

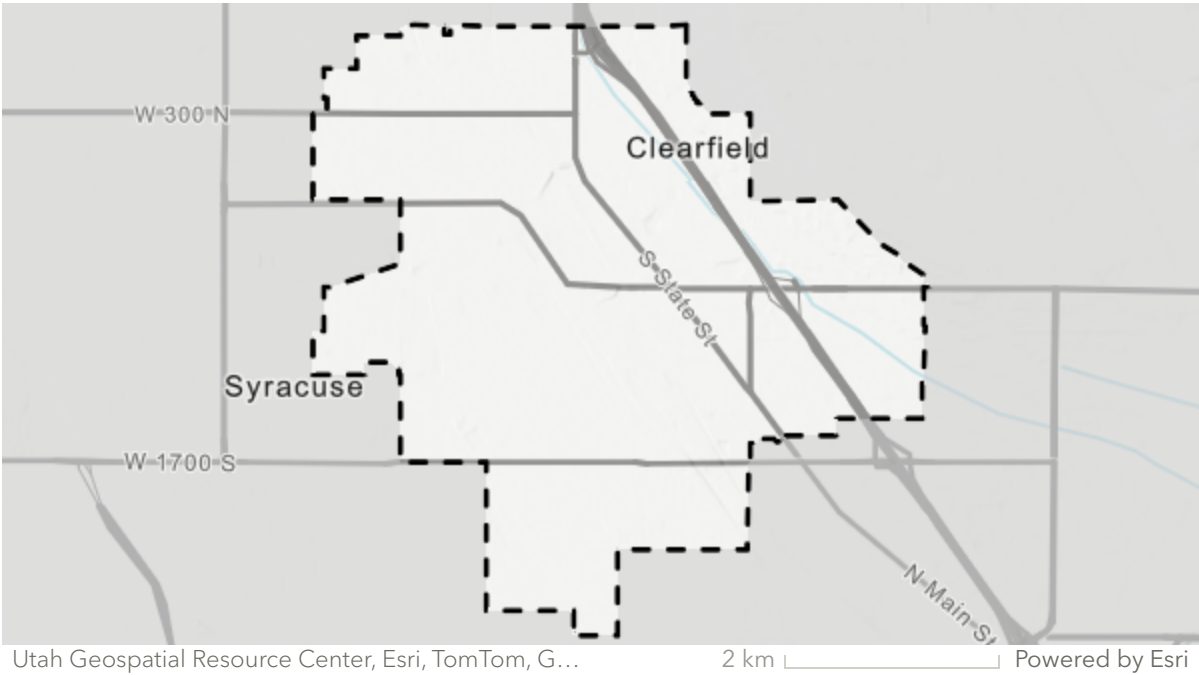


Clearfield Transportation Master Plan

Clearfield City
December 31, 2024

Introduction

The Clearfield Transportation Master Plan (TMP) guides transportation infrastructure investments for the future. An important function of this planning is to forecast and address deficiencies in the roadway network that will likely result from land development and the resulting population growth within Clearfield City. Another key component is exploring ways to improve quality of life and alleviate demand on the roadway network by providing robust access to public transportation and a well-connected, attractive network of active transportation facilities.



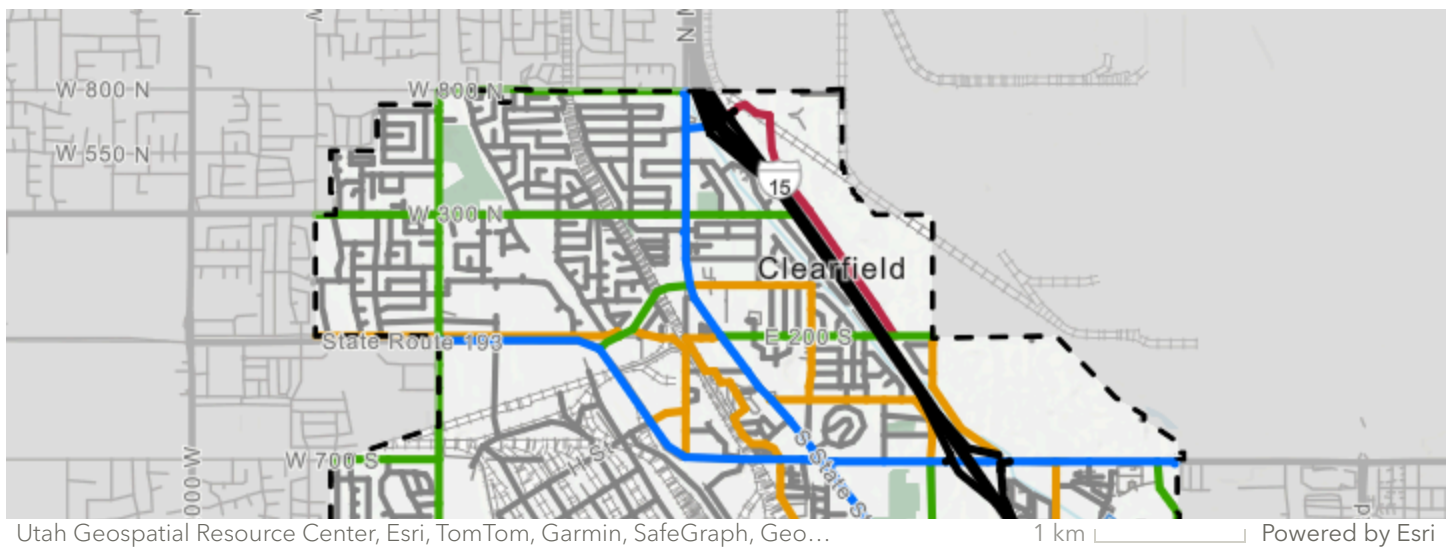
Demographics

Clearfield has experienced dramatic population growth over the past 40 years. The most recent 2020 census shows that Clearfield has a population of 31,909 (an increase of approximately 1,787 since the previous 2010 survey). **The population is expected to reach 46,092 by the year 2050, a 34% increase.**

Table 1: Historic and Projected Population Growth		
Year	Population	% Change
1990	21,435	--
2000	25,974	21.18% (2.12% per year)
2010	30,122	15.97% (1.60% per year)
2020	31,909	5.93% (0.59% per year)
2023	34,470	8.03% (2.68% per year)
2030	37,858	9.83% (1.40% per year)
2040	42,402	12.00% (1.20% per year)
2050	46,092	8.70% (0.87% per year)



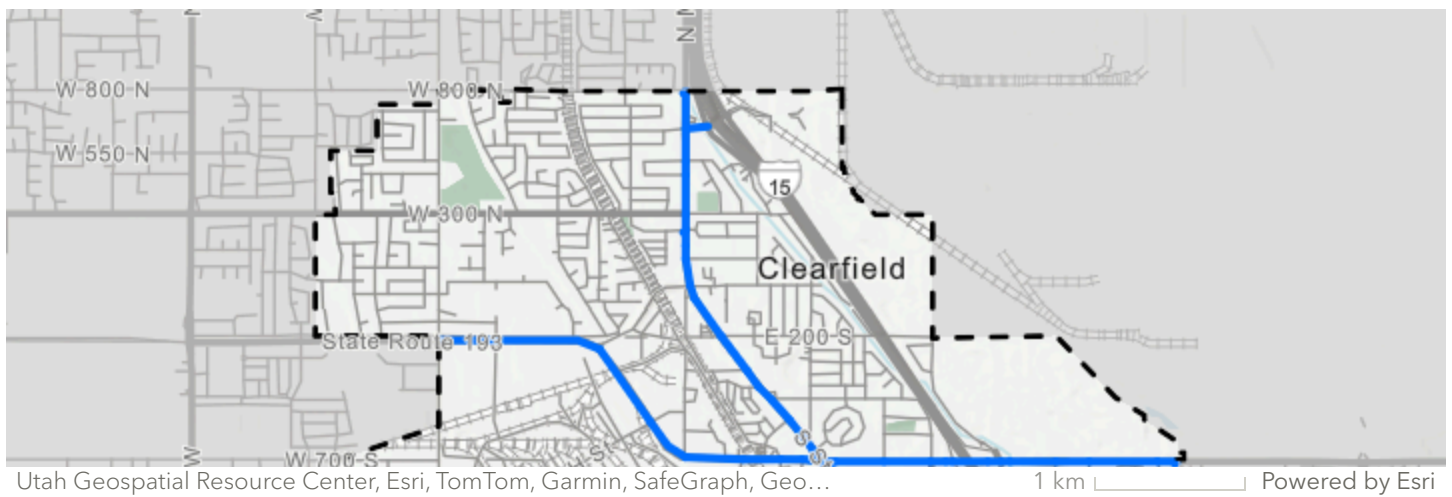
Functional Classifications



Future Functional Classification

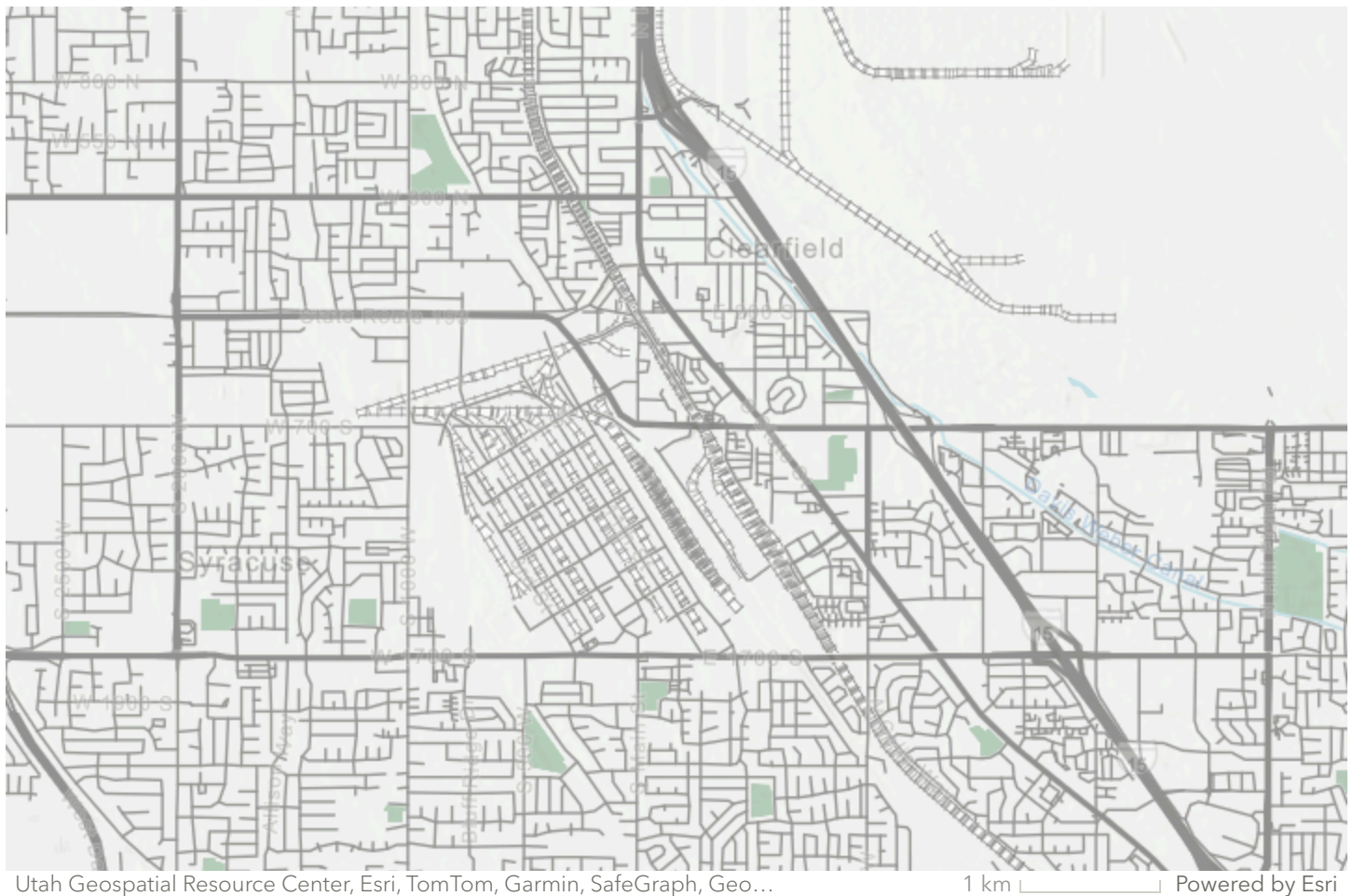
The roadway system has a hierarchy to it based on roadway attributes such as speed and access.





Arterial

All arterial roads in Clearfield are managed by UDOT and the cross-sections are up to UDOT's discretion.

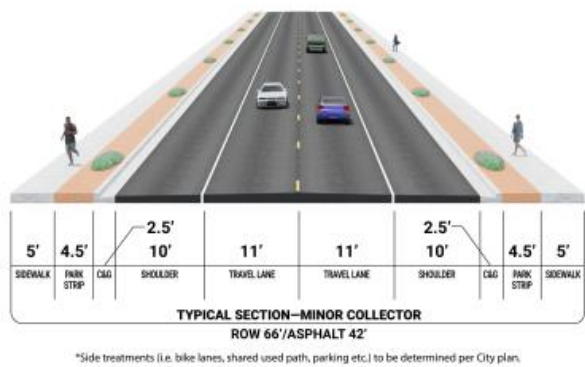


Major Collector



Utah Geospatial Resource Center, Esri, TomTom, Garmin, SafeGraph, Geo... 1 km Powered by Esri

Minor Collector



Esri, NASA, NGA, USGS, FEMA | UGRC

1 km Powered by Esri

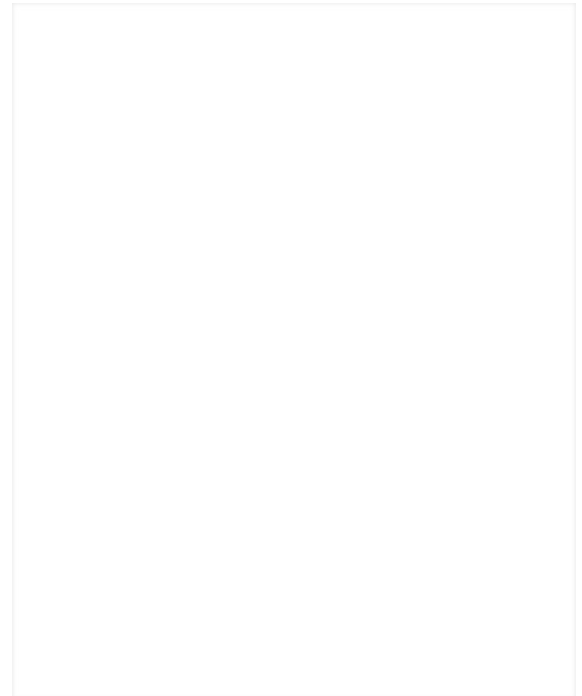
MIDA

The Military Installation Development Authority manages all development on federally-owned land surrounding Hill Air Force Base. As Arsenal Road is planned to connect to 200 South and be moved outside of the fence, it was included in the travel demand model; however, the road is not under the management of Clearfield City or UDOT, so it was given its own classification as a MIDA-managed road.



Travel Demand Model

Roadway traffic congestion is reported using Level of Service (LOS). Roadway segments are assigned LOS categories based on the calculated density of vehicle flow on a roadway, or the volume-to-capacity (VC) ratio, where volumes on each roadway are forecasted by a travel demand model and capacities are determined based on the number of lanes. LOS is reported on a scale from A to F, with A representing free-flow conditions and F representing maximum traffic congestion.

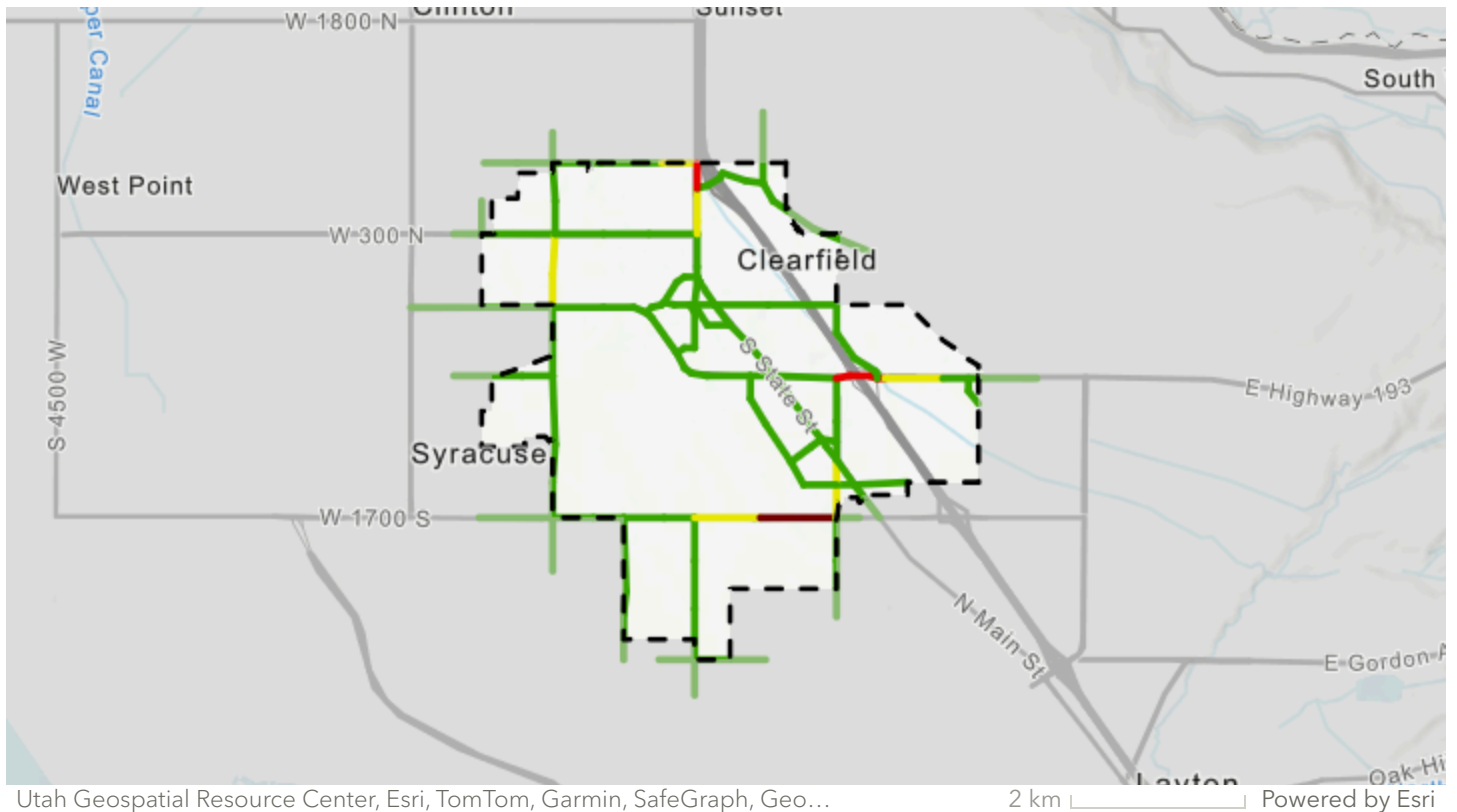


For the purposes of this study, a minimum overall roadway performance of LOS D is considered acceptable. If LOS E or F for a roadway is calculated, explanations and/or mitigation measures are presented.

Details regarding modeling specifics such as roadway network, demographics, and scenario testing are described in the full Transportation Master Plan report.

Existing (2024) Conditions

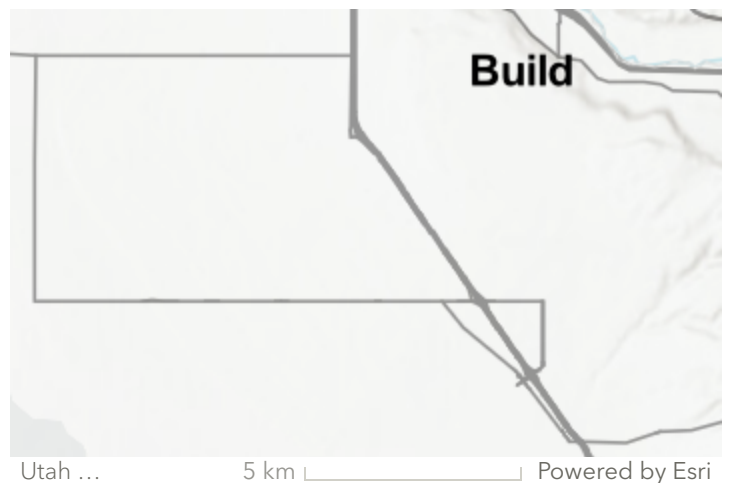
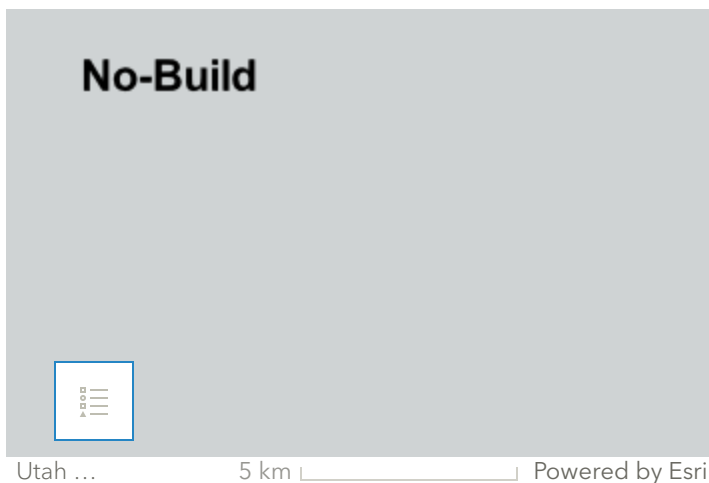
It was found that in the base year (2024) all roadways were operating at acceptable levels of service with the exception of sections of Antelope Drive, SR-193, and Main Street.



2024 Level of Service

2034 Level of Service

It was found that in the 2034 No-Build condition sections of 1000 West, SR-193, Antelope Drive, and Main Street would be operating at unacceptable levels of service. The proposed Phase 1 (2024-2033) roadway and intersection projects are expected to address concerns at all of these locations except for those on SR-193; this corridor will be addressed by UDOT in Phase 2 with a widening project.



2034 Level of Service

2050 Level of Service

It was found that in the 2050 No-Build condition sections of 1000 West, 300 North, SR-193, Antelope Drive, Main Street, and the Frontage Road between SR-193 and 200 South would be operating at unacceptable levels of service. The proposed roadway and intersection projects through 2050 are expected to address at all of these locations except for portions of SR-193 and Antelope Drive. These sections are constrained from further widening by right-of-way availability, practicality, and the need for sensitivity to the adjacent land uses.



2050 Level of Service

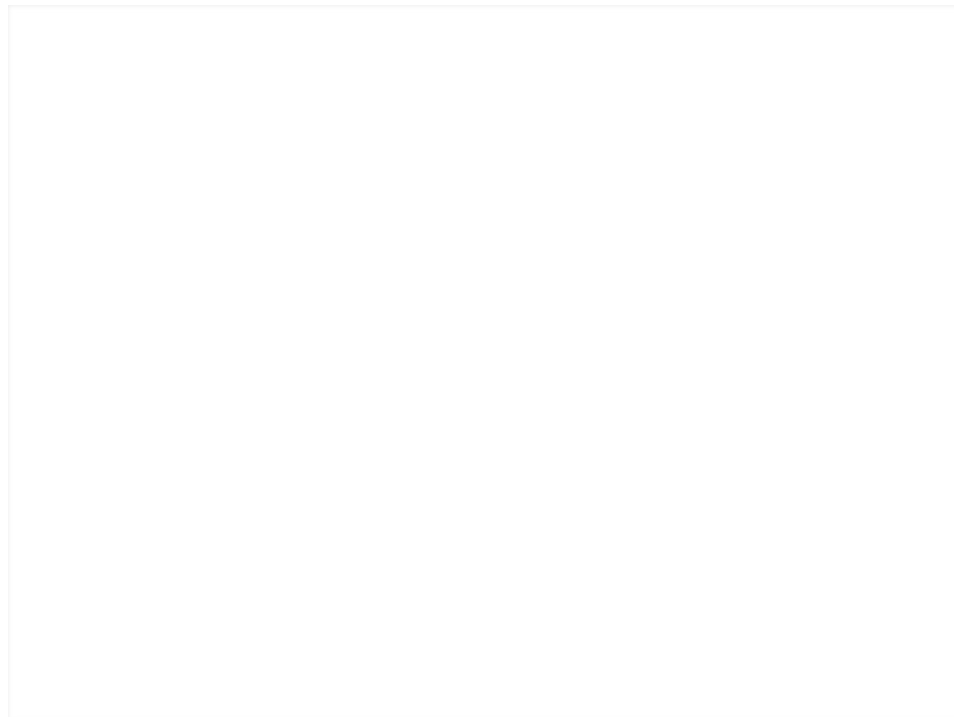




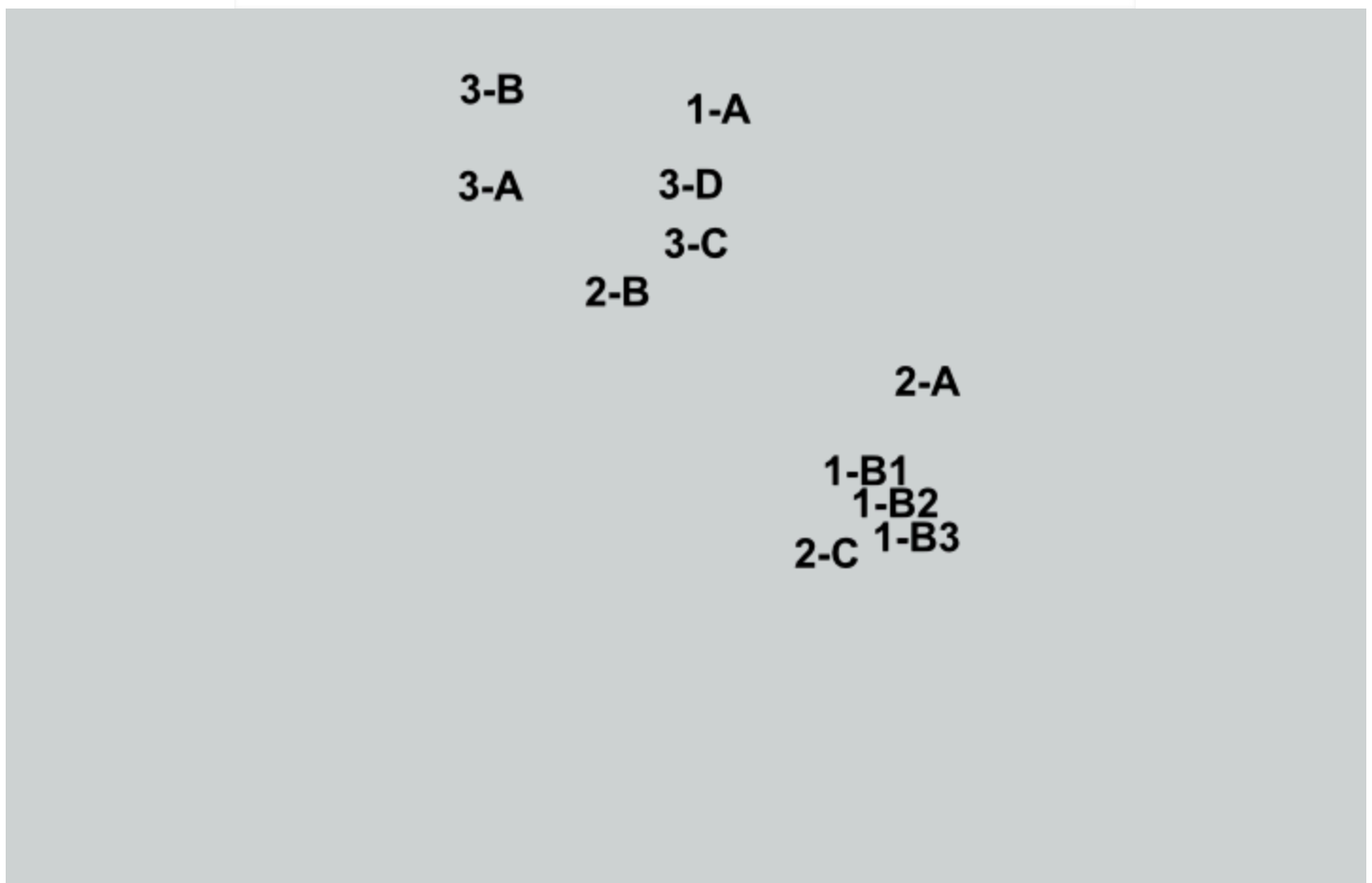
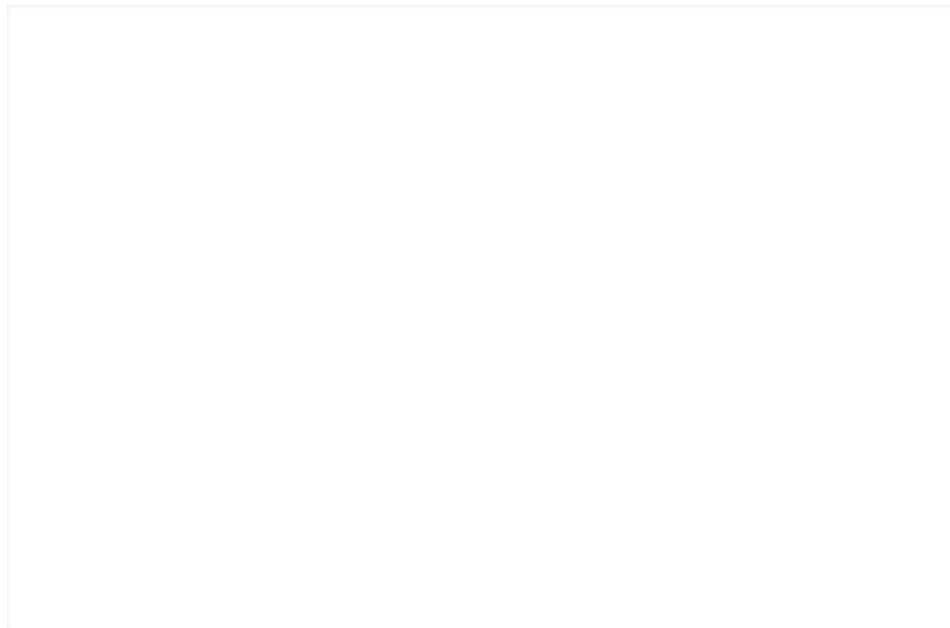
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Roadway Projects



The following roadway projects are recommended for implementation between 2024 and 2050. These were developed as part of the Clearfield transportation master planning process to increase roadway capacity and accommodate future development. The project number listed is for identification only and is no indication of project prioritization.

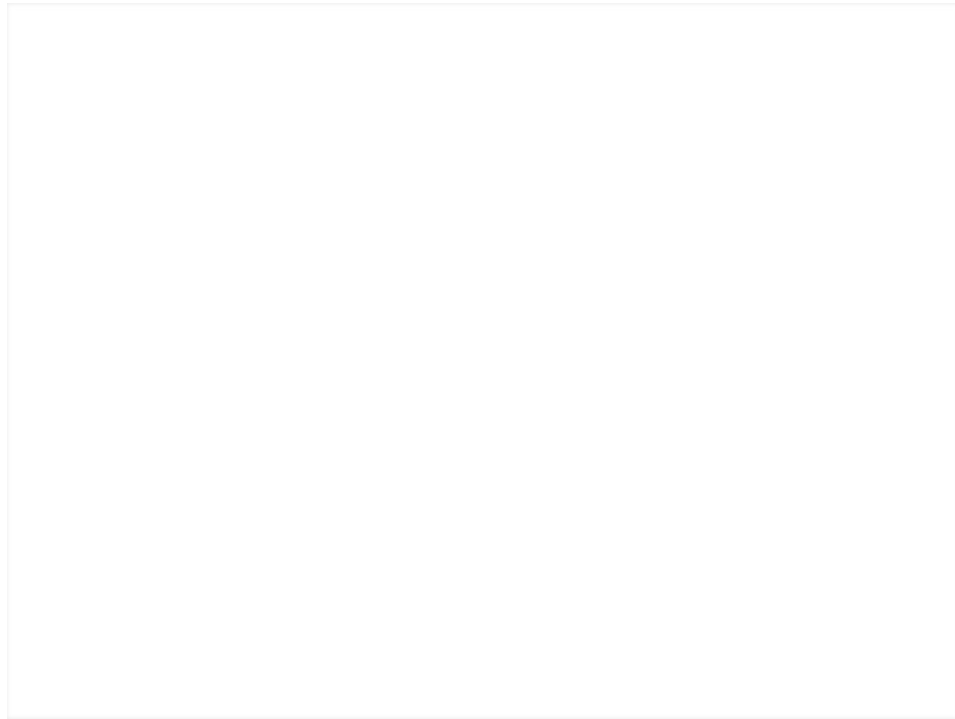


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Intersection Projects



The following intersection projects are recommended for implementation between 2024 and 2050. These were developed as part of the Clearfield transportation master planning process to increase roadway capacity and accommodate future development. The project number listed is for identification only and is no indication of project prioritization.

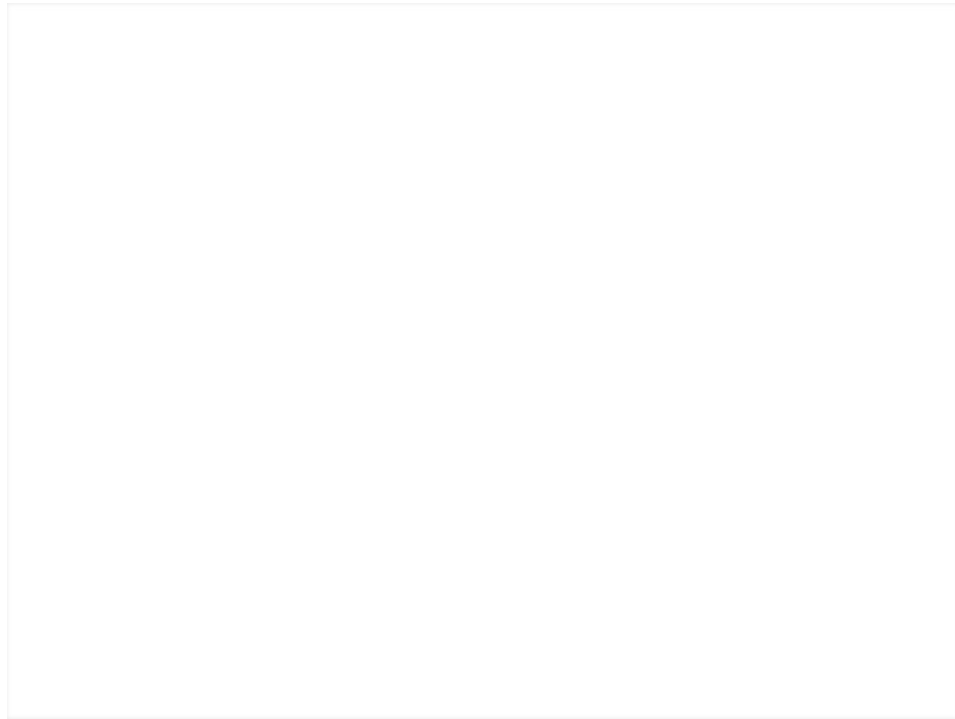




Public Transportation

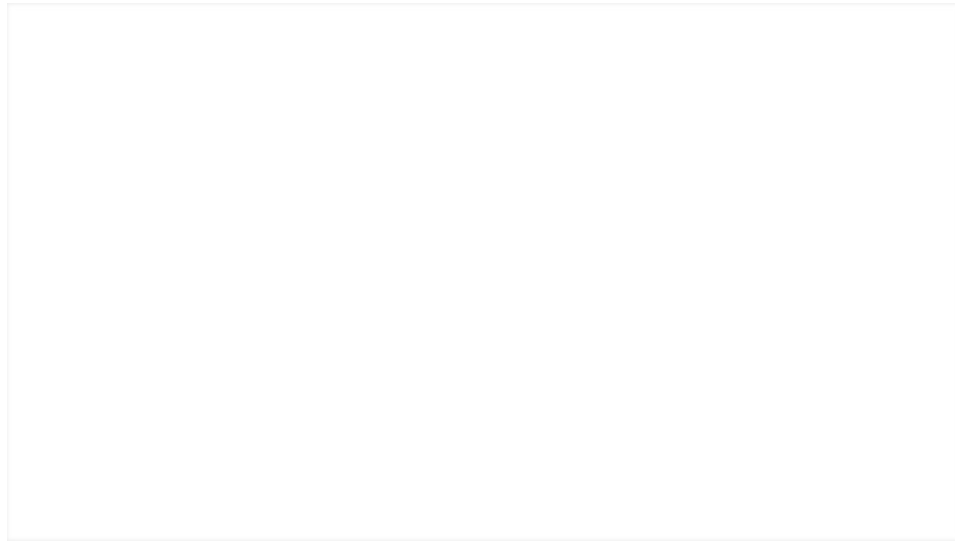
Existing Transit Service

Public transportation in Layton City is served by the Utah Transit Authority (UTA). Public transit typically includes buses, light rail, and shuttle routes.



Future Transit Service

See [UTA's Five Year Service Plan](#) for the most up-to-date transit service improvements in the City.

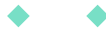
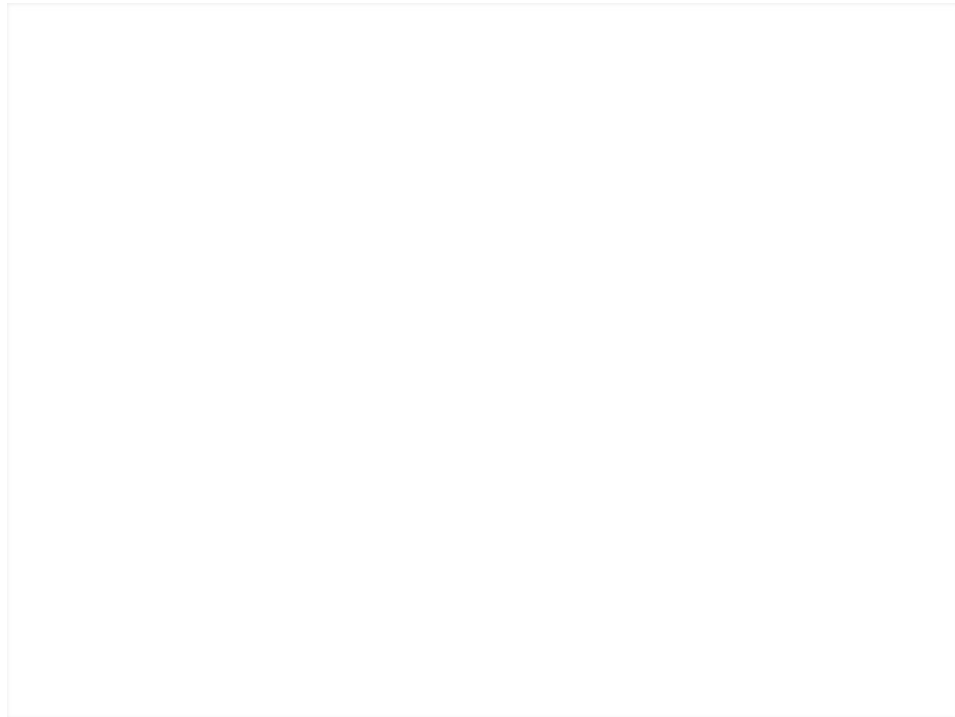


Active Transportation

Active transportation includes any form of non-motorized transportation such as walking or biking.

As part of this TMP's development, an inventory was gathered of existing active transportation network in Clearfield City and a list of proposed active transportation projects was compiled. The existing and future active transportation network is summarized in the figure to the right.

Notable proposals include the 3-Gates Trail, which will connect the Clearfield Canal Trail to the wider region, a shared-use path along Antelope Drive (under construction as of Fall 2024), as well as bike lanes, buffered bike lanes, and both grade-separated and at-grade crossings for roadways and railways.

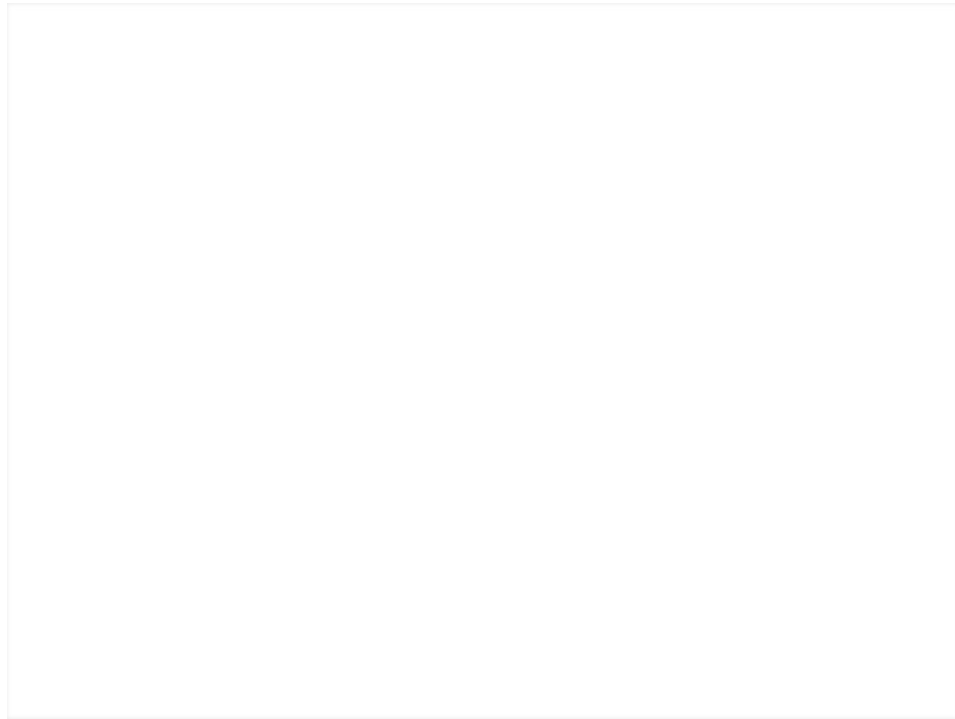




Safety Analysis

A safety analysis was performed for all roadways within Clearfield City. The most recent five full years of available crash data (January 1, 2019 to December 31, 2023) from UDOT Traffic & Safety were used to perform the analysis. Historic crash patterns were analyzed within Clearfield City to develop project and policy recommendations, which are explained in further detail in the Clearfield TMP report.

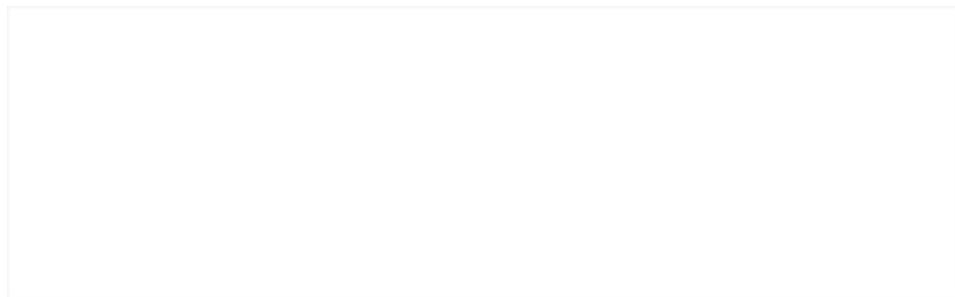




Comparisons between crash rates in the City and the County average are listed in the table below, and are calculated as a portion of all crashes within city limits that did not occur on I-15.

Overall, crash trends in Clearfield City were consistent with other cities in Davis County. About one percent more crashes in Clearfield involved a pedestrian or bicyclist than for the county on average.

The proportion of crashes that were intersection related was over two percent higher in Clearfield than it was for the county as a whole. Crashes in Clearfield represent 12% of all crashes in the County.



It is recommended that Clearfield City implement the following safety improvements:

- **Prohibit right turn on red (RTOR) at the following intersections:**
 - Southbound right turns at the 1000 East / Antelope Drive (SR-108) intersection
 - 400 East / Antelope Drive (SR-108)
- **Add bulb-outs at the following intersections:**
 - 1000 West / 300 North
 - Main Street / 300 North
- **Improved lighting for northbound vehicles at the 1000 West / SR-193 intersection**
- **Request a pedestrian study from UDOT near Lakeside Square on SR-126**



Bridge Inventory

A map inventory was developed of existing bridges located within Clearfield City Boundaries. This inventory includes documentation of the bridge age, existing conditions, and an indication of upgrades and improvements to serve all travel modes.

Bridges owned by Clearfield City are listed below, together with anticipated timelines for replacement:

- 800 North: 2035-2050
- Bruce Street: 2090-2095
- 300 North - Railroad Tracks: 2025-2040
- 300 North - Weber Davis Canal: 2090-2095
- Center Street: 2070-2075

The following bridges are owned by UDOT:

- 700 South (SR-193)
- Antelope Drive (SR-108)

End of Presentation

