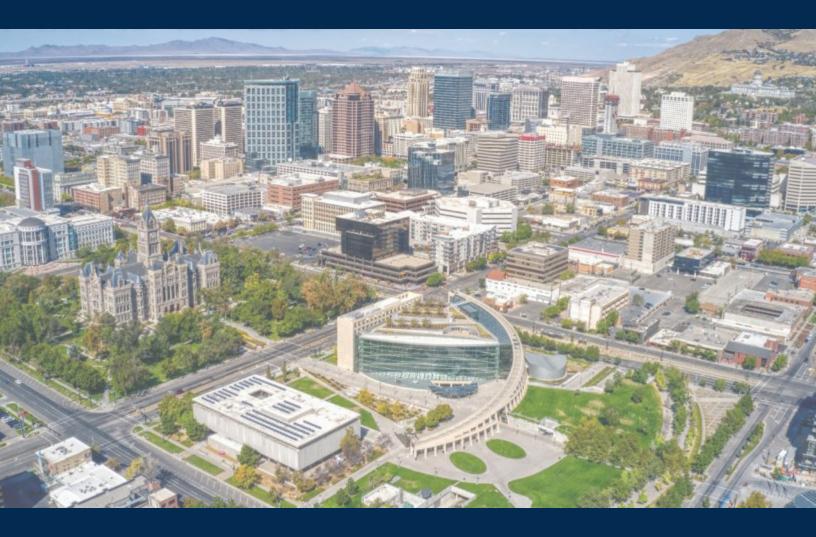
# Urban Mobility Assessment

Salt Lake City



## FINDING HIGHLIGHTS





### **FINDING HIGHLIGHTS**

#### INTRODUCTION

Senate Bill 195 (2025) asked the Department to do a "Mobility and environmental impact analysis" on roadways within SLC where Highway Reduction Strategy (HRS) projects had been implemented or are planned. This included the analysis of elements including vehicular mobility, engagement and environmental factors such as economics, air quality, public health, transit, etc.

Industry standard methods were used for the technical analyses, and proven engagement methods for qualitative data collection and analyses.

The following sections highlight the findings from these analyses.

#### VEHICULAR MOBILITY ANALYSIS RESULTS

- Traffic analysis using multiple data sources have shown the following:
  - » **Traffic Volumes**: At locations where traffic volumes were available, 57% of the HRS routes were observed to have decreasing volumes while 43% of the HRS routes remained at similar levels before and after the project was constructed.
  - » **Signal System Performance Indicators**: Approximately 70% of HRS corridors had negligible changes in signal performance indicators, while approximately 30% showed an increase in vehicles waiting for more than one green light.
  - » **Speeds**: 73% of HRS corridors had minimal changes to speeds before and after construction, while 9% of corridors had increases and the remaining 18% had decrease.
- For HRS projects without lane reductions, impacts to vehicle mobility were found to be negligible.
- For future proposed projects the modeling shows that generally, there were few differences between no-build and build (HRS) conditions using the performance indicators listed above, although some level of service (LOS) deterioration was estimated.

#### VEHICULAR MOBILITY CONSIDERATIONS

- SLC and UDOT should update signal timing across the network for better signal coordination.
- Critical capacity routes should be identified to ensure they protect network capacity.

#### **ENVIRONMENTAL ANALYSIS RESULTS**

- Economics: Projected job losses would be negligible. Economic and fiscal impacts are
  expected to increase over time but would remain minimal relative to overall economic
  output.
- **Air Quality**: Air quality is expected to improve over time, with only negligible pollutant increases attributable to HRS projects.
- Public Health: HRS projects increased pedestrian activity and overall walking distances, resulting in a modest improvement in public health. Future HRS projects are expected to continue this trend.
- **On-street Parking**: A cumulative 6% decrease in parking observed on past HRS corridors; when including adjacent streets within one block, the decrease drops to 2%.

- **Vehicular and Pedestrian Crashes**: No evidence of either an increasing or decreasing trend in severe or fatal crashes was found on completed HRS corridors. Historical data and predictive analyses revealed minimal changes consistent with overall study area trends.
- **Active Transportation**: Changes in bicycle and pedestrian LOS when analyzed using the Highway Capacity Manual methodologies are negligible; most corridors in the area would provide LOS A or B.
- Transit: Changes in ridership and travel time are negligible or slightly better.
- **Operations and Maintenance**: Aspects of HRS projects (e.g., narrow lanes, raised curbs, bulb outs, green pavement paint, etc.) complicate routine maintenance tasks such as sweeping and snow removal.

#### **ENVIRONMENTAL ANALYSIS CONSIDERATIONS**

- Before removing on-street parking, conduct a parking utilization study to assess potential effects on businesses and residents.
- Engage operations staff during planning and design phases to address potential operational concerns.
- Obtain input from emergency service providers during planning and design phases to ensure future HRS projects do not adversely affect emergency response times.

#### **PUBLIC ENGAGEMENT ANALYSIS RESULTS**

Post-project recovery is ongoing for many stakeholders, and the complete picture of changes and impacts is currently unknown. Anecdotally, businesses report that it takes about two years to recover from a significant project or impact, such as construction or the COVID-19 pandemic. Future study may be needed to understand the full spectrum of impacts. The qualitative analysis reflects what is known now and indicates both support and frustration:

- Many respondents appreciated improvements in walkability, safety, and vibrancy.
- Others were concerned about disruption, emergency delays, freight challenges, and parking loss.
- Service providers and institutions noted hidden operating costs.

Across all sources, one consistent theme stands out - the perceived success of projects is determined less by the projects themselves and more so by how they are delivered. When projects are well communicated, access is maintained, and emergency and freight needs are integrated into design, they are generally seen as successful and impacts are better tolerated during construction. When these elements are missing, frustration grows and trust erodes.

To aid analysis of the survey and the large qualitative dataset that resulted from almost 4,000 responses, advanced data processing tools were used to systematically summarize and categorize data for clarity and efficiency. Output was reviewed and verified by members of the project team.

#### PUBLIC ENGAGEMENT ANALYSIS CONSIDERATIONS

- Consider and engage the following groups in the planning and design of future projects to ensure needs are being addressed.
  - » Emergency Services
  - » Logistics & Freight

- » Venues & Retail
- » Operations & Maintenance staff
- Enhance construction management processes and engagement during construction.
- Enhance project engagement during all project phases, particularly early in planning and design when ideas and input can still affect the final project.
- Share information across agencies, utilities, and other interested groups to avoid silos.

#### **SUMMARY**

UDOT measured impacts to mobility, traffic flow, pedestrian and nonmotorized vehicle flow, the economy, public health, quality of life, air quality, and maintenance and operations. More than 88 billion traffic records were analyzed along with conducting hundreds of hours of surveys, interviews and coordination with stakeholders, community members, commuters, business owners, emergency services providers and transportation system operators.

The transportation system within the study area has the capacity to absorb changes in travel patterns brought on by the currently completed HRS projects, however future capacity that will be needed to address population growth, vehicle volumes, changes in land use, events, etc. is being removed without knowing what will be required to provide needed levels of service (LOS) in the future. Further coordination and study will be needed to identify the tipping point at which similar changes will result in more measurable roadway capacity impacts.