rights therein.
- 2.2.8 Once UTA has made a corresponding payment for the Work required for Contractor to prepare any Work Product, Contractor will be deemed to have granted to UTA a license to

use that Work Product in connection with the construction, occupancy, and maintenance of the Project, or any other UTA project or facility.

2.3 Government Approvals, Permits, and Legal Requirements.

- 2.3.1 Except where the Contract Documents expressly state that UTA will be responsible for a specific entitlement, Contractor shall obtain and pay for all necessary permits, approvals, licenses, government charges and inspection fees required for the prosecution of the Work by any government or quasi-government entity having jurisdiction over the Project or Site. Contractor shall provide reasonable assistance to UTA in obtaining any permits, approvals, and licenses that the Contract Documents expressly specify to be a UTA responsibility.
- 2.3.2 Contractor shall perform the Work in accordance with all Legal Requirements and shall provide all notices applicable to the Work as required by the Legal Requirements.
- 2.3.2 Contractor shall file a notice of commencement, a notice of completion, and other notices required by Utah Code Title 38 (Liens). Contractor shall file such notices in the manner and within the time periods required by law.
- 2.3.3 The Contract Price and/or Contract Time(s) will be adjusted to compensate Contractor for the effects of any changes in the Legal Requirements provided that such changes: (i) materially increase Contractor's cost of, or time required for, the performance of the Work; and (ii) are enacted after the effective date of the Agreement.

2.4 Construction Services.

- 2.4.1 Contractor shall proceed with construction in accordance with the approved Construction Documents.
- 2.4.2 Except to the extent that the Contract Documents expressly identify UTA obligations related to the Work, Contractor shall provide through itself or Subcontractors the necessary supervision, labor, inspection, testing, start-up, material, equipment, machinery, temporary utilities and other temporary facilities (whether or not expressly stated or depicted in the Contract Documents or Construction Drawings) to permit Contractor to complete construction of the Project consistent with the Contract Documents.
- 2.4.3 Contractor is responsible for securing the Site until UTA issues a Certificate of Substantial Completion.
- 2.4.4 Contractor shall perform all construction activities efficiently and with the requisite expertise, skill and competence to satisfy the requirements of the Contract Documents. Contractor shall at all times exercise complete and exclusive control over the means, methods, sequences, techniques and procedures of construction.
- 2.4.5 Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take necessary precautions for the safety of, and shall provide necessary protection to prevent damage,

injury or loss to the following: (i) all Contractor, Subcontractor, UTA employees, the public and other persons who may be affected thereby; (ii) all Work and all equipment and materials to be incorporated into the Work; and (iii) other property at the Site or adjacent thereto. Contractor shall comply with the minimum standards imposed by UTA's Construction Safety and Security Program Manual, as updated from time to time (UTA's Construction Safety and Security Program Manual is incorporated into the Contract Documents by reference). However, Contractor shall be responsible for all additional as necessary to comply protect persons and property and comply with applicable Legal Requirements related to safety.

- 2.4.6 Contractor shall employ only Subcontractors who are duly licensed and qualified to perform the Work consistent with the Contract Documents. UTA may require Contractor to remove from the Project a Subcontractor or anyone employed directly or indirectly by any Subcontractor, if UTA reasonably concludes that the Subcontractor is creating safety risks at the Site or quality risks to the Project.
- 2.4.7 Contractor is responsible for the proper performance of the Work by Subcontractors and for any acts and omissions in connection with such performance. Nothing in the Contract Documents is intended or deemed to create any legal or contractual relationship between UTA and any Subcontractor, including but not limited to any third-party beneficiary rights.
- 2.4.8 Contractor shall coordinate the activities of all of its Subcontractors. If UTA performs other work on the Project or at the Site with separate contractors under UTA's control, Contractor agrees to reasonably cooperate and coordinate its activities with those of such separate contractors so that the Project can be completed in an orderly and coordinated manner without unreasonable disruption.
- 2.4.9 Contractor shall keep the Site reasonably free from debris, trash and construction wastes to permit Contractor to perform its construction services efficiently, safely and without interfering with the use of adjacent land areas. Upon Substantial Completion of the Work, or a portion of the Work, Contractor shall remove all debris, trash, construction wastes, materials, equipment, machinery and tools arising from the Work or applicable portions thereof to permit UTA to occupy the Project or a portion of the Project for its intended use.

2.5 Quality Control, Quality Assurance, Inspection, Rejection and Correction of Work.

- 2.5.1 Contractor shall develop a Project-specific construction quality control plan as contemplated in UTA's Quality Management Plan and Construction Quality Plan. The Contractor's plan shall satisfy the minimum requirement imposed by UTA's Construction Quality Plan and shall be sufficient to ensure that Work is performed in compliance with the Contract Documents. If the Work includes any design services, Contractor shall also develop and thereafter comply with a design quality plan that meets the minimum requirements set forth in the UTA Design Quality Plan. The UTA Quality Management Plan, Construction Quality Plan and Design Quality Plan are incorporated into the

Contract Documents by reference. The Contractor's plans shall be subject to UTA's review and approval.

- 2.5.2 Contractor shall comply with the approved quality control plan(s). Responsibilities shall include inspection and testing and related activities including administration, management, supervision, reports, record keeping and use of independent testing agencies and laboratories. Contractor shall provide evidence of compliance with the Contract Documents.
- 2.5.3 UTA will have the right to audit and spot check the Contractor's quality control procedures and documentation. This will include the Company's right to inspect and test all Work at reasonable times. Contractor shall cooperate with any inspection and testing performed by UTA. All contractor-furnished materials and supplies shall be subject to inspection at the point of manufacture.
- 2.5.2 Any inspection and testing performed by UTA shall be for the sole and exclusive benefit of UTA. Neither inspection and testing of Work, nor the lack of same nor acceptance of the Work by UTA, nor payment therefore shall relieve Contractor from any of its obligations under the Contract Documents.
- 2.5.3 At any time prior to Substantial Completion, UTA may reject Work which fails to conform to the Contract Documents. Contractor shall, at its sole expense, promptly re-perform or correct any Work so as to conform to the requirements of the Contract. Contractor shall not be entitled to an adjustment to the Contract Price and/or Contract Times with respect to any corrective action necessary to rectify non-conforming Work.
- 2.5.4 If Contractor fails to promptly remedy rejected Work, UTA may, without limiting or waiving any other rights or remedies it may have, self-perform (through its own forces or through other contractors) the necessary corrective action(s) and deduct all amounts so incurred from any amount then or thereafter due Contractor.

2.6 Contractor's Warranty.

- 2.6.1 Contractor warrants to UTA that all Work, including all materials and equipment furnished as part of the Work, shall be: (i) of good quality conforming to generally recognized industry standards; (ii) in conformance with the Contract Documents; (iii) free of defects in materials and workmanship; and (iv) consistent with applicable Legal Requirements. Without limiting the generality of the forgoing, Contractor also specifically warrants that any design, engineering or other professional services provided by Contractor shall be shall satisfy applicable professional standards of care and that all materials and that any equipment furnished as part of the construction shall be new (unless otherwise specified in the Contract Documents). This provision is not intended to limit any manufacturer's warranty that provides UTA with greater warranty rights than set forth in this Section 2.6. Contractor shall provide UTA with all manufacturers' warranties upon Substantial Completion. Similarly, nothing in this Article is intended to limit any other express warranties set forth in the Contract Documents or to limit any other warranties implied by law, custom or usage of trade.

- 2.6.2 If Contractor becomes aware of any defect in the Work, or non-conformance with the Contract Documents, Contractor shall give prompt written notice of that defect or non-conformance to UTA.
- 2.6.3 Except as otherwise stated in the Agreement, Contractor shall correct any Work that does not comply with the warranties provided above for a period of two years following the date of Substantial Completion.
- 2.6.4 Contractor shall, within seven (7) Days of receipt of written notice from UTA that the Work does not comply with the warranties provided above, take meaningful steps to commence corrective action, including the correction, removal, replacement or re-performance of the nonconforming Work and the repair of any damage to other property caused the warranty failure. If Contractor fails to commence the necessary corrective action within such seven (7) Day period (or thereafter fails to continuously and diligently pursue such corrective action to completion), UTA may (in addition to any other remedies provided under the Contract Documents) provide Contractor with written notice that UTA will self-perform (through its own forces or through other contractors) correction of the warranty failure at Contractor's expense. If UTA performs (or causes to be performed) such corrective action, UTA may collect from Contractor all amounts so incurred. If the nonconforming Work creates an emergency requiring an immediate response, the seven (7) Day period identified above shall be deemed inapplicable.
- 2.6.5 The two-year period referenced in Section 2.6.3 above only applies to Contractor's obligation to correct nonconforming Work and is not intended to constitute a period of limitations for any other rights or remedies UTA may have regarding Contractor's other obligations under the Contract Documents
- 2.6.6 Contractor and UTA understand and agree that the Work as designed and specified may under certain conditions settle and/or subside, even when specified ground and subsurface preparation has been performed by Contractor and accepted by UTA to prevent such settling and subsidence, accordingly, where Contractor and UTA agree that specified ground and subsurface preparations were performed by Contractor but settling or subsidence nevertheless occurred, Contractor's warranty shall not cover such settlement or subsidence of installed Work which has been finally accepted by UTA.

ARTICLE 3

Bond Requirements

3.1 The the contract value exceeds the small purchase threshold, contractor shall provide the following bonds:

3.1.1 A Bid Bond (or equivalent guaranty in the form of a letter of credit, certified check or other negotiable instrument deemed to be equivalent by the Authority) equal to five percent of the proposed Contract price securing performance in accordance with the Bid or Proposal provided with submission of bid or proposal.

3.1.2 A Performance Bond equal to 100% of the Contract price provided prior to formal contract execution; and

3.1.3 A Payment Bond equal to 100% of the Contract price provided prior to formal contract execution.

ARTICLE 4.0

Site Conditions

4.1 Hazardous Materials.

- 4.1.1 Unless otherwise expressly provided in the Contract Documents to be part of the Contractor's Work, Contractor is not responsible for any Hazardous Materials encountered at the Site. "Hazardous Materials" means any substance that: (i) is deemed a hazardous waste or substance under any environmental law; or (ii) might endanger the health of people exposed to it.
- 4.1.2 If Contractor discovers at the Site any substance the Contractor reasonably believes to be a Hazardous Material, Contractor shall immediately stop Work in the area of the discovery and immediately report the discovery to the UTA Project Manager. UTA shall determine how to deal with the Hazardous Material, and Contractor shall resume Work in the area when directed to do so by the UTA Project Manager.
- 4.1.3 Contractor will be entitled to an adjustment to the Contract Price and/or Contract Time(s) to the extent Contractor's cost and/or time of performance have been adversely impacted by the presence of Hazardous Materials.
- 4.1.4 The risk allocation and change provisions of Sections 3.1.1 through 3.1.3 do not apply to any Hazardous Materials introduced to the Site by Contractor, its Subcontractors, or anyone for whose acts Contractor is responsible. Those provisions also exclude Hazardous Materials that were properly stored and/or contained at the Site but thereafter released as a result of the Contractor's negligent performance of the Work. To the extent that Hazardous Materials are introduced and/or released at the Site by Contractor as described above in this Section 3.1.4, then: (i) to the fullest extent permitted by law, Contractor shall defend and indemnify UTA from and against all

claims, losses, damages, liabilities and expenses, including attorneys' fees and expenses, arising out of or resulting from such Hazardous Materials; and (ii) Contractor shall not be entitled to an extension of Contract Price and/or Contract Time(s).

4.2 Differing Site Conditions.

- 4.2.1 If Contractor encounters a Differing Site Condition, Contractor will be entitled to an adjustment to the Contract Price and/or Contract Time(s) to the extent Contractor's cost and/or time of performance have been adversely impacted by the Differing Site Condition. "Differing Site Condition" means concealed or latent physical conditions at the Site that: (i) materially differ from the conditions indicated in the Contract Documents; and (ii) are of an unusual nature, differing materially from the conditions ordinarily encountered and generally recognized as inherent in the Work.
- 4.2.2 Upon encountering a Differing Site Condition, Contractor shall provide prompt written notice to UTA of such condition, which notice shall not be later than five (5) Days after such condition has been encountered. Contractor shall, to the extent reasonably possible, provide such notice before the Differing Site Condition has been substantially disturbed or altered.

ARTICLE 5

Payment

5.1 Schedule of Values (Applicable where payment is made on the basis of progress, milestones, or on a periodic basis.)

- 5.1.1 Unless required by UTA upon execution of this Agreement, within ten (10) Days of execution of the Agreement, Contractor shall submit for UTA's review and approval a Schedule of Values for all of the Work. The Schedule of Values will: (i) subdivide the Work into its respective parts; (ii) include values for all items comprising the Work; and (iii) serve as the basis for monthly progress payments made to Contractor throughout the Work.
- 5.1.2 UTA will timely review and approve the Schedule of Values so as not to delay the submission of the Contractor's first application for payment. UTA and Contractor shall timely resolve any differences so as not to delay the Contractor's submission of its first application for payment.

5.2 Application for Payment.

- 5.2.1 To receive payment, Contractor shall submit to UTA an Application for Payment requesting payment to which contractor is entitled depending on the type of payment specified in Article 5 and Exhibit B. Contractor shall not submit Applications for Payment more often than once per month. The Application for Payment must be accompanied by supporting documentation sufficient to establish, to UTA’s reasonable satisfaction, Contractor’s entitlement to receive payment.
- 5.2.2 The Application for Payment may request payment for equipment and materials not yet incorporated into the Project, provided that: (i) UTA is satisfied that the equipment and materials are suitably stored at either the Site or another acceptable location; (ii) the equipment and materials are protected by suitable insurance; and (iii) upon payment, UTA will receive the equipment and materials free and clear of all liens and encumbrances.
- 5.2.3 The Application for Payment will constitute Contractor’s representation that the Work described therein has been performed consistent with the Contract Documents, has progressed to the point indicated in the Application for Payment, and that title to all materials and equipment will pass to UTA free and clear of all claims, liens, encumbrances, and security interests upon the incorporation of the materials and equipment into the Project, or upon Contractor’s receipt of payment, whichever occurs earlier.

5.3 Invoicing Procedures

- 5.31. Contractor shall invoice UTA after achievement of contractual milestones or after delivery of all Goods and satisfactory performance of all Services. Contractor shall submit invoices to Project Manager Grey Turner at gturner@rideuta.com for processing and payment. In order to timely process invoices, Contractor shall include the following information on each invoice:
 - i. Contractor Name
 - ii. Unique Invoice Number
 - iii. PO Number
 - iv. Invoice Date
 - v. Detailed Description of Charges
 - vi. Total Dollar Amount Due
- 5.3.2 UTA shall have the right to disapprove (and withhold from payment) specific line items of each invoice to address non-conforming Goods or Services. Approval by UTA shall not be unreasonably withheld. UTA shall also have the right to offset (against payments) amounts reasonably reflecting the value of any claim which UTA has against Contractor under the Contract. Payment for all invoice amounts not specifically disapproved or offset by UTA shall be provided to Contractor within thirty (30) calendar days of invoice submittal.

5.4 Sales Tax Exemption

- 5.4.1 Purchases of certain materials are exempt from Utah sales tax. UTA will provide a sales tax exemption certificate to Contractor upon request. UTA will not pay Contractor for sales taxes for exempt purchases, and such taxes should not be included in Contractor's Application for Payment.

5.5 UTA's Payment Obligations.

- 5.5.1 UTA shall pay Contractor all amounts properly requested and documented within thirty (30) Days of receipt of an Application for Payment.
- 5.5.2 Notwithstanding Section 5.5.1, UTA may withhold up to 5% of each payment as retention in accordance with Utah Code Ann. § 13-8-5.
- 5.5.3 Notwithstanding Section 5.5.1, UTA may offset from such Application for Payment amounts any owed to UTA by Contractor pursuant to the Contract Documents.
- 5.5.4 If UTA determines that Contractor is not entitled to all or part of an Application for Payment as a result of Contractor's failure to meet its obligations under the Contract Documents, UTA will notify Contractor of the specific amounts UTA has withheld (or intends to withhold), the reasons and contractual basis for the withholding, and the specific actions Contractor must take to qualify for payment under the Contract Documents. If the Contractor disputes UTA's bases for withholding, Contractor may pursue its rights under the Contract Documents, including those under Article 8.

5.6 Contractor's Payment Obligations.

- 5.6.1 Contractor shall pay Subcontractors, in accordance with its contractual obligations to such parties, all the amounts Contractor has received from UTA on account of their work. Contractor shall indemnify and defend UTA against any claims for payment and mechanic's liens as set forth in Section 6.2 hereof. Contractor may withhold up to 5% of each payment as retention corresponding to retentions withheld by UTA but must pay the subcontractor all retained monies within 10 days of receipt from UTA by the Contractor. All retentions must be in compliance with Utah Code Ann. § 13-8-5.
- 5.6.2 Contractor shall pay its employees and also ensure its sub-tier contractors at every level pay their eligible employees the prevailing wage rate as established by the Utah State Labor Commission.
- 5.6.3 If the Contract Documents include Federal Clauses, the terms of those Federal Clauses pertaining to payment of Subcontractors supersede any conflicting terms of this Article 5.

5.7 Substantial Completion.

- 5.7.1 Contractor shall notify UTA when it believes the entire Work is Substantially Complete. As used in the Contract Documents, "Substantially Complete" or "Substantial Completion" refers to the Contractor's satisfactory completion of all Work in accordance

with the Contract Documents (excluding Punchlist items) to point such that UTA may safely start-up, occupy or otherwise fully use the Project for its intended purposes in compliance with applicable Legal Requirements. The terms “Substantially Complete” or “Substantial Completion” also require the completion of any items of Work specifically set forth as conditions precedent to Substantial Completion in the Agreement. Within five (5) Days of UTA’s receipt of Contractor’s notice, UTA and Contractor will jointly inspect such Work to verify that it is Substantially Complete in accordance with the requirements of the Contract Documents. If such Work is Substantially Complete, UTA shall prepare and issue a Certificate of Substantial Completion that will set forth: (i) the date of Substantial Completion of the Work or portion thereof; (ii) the remaining Punchlist items that have to be completed before Final Completion and final payment; and (iii) provisions (to the extent not already provided in the Contract Documents) establishing UTA’s and Contractor’s responsibility for the Project’s security, maintenance, utilities and insurance pending Final Completion and final payment.

- 5.7.2 Promptly after issuing the Certificate of Substantial Completion, UTA shall release to Contractor all retained amounts, less an amount equal to two times the reasonable value of all remaining Punchlist items noted in the Certificate of Substantial Completion.
- 5.7.3 Upon Contractor’s request or upon UTA’s own initiative, UTA may, in its sole discretion, deem a discrete segment of the Project to be Substantially Complete. The provisions of Sections 5.6.1 and 5.6.2 will apply to that discrete segment of the Project. In addition, before UTA may take possession of a discrete segment of the Project, UTA and Contractor shall obtain the consent of their sureties, insurers, and any government authorities having jurisdiction over the Project.
- 5.7.4 Following Substantial Completion, UTA may restrict Contractor’s access to the Site. UTA shall allow Contractor reasonable access to the Site in order for the Contractor to achieve Final Completion.

5.8 Final Payment.

5.8.1 When Contractor has achieved Final Completion of the Work, Contractor shall submit a Final Application for Payment. As used in the Contract Documents, “Final Completion” refers to the Contractor’s satisfactory completion of all Work in accordance with the Contract Documents including completion of Punchlist items, demobilization from the Site and the transmittal of all deliverables required by the Contract Documents. The Final Application for Payment shall include (at a minimum) the items set forth below.

5.8.1.1 An affidavit that there are no claims, obligations or liens outstanding or unsatisfied for labor, services, materials, equipment, taxes or other items performed, furnished or incurred for or in connection with the Work which will in any way affect UTA’s interests;

5.8.1.2 A general release executed by Contractor waiving, upon receipt of final payment, all claims, except those claims previously made in writing to UTA and remaining unsettled at the time of final payment;

5.8.1.3 All as-built drawings, redlined drawings, operating manuals, warranty assignments and other deliverables required by the Contract Documents; and

5.8.1.4 Certificates of insurance confirming that required coverages will remain in effect consistent with the requirements of the Contract Documents.

5.8.2 Deficiencies in the Work discovered after Substantial Completion, whether or not such deficiencies would have been included on the Punchlist if discovered earlier, will be deemed warranty Work. Contractor shall correct such deficiencies pursuant to Section 2.6, and UTA may withhold from the final payment the reasonable value of completion of the deficient work until that work is completed.

ARTICLE 6

Indemnification and Loss

6.1 **Patent and Copyright Infringement.** If the Work includes any design services, provisions 6.1.1 through 6.1.3 apply.

6.1.1 Contractor shall defend any action or proceeding brought against UTA based on any claim that the Work, or any part thereof, or the operation or use of the Work or any part thereof, constitutes infringement of any United States patent or copyright, now or hereafter issued. UTA shall give prompt written notice to Contractor of any such action or proceeding and will reasonably provide authority, information and assistance in the defense of same. Contractor shall indemnify UTA from and against all damages and costs, including but not limited to attorneys' fees and expenses awarded against UTA or Contractor in any such action or proceeding. Contractor shall keep UTA informed of all developments in the defense of such actions.

6.1.2 If UTA is enjoined from the operation or use of the Work, or any part thereof, as the result of any patent or copyright suit, claim, or proceeding, Contractor shall at its sole expense take reasonable steps to procure the right to operate or use the Work. If Contractor cannot so procure such right within a reasonable time, Contractor shall promptly, at Contractor's expense, either: (i) modify the Work so as to avoid infringement of any such patent or copyright; or (ii) replace said Work with Work that does not infringe or violate any such patent or copyright.

6.1.3 Sections 6.1.1 and 6.1.2 above shall not be applicable to any suit, claim or proceeding based on infringement or violation of a patent or copyright: (i) relating solely to a particular process or product of a particular manufacturer specified by UTA and not offered or recommended by Contractor to UTA; or (ii) arising from modifications to the Work by UTA or its agents after acceptance of the Work

6.2 **Payment Claim Indemnification.** Provided that UTA is not in breach of its contractual obligation to make payments to Contractor for the Work, Contractor shall indemnify, defend and hold harmless UTA from any claims or mechanic's liens brought against UTA or against the Project as a result of the failure of Contractor, its Subcontractors, or others for whose acts Contractor is responsible, to pay

for any services, materials, labor, equipment, taxes or other items or obligations furnished or incurred for or in connection with the Work. Within three (3) Days of receiving written notice from UTA that such a claim or mechanic's lien has been filed, Contractor shall commence to take the steps necessary to discharge said claim or lien, including, if necessary, the furnishing of a mechanic's lien bond. If Contractor fails to do so, UTA will have the right to discharge the claim or lien and hold Contractor liable for costs and expenses incurred, including attorneys' fees.

6.3 Contractor's General Indemnification.

6.3.1 Contractor, to the fullest extent permitted by law, shall indemnify, hold harmless and defend UTA, its officers, trustees, and employees from and against claims, losses, damages, liabilities, including attorneys' fees and expenses, for bodily injury, sickness or death, and property damage or destruction resulting from or arising out of the negligent acts or omissions of Contractor, Subcontractors, anyone employed directly or indirectly by any of them or anyone for whose acts any of them may be liable.

6.3.2 If an employee of Contractor, a Subcontractor, anyone employed directly or indirectly by any of them or anyone for whose acts any of them may be liable has a claim against UTA, its officers, directors, employees, or agents, Contractor's indemnity obligation set forth in Section 5.3.1 above will not be limited by any limitation on the amount of damages, compensation or benefits payable by or for Contractor, Subcontractors, or other entity under any employee benefit acts, including workers' compensation or disability acts.

6.4 **Risk of Loss.** Contractor bears all risk of loss to the Project, including materials and equipment not yet incorporated into the Project, until final payment is made by UTA. The insurance requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract. UTA in no way warrants that the minimum limits contained herein are sufficient to protect the Contractor from liabilities that might arise out of the performance of the work under this contract by the Contractor, his agents, representatives, employees, or subcontractors and Contractor is free to purchase additional insurance as may be determined necessary.

ARTICLE 7

INSURANCE REQUIREMENTS

The insurance requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract. The Utah Transit Authority in no way warrants that the minimum limits contained herein are sufficient to protect the Contractor from liabilities that might arise out of the performance of the work under this contract by the Contractor, his agents, representatives, employees or subcontractors and Contractor is free to purchase additional insurance as may be determined necessary.

A. **MINIMUM SCOPE AND LIMITS OF INSURANCE:** Contractor shall provide coverage with limits of liability not less than those Stated below. An excess liability policy or umbrella liability policy may

be used to meet the minimum liability requirements provided that the coverage is written on a “following form” basis.

1. Commercial General Liability – Occurrence Form

Policy shall include bodily injury, property damage and broad form contractual liability coverage.

- General Aggregate \$4,000,000
- Products – Completed Operations Aggregate \$1,000,000
- Personal and Advertising Injury \$1,000,000
- Each Occurrence \$2,000,000
 - a. The policy shall be endorsed to include the following additional insured language: "The Utah Transit Authority shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor".
 - b. The policy must also contain the following endorsement, WHICH MUST BE STATED ON THE CERTIFICATE OF INSURANCE: “Contractual Liability Railroads” ISO from CG 24 17 10 01 (or a substitute form providing equivalent coverage) showing “Utah Transit Authority Property” as the Designated Job Site

2. Automobile Liability

Bodily Injury and Property Damage for any owned, hired, and non-owned vehicles used in the performance of this Contract.

Combined Single Limit (CSL) \$2,000,000

- a. The policy shall be endorsed to include the following additional insured language: "The Utah Transit Authority shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor, including automobiles owned, leased, hired or borrowed by the Contractor".

3. Worker's Compensation and Employers' Liability

Workers’ Compensation	Statutory
Employers' Liability	
Each Accident	\$100,000
Disease – Each Employee	\$100,000
Disease – Policy Limit	\$500,000

- a. Policy shall contain a waiver of subrogation against the Utah Transit Authority.

- b. This requirement shall not apply when a contractor or subcontractor is exempt under UCA, AND when such contractor or subcontractor executes the appropriate waiver form.

4. Professional Liability (Errors and Omissions Liability)

The policy shall cover professional misconduct or lack of ordinary skill for those positions defined in the Scope of Services of this contract.

Each Claim	\$1,000,000
Annual Aggregate	\$2,000,000

- a. In the event that the professional liability insurance required by this Contract is written on a claims-made basis, Contractor warrants that any retroactive date under the policy shall precede the effective date of this Contract; and that either continuous coverage will be maintained or an extended discovery period will be exercised for a period of three (3) years beginning at the time work under this Contract is completed.

5. **Railroad Protective Liability Insurance (RRPLI) –**

During construction and maintenance within fifty (50) feet of an active railroad track, including but not limited to installation, repair or removal of facilities, equipment, services or materials, the Contractor must maintain “Railroad Protective Liability” insurance on behalf of UTA only as named insured, with a limit of not less than \$2,000,000 per occurrence and an aggregate of \$6,000,000.

If the Contractor is not enrolling for this coverage under UTA’s blanket RRPLI program, the policy provided must have the definition of “JOB LOCATION” AND “WORK” on the declaration page of the policy shall refer to this Agreement and shall describe all WORK or OPERATIONS performed under this Agreement.

- 6. **Contractors’ Pollution Legal Liability and/or Asbestos Legal Liability** (if project involves environmental hazards) with limits no less than \$1,000,000 per occurrence or claim, and \$2,000,000 policy aggregate. *(NOTE: Projects over \$10,000,000 will require limits of \$2,000,000 per occurrence and \$4,000,000 aggregate; Projects over \$40,000,000 will require limits of \$5,000,000 per occurrence and \$5,000,000 aggregate)*

- 7. **Builder’s Risk:** Builder’s risk (course of construction) insurance, covering the risk of loss for any damage or loss to the building or structure by any means or occurrence until the final completion of the contract work. Coverage shall utilize an “All Risk” (Special Perils) coverage form, with limits equal to the completed value of the project and no coinsurance penalty provisions. The coverage shall include mechanical breakdown, property in transit, property at temporary storage locations, earthquake damage and flood damage insuring the interests of UTA, SLCDA and their respective subcontractors of any tier providing equipment, materials or services for the project.

- B. **ADDITIONAL INSURANCE REQUIREMENTS:** The policies shall include, or be endorsed to include the following provisions:
1. On insurance policies where the Utah Transit Authority is named as an additional insured, the Utah Transit Authority shall be an additional insured to the full limits of liability purchased by the Contractor. Insurance limits indicated in this agreement are minimum limits. Larger limits may be indicated after the contractor's assessment of the exposure for this contract; for their own protection and the protection of UTA.
 2. The Contractor's insurance coverage shall be primary insurance and non-contributory with respect to all other available sources.
 3. Contractor and their insurers shall endorse the required insurance policy(ies) to waive their right of subrogation against UTA. Contractor's insurance shall be primary with respect to any insurance carried by UTA. Contractor will furnish UTA at least thirty (30) days advance written notice of any cancellation or non-renewal of any required coverage that is not replaced.
- C. **NOTICE OF CANCELLATION:** Each insurance policy required by the insurance provisions of this Contract shall provide the required coverage and shall not be suspended, voided, or canceled except after thirty (30) days prior written notice has been given to the Utah Transit Authority, except when cancellation is for non-payment of premium, then ten (10) days prior notice may be given. Such notice shall be sent directly to (Utah Transit Authority agency Representative's Name & Address).
- D. **ACCEPTABILITY OF INSURERS:** Insurance is to be placed with insurers duly licensed or authorized to do business in the State and with an "A.M. Best" rating of not less than A-VII. The Utah Transit Authority in no way warrants that the above-required minimum insurer rating is sufficient to protect the Contractor from potential insurer insolvency.
- E. **VERIFICATION OF COVERAGE:** Contractor shall furnish the Utah Transit Authority with certificates of insurance (on standard ACORD form) as required by this Contract. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

All certificates and any required endorsements are to be sent to utahta@ebix.com and received and approved by the Utah Transit Authority before work commences. Each insurance policy required by this Contract must be in effect at or prior to commencement of work under this Contract and remain in effect for the duration of the project. Failure to maintain the insurance policies as required by this Contract or to provide evidence of renewal is a material breach of contract.

All certificates required by this Contract shall be emailed directly to Utah Transit Authority's insurance email address at utahta@ebix.com. The Utah Transit Authority project/contract number and project description shall be noted on the certificate of insurance. The Utah Transit Authority reserves the right to require complete, certified copies of all insurance policies required by this Contract at any time. DO NOT SEND CERTIFICATES OF INSURANCE TO THE UTAH TRANSIT AUTHORITY'S CLAIMS AND INSURANCE DEPARTMENT.

- F. SUBCONTRACTORS: Contractors' certificate(s) shall include all subcontractors as additional insureds under its policies or subcontractors shall maintain separate insurance as determined by the Contractor, however, subcontractor's limits of liability shall not be less than \$1,000,000 per occurrence / \$2,000,000 aggregate. Sub-contractors maintaining separate insurance shall name Utah Transit Authority as an additional insured on their policy. Blanket additional insured endorsements are not acceptable from sub-contractors. Utah Transit Authority must be scheduled as an additional insured on any sub-contractor policies.
- G. APPROVAL: Any modification or variation from the insurance requirements in this Contract shall be made by Claims and Insurance Department or the Office of General Counsel, whose decision shall be final. Such action will not require a formal Contract amendment, but may be made by administrative action.

Article 8.0

Health Insurance

Insurance Coverage for Employees.

- 8.1 If the Contract Price is \$2,000,000 or more, Contractor shall, prior to the effective date of the Agreement, demonstrate to UTA that Contractor has and will maintain an offer of qualified health insurance coverage (as defined by Utah Code Ann. § 17B-2a-818.5) for the Contractor's employees and the employee's dependents during the duration of the Contract.
- 8.2 If the Contractor enters into any subcontracts under the Contract Documents in an amount of \$1,000,000 or more, then Contractor shall also demonstrate to UTA that such subcontractor(s) have and will maintain an offer of qualified health insurance coverage for the subcontractor's employees and the employee's dependents during the duration of the subcontract

Article 9.0

TIMELINESS

- 9.1 **Obligation to Achieve the Contract Times.** Contractor shall commence performance of the Work and achieve the Contract Time(s) in accordance with the Contract Documents. The Contract Documents specify critical completion milestones with which Contractor must comply. All time and schedule

requirements included within the Contract Documents are of the essence. By executing the Agreement, Contractor confirms that the completion milestones in the Contract Documents are reasonable for the performance of the Work. Unless otherwise excused by the terms of the Contract Documents, Contractor’s failure to timely perform the Work in accordance with the completion milestones shall result in the assessment of liquidated damages (if, and to the extent, set forth in the Agreement) and (where no liquidated damages are provided under the Agreement or where the maximum liquidated damages available under the Agreement have been incurred) an event of default.

9.2 Excusable Delays. The Contract Time(s) for performance shall be equitably adjusted by Change Order to the extent that Contractor is actually and demonstrably delayed in the performance of the Work because of: (i) Differing Site Conditions (as provided in Section 3.2); (ii) Hazardous Materials (as provided in Section 3.1); (iii) Force Majeure Events (as defined in Section 1.3); (iv) changes in the Work directed by UTA (as provided in Section 7.2); (v) constructive changes (as provided in Section 7.3); (vi) changes in Legal Requirements (as provided in Section 2.3.3); (vii) a suspension without cause (as provided in Section 9.1); or (viii) UTA’s unexcused delay in performing any UTA obligation specified in the Contract Documents in accordance with the completion milestones indicated in the approved schedule.

9.3 Excusable and Compensable Delays. In addition to Contractor’s right to a time extension for those events set forth in Section 6.2 above, Contractor will also be entitled to an appropriate adjustment of the Contract Price provided, however, that the Contract Price will not be adjusted for delays caused by Force Majeure Events.

ARTICLE 10

Changes

10.1 Change Orders.

10.1.1 Contractor shall not undertake any activity that materially changes the Work, or materially deviates from the requirements of the Contract Documents, except as authorized in this Article 7. Any costs incurred by Contractor without authorization as provided in this Article 7 will be considered non-compensable.

10.1.2 A Change Order is a written instrument, signed by UTA and Contractor, issued after execution of the Agreement, stating their agreement on a change in: (i) the scope of the Work; (ii) the Contract Price; and/or (iii) the Contract Time(s).

10.1.3 All changes in the Work authorized by applicable Change Order shall be performed under the applicable conditions of the Contract Documents. UTA and Contractor shall negotiate in good faith and as expeditiously as possible the appropriate adjustments for such changes.

10.2 UTA-Directed Changes. UTA may direct changes in the Work. Upon receipt of such direction, Contractor shall prepare an estimate of the cost and schedule impact of the change (if any). Upon agreement between UTA and Contractor on the scope of the change to the Work, and the

adjustment, if any, to the Contract Price and/or Contract Times, UTA and Contractor shall execute a written Change Order.

10.3 Constructive Changes.

10.3.1 To the extent that Contractor: (i) receives a written or verbal direction or proceeding from UTA that Contractor believes to constitute a material change to the nature, character or schedule of the Work; and/or (ii) becomes aware of any circumstance or condition that expressly provides Contractor a right to a Change Order under the terms of the Contract Documents, then (in either case) Contractor shall deliver to UTA's Project Manager written notice (hereinafter a "Potential Change Notice") within ten (10) Days after Contractor becomes aware of (or should have reasonably become aware) the facts and circumstances which Contractor believes to give rise to a Change Order.

10.3.2 Contractor's failure to deliver a Potential Change Notice in a timely manner shall constitute a waiver of all of Contractor's rights to a Change Order.

10.3.3 In conjunction with the Potential Change Notice or not longer than 30 days after delivery of notice, Contractor shall submit to UTA all supporting information and documentation necessary for UTA to evaluate the contractual basis for the Potential Change Notice and to also evaluate the relief claimed by Contractor. Contractor shall promptly respond to all UTA inquiries about the Potential Change Notice and the supporting information and documentation.

10.3.4 To the extent UTA concludes that the Potential Change Notice demonstrates Contractor's entitlement to a Contract adjustment, and provided that the parties are able to negotiate mutually agreeable adjustments to the Contract Documents, then UTA and Contractor shall execute a written Change Order.

10.4 Direction or Authorization to Proceed.

10.4.1 Prior to final agreement with respect to a Change Order, UTA may issue a Direction or Authorization to Proceed ("DAP"). A DAP is a written order unilaterally prepared and signed by UTA directing the Contractor to proceed with specified Work while Change Order negotiations or Claim resolution discussions continue. UTA may issue a DAP at any time, and Contractor shall undertake the Work as set forth in the DAP, and in accordance with the Contract Documents.

10.4.2 After issuance of a DAP, UTA and Contractor shall continue to negotiate in good faith to resolve outstanding issues expeditiously.

10.5 Requests for Information. UTA shall have the right, from time to time, to issue clarifications to the Work of a non-material nature at any time. Contractor shall have the corresponding right to seek clarification with respect to ambiguous or conflicting provisions of the Contract Documents. Such clarifications or conflicts shall be confirmed, implemented and documented through a Request for Information ("RFI") process to be developed for the Project. The RFI process may also be used to document minor changes in the Work do not involve an adjustment in the Contract

Price and/or Contract Time(s) and do not materially and adversely affect the Work, including the design, quality, performance and workmanship required by the Contract Documents.

10.6 Contract Price Adjustments.

10.6.1 The increase or decrease in Contract Price resulting from a change in the Work will be determined by one or more of the following methods:

10.6.1.1 Unit prices set forth in the Agreement or as subsequently agreed to between the parties;

10.6.1.2 A mutually accepted lump sum, properly itemized and supported by sufficient substantiating data to permit evaluation by UTA;

10.6.1.3 Costs, fees and any other markup rates set forth in the Agreement; or

10.6.1.4 If an increase or decrease cannot be agreed to as set forth in items 10.6.1.1 through 10.6.1.3 above and UTA issues a DAP, the cost of the change of the Work shall be determined by the reasonable expense and savings in the performance of the Work resulting from the change, including a reasonable overhead and profit rate, as may be set forth in the Agreement.

10.6.2 If unit prices are set forth in the Contract Documents or are subsequently agreed to by the parties, but application of such unit prices will cause substantial inequity to UTA or Contractor because of differences in the character or quantity of such unit items as originally contemplated, such unit prices shall be equitably adjusted.

10.6.3 Negotiations over changes in the Contract Price will be conducted using an open-book cost-estimating process. UTA defines "open-book" to include all elements of Contractor's costs, including labor hours and rates, units and estimated quantities, unit prices, equipment estimates, material costs, and subcontractor costs. Contractor shall openly share its detailed cost estimate, material and subcontractor quotations and any other information used to compile its cost estimate.

10.7 Disputes Regarding Change Orders. If the parties are not able to agree as to whether a Change Order is warranted under the Contract Documents, or cannot agree upon the extent of relief to be granted under a Change Order after good faith negotiations, either party may refer the dispute to the Claim resolution provisions of Article 8. Pending resolution of such Claim, Contractor shall proceed with the Work as directed by UTA under a reservation of rights. UTA shall continue to pay any undisputed payments related to such Claim.

10.8 Emergencies. In any emergency affecting the safety of persons and/or property, Contractor shall act, at its discretion, to prevent threatened damage, injury or loss. Any change in the Contract Price and/or Contract Time(s) on account of emergency work shall be determined as provided in this Article 7.

ARTICLE 11

Claims and Dispute Resolution

11.1 Claims.

- 11.1.1 "Claim" means any disputes between UTA and the Contractor arising out of or relating to the Contract Documents including any disputed claims for Contract adjustments that cannot be resolved in accordance with the Change Order negotiation process set forth in Article 8. Claims must be made by written notice. The responsibility to substantiate claims rests with the party making the claim.
- 11.1.2 Unless otherwise directed by UTA in writing, Contractor shall proceed diligently with performance of the Work pending final resolution of a Claim, including litigation. UTA shall continue to pay any undisputed payments related to such Claim.

11.2 **Dispute Resolution.**

- 11.2.1 The parties shall attempt in good faith to resolve promptly through negotiation any Claim arising out of or relating to the Contract Documents. If a Claim should arise, UTA's Project Manager and Contractor's Project Manager will meet at least once to attempt to resolve the Claim. For such purpose, either may request the other to meet within seven (7) Days of the date the Claim is made, at a mutually agreed upon time and place.
- 11.2.2 If UTA's Project Manager and Contractor's Project Manager are not able to resolve the Claim within fourteen (14) Days after their first meeting (or such longer period of time as may be mutually agreed upon), either party may request that UTA's Senior Representative and the Contractor's management representative ("Contractor's Management Representative") meet at least once to attempt to resolve the Claim.
- 11.2.3 If the Claim has not been resolved within sixty (60) Days of the date the Claim is made, either party may refer the Claim to non-binding mediation by sending a written mediation request to the other party. In the event that such a request is made, the Parties agree to participate in the mediation process. Non-binding mediation of claims or controversies under the Contract Documents shall be conducted by a professional mediator that is mutually acceptable to and agreed upon by both parties (the "Mediator"). The parties and the Mediator may join in the mediation any other party necessary for a mutually acceptable resolution of the Claim. The mediation procedure shall be determined by the Mediator in consultation with the parties. The fees and expenses of the Mediator shall be borne equally by the parties.
- 11.2.4 If the Claim is not resolved within thirty (60) days after the commencement of mediation, or if no mediation has been commenced within one hundred and twenty (120) days of the date the Claim is made, either party may commence litigation to resolve the Claim. The exclusive forum for any such litigation is the Third District Court in and for Salt Lake County, Utah.

ARTICLE 12

Suspension and Termination

12.1 UTA's Right to Stop Work.

- 12.1.1 UTA may, without cause and for its convenience, order Contractor in writing to stop and suspend the Work. Such suspension shall not exceed one hundred and twenty (120) consecutive Days or aggregate more than two hundred and forty (240) Days during the duration of the Project. In the event a suspension continues longer than the above-referenced periods, Contractor shall have the right to terminate the Agreement. Any such termination shall be considered to be a termination for convenience by UTA.
- 12.1.2 If a suspension is directed by UTA without cause, Contractor shall be entitled to seek an adjustment of the Contract Price and/or Contract Time(s) if its cost or time to perform the Work has been adversely impacted by any suspension or stoppage of the Work by UTA.
- 12.1.3 In addition to its rights under Section 12.1.1, UTA shall have the right to order a suspension for cause if the Work at any time ceases to comply with the workmanship, safety, quality or other requirements of the Contract Documents or any Legal Requirements. Contractor shall not be entitled to seek an adjustment the Contract Price and/or Contract Time(s) with regard to any such suspension.

12.2 UTA's Right to Terminate for Convenience. Upon written notice to Contractor, UTA may, for its convenience and without cause, elect to terminate this Agreement. In such event, UTA shall pay Contractor for the following:

- 12.2.1 All Work satisfactorily completed or commenced and in process as of the effective date of termination;
- 12.2.2 The reasonable and demonstrable costs and expenses attributable to such termination, including demobilization costs and amounts due in settlement of terminated contracts with Subcontractors; and
- 12.2.3 The fair and reasonable sums for overhead and profit on the sum of items 12.2.1 and 12.2.2 above. UTA shall not be liable for anticipated profits, costs or overhead based upon Work not yet performed as of the date of termination.

12.3 UTA's Right to Terminate for Cause; Other Remedies for Default.

- 12.3.1 Subject to the cure provision of Section 9.3.2 below and other limitations set forth in these General Conditions, Contractor shall be in default of its obligations under the Contract Documents if Contractor: (i) fails to provide a sufficient number of skilled workers; (ii) fails to supply the materials required by the Contract Documents; (iii) fails to comply with applicable Legal Requirements; (iv) fails to timely pay its Subcontractors without proper cause; (v) makes a materially false or misleading representation or certification in conjunction with the Contract Documents; (vi) fails to prosecute the Work with promptness and diligence to ensure that the Work is completed by the Contract Time(s), as such times may be adjusted; (vii) fails to satisfy any guaranteed interim or completion milestone set

forth in the Contract Documents; or (viii) fails to perform any other material obligations under the Contract Documents. In any such event, UTA (in addition to any other rights and remedies provided in the Contract Documents or by law) shall have the rights set forth in Sections 9.3.2 through 9.3.5 below.

- 12.3.2 Upon the occurrence of an event of default set forth in Section 9.3.1 above, UTA may provide written notice to Contractor that it intends to terminate the Agreement (in whole or in part) or pursue other available remedies unless the grounds for default are cured within ten (10) Days of Contractor's receipt of such notice. If Contractor fails to cure the grounds for default within such period, then UTA may declare the Agreement, or portions of the Agreement, terminated for default by providing written notice to Contractor of such declaration; provided, however, that to the extent that an item included is the notice of default and demand for cure is capable of cure, but not within the ten-Day cure period, then the Agreement shall not be terminated so long as Contractor commences actions to reasonably cure such breach within the 10-Day cure period and thereafter continuously and diligently proceeds with such curative actions until completion (such additional period not to exceed 45 Days). UTA may terminate the Agreement without opportunity to cure if the breach involves the Contractor's material failure to comply with any Legal Requirements pertaining to safety or environmental compliance.
- 12.3.3 Upon the continuance of a breach described in Section 9.3.1 for more than ten (10) Days following delivery of written notice to Contractor (and regardless of whether the Agreement, or any portion hereof, has been terminated as provided above), UTA shall be entitled to self-perform (through its own forces or through other contractors) the corrective action necessary to cure Contractor's event of default and deduct all costs so incurred from any amount then or thereafter due to Contractor.
- 12.3.4 Upon the continuance of a breach described in Section 9.3.1 for more than ten (10) Days following delivery of written notice to Contractor (and regardless of whether the Agreement, or any portion hereof, has been terminated as provided above), UTA shall be entitled to seek performance by any guarantor of Contractor's obligations hereunder or draw upon any surety or security provided for in the Contract Documents.
- 12.3.5 Upon declaring the Agreement terminated pursuant to Section 9.3.2 above, UTA may enter upon the premises and take possession, for the purpose of completing the Work, of all materials, equipment, scaffolds, tools, appliances and other items thereon, which have been purchased or provided for the performance of the Work, all of which Contractor hereby transfers, assigns and sets over to UTA for such purpose, and to employ any person or persons to complete the Work and provide all of the required labor, services, materials, equipment and other items. In the event of such termination, Contractor shall not be entitled to receive any further payments under the Contract Documents until the Work shall be finally completed

in accordance with the Contract Documents. At such time, if the unpaid balance of the Contract Price exceeds the cost and expense incurred by UTA in completing the Work, such excess shall be paid by UTA to Contractor. If UTA's cost and expense of completing the Work exceeds the unpaid balance of the Contract Price, then Contractor shall pay the difference to UTA. Such costs and expenses include not only the cost of completing the Work, but also losses, damages, costs and expenses, including attorneys' fees and expenses, incurred by UTA in connection with the procurement and defense of claims arising from Contractor's default.

12.3.6 All rights and remedies set forth in the Contract Documents are cumulative, and unless otherwise specifically provided in the Contract Documents are not exclusive of any other rights or remedies that may be available, whether provided by law, equity, statute, in any other agreement between the Parties or otherwise. Upon the occurrence of any such default, following the applicable process described in this Article, UTA shall be entitled to pursue any and all other rights and remedies, including without limitation damages, that UTA may have against Contractor under the Contract Documents or at law or in equity.

12.3.7 If UTA improperly terminates the Agreement for cause, the termination for cause will be converted to a termination for convenience in accordance with the provisions of Section 9.2 above.

12.4 **Bankruptcy of Contractor.**

12.4.1 If Contractor institutes or has instituted against it a case under the United States Bankruptcy Code, such event may impair or frustrate the Contractor's ability to perform its obligations under the Contract Documents. Accordingly, should such event occur:

12.4.1.1 Contractor, its trustee or other successor, shall furnish, upon request of UTA, adequate assurance of the ability of the Contractor to perform all future material obligations under the Contract Documents, which assurances shall be provided within ten (10) Days after receiving notice of the request; and

12.4.1.2 Contractor shall file an appropriate action within the bankruptcy court to seek assumption or rejection of the Agreement within sixty (60) Days of the institution of the bankruptcy filing and shall diligently prosecute such action. If Contractor fails to comply with its foregoing obligations, UTA shall be entitled to request the bankruptcy court to reject the Agreement, declare the Agreement terminated and pursue any other recourse available to the UTA under this Article 9.

12.4.2 The rights and remedies under Section 9.4.1 above shall not be deemed to limit the ability of UTA to seek any other rights and remedies provided by the Contract Documents or by law, including its ability to seek relief from any automatic stays under the United States Bankruptcy Code.

ARTICLE 13

Value Engineering

13.1 Value Engineering Change Proposals.

- 13.1.1 A Value Engineering Change Proposal (“VECP”) is a proposal developed, prepared, and submitted to UTA by the Contractor, which reduces the cost of the Work without impairing essential functions or characteristics of the Project, as determined by UTA in its sole discretion. UTA encourages Contractor to submit VECPs whenever it identifies potential savings or improvements. UTA may also request the Contractor to develop and submit a specific VECP.
- 13.1.2 In determining whether a VECP will impair essential functions or characteristics of the Project, UTA may consider: (i) relative service life; (ii) maintenance effort and frequency; (iii) environmental and aesthetic impacts; (iv) system service; (v) effect of other system components; and (vi) other issues as UTA deems relevant. A VECP must not be based solely on a change in quantities.
- 13.1.3 Contractor must include the following information in any VECP:
 - 13.1.3.1 A narrative description of the proposed change,
 - 13.1.3.2 A discussion of differences between existing requirements and the proposed change, together with advantages and disadvantages of each changed item;
 - 13.1.3.3 A complete cost analysis, including the cost estimate of any additional rights-of-way or easements required for implementation of the VECP;
 - 13.1.3.4 Justification for changes in function or characteristics of each item and effect of the change on the performance on the end item;
 - 13.1.3.5 A description of any previous use or testing of the proposed approach and the conditions and results. If the VECP was previously submitted on another UTA project, the Contractor shall indicate the date, contract number, and the action taken by UTA;
 - 13.1.3.6 Costs of development and implementation; and
 - 13.1.3.7 Any additional information requested by UTA, which must be provided in a timely manner.

13.2 Review and Approval of VECPs

- 13.2.1 Upon receipt of a VECP, UTA shall process it expeditiously, but will not be liable for any delay in acting upon any VECP. Contractor may withdraw all or part of any VECP at any time prior to approval by UTA, but shall, in any case, be liable for costs incurred by UTA in reviewing the withdrawn VECP, or part thereof. In all other

situations, each party will bear its own costs in connection with preparation and review of VECPs.

- 13.2.2 UTA may approve in whole or in part any VECP submitted. The decision of UTA regarding rejection or approval of any VECP will be at the sole discretion of UTA and will be final and not subject to appeal. Contractor will have no claim for any additional costs or delays resulting from the rejection of a VECP, including development costs, loss of anticipated profits, or increased material or labor costs
- 13.3 **Cost Savings.** Except as otherwise stated in the Agreement, any savings resulting from an approved VECP will accrue to the benefit of UTA and Contractor on a 50/50 cost sharing basis. Nevertheless, a Contractor shall not be eligible to share in cost savings where the Contractor had responsibility under its scope of work for drafting, reviewing or approving the designs or processes involved in the VECP.
- 13.4 **Ownership of VECPs.** All approved or disapproved VECPs will become the property of UTA and must contain no restrictions imposed by Contractor on their use or disclosure. UTA retains the right to use, duplicate, and disclose, in whole or in part, any data necessary for the utilization of the VECP on any other projects without any obligation to Contractor. This provision is not intended to deny rights provided by law with respect to patented materials or processes.

ARTICLE 14

Miscellaneous

- 14.1 **Confidential Information.** “Confidential Information” means information that is determined by the transmitting party to be of a confidential or proprietary nature and: (i) the transmitting party identifies in writing as either confidential or proprietary; (ii) the transmitting party takes steps to maintain the confidential or proprietary nature of the information; and (iii) the document is not otherwise available in or considered to be in the public domain. To the extent permitted by law (including specifically UCA Title 63G Chapter 2), the receiving party shall maintain the confidentiality of the Confidential Information and shall use the Confidential Information solely in connection with the Project. The parties agree that the Agreement itself (including all incorporated Contract Documents) does not constitute Confidential Information.
- 14.2 **PUBLIC INFORMATION:** Vendor acknowledges that the Contract and related materials (invoices, orders, etc.) will be public documents under the Utah Government Records Access and Management Act (GRAMA). Vendor’s response to the solicitation for the Contract will also be a public document subject to GRAMA, except for legitimate trade secrets, so long as such trade secrets were properly designated in accordance with terms of the solicitation.
- 14.3 **Prohibited Interest.** No member, officer, agent, or employee of UTA during his or her tenure or for one year thereafter shall have any interest, direct or indirect, including prospective employment by, Contractor or the proceeds under the Contract Documents without specific written authorization by UTA.

- 14.4 **Assignment.** Contractor acknowledges that the Work to be performed by Contractor is considered personal by UTA. Contractor shall not assign or transfer its interest in the Contract Documents without prior written approval by UTA.
- 14.5 **Successors.** Contractor and UTA intend that the provisions of the Contract Documents are binding upon the parties, their employees, agents, heirs, successors and permitted assigns.
- 14.6 **Governing Law.** The Agreement and all Contract Documents are governed by the laws of the State of Utah, without giving effect to its conflict of law principles. Actions to enforce the terms of this Agreement may only be brought in the Third District Court for Salt Lake County, Utah.
- 14.7 **Attorneys Fees and Costs.** If any party to this Agreement brings an action to enforce or defend its rights or obligations hereunder, the prevailing party shall be entitled to recover its costs and expenses, including mediation, arbitration, litigation, court costs and attorneys' fees, if any, incurred in connection with such suit, including on appeal.
- 14.8 **Severability.** If any provision or any part of a provision of the Contract Documents is finally determined to be superseded, invalid, illegal, or otherwise unenforceable pursuant to any applicable Legal Requirements, such determination shall not impair or otherwise affect the validity, legality, or enforceability of the remaining provision or parts of the provision of the Contract Documents, which shall remain in full force and effect as if the unenforceable provision or part were deleted.
- 14.9 **No Waiver.** The failure of either Contractor or UTA to insist, in any one or more instances, on the performance of any of the obligations required by the other under the Contract Documents shall not be construed as a waiver or relinquishment of such obligation or right with respect to future performance.
- 14.10 **Headings.** The headings used in these General Conditions, or any other Contract Document, are for ease of reference only and shall not in any way be construed to limit or alter the meaning of any provision.
- 14.11 **Amendments.** The Contract Documents may not be changed, altered, or amended in any way except in writing signed by a duly authorized representative of each party.
- 14.12 **FORCE MAJEURE:** Neither party to the Contract will be held responsible for delay or default caused by fire, riot, acts of God and/or war which are beyond that party's reasonable control. UTA may terminate the Contract after determining such delay or default will reasonably prevent successful performance of the Contract.
- 14.13 **ENTIRE AGREEMENT:** The Contract constitutes the entire agreement between the parties with respect to the subject matter, and supersedes any and all other prior and contemporaneous agreements and understandings between the parties, whether oral or written. The terms of the Contract supersede any additional or conflicting terms or provisions that may be preprinted on Vendor's work plans, cost estimate forms, receiving tickets, invoices, or any other related standard forms or documents of Vendor that may subsequently be used to implement, record, or invoice Goods and/or Services hereunder from time to time, even if such standard forms or documents have been signed or initialed by a representative of UTA. The terms of the Contract prevail in any dispute between the terms of the Contract and the terms printed on any such standard forms or

documents, and such standard forms or documents will not be considered written amendments of the Contract.

Exhibit A Scope of Work

SCOPE OF WORK

Lehi Pedestrian Bridge Repairs

- I. **OBJECTIVE** – The Utah Transit Authority (UTA) will enter into a sole-source contract with Granite Construction, Inc. (Granite) to assist with necessary construction repairs to the Lehi Pedestrian Bridge. These necessary repairs are the result of heavy rain events that occurred in January 2023.

- II. **BACKGROUND** – The Lehi Pedestrian Bridge construction project was completed and subsequently opened in August 2021. As mentioned, in January 2023, the Lehi area experienced several large meteorological events that caused settlement damage. These damaged areas to the bridge and adjoining trail created unsafe conditions to the general public. Temporary repairs and patches were made, however, permanent solutions are necessary.

GENERAL

- A. Contractor, if doing business under an assumed name, i.e. an individual, association, partnership, corporation, or otherwise, shall be registered with the Utah State Division of Corporations and Commercial Code.

NOTE: Forms and information on how to get registered may be obtained by calling (801) 530-4849 or by accessing www.commerce.state.ut.us.

- B. Contractor shall be solely responsible for the safety of the Contractor's employees and others relative to the Contractor's work, work procedures, material, equipment, transportation, signage, and related activities and equipment.

- C. Contractor shall possess and keep in force all licenses and permits required to perform services under this Agreement.

III. PROJECT ASSUMPTIONS

- A. UTA has previously contracted with Civil Science to produce a set of plans to be used in the repair of the bridge and trail. These plans will be used to estimate, prepare a schedule, and complete the construction tasks.

- B. Several geotechnical analyses have been performed to develop the designed repairs. No further geotechnical analysis is anticipated.

IV. RESPONSIBILITIES OF CONTRACTOR – The responsibilities of the consultant include the following elements (with support from the project team and Lehi City as indicated):

1. Project Construction

- 1.1. Finalize project scope and schedule.
- 1.2. Prepare a list of assumptions/clarifications.
- 1.3. Review the design plan set as developed by Civil Science (attached to this document).

- 1.4. Develop a construction schedule consistent with completing the project by December 31, 2024.
- 1.5. Construct the project as designed to repair the damaged bridge structure, approach slab(s), and associated trail.

2. Community and Stakeholder Engagement

- 2.1. Assist with communicating the construction schedule and timeline of events to Lehi City.
- 2.2. Provide temporary detour routing and signing for pedestrians using the bridge and trail.

The above elements are not intended to be a comprehensive itemization of exact work plan components. UTA is relying on the contractor's professional expertise to analyze this approach and consider any other elements that may be relevant to achieving the stated purpose and goals.

Exhibit B – Cost
Lump Sum \$799,272.56

#	Item	Quantity	UOM	UNIT PRICE	TOTAL COST	Referenced Spec/Drawing	Notes
A-1	Mobilization	1	LS	\$ 121,380.95	\$ 121,380.95		Also includes SWPPP, TC, Survey
A-2	Dust Control and Watering	1	LS	\$ 6,773.12	\$ 6,773.12	UDOT Section 01572	
A-3	Roadway Excavation (Plan Quantity)	1362	CY	\$ 17.38	\$ 23,671.56	UDOT Section 02316	Removal of embankment material only
A-4	Remove Asphalt Pavement	333	SY	\$ 12.29	\$ 4,092.57	UDOT Section 02221	
A-5	Remove Fence	298	LF	\$ -	\$ -	UDOT Section 02221	Appears to be duplicated in Item A-9
A-6	Remove Concrete Approach Slab (Estimated 28.80 SY)	1	LS	\$ 3,737.88	\$ 3,737.88	UDOT Section 02221	
A-7	Remove Concrete Sleeper Slab (Estimated 16 FT)	1	LS	\$ 1,946.48	\$ 1,946.48	UDOT Section 02221	
A-8	Remove, Salvage, and Reinstall Catch Basin, Drainage Pipe, and End Section	1	LS	\$ 8,133.28	\$ 8,133.28	UDOT Section 02221	
A-9	Remove, Salvage, and Reinstall 4 FT Chain Link Fence	298	LF	\$ 49.78	\$ 14,834.44	APWA 831	Includes new posts
A-10	Remove, Salvage, and Reinstall 7 FT Chain Link Fence	34	LF	\$ 412.76	\$ 14,033.84	APWA 831	Includes retensioning of fence
A-11	Untreated Base Course	94	TN	\$ 127.39	\$ 11,974.66	UDOT Section 02721	Quantity should be 192 tn
A-12	Granular Backfill Borrow (Plan Quantity)	2548	TN	\$ 65.88	\$ 167,862.24	UDOT Section 02056	Includes Geogrid & Geotextile materials, per plans.
A-13	HMA - 1/2 Inch	75	TN	\$ 310.78	\$ 23,308.50	UDOT Section 02743	
A-14	Curb & Gutter	10	LF	\$ 228.07	\$ 2,280.70	UDOT Section 02777	
A-15	Loose Riprap	106	CY	\$ 234.22	\$ 24,827.32	UDOT Section 02373M	
A-16	Reinforcing Steel - Coated (Plan Quantity)	2841	LB	\$ 2.41	\$ 6,846.81	UDOT Section 03211	Subcontractor quantity estimate of 3,000 lb
A-17	Structural Concrete (Estimated 11.2 CY)	1	LS	\$ 25,653.47	\$ 25,653.47	UDOT Section 03310	Includes concrete for sleeper & approach slabs only
A-18	Flowable Fill (Estimated 6.84 CY)	1	LS	\$ 6,039.92	\$ 6,039.92	UDOT Section 03575	
A-19	Silt Fence	431	LF	\$ 21.88	\$ 9,430.28	UDOT Section 01571	
A-20	Drop-Inlet Barrier	5	EA	\$ 731.16	\$ 3,655.80	UDOT Section 01571	
A-21	Stabilized Construction Entrance	1	EA	\$ 24,186.90	\$ 24,186.90	UDOT Section 01571	Includes installation and removal, along with repair of Murdock Trail
A-22	Concrete Coating	1	LS	\$ 17,426.00	\$ 17,426.00	UDOT Section 09981	Includes heating/cold weather protection
A-23	Broadcast Seed	8	KSF	\$ 70.00	\$ 560.00	UDOT Section 02922	
A-24	HECP Type 1	8	KSF	\$ 70.00	\$ 560.00	UDOT Section 02911	
A-25	Strip, Stockpile, and Spread Topsoil (Plan Quantity)	833	SY	\$ 17.82	\$ 14,844.06	UDOT Section 02911	
A-26	Relocate Existing Sign	3	EA	\$ 1,018.52	\$ 3,055.56	UDOT Section 02891	
A-27	Compression Joint Seal	17	LF	\$ 480.59	\$ 8,170.03	UDOT Section 05831	
A-28	Public Involvement	1	LS	\$ 2,500.00	\$ 2,500.00		
A-29	QA/QC	1	LS	\$ 34,655.84	\$ 34,655.84		

Direct Cost	\$ 586,442.21
Indirects	\$ 127,194.00
Markup (12%)	\$ 85,636.35
Total Project Cost	\$ 799,272.56

Change Order Contingency (10%)	1	LS	\$ 79,927.26	\$ 79,927.26
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Utah Transit Authority

MEETING MEMO

669 West 200 South
Salt Lake City, UT 84101

Board of Trustees

Date: 10/9/2024

TO: Board of Trustees
THROUGH: Jay Fox, Executive Director
FROM: Alisha Garrett, Chief Enterprise Strategy Officer
PRESENTER(S): Kyle Brimley, IT Director
Marci Warren, IT Project Manager

TITLE:

Contract: TRAX and FrontRunner Rail Platform Real Time Digital Signage Equipment (International Display Systems, Inc.)

AGENDA ITEM TYPE:

Procurement Contract/Change Order

RECOMMENDATION:

Approve award and execute the contract and associated disbursements with International Display Systems (IDS) in the amount of \$2,130,386.96 (over 5 years) to purchase new LED signs and a content management software system.

BACKGROUND:

The digital signage currently in use at our rail platforms is 10-12 years old. Spare parts and signs necessary to maintain the system are exhausted, leading to frequent malfunctions and an inconsistent communication experience for passengers. Upgrading to new LED signs and implementing a content management software will ensure uniformity, reliability, and improved communication across the entire system.

Following a competitive bidding process, the evaluation committee has identified International Display Systems as the preferred vendor for this project. The committee evaluated the proposals based on several criteria, including cost, quality, vendor experience, and post-installation support. The new signs will be provided by SunriseSESA model CDP-64x384 Double Sided and the sign content will be managed by Penta WavWriter software.

DISCUSSION:

Replacing the outdated digital signage at our rail platforms will address several critical issues and bring significant benefits. The current signs, being 10-12 years old, are prone to frequent malfunctions, and spare

signs and parts are no longer available. Upgrading to new LED signs will provide uniform and reliable communication across all rail platforms, ensuring passengers receive timely and accurate information. Enhanced visibility and clarity of the new signage will greatly improve the passenger experience. Moreover, the modern and durable equipment will reduce maintenance costs, and the integration of content management software will streamline operations, enabling consistent and efficient updates across the system. This upgrade will not only solve the problem of outdated signs but also elevate the overall effectiveness of our communication infrastructure and provide a signage strategy for upcoming bus and rail projects.

CONTRACT SUMMARY:

Contractor Name:	International Display Systems, Inc.
Contract Number:	22-03654
Base Contract Effective Dates:	November 1, 2024 to October 31, 2027
Extended Contract Dates:	Plus two additional one-year options.
Existing Contract Value:	N/A
Amendment Amount:	N/A
New/Total Contract Value:	\$2,130,386.96 (including option years)
Procurement Method:	RFP
Budget Authority:	Approved 2024 Capital Budget

ALTERNATIVES:

UTA would stay with the current signage. However, the current signage system has exceeded its useful life and will have a significant risk of failure.

FISCAL IMPACT:

The 2024 approved Capital budget includes \$900,000.00 for the replacement of LED Trax and Frontrunner Platform Signs project. Projected Capital Expense funding costs for 2025 will be \$1,129,175.50; all funds from the Capital Budget will come from line 40-2001.65000.5008 Project Code ICI001; there will be no additional 2026 costs as this is included in the 3 year Warranty of the signs. 2027 and 2028 Operational Expense for extended warranty will be \$50,605.73 each year to be paid from 5200.50399.92 budget account. The total 5-year NOT TO EXCEED amount is \$2,130,386.96.

2024 Capital Budget Total: \$900,000.00

2025 Capital Plan Total : \$1,129,175.50

Total Capital 2024-2028 approved Plan: \$2,029,175.50

This contract has a three (3) year base period plus two (2) additional one (1) year options.

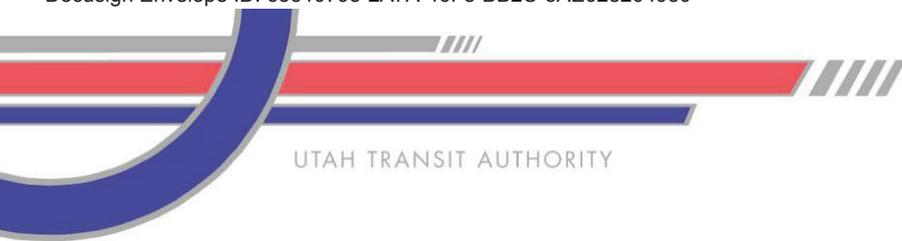
2027 Operational Expense Budget Request: \$50,605.73

2028 Operational Expense Budget Request: \$50,605.73.

Total 5-year Budget request: \$2,130,386.96

ATTACHMENTS:

UTA CONTRACT 22-03654 LED Platform Signs IDS FINAL 9-18-2024 partially signed



UTA CONTRACT 22-03654RW

GOODS AND SERVICES SUPPLY AGREEMENT

TRAX and FrontRunner Rail Platform Real Time Digital Signage Equipment

THIS GOODS AND NON-PROFESSIONAL SERVICES SUPPLY AGREEMENT (“Contract”) is entered into and made effective as of the date of last signature below. (“Effective Date”) by and between UTAH TRANSIT AUTHORITY, a public transit district organized under the laws of the State of Utah (“UTA”), and INTERNATIONAL DISPLAY SYSTEMS, INC. (the “Contractor”).

RECITALS

WHEREAS, on JANUARY 17, 2024 UTA received competitive proposals to provide TRAX and FrontRunner Rail Platform Real Time Digital Signage Equipment and (as applicable) all associated hardware, software, tools, installation services, commissioning and testing services, training and documentation (the “Goods and Services”) according to the terms, conditions and specifications prepared by UTA in RFP 22-03654 v2 (the “RFP”); and

WHEREAS, UTA wishes to procure the Goods and Services according to the terms, conditions and specifications listed in the RFP (as subsequently amended through negotiation by the parties); and

WHEREAS, the IDS UTA Technical Proposal submitted by the Contractor in response to the RFP (“Contractor’s Proposal) was deemed to be the most advantageous to UTA; and

WHEREAS, Contractor is willing to furnish the Goods and Services according to the terms, conditions and specifications of the Contract.

AGREEMENT

NOW, THEREFORE, in accordance with the foregoing Recitals, which are incorporated herein by reference, and for and in consideration of the mutual covenants and agreements hereafter set forth, the mutual benefits to the parties to be derived here from, and for other valuable consideration, the receipt and sufficiency of which the parties acknowledge, it is hereby agreed as follows:

1. **GOOD AND SERVICES TO BE PROVIDED BY CONTRACTOR**

Contractor hereby agrees to furnish and deliver the Goods and/or Services in accordance with the Contract as described in Exhibit A (Statement of Work or Services) (including performing any installation, testing commissioning and other Services described in the Contract).

2. **TERM**

Revision Date: March 2020

This Contract shall commence as of the Effective Date. The Contract shall remain in full force and effect for purchases of Goods and Services (made via purchase order or other agreed order method) during a THREE (3) - year base period expiring AUGUST 31, 2027. UTA may, at its sole election and in its sole discretion, extend the initial term for up to TWO (2) additional one-year option periods, for a total Contract period not to exceed FIVE (5) years. Extension options may be exercised by UTA upon providing Contractor with notice of such election at least thirty (30) days prior to the expiration of the initial term or then-expiring option period (as applicable). The Contract may be further extended if the Contractor and UTA mutually agree to an extension evidenced in writing. The rights and obligations of UTA and Contractor under the Contract shall at all times be subject to and conditioned upon the provisions of the Contract. UTA's extension of the contract duration does not obligate UTA to purchase any minimum quantity of signs or associated services.

3. **COMPENSATION AND FEES**

UTA shall pay Contractor in accordance with the payment milestones or other terms described in Exhibit B with the THREE (3) year base period NOT TO EXCEED the amount of \$2,029,175.50, and the TWO (2) additional one-year option periods NOT TO EXCEED the amount of \$50,605.73 each year, for a total FIVE (5) year contract NOT TO EXCEED the amount of \$2,130,386.96. If Exhibit B does not specify any milestones or other payment provisions, then payment shall be invoiced after the Goods have been delivered and the Services have been performed. In no event shall advance payments be made.

4. **INCORPORATED DOCUMENTS**

- a. The following documents hereinafter listed in chronological order, with most recent document taking precedence over any conflicting provisions contained in prior documents (where applicable), are hereby incorporated into the Contract by reference and made a part hereof:
 1. The terms and conditions of this Goods and Services Supply Agreement (including any exhibits and attachments hereto).
 2. Contractor's Proposal including, without limitation, all federal certifications (as applicable);
 3. UTA's RFP including, without limitation, all attached or incorporated terms, conditions, federal clauses (as applicable), drawings, plans, specifications and standards and other descriptions of the Goods and Services;
- b. The above-referenced documents are made as fully a part of the Contract as if hereto attached or herein repeated. The Contract (including the documents listed above) constitute the complete contract between the parties.

5. **ORDER OF PRECEDENCE**

The Order of Precedence for this contract is as follows:

1. UTA Contract including all attachments
2. UTA Terms and Conditions
3. UTA Solicitation Terms
4. Contractor's Bid or Proposal including proposed terms or conditions

Any contractor proposed term or condition which is in conflict with a UTA contract or solicitation term or condition will be deemed null and void.

6. **LAWS AND REGULATIONS**

Contractor and any and all Goods and/or Services furnished under the Contract will comply fully with all applicable Federal and State laws and regulations, including those related to safety and environmental protection. Contractor shall also comply with all applicable licensure and certification requirements.

7. **INSPECTION, DELIVERY AND TRANSFER OF TITLE**

- a. Upon UTA's request, UTA's representative shall be provided access to Contractor's facilities to obtain information on production progress and to make inspections during the manufacturing or assembly process. Contractor will make reasonable efforts to obtain, for UTA, access to subcontractor facilities for the purposes described above. If the specifications include pre-shipment inspection requirements, Goods shall not be shipped until UTA or its designee has inspected the Goods, and authorized Contractor to proceed with the shipment.
- b. Delivery of the Goods is a substantial and material consideration under the Contract. Unless otherwise specifically set forth in the pricing schedule: (i) Contractor shall be solely responsible for the delivery of the Goods FOB to the delivery point specified in the Contract (or otherwise designated by UTA) and all costs related thereto are included in the pricing; and (ii) Contractor shall retain all liabilities and risk of loss with respect to the Goods until the Goods are delivered to, and accepted by, UTA.
- c. After delivery, the Goods shall be subject to inspection, testing and acceptance by UTA, including any testing or commissioning process described in the specifications. UTA shall have the right to reject any Goods or Services that are defective or do not conform to the specifications or other Contract requirements. Goods or Services rejected shall be replaced, repaired or re-performed so as to conform to the Contract (and to UTA's reasonable satisfaction). If Contractor is unable or refuses to correct such Goods within a time deemed reasonable by UTA, then UTA may cancel the order in whole or in part. Any inspection and testing performed by UTA shall be solely for the benefit of UTA. Neither UTA's inspection of the production processes, production progress and/or Goods or Services (nor its failure to inspect) shall relieve Contractor of its obligations to fulfill the requirements of the Contract, or be construed as acceptance by UTA.
- d. Contractor warrants that title to all Goods covered by an invoice for payment will pass to UTA no later than the time of payment. Contractor further warrants that upon submittal of an invoice for payment, all Goods and/or Services for which invoices for payment have been previously issued and payments received from UTA shall be free and clear of liens, claims, security interests or encumbrances in favor of Contractor or any subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided equipment, materials, and labor related to the equipment

and/or work for which payment is being requested.

8. **INVOICING PROCEDURES**

- a. Contractor shall invoice UTA after achievement of contractual milestones or delivery of all Goods and satisfactory performance of all Services or in accordance with an approved progress or periodic billing schedule. Contractor shall submit invoices to ap@rideuta.com for processing and payment. In order to timely process invoices, Contractor shall include the following information on each invoice:
 - i. Contractor Name
 - ii. Unique Invoice Number
 - iii. PO Number
 - iv. Invoice Date
 - v. Detailed Description of Charges
 - vi. Total Dollar Amount Due
- b. UTA shall have the right to disapprove (and withhold from payment) specific line items of each invoice to address non-conforming Software or Services. Approval by UTA shall not be unreasonably withheld. UTA shall also have the right to offset (against payments) amounts reasonably reflecting the value of any claim which UTA has against Contractor under the Contract. Payment for all invoice amounts not specifically disapproved or offset by UTA shall be provided to Contractor within thirty (30) calendar days of invoice submittal to ap@rideuta.com. Invoices not submitted electronically will shall be paid thirty (30) calendar days from date of receipt by UTA's accounting department.
- c. Invoices must include a unique invoice number, UTA's Purchase Order number, a description of the Good or Service provided, line-item pricing, total amount due, and must be submitted electronically to ap@rideuta.com.

9. **WARRANTY OF GOODS AND SERVICES**

- a. Contractor warrants that all Goods (including hardware, firmware, and/or software products that it licenses) and Services shall conform to the specifications, drawings, standards, samples, and other descriptions made a part of (or incorporated by reference into) the Contract. Contractor further warrants that all Goods and Services shall be of the quality specified, or of the best grade if no quality is specified, and, unless otherwise provided in the Contract, will be new, and free from defects in design, materials and workmanship.
- b. Contractor warrants that all Goods and Services shall be in compliance with applicable federal, state, and local laws and regulations including, without limitation, those related to safety and environmental protection.

- c. *"UTA desires to have the ability to do its own 'Tier 1' troubleshooting, support, and repair with inventory to replace defective modules in the sign to restore functionality, and then send the defective module back to vendor for warranty service. Vendor to provide specific training and certification requirements to meet this request."*
- d. At any time for a period of two (2) years from the date that all Goods have been delivered and all Services have been performed in accordance with the Contract, Contractor shall at its own expense promptly repair, replace and/or re-perform any defective modules as described in paragraph c above.
- e. If Contractor fails within 45 days of receipt of the defective components to make repair, replacement or re-performance as required in paragraph d above, , UTA may conduct the necessary remedial work at Contractor's expense. Contractor cannot void the warranty for repair, replacement or re-performance performed under these circumstances. Provided that such repair, replacement or re-performance is conducted in a reasonable manner and with workmanship and care consistent with industry standards, Contractor shall reimburse UTA for the cost of any warranty repair, replacement or re-performance self-performed by UTA.
- f. The foregoing warranties are not intended as a limitation, but are in addition to all other express warranties set forth in the Contract and such other warranties as are implied by law, custom, and usage of trade. Contractor (seller) acknowledges that all warranties granted to the buyer by the Uniform Commercial Code of the State of Utah apply to the Contract. Product liability disclaimers and/or warranty disclaimers from the seller are not applicable to the Contract unless otherwise specified and mutually agreed upon elsewhere in the Contract. In general, Contractor warrants that: (1) the Good will do what the salesperson said it would do, (2) the Good will live up to all specific claims that the manufacturer makes in their advertisements, (3) the Goods will be suitable for the ordinary purposes for which such items are used, (4) the Goods will be suitable for any special purposes that UTA has relied on Contractor's skill or judgment to consider when it advised UTA about the Good, (5) the Goods have been properly designed and manufactured, and (6) the Goods are free of significant defects or unusual problems about which UTA has not been warned. Nothing in this warranty will be construed to limit any rights or remedies UTA may otherwise have under the Contract.

10. **OWNERSHIP OF DESIGNS, DRAWINGS, AND WORK PRODUCT**

- a. Except as set forth in Section 10(b), any deliverables prepared or developed pursuant to the Contract including without limitation drawings, specifications, manuals, calculations, maps, sketches, designs, tracings, notes, reports, data, computer programs, models and samples, shall become the property of UTA when prepared, and, together with any documents or information furnished to Contractor and its employees or agents by UTA hereunder, shall be delivered to UTA upon request, and, in any event, upon termination or final acceptance of the Goods and Services. UTA shall have full rights and privileges to use and reproduce said items.
- b. Subject to the license granted in Section 10(c), Contractor is and will remain the sole and exclusive owner of all right, title, and interest in and to the Background Technology. "Background Technology" means all software, data, know-how, ideas, methodologies, specifications, and other technology which Contractor owns or has the right to license which (a) were developed, created, reduced to practice, or otherwise acquired by Contractor prior to the Effective Date, or

(b) were developed, created, reduced to practice, or otherwise acquired by Contractor independently of the performance of its obligations under this Contract. In particular, UTA acknowledges that the PENTA WavWriter Software and derivative works based thereon shall be considered Background Technology and shall not be considered deliverables as set forth in Section 10(a), or subject to the restrictions contained therein.

- c. Contractor grants and agrees to grant UTA a perpetual, worldwide, nonexclusive, royalty-free right and license (a) to use, have used, copy, modify, display, prepare derivative works from, and perform the Background Technology for UTA’s internal business purposes in connection with its use of the Goods and Services provided under the Contract; and (b) to authorize contractors providing services to UTA in connection with the Goods and Services to use such Background Technology for UTA’s internal business purposes, solely to the extent necessary for the provision of such services to UTA, provided that such contractors are subject to the obligations of confidentiality and the use of the Background Technology that are at least as protective as those set forth in this Contract. UTA shall be responsible for each such contractor’s compliance with the foregoing obligations.

11. **GENERAL INDEMNIFICATION**

Contractor shall indemnify, hold harmless and defend UTA, its officers, trustees, agents, and employees (hereinafter collectively referred to as “Indemnitees”) from and against all liabilities, claims, actions, damages, losses, and expenses including without limitation reasonable attorneys’ fees and costs (hereinafter referred to collectively as “claims”) related to bodily injury, including death, or loss or damage to tangible or intangible property caused, or alleged to be caused, in whole or in part, by the acts or omissions of Contractor or any of its owners, officers, directors, agents, employees or subcontractors. This indemnity includes any claim or amount arising out of the failure of such Contractor to conform to federal, state, and local laws and regulations. If an employee of Contractor, a subcontractor, anyone employed directly or indirectly by any of them or anyone for whose acts any of them may be liable brings a claim against UTA or another Indemnitee, Contractor’s indemnity obligation set forth above will not be limited by any limitation on the amount of damages, compensation or benefits payable under any employee benefit acts, including workers’ compensation or disability acts. The indemnity obligations of Contractor shall not apply to the extent that claims arise out of the sole negligence of UTA or the Indemnitees.

12. **INSURANCE REQUIREMENTS**

Standard Insurance Requirements

The insurance requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract. The Utah Transit Authority in no way warrants that the minimum limits contained herein are sufficient to protect the Contractor from liabilities that might arise out of the performance of the work under this contract by the Contractor, his agents, representatives, employees or subcontractors and Contractor is free to purchase additional insurance as may be determined necessary.

A. MINIMUM SCOPE AND LIMITS OF INSURANCE: Contractor shall provide coverage with limits of liability not less than those Stated below. An excess liability policy or umbrella liability policy may be used to meet the minimum liability requirements provided that the coverage is written on a “following form” basis.

1. Commercial General Liability – Occurrence Form

Policy shall include bodily injury, property damage and broad form contractual liability coverage.

- General Aggregate \$4,000,000
- Products – Completed Operations Aggregate \$1,000,000
- Personal and Advertising Injury \$1,000,000
- Each Occurrence \$2,000,000

a. The policy shall be endorsed to include the following additional insured language: "The Utah Transit Authority shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor".

2. Automobile Liability

Bodily Injury and Property Damage for any owned, hired, and non-owned vehicles used in the performance of this Contract.

Combined Single Limit (CSL) \$2,000,000

a. The policy shall be endorsed to include the following additional insured language: "The Utah Transit Authority shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor, including automobiles owned, leased, hired or borrowed by the Contractor".

3. Worker's Compensation and Employers' Liability

Workers' Compensation Statutory

Employers' Liability

Each Accident \$100,000

Disease – Each Employee \$100,000

Disease – Policy Limit \$500,000

a. Policy shall contain a waiver of subrogation against the Utah Transit Authority.

- b. This requirement shall not apply when a contractor or subcontractor is exempt under UCA 34A-2-103, AND when such contractor or subcontractor executes the appropriate waiver form.

4. Professional Liability (Errors and Omissions Liability)

The policy shall cover professional misconduct or lack of ordinary skill for those positions defined in the Scope of Services of this contract.

Each Claim	\$1,000,000
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Annual Aggregate	\$2,000,000
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- a. In the event that the professional liability insurance required by this Contract is written on a claims-made basis, Contractor warrants that any retroactive date under the policy shall precede the effective date of this Contract; and that either continuous coverage will be maintained or an extended discovery period will be exercised for a period of three (3) years beginning at the time work under this Contract is completed.

5.

B. ADDITIONAL INSURANCE REQUIREMENTS: The policies shall include, or be endorsed to include, the following provisions:

1. On insurance policies where the Utah Transit Authority is named as an additional insured, the Utah Transit Authority shall be an additional insured to the full limits of liability purchased by the Consultant. Insurance limits indicated in this agreement are minimum limits. Larger limits may be indicated after the consultant’s assessment of the exposure for this contract; for their own protection and the protection of UTA.
2. The Contractor's insurance coverage shall be primary insurance and non-contributory with respect to all other available sources.

C. NOTICE OF CANCELLATION: Each insurance policy required by the insurance provisions of this Contract shall provide the required coverage and shall not be suspended, voided or canceled except after thirty (30) days prior written notice has been given to the Utah Transit Authority, except when cancellation is for non-payment of premium, then ten (10) days prior notice may be given. Such notice shall be sent directly to (Utah Transit Authority agency Representative's Name & Address).

D. ACCEPTABILITY OF INSURERS: Insurance is to be placed with insurers duly licensed or authorized to do business in the State and with an “A.M. Best” rating of not less than A-VII. The Utah Transit Authority in no way warrants that the above-required minimum insurer rating is sufficient to protect the Contractor from potential insurer insolvency.

- E. VERIFICATION OF COVERAGE: Contractor shall furnish the Utah Transit Authority with certificates of insurance (on standard ACORD form) as required by this Contract. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

All certificates and any required endorsements are to be sent to utahta@ebix.com and received and approved by the Utah Transit Authority before work commences. Each insurance policy required by this Contract must be in effect at or prior to commencement of work under this Contract and remain in effect for the duration of the project. Failure to maintain the insurance policies as required by this Contract or to provide evidence of renewal is a material breach of contract.

All certificates required by this Contract shall be emailed directly to Utah Transit Authority's insurance email address at utahta@ebix.com. The Utah Transit Authority project/contract number and project description shall be noted on the certificate of insurance. The Utah Transit Authority reserves the right to require complete, certified copies of all insurance policies required by this Contract at any time. DO NOT SEND CERTIFICATES OF INSURANCE TO THE UTAH TRANSIT AUTHORITY'S CLAIMS AND INSURANCE DEPARTMENT.

- F. SUBCONTRACTORS: Contractors' certificate(s) shall include all subcontractors as additional insureds under its policies or subcontractors shall maintain separate insurance as determined by the Contractor, however, subcontractor's limits of liability shall not be less than \$1,000,000 per occurrence / \$2,000,000 aggregate. Sub-contractors maintaining separate insurance shall name Utah Transit Authority as an additional insured on their policy. Blanket additional insured endorsements are not acceptable from sub-contractors. Utah Transit Authority must be scheduled as an additional insured on any sub-contractor policies.
- G. APPROVAL: Any modification or variation from the insurance requirements in this Contract shall be made by Claims and Insurance Department or the UTA Legal Services, whose decision shall be final. Such action will not require a formal Contract amendment, but may be made by administrative action.

13. OTHER INDEMNITIES

- a. Contractor shall protect, release, defend, indemnify and hold harmless UTA and the other Indemnitees against and from any and all claims of any kind or nature whatsoever on account of infringement relating to Contractor's performance under the Contract. If notified promptly in writing and given authority, information and assistance, Contractor shall defend, or may settle at its expense, any suit or proceeding against UTA so far as based on a claimed infringement and Contractor shall pay all damages and costs awarded therein against UTA due to such breach. In case any Good or Service is in such suit held to constitute such an

infringement or an injunction is filed that interferes with UTA's rights under the Contract, Contractor shall, at its expense and through mutual agreement between UTA and Contractor, either procure for UTA any necessary intellectual property rights, or modify Contractor's Goods and Services such that the claimed infringement is eliminated.

- b. Contractor shall: (i) protect, release, defend, indemnify and hold harmless UTA and the other Indemnitees against and from any and all liens or claims made or filed against UTA on account of any Goods or Services furnished by subcontractors of any tier; and (ii) keep UTA property free and clear of all liens or claims arising in conjunction with any Goods or Services furnished under the Contract by Contractor or its subcontractors of any tier. If any lien arising out of the Contract is filed in conjunction with any Goods or Services furnished under the Contract, Contractor, within ten (10) calendar days after receiving from UTA written notice of such lien, shall obtain a release of or otherwise satisfy such lien. If Contractor fails to do so, UTA may take such steps and make such expenditures as in its discretion it deems advisable to obtain a release of or otherwise satisfy any such lien or liens, and Contractor shall upon demand reimburse UTA for all costs incurred and expenditures made by UTA in obtaining such release or satisfaction. If any non-payment claim is made directly against UTA arising out of non-payment to any subcontractor, Contractor shall assume the defense of such claim within ten (10) calendar days after receiving from UTA written notice of such claim. If Contractor fails to do so, Contractor shall upon demand reimburse UTA for all costs incurred and expenditures made by UTA to satisfy such claim.
- c. Contractor will defend, indemnify and hold UTA, its officers, agents and employees harmless from liability of any kind or nature, arising from Contractor's use of any copyrighted or un-copyrighted composition, trade secret, patented or un-patented invention, article or appliance furnished or used in the performance of the Contract.

14. **INDEPENDENT CONTRACTOR**

The parties agree that Contractor, in the carrying out of its duties hereunder, is an independent contractor and that neither Contractor nor any of its employees is or are agents, servants or employees of UTA. Neither Contractor nor any of Contractor's employees shall be eligible for any workers compensation insurance, pension, health coverage, or fringe benefits which apply to UTA's employees. Neither federal, state, nor local income tax nor payroll tax of any kind shall be withheld or paid by UTA on behalf of Contractor or the employees of Contractor. Contractor acknowledges that it shall be solely responsible for payment of all payrolls, income and other taxes generally applicable to independent contractors.

15. **STANDARD OF CARE.**

Contractor shall perform any Services to be provided under the Contract in a good and workmanlike manner, using at least that standard of care, skill and judgment which can reasonably be expected from similarly situated independent contractors (including, as applicable, professional standards of care).

16. **USE OF SUBCONTRACTORS**

- a. Consultant shall give advance written notification to UTA of any proposed subcontract (not indicated in

Consultant's Proposal) negotiated with respect to the Work. UTA shall have the right to approve all subcontractors, such approval not to be withheld unreasonably.

- b. No subsequent change, removal or substitution shall be made with respect to any such subcontractor without the prior written approval of UTA.
- c. Consultant shall be solely responsible for making payments to subcontractors, and such payments shall be made within thirty (30) days after Consultant receives corresponding payments from UTA.
- d. Consultant shall be responsible for and direct all Work performed by subcontractors.
- e. Consultant agrees that no subcontracts shall provide for payment on a cost-plus-percentage-of-cost basis. Consultant further agrees that all subcontracts shall comply with all applicable laws

17. **CONTRACTOR SAFETY COMPLIANCE**

UTA is an ISO 14001 for Environmental Management Systems, ISO 9001 Quality and Performance Management, and OSHAS 18001 safety systems Management Company. Contractor, including its employees, subcontractors, authorized agents, and representatives, shall comply with all UTA and industry safety standards, NATE, OSHA, EPA and all other State and Federal regulations, rules and guidelines pertaining to safety, environmental Management and will be solely responsible for any fines, citations or penalties it may receive or cause UTA to receive pursuant to this Contract. Each employee, contractor and subcontractor must be trained in UTA EMS and Safety Management principles. Contractor acknowledges that its Goods and Services might affect UTA's Environmental Management Systems obligations. A partial list of activities, products or Services deemed as have a potential EMS effect is available at the UTA website www.rideuta.com. Upon request by UTA, Contractor shall complete and return a *Contractor Activity Checklist*. If UTA determines that the Goods and/or Services under the Contract has the potential to impact the environment, UTA may require Contractor to submit additional environmental documents. Contractor shall provide one set of the appropriate safety data sheet(s) (SDS) and container label(s) upon delivery of a hazardous material to UTA

18. **ASSIGNMENT OF CONTRACT**

Contractor shall not assign any of its rights or responsibilities, nor delegate its obligations, under this Contract or any part hereof without the prior written consent of UTA, and any attempted transfer in violation of this restriction shall be void.

19. **ENVIRONMENTAL RESPONSIBILITY**

UTA is ISO 14001 Environmental Management System (EMS) certified. Contractor acknowledges that its Goods and/or Services might affect UTA's ability to maintain the obligation of the EMS. A partial list of activities, products or Services deemed as have a potential EMS effect is available at the UTA website www.rideuta.com. Upon request by UTA, Contractor shall complete and return a *Contractor Activity Checklist*. If UTA determines that the Goods and/or Services under the

Contract has the potential to impact the environment, UTA may require Contractor to submit additional environmental documents. Contractor shall provide one set of the appropriate safety data sheet(s) (SDS) and container label(s) upon delivery of a hazardous material to UTA.

20. SUSPENSION OF WORK

- a. UTA may, at any time, by written order to Consultant, require Consultant to suspend, delay, or interrupt all or any part of the Work called for by this Contract. Any such order shall be specifically identified as a "Suspension of Work Order" issued pursuant to this Article. Upon receipt of such an order, Consultant shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of further costs allocable to the Work covered by the order during the period of Work stoppage.
- b. If a Suspension of Work Order issued under this Article is canceled, Consultant shall resume Work as mutually agreed to in writing by the parties hereto.
- c. If a Suspension of Work Order is not canceled and the Work covered by such order is terminated for the convenience of UTA, reasonable costs incurred as a result of the Suspension of Work Order shall be considered in negotiating the termination settlement.
- d. If the Suspension of Work causes an increase in Consultant's cost or time to perform the Work, UTA's Project Manager or designee shall make an equitable adjustment to compensate Consultant for the additional costs or time, and modify this Contract by Change Order.

21. TERMINATION

- a. **FOR CONVENIENCE:** UTA shall have the right to terminate the Contract at any time by providing written notice to Contractor. If the Contract is terminated for convenience, UTA shall pay Contractor: (i) in full for Goods delivered and Services fully performed prior to the effective date of termination; and (ii) an equitable amount to reflect costs incurred (including Contract close-out and subcontractor termination costs that cannot be reasonably mitigated) and profit on work-in-progress as of to the effective date of the termination notice. UTA shall not be responsible for anticipated profits based on the terminated portion of the Contract. Contractor shall promptly submit a termination claim to UTA. If Contractor has any property in its possession belonging to UTA, Contractor will account for the same, and dispose of it in the manner UTA directs.
- b. **FOR DEFAULT:** If Contractor (a) becomes insolvent; (b) files a petition under any chapter of the bankruptcy laws or is the subject of an involuntary petition; (c) makes a general assignment for the benefit of its creditors; (d) has a receiver appointed; (e) should fail to make prompt payment to any subcontractors or suppliers; or (f) fails to comply with any of its material obligations under the Contract, UTA may, in its discretion, after first giving Contractor seven (7) days written notice to cure such default:
 1. Terminate the Contract (in whole or in part) for default and obtain the Goods and Services using other contractors or UTA's own forces, in which event Contractor shall be liable for all incremental costs so incurred by UTA;
 2. Pursue other remedies available under the Contract (regardless of whether the termination remedy is invoked); and/or
 3. Except to the extent limited by the Contract, pursue other remedies available at law.

- b. **CONTRACTOR'S POST TERMINATION OBLIGATIONS:** Upon receipt of a termination notice as provided above, Contractor shall (i) immediately discontinue all work affected (unless the notice directs otherwise); and (ii) deliver to UTA all data, drawings and other deliverables, whether completed or in process. Contractor shall also remit a final invoice for all services performed and expenses incurred in full accordance with the terms and conditions of the Contract up to the effective date of termination. UTA shall calculate termination damages payable under the Contract, shall offset such damages against Contractor's final invoice, and shall invoice Contractor for any additional amounts payable by Contractor (to the extent termination damages exceed the invoice). All rights and remedies provided in this Article are cumulative and not exclusive. If UTA terminates the Contract for any reason, Contractor shall remain available, for a period not exceeding 90 days, to UTA to respond to any questions or concerns that UTA may have regarding the Goods and Services furnished by Contractor prior to termination.

22. **CHANGES**

- a. UTA's Project Manager or designee may, at any time, by written order designated or indicated to be a Change Order, direct changes in the Work including, but not limited to, changes:
- A. In the Scope of Services;
 - B. In the method or manner of performance of the Work; or
 - C. In the schedule or completion dates applicable to the Work.

To the extent that any change in Work directed by UTA causes an actual and demonstrable impact to: (i) Consultant's cost of performing the work; or (ii) the time required for the Work, then (in either case) the Change Order shall include an equitable adjustment to this Contract to make Consultant whole with respect to the impacts of such change.

- b. A change in the Work may only be directed by UTA through a written Change Order or (alternatively) UTA's expressed, written authorization directing Consultant to proceed pending negotiation of a Change Order. Any changes to this Contract undertaken by Consultant without such written authority shall be at Consultant's sole risk. Consultant shall not be entitled to rely on any other manner or method of direction.
- c. Consultant shall also be entitled to an equitable adjustment to address the actual and demonstrable impacts of "constructive" changes in the Work if: (i) subsequent to the Effective Date of this Contract, there is a material change with respect to any requirement set forth in this Contract; or (ii) other conditions exist or actions are taken by UTA which materially modify the magnitude, character or complexity of the Work from what should have been reasonably assumed by Consultant based on the information included in (or referenced by) this Contract. In order to be eligible for equitable relief for "constructive" changes in Work, Consultant must give UTA's Project Manager or designee written notice stating:
- A. The date, circumstances, and source of the change; and
 - B. That Consultant regards the identified item as a change in Work giving rise to an adjustment in this Contract.

Consultant must provide notice of a "constructive" change and assert its right to an equitable adjustment under this Section within ten (10) days after Consultant becomes aware (or reasonably

should have become aware) of the facts and circumstances giving rise to the “constructive” change. Consultant’s failure to provide timely written notice as provided above shall constitute a waiver of Consultant’s rights with respect to such claim.

- d. As soon as practicable, but in no event longer than 30 days after providing notice, Consultant must provide UTA with information and documentation reasonably demonstrating the actual cost and schedule impacts associated with any change in Work. Equitable adjustments will be made via Change Order. Any dispute regarding the Consultant’s entitlement to an equitable adjustment (or the extent of any such equitable adjustment) shall be resolved in accordance with Article 20 of this Contract.

23. INFORMATION, RECORDS and REPORTS; AUDIT RIGHTS

Contractor shall retain all books, papers, documents, accounting records and other evidence to support any cost-based billings allowable under Exhibit B (or any other provision of the Contract). Such records shall include, without limitation, time sheets and other cost documentation related to the performance of labor services, as well as subcontracts, purchase orders, other contract documents, invoices, receipts or other documentation supporting non-labor costs. Contractor shall also retain other books and records related to the performance, quality or management of the Contract and/or Contractor’s compliance with the Contract. Records shall be retained by Contractor for a period of at least six (6) years, or until any audit initiated within that six-year period has been completed (whichever is later). During this six-year period, such records shall be made available at all reasonable times for audit and inspection by UTA and other authorized auditing parties including, but not limited to, the Federal Transit Administration. Copies of requested records shall be furnished to UTA or designated audit parties upon request. Contractor agrees that it shall flow-down (as a matter of written contract) these records requirements to all subcontractors utilized in the performance of the Contract at any tier.

24. FINDINGS CONFIDENTIAL

Any documents, reports, information, or other data and materials delivered or made available to or prepared or assembled by Contractor or subcontractor under this Contract are considered confidential and shall not be made available to any person, organization,

or entity by Contractor without consent in writing from UTA. If confidential information is released to any third party without UTA’s written consent as described above, contractor shall notify UTA of the data breach within 10 days and provide its plan for immediate

mitigation of the breach for review and approval by UTA.

- a. It is hereby agreed that the following information is not considered to be confidential:
 - A. Information already in the public domain.
 - B. Information disclosed to Contractor by a third party who is not under a confidentiality obligation.
 - C. Information developed by or in the custody of Contractor before entering into this Contract.

- D. Information developed by Contractor through its work with other clients; and
- E. Information required to be disclosed by law or regulation including, but not limited to, subpoena, court order or administrative order.

25. **PUBLIC INFORMATION.**

Contractor acknowledges that the Contract and related materials (invoices, orders, etc.) will be public documents under the Utah Government Records Access and Management Act (GRAMA). Contractor's response to the solicitation for the Contract will also be a public document subject to GRAMA, except for legitimate trade secrets, so long as such trade secrets were properly designated in accordance with terms of the solicitation.

26. **PROJECT MANAGER**

UTA's Project Manager for the Contract is MARCI WARREN, or designee. All questions and correspondence relating to the technical aspects of the Contract should be directed to UTA's Project Manager at UTA offices located at 669 West 200 South, Salt Lake City, Utah 84101, office phone (801) 287-2509; mwarren@rideuta.com.

27. **CONTRACT ADMINISTRATOR**

UTA's Contract Administrator for the Contract is RICK WILSON, or designee. All questions and correspondence relating to the contractual aspects of the Contract should be directed to UTA's Grants & Contracts Administrator at UTA offices located at 669 West 200 South, Salt Lake City, Utah 84101, office phone (801)287-3016; rwilson@rideuta.com.

28. **CONFLICT OF INTEREST**

Contractor represents that it has not offered or given any gift or compensation prohibited by the laws of the State of Utah to any officer or employee of UTA to secure favorable treatment with respect to being awarded the Contract. No member, officer, or employee of UTA during their tenure or one year thereafter shall have any interest, direct or indirect, in the Contract or the proceeds thereof.

29. **NOTICES OR DEMANDS**

a. Any and all notices, demands or other communications required hereunder to be given by one party to the other shall be given in writing and may be electronically delivered, personally delivered, mailed by US Mail, postage prepaid, or sent by overnight courier service and addressed to such party as follows:

If to UTA:

Utah Transit Authority

ATTN: RICK WILSON

669 West 200 South

Salt Lake City, UT 84101

If to Contractor:

International Display Systems, Inc.

ATTN: ROB KEELOR, President

3131 S Dixie Drive

Dayton, OH 45439

rwilson@rideuta.com

rob@idspids.com

b. Either party may change the address at which such party desires to receive written notice of such change to any other party. Any such notice shall be deemed to have been given, and shall be effective, on delivery to the notice address then applicable for the party to which the notice is directed; provided, however, that refusal to accept delivery of a notice or the inability to deliver a notice because of an address change which was not properly communicated shall not defeat or delay the giving of a notice.

30. **CLAIMS/DISPUTE RESOLUTION**

- a. "Claim" means any disputes between UTA and the Contractor arising out of or relating to the Contract Documents including any disputed claims for Contract adjustments that cannot be resolved in accordance with the Change Order negotiation process set forth in Article 20. Claims must be made by written notice. The responsibility to substantiate claims rests with the party making the claim.
- b. Unless otherwise directed by UTA in writing, Contractor shall proceed diligently with performance of the Work pending final resolution of a Claim, including litigation. UTA shall continue to pay any undisputed payments related to such Claim.
- c. The parties shall attempt to informally resolve all claims, counterclaims and other disputes through the escalation process described below. No party may bring a legal action to enforce any term of this Contract without first having exhausted such process.
- d. The time schedule for escalation of disputes, including disputed requests for change order, shall be as follows:

Level of Authority	Time Limit
UTA's Project Manager: Marci Warren Contractor's Project Manager: Greg Senkiw	Five calendar days
UTA's Shawn Stephens Contractor's Vice President: JB McCarthy	Five calendar days
UTA's Kyle Brimley Contractor's President: Rob Keelor	Five calendar days

Unless otherwise directed by UTA's Project Manager, Contractor shall diligently continue performance under this Contract while matters in dispute are being resolved.

If the dispute cannot be resolved informally in accordance with the escalation procedures set forth above, then either party may commence formal mediation under the Juris Arbitration and Mediation (JAMS) process using a mutually agreed upon JAMS mediator. If resolution does not occur through Mediation, then legal action may be commenced in accordance the venue and governing law provisions of this contract.

31. **GOVERNING LAW**

The validity, interpretation and performance of the Contract shall be governed by the laws of the State of Utah, without regard to its law on the conflict of laws. Any dispute arising out of the Contract that cannot be solved to the mutual agreement of the parties shall be brought in a court of competent jurisdiction in Salt Lake County, State of Utah. Contractor consents to the jurisdiction of such courts.

32. **COSTS AND ATTORNEY FEES.**

If any party to this Agreement brings an action to enforce or defend its rights or obligations hereunder, the prevailing party shall be entitled to recover its costs and expenses, including mediation, arbitration, litigation, court costs and attorneys' fees, if any, incurred in connection with such suit, including on appeal

33. **SEVERABILITY**

Any provision of the Contract prohibited or rendered unenforceable by operation of law shall be ineffective only to the extent of such prohibition or unenforceability without invalidating the remaining provisions of the Contract.

34. **AMENDMENTS**

Any amendment to the Contract must be in writing and executed by the authorized representatives of each party.

35. **FORCE MAJEURE**

Neither party to the Contract will be held responsible for delay or default caused by fire, riot, acts of God and/or war which are beyond that party's reasonable control. UTA may terminate the Contract after determining such delay or default will reasonably prevent successful performance of the Contract.

36. **NO THIRD-PARTY BENEFICIARIES**

The parties enter into the Contract for the sole benefit of the parties, in exclusion of any third party, and no third party beneficiary is intended or created by the execution of the Contract.

37. **ENTIRE AGREEMENT**

This Contract shall constitute the entire agreement and understanding of the parties with respect to the subject matter hereof, and shall supersede all offers, negotiations and other agreements with respect thereto.

38. **COUNTERPARTS**

This Contract may be executed in any number of counterparts and by each of the parties hereto on separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute but one and the same instrument. Any signature page of the Contract may be detached from any counterpart and reattached to any other counterpart hereof. The electronic transmission

of a signed original of the Contract or any counterpart hereof and the electronic retransmission of any signed copy hereof shall be the same as delivery of an original.

39. **NONWAIVER**

No failure or waiver or successive failures or waivers on the part of either party in the enforcement of any condition, covenant, or article of this Contract shall operate as a discharge of any such condition, covenant, or article nor render the same invalid, nor impair the right of either party to enforce the same in the event of any subsequent breaches by the other party.

40. **SALES TAX EXEMPT**

Purchases of certain materials are exempt from Utah sales tax. UTA will provide a sales tax exemption certificate to Contractor upon request. UTA will not pay Contractor for sales taxes for exempt purchases, and such taxes should not be included in Contractor's Application for Payment.

41. **UTAH ANTI-BOYCOTT OF ISRAEL ACT**

Contractor agrees it will not engage in a boycott of the State of Israel for the duration of this contract.

42. **SURVIVAL**

Provisions of this Contract intended by their nature and content to survive termination of this Contract shall so survive including, but not limited to, Articles 7, 9, 10, 11, 12, 13, 15, 17, 18, 19, 21, 23, 24, 25, 30, 31, 32, and 40.

IN WITNESS WHEREOF, the parties hereto have caused the Contract to be executed by officers duly authorized to execute the same as of the date of last signature below.

UTAH TRANSIT AUTHORITY:

By _____

Jay Fox

Executive Director

Date

INTERNATIONAL DISPLAY SYSTEMS, INC.

DocuSigned by:
B Rob Keelor _____
8C54FDEF366649C...

Rob Keelor

President

Date 9/19/2024

By _____

Alisha Garrett

Chief Enterprise Strategy Officer

Date

By _____

Kyle Brimley

IT Director

Date

DocuSigned by:
B Mike Bell _____
70E33A415BA44F6...

Mike Bell

UTA Legal Counsel

Date 9/19/2024

Exhibit A
Statement of Work

TAB 8 – IDS-UTA-TECHNICAL PROPOSAL

1. Quality of the Proposed LED Signs – Compliance Statement

General RFP Requirements

UTA DESIGN REQUIREMENT	IDS COMPLIANCE RESPONSE
Cover Sheet: Contract – Firm Fixed Price for 3 years with two (2) additional one-year options for a total contract period of up to 5 years.	Comply – This is the basis of our Proposal.
Scope of Work: UTA's preference is to select an outdoor rated, single form factor, double-sided LED sign for all our rail station canopies. This will be a multiyear procurement with a minimum quantity of 140 signs purchased over 3 years, approximately 50 double-sided signs will be needed in the first year. UTA requests an option to purchase additional sign quantities in the future if needed.	Comply – All requirements stated in this section are confirmed as part of our Proposal and supported by the Sunrise SESA LED Signs.
Scope of Work: UTA is seeking a robust content management system (CMS) to manage sign tasks with a user-friendly interface. CMS must support real-time data integration, content creation, content scheduling, remote sign management (system health and troubleshooting), real time updates to the content on the LED signage, and role-based user permissions. Create templates for different types of content to ensure a consistent look and feel for the UTA signage. Templates should be able to accommodate real-time data without sacrificing aesthetics.	Comply – All requirements stated in this section are confirmed as part of our Proposal and supported by the Penta WavWriter Content Management System.
Scope of Work: Information to be displayed on the signs will be provided by GTFS-RT or internal UTA internal data source, proposed signs will need to be integrated with either data feed. This project will include multiple signs on each TRAX and FrontRunner platform canopy, signs will inform waiting riders of upcoming train departures. The signs must include internal speakers that can project a text to speech announcement of the	Comply – Penta WavWriter CMS can support the UTA GTFS-RT source interface and other internal sources and APIs. CMS can control a multitude of different signs if needed. Text to Speech device control and further PA system work is available from the Penta WavWriter and Penta Corporation

<p>next departure at time triggered intervals. The PA system will also be fed audio data from UTA internal systems.</p>																													
<p>Scope of Work: The proposed system shall be scalable over its estimated lifetime to support additional digital displays on future TRAX and FrontRunner rail platform locations and some optional transit facilities without replacement of initially installed components, both hardware and software.</p>	<p>Comply – The Penta WavWriter CMS is scalable and modular.</p>																												
<p>Scope of Work: This procurement is requesting the proposing vendor to manage all activities in manufacturing, engineering, testing, delivery of finished sign with mounting hardware to UTA, software installation, and training for CMS software and provided hardware. The proposing vendor will provide documentation and pricing for ongoing maintenance and warranties, for all products delivered under this Request for Proposal (RFP).</p>	<p>Comply – IDS, as prime contractor and systems integrator, will manage all activities from Contract Award to Closeout. We will oversee the work and quality control for our suppliers (i.e., Sunrise SESA and Penta Corporation).</p>																												
<p>Scope of Work: LED real time information signage should display departure information, interleaved messages, and miscellaneous information (i.e., service delays or incident information) provided by GTFS-RT or UTA internal data API. An example of information to display is shown below. Displays should have the capability to display the route number, destination, track assignment, and minutes to departure. Ex "Fronrunner to Ogden departs from platform 1 in 5 mins" (See Figure 1 below)</p>	<p>Comply – The Penta WavWriter CMS and Sunrise SESA LED Signs comply with the stated interfaces and display formats and functions.</p>																												
<table border="1"> <thead> <tr> <th>Route</th> <th>Destination</th> <th>Track</th> <th>Departure</th> </tr> </thead> <tbody> <tr> <td>750</td> <td>Ogden</td> <td>1</td> <td>5 min</td> </tr> <tr> <td>750</td> <td>Provo</td> <td>2</td> <td>17 min</td> </tr> <tr> <th>Route</th> <th>Destination</th> <th>Track</th> <th>Departure</th> </tr> <tr> <td>Blue</td> <td>SL Central</td> <td>2</td> <td>5 min</td> </tr> <tr> <td>Red</td> <td>U of U</td> <td>2</td> <td>7 min</td> </tr> <tr> <td>Green</td> <td>Airport</td> <td>2</td> <td>9 min</td> </tr> </tbody> </table>	Route	Destination	Track	Departure	750	Ogden	1	5 min	750	Provo	2	17 min	Route	Destination	Track	Departure	Blue	SL Central	2	5 min	Red	U of U	2	7 min	Green	Airport	2	9 min	
Route	Destination	Track	Departure																										
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Route	Destination	Track	Departure																										
Blue	SL Central	2	5 min																										
Red	U of U	2	7 min																										
Green	Airport	2	9 min																										
<p>Scope of Work: UTA will provide a virtual server to load the API (Application Programming Interface) to allow route,</p>	<p>Comply – Acknowledged.</p>																												

<p>destination, track, and ETD (Estimated Time to Departure) in GTFS RT format.</p>	
<p>Scope of Work (In Scope): All signs, sign mounts, sign hardware, ethernet and power connectors, CMS software, hardware and software training, software installation and configuration, etc., as well as final testing will be in scope.</p>	<p>Comply – Acknowledged.</p>
<p>Scope of Work (Out of Scope): For this project all equipment that is not part of the signage including, network equipment, conduits, ethernet and power cabling to the signs, structural work required for installation and installation will be out of scope.</p>	<p>Comply – Acknowledged Out of Scope Work by Others.</p>
<p>Electronic Signage: UTA desire is to have a double-sided LED real time information sign for the replacement of our current signage on TRAX and Frontrunner rail stations. A two to four-line sign display will be needed. Character size should be a minimum of 2 inches at close viewing and 3inches for greater distances to meet ADA compliance. The capability of scrolling and rotation of information as well as listing information in columns. Signs will be mounted by UTA on the underside of the platform canopies in the same locations as the existing signs. Double sided signage should be configured with the same information on each side of the display to be seen from two directions and mounted perpendicular to the direction of travel. All electronic sign mounting locations will have a power cable and ethernet data cable located at the mounting site. The installation of the signs and connections to the power and data will be performed by UTA (or UTA designated contractor).</p>	<p>Comply – Acknowledged. Please see our responses to the LED Sign Minimum Requirements for further confirmation. Thank you.</p>
<p>Warranty & Maintenance: The reasonable life expectancy of these signs should be 8 to 12 years. Please include the length and coverage details of the basic warranty on all hardware. Include options to extend the warranty for up to 5 additional years (above standard warranty), and any yearly maintenance fees. UTA desires to have the ability to be our own ‘Tier 1’ troubleshooting, support, and repair with inventory to replace defective modules in the sign to restore functionality, and then send the defective module back to vendor for mounting site. The installation of the signs and connections to</p>	<p>Comply – This IDS Proposal confirms the RFP Contract Length (See Cover Sheet) of 3 Years with 2 Optional Years for a total of 5 Years. All the IDS supplied Hardware & Software is covered for a total of 5 Years. However, if the intent was for a 1-year base contract with 5 additional years, then please note that our price proposal will identify, on the bid form, a 6th year for your consideration. Thank you.</p>

the power and data will be performed by UTA (or UTA designated contractor).	
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LED Display Requirements

UTA DESIGN REQUIREMENT	IDS COMPLIANCE RESPONSE
Ability to display text, logos, multiple font styles and sizes and meet ADA requirements	Comply – Sunrise SESA Signs support text, logos, multiple font styles and sizes, and meet ADA requirements.
A minimum 3 rows of display with minimum 2-inch-high characters	Comply – Sunrise SESA Signs have 64 Pixels High x 384 Pixels Wide which provides for 3 Lines x 24 2” High Characters.
Minimum viewing area: 31” X 6.25 ”	Comply – Sunrise SESA Signs have a viewing area 37.8” W x 6.29” H.
Maximum sign size: ≤40”* x ≤9” x 9”** *Sign width must not exceed 40” **Sign and bracket height cannot exceed 15.75”	Comply as Noted – Sunrise SESA DS Signs are 40”W x 12”H x 12”D. However, they are confident that their mounting brackets with their signs will not exceed the 15.75” total mounting height.
LED and Pixel pitch 2.5mm	Comply – Sunrise SESA Signs are 2.5mm which are “high resolution” for ADA considerations.
Minimum 4500 nits	Comply – Sunrise SESA Signs are 6000 nits.
Full-color capability	Comply – Sunrise SESA Signs are 24 Bit Color.
Viewing angle 140°	Comply – Sunrise SESA Signs has 140 degree viewing angle.
IP 54 or better and no exchange of outside air	Comply – Sunrise SESA Signs are IP64 rated with no vents or fans.
Environmentally sealed case	Comply – Sunrise SESA Signs has a welded chassis with neoprene gaskets and Polycarbonate front lens.
Bracket to hang the sign *Sign and bracket height cannot exceed 15.75”	Comply – Sunrise SESA Signs top, rear, side bracketry will not exceed 15.75” height.
Double-faced electronic sign configurations	Comply – Sunrise SESA Signs utilize a bracket to configure signs as double-sided.
Internal Speaker – capable of projecting text to speech announcement	Comply – Sunrise SESA Signs have embedded Text to Speech Module with ambient noise mic and utilizes Automatic Gain Control (AGC) in its build-in amplifier to drive internal speaker.
Ethernet communication to back office	Comply – Sunrise SESA Signs include RJ45 Ethernet Communications.
Power 120 VAC single phase	Comply – Sunrise SESA Signs are 120V, 12A, with 1400W Max & 370W RMS.
Compliance certifications UL, CUL, CE, NEMA 4	Comply – Sunrise SESA Signs are UL 60950-1, 2nd Edition (2007). “Safety of Information Technology Equipment” and UL 60950-22, 1st Edition (2007). “Information Technology Equipment –Safety Part 22:

	Equipment to be Installed Outdoors.” As previously noted, they are IP64 rated enclosures.
Operating temperature range -40°F to 120°F (-40°C to 50°C)	Comply – Sunrise SESA Signs operation specification is -40°C to 74°C.
Internal temperature monitoring	Comply – Sunrise SESA Signs include Internal Temperature Sensor.
LED sign ability to adjust brightness of display programmatically or by ambient sensor	Comply – Sunrise SESA Signs have built-in light sensor & brightness can also be adjusted via the API.
Sign case color - Black	Comply – Sunrise SESA Sign finish is AAMA 2604 Powder coat, AXALTA AR400 rich black matte finish or equivalent.
Sign health monitoring backend software	Comply – Sunrise SESA Signs include an API for diagnostics with CMS.

Sign Content Functionality & Requirements

UTA DESIGN REQUIREMENT	IDS COMPLIANCE RESPONSE
An API and/or documentation to programmatically define the layout of the sign to determine how the data will be displayed on the sign.	Comply – The Sunrise SESA Signs have extensive API that allows the user to configure the display however they choose. The Penta WavWriter CMS has capabilities to provide and consume in and out APIs. Content creation available from Penta and available in the CMS.
An API and/or documentation to send custom data from a backend service to the sign.	Comply – The Sunrise SESA Signs have extensive API that allows the user to configure the display however they choose. The Penta WavWriter CMS has capabilities to provide and consume in and out APIs. Content creation available from Penta and available in the CMS.
Text to speech able to work with internal speaker or external PA system	Comply – Text to speech module has a 1vp-p output that can be driven to the PA system. The text to speech module is driven to an included internal amplifier to drive internal speaker. The Penta CMS is capable of controlling the TTS and PA System.
Content Management System	Comply – The Penta WavWriter with the Penta Web Console and Sign Manager is the offered CMS.
Roles based permissions for sign content	Comply – The Penta WavWriter CMS supports “roles-based permissions” through network and application credentials.
Ability to display real time service updates	Comply – The Penta WavWriter CMS is to consume the UTA GTFS-RT feed and present the information on the displays. Further API work to the UTA system is noted (TTS, other feeds).
An API and/or documentation to programmatically define the layout of the sign	Comply – We will provide samples of formatted LED Sign layouts for approval.

to determine how the data will be displayed on the sign.	These displays will then be available to the operator in a “what you see is what you get” (WYSIWYG) presentation within the WavWriter CMS.
--	--

Sign Maintenance Functions

UTA DESIGN REQUIREMENT	IDS COMPLIANCE RESPONSE
Top mounting electronic sign	Comply – Top mounting is available/supported. Final bracket assembly and geometry to be determined through the shop drawing submittal process.
Front service accessibility for repairs	Comply – Signs are front serviceable.
Weatherproof and secure power connector	Comply – All sign connections are internal. Wire entry to be done through liquid tight connections to the sign chassis.
Weatherproof and secure ethernet connector	Comply – All sign connections are internal. Wire entry to be done through liquid tight connections to the sign chassis.
Management software for sign environmental, troubleshooting, and brightness adjustment.	Comply – Sunrise SESA Signs have diagnostics API that includes test modes for troubleshooting. The Penta WavWriter & Web Console supports health monitoring of Signs to the desktop.
Mobile Management Application for Tablet / Phone	Comply – Penta Corporation can provide a small “sign maintenance” APP for mobile usage if the Sign Manufacturer does not have one. This APP is limited to the sign capabilities and would need to be reviewed and verified with UTA.
Automatic testing functionality for troubleshooting	Comply – Signs have diagnostics API that includes test modes for functionality and troubleshooting.
The ability to do in-house repairs. Repair Training / Certifications would need to be provided.	Comply – O&M Manuals have extensive troubleshooting sections, along with training, will allow UTA Staff to perform sign repairs.

TAB 8 – IDS-UTA-TECHNICAL PROPOSAL (CONTINUED)

2. Experience & Qualifications in Signage for Public Transit Agencies

a. Customer References

- i. Please reference TAB 5 – IDS REFERENCES & CASE STUDIES of this Proposal on Page 8. Thank you.

b. Experience

- i. Please reference TAB 4 – IDS EXPERIENCE & CUSTOMER PROFILE of this Proposal on Pages 6-7. Thank you.

c. Timeframe for Delivery

i. Project Schedule Narrative (225 – Estimated Days)

1. Project Startup (10) – Time allocated for the execution of Prime Contracts, Subcontracts, and to Mobilize for the Work.
2. Design & Engineering (30) – Time allocated for the Structural Integration Engineering, Power & Data Communications Riser, Schematic, Logic Diagram Confirmation, as well as, Functional, Technical, Performance, Business Rules Confirmation, Etc.
3. Procurement (90) – Time allocated for short-term (COTS) and long-term hardware/software items.
4. Development (90) – Time allocated for software development prior to integration and testing. Parallel with Procurement.
5. Pre-Build & Test (30) – Time allocated for hardware/software integration and testing in a lab environment.
6. Deployment/Implementation (30) – Time allocated for the physical installation & integration on the job site.
7. Test & Commission (10) – Time allocated for the testing of individual installed components, subsystems, and systems.
8. Train & Startup (5) – Time allocated for classroom/hands-on training for operators, administrators, and maintainers. Once training is completed, the systems startup is scheduled.
9. Project Closeout (20) – Time allocated for punch list work, record documents, final inspections, acceptance, and initiation of the O&M Warranty.

- ii. IDS will submit a CPM Project Schedule/Tracking GAANT for this Project.

TAB 8 – IDS-UTA-TECHNICAL PROPOSAL (CONTINUED)

3. Length of Available Warranty

- a. List of Materials with Warranty Information

- i. Sunrise SESA LED Signs with On-Board TTS Driver & Speaker:
 - 1. CDP-64x384-DS-0-F = 3 Year Warranty + 2 Optional Years = 5 Years Manufacturer's Warranty
 - 2. Please see attached Sunrise SESA CDP-64x384-DS-0-F Product Data.

- ii. Penta Servers & Console/Workstations:
 - 1. Dell RM Redundant Servers & Dell Workstation/Console = 3 Years Warranty + 2 Optional Years = 5 Years Manufacturer's Warranty.

- iii. Penta WavWriter & Web Console/Sign Manager CMS:
 - 1. Penta Content Management System Software = 3 Years Warranty + 2 Optional Years = 5 Years Manufacturer's Warranty.
 - 2. Please see attached Penta Corporation WavWriter CMS One Sheet.

22-03654 Exhibit B

Price Schedule

EXHIBIT B

INTERNATIONAL DISPLAY SYSTEMS, INC.

3131 SOUTH DIXIE DRIVE, DAYTON, OH 45439 U.S.A.
TELEPHONE: (937) 293-3118 FAX: (937) 293-4848
WWW.IDSPIDS.COM

IDS PRICE PROPOSAL

UTA RFP 22-03654 Platform Signs & PA Speakers

PRESENTED TO

Rick Wilson
Utah Transit Authority
669 West 200 South
Salt Lake City, Utah 84101
(801) 287-3016
rwilson@rideuta.com

SUBMITTED BY

Rob Keelor

DATE

January 17, 2024



PASSENGER INFORMATION DISPLAY SYSTEMS

Appendix A to RFP 22-03654

EXHIBIT B

SIGNAGE PRICING SHEET DOUBLE SIDED SIGN

	Qty	Cost Each	Extended Cost
Electronic Digital Signage / Optional External PA Speakers			
Double Sided (DS) LED Sign Each	140 *		
Sign Standard Warranty Period		Included	Included
General			
5 Year Extended Warranty per DS sign	140		
Parts			
Mounting Hardware Double Sided Sign	140		
Content Management Software (CMS)			
License Quantity and Fees, if applicable			
Subscription fees (recurring costs)			
Training			
Maintenance Tier 1 Training			
CMS Training			
TOTALS INCLUDING EXTENDED WARRANTY			
Total Per Double Sided Sign			\$2,130,386.96**

* Includes all setup and testing costs prior to shipping

IDS NOTE: IDS has inserted our **Total Price in the above form. However, there is insufficient detail in the above form to communicate a complete and responsive Price Proposal clearly. Therefore, please see our attached **Appendix A - Pricing Sheet** with greater detail/breakdown of each IDS Team Identified Deliverable. **Please note that all of the above items are included in our modified Appendix A - Pricing Sheet.** We have simply added the necessary additional details to complete the RFP Scope of Work and to be consistent with the Cover Sheet's identification of a 3-Year Contract with two additional 1-Year Options for a total of 5-Years. In addition to the items shown above, we have included additional details or breakdown for the DS LED Signs (e.g., providing unit pricing for the on-board TTS and Speakers within the DS LED Signs, additional General Requirements, additional Parts, and much greater detail in the breakdown of the CMS. Finally, we clearly define parts, labor, warranty for each IDS, Penta, and SunriseSESA deliverable. We believe this additional detail will provide sufficient information to allow UTA to compare with other Price Proposals and to make a decision, or at least to confirm in a BAFO exercise. IDS is willing to negotiate final terms with UTA based on any addition refining of the Scope of Work. We have put our best foot forward to help UTA achieve its goals. Please let us know if you have any questions. Thank you.

ITEM	DESCRIPTION	QTY.	UNIT	UNIT PRICE	EXT. PRICE
1	Electronic Digital Signage/Optional Ext. Speakers				
	Sunrise SESA DS LED Signs*	140	Each	\$ 9,536.42	\$ 1,335,098.38
	Sunrise SESA On-Board TTS Module & Speaker*	140	Each	\$ 687.50	\$ 96,250.00
	Sunrise SESA Standard (3-Year) Warranty (Included)	140	Each	\$ -	\$ -
	Subtotal:				\$ 1,431,348.38
2	General				
	IDS General Requirements (Bonds, Insurance, Safety, Security, Travel, Warranty)	1	LS	\$ 103,040.00	\$ 103,040.00
	IDS Project Management	1	LS	\$ 58,650.00	\$ 58,650.00
	Subtotal:				\$ 161,690.00
3	Parts				
	Sunrise SESA Mounting Hardware for DS Signs	140	Each	\$ 495.00	\$ 69,300.00
	IDS Sign Integration Engineering & Elevation Details	1	LS	\$ 17,250.00	\$ 17,250.00
	Subtotal:				\$ 86,550.00
4	Content Management System				
	Penta WavWriter II Virtual Server Software License & Deployment: Penta WavWriter Virtual Server- Includes 2 software application licenses, factory loaded, configured, tested, commissioned and supported on UTA's Virtual Servers. UTA's Virtual Servers, MicroSoftSQL, WinOS, and upkeep, including security, provided by UTA. All work done remotely by Penta. 3 year contract and warranty remote support on Penta provided only.	1	LS	\$ 66,613.12	\$ 66,613.12
	Penta WavWriter II Web Console & Sign Manager Software License	1	LS	\$ 2,808.96	\$ 2,808.96
	Penta WavWriter II LED Sign Interface License	140	Each	\$ 168.00	\$ 23,520.00
	Penta In-House Professional Services	1	LS	\$ 168,691.04	\$ 168,691.04
	Penta WavWriter II TTS Control	1	LS	\$ 10,319.68	\$ 10,319.68
	Penta WavWriter II Mobile Sign Management APP	1	LS	\$ 28,591.36	\$ 28,591.36
	IDS CMS FAT/SAT Testing & Commissioning	1	LS	\$ 21,344.00	\$ 21,344.00
	Subtotal:				\$ 321,888.16
5	Training				
	Sunrise SESA Maintenance Tier 1 Training	1	LS	\$ 6,720.00	\$ 6,720.00
	Penta WavWriter II CMS Training	1	LS	\$ 10,536.96	\$ 10,536.96
	IDS Training Support	1	LS	\$ 10,442.00	\$ 10,442.00
	Subtotal:				\$ 27,698.96
6	TOTAL PRICE WITH 3-YEAR WARRANTY	1	SUM		\$ 2,029,175.50
7	Optional Extended Warranty Year 4				
	Sunrise SESA Extended (1-Year) Warranty Per DS Sign	140	EA	\$ 286.09	\$ 40,053.09
	Penta CMS Extended (1-Year) Warranty	1	YR	\$ 10,552.64	\$ 10,552.64
	Subtotal:				\$ 50,605.73
8	Optional Extended Warranty Year 5				
	Sunrise SESA Extended (1-Year) Warranty Per DS Sign	140	EA	\$ 286.09	\$ 40,053.09
	Penta CMS Extended (1-Year) Warranty	1	YR	\$ 10,552.64	\$ 10,552.64
	Subtotal:				\$ 50,605.73
9	TOTAL PRICE (BASE 3-YEAR + 2-OPTIONAL YEARS)	1	SUM		\$ 2,130,386.96



Utah Transit Authority

MEETING MEMO

669 West 200 South
Salt Lake City, UT 84101

Board of Trustees

Date: 10/9/2024

TO: Board of Trustees
THROUGH: Jay Fox, Executive Director
FROM: Alisha Garrett, Enterprise Solutions Officer
PRESENTER(S): Kyle Brimley, IT Director
Tom Smith, IT Network Support Mgr

TITLE:

Contract: Cohesity Backup and Recovery System Support Annual Subscription (CVE Technologies Group, Inc.)

AGENDA ITEM TYPE:

Procurement Contract/Change Order

RECOMMENDATION:

Approve award and authorize Executive Director to execute a purchase order and associated disbursements with Cache Valley Electric in the amount of \$233,254.98 to procure the yearly subscription renewal for our backup and recovery system.

BACKGROUND:

In 2020, UTA procured a pair of Cohesity backup systems. The Network Support division installed one system at the Primary Data Center and the other in the Secondary Data Center. The two systems copy backed-up data to each other as part of the data protection and disaster recovery strategy. Cohesity serves as the primary backup system for all structured data, virtual servers, and databases, excluding security video footage.

DISCUSSION:

In 2022, the Network Support division, in partnership with Information Security, purchased additional storage space for the Cohesity system using Information Security capital funding. The goal of expanding to support forty (40) snapshot backups on-premises by the end of 2026 will be achieved by June 2024 instead with fifty (50) snapshots on-premises (25 copies at each data center). The next objective is to implement offsite storage backups by the end of 2026, using Microsoft Azure as the planned location, to support a best practice backup methodology of three data copies: two local and one offsite. This contract provides one year of support for UTA's backup systems through a subscription service with CVE Technologies.

CONTRACT SUMMARY:

Contractor Name: Cache Valley Electric/CVE Technologies Group, Inc.
Contract Number: PO-17368
Base Contract Effective Dates: 11/30/2024-11/29/2025
Extended Contract Dates: N/A
Existing Contract Value: N/A
Amendment Amount: N/A
New/Total Contract Value: \$233,254.98
Procurement Method: State Contract AR3227
Budget Authority: Approved 2024 Operating Budget

ALTERNATIVES:

Operate on un-supported hardware and operating system.

FISCAL IMPACT:

The 2024 approved budget includes \$233,254.98 for the renewal subscription of this software to be funded from account 5200.50353.92

ATTACHMENTS:

Purchase order/contract with link to state contract

CVE Technologies Group, Inc 1414 S GUSTIN RD Salt Lake City UT 84104				PURCHASE ORDER NUMBER		OG		17368	
				PO Number Must Appear On All Invoices And Shipments				VENDOR NUMBER	
SEND INVOICE TO: AP@RIDEUTA.COM 669 W 200 S SLC, UT 84101		SHIP TO: ATTENTION: RECEIVING 3600 S 700 W Salt Lake City UT 84119		An Equal Opportunity Employer 801-287-3008 www.rideuta.com		ORDER TAKEN BY		FOB	
						DEREK A		*	
BUYER		PAGE NUMBER		Wilson, Rick V		1 of 1			

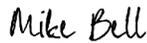
Confirmation: Do not Duplicate
Utah Transit Authority Is Tax Exempt Total PO Value: 233,254.98 Ship as soon as possible. Early Shipments Allowed

LINE #	REQ #	CONFIRMED DELIVERY DATE	QUANTITY	PART NUMBER ACCOUNT CODE	DESCRIPTION	UNIT PRICE	TOTAL PRICE
1	00014085	9/15/24	1 EA	5200.50353.92	2024 Cohesity Backup Lic/Suppt CohesityLic/SupptRenewJeremy A	233254.9800	233,254.98

This order is per Utah State Contract AR3227
<https://statecontracts.utah.gov/Contract/Details/AR3227-Data-Communications-Equipment-and-Services%7Cee54a2a0-8dda-4e7a-818d-f4a74b0dcbc4>

This is to be executed as a NOT TO EXCEED (NTE) order, and may not be executed until a NOTICE TO PROCEED has been received in writing by CVE Technologies Group, Inc. on or after the date of UTA Board of Trustees approval.

UTAH TRANSIT AUTHORITY

DocuSigned by:

 Mike Bell
 70E33A415BA44F6...
UTA Legal Counsel

Date 9/16/2024

CVE Technologies Group, Inc.

Signed by:

 By Kent Rogers
 261E7817108A47F...
Division Manager

Date 9/16/2024

Unless otherwise expressly agreed in a written document executed by Utah Transit Authority ("UTA"), this Purchase Order is subject to UTA's standard terms and conditions revision date: September 2020, effective as of the date of this Purchase Order. UTA's standard terms and conditions are found at https://rideuta.com/-/media/Files/Home/Terms_Conditions_UTAGeneralStandard7821.ashx. Vendor's acceptance of this Purchase Order is limited to the express terms of UTA's standard terms and conditions, without modification. Vendor's delivery of the Goods or commencement of performance of Services identified in this Purchase Order are effective modes of acceptance. Any proposal for additional or different terms or any attempt by Vendor to vary in any degree any of the terms of the Contract, are hereby objected to and rejected (and this Purchase Order shall be deemed accepted by Vendor without the additional or different terms).

If this Purchase order is purchased using a State Contract, then terms and conditions are pursuant to that State Contract.



Utah Transit Authority

MEETING MEMO

669 West 200 South
Salt Lake City, UT 84101

Board of Trustees

Date: 10/9/2024

TO: Board of Trustees
THROUGH: Jay Fox, Executive Director
FROM: Alisha Garrett, Chief Enterprise Strategy Officer
PRESENTER(S): Kyle Brimley, IT Director

TITLE:

Contract: Automatic Passenger Counting (APC) System Upgrade for Bus and Rail (Urban Transportation Associates, Inc.)

AGENDA ITEM TYPE:

Procurement Contract/Change Order

RECOMMENDATION:

Approve award and authorize Executive Director to execute the contract and associated disbursements with Urban Transportation Associates, Inc., in the amount of \$2,382,795, for the upgrade of UTA's Automatic Passenger Counting System on bus and rail.

BACKGROUND:

The purpose of this project is to eliminate vulnerabilities associated with the APC system. The back-office system that runs the APC data processing is operating on an unsupported version of windows server. It is also desired to move away from the current Oracle platform, and to a SQL platform.

Additionally, the CoPilot system on rail is operating on the unsupported windows version XP. This system is what counts the boardings and does preprocessing before sending to the back office.

Finally, we are using the original APC sensors from the original installation of the APC system which are no longer supported. These sensors are not manufactured anymore, and parts are difficult to procure.

DISCUSSION:

Upgrading our APC solution on Rail will remove the vulnerabilities associated with the hardware currently in place and will provide one solution for all modes of service where we count passengers on bus, light rail, and commuter rail.

UTA put this need to RFP and entertained 7 proposals. Urban Transportation Associates provided the most competitive proposal and bid.

CONTRACT SUMMARY:

Contractor Name:	Urban Transportation Associates, Inc.
Contract Number:	24-03847
Base Contract Effective Dates:	November 1, 2024 to November 1, 2027
Extended Contract Dates:	N/A
Existing Contract Value:	N/A
Amendment Amount:	N/A
New/Total Contract Value:	\$2,382,795
Procurement Method:	RFP
Budget Authority:	Approved 2024 Capital Budget

ALTERNATIVES:

There are no reasonable alternatives to this planned upgrade.

FISCAL IMPACT:

The 2024 approved Capital budget includes \$300,000 for the Automatic Passenger Counting (APC) project. Projected funding costs for 2025 will be \$850,000; 2026 will be \$750,000; the 2027 budget will be 600,000. The total NOT TO EXCEED amount is \$2,382,795. All funds will come from the Capital Budget expense line 40-2214.65000.5008 Project Code ICI214.

2024 Capital Budget Total: \$300,000

2025 Capital Plan Total: \$850,000

2026 Capital Plan Total: \$750,000

2027 Capital Plan Total: \$600,000.

Total Approved Capital Budget and Plan: \$2,500,000 with the expected spend of \$2,382,795.

Urban Transportation Associates, Inc. offers a 3-year warranty with their installation, and no software that would require licensing. Therefore, no additional support costs will be needed for the first 3 years.

Optional Years 1 and 2 for Warranty Maintenance beyond 3 years (11/1/2027) will be negotiated at the time of exercise, and will come from Operating Expense Budget 5200.50353.92, IF AND ONLY IF approved by the Board of Trustees prior to exercise of the options.

ATTACHMENTS:

Contract

UTA IT SOFTWARE AND ASSOCIATED SERVICES SUPPLY AGREEMENT



UTA CONTRACT NO. 24-03847

AUTOMATIC PASSENGER COUNTING (APC) FOR BUS AND RAIL FLEET

THIS IT SOFTWARE AND ASSOCIATED SERVICES SUPPLY AGREEMENT ("Contract") is entered into and made effective as of the date of last signature below. ("Effective Date") by and between Utah Transit Authority, a public transit district organized under the laws of the State of Utah ("UTA"), and Urban Transportation Associates, Inc. (the "Contractor").

RECITALS

WHEREAS, on June 21, 2024, UTA received competitive proposals to provide CONTINUOUS UTA WEBSITE MAINTENANCE and (as applicable) all associated hardware, software, tools, installation services, commissioning and testing services, training and documentation (the "Software and Services") according to the terms, conditions and specifications prepared by UTA in RFP 24-03841 (the "RFP"); and

WHEREAS, the document "UTAH_TRANSIT_AUTHORITY_RFP_24-03847_Exhibit_A" dated June 12, 2024, proposal submitted by the Contractor in response to the RFP ("Contractor's Proposal") was deemed to be the most advantageous to UTA; and

WHEREAS, Contractor is willing to furnish the Software and Services according to the terms, conditions and specifications of the Contract.

AGREEMENT

NOW, THEREFORE, in accordance with the foregoing Recitals, which are incorporated herein by reference, and for and in consideration of the mutual covenants and agreements hereafter set forth, the mutual benefits to the parties to be derived here from, and for other valuable consideration, the receipt and sufficiency of which the parties acknowledge, it is hereby agreed as follows:

1. SOFTWARE AND ASSOCIATED SERVICES TO BE PROVIDED BY CONTRACTOR

Contractor hereby agrees to furnish and deliver the Software and Associated Services in accordance with the Contract as described in Exhibit A (Product Description and Statement of Associated Services) (including performing any installation, testing commissioning and other Services described in the Contract).

2. TERM

This Contract shall commence as of the Effective Date. The Contract shall remain in full force and effect for purchases of Software and Services (made via purchase order or other agreed order method) during a THREE (3) - year period expiring November 1, 2027. UTA may, at its sole election and in its sole discretion,

UTA IT SOFTWARE AND ASSOCIATED SERVICES SUPPLY AGREEMENT

extend the initial term for up to TWO (2) additional one-year option periods, for a total Contract period not to exceed FIVE (5) years. Extension options may be exercised by UTA upon providing Contractor with notice of such election at least thirty (30) days prior to the expiration of the initial term or then-expiring option period (as applicable) if both parties mutually agree. The Contract may be further extended if the Contractor and UTA mutually agree to an extension evidenced in writing. The rights and obligations of UTA and Contractor under the Contract shall at all times be subject to and conditioned upon the provisions of the Contract.

3. COMPENSATION AND FEES

UTA shall pay Contractor in accordance with the payment milestones or other terms described in Exhibit B with an NOT TO EXCEED amount of \$2,382,795.00 for the Base Contract Term of THREE (3 years). If Exhibit B does not specify any milestones or other payment provisions, then payment shall be invoiced after the Software have been delivered and the Services have been performed. In no event shall advance payments be made.

4. INCORPORATED DOCUMENTS

a. The following documents hereinafter listed in chronological order, with most recent document taking precedence over any conflicting provisions contained in prior documents (where applicable), are hereby incorporated into the Contract by reference and made a part hereof:

1. The terms and conditions of this Software and Associated Services Supply Agreement (including any exhibits and attachments hereto).

2. UTA's RFP including, without limitation, all attached or incorporated terms, conditions, federal clauses (as applicable), drawings, plans, specifications and standards and other descriptions of the Software and Services;

3. Contractor's Proposal including, without limitation, all federal certifications (as applicable);

b. The above-referenced documents are made as fully a part of the Contract as if hereto attached or herein repeated. The Contract (including the documents listed above) constitute the complete contract between the parties.

c. If this procurement is funded by federal dollars, the mandatory FTA terms and conditions contained at Exhibit C will also apply.

5. ORDER OF PRECEDENCE

The Order of Precedence for this contract is as follows:

- UTA Contract including all attachments and terms and conditions
- UTA Solicitation Terms
- Contractor's Bid or Proposal including proposed terms or conditions

Any contractor proposed term or condition which is in conflict with a UTA contract or solicitation term or condition will be deemed null and void.

UTA IT SOFTWARE AND ASSOCIATED SERVICES SUPPLY AGREEMENT**6. LAWS AND REGULATIONS**

Contractor and any and all Software and/or Services furnished under the Contract will comply fully with all applicable Federal and State laws and regulations, including those related to safety and environmental protection. Contractor shall also comply with all applicable licensure and certification requirements.

7. INVOICING PROCEDURES

- a. Contractor shall submit invoices to UTA's Project Manager for processing and payment in accordance with Exhibit B. If Exhibit B does not specify invoice instructions, then Contractor shall invoice UTA after delivery of all Software and satisfactory performance of all Services. Invoices shall be provided in the form specified by UTA. Reasonable supporting documentation including cost and pricing data demonstrating Contractor's entitlement to the requested payment must be submitted with each invoice.
- b. Contractor shall invoice UTA after delivery of all Goods and satisfactory performance of all Services. Contractor shall submit invoices to ap@rideuta.com for processing and payment. In order to timely process invoices, Contractor shall include the following information on each invoice:
 - i. Contractor Name
 - ii. Unique Invoice Number
 - iii. PO Number
 - iv. Invoice Date
 - v. Detailed Description of Charges
- c. Total Dollar Amount Due UTA shall have the right to disapprove (and withhold from payment) specific line items of each invoice to address non-conforming Goods or Services. Approval by UTA shall not be unreasonably withheld. UTA shall also have the right to offset (against payments) amounts reasonably reflecting the value of any claim which UTA has against Contractor under the Contract. Payment for all invoice amounts not specifically disapproved or offset by UTA shall be provided to Contractor within thirty (30) calendar days of invoice submittal.
- d. UTA shall have the right to disapprove (and withhold from payment) specific line items of each invoice to address non-conforming Software or Services. Approval by UTA shall not be unreasonably withheld. UTA shall also have the right to offset (against payments) amounts reasonably reflecting the value of any claim which UTA has against Contractor under the Contract. Payment for all invoice amounts not specifically disapproved or offset by UTA shall be provided to Contractor within thirty (30) calendar days of invoice submittal to ap@rideuta.com . Invoices not submitted electronically will shall be paid thirty (30) calendar days from date of receipt by UTA's accounting department.
- e. Invoices must include a unique invoice number, UTA's Purchase Order number, a description of the Good or Service provided, line-item pricing, total amount due, and must be submitted electronically to ap@rideuta.com.

UTA IT SOFTWARE AND ASSOCIATED SERVICES SUPPLY AGREEMENT**8. WARRANTY OF SOFTWARE AND SERVICES**

- a. Contractor warrants that all Software (including hardware, firmware, and/or software products that it licenses) and Services shall conform to the specifications, drawings, standards, samples, and other descriptions made a part of (or incorporated by reference into) the Contract. Contractor further warrants that all Software and Services shall be of the quality specified, or of the best grade if no quality is specified, and, unless otherwise provided in the Contract, will be new, and free from defects in design, materials and workmanship.
- b. Contractor warrants that all Software and Services shall be in compliance with applicable federal, state, and local laws and regulations including, without limitation, those related to safety and environmental protection.
- c. At any time for a period of two (2) years from the date that all Software have been delivered and all Services have been performed in accordance with the Contract, Contractor shall at its own expense promptly repair, replace and/or re-perform any Software or Services that are defective or in any way fail to conform to the Contract requirements.
- d. If Contractor fails to promptly make any repair, replacement or re-performance as required herein, UTA may conduct the necessary remedial work at Contractor's expense. Contractor cannot void the warranty for repair, replacement or re-performance performed under these circumstances. Provided that such repair, replacement or re-performance is conducted in a reasonable manner and with workmanship and care consistent with industry standards, Contractor shall reimburse UTA for the cost of any warranty repair, replacement or re-performance self-performed by UTA.
- e. The foregoing warranties are not intended as a limitation but are in addition to all other express warranties set forth in the Contract and such other warranties as are implied by law, custom, and usage of trade. Contractor (seller) acknowledges that all warranties granted to the buyer by the Uniform Commercial Code of the State of Utah apply to the Contract. Product liability disclaimers and/or warranty disclaimers from the seller are not applicable to the Contract unless otherwise specified and mutually agreed upon elsewhere in the Contract. In general, Contractor warrants that: (1) the Good will do what the salesperson said it would do, (2) the Good will live up to all specific claims that the manufacturer makes in their advertisements, (3) the Software will be suitable for the ordinary purposes for which such items are used, (4) the Software will be suitable for any special purposes that UTA has relied on Contractor's skill or judgment to consider when it advised UTA about the Good, (5) the Software have been properly designed and manufactured, and (6) the Software are free of significant defects or unusual problems about which UTA has not been warned. Nothing in this warranty will be construed to limit any rights or remedies UTA may otherwise have under the Contract.

9. OWNERSHIP OF DESIGNS, DRAWINGS, AND WORK PRODUCT

Any deliverables prepared or developed pursuant to the Contract including without limitation drawings, specifications, manuals, calculations, maps, sketches, designs, tracings, notes, reports, data,

UTA IT SOFTWARE AND ASSOCIATED SERVICES SUPPLY AGREEMENT

software, computer programs, models and samples, shall become the property of UTA when prepared, and, together with any documents or information furnished to Contractor and its employees or agents by UTA hereunder, shall be delivered to UTA upon request, and, in any event, upon termination or final acceptance of the Software and Services. UTA shall have full rights and privileges to use and reproduce said items.

To the extent that any deliverables include or incorporate preexisting intellectual property of Contractor, Contractor hereby grants UTA a fully paid, perpetual license to use such intellectual property for UTA's operation, maintenance, modification, improvement and replacement of UTA's assets. The scope of the license shall be to the fullest extent necessary to accomplish those purposes, including the right to share same with UTA's contractors, agent, officers, directors, employees, joint owners, affiliates and contractors.

10. GENERAL INDEMNIFICATION

Contractor shall indemnify, hold harmless and defend UTA, its officers, trustees, agents, and employees (hereinafter collectively referred to as "Indemnitees") from and against all liabilities, claims, actions, damages, losses, and expenses including without limitation reasonable attorneys' fees and costs (hereinafter referred to collectively as "claims") related to bodily injury, including death, or loss or damage to tangible or intangible property caused, or alleged to be caused, in whole or in part, by the acts or omissions of Contractor or any of its owners, officers, directors, agents, employees or subcontractors. This indemnity includes any claim or amount arising out of the failure of such Contractor to conform to federal, state, and local laws and regulations. If an employee of Contractor, a subcontractor, anyone employed directly or indirectly by any of them or anyone for whose acts any of them may be liable brings a claim against UTA or another Indemnitee, Contractor's indemnity obligation set forth above will not be limited by any limitation on the amount of damages, compensation or benefits payable under any employee benefit acts, including workers' compensation or disability acts. The indemnity obligations of Contractor shall not apply to the extent that claims arise out of the sole negligence of UTA or the Indemnitees.

11. INSURANCE REQUIREMENTS

The insurance requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract. The Utah Transit Authority in no way warrants that the minimum limits contained herein are sufficient to protect the Contractor from liabilities that might arise out of the performance of the work under this contract by the Contractor, his agents, representatives, employees or subcontractors and Contractor is free to purchase additional insurance as may be determined necessary.

- A. **MINIMUM SCOPE AND LIMITS OF INSURANCE:** Contractor shall provide coverage with limits of liability not less than those Stated below. An excess liability policy or umbrella liability policy may be used to meet the minimum liability requirements provided that the coverage is written on a "following form" basis.

UTA IT SOFTWARE AND ASSOCIATED SERVICES SUPPLY AGREEMENT

1. Commercial General Liability – Occurrence Form

Policy shall include bodily injury, property damage and broad form contractual liability coverage.

- General Aggregate \$4,000,000
- Products – Completed Operations Aggregate \$1,000,000
- Personal and Advertising Injury \$1,000,000
- Each Occurrence \$2,000,000

a. The policy shall be endorsed to include the following additional insured language: "The Utah Transit Authority shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor".

2. Automobile Liability

Bodily Injury and Property Damage for any owned, hired, and non-owned vehicles used in the performance of this Contract.

Combined Single Limit (CSL) \$2,000,000

a. The policy shall be endorsed to include the following additional insured language: "The Utah Transit Authority shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor, including automobiles owned, leased, hired or borrowed by the Contractor".

3. Worker's Compensation and Employers' Liability

Workers' Compensation Statutory

Employers' Liability

Each Accident	\$100,000
Disease – Each Employee	\$100,000
Disease – Policy Limit	\$500,000

- a. Policy shall contain a waiver of subrogation against the Utah Transit Authority.
- b. This requirement shall not apply when a contractor or subcontractor is exempt under UCA 34A-2-103, AND when such contractor or subcontractor executes the appropriate waiver form.

4. Professional Liability (Errors and Omissions Liability)

The policy shall cover professional misconduct or lack of ordinary skill for those positions defined in the Scope of Services of this contract.

UTA IT SOFTWARE AND ASSOCIATED SERVICES SUPPLY AGREEMENT

Each Claim \$1,000,000

Annual Aggregate \$2,000,000

- a. In the event that the professional liability insurance required by this Contract is written on a claims-made basis, Contractor warrants that any retroactive date under the policy shall precede the effective date of this Contract; and that either continuous coverage will be maintained or an extended discovery period will be exercised for a period of three (3) years beginning at the time work under this Contract is completed.
- B. **ADDITIONAL INSURANCE REQUIREMENTS:** The policies shall include, or be endorsed to include, the following provisions:
 - 1. On insurance policies where the Utah Transit Authority is named as an additional insured, the Utah Transit Authority shall be an additional insured to the full limits of liability purchased by the Contractor. Insurance limits indicated in this agreement are minimum limits. Larger limits may be indicated after the contractor’s assessment of the exposure for this contract; for their own protection and the protection of UTA.
 - 2. The Contractor's insurance coverage shall be primary insurance and non-contributory with respect to all other available sources.
- C. **NOTICE OF CANCELLATION:** Each insurance policy required by the insurance provisions of this Contract shall provide the required coverage and shall not be suspended, voided or canceled except after thirty (30) days prior written notice has been given to the Utah Transit Authority, except when cancellation is for non-payment of premium, then ten (10) days prior notice may be given. Such notice shall be sent directly to (Utah Transit Authority agency Representative's Name & Address).
- D. **ACCEPTABILITY OF INSURERS:** Insurance is to be placed with insurers duly licensed or authorized to do business in the State and with an “A.M. Best” rating of not less than A-VII. The Utah Transit Authority in no way warrants that the above-required minimum insurer rating is sufficient to protect the Contractor from potential insurer insolvency.
- E. **VERIFICATION OF COVERAGE:** Contractor shall furnish the Utah Transit Authority with certificates of insurance (on standard ACORD form) as required by this Contract. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

All certificates and any required endorsements are to be sent to utahta@ebix.com and received and approved by the Utah Transit Authority before work commences. Each insurance policy required by this Contract must be in effect at or prior to commencement of work under this Contract and remain in effect for the duration of the project. Failure to maintain the insurance policies as required by this Contract or to provide evidence of renewal is a material breach of contract.

UTA IT SOFTWARE AND ASSOCIATED SERVICES SUPPLY AGREEMENT

All certificates required by this Contract shall be emailed directly to Utah Transit Authority's insurance email address at utahta@ebix.com. The Utah Transit Authority project/contract number and project description shall be noted on the certificate of insurance. The Utah Transit Authority reserves the right to require complete, certified copies of all insurance policies required by this Contract at any time. DO NOT SEND CERTIFICATES OF INSURANCE TO THE UTAH TRANSIT AUTHORITY'S CLAIMS AND INSURANCE DEPARTMENT.

- F. SUBCONTRACTORS: Contractors' certificate(s) shall include all subcontractors as additional insureds under its policies or subcontractors shall maintain separate insurance as determined by the Contractor, however, subcontractor's limits of liability shall not be less than \$1,000,000 per occurrence / \$2,000,000 aggregate. Sub-contractors maintaining separate insurance shall name Utah Transit Authority as an additional insured on their policy. Blanket additional insured endorsements are not acceptable from sub-contractors. Utah Transit Authority must be scheduled as an additional insured on any sub-contractor policies.
- G. APPROVAL: Any modification or variation from the insurance requirements in this Contract shall be made by Claims and Insurance Department or the UTA Legal Services, whose decision shall be final. Such action will not require a formal Contract amendment but may be made by administrative action.

12. OTHER INDEMNITIES

- a. Contractor shall protect, release, defend, indemnify and hold harmless UTA and the other Indemnitees against and from any and all claims of any kind or nature whatsoever on account of infringement relating to Contractor's performance under the Contract. If notified promptly in writing and given authority, information and assistance, Contractor shall defend, or may settle at its expense, any suit or proceeding against UTA so far as based on a claimed infringement and Contractor shall pay all damages and costs awarded therein against UTA due to such breach. In case any Good or Service is in such suit held to constitute such an infringement or an injunction is filed that interferes with UTA's rights under the Contract, Contractor shall, at its expense and through mutual agreement between UTA and Contractor, either procure for UTA any necessary intellectual property rights, or modify Contractor's Software and Services such that the claimed infringement is eliminated.
- b. Contractor shall: (i) protect, release, defend, indemnify and hold harmless UTA and the other Indemnitees against and from any and all liens or claims made or filed against UTA on account of any Software or Services furnished by subcontractors of any tier; and (ii) keep UTA property free and clear of all liens or claims arising in conjunction with any Software or Services furnished under the Contract by Contractor or its subcontractors of any tier. If any lien arising out of the Contract is filed in conjunction with any Software or Services furnished under the Contract, Contractor, within ten (10) calendar days after receiving from UTA written notice of such lien, shall obtain a release of or otherwise satisfy such lien. If Contractor fails to do so, UTA may take such steps and make such expenditures as in its discretion it deems advisable to obtain a release of or otherwise satisfy any such lien or liens, and Contractor shall upon demand reimburse UTA for all costs incurred and expenditures made by UTA in obtaining such release or satisfaction. If any non-

UTA IT SOFTWARE AND ASSOCIATED SERVICES SUPPLY AGREEMENT

payment claim is made directly against UTA arising out of non-payment to any subcontractor, Contractor shall assume the defense of such claim within ten (10) calendar days after receiving from UTA written notice of such claim. If Contractor fails to do so, Contractor shall upon demand reimburse UTA for all costs incurred and expenditures made by UTA to satisfy such claim.

- c. Contractor will defend, indemnify and hold UTA, its officers, agents and employees harmless from liability of any kind or nature, arising from Contractor's use of any copyrighted or un-copyrighted composition, trade secret, patented or un-patented invention, article or appliance furnished or used in the performance of the Contract.

13. INDEPENDENT CONTRACTOR

The parties agree that Contractor, in the carrying out of its duties hereunder, is an independent contractor and that neither Contractor nor any of its employees is or are agents, servants or employees of UTA. Neither Contractor nor any of Contractor's employees shall be eligible for any workers compensation insurance, pension, health coverage, or fringe benefits which apply to UTA's employees. Neither federal, state, nor local income tax nor payroll tax of any kind shall be withheld or paid by UTA on behalf of Contractor or the employees of Contractor. Contractor acknowledges that it shall be solely responsible for payment of all payrolls, income and other taxes generally applicable to independent contractors.

14. STANDARD OF CARE.

Contractor shall perform any Services to be provided under the Contract in a good and workmanlike manner, using at least that standard of care, skill and judgment which can reasonably be expected from similarly situated independent contractors (including, as applicable, professional standards of care).

15. USE OF SUBCONTRACTORS

- a. Contractor shall give advance written notification to UTA of any proposed subcontract (not indicated in Contractor's Proposal) negotiated with respect to the Work. UTA shall have the right to approve all subcontractors, such approval not to be withheld unreasonably.
- b. No subsequent change, removal or substitution shall be made with respect to any such subcontractor without the prior written approval of UTA.
- c. Contractor shall be solely responsible for making payments to subcontractors, and such payments shall be made within thirty (30) days after Contractor receives corresponding payments from UTA.
- d. Contractor shall be responsible for and direct all Work performed by subcontractors.
- e. Contractor agrees that no subcontracts shall provide for payment on a cost-plus-percentage-of-cost basis. Contractor further agrees that all subcontracts shall comply with all applicable laws

16. CONTRACTOR SAFETY COMPLIANCE

UTA is an ISO 14001 for Environmental Management Systems, ISO 9001 Quality and Performance Management, and OSHAS 18001 safety systems Management Company. Contractor, including its

UTA IT SOFTWARE AND ASSOCIATED SERVICES SUPPLY AGREEMENT

employees, subcontractors, authorized agents, and representatives, shall comply with all UTA and industry safety standards, NATE, OSHA, EPA and all other State and Federal regulations, rules and guidelines pertaining to safety, environmental Management and will be solely responsible for any fines, citations or penalties it may receive or cause UTA to receive pursuant to this Contract. Each employee, contractor and subcontractor must be trained in UTA EMS and Safety Management principles. Contractor acknowledges that its Software and Services might affect UTA's Environmental Management Systems obligations. A partial list of activities, products or Services deemed as have a potential EMS effect is available at the UTA website www.rideuta.com. Upon request by UTA, Contractor shall complete and return a *Contractor Activity Checklist*. If UTA determines that the Software and/or Services under the Contract has the potential to impact the environment, UTA may require Contractor to submit additional environmental documents. Contractor shall provide one set of the appropriate safety data sheet(s) (SDS) and container label(s) upon delivery of a hazardous material to UTA.

17. Security Features

The proposed solution must have a high level of cyber security and have a unique URL for UTA. All UTA data must be kept in a separate database and never commingled with other customers' data. Activity auditing must be available for all actions and be trackable by user. Specific technical details of the security measures in place should be include in the submission for review by UTA's Information Security team. **Proposed solution must comply with UTA Security Requirements for SaaS/Customed Developed Systems found at Exhibit C.**

18. ASSIGNMENT OF CONTRACT

Contractor shall not assign any of its rights or responsibilities, nor delegate its obligations, under this Contract or any part hereof without the prior written consent of UTA, and any attempted transfer in violation of this restriction shall be void.

19. ENVIRONMENTAL RESPONSIBILITY

UTA is ISO 14001 Environmental Management System (EMS) certified. Contractor acknowledges that its Software and/or Services might affect UTA's ability to maintain the obligation of the EMS. A partial list of activities, products or Services deemed as have a potential EMS effect is available at the UTA website www.rideuta.com. Upon request by UTA, Contractor shall complete and return a *Contractor Activity Checklist*. If UTA determines that the Software and/or Services under the Contract has the potential to impact the environment, UTA may require Contractor to submit additional environmental

UTA IT SOFTWARE AND ASSOCIATED SERVICES SUPPLY AGREEMENT

documents. Contractor shall provide one set of the appropriate safety data sheet(s) (SDS) and container label(s) upon delivery of a hazardous material to UTA.

20. SUSPENSION OF WORK

- a. UTA may, at any time, by written order to Contractor, require Contractor to suspend, delay, or interrupt all or any part of the Work called for by this Contract. Any such order shall be specifically identified as a "Suspension of Work Order" issued pursuant to this Article. Upon receipt of such an order, Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of further costs allocable to the Work covered by the order during the period of Work stoppage.
- b. If a Suspension of Work Order issued under this Article is canceled, Contractor shall resume Work as mutually agreed to in writing by the parties hereto.
- c. If a Suspension of Work Order is not canceled and the Work covered by such order is terminated for the convenience of UTA, reasonable costs incurred as a result of the Suspension of Work Order shall be considered in negotiating the termination settlement.
- d. If the Suspension of Work causes an increase in Contractor's cost or time to perform the Work, UTA's Project Manager or designee shall make an equitable adjustment to compensate Contractor for the additional costs or time and modify this Contract by Change Order.

21. TERMINATION

- a. **FOR CONVENIENCE:** UTA shall have the right to terminate the Contract at any time by providing written notice to Contractor. If the Contract is terminated for convenience, UTA shall pay Contractor: (i) in full for Software delivered and Services fully performed prior to the effective date of termination; and (ii) an equitable amount to reflect costs incurred (including Contract close-out and subcontractor termination costs that cannot be reasonably mitigated) and profit on work-in-progress as of to the effective date of the termination notice. UTA shall not be responsible for anticipated profits based on the terminated portion of the Contract. Contractor shall promptly submit a termination claim to UTA. If Contractor has any property in its possession belonging to UTA, Contractor will account for the same, and dispose of it in the manner UTA directs.
- b. **FOR DEFAULT:** If Contractor (a) becomes insolvent; (b) files a petition under any chapter of the bankruptcy laws or is the subject of an involuntary petition; (c) makes a general assignment for the benefit of its creditors; (d) has a receiver appointed; (e) should fail to make prompt payment to any subcontractors or suppliers; or (f) fails to comply with any of its material obligations under the Contract, UTA may, in its discretion, after first giving Contractor seven (7) days written notice to cure such default:
 1. Terminate the Contract (in whole or in part) for default and obtain the Software and Services using other contractors or UTA's own forces, in which event Contractor shall be liable for all incremental costs so incurred by UTA;
 2. Pursue other remedies available under the Contract (regardless of whether the termination remedy is invoked); and/or
 3. Except to the extent limited by the Contract, pursue other remedies available at law.
- c. **CONTRACTOR'S POST TERMINATION OBLIGATIONS:** Upon receipt of a termination notice as provided above, Contractor shall (i) immediately discontinue all work affected (unless the notice

UTA IT SOFTWARE AND ASSOCIATED SERVICES SUPPLY AGREEMENT

directs otherwise); and (ii) deliver to UTA all data, drawings and other deliverables, whether completed or in process. Contractor shall also remit a final invoice for all services performed and expenses incurred in full accordance with the terms and conditions of the Contract up to the effective date of termination. UTA shall calculate termination damages payable under the Contract, shall offset such damages against Contractor's final invoice, and shall invoice Contractor for any additional amounts payable by Contractor (to the extent termination damages exceed the invoice). All rights and remedies provided in this Article are cumulative and not exclusive. If UTA terminates the Contract for any reason, Contractor shall remain available, for a period not exceeding 90 days, to UTA to respond to any questions or concerns that UTA may have regarding the Software and Services furnished by Contractor prior to termination.

22. CHANGES

- a. UTA's Project Manager or designee may, at any time, by written order designated or indicated to be a Change Order, direct changes in the Work including, but not limited to, changes:
 1. In the Scope of Services;
 2. In the method or manner of performance of the Work; or
 3. In the schedule or completion dates applicable to the Work.

To the extent that any change in Work directed by UTA causes an actual and demonstrable impact to: (i) Contractor's cost of performing the work; or (ii) the time required for the Work, then (in either case) the Change Order shall include an equitable adjustment to this Contract to make Contractor whole with respect to the impacts of such change.

- b. A change in the Work may only be directed by UTA through a written Change Order or (alternatively) UTA's expressed, written authorization directing Contractor to proceed pending negotiation of a Change Order. Any changes to this Contract undertaken by Contractor without such written authority shall be at Contractor's sole risk. Contractor shall not be entitled to rely on any other manner or method of direction.
- c. Contractor shall also be entitled to an equitable adjustment to address the actual and demonstrable impacts of "constructive" changes in the Work if: (i) subsequent to the Effective Date of this Contract, there is a material change with respect to any requirement set forth in this Contract; or (ii) other conditions exist or actions are taken by UTA which materially modify the magnitude, character or complexity of the Work from what should have been reasonably assumed by Contractor based on the information included in (or referenced by) this Contract. In order to be eligible for equitable relief for "constructive" changes in Work, Contractor must give UTA's Project Manager or designee written notice stating:
 1. The date, circumstances, and source of the change; and
 2. That Contractor regards the identified item as a change in Work giving rise to an adjustment in this Contract.

Contractor must provide notice of a "constructive" change and assert its right to an equitable adjustment under this Section within ten (10) days after Contractor becomes aware (or reasonably should have become aware) of the facts and circumstances giving rise to the "constructive" change. Contractor's failure to provide timely written notice as provided above shall constitute a waiver of Contractor's rights with respect to such claim.

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- d. As soon as practicable, but in no event longer than 30 days after providing notice, Contractor must provide UTA with information and documentation reasonably demonstrating the actual cost and schedule impacts associated with any change in Work. Equitable adjustments will be made via Change Order. Any dispute regarding the Contractor's entitlement to an equitable adjustment (or the extent of any such equitable adjustment) shall be resolved in accordance with Article 20 of this Contract.

23. INFORMATION, RECORDS and REPORTS; AUDIT RIGHTS

Contractor shall retain all books, papers, documents, accounting records and other evidence to support any cost-based billings allowable under Exhibit B (or any other provision of the Contract). Such records shall include, without limitation, time sheets and other cost documentation related to the performance of labor services, as well as subcontracts, purchase orders, other contract documents, invoices, receipts or other documentation supporting non-labor costs. Contractor shall also retain other books and records related to the performance, quality or management of the Contract and/or Contractor's compliance with the Contract. Records shall be retained by Contractor for a period of at least six (6) years, or until any audit initiated within that six-year period has been completed (whichever is later). During this six-year period, such records shall be made available at all reasonable times for audit and inspection by UTA and other authorized auditing parties including, but not limited to, the Federal Transit Administration. Copies of requested records shall be furnished to UTA or designated audit parties upon request. Contractor agrees that it shall flow-down (as a matter of written contract) these records requirements to all subcontractors utilized in the performance of the Contract at any tier.

24. FINDINGS CONFIDENTIAL

Any documents, reports, information, or other data and materials delivered or made available to or prepared or assembled by Contractor or subcontractor under this Contract are considered confidential and shall not be made available to any person, organization,

or entity by Contractor without consent in writing from UTA. If confidential information is released to any third party without UTA's written consent as described above, contractor shall notify UTA of the data breach within 10 days and provide its plan for immediate

mitigation of the breach for review and approval by UTA.

- a. It is hereby agreed that the following information is not considered to be confidential:
1. Information already in the public domain.
 2. Information disclosed to Contractor by a third party who is not under a confidentiality obligation.
 3. Information developed by or in the custody of Contractor before entering into this Contract.
 4. Information developed by Contractor through its work with other clients; and
 5. Information required to be disclosed by law or regulation including, but not limited to, subpoena, court order or administrative order.

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25. PUBLIC INFORMATION.

Contractor acknowledges that the Contract and related materials (invoices, orders, etc.) will be public documents under the Utah Government Records Access and Management Act (GRAMA). Contractor’s response to the solicitation for the Contract will also be a public document subject to GRAMA, except for legitimate trade secrets, so long as such trade secrets were properly designated in accordance with terms of the solicitation.

26. PROJECT MANAGER

UTA's Project Manager for the Contract is MARCI WARREN, or designee. All questions and correspondence relating to the technical aspects of the Contract should be directed to UTA's Project Manager at UTA offices located at 669 West 200 South, Salt Lake City, Utah 84101, office phone (801)287-2509.

27. CONTRACT ADMINISTRATOR

UTA's Contract Administrator for the Contract is RICK WILSON, or designee. All questions and correspondence relating to the contractual aspects of the Contract should be directed to UTA’s Grants & Contracts Administrator at UTA offices located at 669 West 200 South, Salt Lake City, Utah 84101, office phone (801)287-3016

28. CONFLICT OF INTEREST

Contractor represents that it has not offered or given any gift or compensation prohibited by the laws of the State of Utah to any officer or employee of UTA to secure favorable treatment with respect to being awarded the Contract. No member, officer, or employee of UTA during their tenure or one year thereafter shall have any interest, direct or indirect, in the Contract or the proceeds thereof.

29. NOTICES OR DEMANDS

a. Any and all notices, demands or other communications required hereunder to be given by one party to the other shall be given in writing and may be electronically delivered, personally delivered, mailed by US Mail, postage prepaid, or sent by overnight courier service and addressed to such party as follows:

If to UTA:

Utah Transit Authority

ATTN: Rick Wilson

669 West 200 South

Salt Lake City, UT 84101

rwilson@rideuta.com

If to Contractor:

Urban Transportation Associates, Inc.

Attn: Tom Kowalski

4240 Airport Rd, Suite 212

Cincinnati OH 45226

tkowaski@fuse.net

a. Either party may change the address at which such party desires to receive written notice of such change to any other party. Any such notice shall be deemed to have been given, and shall be

effective, on delivery to the notice address then applicable for the party to which the notice is directed; provided, however, that refusal to accept delivery of a notice or the inability to deliver a notice because of an address change which was not properly communicated shall not defeat or delay the giving of a notice.

30. CLAIMS/DISPUTE RESOLUTION

- a. "Claim" means any disputes between UTA and the Contractor arising out of or relating to the Contract Documents including any disputed claims for Contract adjustments that cannot be resolved in accordance with the Change Order negotiation process set forth in Article 20. Claims must be made by written notice. The responsibility to substantiate claims rests with the party making the claim.
- b. Unless otherwise directed by UTA in writing, Contractor shall proceed diligently with performance of the Work pending final resolution of a Claim, including litigation. UTA shall continue to pay any undisputed payments related to such Claim.
- c. The parties shall attempt to informally resolve all claims, counterclaims and other disputes through the escalation process described below. No party may bring a legal action to enforce any term of this Contract without first having exhausted such process.
- d. The time schedule for escalation of disputes, including disputed requests for change order, shall be as follows:

Level of Authority	Time Limit
UTA's Project Manager – Justin Palmer / Contractor's Project Manager -Tom Kowalski	Five calendar days
UTA's Shawn Stephens / Contractor's David Vanderputten	Five calendar days
UTA's Kyle Brimley / Contractor's Nick Fischer	Five calendar days

Unless otherwise directed by UTA's Project Manager, Contractor shall diligently continue performance under this Contract while matters in dispute are being resolved.

If the dispute cannot be resolved informally in accordance with the escalation procedures set forth above, then either party may commence formal mediation under the Juris Arbitration and Mediation (JAMS) process using a mutually agreed upon JAMS mediator. If resolution does not occur through Mediation, then legal action may be commenced in accordance the venue and governing law provisions of this contract.

31. GOVERNING LAW

The validity, interpretation and performance of the Contract shall be governed by the laws of the State of Utah, without regard to its law on the conflict of laws. Any dispute arising out of the Contract that cannot be solved to the mutual agreement of the parties shall be brought in a court of competent jurisdiction in Salt Lake County, State of Utah. Contractor consents to the jurisdiction of such courts.

32. COSTS AND ATTORNEY FEES.

If any party to this Agreement brings an action to enforce or defend its rights or obligations hereunder, the prevailing party shall be entitled to recover its costs and expenses, including mediation, arbitration, litigation, court costs and attorneys' fees, if any, incurred in connection with such suit, including on appeal

33. UTAH ANTI-BOYCOTT OF ISRAEL ACT

Contractor agrees that will be not engage in any type of boycott against the State of Israel for the duration of this contract.

34. SEVERABILITY

Any provision of the Contract prohibited or rendered unenforceable by operation of law shall be ineffective only to the extent of such prohibition or unenforceability without invalidating the remaining provisions of the Contract.

35. AMENDMENTS

Any amendment to the Contract must be in writing and executed by the authorized representatives of each party.

36. FORCE MAJEURE

Neither party to the Contract will be held responsible for delay or default caused by fire, riot, acts of God and/or war which are beyond that party's reasonable control. UTA may terminate the Contract after determining such delay or default will reasonably prevent successful performance of the Contract.

37. NO THIRD-PARTY BENEFICIARIES

The parties enter in to the Contract for the sole benefit of the parties, in exclusion of any third party, and no third-party beneficiary is intended or created by the execution of the Contract.

38. ENTIRE AGREEMENT

This Contract shall constitute the entire agreement and understanding of the parties with respect to the subject matter hereof, and shall supersede all offers, negotiations and other agreements with respect thereto.

39. COUNTERPARTS

This Contract may be executed in any number of counterparts and by each of the parties hereto on separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute but one and the same instrument. Any signature page of the Contract may be detached from any counterpart and reattached to any other counterpart hereof. The electronic transmission of a signed original of the Contract or any counterpart hereof and the electronic retransmission of any signed copy hereof shall be the same as delivery of an original.

40. NONWAIVER

No failure or waiver or successive failures or waivers on the part of either party in the enforcement of any condition, covenant, or article of this Contract shall operate as a discharge of any such condition, covenant, or article nor render the same invalid, nor impair the right of either party to enforce the same in the event of any subsequent breaches by the other party.

41. INFORMATION, RECORDS and REPORTS; AUDIT RIGHTS

Contractor shall retain all books, papers, documents, accounting records and other evidence to support any cost-based billings allowable under Exhibit B (or any other provision of this Contract). Such records shall include, without limitation, time sheets and other cost documentation related to the performance of labor services, as well as subcontracts, purchase orders, other contract documents, invoices, receipts or other documentation supporting non-labor costs. Contractor shall also retain other books and records related to the performance, quality or management of this Contract and/or Contractor's compliance with this Contract. Records shall be retained by Contractor for a period of at least six (6) years after completion of the Work, or until any audit initiated within that six-year period has been completed (whichever is later). During this six-year period, such records shall be made available at all reasonable times for audit and inspection by UTA and other authorized auditing parties including, but not limited to, the Federal Transit Administration. Copies of requested records shall be furnished to UTA or designated audit parties upon request. Contractor agrees that it shall flow-down (as a matter of written contract) these records requirements to all subcontractors utilized in the performance of the Work at any tier.

42. SALES TAX EXEMPT

Purchases of certain materials are exempt from Utah sales tax. UTA will provide a sales tax exemption certificate to Contractor upon request. UTA will not pay Contractor for sales taxes for exempt purchases, and such taxes should not be included in Contractor's Application for Payment.

43. REVOLVING DOOR RESTRICTIONS

UTA Ethics Policy requires Board approval for the award or amendment of a contract with a contractor that has hired a former UTA employee or who are represented by a former employee where the former employee left UTA employment within the 12 months prior to the contract award or amendment. Approval will not be given if there is a strong appearance of an unfair competitive advantage.

44. SURVIVAL

Provisions of this Contract intended by their nature and content to survive termination of this Contract shall so survive including, but not limited to, Articles 7, 9, 10, 11, 12, 13, 15, 17, 18, 19, 21, 23, 24, 25, 30, 31, 32, and 40.

IN WITNESS WHEREOF, the parties hereto have caused the Contract to be executed by officers duly authorized to execute the same as of the date of last signature below.

UTAH TRANSIT AUTHORITY:

By _____

Jay Fox

Executive Director

Date

URBAN TRANSPORTATION ASSOCIATES, INC.:

DocuSigned by:
Thomas W. Kowalski _____
4866F92B196F4F5...

Thomas W. Kowalski

President/CEO

Date 9/20/2024

By _____

Alisha Garrett

Chief Enterprise Strategy Officer

Date

By _____

Kyle Brimley

IT Director

Date

DocuSigned by:
Mike Bell _____
70E33A415BA44F6...

Mike Bell

UTA Legal Counsel

Date 9/20/2024

UTA Contract 24-03847 EXHIBIT A

SOFTWARE DESCRIPTION AND STATEMENT OF SERVICES

This procurement should include the software, sensors and other necessary hardware for 38 FrontRunner cars. (22 cabs and 16 coach) as well as for 117 cars on Trax. (40 Siemens SD-100/160s, 77 Siemens S70s), plus 5 additional FrontRunner cars...

1. APC SYSTEM EXPECTATIONS

UTA's Administration and Service Analysis departments have expectations and guidelines for securing, monitoring, measuring, for taking corrective actions related to the APC system and its associated data. These expectations are designed to ensure the confidentiality, integrity, and availability of UTA's data while facilitating efficient and secure procurement processes.

A. INFORMATION SECURITY

The proposed solution must have a high level of cyber security.

UTA Information Security policies align with industry standards such as ISO-27417 and NIST 800-53 current revisions. The UTA Operational Technology Procurement Requirements document defines security requirements for all equipment, software, network, Active Directory, and data retention.

- All UTA data must be kept in a separate database and never commingled with other customers' data.
- Activity auditing must be available for all actions and be trackable by user. Specific technical details of the security measures in place should be included in the submission for review by UTA's Information Security team. Proposed solution must comply with UTA Security Requirements for SaaS/Customized Developed Systems found at Exhibit C to the sample contract found at Part 4 of this RFP.
- **Confidentiality:** Utah Transit Authority data will be protected from unauthorized access, disclosure, or modification. Access controls will be implemented based on the principle of least privilege, and data encryption will be employed when necessary.
- **Integrity:** APC data will be accurate, complete, and reliable. Data validation and verification procedures will be established to ensure data accuracy, and measures will be taken to prevent unauthorized data modification.
- **Availability:** Authorized users will have timely and reliable access to APC data for legitimate business purposes. System availability will be maintained through redundancy, backup, and disaster recovery measures.
- **Compliance and Corrective Action:**
 - Yearly risk assessments.

- Security controls and system activities will be continuously monitored and measured to identify and address potential vulnerabilities and security incidents.
- A defined process will be established to promptly address identified security vulnerabilities and data integrity issues.

B. BACKEND SERVICES

- Servers are VMware based.
- Servers must have a current operating system (Windows Server 2022 or newer preferred).
- Data and Applications will be stored on separate partition from OS.
- Application activity must be able to forward events to a SIEM (LogRhythm, etc.).
- Any application language such as JAVA, PYTHON, C, C++, C#, and PHP need to be the current stable release and upgradable if necessary (security).
- Application login should be SAML 2.0 compatible.
- Development environment to test OS and application updates before deployment to production servers.
- No anonymous connections. Devices connecting to network or server will need to have a managed AD account.
- All admin, service accounts will be on UTA domain, no local accounts.

C. DATABASE

- Long-term storage of trip data is preferred to be stored in Microsoft SQL databases.
- Oracle Database (Not preferred but negotiable).
- MySQL (Not preferred but negotiable).
- Other (Not preferred but negotiable).

D. DEVICE, SERVICE AND ADMIN/USER ACCOUNTS IN ACTIVE DIRECTORY (SECURITY)

- All service and Admin, User accounts will be on the UTA domain. No local admin accounts.
- Passwords will be encrypted, no plain text.
- Passwords will have a minimum of 10 characters, containing at least one Alpha (Cap and lower), numeric, special characters.

E. NETWORK CONNECTION

Ensuring vehicle data is available for processing in real-time or at least once a day.

- No Wi-Fi connection.
- System should be able to connect to onboard mobile gateway, data radio using ethernet connection.
- Equipment should be able to securely send trip data to backend using a VPN, or other tunnel protocol.

FRONTRUNNER HARDWARE WILL USE THE GBS NETWORK

- The outdated NOMAD network topology segmentation restrictions will be removed.
- Boldyn/GBS will still provide a train network connection and consist configuration information.
 - Aid in matching cars in train to trips.
- Hardware will be connected to a network switch using a plenum grade shielded ethernet connection. Not Wi-Fi.
- Gateway will have a secure network connection (VPN, Other) to UTA’s FTP server.

TRAX HARDWARE WILL CONNECT TO UTA’S ONBOARD MOBILE GATEWAY (OMG)

- Hardware will be connected to a network switch using a plenum grade shielded ethernet connection. Not Wi-Fi.
- TRAX will have a constant network connection with the back end to upload trip data at any time.
- Gateway will have a secure network connection (VPN, Other) to UTA’s FTP server.

F. SERVICE SCHEDULE

Due to the need for Real-Time APC information, schedule changes in Trapeze FX should be updated in APC systems daily.

- Trapeze FX is the single source for schedule data, APC data will be matched against this for route schedules.
- APC system should be flexible enough to accommodate and capture all schedule aspects. Including but not limited to.
 - Exception trips (Trips that are scheduled but don’t show up on public information feeds).
 - Identify Unscheduled trips (Trips added at last moment for events, emergencies, etc.).
 - Identify Partial trips (Trips that are on a schedule but may not be complete due to construction or incident).

G. SCHEDULE CHANGES

APC system should be flexible enough to accommodate routine schedule updates and ad hoc schedule changes.

- Routine service changes are done 3 times a year, typically follows school schedule and Ski season. April, August, November.
- Ad hoc changes can happen at any time during the year, usually to accommodate large events, construction, etc...

H. SCHEDULE DATA CONVERSION/DISTRIBUTION

It is preferred that the conversion of the Trapeze FX schedule is automated.

- A current offline copy of the Trapeze FX database can be made available.
- Conversion to include but not limited to.
 - Basic schedule data.
 - Route traces.
 - Deletion/Modification to stops.
 - New routes.

I. STATION STOP ACCURACY

Each assigned bus or train in revenue service, will have APC boarding's/alighting's for at least 95% of the scheduled stations stops in a block(s).

J. DIAGNOSTICS

Identification of any issues with APC onboard equipment, backend services, and data issues shall be identified and submitted for vehicle repairs, helpdesk, or vendor assistance.

- Identify vehicles not able to connect and transfer trip data to servers.
 - Reduces extended periods of bad/missing data caused by faulty equipment or network issues.
- Identify issues with processing and storage of trip data.
 - Ensures that current data is available for ridership/reliability reports.
 - Reduces bad data caused by faulty equipment.
 - Ensures that data is as accurate as possible for end users.
- Daily detailed reports for vehicle defects.
 - Reduces extended periods of bad data caused by faulty equipment.
- Test bench system, hardware/software configuration to be used in conjunction with Development back end for testing updates and hardware.

K. PRELIMINARY RELEASE OF TRIP DATA

Preliminary/provisional APC data (Not fully validated) will be available for end users/services to release to the public within 5 days of service date.

- Preliminary/provisional data disclaimer should cover the accuracy of the data and any limitations that may exist.

L. OFFICIAL RIDERSHIP DATA

Ridership data ready for monthly/yearly reports (Public/State/Federal) will be available before the 10th of the following month.

M. APC VALIDATION

At least once a year, each vehicle will have door counts validated and have an accuracy of ± 5 of actual boarding/alighting at each door per station stop.

- Ensures that vehicle is configured and recording passenger events as accurately as possible.
- Identifies equipment issues for repairs. Requires validation after repairs.

N. DATA RETENTION

- Raw Trip data will be archived for 1 year from service date.
 - Backup in case database needs to be rebuilt.
- Processed data will be archived after 1 year from service date.

UTA Contract 24-03847 EXHIBIT B - PRICING

Utah Transit Authority

UTA (Automatic Passenger Counter) APC Upgrade RFP 24-03847

Cost Summary Rev004 – 09/16/24

Item	Total Cost
-----	-----
A. TRAX APC On-Car Equipment (117 Cars) (\$ 13,730/car)	\$ 1,606,410
APC Sensors (8/car) (\$ 895/sensor)	
APC Controller (1/car) (\$ 1,650/CPU)	
Ethernet Switch (1/car)(\$ 1,100/car)	
Cables (13/car) (\$ 2,315/car)	
Power Supply (1/car) (\$175/car)	
Brackets (9/car) (\$ 1,120/car)	
Antenna – Internal GPS (1/car)(\$ 210/car)	
B. FrontRunner APC On-Car Equipment (43 Cars) (\$ 8,600/car)	\$ 369,800
APC Sensors (4/car) (\$ 895/sensor)	
APC Controller (1/car) (\$ 1,650/CPU)	
Ethernet Switch (1/car)(\$ 1,100/car)	
Cables (7/car) (\$ 1,246/car)	
Power Supply (1/car) (\$175/car)	
Brackets (5/car) (\$ 639/car)	
Antenna – Internal GPS (1/car)(\$ 210/car)	
C. APC Installation – Elite Professionals	\$ 263,025
Siemens S70 (\$1,680/car)(77cars)	
Siemens SD-100+SD-160 (\$2,100)(40cars)	
Bombardier (\$1,155)(43cars)	
D. APC Installation Oversight/Inspection – Urban Transp	\$ 78,060
Design Review + Pilot Installation Labor	
(16days)(8hrs/day)(\$105/hr)	
Inspection	
(40days)(8hrs/day)(\$105/hr)	
Travel & Living	
(13trips)(\$900/trip)	
(56days)(\$345/day)	

E. Cyber-Security Compliance - SFB Consulting	\$ 45,000
Assessments	
Actionable Recommendations	
F. APC Training & Documentation	\$ 20,500

Total Project Cost	\$ 2,382,795

Additional Cost Options:

1. Spare Parts (Aforementioned Component Costs – Quantities TBD)

Notes:

**Costs Include Three (3) Year APC Warranty Support
Taxes Not Included**

Proposed Payment Schedule:

Notice To Proceed –	25% Project Total
Installation of 25% of Cars	20% Project Total
Installation of 50% of Cars	20% Project Total
Installation of 75% of Cars	20% Project Total
Installation of 100% of Cars	10% Project Total
Completion of Training/Documentation	5% Project Total

UTA Contract 24-03847 EXHBIT C

SECURITY REQUIREMENTS FOR SaaS/Custom Developed Systems

1 Requirements: General

The following requirements are a guideline for the security requirements of any Software as a Service (SaaS) cloud solution, or custom developed system(s) requested by the Utah Transit Authority “UTA” for use within its corporate or OT/ICS networks. Any proposal submitted should be compliant with industry and/or government standards that govern cybersecurity processes and controls based, at a minimum, on NIST 800-53 current revisions.

1.1.1 Data Ownership and Access

- A. Data, databases, and derived data products created, collected, manipulated, or directly purchased as part of an RFP are the property of the Agency. The purchasing Agency department is considered the custodian of the data and shall determine the use, access, distribution, and other conditions based on appropriate Agency statutes and regulations.
- B. At no time shall any data or processes – that either belong to or are intended for the use of the Agency or its officers, agents, or employees – be copied, disclosed, or retained by the Contractor/Supplier or any party related to the Contractor/Supplier for subsequent use in any transaction that does not include the Agency.
- C. The Contractor/Supplier shall not use any information collected in connection with the services furnished under the Contract for any purpose other than fulfilling such service.

1.1.2 Provisions in Sections 1.1.1 shall survive expiration or termination of the Contract. Additionally, the Contractor/Supplier shall flow down the provisions of **Section 1.1.1** (or the substance thereof) in all subcontracts.

2 Security Requirements

2.1.1 Information Technology

- A. Contractor/Supplier shall comply with and adhere to the Relevant Agency IT Security policies and/or procedures and Standards. These policies may be revised from time to time and the

Contractor/Supplier shall comply with all such revisions. Updated and revised versions of the Agency IT Policy and Standards are available upon request after appropriate Non-disclosure Agreement (NDA) has been filed.

- B. The Contractor/Supplier shall not connect any of its own equipment to an Agency LAN/WAN without prior written approval by the Agency. The Contractor/Supplier shall complete any necessary paperwork as directed and coordinated with the Contract Monitor to obtain approval by the Agency to connect Contractor/Supplier-owned equipment to an Agency LAN/WAN.

The Contractor/Supplier shall:

- 1) Implement administrative, physical, and technical safeguards to protect Agency data that are no less rigorous than accepted industry best practices for information security such as those listed below (see **Section 2.1.2**).
- 2) Ensure that all such safeguards, including the way Agency data is collected, accessed, used, stored, processed, disposed of and disclosed, comply with applicable data protection and privacy laws as well as the terms and conditions of the Contract; and
- 3) The Contractor/Supplier, and Contractor/Supplier Personnel, shall (i) abide by all applicable federal, Agency and local laws, rules and regulations concerning security of Information Systems and Information Technology and (ii) comply with and adhere to the Relevant Agency IT Security policies and/or procedures and Standards as each may be amended or revised from time to time.

2.1.2 Data Protection and Controls

- A. Contractor/Supplier shall ensure a secure environment for all Agency data and any hardware and software (including but not limited to servers, network and data components) provided or used in connection with the performance of the Contract and shall apply or cause application of appropriate controls so as to maintain such a secure environment (“Security Best Practices”). Such Security Best Practices shall comply with an accepted industry standard, such as the National Institute of Standards and Technology (NIST) cybersecurity framework.

- 1) Apply hardware and software hardening procedures as recommended by Center for Internet Security (CIS) guides <https://www.cisecurity.org/>, Security Technical Implementation Guides (STIG) <http://iase.disa.mil/Pages/index.aspx>, or similar industry best practices to reduce the systems' surface of vulnerability, eliminating as many security risks as possible and documenting what is not feasible or not performed according to best practices. Any hardening practices not implemented shall be documented with a plan of action and milestones including any compensating control. These procedures may include but are not limited to removal of unnecessary software, disabling or removing unnecessary services, removal of unnecessary usernames or logins, and the deactivation of unneeded features in the Contractor/Supplier's system configuration files.

- 2) By default, "deny all" and only allow access by exception. Ensure that the APC has mechanisms to prevent unauthorized physical access or tampering.

- 3) Perform regular vulnerability testing of operating system, application, and network devices. Such testing is expected to identify outdated software versions; missing software patches; device or software misconfigurations; and to validate compliance with or deviations from the security policies applicable to the Contract. Contractor/Supplier shall evaluate all identified vulnerabilities for potential adverse effect on security and integrity and remediate the vulnerability no later than 30 days following the earlier of vulnerability's identification or public disclosure, or document why remediation action is unnecessary or unsuitable. The UTA shall have the right to inspect the Contractor/Supplier's policies and procedures and the results of vulnerability testing to confirm the effectiveness of these measures for the services being provided under the Contract.

Regularly perform hardware penetration testing to detect and address vulnerabilities in the device itself, ensuring it is resilient against physical or logical tampering or unauthorized access.

- 4) Enforce strong user authentication and password control measures to minimize the opportunity for unauthorized access through compromise of the user access controls. At a minimum, the implemented measures should be consistent with the most current PCI-DSS or similar standard including specific requirements for password length, complexity, history, and account lockout.

- 5) Ensure Contractor/Supplier's Personnel shall not connect any of its own equipment to an Agency LAN/WAN without prior written approval by the Agency, which may be revoked at anytime for any reason. The Contractor/Supplier shall complete any necessary paperwork as directed and coordinated with the Contract Monitor to obtain approval by the Agency to connect Contractor/Supplier-owned equipment to a Agency LAN/WAN.

Urban Transportation Associates is in agreement, and it is assumed discussions will take place between Utah Transit IT and Urban Transportation Associates after contract award to determine and document the required network interfaces onboard each rail vehicle and obtain proper documentation.

2.1.3 Security Incident Response

- A. Urban Transit will assist UTA in the development or modification of their Incident Response Plan for handling any detected tampering, unauthorized access, or security incidents related specifically to the APC device.

2.1.4 Security Audit Report

In lieu of a SOC 2 Report, Urban Transportation Associates will perform an independently facilitated Cyber Resilience Review (CRR). CISA's Cyber Resilience Review (CRR) is a non-technical, assessment-based approach designed to evaluate an organization's operational resilience and cybersecurity practices. The CRR focuses on how well an organization can manage cybersecurity risks during normal operations and under stress, providing a broad, strategic view of resilience.



Utah Transit Authority

MEETING MEMO

669 West 200 South
Salt Lake City, UT 84101

Board of Trustees

Date: 10/9/2024

TO: Board of Trustees
THROUGH: Jay Fox, Executive Director
FROM: Viola Miller, Chief Finance Officer
PRESENTER(S): Todd Mills, Director of Supply Chain

TITLE:

Contract: Procurement Consulting Services (Concordant, LLC)

AGENDA ITEM TYPE:

Procurement Contract/Change Order

RECOMMENDATION:

Approve contract #24-03874 and authorize the Executive Director to execute the contract and associated disbursements with Concordant, LLC for Procurement Services contractors in the Not To Exceed amount of \$959,727.05 over a period of up to three (3) years.

BACKGROUND:

The procurement team has experienced a substantial rise in the agency's procurement needs. This, along with high employee turnover and the introduction of new processes and procedures over the past five years which have significantly slowed down procurement timelines, has resulted in a backlog exceeding six months.

DISCUSSION:

The Supply Chain team conducted an RFP and reviewed proposals submitted by multiple firms. The selection committee has selected Concordant to provide these services based on their qualifications and overall value to the agency. This contract is for a period of one year, with two (2) one--year options for extension.

CONTRACT SUMMARY:

Contractor Name:	Concordant, LLC
Contract Number:	24-03874
Base Contract Effective Dates:	9/26/2024 - 10/1/2025

Extended Contract Dates:	Two (2) one-year options for extension
Existing Contract Value:	N/A
Amendment Amount:	N/A
New/Total Contract Value:	\$959,727.05 includes base year, plus two 1-year options
Procurement Method:	RFP
Budget Authority:	2024 Approved Capital Budget

ALTERNATIVES:

The agency could increase headcount and hire candidates directly.

FISCAL IMPACT:

2024 amounts shown below are in the current approved 2024 Capital Projects budget. 2025 amount is in the 2025 Capital Plan. Following years are included in the UTA financial plan. All expenses will be charged to account code 40-3265.68000.8001, MSP265.

2024 = \$77,625.21

2025 = \$312,826.60

2026 = \$322,214.48

2027 = \$247,057.76

ATTACHMENTS:

Contract #24-03874



CONTRACT Number 24-03874PP

For

PROCUREMENT CONSULTING PROFESSIONAL SERVICES

This Professional Services Agreement is entered into and made effective as of the date of last signature below (the “Effective Date”) by and between UTAH TRANSIT AUTHORITY, a public transit district organized under the laws of the State of Utah (“UTA”), and CONCORDANT, LLC, a Limited Liability Corporation (“Consultant”).

RECITALS

WHEREAS, UTA desires to hire professional services for Procurement Consulting Services.

WHEREAS, On July 29, 2024, UTA issued Request for Proposal Package Number RFP 24-03874PP (“RFP”) encouraging interested parties to submit proposals to perform the services described in the RFP.

WHEREAS, Upon evaluation of the proposals submitted in response to the RFP, UTA selected Consultant as the preferred entity with whom to negotiate a contract to perform the Work.

WHEREAS, Consultant is qualified and willing to perform the Work as set forth in the Scope of Services.

AGREEMENT

NOW, THEREFORE, in accordance with the foregoing Recitals, which are incorporated herein by reference, and for and in consideration of the mutual covenants and agreements hereafter set forth, the mutual benefits to the parties to be derived here from, and for other valuable consideration, the receipt and sufficiency of which the parties acknowledge, it is hereby agreed as follows:

1. **SERVICES TO BE PROVIDED**

- a. Consultant shall provide qualified individuals approved in advance by UTA to perform all Work as set forth in the Scope of Services (Exhibit A). Except for items (if any) which this Contract specifically states will be UTA-provided, Consultant shall furnish all the labor, material and incidentals necessary for the Work.
- b. Consultant personnel shall perform all Work under this Contract in a professional

manner, using at least that standard of care, skill and judgment which can reasonably be expected from similarly situated professionals.

- c. All Work shall conform to generally accepted standards in the transit industry. Consultant shall perform all Work in compliance with applicable laws, regulations, rules, ordinances, permit constraints and other legal requirements including, without limitation, those related to safety and environmental protection.
- d. A Consultant shall furnish only qualified personnel and materials necessary for the performance of the Work.
- e. When performing Work on UTA property, Consultant shall comply with all UTA work site rules including, without limitation, those related to safety and environmental protection.

2. **MANAGEMENT OF WORK**

- a. Consultant 's Project Manager will be the day-to-day contact person for Consultant and will be responsible for all Work, as well as the coordination of such Work with UTA.
- b. UTA's Project Manager will be the day-to-day contact person for UTA and shall act as the liaison between UTA and Consultant with respect to the Work. UTA's Project Manager shall also coordinate any design reviews, approvals or other direction required from UTA with respect to the Work.

3. **PROGRESS OF WORK**

- a. Consultant shall prosecute the Work in a diligent and continuous manner and in accordance with all applicable notice to proceed, critical path schedule and guaranteed completion date requirements set forth in (or developed and agreed by the parties in accordance with) the Scope of Services.
- b. UTA shall have the right to approve in advance consultant personnel proposed for support to UTA in fulfillment of the requirements of this Contract. Consultant shall not make any commitments to personnel regarding support to UTA without UTA approval in advance.
- c. Consultant shall conduct regular meetings to update UTA's Project Manager regarding the progress of the Work including, but not limited to, any unusual conditions or critical path schedule items that could affect or delay the Work. Such meetings shall be held at intervals mutually agreed to between the parties.
- d. Consultant shall deliver monthly progress reports and provide all Contract submittals

and other deliverables as specified in the Scope of Services.

- e. Any drawing or other submittal reviews to be performed by UTA in accordance with the Scope of Services are for the sole benefit of UTA and shall not relieve Consultant of its responsibility to comply with the Contract requirements.
- f. UTA will have the right to inspect, monitor and review any Work performed by Consultant hereunder as deemed necessary by UTA to verify that such Work conforms to the Contract requirements. Any such inspection, monitoring and review performed by UTA is for the sole benefit of UTA and shall not relieve Consultant of its responsibility to comply with the Contract requirements.
- g. UTA shall have the right to reject Work which fails to conform to the requirements of this Contract. Upon receipt of notice of rejection from UTA, Consultant shall (at its sole expense and without entitlement to equitable schedule relief) promptly re-perform, replace or re-execute the Work so as to conform to the Contract requirements.
- h. If Consultant fails to promptly remedy rejected Work as provided in Section 3.F, UTA may (without limiting or waiving any rights or remedies it may have) perform necessary corrective action using other Consultant s or UTA's own forces. Any costs reasonably incurred by UTA in such corrective action shall be chargeable to Consultant.
- i.

4. **PLACEMENT GUARANTEE**

If a Consultant referred new hire leaves or is terminated by UTA within 30 days of working at UTA the Consultant is responsible for replacing the new hire within 90 days of the referred employee's termination date at no additional cost to UTA. If a new hire terminates employment or is terminated from employment with 30 to 90 days of employment UTA has the right to request a refund or replacement candidate

5. **PERIOD OF PERFORMANCE**

This Contract shall commence as of the Effective Date. This Contract shall remain in full force and effect for an initial one - year period expiring September 26, 2025. UTA may, at its sole election and extend the initial term for Two 1-Year options for a total of three (3) years. Extension options may be exercised by UTA upon providing Consultant with notice of such election at least thirty (30) days prior to the expiration of the initial term or then-expiring option period (as applicable). This Contract may be further extended if the Consultant and UTA mutually agree to an extension evidenced in writing. The rights and obligations of UTA and Consultant under this Contract shall at all times be subject to and conditioned upon the provisions of this Contract.

6. **COMPENSATION**

- a. For the performance of the Work, UTA shall pay Consultant in accordance with the payment's provisions described in Exhibit B. Payments shall be made in accordance with the milestones or other payment provisions detailed in Exhibit B. If Exhibit B does not specify any milestones or other payment provisions, then payment shall be made upon completion of all Work and final acceptance thereof by UTA. Pricing in Exhibit B is for the first one-year period. Pricing for additional option years shall be by mutual agreement of the Parties with price increases not to exceed 3% per year.
- b. To the extent that Exhibit B or another provision of this Contract calls for any portion of the consideration to be paid on a cost-reimbursement basis, such costs shall only be reimbursable to the extent allowed under 2 CFR Part 200 Subpart E. Compliance with federal cost principles shall apply regardless of funding source for this Contract.
- c. To the extent that Exhibit B or another provision of this Contract calls for any portion of the consideration to be paid on a time and materials or labor hour basis, then Consultant must refer to the not-to-exceed amount, maximum Contract amount, Contract budget amount or similar designation (any of these generically referred to as the "Not to Exceed Amount") specified in Exhibit B (as applicable). Unless and until UTA has notified Consultant by written instrument designated or indicated to be a Change Order that the Not to Exceed Amount has been increased (which notice shall specify a revised Not to Exceed Amount): (i) Consultant shall not be obligated to perform services or incur costs which would cause its total compensation under this Contract to exceed the Not to Exceed Amount; and (ii) UTA shall not be obligated to make payments which would cause the total compensation paid to Consultant to exceed the Not to Exceed Amount.
- d. UTA may withhold and/or offset from payment any amounts reasonably reflecting: (i) items of Work that have been rejected by UTA in accordance with this Contract; (ii) invoiced items that are not payable under this Contract; or (iii) amounts Consultant owes to UTA under this Contract.

7. **INCORPORATED DOCUMENTS**

- a. The following documents hereinafter listed in chronological order, with most recent document taking precedence over any conflicting provisions contained in prior documents (where applicable), are hereby incorporated into the Contract by reference and made a part hereof:
 - 1. The terms and conditions of this Professional Services Agreement (including any

exhibits and attachments hereto).

2. UTA's RFP including, without limitation, all attached or incorporated terms, conditions, federal clauses (as applicable), drawings, plans, specifications and standards and other descriptions of the Professional Services;
3. Consultant 's Proposal including, without limitation, all federal certifications (as applicable);

b. The above-referenced documents are made as fully a part of the Contract as if hereto attached or herein repeated. The Contract (including the documents listed above) constitute the complete contract between the parties.

8. **ORDER OF PRECEDENCE**

The Order of Precedence for this contract is as follows:

1. UTA Contract including all attachments
2. UTA Terms and Conditions
3. UTA Solicitation Terms
4. Consultant 's Bid or Proposal including proposed terms or conditions

Any Consultant /Consultant proposed term or condition which is in conflict with a UTA contract or solicitation term, or condition will be deemed null and void.

9. **CHANGES**

a. UTA's Project Manager or designee may, at any time, by written order designated or indicated to be a Change Order, direct changes in the Work including, but not limited to, changes:

1. In the Scope of Services;
2. In the method or manner of performance of the Work; or
3. In the schedule or completion dates applicable to the Work.

To the extent that any change in Work directed by UTA causes an actual and demonstrable impact to: (i) Consultant 's cost of performing the work; or (ii) the time required for the Work, then (in either case) the Change Order shall include an equitable adjustment to this Contract to make Consultant whole with respect to the impacts of such change.

b. A change in the Work may only be directed by UTA through a written Change Order or (alternatively) UTA's expressed, written authorization directing Consultant to proceed pending negotiation of a Change Order. Any changes to this Contract undertaken by Consultant without such written authority shall be at Consultant 's sole risk. Consultant

shall not be entitled to rely on any other manner or method of direction.

- c. Consultant shall also be entitled to an equitable adjustment to address the actual and demonstrable impacts of “constructive” changes in the Work if: (i) subsequent to the Effective Date of this Contract, there is a material change with respect to any requirement set forth in this Contract; or (ii) other conditions exist or actions are taken by UTA which materially modify the magnitude, character or complexity of the Work from what should have been reasonably assumed by Consultant based on the information included in (or referenced by) this Contract. In order to be eligible for equitable relief for “constructive” changes in Work, Consultant must give UTA’s Project Manager or designee written notice stating:
 - A. The date, circumstances, and source of the change; and
 - B. That Consultant regards the identified item as a change in Work giving rise to an adjustment in this Contract.

Consultant must provide notice of a “constructive” change and assert its right to an equitable adjustment under this Section within ten (10) days after Consultant becomes aware (or reasonably should have become aware) of the facts and circumstances giving rise to the “constructive” change. Consultant’s failure to provide timely written notice as provided above shall constitute a waiver of Consultant’s rights with respect to such claim.

- d. As soon as practicable, but in no event longer than 30 days after providing notice, Consultant must provide UTA with information and documentation reasonably demonstrating the actual cost and schedule impacts associated with any change in Work. Equitable adjustments will be made via Change Order. Any dispute regarding the Consultant’s entitlement to an equitable adjustment (or the extent of any such equitable adjustment) shall be resolved in accordance with Article 21 of this Contract.

10. **INVOICING PROCEDURES**

- a. Consultant shall invoice UTA after achievement of contractual milestones or delivery of all Goods and satisfactory performance of all Services or in accordance with an approved progress or periodic billing schedule. Consultant shall submit invoices to ap@rideuta.com for processing and payment. In order to timely process invoices, Consultant shall include the following information on each invoice:
 - i. Consultant Name
 - ii. Unique Invoice Number
 - iii. PO Number
 - iv. Invoice Date
 - v. Detailed Description of Charges

vi. Total Dollar Amount Due

- b. UTA shall have the right to disapprove (and withhold from payment) specific line items of each invoice to address non-conforming Software or Services. Approval by UTA shall not be unreasonably withheld. UTA shall also have the right to offset (against payments) amounts reasonably reflecting the value of any claim which UTA has against Consultant under the Contract. Payment for all invoice amounts not specifically disapproved or offset by UTA shall be provided to Consultant within thirty (30) calendar days of invoice submittal to ap@rideuta.com . Invoices not submitted electronically will shall be paid thirty (30) calendar days from date of receipt by UTA's accounting department.
- c. Invoices must include a unique invoice number, UTA's Purchase Order number, a description of the Good or Service provided, line-item pricing, total amount due, and must be submitted electronically to ap@rideuta.com.

11. **OWNERSHIP OF DESIGNS, DRAWINGS, AND WORK PRODUCT**

Any deliverables prepared or developed pursuant to the Contract including without limitation drawings, specifications, manuals, calculations, maps, sketches, designs, tracings, notes, reports, data, computer programs, models and samples, shall become the property of UTA when prepared, and, together with any documents or information furnished to Consultant and its employees or agents by UTA hereunder, shall be delivered to UTA upon request, and, in any event, upon termination or final acceptance of the Professional Services. UTA shall have full rights and privileges to use and reproduce said items. To the extent that any deliverables include or incorporate preexisting intellectual property of Consultant, Consultant hereby grants UTA a fully paid, perpetual license to use such intellectual property for UTA's operation, maintenance, modification, improvement and replacement of UTA's assets. The scope of the license shall be to the fullest extent necessary to accomplish those purposes, including the right to share same with UTA's Consultant s, agent, officers, directors, employees, joint owners, affiliates and Consultants.

12. **USE OF SUBCONSULTANT'S**

- a. Consultant shall give advance written notification to UTA of any proposed subcontract (not indicated in Consultant 's Proposal) negotiated with respect to the Work. UTA shall have the right to approve all subConsultant s, such approval not to be withheld unreasonably.
- b. No subsequent change, removal or substitution shall be made with respect to any such subConsultant without the prior written approval of UTA.
- c. Consultant shall be solely responsible for making payments to subConsultant s, and such payments shall be made within thirty (30) days after Consultant receives corresponding

payments from UTA.

- d. Consultant shall be responsible for and direct all Work performed by subConsultants.
- e. Consultant agrees that no subcontracts shall provide for payment on a cost-plus-percentage-of-cost basis. Consultant further agrees that all subcontracts shall comply with all applicable laws.

13. **KEY PERSONNEL**

Consultant shall provide the key personnel as indicated in Consultant 's Proposal (or other applicable provisions of this Contract) and shall not change any of said key personnel without the express written consent of UTA. The following individuals are concerned to be key personnel under this contract.

Julia Twiford

If the Consultant changed key personnel without the express written permission of UTA, it shall be in default of the contract and liable for default damages.

14. **SUSPENSION OF WORK**

- a. UTA may, at any time, by written order to Consultant, require Consultant to suspend, delay, or interrupt all or any part of the Work called for by this Contract. Any such order shall be specifically identified as a "Suspension of Work Order" issued pursuant to this Article. Upon receipt of such an order, Consultant shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of further costs allocable to the Work covered by the order during the period of Work stoppage.
- b. If a Suspension of Work Order issued under this Article is canceled, Consultant shall resume Work as mutually agreed to in writing by the parties hereto.
- c. If a Suspension of Work Order is not canceled and the Work covered by such order is terminated for the convenience of UTA, reasonable costs incurred as a result of the Suspension of Work Order shall be considered in negotiating the termination settlement.
- d. If the Suspension of Work causes an increase in Consultant 's cost or time to perform the Work, UTA's Project Manager or designee shall make an equitable adjustment to compensate Consultant for the additional costs or time, and modify this Contract by Change Order.

15. **TERMINATION**

a. **FOR CONVENIENCE:**

UTA shall have the right to terminate the Contract at any time by providing written notice to Consultant. If the Contract is terminated for convenience, UTA shall pay Consultant: (i) in full for Goods delivered and Services fully performed prior to the effective date of termination; and (ii) an equitable amount to reflect costs incurred (including Contract close-out and subConsultant termination costs that cannot be reasonably mitigated) and profit on work-in-progress as of to the effective date of the termination notice. UTA shall not be responsible for anticipated profits based on the terminated portion of the Contract. Consultant shall promptly submit a termination claim to UTA. If Consultant has any property in its possession belonging to UTA, Consultant will account for the same, and dispose of it in the manner UTA directs.

b. **FOR DEFAULT:**

If Consultant (a) becomes insolvent; (b) files a petition under any chapter of the bankruptcy laws or is the subject of an involuntary petition; (c) makes a general assignment for the benefit of its creditors; (d) has a receiver appointed; (e) should fail to make prompt payment to any subConsultant s or suppliers; or (f) fails to comply with any of its material obligations under the Contract, UTA may, in its discretion, after first giving Consultant seven (7) days written notice to cure such default:

1. Terminate the Contract (in whole or in part) for default and obtain the Professional Services using other Consultant s or UTA's own forces, in which event Consultant shall be liable for all incremental costs so incurred by UTA;
2. Pursue other remedies available under the Contract (regardless of whether the termination remedy is invoked); and/or
3. Except to the extent limited by the Contract, pursue other remedies available at law.

CONSULTANT 'S POST TERMINATION OBLIGATIONS:

Upon receipt of a termination notice as provided above, Consultant shall (i) immediately discontinue all work affected (unless the notice directs otherwise); and (ii) deliver to UTA all data, drawings and other deliverables, whether completed or in process. Consultant shall also remit a final invoice for all services performed and expenses incurred in full accordance with the terms and conditions of the Contract up to the effective date of termination. UTA shall calculate termination damages payable under the Contract, shall offset such damages against Consultant 's final invoice, and shall invoice Consultant for any additional amounts payable by Consultant (to the extent termination damages exceed the invoice). All rights and remedies provided in this Article are cumulative and not exclusive. If UTA terminates the Contract for any reason, Consultant shall remain available, for a period not exceeding

90 days, to UTA to respond to any questions or concerns that UTA may have regarding the Professional Services furnished by Consultant prior to termination.

16. **INFORMATION, RECORDS and REPORTS; AUDIT RIGHTS**

Consultant shall retain all books, papers, documents, accounting records and other evidence to support any cost-based billings allowable under Exhibit B (or any other provision of this Contract). Such records shall include, without limitation, time sheets and other cost documentation related to the performance of labor services, as well as subcontracts, purchase orders, other contract documents, invoices, receipts or other documentation supporting non-labor costs. Consultant shall also retain other books and records related to the performance, quality or management of this Contract and/or Consultant's compliance with this Contract. Records shall be retained by Consultant for a period of at least six (6) years after completion of the Work, or until any audit initiated within that six-year period has been completed (whichever is later). During this six-year period, such records shall be made available at all reasonable times for audit and inspection by UTA and other authorized auditing parties including, but not limited to, the Federal Transit Administration. Copies of requested records shall be furnished to UTA or designated audit parties upon request. Consultant agrees that it shall flow-down (as a matter of written contract) these records requirements to all subConsultants utilized in the performance of the Work at any tier.

17. **FINDINGS CONFIDENTIAL**

Any documents, reports, information, or other data and materials delivered or made available to or prepared or assembled by Consultant or subConsultant under this Contract are considered confidential and shall not be made available to any person, organization,

or entity by Consultant without consent in writing from UTA. If confidential information is released to any third party without UTA's written consent as described above, Consultant shall notify UTA of the data breach within 10 days and provide its plan for immediate mitigation of the breach for review and approval by UTA.

- a. It is hereby agreed that the following information is not considered to be confidential:
- A. Information already in the public domain.
 - B. Information disclosed to Consultant by a third party who is not under a confidentiality obligation.
 - C. Information developed by or in the custody of Consultant before entering into this Contract.
 - D. Information developed by Consultant through its work with other clients; and
 - E. Information required to be disclosed by law or regulation including, but not limited to, subpoena, court order or administrative order.

18. **PUBLIC INFORMATION**

Consultant acknowledges that the Contract and related materials (invoices, orders, etc.) will be public documents under the Utah Government Records Access and Management Act (GRAMA). Consultant's response to the solicitation for the Contract will also be a public document subject to GRAMA, except for legitimate trade secrets, so long as such trade secrets were properly designated in accordance with terms of the solicitation.

19. GENERAL INDEMNIFICATION

Consultant shall indemnify, hold harmless and defend UTA, its officers, trustees, agents, and employees (hereinafter collectively referred to as "Indemnitees") from and against all liabilities, claims, actions, damages, losses, and expenses including without limitation reasonable attorneys' fees and costs (hereinafter referred to collectively as "claims") related to bodily injury, including death, or loss or damage to tangible or intangible property caused, or alleged to be caused, in whole or in part, by the acts or omissions of Consultant or any of its owners, officers, directors, agents, employees or subConsultants. This indemnity includes any claim or amount arising out of the failure of such Consultant to conform to federal, state, and local laws and regulations. If an employee of Consultant, a subConsultant, anyone employed directly or indirectly by any of them or anyone for whose acts any of them may be liable brings a claim against UTA or another Indemnatee, Consultant's indemnity obligation set forth above will not be limited by any limitation on the amount of damages, compensation or benefits payable under any employee benefit acts, including workers' compensation or disability acts. The indemnity obligations of Consultant shall not apply to the extent that claims arise out of the sole negligence of UTA or the Indemnitees.

20. INSURANCE REQUIREMENTS

The insurance requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract. The Utah Transit Authority in no way warrants that the minimum limits contained herein are sufficient to protect the Consultant from liabilities that might arise out of the performance of the work under this contract by the Consultant, his agents, representatives, employees or subConsultants and Consultant is free to purchase additional insurance as may be determined necessary.

A. **MINIMUM SCOPE AND LIMITS OF INSURANCE:** Consultant shall provide coverage with limits of liability not less than those Stated below. An excess liability policy or umbrella liability policy may be used to meet the minimum liability requirements provided that the coverage is written on a "following form" basis.

1. **Commercial General Liability – Occurrence Form**

Policy shall include bodily injury, property damage and broad form contractual liability coverage.

- General Aggregate \$4,000,000
- Products – Completed Operations Aggregate \$1,000,000
- Personal and Advertising Injury \$1,000,000

- Each Occurrence \$2,000,000
 - a. The policy shall be endorsed to include the following additional insured language: "The Utah Transit Authority shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Consultant ".
 - b. The policy must also contain the following endorsement, WHICH MUST BE STATED ON THE CERTIFICATE OF INSURANCE: "Contractual Liability Railroads" ISO from CG 24 17 10 01 (or a substitute form providing equivalent coverage) showing "Utah Transit Authority Property" as the Designated Job Site

2. Automobile Liability

Bodily Injury and Property Damage for any owned, hired, and non-owned vehicles used in the performance of this Contract.

Combined Single Limit (CSL) \$2,000,000

- a. The policy shall be endorsed to include the following additional insured language: "The Utah Transit Authority shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Consultant, including automobiles owned, leased, hired or borrowed by the Consultant ".

3. Worker's Compensation and Employers' Liability

Workers' Compensation	Statutory
Employers' Liability	
Each Accident	\$100,000
Disease – Each Employee	\$100,000
Disease – Policy Limit	\$500,000

- a. Policy shall contain a waiver of subrogation against the Utah Transit Authority.
- b. This requirement shall not apply when a Consultant or subConsultant is exempt under UCA, AND when such Consultant or subConsultant executes the appropriate waiver form.

4. Professional Liability (Errors and Omissions Liability)

A. The policy shall cover professional misconduct or lack of ordinary skill for those positions defined in the Scope of Services of this contract.

Each Claim	\$1,000,000
Annual Aggregate	\$2,000,000

- a. In the event that the professional liability insurance required by this Contract is written on a claims-made basis, Consultant warrants that any retroactive date under the policy shall precede the effective date of this Contract; and that either continuous coverage will be maintained, or an extended discovery period will be exercised for a period of three (3) years beginning at the time work under this Contract is completed.
- B. ADDITIONAL INSURANCE REQUIREMENTS: The policies shall include, or be endorsed to include
2. The Consultant 's insurance coverage shall be primary insurance and non-contributory with the following provisions:
 1. On insurance policies where the Utah Transit Authority is named as an additional insured, the Utah Transit Authority shall be an additional insured to the full limits of liability purchased by the Consultant. Insurance limits indicated in this agreement are minimum limits. Larger limits may be indicated after the Consultant 's assessment of the exposure for this contract; for their own protection and the protection of UTA.
 2. The Consultant 's insurance coverage shall be primary insurance and non-contributory with respect to all other available sources.
 3. Consultant and their insurers shall endorse the required insurance policy(ies) to waive their right of subrogation against UTA. Consultant 's insurance shall be primary with respect to any insurance carried by UTA. Consultant will furnish UTA at least thirty (30) days advance written notice of any cancellation or non-renewal of any required coverage that is not replaced.
- C. NOTICE OF CANCELLATION: Each insurance policy required by the insurance provisions of this Contract shall provide the required coverage and shall not be suspended, voided, or canceled except after thirty (30) days prior written notice has been given to the Utah Transit Authority, except when cancellation is for non-payment of premium, then ten (10) days prior notice may be given. Such notice shall be sent directly to (Utah Transit Authority agency Representative's Name & Address).
- D. ACCEPTABILITY OF INSURERS: Insurance is to be placed with insurers duly licensed or authorized to do business in the State and with an "A.M. Best" rating of not less than A-VII. The Utah Transit Authority in no way warrants that the above-required minimum insurer rating is sufficient to protect the Consultant from potential insurer insolvency.
- E. VERIFICATION OF COVERAGE: Consultant shall furnish the Utah Transit Authority with certificates of insurance (on standard ACORD form) as required by this Contract. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.
- All certificates and any required endorsements are to be sent to utahta@ebix.com and received and approved by the Utah Transit Authority before work commences. Each insurance policy

required by this Contract must be in effect at or prior to commencement of work under this Contract and remain in effect for the duration of the project. Failure to maintain the insurance policies as required by this Contract or to provide evidence of renewal is a material breach of contract.

All certificates required by this Contract shall be emailed directly to Utah Transit Authority's insurance email address at utahta@ebix.com. The Utah Transit Authority project/contract number and project description shall be noted on the certificate of insurance. The Utah Transit Authority reserves the right to require complete, certified copies of all insurance policies required by this Contract at any time. DO NOT SEND CERTIFICATES OF INSURANCE TO THE UTAH TRANSIT AUTHORITY'S CLAIMS AND INSURANCE DEPARTMENT.

F. SUBCONSULTANT S: Consultant s' certificate(s) shall include all subConsultant s as additional insureds under its policies or subConsultant s shall maintain separate insurance as determined by the Consultant, however, subconsultant 's limits of liability shall not be less than \$1,000,000 per occurrence / \$2,000,000 aggregate. Sub-Consultant s maintaining separate insurance shall name Utah Transit Authority as an additional insured on their policy. Blanket additional insured endorsements are not acceptable from sub-Consultant s. Utah Transit Authority must be scheduled as an additional insured on any sub-Consultant policies.

G. APPROVAL: Any modification or variation from the insurance requirements in this Contract shall be made by Claims and Insurance Department or the Office of General Counsel, whose decision shall be final. Such action will not require a formal Contract amendment but may be made by administrative action.

21. **OTHER INDEMNITIES**

a. Consultant shall protect, release, defend, indemnify and hold harmless UTA and the other Indemnitees against and from any and all Claims of any kind or nature whatsoever on account of infringement relating to Consultant 's performance under this Contract. If notified promptly in writing and given authority, information and assistance, Consultant shall defend, or may settle at its expense, any suit or proceeding against UTA so far as based on a claimed infringement and Consultant shall pay all damages and costs awarded therein against UTA due to such breach. In case any portion of the Work is in such suit held to constitute such an infringement or an injunction is filed that interferes with UTA's rights under this Contract, Consultant shall, at its expense and through mutual agreement between the UTA and Consultant, either procure for UTA any necessary intellectual property rights, or modify Consultant 's services or deliverables such that the claimed infringement is eliminated.

b. Consultant shall: (i) protect, release, defend, indemnify and hold harmless UTA and the other Indemnitees against and from any and all liens or Claims made or filed against UTA

or upon the Work or the property on which the Work is located on account of any labor performed or labor, services, and equipment furnished by subConsultant s of any tier; and (ii) keep the Work and said property free and clear of all liens or claims arising from the performance of any Work covered by this Contract by Consultant or its subConsultant s of any tier. If any lien arising out of this Contract is filed, before or after Work is completed, Consultant, within ten (10) calendar days after receiving from UTA written notice of such lien, shall obtain a release of or otherwise satisfy such lien. If Consultant fails to do so, UTA may take such steps and make such expenditures as in its discretion it deems advisable to obtain a release of or otherwise satisfy any such lien or liens, and Consultant shall upon demand reimburse UTA for all costs incurred and expenditures made by UTA in obtaining such release or satisfaction. If any non-payment claim is made directly against UTA arising out of non-payment to any subConsultant , Consultant shall assume the defense of such claim within ten (10) calendar days after receiving from UTA written notice of such claim. If Consultant fails to do so, Consultant shall upon demand reimburse UTA for all costs incurred and expenditures made by UTA to satisfy such claim.

22. **INDEPENDENT CONSULTANT**

Consultant is an independent Consultant and agrees that its personnel will not represent themselves as, nor claim to be, an officer or employee of UTA by reason of this Contract. Consultant is responsible to provide and pay the cost of all its employees' benefits.

23. **PROHIBITED INTEREST**

No member, officer, agent, or employee of UTA during his or her tenure or for one year thereafter shall have any interest, direct or indirect, including prospective employment by Consultant in this Contract or the proceeds thereof without specific written authorization by UTA.

24. **CLAIMS/DISPUTE RESOLUTION**

- a. "Claim" means any disputes between UTA and the Consultant arising out of or relating to the Contract Documents including any disputed claims for Contract adjustments that cannot be resolved in accordance with the Change Order negotiation process set forth in Article 6. Claims must be made by written notice. The responsibility to substantiate claims rests with the party making the claim.

- b. Unless otherwise directed by UTA in writing, Consultant shall proceed diligently with performance of the Work pending final resolution of a Claim, including litigation. UTA shall continue to pay any undisputed payments related to such Claim.
- c. The parties shall attempt to informally resolve all claims, counterclaims and other disputes through the escalation process described below. No party may bring a legal action to enforce any term of this Contract without first having exhausted such process.
- d. The time schedule for escalation of disputes, including disputed requests for change order, shall be as follows:

Level of Authority	Time Limit
UTA's Project Manager/Consultant's Project Manager	Five calendar days
UTA's CFO/Consultant's CFO	Five calendar days
UTA's CEO's/Consultant's CEO	Five calendar days

Unless otherwise directed by UTA's Project Manager, Consultant shall diligently continue performance under this Contract while matters in dispute are being resolved.

If the dispute cannot be resolved informally in accordance with the escalation procedures set forth above, then either party may commence formal mediation under the Juris Arbitration and Mediation (JAMS) process using a mutually agreed upon JAMS mediator. If resolution does not occur through Mediation, then legal action may be commenced in accordance the venue and governing law provisions of this contract.

25. **GOVERNING LAW**

This Contract shall be interpreted in accordance with the substantive and procedural laws of the State of Utah. Any litigation between the parties arising out of or relating to this Contract will be conducted exclusively in federal or state courts in the State of Utah and Consultant consents to the jurisdiction of such courts.

26. **ASSIGNMENT OF CONTRACT**

Consultant shall not assign, sublet, sell, transfer, or otherwise dispose of any interest in this Contract without prior written approval of UTA, and any attempted transfer in violation of this restriction shall be void.

27. **NONWAIVER**

No failure or waiver or successive failures or waivers on the part of either party in the enforcement of any condition, covenant, or article of this Contract shall operate as a discharge of

any such condition, covenant, or article nor render the same invalid, nor impair the right of either party to enforce the same in the event of any subsequent breaches by the other party.

28. **NOTICES OR DEMANDS**

- a. Any formal notice or demand to be given by one party to the other shall be given in writing by one of the following methods: (i) hand delivered; (ii) deposited in the mail, properly stamped with the required postage; (iii) sent via registered or certified mail; or (iv) sent via recognized overnight courier service. All such notices shall be addressed as follows:

If to UTA:
Utah Transit Authority
ATTN: Pat Postell
669 West 200 South
Salt Lake City, UT 84101

with a required copy to:
Utah Transit Authority
ATTN: Legal Counsel
669 West 200 South
Salt Lake City, UT 84101

If to Consultant :
Concordant, LLC
ATTN: JR Twiford
208 E Garfield Street, Suite 200
Laramie, WY 82070

- b. Any such notice shall be deemed to have been given, and shall be effective, on delivery to the notice address then applicable for the party to which the notice is directed; provided, however, that refusal to accept delivery of a notice or the inability to deliver a notice because of an address change which was not properly communicated shall not defeat or delay the giving of a notice. Either party may change the address at which such party desires to receive written notice by providing written notice of such change to any other party.
- c. Notwithstanding Section 27, the parties may, through mutual agreement, develop alternative communication protocols to address change notices, requests for information and similar categories of communications. Communications provided pursuant to such agreed means shall be recognized as valid notices under this Contract.

29. **CONTRACT ADMINISTRATOR**

UTA's Contract Administrator for this Contract is Pat Postell, or designee. All questions and correspondence relating to the contractual aspects of this Contract should be directed to said Contract Administrator, or designee.

30. **INSURANCE COVERAGE REQUIREMENTS FOR CONSULTANT EMPLOYEES AND SUBCONSULTANTS UNDER DESIGN AND CONSTRUCTION CONTRACTS**

- a. The following requirements apply to the extent that the Consultant is providing design or construction services and (i) the initial value of this Contract is equal to or in excess of \$2 million; (ii) this Contract, with subsequent modifications, is reasonably anticipated to equal or exceed \$2 million; (iii) Consultant has a subcontract at any tier that involves a sub-Consultant that has an initial subcontract equal to or in excess of \$1 million; or (iv) any subcontract, with subsequent modifications, is reasonably anticipated to equal or exceed \$1 million:
- b. Consultant shall, prior to the effective date of this Contract, demonstrate to UTA that Consultant has and will maintain an offer of qualified health insurance coverage (as defined by Utah Code Ann. § 17B-2a-818.5) for the Consultant's employees and the employee's dependents during the duration of this Contract.
- c. Consultant shall also demonstrate to UTA that subConsultants meeting the above-described subcontract value threshold have and will maintain an offer of qualified health insurance coverage (as defined by Utah Code Ann. § 17B-2a-818.5) for the subConsultant's employees and the employee's dependents during the duration of the subcontract.

31. **COSTS AND ATTORNEY'S FEES**

If any party to this Agreement brings an action to enforce or defend its rights or obligations hereunder, the prevailing party shall be entitled to recover its costs and expenses, including mediation, arbitration, litigation, court costs and attorneys' fees, if any, incurred in connection with such suit, including on appeal

32. **NO THIRD-PARTY BENEFICIARY**

The parties enter into this Contract for the sole benefit of the parties, in exclusion of any third-party, and no third-party beneficiary is intended or created by the execution of this Contract.

33. **FORCE MAJEURE**

Neither party to the Contract will be held responsible for delay or default caused by fire, riot, acts of God and/or war which are beyond that party's reasonable control. UTA may terminate the Contract after determining such delay or default will reasonably prevent successful performance of the Contract.

34. **UTAH ANTI-BOYCOTT OF ISRAEL ACT**

Consultant agrees it will not engage in a boycott of the State of Israel for the duration of this contract.

35. **TRAVEL COSTS**

Any travel costs charged against this contract and paid for with contract funds must be in compliance with UTA's Travel Policy (UTA.02.07) and the U.S. General Services Administration (GSA) per diem rates

36. **SEVERABILITY**

Any provision of this Contract prohibited or rendered unenforceable by operation of law shall be ineffective only to the extent of such prohibition or unenforceability without invalidating the remaining provisions of this Contract.

37. **ENTIRE AGREEMENT**

This Contract shall constitute the entire agreement and understanding of the parties with respect to the subject matter hereof, and shall supersede all offers, negotiations and other agreements with respect thereto. The terms of the Contract supersede any additional or conflicting terms or provisions that may be preprinted on Vendor's work plans, cost estimate forms, receiving tickets, invoices, or any other related standard forms or documents of Vendor that may subsequently be used to implement, record, or invoice Goods and/or Services hereunder from time to time, even if such standard forms or documents have been signed or initialed by a representative of UTA. The terms of the Contract prevail in any dispute between the terms of the Contract and the terms printed on any such standard forms or documents, and such standard forms or documents will not be considered written amendments of the Contract.

38. **REVOLVING DOOR RESTRICTIONS**

UTA Ethics Policy requires Board approval for the award or amendment of a contract with a Consultant that has hired a former UTA employee or who are represented by a former employee where the former employee left UTA employment within the 12 months prior to the contract award or amendment. Approval will not be given if there is a strong appearance of an unfair competitive advantage.

39. **AMENDMENTS**

Any amendment to this Contract must be in writing and executed by the authorized representatives of each party.

40. **COUNTERPARTS**

This Contract may be executed in any number of counterparts and by each of the parties hereto on separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute but one and the same instrument. Any signature page of the Contract may be detached from any counterpart and reattached to any other counterpart hereof. The electronic transmission of a signed original of the Contract or any counterpart hereof and the electronic retransmission of any signed copy hereof shall be the same as delivery of an original.

41. **SURVIVAL**

Provisions of this Contract intended by their nature and content to survive termination of this Contract shall so survive including, but not limited to, Articles 5, 7, 8, 10, 14, 15, 17, 18, 19, 20, 23, 29 and 30.

IN WITNESS WHEREOF, the parties have made and executed this Contract as of the day, month and year of the last signature contained below.

CONCORDANT, LLC.

By 
James R Twiford
CEO

UTAH TRANSIT AUTHORITY:

By _____
Jay Fox
Executive Director

By _____
Viola Miller
Chief Financial Officer

DocuSigned by:

70E33A415BA44F6...
Mike Bell
UTA Legal Counsel

EXHIBIT A

SCOPE OF WORK

SCOPE OF WORK

Provide cradle-to-grave management of complex procurements and contract administration.

Perform a full range of procurement professional duties involved in planning, preparing, issuing, analyzing, project management, contract close-out and administering of complex solicitations for UTA's Capital Development Business Unit.

Oversee project managers, departments, and/or external stakeholders/agencies in selecting procurement methods and strategies.

Plan, prepares, issues, manage, and award solicitations in accordance with UTA policies, FTA regulations and other federal and state laws.

Approve invoices to ensure contractual terms and conditions are followed and in compliance with federal and/or local grant funds distribution requirements.

Establish vendor/supplier relationships and enforces contractual terms and conditions.

Serve as subject matter expert to management at all levels on matters pertaining to procurement, grant, and contract administration.

Research and implement all updated state and federal procurement policies, clauses and guidelines.

OTHER GENERAL DUTIES and RESPONSIBILITIES

- *Plan, prepare, issue, analyze, manage, and award solicitations (RFP, IFB, RFQ):*
- *Analyze and determine appropriate procurement type and method of solicitation.*
- *Consult with Project Manager to establish budget, scope, schedule, independent cost estimate, and requisition.*
- *Plan and prepare solicitation documents in accordance with UTA, state, and federal regulations (e.g. UTA SOP 1.2.2, FTA Circular 4220.1F, and Master Agreement).*
- *Publish and distribute solicitations pursuant to UTA, state, and federal regulations.*
- *Manage all aspects of solicitations to guarantee fair and open competition.*
- *Effectively and clearly communicate with internal customers and external suppliers all information related to a solicitation and the procurement process.*
- *Research requested clarifications/questions, and issues addenda.*
- *Conduct pre-bid/proposal, bid opening, proposal evaluation committee meetings, and proposer interviews/presentations.*
- *Evaluate bids/proposals for responsiveness and issues award to the low bid or selected contractor/firm.*
- *Investigate and resolve any issues relating to the solicitation, including protests.*
- *Negotiate all contract terms and conditions and price with awarded contractor/firm.*
- *Review potentially litigious contractual issues with Legal Counsel.*

- *Create contract documents for review by Legal, project manager, and contractor/firm.*
- *Finalize and distribute contract for final signature execution.*
- *Perform close-out of all contracts awarded to third-party vendor/suppliers. Oversees third-party contractors and/or consultants in coordination with assigned project manager throughout the entire project to ensure compliance with scope, schedule, budget, and applicable state and federal regulations.*
- *Establish and maintain contractor relationships and resolves any disputes regarding contract agreements.*
- *Manage contract modifications/change orders in compliance with FTA and UTA policy.*
- *Review all invoices, certify accuracy and initiate payment procedures, or reconcile errors as necessary prior to payment.*
- *Monitor contractor compliance with UTA, state, and federal procurement policies and procedures. Ensure contractors comply with applicable federal certification requirements to ensure an uninterrupted flow of federal funding.*
- *Maintain contract files and records; prepare status reports; and reconciles differences with Finance, project control, and project manager.*
- *Analyze contract updates and disseminates new releases and/or changes of applicable government policies and procedures to appropriate parties.*
- *Organize and review contract files to ensure proper documentation is maintained according to retention policy.*
- *Ensure all contract deadlines are met and proper contract close out procedures are followed.*

EXHIBIT B

PRICING



2 PRICE

2.1 Procurement Specialist Rates

Our submission of this proposal constitutes an offer to provide the services described in the RFP, at the following rates for Procurement Specialists. This offer is good and firm for a period of ninety (90) days after the Deadline to Submit Proposals, from 8/16/2024 to 11/14/2024.

Labor Category	Annual Work Hours	Rate per hour
Procurement Consultant	1880	\$ 82.58

2.2 Annual Work Hour Calculations

Concordant employees observe 11 Federal Holidays per year and are provided two weeks of Paid Time Off per year. The calculations for annual Full Time employee work hours are:

Description	Times / year	Hours	Total	Annual Work Hours calculation
Total Work Hours	52 weeks	40 hours per week	52 x 40 = 2080 hours	2080
Federal Holidays	11 days	8 hours per day	11 x 8 = 88 hours	- 88
Paid Time Off	14 days	8 hours per day	14 x 8 = 112 hours	- 112
				= 1880 hours

2.3 Total Evaluated Price

For two (2) full-time Procurement Consultants to assist UTA with cradle-to-grave procurements, working 1880 hour per year, at a rate of \$82.58 per hour.

Total Evaluated Price is: $(2) \times (1880) \times (82.58) = \mathbf{\$310,500.80}$



Utah Transit Authority

MEETING MEMO

669 West 200 South
Salt Lake City, UT 84101

Board of Trustees

Date: 10/9/2024

TO: Board of Trustees
THROUGH: Jay Fox, Executive Director
FROM: David Hancock, Chief Capital Services Officer
PRESENTER(S): Patti Garver, Manager of Environmental & Sustainability

TITLE:

Contract: Critical Connections Study Funding Agreement (UDOT)

AGENDA ITEM TYPE:

Non-Procurement Agreement

RECOMMENDATION:

Approve and authorize the Executive Director to execute a funding agreement and associated disbursements between UTA and the Utah Department of Transportation in the amount of \$500,000 for critical connections study.

BACKGROUND:

The USDOT published a notice of funding opportunity for the Reconnecting Communities Grant Program on June 30, 2022. This planning grant program funds planning projects that reconnect communities by removing, retrofitting, or mitigating transportation facilities that create barriers to community connectivity, including to mobility, access, or economic development. Salt Lake City submitted a grant application in September 2022 for the Project. Salt Lake City was selected on February 28, 2023, to receive funding under this program. Salt Lake City is not an eligible recipient of USDOT funds. Therefore, the funds will be awarded to UDOT as an eligible recipient; however, the Project will be managed by Salt Lake City. The agreement will allow transfer of UTA's match of \$500,000 to UDOT for the Project.

A previous version of this agreement (#23-P00309) was approved by the UTA Board of Trustees on December 20, 2023. The signatories on the previous version included the Redevelopment Agency of Salt Lake City, Salt Lake City (RDA), UDOT, and UTA. However, upon further review, UDOT requested a new agreement to only include UDOT and UTA. A separate agreement would be completed between the RDA, Salt Lake City, and UDOT. Therefore, the December 20, 2023, agreement is rescinded and replaced by this agreement.

DISCUSSION:

The USDOT selected Salt Lake City to receive an award amount of \$1,970,000 for the Critical Connections: Healing Salt Lake City’s East-West Divide project on February 28, 2023. The aim of the Project is to better understand the nature of the East-West transportation divide and then co-create an infrastructure solution or program of solutions for further consideration and/or implementation by the Project Partners.

UTA will pay \$500,000 to UDOT for costs authorized under the agreement.

CONTRACT SUMMARY:

Contractor Name:	UDOT
Contract Number:	24-P00396
Base Contract Effective Dates:	10/09/2024
Extended Contract Dates:	N/A
Existing Contract Value:	N/A
Amendment Amount:	N/A
New/Total Contract Value:	\$500,000
Procurement Method:	Non-procurement
Budget Authority:	Approved 2024 Capital Budget

ALTERNATIVES:

If this funding agreement is not executed, it may delay planning solutions to overcome transportation barriers to community connections.

FISCAL IMPACT:

UTA’s 5-year capital plan includes the Reconnecting Communities Study for \$500,000 in MSP248-Planning and Environmental Analysis.

2024 Approved Capital Budget: \$1,150,000

ATTACHMENTS:

Critical Connections Study Funding Agreement

**CRITICAL CONNECTIONS
STUDY FUNDING
AGREEMENT**

This Critical Connections Study Funding Agreement ("Agreement") is entered into this day of , 2024, by and between UTAH TRANSIT AUTHORITY ("UTA"), a special service district responsible for providing public transportation and organized under the laws of the State of Utah, and UTAH DEPARTMENT OF TRANSPORTATION ("UDOT"), an agency of the state government of Utah.

RECITALS

WHEREAS, Salt Lake City is a regional hub of economic and population growth; and

WHEREAS, UDOT recently received a Reconnecting Communities Pilot Program ("RECONNECTING COMMUNITIES") funding award from the U.S. Department of Transportation ("USDOT") for UDOT to pay for a portion of the costs to examine the East-West Divide in Salt Lake City created by the heavy rail, interstate freeway and subsequent investment practice ("Project");

WHEREAS, UDOT received \$1,970,000 from the RECONNECTING COMMUNITIES award, but estimates the total Project cost will be approximately \$3,740,000; and

WHEREAS, pursuant to the terms of this Agreement, the UTA desires to work together with UDOT and other Project stakeholders on this Project and will provide funding to help cover the cost difference between the amount UDOT received from the RECONNECTING COMMUNITIES award and the estimated total Project cost ("UTA Project Funds").

AGREEMENT

NOW, THEREFORE, it is hereby agreed as follows:

1. **Project.** Conduct a collaborative study between stakeholders with the assistance of a consultant which addresses the subject of "Critical Connections: Healing Salt Lake City's East-West Divide". The aim of the Project is to better understand the nature of the East-West divide and then co-create an infrastructure solution or program of solutions for further consideration and/or implementation by Project Partners. The scope of the Project is more fully defined in Exhibit A attached hereto and incorporated herein.
2. **Purpose of Agreement.** This Agreement outlines the terms and conditions pursuant to which the UTA Project Funds will be used to help complete the Project. The scope of work and schedule for the Project is described in Exhibit A.
3. **Project Funds.** The budget for the Project is estimated to be \$3,740,000, attached here as Exhibit A. UDOT is the recipient of a \$1,970,000 RECONNECTING COMMUNITIES award that will be used to fund the Project. In addition, UTA has agreed to contribute a total of \$500,000 in UTA Project Funds. The remaining \$1,270,000 will be provided by Salt Lake City Corporation concurrently with the UTA Project Funds and is covered by a separate funding agreement.

4. Selection of Consultant to Perform the Project. Selection of the consultant, or consultant team, to perform the Project ("Consultant") will be effectuated pursuant to a public procurement process in accordance with appropriate federal and state procurement requirements.
5. Transfer and Use of Funds. UTA shall transfer the UTA Project Funds to UDOT no later than thirty days after the execution of this agreement. UTA shall segregate the UTA Project Funds into a separate internal account. Unless otherwise specifically approved, UDOT may only: (i) use the UTA Project Funds for the Project; and (ii) draw upon the UTA Project Funds only as necessary to select a consultant or make progress payments to the Consultant, in arrears, for services satisfactorily performed in furtherance of the Project. Payments for the Project will be made on a prorated basis (meaning that each payment will be drawn on a prorated basis from UDOT's RECONNECTING COMMUNITIES funds, the UTA Project Funds, and the funds of other Project stakeholders). Any excess local funding at the conclusion of the Project will be distributed on a prorated basis.
6. Coordination of Project with Steering Committee. UDOT will serve as the lead agency for the Project and will hold and manage the contract with the Consultant. UDOT will coordinate with UTA and solicit Project input through a Project steering committee, which will be established after the execution of this Agreement. UTA will appoint a representative to the Project steering committee. The Project steering committee will meet periodically during the progress of the Project to discuss substantive Project issues. UDOT will use reasonable efforts to provide the Project steering committee members with the opportunity to review and provide feedback regarding the deliverables submitted by the Consultant from time to time.
7. Recordkeeping. UDOT shall maintain a record of all expenditures of UTA Project Funds in such a way that UTA may confirm that such funds have been spent only for the purposes specified in this Agreement. UDOT shall make relevant books and records available to UTA at reasonable times and upon reasonable notice.
8. Amendment, Waiver. No waiver, termination, amendment, or other modification of any provision to this Agreement shall be effective unless the same shall be in writing and signed by UTA and UDOT, and then such waiver, termination, amendment, or modification shall be effective only in the specific instance and for the specific purpose for which it is given.
9. Entire Agreement. This Agreement constitutes the entire Agreement by and between UDOT and UTA with respect to the subject matter of this Agreement and supersedes all prior agreements, understandings, and negotiations, both written and oral, with respect to the subject matter of this Agreement. No representation, warranty, inducement, promise, understanding or condition which is not set forth in this Agreement has been made or relied upon hereto.
10. Dispute Resolution. UDOT and UTA agree to make a good faith effort to resolve any dispute regarding the construction or interpretation of any provision of this Agreement, or regarding any policy matter or the determination of any issue of fact, at the lowest appropriate level.
11. Governmental Immunity. UDOT and UTA are governmental entities for purposes of the Governmental Immunity Act of Utah, Utah Code Ann. Section 63G, Chapter 7. Consistent with the terms of this Act, it is mutually agreed that each of the above-referenced Project partners is

responsible and liable for its own wrongful or negligent acts which it commits, or which are committed by its agents, officials, or employees. No Project partner waives any defenses otherwise available under the Governmental Immunity Act.

12. Authority. The parties executing this Agreement each represent and warrant (i) that the individual signing is authorized to do so on behalf of the respective agency hereto, (ii) that she or he has full legal power and authority to bind the respective agency hereto, and if necessary, has obtained all required consents or delegations of such power and authority, and (iii) that the execution, delivery and performance by the respective agency hereto of this document will not constitute a default under any agreement to which it is a party.

IN WITNESS WHEREOF, UDOT and UTA have entered into this Agreement effective the date first set forth herein.

CRITICAL CONNECTIONS STUDY FUNDING AGREEMENT -- SIGNATURE PAGE

Utah Transit Authority				Utah Department of Transportation			
By		Date		By		Date	
Chief Capital Services Officer, David Hancock				Project Manager, Diego Carroll			
By		Date		By		Date	
Executive Director, Jay Fox				Region Director, Robert Stewart			
By		Date		By		Date	
				Contract Administrator			

Approved-as-to-form

Signed by:

Tim Merrill

9/6/2024

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UTA Legal

EXHIBIT A

Critical Connections Partnership

Critical Connections: Healing Salt Lake City's East-West Divide Scope of Work

Executive Summary

The following scope of work outlines a plan to fulfill the work described in the grant application "Critical Connections: Healing Salt Lake City's East-West Divide". The application was funded in part by the USDOT Federal Highways Administration Reconnecting Communities Pilot program. The goal of the study is to more fully understand the nature of the East-West divide and then cocreate an infrastructure solution or program of solutions. With a focus on community engagement and empowerment, the end goal is a package of projects that are ready to seek funding for application.

Task 1: Project Management

This task includes oversight of the consultant team, including subconsultants, and the administrative tasks required to support the overall project. This work will include but is not limited to the creation of steering and technical committees; a defined schedule of work; engagement and meetings; and a process for communication between project managers, committees, stakeholders; and the consultant team via a project charter. Task 1 should include a kickoff meeting and a schedule for subsequent meetings with all necessary bodies.

Task 2: Establish a Framework for Community Engagement

Defining the nature and composition of community engagement is central to the success and spirit of this project. The work should define how community representation will be realized. Once this representation is formalized, the team will work with the representatives to define the scope, schedule, and practice of engagement for the broader community.

Task 3: Identify the Problem

Clear and concise East-West divide issues should be defined by the community representative body and formalized by broader engagement. This work should also identify core values that are required for each potential solution. These may include, but are not limited to:

- Safety;
- Equity;
- Mobility;
- Affordability;
- Access to Opportunities

This problem statement will serve as the basis for all future work and ground the project in a clear mission.

Task 4: Analysis of Existing Conditions and Current and Planned Work

The project team will analyze the East-West divide in Salt Lake City through the lens of the problem statement to produce a report regarding the state of the divide. Considerations should include but may not be limited to safety, mobility, equity, affordability and access to opportunities, potential impediments to solutions, and existing area assets. The report should also include a survey of current and planned work on or around the divide.

Task 5: Create a Menu of Potential Solutions

The project team, with clearly defined and meaningful direction from the community representative body, should create a menu of potential solutions to the East-West Divide. As the representative body generates solutions, the project team should facilitate the ideas of the body and build their capacity to understand the challenges and unintended consequences and benefits of any given infrastructure project.

Task 6: Narrow the Field

Working in close collaboration with the representative body and engaging with the public more broadly, the project team should analyze the menu of potential solutions created in Task 5 and begin to evaluate and narrow?. Potential criteria for eliminating a solution may include, but not be limited to feasibility, cost, community disruption, or lack of development? identified in Task 3.

Task 7: Assess the Feasibility of the Remaining Solutions

Using the information gathered in Task 6, the project team will evaluate the solutions and determine which best a) solve the identified problem; b) have a reasonable chance of implementation and c) have an acceptable amount of second order negative impacts to the community. These three criteria may be added to or modified based on the preceding work and/or influence from the representative body. This process should conclude by selecting a solution or package of solutions that will be the first iteration of a final project recommendations for this study.

Task 8: Design the Solution

The project team will create planning level design of the selected solution(s). This work should be done in conjunction with Task 9, and with an eye toward specific funding for the identified solution(s).

Task 9: A Map to Realization

The size and scope of this work are large enough that they are likely to generate a significant amount of interest. Continuing the momentum of the infrastructure planning, as well as the corresponding community engagement will require success in implementation. The final work of this study should result in the creation of a roadmap illustrating how the selected solution(s) will be built. Specific funding sources and strategies should be provided in a timeline format. If a package of solutions is selected, then a phased approach identifying early successes should be included. The final product should be a document that is easily transformed into infrastructure funding applications.



Utah Transit Authority

MEETING MEMO

669 West 200 South
Salt Lake City, UT 84101

Board of Trustees

Date: 10/9/2024

TO: Board of Trustees
THROUGH: Jay Fox, Executive Director
FROM: Viola Miller, Chief Financial Officer
PRESENTER(S): Daniel Hofer, Director- Capital Programming and Support
Greg Andrews- Senior Capital Budget Analyst

TITLE:

TBA2024-10-01 - Technical Budget Adjustment - 2024 Capital Program

AGENDA ITEM TYPE:

Other Approval

RECOMMENDATION:

Approve TBA2024-10-01 to authorize transfer of \$6.011 million between various projects within the 2024 Capital Budget as presented.

BACKGROUND:

Board Policy 2.3 Budget allows the Board of Trustees to amend or supplement the Authority's budget at any time after its adoption. The Board may do this through a Technical Budget Adjustment (TBA) when the request does not increase budget authority, or through a Budget Amendment, after consultation with the Local Advisory Council, when an increase in the annual appropriation authority is requested.

DISCUSSION:

This Technical Budget Adjustment will transfer a total of \$6.011 million to various projects within UTA's 2024 capital budget to aid in the delivery of projects this year. This request will affect the current budget total of 20 different projects within UTA's capital program. Due to the length of the list, a supplemental document has been provided that details the current budgets for the affected projects, the requested amount, and the proposed new total, upon approval from the Board of Trustees.

The main benefits UTA anticipates resulting from the proposed Technical Budget Adjustment include:

- Aligning budgets with contract milestones or anticipated expenditure amounts for the projects thru the
-

end of 2024.

The following are projects where the budgets will be increased:

- The Mid-Valley Connector project is a federally funded grant project that connects the Murray Central Station with the West Valley Central Station via Salt Lake Community College. This project received a Letter of No Prejudice (LONP) from the Federal Transit Administration in advance of the grant award which allows work on the project to progress in advance of formal issuance of the actual award. Work has been able to progress rapidly on this project and the Project team believes adding these additional funds will allow them to continue advancement of this construction thru 2024.
- The Program Management Support project is a general capital program support line that supports the execution of UTA's capital program in a more programmatic way as opposed to being more project specific. This addition of funds will allow UTA to continue to add some additional scope to the HNTB program management support in the general administration of the capital program and accommodate some additional UTA salaries for employees who support the capital program in general. This additional work and employee salaries are in addition to the ones that were discussed in the July Technical Budget Adjustment request. The previous one was done before the final cash flow exercise was completed to determine a final forecast for the year.
- The Facility Rehab and Repair project is used to perform rehabilitation and replacement work related to UTA facilities and to systems that are integral to the functionality of these systems. This additional funding request will allow the project team to complete the fire suppression upgrade at Meadowbrook and the Timpanogos yard concrete and tank containment rehabilitation.
- The FrontRunner 2X project is done in conjunction with UDOT. This is for the double-tracking efforts related to UTA's FrontRunner system. These additional funds will be used for program management services as it relates to the procurement of the new vehicles that will come as a part of this project.
- The Bus Stop Enhancements project is used to provide additional bus stops or improve existing ones in support of UTA's five-year service plan. These additional funds will allow for work to continue through 2024 in strategic locations around downtown Salt Lake City.
- The Operator Restrooms throughout System project will be increased to address some change orders and provide contingency to this project. Due to the unique site conditions at each location as well as sometimes hidden conditions, these changes are often difficult to foresee.

The main reason for decreasing the funding levels of the other offsetting projects would be to align the project budget more closely with the anticipated total need required at the end of the year.

ALTERNATIVES:

The following are options the Board could consider and the potential impacts of those decisions:

- Projects could be cancelled.
- Projects could be delayed until next year.

- The board may request revisions to the proposed Technical Budget Adjustment.
-

FISCAL IMPACT:

The proposed TBA of \$6.011 million will be funded by the approved 2024 Capital Budget. Funds will be redistributed among the projects as described in the presentation and supplemental material contained within this packet.

If TBA is approved, there will be a balance remaining in the Capital Contingency of \$3,945,000 (unchanged by this TBA).

There is no increase in budget authority. There will be no impact on UTA's Fund Balance with this TBA.

ATTACHMENTS:

- TBA2024-10-01 Technical Budget Adjustment - Capital
- TBA2024-10-01 Technical Budget Adjustment - Details

**UTAH TRANSIT AUTHORITY
2024 CAPITAL BUDGET
BUDGET ADJUSTMENT**

REF#: TBA 2024-10-01

<u>Funding Sources</u>	<u>Adopted 2024 Budget</u>	<u>Technical Budget Adjustment</u>	<u>Amended 2024 Capital Budget</u>
1 UTA Current Year Funding	\$ 139,872,000		\$ 139,872,000
2 Grants	55,803,000		55,803,000
3 Local Partner Contributions	8,913,000		8,913,000
4 State Contribution	17,983,000		17,983,000
5 Leasing	39,725,000		39,725,000
6 Bonding	2,244,000		2,244,000
7 Total Funding Sources	264,540,000	-	264,540,000
Expense			
8 Capital Services	198,913,000	1,236,000	200,149,000
MSP253- Mid-Valley Connector	14,500,000	4,000,000	18,500,000
MSP265- Program Management Support	2,875,000	700,000	3,575,000
MSP252- FrontRunner 2X	2,000,000	400,000	2,400,000
SGR407- Bus Stop Enhancements	3,049,000	331,000	3,380,000
MSP240 - Operator Restrooms throughout System	2,685,000	250,000	2,935,000
SGR409 - System Restrooms	1,685,000	(250,000)	1,435,000
MSP229- Bus Stop Improvements	1,563,000	(331,000)	1,232,000
SGR403- Train Control	4,962,000	(300,000)	4,662,000
SGR404- Rail Switches & Trackwork	3,815,000	(1,900,000)	1,915,000
REV240- Motor Pool Key Mgmt System	330,000	(150,000)	180,000
MSP272- Trax Operational Simulator	1,384,000	(300,000)	1,084,000
SGR040- LRV Overhaul	9,500,000	(400,000)	9,100,000
SGR386- Light Rail Vehicle Repairs (1137 & 1122)	1,344,000	(744,000)	600,000
FMA687- Layton Station Improvements	72,000	(70,000)	2,000
9 Finance	33,557,000	(536,000)	33,021,000
ICI222 - Fares Systems Replacement Program	12,414,000	(536,000)	11,878,000
10 Enterprise Strategy	12,573,000	-	12,573,000
11 Operations	8,128,000	(400,000)	7,728,000
FMA653- Facility Rehab and Replace	1,141,000	330,000	1,471,000
FMA685- Wheel Truing Machine	500,000	(400,000)	100,000
FMA672- Park and Ride Rehab and Replacement	450,000	(130,000)	320,000
FMA673- Station Rehab and Replacement	557,000	(200,000)	357,000
12 Planning & Engagement	6,436,000		6,436,000
13 Executive Director	2,628,000	(300,000)	2,328,000
FMA681- Arc Flash	763,000	(300,000)	463,000
14 People	2,305,000		2,305,000
15 Total Expense	\$ 264,540,000	\$ -	\$ 264,540,000

TBA2024-10-01 Technical Budget Adjustment Details

Project	Current Budget	Additional Request	2024 Adjusted Total
MSP253- Mid-Valley Connector	14,500,000	4,000,000	18,500,000
MSP265- Program Management Support	2,875,000	700,000	3,575,000
FMA653- Facility Rehab and Replace	1,141,000	330,000	1,471,000
MSP252- FrontRunner 2X	2,000,000	400,000	2,400,000
SGR407- Bus Stop Enhancements	3,049,000	331,000	3,380,000
MSP229- Bus Stop Improvements	1,563,000	(331,000)	1,232,000
SGR403- Train Control	4,962,000	(300,000)	4,662,000
SGR404- Rail Switches & Trackwork	3,815,000	(1,900,000)	1,915,000
REV240- Motor Pool Key Mgmt System	330,000	(150,000)	180,000
FMA685- Wheel Truing Machine	500,000	(400,000)	100,000
FMA681- Arc Flash	763,000	(300,000)	463,000
MSP272- Trax Operational Simulator	1,384,000	(300,000)	1,084,000
FMA672- Park and Ride Rehab and Replacement	450,000	(130,000)	320,000
FMA673- Station Rehab and Replacement	557,000	(200,000)	357,000
SGR040- LRV Overhaul	9,500,000	(400,000)	9,100,000
SGR386- Light Rail Vehicle Repairs (1137 & 1122)	1,344,000	(744,000)	600,000
FMA687- Layton Station Improvements	72,000	(70,000)	2,000
ICI222- Fares Systems Replacement Program	12,141,000	(536,000)	11,605,000
MSP240- Operator Systems throughout System	2,685,000	250,000	2,935,000
SGR409- Systems Restrooms	1,685,000	(250,000)	1,435,000
Total		-	



Utah Transit Authority

MEETING MEMO

669 West 200 South
Salt Lake City, UT 84101

Board of Trustees

Date: 10/9/2024

TO: Board of Trustees
THROUGH: Jay Fox, Executive Director
FROM: Viola Miller, Chief Financial Officer
PRESENTER(S): Dave Pitcher, Claims and Insurance Manager

TITLE:

2024-2025 UTA Insurance Program and Renewals

AGENDA ITEM TYPE:

Report

RECOMMENDATION:

Informational report for discussion.

BACKGROUND:

This is presented in compliance with Board of Trustees Policy 2.1.II.E which states:

- The Authority will maintain Public Officials Errors and Omissions Insurance in an amount determined to adequately protect the Authority.
- The Executive Director will, as necessary, procure other insurance to compensate for losses that would adversely affect the Authority.

This presentation will also include a benchmark comparison of anticipated premium expenditures approved by the Board last year under the Insurance Brokerage Services contract.

DISCUSSION:

Insurance Market - Some areas of the insurance market are beginning to soften particularly with property and cyber risks. We are still seeing increases in some liability coverages.

Public Officials Errors and Omissions

0.15% increase

Other Insurance

Property 0.41% decrease

Rail Liability	5.05% increase
Railroad Protective	4.43% increase
Rideshare Vanpool Liability	6.13% increase
Police Professional Liability	1.73% decrease
Blanket Excess Liability	6.13% increase
Premises Liability	1.73% increase
Excess Work Comp Liability	Flat Renewal
Cyber Security/Privacy Liability	3.03% decrease
Fiduciary Liability	3.02% increase
Terrorism - Liability only	18.03% decrease
Crime	2.71% increase
Overall Premiums:	3.08% increase

Benchmark with projections for 2024:

Projected 2024 Premiums: \$3,631,399.50

Actual 2024 Premiums: \$3,722,780.00

The program renewal for 2024 was \$91,380.50 over the projection made during the contract approval for Insurance Brokerage Services. This is still within the five-year approved amount.

ALTERNATIVES:

None

FISCAL IMPACT:

An overall 3.08% increase in premiums for 2024-2025.

ATTACHMENTS:

None



Utah Transit Authority

MEETING MEMO

669 West 200 South
Salt Lake City, UT 84101

Board of Trustees

Date: 10/9/2024

TO: Board of Trustees
THROUGH: Jay Fox, Executive Director
FROM: Nichol Bourdeaux, Chief Planning & Engagement Officer
PRESENTER(S): Nichol Bourdeaux, Chief Planning & Engagement Officer
Megan Waters, Community Engagement Director
Eric Callison, Manager of Service Planning

TITLE:

2025-2029 Five Year Service Plan

AGENDA ITEM TYPE:

Discussion

RECOMMENDATION:

Informational item for discussion

BACKGROUND:

Per UTA Board of Trustees Policy No. 3.2 and in compliance with Utah Public Transit District Act, the UTA Five Year Service Plan (5YSP) is updated every two years. The UTA Local Advisory Council reviews, approves and recommends the plan for adoption by the Board of Trustees.

UTA presented the draft 5YSP network to the Board of Trustees in June 2024 in preparation for the first round of public engagement. Based on comments received during this outreach period, internal vetting, and additional analysis, UTA Service Planning revised the draft network and developed annual phasing for each change as part of the Final Draft Network.

The final 5YSP will be presented to the Local Advisory Council (LAC) for approval in November 2024, with adoption by the Board of Trustees planned for December. The service implementation process for April 2025 Change Day will begin immediately after that.

Once approved, proposed changes in the 5YSP will enter UTA's annual budgeting process and be further vetted for resource availability and operational feasibility. Additional service changes may be presented to the board during the annual service process prior to change day, along with Title VI information.

DISCUSSION:

The Planning and Engagement team will present the final draft service plan and a preliminary community engagement report to the Board of Trustees. The presentation notes changes made from the draft proposal, including changes in the corridor, frequency, span, and proposed annual service levels, and identifies community priorities. The Board will receive an update on the community feedback regarding the draft plan. UTA is still receiving input from the community on the phased plan, and a complete community engagement report will be included in the final 5YSP to be presented to the LAC and Board of Trustees for adoption.

The following changes are proposed for **April 2025**:

Weber, Davis, and Box Elder Counties:

The following route adds service to new areas: 417

The following routes will be modified in terms of alignment or frequency: 470, 626, 627, 628, 640

Salt Lake County:

The following routes add service to new areas: 126, 219

The following routes will be modified in terms of alignment or frequency: F11, 39, 201, 217, 218

Utah County:

The following routes/zones add service to new areas: 581, 823

The following routes will be modified in terms of alignment or frequency: 871

The following changes are proposed for **April 2026**:

Weber, Davis, and Box Elder Counties:

The following routes/zones add service to new areas: 610, new Innovative Mobility Zones

The following routes will be modified in terms of alignment or frequency: 455, 604, 612, 630, 640, 645

The following routes will be discontinued and replaced by other services: 601, 625, 628, F638

Salt Lake County:

The following routes add service to new areas: 2A, 2B

The following routes/zones will be modified in terms of alignment or frequency: 4, 45, 54, 62, 72, 205, 223, 502, 720

The following routes will be discontinued and replaced by other services: 2

Utah County:

The following routes/zones add service to new areas: 846, 860, new Innovative Mobility Zone

The following routes will be modified in terms of alignment or frequency: 850, 862

The following routes will be discontinued and replaced by other services: 806

The following changes are proposed for **April 2027:**

Weber, Davis, and Box Elder Counties:

The following routes will be modified in terms of alignment or frequency: 604, 613, 626

The following routes will be discontinued and replaced by other services: F618, F620

Salt Lake County:

The following routes add service to new areas: 26, 31, 50X, 203, 208, 236

The following routes will be modified in terms of alignment or frequency: 17, 35, 39, 45, 47, 205, 223, 240, 227

The following routes will be discontinued and replaced by other services: 509, 513, 551, F590

Utah County:

The following zone adds service to new areas: New Innovative Mobility Zone

The following routes will be modified in terms of alignment or frequency: 830X, 833

The following changes are proposed for **April 2028:**

Weber, Davis, and Box Elder Counties:

The following routes add service to new areas: 400, 470X, 600, 609

The following route will be modified in terms of alignment or frequency: 417

The following routes will be discontinued and replaced by other services: 455, 470, 473, 667

Salt Lake County:

The following route adds service to new areas: 256

The following routes will be modified in terms of alignment or frequency: 126, 200, 217, 219

The following routes will be discontinued and replaced by other services: 201, 218, F556

Utah County:

The following zone adds service to new areas: New Innovative Mobility Zone

The following route will be modified in terms of alignment or frequency: 871

The following changes are proposed for **April 2029:**

Salt Lake County:

The following routes/zones adds service to new areas: F264, new Innovative Mobility Zone

The following routes will be modified in terms of alignment or frequency: 62, 209, 213

The following route will be discontinued and replaced by other services: 72

ALTERNATIVES:

The proposed plan is being presented for feedback and for public comment before a final draft 5YSP is presented to the Local Advisory Council for approval in November and the Board of Trustees for adoption in December.

FISCAL IMPACT:

For April 2025 Change Day, the addition of: 102,076 hours, 1,109,163 miles, 20 pullouts, and 47 shifts.

For April 2026 Change Day, the addition of: 150,873 hours, 2,271,282 miles, 27 pullouts, and 76 shifts.

For April 2027 Change Day, the addition of: 156,291 hours, 1,950,349 miles, 30 pullouts, and 76 shifts.

For April 2028 Change Day, the addition of: 239,457 hours, 2,966,566 miles, 25 pullouts, and 110 shifts.

For April 2029 Change Day, the addition of: 26,443 hours, 439,940 miles, 5 pullouts, and 13 shifts.

ATTACHMENTS:

- Five-Year Service Plan 2025-2029 Final Draft Document Memo

Memo

2025-2029 Five-Year Service Plan: Technical Memorandum to the Board of Trustees

September 2024

Introduction

The Five-Year Service Plan establishes a route map for UTA's transit service for the next five years, from 2025 through 2029. This plan is updated every two years and reflects UTA's intended service based on the best and most recent information available; the previous iteration of this plan was the 2023-2027 Five-Year Service Plan. This memorandum summarizes the annual service changes proposed for April 2025 through 2029, organized by geography and type of change (new service added, route realignments or frequency changes, and discontinuations).

Relationship To Other UTA Plans

The Five-Year Service Plan feeds into and is fed by other UTA planning documents:

- UTA's Long Range Transit Plan identifies projects, including service and capital projects, for implementation through 2050. This Five-Year Service Plan overlaps with Phase One (2023-2032) of the Long Range Transit Plan and includes many projects from that Plan. Phase One Long Range Transit Plan projects not addressed in this Five-Year Service Plan are listed at the end of this memorandum.
- Capital needs associated with the Five-Year Service Plan (for instance, new operator restrooms, park, and rides, or other physical infrastructure) are captured within the Five-Year Capital Plan. Similarly, service needs associated with capital transit investments are reflected within this Five-Year Service Plan.
- The first year of the Five-Year Service Plan becomes the Annual Service Plan and integrates operational planning to ensure that adequate staff are hired to run the new transit services proposed.
- Annual Change Days in April and August each year implement the Annual Service Plan.

Community Engagement

UTA conducted public engagement for the 2025-2029 Five-Year Service Plan in two phases: one for the initial unphased draft in June and July 2024, and the second for the updated phased draft in September

2024. Detailed information has been made available on the UTA website at rideuta.com/FYSP, including an interactive map and opportunities to provide feedback. Two virtual information sessions for each phase of engagement were held on July 9 and September 17, respectively. To spread the word about this opportunity, UTA utilized regular communication channels, including social media, email listservs, and partner communication, including with cities and organizations in the UTA service area. The sections below provide more detail on engagement activity in each phase.

June/July Engagement

During the first phase of engagement in June and July 2024, 187 comments were received via the comment form; an additional 101 comments were provided on the interactive map; and one comment was received via email. 50 individuals registered for the July virtual information session on Zoom, including UTA staff; approximately 20 attended the information session. The comment form was intended to be the primary public feedback collection tool. UTA asked for a few demographics including city and zip code, as well as transit riding frequency. The cities with the most respondents included:

- Herriman (57 respondents)
- Salt Lake City (30 respondents)
- Ogden (10 respondents)
- South Jordan (7 respondents)
- West Jordan (5 respondents)
- Springville (5 respondents)
- Sandy (5 respondents)
- Riverton (5 respondents)
- Payson (5 respondents)
- Murray (5 respondents)

Most people rode at least somewhat frequently:

- Sometimes (monthly or less) – 42.25%
- Regularly (at least weekly) – 40.64%
- Never – 16.04%

UTA asked participants via the comment form to share their priorities for the unphased service changes. There was support for more service and more frequent service in general, but several of the service change “packages” did have more priority for the participants than others, including:

- Weber/Davis/Salt Lake Regional Service Changes (Route 470X Davis-SLC Connector, Route 609, Route 400, Route 417)
- Riverton/Herriman/Draper Changes (Route 126, Route 248)
- Provo Airport/West Provo Changes (Route 833, Innovative Mobility Zone – UTA On Demand)

Common themes heard during the June and July 2024 engagement period included requests for more frequent bus service, east-west connections, and a longer span of service on weekends.

September/October Engagement

Following review of public feedback, stakeholder feedback, and other considerations (such as budgetary and operational concerns), the draft plan has been updated to include phasing for 2025-2029 and published for public review and feedback once again. The public will have an opportunity to review the updated draft plan from September 10 through October 6. Information about the updated draft plan, including an interactive map, virtual information session recordings, and feedback opportunities are available at rideuta.com/FYSP. A final engagement report will be included with the final draft plan.

2025-2029 Service Plan

The following sections identify additions, revisions, or reductions of service proposed for the 2025-2029 time frame. The document includes the purpose of each service change and alterations after the public comment period. The discussion is limited only to routes with proposed changes; if no changes are proposed for a particular route, it is not discussed in this memorandum and will continue in its current configuration. Routes are grouped geographically: Box Elder, Weber, and Davis Counties; Salt Lake and Tooele Counties; and Utah County. Changes in miles and hours are shown in Exhibit A.

April 2025 Service Changes

The following sections identify additions, revisions, or reductions of service proposed for April 2025. Proposed changes for April 2025 are shown in Figure 1 through Figure 6.

Box Elder, Weber, and Davis Counties

New Service Added

The following routes add service to new areas.

- **Route 417**, Redwood Road Intercounty, will be a north-south service between Wood Cross Station and 1940 West Station in Salt Lake City via Redwood Road with connections to Frontrunner and TRAX Green Line. The route will run a 30-minute service on weekdays.
 - Purpose: The new service was a response to stakeholder feedback. It supports improved reliability of on-demand service and serves potential growth areas.
 - After the public comment period: UTA is changing the location of the southern terminus to the Utah Department for Services for the Blind and Visually Impaired, replacing service on Route 217. The phasing of the southern section was shifted to 2025 due to increased resource availability.

Realignments or Frequency Changes to Existing Service

The following routes will be modified either in terms of alignment or frequency.

- **Route 217**, Redwood Road North, will change its north terminus from 1940 West to 1460 West, changing the connection to the TRAX Green Line from 1940 West Station to Power Station.
 - Purpose: The new location in the north end will better accommodate the frequency of buses, providing operational feasibility. The change is also a response to stakeholder feedback, as it will allow the new Route 417 to make connections between State offices and destinations along Redwood Road north of North Temple.
 - After the public comment period: Route 217 phasing was changed to ensure this service is implemented before completing the Power Station Transit Hub.
- **Route 470**, Salt Lake/Ogden Intercity, will be modified to serve Layton Hills Mall via 1350/1300/1425 North, 675/700 West, Antelope Drive, 1500 East, and 1450 South. This change will service areas currently covered by Routes 628 and 640. Route 470 will also be modified to no longer serve the Davis Technical College campus in Kaysville since Route 627 will serve this area.
 - Purpose: Commercial areas near Layton Hills Mall are better served directly by Route 470 than by a combination of other routes that require a transfer from Main Street. It also allows for the replacement of the Midtown Trolley with regular bus service.
 - After the public comment period: Some modifications proposed for Route 600 were moved up to 2025. An increase in frequency is planned for 2028.

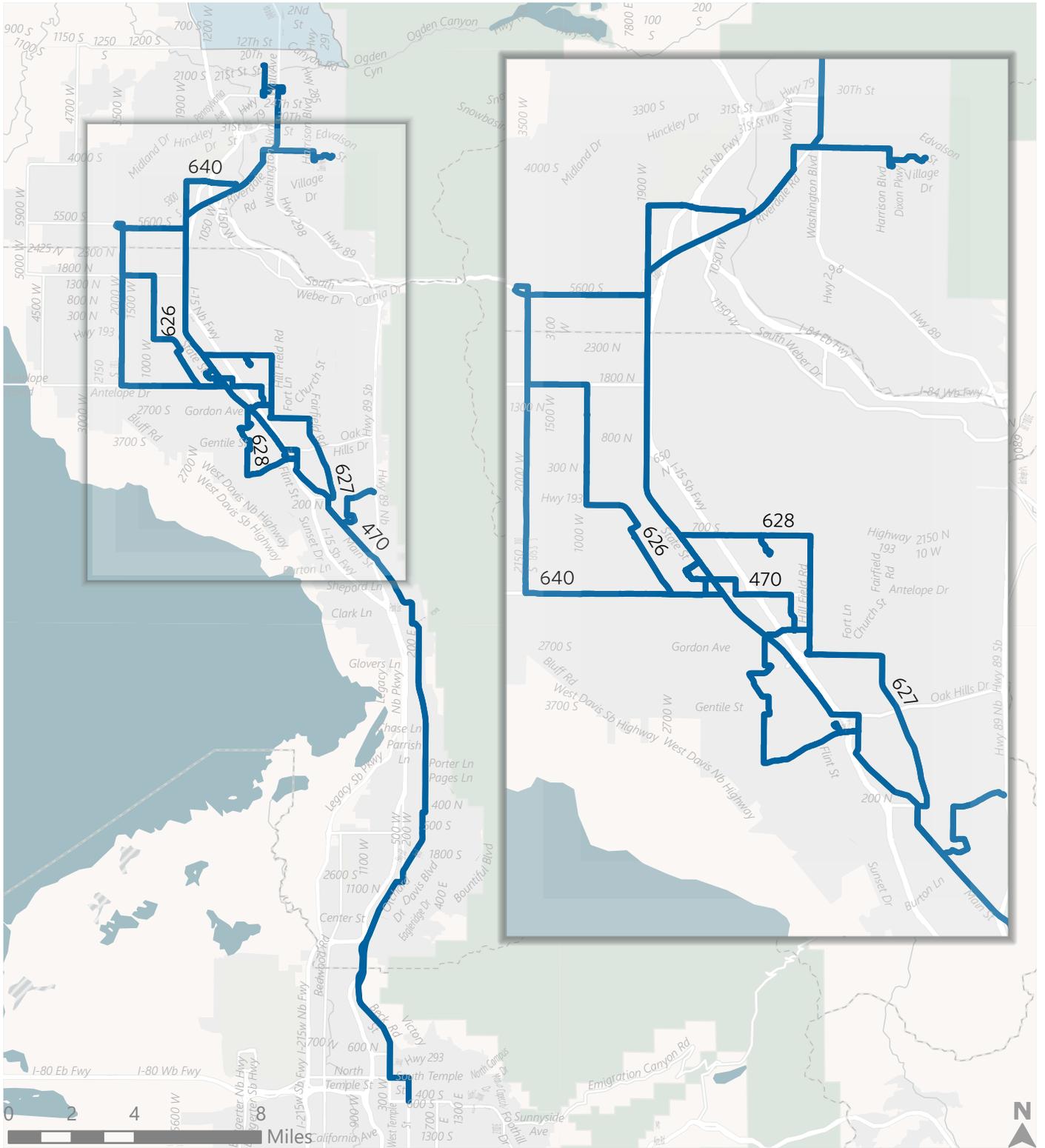
- **Route 626**, West Roy/Freeport, will be modified to serve Freeport Center, 1000 West, and 1800 North, replacing portions of Route 640. Service on 2000 West will be replaced by Route 640.
 - Purpose: Streamline routing of 626 and 640 and provide additional connections in Sunset/Roy.
 - After the public comment period: Route 626 was originally planned for a frequency increase in a later phase, but was moved to an earlier timeframe in response to comment. This alteration allows for an earlier increase in frequency to downtown Syracuse.
- **Route 627**, Layton / Kaysville Connector, will be modified to serve Main Street between Clearfield Station and 1350 North; Davis Technical College via Main Street and 500 East; and will be extended on the south end to Fruit Heights Park & Ride.
 - Purpose: This change will maintain coverage on Main Street, reduce duplication with 470 at Davis Technical College, and remove inefficient routing in Kaysville. Also, it will create new connections with Routes 455 and 473 at the Fruit Heights Park & Ride.
 - After the public comment period: Phasing moved up to 2025 due to increased resource availability.
- **Route 628**, Layton Westside, will be modified to travel between Clearfield and Layton Station via 700 South, Weber State University - Davis/NUAMES, Hill Field Road, 1425/1300/1350 North, 1100 West, Marshall Way, Sugar Street, Gentile Street, and Layton Parkway.
 - Purpose: It replaces the Midtown Trolley with regular bus service (not a free trolley), increases coverage in west Layton, and optimizes and improves connections between Clearfield Station and Weber State University - Davis/NUAMES.
 - After the public comment period: Route has been modified to serve Hill Field Road and Marshall Way between 1100 West/Sugar Street, and Angel Street between Gentile Street and Layton Parkway. Route 628 will be combined with Route 640 in 2026.
- **Route 640**, North Davis Westside, will be shortened to Clearfield Station. The route will be modified to serve 2000 West and 5600 South (replacing portions of Route 626). Service to Freeport Center/1000 West will be replaced by Route 626.
 - Purpose: Streamline routing of 626 and 640, provide additional connections in Sunset/Roy, and optimize transfers to FrontRunner at Clearfield Station.



- After the public comment period: The replacement of some sections of Route 626 with the new Route 40 was in response to comments received. The planned weekend service was restored to match existing conditions and improve service to transit dependent communities in Syracuse.

Discontinued Service

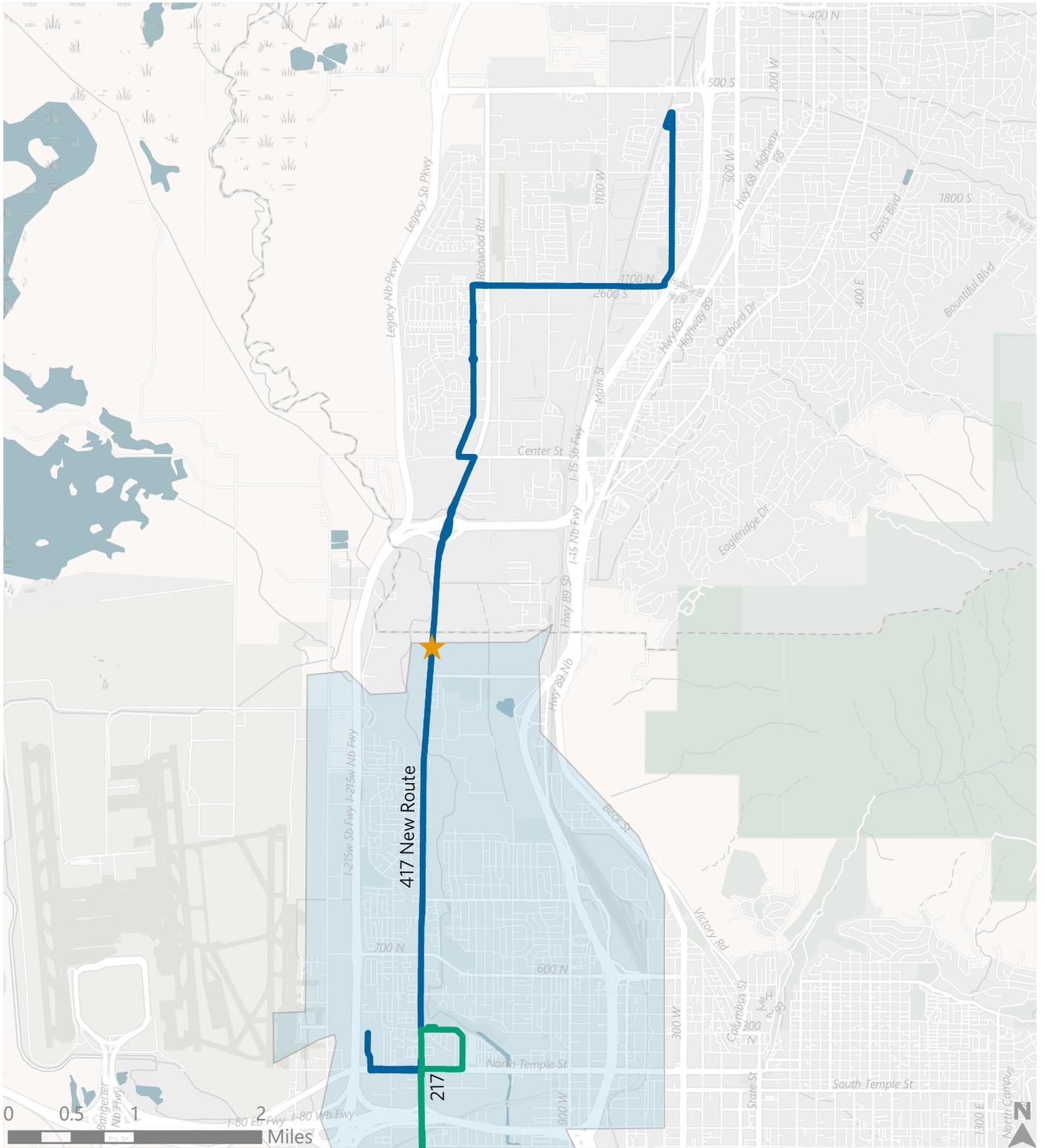
No routes will be discontinued in Box Elder, Weber, or Davis Counties in 2025 as part of this Five-Year Service Plan.



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- ▨ Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 1. April 2025 Weber-Davis Regional Service Changes



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 2. April 2025 Weber-Davis Regional Service Changes

Salt Lake and Tooele Counties

The following section describes new services added, changes to existing services, or routes discontinued in Salt Lake County in 2025. No changes are proposed to Tooele County services.

New Service Added

The following routes add service to new areas.

- **Route 126**, South Valley Regional, will be a new east-west service between Daybreak Parkway Station in South Jordan and Draper Town Center Station via 12300/12600 South and 13400 South with connections to Draper Frontrunner Station and Herriman SLCC/Real Academy. The route will run on weekdays at a 60-minute frequency.
 - Purpose: This new route is a response to stakeholder feedback and supports the Southern Salt Lake County On-Demand zone.
 - After the public comment period: Connections to Herriman SLCC/Real Academy coming from Herriman Town Center will be via Mountain View Corridor, not via Juniper Crest Road.
- **Route 219**, Redwood Road South, will be a new north-south route on Redwood Road between Sandy Civic Station and Bluffdale with connections to Sandy City Hall, South Jordan Station, Riverpark Business Park, South Jordan Towne Center, Riverton City Center, and Bluffdale City Hall. Route 219 will initially operate on weekdays at a 60-minute frequency.
 - Purpose: This new route is a response to stakeholder and community feedback.
 - After the public comment period: The route will end in the south at Bluffdale City Hall until The Point of the Mountain development is completed.

Realignments or Frequency Changes to Existing Service

The following routes will be modified either in terms of alignment or frequency.

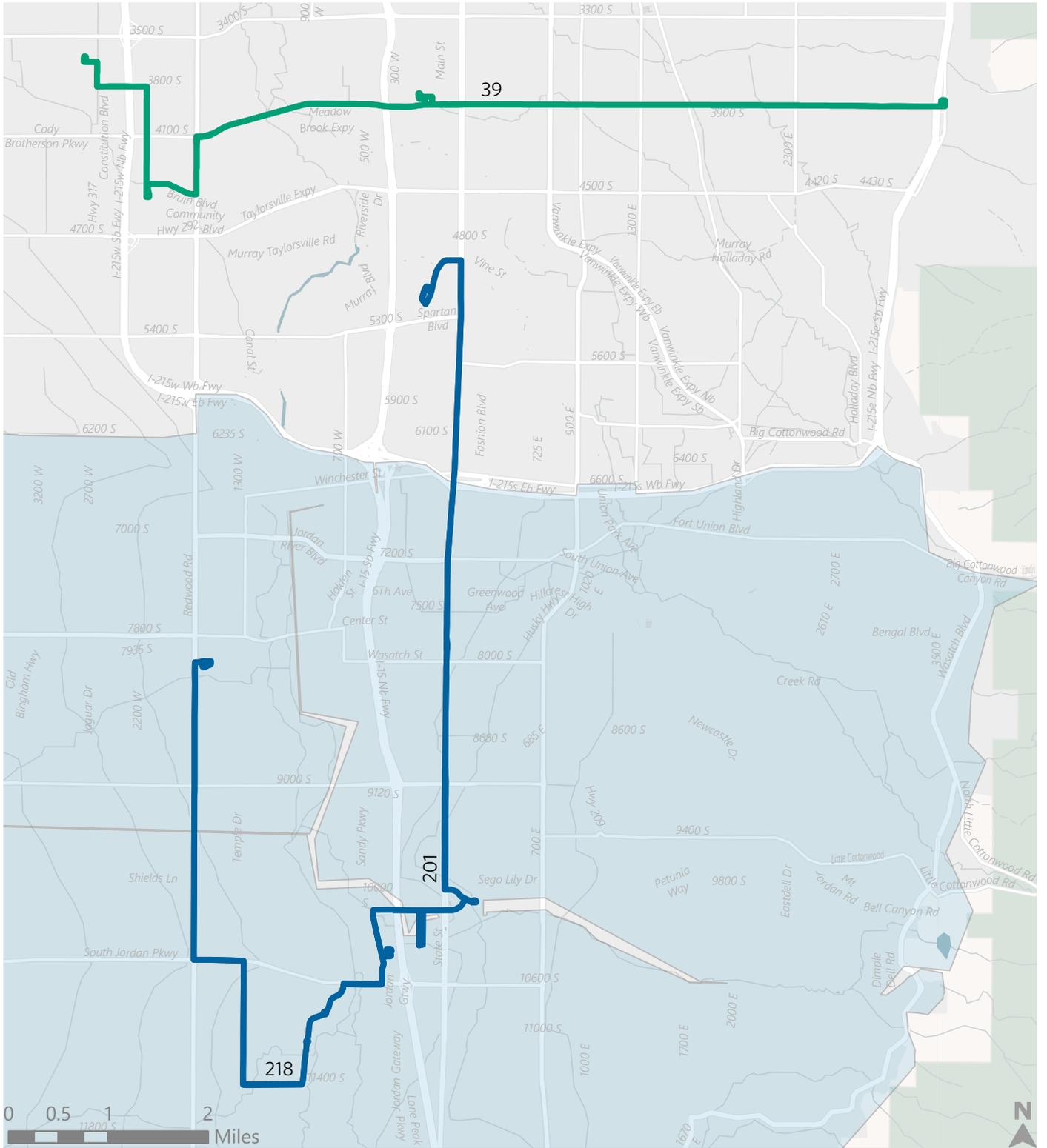
- **Route 39**, 3900 South, will have its headway improved from 30 minutes to 15 minutes.
 - Purpose: This change restores headways previously reduced because of labor shortages.
 - After the public comment period: No changes.
- **Route 201**, State Street South, will have its headway improved from 60 minutes to 30 minutes.
 - Purpose: This change restores headways previously reduced because of labor shortages.
 - After the public comment period: No changes.
- **Route 218**, Redwood Road Midvalley, will have its headway improved from 60 minutes to 30 minutes.



- Purpose: This change restores headways previously reduced because of labor shortages.
- After the public comment period: No changes.

Discontinued Service

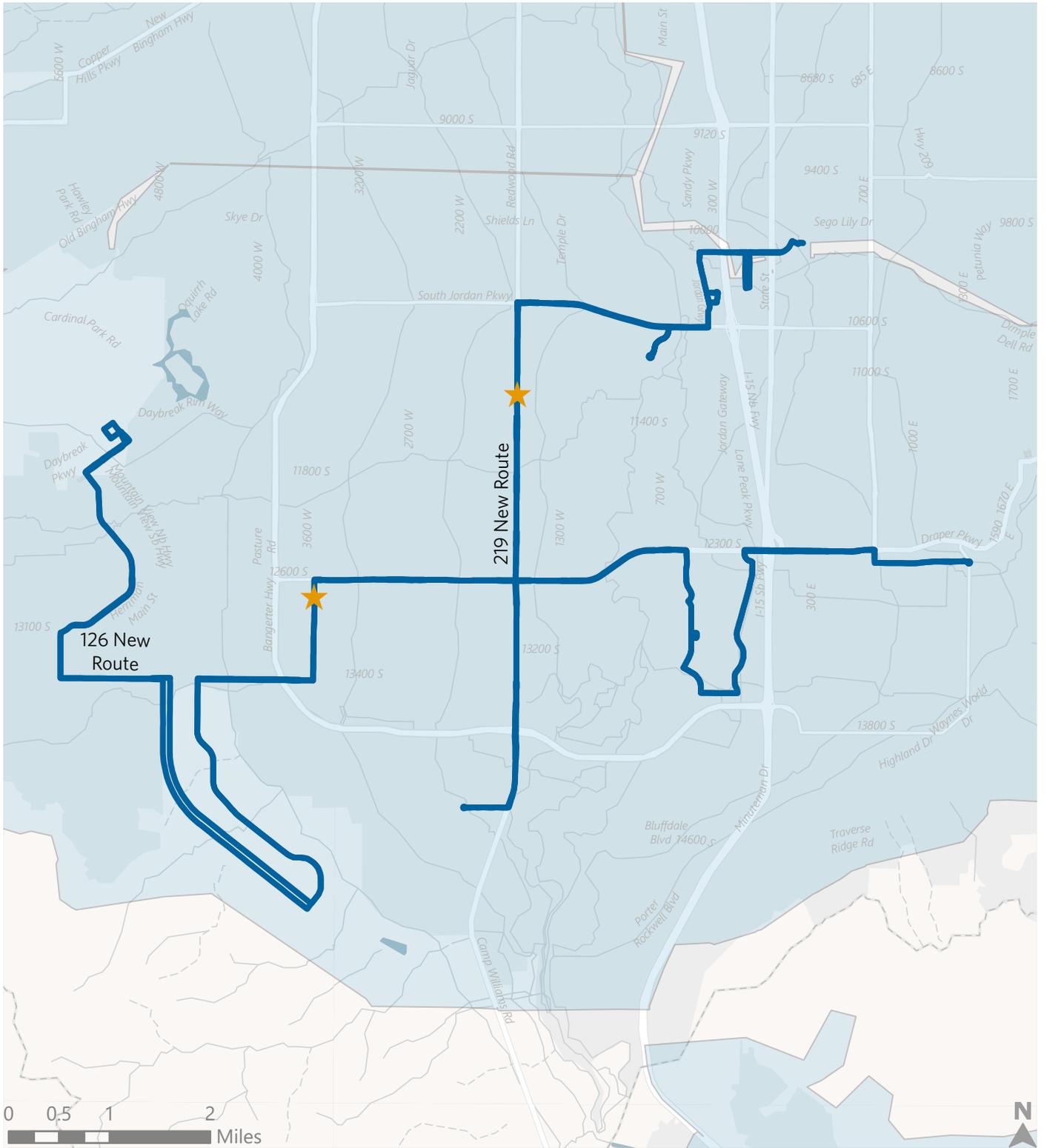
No routes in Salt Lake County will be discontinued in 2025 as part of this Five-Year Service Plan.



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 3. April 2025 Salt Lake County Local Service Changes



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 4. April 2025 Herriman, Riverton, Draper and Bluffdale Service Changes

Utah County

The following section describes new services added, changes to existing services, or routes discontinued in Utah County in 2025.

Realignments or Frequency Changes to Existing Service

The following routes will be modified either in terms of alignment or frequency.

- **Route 871**, Tech Corridor Rail Connector, will no longer end at Draper Town Center Station. Instead, it will exit the freeway at 12300 South to extend north on State Street ending at Sandy Civic Center Station. The route will continue to go to Lehi Station, preserving connections between Utah County and TRAX Blue Line seven days a week.
 - Purpose: This change will reduce redundancy since the new Route 126 will replace connections along 12300 South to Draper Town Center Station. Route 871 will also provide coverage on State Street south of Sandy Civic Center Station (10000 South).
 - After the public comment period: The route will access Draper Station via Bangerter Highway until the road network from 14600 South through the Point of the Mountain development is built.

New Service Added

The following routes add service to new areas.

- **Route 823**, Spanish Fork - Provo Local, will be a new north-south route between Provo Central Station and Spanish Fork Center Street via service along State Street, Main Street, 400 South, 1750 West in Springville, and Canyon Creek Parkway, 1000 North, and Main Street in Spanish Fork. The route will run every 30 minutes on weekdays, and 60 minutes on Saturdays.
 - Purpose: The route is a result of coordinated planning with Springville and Spanish Fork to better connect high-growth areas and major destinations. Also, the route is a precursor for future Frontrunner connections.
 - After the public comment period: This route change was moved up to 2025 in response to comments received.
- The **West Provo Innovative Mobility Zone** provides On Demand service to the west side of Provo and the Provo Airport.
 - Purpose: This zone will provide baseline service in a fast-growing part of Utah County.
 - After the public comment period: This service change was moved up to 2025 in response to comments received.



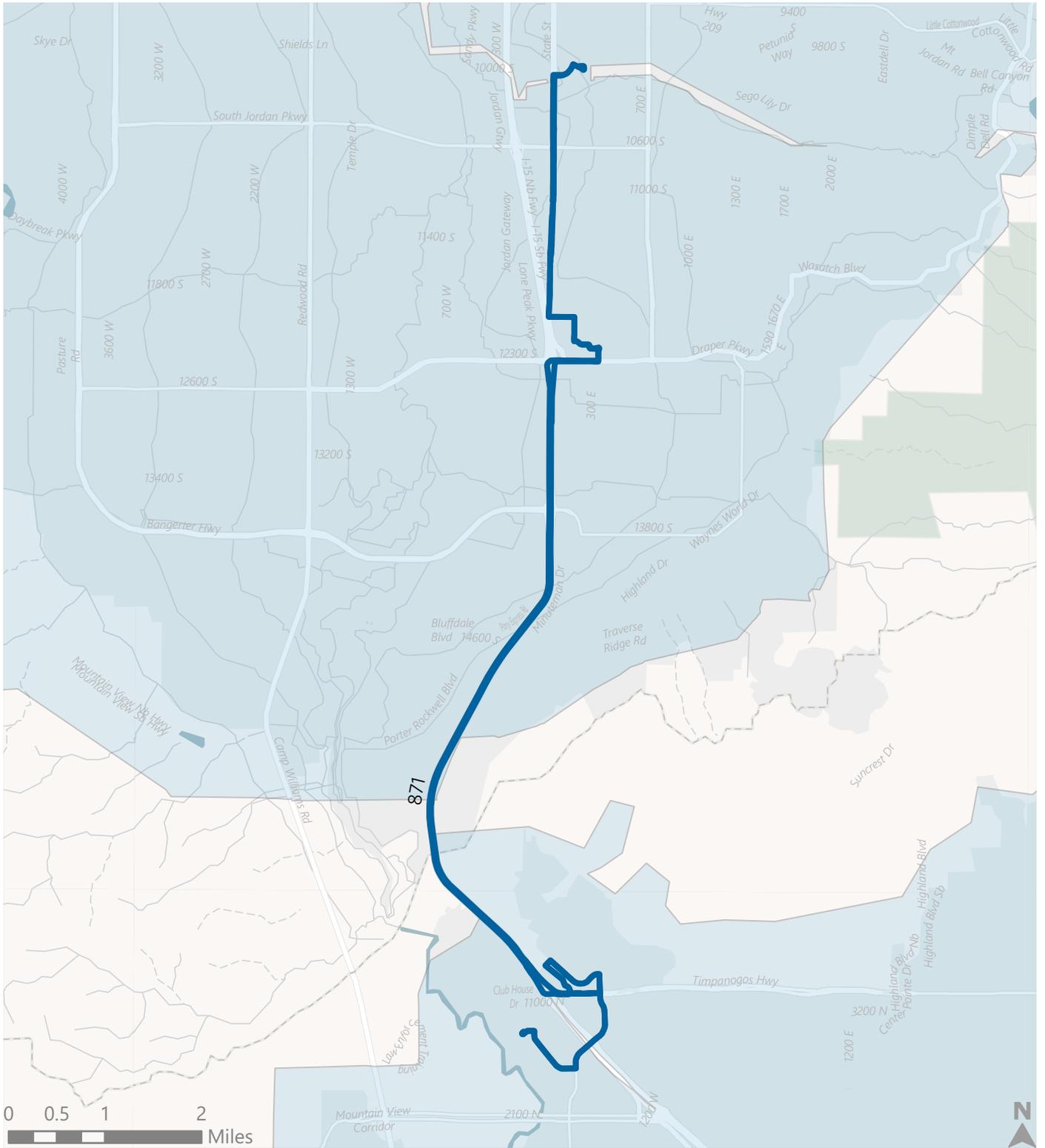
UTAH TRANSIT AUTHORITY



669 West 200 South
Salt Lake City, UT 84101

Discontinued Service

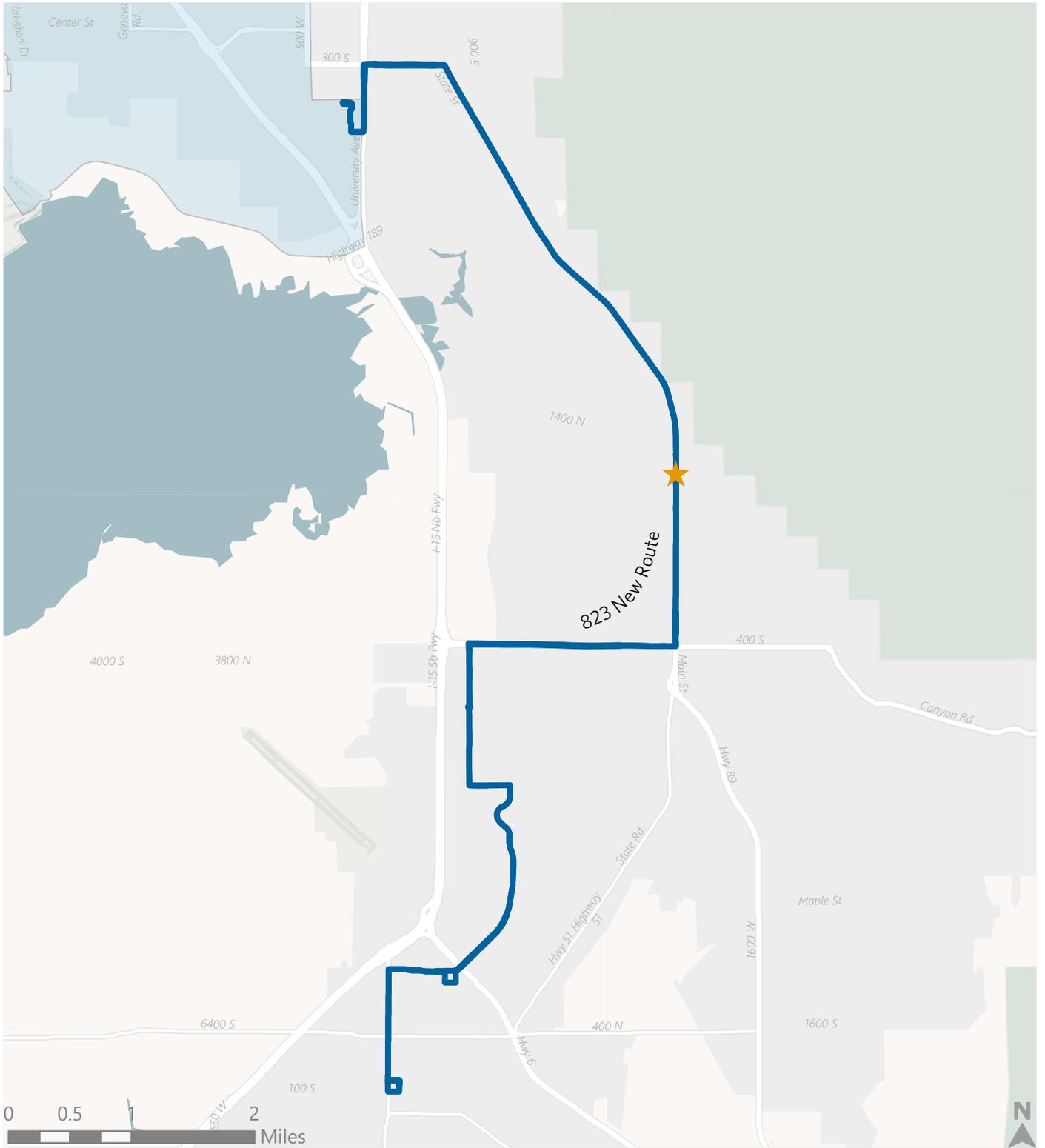
No routes will be discontinued in Utah County in 2025 as part of this Five-Year Service Plan.



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 5. April 2025 Lehi and Sandy Service Changes



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 6. April 2025 South Utah County Service Changes

April 2026 Service Changes

The following sections identify additions, revisions, or reductions of service proposed for April 2026.

Proposed changes are shown in Figure 7 through Figure 15.

Box Elder, Weber, and Davis Counties

New Service Added

The following routes add service to new areas.

- **Route 610**, Ogden Community Circulator, will be a new bi-directional service connecting 12th Street, Wall Avenue, US-89, and Harrison Boulevard. This route provides 30-minute service to areas where service was reduced during the pandemic. Route 610 will also provide new connections from all these areas to Ogden FrontRunner station.
 - Purpose: Route 610 will significantly improve connectivity throughout the Ogden area, allow more east-west movement patterns, and allow for a reorganization and consolidation of other services throughout Weber County.
 - After the public comment period: No changes were made to Route 610 following the public comment period.

Realignments or Frequency Changes to Existing Service

The following routes will be modified either in terms of alignment or frequency.

- **Route 455**, East Bench Intercounty, will be shortened at the north end to Dee Events Center since service on 30th Street will be replaced by Route 604.
 - Purpose: This modification is related to other changes to local bus service in Ogden, specifically Routes 604 and 610.
 - After the public comment period: This change was moved up for earlier implementation in response to comments received.
- **Route 604**, Ogden Crosstown, will extend to Dee Events Center via 30th Street, Taylor Avenue, and end at Weber State University.
 - Purpose: Preserve coverage in Ogden along with other local service changes and increase connections from West Ogden.
 - After the public comment period: The route was altered near Taylor Avenue and the end-of-line location was shifted from Edvalson Street to Dee Event Center.
- **Route 612**, Washington Boulevard, will be extended to Pleasant View Station instead of its current terminus in North Ogden. North Ogden will be served by the new North Weber IMZ

area. The route will be modified to serve Ogden Station via 23rd Street and 26th Street. The southern end-of-line on Route 612 moved to 5800 South Adams Avenue Parkway and the route will not serve residential Washington Terrace, as that area will be served by Route 610.

- Purpose: This change to Route 612 optimizes the network to improve connections throughout the region. It will add core service to Pleasant View Station, create improved connections to FrontRunner, and provide a faster connection to Ogden Regional Medical Center.
- After the public comment period: the routing was changed to show service continuing from Ogden Transit Center south along Washington Boulevard to the new proposed southern terminus on Adams Avenue Parkway. Lower income populations along Washington Boulevard from 27th Street to 40th Street use this route to make connections to services they need along Washington Boulevard. Washington Boulevard also has a higher density of individuals without access to a car or only a one-car household. This corridor, in conjunction with Monroe and Midtown Ogden district, has the highest concentration of people in the Mt. Ogden service area that relies on public transit.
- **Route 630**, Brigham City Commuter, will increase weekday frequencies from 60 minutes to 30 minutes to help with passenger loads. The route will be deviated to Pleasant View Station, while the deviation on 1100 South to Wal-Mart in Brigham City will be eliminated (and replaced with an Innovative Mobility Zone).
 - Purpose: This change will optimize resources in Brigham City, increase ridership, and improve operator working conditions.
 - After the public comment period: Routing was changed to show service into Pleasant View Station.
- **Route 645**, Harrison Boulevard/40th Street, will operate with increased weekday frequency on a modified routing. Service will proceed down Quincy Avenue south of 30th Street to 36th Street. It will then deviate up Edvalson Street before proceeding to 42nd / 40th Street to Riverdale Road and Roy Station. This modification will replace service on the northern half of Route 640. Service in the north will no longer extend beyond North Street, with service on Monroe Boulevard to 1100 North provided by an Innovative Mobility Zone. Stops to the west of Quincy Avenue along 36th Street will no longer be serviced.

- Purpose: This modification allows a faster return of 30-minute service to Monroe Boulevard, eliminates redundant service on Monroe Boulevard, and incorporates changes processed in the Wasatch Front Regional Council Regional Transportation Plan by providing service on 40th Street. It also serves as part of the broader package of changes extending south to Layton and provides a link to Roy Frontrunner Station from Weber State University's campus.
- After the public comment period: The route will deviate to Edvalson Street due to rider and stakeholder feedback. Service will no longer access Dee Event Center via OGX Right of Way.
- The **North Weber Innovative Mobility Zone** will be a new zone that covers North Ogden, Marriott-Slaterville, Harrisville, Plain City, and Pleasant View. This provides service to areas previously accessible by Routes 612, 630, and 645.
 - Purpose: This zone will provide baseline service in a fast-growing part of Weber County.
 - After the public comment period: This zone will be implemented as proposed in the original draft plan. UTA is still determining the appropriate method of service delivery (e.g. UTA On Demand, Uber/Lyft partnership, etc.)
- The **Brigham City Innovative Mobility Zone** will be a new zone covering Brigham City and Perry. This replaces Route F638, which previously served as a local circulator in Brigham City with 60-minute headways.
 - Purpose: This zone will provide baseline service in a fast-growing part of Box Elder County.
 - After the public comment period: This zone will be implemented as proposed in the original draft plan. UTA is still determining the appropriate method of service delivery (e.g. UTA On Demand, Uber/Lyft partnership, etc.)

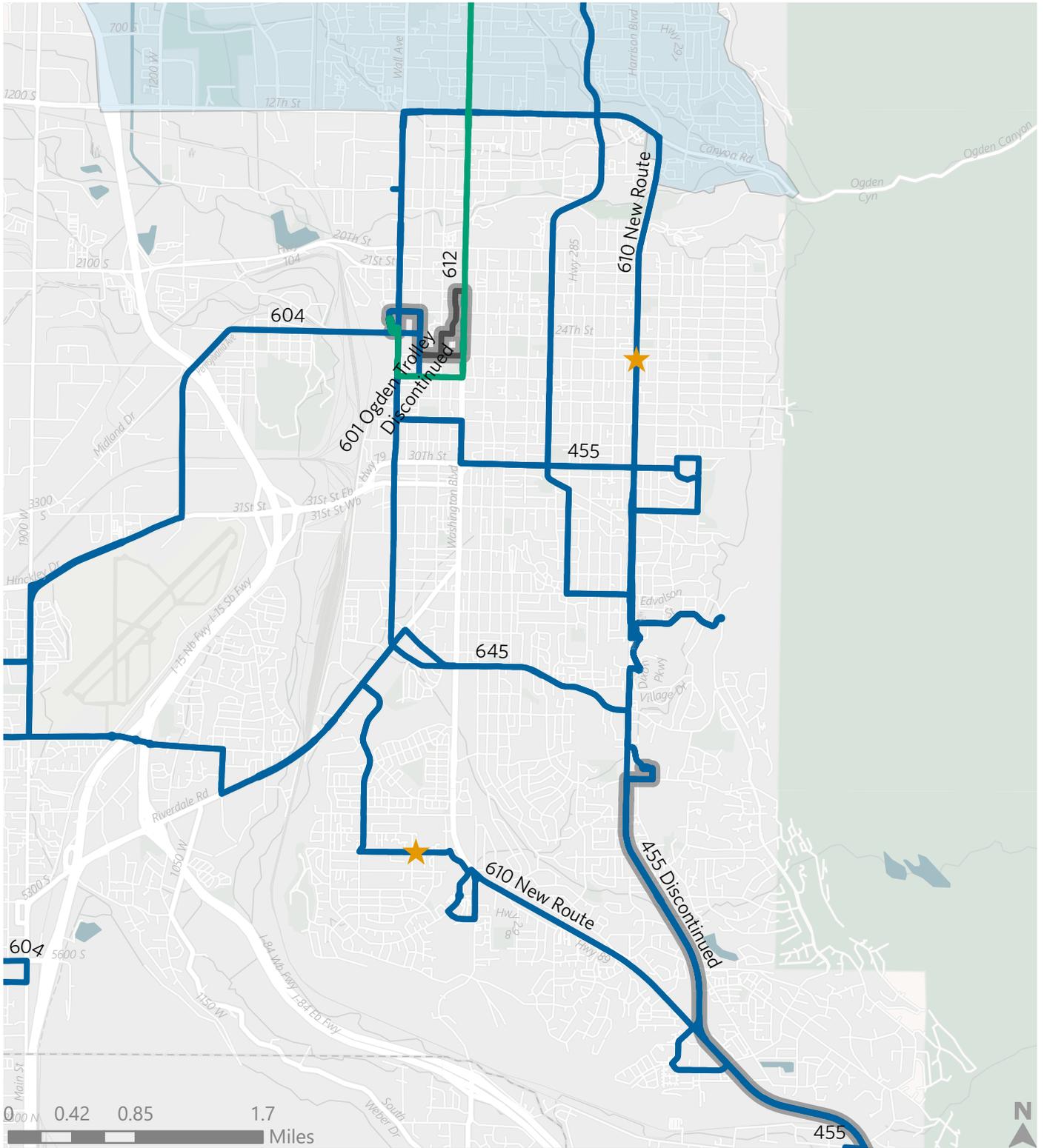
Discontinued Service

The following routes will be discontinued as part of the 2025-2029 Five-Year Service Plan.

- **Route 601**, the Ogden Trolley, will be discontinued and replaced by a 15-minute service on Route 600, Ogden/Farmington.
 - Purpose: The Ogden Trolley performs poorly, and with the implementation of OGX, has been rendered redundant. Eliminating this service will allow UTA and Ogden City to dedicate more resources to regional services connecting to downtown Ogden.



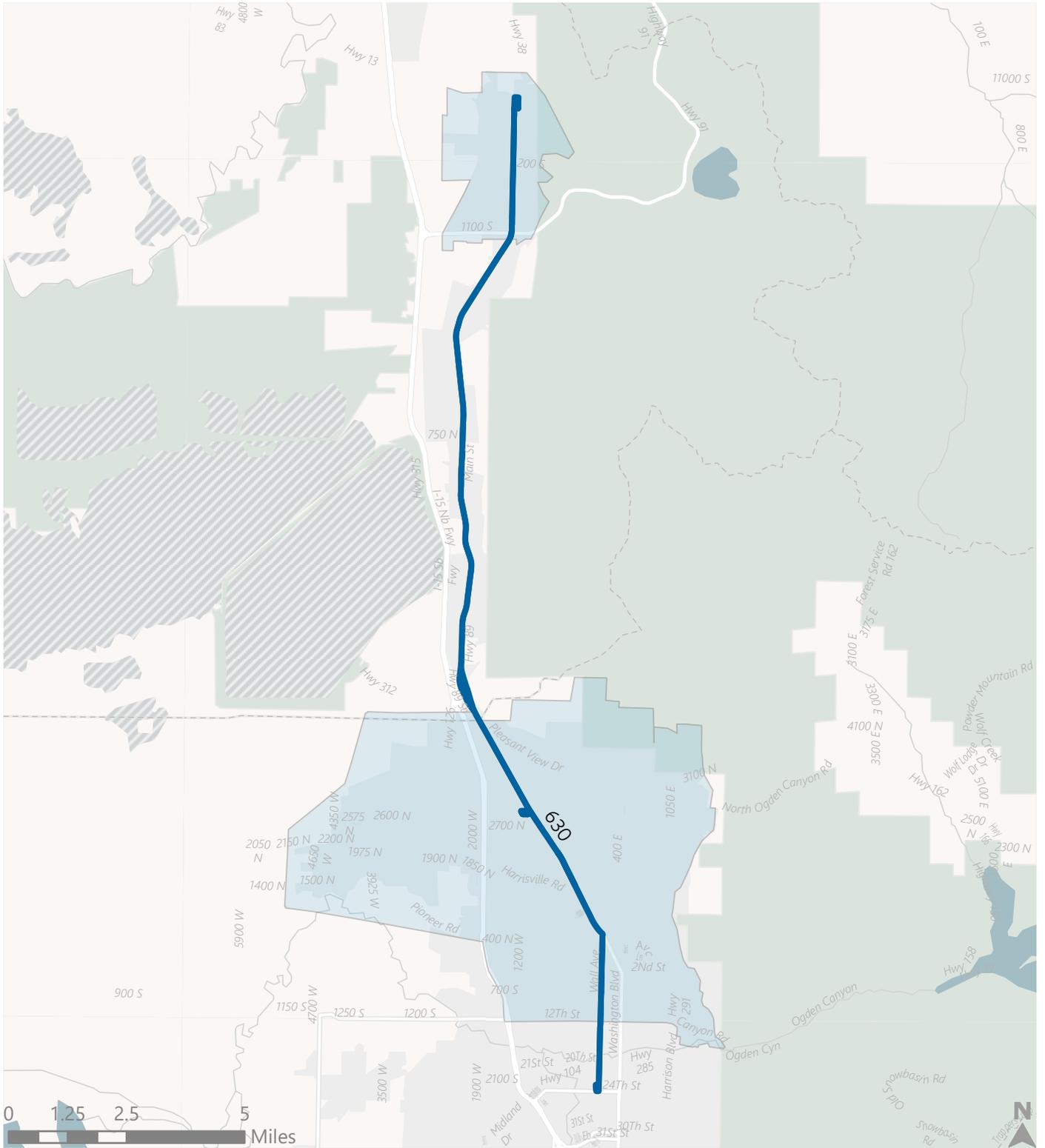
- After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route F638**, Brigham City Flex, will be discontinued and replaced by an Innovative Mobility Zone.
 - Purpose: This route has shown low ridership levels so reallocating resources will increase coverage and flexibility.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 7. April 2026 Ogden Local Service Service Changes



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 8. April 2026 Brigham City Service Changes

Salt Lake and Tooele Counties

The following section describes new services added, changes to existing service or routes discontinued in Salt Lake County. No changes are proposed to Tooele County services.

New Service Added

The following routes add service to new areas.

- **Route 72**, 7200 South, will be extended east to the 6200 South Wasatch Park & Ride.
 - Purpose: Create a transfer connection with the new extended Route 4, which serves the east bench of the Salt Lake Valley.
 - After the public comment period: This service extension was added in response to comments received.
- The **Salt Lake City West Side On Demand Zone** will be expanded to include Central Pointe Station.
 - Purpose: This zone expansion will enhance east-west connectivity from areas on the west side of Salt Lake County.
 - After the public comment period: The extension will be implemented as proposed in the original draft plan.

Realignments or Frequency Changes to Existing Service

The following routes will be modified either in terms of alignment or frequency.

- **Routes 2A and 2B**, 200 South Clockwise and 200 South Counterclockwise respectively, will replace Route 2, and the segment of Route 220 operating on 200 South. Both will run every 15 minutes, with staggered schedules to provide 7.5-minute intervals on 200 South between 600 West and University Street (1350 East).
 - Purpose: The 200 South corridor, from downtown Salt Lake City to the University of Utah, has the highest potential for transit use, as shown by the high productivity of routes operating there and the overcrowding on Route 2. The routes will also restore service suspended during the pandemic and carryover from the 2023-2027 Five-Year Service Plan.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 4**, 400 South/East Bench Connector, will be extended to the 6200 South/Wasatch Boulevard Park & Ride from the 3900 South/Wasatch Boulevard Park & Ride. Eventually, it will

terminate at a larger mobility hub to be built by UDOT when enhanced ski transit service is provided for both Big and Little Cottonwood Canyons.

- Purpose: This change will allow for connections to existing ski service and future enhance ski service planned by UDOT. Also, it will be a precursor for more enhanced transit connections at the base of the Cottonwood Canyon as well as adjacent to I-215.
 - After the public comment period: This change was a result of partner and stakeholder feedback received during the comment period.
- **Route 45**, 4500 South, will be rerouted to serve 4500 South between 1300 East and 2300 East; service to Murray-Holladay Road will be replaced by Route 223.
 - Purpose: Route 223 will be providing service on Murray-Holladay Road, allowing Route 45 to remain continuously on 4500 South.
 - After the public comment period: Extension of Route 4 allows for realignment of Route 223 which in turn allows for Route 45 to provide additional coverage on 4500 South.
- **Route 54**, 5400 South, will have frequency increased from every 30 to every 15 minutes. Route 54 will extend to Utah First Credit Union Amphitheater.
 - Purpose: This change restores service that was reduced in 2020 as result of the pandemic. The route exceeds the performance standard and criteria to be a service that runs every 15 minutes. Stakeholder feedback has been consistent in requesting improved frequency.
 - After the public comment period: This change was added to the plan because of feedback received during the comment period.
- **Route 62**, 6200 South, will be extended from Fashion Place West Station to Copper City Drive and an end-of-line location at Utah First Credit Union Amphitheater.
 - Purpose: This change will allow for better connectivity, reducing the number of transfers that some riders must make in order to reach their destinations.
 - After the public comment period: This change was proposed in response to changes suggested for Route 54 during the comment period.
- **Route 205**, 500 East, will increase its weekday and Saturday service to 15-minute headways, up from 30-minute headways currently. The route will be extended from its current southern

terminus at the Murray North Station to Murray Central Station when Midvalley Connector opens.

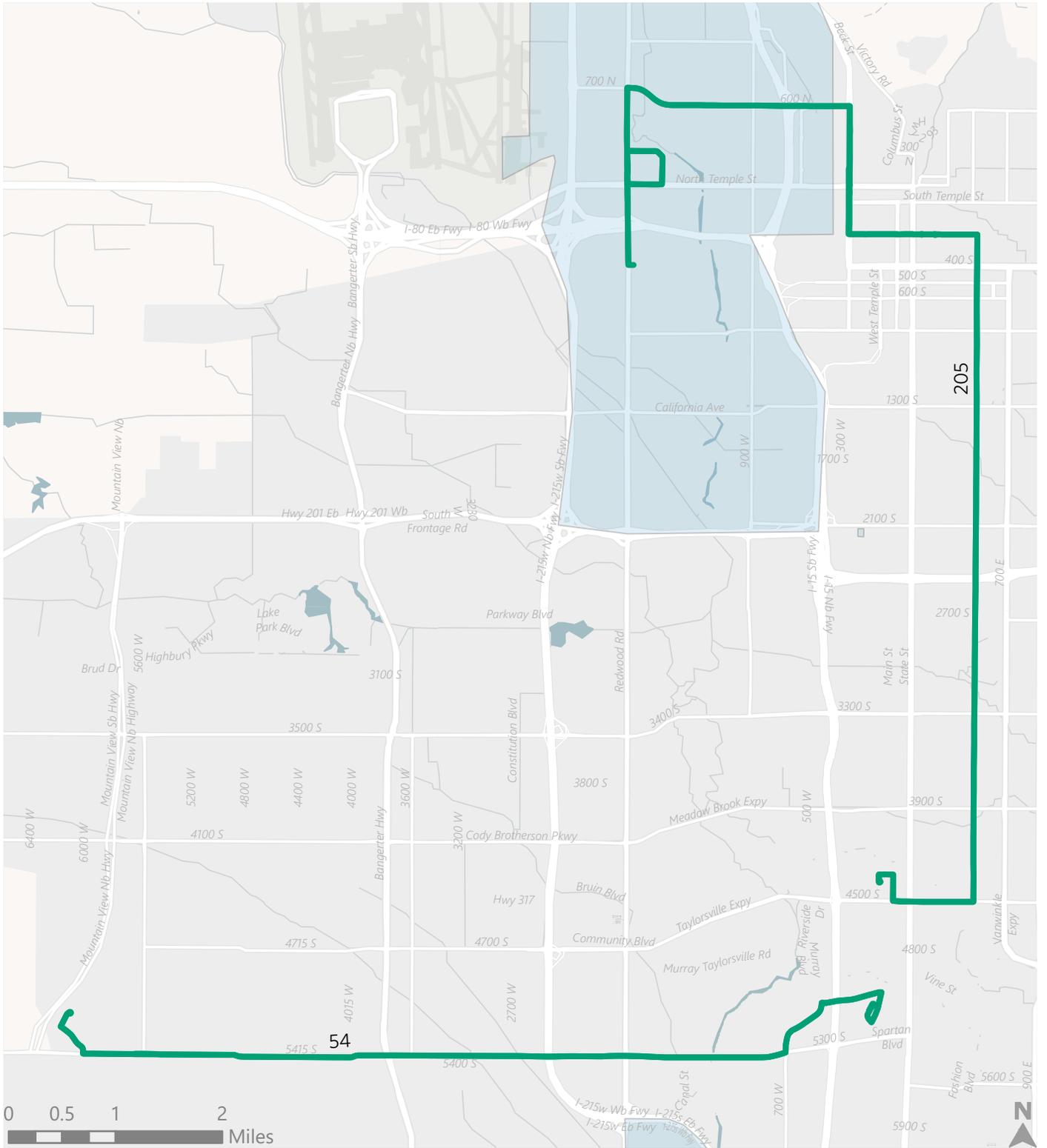
- Purpose: This extension will restore service lost during the pandemic, and align routes related to Midvalley Connector when that route begins service. The route exceeds the performance standard and criteria to be a service that runs every 15 minutes, and stakeholder feedback has been consistent in requesting improved frequency. This service change is a carryover from the 2023-2027 Five-Year Service Plan. UTA's Long Range Transit Plan proposes 10-minute headways on Route 205 by 2028; while this Five-Year Service Plan does not yet establish that frequency of service, the increase in frequency from 30-minute headways to 15-minute headways serves as a stepping stone to the eventual 10-minute headways.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 220**, Highland Drive, will be shortened to end at the University of Utah's student union instead of continuing to Salt Lake Central Station, and will reduce duplication on 200 South once Route 2 service changes are implemented. Routes 2A and 2B will replace the service Route 220 formerly provided on 200 South. Short transfers between Route 220 will be accommodated at 200 South and University Street where the 2A and 2B converge with staggered 15-minute headways.
 - Purpose: This change optimizes resources to use towards high-frequency service on 200 South and improves the feasibility and reliability of staggered headways on 200 South. These service changes were also shown in the 2023-2027 Five-Year Service Plan.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 223**, 2300 East, will be modified to serve Murray Central Station via 5300 South, Vine Street, 5600 South, 1300 East, and Murray-Holladay Road. Weekday frequency will be increased to every 30 minutes.
 - Purpose: The current Holladay Boulevard segment has very low ridership and has remained in place to preserve paratransit coverage. The Route 4 extension will provide paratransit coverage, so it is possible to modify Route 223 to create new connections and expanded coverage.

- After the public comment period: This change was proposed in response to changes suggested for Route 4 during the comment period.
- **Route 720, S-Line Streetcar**, will extend the streetcar corridor from its current eastern terminus at Fairmont Station to Highland Drive.
 - Purpose: This extension will better serve economic development and growth in Sugar House and enhance reliable transportation in the area.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.

Discontinued Service

The following routes will be discontinued as part of the 2025-2029 Five-Year Service Plan.

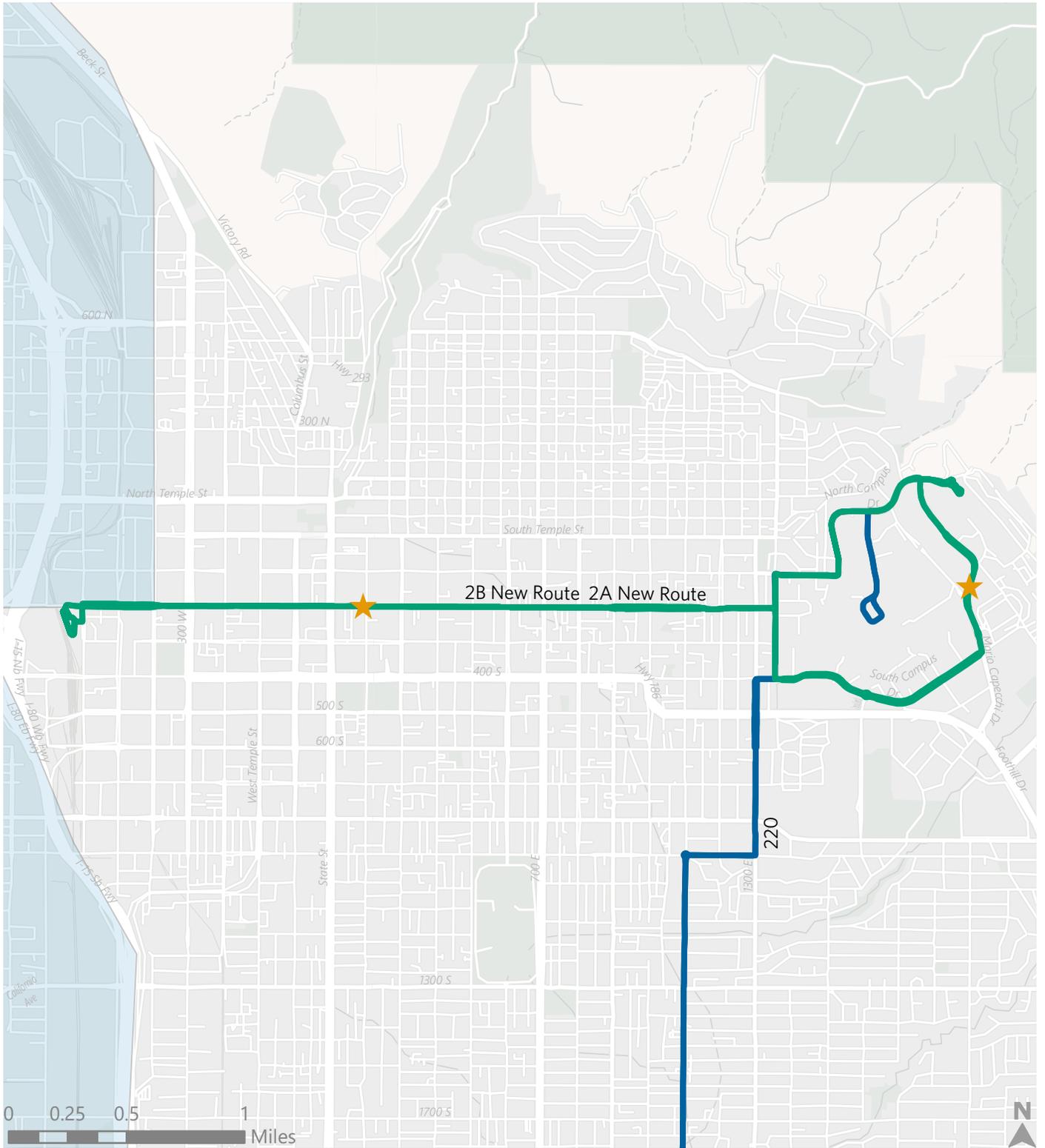
- **Route 2, 200 South**, will be discontinued and replaced by Routes 2A and 2B.
 - Purpose: Routes 2A and 2B will offer a higher level of service.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



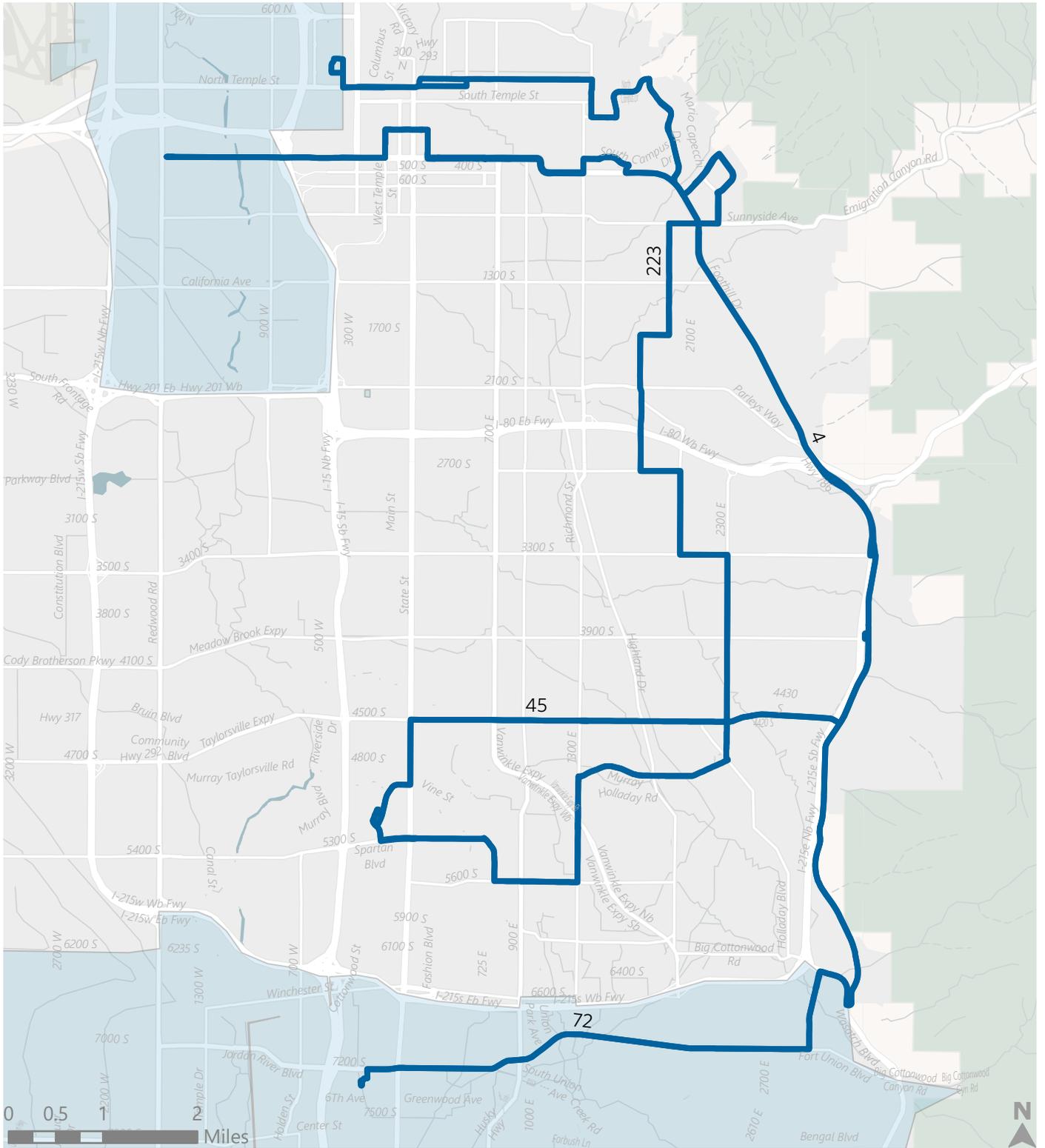
Figure 9. April 2026 Salt Lake County Service Restoration



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



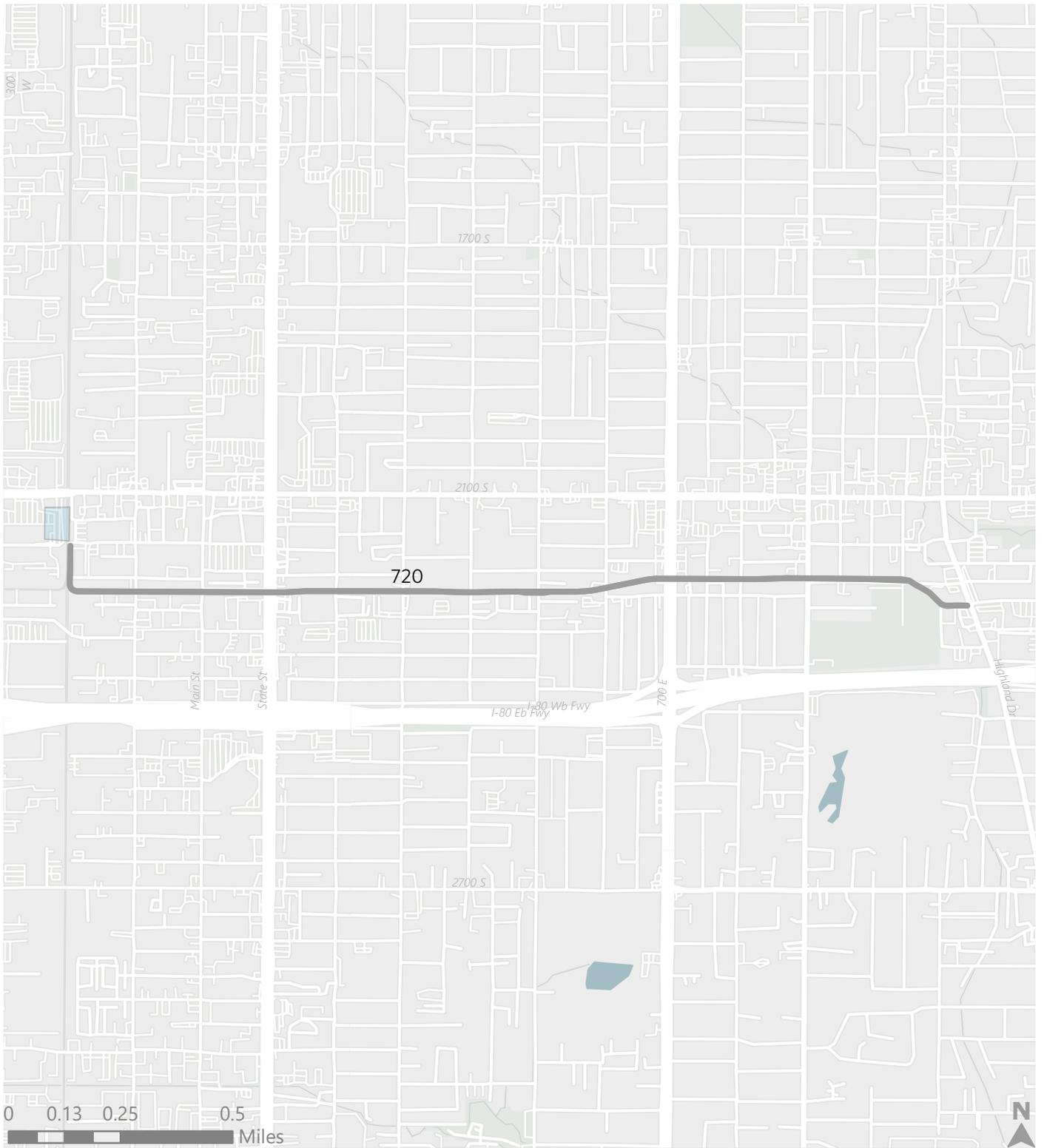
Figure 10. April 2026 200 South Service Changes



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



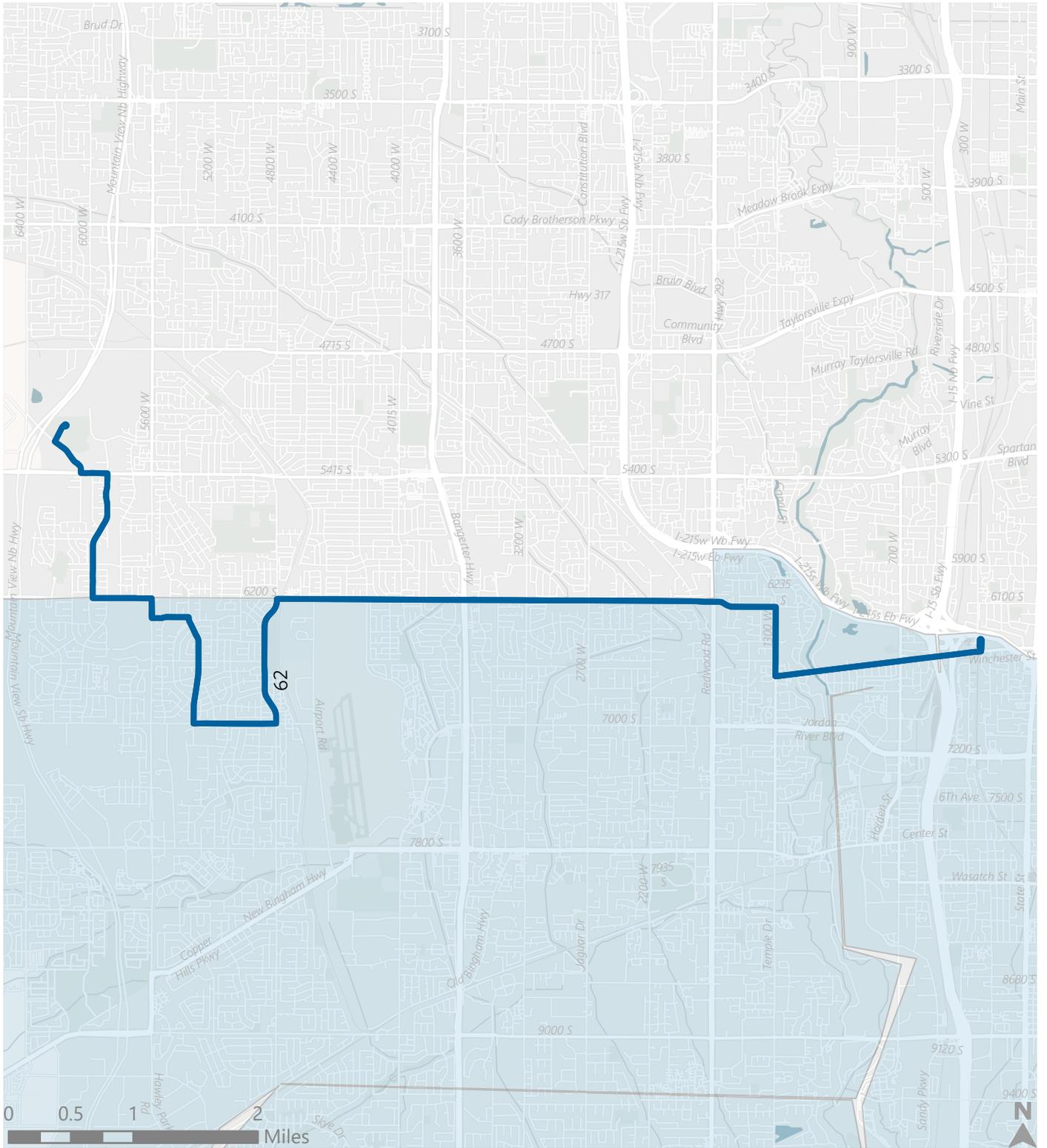
Figure 11. April 2026 Canyon Connections Service Changes



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



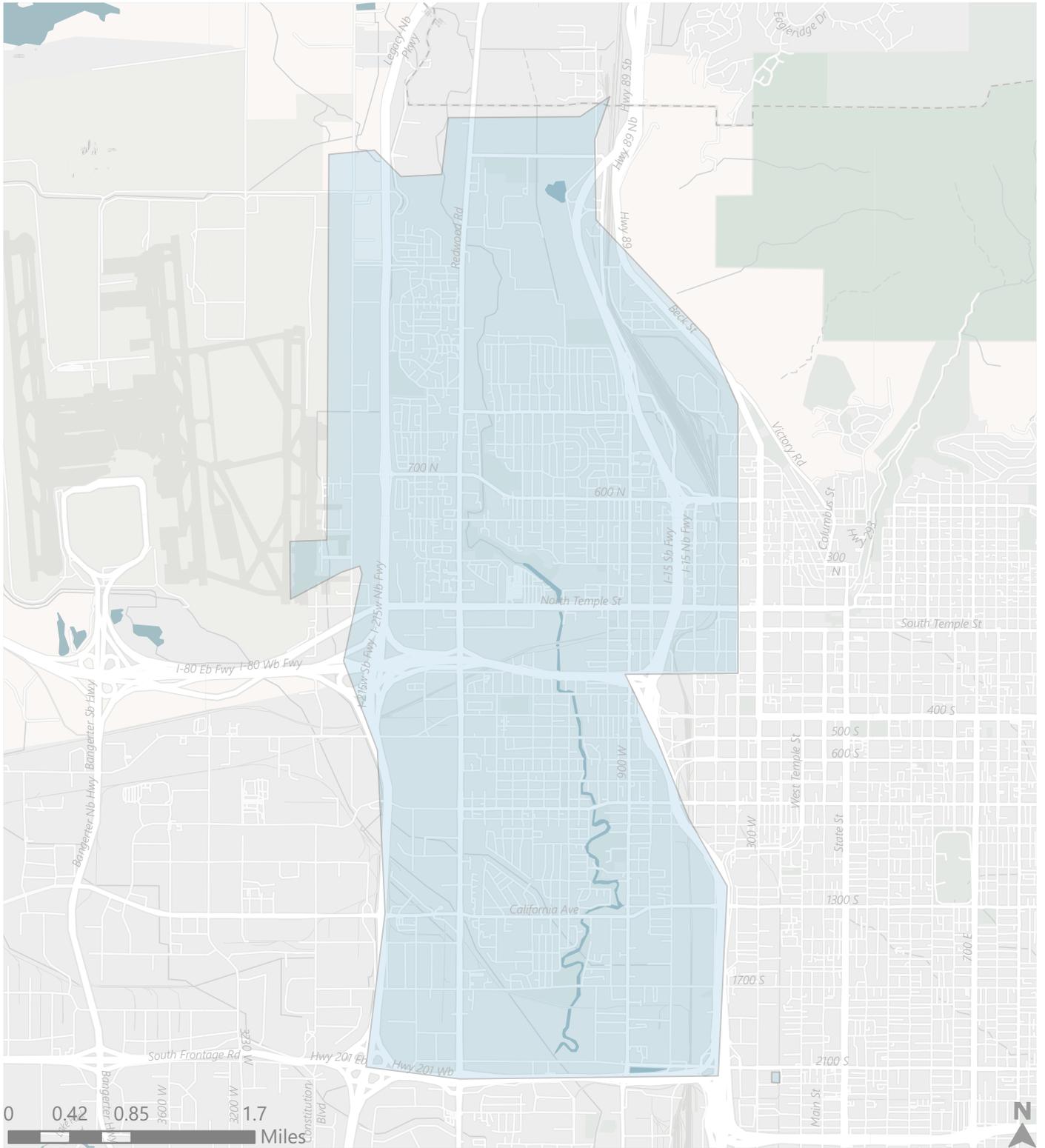
Figure 12. April 2026 S-Line Extension



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 13. April 2026 6200 South Service Changes



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 14. April 2026 Central Pointe Station Service Changes

Utah County

The following section describes new services added, changes to existing services, or routes discontinued in Utah County in 2026.

New Service Added

The following routes add service to new areas.

- **Route 846**, Vineyard / Orem Connector, is a new 30-minute all-day route serving residential destinations in East Orem previously served by Route 862. It will also provide a connection to Vineyard Station from the north side of Orem and University Place via 800 North.
 - Purpose: This route will provide additional connections between east Orem and Vineyard FrontRunner Stations, as well as maintain coverage in areas previously served by Route 862.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 860**, Eagle Mountain/Saratoga Springs, will provide service to new park and ride lots in Eagle Mountain and Saratoga Springs, and will connect riders to Eagle Mountain's city center. This route will provide 30-minute all-day service to areas previously served by peak-hour service on Route 806, which will be discontinued.
 - Purpose: This change will provide network enhancements and improve operator work conditions by replacing peak-hour service with all-day service, reducing the number of irregular shifts. This service change is also a carryover from the 2023-2027 Five-Year Service Plan.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- The **Lehi Innovative Mobility Zone** will cover portions of West Lehi and connect riders to Lehi FrontRunner Station.
 - Purpose: This zone will provide baseline service in a fast-growing part of Utah County.
 - After the public comment period: This zone will be implemented as proposed in the original draft plan. UTA is still determining the appropriate method of service delivery (e.g. UTA On Demand, Uber/Lyft partnership, etc.)

Realignments or Frequency Changes to Existing Service

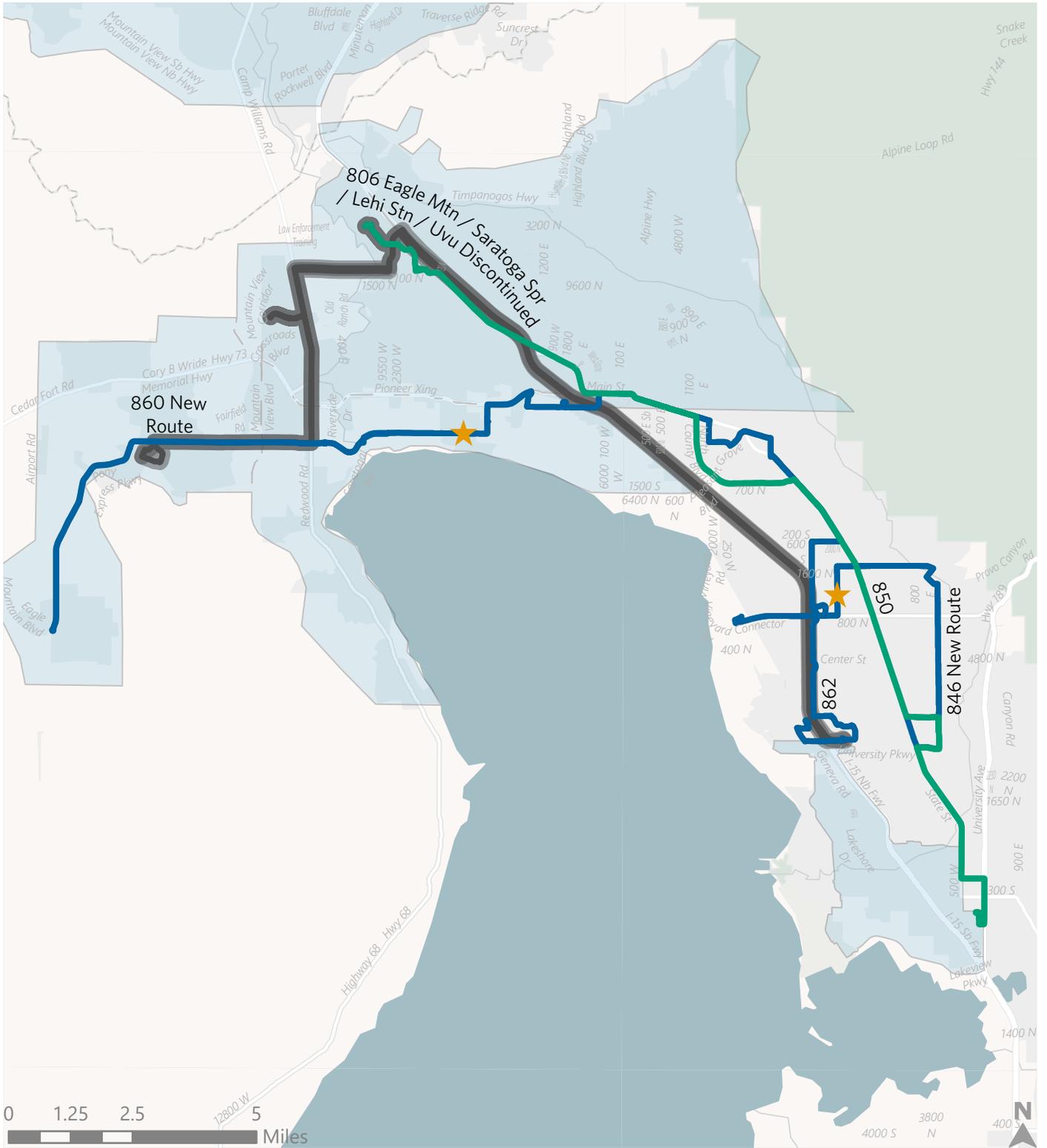
The following routes will be modified either in terms of alignment or frequency.

- **Route 850**, State Street Utah County, will reroute from State Street to 700 North and North County Boulevard to serve the Valley Grove area. The modified Route 862 will cover the downtown Pleasant Grove area currently served by Route 850.
 - Purpose: This change will serve employment centers in Pleasant Grove and new service to high-density Valley Grove commercial and residential areas near the I-15 Pleasant Grove Boulevard exit. In the future, Route 850 will become the Central Corridor bus rapid transit line, but implementation of Central Corridor is not anticipated within the timeframe of this Five-Year Service Plan.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 862**, 400 West Orem, will extend the west portion of the current route to serve State Street north of 1600 North, Lindon, Pleasant Grove, and American Fork. This will provide coverage to areas previously served by Route 850, as well as create a new connection at American Fork Station. Service to east Orem will be replaced by Route 846.
 - Purpose: This route will provide a new connection to American Fork Station from the east, as well as maintain coverage to downtown Pleasant Grove that was previously served by Route 850.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.

Discontinued Service

The following routes will be discontinued in 2026 as part of the 2025-2029 Five-Year Service Plan.

- **Route 806**, Eagle Mountain/Saratoga Springs/Lehi Station, will be discontinued and the loss of geographic coverage will be mitigated by the implementation of an Innovative Mobility Zone, as well as all-day service on Route 860. Route 806 provided four-morning inbound buses from Eagle Mountain and four outbound buses from UVU.
 - Purpose: The route will be discontinued as it has demonstrated underperforming segments, and it is a result of stakeholder feedback.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 15. April 2026 North Utah County Service Changes

April 2027 Service Changes

The following sections identify additions, revisions, or reductions of service proposed for April 2027.

Proposed changes are shown in Figure 16 through Figure 22.

Box Elder, Weber, and Davis Counties

Realignments or Frequency Changes to Existing Service

The following routes will be modified either in terms of alignment or frequency.

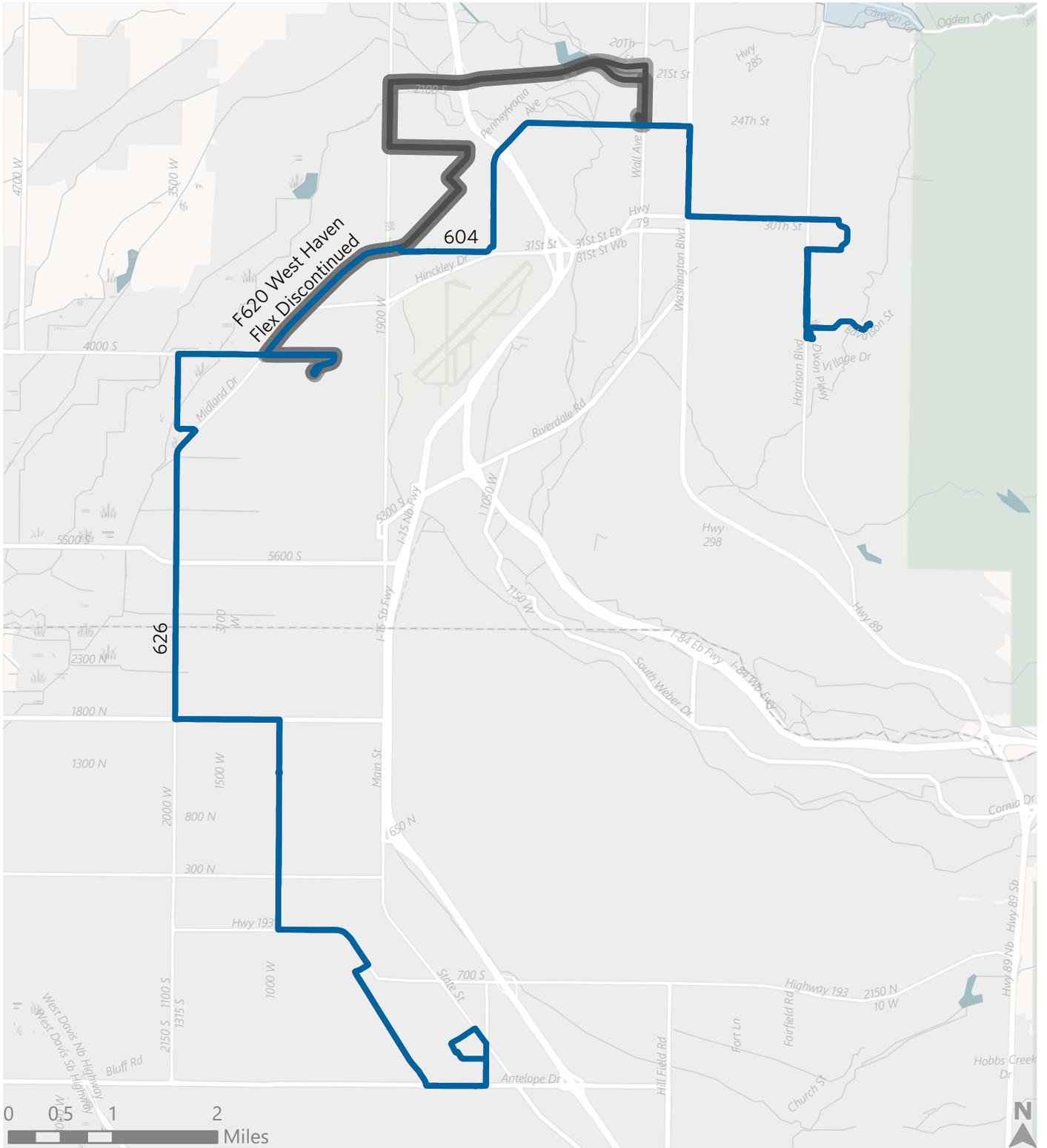
- **Route 604**, Ogden Crosstown, will be shortened to Roy Station and increase its frequency to 30 minutes. Route 626 will cover the remaining portion. Route 604 will also replace service on portions of F620.
 - Purpose: This change will increase connectivity between buses and with FrontRunner at Roy Station, and remove the need for a mid-route hold on route 604 to connect with FrontRunner.
 - After the public comment period: Route 604 increased from 60-minute service on weekdays to 30 minutes to mitigate the loss of trips on portions currently served by Route F620.
- **Route 613**, Northwest Weber Local, will be rerouted to serve Business Depot Ogden (BDO), and will replace the F618 (Ogden BDO Shuttle). Currently, Route 613 skips BDO and does not provide direct access; this change will provide direct access to BDO and eliminate the need for the F618, providing a 30-minute direct route service to BDO throughout the day on weekdays. Route 613 will also extend to Pleasant View Station and serve stops on 20th and 21st Streets that were previously served by Route F620.
 - Purpose: This change will provide connections at Pleasant View Station to other routes, network optimization, and connectivity improvements.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 626**, West Roy/Freeport, will be extended from 5600 South to serve Roy FrontRunner Station, replacing a portion of Route 604.
 - Purpose: This change will improve transfers between local buses and the FrontRunner and provide operators with a more stable location to lay over at Roy FrontRunner Station. This change is a carryover from the 2023-2027 Five-Year Service Plan.

- After the public comment period: No modifications were made to this proposed service change in response to public comment.

Discontinued Service

The following routes will be discontinued as part of the 2025-2029 Five-Year Service Plan.

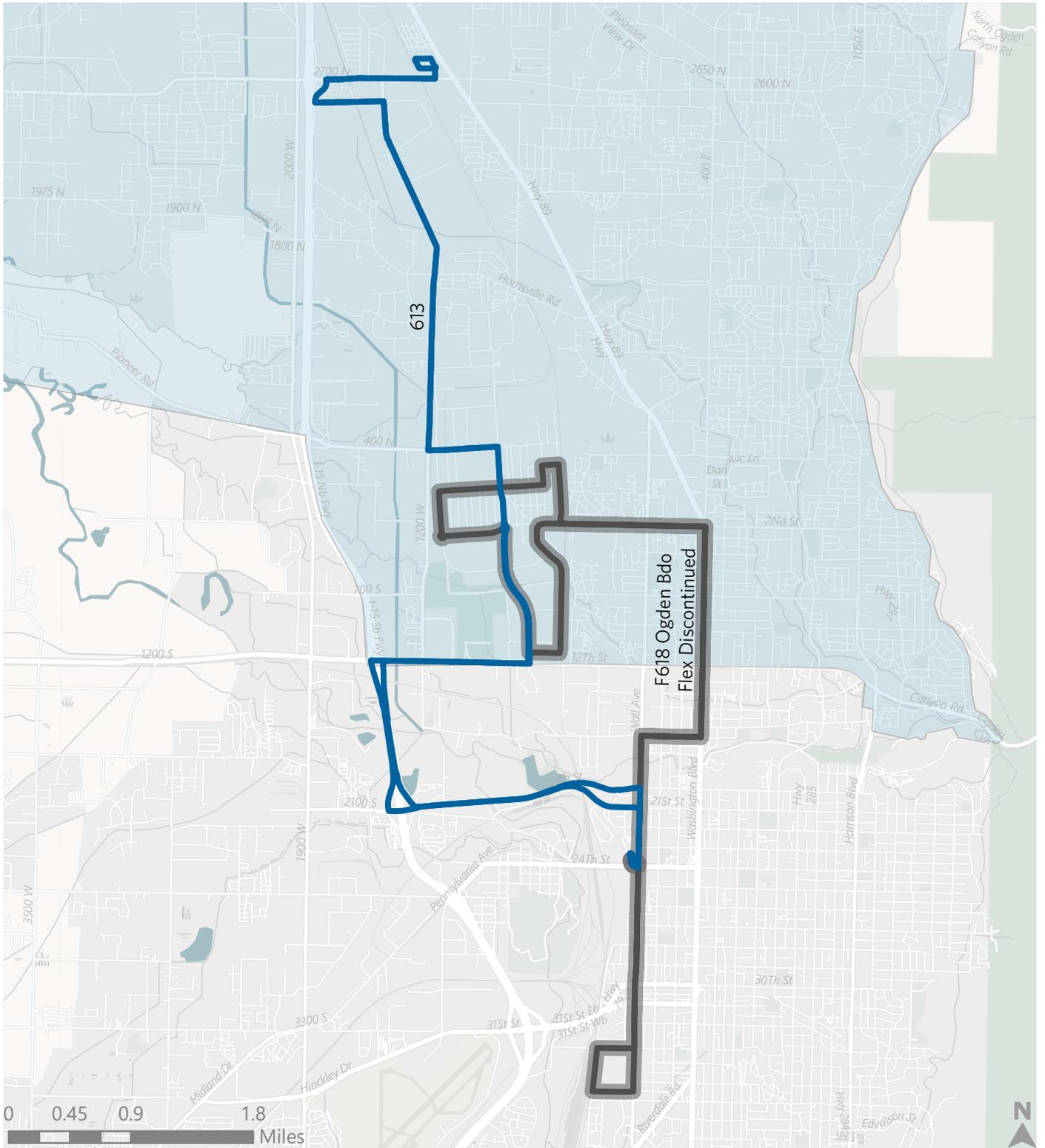
- **Route F618**, Ogden BDO Shuttle, will be discontinued and replaced by service on Route 613 (Northwest Weber Local).
 - Purpose: This route will be discontinued to reduce redundant service.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route F620**, West Haven Flex, will be discontinued and replaced by Route 604 (Ogden Crosstown).
 - Purpose: This route will be discontinued to avoid redundant service. Instead, Route 604 will service areas with the highest ridership potential.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 16. April 2027 Roy Station Service Changes



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 17. April 2027 Business Depot Ogden Service Changes

Salt Lake and Tooele Counties

The following section describes new services added, changes to existing services, or routes discontinued in Salt Lake County in 2027. No changes are proposed to Tooele County services.

New Service Added

The following routes add service to new areas.

- **Route 26**, Lake Park Boulevard, is a new route serving industrial areas along Parkway Boulevard in West Valley City. Route 26 will provide all-day 60-minute service to areas currently served by Routes 509 and 513. It will also provide a new transfer connection between Millcreek TRAX Station and Lake Park via Decker Lake and Parkway Boulevard.
 - Purpose: Routes 509 and 513 are currently relatively inefficient routes that circulate through the industrial areas of Salt Lake City and West Valley City. This service change is designed to improve both rider experience and operator working conditions, by shifting to a more gridded system (alongside other route changes), eliminating peak-only service on Route 513, and reducing the number of irregular shifts. It also expands coverage to light industrial areas along Redwood Road and Parkway Boulevard east of I-215, which were not well served by Routes 509 or 513.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 50X**, Midvalley Connector (or MVX), is the new Midvalley Connector bus rapid transit service constructed under the Midvalley Connector Project. This 15-minute all-day route will replace portions of Route 47, 4700 South, and Route 227, 2700 West.
 - Purpose: The new route will provide service enhancements and bring economic development to the area.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 31**, 3100 South, will provide 30-minute all-day service between the new Magna Transit Center and Central Pointe TRAX Station via 3100 South. It will be implemented as part of a package of alterations designed to improve the service currently provided by Routes 509 and 513.
 - Purpose: This new route will use the proposed new Magna Transit Center located at 9180 West north of 2700 South and provide an operator breakroom, restroom, and

other layover-related facilities. Route 31 will also improve connections to Magna and provide additional east-west transit service in areas where service was reduced during the pandemic. This service change is a carryover from the 2023-2027 Five-Year Service Plan.

- After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 203**, 300 West, provides a new 30-minute all-day service between North Temple TRAX and FrontRunner Station, and Central Pointe TRAX Station via 300 West.
 - Purpose: This route is part of the Salt Lake City Transit Master Plan and is part of the adjustments in local service that will accompany the Davis-SLC Community Connector. It will provide expanded coverage to locations south of downtown Salt Lake City and the City's west side. In addition, community feedback identifies the need for more service in Salt Lake City's Granary District.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 208**, 900 West, provides new 30-minute all-day service on 900 West between Salt Lake Central Station and Central Pointe TRAX Station. This provides a connection to the Central Pointe TRAX Station for students on the west side of Salt Lake City who attend high schools on the City's east side. This also replaces the service currently provided by Route 509, the 900 West Shuttle. Other areas of service currently covered by Route 509 will be provided by Routes 26 and 31.
 - Purpose: The new route will provide a more linear service on Salt Lake City's west side and northern West Valley City, improving the connection between the west side and Central Pointe.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 236**, 3600 West, will be a new north-south service providing streamlined connections from West Valley Central Station through industrial areas of West Valley and Salt Lake Cities, the Salt Lake City International Airport, and the International Center.

- Purpose: The new route is a result of stakeholder feedback, and it will provide a direct connection to the Airport and International Center from the west side of Salt Lake County.
- After the public comment period: The northern end-of-line of the route was modified to conform to operational feasibility requirements. Overnight service that was originally considered as part of Route 236 will be separated into a separate pilot program, Route 236E.
- **Route 236E**, 3600 West Overnight Service Pilot Program, will follow the same route as Route 236 for overnight service.
 - Purpose: The new route has been split into a separate pilot program for recordkeeping purposes, operational feasibility, and network optimization.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.

Realignments or Frequency Changes to Existing Service

The following routes will be modified either in terms of alignment or frequency.

- **Route 17**, 1700 South, will be restored to 30-minute frequency and realigned to extend west through the industrial areas on Salt Lake City's west side. The route will also be modified to connect to TRAX via Ballpark Station rather than Central Pointe Station.
 - Purpose: These changes fulfill community-requested restoration of 30-minute service on 1700 South and support other changes to the west side's industrial area.
 - After the public comment period: Route 17 is a consolidation of Routes 17 and 18 that were originally proposed in this plan. The decision was a result of cost and network optimization, and community feedback. This change will also create an east-west service between the University of Utah and 5600 West. Route 223 will serve Hogle Zoo and This is the Place Heritage Park instead of Route 17.
- **Route 35**, 3500 South, will be extended to the proposed Magna Transit Center and have hourly service between midnight and 4:00 AM. It will no longer make a loop around downtown Magna, but instead follow 8400 West to 2700 South to the transit center. Route 31 will serve the portion of the loop on 3100 South.

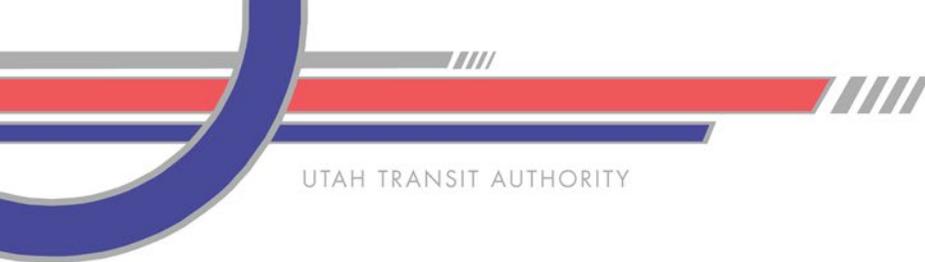
- Purpose: This change will allow UTA to serve Magna’s Main Street in both directions instead of a one-way loop, improving operator conditions with the construction of the Magna Transit Center. It will also improve network connectivity.
 - After the public comment period: As part of discussions of Route 236 Overnight Service Pilot Program, it was determined that Route 35 would also support overnight service.
- **Route 39**, 3900 South, will be rerouted at 4100 South and Redwood Road to go north on Redwood Road to 3800 South then west to terminate at West Valley Central Station. Additionally, the current stop location at Salt Lake Community College’s Redwood Campus will be closing, and the campus will be served by the Midvalley Connector instead.
 - Purpose: This change will reduce duplication with the Midvalley Connector which will also serve West Valley Central Station. Also, it will provide east-west connectivity to areas along 3800 South with high population densities.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 45**, 4500 South, will be rerouted from Murray Central Station to Murray North Station when Midvalley Connector opens.
 - Purpose: This change is tied to Route 47 whose eastern terminus is shifting to Murray North Station when the Midvalley Connector is implemented. To maintain the east-west connection on both routes, Route 45 must terminate at Murray North Station. Routes 205 and 223 will provide east side connections to Murray Central Station as well.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 47**, 4100 South/4700 South, will reroute from Murray Central Station to Murray North Station when the Midvalley Connector begins service. It will also skip the Atherton Drive loop and remain at 4700 South instead. Atherton Drive and Salt Lake Community College will be served by the Midvalley Connector. This service change is a carryover from the 2023-2027 Five-Year Service Plan.
 - Purpose: This change will eliminate redundancy in service to Murray Central Station.

- After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 205**, 500 East, will extend further south on State Street to Murray Central Station, maintaining connections to TRAX Blue and Red Lines and adding a connection to Frontrunner on the South end.
 - Purpose: This extension maintains connections to Routes 45 and 47, TRAX, and FrontRunner.
 - After the public comment period: Route 205 will extend further south on State St to Murray Central station maintaining connections to TRAX Blue and Red Lines and adding a connection to Frontrunner on the South end.
- **Route 223**, 2300 East, will shift from 1900 East to 1500 East between 2100 South and 900 South. A deviation will be added on Sunnyside Ave to serve Hogle Zoo and This is the Place Heritage Park.
 - Purpose: This change is a result of stakeholder and public feedback.
 - After the public comment period: Route 223 will proceed to Hogle Zoo instead of Route 17 in response to feedback received.
- **Route 240**, 4000 West, will be rerouted to Park Center Drive between 7200 South and 6200 South. Service on Dixie Drive will be discontinued.
 - Purpose: This change will avoid an unsafe turn and provide a more direct connection to developing areas. It will also improve operational feasibility and network optimization.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.

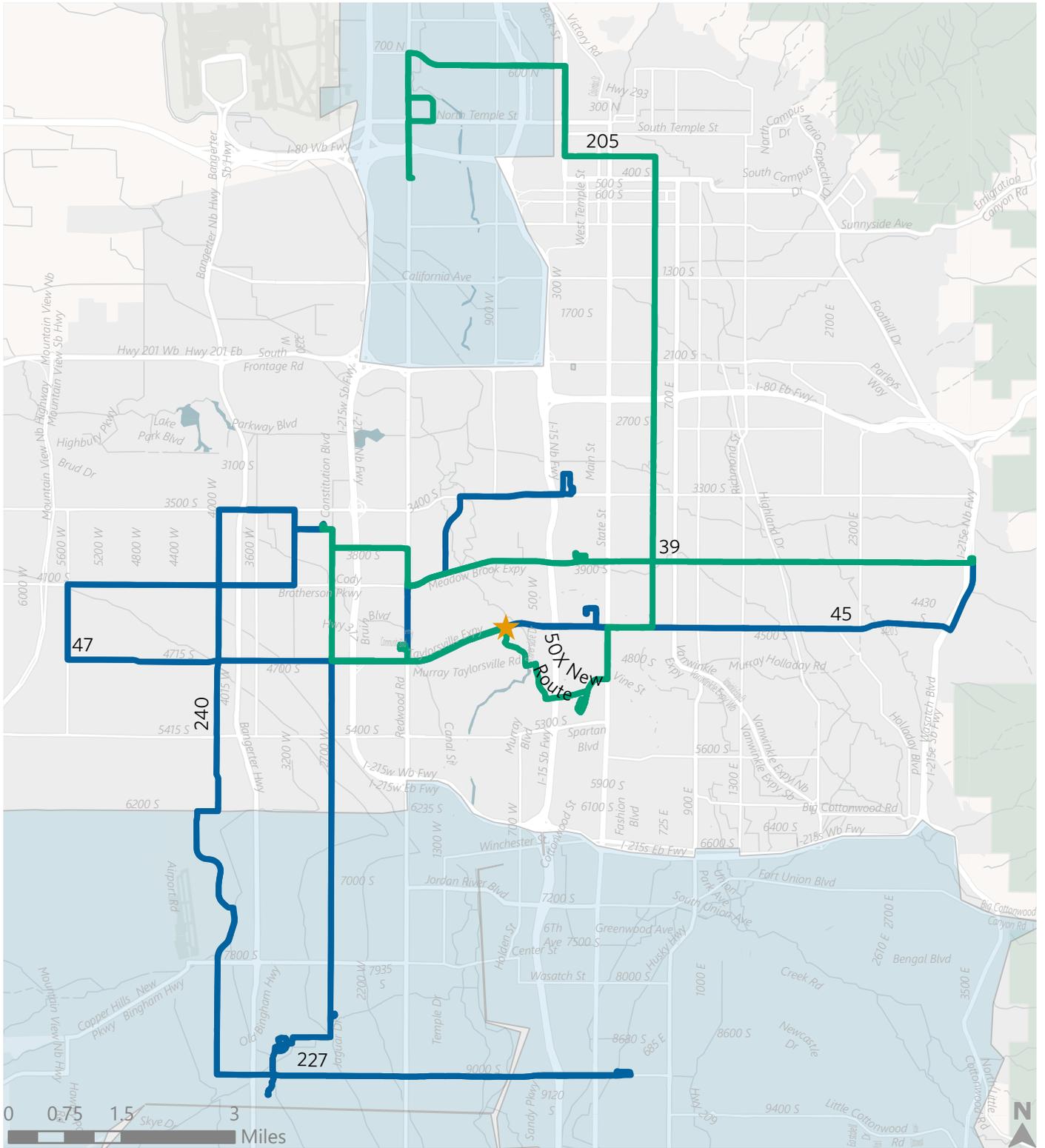
Discontinued Service

The following routes will be discontinued in 2027 as part of the 2025-2029 Five-Year Service Plan.

- **Route 509**, 900 West Shuttle, will be discontinued and replaced by portions of Routes 26, 31, 208 and 236.
 - Purpose: The route will be discontinued because of stakeholder and public feedback, as well as network enhancements.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.



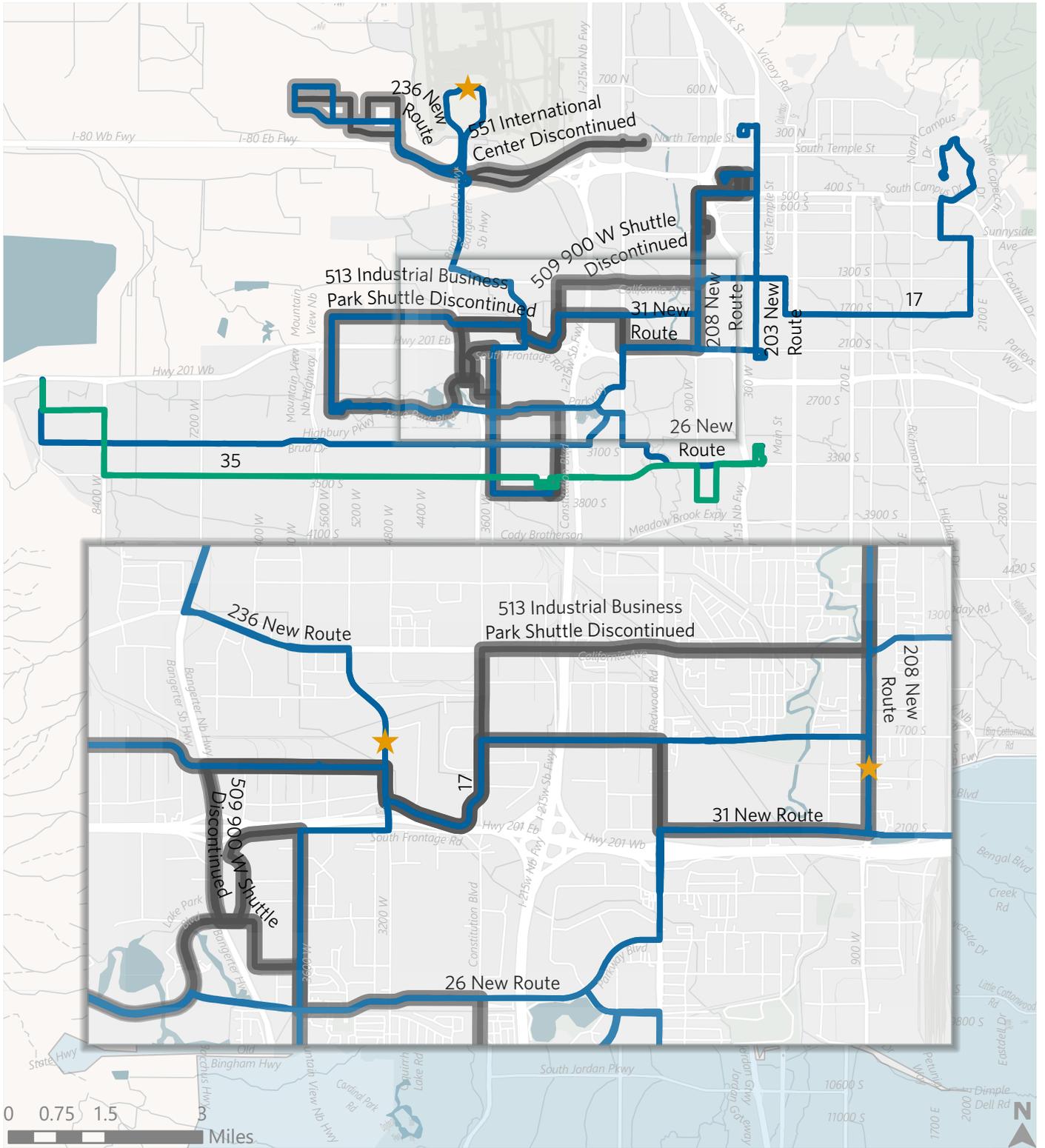
- **Route 513**, Industrial/Business Park Shuttle, will be discontinued and replaced by portions of Routes 26, 31, 208, and 236.
 - Purpose: The route will be discontinued because of stakeholder and public feedback. This decision is also a product of network enhancements and improvements in operator conditions.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 551**, International Center, will be discontinued and replaced by Routes 256 and 236.
 - Purpose: The route will be discontinued because of stakeholder and public feedback. This decision is also a product of network enhancements and improvements in operator conditions.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route F590**, 9000 South Flex, will be discontinued and replaced by Route 227.
 - Purpose: This decision will provide network optimization and improved connectivity between Salt Lake Community College campuses.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



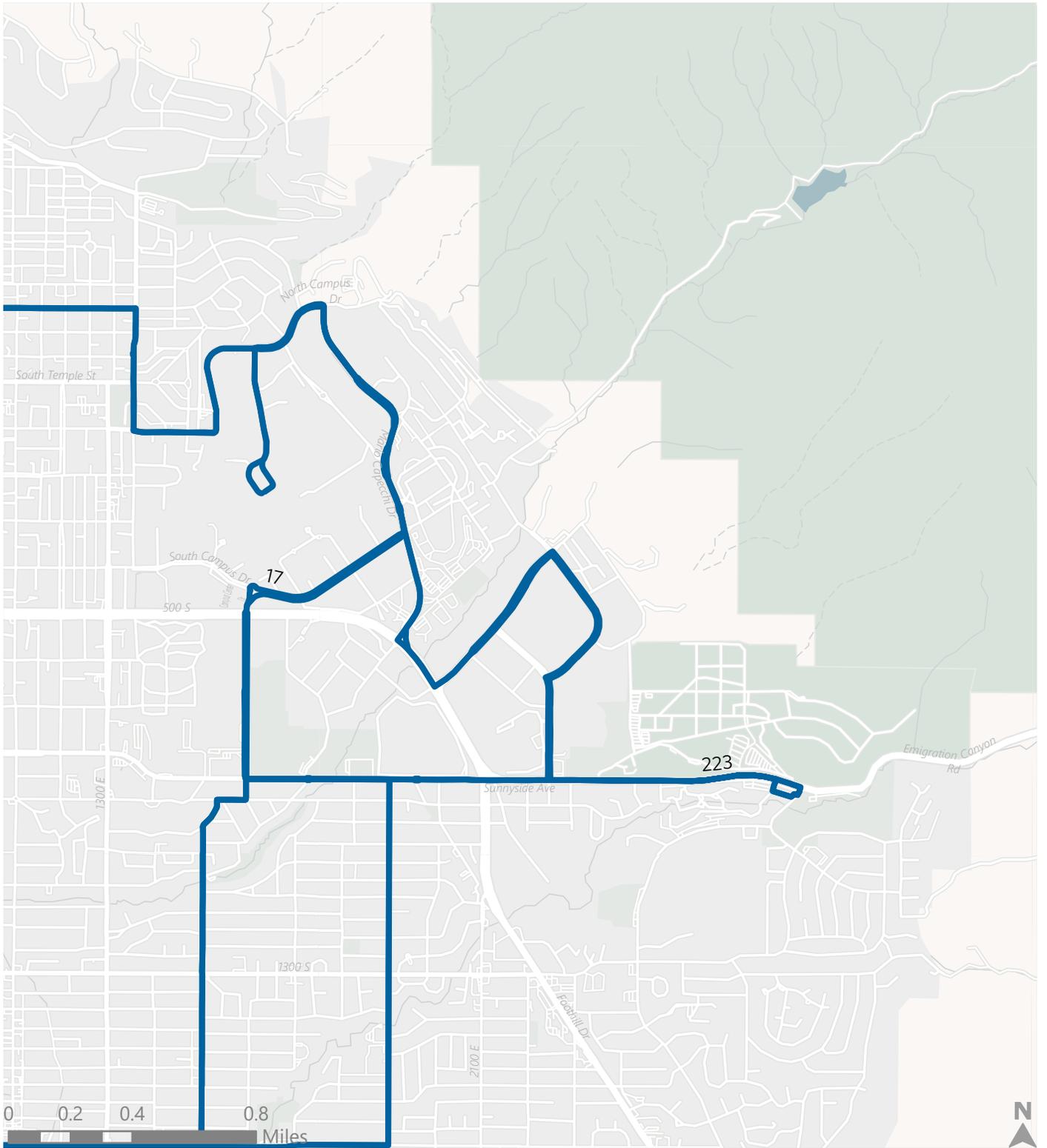
Figure 18. April 2027 Midvale Connector Service Changes



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 19. April 2027 West Salt Lake County Service Changes



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 20. April 2027 Hogle Zoo Service Changes

Utah County

The following section describes new services added, changes to existing services, or routes discontinued in Utah County in 2027.

New Service Added

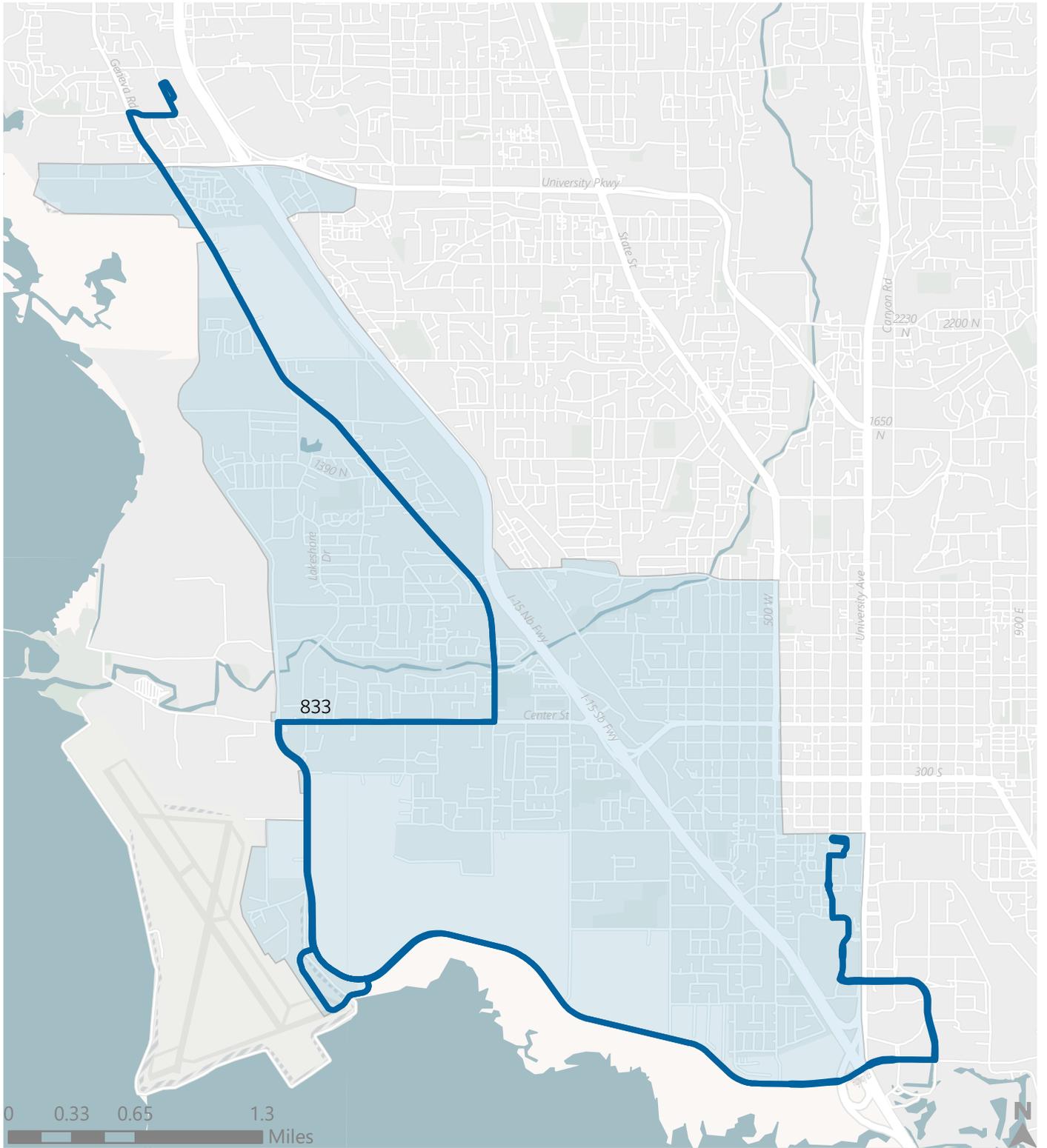
The following routes add service to new areas.

- The **Alpine/Highland Innovative Mobility Zone** will provide connections to FrontRunner from communities in northeast Utah County and serve the Thanksgiving Park/Lehi Station area.
 - Purpose: This zone will provide baseline service in a fast-growing part of Utah County.
 - After the public comment period: This zone will be implemented as proposed in the original draft plan. UTA is still determining the appropriate method of service delivery (e.g. UTA On Demand, Uber/Lyft partnership, etc.)

Realignments or Frequency Changes to Existing Service

The following routes will be modified either in terms of alignment or frequency.

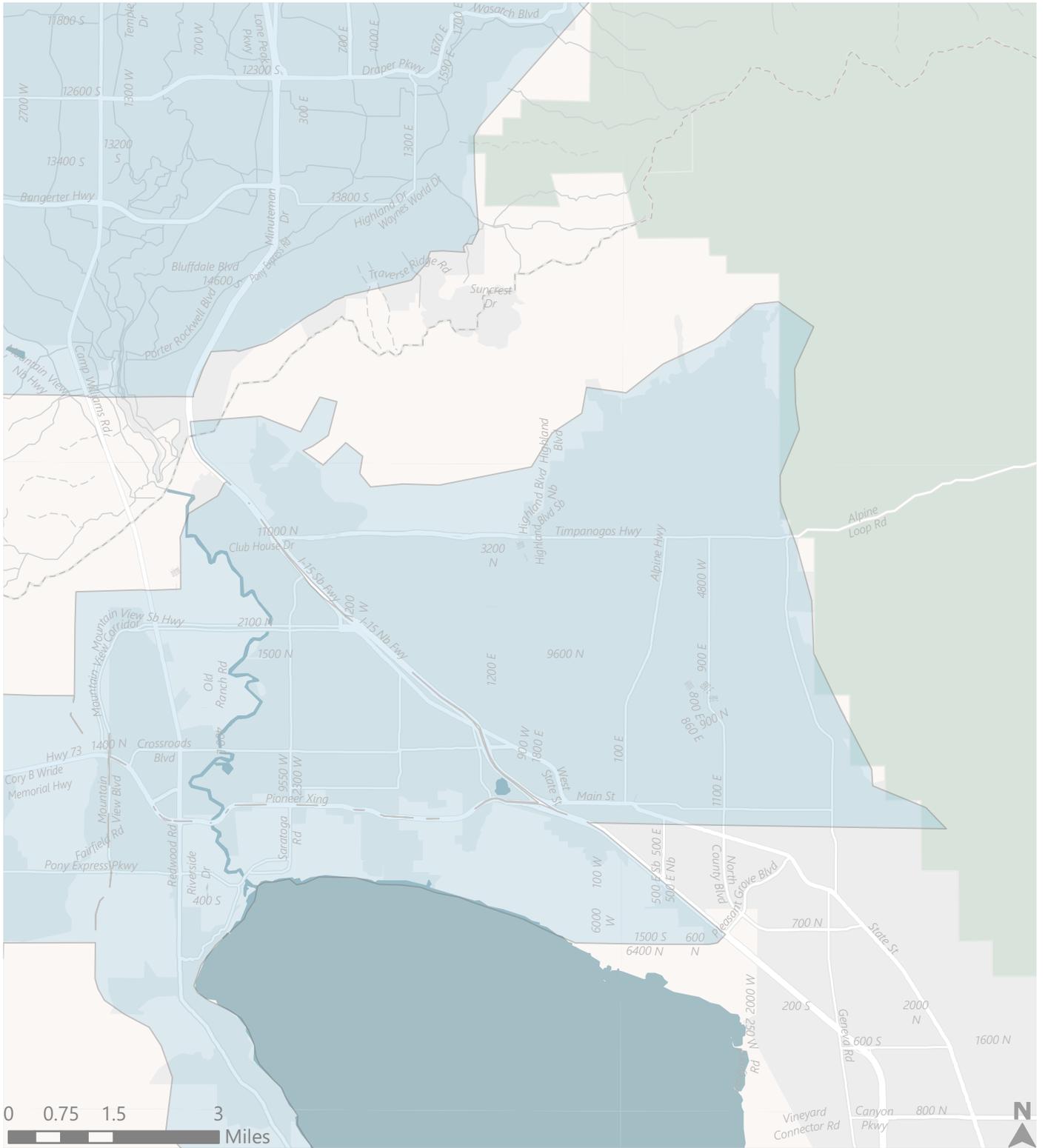
- **Route 830X**, Utah Valley Express (UVX), will no longer serve stations at East Bay. The modified Route 833 will serve stops at Provo Towne Centre, East Bay North, and East Bay South.
 - Purpose: This section of the route has underperformed in comparison to other segments of UVX, and service can instead be provided by Route 833.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 833**, Provo Airport/Geneva Road, will be modified to serve stations in East Bay previously served by 830X (UVX). It will also be extended north via Geneva Road to Orem Station. Weekday service will increase to 30 minutes.
 - Purpose: This change will provide network enhancements and a more appropriate level of transit service to the East Bay.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 21. April 2027 East Bay/West Provo



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 22. April 2027 Alpine / Highland Service Changes

April 2028 Service Changes

The following sections identify additions, revisions, or reductions of service proposed for April 2028.

Proposed changes are shown in Figure 23 through Figure 28.

Box Elder, Weber, and Davis Counties

New Service Added

The following routes add service to new areas.

- **Route 400**, State Capitol/Orchard Drive, will be a new 30-minute all-day route connecting Salt Lake Central Station, Woods Cross FrontRunner Station, employment centers in Bountiful, as well as destinations along Orchard Drive and 500 South, and the Utah State Capitol. This route covers portions of Route 455 that will be discontinued when Route 470X, the Davis-SLC Community Connector, begins operations. Route 400 also replaces sections of Route 200 at the State Capitol.
 - Purpose: The new route is part of the implementation of the Davis-Salt Lake Community Connector.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 470X**, Davis-SLC Community Connector, will provide an all-day 15-minute service between Farmington FrontRunner Station and Research Park at the University of Utah. Route 470X will replace Route 470, south of Farmington FrontRunner Station. It will also replace portions of Route 455, which will be discontinued when service starts on 470X.
 - Purpose: This corridor-based BRT route has been studied by UTA and partner organizations since the mid-2000s and is currently in the environmental and preliminary design stage. This route provides connectivity improvements and frequent service with enhanced passenger amenities for commuters traveling between bedroom communities in Davis County and major work destinations in downtown Salt Lake City and the University of Utah. This change also improves operator work by providing operators with a more stable location (at Farmington FrontRunner Station) to lay over.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 600**, Main Street Weber/Davis, will add 15-minute service to the current Route 470 corridor between Farmington FrontRunner Station and the Ogden Garage near 17th Street and

Wall Avenue, connecting to commercial areas in Layton, Clearfield FrontRunner Station, and Ogden FrontRunner Station in between. This route replaces the portion of Route 470 that provides a 30-minute service from Farmington FrontRunner Station northward.

- Purpose: This route is part of the service reorganization which will take place as part of the implementation of Route 470X, Davis-SLC Community Connector. With more resources, UTA can better serve northern Davis County with higher frequency.
- After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 609**, US-89 East Side, will provide a 30-minute freeway-based service connecting to the park-and-rides along US-89, Dee Event Center, and Farmington Station. This route will replace portions of Routes 455 and 473.
 - Purpose: This route is part of the service reorganization which will take place as part of implementation of Route 470X, Davis-SLC Community Connector.
 - After the public comment period: Route 609 is planned to travel through Farmington Station Park in both directions.

Realignments or Frequency Changes to Existing Service

The following routes will be modified either in terms of alignment or frequency.

- **Route 417**, South Davis West Side, will extend 30-minute all-day service from Woods Cross Station to Lakeview Hospital, then continuing up to the north of 500 South (Bountiful), and Legacy Crossing in Centerville.
 - Purpose: This route (implemented originally in 2025 as the Redwood Road Intercounty route) addresses requests from community partners and residents for improved school access and reduces the need for on-demand service in this area. In addition, the Davis Salt Lake Community Connector implementation and discontinuation of Route 455 will free up resources to add additional local services for southern Davis County.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.

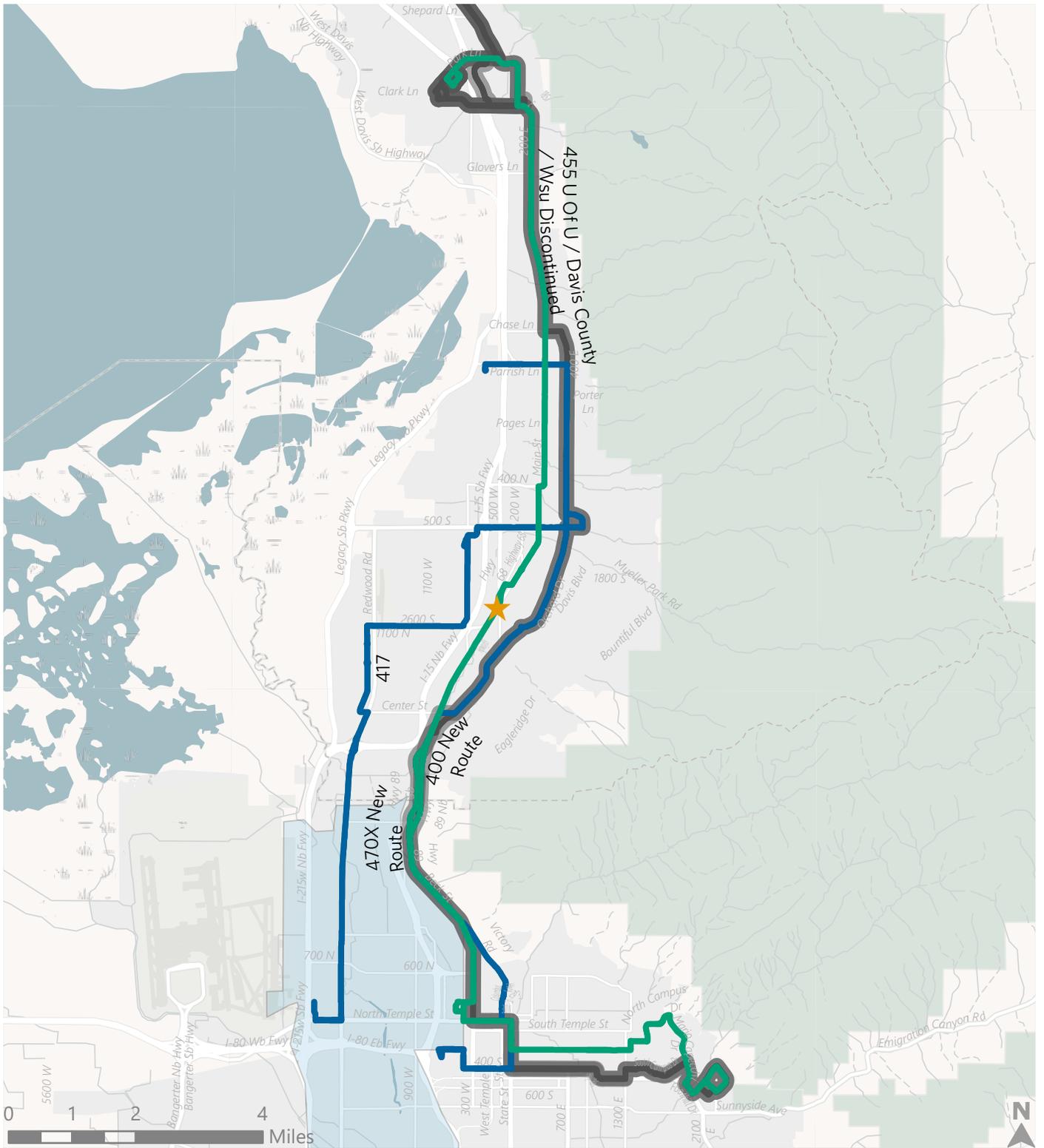
Discontinued Service

The following routes will be discontinued as part of the 2025-2029 Five-Year Service Plan.

- **Route 455**, Davis County East Bench, will be replaced by portions of Routes 400, 417, 470X, and 609.



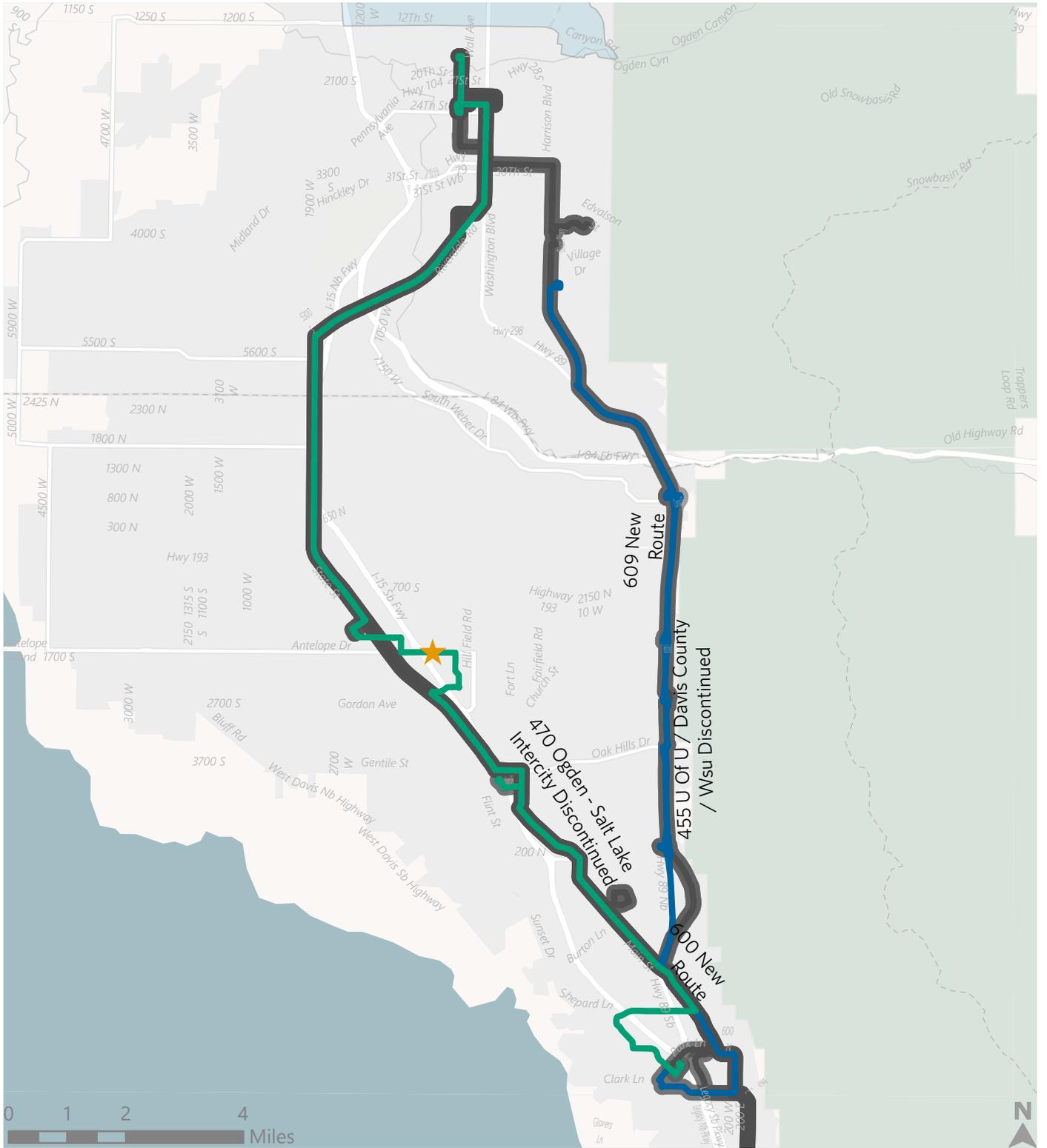
- Purpose: Route 455 has performed poorly, especially in Weber and Davis Counties. With Route 470X, Davis-SLC Community Connector, the connection between the University of Utah and Southern Davis County will be provided by UTA Enhanced Bus. Thus, there is an opportunity to use the resources of Route 455 to connect the East Bench of Davis County using other routes that improve local connectivity.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 470**, Salt Lake/Ogden Intercity, will be replaced by Routes 470X, 400, and 600.
 - Purpose: This route will be discontinued due to implementation of Route 470X, the Davis-SLC Community Connector.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 667**, Station Park Trolley, will be discontinued. Instead, Route 470X will connect to Lagoon pending pedestrian access and updated stops.
 - Purpose: This change is part of the service reorganization which will take place as part of the implementation of Route 470X, Davis-SLC Community Connector.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.



- █ Ski or School
- █ All Day Service
- █ FrontRunner
- █ Frequent All Day Service
- █ Peak Hour Service
- █ S-Line
- █ Discontinued Service
- █ Innovative Mobility Zone
- ★ New Route



Figure 23. April 2028 Davis-Salt Lake Community Connector Service Changes



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 24. April 2028 Ogden and Farmington Service Changes

Salt Lake and Tooele Counties

The following section describes new services added, changes to existing services, or routes discontinued in Salt Lake County in 2028. No changes are proposed to Tooele County services.

New Service Added

The following routes add service to new areas.

- **Route 256**, 5600 West, will provide weekday 15-minute frequency, Saturday 30-minute frequency, and Sunday 60-minute frequency services. It will operate between the 5600 West Old Bingham Highway TRAX Station at roughly 10000 South and the Salt Lake City International Airport via 5600 West. It will provide connections to Salt Lake International Airport, the International Center, and industrial areas in Salt Lake City and West Valley City. Route 256 replaces Route F556, 5600 West Flex, which provided 30-minute service on 5600 West between 2700 South and 7800 South and will be discontinued as part of this Five-Year Service Plan.
 - Purpose: This route is a response to stakeholder and public feedback. It intends to add service to previously unserved areas of western Salt Lake County and is legally required to be implemented for the Mountain View Corridor to be completed. Also, this service change is a carryover from the 2023-2027 Five-Year Service Plan.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.

Realignments or Frequency Changes to Existing Service

The following routes will be modified either in terms of alignment or frequency.

- **Route 126**, South Valley Regional, will change its frequency from every 60 minutes to 30 minutes.
 - Purpose: Route 126, to be initially implemented in 2025 as a new route, is expected to grow in ridership as communities become familiar with the service. It is anticipated that future ridership will justify an increase in frequency on Route 126, further developing the transit market and improving availability and accessibility.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 200**, State Street, will no longer provide service to the Utah State Capitol. Instead, it will provide frequent service connections between North Temple Station and downtown Salt Lake City. The new Route 400, Orchard Drive/State Capitol, will provide service to the Capitol from

Davis County and from Salt Lake Central Station. Route 200 will also be extended south to the Sandy Civic Center Station and then west to South Jordan FrontRunner Station and will replace Route 201 (State Street South). It will provide a 15-minute frequency on weekdays and Saturdays, and a 30-minute frequency on Sundays.

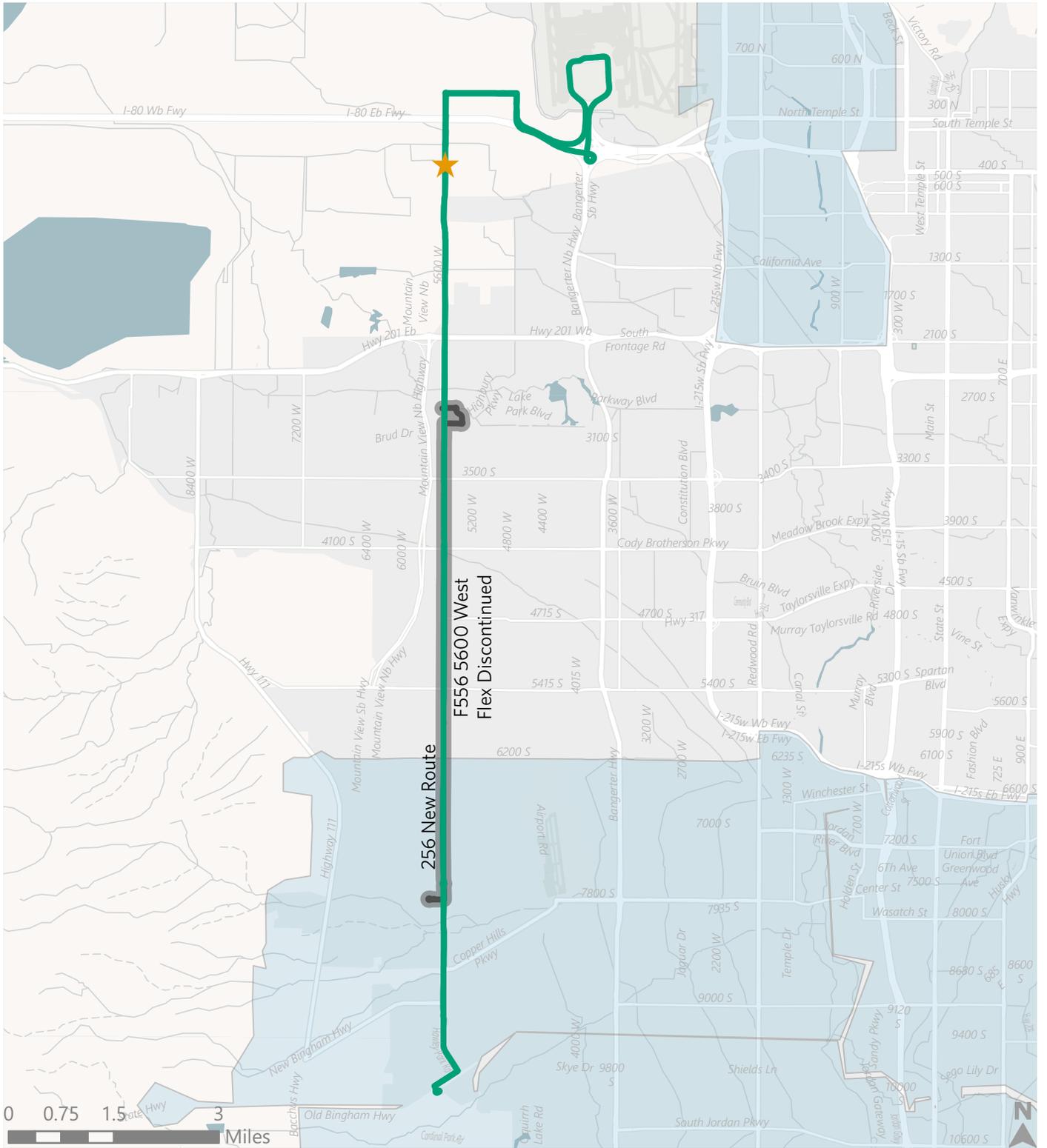
- Purpose: This change will enhance accessibility along the State Street corridor for the transit users that use the corridor for frequent short trips along the entire corridor. It will also improve the service quality and operational efficiency. In addition, UTA's Long Range Transit Plan identifies a BRT project on State Street with 15-minute service and enhanced features such as branded stops, off-board fare collection, elevated platforms, and transit signal priority. The Route 200 changes in this Five-Year Service Plan do not yet propose BRT service but will build a transit market along this corridor for future high-capacity service.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 217**, Redwood Road, will run the Redwood Road corridor for 16 miles, combining Routes 217 and 218 into one line that runs every 15 minutes from North Temple in Salt Lake City to Sandy and South Jordan. This combined route will connect TRAX Red, Green, Blue Lines, and Frontrunner with 15-minute frequency on weekdays, and 30-minute frequency on Sundays.
 - Purpose: This route will enhance accessibility along the Redwood Road corridor for transit users that use the corridor for frequent short trips, connecting TRAX Red, Green, Blue Lines, and Frontrunner. The route will also provide service to areas of interest identified in the Sandy/South Jordan Small Area Transit Study and improve operational efficiency and service quality. In addition, it is currently supportive of transit propensity with future projections.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 219**, Redwood Road (South), will extend south to the Point Transit Hub and increase frequency from 60-minute headways to 30-minute headways.
 - Purpose: This change will provide a connection with the planned Transit Hub at the Point of the Mountain development. Resource availability is expected to allow an increase in frequency.

- After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 871**, State Street Tech Corridor, will be extended to serve the FrontRunner Station at Point of the Mountain and will serve State Street between 12300 South and Sandy Civic Center Station. Route 871 will no longer cover the Lehi area east of I-15. This service will be replaced by an Innovative Mobility Zone expanding service and connecting to Lehi Station. Service will be increased on weekdays from a 60-minute frequency to a 30-minute frequency.
 - Purpose: This section of State Street does not currently have any bus service, so Route 871 will fill a gap in service, providing more frequent, faster service to high-intensity development areas while transitioning under-performing segments to other services. It also sets the stage for further service improvements proposed on State Street in the Long-Range Transit Plan.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.

Discontinued Service

The following routes will be discontinued as part of the 2025-2029 Five-Year Service Plan.

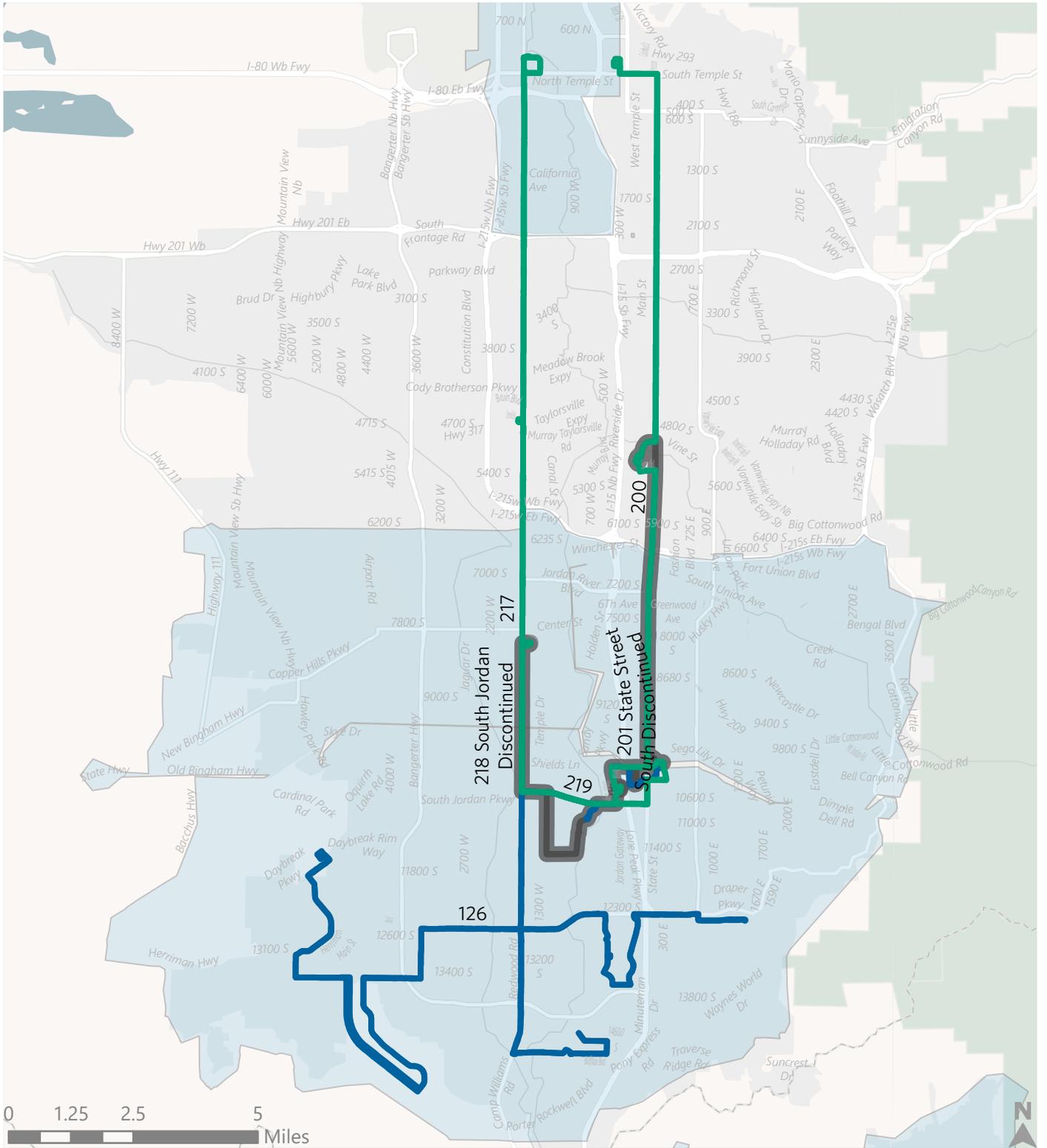
- **Route 201**, State Street South, will be replaced by a 15-minute service on Route 200.
 - Purpose: The route will be combined into Route 200 to become a single continuous line from North Temple to 10600 South in Sandy.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route 218**, Redwood Road Midvalley, will be replaced by Route 217.
 - Purpose: The route will be combined with Route 217 for a single contiguous line on Redwood Road from North Temple to South Jordan.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- **Route F556**, 5600 West Flex, will be discontinued and replaced by Route 256.
 - Purpose: This service will be discontinued due to service redundancy.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- New Route



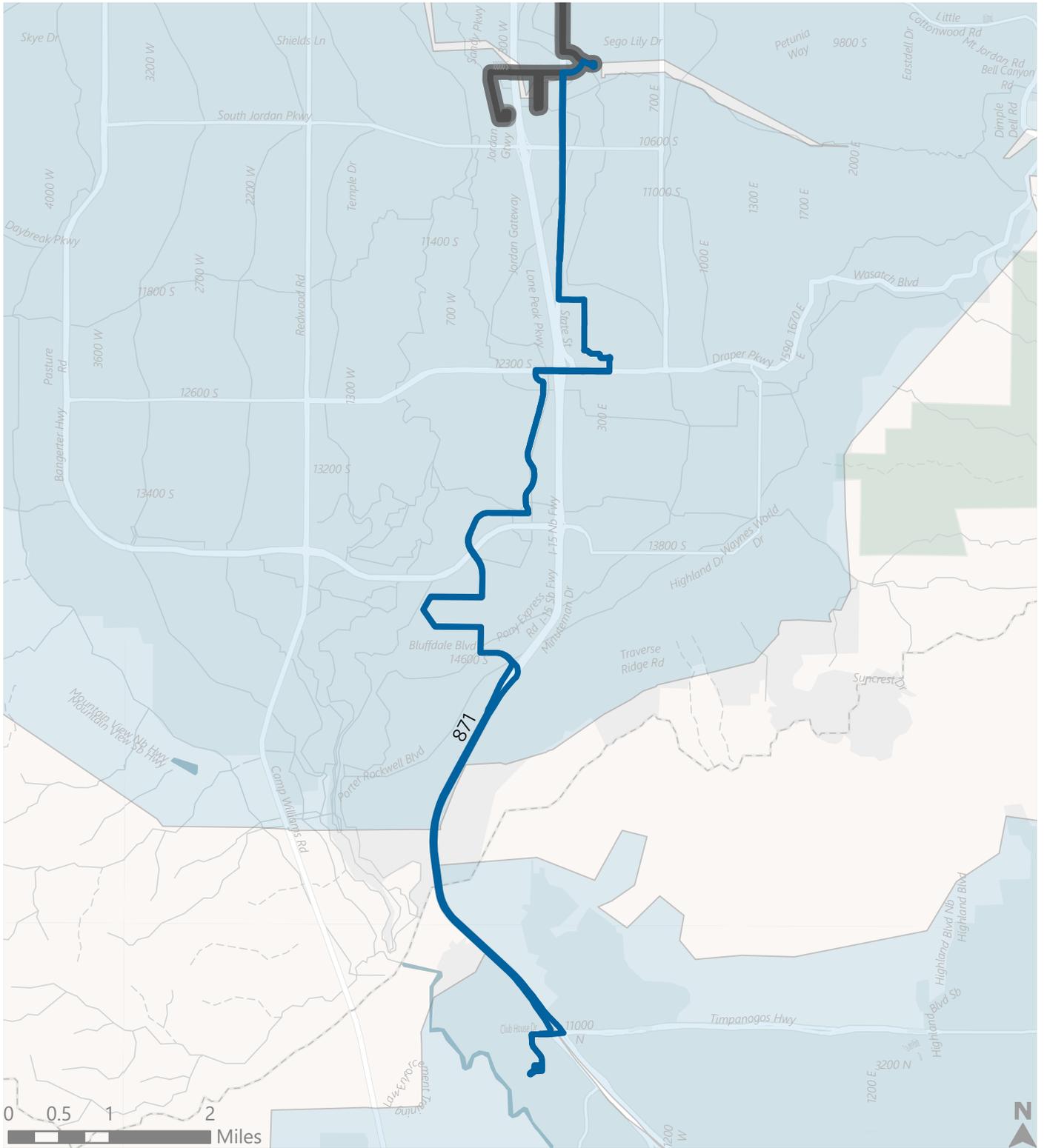
Figure 25. April 2028 5600 West



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 26. April 2028 Sandy and South Jordan Service Changes



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 27. April 2028 Lehi and Sandy Service Changes



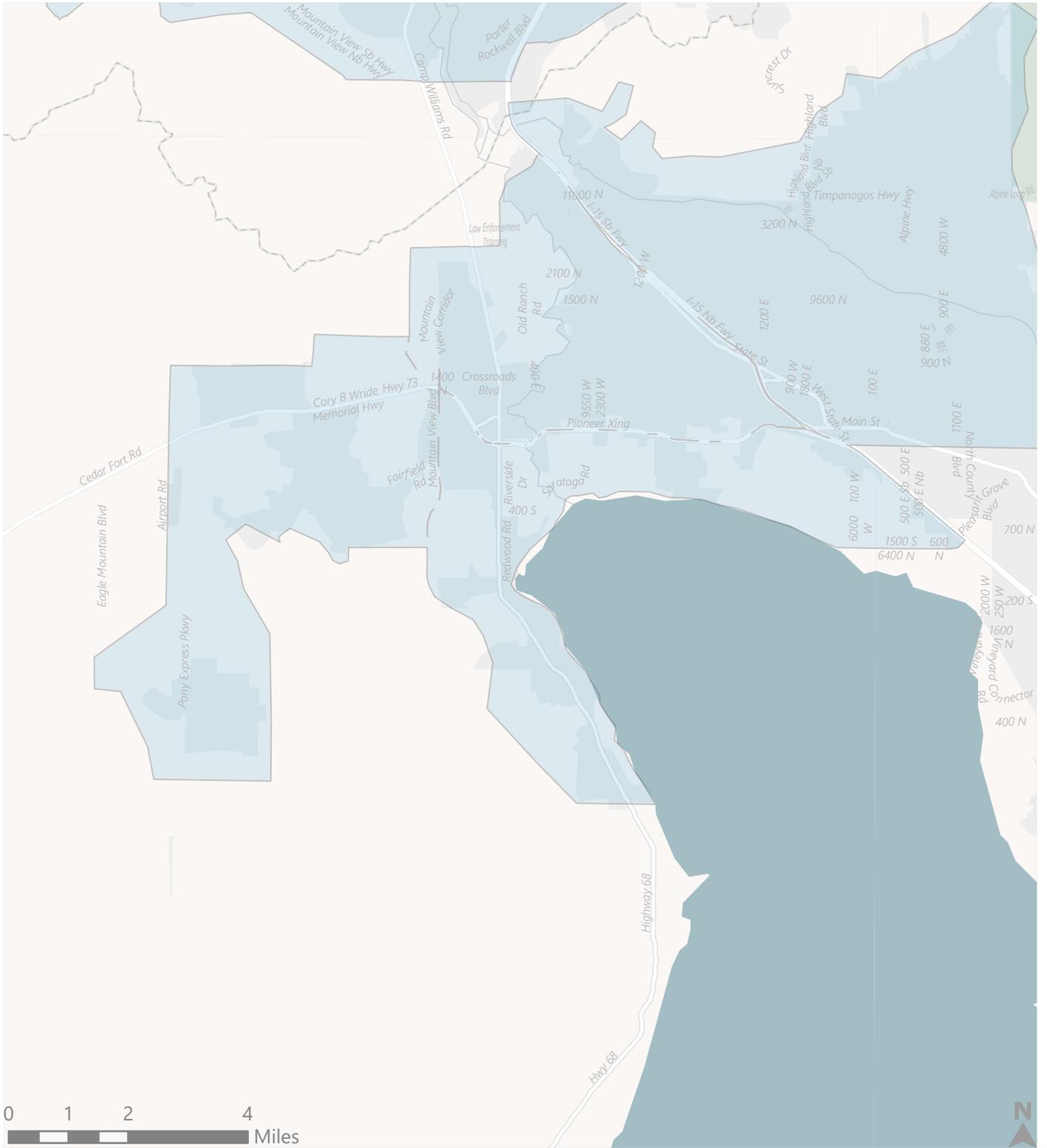
Utah County

The following section describes new services added, changes to existing services, or routes discontinued in Utah County in 2028.

New Service Added

The following routes add service to new areas.

- The **Northwest Utah County Innovative Mobility Zone** will provide On Demand service to Eagle Mountain, Saratoga Springs, and Lehi, including Lehi FrontRunner Station.
 - Purpose: This zone will provide baseline service in a fast-growing part of Utah County.
 - After the public comment period: This zone will be implemented as proposed in the original draft plan. UTA is still determining the appropriate method of service delivery (e.g. UTA On Demand, Uber/Lyft partnership, etc.)



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 28. April 2028 Northwest Utah County Service Changes

April 2029 Service Changes

The following sections identify additions, revisions, or reductions of service proposed for April 2029.

Proposed changes are shown in Figure 29 through Figure 31.

Salt Lake and Tooele Counties

New Service Added

The following routes add service to new areas.

- **Route F264**, Southwest Quadrant Flex, is a new route that serves the industrial area of South Jordan between 5600 West and 7800 South, and the 5600 West Old Bingham Highway TRAX Station via 6400 South and Prosperity Road. The route will be a weekday-only service and have a 30-minute frequency.
 - Purpose: This flex route will support southwest quadrant employment centers and will serve as a precursor route for further expansion along 6400 West as growth occurs. This is also an area of interest for West Jordan City and multiple stakeholders.
 - After the public comment period: No modifications were made to this proposed service change in response to public comment.
- The **West Jordan/Midvale/Cottonwood Heights Innovative Mobility Zone** will provide On Demand service to communities in the middle of the Salt Lake Valley.
 - Purpose: This zone will provide connectivity for residents of these communities accessing major regional transit lines.
 - After the public comment period: This zone will be implemented as proposed in the original draft plan. UTA is still determining the appropriate method of service delivery (e.g. UTA On Demand, Uber/Lyft partnership, etc.)

Realignments or Frequency Changes to Existing Service

The following routes will be modified either in terms of alignment or frequency.

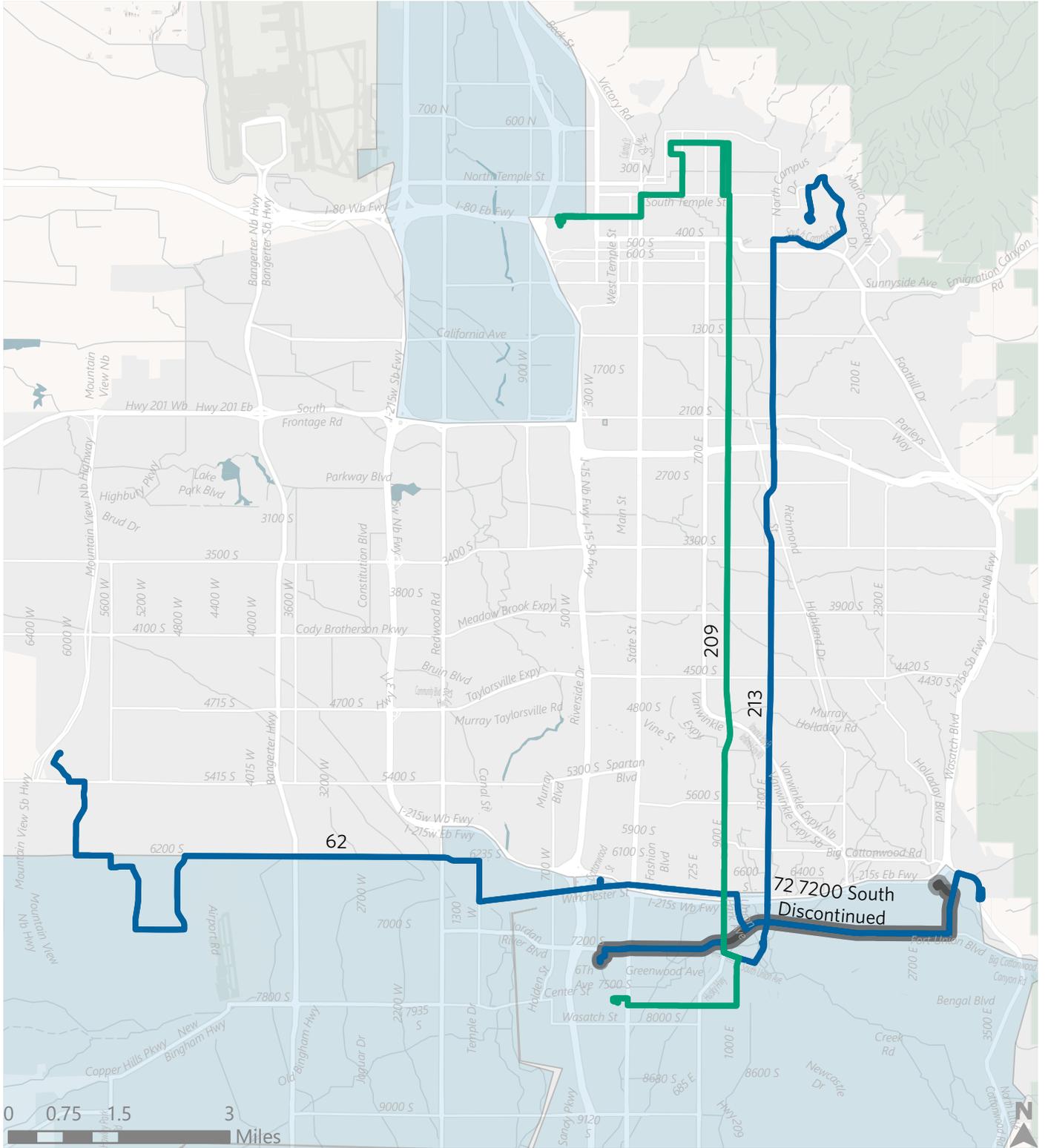
- **Route 62**, 6200 South/7200 South, will be extended to run from Mountain View Corridor to Wasatch Drive via 6200 South, Winchester Street, and Fort Union Boulevard. Route 62 will replace the eastern segment of Route 72 from Union Park Avenue to Wasatch Boulevard with connections to the Fort Union area, Cottonwood Corporate Center, and Mill Rock Office Park. The service frequency will increase to 30 minutes on weekdays and 60 minutes on Saturdays.

- Purpose: This change is part of a reconfiguration to optimize service in the Fort Union area. The extension will improve access to points of interest between Fort Union and Fashion Place.
 - After the public comment period: This extension was added in response to comments received.
- **Route 209**, 900 East/9th Avenue, will extend from Winchester Street further south on 900 East through the Fort Union area, and on 1000 East to 7800 South ending at Midvale Center Station. The frequency on Saturdays will be increased to 15 minutes, while the frequency on Sundays will be increased to 30 minutes.
 - Purpose: This reroute is part of a comprehensive network optimization for the Fort Union area, which will improve connectivity in the area. Frequency adjustments are part of the plan to streamline and standardize UTA's tiers of service.
 - After the public comment period: This extension was added in response to comments received.
- **Route 213**, 1300 East, will reroute from 7800 South in the Fort Union area to serve 7200 South from 900 East to Midvale Fort Union Station.
 - Purpose: This reroute is part of a comprehensive network optimization for the Fort Union, which will improve connectivity in the area.
 - After the public comment period: This extension was added in response to comments received.

Discontinued Service

The following routes will be discontinued in 2029 as part of the 2025-2029 Five-Year Service Plan.

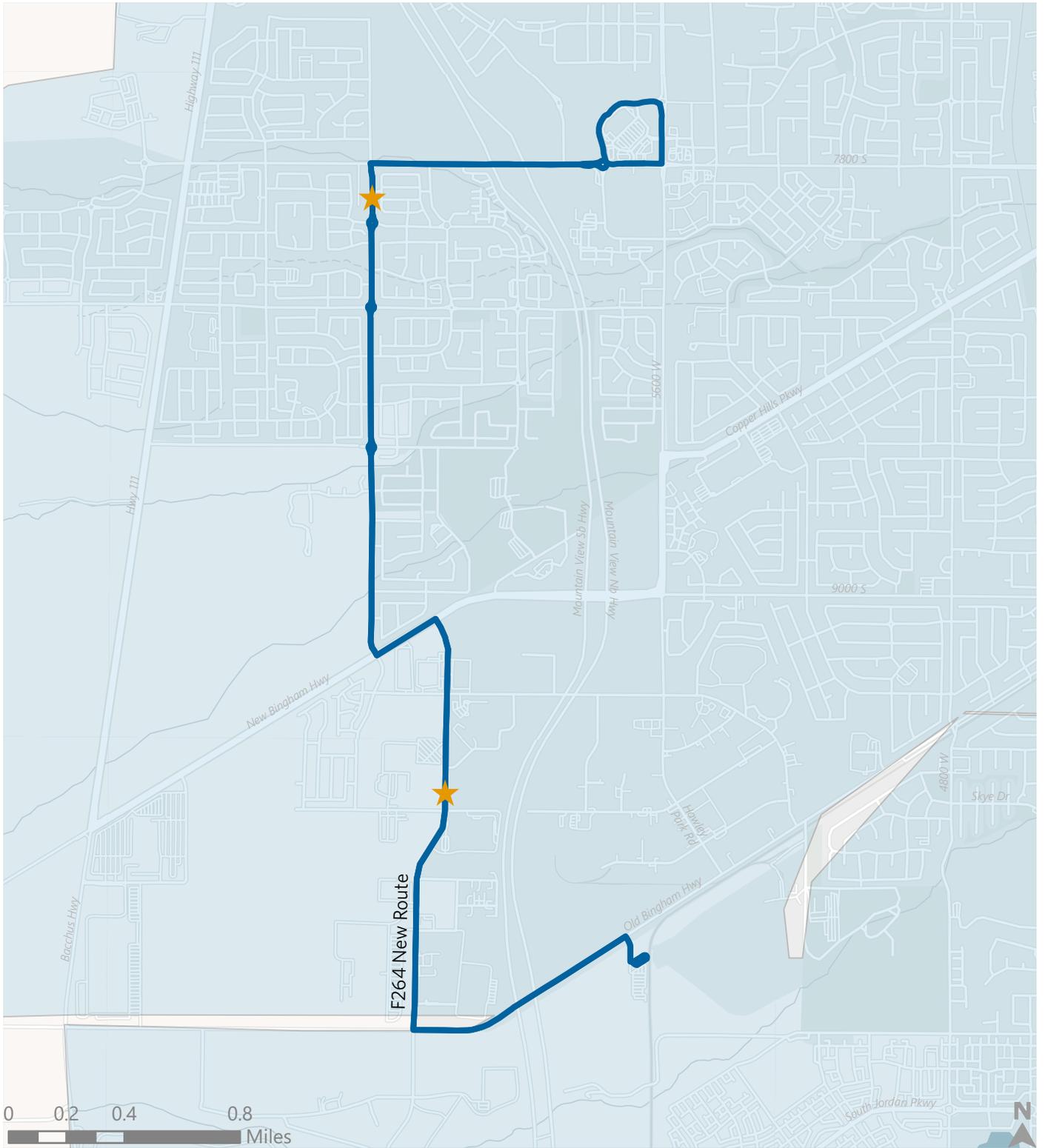
- **Route 72**, 7200 South, will be discontinued and replaced with extensions on Routes 62 and 213.
 - Purpose: This discontinuation is part of a comprehensive reorganization of service in the Fort Union area, which will bring high-frequency service on Route 209 to the core of the area.
 - After the public comment period: This change was proposed in response to comments received.



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 29. April 2029 Fort Union Service Changes



- Ski or School
- All Day Service
- FrontRunner
- Frequent All Day Service
- Peak Hour Service
- S-Line
- Discontinued Service
- Innovative Mobility Zone
- ★ New Route



Figure 30. April 2029 Southwest Quadrant Service Changes

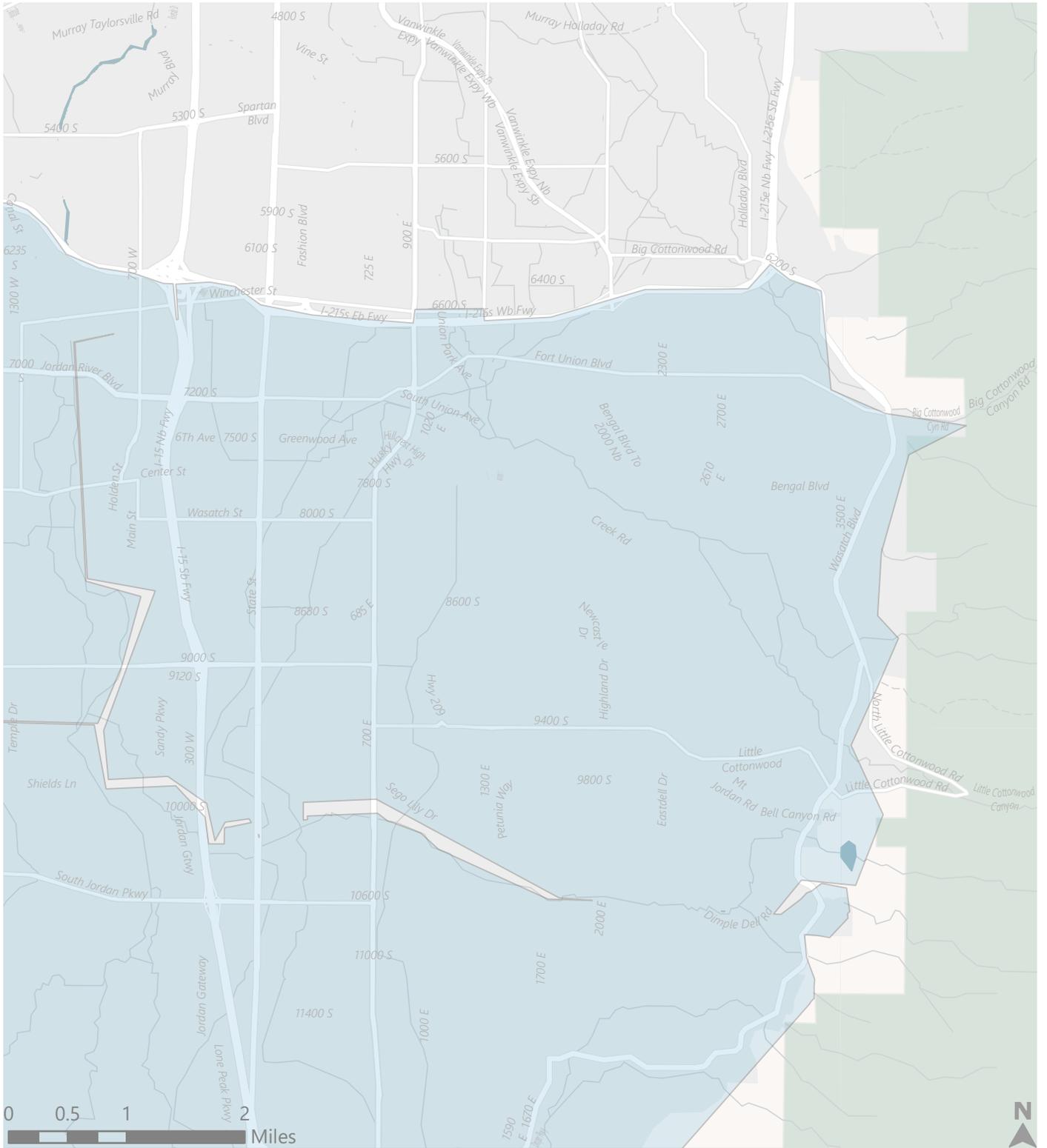


Figure 31. April 2029 West Jordan / Midvale / Cottonwood Heights Service Changes



Changes to Expect in Upcoming Five-Year Service Plans

While this Five-Year Service Plan contains many of the projects captured in Phase One of UTA's Long Range Transit Plan, some projects are further in the future and are not addressed in this plan. They will, however, likely be addressed in future Five-Year Service Plan iterations. These projects could include:

- Upgrade Route 1, Rose Park/South Temple, to enhanced bus service
- Upgrade Route 2, 200 South, to BRT
- Upgrade Route 4, 400 South, to enhanced bus service and increase frequency to 10 minutes on weekdays
- Upgrade Route 9, 900 South, to enhanced bus service
- Upgrade Route 21, 2100 South/2100 East, to enhanced bus service
- Upgrade Route 33, 3300 South, to enhanced bus service
- Upgrade Route 45, 4500 South, to enhanced bus service
- Implement Route 146, Mountain View South Local Route
- Upgrade Route 200, State Street North, to BRT
- Upgrade Route 217, Redwood Road, to enhanced bus service and increase frequency to 10 minutes on weekdays
- Upgrade Route 220, Highland Drive, to enhanced bus service
- Implement Route 298, Lake Avenue Local Route
- Extend Route 750, FrontRunner, to Payson, and add 15-minute service and Sunday service
- Upgrade Route 850, Central Corridor State Street, to BRT
- Implement Point of the Mountain BRT

Exhibit A: Changes in Miles and Hours

Weber, Davis, and Box Elder County				
Change	Hours	Miles	Pullouts	Shifts
April 2025	5,037	(1,205)	(5)	2
New Coverage - Layton Hills Mall	5,037	-1,205	-5	2
April 2026	43,400	800,688	3	23
Ogden Local	37,700	614,871	3	20
Brigham City	5,700	185,817	0	3
April 2027	7,845	107,571	(2)	4
West Haven/Roy/West Ogden	5,782	81,777	-1	3
BDO	2,063	25,794	-1	1
April 2028	90,648	1,111,646	9	44
Davis-Salt Lake Community Connector	90,648	1,111,646	9	44
Total	146,930	2,018,700	5	73

Salt Lake County				
Change	Hours	Miles	Pullouts	Shifts
April 2025	62,570	803,693	19	33
Service Restoration	21,181	264,430	6	9
Added Coverage-South County	22,309	333,389	9	15
New Coverage - North Redwood	19,080	205,874	4	9
April 2026	68,915	1,066,174	16	32
Service Restoration	45,313	644,736	7	22
200 South	13,016	113,596	5	6
Canyon Connections	10,586	307,842	4	4
S-Line	1,992	23,632	1	2
April 2027	143,657	1,796,897	32	70
MVX	48,782	659,174	11	23
West Salt Lake County	94,802	1,121,972	21	47
Hogle Zoo	73	15,751	0	0
April 2028	131,848	1,673,702	14	58
5600 West	67,738	730,409	11	33
Sandy/South Jordan	64,110	943,293	3	25



April 2029	26,443	439,940	5	13
Fort Union	16,680	337,647	2	8
West Jordan/Midvale/Cottonwood Heights	9,763	102,293	3	5
Total	433,433	5,780,406	86	206

Utah County				
Change	Hours	Miles	Pullouts	Shifts
April 2025	34,469	306,675	6	12
South Utah County	20,446	276,057	5	10
West Provo/Airport	10,192	NA	NA	NA
Lehi-Sandy	3,831	30,618	1	2
April 2026	38,558	404,420	8	21
North Utah County	38,558	404,420	8	21
April 2027	12,637	151,366	3	6
East Bay/West Provo	12,637	151,366	3	6
April 2028	16,961	181,218	2	8
Lehi-Sandy	16,961	181,218	2	8
Total	85,664	862,461	17	39



Utah Transit Authority

MEETING MEMO

669 West 200 South
Salt Lake City, UT 84101

Board of Trustees

Date: 10/9/2024

TO: Board of Trustees
THROUGH: Jay Fox, Executive Director
FROM: David Hancock, Chief Capital Services Officer
Nichol Bourdeaux, Chief Planning and Engagement Officer
PRESENTER(S): Patti Garver, Manager of Environmental Compliance & Sustainability
Alex Beim, Manager of Long Range & Strategic Planning

TITLE:

TechLink TRAX Study Update and Locally Preferred Alternative Recommendation

AGENDA ITEM TYPE:

Discussion

RECOMMENDATION:

Informational report for discussion

BACKGROUND:

In early 2023, the Utah Transit Authority (UTA) in collaboration with Salt Lake City (SLC), the University of Utah, Wasatch Front Regional Council (WFRC), and the Utah Department of Transportation (UDOT), initiated the TechLink TRAX Study to analyze an additional light rail service between the Salt Lake City International Airport, Downtown Salt Lake City, and the University of Utah, including a connection into Research Park and a connection into the Granary District that connects into the Ballpark Station. The project also includes proposed operational changes with the Blue and Green TRAX line termini. The study consists of developing project alternatives, evaluating the alternatives relative to the project purpose and need, completing a preliminary environmental analysis of the study corridor, and selecting the study's LPA.

This project is among UTA's top five priority projects, and revenue service is expected before the 2034 Winter Olympics.

Board Policy 3.3 - Capital Development Project Implementation establishes requirements for review and adoption of Capital Project Plans, including Locally Preferred Alternatives.

DISCUSSION:

The TechLink Study Locally Preferred Alternative (LPA) extends from the Salt Lake City International Airport on the west side of Salt Lake City, along North Temple, through the downtown area, and east along 400 S to the University of Utah. This alignment, known as the Orange Line, will utilize both existing and new light rail infrastructure for the implementation of additional light rail service, providing a more direct connection between the airport and Research Park via North Temple, 400 West, 400 South and the University of Utah campus, including a new connection into Research Park. In addition, the LPA includes a realignment of the Red Line south of 400 south at 400 West into the Granary District neighborhood and eventually connecting to the existing Ballpark TRAX Station at 1300 South. The LPA proposes switching the northern termini of the Green Line and the Blue Line with the Green Line ending at Salt Lake Central and the Blue Line ending at the airport. Selection of the study's LPA has included input from the public, stakeholders, Technical Advisory and Steering Committee. Specific agencies involved include SLC Transportation, SLC Redevelopment Agency, University of Utah, WFRC, and UDOT.

The LPA is being presented to the Board of Trustees today as an informational item. A Capital Project Plan, including the LPA and the proposed project funding plan, will be presented to the Board at a later date for consideration and adoption.

ALTERNATIVES:

The Board may request further evaluation of the alternatives or choose an alternative alignment.

FISCAL IMPACT:

UTA has already been selected to receive \$3M in flex funds from WFRC for completion of an environmental document.

The estimated environmental and preliminary design costs for the project are included in the 5-Year Capital Plan.

ATTACHMENTS:

None



Utah Transit Authority

MEETING MEMO

669 West 200 South
Salt Lake City, UT 84101

Board of Trustees

Date: 10/9/2024

TO: Board of Trustees
THROUGH: Jay Fox, Executive Director
FROM: Nichol Bourdeaux, Chief Planning and Engagement Officer
PRESENTER(S): Alex Beim, Manager of Longe Range and Strategic Planning
Dede Murray, Strategic Planner III

TITLE:

UTA Economic Value Study

AGENDA ITEM TYPE:

Discussion

RECOMMENDATION:

Informational item for discussion

BACKGROUND:

In the fall of 2023, UTA, in coordination with transportation partners, engaged the services of Metro Analytics to conduct a study looking at the economic effects of transit within the context of the Utah Unified Transportation Plan (UUTP). Metro Analytics also developed the economic impact study for the UUTP. The study involved analysis of UTA's transit service, quantifying the benefits and economic impacts of today's transit assets and services. The study findings provided information on the cost savings and associated performance outcomes of transit as it currently exists in the UTA service area (2023 data).

DISCUSSION:

Key findings of the reports have been summarized to showcase the economic return of UTA services. This includes impacts on spending, travel efficiencies, transportation savings, job creation, market access, workforce participation, and tax outcomes. Analysis findings were developed into a report with maps, tables, and charts illustrating the contribution that transit makes to the Utah Economy. This report is supported by a Key Findings Summary and a Report Addendum.

ALTERNATIVES:

N/A

FISCAL IMPACT:

The funds to procure this study were approved in the 2023 and 2024 Planning Operating Budgets under account code 6200.50339.

ATTACHMENTS:

- Transportation Efficiency Analysis Report

Comprehensive Economic Impact Assessment of Utah Transit Authority's Service Transportation Efficiency Analysis

May 2024



Prepared for:



Supported by:



Prepared by:



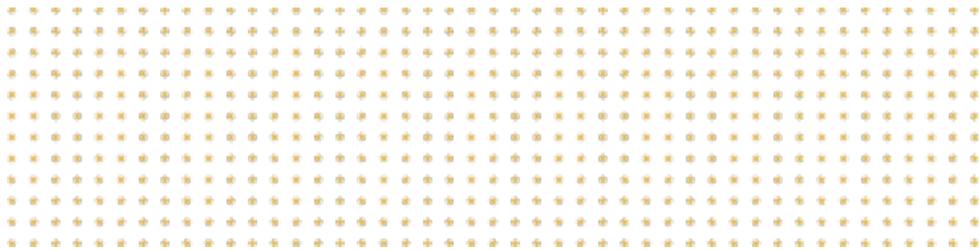
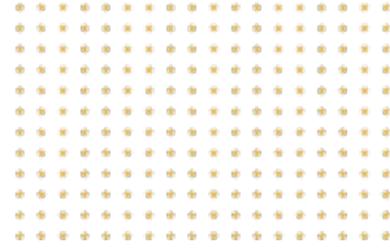


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EXECUTIVE SUMMARY



The Utah Transit Authority (UTA) moves millions of people to home, work, and experiences each year. UTA also generates jobs, spending, travel savings, and tax revenue that benefits individuals, businesses, and the entire state of Utah.

Key findings summary

Utah's Economic Return from UTA Services (2023)

Investing in UTA benefits Utah's economy.

The economic return of UTA services impacts spending, travel efficiencies, transportation savings, job creation, market access, workforce participation, and tax outcomes.

\$1/\$5.11 ROI (value of goods and services produced per dollar of transit outlay)¹

For every \$1 invested in UTA operations and capital, Utah's economy is able to produce a \$5.11 in additional goods and services that could not have otherwise been possible.

\$9.6B a year in goods and services enabled by time and mileage savings

Because of time and mileage savings, Utah generated \$9.6 billion² in additional impact on goods and services that would not have otherwise been produced in 2023. This is the total value of goods and services generated due to time and mileage savings, market access, workforce participation, and UTA spending effects in 2023.

¹ **Business Output Impacts Per Dollar (2023):**

Impacts (Returns) Include: (1) Efficiency Savings: **\$1,889 million** [Yellow Report: Appendix I, [Page xi](#)] + (2) Market Access Gains: **\$12 million** [Yellow Report: Appendix II, [Page xvi](#)] + (3) Paratransit/MAAS/OnDemand: **\$43 million** [Green Report: Executive Summary, Page i, Table 1] + (4) Transit Spending: **\$1,129 million** [Yellow Report: Appendix IV, [Page xxiv](#)] = **\$3,073 million**.

Dollars Spent (Investment) Include: \$602 million of total UTA 2023 outlays (per UTA accounting, December 2023). Impact Per Dollar Spent (Return on Investment): \$3,075 million/\$602 million = **5.10 per dollar of UTA outlay**

² **Sum of Business Output Impacts of:**

(1) Efficiency Savings: **\$1,889 million** [Yellow Report: Appendix I, [Page xi](#)] + (2) Market Access: **\$12 million** [Yellow Report: Appendix II, [Page xvi](#)] + (3) Workforce Participation: **\$6,593 million** [Yellow Report: Appendix III, [Page xx](#)] + (4) Spending Impacts: **\$1,129 million** [Yellow Report: Appendix IV, [Page xxiv](#)] = **\$9,623 million = \$9.6 billion**

\$377M in state, federal, and local tax revenue generated in Utah.³

UTA's service benefits on travel, spending, and business conditions generate an additional \$105 million in local taxes, \$126 million in state taxes, and \$146 million in federal taxes in Utah each year.

79,000 total jobs created⁴

UTA services were responsible for 79,000 direct, indirect, and induced jobs by saving money for drivers, connecting workforce to employers, providing workers access to higher earnings, and spending money on the economy.

10,000 jobs are created because of transportation money saved to Utah households and businesses as a result of UTA's activities

Because transit reduces congestion and other costs for cars and trucks, Utah firms could employ 10,000 more employees⁵.

24,000 workers⁶ depend on transit to access their jobs supporting an additional **31,500** workers⁷ whose jobs otherwise rely on these transit users every day

UTA services connected 24,000 people to jobs. The daily work of these UTA riders supports an additional 31,500 jobs for employees who depend on these transit users.

13,500 jobs⁸ created for UTA employees, suppliers, and other related businesses, earning **\$334M**⁹ and stimulating another **\$1.1B** in sales¹⁰ for other Utah businesses

As an employer, UTA operations, suppliers, contractors, and employees generate 13,500 jobs. These direct and indirect jobs resulting from UTA as an employer generate another \$1.1 billion in total sales for other Utah businesses.

³ Yellow Report, Appendix V: Fiscal Impacts, [Page xxvi](#)

⁴ ***Sum of Jobs Created by:***

(1) Efficiency Savings: **10,000** [*Yellow Report: Appendix I, [Page viii](#)*] + (2) Market Access **78** [*Yellow Report: Appendix II, [Page xiii](#)*] + (3) Transit enabled Jobs **24,000** [*Yellow Report: Jobs Supported by Transit, [Page 40](#)*] + (4) Workforce Participation **31,500** [*Yellow Report: Appendix III, [Page xvii](#)*] + (5) Spending Impacts **13,500** [*Yellow Report: Appendix IV, [Page xxi](#)*] = **79,078 Total Jobs**

⁵ Yellow Report: Appendix I: Transportation Efficiency Benefits and Impacts, [Page viii](#)

⁶ Yellow Report, Jobs Supported by Transit, [Page 40](#)

⁷ Yellow Report, Appendix III: Workforce Participation, [Page xvii](#)

⁸ Yellow Report: Appendix IV: Transit Spending Impacts, [Page xxi](#)

⁹ Yellow Report, Appendix IV: Transit Spending Impacts, [Page xxii](#)

¹⁰ Yellow Report, Appendix IV: Transit Spending Impacts, [Page xxiv](#)

UTA's economic impact benefits all Utahns, whether they ride transit or not.

UTA services reduce road traffic congestion on freeways and in town, benefitting everyone on the road through fewer miles traveled, fewer hours on the road, fewer car expenses, less tax dollars to road repairs, quicker travel times, less stress, access to more employers (and choice in employment), and cleaner air.

\$1/\$1.27 return in transportation savings.¹¹

Because of UTA's impact on reduced roadway travel including congestion, emissions, fuel use, and other cost of driving, Utah's economy (including drivers and others enjoying clean air and other effects) save \$1.27 in transportation costs for every \$1 spent.

\$717M in travel efficiency savings.¹²

The estimated time, travel, maintenance savings, and reduced air quality costs for Utah households and business travel totaled \$717 million in 2023.

\$595M in household income because of household and business travel savings combined.¹³

\$2.9B in household income earned from all effects of transit including reduced travel costs, increased productivity, workforce participation and UTA spending.¹⁴

Economic impact is one part of transit decision-making.

Economic impact is not the only factor in choosing to invest in UTA public transit according to the 2023-2050 Utah Unified Plan. Factoring it in can help prioritize and plan future investment for maximum benefits to Utah's economy.

Data shows UTA has an economic benefit in improving roadway capacity, land value, business and employment opportunities, and investment in infrastructure. In the 2023-2050 Utah Unified Plan, transit services provided by UTA account for over one-third of the entire unified plan's projected economic benefits. Investing in UTA will yield increasing returns for Utah's future economy. If 2023-2050 Utah Unified Plan is fully built out, in 2050, each \$1 invested in transit will enable Utah's businesses and workers to produce \$6.08.¹⁵ worth of goods and services.

¹¹ Efficiency Benefits: **\$717.23 million** [Yellow Report: Appendix I, [Page vi](#)] / **\$565 million** in UTA's capital outlays (aside from Paratransit O&M Costs, per UTA accounting, December 2023) = **1.27 per dollar of UTA outlay**

¹² Yellow Report, Appendix I: Transportation Efficiency Benefits and Impacts, [Page vi](#)

¹³ Yellow Report, Appendix I: Transportation Efficiency Benefits and Impacts, [Page ix](#)

¹⁴ **Sum of Household Income Impacts of:**

(1) Efficiency Savings: **\$596 million** [Yellow Report: Appendix I, [Page ix](#)] + (2) Market Access: **\$4.2 million** [Yellow Report: Appendix II, [Page xiv](#)] + (3) Workforce Participation: **\$1,986 million** [Yellow Report: Appendix III, [Page xviii](#)] + (4) Spending Impacts: **\$334 million** [Yellow Report: Appendix IV, [Page xxiv](#)] = **\$9,623 million**

¹⁵ **Business Output Impacts Per Dollar (2050):** (continued in next page...)

If the transit services in 2023-2050 Utah Unified Plan are fully funded, in 2050, the same \$1 invested in UTA will save Utah's households and businesses \$2.14.¹⁶ in transportation efficiency and market access, or double UTA's current rate of savings (2023).

Data and Methodology

The purpose of this report is to provide data to support early decision-making based on projected economic benefit, using data which otherwise would be available only after investment, or following project completion. To do this, the WFRC-MAG Travel Demand Model v.9.0.0 was used to analyze Wasatch Front's travel characteristics for various transit systems and projects at different investment levels outlined in Utah's Unified Plan 2023-2050. These characteristics include the total number of trips, travel time and distance, congestion levels, and modes of travel, among others. The analysis revealed:

- With higher investments in transit, the model is expected to show decreases in congestion, overall travel time, and emissions, leading to a more efficient transportation system in the Wasatch Front region. Reduced congestion, travel time, and emissions lower travel-related costs for Utah's households and businesses that rely on the transportation system for commuting, obtaining, and delivering goods.
- This efficiency translates into monetary savings, as specified by the US Department of Transportation's Benefit-Cost Analysis Guidance for Discretionary Grant Programs, 2023.¹⁷ These savings benefit Utah's households and businesses due to the more efficient transportation system.
- Households are likely to spend their savings in the local economy on sectors such as entertainment, and groceries, thereby supporting jobs, GDP, and the production of goods and services in the Wasatch Front and, by extension, Utah's economy. Businesses will use their savings from reduced trucking and delivery costs to enhance productivity, generating additional goods and services, which in turn contribute to increased employment, household income, and GDP in both the Wasatch Front and Utah's economies.
- On the other hand, increased transportation system efficiency results in businesses in the region having access to larger labor pool and supplier/customer market, resulting in productivity gains. This again translates to additional production of goods and services, employment opportunities, and value added to the regional economy.

(...continued from previous page)

Impacts (Returns) Include: (1) Efficiency Savings: \$7,335 million [Yellow Report: Appendix I, Page xi] + (2) Market Access Gains: \$2,250 million [Yellow Report: Appendix II, Page xvi] = \$9,585 million at RTP-Priority Needs investment level.

Dollars Spent (Investment) Include: \$1,576 million of total UTA 2050 outlays at RTP-Priority Needs investment level (as per UTA accounting, December 2023).

Impacts per Dollar Spent (Return on Investment): \$9,585 million/\$1,576 million = 6.08 per dollar of UTA outlay

¹⁶ **Benefits Per Dollar (2050):**

Savings (Benefits) Include: (1) Efficiency Savings \$2,268 million [Yellow Report: Appendix I, Page vi] + (2) Market Access Gains \$1,097 million [Yellow Report: Appendix I, Page xv] = \$3,365 million

Dollars Spent (Investment) Include: \$1,576 million of total UTA 2050 outlays at RTP-Priority Needs investment level (as per UTA accounting, December 2023).

Benefits per Dollar Spent: \$3,365 million/\$1,576 million = 2.14 per dollar of UTA outlay

¹⁷ <https://www.transportation.gov/mission/office-secretary/office-policy/transportation-policy/benefit-cost-analysis-guidance>

- These direct, indirect, and induced impacts of transportation savings and market access improvements have been estimated using the IMPLAN¹⁸ economic impact model.
- Please refer to [Page 3](#) for further information on the data and methodology employed for this economic impact study.

¹⁸ <https://implan.com/white-papers/>

Report Summary

Utah’s Unified Plan 2023-2050 envisions a robust transportation system that caters for the transportation needs of Utah’s households and businesses at two investment levels: Priority Needs and Total Needs. The Priority Needs represents the investment level supported by current revenue streams to accommodate future demand with respect to transportation projects of priority as identified by the stakeholders. The Total Needs scenario represents the investment level required to fulfill all the unmet demands identified by the Unified Plan. While there are costs associated with each of these investment levels, the economic benefits and impacts of such investments are not limited to the dollar amount directly spent but diffuse and disseminate throughout the regional economy because of multiplier effects.

Utah Transit Authority (UTA)’s transit system that includes the bus, light rail, commuter rail, On Demand and paratransit services is an integral part of this plan to make the transportation system meet the increasing travel demand of the future. Similar to the entirety of the Unified Plan, the investment made by the UTA over the period of the Unified Plan on the operation, maintenance, and capital projects of its transit system is not limited to the money directly paid by UTA, but also impacts on employment, labor income, and value added (GDP) created. This study analyzes the impacts of UTA’s investment as a tool to both meet the transportation demand of the region, as well as bolster its economic growth. Table 1 presents a summary finding of the total economic benefits and fiscal impacts of the transit investments at different investment levels and transit scenarios.

Table 1: Comparative Economic and Fiscal Impact Outcomes of UTA’s Transit Investment at Different Investment Levels

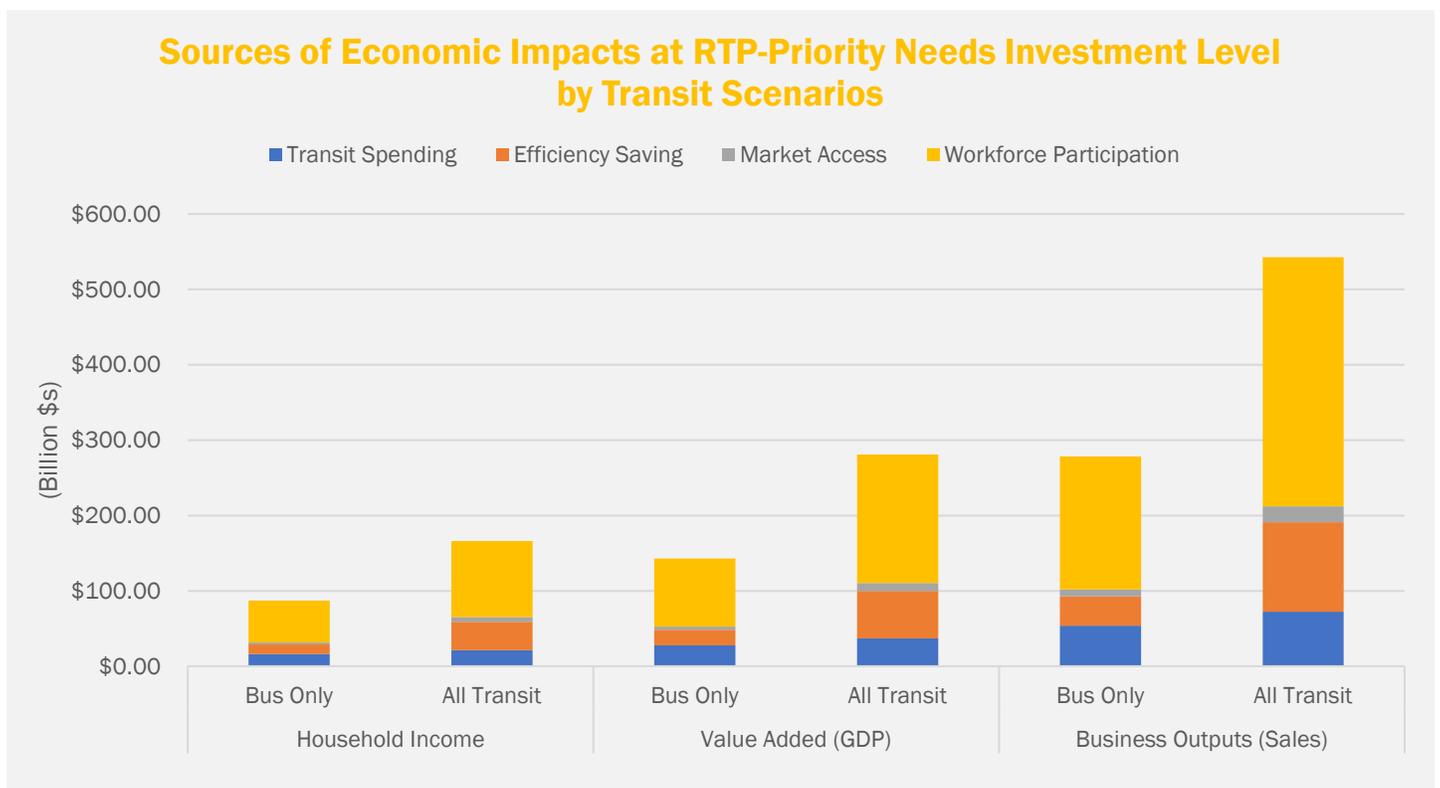
Benefit Scenarios:	Bus-Only Scenario				All-Transit Scenario			
	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
Investment Levels:								
<i>Transit Spending (Billion \$s)</i>	\$16.14	\$17.45	\$26.71	\$29.29	\$22.22	\$24.07	\$36.19	\$47.01
<i>Efficiency Benefits (Billion \$s)</i>	\$6.91	\$8.42	\$12.84	\$12.87	\$24.42	\$24.91	\$41.28	\$38.37
Economic Impacts								
<i>Employment (# of Jobs)</i>	55,453	65,404	119,212	123,442	120,884	128,895	202,221	212,064
<i>Labor Income (Billion \$s)</i>	\$57.34	\$68.62	\$86.99	\$79.93	\$118.94	\$127.85	\$166.11	\$167.99
<i>Value Added/GDP (Billion \$s)</i>	\$97.07	\$112.80	\$142.79	\$133.78	\$201.33	\$216.29	\$280.87	\$284.36
<i>Business Output (Billion \$s)</i>	\$188.28	\$219.79	\$278.47	\$261.82	\$389.67	\$419.18	\$542.63	\$548.99
Fiscal Impacts	\$7.95	\$8.96	\$13.31	\$13.76	\$16.98	\$17.96	\$26.08	\$28.01
<i>Local Taxes (Billion \$s)</i>	\$2.59	\$2.71	\$4.01	\$4.16	\$4.93	\$5.00	\$7.21	\$7.75
<i>State Taxes (Billion \$s)</i>	\$2.92	\$3.14	\$4.66	\$4.82	\$5.82	\$6.00	\$8.69	\$9.34
<i>Federal Taxes (Billion \$s)</i>	\$2.45	\$3.10	\$4.64	\$4.78	\$6.23	\$6.96	\$10.17	\$10.91

Transportation Efficiency

Having a robust transit system will enable Utah’s overall transportation system to be more efficient, resulting in travel cost savings for Utah’s households and businesses. These savings can be used to invest in productivity in other sectors, creating positive indirect and induced impacts on Utah’s economy. These impacts are discussed below and shown in Figure 1 and Figure 2.

According to the Unified Plan: Priority Needs scenario, investing \$26.71 billion in Utah Transit Authority's (UTA) bus system would yield \$12.84 billion in transportation efficiency benefits, create 12,000 jobs, and contribute \$12.32 billion to household income, \$20.65 billion to GDP, and \$38.97 billion to total business output in Utah versus a baseline scenario without any transit services (No-Transit). Allocating a total of \$36.19 billion for both bus and rail transit systems at the Priority Needs level would result in \$41.28 billion in transportation cost savings, generating an additional 39,000 jobs, \$37.53 billion in household income, \$63.20 billion in GDP, and \$118.83 billion in business output over the No-Transit scenario. Similarly, allocating \$29.29 billion to UTA's bus system under the Unified Plan: Total Needs would generate \$12.87 billion in user efficiency benefits, create 10,000 jobs, and contribute \$11.23 billion to household income, \$18.88 billion to GDP, and \$35.56 billion to total business output over a No-Transit scenario. Extending the investment to encompass both bus and rail transit systems, with a total allocation of \$47.01 billion, would result in \$38.37 billion in transportation cost savings, generating an additional 34,000 jobs, \$34.55 billion in household income, \$58.39 billion in GDP, and \$109.54 billion in business output over a No-Transit scenario. Figure 1 and Figure 2 below provide a breakdown of the economic impacts by sources at the RTP-Priority Needs Investment Level for both Bus-Only and All-Transit scenarios.

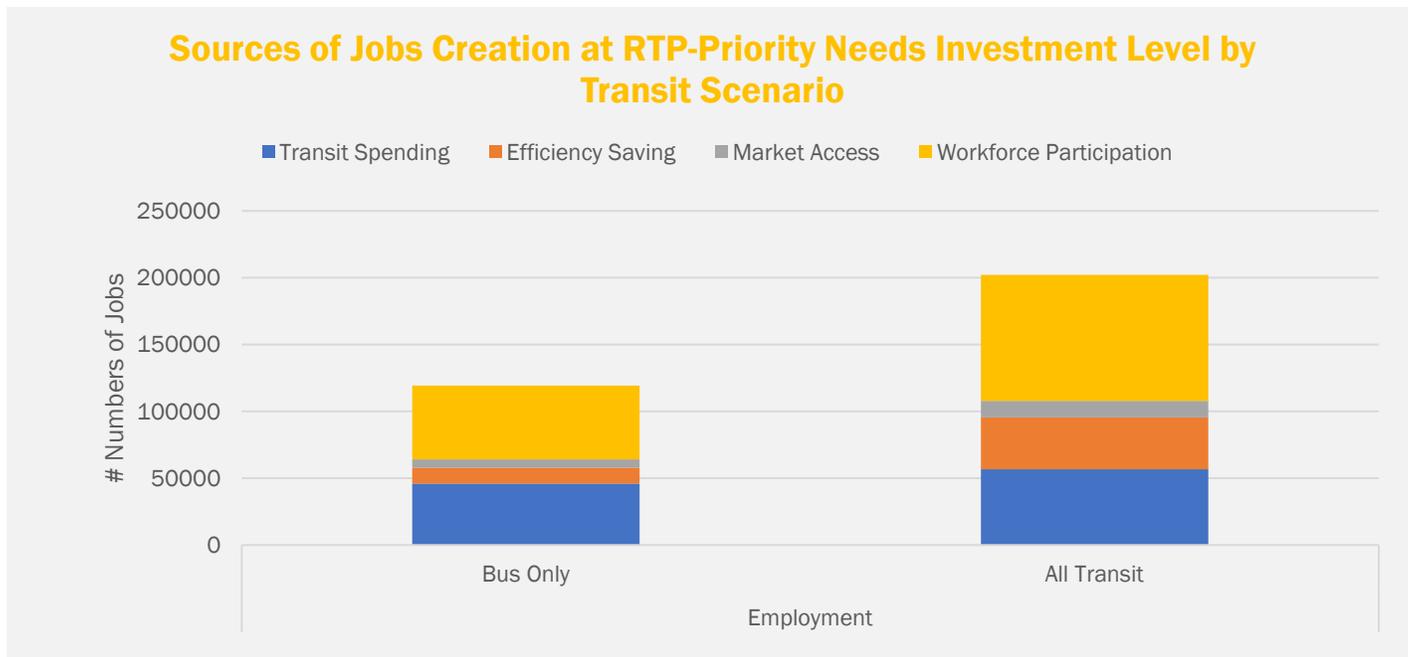
Figure 1: Sources of Economic Impacts at RTP-Priority Needs Investment Level by Transit Scenarios



The apparent decrease in benefits and impacts in the Total Needs scenario compared to the Priority Needs scenario can be attributed to the substantial investment in Utah's roadway system in the Total Needs scenario, which diminishes the extent of Vehicle Miles Traveled (VMT) reduction achieved by UTA's transit system. This is because the increase in funding for UTA's transit system in the Total Needs scenario is not proportionate to the funding increment in the roadway system compared to the Priority Needs scenario. Consequently, the heightened investment in UTA's transit system may not result in higher benefits, as the VMT reduced by the transit system

investment might be offset by the demands on the highway system in the Total Needs scenario. A more in-depth comparison of the economic benefits and impacts of UTA’s transit system in the Unified Plan totals reveals that the transit system not only contributes significantly to the Unified Plan’s benefits but also enhances the return on investment in roadways compared to a scenario without any transit services.

Figure 2: Sources of Job Creation at RTP-Priority Needs Investment Level by Transit Scenarios



Market Access

The increase in labor accessibility from investment only in UTA’s bus system at the Unified Plan’s Priority Needs level would generate an additional 6,000 jobs, \$2.85 billion in household income, \$4.34 billion in GDP, and \$9.36 billion in business output over a No-Transit scenario. On the other hand, investment in both the bus and rail system would generate an additional 12,600 jobs, \$6.47 billion in household income, \$10.25 billion in GDP, and \$21.02 billion in business outputs compared to a scenario without transit. Similarly, the labor access increases due to investment only in the bus system at the level of Unified Plan’s Total Needs would generate an additional 5,500 jobs, \$2.67 billion in household income, \$3.95 billion in GDP, and \$8.30 billion in business output over a No-Transit scenario. On the other hand, investment in both the bus and rail system would generate an additional 9,000 jobs, \$5.01 billion in household income, \$7.69 billion in GDP, and \$15.27 billion in business outputs.

Workforce Participation

Investing solely in UTA's bus system at the Priority Needs level of the Unified Plan is projected to boost workforce participation in the economy, resulting in an extra 55,000 jobs, \$55.73 billion in household income, \$90.31 billion in GDP, and \$176.51 billion in business output compared to a scenario with no transit. Conversely, allocating resources to both the bus and rail systems would yield even more substantial gains, with an additional 94,214 jobs, \$100.72 billion in household income, \$170.73 billion in GDP, and \$330.48 billion in business outputs, in comparison to a transit-absent scenario. Similarly, focusing on the Total Needs level of the Unified Plan, investing

exclusively in the bus system is anticipated to result in an extra 47,350 jobs, \$48.06 billion in household income, \$80.80 billion in GDP, and \$159.17 billion in business output when compared to a No-Transit scenario. Conversely, simultaneous investment in both the bus and rail systems is expected to generate an additional 94,080 jobs, \$100.66 billion in household income, \$170.63 billion in GDP, and \$330.28 billion in business outputs, showcasing the considerable benefits associated with a comprehensive transit strategy.

Transit Spending

The data in Figure 1 and Figure 2 above show that at the Unified Plan's Priority Needs level, direct spending on UTA's bus system operations, maintenance, and capital outlays alone would result in 46,000 additional jobs, \$16.38 billion in household income, \$27.49 billion in GDP, and \$53.62 billion in business output compared to no transit investment. Conversely, investing in both the bus and rail systems would generate even greater impacts, including 57,000 additional jobs, \$21.39 billion in household income, \$47.65 billion in GDP, and \$72.30 billion in business output versus a No-Transit scenario. Directing UTA's operation, maintenance, and capital outlays to the bus system at the Unified Plan's Total Needs level would yield an additional 60,500 jobs, \$17.97 billion in household income, \$30.15 billion in GDP, and \$58.79 billion in business output over no transit investment. Meanwhile, opting for investment in both the bus and rail systems at this level would generate an additional 75,000 jobs, \$27.78 billion in household income, \$47.65 billion in GDP, and \$93.90 billion in business outputs versus a No-Transit scenario.

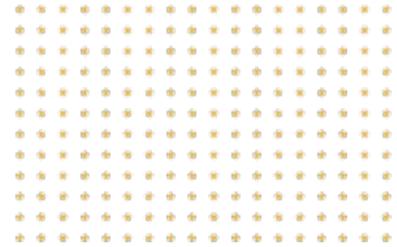
Fiscal Impacts

At the Unified Plan's Priority Needs level, UTA's transit investment in operation, maintenance, and capital projects is estimated to generate a cumulative amount of \$13.31 billion and \$26.08 billion in local, state, and federal taxes (at current tax rates) in the Bus-Only and All-Transit scenarios respectively as a result of direct spending, transportation efficiency, and market access gains. Similarly, the transit investment at the level of Unified Plan's Total Needs, the transit investment is expected to generate \$13.76 billion and \$28.00 billion in local, state, and federal taxes (at current tax rates) in the Bus-Only and All-Transit scenario.

Land Value Sensitivity

Land value, especially for single-family and non-residential plots, exhibits a gradual correlation with investments in the transit system. The positive effects of transit investments on land value extend beyond the parcels directly adjacent to transit lines. In the region where land parcels face heightened accessibility challenges due to traffic congestion and a lack of transit options, the impact of transit investment is most significant, leading to congestion relief and consequent increases in land value. The value of multi-family parcels, however, is not as responsive to the enhanced accessibility resulting from transit investment, as these values are more sensitive to other factors. However, the rental rates of multi-family residential units may exhibit greater sensitivity to transit investments, although a more thorough investigation is needed for definitive conclusions.

1. INTRODUCTION



Overview

Utah's Unified Plan 2023-2050 encompasses a twenty-eight-year outlook for state transportation facilities across multiple modes of transportation. Within this framework, the Utah Department of Transportation (UDOT) takes the lead in preparing the Long-Range Transportation Plan (LRP) for rural areas, while in urban regions with populations exceeding 50,000 residents, the Metropolitan Planning Organizations of greater Logan (CACHE) and Salt Lake City (WFRC), and the counties of Summit, Utah, and Wasatch together (MAG), and Washington County (DMPO) craft their respective Regional Transportation Plans (RTPs). These plans collectively chart a course for transportation improvement projects, guided by federal regulations and refreshed every four years to meet the evolving transportation needs of the state.

Utah's transit system, particularly the ones managed by the Utah Transit Authority (UTA), stands as a linchpin in this comprehensive transportation strategy, catering to the diverse travel demands of the urbanized areas within the state. In 2022 alone, UTA's transit system facilitated over 31.5 million unlinked passenger trips with 11,244 vehicles operated in maximum service, covering an extensive 37.6 million vehicle revenue miles of travel and clocking in over 2.2 million vehicle revenue hours of travel in Wasatch Front region¹⁹, the largest metropolitan region within Utah. By all measures, UTA's transit system is a pivotal asset for the state, particularly as the state expects tremendous future economic growth.

This report delves into the economic repercussions of three distinct investment levels and two distinct transit service scenarios for UTA's transit system, each described below:

Investment Levels

- **Maintain-Existing-System:** This scenario outlines the investment required to maintain the current transit system status, focusing on basic preservation, amounting to \$17.42 billion for operation and maintenance, with additional \$4.80 billion allocated for preserving system at the State of Good Repair (SGR).
- **Business-As-Usual:** This scenario outlines the investment required to maintain the current transit system status, amounting to \$17.42 billion, with additional funds of \$6.65 billion that have already been secured for system expansion projects.
- **RTP-Priority Needs (also referred to as Constrained Funding):** This scenario aligns investments with current revenue streams to cater to future demand. It encompasses \$22.79 billion for basic preservation and an additional \$13.40 billion for crucial system expansion, aligning with the Utah's Unified Plan: Priority Needs.

¹⁹ National Transit Database (NTD) <https://www.transit.dot.gov/ntd-ntd-data>

- **RTP-Total Needs** (also referred to as **Unconstrained Funding**): This investment scenario represents the investment level recommended by the Unified Plan at the Total Needs level. It emphasizes not only basic preservation with an investment of \$24.76 billion but also substantial system expansion investment of \$22.25 billion. This visionary approach aims to meet the comprehensive and evolving needs of Utah’s dynamic transit landscape.

Transit Service Scenarios

- **No-Transit Service:** This scenario imagines a Utah without any transit services, providing a baseline for assessing the pivotal role of transit in the state's mobility and economic landscape.
- **Bus-Only Service:** This scenario highlights the economic and mobility benefits of bus transit, showcasing their significance in Utah’s transportation network.
- **All-Transit Service:** This scenario represents a comprehensive vision, encompassing bus and rail options, exemplifying the transformative potential of a diversified transit system in enhancing Utah’s economic prosperity and mobility.

Objective and Scope

The objective of the Economic Impact Analysis of UTA’s Transit Investment report is to comprehensively assess the economic contributions of UTA transit services to the economy of the Wasatch Front region and, in broader context, Utah. This analysis aims to isolate and quantify the monetary, fiscal, and broader impacts that transit systems have in the regional economy. It specifically focuses on the role of transit in improving overall efficiency of the transportation system, increased workforce participation in the economy, and expanded labor force pool for the businesses, and property value sensitivities, providing valuable insights for informed decision-making.

The economic impact analysis encompasses the following elements, elucidating the significance of transit investments and their multifaceted impact on Utah’s economy:

- **Transit Contribution and Efficiency:** Analyze and showcase the economic and fiscal benefits of transit in Utah, comparing scenarios with and without transit to highlight its contributions and efficiency in reducing costs and boosting the state's economy through federal funding, cost savings, and tax revenue.
- **Business Market Access:** Investigate how transit increases the labor pool for Utah’s employment locations and expands job opportunities for households, and assess its impact on productivity, industry outputs, household earnings, and broader economic metrics.
- **Workforce Participation:** Investigate the number of work trips enabled by the availability of transit which would not have been possible without transit. Also analyze the impacts of this increased workforce participation within the economy.
- **Impacts of Direct Spending:** Analyze the broader economic impacts of the direct spending on UTA’s transit system through the purchase of goods and services for operation and maintenance, as well as for execution of capital projects.

- **Property Value Sensitivity Analysis:** Examine how transit affects property values by considering access to labor and consumer markets. Estimate the impact of changes in transit access on property values for various property types and density levels, and provide profiles of scenarios where transit significantly influences property values and associated tax revenues.

While this report focuses only on the efficiency benefits and related economic impacts, future reports will discuss the role of transit for business attraction, the role of paratransit and ACES (Autonomous, Connected, Electric and Shared services) will be analyzed further in the subsequent reports.

Methodology

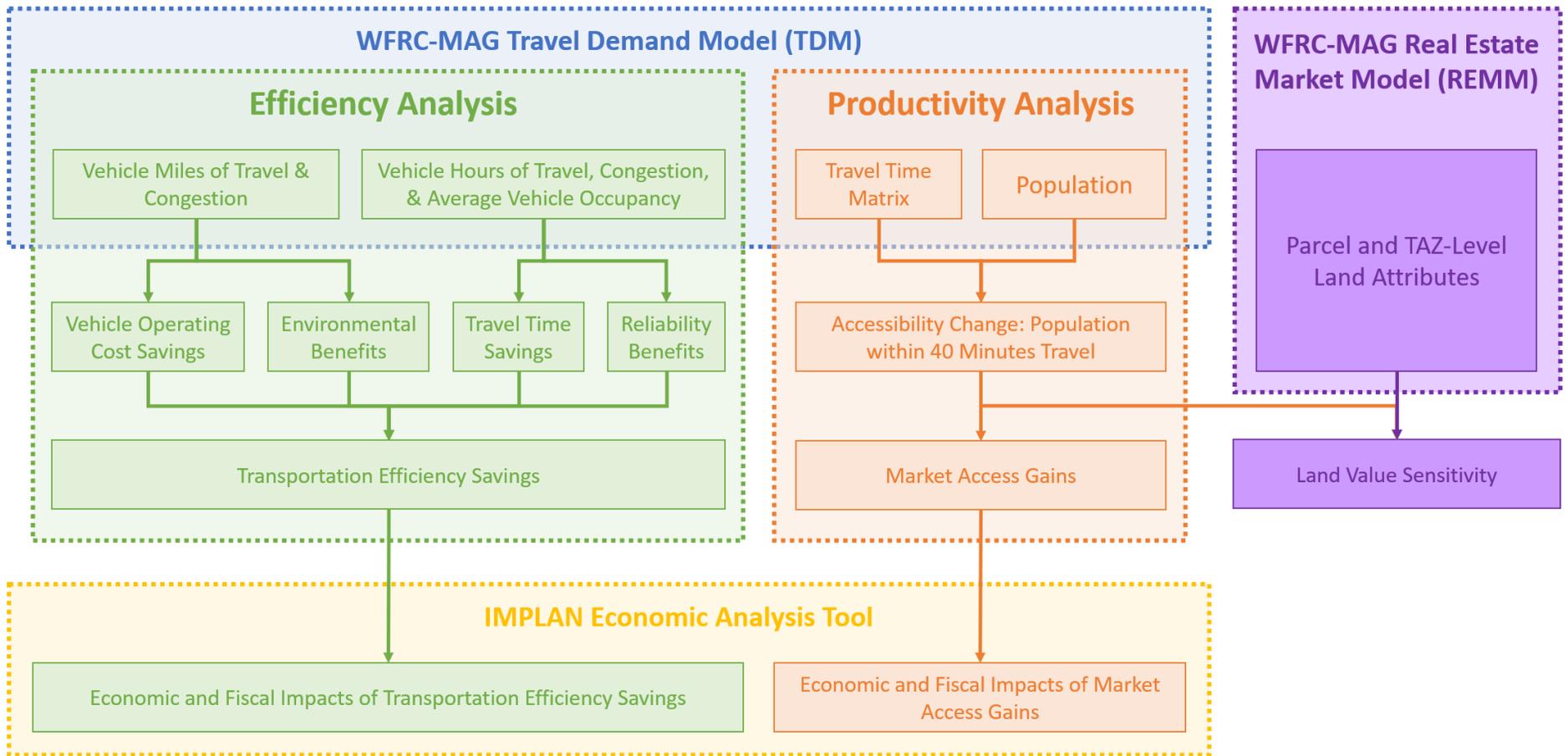
The methodology employed in this analysis is displayed in Figure 3 below. It is systematic and rigorous, offering a structured approach to evaluate transportation benefits and the direct, indirect and the induced economic impacts of those benefits. Central to this methodology is the calculation of user costs, which represent the monetary equivalent of travel demand characteristics. For instance, the user vehicle operating cost would be calculated based on the total vehicle miles of travel and the per-mile vehicle operating cost by modes of travel, the user value of time cost would be calculated based on the total vehicle hours of travel and the per-hour value of time of the riders, etc. This computation incorporates fixed factors such as the per-mile vehicle operating costs and per-hour value of time. These are derived from authoritative sources, including the *Benefit-Cost Analysis Guidance for Discretionary Grant Programs 2023*²⁰ and other relevant references, effectively capturing the financial burdens experienced by individuals and businesses in their transportation activities.

Furthermore, the user or societal benefits of various transit scenarios are assessed by comparing user costs across different investment levels in the Bus-Only and All-Transit scenarios with respect to the No-Transit scenario. This calculation enables us to discern the cost savings and efficiency enhancements associated with transit investments, facilitating an evaluation of potential returns on these investments. Our methodology also extends to the evaluation of expected benefits for Utah’s businesses and households. Specifically, we anticipate that Utah’s businesses will experience direct, indirect, and induced benefits from savings associated with truck transportation, while the state's households are expected to benefit from the savings in auto commute trips.

Additionally, a comprehensive assessment of Market Access gains for each scenario is conducted by examining variations in accessibility, particularly the number of populations within a 40-minute congested commuting distance from each Traffic Analysis Zone (TAZ) compared to the No-Transit scenario. This perspective provides valuable insights into the impact of transit improvements on regional accessibility.

²⁰ Benefit-Cost Analysis Guidance for Discretionary Grant Programs, 2023 <https://www.transportation.gov/mission/office-secretary/office-policy/transportation-policy/benefit-cost-analysis-guidance>

Figure 3: Schematic Economic Impact Analysis Methodology



To estimate the broader economic impacts of transportation benefits, the analysis utilizes the IMPLAN²¹ economic modeling tool. This modeling approach accounts for the direct, indirect, and induced effects of transportation enhancements on various economic indicators, including jobs, labor income, value added, outputs, and revenue collection. Employing this approach provides a comprehensive understanding of the potential economic implications of transit investments on Utah’s economy, aiding informed decision-making in transportation planning and infrastructure investment.

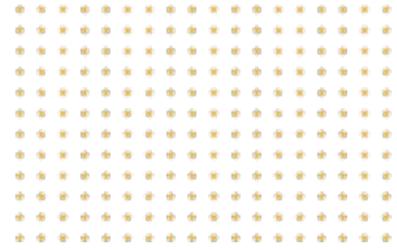
Data

This analysis relies on an extensive travel demand output summary dataset encompassing multiple transportation system use characteristics from the WFRC-MAG Travel Demand Model v9.0.0 made available by the Wasatch Front Regional Council (WFRC). These essential metrics include vehicle and person trips, vehicle and person miles of travel, vehicle and person hours of travel, and average vehicle occupancy. The dataset is meticulously categorized to provide insights across various dimensions of travel in the region. Time of day is a key dimension, with data segmented into morning, midday, afternoon/evening, and night, allowing for a comprehensive understanding of diurnal travel patterns. The dataset also covers diverse transportation modes, including auto (for work and non-work purposes), truck (categorized by weight as light, medium, and heavy), public transit (bus and rail), and non-motorized transportation. This segmentation facilitates a hyper-detailed examination of the movement of individuals and goods in the region. Furthermore, the dataset considers different investment levels, encompassing scenarios with maintaining existing system (Absolute No Build), business as usual (No Build), RTP-Priority Needs (aligned with Unified Plan: Priority Needs), and RTP-Total Needs (following Unified Plan: Total Needs). This diverse dataset forms the foundation for the analysis, providing the necessary information to assess the financial and operational implications across various investment scenarios and transportation modes.

The financial quantification of the user benefits has been carried out using the per-unit cost of travel (fixed factors) provided in Appendix A of the Benefit-Cost Analysis Guidance for Discretionary Grant Programs 2023.

²¹ Economic Impact Analysis for Planning <https://implan.com/>

2. TRANSPORTATION EFFICIENCY



Investments in transit infrastructure yield a wide range of transportation efficiency benefits and can fundamentally transform the way people and goods move within a region. These investments enhance transit system capacity, alleviating traffic congestion and resulting in reduced travel times, fuel consumption, and emissions. Improved fuel efficiency and reduced vehicle wear and tear lead to significant cost savings for transit operators and users alike. Notably, time savings resulting from efficient transit options enhance productivity and elevate quality of life by minimizing time spent commuting. Additionally, reliable and predictable transit systems contribute to reliability savings by minimizing delays and disruptions. Safety improvements, active transportation benefits, and environmental sustainability further highlight the comprehensive benefits of investing in transit infrastructure.

Transportation Efficiency Savings

This section analyses the societal benefits of transit investments in Utah’s transit system, considering different investment levels and transit scenarios. Figure 4 illustrates a clear trend where societal benefits increase with higher investment levels. The Bus-Only scenario delivers substantial benefits, but the All-Transit scenario offers even greater contributions. Additionally, a subtle reduction in efficiency benefits and savings becomes evident as investment levels progress from RTP-Priority Needs to RTP-Total Needs. This reduction is attributed to the law of diminishing returns, as the unconstrained investment in roadway projects would attract more vehicle users back to the roads, increasing total vehicle miles of travel. This influx of road users would partially offset the transit ridership increase and the resulting societal benefits.

Additionally, Table 2 illustrates the increase in total user savings with higher investment levels and an expanded range of transit options. Notably, the majority of these benefits are realized by non-transit users, as transit eases traffic congestion and shortens travel times by reducing vehicle miles traveled on roadways. This would then result in less fuel consumption, reduced travel time, reduced time spent stuck on traffic, and less tailpipe emissions resulting in vehicle operating cost savings, travel time and reliability savings, and environmental benefits enjoyed by the entire region.

Figure 4: Comparison of Total User Benefits of Transit Investment in All Scenarios

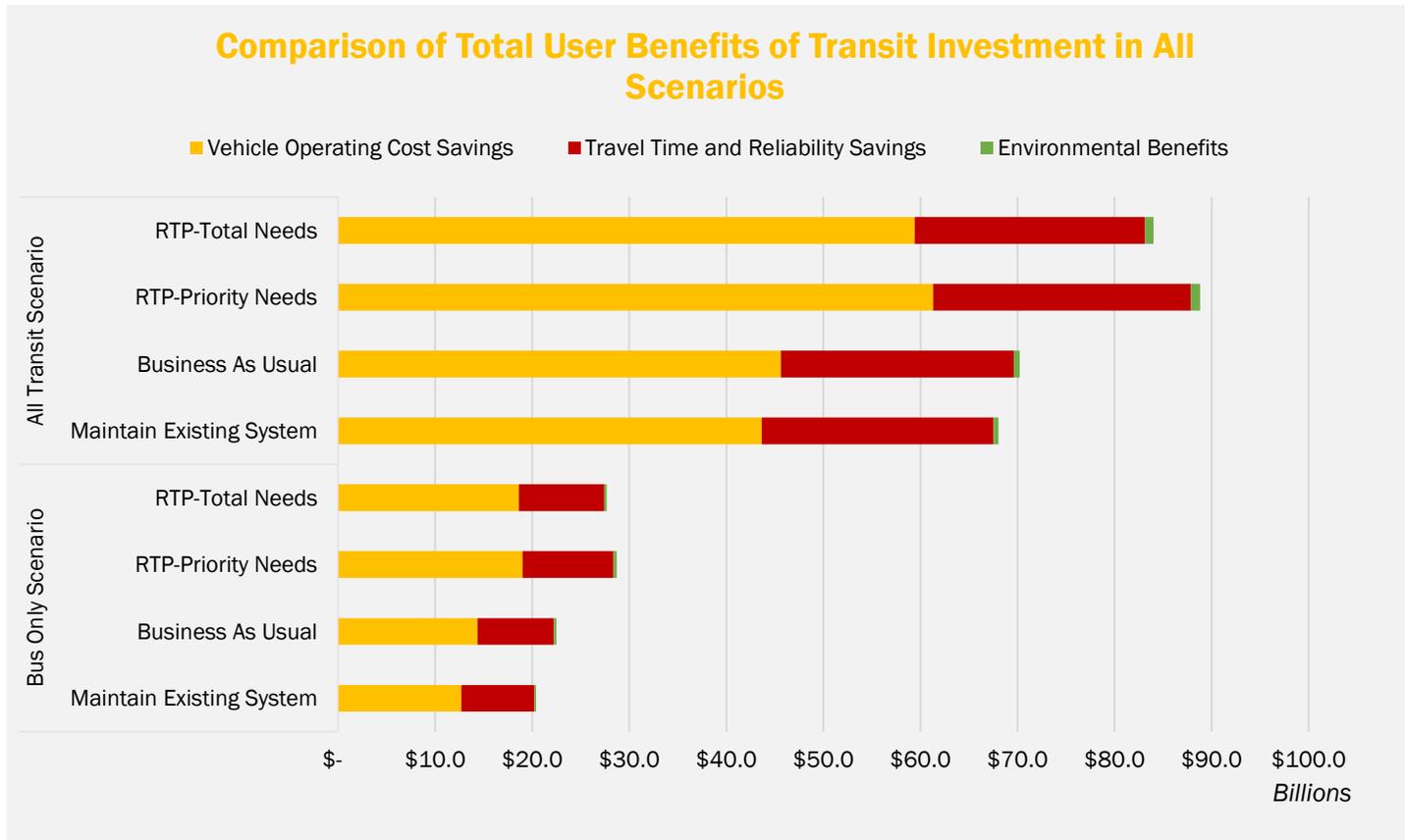


Table 2: Transportation Efficiency Savings for Non-Transit Users in the UTA Service Region

Benefit Scenarios:	Bus-Only Scenario (in Million \$s)				All-Transit Scenario (in Million \$s)			
	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
Total Efficiency Savings (Undiscounted)	\$20,395.0	\$22,477.5	\$28,712.0	\$27,672.2	\$68,111.8	\$70,227.6	\$88,807.2	\$84,005.7
Vehicle Operating Cost Savings	\$12,694.9	\$14,354.4	\$18,992.7	\$18,612.9	\$43,663.4	\$45,607.4	\$61,290.4	\$59,392.8
<i>Auto Work</i>	\$5,522.2	\$6,034.3	\$8,488.4	\$8,484.4	\$20,595.4	\$21,008.8	\$29,564.4	\$29,423.0
<i>Auto Non-Work</i>	\$5,101.8	\$5,791.0	\$7,127.7	\$7,124.1	\$17,092.6	\$18,034.8	\$22,159.9	\$21,269.0
<i>Truck</i>	\$2,070.9	\$2,529.1	\$3,376.6	\$3,004.4	\$5,975.4	\$6,563.8	\$9,566.1	\$8,700.8
Travel Time and Reliability Savings	\$7,502.9	\$7,885.3	\$9,402.8	\$8,787.2	\$23,868.0	\$23,991.6	\$26,592.0	\$23,763.3
<i>Auto Work</i>	\$2,308.0	\$2,315.0	\$3,161.3	\$2,970.2	\$8,764.8	\$8,650.7	\$10,166.5	\$9,183.1
<i>Auto Non-Work</i>	\$3,539.6	\$3,704.0	\$4,257.4	\$4,089.8	\$9,729.6	\$9,857.4	\$10,536.5	\$9,631.6
<i>Truck</i>	\$1,655.3	\$1,866.3	\$1,984.1	\$1,727.2	\$5,373.6	\$5,483.5	\$5,889.0	\$4,948.6
Environmental Benefits	\$197.2	\$237.8	\$316.5	\$272.1	\$580.4	\$628.6	\$924.8	\$849.6
<i>Auto</i>	\$120.4	\$130.0	\$185.1	\$183.1	\$406.8	\$422.9	\$574.2	\$570.9
<i>Truck</i>	\$76.8	\$107.8	\$131.4	\$89.0	\$173.6	\$205.7	\$350.6	\$278.7

The above table only compares the transportation efficiency savings of the non-transit users that are existing in the system regardless of presence of the transit. However, when the addition of transit users is considered in the two transit scenarios, an apparent reduction in benefits occurs when introducing new transit modes, such as bus transit

in the Bus-Only scenario and rail transit in the All-Transit scenario. This is because some trips that would not have taken place in the No-Transit scenario without the presence of transit now occur, imposing additional travel time and emissions costs on the system. The efficiency cost of having transit services in the regional transportation system for all scenarios and investment levels is presented in Table 3.

Table 3: Transportation Efficiency Costs for Non-Transit Users in the UTA Service Region

<i>Benefit Scenarios:</i>	Bus-Only Scenario				All-Transit Scenario			
<i>Investment Levels:</i>	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
Total Transit Efficiency Costs	\$13,483.00	\$14,057.80	\$15,868.60	\$14,804.90	\$43,693.80	\$45,314.10	\$47,527.00	\$45,634.20
<i>Vehicle Operating Cost</i>	\$4,050.0	\$4,412.2	\$4,887.8	\$4,680.9	\$4,541.8	\$4,891.8	\$5,421.2	\$5,251.9
<i>Travel Time and Reliability Costs</i>	\$9,172.2	\$9,354.9	\$10,614.2	\$9,759.5	\$38,839.7	\$40,080.1	\$41,675.8	\$39,950.9
<i>Environmental Costs</i>	\$260.8	\$290.7	\$366.6	\$364.5	\$312.3	\$342.2	\$430.0	\$431.4

While this apparent disbenefit offsets the gains of non-transit users across all future scenarios, with a notable impact on travel time, reliability, and environmental benefits, the overall benefits in both the Bus-Only and All-Transit scenarios remain positive across all investment levels. Importantly, the All-Transit scenario outperforms the Bus-Only scenario due to the efficiency of rail transit.

The net effect of transportation efficiency savings and cost of all modes are presented in Table 4. Under RTP-Priority Needs, the Bus-Only scenario is expected to yield a net benefit of \$12.8 billion, illustrating the positive effects of bus transit projects planned at the RTP-Priority Needs investment level. However, the All-Transit scenario demonstrates significantly higher net benefits at \$41.3 billion, showcasing the significant positive impact of substantial funding for rail transit system on societal benefits. Finally, at the RTP-Total Needs level, having bus transit as the only transit scenario would yield a net benefit of \$12.9 billion, while in the All-Transit scenario, there is a substantial net benefit of \$38.4 billion. This, however, is a slight decline from the benefits of the RTP-Priority Needs investment level as a result of diminishing returns.

Table 4: Net Transportation Efficiency Benefits at All Scenarios and Investment Levels

<i>Benefit Scenarios:</i>	Bus-Only Scenario				All-Transit Scenario			
<i>Investment Levels:</i>	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
Net Efficiency Benefits (Undiscounted)	\$6,912.0	\$8,419.6	\$12,843.3	\$12,867.3	\$24,417.9	\$24,913.4	\$41,280.1	\$38,371.4
<i>Discounted @ 3.5%</i>	\$4,530.9	\$5,299.4	\$7,655.9	\$7,669.6	\$15,596.9	\$15,861.7	\$24,604.2	\$23,104.1
<i>Vehicle Operating Cost Savings</i>	\$8,644.9	\$9,942.2	\$14,104.9	\$13,931.9	\$39,121.6	\$40,715.6	\$55,869.2	\$54,140.8
<i>Travel Time and Reliability Savings</i>	\$(1,669.4)	\$(1,469.7)	\$(1,211.5)	\$(972.2)	\$(14,971.7)	\$(16,088.5)	\$(15,083.8)	\$(16,187.5)
<i>Environmental Benefits</i>	\$(63.5)	\$(52.9)	\$(50.1)	\$(92.5)	\$268.0	\$286.3	\$494.7	\$418.1

The following sections provide a breakdown of the transportation efficiency benefits by the different categories of efficiency savings. Refer to Appendix I: Transportation Efficiency Benefits and Impacts for the year-by-year breakdown of transportation efficiency savings and its economic impacts to Utah’s households and businesses.

Understanding the Efficiency Impacts of Transit

At the RTP-Priority Needs investment level, the Unified Plan spanning from 2023 to 2050 foresees a staggering total of approximately 124.94 billion person trips and 95.13 billion vehicle trips (comprising auto and truck trips) within the transportation network in the Wasatch Front region, assuming a world without transit. However, implementing transit options demonstrates substantial cost savings and increased efficiency. Specifically, opting for a Bus-Only scenario results in a noteworthy reduction of \$19.00 billion in the costs associated with moving these vehicle trips, while the All-Transit scenario achieves an even more impressive \$61.29 billion in vehicle operating costs savings. Moreover, the presence of transit enables an additional 1.09 billion transit trips in the Bus-Only scenario and 1.81 billion transit trips in the All-Transit scenario. These include 414 million work-related trips and 765 million trips supporting jobs in the Bus-Only and All-Transit scenarios, respectively. Although the cost of moving these transit trips amounts to \$4.89 billion and \$5.42 billion in the Bus-Only and All-Transit scenarios, the overall result is a substantial \$14.10 billion and \$55.87 billion reduction in vehicle operating costs for the Wasatch Front’s transportation system, showcasing the significant benefits of incorporating transit solutions.

Vehicle Operating Cost Savings

One of the immediate and tangible advantages stemming from investments in transportation infrastructure, including transit, is the cost savings associated with vehicle operation. These savings are primarily achieved through the alleviation of congestion, leading to reduced idling, smoother traffic flow, and fewer stops and starts. Vehicles spend less time trapped in traffic, subsequently enhancing fuel efficiency, and resulting in diminished fuel consumption and reduced operational costs for both individual commuters and freight operators. Furthermore, the wear and tear on vehicles is significantly reduced, which not only extends their lifespan but also leads to lower maintenance and repair expenses. These savings not only benefit individuals by putting more money in their pockets but also contribute to the overall cost-effectiveness and sustainability of transportation systems. The federal BCA guidance²² provides an estimate for the vehicle operating cost per mile by mode and purpose.

²² Benefit-Cost Analysis Guidance for Discretionary Grant Programs, Page 39, Table A-5.

Figure 5: Comparison of Vehicle Operating Cost Savings of Transit Investment in All Scenarios

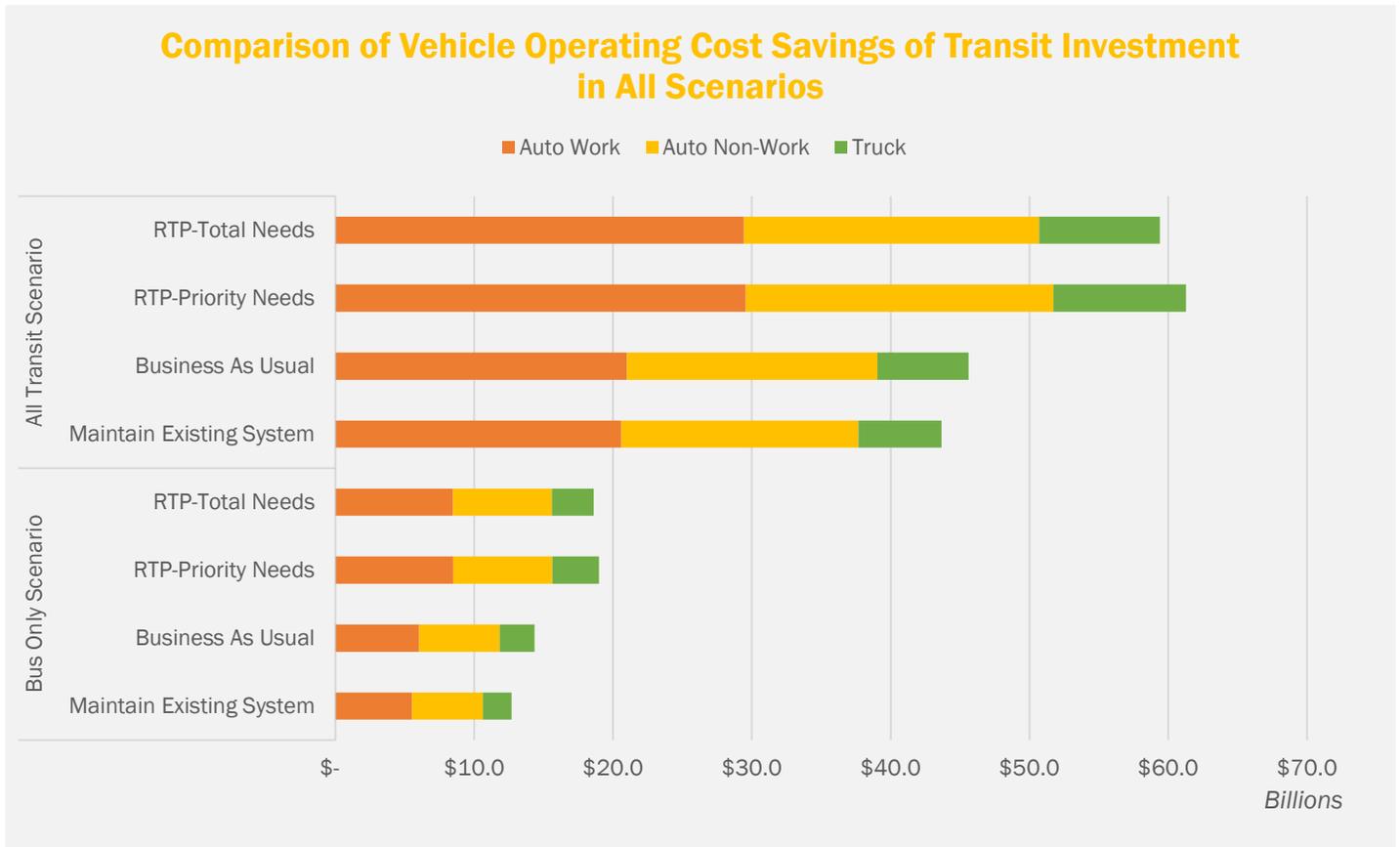


Figure 5 shows that by maintaining the existing bus service, substantial savings in reduced vehicle operating and travel costs can be anticipated for both households and businesses, amounting to \$12.69 billion. Furthermore, if all current transit options including bus and rail are sustained, Utah stands to gain even more, with estimated vehicle operating cost savings increasing to an impressive \$43.6 billion. However, this would come at a cost of \$4.05 billion and \$4.54 billion for operating transit vehicles in the respective scenarios. Upon completing the projects currently in progress, which have secured funding, Utah can expect additional travel cost benefits. In the Bus-Only scenario, this would equate to \$14.35 billion in operating cost savings, and in the All-Transit scenario, the vehicle operating cost savings would rise to \$45.61 billion. This again would come at the transit operating cost of \$4.41 billion and \$4.89 billion in the Bus-Only and All-Transit scenarios respectively.

Notably, by enhancing transit services, such as the FrontRunner system, through increased investment up to the RTP-Priority Needs level, Utah could significantly boost its projected vehicle operating cost savings. This enhancement is projected to raise the overall vehicle operating cost benefits to \$18.99 billion in the Bus-Only scenario and \$61.29 billion in the All-Transit scenario, at the cost of operating transit at \$4.89 billion and \$5.82 billion respectively. These savings are a result of a reduction in the overall vehicle miles of travel in the system as users transition from using the roadways to using transit. However, it's important to note that, with an RTP-Total Needs level, the anticipated vehicle operating cost savings are expected to decrease slightly, reaching \$18.61 billion in the Bus-Only scenario and \$59.39 billion in the All-Transit scenario, which comes at the societal cost of \$4.68

billion and \$5.25 billion respectively on transit operations. A detailed breakdown of Vehicle Operating Cost savings by mode of transportation is shown earlier in Table 2.

Congestion Relief

The infusion of transit investment yields substantial benefits in terms of congestion relief within the transportation network. By offering alternative modes of transportation such as bus and rail services, transit provides users with choices beyond relying solely on private automobiles. In a hypothetical scenario without transit options, individuals would be compelled to use existing modes of travel, predominantly private vehicles, to fulfill their transportation needs. However, the availability of transit modes encourages users to opt for public transportation, displacing a significant number of individual automobile trips from highways. This results in a decrease of vehicles on the road and vehicle miles traveled, leading to improved highway system efficiency characterized by reduced congestion, shorter travel times, increased reliability, and lower tailpipe emissions. The ability of a single transit vehicle trip to accommodate the trips of multiple people to multiple destinations further contributes to these positive outcomes. This not only enables individuals to reach their destinations faster but also allows for expanded travel distances within the same time frame. Additionally, businesses in Utah benefit from more efficient delivery of imports and products, translating into significant cost savings that can be redirected toward enhancing productivity.

Figure 6 through Figure 9 demonstrate the reduction in congestion, measured by the percent change in volume-to-capacity ratio, across Bus-Only scenarios compared to the No-Transit scenario at the respective investment levels.

Figure 6: Congestion Relief in 'Bus-Only' Scenario at 'Maintain-Existing-System' Investment Level

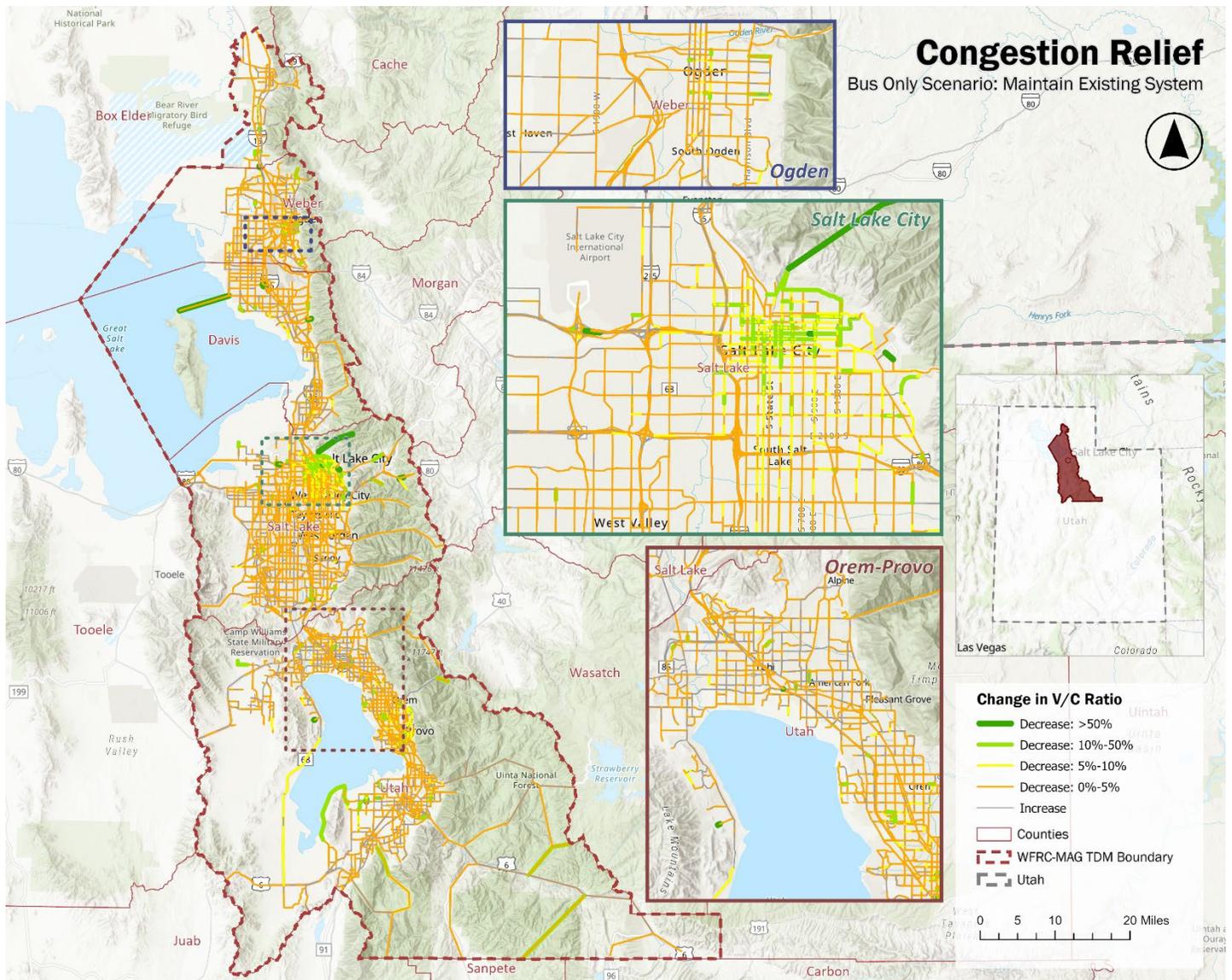


Figure 7: Congestion Relief in 'Bus-Only' Scenario at 'Business-As-Usual' Investment Level

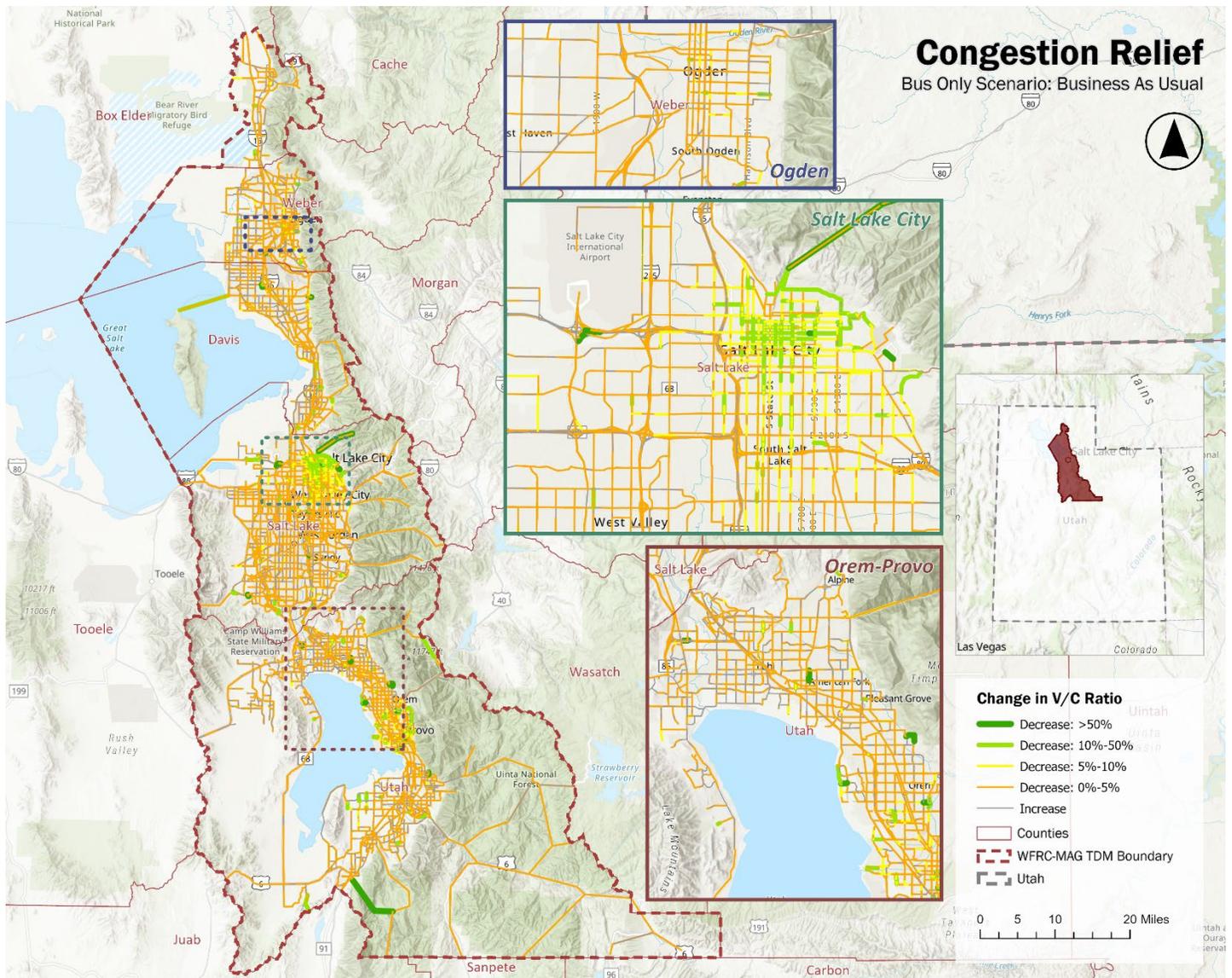


Figure 8: Congestion Relief in 'Bus-Only' Scenario at 'RTP-Priority Needs' Investment Level

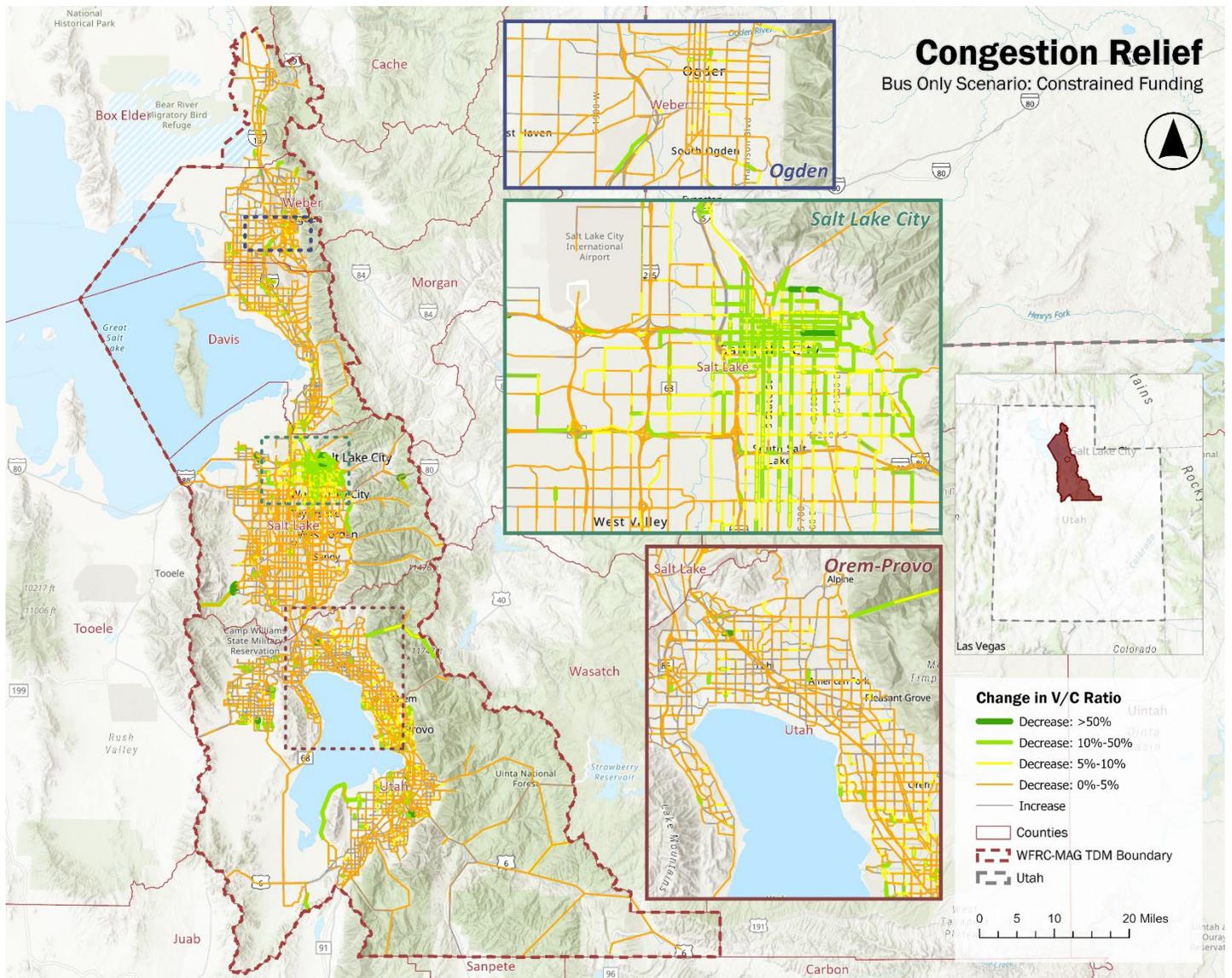
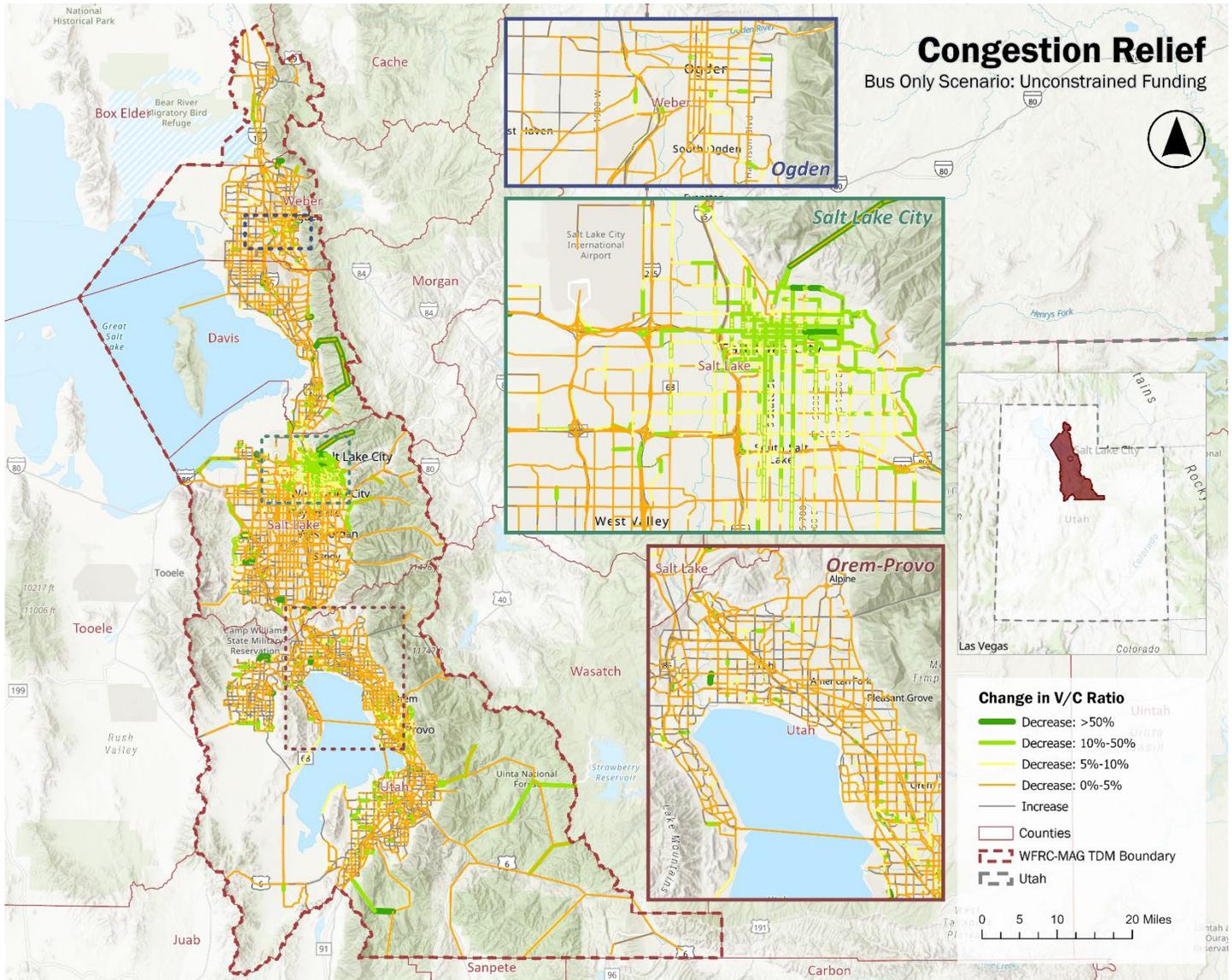


Figure 9: Congestion Relief in 'Bus-Only' Scenario at 'RTP-Total Needs' Investment Level



The maps demonstrate that major urban centers, such as Downtown Salt Lake City and Provo, experience the most significant congestion relief. Importantly, the positive impact extends beyond transit-served areas, benefiting the entire Wasatch Front region. The maps clearly show that as investment levels increase, there is a corresponding improvement in the V-C ratio at each step. This signifies a gradual alleviation of congestion in urban road links with each incremental investment, with the most significant enhancements observed in the RTP-Priority Needs and RTP-Total Needs scenarios. However, it is noteworthy that the congestion mitigation achieved in this context is surpassed by the significant improvements observed in scenarios incorporating all transit options.

Figure 10 through Figure 13 demonstrate the reduction in congestion, measured by the percent change in volume-to-capacity ratio, across All-Transit scenarios compared to the No-Transit scenario at the respective investment levels.

Figure 10: Congestion Relief in 'All-Transit' Scenario at 'Maintain-Existing-System' Investment Level

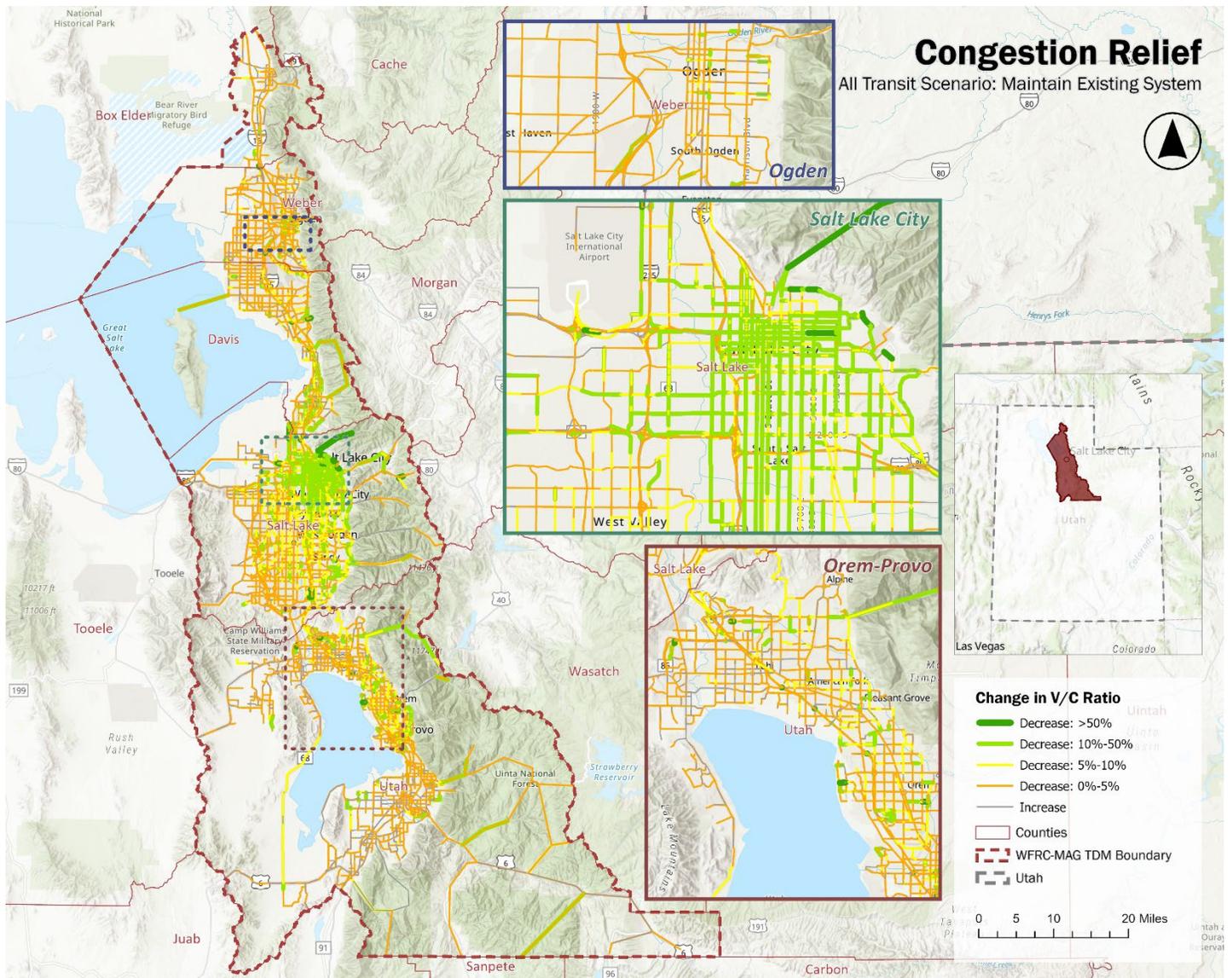


Figure 11: Congestion Relief in 'All-Transit' Scenario at 'Business-As-Usual' Investment Level

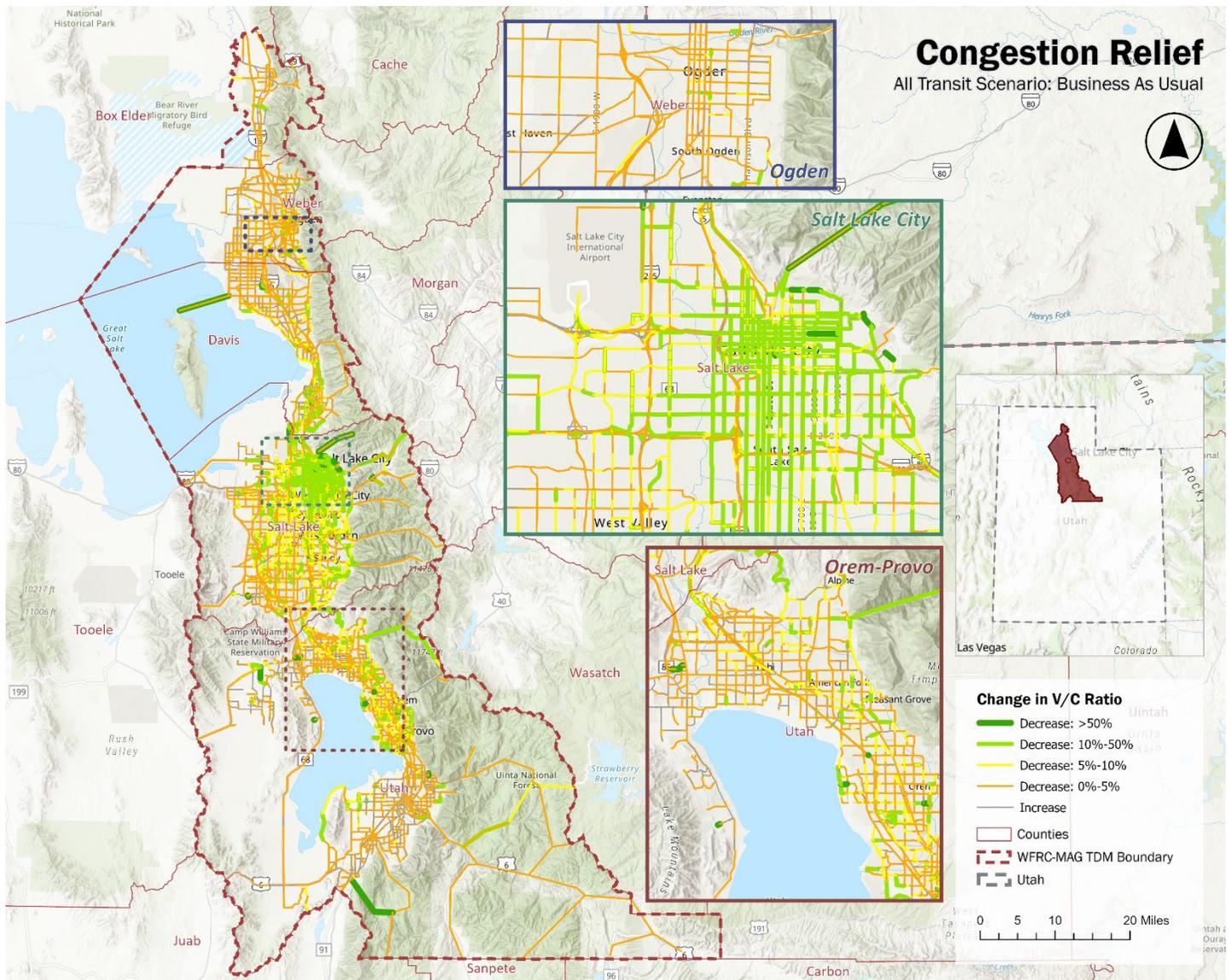


Figure 12: Congestion Relief in 'All-Transit' Scenario at 'RTP-Priority Needs' Investment Level

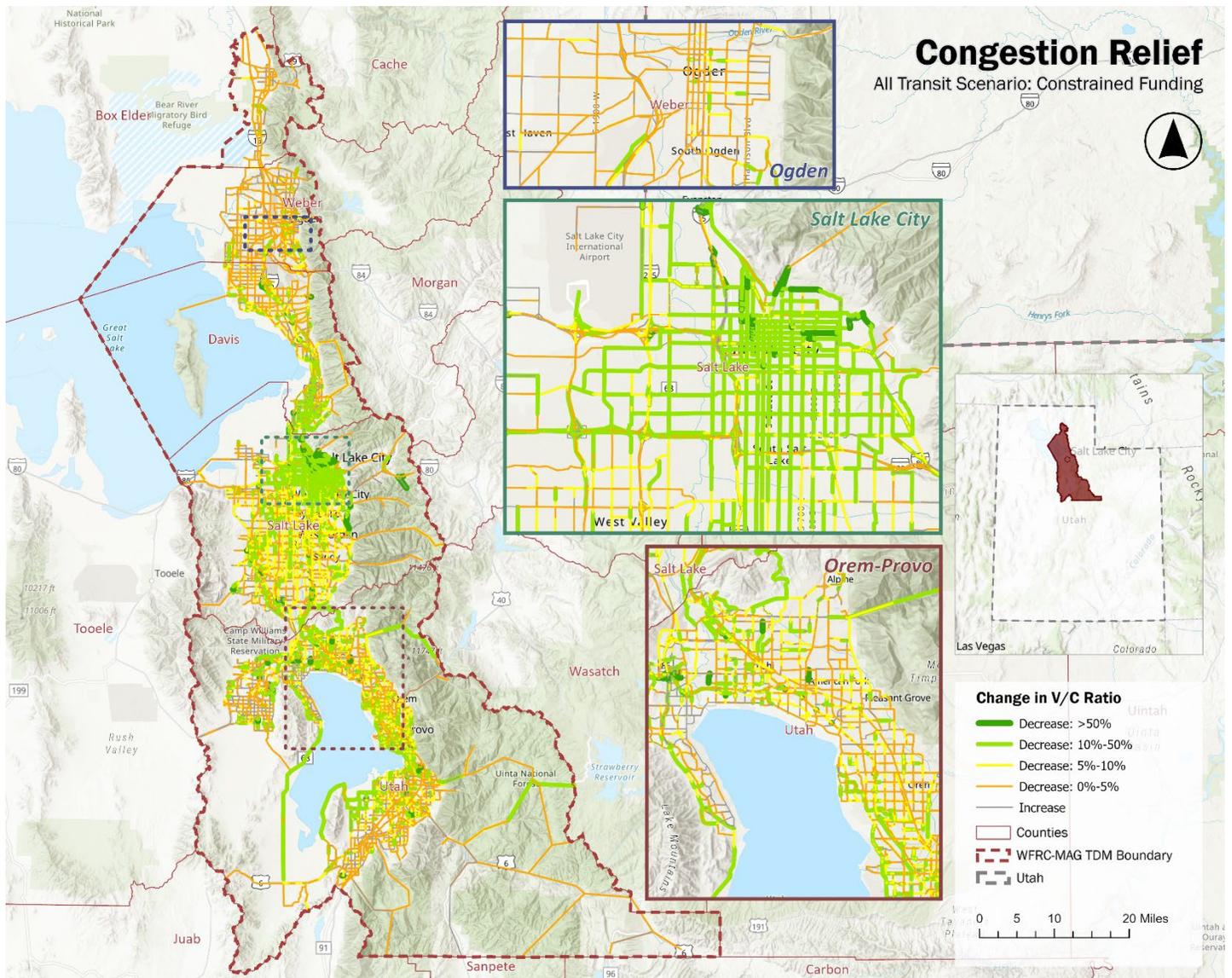
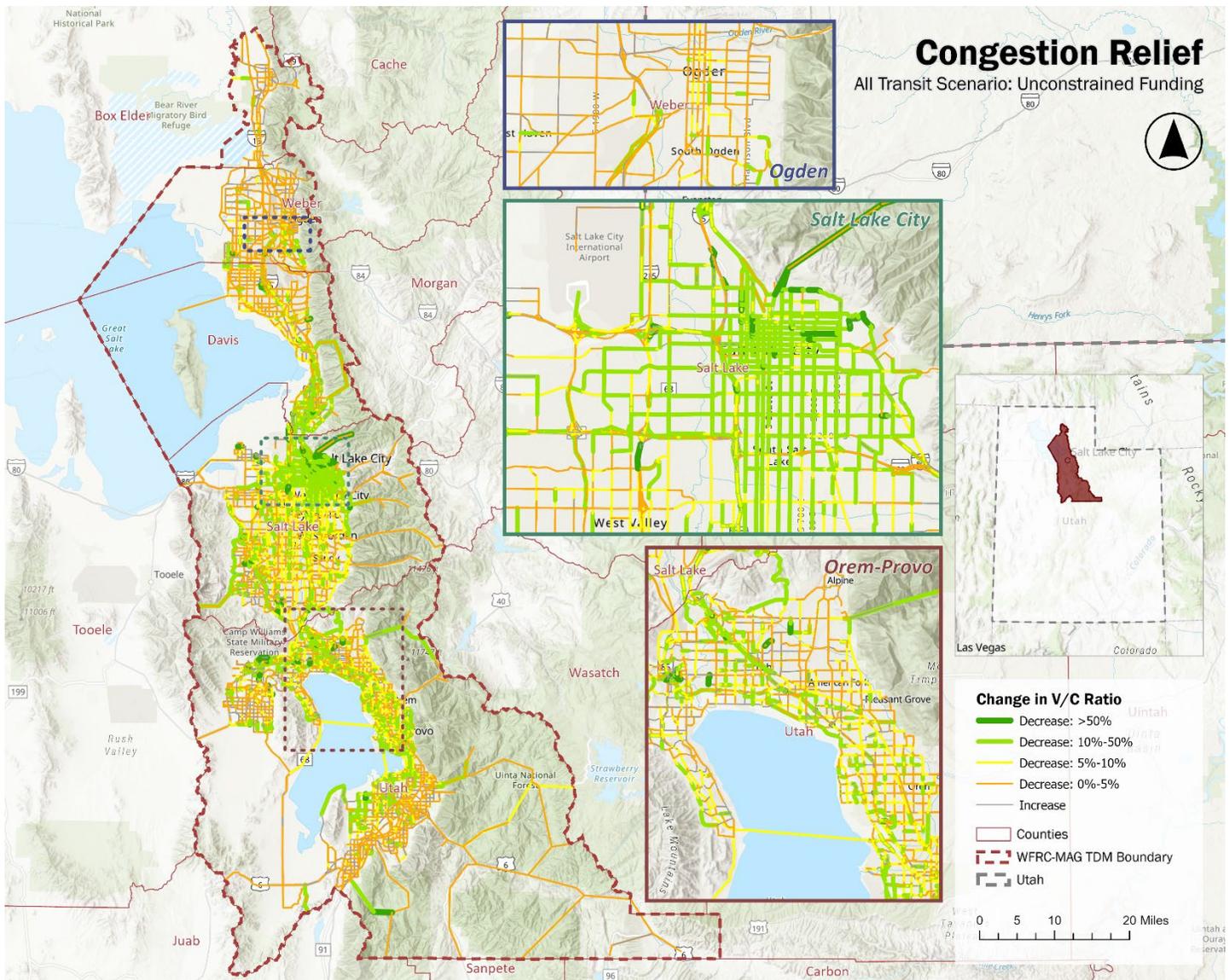


Figure 13: Congestion Relief in 'All-Transit' Scenario at 'RTP-Total Needs' Investment Level



The maps demonstrate that major urban centers, such as Downtown Salt Lake City and Provo, experience the most significant congestion relief. Importantly, the positive impact extends beyond transit-served areas, benefiting the entire Wasatch Front region. Similar to the Bus-Only scenario, the enhancements in congestion observed in the All-Transit scenario are directly proportional to the level of investments made in the transit system. The most substantial congestion relief is witnessed in the RTP-Priority Needs and RTP-Total Needs Scenarios. The minimal disparity between these two scenarios arises from the fact that the transit projects outlined in the Unified Plan's two scenarios exhibit limited differences.

Among the transit scenarios, a higher reduction in congestion can be observed in the scenario with both bus and rail services (All-Transit) than the scenario with just the bus services (Bus-Only). The reduction in congestion and improvement in highway system efficiency also correspond to the level of investment in each transit scenario, suggesting that increased transit funding would enhance Utah's overall transportation efficiency. This relief

enhances market access and contributes to increased land value sensitivity throughout the region, factors that will be elaborated upon in subsequent sections of this report.

Emission Reduction Benefits

Another vital outcome of capacity enhancement through transit investments is the reduction in emissions. Less trips and miles traveled by vehicles mean less emissions. Additionally, a reduction is achieved through the mitigation of congestion, resulting in less time spent idling and improved operational efficiency of vehicles. This, in turn, leads to reduced emissions of greenhouse gases and pollutants. These environmental benefits are vast and include improved local air quality, diminished occurrences of respiratory illnesses, and mitigation of greenhouse gases that contribute to global climate change. Furthermore, investments that encourage the adoption of alternative and sustainable transportation modes, such as public transit and electric vehicles, contribute to diversifying the economic base within the transportation sector.

The data regarding criteria pollutant emissions, specifically Volatile Organic Compounds (VOCs), Nitrogen Oxides (NO_x), Sulphur Oxides (SO_x), Particulate Matters of 2.5 micrometers or less in diameter (PM_{2.5}), and Carbon dioxide (CO₂) emissions, are derived on a per-mile basis from passenger cars²³ (both business and personal) and trucks²⁴ and sourced from the U.S. EPA Office of Transportation and Air Quality. The costs and savings associated with these emission reductions are then evaluated by multiplying them by the cost per metric ton²⁵ of pollutant emissions saved to quantify the emissions reduction benefits.

Figure 14 provides an overview of the environmental costs/benefits of transit investments at all transit scenarios and investment levels. A detailed breakdown of this by the modes of transportation is provided earlier in Table 2.

²³ Average Annual Emissions and Fuel Consumption for Gasoline-Fueled Passenger Cars and Light Trucks, Page 4.

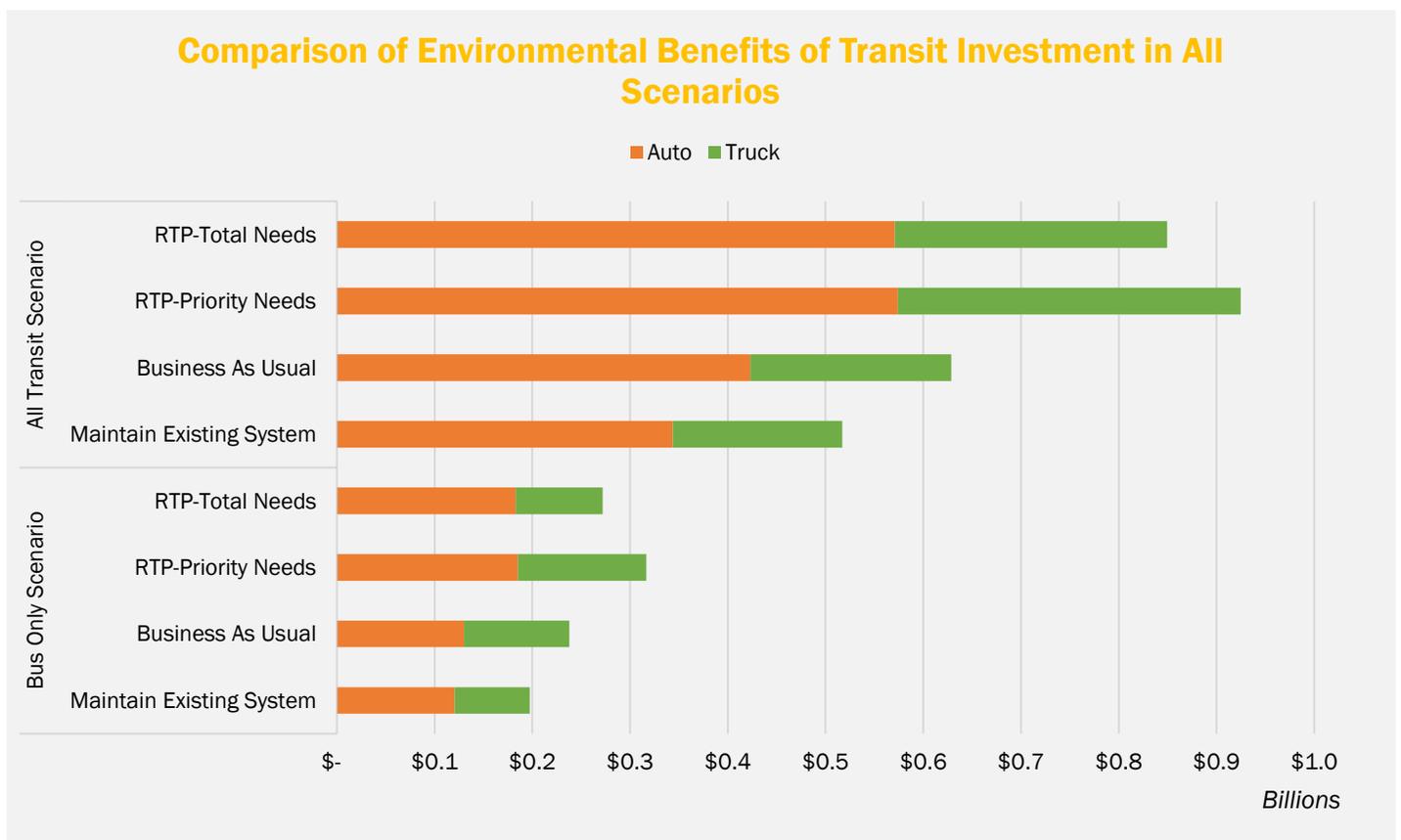
<https://nepis.epa.gov/Exe/ZyPDF.cgi/P100EVXP.PDF?Dockey=P100EVXP.PDF>

²⁴ Average In-Use Emissions from Heavy-Duty Trucks, Page 4, Table 1.

<https://nepis.epa.gov/Exe/ZyPDF.cgi/P100EY6.PDF?Dockey=P100EY6.PDF>

²⁵ Benefit-Cost Analysis Guidance for Discretionary Grant Programs, Page 40, Table A-6.

Figure 14: Comparison of Environmental Benefits of Transit Investment in All Scenarios



Just maintaining the existing bus service would lead to emissions savings to the system, totaling \$197.2 million from the trips that would have resulted from the lack of transit. If Utah continues to support its current transit options encompassing bus and rail, the impact on emissions is expected to result in a gross benefit of \$518.2 million to the riders. This is due to the added efficiency of rail transit resulting in positive net emission benefits from its higher carrying capacity and lower per-user, per-mile emissions. While operating transit would also add societal costs of the emissions, amounting to \$260.8 million and \$312.3 million respectively in the two transit scenarios at this investment level, it would produce a net benefit of - \$63.5 million and \$204.9 million respectively in these two scenarios. At the Maintain Existing System investment level, the bus only scenario does not offset enough vehicle miles of travel to create a positive emissions benefit. However, with the availability of light rail and commuter rail options in All Transit scenario at this level, enough auto trips are captured by transit services to obtain a net societal benefit to the households and businesses in Utah.

Utah can anticipate additional emission costs and savings at the Business-As-Usual investment level. In the Bus-Only scenario, this translates to \$237.8 million in user savings, and in the All-Transit scenario, the savings increases to \$628.6 million in benefits savings. However, these savings would come at the emission cost of \$290.7 million and \$342.2 million in the respective scenarios. By enhancing transit services through increased investments up to the RTP-Priority Needs level, UTA’s transit has the potential to reduce its estimated cost in emissions in the Bus-Only Scenario and boost the emissions benefits in the All-Transit scenario. This enhancement is projected to save \$316.5 million in the Bus-Only scenario and substantially increase savings to \$924.8 million in the All-Transit scenario while

transit would result in emission cost of \$366.6 million and \$430.0 million respectively. The RTP-Total Needs investments would result in the overall emissions costs of \$272.10 million in the Bus-Only scenario and convert it to \$849.60 million emissions benefits in the All-Transit scenario. This would come at the transit emission costs of \$364.5 million and \$431.4 million in the two transit scenarios respectively at the RTP-Total Needs investment level. The substantial increase in emissions cost of Bus transit in Unconstrained Investment is the result of increases in transit usage being outgained by increases in driving from the more substantial investments into the roadway system.

Notably, in scenarios focusing on Bus-Only transit services, the net environmental benefits are negative, indicating an increase in emissions, due to new transit trips inducing additional emissions which would not have existed in a scenario without any transit services. However, the All-Transit scenario shows positive emissions benefits, suggesting that the integration of buses and railways enhances overall transit efficiency, leading to reduced emissions. It is critical to recognize that by inducing additional emissions to the system through transit uses, it is possible to reduce the overall emission of the transportation system as a result of eliminating a substantial amount of automobile trips in addition to a relief in system congestion to other roadway users such as trucks. The positive emissions reductions in the All-Transit scenario underscore the environmental advantages of a comprehensive and integrated transit network.

Travel Time Savings and Reliability Benefits

An essential dimension of transportation efficiency benefits is the value of time savings. When investments enhance transportation infrastructure, both commuters and businesses benefit from spending less time in transit, yielding far-reaching implications. For individuals, this translates into additional hours for productive activities, quality family time, and leisure, thereby elevating their overall quality of life. Businesses enjoy increased worker productivity, with employees spending less time commuting and more time engaged in their professional roles. Additionally, the value of time savings extends to reduced stress related to congestion. Transportation investments that reduce travel times deliver positive impacts on economic productivity, as well as overall physical and mental well-being. The per-person-hour values of time and freight time costs utilized for the analysis adhere to the recommendations provided by the Benefit-Cost Analysis Guidance for Discretionary Grant Programs in 2023.²⁶

Reliability savings constitute a crucial aspect of capacity enhancement benefits resulting from investments in transportation. These savings are realized as transportation systems become more dependable and less prone to delays and disruptions. By mitigating congestion and optimizing traffic flow, transportation investments enhance the reliability of the entire system. This benefits commuters, who can plan their journeys with greater confidence, businesses that experience fewer disruptions to their supply chains, and emergency services that can respond more effectively. The methodology used for reliability savings employs the Travel Time Index²⁷ calculation, estimating the buffer time required to account for congestion alleviation, as developed by the Texas A&M Transportation

²⁶ Benefit-Cost Analysis Guidance for Discretionary Grant Programs, Page 38, Table A-3

²⁷ Travel Time Index <https://www.bts.gov/content/travel-time-index>

Institute.²⁸ Buffer time is the additional time a transportation system user would allocate for the trip in unreliable systems, which is distinct from the time spent driving or in congestion. This buffer time is then multiplied by the value of travel time to quantify the reliability benefits resulting from transportation investments.

Figure 15 illustrates the Total Travel Time and Reliability Benefits, expressed in billions of dollars, for different transit service scenarios at various investment levels. It is important to consider that the inclusion of additional transit modes in the Bus-Only and All-Transit scenarios comes with a trade-off. While these additions may offer benefits such as reduced congestion and enhanced travel time and reliability for transit users, they simultaneously introduce new trips, which impose additional travel time and reliability costs on the system. Consequently, the net effect of these changes results in added systemwide travel time and reliability costs. A detailed breakdown of the travel time and reliability savings is provided in Table 2.

Figure 15: Comparison of Travel Time and Reliability Savings of Transit Investment in All Scenarios



In the Bus-Only scenarios, we observe a negative though relatively small impact on travel time and reliability savings. Existing non-transit system users would still benefit from the decrease in travel time and increase in reliability, but this benefit is offset by the additional travel time cost to the transit users which did not exist in the No-Transit scenario. Similarly, in the All-Transit scenarios, we see further negative values, reflecting the increase in transit ridership with the integration of both bus and rail transit modes. This analysis underscores the intricate dynamics of

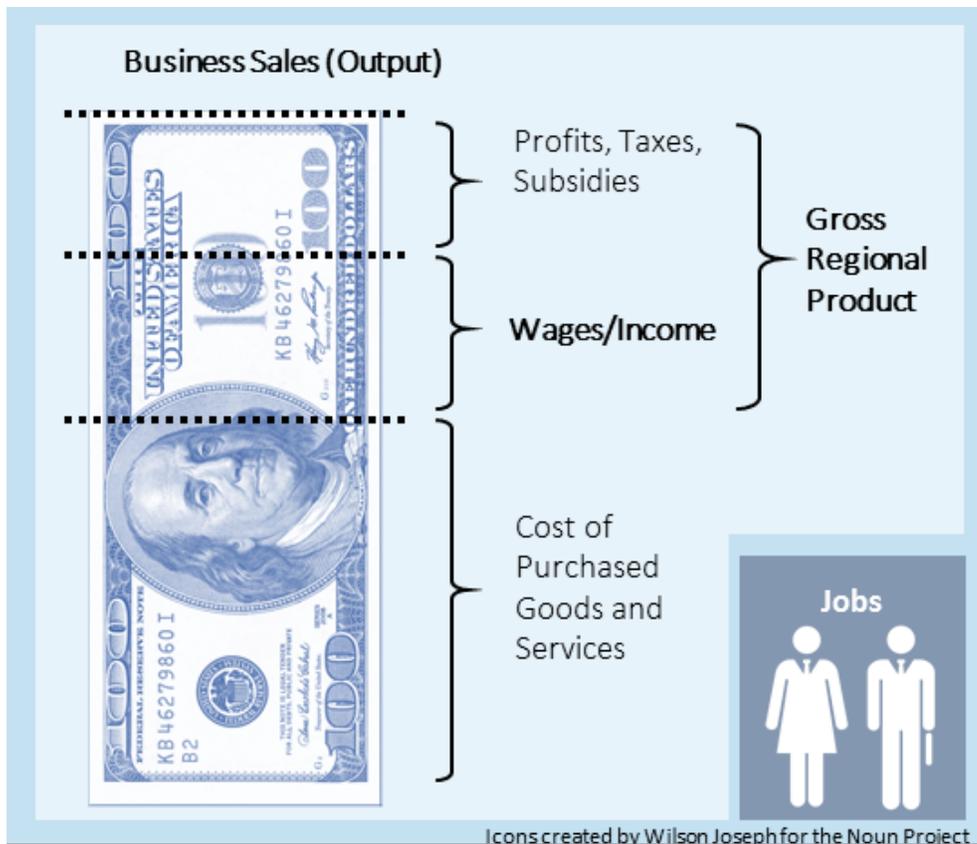
²⁸ Traffic Congestion and Reliability: Trends and Advanced Strategies for Congestion Mitigation
https://ops.fhwa.dot.gov/congestion_report/

transit service scenarios, where the travel time and reliability benefits of congestion relief for non-transit users can get offset by the complexities of accommodating and managing additional transit trips in the system. However, it should also be noted that this net travel time and reliability costs to the system is again compensated by a substantial vehicle operating cost savings to the users and generate net positive user benefits of transit investment in Utah’s transportation system.

Economic Impacts

The advantages of transit investments extend beyond businesses and household savings and deeply impact the economic landscape. Utah's economy reaps benefits through enhanced productivity, increased competitiveness, and the creation of new opportunities. The economic impacts of transit investments are measured by the generation of jobs, income, business output, and the overall state GDP resulting from a more efficient transit system. The transportation efficiency savings would enable Utah’s business and households to have higher purchasing power, resulting in a more vibrant economy and fueling further economic growth. Figure 16 demonstrates the composition of indicators of broader economic impact of transit investments.

Figure 16: Economic Impact Measures



The vehicle operating costs, travel time and reliability savings (or benefits) can be expected to have greater economic impact due to the multiplier effect where the savings are used by businesses and families to buy more from firms. To meet this increasing demand, the firms then hire workers and suppliers, and workers and suppliers buy more goods from other firms, and increased economic activity permeates throughout the region. Household

travel cost savings results in shifts to spending habits that influence a broader spectrum of economic activities beyond transportation. Businesses, with reduced operating costs and increased reliability, experience significant savings which can be reinvested to expand operations, generate more jobs, and ultimately augment their output. Indirectly, as businesses expand and demand more from their suppliers, these suppliers experience growth. The induced effects of this transformation manifest as businesses hire more workers, creating a larger payroll that, in turn, circulates back into the economy through consumer purchases.

For example: if a transit-dependent business saves \$20,000 over a period due to improved transit services, those savings may be reinvested into technological upgrades. These upgrades could boost the firm's productivity, resulting in an additional annual output worth \$100,000, considerably more than what was originally saved. Consequently, the firm might take this new dividend and use it to employ new workers, thereby creating job opportunities and boosting the state's economy. Moreover, this increased output contributes to the state's GDP, illustrating how the initial transportation savings translate into broader economic impacts.

Table 5 summarizes the broader economic impact of transit investment in terms of employment, cumulative labor income, cumulative value added (GDP), and cumulative business output in all future scenarios. The following sections discuss each economic impact in detail.

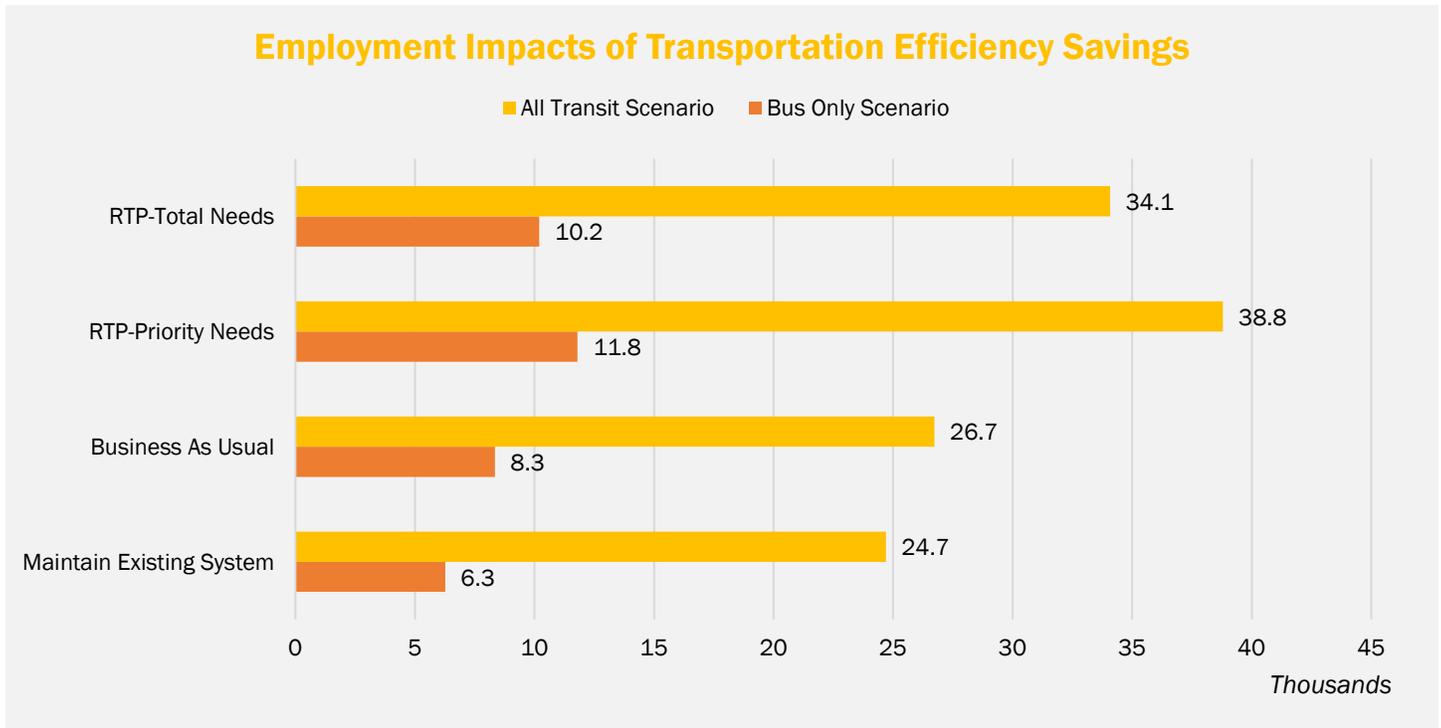
Table 5: Summary of Economic Impacts of Transportation Efficiency Benefits for All Future Scenarios

Benefit Scenarios:	Bus-Only Scenario				All-Transit Scenario			
	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
<i>Investment Levels:</i>								
Total Efficiency Benefits (Undiscounted in Billion \$s)	\$6.91	\$8.42	\$12.84	\$12.87	\$24.42	\$24.91	\$41.28	\$38.37
<i>Discounted @ 3.5% (Billion \$s)</i>	\$4.53	\$5.30	\$7.66	\$7.67	\$15.60	\$15.86	\$24.60	\$23.10
Economic Impacts								
<i>Employment (# of Jobs)</i>	6,264	8,343	11,801	10,202	24,699	26,729	38,798	34,079
<i>Labor Income (Billion \$s)</i>	\$8.43	\$9.77	\$12.32	\$11.23	\$27.15	\$28.52	\$37.53	\$34.55
<i>Value Added/GDP (Billion \$s)</i>	\$14.10	\$16.31	\$20.65	\$18.88	\$45.66	\$47.90	\$63.20	\$58.39
<i>Business Output (Billion \$s)</i>	\$26.65	\$30.87	\$38.97	\$35.56	\$85.94	\$90.23	\$118.83	\$109.54

Employment

Figure 17 presents an overview of the impacts of transit investment on employment across various investment levels and transit service scenarios, with benefits increasing as funding levels rise and transit services diversify, ultimately contributing to community prosperity and opportunity over the course of 28 years of the Unified Plan.

Figure 17: Employment Impacts of Transportation Efficiency Savings

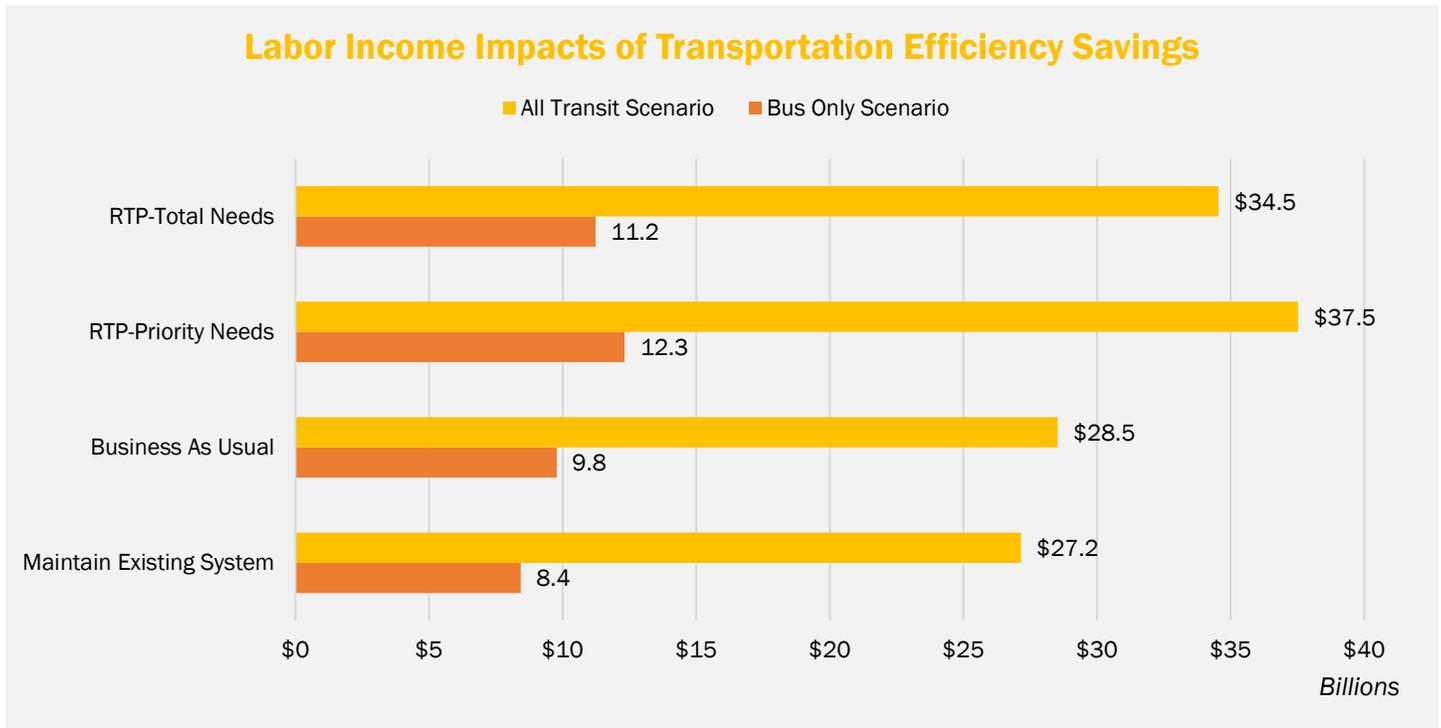


The No-Transit scenario, with no employment impact of (no) transit investment serves as a baseline for analyzing the employment impact of the transit scenarios. By just maintaining the system until 2050, an additional 6,200 jobs are expected to be generated over the years in the Bus-Only scenario while 25,000 jobs will be created by maintaining the existing transit system. At the Business-As-Usual level, Utah’s transit system is expected to generate an additional 2,100 jobs over the Maintain-Existing-System investment level in both Bus-Only and All-Transit scenarios. Increasing the investment to the level of RTP-Priority Needs, a significant boost in employment generation is expected, to 11,800 additional jobs for the Bus-Only scenario and 38,800 for the All-Transit scenario. Further investment at the level of RTP-Total Needs will result in a slight diminishing return as the Bus-Only scenario is estimated to generate 10,200 jobs and the All-Transit scenario is estimated to generate 34,000 jobs.

Labor Income

Figure 18 offers an insight into the effects of transit investment on household income, encompassing different investment tiers and transit service scenarios. As with the employment, it highlights the growing advantages in household income that come with higher funding levels and the expansion of transit services, ultimately playing a role in fostering community prosperity and opportunities from 2023 to 2050.

Figure 18: Labor Income Impacts of Transportation Efficiency Savings



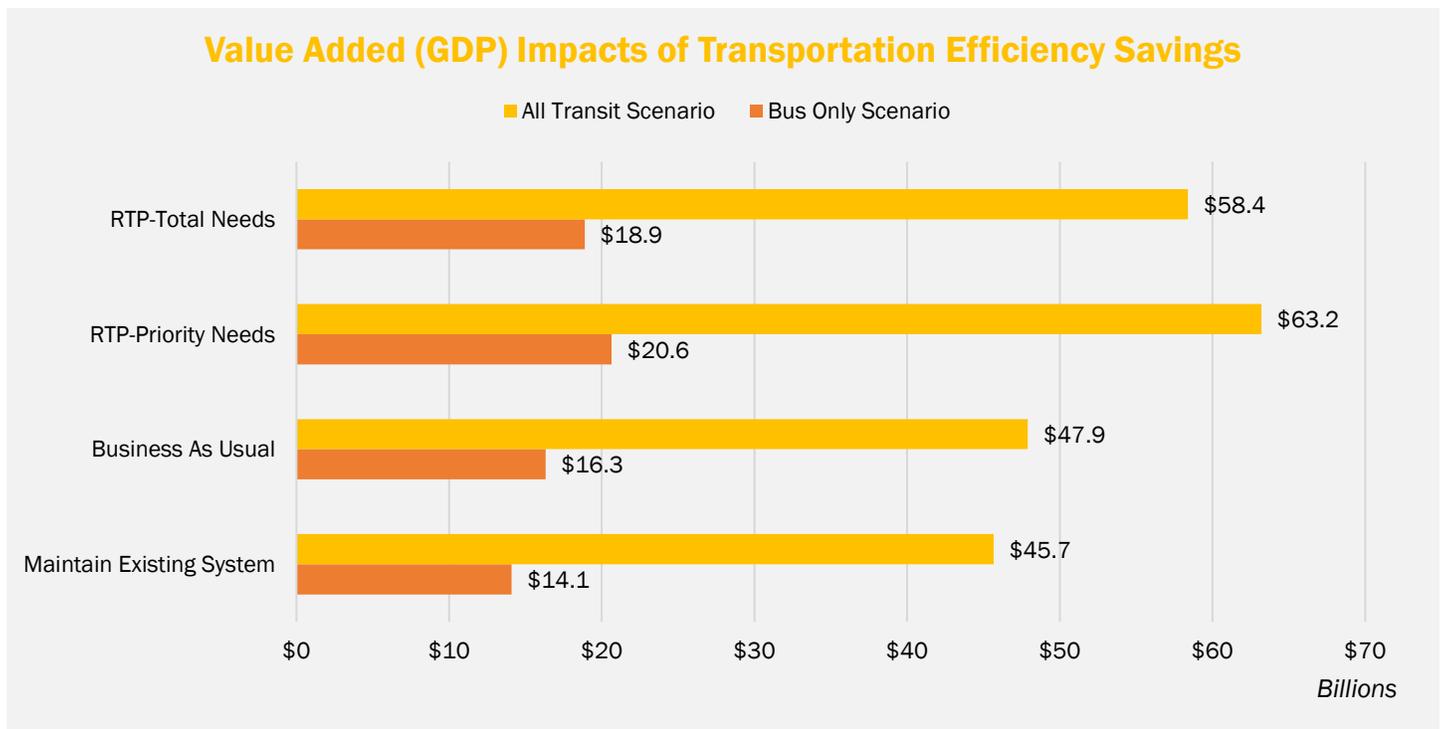
Again, the No-Transit scenario without any household income impact serves as a baseline with the lack of household income benefits due to transit. Maintaining operation of only the bus system until 2050 is expected to generate an additional \$8.4 billion in household income over the years, while maintain the entirety of UTA's transit system is projected to contribute cumulative \$27.2 billion in household income. Investing at the Business-As-Usual investment level is estimated to result in an additional \$1.3 billion in household income over just maintaining the existing system in both the Bus-Only and All-Transit scenarios.

When the investment level is increased to the RTP-Priority Needs, a substantial increase in household income is anticipated, with an additional \$12.3 billion from the Bus-Only scenario and an additional \$37.5 billion from the All-Transit scenario. However, further investment at the RTP-Total Needs level is expected to yield diminishing returns, with the Bus-Only scenario estimated to generate \$11.2 billion and the All-Transit scenario estimated to generate \$34.5 billion in household income.

Value Added (GDP)

Figure 19 offers a summary of the impacts on Value Added (GDP) associated with transit investment at varying funding levels and under different transit service scenarios. It highlights how value-added benefits grow with higher funding and greater diversity in transit services, ultimately leading to improved community prosperity and increased opportunities throughout the 28-year duration of the Unified Plan.

Figure 19: Value Added (GDP) Impacts of Transportation Efficiency Savings

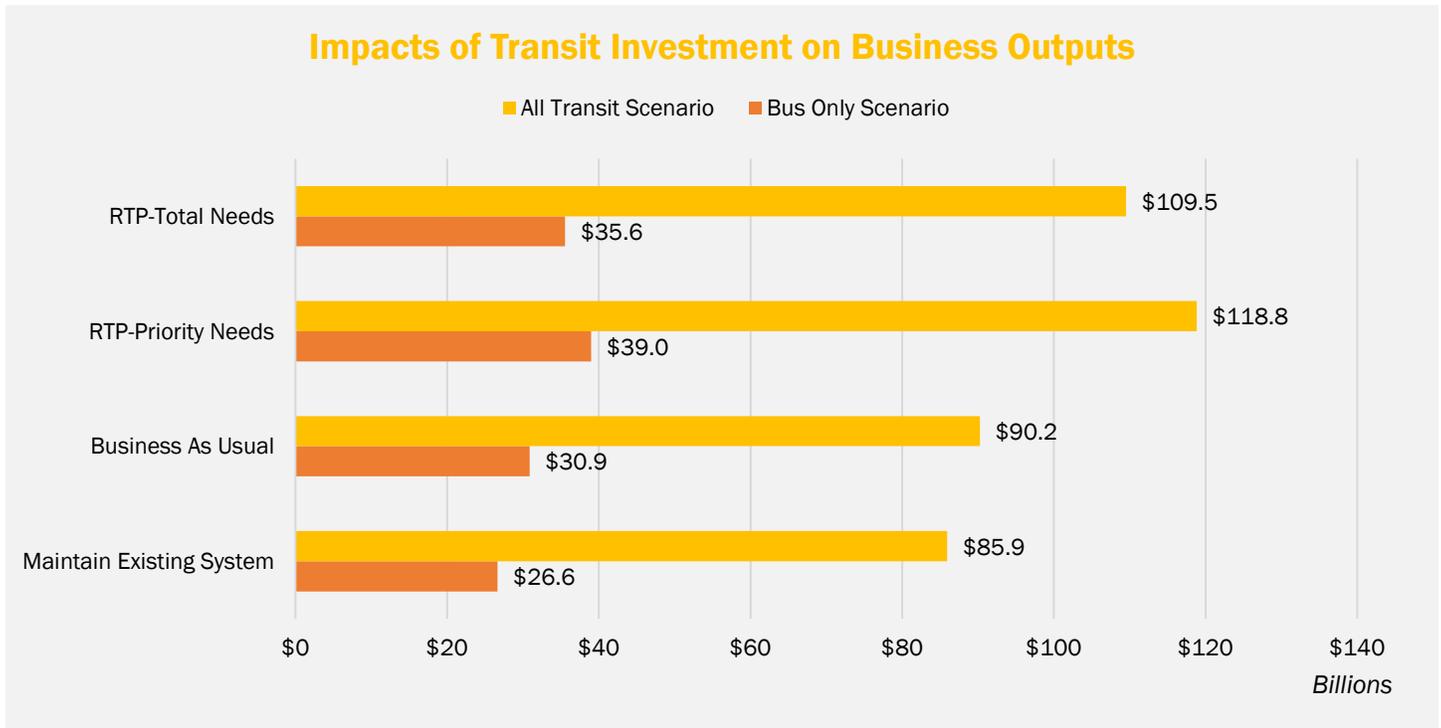


Once more, the No-Transit scenario serves as a baseline for comparison of any value-added (GDP) benefits in the two transit scenarios: Bus-Only and All-Transit. Simply operating buses at existing level until 2050 is projected to create an \$14.1 billion in value-added benefits. Maintaining the existing both train and bus system in Utah’s transit system is expected to generate \$45.7 billion in value-added benefits. Investing at the Business-As-Usual level, Utah’s transit system is anticipated to produce an additional \$2.3 billion and \$2.2 billion value-added impacts beyond the Maintain-Existing-System investment level in the Bus-Only and All-Transit scenarios, respectively. Increasing investment to the RTP-Priority Needs level is expected to substantially boost value-added benefits, with estimates of \$20.6 billion for the Bus-Only scenario and \$63.2 billion for the All-Transit scenario. Further investment at the RTP-Total Needs level shows a slight diminishing return, with the Bus-Only scenario estimated to generate \$18.9 billion and the All-Transit scenario estimated to generate \$58.4 billion in value-added benefits.

Business Outputs

Figure 20 offers an insight into the business output effects of transit investment at different funding levels and under various transit service scenarios. It demonstrates that as funding levels increase and transit services become more diverse, the resulting business output benefits grow, ultimately playing a significant role in enhancing community prosperity and creating opportunities from 2023 to 2050.

Figure 20: Business Outputs Impacts of Transportation Efficiency Savings



The absence of transit services in the No-Transit scenario without any business output impacts due to transit provides baseline scenario for any Business Output benefits from transit services in the two transit scenarios. Running buses alone at existing system level until 2050 is expected to generate \$26.6 billion in business outputs over the years, while running both trains and buses at the level of Utah's existing transit system is projected to create \$85.9 billion in business outputs.

When investing at the Business-As-Usual investment level, UTA’s transit system is forecasted to produce an additional \$4.2 billion and \$4.3 billion of business output benefits over the Maintain-Existing-System in the Bus-Only and All-Transit scenarios, respectively. Increasing the investment to the RTP-Priority Needs level is anticipated to result in a significant boost in business output generation, with projections of \$39.0 billion for the Bus-Only scenario and \$118.8 billion for the All-Transit scenario. However, further increasing investment to the RTP-Total Needs level again yields diminishing returns. In this scenario, the Bus-Only scenario is estimated to generate \$35.6 billion, while the All-Transit scenario is projected to create \$109.5 billion in business outputs.

Role of Transit in Utah’s Unified Plan

In the Unified Plan, the role of transit emerges as a pivotal element in achieving the overarching goals of enhancing transportation efficiency while operating within RTP-Priority Needs scenario, and significantly impacting various economic facets throughout Utah. The Economic Impacts Comparison of Transportation Benefits outlined in Table 6 sheds light on the pivotal role that transit investments play within the broader framework of Utah's Unified Plan. By emphasizing transit investment, Utah is not only addressing its transportation needs but also nurturing a climate of

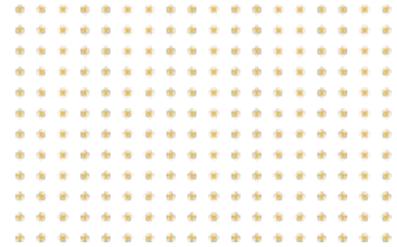
economic growth, higher incomes, and increased business productivity—a testament to the integral role transit plays in the overall prosperity and development of the state.

Table 6: Economic Impacts Comparison of Efficiency Benefits of Transit to Total Unified Plan

Investment Levels	Economic Impacts of Transportation Efficiency at RTP-Priority Needs		
	Transit Investment	Unified Plan Total	Percent from Transit
<i>Employment Impacts (Number of Jobs)</i>	38,798	100,326	38.7%
<i>Efficiency Benefits (Million \$s)</i>	\$41,280.1	\$121,830.1	33.9%
<i>Labor Income Impacts (Million \$s)</i>	\$37,525.8	\$60,450.2	62.1%
<i>Value Added Impacts (Million \$s)</i>	\$63,201.8	\$99,461.5	63.5%
<i>Business Output Impacts (Million \$s)</i>	\$118,832.8	\$191,251.6	62.1%

Beyond the raw numbers, a deeper analysis reveals that these investments play a critical role in supporting employment, labor income, value-added activities, and overall business output, thereby contributing significantly to Utah's economic prosperity. Notably, these investments account for 38.7% of the employment generated by the plan, offering critical job opportunities and supporting labor income that make up 62.1% of the total. The value-added activities from transit constitute 63.5% of the total in the plan, highlighting transit's positive influence on a range of economic sectors. Moreover, transit investments foster business output, representing 62.1% of the total, showing the interdependence between public transportation and commercial growth. These figures underline the essential role of transit in shaping Utah's economic prosperity, fostering job creation, enhancing income, promoting value-added activities, and driving business output while advancing the state's vision for a more connected and resilient future.

3. MARKET ACCESS



Economic benefits are closely tied to access to the transportation network. The benefits related to increased business output because of network expansion are referred to as market access benefits. This analysis looks at labor access benefits as the primary driver of the economic impact of market access. Labor access benefits are technically defined as the changes in output as a product of the population having greater access to employers and businesses, specified here as those living within a 40-minute drive time radius.

Replica data was used to create a profile of the employment distribution among industries of transit users, as well as industries that were found to be sensitive to labor access as a variable with business impact. Education, healthcare, financial and professional services, and executive management are the industries with a sizable commuter demographic based in transit that are directly impacted by the phenomenon of market access.

Below are several maps that display the percent change in accessibility across the four scenarios. Figure 21 through Figure 24 show the growth in accessibility as investment level grows, as measured by the change in accessibility radius of those within 40-minute drive times.

Figure 21: Percent Accessibility Change in 'Bus-Only' Scenario at 'Maintain-Existing-System' Investment Level

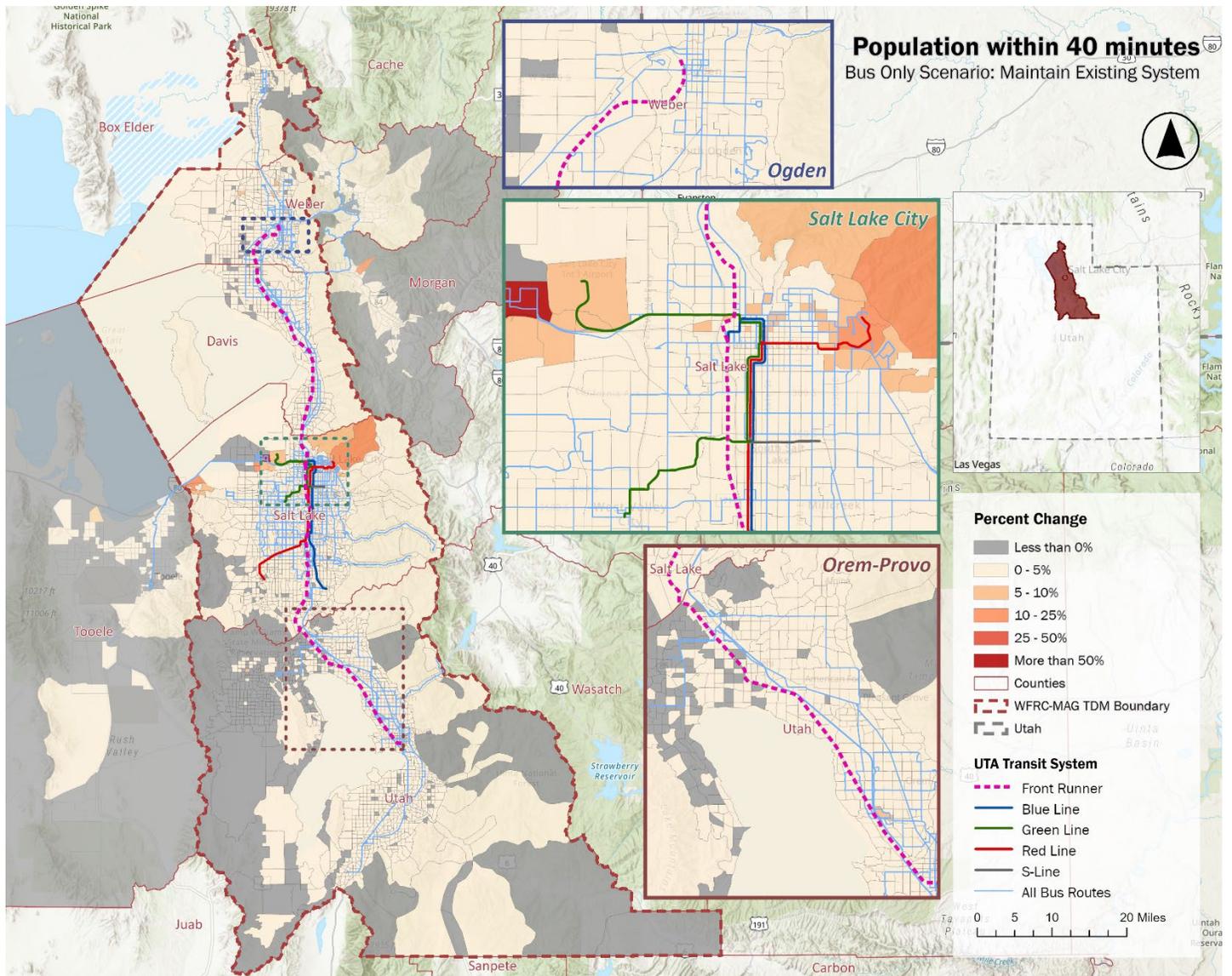


Figure 22: Percent Accessibility Change in 'Bus-Only' Scenario at 'Business-As-Usual' Investment Level

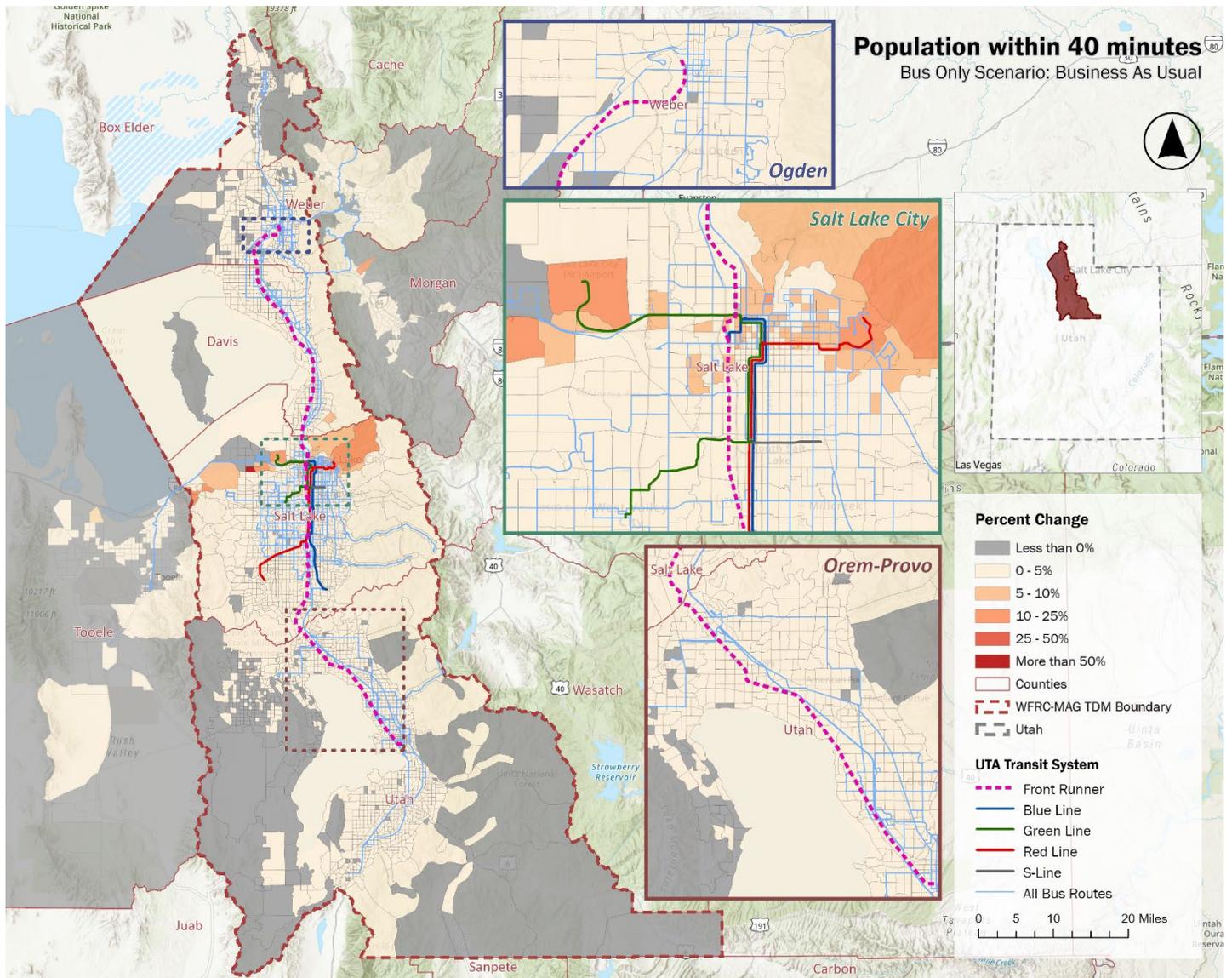
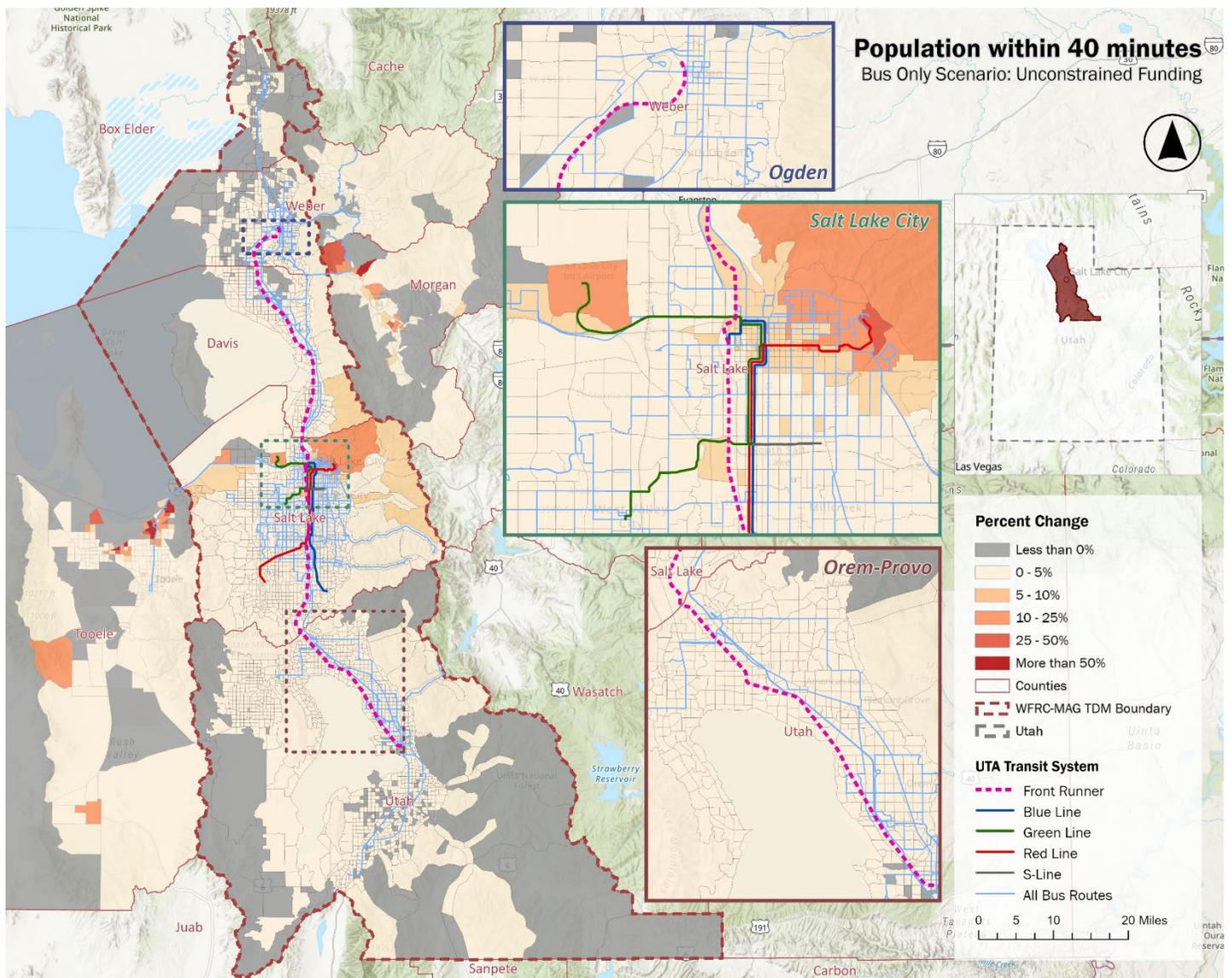


Figure 24: Percent Accessibility Change in 'Bus-Only' Scenario at 'RTP-Total Needs' Investment Level



Accessibility most notably grows between the Business-As-Usual and Priority Needs investment levels, with portions of Salt Lake City becoming more accessible, as well as outer areas of the UTA service areas such as those in Tooele. However, while the Bus-Only network accessibility improves with investment level, evaluating investment with respect to the All-Transit network reveals substantially higher market accessibility. Figure 25 through 28 demonstrate the change in accessibility within a 40-minute drive radius across investment levels.

Figure 25: Percent Accessibility Change in 'All-Transit' Scenario at 'Maintain-Existing-System' Investment Level

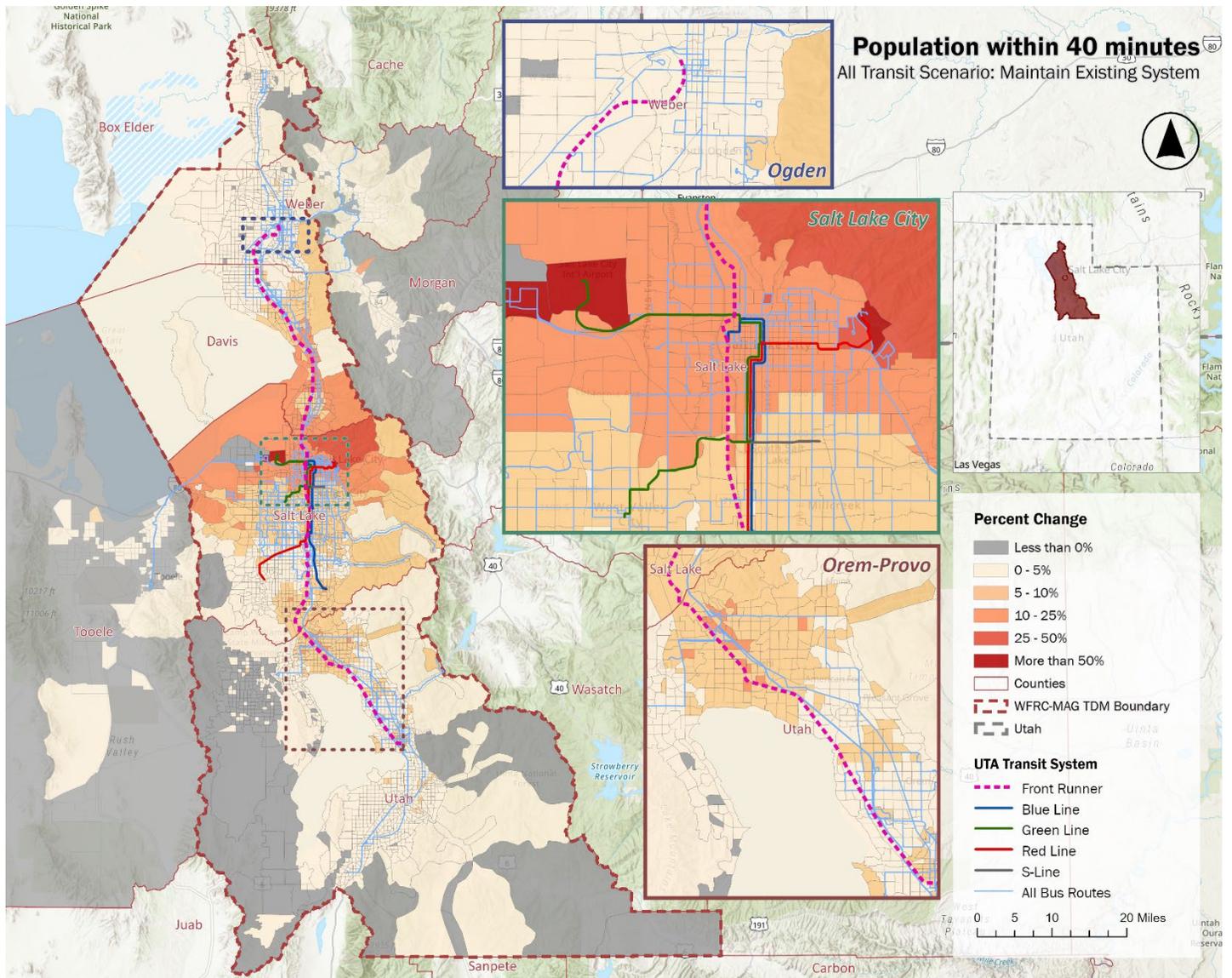


Figure 26: Percent Accessibility Change in 'All-Transit' Scenario at 'Business-As-Usual' Investment Level

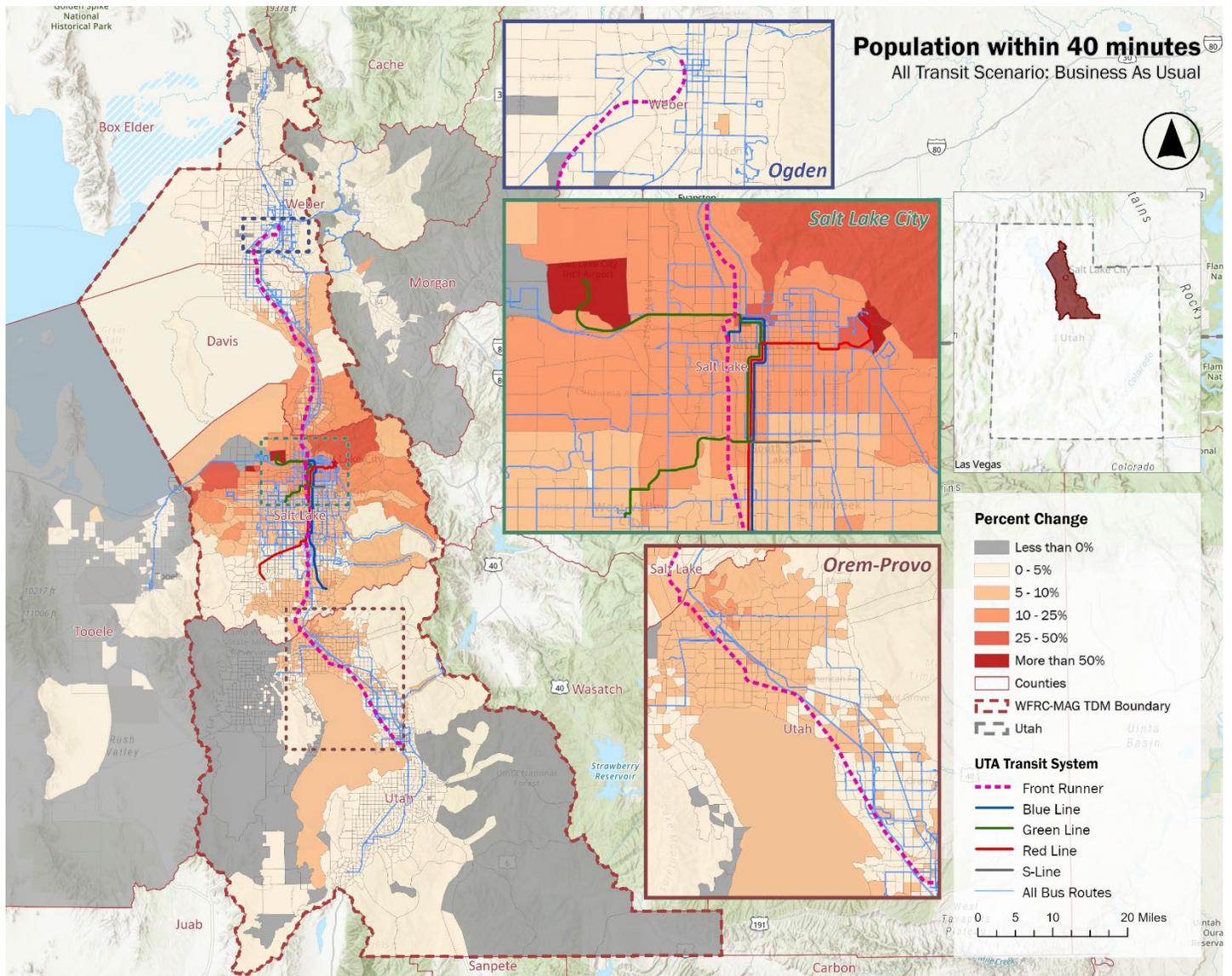


Figure 27: Percent Accessibility Change in 'All-Transit' Scenario at 'RTP-Priority Needs' Investment Level

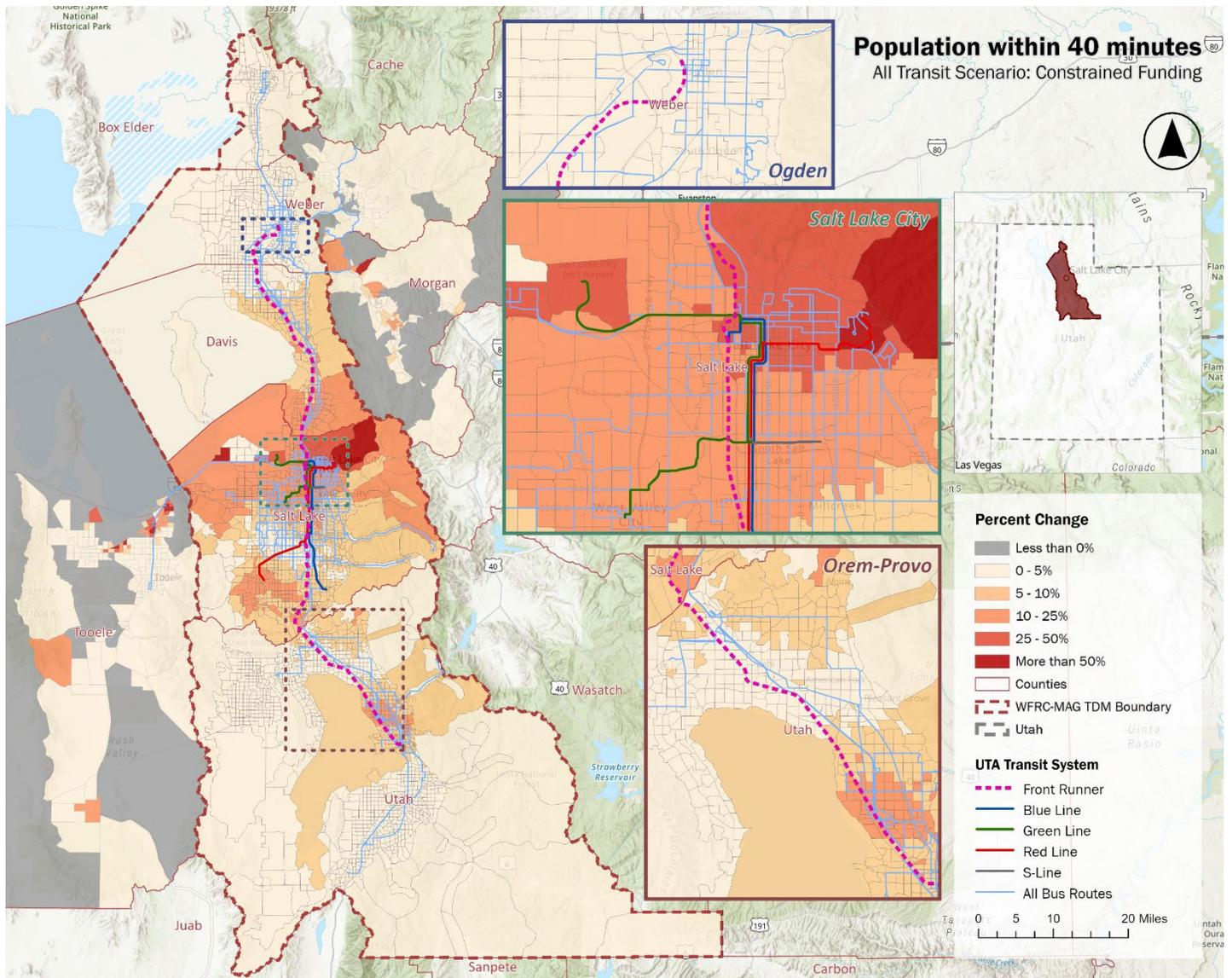
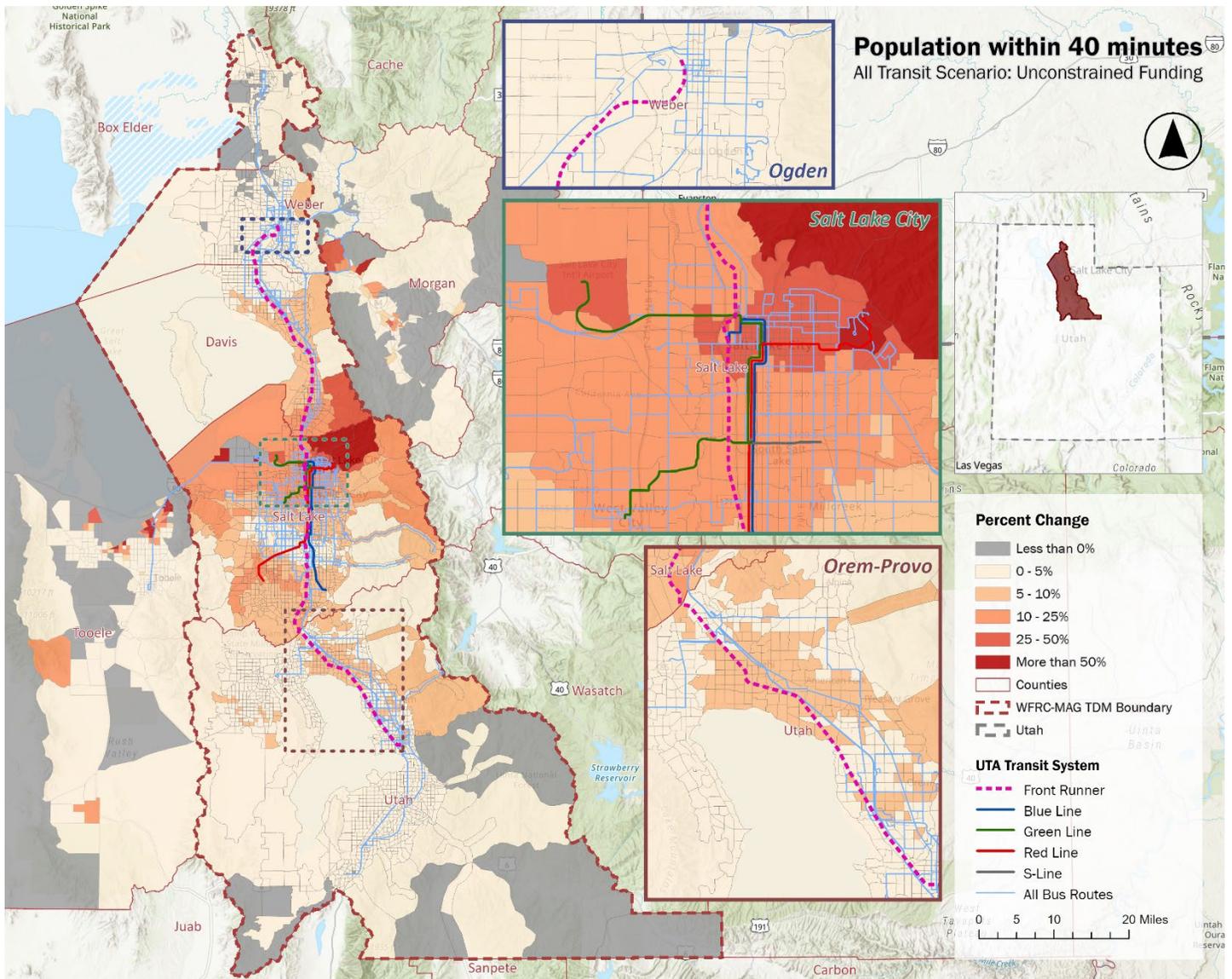


Figure 28: Percent Accessibility Change in 'All-Transit' Scenario at 'RTP-Total Needs' Investment Level



Under the All-Transit scenario, investment makes the outer regions of Salt Lake City as well as portions of western Tooele more accessible. Parts of the northeastern portion of the region also becomes more accessible with western parts of Morgan County growing in drive-time radius with investment as well. As investment and transit scenario ascend in funding level and capability between Bus-Only and All-Transit, regions previously more distant become more accessible, suggesting greater access that businesses will have to potential labor pools, and thus, will see increases in productivity. While accessibility grows with investment, most dramatic shifts in accessibility are visible when comparing investing in all transit as opposed to only the buses being present.

Methodology

The market access impact with respect to transit is based on an increased size of the accessible labor pool, which is understood as the increase in accessibility to population within a 40-minute drive radius that has access to transit.

The impacts on market access are summarized in Table 5 below; the full methodology is described in Appendix II: Market Access Impacts.

Market Access Benefits

Table 7: Summary of Economic Impacts of Market Access for all Transit Scenarios

<i>Benefit Scenarios:</i>	Bus-Only Scenario				All-Transit Scenario				
	<i>Investment Levels:</i>	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
Economic Impacts									
<i>Employment (# of Jobs)</i>	0	3,103	6,167	5,471	2,738	7,896	12,608	9,101	
<i>Labor Income (Billion \$s)</i>	\$0.00	\$1.57	\$2.85	\$2.67	\$1.74	\$4.12	\$6.47	\$5.01	
<i>Value Added/GDP (Billion \$s)</i>	\$0.00	\$2.24	\$4.34	\$3.95	\$3.53	\$5.71	\$10.25	\$7.69	
<i>Business Output (Billion \$s)</i>	\$0.00	\$5.02	\$9.36	\$8.30	\$5.75	\$11.96	\$21.02	\$15.27	

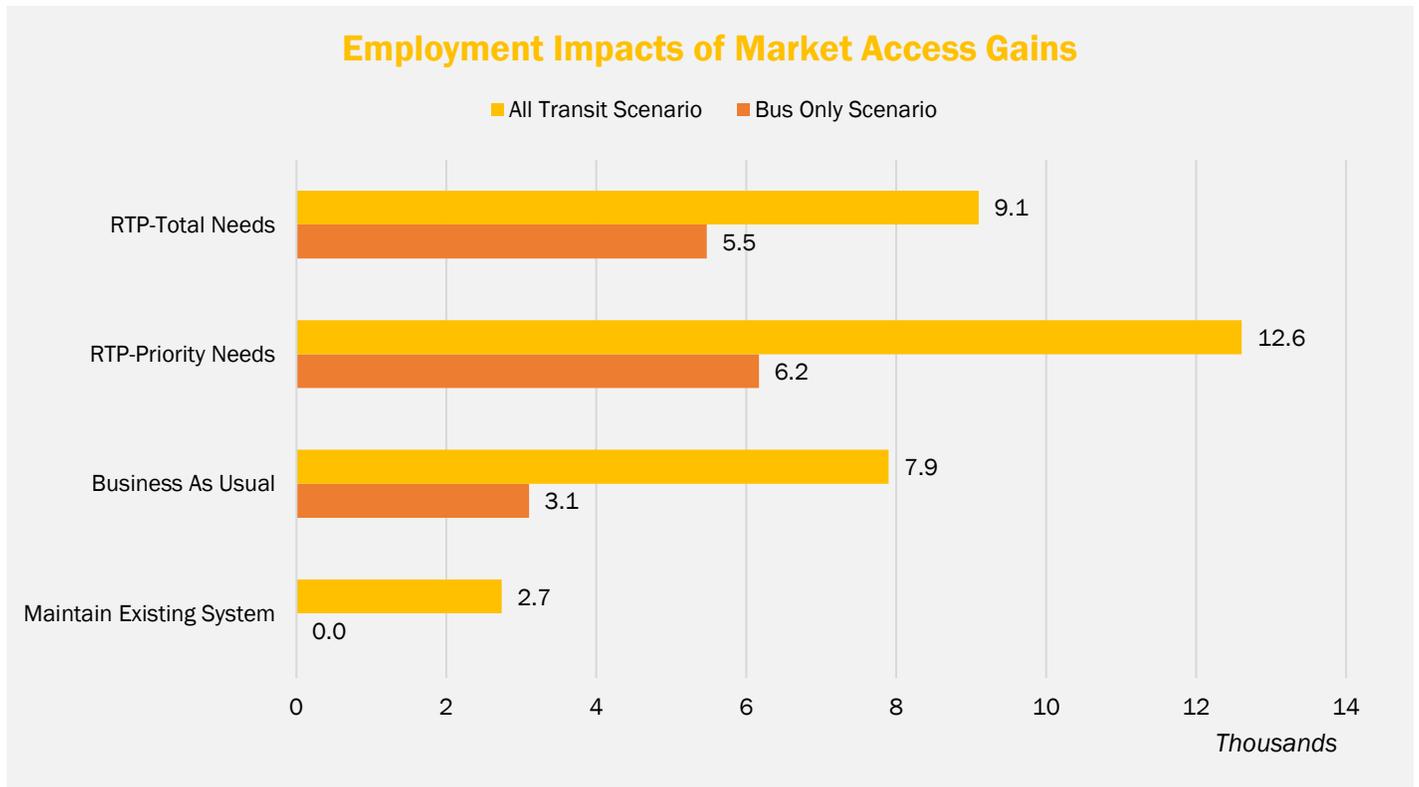
Economic Impacts

The employment profile of industries related to transit market access impacts includes professional service sectors, such as financial services and insurance, as well as health care and educational fields. Due to alleviated congestion and expanded connectivity to the transit system, businesses are provided with expanded labor potential. It is also noteworthy that while transit is the driver of benefit in this analysis, those who experience these benefits are not limited to transit riders. Market access impacts would be experienced by those who experience the congestion that occurs because of transit not being present under the scenarios as well as business and households who would experience increased congestion without transit. Thus, transit creates an increase in economic output with an increase in employment, GDP, business output and labor income from increasing market access and decreasing congestion that would occur without it. Under the All-Transit scenario, by 2050 Utah’s transportation investments will have led to the creation of over 12,600 jobs, \$6.5 billion in labor income, \$10.2 billion in GDP, and \$21 billion in business output.

Please refer to Appendix II: Market Access Impacts for year-by-year breakdown of economic impacts of Market Access as a result of UTA’s investments.

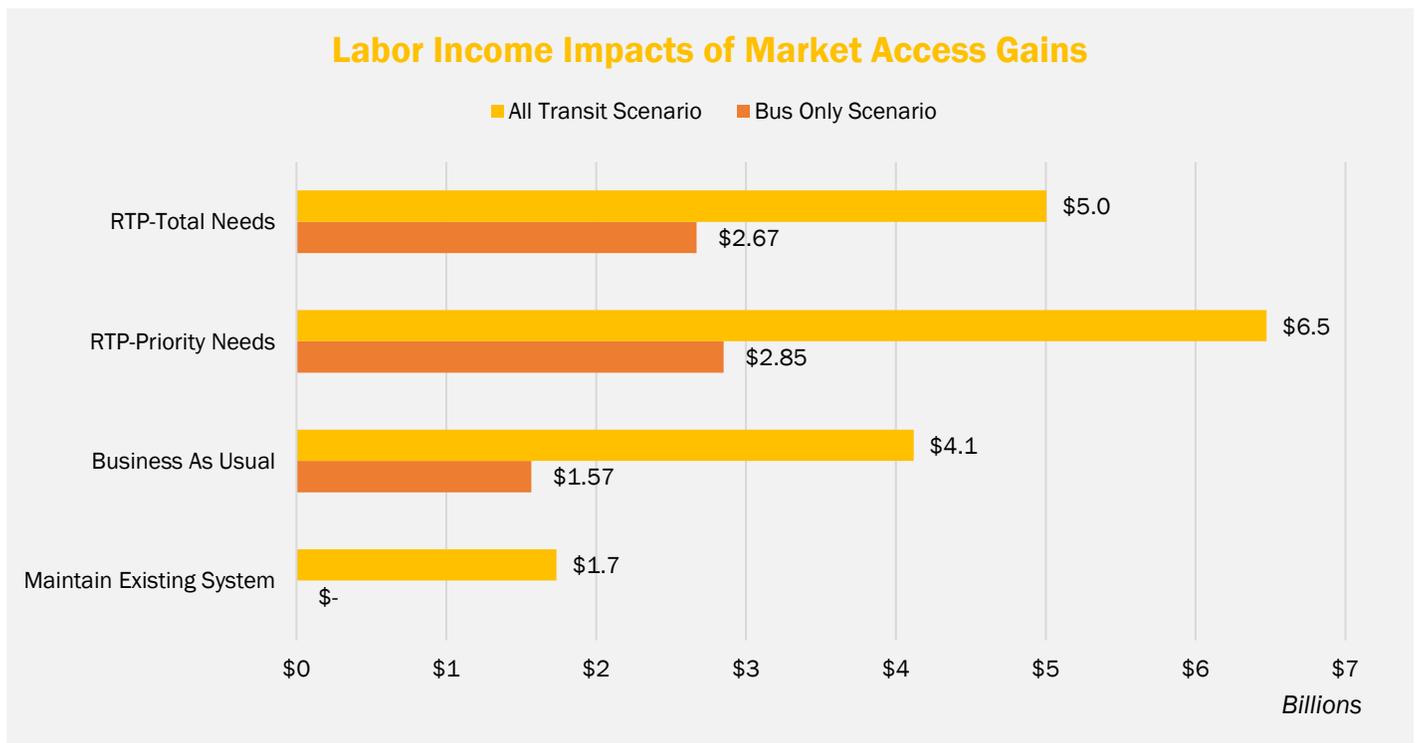
Employment

Figure 29: Employment Impacts of Market Access Gains



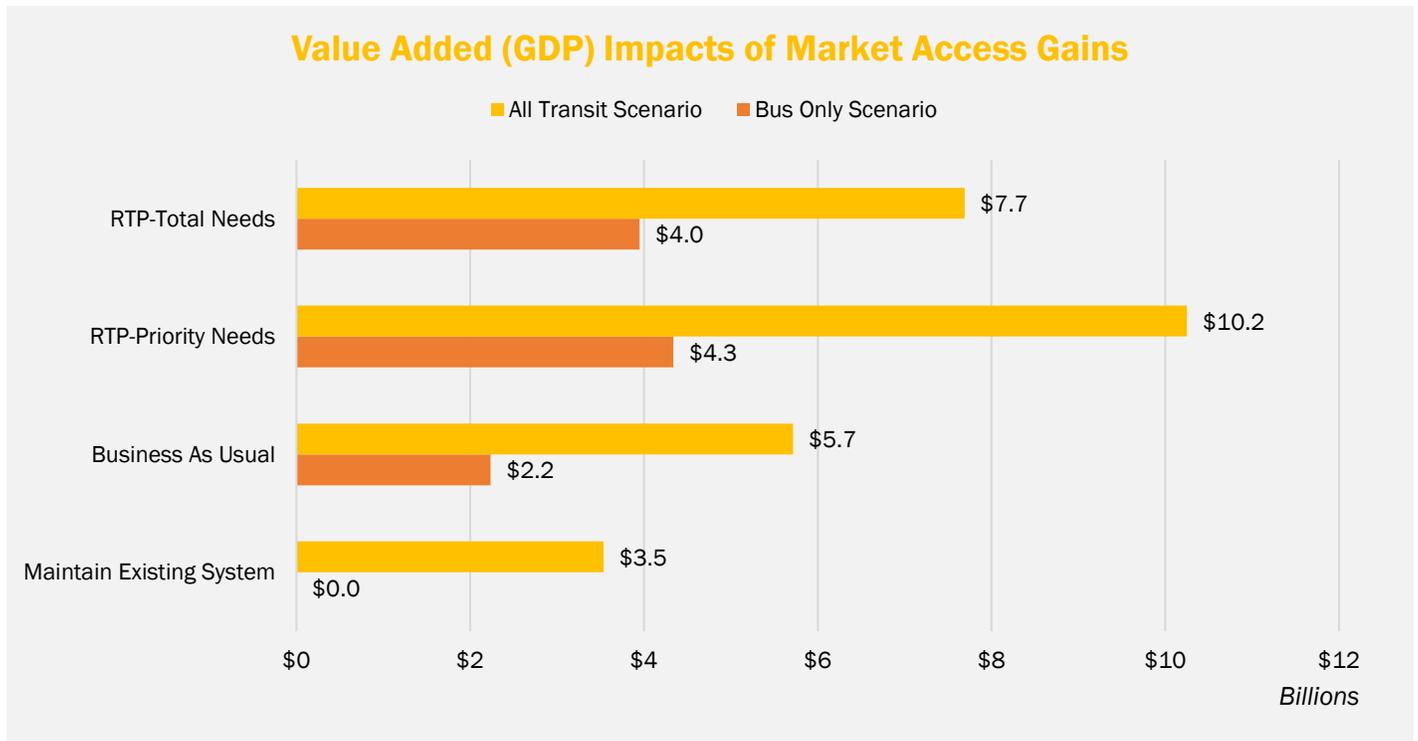
Labor Income

Figure 30: Labor Income Impacts of Market Access Gains



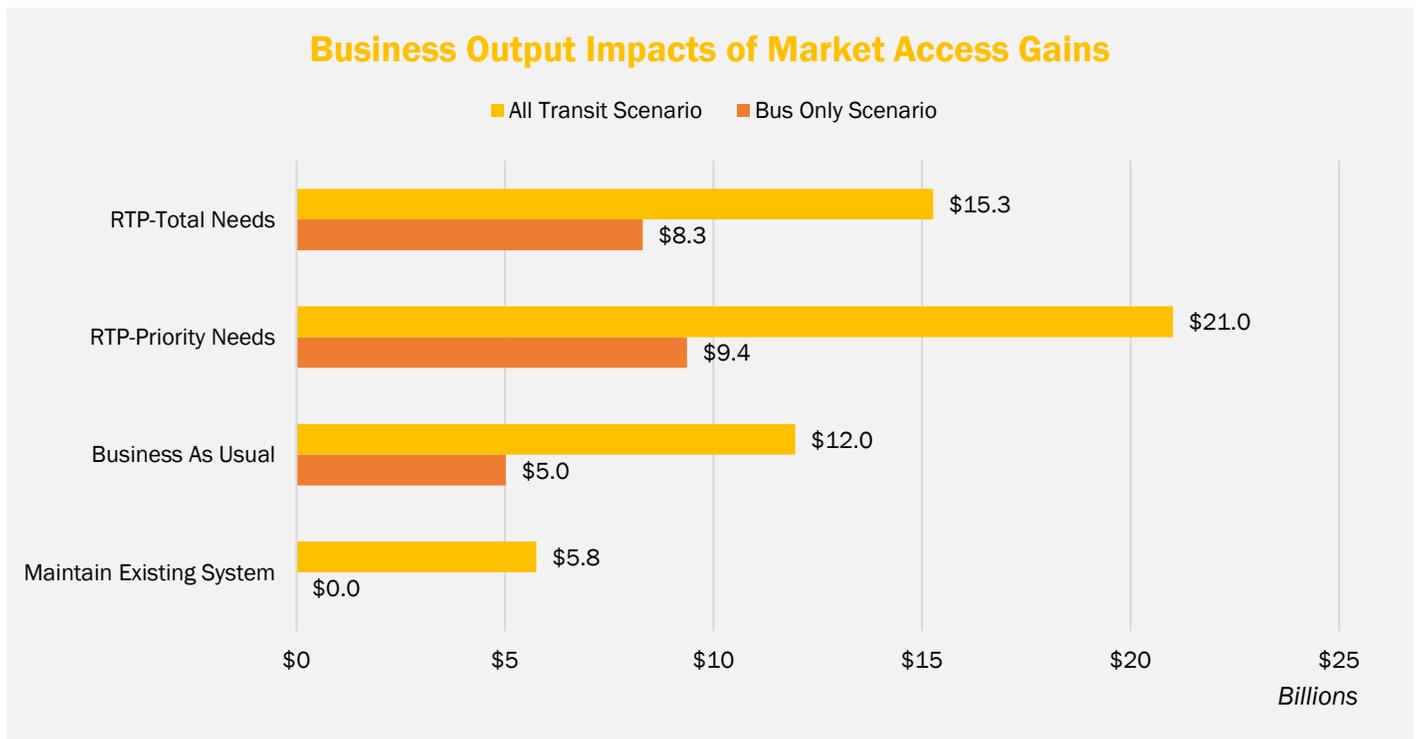
Value Added (GDP)

Figure 31: Value Added (GDP) Impacts of Market Access Gains



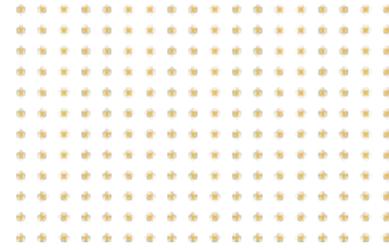
Business Output

Figure 32: Business Output Impacts of Market Access Gains



Notably, these impacts decrease when investment level goes from the Unified Plan to the RTP-Total Needs levels under both the All-Transit and Bus-Only scenarios. This results from lower base congestion levels under RTP-Total Needs circumstances and thus the benefit being lower, as highway investments start to work opposite to transit benefits. Figure 29 through Figure 32 below display the economic impact categories, Employment, Labor Income, GDP, and Business Output, and respective outcomes by investment level and transit scenario.

4. WORKFORCE PARTICIPATION



Jobs Supported by Transit

UTA's transit services play a pivotal role in enhancing the efficiency of the overall transportation system within the Wasatch Front region. Beyond catering to the needs of existing users, these services facilitate an expanded user base, enabling individuals to fulfill their transportation requirements through UTA's transit system. Notably, a significant proportion of these transit trips are dedicated to commuting to and from work locations. The number of transit work trips for each scenario has been derived from the Wasatch Front Travel Demand Model. The identification of these work-related trips serves as a key metric for evaluating the impact of transit services on employment dynamics in the region. By discerning the total employments or jobs directly supported by the availability of transit services, it becomes evident that such opportunities would be unattainable in the absence of robust transit infrastructure.

Table 8 shows the estimated annual employment supported by transit trips for varying investment levels and transit scenarios over the years 2023-2050. These results underscore the indispensable workforce participation benefits attributed to UTA's transit services in the Wasatch Front region, thereby emphasizing the broader economic implications of a well-functioning public transportation system.

Table 8: Number of Employees directly supported by UTA's Transit System

Benefit Scenarios:	Bus-Only Scenario				All-Transit Scenario			
	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
Investment Levels:								
2023	13,035	13,035	13,035	13,035	24,384	24,384	24,384	24,384
2024	13,235	13,295	13,583	13,579	25,000	25,060	25,386	25,386
2025	13,438	13,561	14,155	14,146	25,635	25,757	26,430	26,430
2026	13,644	13,832	14,751	14,737	26,290	26,476	27,517	27,517
2027	13,853	14,108	15,373	15,353	26,965	27,218	28,649	28,649
2028	14,066	14,390	16,020	15,995	27,662	27,984	29,829	29,828
2029	14,282	14,678	16,695	16,663	28,381	28,775	31,058	31,057
2030	14,501	14,971	17,398	17,360	29,122	29,590	32,339	32,337
2031	14,724	15,271	18,131	18,086	29,887	30,432	33,673	33,670
2032	14,950	15,576	18,895	18,842	30,676	31,301	35,063	35,059
2033	15,179	15,888	19,692	19,630	31,490	32,198	36,512	36,506
2034	15,412	16,205	20,521	20,450	32,330	33,124	38,021	38,013
2035	15,649	16,530	21,386	21,306	33,198	34,081	39,593	39,583
2036	15,889	16,860	22,288	22,197	34,092	35,068	41,231	41,219
2037	16,133	17,197	23,227	23,125	35,016	36,087	42,938	42,923

Benefit Scenarios:	Bus-Only Scenario				All-Transit Scenario			
	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
Investment Levels:								
2038	16,381	17,541	24,207	24,092	35,970	37,140	44,717	44,698
2039	16,633	17,892	25,227	25,100	36,954	38,227	46,570	46,548
2040	16,888	18,250	26,291	26,150	37,970	39,350	48,501	48,475
2041	17,147	18,616	27,399	27,245	39,019	40,510	50,514	50,483
2042	17,411	18,988	28,555	28,385	40,102	41,707	52,611	52,575
2043	17,678	19,368	29,759	29,573	41,220	42,945	54,796	54,755
2044	17,950	19,756	31,015	30,811	42,375	44,223	57,074	57,026
2045	18,226	20,151	32,323	32,100	43,568	45,544	59,447	59,392
2046	18,506	20,554	33,687	33,444	44,800	46,908	61,920	61,857
2047	18,790	20,966	35,108	34,844	46,072	48,318	64,498	64,426
2048	19,079	21,386	36,589	36,303	47,386	49,775	67,184	67,103
2049	19,372	21,814	38,134	37,823	48,743	51,281	69,984	69,892
2050	19,670	22,251	39,743	39,408	50,146	52,837	72,902	72,799
Maximum Jobs	19,670	22,251	39,743	39,408	50,146	52,837	72,902	72,799

Economic Impacts

The economic impact of workforce participation is not confined to the direct jobs supported by transit alone. Enabling additional employment in the economy that would have otherwise not been possible, UTA’s transit system initiates a ripple effect, generating additional employment, labor income, value added (GDP), and business output (sales) due to the multiplier effect. Table 7 provides a summary of the economic impacts of workforce participation in the economy across all the investment levels and transit scenarios over the duration of the Unified Plan.

Table 9: Summary of Economic Impacts of Workforce Participation for all Transit Scenarios

Benefit Scenarios:	Bus-Only Scenario				All-Transit Scenario			
	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
Investment Levels:								
Economic Impacts								
Employment (# of Jobs)	27,610	34,584	55,224	47,350	63,062	66,290	94,214	94,080
Labor Income (Billion \$s)	\$39.69	\$46.57	\$55.73	\$48.06	\$77.70	\$80.98	\$100.72	\$100.66
Value Added/GDP (Billion \$s)	\$66.46	\$76.29	\$90.31	\$80.80	\$129.67	\$138.28	\$170.73	\$170.63
Business Output (Billion \$s)	\$129.47	\$148.85	\$176.51	\$159.17	\$253.83	\$268.90	\$330.48	\$330.28

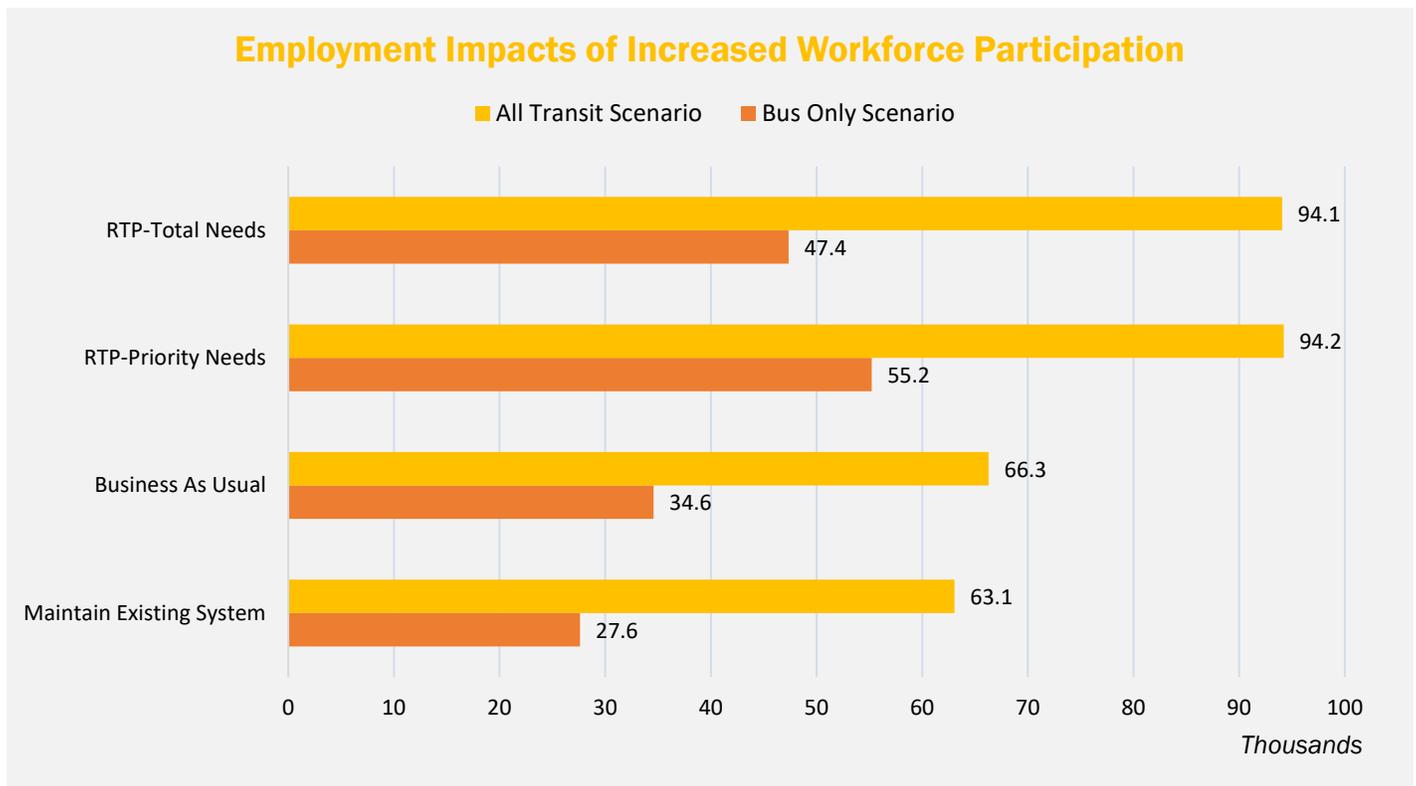
As the investment levels increase from Maintaining Existing System through funding the RTP-Total Needs of the Unified Plan, there is a consistent uptrend in the economic indicators across all categories, demonstrating the positive correlation between transit investment and economic outcomes. Notably, the highest impact is estimated at RTP-Priority Needs investment level, where the Bus-Only transit scenario supports 55,224 jobs, contributing \$55.73 billion in labor income, \$90.31 billion in value added/GDP, and generating \$176.51 billion in business output as a result of increased workforce participation. Transitioning to the All-Transit Scenario yields even more substantial

benefits, with 94,214 jobs, \$100.72 billion in labor income, \$170.73 billion in value added/GDP, and \$330.48 billion in business output under the RTP-Priority Needs investment level. The RTP-Total Needs scenario sees a slightly less impact than the RTP-Total Needs because funding total highway needs would reduce the efficiency of the transit system in displacing the automobile trips at the RTP-Total Needs level. These figures highlight the significant potential for economic growth and prosperity associated with increased workforce participation from investment in a comprehensive transit system, particularly when aligned with regional transportation priorities. A year-by-year breakdown of economic impacts of workforce participation as a result of UTA’s investment in Utah’s economy is provided in Appendix III: Workforce Participation Impacts.

Figure 33 through Figure 36 visually compares the four different economic impact indicators of Workforce participation at different investment and transit scenarios.

Employment

Figure 33: Employment Impacts of Increased Workforce Participation



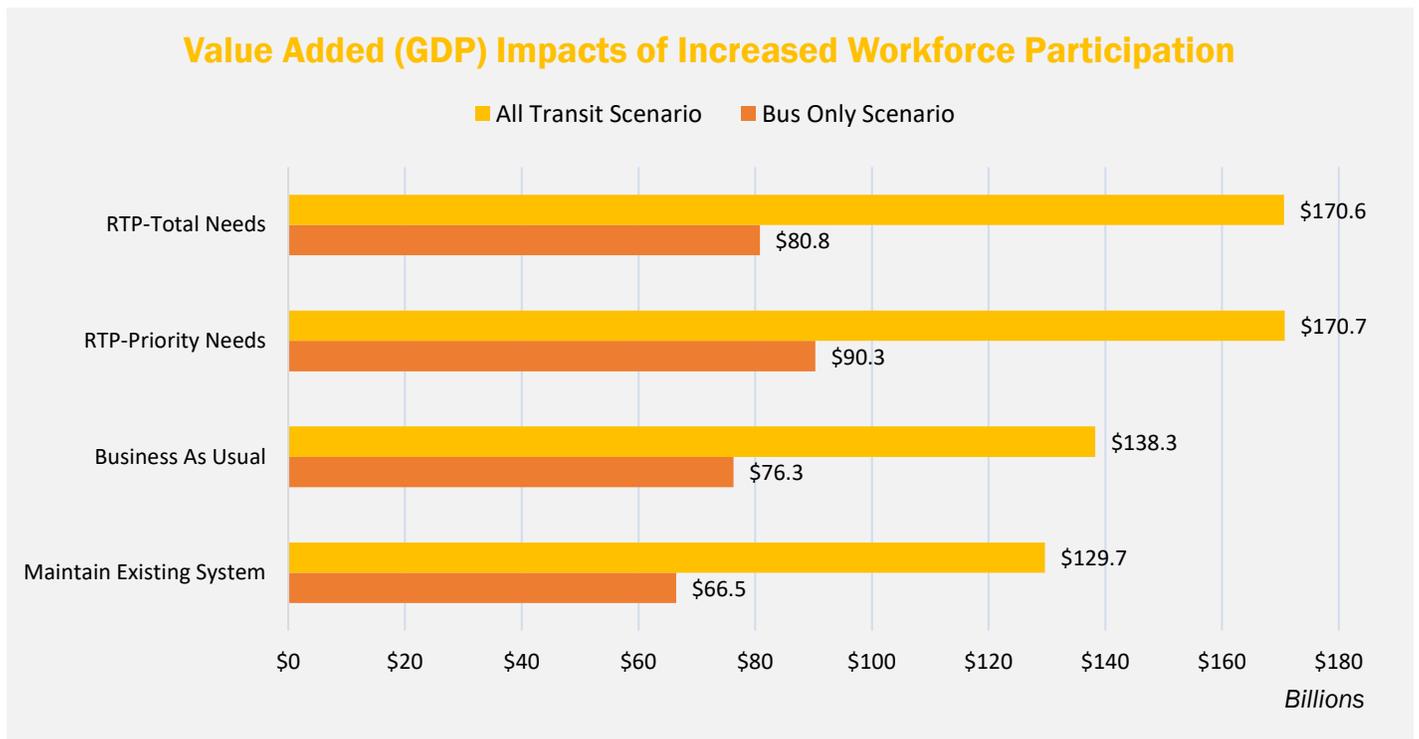
Labor Income

Figure 34: Labor Income Impacts of Increased Workforce Participation



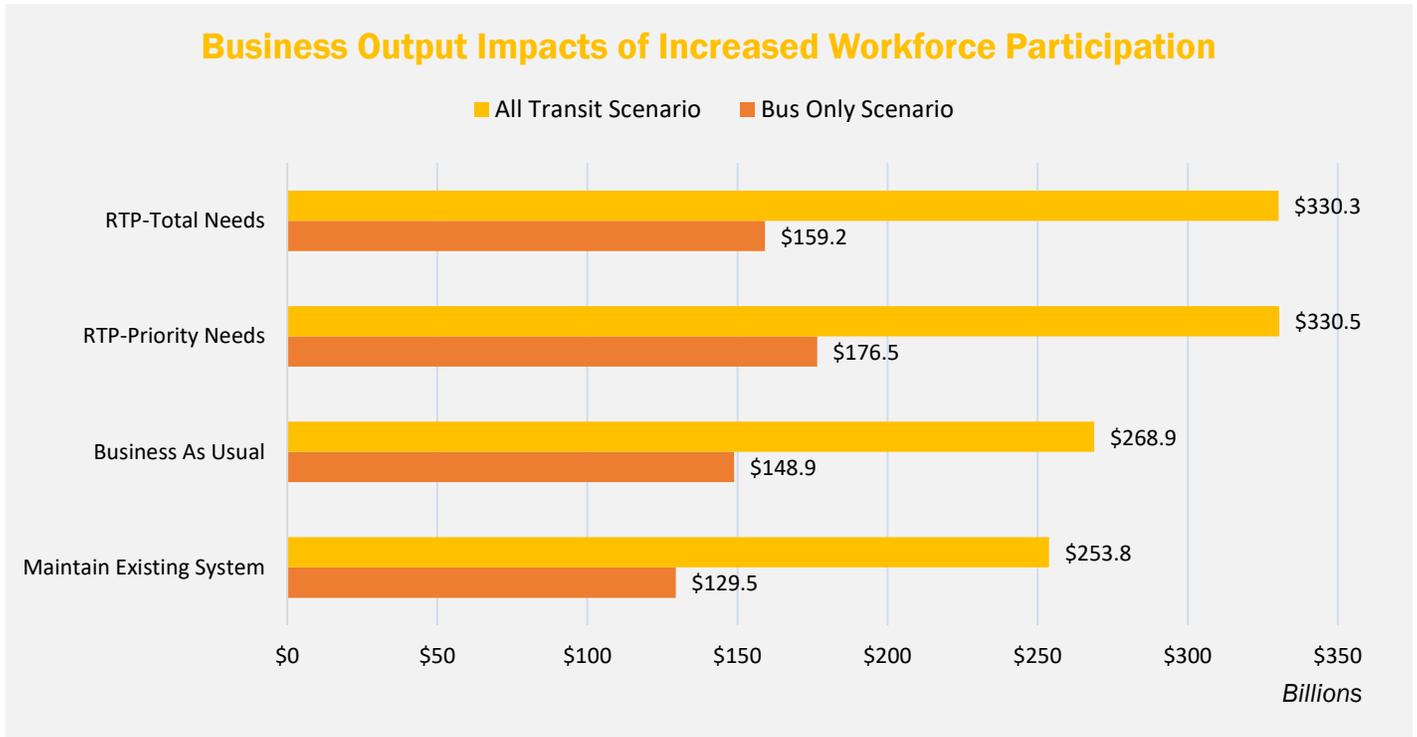
Value Added (GDP)

Figure 35: Value Added (GDP) Impacts of Increased Workforce Participation



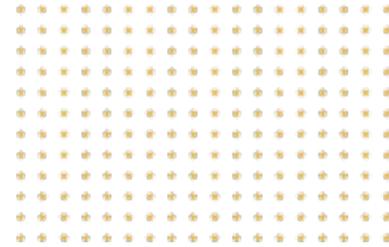
Business Output

Figure 36: Business Output Impacts of Increased Workforce Participation



These findings underscore a clear correlation between increased investment in the transit system and heightened workforce participation in the regional economy. This correlation is reflected in elevated levels of employment, household income, value added (GDP), and business outputs. Notably, the economic impacts are most pronounced in the RTP-Priority Needs scenario, primarily because the transit projects outlined in both the RTP-Priority Needs and RTP-Total Needs scenarios are relatively similar within the Unified Plan. Conversely, greater disparities exist in highway projects between these two investment levels, resulting in a notable shift of trips back to the highway system as investment progresses from RTP-Priority Needs to RTP-Total Needs. This trend is more evident in the Bus-Only scenario compared to the All-Transit scenario, highlighting that bus users are more inclined to revert to driving under favorable conditions, unlike rail users. This underscores the importance of proportionally greater funding in the transit system compared to the highway system for fully maximizing the workforce participation benefits of transit.

5. TRANSIT SPENDING



Transit Spending

The direct investments in a transit system play a pivotal role in shaping Utah's economic landscape through its multifaceted impacts from UTA's operation, maintenance, and capital investments. The injection of funds into capital projects, such as the construction of transit infrastructure, initiates a ripple effect throughout the state's economy. This catalyzes employment opportunities across sectors involved in project construction such as construction, engineering, and other related fields, leading to a boost in wages, overall output, and GDP. The significance of this economic stimulation is further underscored by the indirect and induced impacts that follow. The workforce employed in transit-related projects subsequently channels their earnings to the local economy, initiating a multiplier effect and downstream to businesses and services across Utah. This interconnected web of economic activity strengthens local industries and contributes to the overall vibrancy of the state's economy.

Moreover, the operation and maintenance costs associated with UTA's transit system contribute to the economic ecosystem. These expenditures are redirected to industries within the region that provide the necessary support for the continued functionality and upkeep of the transit infrastructure. As the financial flow permeates various sectors, it amplifies economic vitality, supporting businesses and sustaining jobs. The direct economic impact of transit investment, therefore, serves as a catalyst for broader economic development, fostering a cycle of growth that extends beyond the initial capital investments.

Table 10: Summary of Economic Impacts of Transit Spending for all Transit Scenarios

<i>Benefit Scenarios:</i>	Bus-Only Scenario				All-Transit Scenario			
<i>Investment Levels:</i>	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
Total Transit Spending (Billion \$s)	\$16.14	\$17.45	\$26.71	\$29.29	\$22.22	\$24.07	\$36.19	\$47.01
<i>Operation and Maintenance Costs (Billion \$s)</i>	\$12.79	\$12.79	\$16.68	\$17.01	\$17.42	\$17.42	\$22.79	\$24.76
<i>Capital Outlays (Billion \$s)</i>	\$3.35	\$4.66	\$10.02	\$12.27	\$4.80	\$6.65	\$13.40	\$22.25
Economic Impacts								
<i>Employment (# of Jobs)</i>	21,579	19,374	46,020	60,420	30,385	27,979	56,602	74,804
<i>Labor Income (Billion \$s)</i>	\$9.22	\$10.71	\$16.38	\$17.97	\$12.34	\$14.22	\$21.39	\$27.78
<i>Value Added/GDP (Billion \$s)</i>	\$16.52	\$17.97	\$27.49	\$30.15	\$22.47	\$24.40	\$36.69	\$47.65
<i>Business Output (Billion \$s)</i>	\$32.16	\$35.04	\$53.62	\$58.79	\$44.14	\$48.08	\$72.30	\$93.90

Table 10 provides an overview of the estimated outlays for each transit and investment level scenario, coupled with the subsequent economic impacts on employment, labor income, value added, and business outputs. These

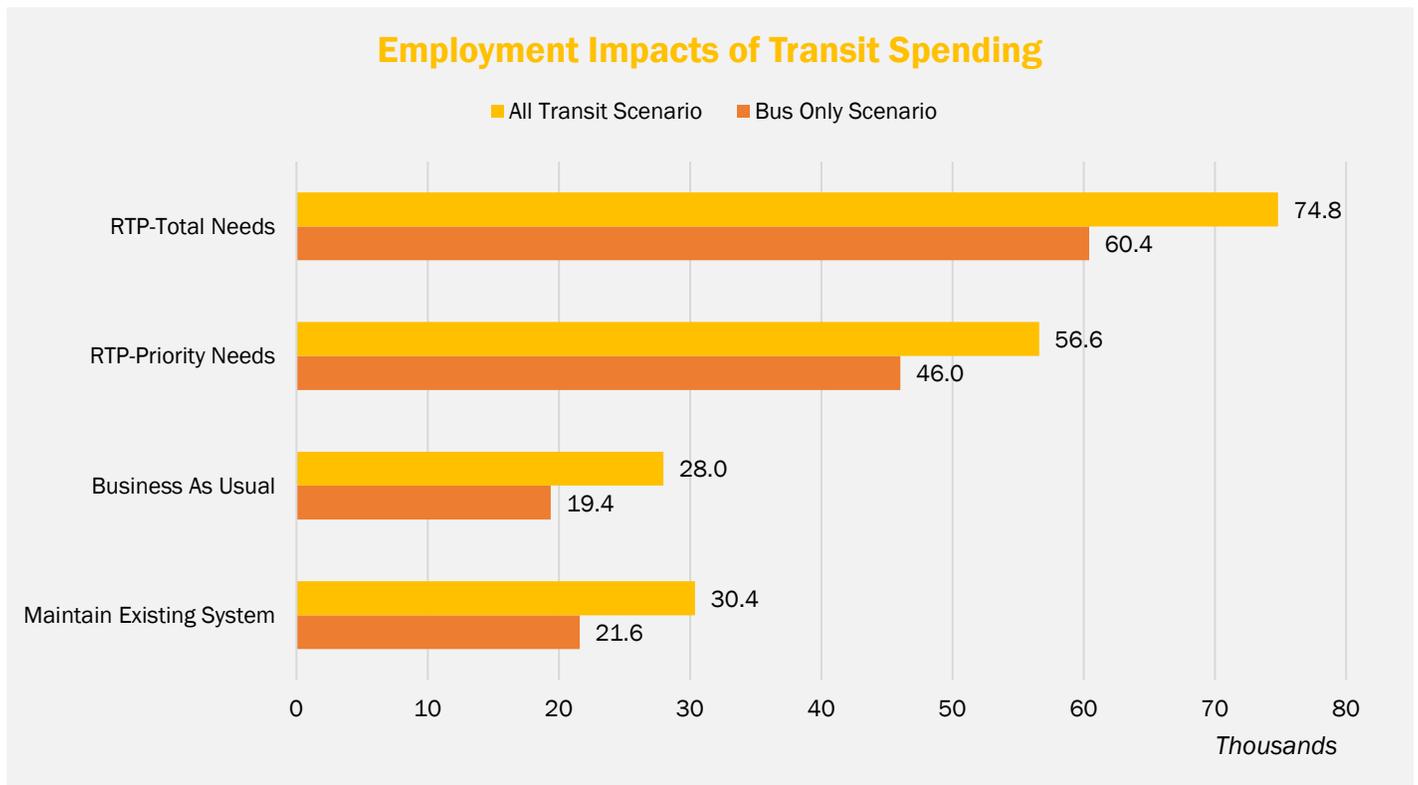
economic impacts are discussed further with Figure 37 to Figure 40 below. Please refer to Appendix IV: Transit Spending Impacts for year-by-year breakdown of economic impacts of UTA's transit spending.

Economic Impacts

Employment

The Utah Transit Authority's transit investment and expenditure play a crucial role in shaping the employment landscape within Utah's economy across different scenarios, as shown in Figure 33 below. In the Maintain-Existing-System category, the employment impact varies between the Bus-Only and All-Transit scenarios. For Bus-Only, the employment generated is estimated at 21,579 jobs, while the All-Transit scenario contributes to 30,385 jobs. The operation and maintenance costs and state of good repair outlays associated with these scenarios, standing at \$16.14 billion and \$22.22 billion, respectively, underscore the significant employment opportunities tied to sustaining and expanding transit services.

Figure 37: Employment Impacts of Transit Spending



Under the Business-As-Usual scenario, where both operation and maintenance costs and capital outlays are considered, the employment impact remains substantial. The Bus-Only scenario is anticipated to create 19,374 jobs, while the All-Transit option is projected to result in 27,979 jobs. Moving into the realm of RTP-Priority Needs, employment opportunities escalate further, reaching 46,020 jobs for Bus-Only and 56,602 jobs for All-Transit. Lastly, the RTP-Total Needs scenario demonstrates the highest employment impact, with 60,420 jobs for Bus-Only and an impressive 74,804 jobs for All-Transit. These employment figures underscore the far-reaching economic

consequences and job creation potential associated with different levels of transit investment by the Utah Transit Authority.

Labor Income

The Utah Transit Authority's transit investment strategies from 2023 to 2050 exhibit varying impacts on labor income across different scenarios. In the Maintain-Existing-System category, the labor income impact is \$9.2 billion, while the All-Transit scenario forecasts a higher labor income of \$12.3 billion. These figures reflect the significant role of maintaining and expanding transit services in generating labor income within Utah's economy.

Figure 38: Labor Income Impacts of Transit Spending



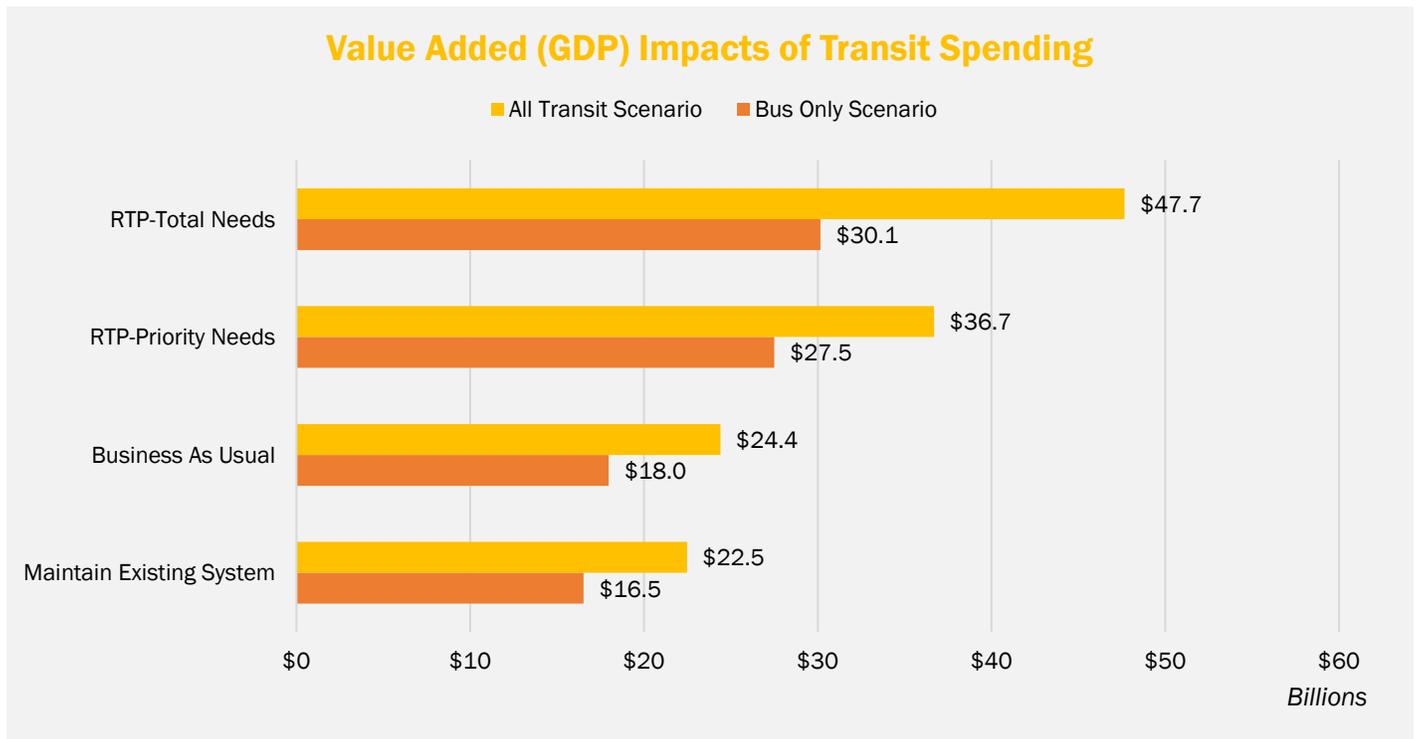
Under the Business-As-Usual scenario, where both operation and maintenance costs and capital outlays are considered, the labor income impact increases. The Bus-Only scenario is anticipated to generate \$10.7 billion in labor income, while the All-Transit option is projected to result in a higher figure of \$14.2 billion. As the investment scenario shifts to "RTP-Priority Needs," the labor income impact rises even further, reaching \$16.4 billion for Bus-Only and \$21.4 billion for All-Transit. Finally, in the RTP-Total Needs scenario, the labor income impact peaks at \$18 billion for Bus-Only and an impressive \$27.8 billion for All-Transit. These labor income figures underscore the income generation potential associated with different levels of transit investment by the Utah Transit Authority.

Value Added (GDP)

The Utah Transit Authority's transit investment and expenditure from 2023 to 2050 yields substantial influence on the value added (GDP) within Utah's economy across the scenarios. In the Maintain-Existing-System category, the GDP impact for Bus-Only is estimated at \$16.5 billion, while the All-Transit scenario forecasts a higher GDP impact

of \$22.5 billion. These figures underscore the importance of the necessity of transit services for the overall economic output of the state.

Figure 39: Value Added (GDP) Impacts of Transit Spending

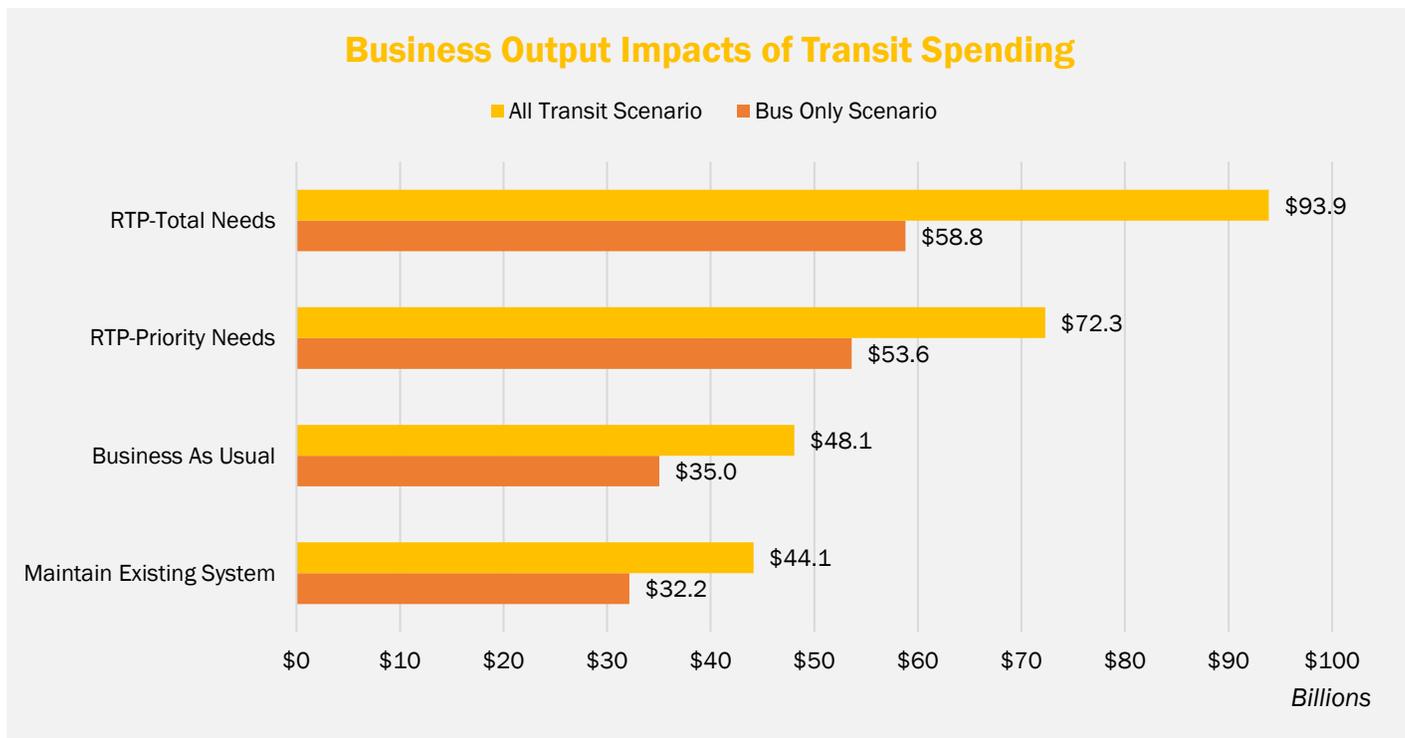


Under the Business-As-Usual scenario, encompassing both operation and maintenance costs and capital outlays, the GDP impact escalates. The Bus-Only scenario is projected to generate \$18 billion in GDP impact, while the All-Transit option is anticipated to result in \$24.4 billion. As the investment scenario shifts to "RTP-Priority Needs," the GDP impact rises even further, reaching \$27.5 billion for Bus-Only and \$36.7 billion for All-Transit. Finally, in the RTP-Total Needs scenario, the GDP impact peaks at \$30.1 billion for Bus-Only and an impressive \$47.7 billion for All-Transit. These GDP impact figures highlight the value-added potential for the economy in the region that are associated with different levels of transit investment by the Utah Transit Authority.

Business Output

The Utah Transit Authority's transit investment and expenditure strategies from 2023 to 2050 yield substantial impacts on business outputs within Utah's economy across diverse scenarios. In the Maintain-Existing-System category the estimated business output impact is \$32.2 billion for Bus-Only, while the All-Transit scenario forecasts a higher business output impact of \$44.1 billion. These figures highlight the pivotal role of the presence of transit services in contributing to the overall business outputs of the state.

Figure 40: Business Output Impacts of Transit Spending

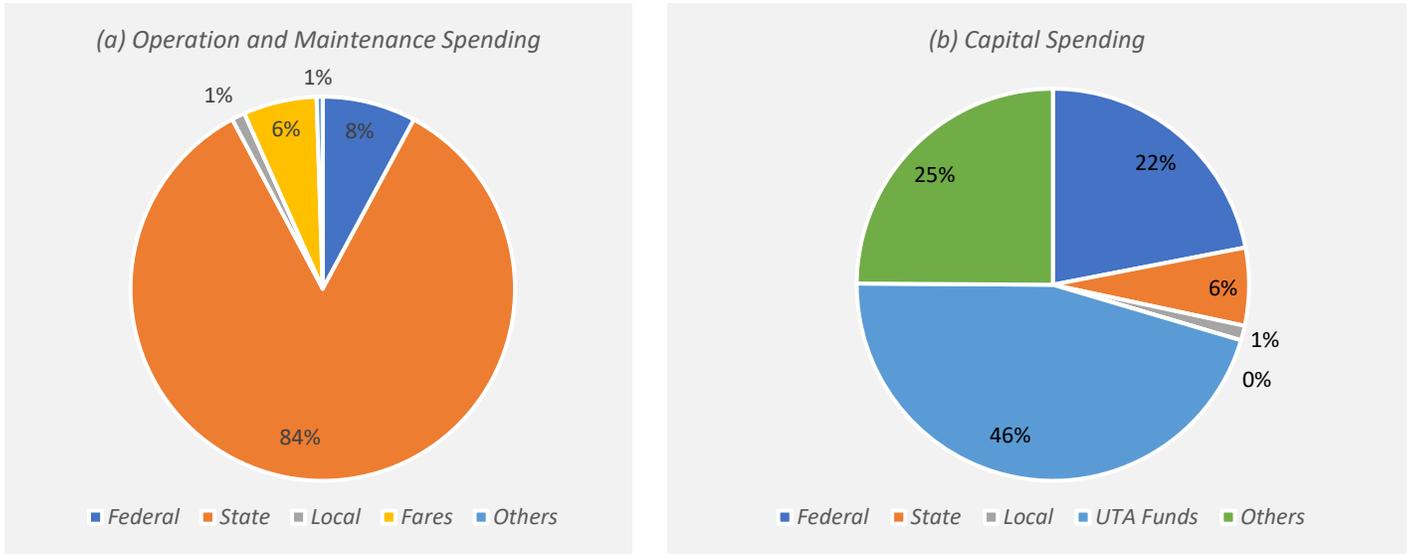


Under the Business-As-Usual scenario, encompassing both operation and maintenance costs and capital outlays, the business output impact escalates. The Bus-Only scenario is projected to generate \$35 billion in business output impact, while the All-Transit option is anticipated to result in a higher figure of \$48.1 billion. As the investment scenario escalates to RTP-Priority Needs, the business output impact rises further to \$53.6 billion for Bus-Only and \$72.3 billion for All-Transit. Finally, in the RTP-Total Needs scenario, the business output impact peaks at \$58.8 billion for Bus-Only and \$93.9 billion for All-Transit. These business output impact figures emphasize the output-generation potential for the economy that are associated with different levels of transit investment by the Utah Transit Authority.

Sources of Transit Spending

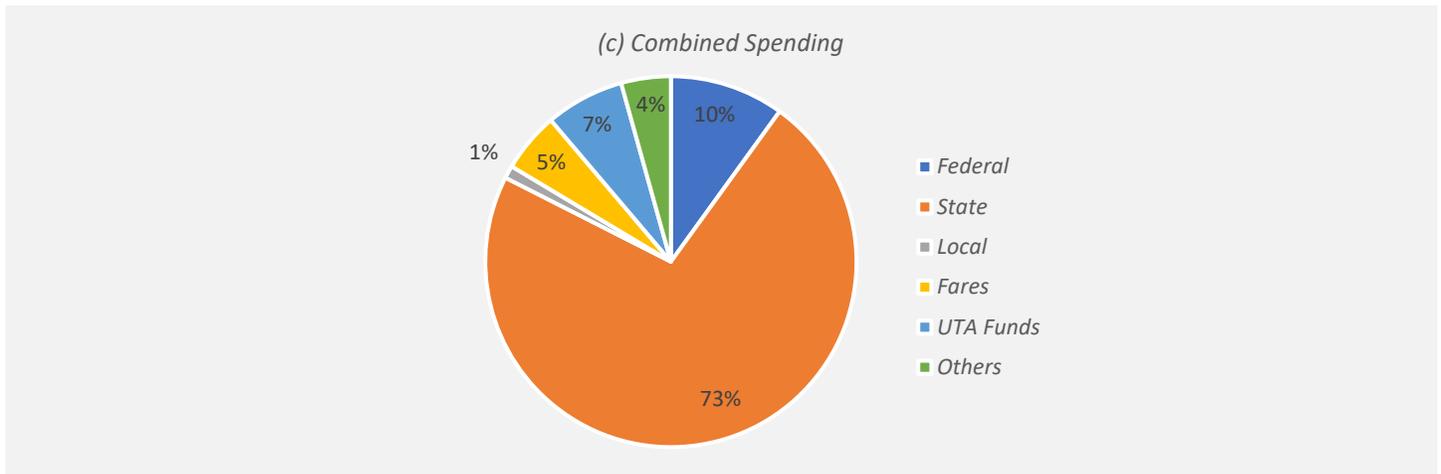
During the Unified Plan spanning from 2023 to 2050, the vast majority of the operation and maintenance (O&M) spending – roughly 84% - is estimated to be covered by State funding. Federal contributions and farebox collection each account for 8% and 6% of the estimated O&M spending, respectively. In contrast, the capital spending primarily relies on UTA Funds at approximately 46%, followed by Federal and State sources at 22% and 6%, respectively. Other sources, including bonding and leasing, make up 25% of capital spending during this period. As an example for discussion, Figure 41 illustrates a generalized distribution of these spending types based on funding sources for the All-Transit scenario at both the RTP-Priority Needs and RTP-Total Needs investment levels.

Figure 41: Generalized Distribution of Spending by Funding Source in RTP: All-Transit Scenario (2023-2050)



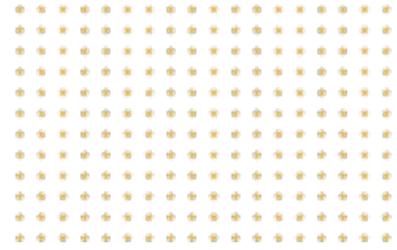
Collectively, for both the Bus-Only and All-Transit scenarios, it is estimated that around 72% of UTA spending during the Unified Plan period is sourced from the State, with approximately 10% from Federal sources and an average of 1.1% from Local sources (see Figure 42). Additionally, UTA Funds, Ridership fares, and other funding sources contribute 7%, 5.2%, and 4.3%, respectively. While about 90% of the spending originates within Utah, the 10% sourced from Federal funding represents new money injected into Utah's economy due to UTA's transit investments in operations, maintenance, and capital projects. Bringing this investment directly into Utah results in an additional stimulus to the state's economy.

Figure 42: Generalized Distribution of Total UTA Spending at RTP Scenario (2023-2050)



If the relationships described in the above analysis are indicative of federal funding, it suggests that UTA's attraction of federal investment in Utah could result in approximately 4,600 jobs, \$1.64 billion in labor income, \$2.75 billion in GDP, and \$5.36 billion in additional business output in the Bus-Only scenario at the investment level of the Unified Plan's Priority needs. In the All-Transit scenario of the same investment level, it could lead to 5,700 jobs, \$2.14 billion in labor income, \$3.67 billion in GDP, and \$7.23 billion in additional business output.

6. FISCAL IMPACTS



Investing in the Utah Transit Authority’s transit system holds the potential to generate significant fiscal impacts across various levels of government. This investment is poised to stimulate economic activities, with the promise of more jobs, increased labor income, expanded business outputs, and added value to the local economy. The fiscal impacts of this initiative can be attributed to a combination of direct, indirect, and induced effects, driven by spending on construction, the establishment of more efficient transportation systems, and the broadened market access they facilitate. Consequently, all levels of government, including federal, state, and local authorities, are expected to benefit from enhanced fiscal revenues resulting from this growth. This section highlights the multi-dimensional potential of the Utah Transit Authority’s system investment and its substantial influence on government revenues in Utah, contingent on different scenarios and investment levels.

Across various transit scenarios in the Cumulative Fiscal Impacts of Transportation Funding, distinct patterns emerge in total taxes. In the Bus-Only Scenario, total taxes amount to \$7.95 billion under the Maintain-Existing-System, rising to \$8.96 billion in the Business-As-Usual scenario. Both RTP-Priority Needs and RTP-Total Needs scenarios witness a notable further increase, reaching \$13.31 billion and \$13.76 billion, respectively. The All-Transit Scenario exhibits an even higher magnitude of fiscal impacts. Starting at \$16.98 billion under the Maintain-Existing-System, total taxes escalated to \$17.96 billion in the Business-As-Usual scenario. The subsequent RTP-Priority Needs and RTP-Total Needs scenarios depict a substantial surge, reaching \$26.08 billion and \$28.00 billion, respectively. Thus, while both scenarios show an upward trajectory, the All-Transit Scenario consistently demonstrates significantly higher cumulative fiscal impacts compared to the Bus-Only Scenario across the different funding levels.

Appendix V: Fiscal Impacts provides a year-by-year breakdown of total anticipated fiscal impacts at local, state, and federal levels due to UTA’s investment in Utah’s market. Appendix VI: Cumulative Fiscal Impacts (2023-2050) further dives into the breakdown of these cumulative fiscal impacts.

Bus-Only Scenario

The cumulative fiscal impacts of transportation funding under the Bus-Only Scenario for the Utah Transit Authority, as outlined in Table 11, reveal distinct trends across various tax categories and funding scenarios. The analysis encompasses local, state, and federal taxes, shedding light on the financial implications associated with maintaining the existing transit system, adopting a business-as-usual approach, facing RTP-Priority Needs, or benefiting from RTP-Total Needs.

Table 11: Cumulative Fiscal Impacts of Transportation Funding in the Bus-Only Scenario

Description	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
ALL LOCAL TAXES				
Social Insurance Tax- Employee Contribution	\$-	\$-	\$-	\$-
Social Insurance Tax- Employer Contribution	\$-	\$-	\$-	\$-
TOPI: Sales Tax	\$808,128,853	\$845,462,221	\$1,251,824,669	\$1,296,190,552
TOPI: Property Tax	\$1,688,447,953	\$1,766,449,683	\$2,615,474,983	\$2,708,169,957
TOPI: Motor Vehicle License	\$102,547	\$107,284	\$158,849	\$164,479
TOPI: Severance Tax	\$-	\$-	\$-	\$-
TOPI: Other Taxes	\$72,325,334	\$75,666,569	\$112,034,902	\$116,005,529
TOPI: Special Assessments	\$17,589,212	\$18,401,786	\$27,246,409	\$28,212,049
OPI: Corporate Profits Tax	\$-	\$-	\$-	\$-
Personal Tax: Income Tax	\$-	\$-	\$-	\$-
Personal Tax: Motor Vehicle License	\$25,721	\$31,024	\$46,225	\$47,753
Personal Tax: Property Taxes	\$3,957,091	\$4,764,396	\$7,098,304	\$7,333,122
Personal Tax: Other Tax (Fish/Hunt)	\$-	\$-	\$-	\$-
Total Local Taxes	\$2,590,576,710	\$2,710,882,965	\$4,013,884,346	\$4,156,123,441
STATE TAXES				
Social Insurance Tax- Employee Contribution	\$551,608	\$673,911	\$1,004,688	\$1,037,698
Social Insurance Tax- Employer Contribution	\$644,888	\$787,871	\$1,174,585	\$1,213,176
TOPI: Sales Tax	\$2,212,189,379	\$2,314,386,549	\$3,426,771,892	\$3,548,220,015
TOPI: Property Tax	\$-	\$-	\$-	\$-
TOPI: Motor Vehicle License	\$40,970,096	\$42,862,804	\$63,464,356	\$65,713,595
TOPI: Severance Tax	\$18,884,076	\$19,756,469	\$29,252,207	\$30,288,934
TOPI: Other Taxes	\$29,103,708	\$30,448,220	\$45,082,834	\$46,680,613
TOPI: Special Assessments	\$-	\$-	\$-	\$-
OPI: Corporate Profits Tax	\$77,651,991	\$89,036,116	\$133,046,865	\$137,356,314
Personal Tax: Income Tax	\$512,604,418	\$616,092,874	\$917,821,941	\$948,209,596
Personal Tax: Motor Vehicle License	\$12,363,622	\$14,905,495	\$22,208,472	\$22,942,695
Personal Tax: Property Taxes	\$-	\$-	\$-	\$-
Personal Tax: Other Tax (Fish/Hunt)	\$10,164,392	\$12,207,765	\$18,185,887	\$18,788,195
Total State Taxes	\$2,915,128,179	\$3,141,158,075	\$4,658,013,728	\$4,820,450,832
FEDERAL TAXES				
Social Insurance Tax- Employee Contribution	\$986,980,497	\$1,194,063,338	\$1,779,375,317	\$1,838,105,826
Social Insurance Tax- Employer Contribution	\$778,445,394	\$951,041,624	\$1,417,844,766	\$1,464,428,599
TOPI: Excise Taxes	\$(493,586,683)	\$(516,389,054)	\$(764,585,974)	\$(791,683,643)
TOPI: Custom Duty	\$(514,489,384)	\$(538,257,403)	\$(796,965,113)	\$(825,210,330)
OPI: Corporate Profits Tax	\$316,412,612	\$362,800,101	\$542,132,992	\$559,692,930
Personal Tax: Income Tax	\$1,374,803,811	\$1,650,152,572	\$2,458,160,460	\$2,539,597,617
Personal Tax: Estate and Gift Tax	\$-	\$-	\$-	\$-
Total Federal Taxes	\$2,448,566,248	\$3,103,411,179	\$4,635,962,447	\$4,784,930,998
TOTAL TAXES	\$7,954,271,137	\$8,955,452,219	\$13,307,860,520	\$13,761,505,270

In terms of local taxes, the total local tax revenue under the Bus-Only Scenario ranges from \$2.59 billion in the Maintain-Existing-System scenario to \$4.16 billion in the RTP-Total Needs scenario. Comparatively, RTP-Priority Needs shows a slightly reduced total of \$4.01 billion. This indicates that increased funding directly correlates with higher local tax revenues, emphasizing the importance of financial support for sustaining and expanding transit operations at the local level. A similar pattern emerges when looking at state taxes. The cumulative state tax revenue varies from \$2.92 billion in the Maintain-Existing-System scenario to \$4.82 billion in the RTP-Total Needs scenario. RTP-Priority Needs registers a total of \$4.66 billion. Again, these data underscore a positive relationship between higher investment levels and increased state tax revenues, suggesting that greater financial commitments lead to broader economic benefits at the state level.

The federal tax perspective also reflects this trend. Cumulative federal tax revenue ranges from \$2.45 billion in the Maintain-Existing-System scenario to \$4.78 billion in the RTP-Total Needs scenario. RTP-Priority Needs results in a slightly lower total of \$4.64 billion. This consistent pattern across all tax categories demonstrates that increased transportation funding positively correlates with higher tax revenues at the local, state, and federal levels, thereby reinforcing the significance of the economic impact of robust transit investment.

All-Transit Scenario

The cumulative fiscal impacts of transportation funding for the Utah Transit Authority (UTA) in the All-Transit Scenario are detailed in Table 12, contrasting the four funding scenarios: Maintain-Existing-System, Business-As-Usual, RTP-Priority Needs, and RTP-Total Needs.

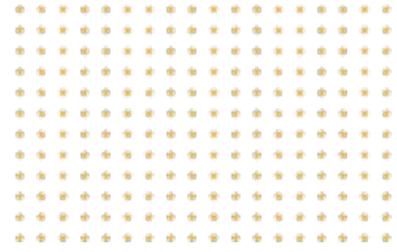
Within the domain of local taxes, the Maintain-Existing-System registers a total of \$4.93 billion, escalating to \$5.00 billion under Business-As-Usual. Subsequently, the RTP-Priority Needs and RTP-Total Needs scenarios reveal substantial increases, reaching \$7.21 billion and \$7.75 billion, respectively. The TOPI: Property Tax and TOPI: Sales Tax emerge as pivotal contributors, indicating pronounced fiscal influences. Examining state taxes, a parallel trend unfolds. The Maintain-Existing-System and Business-As-Usual scenarios record amounts of \$5.82 billion and \$6.00 billion, respectively. Both RTP-Priority Needs and RTP-Total Needs projections exhibit a remarkable surge to \$8.69 billion and \$9.34 billion, highlighting TOPI: Sales Tax, Personal Tax: Income Tax, and OPI: Corporate Profits Tax as significant contributors.

In the federal tax domain, the cumulative fiscal impacts reflect a similar pattern. Total federal taxes rise from \$6.23 billion (Maintain-Existing-System) and \$6.96 billion (Business-As-Usual) to \$10.17 billion (RTP-Priority Needs) and \$10.91 billion (RTP-Total Needs). Notably, Social Insurance Tax and Personal Tax: Income Tax significantly shape the cumulative fiscal landscape. In summary, the All-Transit Scenario underscores substantial fiscal influences, with escalating impacts across funding scenarios, mirroring the evolution from maintaining the existing system to adopting RTP-Total Needs.

Table 12: Cumulative Fiscal Impacts of Transportation Funding in the All-Transit Scenario

Description	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
ALL LOCAL TAXES				
Social Insurance Tax- Employee Contribution	\$-	\$-	\$-	\$-
Social Insurance Tax- Employer Contribution	\$-	\$-	\$-	\$-
TOPI: Sales Tax	\$1,538,105,350	\$1,557,593,715	\$2,248,924,989	\$2,417,269,435
TOPI: Property Tax	\$3,213,609,832	\$3,254,327,461	\$4,698,746,715	\$5,050,473,838
TOPI: Motor Vehicle License	\$195,176	\$197,649	\$285,375	\$306,737
TOPI: Severance Tax	\$-	\$-	\$-	\$-
TOPI: Other Taxes	\$137,656,245	\$139,400,400	\$201,272,670	\$216,339,039
TOPI: Special Assessments	\$33,477,411	\$33,901,582	\$48,948,652	\$52,612,730
OPI: Corporate Profits Tax	\$-	\$-	\$-	\$-
Personal Tax: Income Tax	\$-	\$-	\$-	\$-
Personal Tax: Motor Vehicle License	\$60,102	\$65,811	\$95,935	\$102,964
Personal Tax: Property Taxes	\$9,224,620	\$10,092,773	\$14,710,981	\$15,789,522
Personal Tax: Other Tax (Fish/Hunt)	\$-	\$-	\$-	\$-
Total Local Taxes	\$4,932,328,735	\$4,995,579,392	\$7,212,985,316	\$7,752,894,266
STATE TAXES				
Social Insurance Tax- Employee Contribution	\$1,310,700	\$1,443,299	\$2,105,383	\$2,259,068
Social Insurance Tax- Employer Contribution	\$1,532,345	\$1,687,366	\$2,461,412	\$2,641,085
TOPI: Sales Tax	\$4,210,442,809	\$4,263,790,682	\$6,156,255,847	\$6,617,085,573
TOPI: Property Tax	\$-	\$-	\$-	\$-
TOPI: Motor Vehicle License	\$77,978,065	\$78,966,076	\$114,014,829	\$122,549,468
TOPI: Severance Tax	\$35,941,915	\$36,397,313	\$52,552,104	\$56,485,920
TOPI: Other Taxes	\$55,392,859	\$56,094,707	\$80,992,102	\$87,054,808
TOPI: Special Assessments	\$-	\$-	\$-	\$-
OPI: Corporate Profits Tax	\$194,146,301	\$205,144,484	\$300,340,682	\$322,254,085
Personal Tax: Income Tax	\$1,192,193,448	\$1,303,361,510	\$1,899,562,036	\$2,038,904,232
Personal Tax: Motor Vehicle License	\$28,871,177	\$31,606,787	\$46,072,615	\$49,449,105
Personal Tax: Property Taxes	\$-	\$-	\$-	\$-
Personal Tax: Other Tax (Fish/Hunt)	\$23,617,826	\$25,811,862	\$37,617,572	\$40,377,606
Total State Taxes	\$5,821,427,445	\$6,004,304,086	\$8,691,974,582	\$9,339,060,947
FEDERAL TAXES				
Social Insurance Tax- Employee Contribution	\$2,315,354,674	\$2,538,677,497	\$3,701,291,425	\$3,972,259,188
Social Insurance Tax- Employer Contribution	\$1,849,697,420	\$2,036,823,976	\$2,971,176,804	\$3,188,061,433
TOPI: Excise Taxes	\$(939,439,688)	\$(951,342,737)	\$(1,373,592,121)	\$(1,476,413,072)
TOPI: Custom Duty	\$(979,223,636)	\$(991,630,763)	\$(1,431,761,815)	\$(1,538,937,088)
OPI: Corporate Profits Tax	\$791,098,047	\$835,912,914	\$1,223,813,823	\$1,313,105,506
Personal Tax: Income Tax	\$3,191,852,606	\$3,487,388,034	\$5,082,256,536	\$5,455,217,354
Personal Tax: Estate and Gift Tax	\$-	\$-	\$-	\$-
Total Federal Taxes	\$6,229,339,424	\$6,955,828,921	\$10,173,184,654	\$10,913,293,321
TOTAL TAXES	\$16,983,095,604	\$17,955,712,399	\$26,078,144,552	\$28,005,248,534

7. LAND VALUE SENSITIVITY



Although several theories and methodologies delve into understanding and modeling the land value, two of the most prominent are bid-rent theory and the hedonic price model. Proximity to central business district is a critical predictor of land values according to bid rent theory, whereas the hedonic price model considers a more holistic approach by assigning the land value to a combination of factors including the attributes of a property as well as characteristics of neighborhood and location. Whether living in a CBD or near a suburban area, the choice of buying a property is largely influenced by accessibility (i.e. how easy is it to reach workplace or other amenities such as grocery, shopping, school, etc.). This study builds upon the well-documented relationship between accessibility and land value. It is based on the premise that transit infrastructure has the capacity to enhance access to employment/amenities, and this improved accessibility can augment the value of land. The primary objectives of the land value sensitivity analysis are (1) develop a methodology to estimate the marginal effects of accessibility on different property types (single-family, multi-family and non-residential), and (2) classify land value parcels across the UTA service area according to anticipated change in land value in the future year.

Data and Methods

Three primary data sources were utilized for this study.

1. **WFRC REMM (Real Estate Market Model):** The WFRC REMM documentation contains models for estimating the property value of different property types. The models were used to identify critical variables that impact property values.
2. **WFRC Travel Demand Model (WFRC TDM):** The WFRC Travel Demand Model was used to quantify the accessibility for a particular TAZ (Travel Analysis Zone).
3. **Parcel data:** Parcel level information was collected for the year 2019 which included information such as assessed property values, employment, population, availability of transit stations and other relevant variables.

A methodology to assess the property value sensitivity is described in the steps below (also shown in Figure 43):

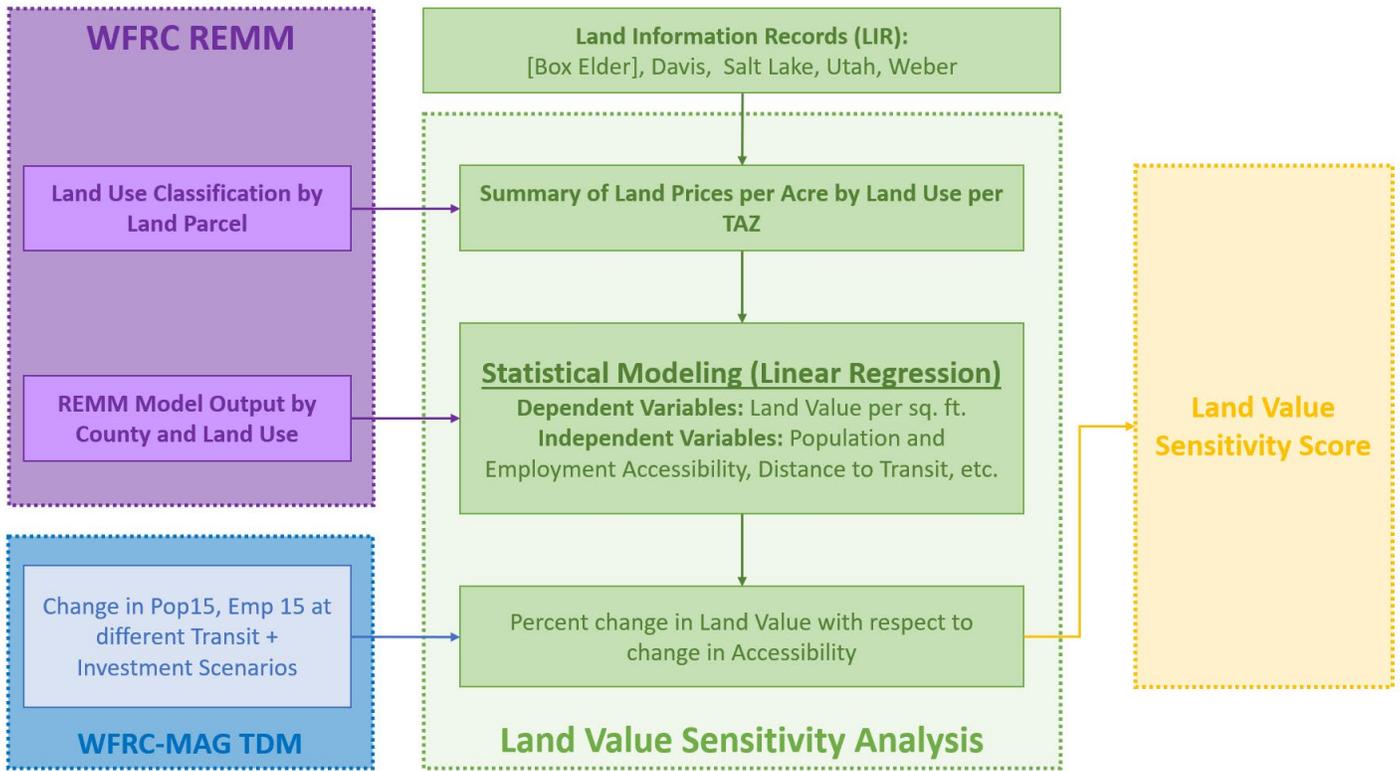
- i. **Regression Models:** Three regression models for assessed land value (per sq. ft.) according to the property type (single family, multifamily, and non-residential) were developed using parcel level information. Marginal coefficient for population and jobs within 15 minutes were calculated, controlling for the exogenous variables that are known to impact the property values. The control variables included measures like distance to the transit station, distance to the nearest freeway exit, total parcel volume, average age of building, area per unit, etc., each slightly varying for the models pertaining to single-family, multi-family and non-residential.

Regression models from REMM were used to ascertain variables for input to the regression model. The best fit

regression models for each property type were identified by their prediction power (R-squared and AIC), and the final model predicted the log of assessed property values (as dependent variable) as a function of accessibility and other control variables.

- ii. **Accessibility Variables (Pop-15 and Emp-15):** Population and employment within a 15-minute range of a TAZ centroid can be obtained for each scenario. Changes in these values reflect changes in accessibility, which in turn can impact property values.
- iii. **Scaling:** While the parcel level information is used in developing the models, accessibility measures are available only at the level of TAZs from the WFRC travel demand model outputs. An inherent assumption is made that the models developed from the parcels also work well at the TAZ level. Despite the team's attempt to consolidate parcel-level information into TAZs the challenge arose from numerous parcels spanning across multiple TAZs, compromising the robustness of the aggregation for the analysis.
- iv. **Land Value Sensitivity Score:** Once the accessibility variables are calculated from the WFRC TDM outputs, they are multiplied by the marginal coefficients obtained from the (parcel) regression models, to obtain change in land value between different scenarios. For each scenario (all transit and bus only) and their subsequent investment levels, the change is calculated on the basis of the subsequent investment levels at no- transit scenario. For all the three property types, these values are then indexed appropriately in four categories (high, moderate, low, and no change). The scores for TAZs outside of the WFRC-MAG Travel Demand Model boundary were imputed based on generalized measures such as the location and land uses. Finally, maps showing property value sensitivity are displayed.

Figure 43: Schematic Land Value Sensitivity Methodology



Results

Land value sensitivity scores for each scenario and investment levels, compared to the no-transit scenario of the respective investment levels were developed and then visualized. For each property type, eight maps are developed to elucidate differences between each investment level (4 investment levels) of each transit scenario (Bus-Only and All-Transit).

Single-Family

The greatest change in land value for single family properties was observed at All-Transit scenario at the RTP-Total Needs investment level. Additionally, All-Transit scenario had greater changes in land value compared to the Bus-Only scenario at all investment levels. From a spatial perspective, the land value changes do not only occur in the areas near the transit lines or transit stations, but they also occur in areas that are not proximate to transit services. This might occur due to congestion relief, and hence the accessibility gain in those areas. These changes are visualized in Figure 44 through Figure 51 below.

Figure 46: RTP-Priority Needs Bus-Only Single-Family

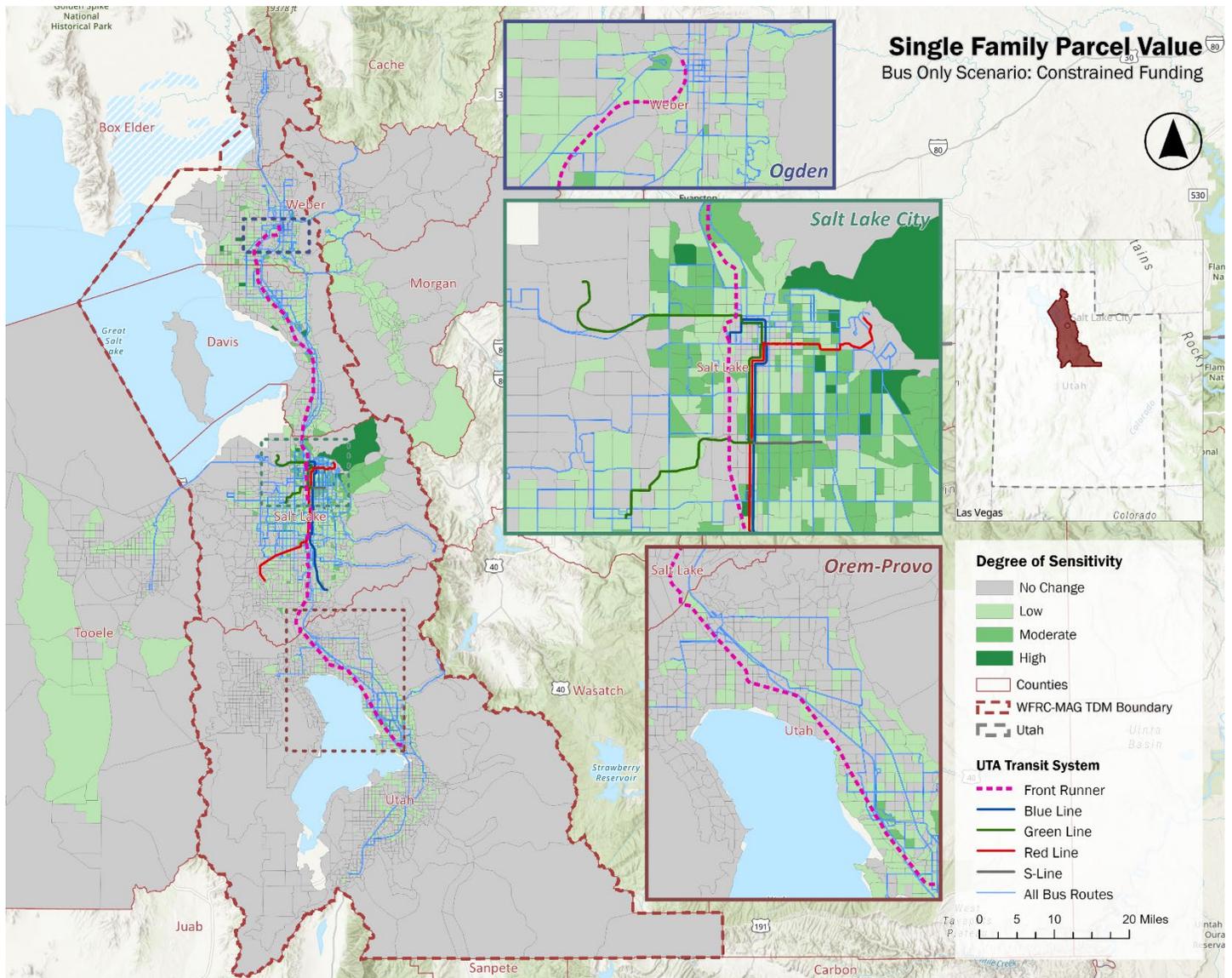


Figure 47: RTP-Total Needs Bus-Only Single-Family

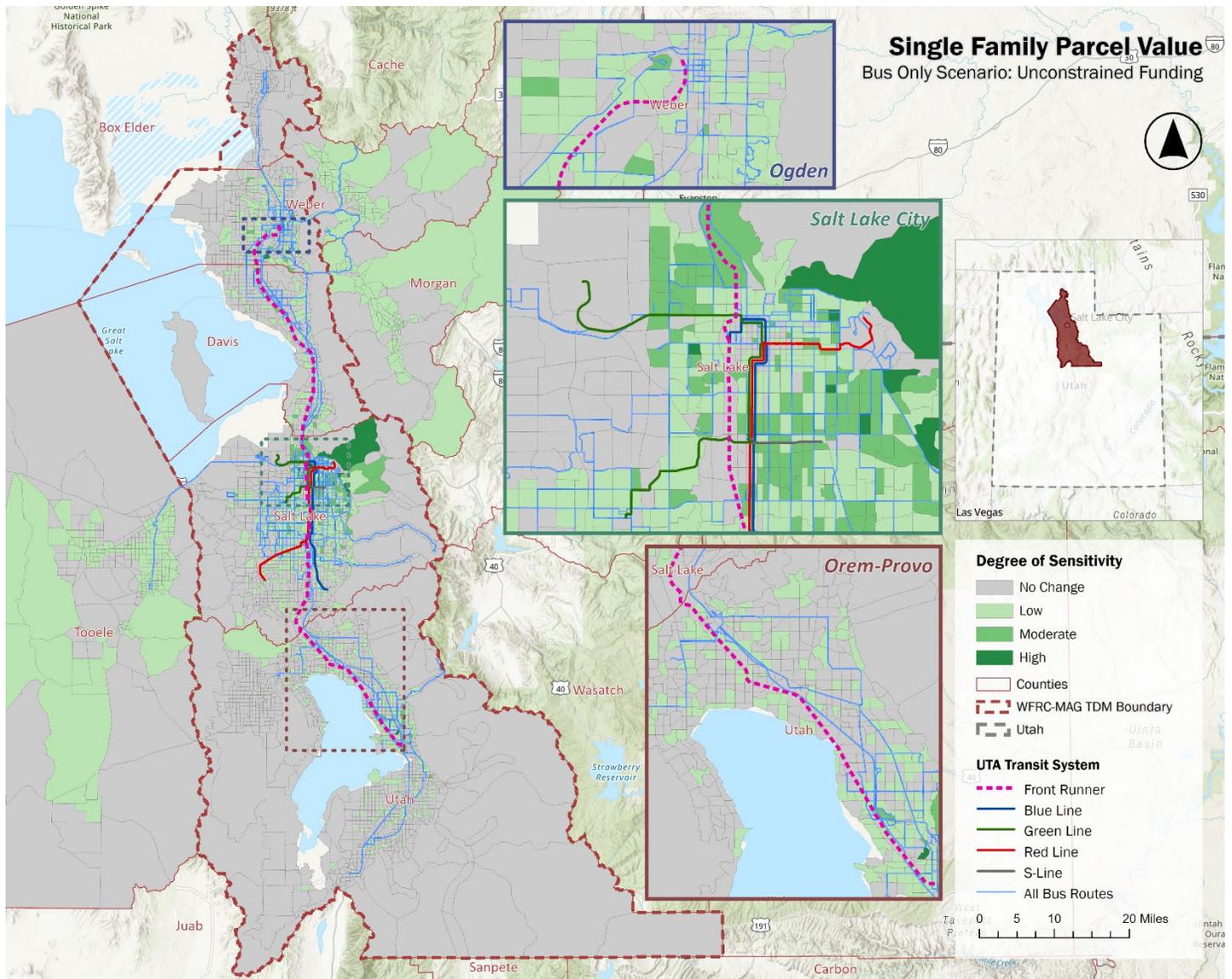


Figure 49: Business-As-Usual All-Transit Single-Family

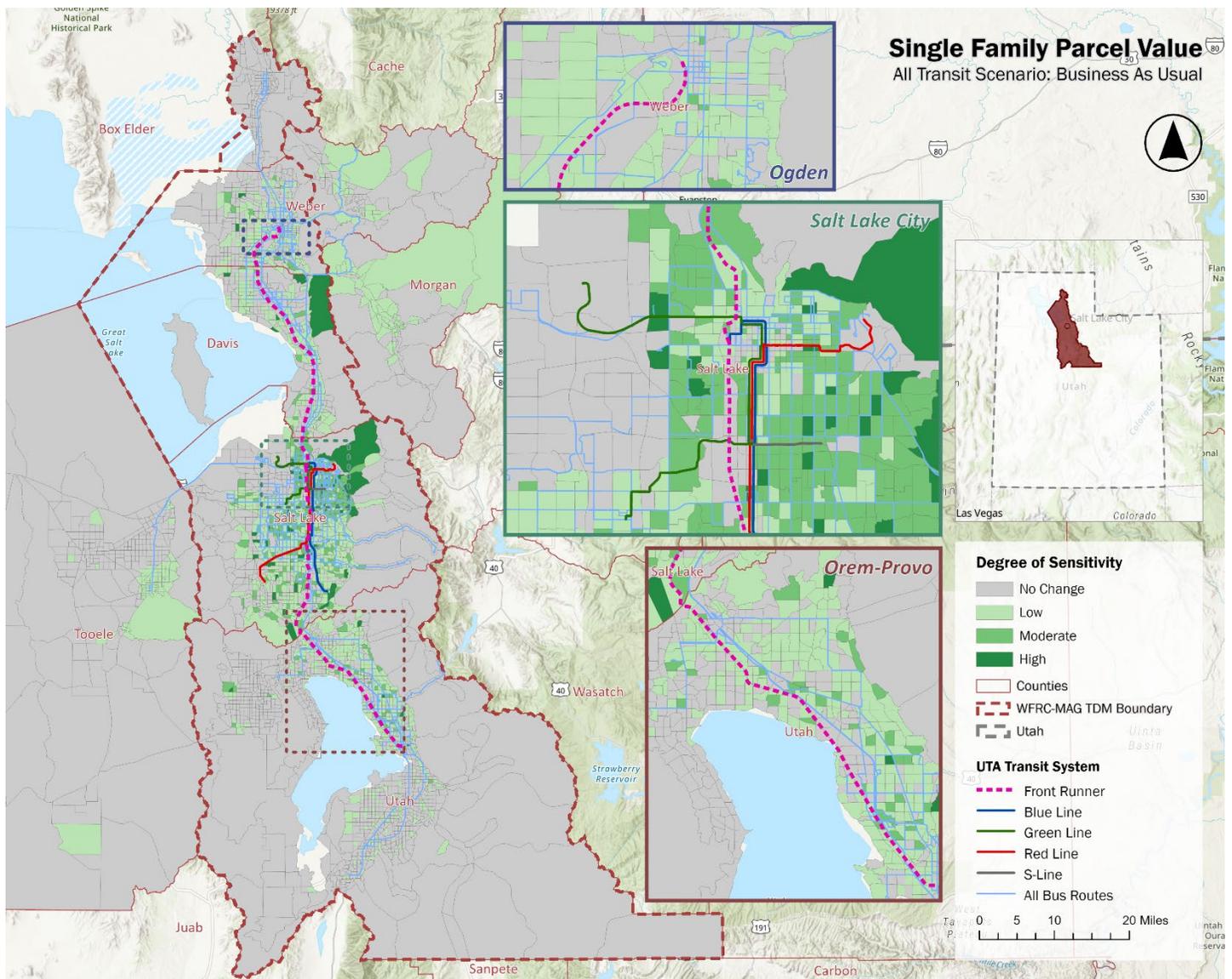


Figure 50: RTP-Priority Needs All-Transit Single-Family

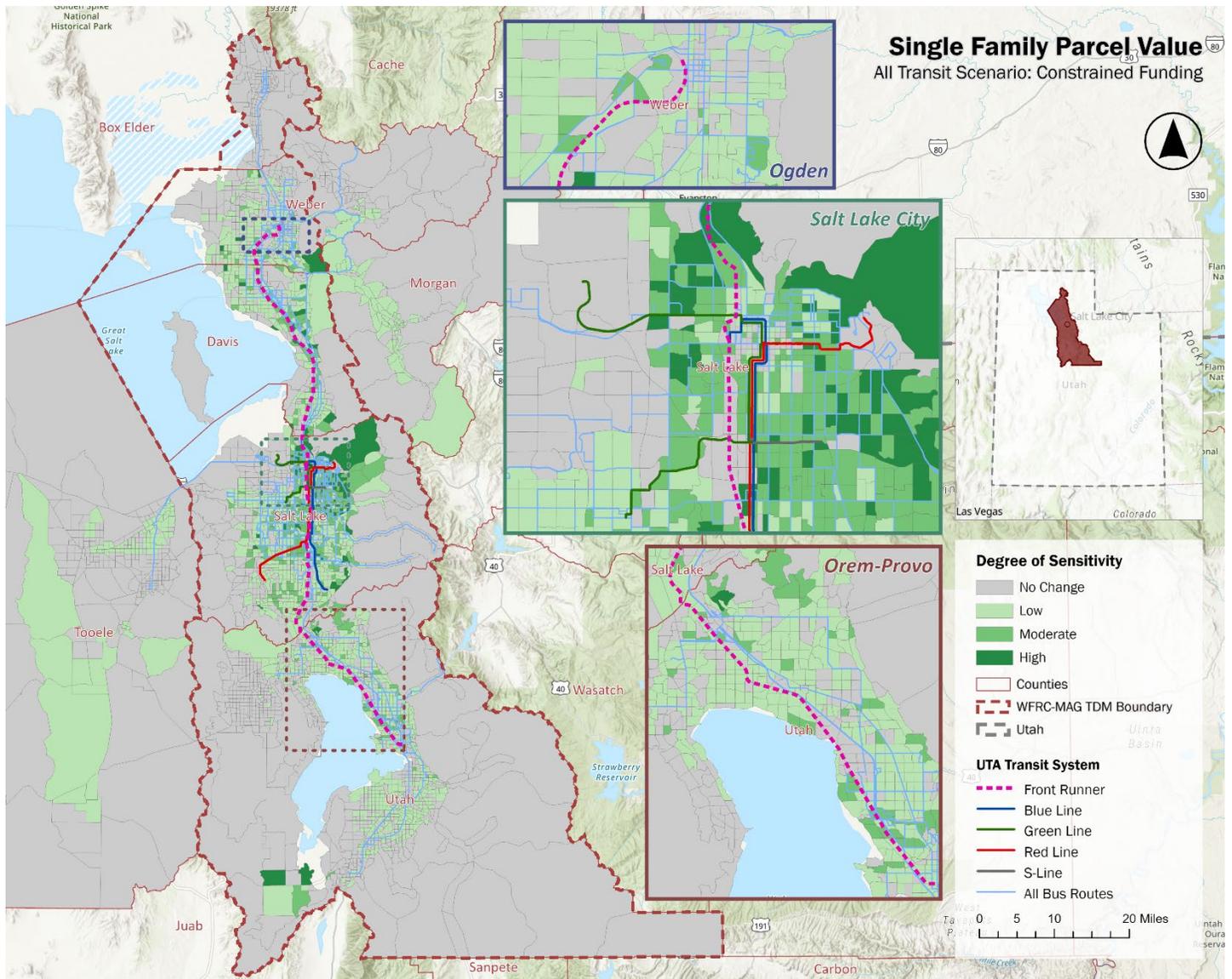
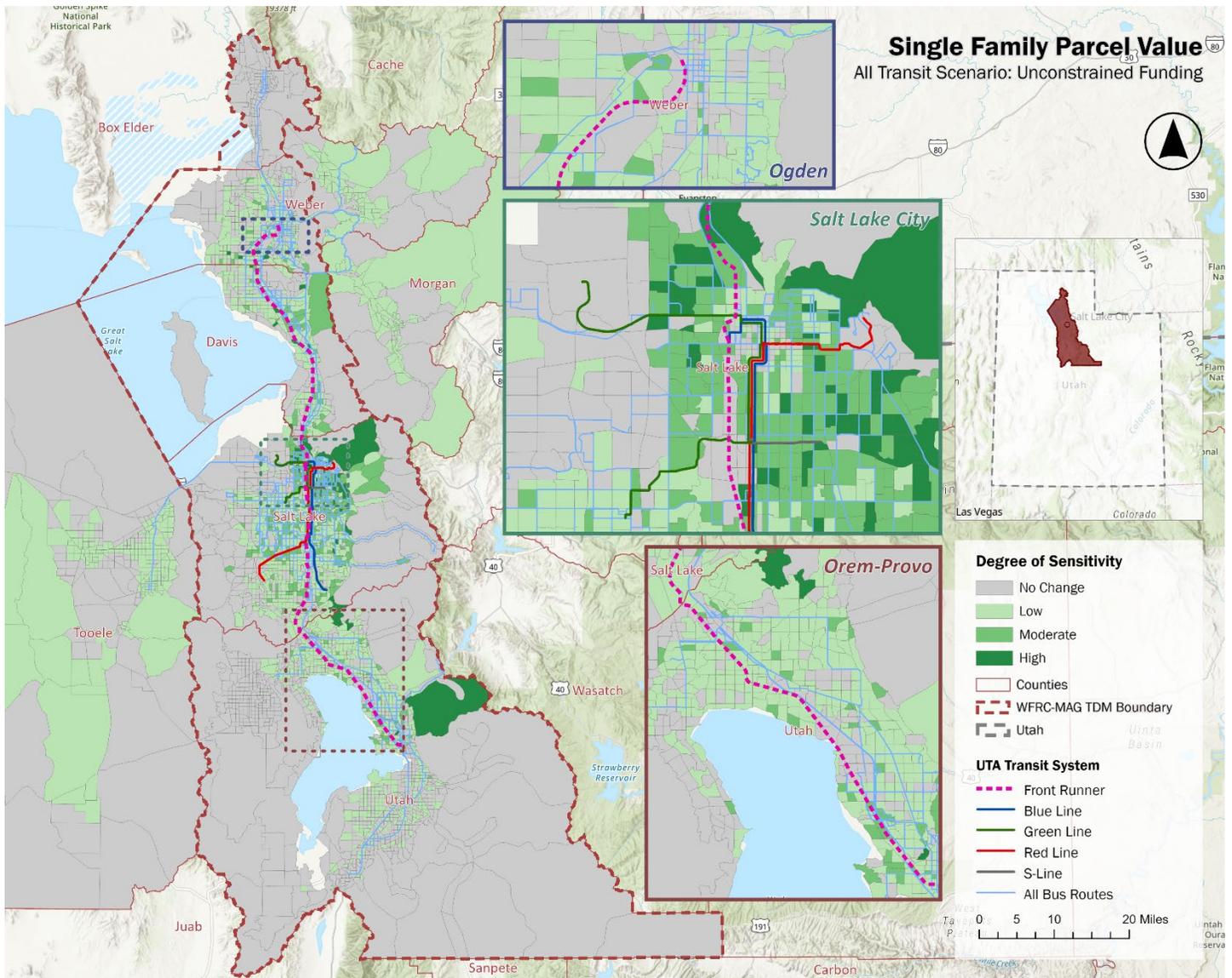


Figure 51: RTP-Total Needs All-Transit Single-Family



Multi-Family

Land values associated with multi-family properties showed only a minor change from No-Transit scenario to Bus-Only and All transit scenarios at all investment levels. Previous literature and findings from real estate market analysis suggest that multi-family land values are relatively stable, and do not fluctuate greatly due to location characteristics or the market economy (such as interest rates). Perhaps, the rent price could be a more appropriate indicator than the property values, as the rent prices may be more closely tied to accessibility, however, further analysis is required to be conclusive. Furthermore, other control variables could be more influential in determining the values for multi-family residences than accessibility. These contrasts are detailed in Figure 52 through Figure 59 on the following pages.

Figure 52: Maintain-Existing-System Bus-Only Multi-Family

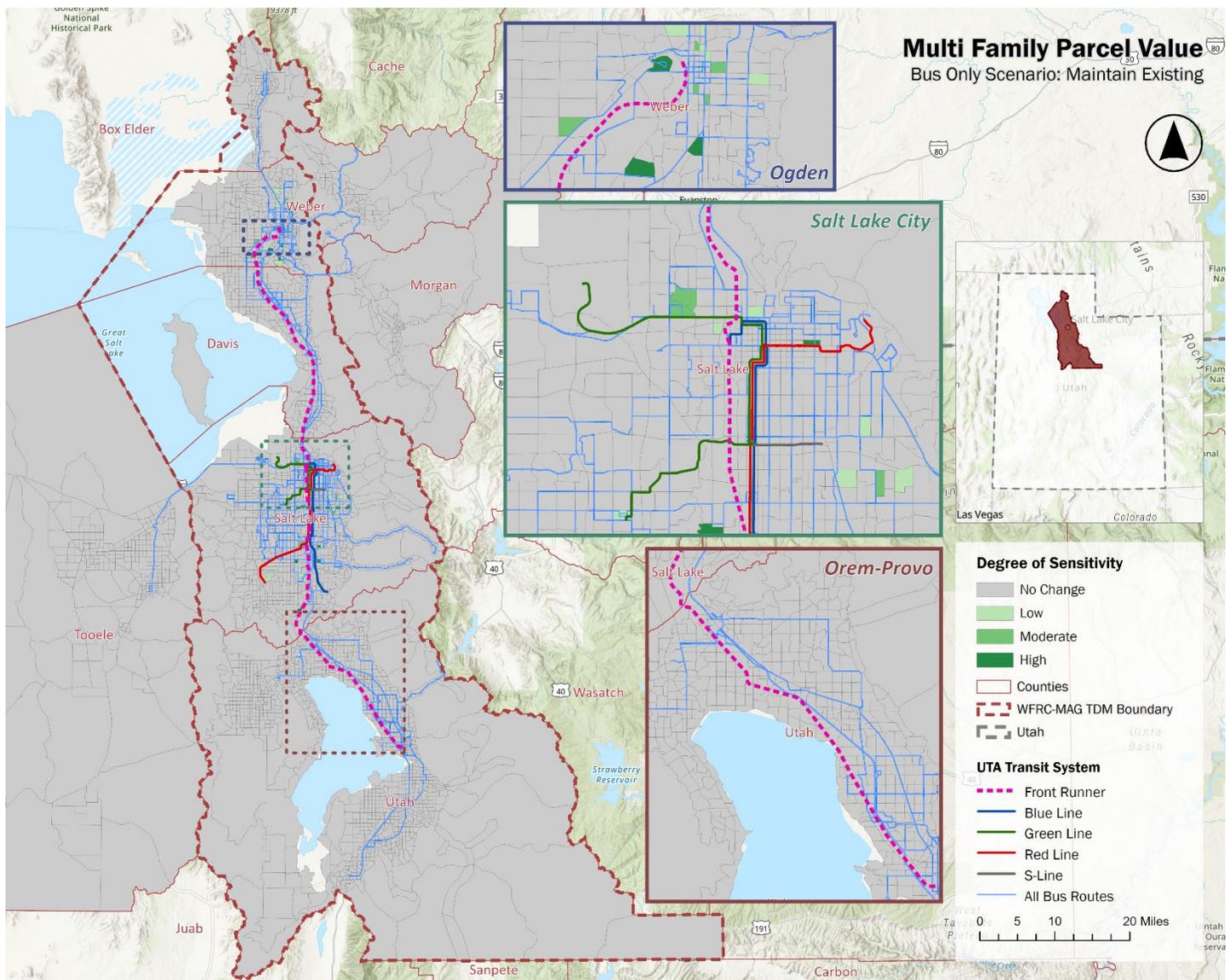


Figure 53: Business-As-Usual Bus-Only Multi-Family

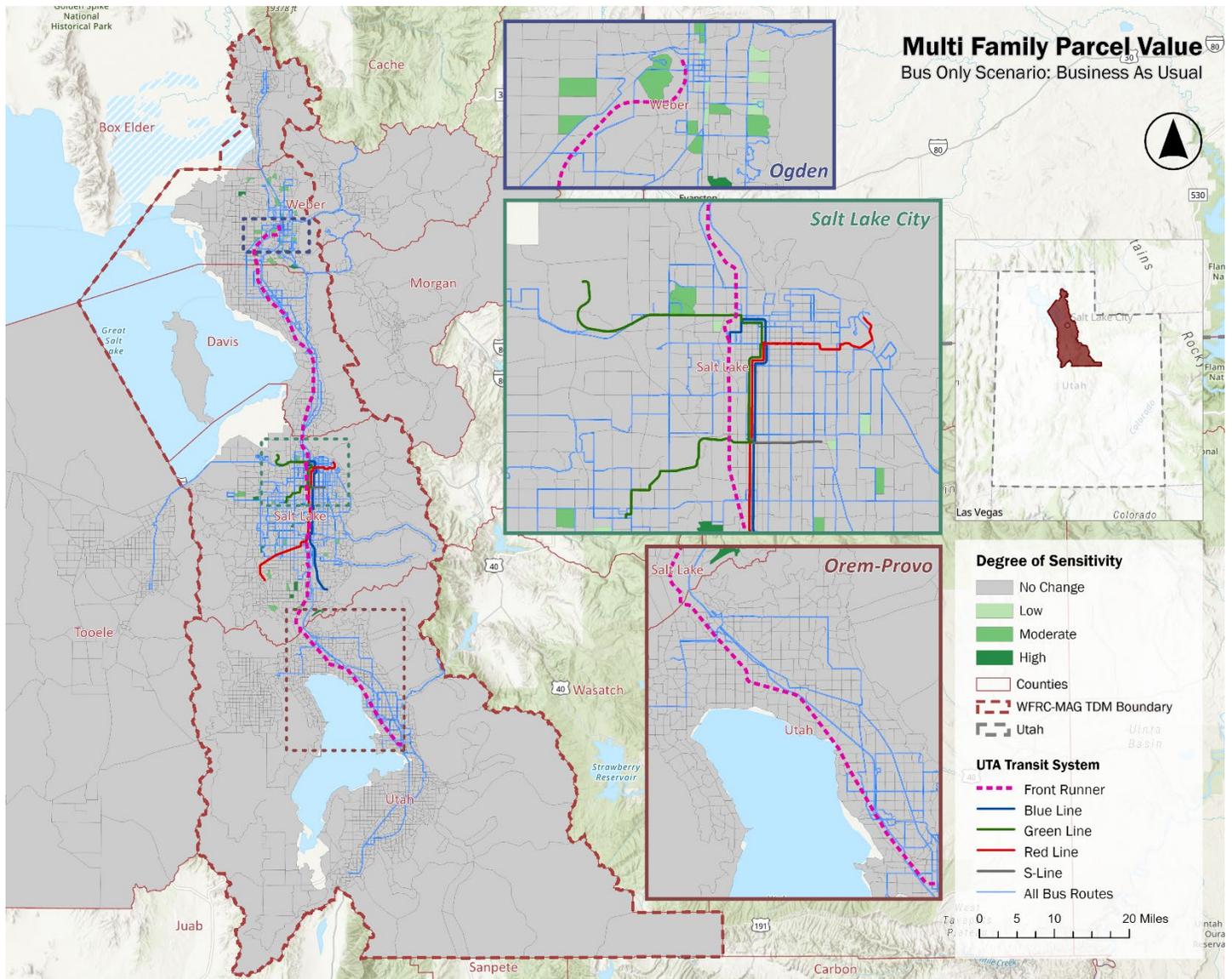


Figure 54: RTP-Priority Needs Bus-Only Multi-Family

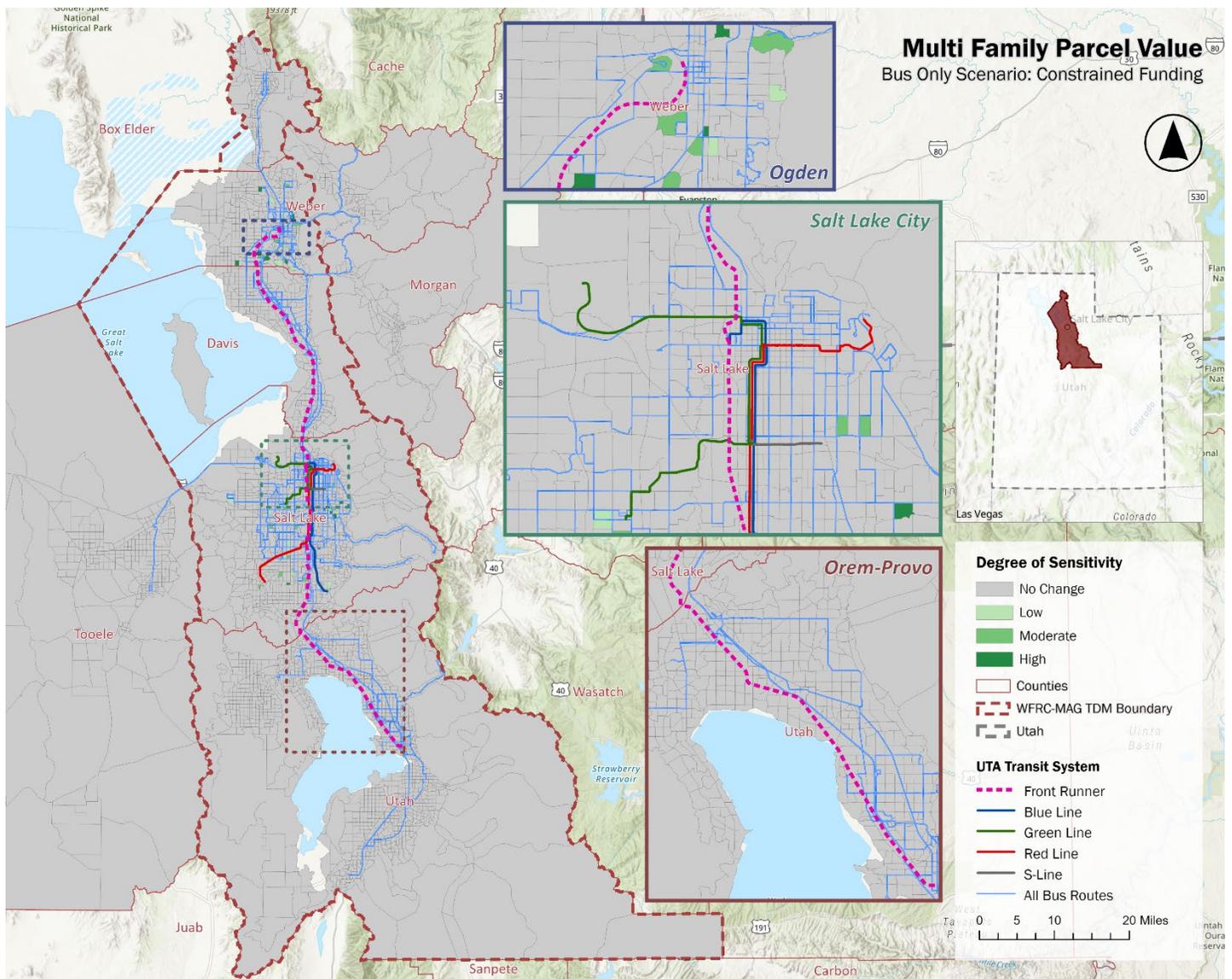


Figure 55: RTP-Total Needs Bus-Only Multi-Family

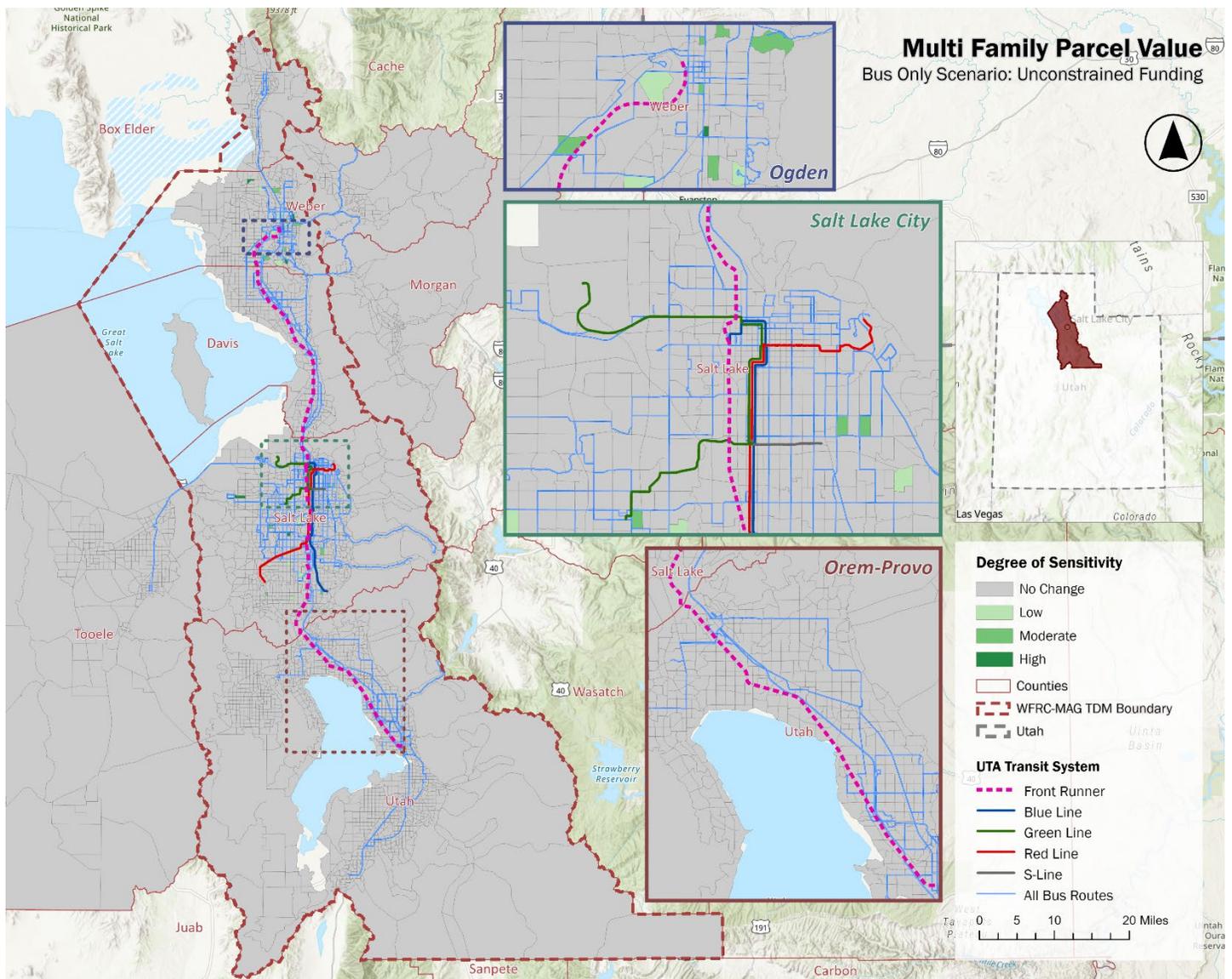


Figure 56: Maintain Existing All-Transit Multi-Family

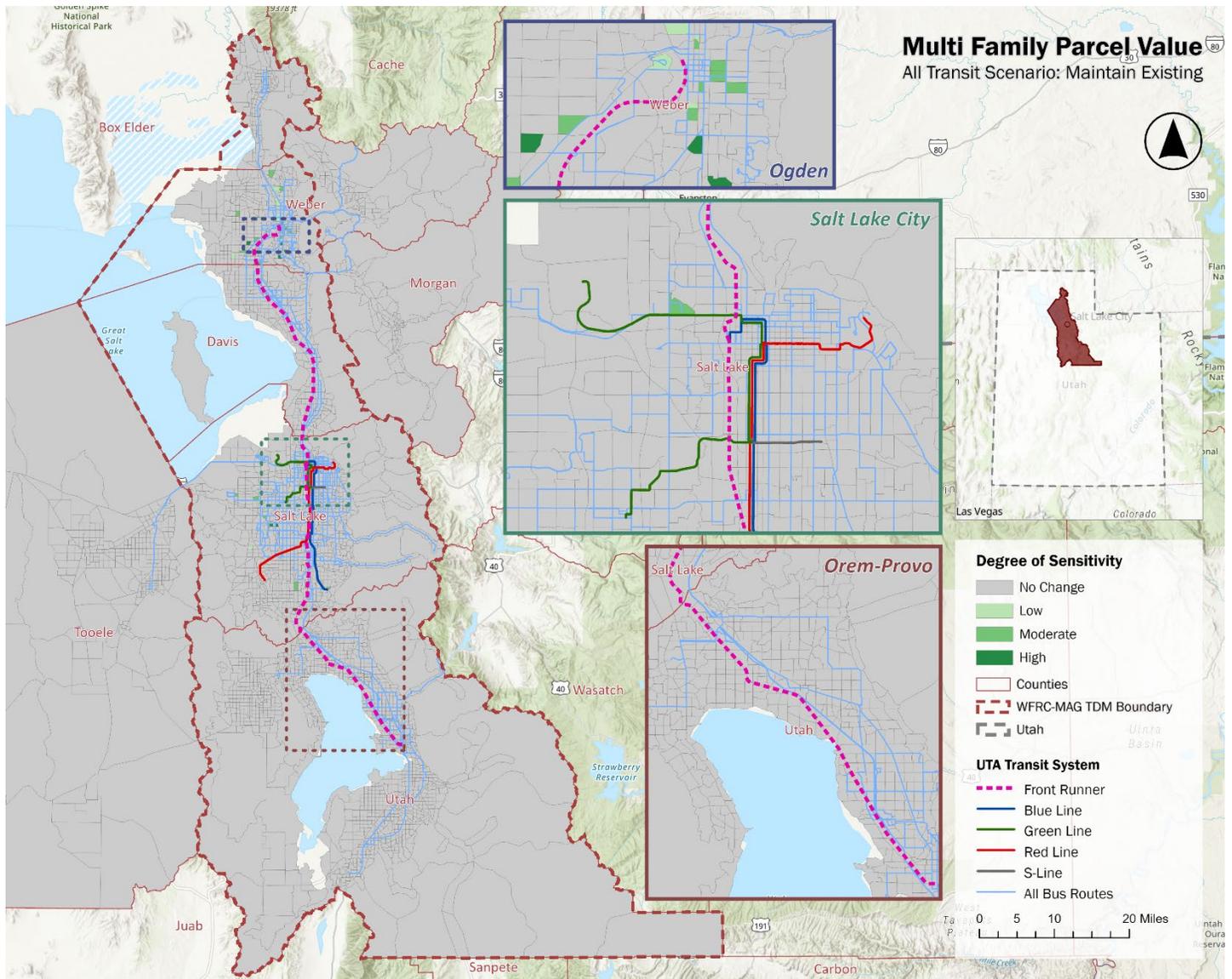


Figure 57: Business-As-Usual All-Transit Multi-Family

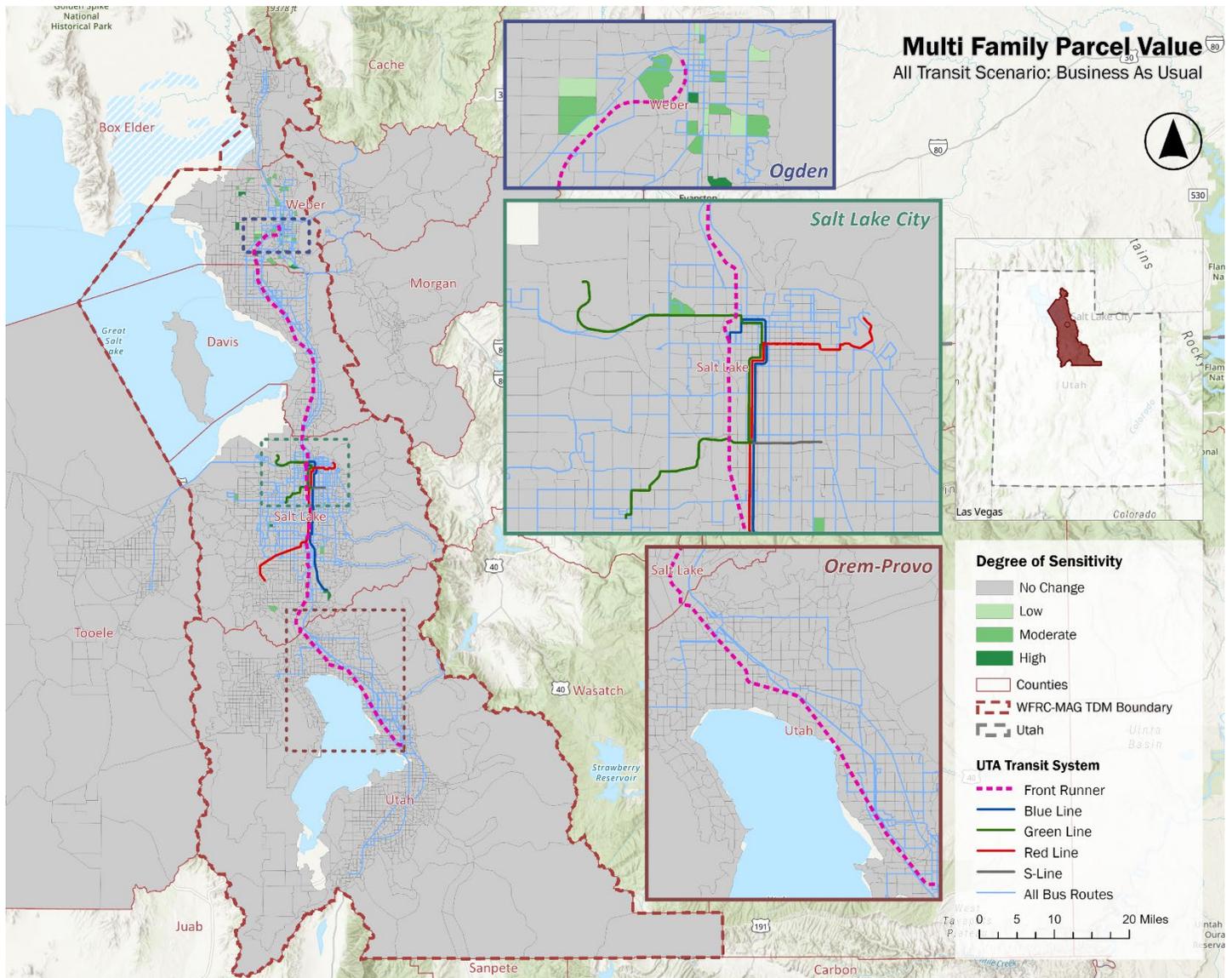


Figure 58: RTP-Priority Needs All-Transit Multi-Family

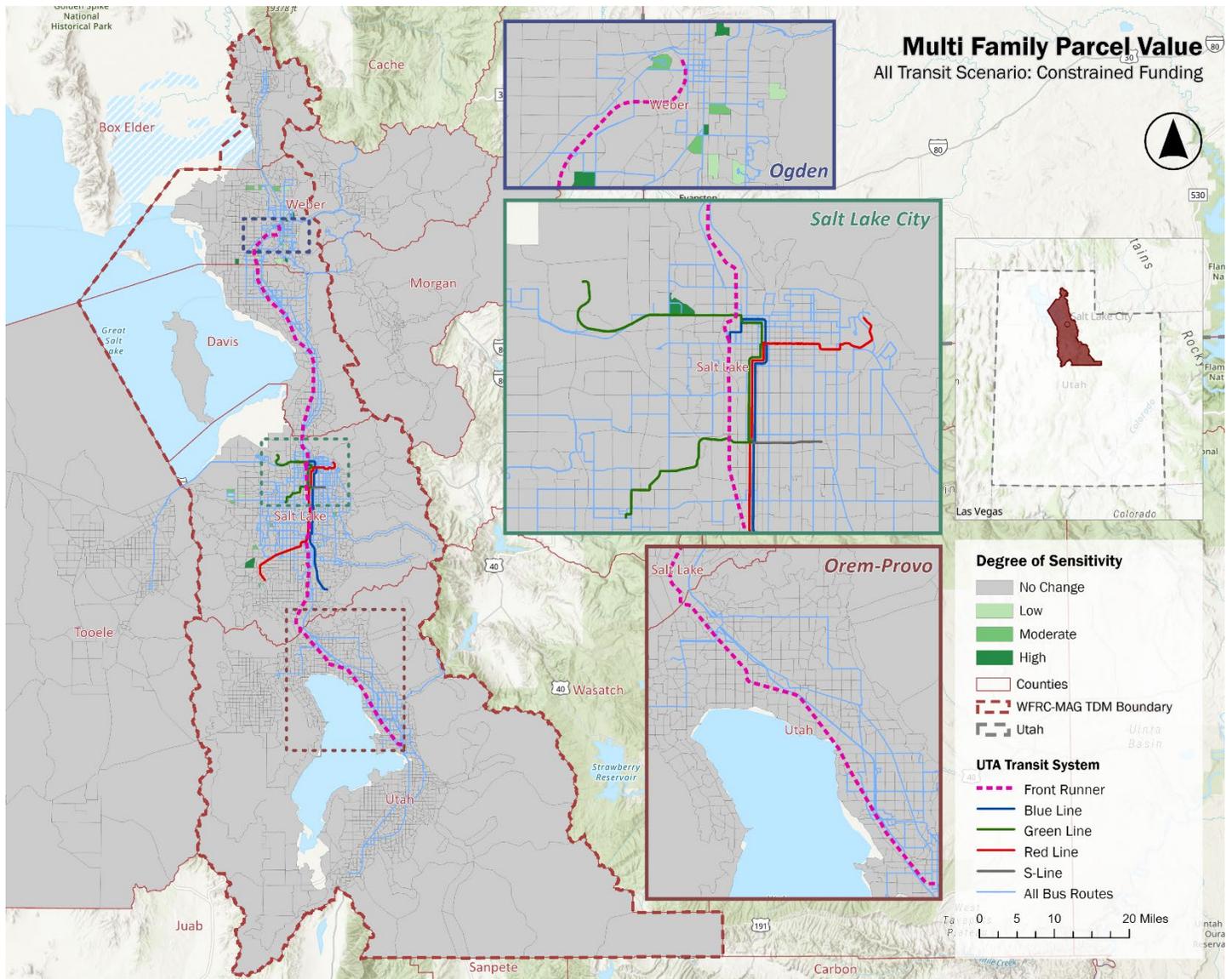
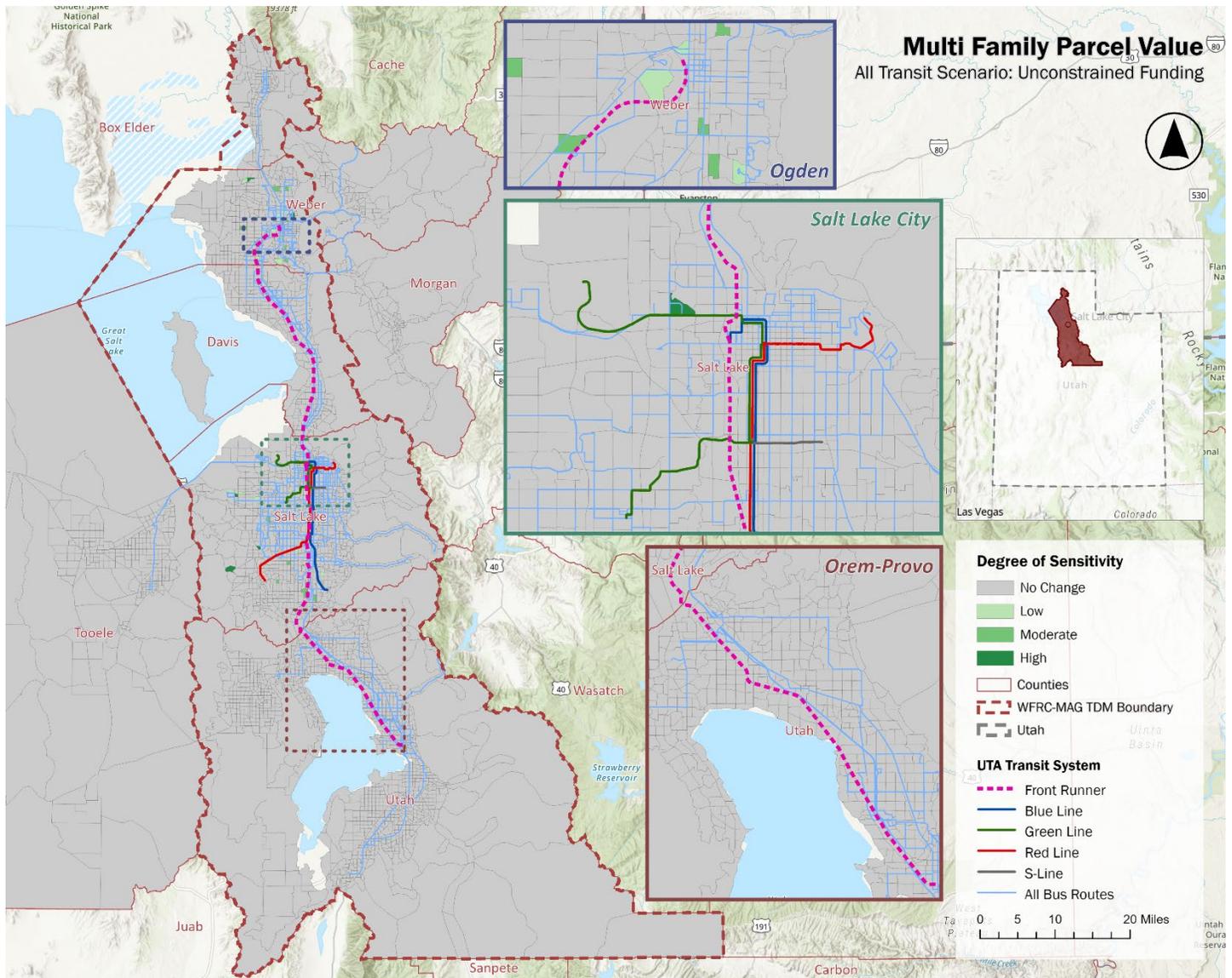


Figure 59: RTP-Total Needs All-Transit Multi-Family



Non-Residential

All the other property types (retail, commercial, office) are considered as non-residential for the analysis. Significant variations in the values of non-residential properties were noted in both unconstrained and constrained investment levels, for the bus only and all transit scenarios. Like single family properties, the inclusion of transit along with the bus provides a greater change of accessibility and thus property values. Considering spatial effects, property values near transit lines/stations as well as properties out of the buffer area were found to be impacted by transit investments, supporting the fact the accessibility gains of the transit are not only seen in areas served by transit, but also in areas where transit services provide congestion relief and improve in accessibility. These differences are seen in detail in Figure 60 through Figure 67 below.

Figure 60: Maintain-Existing System Bus-Only Non-Residential

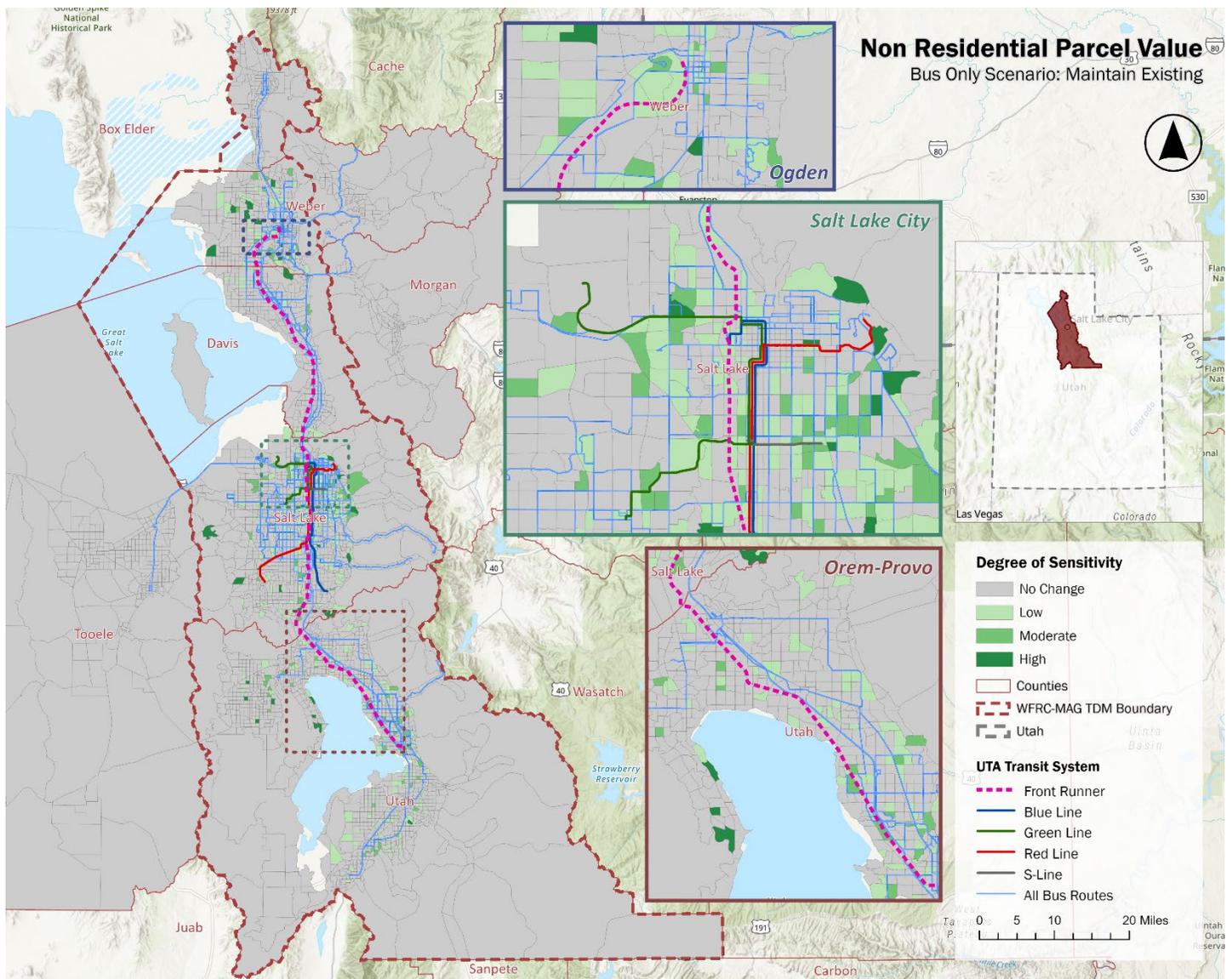


Figure 62: RTP-Priority Needs Bus-Only Non-Residential

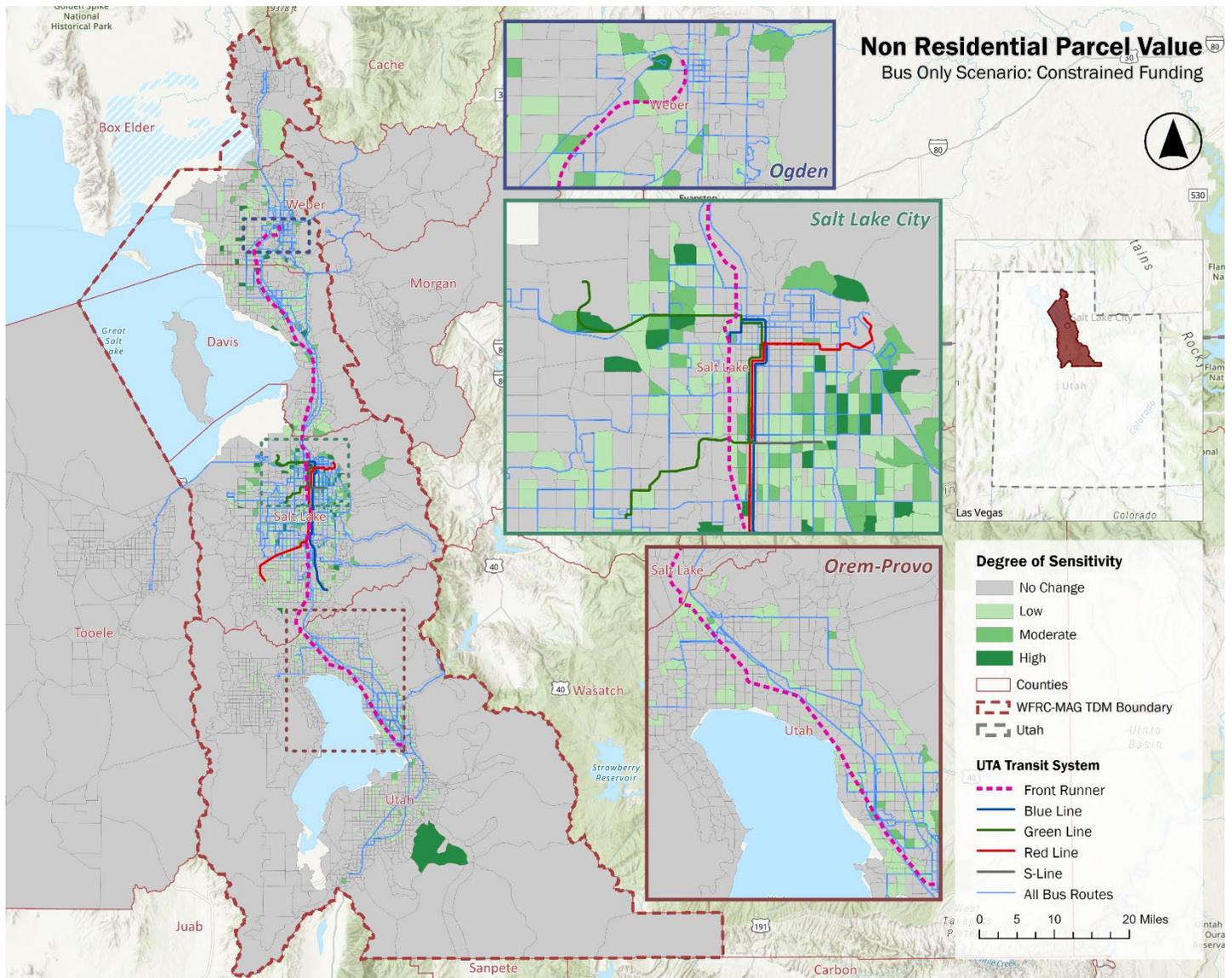


Figure 63: RTP-Total Needs Bus-Only Non-Residential

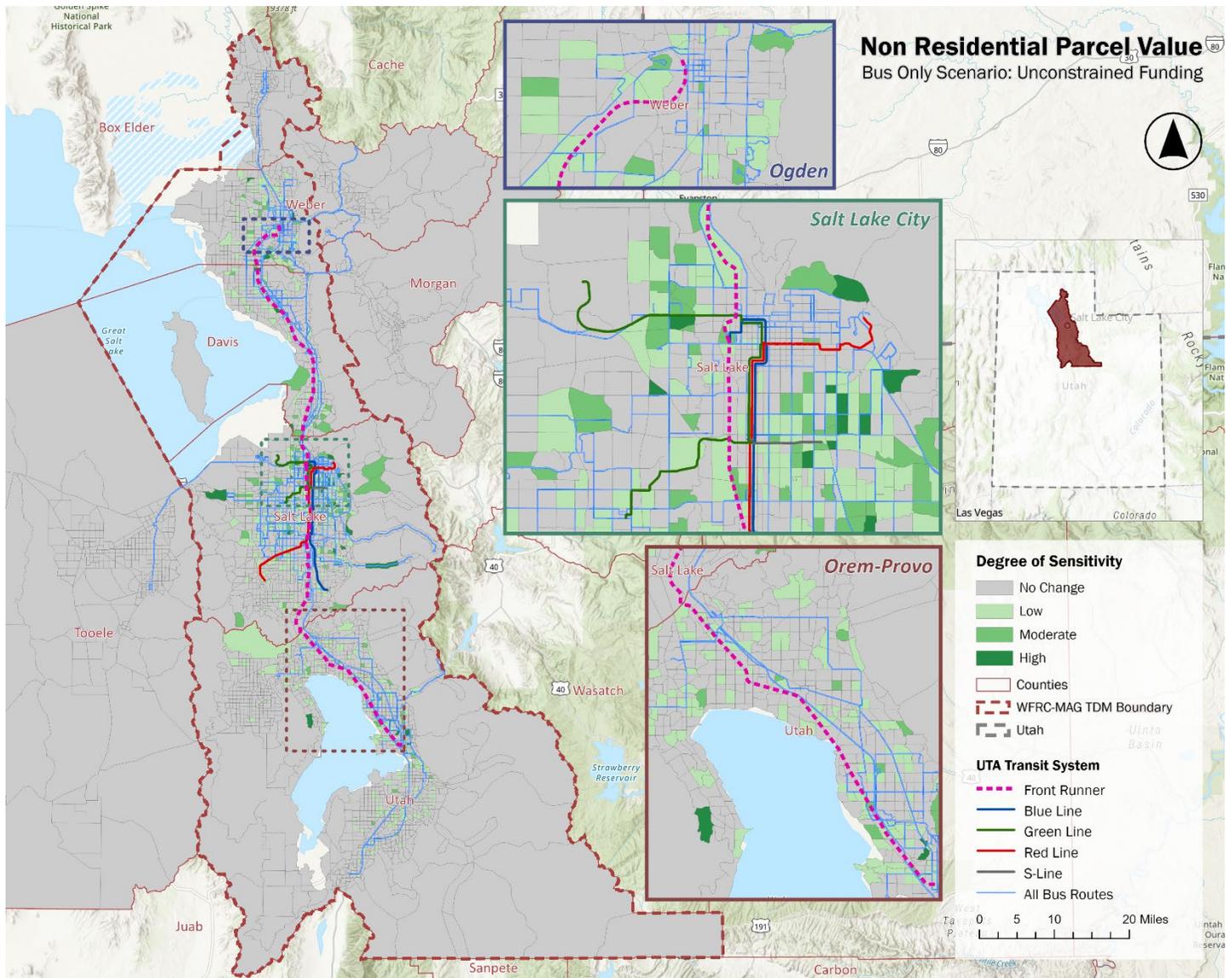


Figure 64: Maintain-Existing System All-Transit Non-Residential

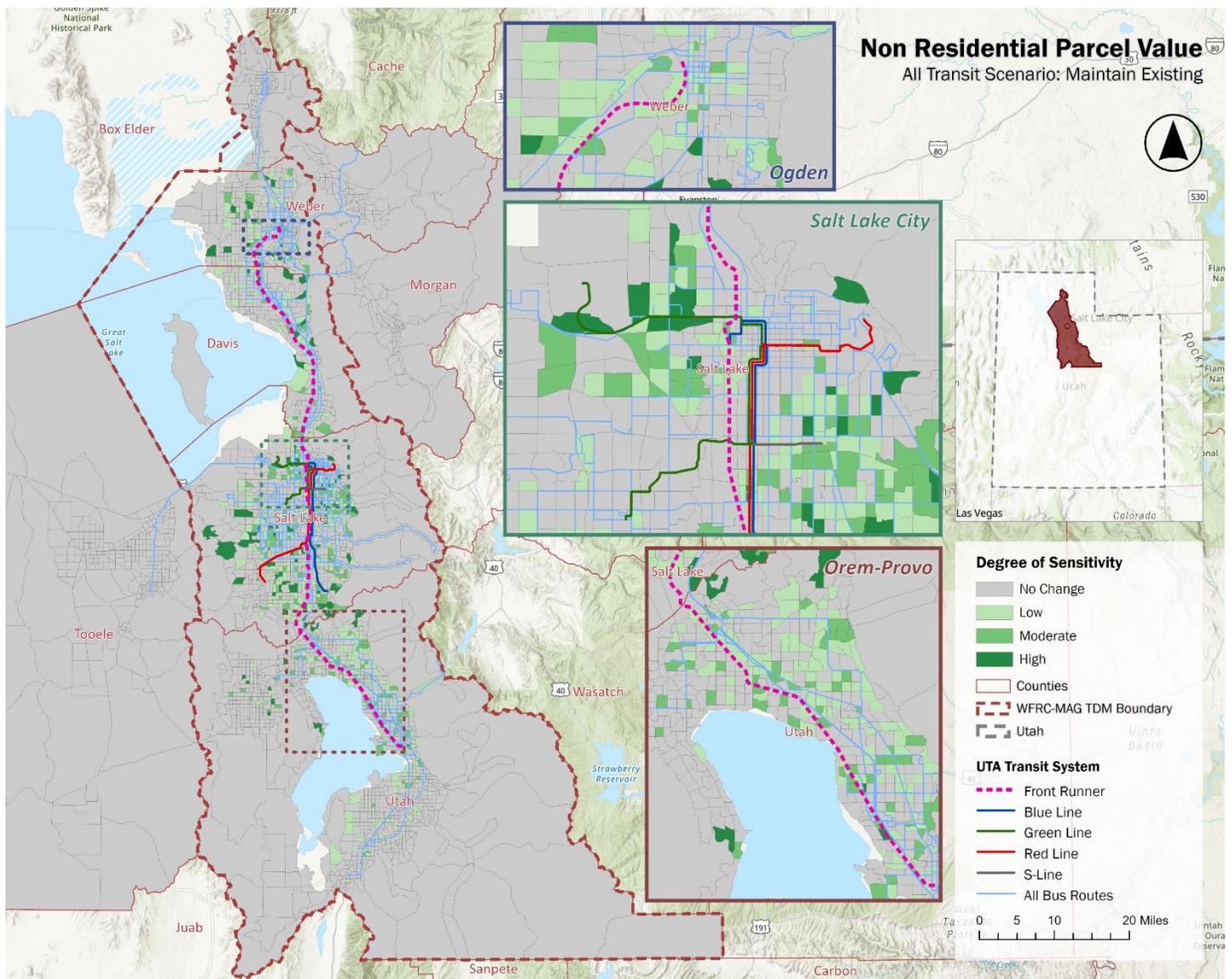


Figure 65: Business-As-Usual All-Transit Non-Residential

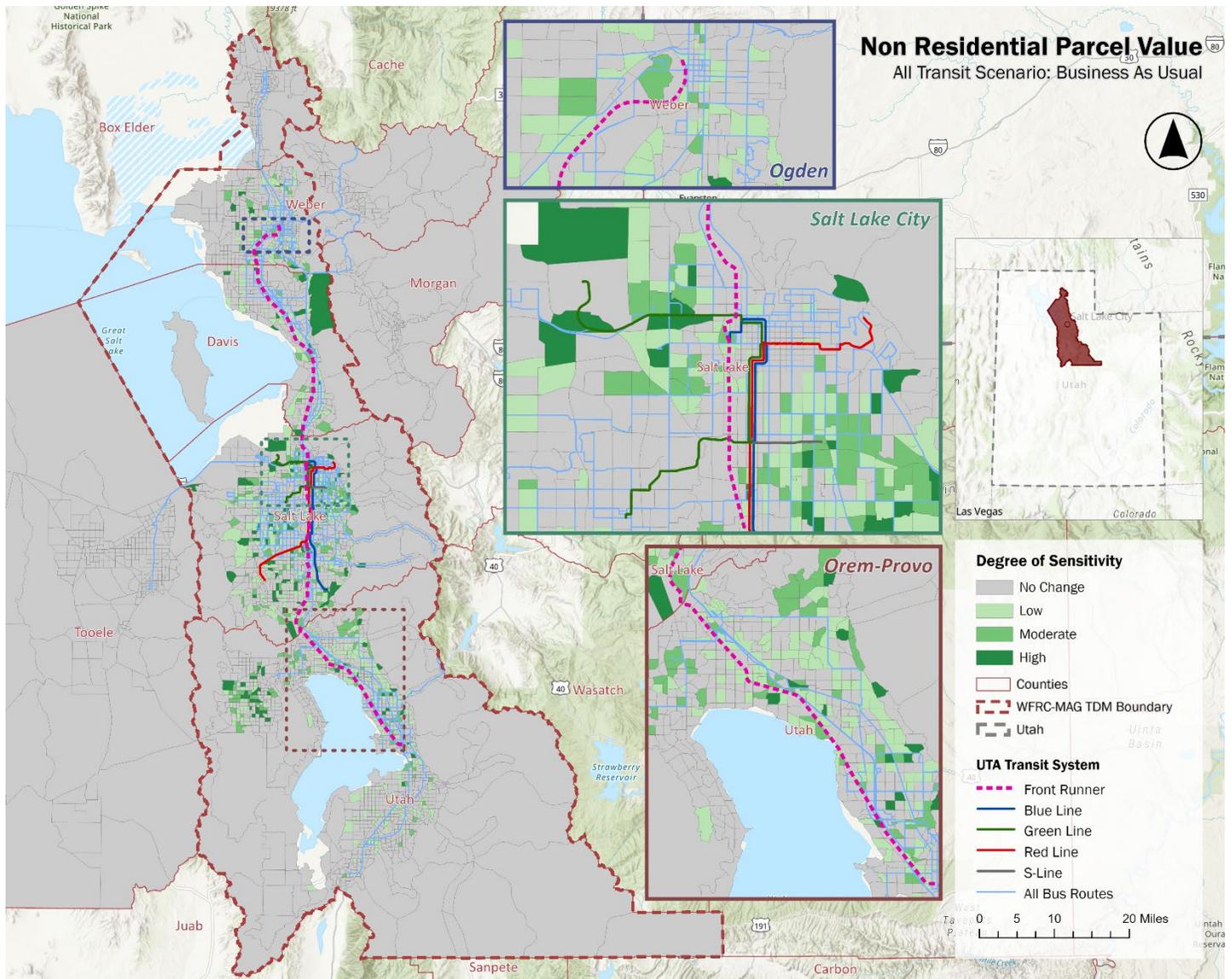


Figure 66: RTP-Priority Needs All-Transit Non-Residential

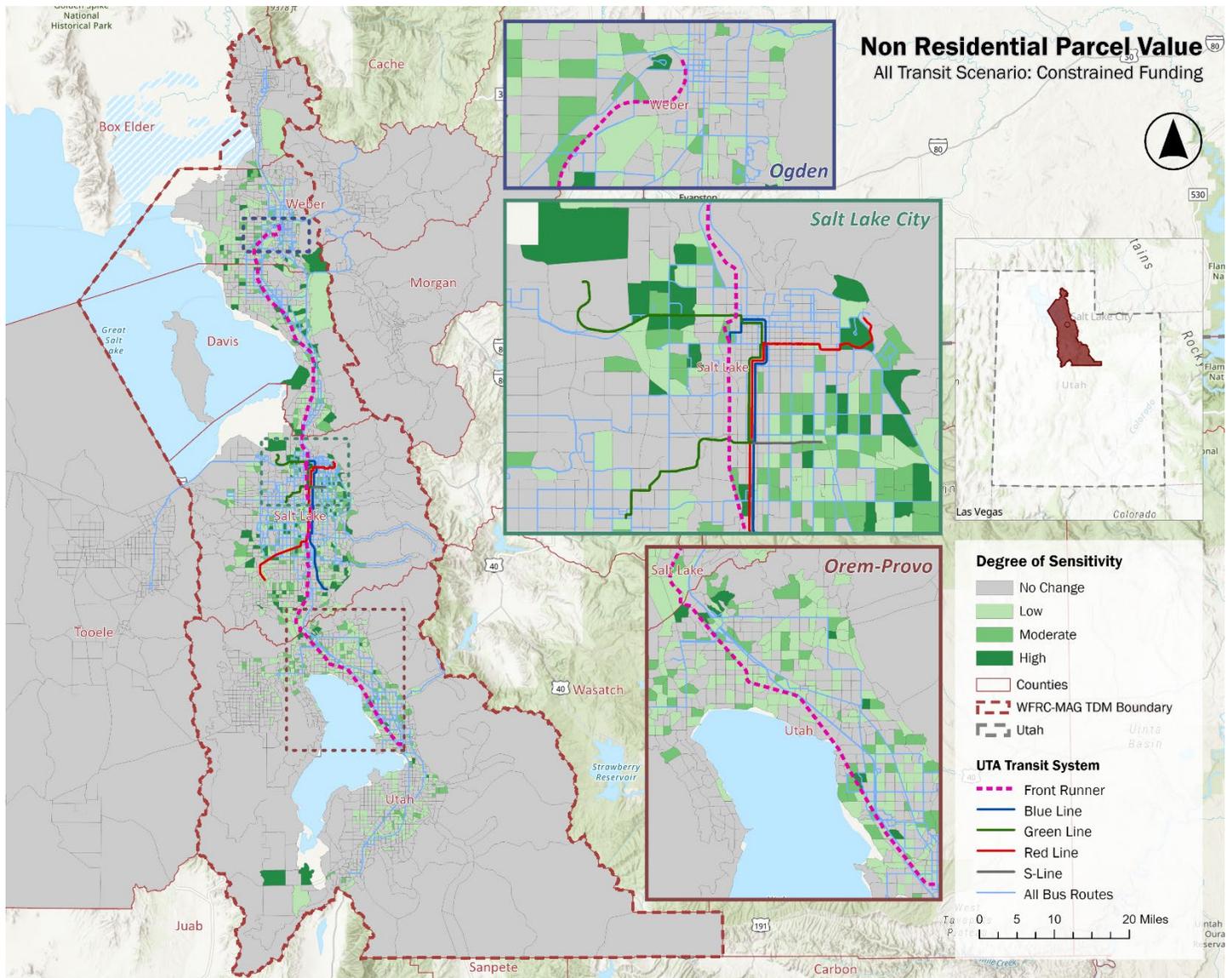
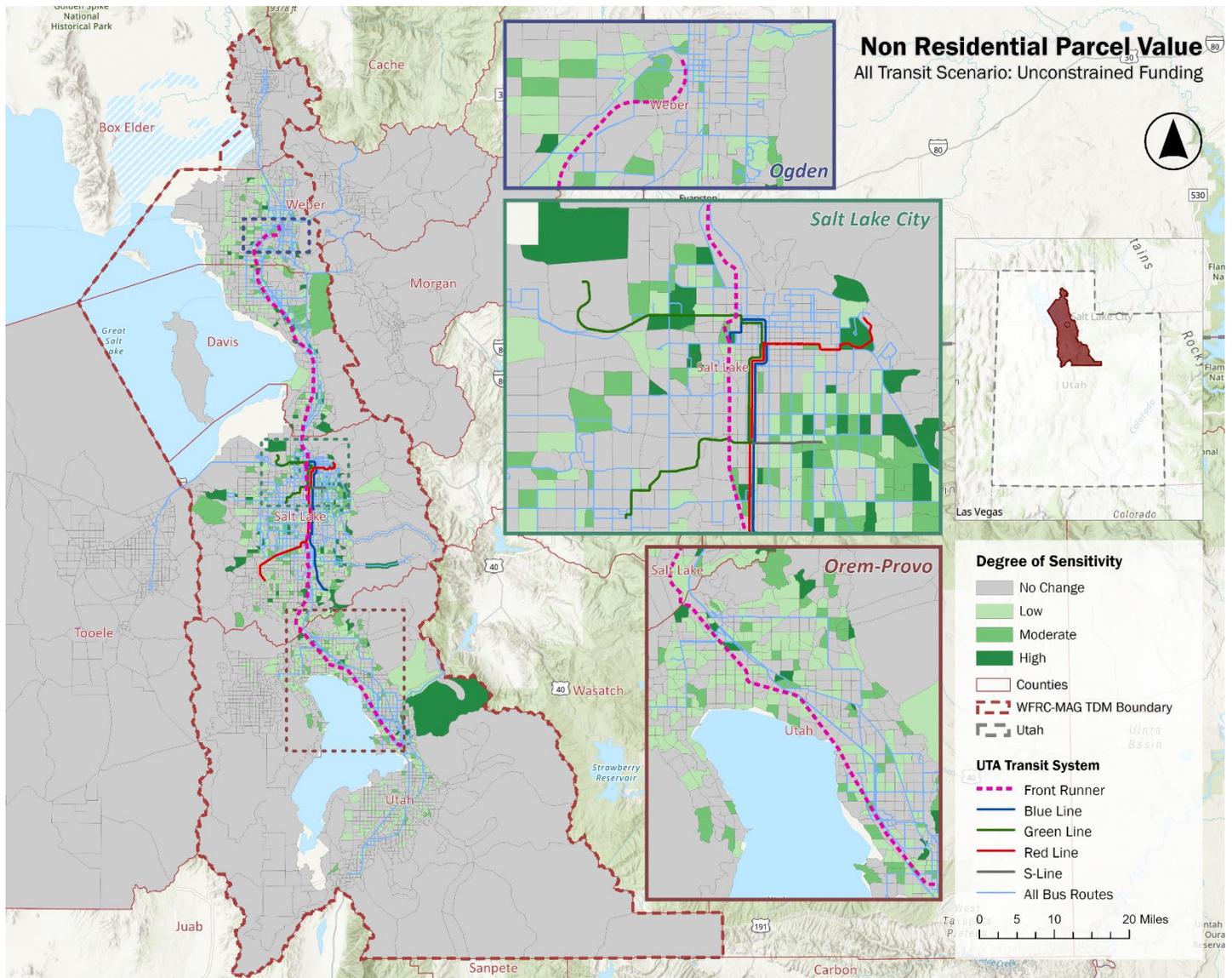
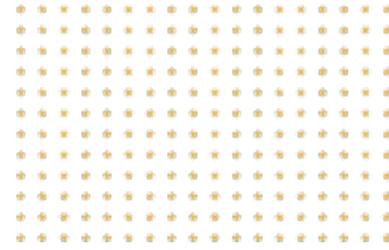


Figure 67: RTP-Total Needs All-Transit Non-Residential



CONCLUSION



The transit system of UTA addresses the diverse travel needs of the urbanized areas in the Wasatch Front region, facilitating over 31.5 million passenger trips, covering more than 37.6 million vehicle revenue miles, and operating for 2.2 million vehicle revenue hours in the year 2022 alone. Public transit plays a vital role in shaping the future outlined in Utah's Unified Plan 2023-2050, contributing to over a third of the projected economic benefits and impacts of the entire Unified Plan implementation. Furthermore, the congestion relief and improved accessibility resulting from increased investment in transit contribute to improved efficiency of the road and highway system, yielding a higher return on investment. This would not only benefit the existing transportation system users, but also facilitate the movement of additional transit users which results in even greater economic impact in the region.

A comprehensive overview of the costs, economic benefits, and impacts of UTA's transit system at different investment levels and transit scenarios is outlined in Table 13 below.

Table 13: Summary of Economic and Fiscal Impact Outcomes of UTA's Transit Investment

Benefit Scenarios: Investment Levels:	Bus-Only Scenario				All-Transit Scenario			
	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
Transit Spending (Billion \$s)	\$16.14	\$17.45	\$26.71	\$29.29	\$22.22	\$24.07	\$36.19	\$47.01
Operation and Maintenance Costs (Billion \$s)	\$12.79	\$12.79	\$16.68	\$17.01	\$17.42	\$17.42	\$22.79	\$24.76
Capital Outlays (Billion \$s)	\$3.35	\$4.66	\$10.02	\$12.27	\$4.80	\$6.65	\$13.40	\$22.25
Economic Impacts of Spending								
Employment (# of Jobs)	21,579	19,374	46,020	60,420	30,385	27,979	56,602	74,804
Labor Income (Billion \$s)	\$9.22	\$10.71	\$16.38	\$17.97	\$12.34	\$14.22	\$21.39	\$27.78
Value Added/GDP (Billion \$s)	\$16.52	\$17.97	\$27.49	\$30.15	\$22.47	\$24.40	\$36.69	\$47.65
Business Output (Billion \$s)	\$32.16	\$35.04	\$53.62	\$58.79	\$44.14	\$48.08	\$72.30	\$93.90
Efficiency Benefits (\$Billion)	\$6.91	\$8.42	\$12.84	\$12.87	\$24.42	\$24.91	\$41.28	\$38.37
Discounted @ 3.5% (Billion \$s)	\$4.53	\$5.30	\$7.66	\$7.67	\$15.60	\$15.86	\$24.60	\$23.10
Vehicle Operating Cost Savings	\$8.64	\$9.94	\$14.10	\$13.93	\$39.12	\$40.72	\$55.87	\$54.14
Travel Time and Reliability Savings	(\$1.67)	(\$1.47)	(\$1.21)	(\$0.97)	(\$14.97)	(\$16.09)	(\$15.08)	(\$16.19)
Environmental Benefits	(\$0.06)	(\$0.05)	(\$0.05)	(\$0.09)	\$0.27	\$0.09	\$0.49	\$0.42
Economic Impacts of Efficiency Savings								
Employment (# of Jobs)	6,264	8,343	11,801	10,202	24,699	26,729	38,798	34,079
Labor Income (Billion \$s)	\$8.43	\$9.77	\$12.32	\$11.23	\$27.15	\$28.52	\$37.53	\$34.55
Value Added/GDP (Billion \$s)	\$14.10	\$16.31	\$20.65	\$18.88	\$45.66	\$47.90	\$63.20	\$58.39
Business Output (Billion \$s)	\$26.65	\$30.87	\$38.97	\$35.56	\$85.94	\$90.23	\$118.83	\$109.54
Economic Impacts of Market Access Gains								

Benefit Scenarios:	Bus-Only Scenario				All-Transit Scenario			
	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
<i>Investment Levels:</i>								
<i>Employment (# of Jobs)</i>	0	3,103	6,167	5,471	2,738	7,896	12,608	9,101
<i>Labor Income (Billion \$s)</i>	\$0.00	\$1.57	\$2.85	\$2.67	\$1.74	\$4.12	\$6.47	\$5.01
<i>Value Added/GDP (Billion \$s)</i>	\$0.00	\$2.24	\$4.34	\$3.95	\$3.53	\$5.71	\$10.25	\$7.69
<i>Business Output (Billion \$s)</i>	\$0.00	\$5.02	\$9.36	\$8.30	\$5.75	\$11.96	\$21.02	\$15.27
Economic Impacts of Workforce Participation Increase								
<i>Employment (# of Jobs)</i>	27,610	34,584	55,224	47,350	63,062	66,290	94,214	94,080
<i>Labor Income (Billion \$s)</i>	\$39.69	\$46.57	\$55.73	\$48.06	\$77.70	\$80.98	\$100.72	\$100.66
<i>Value Added/GDP (Billion \$s)</i>	\$66.46	\$76.29	\$90.31	\$80.80	\$129.67	\$138.28	\$170.73	\$170.63
<i>Business Output (Billion \$s)</i>	\$129.47	\$148.85	\$176.51	\$159.17	\$253.83	\$268.90	\$330.48	\$330.28
Cumulative Fiscal Impacts	\$7.95	\$8.96	\$13.31	\$13.76	\$16.98	\$17.96	\$26.08	\$28.01
<i>Local Taxes (Billion \$s)</i>	\$2.59	\$2.71	\$4.01	\$4.16	\$4.93	\$5.00	\$7.21	\$7.75
<i>State Taxes (Billion \$s)</i>	\$2.92	\$3.14	\$4.66	\$4.82	\$5.82	\$6.00	\$8.69	\$9.34
<i>Federal Taxes (Billion \$s)</i>	\$2.45	\$3.10	\$4.64	\$4.74	\$6.23	\$6.96	\$10.17	\$10.91

Through a cumulative impact of direct spending in transit operations, maintenance, and capital projects, efficiency savings, market access gains, as well as workforce participation, the regional economy is expected to be significantly bolstered by the presence and services of UTA's transit system compared to not having transit. Sustaining the current level of bus services at a cost of \$16.14 billion from 2023-2050 will not only save an additional \$6.91 billion in transportation expenses for Utah's households and businesses but also foster the creation of 28,000 jobs, generate \$17.65 billion in household income, and contribute \$30.62 billion in value added (GDP) to the state's economy. Similarly, maintaining the existing transit services at a cost of \$22.22 billion would result in \$24.42 billion in transportation cost savings, along with the creation of 58,000 jobs, \$41.23 billion in household income, and \$71.66 billion in value added (GDP). Operating just the bus services at a Business-As-Usual cost \$17.45 billion would yield \$8.42 billion in transportation efficiency savings, create 31,000 jobs, generate \$22.05 billion in household income, and contribute \$36.51 billion in value added (GDP). At the Business-As-Usual investment level of \$24.07 billion for operating all transit, about \$24.91 billion in transportation cost savings is realized while fostering the creation of 62,500 jobs, generating \$46.86 billion in household income, and contributing \$78.01 billion in value added (GDP) to the economy.

However, the Unified Plan offers two investment levels that significantly expand the impact of transit to the economic well-being of the region. Allocating \$26.71 billion to bus services only at the Unified Plan: Priority Needs level will result in an additional \$12.84 billion in transportation cost savings for Utah's households and businesses, fostering the creation of 64,000 jobs and contributing \$31.56 billion in household income, as well as \$52.48 billion in value added (GDP) to the state's economy. Operating both bus and rail transit services at a cost of \$36.19 billion under the Unified Plan: Priority Needs level would contribute \$41.28 billion in transportation cost savings, along with a collective impact of 108,000 jobs, \$65.39 billion in household income, and \$110.14 billion in value added (GDP). Meanwhile, funding the bus system only at the Unified Plan: Total Needs level, with a cost of \$29.29 billion, would

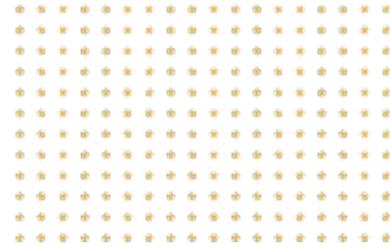
generate \$12.87 billion in transportation efficiency savings, create 76,000 jobs, contribute \$31.86 billion in household income, and add \$52.98 billion in value to the state's economy. Investing \$47.01 billion in both bus and rail transit systems at the Unified Plan: Total Needs level would result in \$38.37 billion in transportation cost savings, while also fostering the creation of 118,000 jobs, generating \$67.33 billion in household income, and contributing \$113.72 billion in value added (GDP) to the economy.

Analysis of the transit profile with respect to market access found professional services-oriented service sectors to have the most direct relationship with economic gains stemming from accessibility. While these sectors may see most direct benefits with the expansion of labor access due to transit, those experiencing the economic benefits are not limited to solely transit users such as those within these industries. The synergistic effect of transit and auto ridership coexisting is optimized at the RTP-Priority Needs level, when these accessibility benefits peak at the creation of 12,608 jobs, \$6.47 billion in labor income, \$10.25 billion in GDP, and \$21.02 billion in business output. Increased workforce participation would further contribute up to 94,200 jobs, \$100.72 billion in labor income, \$170.73 billion in GDP, and \$330.48 billion in total business outputs.

In terms of the Fiscal Impacts of UTA's transit investments, the Bus-Only Scenario sees total taxes rise of \$7.95 billion under Maintain-Existing-System, \$8.96 billion under Business-As-Usual, reaching \$13.31 billion and \$13.76 billion in RTP-Priority Needs and RTP-Total Needs scenarios. The All-Transit Scenario, starting at \$16.98 billion in Maintain-Existing-System, escalates to \$17.96 billion under Business-As-Usual, surging to \$26.08 billion and \$28.01 billion in RTP-Priority Needs and RTP-Total Needs scenarios. Despite both scenarios trending upward, the All-Transit Scenario consistently outshines the Bus-Only Scenario in cumulative fiscal impacts at different funding levels as would be expected.

UTA's investment in enhancing its transit system is poised to yield substantial returns, surpassing the initial investment. The Unified Plan scenarios outline UTA's expenditures on infrastructure and services, projecting savings for Utah's private sector. However, the real impact extends beyond transportation efficiency gains. The primary contributors to the economy are anticipated through reduced costs associated with congestion and enhanced travel reliability. This, in turn, allows Utah businesses to generate additional output, fostering economic growth. The resulting job opportunities and increased wages contribute significantly to Utah's workforce, creating a larger and more robust economy than would be possible by maintaining the existing 2023 transit system level or continuing with business-as-usual levels of investment.

APPENDIX



Appendix I: Transportation Efficiency Benefits and Impacts

Efficiency Savings in Million Dollars by Year (Undiscounted)

Benefit Scenarios: Investment Levels:	Bus-Only Scenario				All-Transit Scenario			
	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
2023	\$233.69	\$233.69	\$233.69	\$233.69	\$717.23	\$717.23	\$717.23	\$717.23
2024	\$237.08	\$238.62	\$247.20	\$247.39	\$732.75	\$733.77	\$766.74	\$763.59
2025	\$240.30	\$243.57	\$261.06	\$261.41	\$748.14	\$750.24	\$817.26	\$810.51
2026	\$243.35	\$248.53	\$275.26	\$275.75	\$763.34	\$766.59	\$868.79	\$857.97
2027	\$246.21	\$253.51	\$289.81	\$290.41	\$778.34	\$782.80	\$921.29	\$905.94
2028	\$248.87	\$258.51	\$304.73	\$305.41	\$793.07	\$798.81	\$974.73	\$954.36
2029	\$251.31	\$263.52	\$320.00	\$320.74	\$807.50	\$814.58	\$1,029.11	\$1,003.21
2030	\$253.52	\$268.56	\$335.65	\$336.43	\$821.64	\$830.14	\$1,084.47	\$1,052.53
2031	\$255.53	\$273.66	\$351.74	\$352.54	\$835.33	\$845.28	\$1,140.57	\$1,102.07
2032	\$257.26	\$278.76	\$368.19	\$369.00	\$848.53	\$860.01	\$1,197.46	\$1,151.86
2033	\$258.69	\$283.85	\$385.01	\$385.81	\$861.21	\$874.25	\$1,255.10	\$1,201.85
2034	\$259.78	\$288.94	\$402.19	\$402.98	\$873.28	\$887.95	\$1,313.43	\$1,251.97
2035	\$260.52	\$294.00	\$419.75	\$420.51	\$884.67	\$901.03	\$1,372.39	\$1,302.13
2036	\$260.89	\$299.06	\$437.69	\$438.42	\$895.39	\$913.49	\$1,432.05	\$1,352.41
2037	\$260.84	\$304.08	\$455.98	\$456.68	\$905.18	\$925.07	\$1,492.07	\$1,402.45
2038	\$260.35	\$309.06	\$474.64	\$475.30	\$914.05	\$935.76	\$1,552.49	\$1,452.29
2039	\$259.39	\$314.01	\$493.65	\$494.30	\$921.89	\$945.46	\$1,613.24	\$1,501.84
2040	\$257.92	\$318.91	\$513.03	\$513.66	\$928.59	\$954.06	\$1,674.20	\$1,550.98
2041	\$255.93	\$323.78	\$532.80	\$533.42	\$934.13	\$961.55	\$1,735.45	\$1,599.77
2042	\$253.36	\$328.57	\$552.88	\$553.54	\$938.22	\$967.58	\$1,796.53	\$1,647.77
2043	\$250.17	\$333.31	\$573.31	\$574.03	\$940.81	\$972.12	\$1,857.47	\$1,695.00
2044	\$246.35	\$337.97	\$594.09	\$594.91	\$941.77	\$975.04	\$1,918.14	\$1,741.32
2045	\$241.86	\$342.57	\$615.21	\$616.17	\$940.97	\$976.16	\$1,978.39	\$1,786.59
2046	\$236.70	\$347.13	\$636.71	\$637.86	\$938.35	\$975.48	\$2,038.29	\$1,830.86
2047	\$230.83	\$351.62	\$658.52	\$659.93	\$933.62	\$972.55	\$2,097.25	\$1,873.58
2048	\$224.31	\$356.07	\$680.71	\$682.44	\$926.74	\$967.33	\$2,155.32	\$1,914.80
2049	\$217.22	\$360.55	\$703.31	\$705.45	\$917.68	\$959.66	\$2,212.37	\$1,954.37
2050	\$209.76	\$365.13	\$726.44	\$729.06	\$912.33	\$949.42	\$2,268.27	\$1,992.21
Cumulative Total	\$6,912.00	\$8,419.56	\$12,843.25	\$12,867.27	\$24,354.73	\$24,913.40	\$41,280.10	\$38,371.43

Efficiency Savings in Million Dollars by Year (Discounted at 3.5%)

Benefit Scenarios:	Bus-Only Scenario				All-Transit Scenario			
Investment Levels:	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
2023	\$233.69	\$233.69	\$233.69	\$233.69	\$717.23	\$717.23	\$717.23	\$717.23
2024	\$229.06	\$230.55	\$238.84	\$239.03	\$707.97	\$708.96	\$740.81	\$737.76
2025	\$224.32	\$227.37	\$243.70	\$244.03	\$698.39	\$700.36	\$762.92	\$756.62
2026	\$219.49	\$224.16	\$248.27	\$248.71	\$688.49	\$691.42	\$783.59	\$773.84
2027	\$214.56	\$220.92	\$252.55	\$253.07	\$678.27	\$682.17	\$802.85	\$789.47
2028	\$209.54	\$217.66	\$256.57	\$257.15	\$667.74	\$672.58	\$820.70	\$803.55
2029	\$204.44	\$214.38	\$260.32	\$260.92	\$656.90	\$662.66	\$837.18	\$816.11
2030	\$199.26	\$211.09	\$263.82	\$264.43	\$645.80	\$652.48	\$852.38	\$827.28
2031	\$194.05	\$207.82	\$267.11	\$267.72	\$634.36	\$641.91	\$866.16	\$836.92
2032	\$188.76	\$204.54	\$270.15	\$270.75	\$622.60	\$631.01	\$878.62	\$845.16
2033	\$183.39	\$201.23	\$272.94	\$273.51	\$610.53	\$619.77	\$889.77	\$852.02
2034	\$177.94	\$197.91	\$275.48	\$276.02	\$598.15	\$608.20	\$899.63	\$857.53
2035	\$172.41	\$194.57	\$277.78	\$278.29	\$585.46	\$596.28	\$908.22	\$861.73
2036	\$166.82	\$191.22	\$279.86	\$280.33	\$572.51	\$584.09	\$915.66	\$864.73
2037	\$161.14	\$187.85	\$281.70	\$282.13	\$559.21	\$571.49	\$921.77	\$866.41
2038	\$155.40	\$184.48	\$283.31	\$283.70	\$545.59	\$558.55	\$926.67	\$866.86
2039	\$149.59	\$181.09	\$284.69	\$285.06	\$531.66	\$545.25	\$930.36	\$866.12
2040	\$143.72	\$177.70	\$285.86	\$286.22	\$517.41	\$531.60	\$932.87	\$864.21
2041	\$137.78	\$174.31	\$286.84	\$287.18	\$502.90	\$517.66	\$934.30	\$861.25
2042	\$131.78	\$170.91	\$287.58	\$287.93	\$488.02	\$503.29	\$934.47	\$857.10
2043	\$125.73	\$167.51	\$288.13	\$288.49	\$472.82	\$488.56	\$933.50	\$851.85
2044	\$119.62	\$164.11	\$288.47	\$288.87	\$457.30	\$473.45	\$931.39	\$845.53
2045	\$113.47	\$160.72	\$288.63	\$289.08	\$441.46	\$457.97	\$928.16	\$838.18
2046	\$107.29	\$157.35	\$288.61	\$289.13	\$425.34	\$442.17	\$923.93	\$829.90
2047	\$101.09	\$153.99	\$288.40	\$289.02	\$408.88	\$425.93	\$918.51	\$820.55
2048	\$94.92	\$150.67	\$288.04	\$288.77	\$392.15	\$409.32	\$912.02	\$810.24
2049	\$88.81	\$147.40	\$287.54	\$288.42	\$375.18	\$392.35	\$904.50	\$799.02
2050	\$82.86	\$144.23	\$286.95	\$287.99	\$360.38	\$375.03	\$896.00	\$786.95
Cumulative Total	\$4,530.94	\$5,299.43	\$7,655.85	\$7,669.63	\$15,562.70	\$15,861.75	\$24,604.18	\$23,104.11

Impacts on Employment (Number of Jobs) by Year

Benefit Scenarios:	Bus-Only Scenario				All-Transit Scenario			
	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
Investment Levels:								
2023	3,956	3,957	3,957	3,957	10,003	10,004	10,006	10,072
2024	4,024	4,057	4,143	4,114	10,336	10,372	10,688	10,688
2025	4,093	4,161	4,335	4,276	10,679	10,754	11,392	11,321
2026	4,164	4,268	4,533	4,443	11,035	11,150	12,120	11,971
2027	4,235	4,378	4,738	4,614	11,404	11,561	12,873	12,640
2028	4,307	4,492	4,950	4,791	11,785	11,987	13,650	13,326
2029	4,381	4,609	5,168	4,972	12,179	12,428	14,454	14,032
2030	4,456	4,731	5,394	5,158	12,588	12,886	15,284	14,757
2031	4,532	4,857	5,628	5,350	13,011	13,361	16,141	15,501
2032	4,610	4,987	5,868	5,547	13,448	13,853	17,026	16,266
2033	4,688	5,121	6,117	5,750	13,902	14,364	17,940	17,051
2034	4,768	5,260	6,374	5,958	14,371	14,894	18,884	17,857
2035	4,849	5,404	6,639	6,172	14,858	15,444	19,859	18,685
2036	4,932	5,553	6,912	6,393	15,361	16,015	20,865	19,535
2037	5,016	5,707	7,194	6,619	15,883	16,607	21,903	20,408
2038	5,101	5,867	7,486	6,851	16,424	17,221	22,974	21,304
2039	5,187	6,033	7,786	7,090	16,984	17,859	24,080	22,224
2040	5,275	6,204	8,097	7,336	17,564	18,521	25,221	23,167
2041	5,365	6,383	8,417	7,589	18,166	19,209	26,397	24,136
2042	5,456	6,568	8,747	7,848	18,789	19,922	27,611	25,130
2043	5,548	6,760	9,088	8,115	19,435	20,664	28,863	26,151
2044	5,642	6,960	9,439	8,389	20,105	21,433	30,155	27,197
2045	5,738	7,167	9,802	8,670	20,799	22,233	31,487	28,272
2046	5,836	7,383	10,176	8,960	21,520	23,064	32,860	29,374
2047	5,936	7,608	10,563	9,257	22,268	23,927	34,276	30,505
2048	6,040	7,842	10,962	9,563	23,046	24,825	35,737	31,665
2049	6,149	8,087	11,374	9,878	23,855	25,758	37,244	32,856
2050	6,264	8,343	11,801	10,202	24,699	26,729	38,798	34,079
Maximum	6,264	8,343	11,801	10,202	24,699	26,729	38,798	34,079

Impacts on Household Income in Million Dollars by Year

<i>Benefit Scenarios:</i>	Bus-Only Scenario				All-Transit Scenario			
<i>Investment Levels:</i>	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
2023	\$235.94	\$235.95	\$235.97	\$235.96	\$595.58	\$595.60	\$595.75	\$599.81
2024	\$240.07	\$242.05	\$247.15	\$245.40	\$615.50	\$617.73	\$636.50	\$636.50
2025	\$244.26	\$248.34	\$258.71	\$255.11	\$636.12	\$640.67	\$678.63	\$674.20
2026	\$248.53	\$254.83	\$270.66	\$265.10	\$657.46	\$664.46	\$722.17	\$712.95
2027	\$252.87	\$261.54	\$282.99	\$275.38	\$679.55	\$689.13	\$767.17	\$752.76
2028	\$257.29	\$268.46	\$295.74	\$285.95	\$702.42	\$714.71	\$813.67	\$793.66
2029	\$261.78	\$275.62	\$308.91	\$296.82	\$726.10	\$741.24	\$861.71	\$835.68
2030	\$266.35	\$283.02	\$322.50	\$307.99	\$750.62	\$768.75	\$911.34	\$878.84
2031	\$271.00	\$290.67	\$336.55	\$319.48	\$776.01	\$797.30	\$962.60	\$923.17
2032	\$275.73	\$298.58	\$351.05	\$331.30	\$802.30	\$826.91	\$1,015.54	\$968.70
2033	\$280.54	\$306.77	\$366.02	\$343.44	\$829.53	\$857.63	\$1,070.21	\$1,015.45
2034	\$285.44	\$315.25	\$381.48	\$355.93	\$857.74	\$889.50	\$1,126.65	\$1,063.46
2035	\$290.42	\$324.02	\$397.44	\$368.77	\$886.96	\$922.58	\$1,184.92	\$1,112.75
2036	\$295.48	\$333.11	\$413.91	\$381.96	\$917.23	\$956.91	\$1,245.06	\$1,163.36
2037	\$300.64	\$342.53	\$430.91	\$395.53	\$948.59	\$992.54	\$1,307.13	\$1,215.31
2038	\$305.88	\$352.30	\$448.46	\$409.47	\$981.09	\$1,029.53	\$1,371.19	\$1,268.64
2039	\$311.21	\$362.42	\$466.57	\$423.80	\$1,014.76	\$1,067.92	\$1,437.29	\$1,323.39
2040	\$316.63	\$372.92	\$485.25	\$438.52	\$1,049.66	\$1,107.79	\$1,505.49	\$1,379.57
2041	\$322.15	\$383.83	\$504.54	\$453.66	\$1,085.84	\$1,149.19	\$1,575.84	\$1,437.23
2042	\$327.77	\$395.15	\$524.43	\$469.21	\$1,123.33	\$1,192.18	\$1,648.42	\$1,496.40
2043	\$333.49	\$406.90	\$544.96	\$485.19	\$1,162.21	\$1,236.83	\$1,723.27	\$1,557.12
2044	\$339.32	\$419.13	\$566.14	\$501.61	\$1,202.52	\$1,283.22	\$1,800.47	\$1,619.43
2045	\$345.27	\$431.84	\$588.00	\$518.49	\$1,244.34	\$1,331.41	\$1,880.09	\$1,683.36
2046	\$351.36	\$445.06	\$610.55	\$535.83	\$1,287.72	\$1,381.48	\$1,962.19	\$1,748.95
2047	\$357.61	\$458.84	\$633.83	\$553.66	\$1,332.78	\$1,433.53	\$2,046.86	\$1,816.25
2048	\$364.08	\$473.21	\$657.87	\$571.99	\$1,379.60	\$1,487.64	\$2,134.18	\$1,885.31
2049	\$370.84	\$488.22	\$682.72	\$590.85	\$1,428.34	\$1,543.92	\$2,224.25	\$1,956.18
2050	\$378.02	\$503.93	\$708.44	\$610.28	\$1,479.19	\$1,602.48	\$2,317.18	\$2,028.93
<i>Cumulative Total</i>	\$8,429.96	\$9,774.48	\$12,321.75	\$11,226.70	\$27,153.08	\$28,522.77	\$37,525.79	\$34,547.36

Impacts on Value Added (GDP) in Million Dollars by Year

<i>Benefit Scenarios:</i>	Bus-Only Scenario				All-Transit Scenario			
<i>Investment Levels:</i>	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
2023	\$398.18	\$398.19	\$398.21	\$398.20	\$1,006.93	\$1,006.96	\$1,007.18	\$1,013.60
2024	\$404.95	\$408.20	\$416.82	\$414.01	\$1,040.24	\$1,043.89	\$1,075.58	\$1,075.58
2025	\$411.82	\$418.52	\$436.04	\$430.27	\$1,074.71	\$1,082.16	\$1,146.30	\$1,139.29
2026	\$418.80	\$429.16	\$455.90	\$446.99	\$1,110.37	\$1,121.82	\$1,219.40	\$1,204.75
2027	\$425.90	\$440.14	\$476.41	\$464.19	\$1,147.27	\$1,162.94	\$1,294.94	\$1,272.02
2028	\$433.11	\$451.48	\$497.60	\$481.88	\$1,185.46	\$1,205.56	\$1,373.01	\$1,341.14
2029	\$440.43	\$463.19	\$519.49	\$500.08	\$1,224.99	\$1,249.75	\$1,453.67	\$1,412.15
2030	\$447.87	\$475.28	\$542.09	\$518.78	\$1,265.90	\$1,295.57	\$1,536.99	\$1,485.10
2031	\$455.42	\$487.77	\$565.43	\$538.02	\$1,308.26	\$1,343.09	\$1,623.06	\$1,560.03
2032	\$463.10	\$500.68	\$589.53	\$557.80	\$1,352.11	\$1,392.37	\$1,711.95	\$1,636.99
2033	\$470.89	\$514.03	\$614.41	\$578.13	\$1,397.51	\$1,443.48	\$1,803.73	\$1,716.02
2034	\$478.80	\$527.83	\$640.10	\$599.04	\$1,444.53	\$1,496.50	\$1,898.50	\$1,797.19
2035	\$486.84	\$542.12	\$666.61	\$620.53	\$1,493.21	\$1,551.51	\$1,996.34	\$1,880.53
2036	\$495.00	\$556.91	\$693.98	\$642.62	\$1,543.63	\$1,608.57	\$2,097.33	\$1,966.09
2037	\$503.29	\$572.22	\$722.22	\$665.32	\$1,595.86	\$1,667.79	\$2,201.57	\$2,053.94
2038	\$511.70	\$588.08	\$751.37	\$688.66	\$1,649.96	\$1,729.24	\$2,309.14	\$2,144.13
2039	\$520.25	\$604.52	\$781.45	\$712.65	\$1,706.00	\$1,793.02	\$2,420.15	\$2,236.70
2040	\$528.92	\$621.56	\$812.49	\$737.30	\$1,764.07	\$1,859.22	\$2,534.68	\$2,331.72
2041	\$537.73	\$639.23	\$844.51	\$762.64	\$1,824.24	\$1,927.94	\$2,652.83	\$2,429.24
2042	\$546.68	\$657.57	\$877.56	\$788.67	\$1,886.59	\$1,999.29	\$2,774.72	\$2,529.33
2043	\$555.77	\$676.61	\$911.64	\$815.43	\$1,951.21	\$2,073.38	\$2,900.44	\$2,632.04
2044	\$565.02	\$696.39	\$946.82	\$842.92	\$2,018.20	\$2,150.32	\$3,030.11	\$2,737.44
2045	\$574.44	\$716.95	\$983.10	\$871.18	\$2,087.67	\$2,230.24	\$3,163.83	\$2,845.59
2046	\$584.06	\$738.33	\$1,020.55	\$900.22	\$2,159.74	\$2,313.26	\$3,301.74	\$2,956.56
2047	\$593.92	\$760.59	\$1,059.20	\$930.07	\$2,234.54	\$2,399.53	\$3,443.96	\$3,070.43
2048	\$604.11	\$783.80	\$1,099.11	\$960.76	\$2,312.27	\$2,489.20	\$3,590.64	\$3,187.29
2049	\$614.74	\$808.02	\$1,140.37	\$992.35	\$2,393.15	\$2,582.44	\$3,741.94	\$3,307.22
2050	\$626.04	\$833.38	\$1,183.07	\$1,024.88	\$2,477.52	\$2,679.45	\$3,898.05	\$3,430.34
<i>Cumulative Total</i>	\$14,097.78	\$16,310.72	\$20,646.09	\$18,883.58	\$45,656.14	\$47,898.50	\$63,201.79	\$58,392.45

Impacts on Business Outputs in Million Dollars by Year

<i>Benefit Scenarios:</i>	Bus-Only Scenario				All-Transit Scenario			
<i>Investment Levels:</i>	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
2023	\$748.15	\$748.17	\$748.22	\$748.20	\$1,888.60	\$1,888.66	\$1,889.06	\$1,901.64
2024	\$761.10	\$767.32	\$783.51	\$778.05	\$1,951.53	\$1,958.51	\$2,017.95	\$2,017.95
2025	\$774.27	\$787.07	\$819.98	\$808.76	\$2,016.65	\$2,030.93	\$2,151.19	\$2,137.48
2026	\$787.66	\$807.46	\$857.65	\$840.35	\$2,084.05	\$2,106.00	\$2,288.92	\$2,260.31
2027	\$801.28	\$828.51	\$896.58	\$872.84	\$2,153.82	\$2,183.83	\$2,431.27	\$2,386.52
2028	\$815.12	\$850.25	\$936.79	\$906.26	\$2,226.03	\$2,264.54	\$2,578.35	\$2,516.19
2029	\$829.20	\$872.70	\$978.32	\$940.63	\$2,300.78	\$2,348.23	\$2,730.32	\$2,649.41
2030	\$843.52	\$895.91	\$1,021.22	\$975.96	\$2,378.18	\$2,435.02	\$2,887.31	\$2,786.25
2031	\$858.07	\$919.89	\$1,065.51	\$1,012.30	\$2,458.31	\$2,525.05	\$3,049.46	\$2,926.81
2032	\$872.87	\$944.70	\$1,111.25	\$1,049.66	\$2,541.29	\$2,618.43	\$3,216.93	\$3,071.16
2033	\$887.92	\$970.36	\$1,158.47	\$1,088.07	\$2,627.23	\$2,715.30	\$3,389.85	\$3,219.41
2034	\$903.22	\$996.91	\$1,207.23	\$1,127.56	\$2,716.23	\$2,815.81	\$3,568.40	\$3,371.64
2035	\$918.77	\$1,024.40	\$1,257.56	\$1,168.15	\$2,808.42	\$2,920.10	\$3,752.72	\$3,527.95
2036	\$934.58	\$1,052.87	\$1,309.51	\$1,209.88	\$2,903.91	\$3,028.32	\$3,942.97	\$3,688.43
2037	\$950.66	\$1,082.36	\$1,363.14	\$1,252.77	\$3,002.84	\$3,140.63	\$4,139.34	\$3,853.17
2038	\$967.00	\$1,112.92	\$1,418.48	\$1,296.85	\$3,105.34	\$3,257.21	\$4,341.99	\$4,022.29
2039	\$983.61	\$1,144.60	\$1,475.59	\$1,342.16	\$3,211.54	\$3,378.22	\$4,551.09	\$4,195.89
2040	\$1,000.51	\$1,177.47	\$1,534.52	\$1,388.73	\$3,321.59	\$3,503.85	\$4,766.83	\$4,374.06
2041	\$1,017.68	\$1,211.57	\$1,595.33	\$1,436.58	\$3,435.65	\$3,634.30	\$4,989.40	\$4,556.93
2042	\$1,035.15	\$1,246.97	\$1,658.07	\$1,485.76	\$3,553.87	\$3,769.75	\$5,218.99	\$4,744.59
2043	\$1,052.93	\$1,283.74	\$1,722.81	\$1,536.29	\$3,676.42	\$3,910.42	\$5,455.81	\$4,937.16
2044	\$1,071.03	\$1,321.94	\$1,789.60	\$1,588.22	\$3,803.49	\$4,056.54	\$5,700.05	\$5,134.77
2045	\$1,089.50	\$1,361.67	\$1,858.51	\$1,641.59	\$3,935.29	\$4,208.33	\$5,951.93	\$5,337.52
2046	\$1,108.38	\$1,403.01	\$1,929.63	\$1,696.44	\$4,072.03	\$4,366.05	\$6,211.68	\$5,545.57
2047	\$1,127.76	\$1,446.06	\$2,003.04	\$1,752.81	\$4,214.00	\$4,529.96	\$6,479.56	\$5,759.03
2048	\$1,147.80	\$1,490.94	\$2,078.84	\$1,810.79	\$4,361.53	\$4,700.35	\$6,755.82	\$5,978.07
2049	\$1,168.73	\$1,537.82	\$2,157.20	\$1,870.43	\$4,515.09	\$4,877.56	\$7,040.77	\$6,202.87
2050	\$1,190.98	\$1,586.88	\$2,238.30	\$1,931.87	\$4,675.29	\$5,061.96	\$7,334.80	\$6,433.65
<i>Cumulative Total</i>	\$26,647.46	\$30,874.47	\$38,974.84	\$35,557.95	\$85,938.99	\$90,233.83	\$118,832.75	\$109,536.71

Appendix II: Market Access Impacts

Market Access Methodology

Data from the economic analysis software IMPLAN are analyzed to assess the impacts on business location and output of four different scenarios for the transportation network for each zip code in Utah. These include variables for employment and output figures for each subsector, as well as figures for population within a 40-minute radius (“Pop40”) for each scenario: Maintain-Existing-System, Business as Usual, RTP-Priority Needs, and RTP-Total Needs.

Zip codes are assigned a bin number for “base” labor access bin of 1 through 5, based on the quintiles of the “No-Transit” population within a 40-minute drive radius. The zip codes were then given “build” labor access and business access bin numbers, based on where the analyzed scenario’s pop40 fell according to the bin thresholds of the respective No-Transit scenario figures.

Once the base and build bins have been assigned, productivity numbers for every industry found from the transit profile were calculated for each bin. This was calculated by taking all zip codes within a bin assignment, finding the total output of each industry, and dividing that by the total number of workers in each industry. To ensure that findings were sensible, only industries whose productivity figures were ascending with increase in access (i.e., productivity for an industry was consistently increasing as labor accessibility was increasing) were considered for further analysis. As another measure of ensuring sensible results, the remaining industries were also assessed such that only industries that had gains in productivity were left to be considered.

As a result of the binning differentials, the industries that are found to benefit from improved market access are evaluated to determine how much more each industry would produce because of improved access to labor and employment in each zip code, producing a final estimate of the increase in business output due to the different scenarios of market access.

Once these figures are calculated, a 28-year benefit stream is outlined to portray the change in economic benefits due to market access over time. The percentage growth is sourced from capital outlay progression as well as year over year economic growth figures. The sum of this stream of 28 year over year benefits is the cumulative market access benefit figure for each scenario. Each figure is subsequently run through IMPLAN’s economic modeling system to produce output figures with additional indirect and induced benefit figures added to the cumulative figure, producing a final market access benefit output number for each scenario.

Impacts on Employment (Number of Jobs) by Year

Benefit Scenarios:	Bus-Only Scenario				All-Transit Scenario			
	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
Investment Levels:								
2023	-	33	44	37	23	78	84	47
2024	-	39	53	44	28	92	101	57
2025	-	81	110	92	60	197	215	121
2026	-	133	180	149	95	327	357	201
2027	-	184	250	207	134	458	499	281
2028	-	235	319	265	177	588	641	360
2029	-	294	398	331	225	741	808	454
2030	-	348	477	397	276	876	997	574
2031	-	406	563	469	332	1,021	1,224	733
2032	-	470	656	547	393	1,184	1,479	911
2033	-	542	763	639	458	1,368	1,747	1,083
2034	-	618	915	768	528	1,558	2,070	1,270
2035	-	707	1,113	935	603	1,777	2,452	1,492
2036	-	799	1,333	1,116	684	2,008	2,893	1,807
2037	-	898	1,577	1,319	771	2,255	3,421	2,265
2038	-	1,012	1,793	1,494	864	2,562	3,949	2,764
2039	-	1,134	2,035	1,696	964	2,883	4,486	3,202
2040	-	1,273	2,296	1,885	1,070	3,254	4,996	3,574
2041	-	1,411	2,583	2,113	1,184	3,623	5,555	4,001
2042	-	1,548	2,868	2,337	1,306	3,981	6,113	4,383
2043	-	1,687	3,128	2,563	1,435	4,336	6,640	4,754
2044	-	1,831	3,436	2,864	1,572	4,696	7,240	5,177
2045	-	1,987	3,814	3,199	1,717	5,084	7,988	5,688
2046	-	2,166	4,139	3,473	1,871	5,538	8,647	6,179
2047	-	2,346	4,516	3,864	2,035	5,995	9,381	6,822
2048	-	2,537	4,891	4,201	2,210	6,479	10,110	7,356
2049	-	2,740	5,415	4,748	2,396	6,990	11,147	8,118
2050	-	3,103	6,167	5,471	2,738	7,896	12,608	9,101
Maximum	-	3,103	6,167	5,471	2,738	7,896	12,608	9,101

Impacts on Household Income in Million Dollars by Year

<i>Benefit Scenarios:</i>	Bus-Only Scenario				All-Transit Scenario			
<i>Investment Levels:</i>	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
2023	\$-	\$1.70	\$2.26	\$2.08	\$1.55	\$4.12	\$4.59	\$2.82
2024	\$-	\$2.01	\$2.71	\$2.50	\$1.85	\$4.89	\$5.53	\$3.43
2025	\$-	\$4.18	\$5.64	\$5.19	\$3.97	\$10.44	\$11.81	\$7.31
2026	\$-	\$6.81	\$9.19	\$8.45	\$6.32	\$17.34	\$19.62	\$12.15
2027	\$-	\$9.46	\$12.76	\$11.73	\$8.91	\$24.25	\$27.44	\$16.99
2028	\$-	\$12.08	\$16.29	\$14.99	\$11.75	\$31.13	\$35.21	\$21.80
2029	\$-	\$15.08	\$20.35	\$18.71	\$14.93	\$39.25	\$44.41	\$27.50
2030	\$-	\$17.84	\$24.40	\$22.47	\$18.36	\$46.37	\$54.79	\$34.71
2031	\$-	\$20.83	\$28.77	\$26.54	\$22.08	\$54.05	\$67.31	\$44.37
2032	\$-	\$24.14	\$33.51	\$30.94	\$26.09	\$62.71	\$81.30	\$55.12
2033	\$-	\$27.82	\$38.97	\$36.13	\$30.42	\$72.47	\$96.05	\$65.52
2034	\$-	\$31.73	\$46.78	\$43.45	\$35.08	\$82.50	\$113.78	\$76.84
2035	\$-	\$36.29	\$56.86	\$52.90	\$40.09	\$94.11	\$134.80	\$90.26
2036	\$-	\$41.02	\$68.12	\$63.14	\$45.47	\$106.35	\$159.06	\$109.32
2037	\$-	\$46.10	\$80.62	\$74.61	\$51.24	\$119.44	\$188.07	\$137.06
2038	\$-	\$51.93	\$91.64	\$84.53	\$57.42	\$135.68	\$217.08	\$167.24
2039	\$-	\$58.19	\$104.00	\$95.96	\$64.03	\$152.70	\$246.61	\$193.76
2040	\$-	\$65.34	\$117.34	\$106.65	\$71.11	\$172.31	\$274.67	\$216.25
2041	\$-	\$72.43	\$131.99	\$119.55	\$78.68	\$191.85	\$305.38	\$242.13
2042	\$-	\$79.43	\$146.60	\$132.18	\$86.75	\$210.85	\$336.04	\$265.25
2043	\$-	\$86.58	\$159.84	\$144.96	\$95.37	\$229.61	\$365.03	\$287.71
2044	\$-	\$93.99	\$175.59	\$162.00	\$104.41	\$248.69	\$398.04	\$313.27
2045	\$-	\$101.97	\$194.92	\$180.96	\$114.05	\$269.23	\$439.16	\$344.22
2046	\$-	\$111.15	\$211.53	\$196.47	\$124.31	\$293.28	\$475.39	\$373.89
2047	\$-	\$120.41	\$230.81	\$218.58	\$135.22	\$317.49	\$515.72	\$412.80
2048	\$-	\$130.23	\$249.97	\$237.67	\$146.83	\$343.10	\$555.80	\$445.15
2049	\$-	\$140.62	\$276.77	\$268.60	\$159.16	\$370.18	\$612.84	\$491.24
2050	\$-	\$159.24	\$315.19	\$309.47	\$181.91	\$418.15	\$693.11	\$550.71
<i>Cumulative Total</i>	\$-	\$1,566.92	\$2,851.16	\$2,669.33	\$1,735.81	\$4,118.45	\$6,474.06	\$5,005.99

Impacts on Value Added (GDP) in Million Dollars by Year

<i>Benefit Scenarios:</i>	Bus-Only Scenario				All-Transit Scenario			
<i>Investment Levels:</i>	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
2023	\$-	\$2.43	\$3.44	\$3.07	\$3.15	\$5.71	\$7.27	\$4.33
2024	\$-	\$2.87	\$4.13	\$3.70	\$3.76	\$6.78	\$8.76	\$5.26
2025	\$-	\$5.97	\$8.59	\$7.68	\$8.08	\$14.49	\$18.70	\$11.23
2026	\$-	\$9.72	\$13.98	\$12.51	\$12.87	\$24.06	\$31.06	\$18.66
2027	\$-	\$13.49	\$19.41	\$17.37	\$18.13	\$33.65	\$43.44	\$26.09
2028	\$-	\$17.23	\$24.79	\$22.18	\$23.92	\$43.19	\$55.75	\$33.49
2029	\$-	\$21.51	\$30.96	\$27.69	\$30.38	\$54.46	\$70.30	\$42.23
2030	\$-	\$25.46	\$37.12	\$33.26	\$37.38	\$64.33	\$86.74	\$53.31
2031	\$-	\$29.71	\$43.78	\$39.27	\$44.95	\$74.99	\$106.56	\$68.15
2032	\$-	\$34.44	\$50.99	\$45.78	\$53.12	\$87.01	\$128.72	\$84.67
2033	\$-	\$39.69	\$59.30	\$53.48	\$61.92	\$100.55	\$152.07	\$100.64
2034	\$-	\$45.26	\$71.18	\$64.31	\$71.40	\$114.47	\$180.13	\$118.03
2035	\$-	\$51.77	\$86.52	\$78.29	\$81.60	\$130.57	\$213.40	\$138.63
2036	\$-	\$58.52	\$103.65	\$93.45	\$92.55	\$147.55	\$251.82	\$167.92
2037	\$-	\$65.77	\$122.66	\$110.42	\$104.29	\$165.72	\$297.75	\$210.52
2038	\$-	\$74.09	\$139.43	\$125.10	\$116.87	\$188.25	\$343.67	\$256.88
2039	\$-	\$83.02	\$158.24	\$142.01	\$130.34	\$211.85	\$390.42	\$297.62
2040	\$-	\$93.21	\$178.54	\$157.84	\$144.75	\$239.07	\$434.84	\$332.16
2041	\$-	\$103.33	\$200.83	\$176.93	\$160.14	\$266.18	\$483.47	\$371.90
2042	\$-	\$113.32	\$223.06	\$195.62	\$176.58	\$292.54	\$532.01	\$407.42
2043	\$-	\$123.52	\$243.21	\$214.54	\$194.12	\$318.57	\$577.90	\$441.91
2044	\$-	\$134.09	\$267.16	\$239.77	\$212.53	\$345.04	\$630.17	\$481.17
2045	\$-	\$145.47	\$296.59	\$267.81	\$232.15	\$373.54	\$695.26	\$528.71
2046	\$-	\$158.57	\$321.85	\$290.77	\$253.03	\$406.91	\$752.62	\$574.29
2047	\$-	\$171.78	\$351.20	\$323.50	\$275.24	\$440.50	\$816.47	\$634.06
2048	\$-	\$185.78	\$380.34	\$351.74	\$298.87	\$476.03	\$879.92	\$683.75
2049	\$-	\$200.61	\$421.12	\$397.53	\$323.98	\$513.61	\$970.22	\$754.54
2050	\$-	\$227.18	\$479.57	\$458.01	\$370.27	\$580.15	\$1,097.31	\$845.89
Cumulative Total	\$-	\$2,235.37	\$4,338.20	\$3,950.59	\$3,533.21	\$5,714.06	\$10,249.49	\$7,689.14

Impacts on Business Outputs in Million Dollars by Year

<i>Benefit Scenarios:</i>	Bus-Only Scenario				All-Transit Scenario			
<i>Investment Levels:</i>	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
2023	\$-	\$5.45	\$7.43	\$6.46	\$5.13	\$11.97	\$14.91	\$8.60
2024	\$-	\$6.45	\$8.92	\$7.77	\$6.12	\$14.20	\$17.96	\$10.45
2025	\$-	\$13.40	\$18.53	\$16.14	\$13.16	\$30.33	\$38.35	\$22.31
2026	\$-	\$21.83	\$30.18	\$26.28	\$20.96	\$50.38	\$63.69	\$37.05
2027	\$-	\$30.31	\$41.90	\$36.50	\$29.52	\$70.45	\$89.07	\$51.82
2028	\$-	\$38.71	\$53.52	\$46.61	\$38.97	\$90.42	\$114.31	\$66.50
2029	\$-	\$48.33	\$66.82	\$58.19	\$49.49	\$114.03	\$144.16	\$83.86
2030	\$-	\$57.19	\$80.13	\$69.89	\$60.88	\$134.70	\$177.86	\$105.86
2031	\$-	\$66.75	\$94.49	\$82.53	\$73.21	\$157.01	\$218.52	\$135.33
2032	\$-	\$77.36	\$110.05	\$96.21	\$86.51	\$182.18	\$263.94	\$168.13
2033	\$-	\$89.17	\$128.00	\$112.38	\$100.86	\$210.52	\$311.82	\$199.84
2034	\$-	\$101.68	\$153.64	\$135.14	\$116.30	\$239.66	\$369.37	\$234.37
2035	\$-	\$116.31	\$186.75	\$164.53	\$132.91	\$273.38	\$437.60	\$275.28
2036	\$-	\$131.46	\$223.74	\$196.37	\$150.74	\$308.94	\$516.37	\$333.45
2037	\$-	\$147.74	\$264.77	\$232.04	\$169.86	\$346.98	\$610.55	\$418.04
2038	\$-	\$166.43	\$300.96	\$262.89	\$190.36	\$394.15	\$704.71	\$510.10
2039	\$-	\$186.50	\$341.56	\$298.43	\$212.30	\$443.57	\$800.59	\$590.99
2040	\$-	\$209.39	\$385.39	\$331.69	\$235.76	\$500.56	\$891.66	\$659.58
2041	\$-	\$232.13	\$433.49	\$371.81	\$260.84	\$557.31	\$991.39	\$738.50
2042	\$-	\$254.57	\$481.48	\$411.08	\$287.61	\$612.51	\$1,090.91	\$809.02
2043	\$-	\$277.47	\$524.97	\$450.85	\$316.18	\$667.02	\$1,185.01	\$877.52
2044	\$-	\$301.23	\$576.67	\$503.85	\$346.17	\$722.42	\$1,292.19	\$955.48
2045	\$-	\$326.79	\$640.18	\$562.78	\$378.11	\$782.10	\$1,425.67	\$1,049.88
2046	\$-	\$356.21	\$694.71	\$611.04	\$412.12	\$851.97	\$1,543.28	\$1,140.39
2047	\$-	\$385.90	\$758.06	\$679.81	\$448.31	\$922.30	\$1,674.22	\$1,259.08
2048	\$-	\$417.35	\$820.96	\$739.16	\$486.79	\$996.70	\$1,804.32	\$1,357.75
2049	\$-	\$450.65	\$908.98	\$835.38	\$527.69	\$1,075.37	\$1,989.48	\$1,498.33
2050	\$-	\$510.34	\$1,035.16	\$962.47	\$603.08	\$1,214.71	\$2,250.09	\$1,679.72
<i>Cumulative Total</i>	\$-	\$5,021.66	\$9,364.00	\$8,301.81	\$5,754.80	\$11,963.90	\$21,017.11	\$15,268.63

Appendix III: Workforce Participation Impacts

Impacts on Employment (Number of Jobs) by Year

Benefit Scenarios:	Bus-Only Scenario				All-Transit Scenario			
	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
Investment Levels:								
2023	18,296	20,259	18,112	15,662	29,103	32,235	31,512	31,512
2024	18,577	20,664	18,874	16,316	29,909	33,049	32,807	32,807
2025	18,862	21,077	19,669	16,998	30,741	33,888	34,156	34,156
2026	19,151	21,499	20,498	17,708	31,600	34,754	35,561	35,561
2027	19,445	21,928	21,361	18,448	32,486	35,647	37,025	37,024
2028	19,744	22,367	22,261	19,219	33,400	36,568	38,550	38,548
2029	20,047	22,814	23,198	20,022	34,343	37,518	40,138	40,136
2030	20,354	23,270	24,176	20,859	35,317	38,498	41,793	41,790
2031	20,667	23,735	25,194	21,731	36,321	39,509	43,518	43,513
2032	20,984	24,210	26,256	22,639	37,359	40,552	45,314	45,308
2033	21,306	24,694	27,362	23,586	38,429	41,629	47,186	47,178
2034	21,633	25,188	28,515	24,572	39,535	42,740	49,136	49,126
2035	21,966	25,692	29,717	25,600	40,676	43,886	51,168	51,155
2036	22,303	26,206	30,970	26,670	41,854	45,069	53,285	53,269
2037	22,645	26,730	32,275	27,786	43,071	46,290	55,491	55,471
2038	22,993	27,265	33,636	28,948	44,327	47,550	57,790	57,766
2039	23,346	27,810	35,054	30,159	45,625	48,851	60,185	60,156
2040	23,705	28,366	36,532	31,421	46,965	50,195	62,680	62,646
2041	24,069	28,934	38,072	32,736	48,349	51,581	65,281	65,241
2042	24,439	29,513	39,678	34,106	49,778	53,013	67,991	67,945
2043	24,814	30,104	41,352	35,533	51,255	54,492	70,816	70,761
2044	25,196	30,706	43,096	37,020	52,781	56,018	73,759	73,696
2045	25,583	31,321	44,914	38,570	54,357	57,595	76,826	76,754
2046	25,976	31,948	46,809	40,185	55,986	59,223	80,022	79,940
2047	26,375	32,587	48,784	41,867	57,669	60,905	83,353	83,260
2048	26,780	33,240	50,842	43,620	59,408	62,642	86,825	86,720
2049	27,192	33,905	52,988	45,447	61,205	64,437	90,443	90,324
2050	27,610	34,584	55,224	47,350	63,062	66,290	94,214	94,080
Maximum	27,610	34,584	55,224	47,350	63,062	66,290	94,214	94,080

Impacts on Household Income by in Million Dollars Year

Benefit Scenarios:	Bus-Only Scenario				All-Transit Scenario			
Investment Levels:	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
2023	\$1,145.36	\$1,256.92	\$1,073.30	\$935.35	\$1,846.18	\$1,985.67	\$1,975.35	\$1,975.34
2024	\$1,162.93	\$1,282.04	\$1,118.49	\$974.42	\$1,897.35	\$2,035.83	\$2,056.51	\$2,056.51
2025	\$1,180.78	\$1,307.67	\$1,165.59	\$1,015.13	\$1,950.13	\$2,087.54	\$2,141.05	\$2,141.05
2026	\$1,198.90	\$1,333.81	\$1,214.68	\$1,057.55	\$2,004.59	\$2,140.88	\$2,229.13	\$2,229.11
2027	\$1,217.30	\$1,360.47	\$1,265.84	\$1,101.74	\$2,060.78	\$2,195.88	\$2,320.88	\$2,320.84
2028	\$1,235.98	\$1,387.66	\$1,319.15	\$1,147.78	\$2,118.77	\$2,252.62	\$2,416.46	\$2,416.39
2029	\$1,254.95	\$1,415.41	\$1,374.72	\$1,195.75	\$2,178.61	\$2,311.14	\$2,516.04	\$2,515.92
2030	\$1,274.22	\$1,443.71	\$1,432.64	\$1,245.74	\$2,240.37	\$2,371.51	\$2,619.79	\$2,619.60
2031	\$1,293.78	\$1,472.57	\$1,492.99	\$1,297.81	\$2,304.11	\$2,433.79	\$2,727.88	\$2,727.60
2032	\$1,313.64	\$1,502.02	\$1,555.90	\$1,352.07	\$2,369.91	\$2,498.05	\$2,840.49	\$2,840.11
2033	\$1,333.81	\$1,532.06	\$1,621.47	\$1,408.60	\$2,437.83	\$2,564.36	\$2,957.81	\$2,957.32
2034	\$1,354.29	\$1,562.70	\$1,689.80	\$1,467.50	\$2,507.94	\$2,632.78	\$3,080.06	\$3,079.42
2035	\$1,375.09	\$1,593.95	\$1,761.02	\$1,528.87	\$2,580.34	\$2,703.39	\$3,207.43	\$3,206.61
2036	\$1,396.20	\$1,625.83	\$1,835.25	\$1,592.81	\$2,655.08	\$2,776.27	\$3,340.14	\$3,339.13
2037	\$1,417.64	\$1,658.36	\$1,912.61	\$1,659.44	\$2,732.27	\$2,851.48	\$3,478.42	\$3,477.18
2038	\$1,439.42	\$1,691.53	\$1,993.24	\$1,728.85	\$2,811.97	\$2,929.12	\$3,622.51	\$3,621.01
2039	\$1,461.52	\$1,725.37	\$2,077.28	\$1,801.18	\$2,894.28	\$3,009.27	\$3,772.65	\$3,770.85
2040	\$1,483.97	\$1,759.89	\$2,164.87	\$1,876.54	\$2,979.29	\$3,092.01	\$3,929.09	\$3,926.96
2041	\$1,506.77	\$1,795.11	\$2,256.16	\$1,955.06	\$3,067.09	\$3,177.44	\$4,092.12	\$4,089.62
2042	\$1,529.92	\$1,831.03	\$2,351.31	\$2,036.87	\$3,157.79	\$3,265.64	\$4,262.01	\$4,259.08
2043	\$1,553.42	\$1,867.67	\$2,450.49	\$2,122.12	\$3,251.48	\$3,356.72	\$4,439.04	\$4,435.65
2044	\$1,577.29	\$1,905.05	\$2,553.85	\$2,210.94	\$3,348.26	\$3,450.76	\$4,623.53	\$4,619.62
2045	\$1,601.52	\$1,943.18	\$2,661.58	\$2,303.49	\$3,448.26	\$3,547.89	\$4,815.78	\$4,811.30
2046	\$1,626.13	\$1,982.08	\$2,773.87	\$2,399.92	\$3,551.57	\$3,648.19	\$5,016.15	\$5,011.02
2047	\$1,651.12	\$2,021.75	\$2,890.91	\$2,500.40	\$3,658.33	\$3,751.79	\$5,224.95	\$5,219.13
2048	\$1,676.50	\$2,062.23	\$3,012.90	\$2,605.10	\$3,768.64	\$3,858.80	\$5,442.57	\$5,435.97
2049	\$1,702.27	\$2,103.51	\$3,140.04	\$2,714.19	\$3,882.63	\$3,969.33	\$5,669.37	\$5,661.93
2050	\$1,728.43	\$2,145.63	\$3,272.57	\$2,827.86	\$4,000.44	\$4,083.52	\$5,905.74	\$5,897.37
Cumulative Total	\$39,693.16	\$46,569.22	\$55,432.53	\$48,063.10	\$77,704.27	\$80,981.68	\$100,722.93	\$100,661.63

Impacts on Value Added (GDP) by in Million Dollars Year

<i>Benefit Scenarios:</i>	Bus-Only Scenario				All-Transit Scenario			
<i>Investment Levels:</i>	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
2023	\$1,917.69	\$2,059.10	\$1,748.60	\$1,572.44	\$3,080.76	\$3,390.54	\$3,348.34	\$3,348.33
2024	\$1,947.11	\$2,100.26	\$1,822.22	\$1,638.13	\$3,166.14	\$3,476.17	\$3,485.92	\$3,485.92
2025	\$1,976.99	\$2,142.23	\$1,898.95	\$1,706.57	\$3,254.23	\$3,564.48	\$3,629.23	\$3,629.23
2026	\$2,007.33	\$2,185.05	\$1,978.92	\$1,777.88	\$3,345.10	\$3,655.55	\$3,778.52	\$3,778.50
2027	\$2,038.14	\$2,228.73	\$2,062.27	\$1,852.17	\$3,438.87	\$3,749.47	\$3,934.05	\$3,933.98
2028	\$2,069.42	\$2,273.28	\$2,149.13	\$1,929.57	\$3,535.64	\$3,846.34	\$4,096.07	\$4,095.95
2029	\$2,101.18	\$2,318.73	\$2,239.66	\$2,010.22	\$3,635.49	\$3,946.27	\$4,264.87	\$4,264.66
2030	\$2,133.44	\$2,365.09	\$2,334.01	\$2,094.25	\$3,738.55	\$4,049.35	\$4,440.72	\$4,440.40
2031	\$2,166.19	\$2,412.38	\$2,432.35	\$2,181.79	\$3,844.92	\$4,155.70	\$4,623.93	\$4,623.47
2032	\$2,199.44	\$2,460.62	\$2,534.83	\$2,273.01	\$3,954.71	\$4,265.42	\$4,814.82	\$4,814.18
2033	\$2,233.21	\$2,509.83	\$2,641.65	\$2,368.04	\$4,068.05	\$4,378.64	\$5,013.70	\$5,012.85
2034	\$2,267.50	\$2,560.02	\$2,752.97	\$2,467.06	\$4,185.06	\$4,495.47	\$5,220.91	\$5,219.82
2035	\$2,302.32	\$2,611.23	\$2,869.00	\$2,570.24	\$4,305.86	\$4,616.04	\$5,436.81	\$5,435.43
2036	\$2,337.67	\$2,663.46	\$2,989.93	\$2,677.73	\$4,430.59	\$4,740.47	\$5,661.76	\$5,660.05
2037	\$2,373.57	\$2,716.73	\$3,115.97	\$2,789.73	\$4,559.39	\$4,868.91	\$5,896.16	\$5,894.05
2038	\$2,410.03	\$2,771.08	\$3,247.34	\$2,906.43	\$4,692.39	\$5,001.48	\$6,140.40	\$6,137.85
2039	\$2,447.04	\$2,826.52	\$3,384.25	\$3,028.02	\$4,829.74	\$5,138.33	\$6,394.89	\$6,391.84
2040	\$2,484.63	\$2,883.07	\$3,526.95	\$3,154.71	\$4,971.60	\$5,279.61	\$6,660.08	\$6,656.47
2041	\$2,522.80	\$2,940.76	\$3,675.68	\$3,286.71	\$5,118.12	\$5,425.48	\$6,936.42	\$6,932.18
2042	\$2,561.55	\$2,999.61	\$3,830.70	\$3,424.25	\$5,269.47	\$5,576.08	\$7,224.39	\$7,219.43
2043	\$2,600.91	\$3,059.64	\$3,992.26	\$3,567.56	\$5,425.81	\$5,731.59	\$7,524.47	\$7,518.72
2044	\$2,640.87	\$3,120.87	\$4,160.66	\$3,716.88	\$5,587.32	\$5,892.18	\$7,837.19	\$7,830.56
2045	\$2,681.45	\$3,183.33	\$4,336.18	\$3,872.47	\$5,754.18	\$6,058.01	\$8,163.08	\$8,155.48
2046	\$2,722.65	\$3,247.05	\$4,519.12	\$4,034.59	\$5,926.59	\$6,229.29	\$8,502.71	\$8,494.02
2047	\$2,764.49	\$3,312.05	\$4,709.79	\$4,203.50	\$6,104.73	\$6,406.18	\$8,856.65	\$8,846.78
2048	\$2,806.98	\$3,378.35	\$4,908.53	\$4,379.51	\$6,288.81	\$6,588.90	\$9,225.52	\$9,214.35
2049	\$2,850.12	\$3,445.99	\$5,115.67	\$4,562.91	\$6,479.03	\$6,777.64	\$9,609.96	\$9,597.35
2050	\$2,893.93	\$3,514.99	\$5,331.58	\$4,754.00	\$6,675.62	\$6,972.61	\$10,010.63	\$9,996.45
<i>Cumulative Total</i>	\$66,458.65	\$76,290.08	\$90,309.17	\$80,800.40	\$129,666.79	\$138,276.19	\$170,732.20	\$170,628.30

Impacts on Business Outputs by in Million Dollars Year

<i>Benefit Scenarios:</i>	Bus-Only Scenario				All-Transit Scenario			
<i>Investment Levels:</i>	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
2023	\$3,736.00	\$4,017.61	\$3,417.73	\$3,097.51	\$6,030.84	\$6,593.48	\$6,481.33	\$6,481.30
2024	\$3,793.33	\$4,097.91	\$3,561.64	\$3,226.91	\$6,197.97	\$6,760.02	\$6,747.63	\$6,747.63
2025	\$3,851.53	\$4,179.81	\$3,711.61	\$3,361.73	\$6,370.40	\$6,931.75	\$7,025.03	\$7,025.03
2026	\$3,910.64	\$4,263.36	\$3,867.92	\$3,502.19	\$6,548.30	\$7,108.85	\$7,314.01	\$7,313.97
2027	\$3,970.66	\$4,348.58	\$4,030.82	\$3,648.54	\$6,731.86	\$7,291.49	\$7,615.06	\$7,614.94
2028	\$4,031.60	\$4,435.51	\$4,200.60	\$3,801.02	\$6,921.28	\$7,479.88	\$7,928.69	\$7,928.45
2029	\$4,093.48	\$4,524.19	\$4,377.55	\$3,959.88	\$7,116.76	\$7,674.20	\$8,255.43	\$8,255.02
2030	\$4,156.32	\$4,614.64	\$4,561.96	\$4,125.40	\$7,318.50	\$7,874.66	\$8,595.83	\$8,595.21
2031	\$4,220.12	\$4,706.91	\$4,754.16	\$4,297.85	\$7,526.72	\$8,081.47	\$8,950.47	\$8,949.58
2032	\$4,284.91	\$4,801.04	\$4,954.48	\$4,477.54	\$7,741.66	\$8,294.85	\$9,319.96	\$9,318.73
2033	\$4,350.70	\$4,897.05	\$5,163.26	\$4,664.75	\$7,963.53	\$8,515.02	\$9,704.92	\$9,703.29
2034	\$4,417.50	\$4,994.98	\$5,380.85	\$4,859.80	\$8,192.58	\$8,742.22	\$10,106.02	\$10,103.91
2035	\$4,485.33	\$5,094.89	\$5,607.64	\$5,063.04	\$8,429.06	\$8,976.68	\$10,523.93	\$10,521.26
2036	\$4,554.21	\$5,196.79	\$5,844.00	\$5,274.79	\$8,673.23	\$9,218.67	\$10,959.38	\$10,956.05
2037	\$4,624.15	\$5,300.75	\$6,090.35	\$5,495.42	\$8,925.36	\$9,468.43	\$11,413.09	\$11,409.02
2038	\$4,695.17	\$5,406.79	\$6,347.11	\$5,725.30	\$9,185.72	\$9,726.24	\$11,885.86	\$11,880.93
2039	\$4,767.28	\$5,514.96	\$6,614.72	\$5,964.82	\$9,454.60	\$9,992.37	\$12,378.48	\$12,372.58
2040	\$4,840.51	\$5,625.30	\$6,893.63	\$6,214.38	\$9,732.29	\$10,267.12	\$12,891.80	\$12,884.81
2041	\$4,914.87	\$5,737.86	\$7,184.33	\$6,474.41	\$10,019.12	\$10,550.78	\$13,426.71	\$13,418.49
2042	\$4,990.37	\$5,852.68	\$7,487.32	\$6,745.34	\$10,315.39	\$10,843.65	\$13,984.12	\$13,974.53
2043	\$5,067.04	\$5,969.80	\$7,803.12	\$7,027.65	\$10,621.44	\$11,146.07	\$14,564.99	\$14,553.86
2044	\$5,144.89	\$6,089.28	\$8,132.26	\$7,321.79	\$10,937.61	\$11,458.35	\$15,170.31	\$15,157.48
2045	\$5,223.94	\$6,211.15	\$8,475.32	\$7,628.27	\$11,264.26	\$11,780.85	\$15,801.13	\$15,786.41
2046	\$5,304.22	\$6,335.48	\$8,832.89	\$7,947.62	\$11,601.75	\$12,113.92	\$16,458.54	\$16,441.73
2047	\$5,385.73	\$6,462.30	\$9,205.57	\$8,280.37	\$11,950.48	\$12,457.93	\$17,143.66	\$17,124.56
2048	\$5,468.50	\$6,591.67	\$9,594.02	\$8,627.08	\$12,310.82	\$12,813.25	\$17,857.68	\$17,836.05
2049	\$5,552.55	\$6,723.63	\$9,998.89	\$8,988.34	\$12,683.21	\$13,180.29	\$18,601.84	\$18,577.42
2050	\$5,637.89	\$6,858.25	\$10,420.88	\$9,364.77	\$13,068.05	\$13,559.44	\$19,377.41	\$19,349.95
<i>Cumulative Total</i>	\$129,473.4	\$148,853.1	\$176,514.6	\$159,166.4	\$253,832.7	\$268,901.9	\$330,483.3	\$330,282.2
	2	7	4	8	9	4	1	0

Appendix IV: Transit Spending Impacts

Impacts on Employment (Number of Jobs) by Year

Benefit Scenarios:	Bus-Only Scenario				All-Transit Scenario			
Investment Levels:	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
2023	7,474	10,826	10,826	10,826	9,664	13,506	13,506	13,506
2024	9,753	10,871	10,871	10,871	13,190	14,424	14,424	14,424
2025	10,892	12,923	12,923	12,923	15,106	17,223	17,223	17,223
2026	10,886	11,949	11,949	11,949	15,090	16,123	16,123	16,123
2027	11,506	10,741	10,741	10,741	15,982	14,964	14,964	14,964
2028	12,895	11,813	11,813	11,813	18,648	17,179	17,179	17,179
2029	10,037	9,339	11,025	11,086	14,124	13,547	18,669	21,446
2030	10,392	9,654	11,395	11,458	14,629	14,007	22,042	28,538
2031	11,369	10,506	12,304	12,369	16,172	15,378	23,715	30,470
2032	12,517	11,505	14,538	14,860	17,840	16,859	23,768	27,460
2033	12,582	11,571	19,963	20,076	17,280	16,385	28,153	28,717
2034	15,225	13,861	26,401	26,633	19,931	18,730	32,744	33,443
2035	14,681	13,442	28,547	28,660	20,026	18,873	36,855	48,469
2036	15,211	13,947	31,555	32,086	20,598	19,431	43,307	71,088
2037	17,849	16,235	24,940	26,510	26,341	24,494	40,815	74,157
2038	18,747	16,842	27,181	28,069	26,550	24,514	39,375	59,891
2039	21,579	19,374	24,190	24,616	30,385	27,979	34,610	45,609
2040	19,505	17,603	26,400	30,320	28,284	26,162	36,930	51,921
2041	17,303	15,707	24,721	25,175	25,385	23,630	34,677	41,876
2042	16,337	14,906	21,152	22,958	23,205	21,758	30,025	37,756
2043	16,603	15,007	26,194	32,100	22,489	20,929	34,324	43,114
2044	17,613	15,879	35,627	38,116	23,779	22,071	44,307	53,507
2045	21,343	19,109	25,189	25,770	28,725	26,435	34,719	47,510
2046	19,855	17,831	28,805	43,186	27,179	25,091	38,462	65,870
2047	20,388	18,303	26,041	30,088	27,899	25,746	35,866	47,646
2048	20,938	18,790	46,020	60,420	28,643	26,422	56,602	74,804
2049	21,506	19,294	33,407	33,978	29,411	27,119	43,921	48,054
2050	21,057	18,919	27,684	34,835	28,412	26,266	37,659	48,656
Maximum	21,579	19,374	46,020	60,420	30,385	27,979	56,602	74,804

Impacts on Household Income by in Million Dollars Year

<i>Benefit Scenarios:</i>	Bus-Only Scenario				All-Transit Scenario			
<i>Investment Levels:</i>	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
2023	\$157.99	\$285.00	\$285.00	\$285.00	\$197.16	\$333.92	\$333.92	\$333.92
2024	\$206.16	\$286.19	\$286.19	\$286.19	\$269.11	\$356.62	\$356.62	\$356.62
2025	\$230.24	\$340.20	\$340.20	\$340.20	\$308.19	\$425.82	\$425.82	\$425.82
2026	\$230.11	\$314.56	\$314.56	\$314.56	\$307.86	\$398.63	\$398.63	\$398.63
2027	\$243.22	\$282.77	\$282.77	\$282.77	\$326.06	\$369.97	\$369.97	\$369.97
2028	\$272.58	\$310.98	\$310.98	\$310.98	\$380.45	\$424.74	\$424.74	\$424.74
2029	\$212.18	\$245.85	\$290.24	\$291.84	\$288.16	\$334.93	\$461.58	\$530.23
2030	\$219.67	\$254.14	\$299.97	\$301.62	\$298.47	\$346.30	\$544.96	\$705.58
2031	\$240.33	\$276.58	\$323.90	\$325.61	\$329.96	\$380.21	\$586.33	\$753.34
2032	\$264.58	\$302.88	\$382.70	\$391.19	\$363.99	\$416.83	\$587.63	\$678.92
2033	\$265.96	\$304.60	\$525.52	\$528.50	\$352.56	\$405.09	\$696.05	\$709.99
2034	\$321.84	\$364.90	\$695.00	\$701.10	\$406.65	\$463.07	\$809.55	\$826.85
2035	\$310.33	\$353.86	\$751.49	\$754.48	\$408.58	\$466.61	\$911.20	\$1,198.35
2036	\$321.55	\$367.15	\$830.68	\$844.66	\$420.25	\$480.41	\$1,070.71	\$1,757.57
2037	\$377.30	\$427.38	\$656.55	\$697.89	\$537.43	\$605.58	\$1,009.12	\$1,833.45
2038	\$396.28	\$443.36	\$715.55	\$738.90	\$541.69	\$606.07	\$973.50	\$1,480.74
2039	\$456.16	\$510.02	\$636.81	\$648.01	\$619.93	\$691.76	\$855.69	\$1,127.64
2040	\$412.31	\$463.39	\$694.97	\$798.18	\$577.05	\$646.82	\$913.05	\$1,283.70
2041	\$365.77	\$413.48	\$650.78	\$662.72	\$517.92	\$584.22	\$857.35	\$1,035.35
2042	\$345.35	\$392.41	\$556.82	\$604.37	\$473.44	\$537.95	\$742.33	\$933.48
2043	\$350.97	\$395.06	\$689.57	\$845.03	\$458.83	\$517.44	\$848.62	\$1,065.94
2044	\$372.32	\$418.01	\$937.88	\$1,003.40	\$485.15	\$545.68	\$1,095.45	\$1,322.90
2045	\$451.16	\$503.05	\$663.10	\$678.39	\$586.06	\$653.58	\$858.40	\$1,174.63
2046	\$419.71	\$469.39	\$758.29	\$1,136.87	\$554.51	\$620.35	\$950.92	\$1,628.58
2047	\$430.98	\$481.82	\$685.52	\$792.05	\$569.21	\$636.54	\$886.74	\$1,177.99
2048	\$442.60	\$494.66	\$1,211.48	\$1,590.55	\$584.38	\$653.25	\$1,399.41	\$1,849.45
2049	\$454.61	\$507.90	\$879.44	\$894.46	\$600.05	\$670.49	\$1,085.91	\$1,188.09
2050	\$445.11	\$498.05	\$728.79	\$917.04	\$579.67	\$649.40	\$931.09	\$1,202.96
<i>Cumulative Total</i>	\$9,217.36	\$10,707.63	\$16,384.75	\$17,966.58	\$12,342.76	\$14,222.28	\$21,385.30	\$27,775.44

Impacts on Value Added (GDP) by in Million Dollars Year

<i>Benefit Scenarios:</i>	Bus-Only Scenario				All-Transit Scenario			
<i>Investment Levels:</i>	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
2023	\$283.13	\$478.26	\$478.26	\$478.26	\$358.97	\$572.87	\$572.87	\$572.87
2024	\$369.46	\$480.24	\$480.24	\$480.24	\$489.97	\$611.83	\$611.83	\$611.83
2025	\$412.61	\$570.89	\$570.89	\$570.89	\$561.12	\$730.55	\$730.55	\$730.55
2026	\$412.39	\$527.85	\$527.85	\$527.85	\$560.52	\$683.91	\$683.91	\$683.91
2027	\$435.87	\$474.50	\$474.50	\$474.50	\$593.65	\$634.73	\$634.73	\$634.73
2028	\$488.50	\$521.86	\$521.86	\$521.86	\$692.69	\$728.69	\$728.69	\$728.69
2029	\$380.24	\$412.56	\$487.05	\$489.73	\$524.64	\$574.61	\$791.91	\$909.69
2030	\$393.67	\$426.46	\$503.38	\$506.15	\$543.43	\$594.13	\$934.95	\$1,210.51
2031	\$430.70	\$464.12	\$543.53	\$546.39	\$600.75	\$652.29	\$1,005.93	\$1,292.46
2032	\$474.16	\$508.25	\$642.20	\$656.46	\$662.71	\$715.13	\$1,008.15	\$1,164.78
2033	\$476.63	\$511.15	\$881.86	\$886.87	\$641.90	\$694.99	\$1,194.17	\$1,218.08
2034	\$576.77	\$612.32	\$1,166.26	\$1,176.51	\$740.38	\$794.46	\$1,388.89	\$1,418.57
2035	\$556.14	\$593.80	\$1,261.06	\$1,266.08	\$743.90	\$800.52	\$1,563.28	\$2,055.93
2036	\$576.24	\$616.10	\$1,393.94	\$1,417.40	\$765.15	\$824.20	\$1,836.94	\$3,015.33
2037	\$676.17	\$717.18	\$1,101.74	\$1,171.11	\$978.48	\$1,038.95	\$1,731.27	\$3,145.52
2038	\$710.18	\$744.00	\$1,200.74	\$1,239.94	\$986.25	\$1,039.80	\$1,670.17	\$2,540.39
2039	\$817.48	\$855.85	\$1,068.62	\$1,087.42	\$1,128.70	\$1,186.80	\$1,468.06	\$1,934.62
2040	\$738.90	\$777.60	\$1,166.22	\$1,339.41	\$1,050.64	\$1,109.71	\$1,566.45	\$2,202.36
2041	\$655.49	\$693.86	\$1,092.06	\$1,112.09	\$942.96	\$1,002.30	\$1,470.89	\$1,776.27
2042	\$618.90	\$658.49	\$934.39	\$1,014.19	\$861.98	\$922.92	\$1,273.57	\$1,601.51
2043	\$628.98	\$662.94	\$1,157.15	\$1,418.03	\$835.38	\$887.74	\$1,455.92	\$1,828.75
2044	\$667.24	\$701.46	\$1,573.84	\$1,683.79	\$883.30	\$936.18	\$1,879.39	\$2,269.60
2045	\$808.52	\$844.16	\$1,112.74	\$1,138.39	\$1,067.04	\$1,121.30	\$1,472.69	\$2,015.24
2046	\$752.17	\$787.67	\$1,272.47	\$1,907.75	\$1,009.59	\$1,064.30	\$1,631.43	\$2,794.03
2047	\$772.35	\$808.54	\$1,150.36	\$1,329.13	\$1,036.35	\$1,092.07	\$1,521.32	\$2,021.00
2048	\$793.19	\$830.08	\$2,032.96	\$2,669.06	\$1,063.97	\$1,120.73	\$2,400.87	\$3,172.98
2049	\$814.70	\$852.30	\$1,475.78	\$1,500.98	\$1,092.49	\$1,150.31	\$1,863.02	\$2,038.31
2050	\$797.67	\$835.76	\$1,222.97	\$1,538.86	\$1,055.40	\$1,114.13	\$1,597.40	\$2,063.83
<i>Cumulative Total</i>	\$16,518.43	\$17,968.25	\$27,494.91	\$30,149.35	\$22,472.30	\$24,400.15	\$36,689.24	\$47,652.34

Impacts on Business Outputs by in Million Dollars Year

<i>Benefit Scenarios:</i>	Bus-Only Scenario				All-Transit Scenario			
<i>Investment Levels:</i>	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs	Maintain-Existing-System	Business-As-Usual	RTP-Priority Needs	RTP-Total Needs
2023	\$551.22	\$932.64	\$932.64	\$932.64	\$705.08	\$1,128.86	\$1,128.86	\$1,128.86
2024	\$719.29	\$936.51	\$936.51	\$936.51	\$962.38	\$1,205.63	\$1,205.63	\$1,205.63
2025	\$803.30	\$1,113.27	\$1,113.27	\$1,113.27	\$1,102.13	\$1,439.58	\$1,439.58	\$1,439.58
2026	\$802.87	\$1,029.35	\$1,029.35	\$1,029.35	\$1,100.96	\$1,347.66	\$1,347.66	\$1,347.66
2027	\$848.59	\$925.32	\$925.32	\$925.32	\$1,166.03	\$1,250.75	\$1,250.75	\$1,250.75
2028	\$951.04	\$1,017.66	\$1,017.66	\$1,017.66	\$1,360.55	\$1,435.90	\$1,435.90	\$1,435.90
2029	\$740.29	\$804.51	\$949.79	\$955.02	\$1,030.49	\$1,132.28	\$1,560.47	\$1,792.56
2030	\$766.43	\$831.63	\$981.62	\$987.03	\$1,067.38	\$1,170.74	\$1,842.34	\$2,385.35
2031	\$838.52	\$905.06	\$1,059.93	\$1,065.51	\$1,179.96	\$1,285.36	\$1,982.20	\$2,546.82
2032	\$923.13	\$991.12	\$1,252.35	\$1,280.14	\$1,301.67	\$1,409.17	\$1,986.59	\$2,295.23
2033	\$927.93	\$996.77	\$1,719.69	\$1,729.47	\$1,260.79	\$1,369.50	\$2,353.14	\$2,400.26
2034	\$1,122.89	\$1,194.08	\$2,274.29	\$2,294.27	\$1,454.22	\$1,565.51	\$2,736.84	\$2,795.32
2035	\$1,082.72	\$1,157.96	\$2,459.17	\$2,468.96	\$1,461.14	\$1,577.45	\$3,080.48	\$4,051.26
2036	\$1,121.87	\$1,201.44	\$2,718.29	\$2,764.03	\$1,502.88	\$1,624.11	\$3,619.74	\$5,941.80
2037	\$1,316.41	\$1,398.56	\$2,148.47	\$2,283.75	\$1,921.90	\$2,047.29	\$3,411.51	\$6,198.33
2038	\$1,382.62	\$1,450.85	\$2,341.54	\$2,417.97	\$1,937.15	\$2,048.95	\$3,291.12	\$5,005.91
2039	\$1,591.52	\$1,668.98	\$2,083.89	\$2,120.54	\$2,216.94	\$2,338.62	\$2,892.84	\$3,812.22
2040	\$1,438.54	\$1,516.38	\$2,274.21	\$2,611.96	\$2,063.62	\$2,186.71	\$3,086.73	\$4,339.80
2041	\$1,276.16	\$1,353.07	\$2,129.59	\$2,168.67	\$1,852.13	\$1,975.06	\$2,898.43	\$3,500.18
2042	\$1,204.92	\$1,284.11	\$1,822.12	\$1,977.74	\$1,693.07	\$1,818.65	\$2,509.60	\$3,155.82
2043	\$1,224.54	\$1,292.78	\$2,256.53	\$2,765.26	\$1,640.83	\$1,749.31	\$2,868.93	\$3,603.61
2044	\$1,299.03	\$1,367.90	\$3,069.11	\$3,283.52	\$1,734.95	\$1,844.76	\$3,703.38	\$4,472.31
2045	\$1,574.08	\$1,646.17	\$2,169.92	\$2,219.95	\$2,095.84	\$2,209.54	\$2,901.97	\$3,971.08
2046	\$1,464.37	\$1,536.02	\$2,481.42	\$3,720.26	\$1,982.99	\$2,097.23	\$3,214.77	\$5,505.72
2047	\$1,503.67	\$1,576.71	\$2,243.28	\$2,591.90	\$2,035.55	\$2,151.96	\$2,997.80	\$3,982.43
2048	\$1,544.24	\$1,618.71	\$3,964.42	\$5,204.87	\$2,089.82	\$2,208.44	\$4,730.98	\$6,252.44
2049	\$1,586.12	\$1,662.06	\$2,877.87	\$2,927.01	\$2,145.84	\$2,266.72	\$3,671.14	\$4,016.55
2050	\$1,552.97	\$1,629.80	\$2,384.87	\$3,000.90	\$2,072.98	\$2,195.42	\$3,147.72	\$4,066.82
<i>Cumulative Total</i>	\$32,159.29	\$35,039.41	\$53,617.11	\$58,793.45	\$44,139.27	\$48,081.15	\$72,297.12	\$93,900.20

Appendix V: Fiscal Impacts

Fiscal Impacts at 'Maintain Existing System' Investment Level in Million Dollars by Year

Benefit Scenarios:	Bus-Only Scenario				All-Transit Scenario			
Levels:	Local	State	Federal	Total	Local	State	Federal	Total
2023	\$57.53	\$64.74	\$54.38	\$176.64	\$94.39	\$111.40	\$119.21	\$325.01
2024	\$66.54	\$74.88	\$62.90	\$204.32	\$107.80	\$127.23	\$136.14	\$371.17
2025	\$71.22	\$80.14	\$67.32	\$218.68	\$116.17	\$137.11	\$146.72	\$400.00
2026	\$71.54	\$80.51	\$67.62	\$219.68	\$118.48	\$139.84	\$149.64	\$407.96
2027	\$74.24	\$83.55	\$70.17	\$227.97	\$123.79	\$146.10	\$156.34	\$426.23
2028	\$79.87	\$89.87	\$75.49	\$245.23	\$134.86	\$159.16	\$170.32	\$464.34
2029	\$69.34	\$78.02	\$65.54	\$212.90	\$123.12	\$145.31	\$155.50	\$423.93
2030	\$71.02	\$79.92	\$67.13	\$218.06	\$127.53	\$150.52	\$161.07	\$439.11
2031	\$75.06	\$84.47	\$70.95	\$230.48	\$135.36	\$159.76	\$170.96	\$466.08
2032	\$79.75	\$89.74	\$75.38	\$244.87	\$143.72	\$169.62	\$181.51	\$494.84
2033	\$80.32	\$90.38	\$75.92	\$246.62	\$145.09	\$171.24	\$183.24	\$499.57
2034	\$90.68	\$102.05	\$85.71	\$278.44	\$156.83	\$185.10	\$198.07	\$540.01
2035	\$88.92	\$100.06	\$84.05	\$273.03	\$160.57	\$189.51	\$202.79	\$552.86
2036	\$91.24	\$102.67	\$86.24	\$280.15	\$165.96	\$195.88	\$209.60	\$571.44
2037	\$101.57	\$114.29	\$96.00	\$311.85	\$187.99	\$221.88	\$237.43	\$647.31
2038	\$105.26	\$118.45	\$99.49	\$323.21	\$192.54	\$227.25	\$243.17	\$662.96
2039	\$116.31	\$130.89	\$109.94	\$357.14	\$208.81	\$246.45	\$263.72	\$718.97
2040	\$108.69	\$122.31	\$102.74	\$333.74	\$206.32	\$243.51	\$260.58	\$710.41
2041	\$100.58	\$113.18	\$95.07	\$308.83	\$201.47	\$237.79	\$254.45	\$693.71
2042	\$97.16	\$109.33	\$91.83	\$298.31	\$199.10	\$234.99	\$251.45	\$685.54
2043	\$98.40	\$110.73	\$93.01	\$302.15	\$201.59	\$237.93	\$254.60	\$694.12
2044	\$102.47	\$115.31	\$96.85	\$314.63	\$210.66	\$248.63	\$266.05	\$725.33
2045	\$116.87	\$131.51	\$110.46	\$358.83	\$231.59	\$273.34	\$292.49	\$797.41
2046	\$111.41	\$125.37	\$105.31	\$342.09	\$232.05	\$273.87	\$293.06	\$798.98
2047	\$113.63	\$127.87	\$107.40	\$348.91	\$239.96	\$283.22	\$303.07	\$826.25
2048	\$115.91	\$130.44	\$109.56	\$355.91	\$248.21	\$292.95	\$313.47	\$854.63
2049	\$118.26	\$133.08	\$111.78	\$363.12	\$256.79	\$303.08	\$324.32	\$884.18
2050	\$116.76	\$131.38	\$110.36	\$358.50	\$261.60	\$308.75	\$330.39	\$900.73
Cumulative Total	\$2,590.58	\$2,915.13	\$2,448.57	\$7,954.27	\$4,932.33	\$5,821.43	\$6,229.34	\$16,983.10

Fiscal Impacts at 'Business As Usual' Investment Level in Million Dollars by Year

Benefit Scenarios: Levels:	Bus-Only Scenario				All-Transit Scenario			
	Local	State	Federal	Total	Local	State	Federal	Total
2023	\$67.75	\$78.50	\$77.56	\$223.81	\$104.68	\$125.82	\$145.76	\$376.26
2024	\$68.64	\$79.54	\$78.58	\$226.76	\$110.17	\$132.42	\$153.41	\$396.00
2025	\$77.36	\$89.64	\$88.56	\$255.57	\$122.14	\$146.81	\$170.07	\$439.02
2026	\$74.39	\$86.20	\$85.16	\$245.75	\$121.16	\$145.62	\$168.70	\$435.48
2027	\$70.52	\$81.72	\$80.74	\$232.98	\$120.04	\$144.28	\$167.14	\$431.46
2028	\$75.52	\$87.51	\$86.46	\$249.49	\$130.37	\$156.70	\$181.53	\$468.61
2029	\$66.80	\$77.40	\$76.47	\$220.66	\$121.18	\$145.64	\$168.72	\$435.54
2030	\$68.89	\$79.82	\$78.87	\$227.58	\$125.76	\$151.15	\$175.10	\$452.00
2031	\$73.11	\$84.72	\$83.70	\$241.53	\$133.55	\$160.51	\$185.95	\$480.01
2032	\$77.96	\$90.33	\$89.25	\$257.53	\$141.89	\$170.54	\$197.57	\$510.00
2033	\$79.23	\$91.81	\$90.71	\$261.75	\$143.83	\$172.87	\$200.27	\$516.97
2034	\$89.20	\$103.35	\$102.11	\$294.66	\$155.40	\$186.78	\$216.38	\$558.55
2035	\$88.73	\$102.81	\$101.57	\$293.11	\$159.79	\$192.06	\$222.49	\$574.34
2036	\$91.88	\$106.46	\$105.19	\$303.53	\$165.74	\$199.21	\$230.78	\$595.72
2037	\$102.03	\$118.22	\$116.80	\$337.05	\$187.08	\$224.86	\$260.49	\$672.43
2038	\$105.75	\$122.53	\$121.06	\$349.34	\$191.83	\$230.56	\$267.10	\$689.50
2039	\$117.02	\$135.60	\$133.97	\$386.58	\$208.39	\$250.47	\$290.16	\$749.03
2040	\$111.70	\$129.43	\$127.87	\$369.00	\$207.50	\$249.40	\$288.93	\$745.84
2041	\$105.90	\$122.71	\$121.23	\$349.84	\$204.30	\$245.56	\$284.47	\$734.34
2042	\$104.36	\$120.93	\$119.48	\$344.77	\$203.39	\$244.46	\$283.20	\$731.06
2043	\$106.37	\$123.25	\$121.77	\$351.38	\$206.09	\$247.70	\$286.96	\$740.75
2044	\$111.42	\$129.10	\$127.55	\$368.08	\$215.60	\$259.13	\$300.20	\$774.93
2045	\$125.73	\$145.69	\$143.94	\$415.36	\$236.27	\$283.97	\$328.98	\$849.21
2046	\$122.69	\$142.17	\$140.46	\$405.32	\$238.17	\$286.26	\$331.63	\$856.07
2047	\$126.50	\$146.58	\$144.81	\$417.89	\$246.98	\$296.85	\$343.89	\$887.73
2048	\$130.46	\$151.16	\$149.35	\$430.97	\$256.15	\$307.88	\$356.67	\$920.70
2049	\$134.58	\$155.94	\$154.07	\$444.59	\$265.71	\$319.36	\$369.97	\$955.05
2050	\$136.39	\$158.04	\$156.14	\$450.57	\$272.41	\$327.41	\$379.30	\$979.12
Cumulative Total	\$2,710.88	\$3,141.16	\$3,103.41	\$8,955.45	\$4,995.58	\$6,004.30	\$6,955.83	\$17,955.71

Fiscal Impacts at 'RTP-Priority Needs' Investment Level in Million Dollars by Year

Benefit Scenarios:	Bus-Only Scenario				All-Transit Scenario			
	Local	State	Federal	Total	Local	State	Federal	Total
2023	\$67.41	\$78.23	\$77.86	\$223.51	\$103.86	\$125.16	\$146.48	\$375.50
2024	\$68.96	\$80.03	\$79.65	\$228.64	\$111.29	\$134.11	\$156.97	\$402.38
2025	\$78.33	\$90.90	\$90.47	\$259.70	\$125.24	\$150.92	\$176.64	\$452.81
2026	\$76.11	\$88.33	\$87.91	\$252.35	\$126.45	\$152.38	\$178.34	\$457.17
2027	\$73.03	\$84.75	\$84.35	\$242.13	\$127.59	\$153.75	\$179.95	\$461.29
2028	\$78.79	\$91.44	\$91.01	\$261.24	\$140.16	\$168.90	\$197.69	\$506.75
2029	\$77.47	\$89.90	\$89.48	\$256.85	\$150.62	\$181.51	\$212.44	\$544.57
2030	\$80.66	\$93.60	\$93.16	\$267.43	\$167.67	\$202.05	\$236.48	\$606.21
2031	\$86.02	\$99.82	\$99.35	\$285.19	\$179.44	\$216.23	\$253.08	\$648.75
2032	\$96.59	\$112.09	\$111.56	\$320.23	\$186.11	\$224.27	\$262.49	\$672.87
2033	\$119.64	\$138.83	\$138.18	\$396.65	\$207.54	\$250.10	\$292.71	\$750.35
2034	\$146.96	\$170.54	\$169.73	\$487.23	\$230.18	\$277.38	\$324.64	\$832.20
2035	\$158.03	\$183.39	\$182.52	\$523.93	\$251.78	\$303.40	\$355.10	\$910.28
2036	\$172.63	\$200.34	\$199.39	\$572.36	\$281.77	\$339.55	\$397.41	\$1,018.74
2037	\$150.24	\$174.35	\$173.52	\$498.10	\$282.57	\$340.51	\$398.54	\$1,021.63
2038	\$161.94	\$187.92	\$187.03	\$536.89	\$287.07	\$345.94	\$404.89	\$1,037.90
2039	\$153.63	\$178.29	\$177.44	\$509.36	\$280.69	\$338.25	\$395.89	\$1,014.82
2040	\$165.62	\$192.20	\$191.29	\$549.10	\$298.05	\$359.16	\$420.37	\$1,077.58
2041	\$162.79	\$188.92	\$188.02	\$539.74	\$300.62	\$362.26	\$423.99	\$1,086.86
2042	\$152.71	\$177.21	\$176.37	\$506.29	\$295.34	\$355.90	\$416.55	\$1,067.80
2043	\$175.80	\$204.01	\$203.04	\$582.84	\$320.06	\$385.68	\$451.41	\$1,157.15
2044	\$216.25	\$250.96	\$249.77	\$716.98	\$364.50	\$439.24	\$514.10	\$1,317.85
2045	\$180.40	\$209.35	\$208.36	\$598.12	\$344.61	\$415.27	\$486.04	\$1,245.93
2046	\$198.60	\$230.47	\$229.38	\$658.44	\$369.00	\$444.66	\$520.44	\$1,334.10
2047	\$192.54	\$223.44	\$222.38	\$638.36	\$372.90	\$449.36	\$525.93	\$1,348.18
2048	\$274.49	\$318.54	\$317.03	\$910.06	\$455.13	\$548.46	\$641.92	\$1,645.51
2049	\$231.49	\$268.63	\$267.36	\$767.48	\$427.77	\$515.48	\$603.33	\$1,546.58
2050	\$216.76	\$251.54	\$250.35	\$718.66	\$424.96	\$512.09	\$599.36	\$1,536.41
Cumulative Total	\$4,013.88	\$4,658.01	\$4,635.96	\$13,307.86	\$7,212.99	\$8,691.97	\$10,173.18	\$26,078.14

Fiscal Impacts at 'RTP-Total Needs' Investment Level in Million Dollars by Year

Benefit Scenarios:	Bus-Only Scenario				All-Transit Scenario			
	Local	State	Federal	Total	Local	State	Federal	Total
2023	\$67.44	\$78.22	\$77.64	\$223.30	\$104.15	\$125.46	\$146.61	\$376.21
2024	\$68.87	\$79.87	\$79.28	\$228.02	\$111.22	\$133.98	\$156.56	\$401.76
2025	\$78.11	\$90.59	\$89.93	\$258.63	\$124.76	\$150.29	\$175.62	\$450.67
2026	\$75.74	\$87.85	\$87.20	\$250.80	\$125.43	\$151.09	\$176.56	\$453.08
2027	\$72.51	\$84.10	\$83.48	\$240.08	\$126.00	\$151.78	\$177.37	\$455.15
2028	\$78.11	\$90.60	\$89.93	\$258.65	\$138.01	\$166.25	\$194.28	\$498.54
2029	\$76.85	\$89.14	\$88.48	\$254.47	\$157.13	\$189.28	\$221.19	\$567.60
2030	\$79.88	\$92.64	\$91.96	\$264.48	\$186.03	\$224.09	\$261.87	\$671.99
2031	\$85.06	\$98.65	\$97.92	\$281.63	\$198.01	\$238.52	\$278.72	\$715.24
2032	\$96.43	\$111.84	\$111.02	\$319.28	\$193.63	\$233.25	\$272.57	\$699.45
2033	\$118.47	\$137.41	\$136.40	\$392.29	\$203.67	\$245.34	\$286.70	\$735.71
2034	\$146.02	\$169.36	\$168.11	\$483.48	\$225.60	\$271.75	\$317.56	\$814.91
2035	\$156.35	\$181.34	\$180.00	\$517.69	\$282.49	\$340.28	\$397.64	\$1,020.40
2036	\$172.22	\$199.75	\$198.28	\$570.26	\$365.66	\$440.48	\$514.72	\$1,320.86
2037	\$153.47	\$178.00	\$176.69	\$508.17	\$384.35	\$462.98	\$541.02	\$1,388.34
2038	\$162.16	\$188.08	\$186.69	\$536.92	\$345.24	\$415.87	\$485.97	\$1,247.09
2039	\$151.69	\$175.93	\$174.64	\$502.26	\$305.80	\$368.36	\$430.45	\$1,104.61
2040	\$176.59	\$204.82	\$203.31	\$584.72	\$335.18	\$403.76	\$471.82	\$1,210.76
2041	\$159.84	\$185.39	\$184.03	\$529.26	\$310.19	\$373.65	\$436.63	\$1,120.47
2042	\$154.43	\$179.12	\$177.80	\$511.35	\$304.92	\$367.30	\$429.22	\$1,101.44
2043	\$193.03	\$223.89	\$222.24	\$639.16	\$331.56	\$399.39	\$466.71	\$1,197.66
2044	\$220.13	\$255.32	\$253.44	\$728.89	\$375.63	\$452.48	\$528.75	\$1,356.87
2045	\$176.48	\$204.69	\$203.18	\$584.36	\$365.46	\$440.23	\$514.44	\$1,320.13
2046	\$247.58	\$287.15	\$285.04	\$819.77	\$437.11	\$526.53	\$615.29	\$1,578.93
2047	\$201.53	\$233.74	\$232.02	\$667.28	\$387.15	\$466.36	\$544.97	\$1,398.48
2048	\$323.16	\$374.81	\$372.05	\$1,070.02	\$489.01	\$589.06	\$688.35	\$1,766.41
2049	\$226.72	\$262.96	\$261.03	\$750.71	\$411.63	\$495.85	\$579.43	\$1,486.91
2050	\$237.25	\$275.18	\$273.15	\$785.58	\$427.86	\$515.40	\$602.28	\$1,545.54
Cumulative Total	\$4,156.12	\$4,820.45	\$4,784.93	\$13,761.51	\$7,752.89	\$9,339.06	\$10,913.29	\$28,005.25

Appendix VI: Cumulative Fiscal Impacts (2023-2050)

Bus-Only Scenario: Maintain-Existing-System

Description	Employee Compensation	Proprietor Income	Taxes on Production and Import Net of Subsidies	Households	Enterprises (Corporations)	Total
ALL LOCAL TAXES						
Social Insurance Tax-Employee Contribution	\$-	\$-	\$-	\$-	\$-	\$-
Social Insurance Tax-Employer Contribution	\$-	\$-	\$-	\$-	\$-	\$-
TOPI: Sales Tax	\$-	\$-	\$808,128,853	\$-	\$-	\$808,128,853
TOPI: Property Tax	\$-	\$-	\$1,688,447,953	\$-	\$-	\$1,688,447,953
TOPI: Motor Vehicle License	\$-	\$-	\$102,547	\$-	\$-	\$102,547
TOPI: Severance Tax	\$-	\$-	\$-	\$-	\$-	\$-
TOPI: Other Taxes	\$-	\$-	\$72,325,334	\$-	\$-	\$72,325,334
TOPI: Special Assessments	\$-	\$-	\$17,589,212	\$-	\$-	\$17,589,212
OPI: Corporate Profits Tax	\$-	\$-	\$-	\$-	\$-	\$-
Personal Tax: Income Tax	\$-	\$-	\$-	\$-	\$-	\$-
Personal Tax: Motor Vehicle License	\$-	\$-	\$-	\$25,720	\$-	\$25,721
Personal Tax: Property Taxes	\$-	\$-	\$-	\$3,957,092	\$-	\$3,957,091
Personal Tax: Other Tax (Fish/Hunt)	\$-	\$-	\$-	\$-	\$-	\$-
Total Local Taxes	\$-	\$-	\$2,586,593,898	\$3,982,813	\$-	\$2,590,576,710
STATE TAXES						
Social Insurance Tax-Employee Contribution	\$551,608	\$-	\$-	\$-	\$-	\$551,608
Social Insurance Tax-Employer Contribution	\$644,888	\$-	\$-	\$-	\$-	\$644,888
TOPI: Sales Tax	\$-	\$-	\$2,212,189,379	\$-	\$-	\$2,212,189,379
TOPI: Property Tax	\$-	\$-	\$-	\$-	\$-	\$-
TOPI: Motor Vehicle License	\$-	\$-	\$40,970,096	\$-	\$-	\$40,970,096
TOPI: Severance Tax	\$-	\$-	\$18,884,076	\$-	\$-	\$18,884,076
TOPI: Other Taxes	\$-	\$-	\$29,103,708	\$-	\$-	\$29,103,708
TOPI: Special Assessments	\$-	\$-	\$-	\$-	\$-	\$-
OPI: Corporate Profits Tax	\$-	\$-	\$-	\$-	\$77,651,991	\$77,651,991
Personal Tax: Income Tax	\$-	\$-	\$-	\$512,604,418	\$-	\$512,604,418
Personal Tax: Motor Vehicle License	\$-	\$-	\$-	\$12,363,621	\$-	\$12,363,622
Personal Tax: Property Taxes	\$-	\$-	\$-	\$-	\$-	\$-
Personal Tax: Other Tax (Fish/Hunt)	\$-	\$-	\$-	\$10,164,394	\$-	\$10,164,392
Total State Taxes	\$1,196,496	\$-	\$2,301,147,260	\$535,132,433	\$77,651,991	\$2,915,128,179
FEDERAL TAXES						
Social Insurance Tax-Employee Contribution	\$862,230,145	\$124,750,352	\$-	\$-	\$-	\$986,980,497

Description	Employee Compensation	Proprietor Income	Taxes on Production and Import Net of Subsidies	Households	Enterprises (Corporations)	Total
<i>Social Insurance Tax-Employer Contribution</i>	\$778,445,394	\$-	\$-	\$-	\$-	\$778,445,394
<i>TOPI: Excise Taxes</i>	\$-	\$-	\$(493,586,683)	\$-	\$-	\$(493,586,683)
<i>TOPI: Custom Duty</i>	\$-	\$-	\$(514,489,384)	\$-	\$-	\$(514,489,384)
<i>OPI: Corporate Profits Tax</i>	\$-	\$-	\$-	\$-	\$316,412,612	\$316,412,612
<i>Personal Tax: Income Tax</i>	\$-	\$-	\$-	\$1,374,803,812	\$-	\$1,374,803,811
<i>Personal Tax: Estate and Gift Tax</i>	\$-	\$-	\$-	\$-	\$-	\$-
Total Federal Taxes	\$1,640,675,538	\$124,750,352	\$(1,008,076,067)	\$1,374,803,812	\$316,412,612	\$2,448,566,248
TOTAL TAXES	\$1,641,872,034	\$124,750,352	\$3,879,665,091	\$1,913,919,058	\$394,064,603	\$7,954,271,137

Bus-Only Scenario: Business-As-Usual

Description	Employee Compensation	Proprietor Income	Taxes on Production and Import Net of Subsidies	Households	Enterprises (Corporations)	Total
ALL LOCAL TAXES						
<i>Social Insurance Tax-Employee Contribution</i>	\$-	\$-	\$-	\$-	\$-	\$-
<i>Social Insurance Tax-Employer Contribution</i>	\$-	\$-	\$-	\$-	\$-	\$-
<i>TOPI: Sales Tax</i>	\$-	\$-	\$845,462,221	\$-	\$-	\$845,462,221
<i>TOPI: Property Tax</i>	\$-	\$-	\$1,766,449,683	\$-	\$-	\$1,766,449,683
<i>TOPI: Motor Vehicle License</i>	\$-	\$-	\$107,284	\$-	\$-	\$107,284
<i>TOPI: Severance Tax</i>	\$-	\$-	\$-	\$-	\$-	\$-
<i>TOPI: Other Taxes</i>	\$-	\$-	\$75,666,569	\$-	\$-	\$75,666,569
<i>TOPI: Special Assessments</i>	\$-	\$-	\$18,401,786	\$-	\$-	\$18,401,786
<i>OPI: Corporate Profits Tax</i>	\$-	\$-	\$-	\$-	\$-	\$-
<i>Personal Tax: Income Tax</i>	\$-	\$-	\$-	\$-	\$-	\$-
<i>Personal Tax: Motor Vehicle License</i>	\$-	\$-	\$-	\$31,025	\$-	\$31,024
<i>Personal Tax: Property Taxes</i>	\$-	\$-	\$-	\$4,764,398	\$-	\$4,764,396
<i>Personal Tax: Other Tax (Fish/Hunt)</i>	\$-	\$-	\$-	\$-	\$-	\$-
Total Local Taxes	\$-	\$-	\$2,706,087,545	\$4,795,422	\$-	\$2,710,882,965
STATE TAXES						
<i>Social Insurance Tax-Employee Contribution</i>	\$673,911	\$-	\$-	\$-	\$-	\$673,911
<i>Social Insurance Tax-Employer Contribution</i>	\$787,871	\$-	\$-	\$-	\$-	\$787,871
<i>TOPI: Sales Tax</i>	\$-	\$-	\$2,314,386,549	\$-	\$-	\$2,314,386,549
<i>TOPI: Property Tax</i>	\$-	\$-	\$-	\$-	\$-	\$-
<i>TOPI: Motor Vehicle License</i>	\$-	\$-	\$42,862,804	\$-	\$-	\$42,862,804
<i>TOPI: Severance Tax</i>	\$-	\$-	\$19,756,469	\$-	\$-	\$19,756,469

Description	Employee Compensation	Proprietor Income	Taxes on Production and Import Net of Subsidies	Households	Enterprises (Corporations)	Total
TOPI: Other Taxes	\$-	\$-	\$30,448,220	\$-	\$-	\$30,448,220
TOPI: Special Assessments	\$-	\$-	\$-	\$-	\$-	\$-
OPI: Corporate Profits Tax	\$-	\$-	\$-	\$-	\$89,036,116	\$89,036,116
Personal Tax: Income Tax	\$-	\$-	\$-	\$616,092,875	\$-	\$616,092,874
Personal Tax: Motor Vehicle License	\$-	\$-	\$-	\$14,905,495	\$-	\$14,905,495
Personal Tax: Property Taxes	\$-	\$-	\$-	\$-	\$-	\$-
Personal Tax: Other Tax (Fish/Hunt)	\$-	\$-	\$-	\$12,207,764	\$-	\$12,207,765
Total State Taxes	\$1,461,782	\$-	\$2,407,454,043	\$643,206,136	\$89,036,116	\$3,141,158,075
FEDERAL TAXES						
Social Insurance Tax-Employee Contribution	\$1,053,403,056	\$140,660,283	\$-	\$-	\$-	\$1,194,063,338
Social Insurance Tax-Employer Contribution	\$951,041,624	\$-	\$-	\$-	\$-	\$951,041,624
TOPI: Excise Taxes	\$-	\$-	\$(516,389,054)	\$-	\$-	\$(516,389,054)
TOPI: Custom Duty	\$-	\$-	\$(538,257,403)	\$-	\$-	\$(538,257,403)
OPI: Corporate Profits Tax	\$-	\$-	\$-	\$-	\$362,800,101	\$362,800,101
Personal Tax: Income Tax	\$-	\$-	\$-	\$1,650,152,571	\$-	\$1,650,152,572
Personal Tax: Estate and Gift Tax	\$-	\$-	\$-	\$-	\$-	\$-
Total Federal Taxes	\$2,004,444,679	\$140,660,283	\$(1,054,646,456)	\$1,650,152,571	\$362,800,101	\$3,103,411,179
TOTAL TAXES	\$2,005,906,461	\$140,660,283	\$4,058,895,131	\$2,298,154,129	\$451,836,217	\$8,955,452,219

Bus-Only Scenario: RTP-Priority Needs

Description	Employee Compensation	Proprietor Income	Taxes on Production and Import Net of Subsidies	Households	Enterprises (Corporations)	Total
ALL LOCAL TAXES						
Social Insurance Tax-Employee Contribution	\$-	\$-	\$-	\$-	\$-	\$-
Social Insurance Tax-Employer Contribution	\$-	\$-	\$-	\$-	\$-	\$-
TOPI: Sales Tax	\$-	\$-	\$1,251,824,669	\$-	\$-	\$1,251,824,669
TOPI: Property Tax	\$-	\$-	\$2,615,474,983	\$-	\$-	\$2,615,474,983
TOPI: Motor Vehicle License	\$-	\$-	\$158,849	\$-	\$-	\$158,849
TOPI: Severance Tax	\$-	\$-	\$-	\$-	\$-	\$-
TOPI: Other Taxes	\$-	\$-	\$112,034,902	\$-	\$-	\$112,034,902
TOPI: Special Assessments	\$-	\$-	\$27,246,409	\$-	\$-	\$27,246,409
OPI: Corporate Profits Tax	\$-	\$-	\$-	\$-	\$-	\$-
Personal Tax: Income Tax	\$-	\$-	\$-	\$-	\$-	\$-

Description	Employee Compensation	Proprietor Income	Taxes on Production and Import Net of Subsidies	Households	Enterprises (Corporations)	Total
<i>Personal Tax: Motor Vehicle License</i>	\$-	\$-	\$-	\$46,225	\$-	\$46,225
<i>Personal Tax: Property Taxes</i>	\$-	\$-	\$-	\$7,098,303	\$-	\$7,098,304
<i>Personal Tax: Other Tax (Fish/Hunt)</i>	\$-	\$-	\$-	\$-	\$-	\$-
Total Local Taxes	\$-	\$-	\$4,006,739,816	\$7,144,530	\$-	\$4,013,884,346
STATE TAXES						
<i>Social Insurance Tax-Employee Contribution</i>	\$1,004,688	\$-	\$-	\$-	\$-	\$1,004,688
<i>Social Insurance Tax-Employer Contribution</i>	\$1,174,585	\$-	\$-	\$-	\$-	\$1,174,585
<i>TOPI: Sales Tax</i>	\$-	\$-	\$3,426,771,892	\$-	\$-	\$3,426,771,892
<i>TOPI: Property Tax</i>	\$-	\$-	\$-	\$-	\$-	\$-
<i>TOPI: Motor Vehicle License</i>	\$-	\$-	\$63,464,356	\$-	\$-	\$63,464,356
<i>TOPI: Severance Tax</i>	\$-	\$-	\$29,252,207	\$-	\$-	\$29,252,207
<i>TOPI: Other Taxes</i>	\$-	\$-	\$45,082,834	\$-	\$-	\$45,082,834
<i>TOPI: Special Assessments</i>	\$-	\$-	\$-	\$-	\$-	\$-
<i>OPI: Corporate Profits Tax</i>	\$-	\$-	\$-	\$-	\$133,046,865	\$133,046,865
<i>Personal Tax: Income Tax</i>	\$-	\$-	\$-	\$917,821,941	\$-	\$917,821,941
<i>Personal Tax: Motor Vehicle License</i>	\$-	\$-	\$-	\$22,208,472	\$-	\$22,208,472
<i>Personal Tax: Property Taxes</i>	\$-	\$-	\$-	\$-	\$-	\$-
<i>Personal Tax: Other Tax (Fish/Hunt)</i>	\$-	\$-	\$-	\$18,185,887	\$-	\$18,185,887
Total State Taxes	\$2,179,273	\$-	\$3,564,571,289	\$958,216,300	\$133,046,865	\$4,658,013,728
FEDERAL TAXES						
<i>Social Insurance Tax-Employee Contribution</i>	\$1,570,448,623	\$208,926,694	\$-	\$-	\$-	\$1,779,375,317
<i>Social Insurance Tax-Employer Contribution</i>	\$1,417,844,766	\$-	\$-	\$-	\$-	\$1,417,844,766
<i>TOPI: Excise Taxes</i>	\$-	\$-	\$(764,585,974)	\$-	\$-	\$(764,585,974)
<i>TOPI: Custom Duty</i>	\$-	\$-	\$(796,965,113)	\$-	\$-	\$(796,965,113)
<i>OPI: Corporate Profits Tax</i>	\$-	\$-	\$-	\$-	\$542,132,992	\$542,132,992
<i>Personal Tax: Income Tax</i>	\$-	\$-	\$-	\$2,458,160,457	\$-	\$2,458,160,460
<i>Personal Tax: Estate and Gift Tax</i>	\$-	\$-	\$-	\$-	\$-	\$-
Total Federal Taxes	\$2,988,293,388	\$208,926,694	\$(1,561,551,088)	\$2,458,160,457	\$542,132,992	\$4,635,962,447
TOTAL TAXES	\$2,990,472,662	\$208,926,694	\$6,009,760,018	\$3,423,521,286	\$675,179,858	\$13,307,860,520

Bus-Only Scenario: RTP-Total Needs

Description	Employee Compensation	Proprietor Income	Taxes on Production and Import Net of Subsidies	Households	Enterprises (Corporations)	Total
ALL LOCAL TAXES						
Social Insurance Tax-Employee Contribution	\$-	\$-	\$-	\$-	\$-	\$-
Social Insurance Tax-Employer Contribution	\$-	\$-	\$-	\$-	\$-	\$-
TOPI: Sales Tax	\$-	\$-	\$1,296,190,552	\$-	\$-	\$1,296,190,552
TOPI: Property Tax	\$-	\$-	\$2,708,169,957	\$-	\$-	\$2,708,169,957
TOPI: Motor Vehicle License	\$-	\$-	\$164,479	\$-	\$-	\$164,479
TOPI: Severance Tax	\$-	\$-	\$-	\$-	\$-	\$-
TOPI: Other Taxes	\$-	\$-	\$116,005,529	\$-	\$-	\$116,005,529
TOPI: Special Assessments	\$-	\$-	\$28,212,049	\$-	\$-	\$28,212,049
OPI: Corporate Profits Tax	\$-	\$-	\$-	\$-	\$-	\$-
Personal Tax: Income Tax	\$-	\$-	\$-	\$-	\$-	\$-
Personal Tax: Motor Vehicle License	\$-	\$-	\$-	\$47,755	\$-	\$47,753
Personal Tax: Property Taxes	\$-	\$-	\$-	\$7,333,121	\$-	\$7,333,122
Personal Tax: Other Tax (Fish/Hunt)	\$-	\$-	\$-	\$-	\$-	\$-
Total Local Taxes	\$-	\$-	\$4,148,742,564	\$7,380,877	\$-	\$4,156,123,441
STATE TAXES						
Social Insurance Tax-Employee Contribution	\$1,037,698	\$-	\$-	\$-	\$-	\$1,037,698
Social Insurance Tax-Employer Contribution	\$1,213,176	\$-	\$-	\$-	\$-	\$1,213,176
TOPI: Sales Tax	\$-	\$-	\$3,548,220,015	\$-	\$-	\$3,548,220,015
TOPI: Property Tax	\$-	\$-	\$-	\$-	\$-	\$-
TOPI: Motor Vehicle License	\$-	\$-	\$65,713,595	\$-	\$-	\$65,713,595
TOPI: Severance Tax	\$-	\$-	\$30,288,934	\$-	\$-	\$30,288,934
TOPI: Other Taxes	\$-	\$-	\$46,680,613	\$-	\$-	\$46,680,613
TOPI: Special Assessments	\$-	\$-	\$-	\$-	\$-	\$-
OPI: Corporate Profits Tax	\$-	\$-	\$-	\$-	\$137,356,314	\$137,356,314
Personal Tax: Income Tax	\$-	\$-	\$-	\$948,209,595	\$-	\$948,209,596
Personal Tax: Motor Vehicle License	\$-	\$-	\$-	\$22,942,695	\$-	\$22,942,695
Personal Tax: Property Taxes	\$-	\$-	\$-	\$-	\$-	\$-
Personal Tax: Other Tax (Fish/Hunt)	\$-	\$-	\$-	\$18,788,195	\$-	\$18,788,195
Total State Taxes	\$2,250,875	\$-	\$3,690,903,156	\$989,940,486	\$137,356,314	\$4,820,450,832
FEDERAL TAXES						
Social Insurance Tax-Employee Contribution	\$1,622,046,316	\$216,059,511	\$-	\$-	\$-	\$1,838,105,826
Social Insurance Tax-Employer Contribution	\$1,464,428,599	\$-	\$-	\$-	\$-	\$1,464,428,599

Description	Employee Compensation	Proprietor Income	Taxes on Production and Import Net of Subsidies	Households	Enterprises (Corporations)	Total
TOPI: Excise Taxes	\$-	\$-	\$(791,683,643)	\$-	\$-	\$(791,683,643)
TOPI: Custom Duty	\$-	\$-	\$(825,210,330)	\$-	\$-	\$(825,210,330)
OPI: Corporate Profits Tax	\$-	\$-	\$-	\$-	\$559,692,930	\$559,692,930
Personal Tax: Income Tax	\$-	\$-	\$-	\$2,539,597,614	\$-	\$2,539,597,614
Personal Tax: Estate and Gift Tax	\$-	\$-	\$-	\$-	\$-	\$-
Total Federal Taxes	\$3,086,474,915	\$216,059,511	\$(1,616,893,974)	\$2,539,597,614	\$559,692,930	\$4,784,930,998
TOTAL TAXES	\$3,088,725,790	\$216,059,511	\$6,222,751,746	\$3,536,918,977	\$697,049,244	\$13,761,505,270

All-Transit Scenario: Maintain-Existing-System

Description	Employee Compensation	Proprietor Income	Taxes on Production and Import Net of Subsidies	Households	Enterprises (Corporations)	Total
ALL LOCAL TAXES						
Social Insurance Tax-Employee Contribution	\$-	\$-	\$-	\$-	\$-	\$-
Social Insurance Tax-Employer Contribution	\$-	\$-	\$-	\$-	\$-	\$-
TOPI: Sales Tax	\$-	\$-	\$1,538,105,350	\$-	\$-	\$1,538,105,350
TOPI: Property Tax	\$-	\$-	\$3,213,609,832	\$-	\$-	\$3,213,609,832
TOPI: Motor Vehicle License	\$-	\$-	\$195,176	\$-	\$-	\$195,176
TOPI: Severance Tax	\$-	\$-	\$-	\$-	\$-	\$-
TOPI: Other Taxes	\$-	\$-	\$137,656,245	\$-	\$-	\$137,656,245
TOPI: Special Assessments	\$-	\$-	\$33,477,411	\$-	\$-	\$33,477,411
OPI: Corporate Profits Tax	\$-	\$-	\$-	\$-	\$-	\$-
Personal Tax: Income Tax	\$-	\$-	\$-	\$-	\$-	\$-
Personal Tax: Motor Vehicle License	\$-	\$-	\$-	\$60,102	\$-	\$60,102
Personal Tax: Property Taxes	\$-	\$-	\$-	\$9,224,618	\$-	\$9,224,620
Personal Tax: Other Tax (Fish/Hunt)	\$-	\$-	\$-	\$-	\$-	\$-
Total Local Taxes	\$-	\$-	\$4,923,044,014	\$9,284,722	\$-	\$4,932,328,735
STATE TAXES						
Social Insurance Tax-Employee Contribution	\$1,310,700	\$-	\$-	\$-	\$-	\$1,310,700
Social Insurance Tax-Employer Contribution	\$1,532,345	\$-	\$-	\$-	\$-	\$1,532,345
TOPI: Sales Tax	\$-	\$-	\$4,210,442,809	\$705,078,771	\$-	\$4,210,442,809
TOPI: Property Tax	\$-	\$-	\$-	\$553,665,209	\$-	\$-
TOPI: Motor Vehicle License	\$-	\$-	\$77,978,065	\$-	\$-	\$77,978,065
TOPI: Severance Tax	\$-	\$-	\$35,941,915	\$-	\$-	\$35,941,915
TOPI: Other Taxes	\$-	\$-	\$55,392,859	\$24,753,677	\$-	\$55,392,859

Description	Employee Compensation	Proprietor Income	Taxes on Production and Import Net of Subsidies	Households	Enterprises (Corporations)	Total
TOPI: Special Assessments	\$-	\$-	\$-	\$32,259	\$-	\$-
OPI: Corporate Profits Tax	\$-	\$-	\$-	\$-	\$194,146,301	\$194,146,301
Personal Tax: Income Tax	\$-	\$-	\$-	\$-	\$-	\$1,192,193,448
Personal Tax: Motor Vehicle License	\$-	\$-	\$-	\$-	\$-	\$28,871,177
Personal Tax: Property Taxes	\$-	\$-	\$-	\$-	\$-	\$-
Personal Tax: Other Tax (Fish/Hunt)	\$-	\$-	\$-	\$-	\$-	\$23,617,826
Total State Taxes	\$2,843,045	\$-	\$4,379,755,649	\$1,283,529,915	\$194,146,301	\$5,821,427,445
FEDERAL TAXES						
Social Insurance Tax-Employee Contribution	\$2,048,781,951	\$266,572,723	\$-	\$-	\$-	\$2,315,354,674
Social Insurance Tax-Employer Contribution	\$1,849,697,420	\$-	\$-	\$-	\$-	\$1,849,697,420
TOPI: Excise Taxes	\$-	\$-	\$(939,439,688)	\$-	\$-	\$(939,439,688)
TOPI: Custom Duty	\$-	\$-	\$(979,223,636)	\$-	\$-	\$(979,223,636)
OPI: Corporate Profits Tax	\$-	\$-	\$-	\$-	\$791,098,047	\$791,098,047
Personal Tax: Income Tax	\$-	\$-	\$-	\$3,191,852,606	\$-	\$3,191,852,606
Personal Tax: Estate and Gift Tax	\$-	\$-	\$-	\$-	\$-	\$-
Total Federal Taxes	\$3,898,479,370	\$266,572,723	\$(1,918,663,324)	\$3,191,852,606	\$791,098,047	\$6,229,339,424
TOTAL TAXES	\$3,901,322,416	\$266,572,723	\$7,384,136,339	\$4,484,667,242	\$985,244,348	\$16,983,095,604

All-Transit Scenario: Business-As-Usual

Description	Employee Compensation	Proprietor Income	Taxes on Production and Import Net of Subsidies	Households	Enterprises (Corporations)	Total
ALL LOCAL TAXES						
Social Insurance Tax-Employee Contribution	\$-	\$-	\$-	\$-	\$-	\$-
Social Insurance Tax-Employer Contribution	\$-	\$-	\$-	\$-	\$-	\$-
TOPI: Sales Tax	\$-	\$-	\$1,557,593,715	\$-	\$-	\$1,557,593,715
TOPI: Property Tax	\$-	\$-	\$3,254,327,461	\$-	\$-	\$3,254,327,461
TOPI: Motor Vehicle License	\$-	\$-	\$197,649	\$-	\$-	\$197,649
TOPI: Severance Tax	\$-	\$-	\$-	\$-	\$-	\$-
TOPI: Other Taxes	\$-	\$-	\$139,400,400	\$-	\$-	\$139,400,400
TOPI: Special Assessments	\$-	\$-	\$33,901,582	\$-	\$-	\$33,901,582
OPI: Corporate Profits Tax	\$-	\$-	\$-	\$-	\$-	\$-
Personal Tax: Income Tax	\$-	\$-	\$-	\$-	\$-	\$-
Personal Tax: Motor Vehicle License	\$-	\$-	\$-	\$65,811	\$-	\$65,811

Description	Employee Compensation	Proprietor Income	Taxes on Production and Import Net of Subsidies	Households	Enterprises (Corporations)	Total
Personal Tax: Property Taxes	\$-	\$-	\$-	\$10,092,772	\$-	\$10,092,773
Personal Tax: Other Tax (Fish/Hunt)	\$-	\$-	\$-	\$-	\$-	\$-
Total Local Taxes	\$-	\$-	\$4,985,420,808	\$10,158,585	\$-	\$4,995,579,392
STATE TAXES						
Social Insurance Tax-Employee Contribution	\$1,443,299	\$-	\$-	\$-	\$-	\$1,443,299
Social Insurance Tax-Employer Contribution	\$1,687,366	\$-	\$-	\$-	\$-	\$1,687,366
TOPI: Sales Tax	\$-	\$-	\$4,263,790,682	\$714,012,380	\$-	\$4,263,790,682
TOPI: Property Tax	\$-	\$-	\$-	\$560,680,352	\$-	\$-
TOPI: Motor Vehicle License	\$-	\$-	\$78,966,076	\$-	\$-	\$78,966,076
TOPI: Severance Tax	\$-	\$-	\$36,397,313	\$-	\$-	\$36,397,313
TOPI: Other Taxes	\$-	\$-	\$56,094,707	\$25,067,315	\$-	\$56,094,707
TOPI: Special Assessments	\$-	\$-	\$-	\$32,667	\$-	\$-
OPI: Corporate Profits Tax	\$-	\$-	\$-	\$-	\$205,144,484	\$205,144,484
Personal Tax: Income Tax	\$-	\$-	\$-	\$-	\$-	\$1,303,361,510
Personal Tax: Motor Vehicle License	\$-	\$-	\$-	\$-	\$-	\$31,606,787
Personal Tax: Property Taxes	\$-	\$-	\$-	\$-	\$-	\$-
Personal Tax: Other Tax (Fish/Hunt)	\$-	\$-	\$-	\$-	\$-	\$25,811,862
Total State Taxes	\$3,130,664	\$-	\$4,435,248,779	\$1,299,792,714	\$205,144,484	\$6,004,304,086
FEDERAL TAXES						
Social Insurance Tax-Employee Contribution	\$2,256,049,101	\$282,628,395	\$-	\$-	\$-	\$2,538,677,497
Social Insurance Tax-Employer Contribution	\$2,036,823,976	\$-	\$-	\$-	\$-	\$2,036,823,976
TOPI: Excise Taxes	\$-	\$-	\$(951,342,737)	\$-	\$-	\$(951,342,737)
TOPI: Custom Duty	\$-	\$-	\$(991,630,763)	\$-	\$-	\$(991,630,763)
OPI: Corporate Profits Tax	\$-	\$-	\$-	\$-	\$835,912,914	\$835,912,914
Personal Tax: Income Tax	\$-	\$-	\$-	\$3,487,388,034	\$-	\$3,487,388,034
Personal Tax: Estate and Gift Tax	\$-	\$-	\$-	\$-	\$-	\$-
Total Federal Taxes	\$4,292,873,078	\$282,628,395	\$(1,942,973,501)	\$3,487,388,034	\$835,912,914	\$6,955,828,921
TOTAL TAXES	\$4,296,003,742	\$282,628,395	\$7,477,696,086	\$4,797,339,334	\$1,041,057,398	\$17,955,712,399

All-Transit Scenario: RTP-Priority Needs

Description	Employee Compensation	Proprietor Income	Taxes on Production and Import Net of Subsidies	Households	Enterprises (Corporations)	Total
ALL LOCAL TAXES						

Description	Employee Compensation	Proprietor Income	Taxes on Production and Import Net of Subsidies	Households	Enterprises (Corporations)	Total
<i>Social Insurance Tax-Employee Contribution</i>	\$-	\$-	\$-	\$-	\$-	\$-
<i>Social Insurance Tax-Employer Contribution</i>	\$-	\$-	\$-	\$-	\$-	\$-
<i>TOPI: Sales Tax</i>	\$-	\$-	\$2,248,924,989	\$-	\$-	\$2,248,924,989
<i>TOPI: Property Tax</i>	\$-	\$-	\$4,698,746,715	\$-	\$-	\$4,698,746,715
<i>TOPI: Motor Vehicle License</i>	\$-	\$-	\$285,375	\$-	\$-	\$285,375
<i>TOPI: Severance Tax</i>	\$-	\$-	\$-	\$-	\$-	\$-
<i>TOPI: Other Taxes</i>	\$-	\$-	\$201,272,670	\$-	\$-	\$201,272,670
<i>TOPI: Special Assessments</i>	\$-	\$-	\$48,948,652	\$-	\$-	\$48,948,652
<i>OPI: Corporate Profits Tax</i>	\$-	\$-	\$-	\$-	\$-	\$-
<i>Personal Tax: Income Tax</i>	\$-	\$-	\$-	\$-	\$-	\$-
<i>Personal Tax: Motor Vehicle License</i>	\$-	\$-	\$-	\$95,935	\$-	\$95,935
<i>Personal Tax: Property Taxes</i>	\$-	\$-	\$-	\$14,710,982	\$-	\$14,710,981
<i>Personal Tax: Other Tax (Fish/Hunt)</i>	\$-	\$-	\$-	\$-	\$-	\$-
Total Local Taxes	\$-	\$-	\$7,198,178,403	\$14,806,918	\$-	\$7,212,985,316
STATE TAXES						
<i>Social Insurance Tax-Employee Contribution</i>	\$2,105,383	\$-	\$-	\$-	\$-	\$2,105,383
<i>Social Insurance Tax-Employer Contribution</i>	\$2,461,412	\$-	\$-	\$-	\$-	\$2,461,412
<i>TOPI: Sales Tax</i>	\$-	\$-	\$6,156,255,847	\$1,030,923,705	\$-	\$6,156,255,847
<i>TOPI: Property Tax</i>	\$-	\$-	\$-	\$809,535,916	\$-	\$-
<i>TOPI: Motor Vehicle License</i>	\$-	\$-	\$114,014,829	\$-	\$-	\$114,014,829
<i>TOPI: Severance Tax</i>	\$-	\$-	\$52,552,104	\$-	\$-	\$52,552,104
<i>TOPI: Other Taxes</i>	\$-	\$-	\$80,992,102	\$36,193,336	\$-	\$80,992,102
<i>TOPI: Special Assessments</i>	\$-	\$-	\$-	\$47,166	\$-	\$-
<i>OPI: Corporate Profits Tax</i>	\$-	\$-	\$-	\$-	\$300,340,682	\$300,340,682
<i>Personal Tax: Income Tax</i>	\$-	\$-	\$-	\$-	\$-	\$1,899,562,036
<i>Personal Tax: Motor Vehicle License</i>	\$-	\$-	\$-	\$-	\$-	\$46,072,615
<i>Personal Tax: Property Taxes</i>	\$-	\$-	\$-	\$-	\$-	\$-
<i>Personal Tax: Other Tax (Fish/Hunt)</i>	\$-	\$-	\$-	\$-	\$-	\$37,617,572
Total State Taxes	\$4,566,794	\$-	\$6,403,814,883	\$1,876,700,124	\$300,340,682	\$8,691,974,582
FEDERAL TAXES						
<i>Social Insurance Tax-Employee Contribution</i>	\$3,290,967,131	\$410,324,295	\$-	\$-	\$-	\$3,701,291,425
<i>Social Insurance Tax-Employer Contribution</i>	\$2,971,176,804	\$-	\$-	\$-	\$-	\$2,971,176,804
<i>TOPI: Excise Taxes</i>	\$-	\$-	\$(1,373,592,121)	\$-	\$-	\$(1,373,592,121)
<i>TOPI: Custom Duty</i>	\$-	\$-	\$(1,431,761,815)	\$-	\$-	\$(1,431,761,815)
<i>OPI: Corporate Profits Tax</i>	\$-	\$-	\$-	\$-	\$1,223,813,823	\$1,223,813,823

Description	Employee Compensation	Proprietor Income	Taxes on Production and Import Net of Subsidies	Households	Enterprises (Corporations)	Total
Personal Tax: Income Tax	\$-	\$-	\$-	\$5,082,256,536	\$-	\$5,082,256,536
Personal Tax: Estate and Gift Tax	\$-	\$-	\$-	\$-	\$-	\$-
Total Federal Taxes	\$6,262,143,936	\$410,324,295	\$(2,805,353,935)	\$5,082,256,536	\$1,223,813,823	\$10,173,184,654
TOTAL TAXES	\$6,266,710,730	\$410,324,295	\$10,796,639,350	\$6,973,763,578	\$1,524,154,506	\$26,078,144,552

All-Transit Scenario: RTP-Total Needs

Description	Employee Compensation	Proprietor Income	Taxes on Production and Import Net of Subsidies	Households	Enterprises (Corporations)	Total
ALL LOCAL TAXES						
Social Insurance Tax-Employee Contribution	\$-	\$-	\$-	\$-	\$-	\$-
Social Insurance Tax-Employer Contribution	\$-	\$-	\$-	\$-	\$-	\$-
TOPI: Sales Tax	\$-	\$-	\$2,417,269,435	\$-	\$-	\$2,417,269,435
TOPI: Property Tax	\$-	\$-	\$5,050,473,838	\$-	\$-	\$5,050,473,838
TOPI: Motor Vehicle License	\$-	\$-	\$306,737	\$-	\$-	\$306,737
TOPI: Severance Tax	\$-	\$-	\$-	\$-	\$-	\$-
TOPI: Other Taxes	\$-	\$-	\$216,339,039	\$-	\$-	\$216,339,039
TOPI: Special Assessments	\$-	\$-	\$52,612,730	\$-	\$-	\$52,612,730
OPI: Corporate Profits Tax	\$-	\$-	\$-	\$-	\$-	\$-
Personal Tax: Income Tax	\$-	\$-	\$-	\$-	\$-	\$-
Personal Tax: Motor Vehicle License	\$-	\$-	\$-	\$102,963	\$-	\$102,964
Personal Tax: Property Taxes	\$-	\$-	\$-	\$15,789,523	\$-	\$15,789,522
Personal Tax: Other Tax (Fish/Hunt)	\$-	\$-	\$-	\$-	\$-	\$-
Total Local Taxes	\$-	\$-	\$7,737,001,781	\$15,892,487	\$-	\$7,752,894,266
STATE TAXES						
Social Insurance Tax-Employee Contribution	\$2,259,068	\$-	\$-	\$-	\$-	\$2,259,068
Social Insurance Tax-Employer Contribution	\$2,641,085	\$-	\$-	\$-	\$-	\$2,641,085
TOPI: Sales Tax	\$-	\$-	\$6,617,085,573	\$1,108,094,034	\$-	\$6,617,085,573
TOPI: Property Tax	\$-	\$-	\$-	\$870,134,148	\$-	\$-
TOPI: Motor Vehicle License	\$-	\$-	\$122,549,468	\$-	\$-	\$122,549,468
TOPI: Severance Tax	\$-	\$-	\$56,485,920	\$-	\$-	\$56,485,920
TOPI: Other Taxes	\$-	\$-	\$87,054,808	\$38,902,606	\$-	\$87,054,808
TOPI: Special Assessments	\$-	\$-	\$-	\$50,697	\$-	\$-
OPI: Corporate Profits Tax	\$-	\$-	\$-	\$-	\$322,254,085	\$322,254,085

Description	Employee Compensation	Proprietor Income	Taxes on Production and Import Net of Subsidies	Households	Enterprises (Corporations)	Total
<i>Personal Tax: Income Tax</i>	\$-	\$-	\$-	\$-	\$-	\$2,038,904,232
<i>Personal Tax: Motor Vehicle License</i>	\$-	\$-	\$-	\$-	\$-	\$49,449,105
<i>Personal Tax: Property Taxes</i>	\$-	\$-	\$-	\$-	\$-	\$-
<i>Personal Tax: Other Tax (Fish/Hunt)</i>	\$-	\$-	\$-	\$-	\$-	\$40,377,606
Total State Taxes	\$4,900,153	\$-	\$6,883,175,768	\$2,017,181,485	\$322,254,085	\$9,339,060,947
FEDERAL TAXES						
<i>Social Insurance Tax-Employee Contribution</i>	\$3,531,195,240	\$441,063,949	\$-	\$-	\$-	\$3,972,259,188
<i>Social Insurance Tax-Employer Contribution</i>	\$3,188,061,433	\$-	\$-	\$-	\$-	\$3,188,061,433
<i>TOPI: Excise Taxes</i>	\$-	\$-	\$(1,476,413,072)	\$-	\$-	\$(1,476,413,072)
<i>TOPI: Custom Duty</i>	\$-	\$-	\$(1,538,937,088)	\$-	\$-	\$(1,538,937,088)
<i>OPI: Corporate Profits Tax</i>	\$-	\$-	\$-	\$-	\$1,313,105,506	\$1,313,105,506
<i>Personal Tax: Income Tax</i>	\$-	\$-	\$-	\$5,455,217,354	\$-	\$5,455,217,354
<i>Personal Tax: Estate and Gift Tax</i>	\$-	\$-	\$-	\$-	\$-	\$-
Total Federal Taxes	\$6,719,256,673	\$441,063,949	\$(3,015,350,160)	\$5,455,217,354	\$1,313,105,506	\$10,913,293,321
TOTAL TAXES	\$6,724,156,826	\$441,063,949	\$11,604,827,390	\$7,488,291,326	\$1,635,359,591	\$28,005,248,534