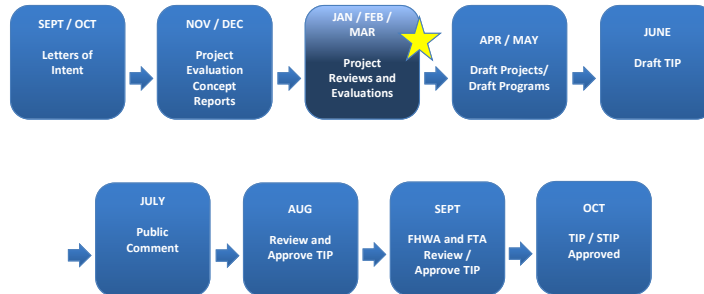
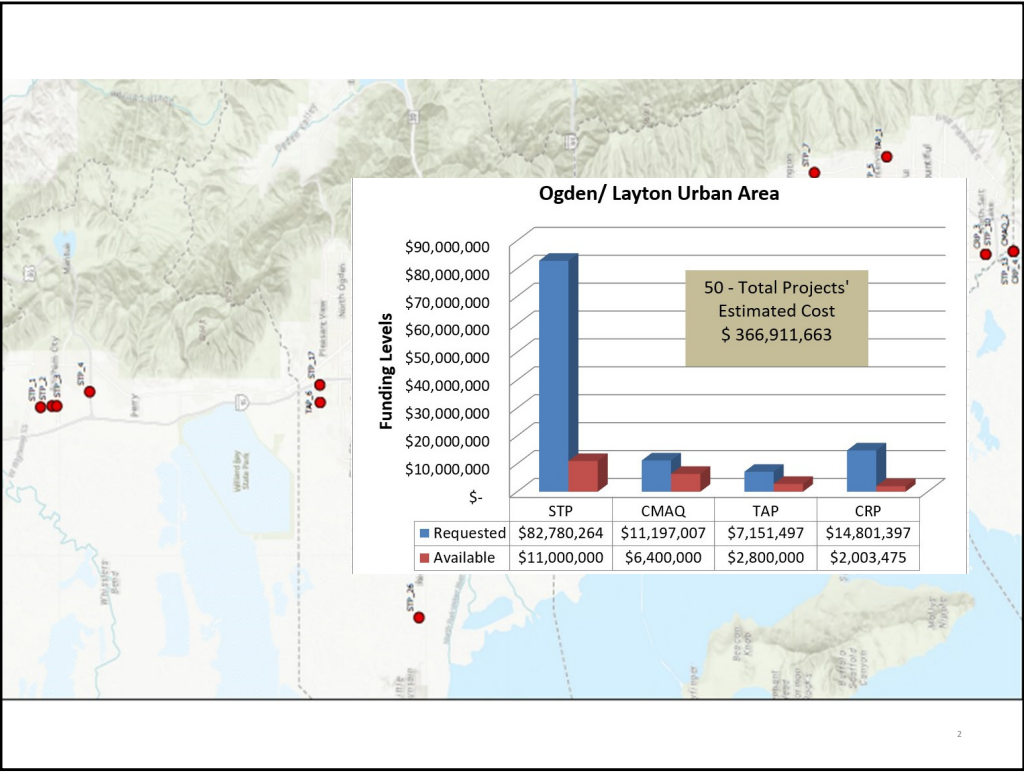
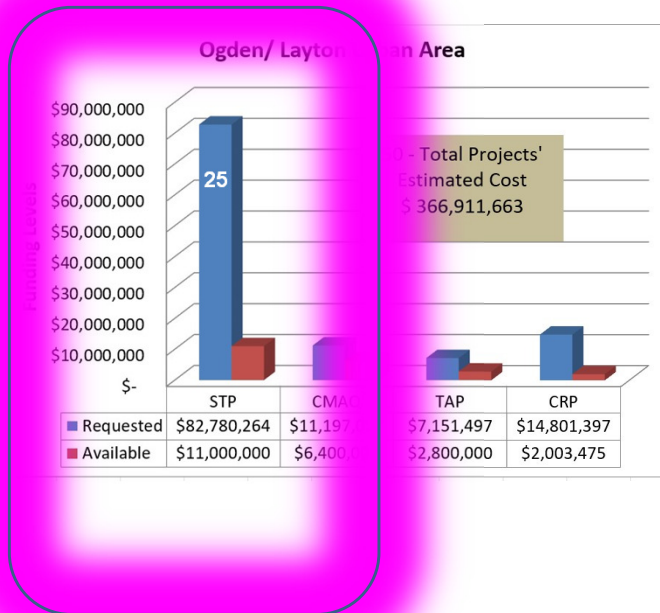


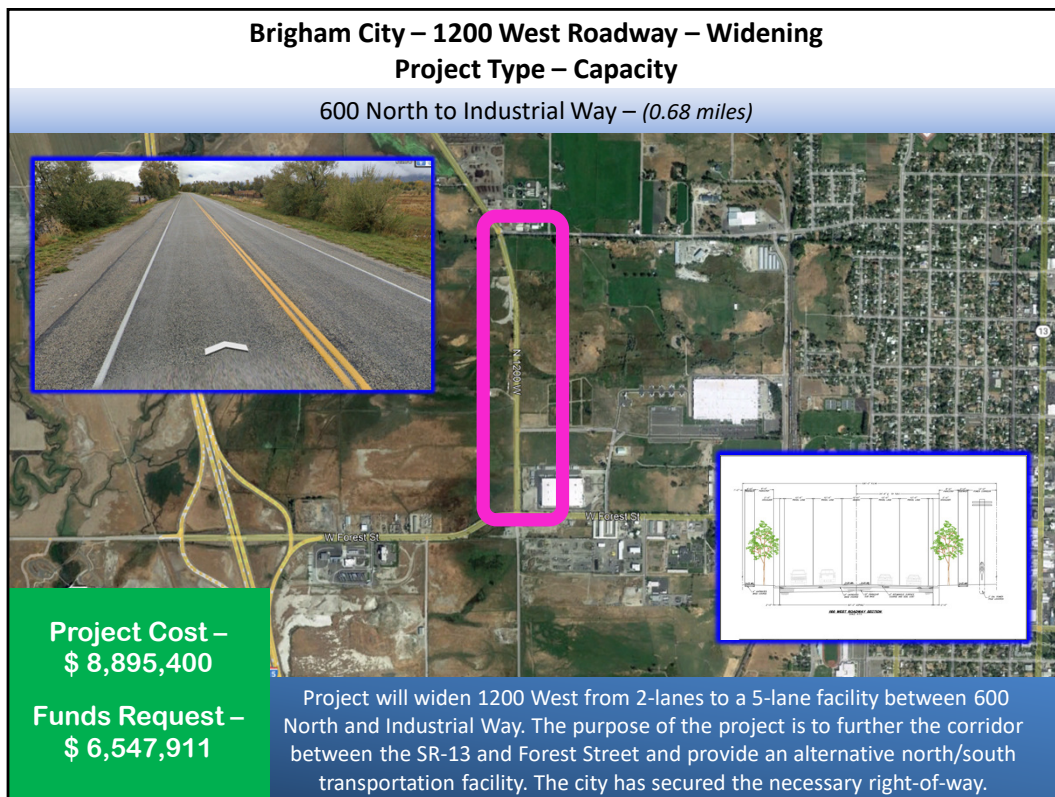
Process for New Projects & The Draft TIP



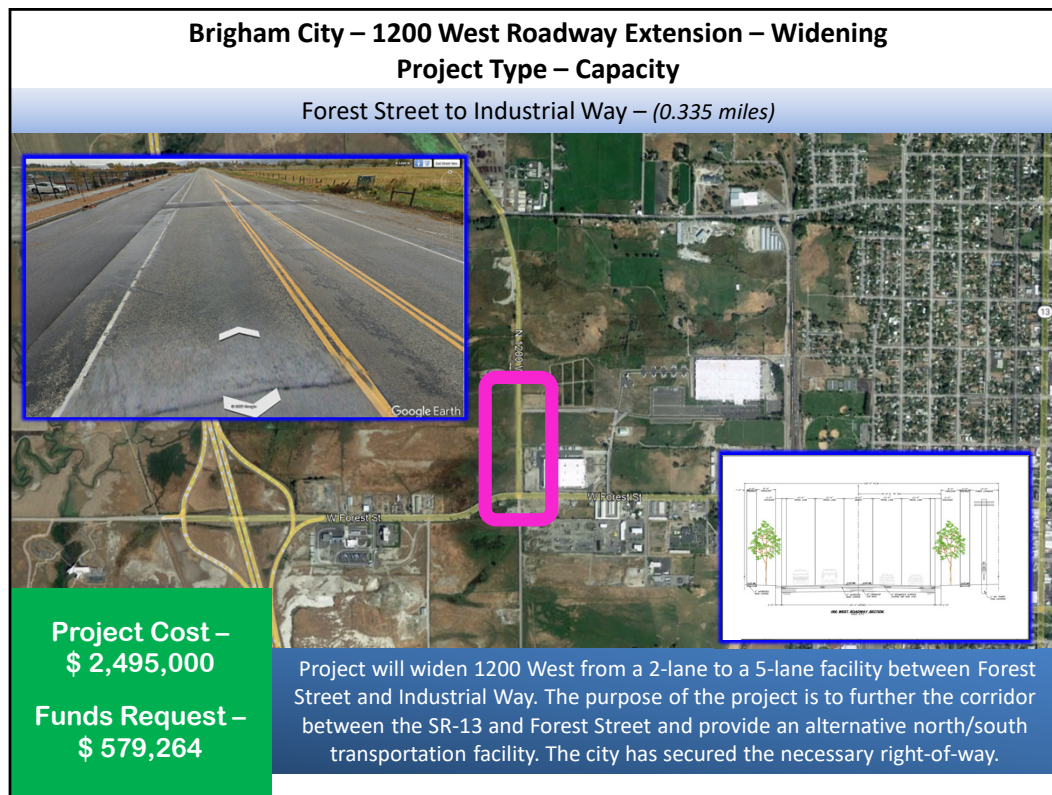

WASATCH FRONT REGIONAL COUNCIL



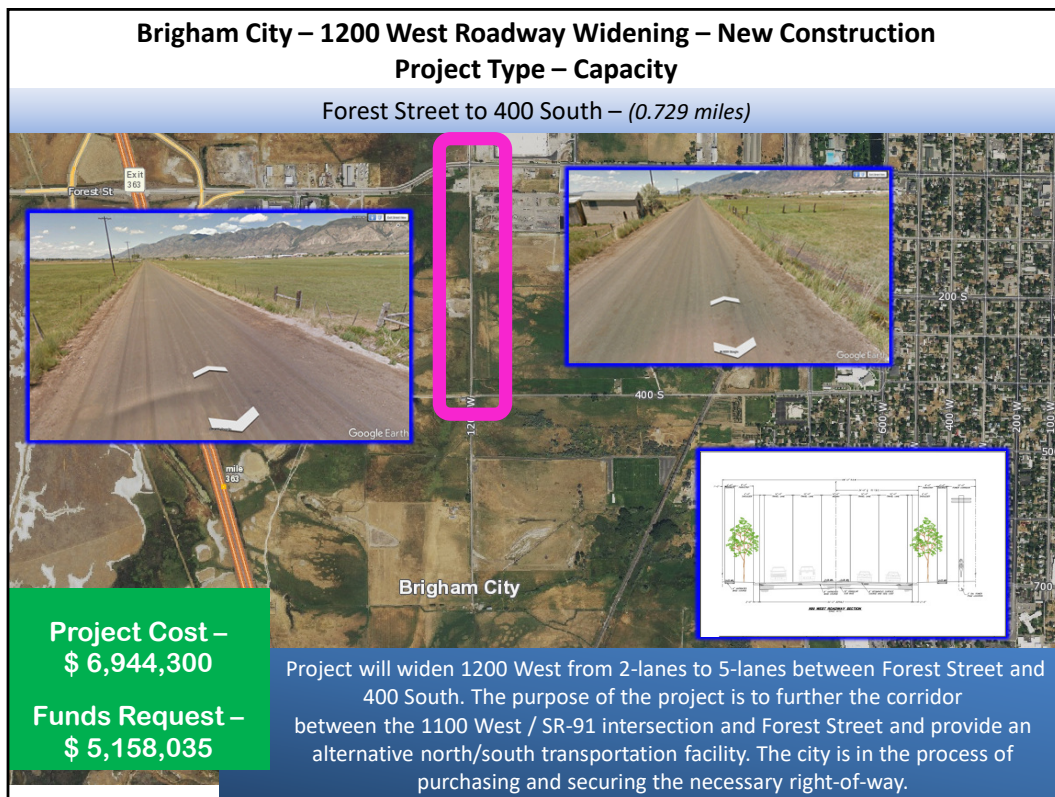




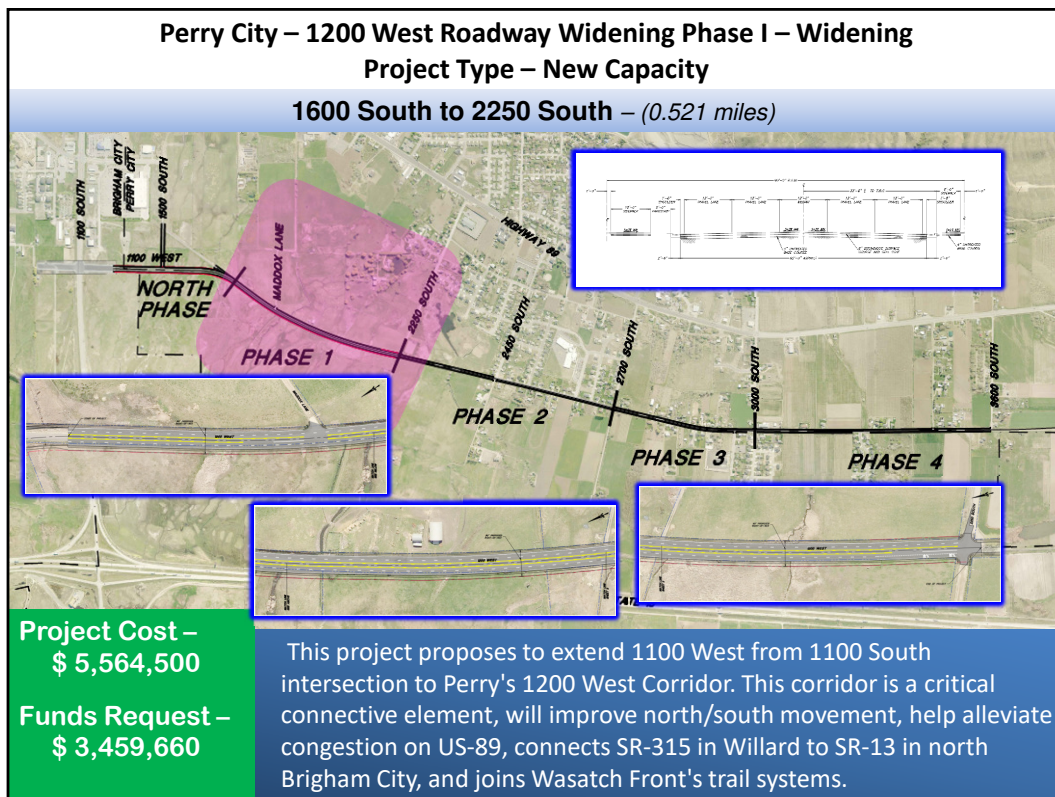
The transportation needs are currently served by three interstate accesses, a regional airport and a heavy rail system. The westerly area of the City, however, is deficient in adequate roadway infrastructure to support future growth. The 1200 West corridor will provide the main north/south transportation corridor for the western part of the City. It begins with Watery Lane on the north end of the City at SR-13 with a 60-foot paved roadway and ends with a dirt road just past the city sports park. The pavement width ranges from 60 feet to 24 feet. It is planned to continue the corridor and connect to the new 1100 West 1100 South intersection. The overall project will be separated into phases/projects. This project is to widen the 24-foot paved roadway from Forest Street to industrial way. The city has purchased the right-of-way and is now looking for funding assistance for completing the construction for this project.



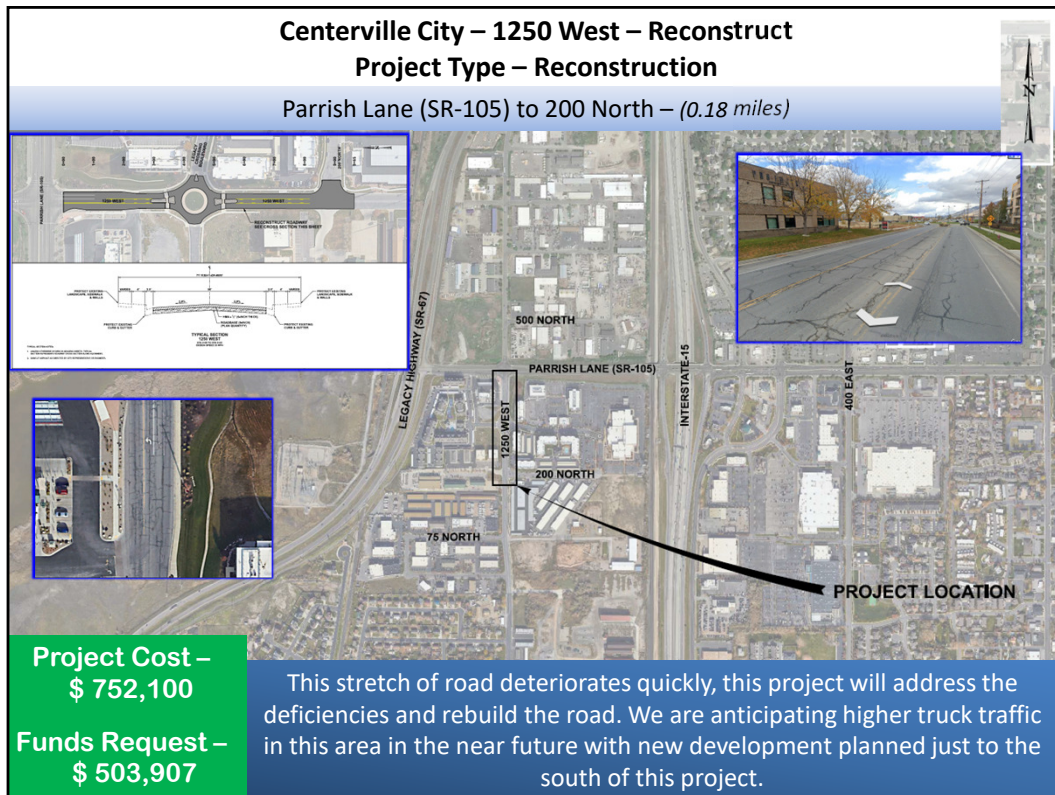
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This project proposes to widen the 1200 West corridor from approximately 1600 South to 2250 South. The project consists of roadway widening and an associated 10' wide pedestrian/biking path. The proposed roadway will improve north/south movement throughout the entire city, help alleviate congestion on US-89 (the only other primary north/south corridor east of I-15) and improve the essential link in the connection of SR-315 in Willard to SR-13 in north Brigham City. This corridor is also a critical connective element which will facilitate the joining of Box Elder County's trail system to Weber, Davis, Salt Lake, and Utah County's Pathways.




This section of 1250 West is in terrible shape. It poses a hazard for all users - vehicle, transit, pedestrian, and cyclist. In addition, we are anticipating a significant increase in traffic in this section as new development comes on line. We also expect that when 1250 W is connected to Farmington in the near future, this will become an alternate route for all users as well going to the High School, work, shopping, high density housing and as an alternate to a traffic congested freeway (both Legacy Highway and I-15).

Clinton – 1300 North/ 1500 West – Round-about

Project Type – Operations

1300 North & 1500 West

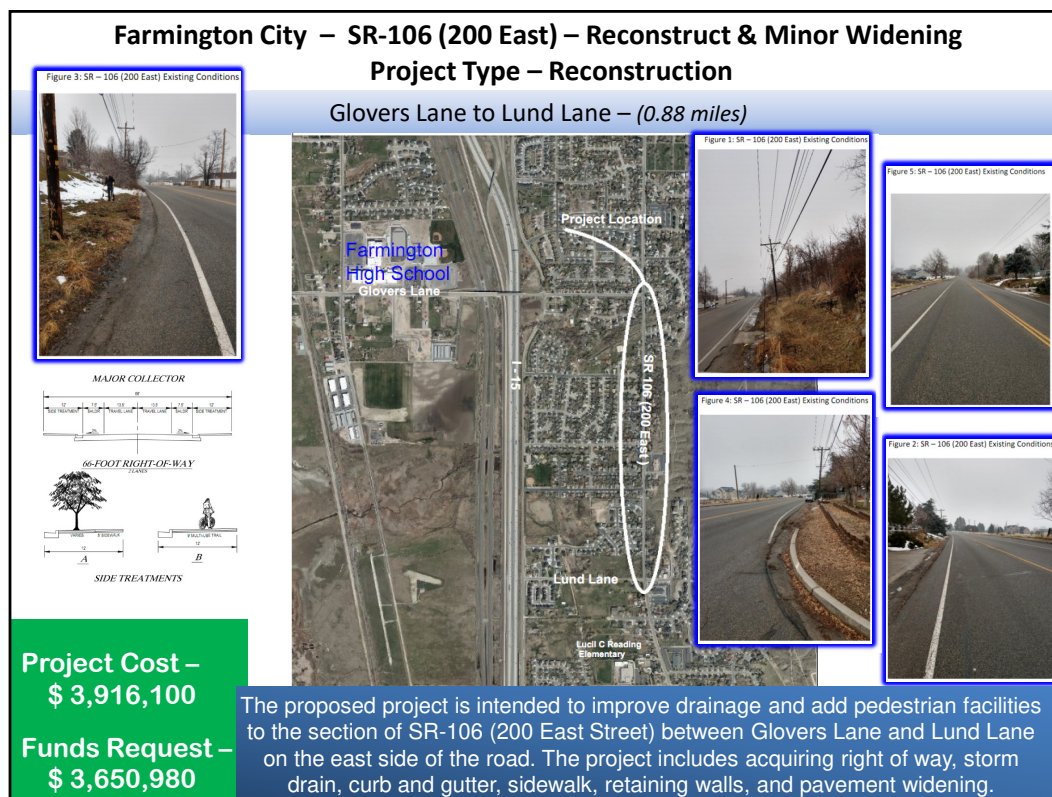


The 1300 N 1500 W intersection is a four-way stop controlled intersection. The intersection sight distances are inadequate, and shoulders are undeveloped. The project would remove the obstructions and construct a roundabout at the intersection to improve traffic flow and enhance pedestrian safety and mobility.

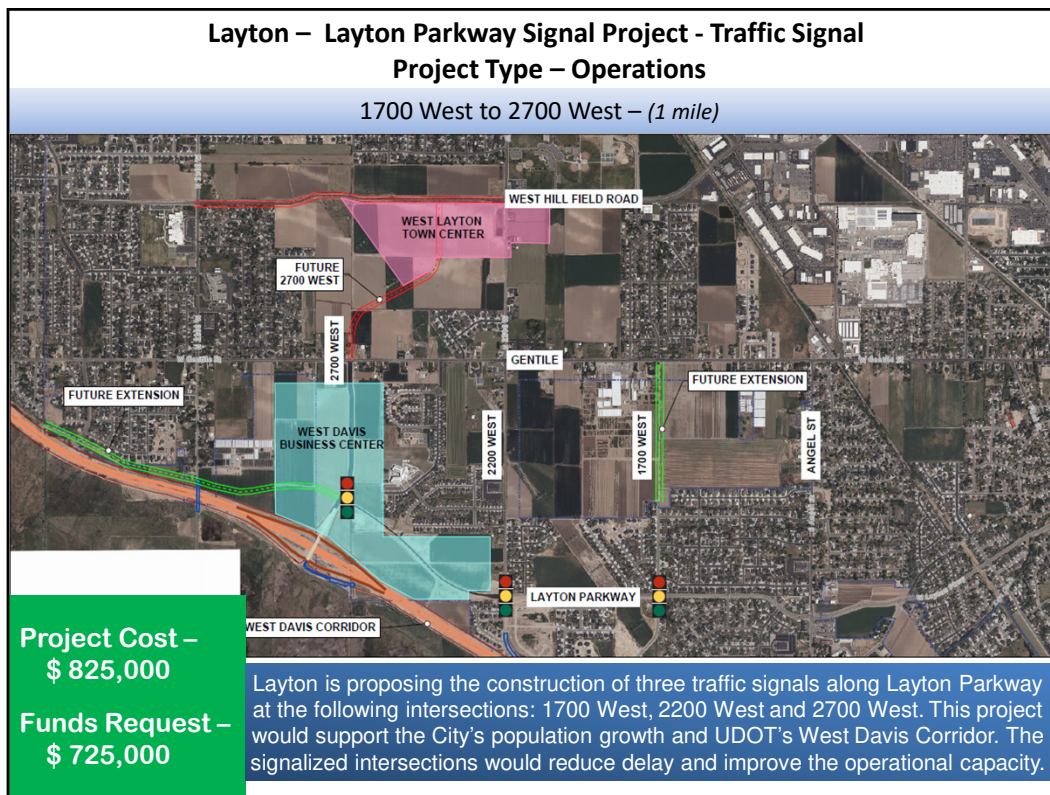
Project Cost –
\$ 2,780,800

Funds Request –
\$ 1,800,000

The 1300 N 1500 W intersection is a four-way stop controlled intersection. Obstructions on the southeast corner make it difficult to see traffic, bikes, and pedestrians. The project would remove the obstructions and construct a roundabout at the intersection. The roundabout will provide a much safer and more navigable intersection for all transportation modes. The project will also improve traffic flow at the intersection which reduce vehicle emissions. This project has been partially funded with \$850,000 in CMAQ funding. An additional \$1,800,000 is needed to construct the project.



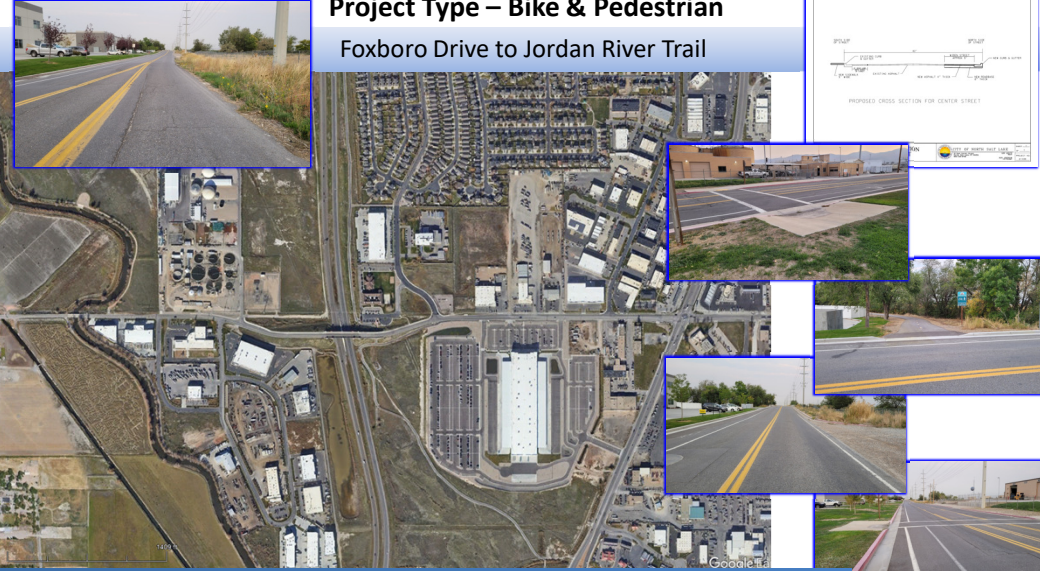
This project will provide improvements for the pedestrians in Farmington that currently are walking on the streets instead of sidewalk, bicyclists, and vehicle traffic. This road currently has little to no existing shoulders and no drainage improvements along this section. Additionally, this route is part of UTA's established bus route. Improving this route provides a safe place for buses to pull off and for riders to safely board and unload from the bus. Improving this road also provides connectivity for pedestrians, and bicyclists. Widening the shoulders and adding a sidewalk, provides a safe place for pedestrians, school children, and bicyclists where currently there is nothing. This project is identified as a "safe route to school".



West Layton is growing rapidly and the completion of UDOT's West Davis Corridor will enable further growth. The City has extended Layton Parkway to 2700 West, the only access into Layton off of the corridor, and has also built 2700 West out to Gentile Street. Adjacent to this new corridor will be the West Davis Business Center that will satisfy the increasing market demand for office space in Davis County. At the north end of 2700 West, the West Layton Town Center will be the primary retail destination for this area and will be directly connected to the future West Davis Business center. The future development and new infrastructure will change the traffic patterns in this area and Layton Parkway will become an important east-west connector through the City. The signalized intersections would reduce delay, improve the operational capacity of this corridor, and improve the overall safety for all users.

North Salt Lake – Center Street Widening & AT Facilities

Project Type – Bike & Pedestrian
Foxboro Drive to Jordan River Trail

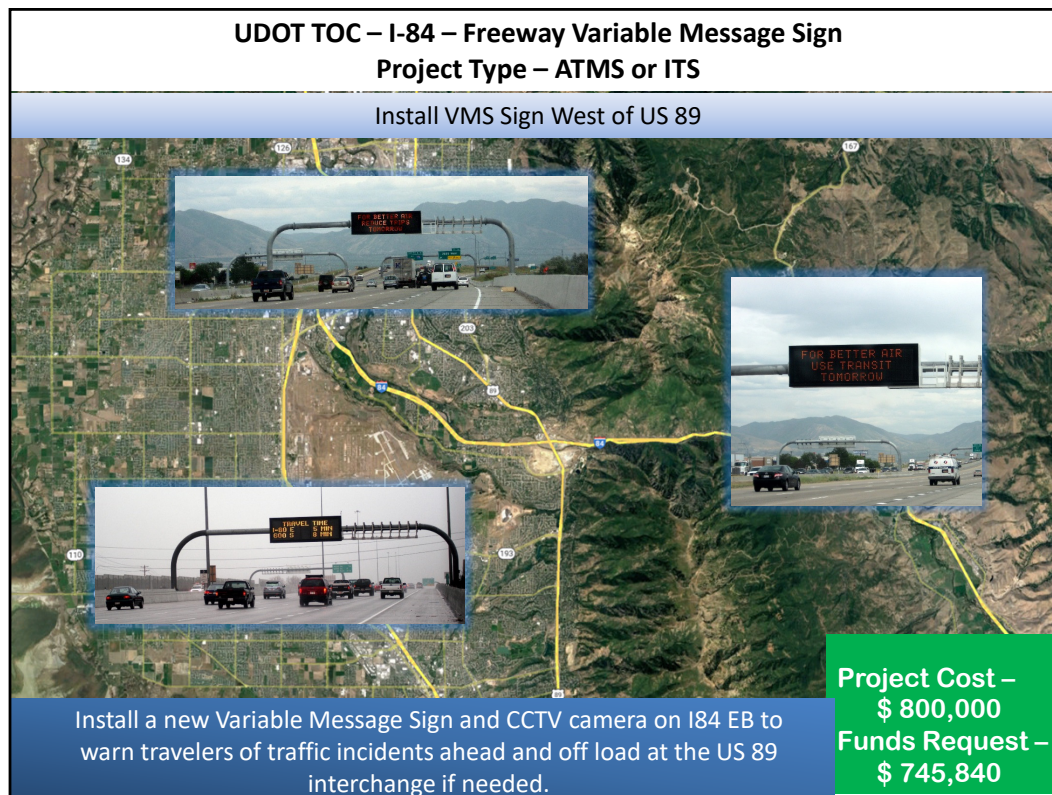


The Jordan River Trail has been extended to Center Street, and there is a need to create active transportation connections from that trail to other trail systems and bike lanes. This project will make those connections in addition to widening the road in anticipation of future development on the west side of the river.

Project Cost –
\$ 593,400

Funds Request –
\$ 504,390

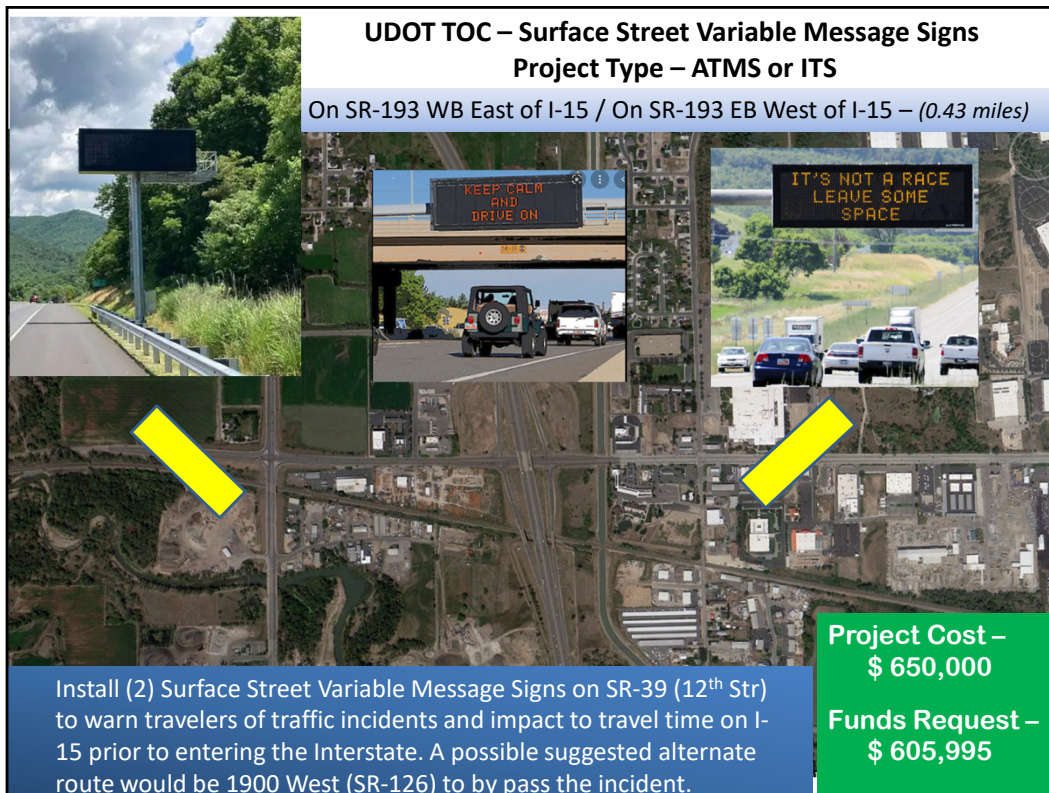
Currently, the Jordan River Trail ends at Center St. Once pedestrians and cyclists get to the end of the trail, there is nowhere for them to safely go. Constructing sidewalk in this location & striping bike lanes will provide a non-vehicular route to access the Legacy Trail (regional), the Center Street Trail/Town Center, and also the Redwood Road trail which connects to a grocery store, restaurants, and over 2,500 homes. The City recently included the area west of the Jordan River in its Annexation Policy Plan. With new development and expansion of Cross-E Ranch in that area, it is likely that the bridge over the Jordan River will be widened. The widening of the road and installation of curb & gutter associated with this project is in an effort to get ahead of that bridge expansion and allow for bike lanes. This project should be selected because it has regional significance in regards to active transportation, and also supports planning for future development in the annexation area.



UDOT wants to place a Freeway Variable Message Sign (VMS) on I84 EB near MP 86.9. This allows travelers to offload onto US89 should there be an incident ahead. For this funding application, a PeMS model set for bottlenecks on both EB and WB lanes between MP85 and MP119.34 was produced. It shows (18) incidents between US89 and Echo Jct. with vehicle delays up to 549.4 veh-hrs. for 240 minutes duration and a queue extending 4.9 miles. When all (18) incidents were averaged, it resulted in 128.33 veh-hrs delay, 89.33 minutes duration, and an average queue extending 3.46 miles. The Reduced VHT model assumes a VMS would divert 60% of the traffic from continuing on I84, and uses averaged delays for (18) events. The time span used was (18) days to match the actual events. This produces a Benefit/Cost ratio is 0.1 to 1.

UDOT TOC – Surface Street Variable Message Signs
Project Type – ATMS or ITS

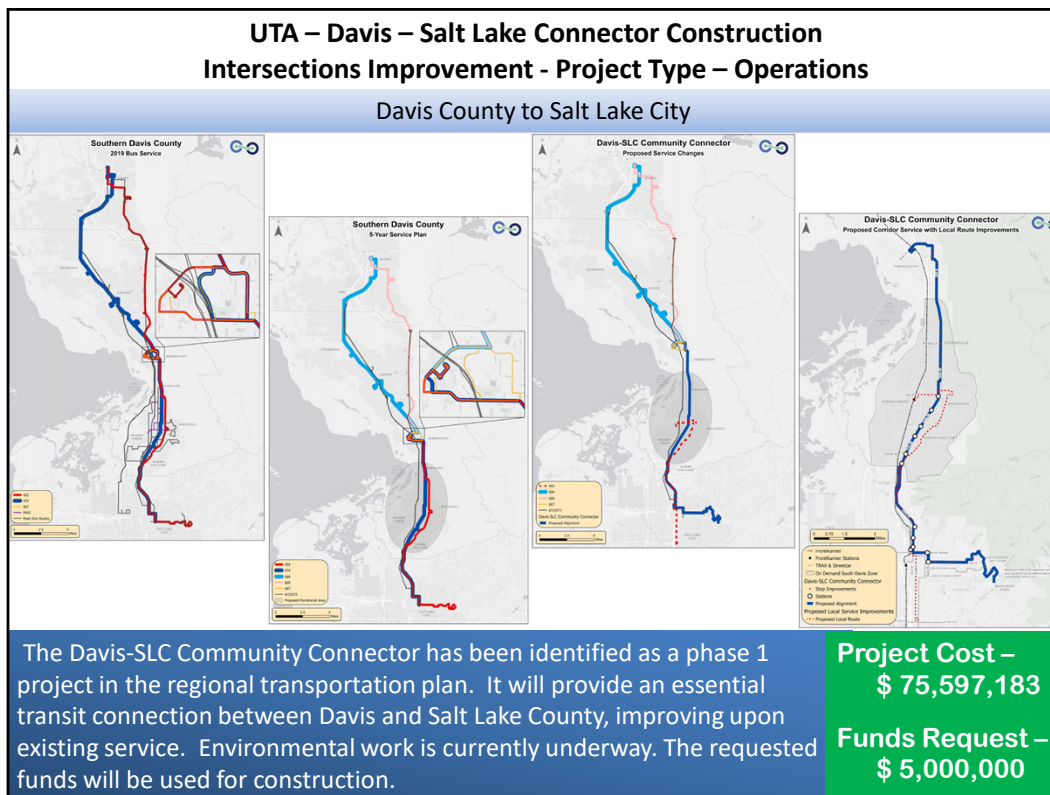
On SR-193 WB East of I-15 / On SR-193 EB West of I-15 – (0.43 miles)



Install (2) Surface Street Variable Message Signs on SR-39 (12th Str) to warn travelers of traffic incidents and impact to travel time on I-15 prior to entering the Interstate. A possible suggested alternate route would be 1900 West (SR-126) to by pass the incident.

Project Cost – \$ 650,000
Funds Request – \$ 605,995

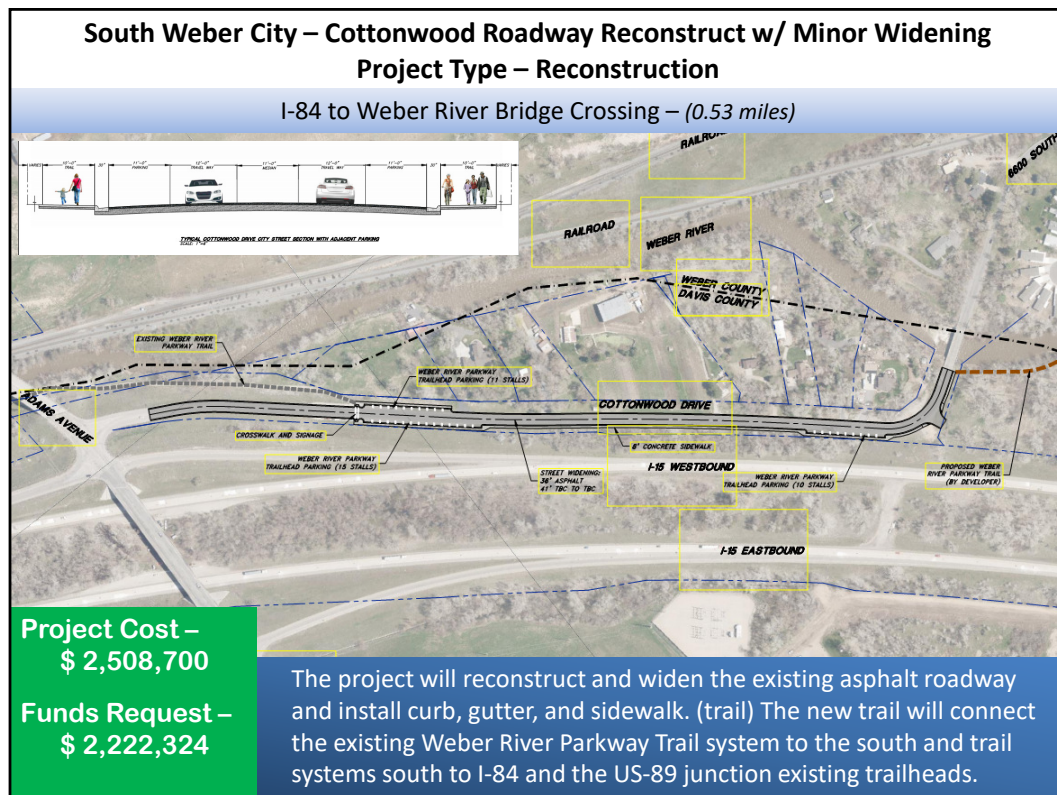
Placing Surface Street VMS (SSVMS) on SR193 (E700S) prior to the entrance ramps at the I15 interchange provides traveler information of congestion ahead on SB or NB I15. Incidents in this I15 segment show worst-case vehicle delays of 860.24 Veh-Hrs. lasting 198.46 minutes that extended 3.19 miles. That PeMS data set show average delays of 91.95 Veh-Hrs. Determining the VHT Delay to I15 that SSVMS may reduce, the analysis uses the AADT to estimate the number of vehicles entering I15 from SR193 converted to an hourly volume in each direction SB or NB that is 187.5. Converting incident duration (198min) (hr/60) = 3.3hr. Then $(187.5 \times 3.3) = 621 \text{ veh.}$ diverted from I15. The number of veh. in the 3.19-mile queue = 1347. The veh. not entering I15 is $(621/1347) = 46.1\%$. Assuming the SSVMS are 100% effective at rerouting the traffic from SH193, the reduced VHT Delay $\Rightarrow (860.24 \times .461) = 396.57 \text{ Veh-Hr. Delay.}$ Input into the CMAQ spreadsheet to get a Benefit/Cost ratio of 26.4:1. Avg. B/C = 3:1



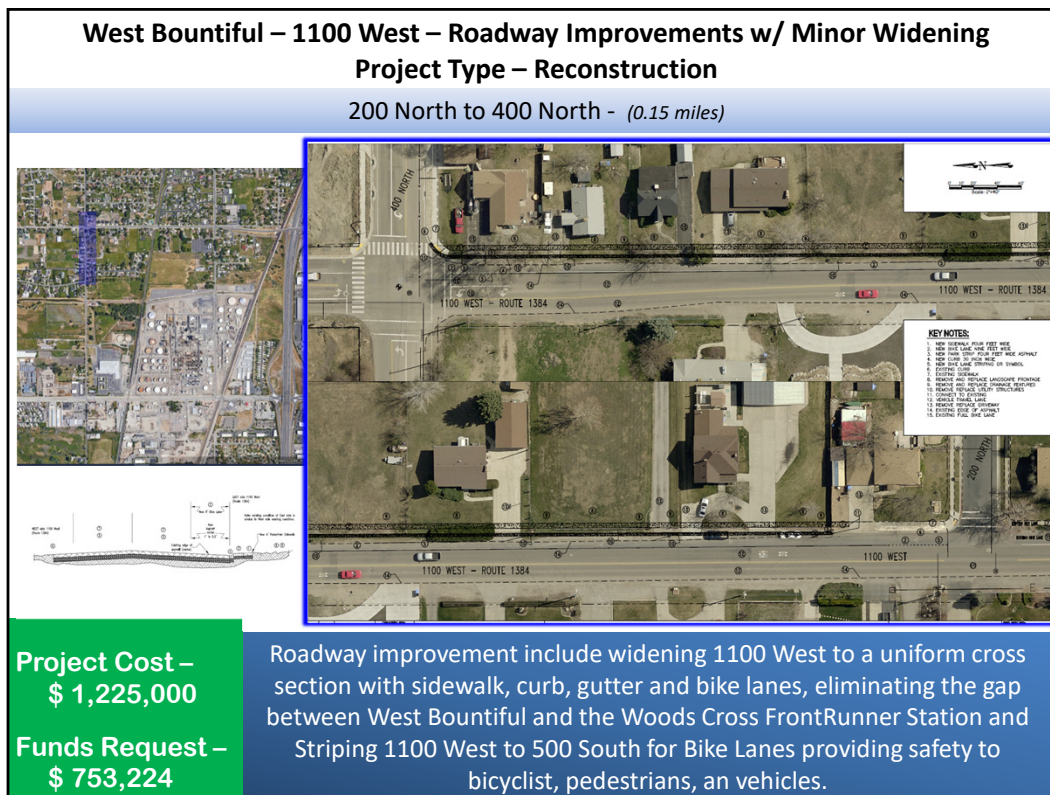
WFRCS L RTP has identified the need to improve transit between Davis Co. and SL County. The locally preferred alternative selected by project partners and UTA In 2014 has been refined in recent development efforts.

Based on tech. analysis, stakeholder coordination, and public outreach, the Davis-SLC Community Connector will run from Farmington to the University of Utah. The project will be enhanced bus with improvements such as station amenities and transit signal priority. The base portion of the project (500 South in Bountiful to 200 South in Salt Lake City) will have high-end stations. Updated FTA guidance on the Capital Investment Program allows corridor-based BRT projects (with no exclusive lanes).

This project will better connect Davis County and Salt Lake City. The improved bus system gives individuals a better/more direct commute between Davis and SLC. This helps reduce the number of cars on the road, which improves the air quality and congestion on the roads.



The main purpose of this project is to reconstruct and improve the existing Cottonwood Drive roadway to better provide off street access and parking for the Weber River trail system. This particular section of road is highly used throughout the year and at any given time of day. The current facilities is inadequate such that the conditions are unsafe for all forms of transportation (e.g. motorists, pedestrian, etc.). This project, along with the other planned phases, will also join the trail with the regionally planned trail network and create connectivity.



The project improves safety by providing separation between vehicle traffic and bicycle /pedestrian traffic by widening 1100 W and installing curb/gutter. Sidewalk and separate bike lane improvements provide for pedestrian and bicycle access between West Bountiful and the Woods Cross Frontrunner Station (and soon bus rapid transit). Due to the HollyFrontier Refinery presence on 800 W, 1100 W is the safest and best route for alternative transportation options exiting West Bountiful. This project completes the final gap of 0.15 miles of infrastructure along 1100 W from 400 N to 500 S. As the 400 N overpass is the only way in the area for pedestrians and bicyclists to avoid freight train traffic, this project also completes an alternative transportation route for anyone trying to access the Frontrunner Station from the north side of Bountiful.

West Point – 700 South – Reconstruct/ Minor Widening
Project Type - Reconstruction
 3500 West to 4000 West – (0.5 miles)



Project Cost –
\$ 4,170,600

Funds Request –
\$ 2,955,950

This road is adjacent to the new off ramp of the West Davis Highway near SR193. It is currently a very narrow two lane section with high traffic volumes. With the West Davis Highway soon to be completed the traffic volumes will increase significantly. This road needs to be widened to a three lane section.

This road is adjacent to a major off ramp of the West Davis Highway and SR193. We expect traffic volumes to increase significantly in the near future. This road also provides access to an elementary school and a Jr. High that are both under construction. The need for the school underscores the need for the road as well. This area has experienced significant growth even before the West Davis Highway will open. This road will also provide access to future commercial and mixed use projects that will be built near the interchange.




This roadway is a collector road in Farr West that extends from SR-126 to the western city limit where it continues into Plain City. This route is used by Plain City and Farr West City residents to access the SR-126, I-15, a nearby elementary school and a golf course. Proposed developments in both cities will increase use of the roadway. This project will increase capacity by adding a center turn lane and increase safety to allow for dedicated turn lanes. Pedestrian access will improve with sidewalks on both sides of the road and the widening will allow for shared-use bike lanes. The roadway is narrower than a city standard collector road and needs to be widened to accomplish these purposes. The intersection at 2575 West is skewed and the roundabout will improve traffic flow and safety. The bridge over the canal only allows for two lanes and a widened bridge is necessary for the additional lane, bike lanes, and pedestrian routes on both sides of the road.

Harrisville City – 750 West Phase I – Reconstruct w/ Minor Widening

Project Type - Reconstruction

West Harrisville Road to US-89 – (0.804 miles)

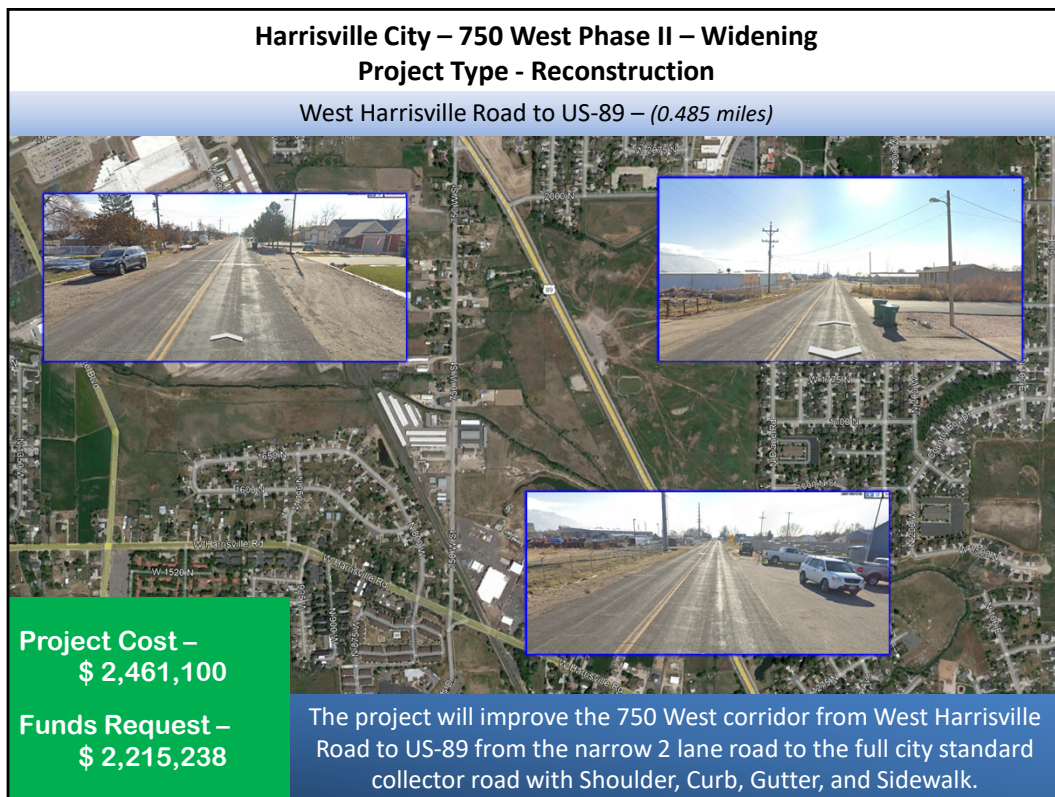


Project Cost –
\$ 6,784,300

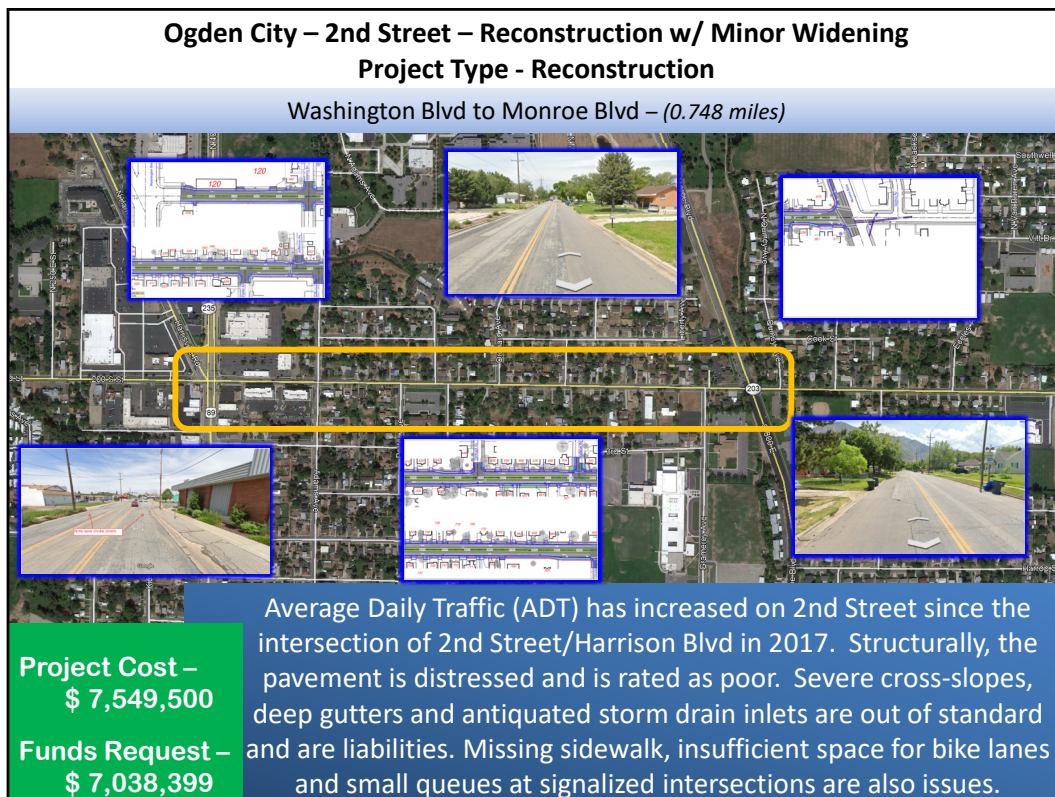
Funds Request –
\$ 6,245,757

The project will improve the 750 West corridor from West Harrisville Road to US-89 from the narrow 2 lane road to the full city standard collector road with Shoulder, Curb, Gutter, and Sidewalk.

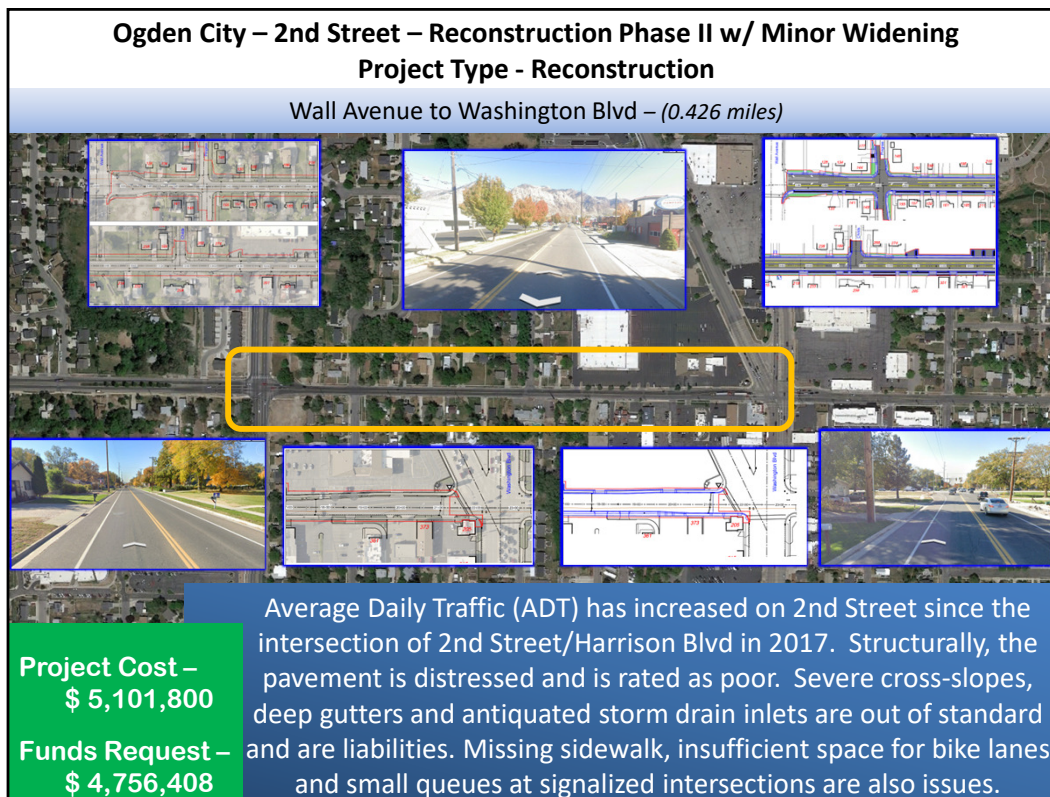
The existing roadway connects West Harrisville Road (collector road) to Highway 89 and also extends to 2550 North in Pleasant View City. It is currently a narrow 2-lane roadway without shoulders, bike lanes, or turning lanes. The City plans to construct a new City public works facility, city hall, police station, fire station, and park on property between 750 West and Highway 89 and commercial and manufacturing development is projected near this site as well. The development of this area is projected to increase the traffic volume on the roadway. In anticipation of this development and the increased traffic that will be generated, the project is necessary to provide for additional capacity, turning movements, pedestrian and bike facilities. The roadway will also help provide access to larger arterials and collector roads in the area to help with traffic circulation in the City.



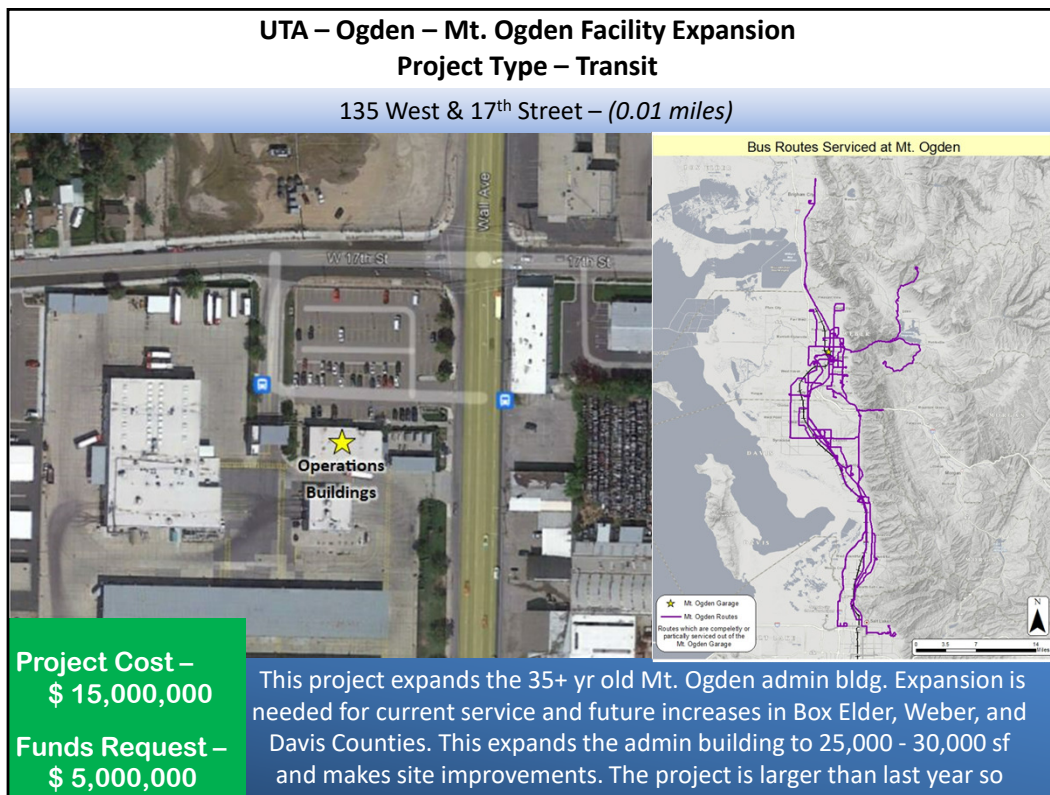
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The improvements to the 2nd/Harrison intersection along with the I-15 Pioneer Avenue interchange effectively link Harrison Bl, Monroe Bl, Washington Bl and Wall Avenue to I-15. 2nd Street has seen an increase in traffic since the Harrison Project was completed in 2017. There are many issues this project could resolve: 1) Increase separation between on street parking and traveled lanes 2) Install right turn pockets to improve capacity and safety 3) Add pavement width to install TWLTL- which will improve capacity reduce rear end accidents 4) Install sidewalk on both sides of 2nd Street serving transit users, general public and school age pedestrians 5) Improve intersection alignments and remove antiquated storm drain inlets 6) Offset roadway widening by added two midblock crossings retaining community connectivity 7) Resolve excessive crown and small corner radii 7) Install better street lighting and RRFBs to serve vulnerable roadway users.



The improvements to the 2nd/Harrison intersection along with the I-15 Pioneer Avenue interchange effectively link Harrison Bl, Monroe Bl, Washington Bl and Wall Avenue to I-15. 2nd Street has seen an increase in traffic since the Harrison Project was completed in 2017. There are many issues this project could resolve: 1) Reduce/eliminate roadside hazards 2) Install right turn pockets to improve capacity and safety 3) Add pavement width to install TWLTL- which will improve capacity reduce rear end accidents 4) Install sidewalk on both sides of 2nd Street serving transit users, general public and school age pedestrians 5) Improve intersection alignments and lengthen queues 6) Offset roadway widening by added one midblock crossing retaining community connectivity 7) Resolve excessive crown and small corner radii 7) Install better street lighting and RRFBs to serve vulnerable roadway users.



UTA's Mt. Ogden bus facility was originally built in 1985. The operations building is undersized and outdated. Upgrading and expanding this facility will provide a better experience for Mt. Ogden's operators and administrative staff, in addition to allowing for future growth.

As the Wasatch Front's population grows, transit service will have to expand to meet the demand. As a result, 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. UTA's Mt. Ogden facility is over 35 years and is in need of upgrades and increase of its size to 25,000 to 30,000 square feet. This project will support the operations of the transit system in Box Elder, Weber, and Davis County. It also allows for future further expansion of the maintenance facility and of transit services. Improvements would directly benefit UTA employees.




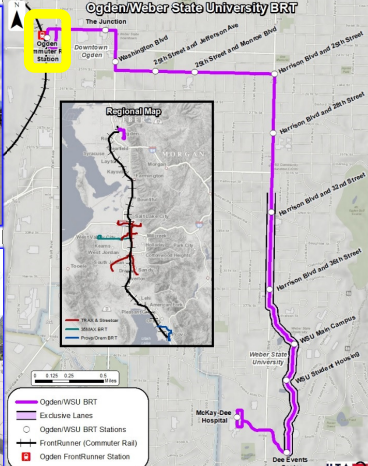
Project Cost –
\$ 1,500,000

Funds Request –
\$ 1,398,450

UTA – Ogden-On-Route Electric Bus Charging Infrastructure

Project Type - Transit

A network of high-power on-route chargers at key locations

UTA is working to acquire more all-electric buses. It is anticipated that there will be a fleet of electric buses for the future Ogden/WSU BRT. To support the all-day operation of the vehicles, on-route charging is needed to extend range. A network of high-power on-route chargers at key locations enables these buses to be deployed in more locations without concerns about a bus being limited by charge range.

Electric vehicles are an important component to improving local air quality. Transit already helps keep cars off the road. By utilizing all-electric buses, UTA is furthering its commitment to improve air quality along the Wasatch Front. To make this propulsion technology successful it is important to construct on-route charging. With infrastructure in key locations, UTA can deploy buses for all day service without having to return to the garage to charge.

UTA has constructed or planned the following 10 funded on-route chargers for electric buses:

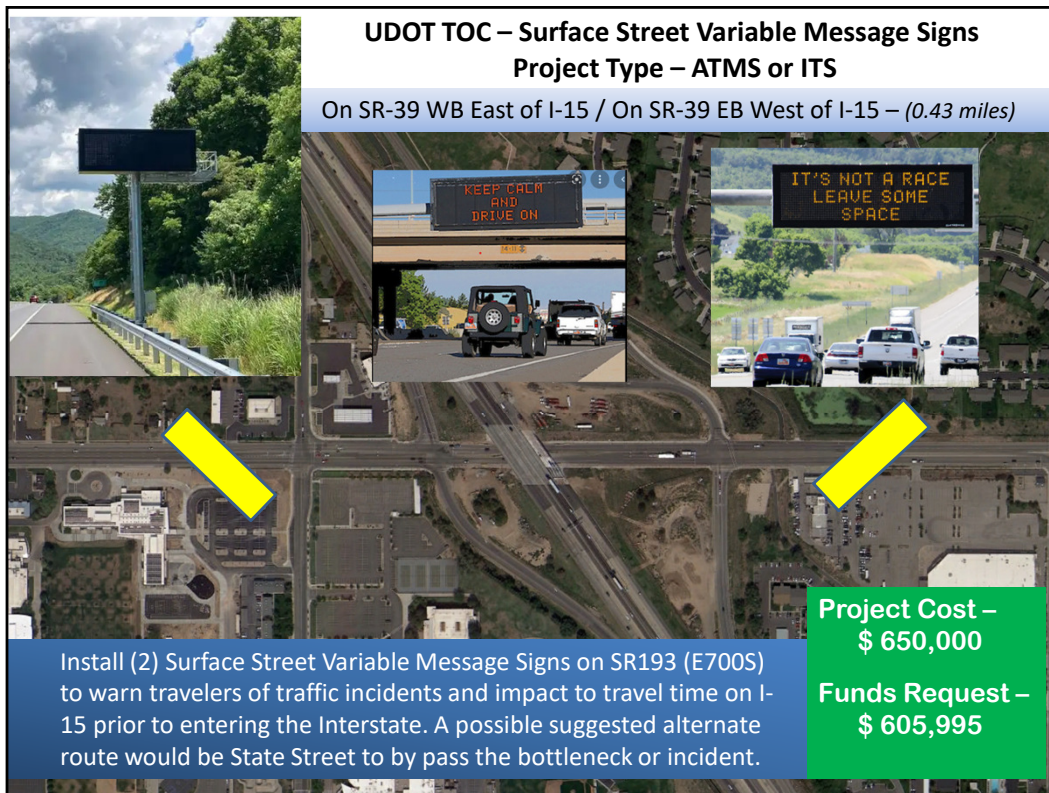
CMAQ funded: 3900 South Wasatch and (1); Central Point (1st of 2); Dee Event Center (1)
 UTA, SLC, VW, Rocky Mt. Power, and FTA (Small Starts or LoNo) funded: Salt Lake Central (2, LoNo and UTA); Orange Street (1 UTA/SLC); Central Point (2nd of 2, VW and UTA); and 3 Small Starts funded at Murray Central, WVC, at Ogden Station.

To accommodate currently ordered and future expanding deployment of electric buses, UTA proposes three more on-route chargers be funded with WFRC programed funds:

One in the Ogden/Layton UZA, at Ogden Central Station

Two in the Salt Lake/West Valley UZA at two (2) of the following 4 locations depending on which are ready when the program year arrives: University of Utah Medical Center Transit Intermodal Hub, North Temple Intermodal Transit Hub, a second charger at WVC, a second at Wasatch and 3900 S, or a second at Orange Street.


UDOT TOC – Surface Street Variable Message Signs
Project Type – ATMS or ITS
 On SR-39 WB East of I-15 / On SR-39 EB West of I-15 – (0.43 miles)



Install (2) Surface Street Variable Message Signs on SR193 (E700S) to warn travelers of traffic incidents and impact to travel time on I-15 prior to entering the Interstate. A possible suggested alternate route would be State Street to by pass the bottleneck or incident.

Project Cost – \$ 650,000
Funds Request – \$ 605,995


Placing Surface Street VMS (SSVMS) on SR193 (E700S) prior to the entrance ramps at the I15 interchange provides traveler information of congestion ahead on SB or NB I15. Incidents in this I15 segment show worst-case vehicle delays of 860.24 Veh-Hrs. lasting 198.46 minutes that extended 3.19 miles. That PeMS data set show average delays of 91.95 Veh-Hrs. Determining the VHT Delay to I15 that SSVMS may reduce, the analysis uses the AADT to estimate the number of vehicles entering I15 from SR193 converted to an hourly volume in each direction SB or NB that is 187.5. Converting incident duration (198min) (hr/60) = 3.3hr. Then $(187.5 \times 3.3) = 621 \text{ veh.}$ diverted from I15. The number of veh. in the 3.19-mile queue = 1347. The veh. not entering I15 is $(621/1347) = 46.1\%$. Assuming the SSVMS are 100% effective at rerouting the traffic from SH193, the reduced VHT Delay $\Rightarrow (860.24 \times .461) = 396.57 \text{ Veh-Hr. Delay.}$ Input into the CMAQ spreadsheet to get a Benefit/Cost ratio of 26.4:1. Avg. B/C = 3:1

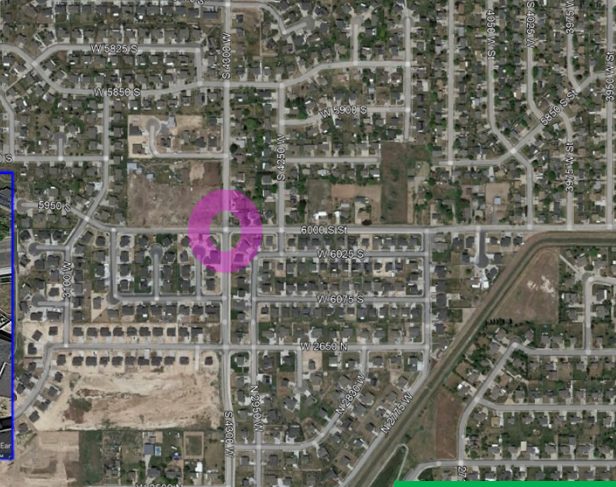


Roy – 4300 West/ 6000 South – Round-about

Project Type – Operations

4300 West & 6000 South





The proposed project includes the construction of a roundabout at the intersection of 6000 South and 4300 West. This busy intersection connects multiple cities in Weber and Davis Counties. The project will include property acquisition, roadway improvements, sidewalk, bicycle facilities, drainage, and lighting improvements.

Project Cost –
\$ 1,350,000

Funds Request –
\$ 1,258,605

The intersection of 4300 West and 6000 South has been identified in our Master Plan as needing additional traffic control. This is currently a two-way stop-controlled intersection. An analysis of both a traffic signal and roundabout was performed. The City has determined that a roundabout provides the needed traffic control, a speed control element to the corridor and the best air quality solution to the intersection. Therefore, the City is requesting funds to install a single-lane roundabout at this intersection.

10000 West to 7100 West – (2 miles)

10000 West to 7100 West – (2 miles)



Currently there is no continuous turning lane or shoulder. This is the last phase of the proposed widening from the end of the previous phase to Little Mountain. By improving the shoulder and drainage, pedestrian use will be safer.