
M E M O R A N D U M

DATE: May 24, 2006
TO: City Council Members
FROM: Russell Weeks
RE: Presentation: *I-80, State Street to 1300 East Improvement Study*
CC: Cindy Gust-Jenson, Rocky Fluhart, Louis Zunguze, DJ Baxter, Alex Ikefuna, Tim Harpst, Kevin Young, Gary Mumford, Janice Jardine

This memorandum pertains to a scheduled presentation of the *I-80, State Street to 1300 East Improvement Study* on May 30. Kim Clark of H.W. Lochner and Jim Horrocks of Horrocks Engineering will make the presentation on behalf of the Utah Department of Transportation. The presentation is scheduled to include a roughly 15-minute Power Point presentation based on the attached document.

The Utah Department of Transportation held six open-house meetings between April 18 and May 18 with residents of neighborhoods near Interstate 80. According to UDOT representatives, the department mailed 5,000 meeting notices. About 200 people attended the open houses. UDOT representatives also met with about 25 residents at a City-sponsored meeting on May 23 and with the Salt Lake City Planning Commission on May 24.

KEY POINTS

- The proposed project is a roughly \$104 million project, according to the UDOT Internet website. It currently is in a study phase. If UDOT decides to pursue the project, design would begin in fall 2006, and construction would start in fall 2007 or spring 2008.¹
- UDOT representatives plan to bring four issues before the City Council:
 - Potential changes to Driggs Avenue near 1300 East Street that would include closing Driggs Avenue west of 1300 East. Closing the avenue probably would require the demolition of two homes.
 - Closing 600 East Street to automobile traffic where the street runs underneath the interstate highway.
 - Modifying Elizabeth Sherman Park which is located at 2400 South and Highland Drive.
 - Using noise walls along the I-80 corridor.
- According to UDOT representatives, priorities for using the \$104 million allocated for the project are:
 - Safety improvements.
 - Replacing worn structures and pavement.

- Improving I-80's capacity to carry traffic.
 - Noise walls.
 - Aesthetics.
- It should be noted that UDOT representatives indicated that capacity improvements and noise walls generally are considered together because if carrying capacity increases, noise walls have to be considered as a way to mitigate increased noise. It might also be noted here that one UDOT representative indicated that the project might require 12-foot-high to 16-foot-high noise walls almost the full length of the I-80 corridor with the exception of commercial areas near downtown Salt Lake City and possibly at 1300 East Street. In addition, noise walls might be built first to mitigate construction noise.²
 - The project is expected to remain mostly within existing UDOT right of way. However, "minor areas of land will need to be obtained, specifically at State Street and at 700 East."³

ISSUES/QUESTIONS FOR CONSIDERATION

- What is the Administration's position or viewpoint of the study and project?
- Would repairs to structures and pavement dampen traffic sound enough to eliminate the need for noise walls?
- Where are the sections on State Street and 700 East Street where the right of way might be expanded? What properties would be affected by expanding the right of way?
- What specific modifications might be made to Elizabeth Sherman Park?

DISCUSSION/BACKGROUND

The project under study will be paid entirely with State of Utah funds. According to an *Improvement Study* slide, UDOT identified ramp lengths, pavement deterioration, median treatment, the structural integrity of the highway system, congestion, and traffic safety as issues the study should address. In addition, the study has listed the following items as identified by the public: noise, schedule, utility conflicts, community cohesion, and impacts to surface streets.

The study currently is in a public comment phase that will run through most of the summer. Later in the summer, UDOT will publish the study. After the study is published there will be a 30-day public comment period including a public hearing.

It should be noted that Salt Lake City Planning Commissioners suggested that other states include the potential for light rail lines in highway project plans and that UDOT might consider doing the same for the Interstate 80 corridor, particularly long-term to address Summit County population growth.⁴

The following is intended to address the four items listed by UDOT representatives in more detail.

DRIGGS AVENUE

The Interstate 80 eastbound exit for 1300 East Street runs parallel to Driggs Avenue which is south of the exit ramp. UDOT would like to close the west end of Driggs Avenue and make a cul-de-sac. The cul-de-sac appears to do two things. One, the cul-de-sac would eliminate

conflicts between cars from the exit ramp turning right onto 1300 East Street and cars turning right from Driggs Avenue onto 1300 East Street. Two, it would allow improvements for exiting traffic so that traffic would not back up onto Interstate 80. The proposal might require City Council action to close Driggs Avenue at that location. According to UDOT representatives, the department views reconfiguring the exit ramp as a safety issue and a major component of the project.

CLOSING 600 EAST STREET TO AUTOMOBILE TRAFFIC

According to UDOT representatives, the department supports closing the street to automobile traffic. The presentation poses the issue this way: “Would closing 600 East to motorized vehicle traffic and providing a pedestrian underpass better serve the community?” One result of closing the street to motorized traffic would be that a bridge spanning 600 East could be shortened considerably. UDOT representatives indicated that shortening the span could save up to \$3 million – some of which could be re-allocated to improve the aesthetics of noise walls. Closing the street would require City Council action.

MODIFYING ELIZABETH SHERMAN PARK

The Sugar House Master Plan describes Elizabeth Sherman Park as “a 1.5- acre linear park located behind the UP&L Southeast Power Station between Elizabeth Street and the Interstate 80 overpass. The park was built in 1987 through efforts of the Sugar House Community Council, with contributions from UP&L and UDOT. It is built over the former Brickyard railroad spur, and connects the Jordan and Salt Lake City Canal corridor to the Parleys Creek/Denver & Rio Grand Railway trail corridor.”

UDOT representatives indicated that residents near the park would like the park improved to deter loitering, improve safety and reduce crime. Modifications also would provide pedestrian and bicycle access, better landscaping and additional lighting.⁵ According to a UDOT representative, the department owns the park.

NOISE WALLS

The project includes adding additional traffic lanes within the Interstate 80 right of way. According to an *Improvement Study* slide, “if lanes are added to I-80, noise will be mitigated where feasible.” As mentioned previously, noise walls might be a component of the project throughout most of its length.

To determine if noise walls are necessary, UDOT would take a reading of current noise decibels near the freeway. The department then would use the readings and future estimated traffic levels to project future noise levels and “sound contours” – more or less a topographical map of noise affected by landscape and structures.

Utah Administrative Code R930-3 requires that sound barriers must reduce noise levels by at least five decibels for “typical impacted receivers nearest the highway.” The code also says in part, “Noise abatement may not be planned after local government department and impacted residents’ involvement if a majority of them are in opposition or indifferent to noise mitigation.” To determine support or opposition, UDOT would send ballot to people who would have a five-decibel reduction in noise based on the “sound contours.” If 75 percent of those who receive

ballots and who live closest to a noise wall support building a wall, UDOT will proceed to build a noise wall.

If a wall is built UDOT would be responsible for maintaining the side closest to the freeway. The property owner on the other side of the wall would be responsible for maintaining that side.

Another section of R930 says, “The Department shall coordinate in the local government review process with regard to aesthetics, height, and other design features of the proposed noise abatement measure.”

Salt Lake City’s *Zoning Ordinance* – Section 21A.40.120 – has height restrictions on fences and walls but appears to deal largely with private property. Another section – 21A.52.100 – says, “The board of adjustment may grant a special exception to exceed the height limits established for fences and walls in part IV, chapter 21A.40 of this title” under certain conditions. One of those conditions includes the following: “Fences, walls or other similar structures which exceed the allowable height limits, in cases where it is determined that an undesirable condition exists because of the abnormal intrusion of offensive levels of noise, pollution, light or other encroachments on the rights to privacy, safety, security and aesthetics.”

The Sugar House Master Plan also includes this paragraph:

“Fairmont Park -- When the detailed planning for the Interstate-80 reconstruction project is commenced by UDOT, the issue of buffering Fairmont Park should be addressed. Whether through increased vegetation or sound walls, the investment the City has in Fairmont Park and the experience of the park user needs to be protected. In order to address all of these needs in a comprehensive manner, a master plan for the park is recommended.”

¹ *Improvement Study* slide, Page 2; Planning & Zoning Division Memorandum, Page 2, Question 11.

² Planning & Zoning Division Memorandum, Page 2, Question 4.

³ Planning & Zoning Division Memorandum, Page 2, Question 13.

⁴ Summary of the Planning Commission I-80 Meeting (May 24, 2006).

⁵ *Improvement Study* slide.

MEMORANDUM

451 South State Street, Room 406
Salt Lake City, Utah 84111
(801) 535-7757



Planning and Zoning Division
Department of Community Development

TO: Louis Zunguze, Community Development Director

FROM: Alex Ikefuna – Planning Director

DATE: May 24, 2006

CC: Brent Wilde, Deputy Community Development Director
Tim Harpst, Transportation Division Director

SUBJECT: I-80 Presentation at Sprague Library in Sugar House

On May 23, 2006, the Salt Lake City Transportation and Salt Lake City Planning Divisions co-hosted a community meeting at the Sprague Library in Sugar House to discuss the Utah Department of Transportation's I-80 Reconstruction project. Approximately 25 members of the public attended this meeting.

As you are aware, UDOT is in the environmental planning stage for a reconstruction project along 1-80 from State Street to 1300 East. One critical aspect of this stage is to obtain public input regarding the project. Consultants for UDOT presented an overview of the project and entertained a question and answer session at the community meeting. The following is a list of questions and answers, as well as comments, expressed by various members of the public during this meeting as noted by Planning Staff:

1. Comment – The numbers presented for reported accidents at each of the interchanges appears to be underestimated. This comment was made by a former police officer who responded to accidents along this section of the freeway for a period of six years. The consultant responded that any additional information that this member of the public could provide would be helpful in presenting the case that accidents along this stretch of the freeway are a problem and a significant safety concern.
2. Question – Has there been much opposition from the public regarding sound walls?
Answer – A couple, but the overwhelming response has been in favor of sound walls. UDOT utilizes a ballot/voting system to obtain input as to whether or not a neighborhood wants sound walls installed.
3. Question – What is the volume of traffic increase along this section of freeway in the last 10 years?
Answer – The consultant responded that he did not have numbers readily available at the meeting, but noted that a great amount of the noise produced from this stretch of freeway is due to road deterioration and not necessarily increased traffic volumes.

4. Question – What are some of the impacts to be expected during the construction?
Answer – In terms of noise, sound walls will most like be constructed first to help mitigate the noise impact. The construction will be “phased”, and “Rapid Construction Techniques” such as prefabricated bridges constructed off-site will be used to mitigate noise. It is difficult to balance construction and noise impact during the day and night hours, but the contractors will be sensitive to this issue. Of course, there will be traffic impacts (delays) due to the construction.
5. Question – Explain how costs can be decreased for the proposal at 600 East?
Answer – A reduction in the existing bridge lengths causes costs to decrease. This savings can be used for other aspects of the project such as aesthetic enhancements.
6. Question – How much of the funding for this project is Federal?
Answer – This project is State funded.
7. Question – Is there any consideration for pedestrian crossings, specifically at 1300 East with the proposed free flow turn lane?
Answer – Pedestrian crossings are an issue that must be addressed.
8. Comment – A citizen noted that those turning right at the top of the 1300 East eastbound exit often turn right again at Parkway and proceed down to Highland Drive to access the Sugar House Business District. This citizen wanted to know if any traffic calming measures were proposed to mitigate the traffic impact on Parkway. Salt Lake City Transportation Division responded that changes to the interstate often have other impacts and traffic impact mitigation could be examined for Parkway.
9. Comment – If 600 East is closed to vehicular traffic, a park at either end of the underpass would be preferable to aesthetic treatments to the underpass itself.
10. Question – How can dust be mitigated at State Street?
Answer – New pavement (although this too will deteriorate over time) and sound walls can and will mitigate some dust impact.
11. Question - What is the timeframe between the decision to build the project and the actual construction?
Answer – Should the decision to be made to go ahead and build the project, construction would take place starting in Fall 2007 or Spring 2008. It is anticipated that the construction would take place over two building seasons.
12. Comment – It appears that with the construction of retaining and noise walls, combined with the required slope, the physical structures of the interstate will be closer to several residences.
13. Question – The existing chain link fence that borders the freeway is the extent of the current right-of-way? Will more right-of-way need to be obtained for construction?
Answer – Additional, yet minor, areas of land will need to be obtained, specifically at State Street and at 700 East.

Summary of the Planning Commission I-80 Meeting (May 24, 2006)

At 6:52 p.m., Ms. Clark concluded the presentation and requested comments from the Commissioners.

Commissioner Diamond extended appreciation for the presentation, and expressed concern regarding the integration of potential light rail into the I-80 project plan. He noted numerous states include the potential for light rail into project plans and suggested the topic be considered in the further development of the plan. He requested additional insight from Ms. Clark regarding the project's intentions for development of light rail within the Interstate corridors.

Ms. Clark stated that UTA and WFRC had worked with UDOT on the plan, and noted that plans to identify other modes of transportation were being considered for the long range plan. She stated that funding for the rail line would be from a different source with the potential of using the Sugar House Spur Line. In response to Commissioner Diamond's comment regarding light rail within the Interstate corridors, Ms. Clark commented that UTA has been addressing the light rail approach with the consideration of the existing line south of 2100 South. She stated that HOV lanes in the median are being considered by UDOT.

Commissioner Diamond stated that the growth of Summit County should be a concern and considered when preparing a plan for the transportation in the area. He requested UDOT to consider the light rail, or regular gauge trains, to move people more efficiently with non-vehicular means. He stated that the Planning Commission considers long-term planning, and acknowledges the budget and safety concerns for Interstate 80, but requested additional thought be taken for potential long-term action.

Ms. Clark stated that she would transmit the concerns and suggestions to WFRC, but that the funding for the proposed project is generally for safety improvements.

Commissioner Chambless agreed with the comments stated by Commissioner Diamond and included that the general purpose lanes, could serve as a potential for light rail when considering long-term transit concerns.

Russell:

In addition to the information Alex has shared, I would like to provide you with comments from the Transportation Advisory Board and the issues this office sees as items the City Council may wish to question UDOT about at the briefing. Because of the shortness of time between the recent meetings and the upcoming briefing, I am providing this information to you such that you can, in turn, provide it to City Council in preparation for the briefing.

TAB

At the May 1 TAB meeting, UDOT presented the environmental study they are doing. TAB stated they would like UDOT to return to their June 5 TAB meeting to present the results of the various neighborhood meetings they have conducted over the past couple of weeks. TAB expects to take some positions regarding aspects of the proposed improvements at their June meeting. However, they did feel strongly enough about one matter that they made a unanimous recommendation regarding 600 East at their May meeting. TAB recommended that at a minimum, a bicycle and pedestrian way remain under I-80 at 600 East.

ISSUES

There are 5 issues that City staff have identified that the City administration and/or City Council may well wish to make recommendations on. UDOT, to their credit, has asked that the City consider providing them recommendations of any kind on this project, but they are very interested in the following:

1. Proposal to cul-de-sac Driggs Avenue at 1300 East.

The planned improvements provide additional vehicle stacking space on the eastbound off-ramp plus a free right turn lane for east-to-south traffic. The project is primarily being pursued by UDOT as a safety matter. At this location, traffic routinely backs down the ramp onto the mainline of I-80. This location has the highest crash statistics and these types of crashes are often severe due to the high speed on mainline traffic. In order to install the improvements that would correct the problem, Driggs would need to be closed and the two houses immediately west of 1300 East purchased and removed to construct a cul-de-sac. Closing Driggs has been a proposed action for a number of years. This office concurs that the safety problem needs to be corrected. UDOT has requested to go through the City's street closure process. If the City does not go through such a process or if the result of processing such a request does not result in a closure, UDOT will assess it's ability to close the street anyway using their authority and the seriousness of the safety problem as justification.

2. Noise Abatement.

UDOT's study consultant, Horrocks Engineers, is currently performing noise analysis along this section of I-80. Their preliminary work indicates that noise abatement, highly likely in the form of noise walls, would meet the UDOT criteria which is basically to provide noise abatement as part of the project improvements if the nearby residents agree to have them as determined in a ballot process. UDOT has asked if the City has any comment on this matter. The City does not have any adopted preferences regarding noise walls. Those that have been installed in recent years have followed UDOT's criteria.

3. Aesthetics.

UDOT has asked the City and general public for input on aesthetic matters relative to the project. A workshop has been held in which City staff and interested citizens have participated to discuss types of aesthetic improvements such as landscaping. In addition, UDOT has stated that they intend to spend their entire \$104 million budget on the project and are willing to incorporate some or all savings, as the result of decisions or recommendations the City provides, to additional aesthetic improvements. UDOT has been asked to be more specific about this.

4. Possible narrowing of Elizabeth Sherman Park.

UDOT has suggested that if the City concurs, the bridge over Highland Drive and this park could be replaced with a narrower bridge that spans Highland, but not as much of the park as at present. This would save funds that could be used toward aesthetics elsewhere on the project. The current bridge was built to span the road and a rail line that has since been abandoned and a small park with winding sidewalks now takes its place. The suggestion is to not have as wide an opening on the west side of the street. There have been problems with vagrants and illegal activities in this area induced or enhanced by the otherwise unused space west of the streetside sidewalk. The underlying ground where the park exists under I-80 is owned by UDOT.

5. Possible narrowing or closure of 600 East.

UDOT has suggested that if the City concurs, 600 East could be closed or narrowed to preclude car traffic, but still allow bicycle and pedestrian movement. Savings from a shortening or elimination of the interstate overpass bridge could be put toward project aesthetics. UDOT has identified this as an idea to consider, but has no position on it. UDOT will incorporate whatever preference the City has with respect to maintaining the street underpass as is, narrowing the bridge to allow bikes and peds only or eliminating the crossing entirely. 600 East currently carries about 1,400 cars per day and is a designated bicycle route. Concerns would be impacts to nearby streets if the road was closed to auto traffic. Because this is an existing bicycle route, this office concurs with TAB that at least the bicycle and pedestrian movements under the interstate should be preserved.

Because the analysis on several of the above issues have not been completed, we are not in a position to provide additional recommendations at this time. The above information is intended to provide background for the upcoming briefing.

Timothy P. Harpst, P.E., PTOE

Transportation Director

Salt Lake City Transportation Division Phone: 801 535-6630

349 South 200 East, Suite 450 Fax: 801 535-6019

Salt Lake City, Utah 84111 email: tim.harpst@ci.sl.c.ut.us

I-80

State Street to 1300 East

I-80, State Street to 1300 East Improvement Study

Salt Lake City Public Meeting
May 23, 2006
Sprague Library



I-80

State Street to 1300 East

I-80 History

- Construction of I-80 – 1960's
- Major Investment Study – Late 1990's
 - ❖ Project Limits – I-15 to Base of Parleys Canyon
 - ❖ Funding Required - +\$500 million
 - ❖ Complete Redesign of Interchanges
- Under Bridge Rehabilitation Project – 2000
 - ❖ Rehabilitated Structures from I-15 to Base of Parley's Canyon
- Environmental Study – Currently Underway



I-80

State Street to 1300 East

Other Area Projects

- ☐ UTA
 - ❖ Sugar House Spur - TBD
- ☐ Trails/PRATT Projects
 - ❖ Jordan River to 1300 East - Future Project
 - ❖ 1300 East to 1700 East - Environmental Study
 - ❖ 1700 East to I-215 - Environmental Study
 - ❖ I-215 Bridge - Under Construction



I-80

State Street to 1300 East

Project Schedule

	2005			I 2006											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	
Notice To Proceed		Sep 27, 2005													
Kickoff Meeting		Oct 20, 2005													
Agency Scoping		Nov 2005 – Jan 2006													
Draft Improvement Study		Nov 2005 – Summer 2006													
Public Hearing												Fall 2006			
Final Improvement Study									Summer 2006 – Fall 2006						

If a build alternative is selected:
 Design: Begin Fall 2006
 Construction: Begin Fall 2007

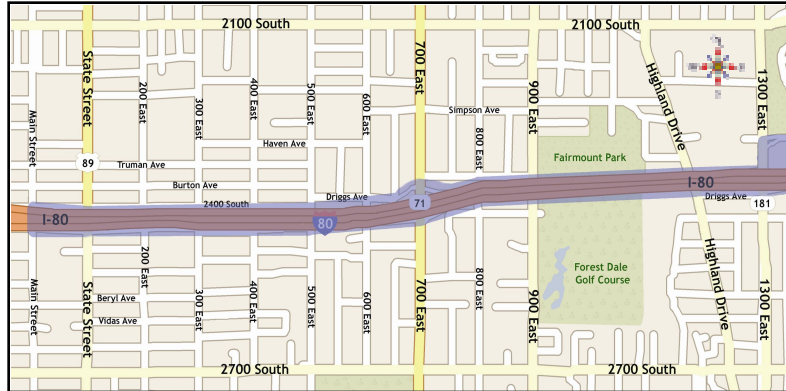


I-80

State Street to 1300 East

Project Area

Interstate 80 from State Street to 1300 East



I-80

State Street to 1300 East

Project Overview

- Project Goal
 - ❖ Develop an improvement study to address correction of several deficiencies

- Project Commitments
 - ❖ Improve safety
 - ❖ Take care of what we have
 - ❖ Make what we have work better
 - ❖ Seek input to understand and effectively respond to community concerns



I-80

State Street to 1300 East

Project Overview

- Existing Project Issues Identified by the Project Team:
 - ❖ Ramp Lengths
 - ❖ Pavement Deterioration
 - ❖ Median Treatment
 - ❖ Structural Integrity
 - ❖ Congestion
 - ❖ Traffic Safety



I-80

State Street to 1300 East

Project Overview

- Some of the Project Issues Identified by the Public:
 - ❖ Noise
 - ❖ Schedule
 - ❖ Utility Conflicts
 - ❖ Community Cohesion
 - ❖ Impacts to Surface Streets
 - ❖ Others?

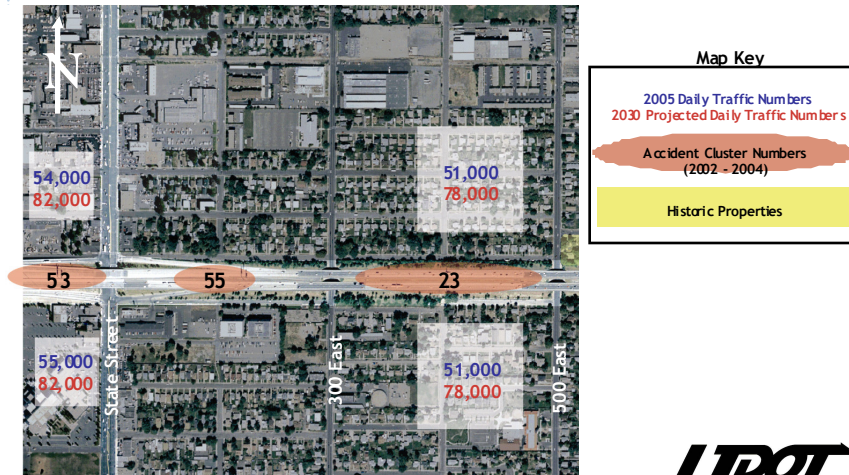


I-80

State Street to 1300 East

Project Overview

Traffic and Safety

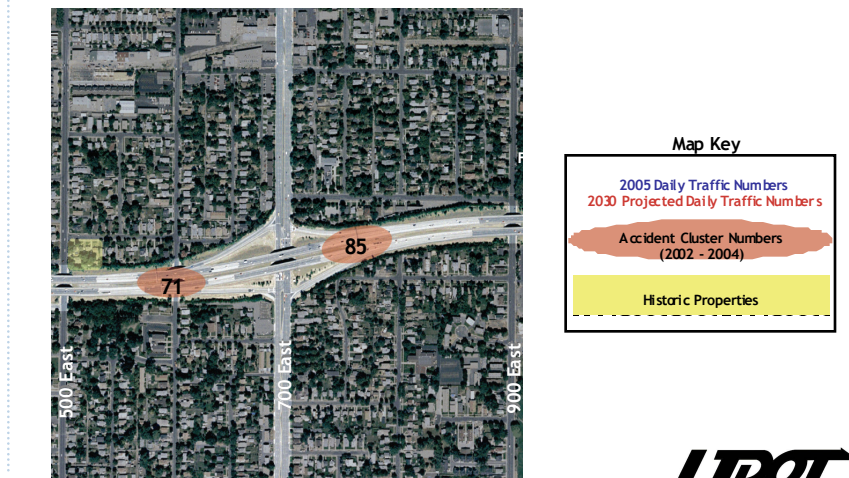


I-80

State Street to 1300 East

Project Overview

Traffic and Safety

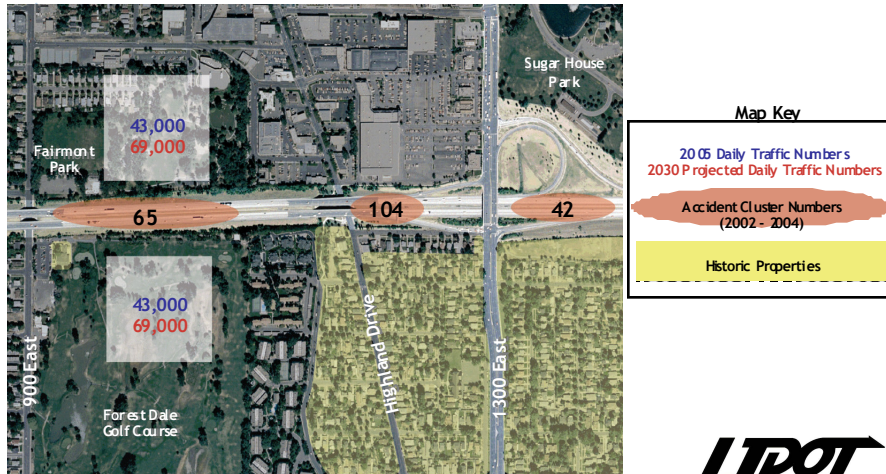


I-80

State Street to 1300 East

Project Overview

Traffic and Safety



I-80

State Street to 1300 East

Possible Improvements

□ Improvements to be Evaluated May Include:

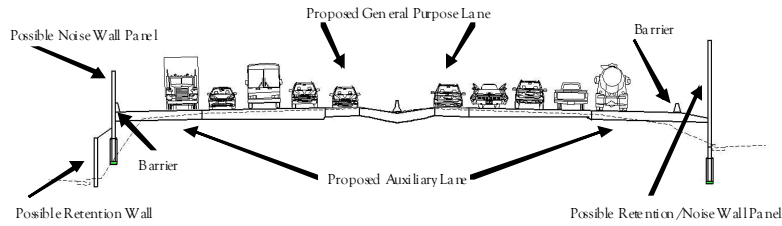
- ❖ Additional General Purpose Lane: EB and WB
- ❖ Auxiliary Lane: EB and WB
- ❖ Ramp Improvements
- ❖ New Concrete Pavement
- ❖ New Bridges at 300 East, 500 East, 600 East, 700 East, 900 East and Highland Drive
- ❖ Rehabilitation of the State Street Bridge
- ❖ Intersection Improvements
- ❖ Retaining Walls to Reduce Right-of-Way Impacts
- ❖ Noise/Sound Walls



I-80

State Street to 1300 East

Typical Section



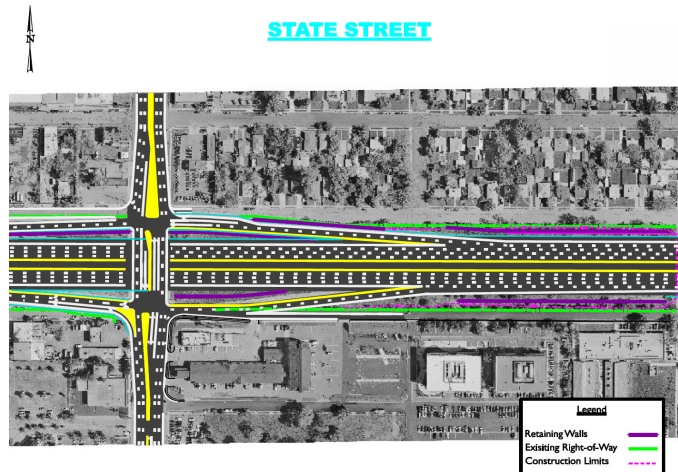
Four General Purpose Lanes Alternative



I-80

State Street to 1300 East

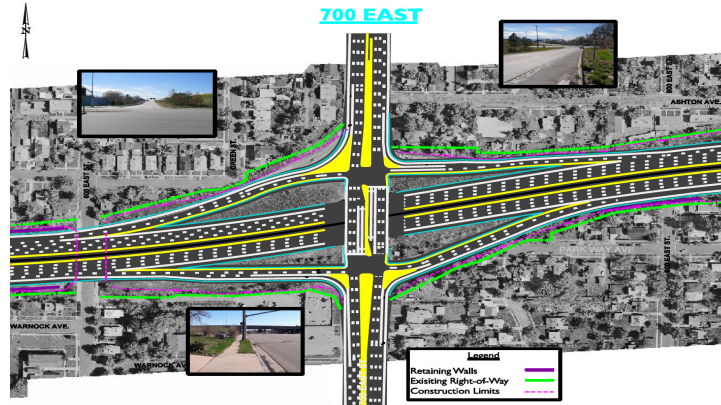
State Street Interchange



I-80

State Street to 1300 East

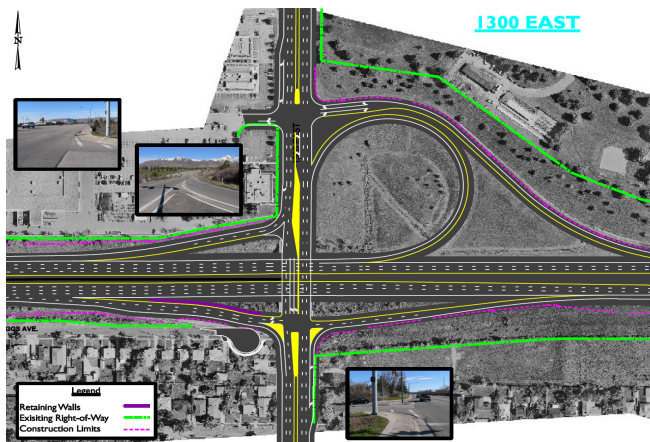
700 East Interchange



I-80

State Street to 1300 East

1300 East Interchange



I-80

State Street to 1300 East

Specific Areas

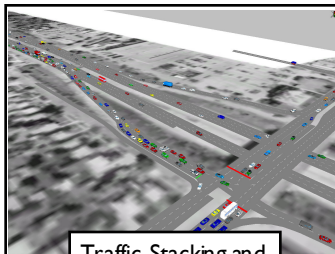
- ❑ Specific Areas of Question and Input
 - ❖ Driggs Avenue
 - ❖ 600 East
 - ❖ Elizabeth Sherman Park
 - ❖ Corridor-Wide Noise



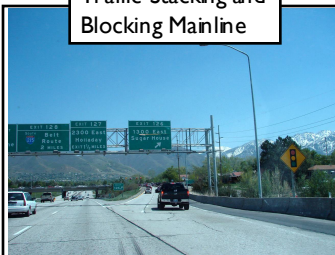
I-80

State Street to 1300 East

Driggs Avenue



Traffic Stacking and Blocking Mainline



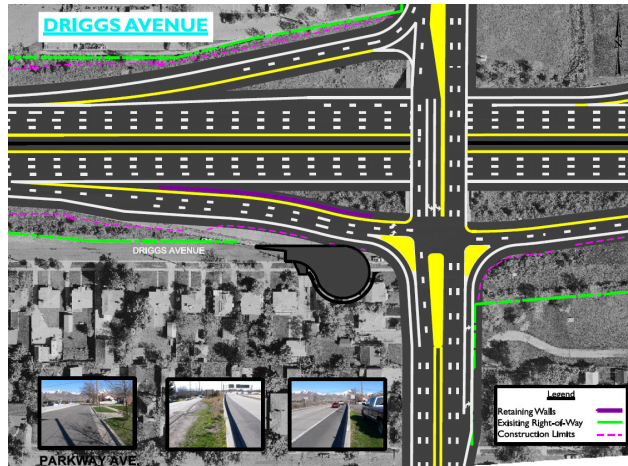
Conflict with two right turns



I-80

State Street to 1300 East

Driggs Avenue



I-80

State Street to 1300 East

Driggs Avenue

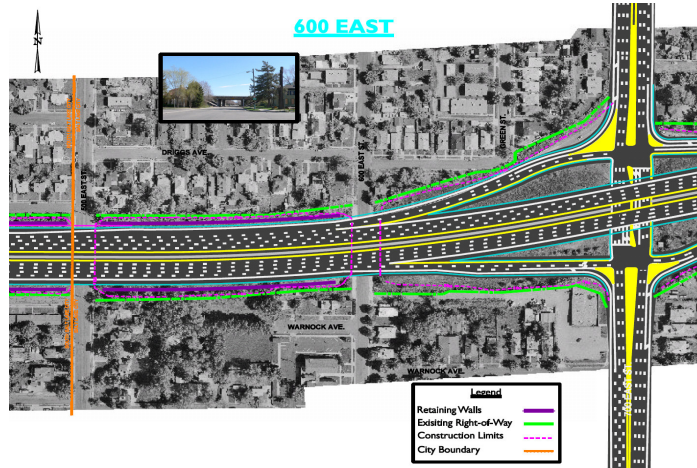
- Summary of Concerns
 - ❖ Maintenance
 - ❖ Visual Impacts
 - ❖ Property Acquisition
 - ❖ Noise
 - ❖ Aesthetics and Landscaping
 - ❖ Loitering



I-80

State Street to 1300 East

600 East

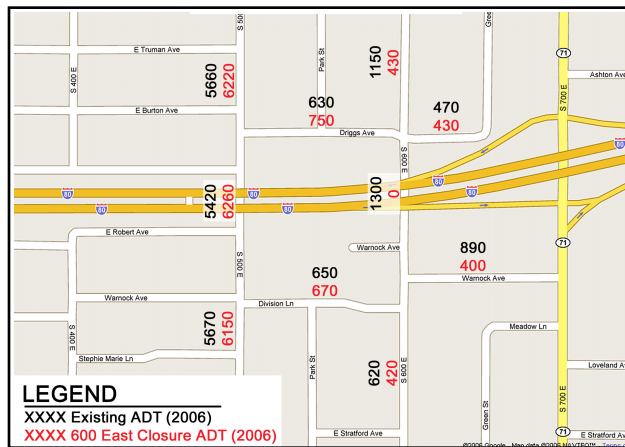


I-80

State Street to 1300 East

600 East

Traffic Volumes if 600 East is Closed to Motorized Traffic

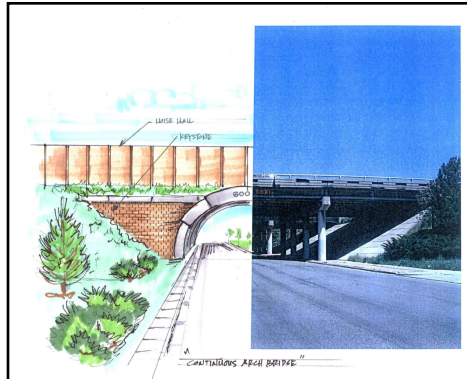


I-80

State Street to 1300 East

600 East

Would closing 600 East to motorized vehicle traffic and providing a pedestrian underpass better serve the community?



I-80

State Street to 1300 East

600 East

Conceptual Ideas for 600 East



I-80

State Street to 1300 East

600 East

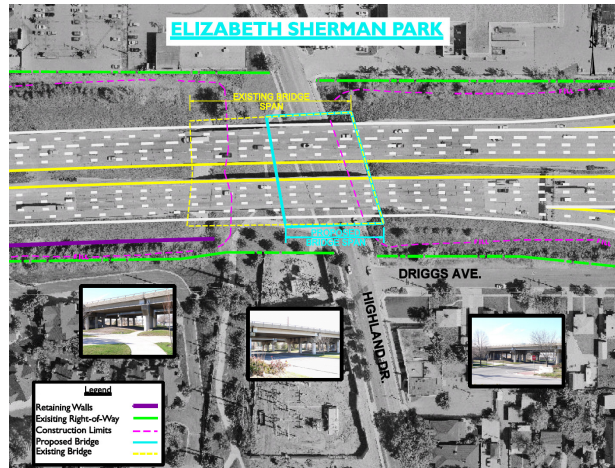
- Summary of Concerns
 - ❖ Speeding
 - ❖ Traffic Impacts
 - ❖ Safety
 - ❖ Pedestrian and Bicycle Access
 - ❖ Aesthetics and Landscaping
 - ❖ Access for Emergency Vehicles
 - ❖ Impacts to Surrounding Streets
 - ❖ Community Cohesion
 - ❖ Clean up Trash and Graffiti



I-80

State Street to 1300 East

Elizabeth Sherman Park



I-80

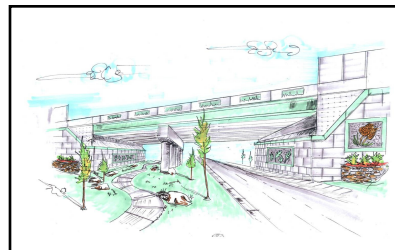
State Street to 1300 East

Elizabeth Sherman Park

Would modifications to Elizabeth Sherman Park benefit the community?



Looking North



Looking North



I-80

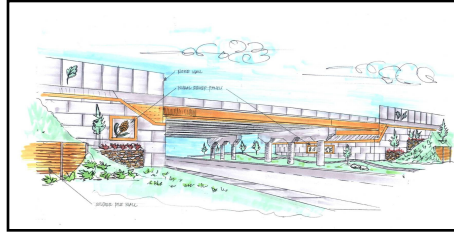
State Street to 1300 East

Elizabeth Sherman Park

Would modifications to Elizabeth Sherman Park benefit the community?



Looking South



Looking South



I-80

State Street to 1300 East

Elizabeth Sherman Park

- Summary of Concerns
 - ❖ Pedestrian and Bicycle Access
 - ❖ Improve Safety and Reduce Crime
 - ❖ Aesthetics and Landscaping
 - ❖ Additional Lighting
 - ❖ Clean Up
 - ❖ Deter Loitering and Graffiti Artists
 - ❖ Open Park Feel
 - ❖ Don't Add More Concrete



I-80

State Street to 1300 East

Noise Analysis

Noise Background

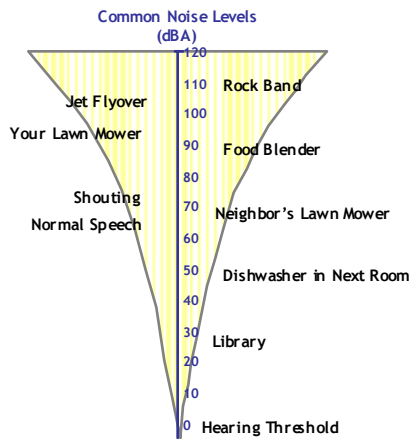
- ❑ Noise is defined as unwanted sound. Sound is produced by the vibration of sound pressure waves in the air.
- ❑ Sound pressure levels are used to measure the intensity of sound and are measured in terms of decibels (dBA).



I-80

State Street to 1300 East

Noise Analysis



1. Existing and future noise levels will be calculated along I-80
2. Noise levels will be compared to UDOT Noise Abatement Criteria:
 - ❑ 65 dBA for Residential Areas (outdoor)
 - ❑ 72 dBA for Commercial Areas (outdoor)
3. If lane(s) are added to I-80, noise will be mitigated where feasible



I-80

State Street to 1300 East

Noise Mitigation

Abatement

- Noise mitigation will be provided if it is determined that it is both feasible and reasonable.
- Noise abatement must substantially reduce noise when noise levels reach 65 dBA or greater for residential and public areas.
- At a minimum a 5 dBA decrease must be achieved by those landowners in the impact area. 5 dBA is a readily perceptible change.



I-80

State Street to 1300 East

Noise Mitigation

Noise walls are the most common way to mitigate roadway noise.



Vegetation Barriers
(usually not dense enough to be effective)



Earth Berms
(require a lot of space)



Noise Walls
(effective if they break line-of-sight)



Traffic Management
(usually not possible to restrict roadway use)



I-80

State Street to 1300 East

Noise Mitigation

UDOT Noise Mitigation Policy

Walls must meet specific requirements:

- They work to reduce noise by at least 5 decibels
- They can be built
- They are cost effective
- Affected residents want them

UDOT will also consider written documentation from local governments and/or community councils regarding their noise wall/abatement desires.



I-80

State Street to 1300 East

Noise Mitigation

Community Acceptance

- Balloting - only property owners with noise levels greater than 65 decibels receiving a 5 decibel reduction receive a ballot.
- At least 75% of the impacted front row (adjacent) residents/landowners and 67% of overall residents/landowners (including front row receivers) must provide written support for the wall.
- Ballots will be mailed to the impacted residents/landowners. The number of ballots returned will be divided by the number of ballots that were sent out to determine the percentage.



I-80

State Street to 1300 East

Impacts of Noise Walls

Visual Impacts



I-80

State Street to 1300 East

Impacts of Noise Walls

Typical Noise Walls



I-80

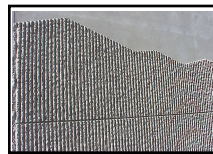
State Street to 1300 East

Impacts of Noise Walls

Some noise walls have included aesthetic treatments.



Wall type can influence the look of the roadway corridor.



I-80

State Street to 1300 East

Impacts of Noise Walls

Conceptual Noise Walls Along I-80

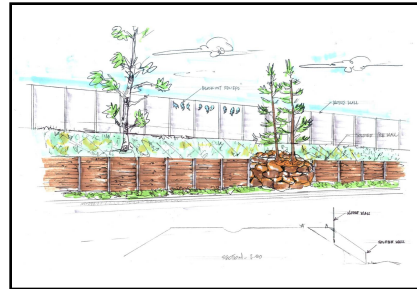


I-80

State Street to 1300 East

Side-Slopes

Conceptual Side-Slope Treatment



I-80

State Street to 1300 East

Community Outreach

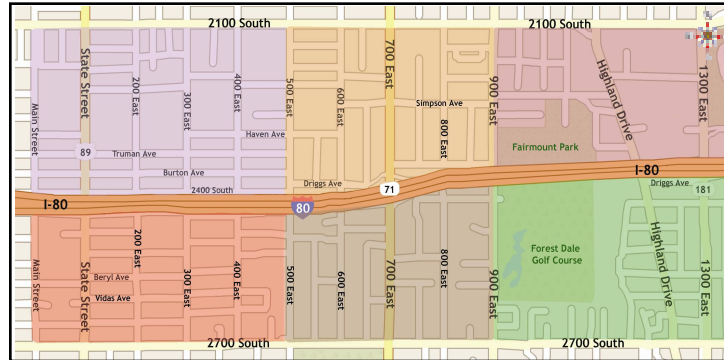
- Neighborhood Meetings (May 2006)
- Local Organization and Government Meetings
- Online and Printed Comment Forms
- Bi-lingual Support
- Web Site (www.udot.utah.gov/i-80state-1300)
- Media Relations



I-80

State Street to 1300 East

Neighborhood Groups



- 1 Neighborhood Group # 1
North Side of I-80: Main Street to 500 East
- 2 Neighborhood Group # 2
South Side of I-80: Main Street to 500 East
- 3 Neighborhood Group # 3
North Side of I-80: 500 East to 900 East
- 4 Neighborhood Group # 4
South Side of I-80: 500 East to 900 East
- 5 Neighborhood Group # 5
North Side of I-80: 900 East to 1300 East
- 6 Neighborhood Group # 6
South Side of I-80: 900 East to 1300 East



I-80

State Street to 1300 East

Neighborhood Groups

Neighborhood Group Meetings:

- Neighborhood Group # 1:** May 17, 2006 from 6:00 p.m. to 7:30 p.m.
South Salt Lake Columbus Hall: 2531 South 500 East
- Neighborhood Group # 2:** May 18, 2006 from 6:00 p.m. to 7:30 p.m.
South Salt Lake Columbus Hall: 2531 South 500 East
- Neighborhood Group # 3:** May 3, 2006 from 6:00 p.m. to 7:30 p.m.
Nibley Elementary School: 2785 South 800 East
- Neighborhood Group # 4:** May 4, 2006 from 6:00 p.m. to 7:30 p.m.
Nibley Elementary School: 2785 South 800 East
- Neighborhood Group # 5:** May 9, 2006 from 6:00 p.m. to 7:30 p.m.
Nibley Elementary School: 2785 South 800 East
- Neighborhood Group # 6:** May 10, 2006 from 6:00 p.m. to 7:30 p.m.
Nibley Elementary School: 2785 South 800 East

