

UTA Board of Trustees Meeting

August 10, 2022



Call to Order and Opening Remarks



Pledge of Allegiance



Safety First Minute



Public Comment

Live comments are limited to 3 minutes per commenter

Public comment was solicited prior to the meeting through alternate means, including email, telephone, and the UTA website

Any comments received through alternate means were distributed to the board for review in advance of the meeting



Consent Agenda

- a. Approval of July 27, 2022, Board Meeting Minutes



Recommended Action

(by acclamation)

Motion to approve consent agenda



Reports



Executive Director's Report

- Personnel Decision
- APTA Commuter Rail CEO Workshop



Personnel Decision



APTA Commuter Rail CEO Workshop



Financial Report – June 2022



Monthly Operating Financial Report

June 2022

August 10, 2022

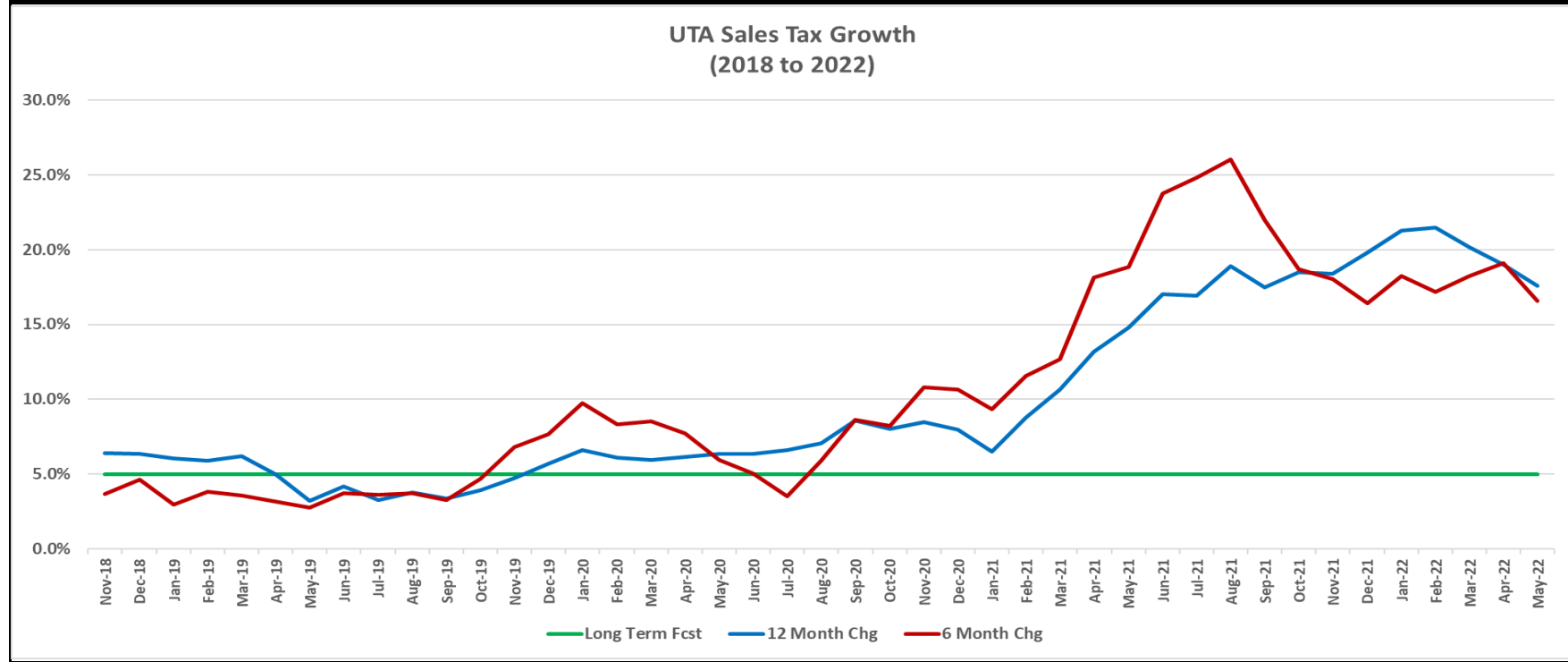


UTA Board Dashboard

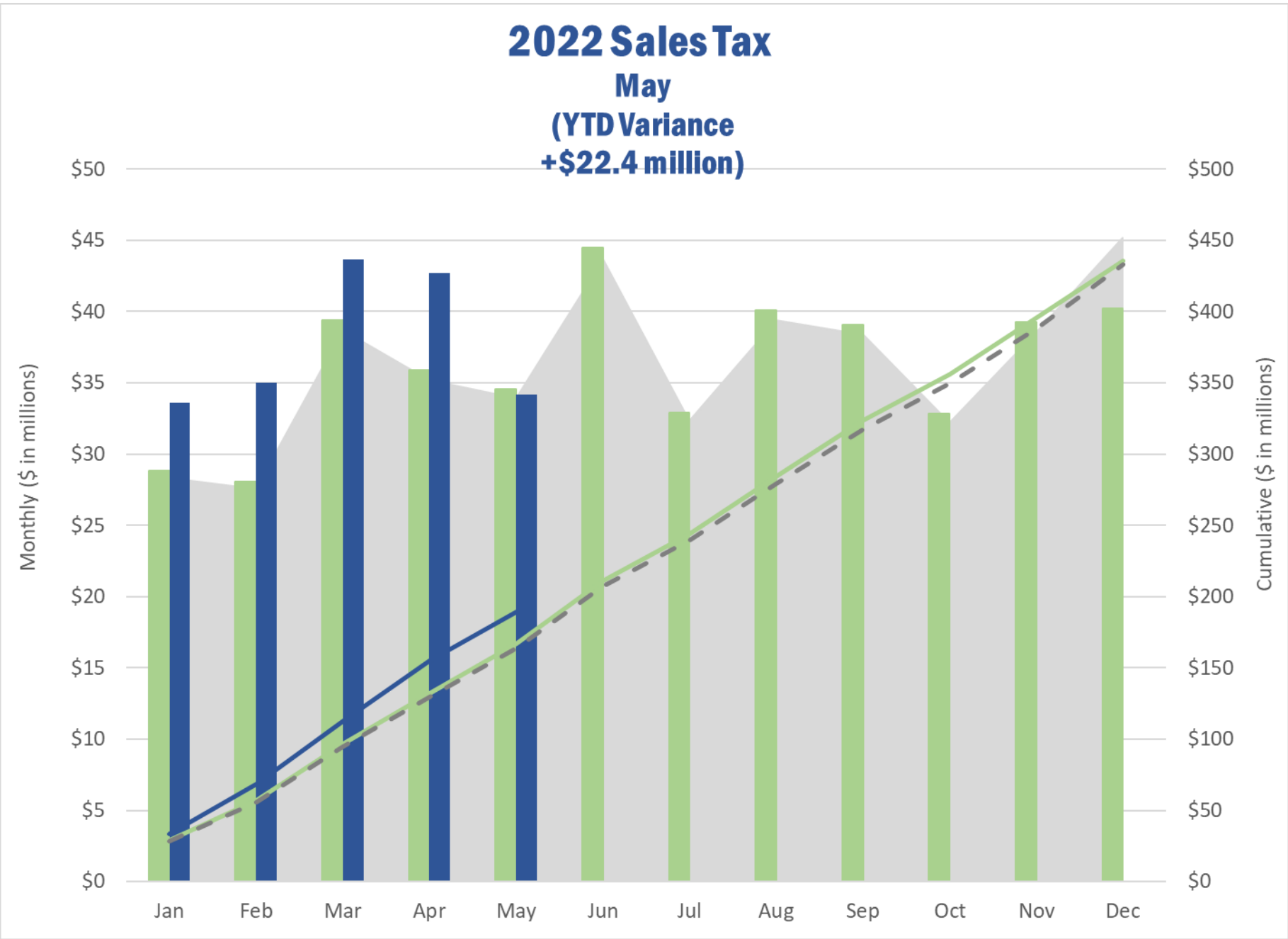
June 2022

UTAH TRANSIT AUTHORITY

Financial Metrics	Jun Actual	Jun Budget	Fav/ (Unfav)	%	YTD Actual	YTD Budget	Fav/ (Unfav)	%
Sales Tax (May '22 mm \$)	\$ 34.2	\$ 34.6	\$ (0.35)	● -1.0%	\$ 189.1	\$ 166.8	\$ 22.36	● 13.4%
Fare Revenue (mm)	\$ 2.2	\$ 2.8	\$ (0.60)	● -21.6%	\$ 16.2	\$ 16.8	\$ (0.58)	● -3.5%
Operating Exp (mm)	\$ 32.8	\$ 30.6	(2.13)	● -7.0%	\$ 167.5	\$ 177.6	\$ 10.09	● 5.7%
Subsidy Per Rider (SPR)	\$ 11.29	\$ 13.25	\$ 1.96	● 14.8%	\$ 9.98	\$ 13.25	\$ 3.27	● 24.7%
UTA Diesel Price (\$/gal)	\$ 4.64	\$ 2.75	\$ (1.89)	● -68.7%	\$ 3.86	\$ 2.75	\$ (1.11)	● -40.5%
Operating Metrics	Jun Actual	Jun-21	F/ (UF)	%	YTD Actual	YTD 2021	F/ (UF)	%
Ridership (mm)	2.71	1.85	0.9	● 46.3%	15.16	10.52	4.6	● 44.1%
Alternative Fuels	CNG Price (Diesel Gal Equiv)		\$ 1.82					



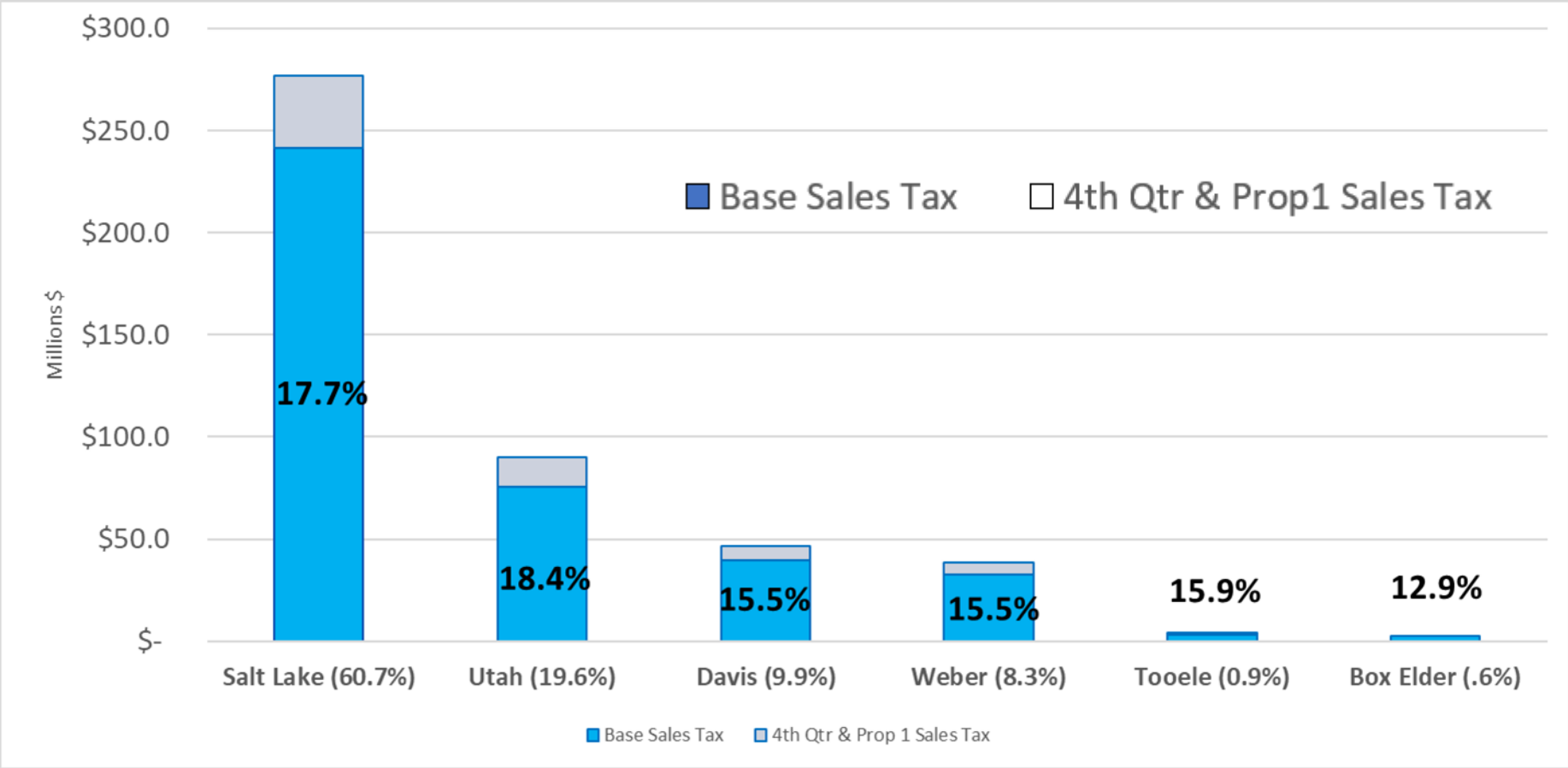
Sales Tax



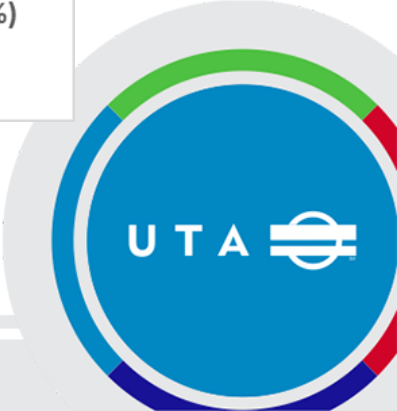
UTAH TRANSIT AUTHORITY



Sales Tax Collections (Percentage Growth for 12 months ended May 31, 2022)



- % growth in base sales tax revenues over prior year
- (includes impact of Prop1 and 4th quarter rate changes in 2019).

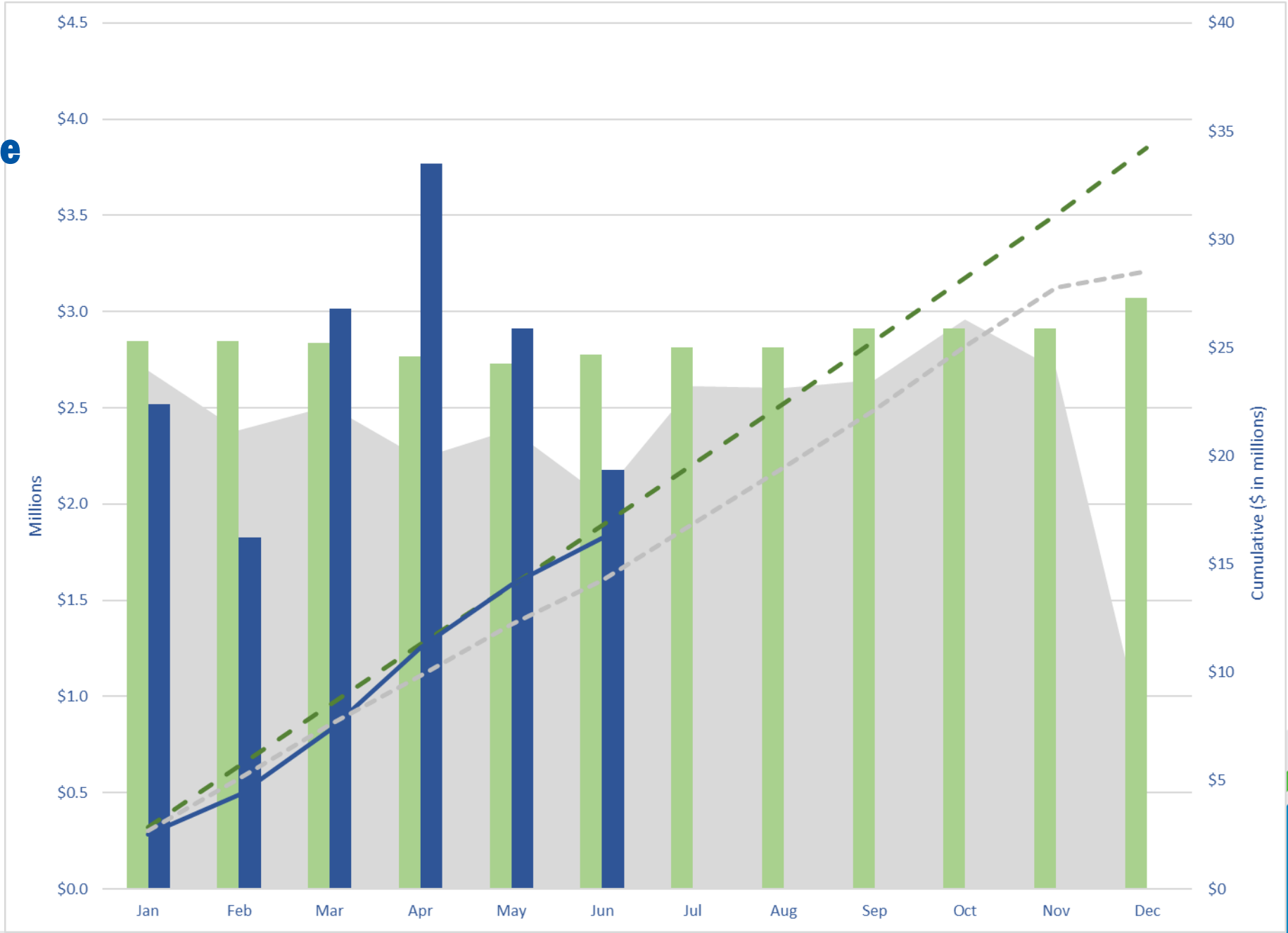


2022 Passenger Revenues

June YTD Variance = (\$0.6 million)

UTAH TR

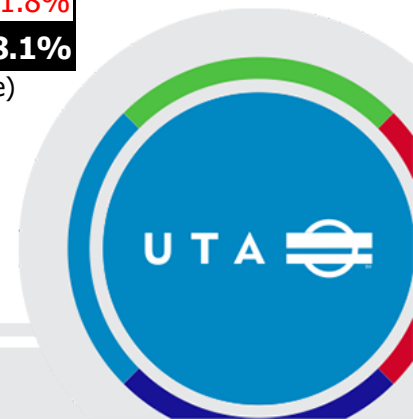
- 2021 Actual
- Mo Budget
- Mo Actuals
- Cum Budget
- Cum Actual
- Cum 2021



June 2022

UTAH TRANSIT AUTHORITY

MONTHLY RESULTS						FISCAL YEAR 2022 Dollars in Millions	YEAR-TO-DATE RESULTS					
Prior Year Actual	Current Year						Prior Year Actual	Current Year				
	Actual	Budget	Variance					Actual	Budget	Variance		
						Revenue						
\$ 42.3	\$ 51.3	\$ 44.5	\$ 6.8	15.4%		Sales Tax <i>(June accrual)</i>	\$ 192.9	234.0	\$ 211.3	\$ 22.7	10.8%	
2.0	2.2	2.8	(0.6)	-21.6%		Fares	14.3	16.2	16.8	(0.6)	-3.5%	
2.4	11.6	19.7	(8.1)	-41.2%		Federal	138.0	172.7	122.0	50.6	41.5%	
0.8	1.6	1.8	(0.3)	-14.5%		Other	4.8	8.0	8.7	(0.7)	-7.7%	
\$ 47.6	\$ 66.6	\$ 68.7	\$ (2.1)	-3.1%		TOTAL REVENUE	\$ 349.9	\$ 430.9	\$ 358.8	\$ 72.1	20.1%	
						Expense						
\$ 13.5	\$ 14.0	\$ 14.3	\$ 0.3	2.3%		Salary/Wages	\$ 76.9	\$ 83.1	\$ 85.6	\$ 2.6	3.0%	
6.6	8.3	7.0	(1.3)	-17.8%		Fringe Benefits	37.6	41.8	42.4	0.6	1.3%	
2.0	3.6	3.6	0.0	0.9%		Services	11.2	14.5	17.1	2.6	15.1%	
1.6	1.0	1.9	0.9	49.5%		Parts	9.8	8.0	11.4	3.4	29.5%	
2.3	4.0	2.4	(1.7)	-70.6%		Fuel	10.7	14.3	13.6	(0.6)	-4.6%	
0.5	0.5	0.5	(0.1)	-15.4%		Utilities	3.1	3.1	3.1	(0.0)	0.0%	
1.1	1.7	1.8	0.1	6.5%		Other	4.9	6.2	9.9	3.7	37.5%	
(0.6)	(0.3)	(0.9)	0.6	-62.5%		Capitalized Cost	(4.3)	(3.3)	(5.4)	2.0	-37.8%	
\$ 27.1	\$ 32.8	\$ 30.6	\$ (2.1)	-7.0%		TOTAL EXPENSE	\$ 149.8	\$ 167.5	\$ 177.6	\$ 10.1	5.7%	
\$ 7.6	\$ 7.6	\$ 6.8	\$ (0.8)	-11.6%		Debt Service	\$ 45.9	\$ 41.8	\$ 41.0	\$ (0.8)	-1.8%	
\$ 12.9	\$ 26.2	\$ 31.3	\$ (5.0)	-16.1%		Contrib. Capital/Reserves	\$ 154.3	\$ 221.6	\$ 140.2	\$ 81.4	58.1%	
Favorable/(Unfavorable)							Favorable/(Unfavorable)					



Questions?



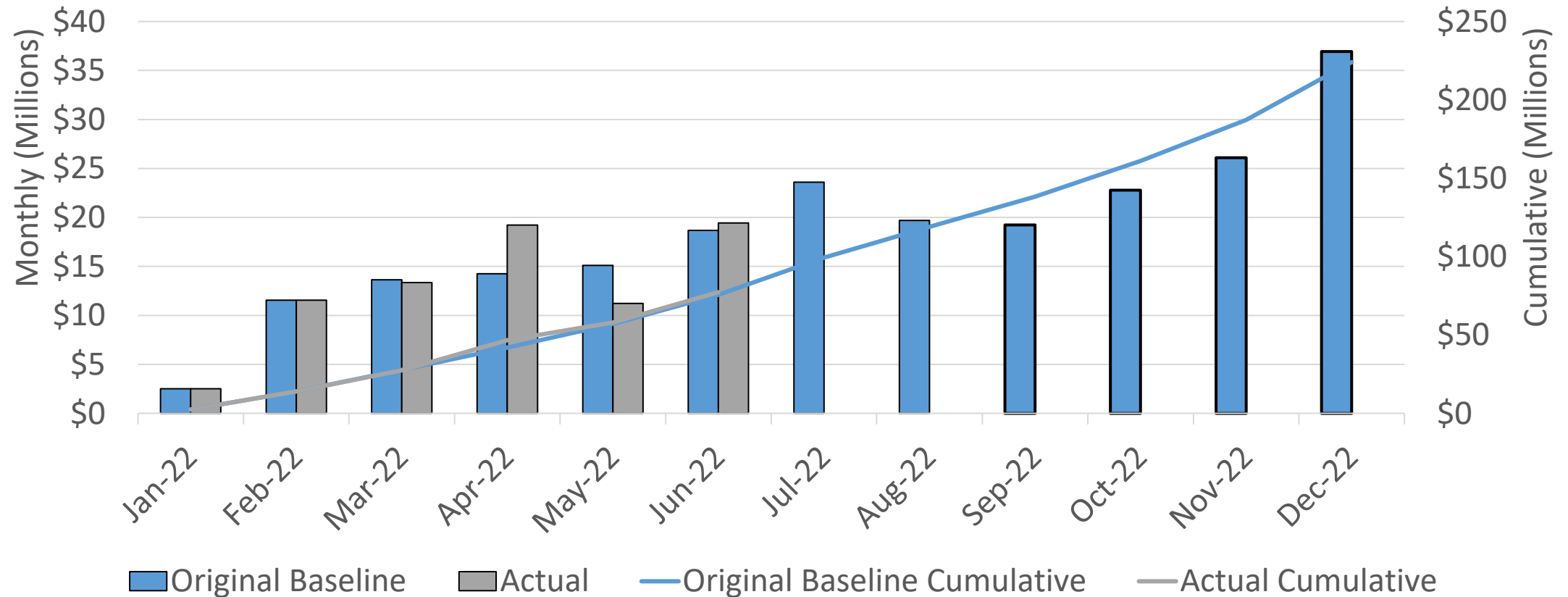
Capital Program Update January – June 2022

August 10, 2022



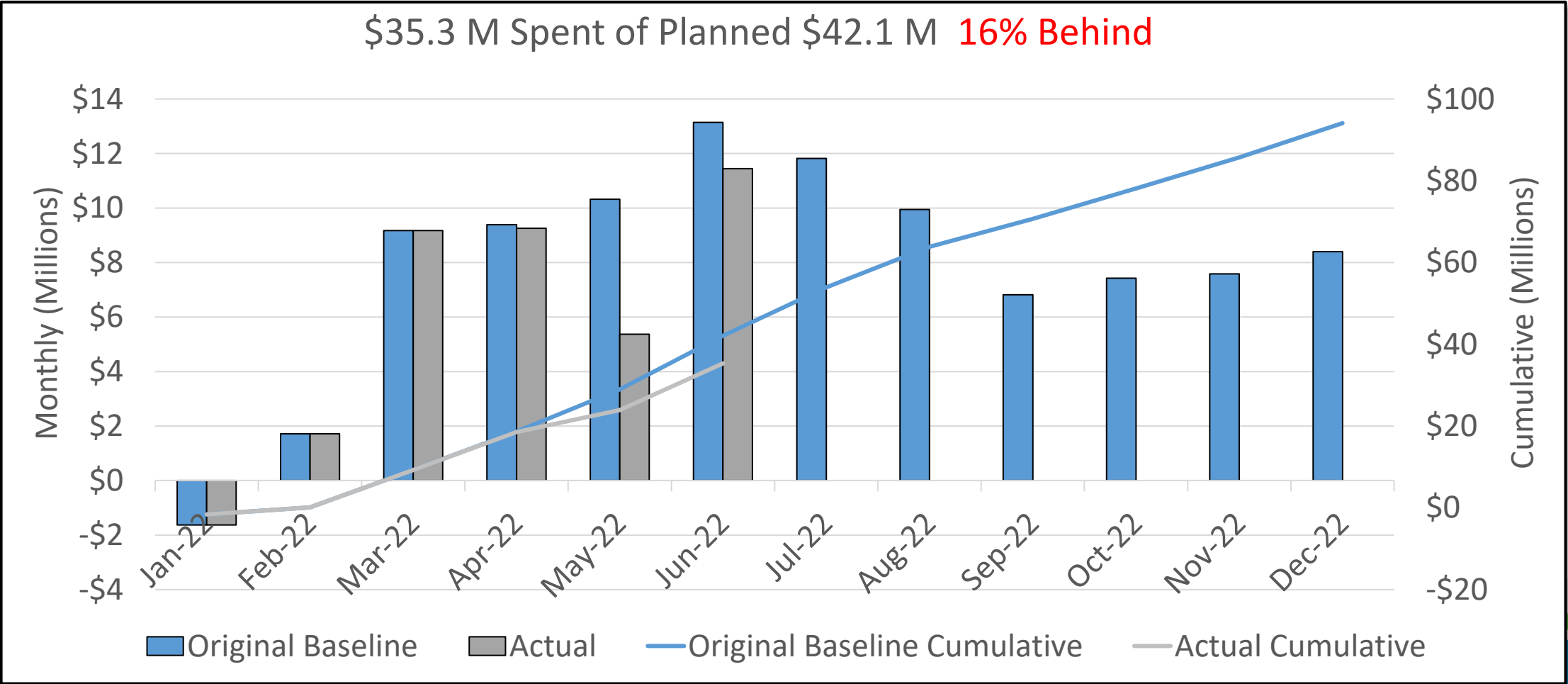
Program Summary

\$76.4 M Spent of Planned \$75.3 M **1% Ahead**



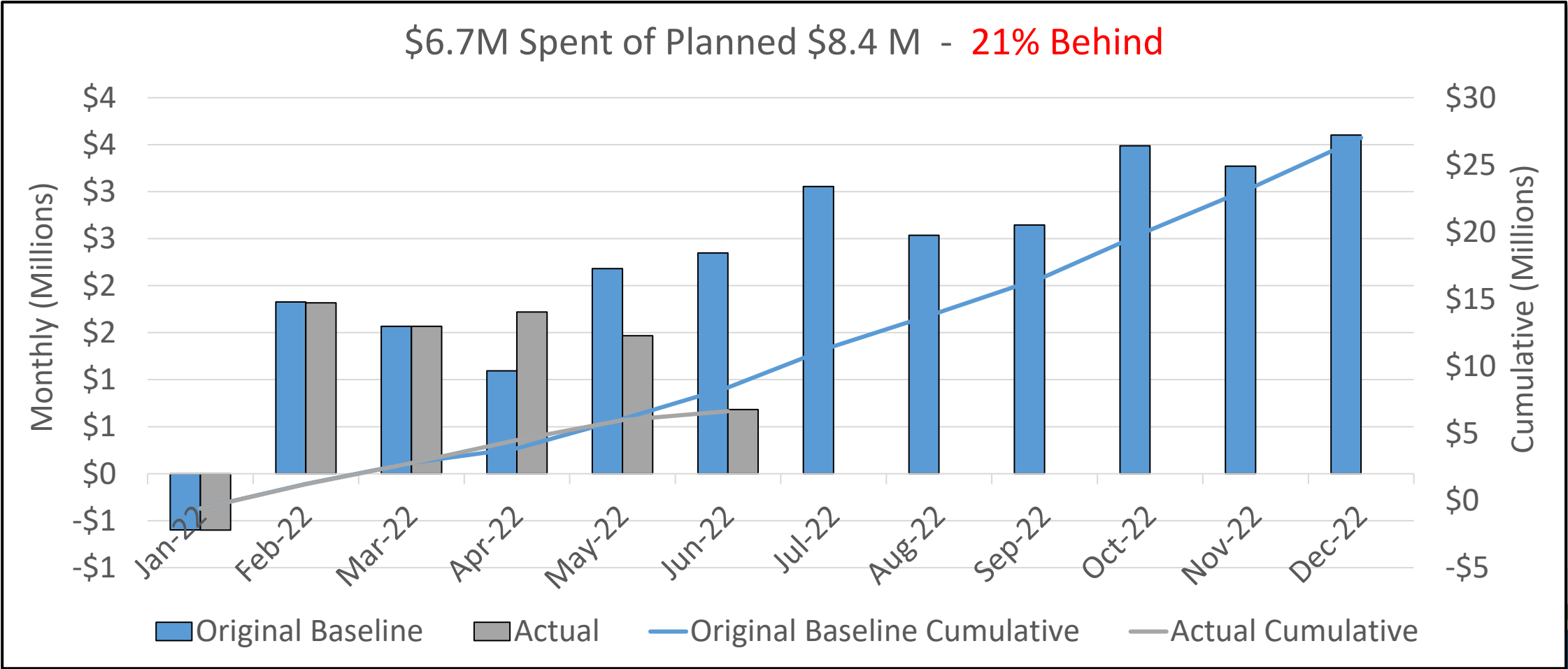
Capital Construction

UTAH TRANSIT AUTHORITY

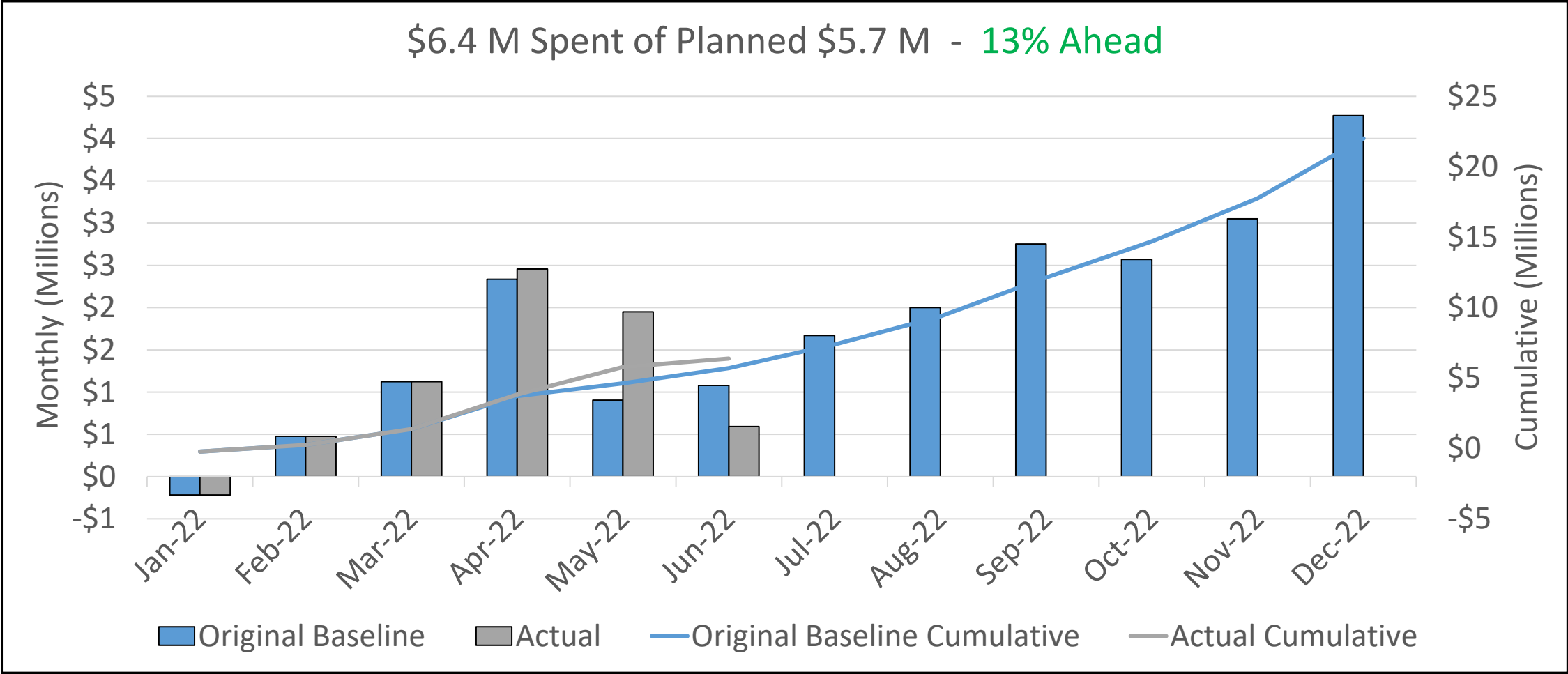


Capital Development

UTAH TRANSIT AUTHORITY

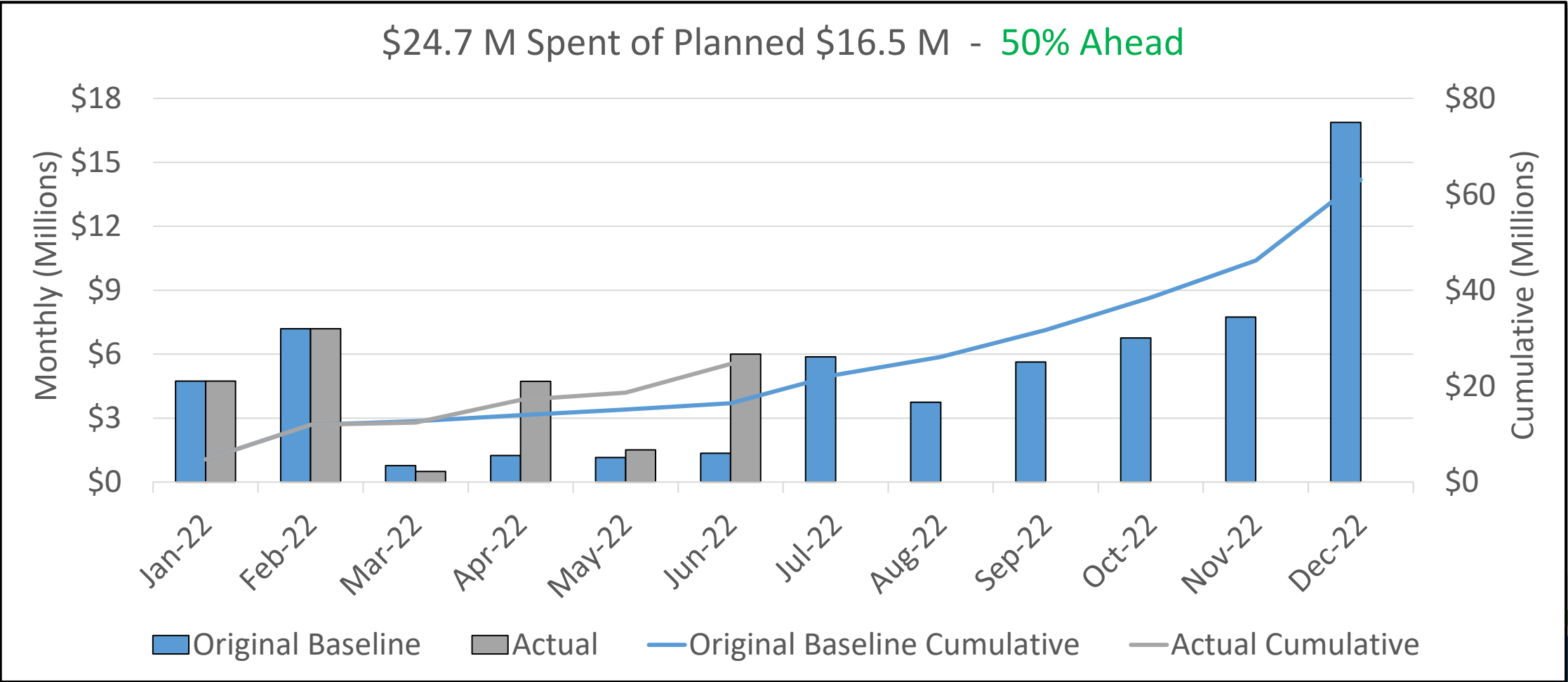


Infrastructure SGR Projects



Revenue/Service Vehicles

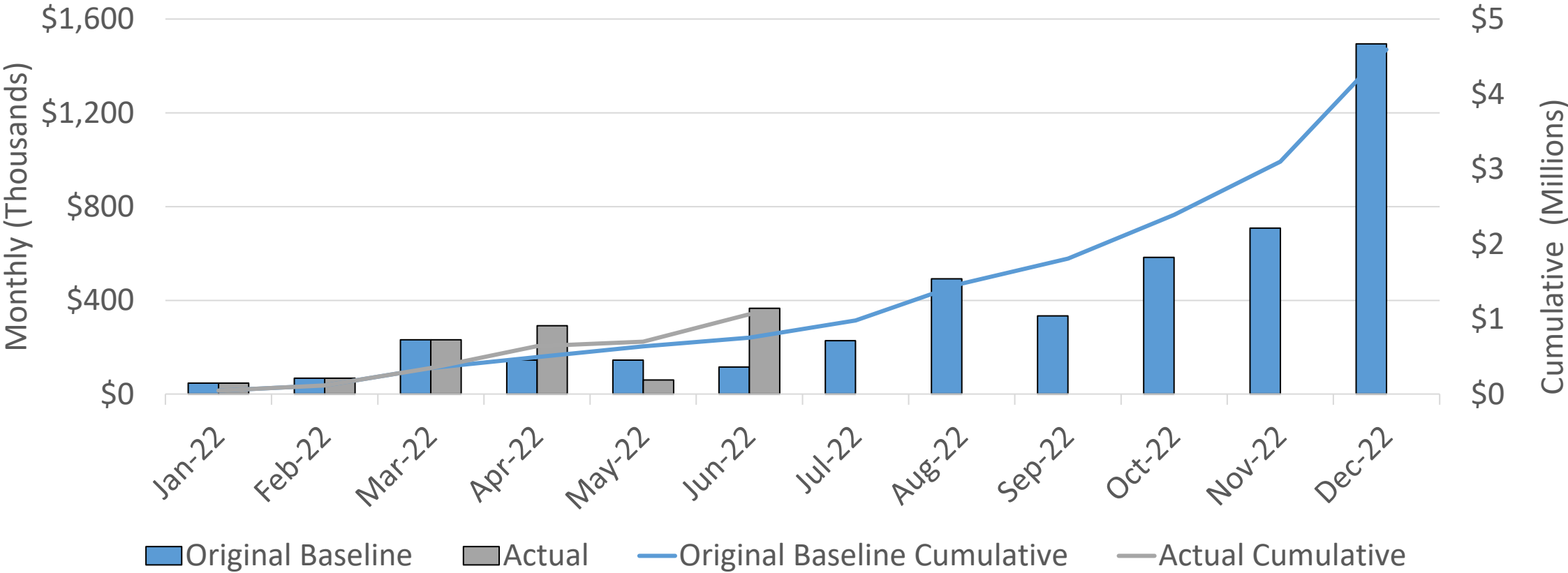
UTAH TRANSIT AUTHORITY



Facilities- SGR

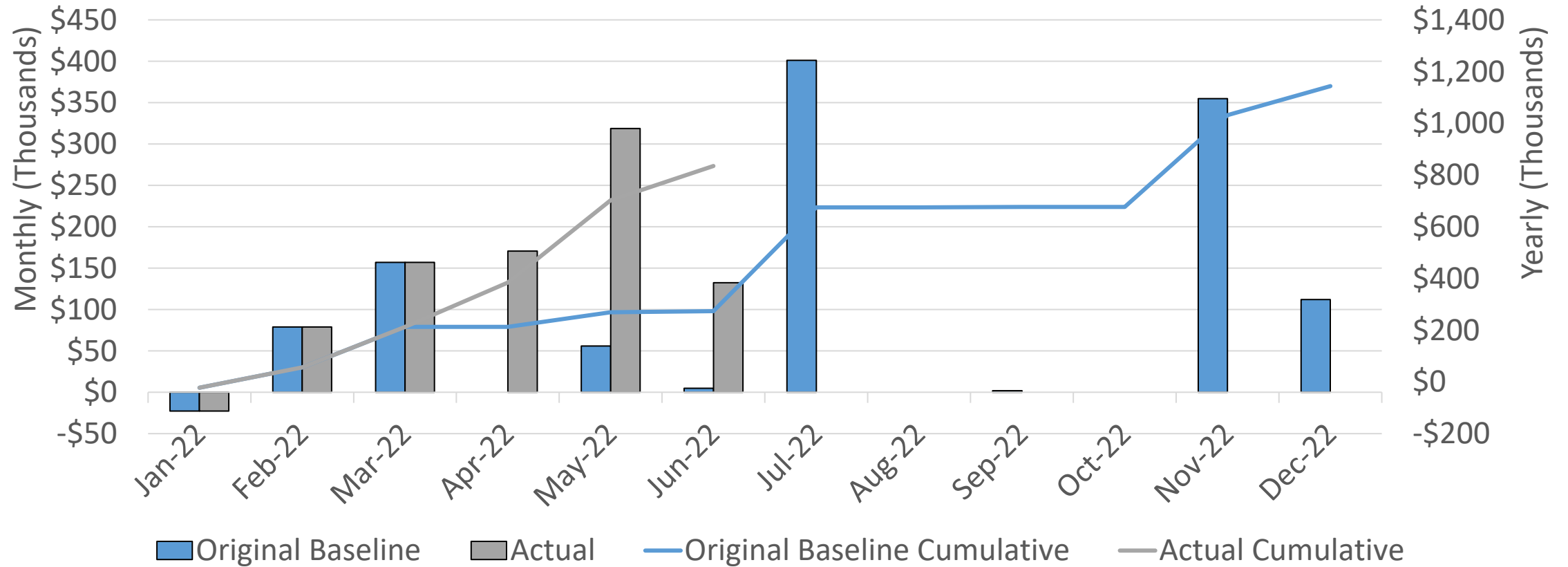
UTAH TRANSIT AUTHORITY

\$1.1M Spent of Planned \$753 K - 41% Ahead



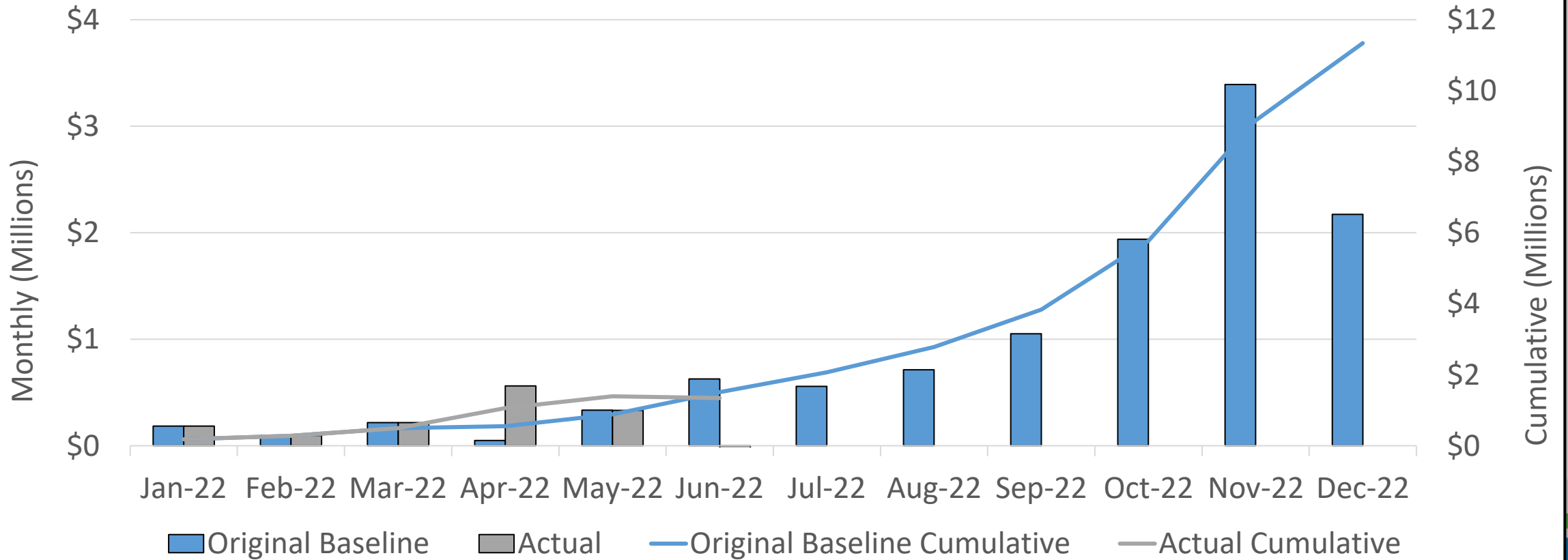
Safety and Security

\$835,000 Spent of Planned \$274,000 - 205% Ahead



Information Technology Projects

\$1.4 Million Spent of Planned \$1.5 Million - **11% Behind**



MSP232- Northern Utah County Double Track

- Project nearing completion
 - PCC cabinet is in
 - Temporary Parking Lot is in
- Opening August 12th



Questions?



Contracts, Disbursements, and Grants



Contract: UTA-Tooele County Flex Route and On-Demand Microtransit Services Operating Agreement (Tooele County Health and Aging Services)

Recommended Action (by acclamation)

Motion to approve the contract with Tooele County
Health and Aging Services, for UTA-Tooele County Flex
Route and On-Demand Microtransit Services, as presented



Change Order: Advertising Services Extension (Lamar Transit Advertising)

Recommended Action (by acclamation)

Motion to approve the Advertising Services Extension with
Lamar Transit Advertising, as presented



Change Order: FrontRunner Forward Environmental Services Master Task Ordering Agreement, Task Order No. 3 - Advanced Conceptual Design, for American Fork, Lehi, Woods Cross, Clearfield Strategic Double Track Projects (Parametrix Consult, Inc.)

Recommended Action (by acclamation)

Motion to approve the FrontRunner Forward Environmental Services Master Task Ordering Agreement, Task Order No. 3 for Advanced Conceptual Design, for American Fork, Lehi, Woods Cross, and Clearfield Strategic Double Track Projects, with Parametrix Consult Inc., as presented



Change Order: Depot District Clean Fuels Technology Center Contract Change Order No. 28 - Phase 5 On Site Underground Power Conduits and Vaults (Big D Construction)

Recommended Action (by acclamation)

Motion to approve the Depot District Clean Fuels Technology Center Contract Change Order No. 28 for Phase 5, On Site Underground Power Conduits and Vaults, with Big D Construction, as presented



Service and Fare Approvals



Fare Agreement: Ski Bus Service Agreement Amendment 1 (Snowbird Ski Resort, LLC)

Recommended Action (by acclamation)

Motion to approve the Ski Bus Service Agreement Amendment 1 with Snowbird Ski Resort, LLC, as presented



Discussion Items

- a. Mixed Bus Fleet Composition Strategy
- b. Adopt A-Stop Program Update



Mixed Bus Fleet Composition Strategy

Board of Trustees

August 10, 2022



Proposed Strategy

- 20-year plan
- 50% alternative fuels by 2042
- 38% Battery Electric, 14% CNG and 48% Clean Diesel
- Plan Complies with FTA's Zero Emission Transition Plan
- Review plan every 3 years
- Collaboration with TED, ET, RGM's and Maintenance Managers



Team Members

▪ Chief Enterprise Strategy Office

- Alisha Garrett (Chief Enterprise Strategy Officer)
- Bill Gerow (Sr Continuous Improvement Consultant)
- Jordan Eves (Business & Quality Analyst Supv)
- Jacob Ekker (Business Strategy Specialist)

▪ Chief Planning & Engagement Office

- Eric Callison (Mgr Service Planning)
- Kerry Doane (Mgr Long Range Strategic Planning)

▪ Chief Service Development Office

- Kyle Stockley (Mgr Veh Overhaul & Bus Support)
- Hal Johnson (Mgr Project Dev-System Planning)
- Ethan Ray (Proj Development Planner II)
- Daniel Locke (Environmental Compliance Admin)
- Jesse Rogers (Vehicle Procurement-Comm Admin)

▪ Chief Financial Office

- William Greene (Chief Financial Officer)

▪ Chief Operating Office

- Celeste Sloan (Senior Office Specialist)
- Andres Colman (Regional General Manager)



Areas of Analysis

PURPOSE

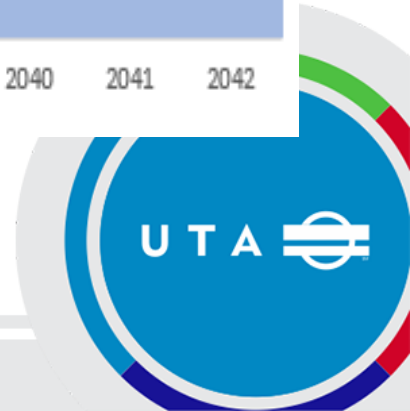
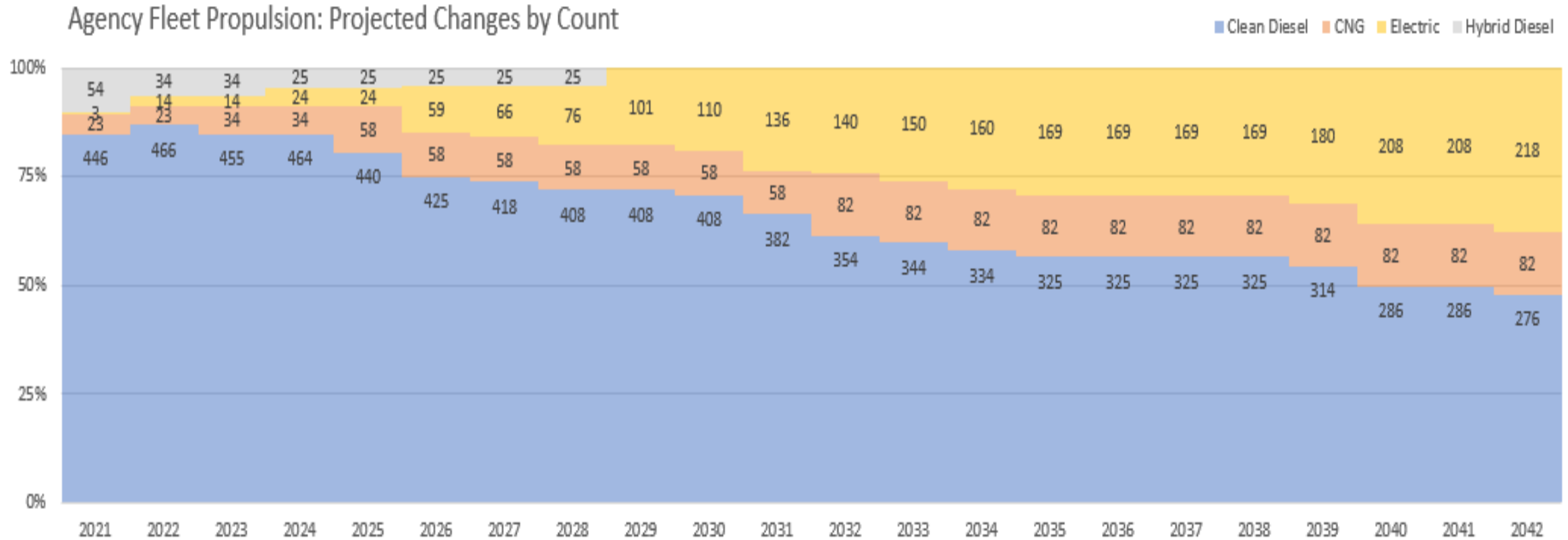
Develop a data driven mixed bus fleet composition strategy that supports UTA's mission. This strategy will align with UTA's service plan, the long-range transportation plan, and serve as a guide for future vehicle procurement and facilities plans

STRATEGY DEVELOPMENT INPUTS

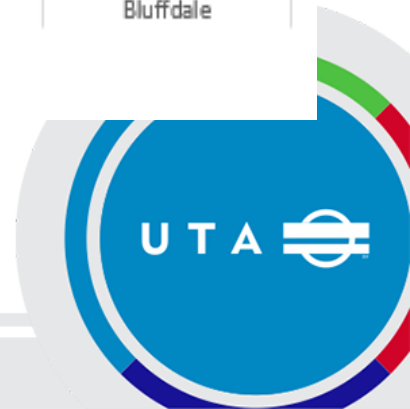
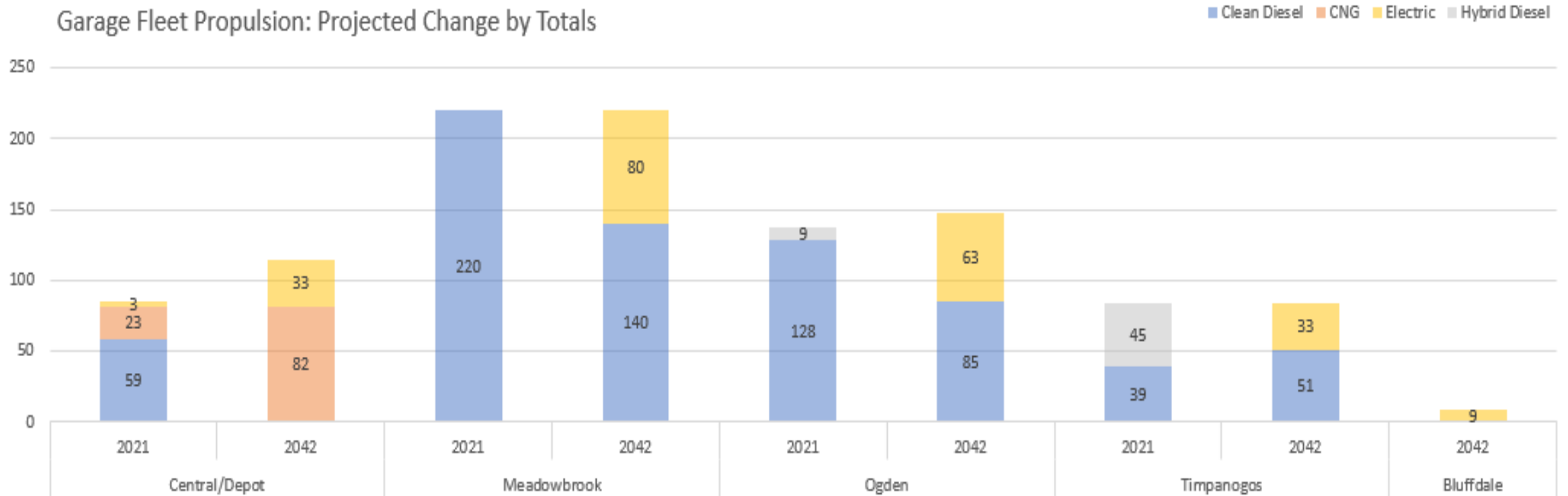
- Current fleet mix & replacement schedule
- Environmental Impact
- Full life cycle vehicle cost
- Vehicle reliability
- Vehicle compatibility with service plan
- Resources per fleet (onboard, support, maintain)
- Current infrastructure & future needs
- Technological innovations
- National trends (other agencies, climate)
- External conditions (social, political)
- Available funding



Projected Change Agency



Projected Change Garage



Training

ZEB Transition Plan for UTA Bus Operations & Maintenance Personnel

Needs Assessment

- Understand Workforce Skills
- Identify knowledge gaps and concerns
- Assessment/Revision of OEM training + Internal training material

Workforce Training & Deployment

- Lessons learned from peer agencies
- Safety Training
- Emergency procedures
- Best Practices (FTA, APTA)

First Responder Training

- Training to ensure proper emergency response procedures

Training Program

Safety

- Emergency procedures for charging and hazards
- Safe handling of high voltage components

Operations

- Operating time and range
- Optimal driving procedures
- Regenerative braking

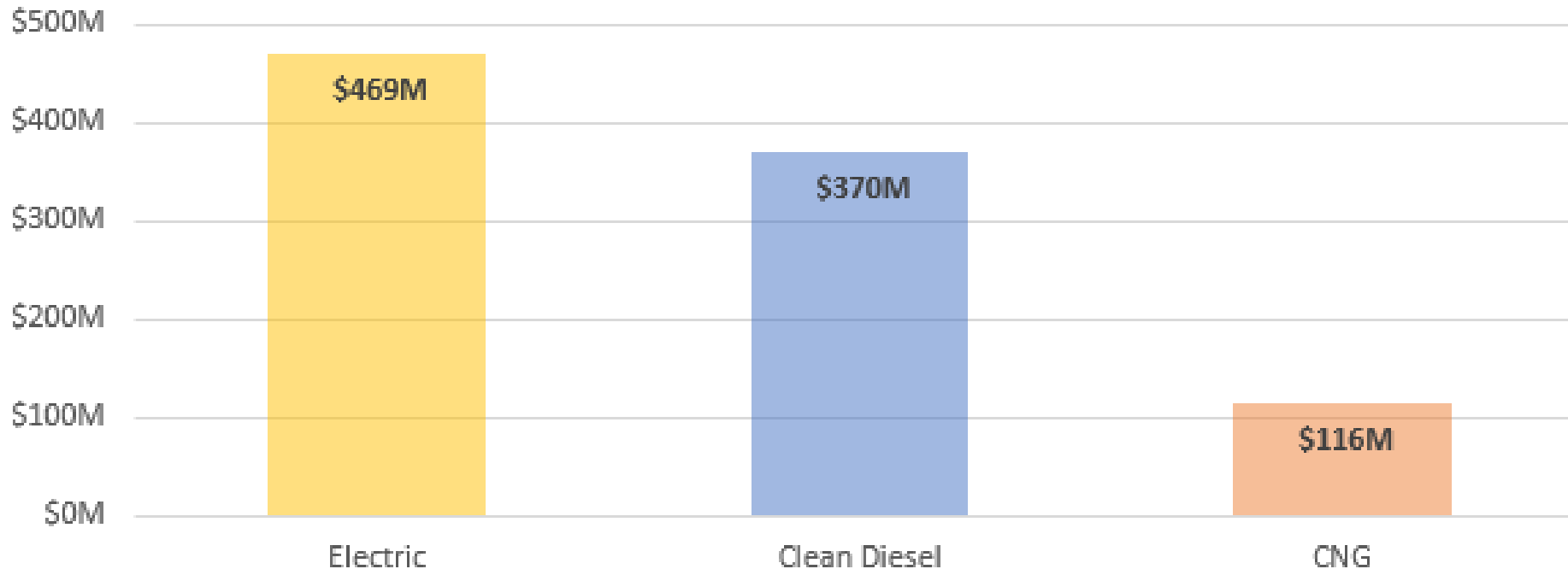
Maintenance

- Servicing and Troubleshooting of new Electrical Systems
- Diagnostic Systems
- Towing & Recovery



Implementation Cost

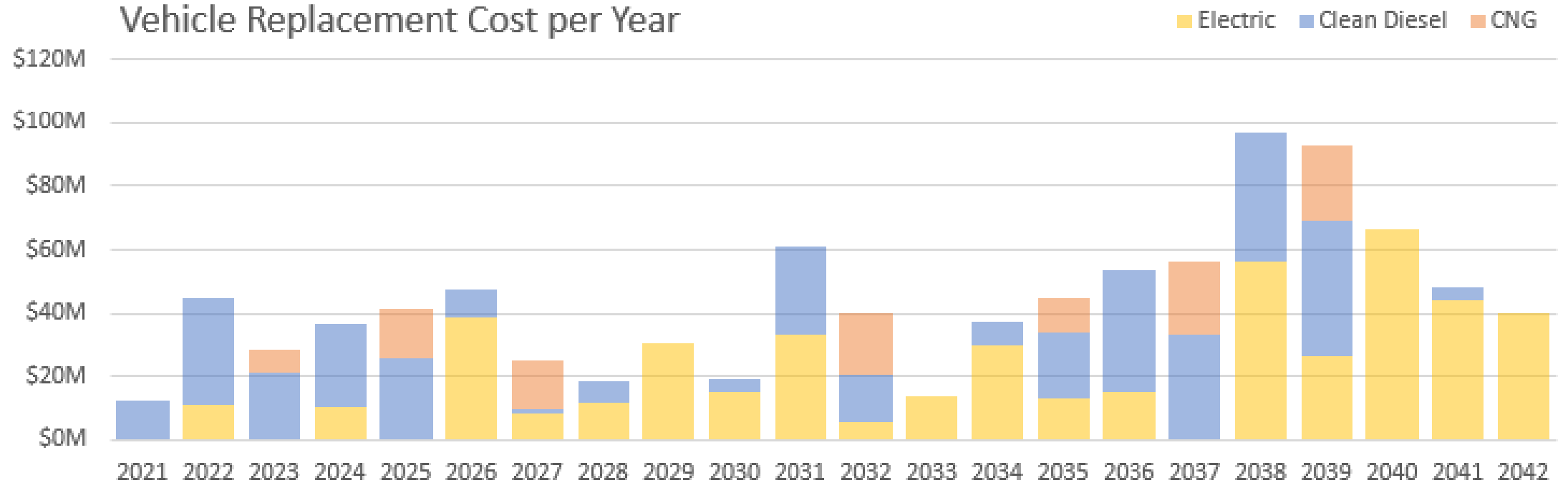
Total Cost by Propulsion Type
Years: 2021 - 2042



- Vehicle costs assume a 3.25% annual inflation increase. While current inflation rates are higher, the costing model does not speculate on uncertain conditions.



Implementation Cost



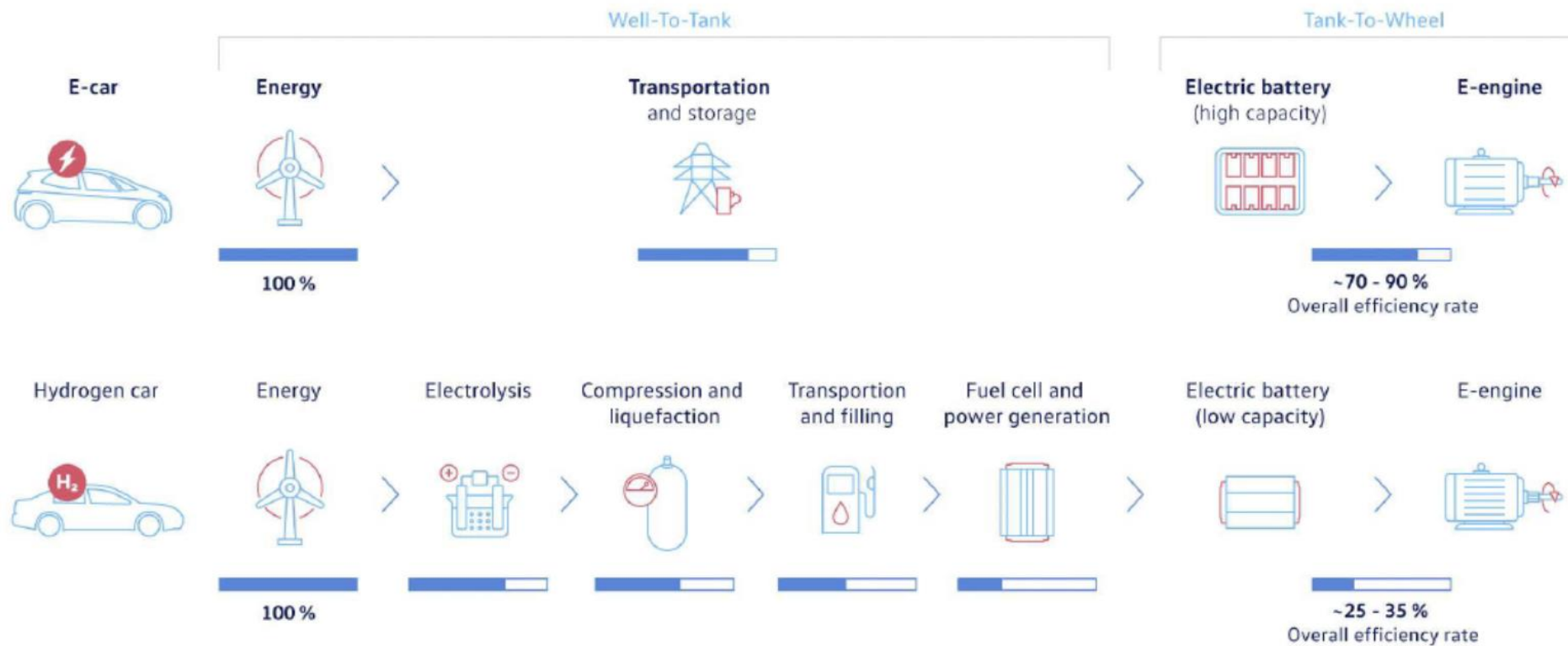
- Vehicle costs assume a 3.25% annual inflation increase. While current inflation rates are higher, the costing model does not speculate on uncertain conditions.



How Hydrogen Drive Works

Hydrogen and electric drive

Efficiency rates in comparison using eco-friendly energy



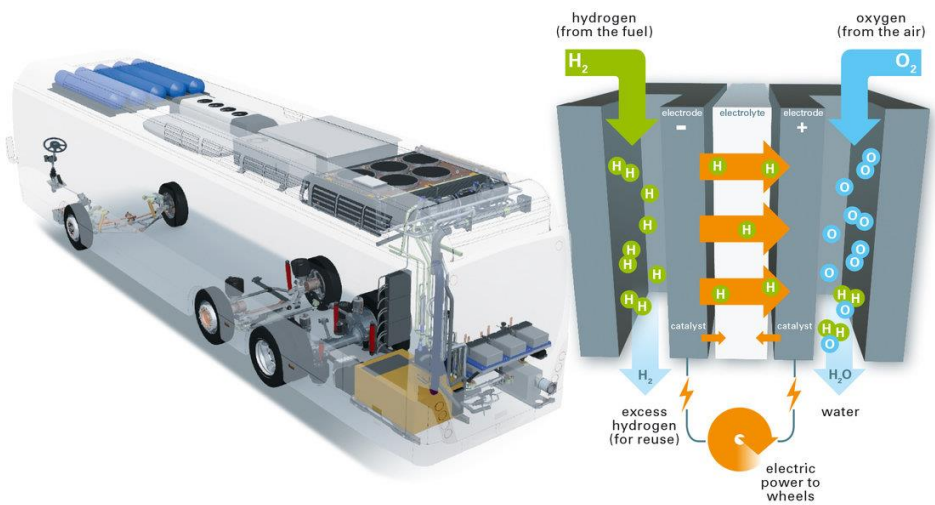
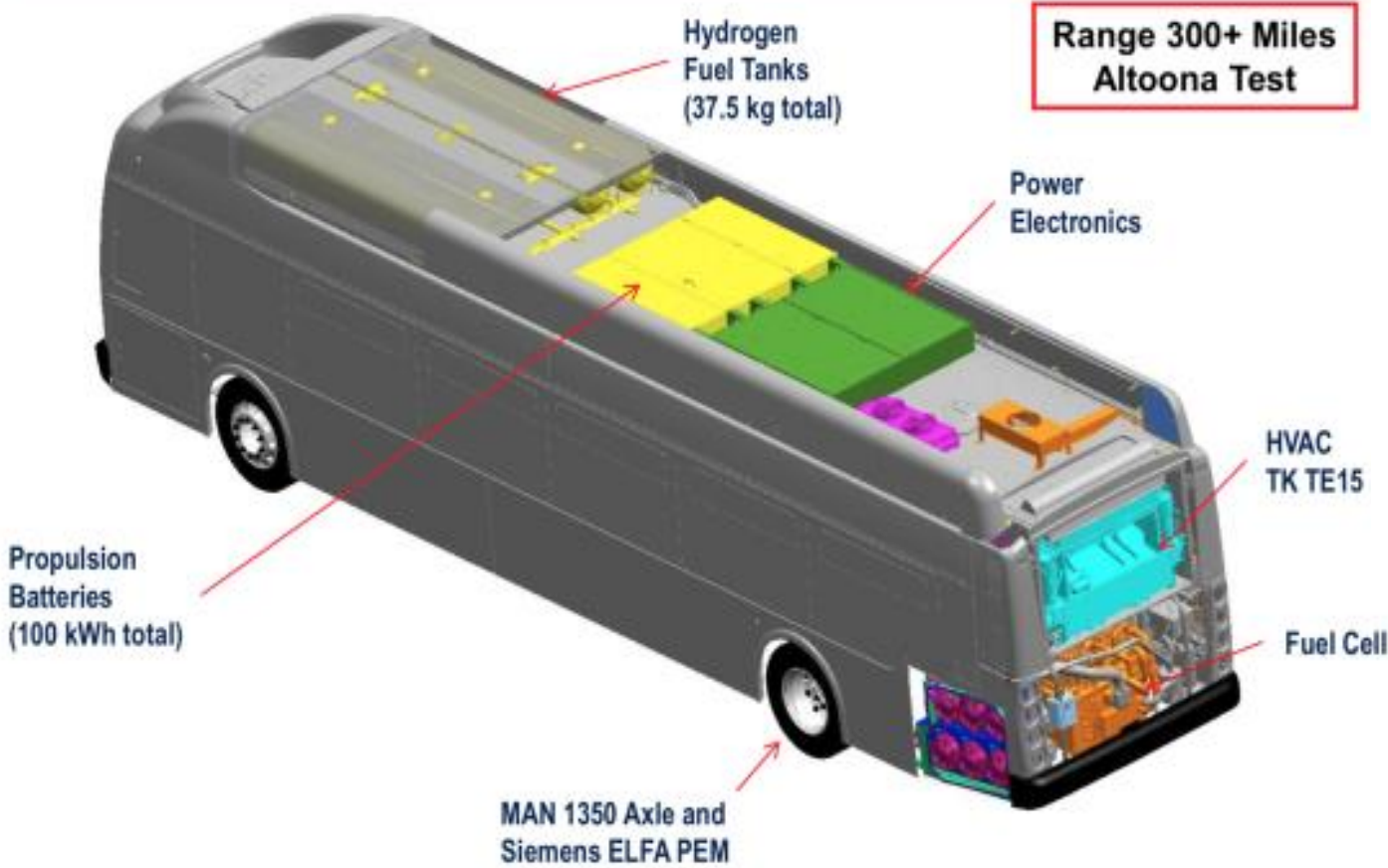
Source Volkswagen



Fuel Cell Bus Architecture



Xcelsior XHE40 Fuel Cell Bus



Bus Comparison: OCTA/UTA

Vehicle (Bus) System	Fuel Cell (OCTA)	CNG (UTA)	Clean Diesel (UTA)	Electric Battery (UTA)
Bus Purchase Cost (\$)	1.3 M	0.57 M	0.55 M	0.93 M
Miles per DGE	9.79	3.88	5.48	16.14
Miles Between Road Calls (Maint.)	7,124	12,769	16,869	19,653



Hydrogen Implementation Barriers

- Greater than 90% of the hydrogen produced today comes from steam methane reformation
 - This process uses high temperature and pressure to breakdown CNG (methane) into hydrogen (H₂) gas and carbon oxides (e.g., CO, CO₂- greenhouse gas)
- The 2nd most used technology to produce H₂ is the electrolysis of water
 - 45 percent of the energy (electricity) to produce H₂ is lost through the generation of heat
 - 55 percent of the remaining energy of H₂ is lost in the conversion to electricity, when combining with oxygen (O₂) to make water (H₂O) and to drive the electric motor
 - Only 25 – 35 percent of the energy in the process is converted to useable electricity for traction power
- The National Renewable Energy Laboratory (NREL) estimated cost for a hydrogen fuel station is \$5.05M (2019)



Hydrogen Next Steps

- Per H.B. 404 UTA will continue to monitor and evaluate business opportunities
- New hydrogen sources and opportunities are coming to the market
- More green hydrogen is becoming available

Green

U.S. Earmarks \$504 Million to Back World's Largest Hydrogen Hub

- Developers for Utah project gain DOE conditional commitment
- Hub to provide over 300 gigawatt-hours of clean energy a year



Infrastructure – Facilities Strategic Plan

- As the Wasatch Front's population continues to grow, transit service will have to expand to meet the demand
 - Additional buses, light rail vehicles, and commuter trains will be required. The maintenance of UTA's fleet and infrastructure is vital to provide safe and efficient service to the public
 - This plan provides a blueprint for UTA's facilities as the region continues to grow
- As UTA expands its electric bus fleet, additional infrastructure will be needed

Utah Transit Authority Facilities Strategic Plan

March 2020 Update

Version 1.0



Infrastructure – CNG Buses

- All CNG buses are planned to operate out of Depot District
- Existing fueling infrastructure will have to be expanded to support more CNG buses (new fuel pump included in the plan)



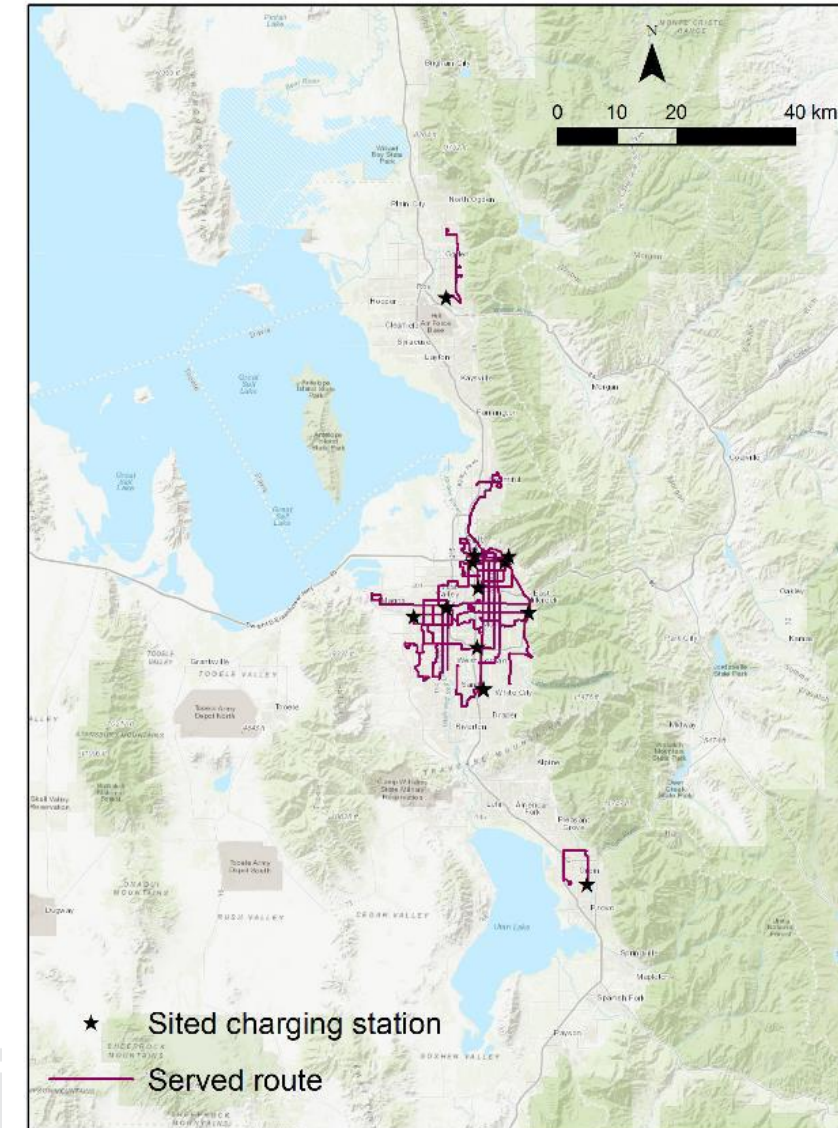
Infrastructure – Electric Buses

- Overhead and Depot Chargers support the battery electric buses



Infrastructure – Electric Buses

- On route chargers are being located based on study completed by the University of Utah
 - Equity was a consideration in the proposed deployment
 - Ideal locations for charging include West Valley Central, Millcreek, North Temple, SL Central, Murray, Ogden, and Orem (among others)



Transportation Electrification Forum

- This event will be an opportunity to discuss various endeavors to electrify transportation and create better air quality
 - It will include groups such as UTA, Rocky Mountain Power, academic researchers, FHWA, UDOT, WFRC, Envision Utah, CALSTART, CTE, government officials, and the public
- UTA will be able to discuss our efforts to electrify our bus fleet, and the benefits of doing so
- Stakeholders will be able to discuss their respective efforts regarding transportation electrification and air quality



Thank You

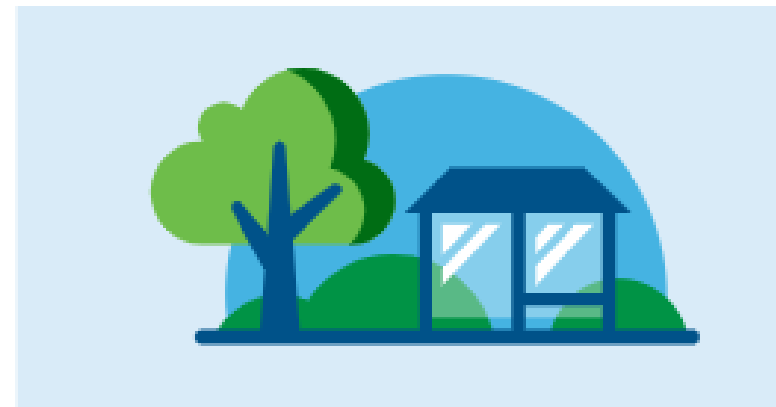


Adopt-A-Stop Program Update



Program Overview

- 1.** Businesses, 501c3 organizations and government organizations can apply to adopt a UTA bus stop.
- 2.** Stop adoption requires basic maintenance and stewardship on the part of the adopter. UTA will provide a plaque with your organization's name.
- 3.** Incorporating artwork for the stop is an optional aspect of the program after 6 months of adoption.
- 4.** Stop should be located within $\frac{1}{2}$ mile from your location.
- 5.** All Adopt-A-Stop agreements require a minimum two-year commitment.



Current Partnerships

- SLC Library (2 branches currently, 1 additional future)
- SpyHop (partial)
- Alta Community Enrichment & Town of Alta (in progress)



Future Growth & Expansion

- Goals:
 - Geographic and organizational diversity
 - Partnership opportunities
 - High need areas, including shelters with frequent damage
- Compiling list of stops w/ shelters in equity areas
- Documenting process
- Open to referrals and requests
 - Developing a strategy for open call in the future



Questions?



Other Business

- a. Next Meeting: Wednesday, August 24, 2022, at 9:00 a.m.



Closed Session

- Strategy Session to Discuss Collective Bargaining



Recommended Action

(by acclamation)

Motion for a closed session for a strategy session to discuss collective bargaining



Closed Session



Open Session



Adjourn

