

## **SECTION VI**

### **SALT LAKE/ WEST VALLEY AND THE OGDEN/ LAYTON URBANIZED AREAS**

#### **Congestion Mitigation / Air Quality Program (CMAQ)**

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Program Tables and  
Project Descriptions



2015 – 2020 Transportation Improvement Program (TIP)

SALT LAKE/ WEST VALLEY and the OGDEN/ LAYTON TRANSPORTATION IMPROVEMENT PROGRAM  
URBAN AREA CONGESTION MITIGATION / AIR QUALITY PROGRAM (CMAQ)

County	Sponsor	Route	Project Number	Project Information			Year Added to TIP	Estimated Total Project Cost	Original Funds Programmed	Local Matching Funds Due	Total Amount Obligated as of Dec '13	Estimated CMAQ Funds and Phasing (Fiscal Year)					Concept Development	
				PIN	Location/ Limits	Concept/ Type of Improvement						2014	2015	2016	2017	2018	2019	2020
<b>SALT LAKE/ WEST VALLEY URBAN AREA</b>																		
Salt Lake	Bluffdale	140	New	13130	14600 South (SR-140); Pony Express Road to UPRR Bridge over SR-140	Construct Bicycle & Pedestrian Facility	2014	\$ 669,700	\$ 624,361	\$ 45,339	\$ -	\$ -	\$ -	\$ 10,000	\$ -	\$ 614,361	\$ -	\$ -
Salt Lake	Cottonwood Heights		Newproject-0028()	8601	Wasatch Boulevard & 7650 South	Park-n-Ride Lot	2010	\$ 1,600,000	\$ 1,486,000	\$ 107,908	\$ -	\$ 10,000	\$ 150,000	\$ 326,000	\$ 1,000,000	\$ -	\$ -	\$ -
Salt Lake	Cottonwood Heights		New	12000	Bengal Blvd & 2300 East Round-About	Intersection Improvements	2013	\$ 2,655,000	\$ 2,655,000	\$ 192,796	\$ -	\$ 10,000	\$ -	\$ -	\$ -	\$ 1,000,000	\$ 1,645,000	\$ -
Salt Lake	Cottonwood Heights	Var	New	13128	Park and Ride Smart Boards	Construct "Live Parking Availability" Signs for Select Canyon Park-n-Ride Lots	2014	\$ 706,900	\$ 659,043	\$ 47,857	\$ -	\$ -	\$ -	\$ -	\$ 10,000	\$ -	\$ 349,043	\$ 300,000
Salt Lake	Holladay		Newproject-003()	8555	6200 South & Holladay Boulevard	Intersection Improvements	2010	\$ 1,500,000	\$ 1,300,000	\$ 94,401	\$ 10,000	\$ -	\$ 250,000	\$ 1,040,000	\$ -	\$ -	\$ -	\$ -
Salt Lake	Holladay	LC35	F-R299(144)	10020	6200 South & 2300 East Intersection	Intersection Improvements	2011	\$ 938,000	\$ 874,000	\$ 63,466	\$ -	\$ 10,000	\$ 150,000	\$ 214,000	\$ 500,000	\$ -	\$ -	\$ -
Salt Lake	Salt Lake City & UTA	Var	New	13125	Sugar House Streetcar Double Track; 500 East to 600 East	Construct a Double Track	2014	\$ 3,016,100	\$ 900,000	\$ 65,354	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 900,000
Salt Lake	Salt Lake City/ UTA		New	11999	Black Line TRAX Service; SL Central Station to University of Utah	Light Rail Service & Operations	2013	\$ 7,240,000	\$ 2,000,000	\$ 145,232	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000,000
Salt Lake	Salt Lake County & UTA	Var	New	13126	Hillsborough Pond Park & Ride Expansion; Wasatch Blvd & Creek Rd	Expand and Improve Parking Facility	2014	\$ 1,784,700	\$ 1,663,876	\$ 120,824	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500,000	\$ 1,163,876
Salt Lake	Sandy		New	12001	1300 East Buttercup Pedestrian Bridge	Pedestrian Bridge New Construction/ Intersection Improvements	2013	\$ 3,116,000	\$ 2,000,000	\$ 145,232	\$ -	\$ 10,000	\$ -	\$ 1,000,000	\$ 990,000	\$ -	\$ -	\$ -
Salt Lake	UDOT	68	CM-0068(38)52	5262	SR-68; Redwood Road 4700 South, Taylorsville	Intersection - Improvements	2005	\$ 2,130,537	\$ 2,263,727	\$ 164,383	\$ 2,263,728	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Salt Lake	UDOT	68	CM-0068(39)51	5264	SR-68; Redwood Road 5400 South, Taylorsville	Intersection - Improvements	2005	\$ 2,660,817	\$ 2,758,107	\$ 200,283	\$ 2,758,108	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Salt Lake	UDOT	Var	CM-R299(9)	5996	Region 2 Commuter Link	ITS/ATMS - Commuter Link	1999	\$ 30,684,350	\$ 7,741,000	\$ 671,045	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,341,000	\$ 400,000	\$ -
Salt Lake	UDOT	Var	F-ST99(162)	10018	TravelWise	Comprehensive Travel Demand Management Program. (For Private & Public Partnership)	2011	\$ 2,400,000	\$ 746,077	\$ 54,177	\$ 202,077	\$ -	\$ 136,000	\$ 136,000	\$ 136,000	\$ 136,000	\$ -	\$ -
Salt Lake	UDOT		New	11096	I-215 Ramp Meters - I-215 between 6200 South and State Street	Construct & Implement Ramp Meters	2012	\$ 3,813,000	\$ 924,000	\$ 67,097	\$ -	\$ 10,000	\$ -	\$ -	\$ 914,000	\$ -	\$ -	\$ -
Salt Lake	UDOT		New	11998	Little Cottonwood Canyon Intersection - Snowbird Entry 1	Intersection Improvements	2013	\$ 953,000	\$ 350,000	\$ 25,416	\$ -	\$ 10,000	\$ -	\$ -	\$ 340,000	\$ -	\$ -	\$ -
Salt Lake	UDOT	Var		12008	Salt Lake Green Bike Share Expansion	Constructs additional Bike Docking Stations/ Purchases additional Bikes	2013	\$ 75,000	\$ 69,923	\$ 46,759	\$ 69,923	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000	\$ 324,000

2015 – 2020 Transportation Improvement Program (TIP)

SALT LAKE/ WEST VALLEY and the OGDEN/ LAYTON TRANSPORTATION IMPROVEMENT PROGRAM  
URBAN AREA CONGESTION MITIGATION / AIR QUALITY PROGRAM (CMAQ)

County	Sponsor	Route	Project Number	PIN	Project Information		Year Added to TIP	Estimated Total Project Cost	Original Funds Programmed	Local Matching Funds Due	Total Amount Obligated as of Dec '13	Estimated CMAQ Funds and Phasing (Fiscal Year)					Concept Development				
					Location/ Limits	Concept/ Type of Improvement						2014	2015	2016	2017	2018	2019	2020			
SALT LAKE/ WEST VALLEY URBAN AREA																					
Salt Lake	UDOT	154	New	13129	10400 South & Bangert Hwy VMS; Northbound & Southbound	Install Variable Message Signs (VMS)	2014	\$ 915,200	\$ 863,124	\$ 62,677	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 863,124	\$ -				
Salt Lake	UDOT		New	13131	Foothill VMS; Southbound	Install Variable Message Sign (VMS)	2014	\$ 462,900	\$ 431,562	\$ 31,338	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 431,562	\$ -				
Salt Lake	UTA	Var	F-0070(17)	8597	Tooele - Stansbury Park and Ride Lot	Park-n-Ride Lot	2010	\$ 2,219,000	\$ 1,025,500	\$ 74,468	\$ 1,025,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
Salt Lake	UTA		F-R299(143)	10019	Key North Temple Project 500 West; from North Temple to 300 North	Multimodal connections to FrontRunner, TRAX, Bus, Bicycle, and Pedestrian	2011	\$ 3,064,000	\$ 1,400,000	\$ 101,663	\$ 130,000	\$ -	\$ 270,000	\$ 1,000,000	\$ -	\$ -	\$ -				
Salt Lake	UTA	Var	CM-9999( )	2351	WFRC Area	Air Quality - Rideshare & Vanpool Management	1993	\$ 2,488,870	\$ 2,231,132	\$ 257,739	\$ 1,318,199	\$ 318,733	\$ 318,733	\$ 318,733	\$ 318,733	\$ 318,733	\$ 318,733				
Salt Lake	UTA	Var	CM-9999( )	Tran SEC.	IIS/APTS Deployment in S L	Air Quality - FTA Fund Transfer	1999	\$ 12,000,000	\$ 500,000	\$ 60,998	\$ 340,000	\$ -	\$ -	\$ -	\$ 250,000	\$ 250,000	\$ -				
Salt Lake	UTA	Var	CM-9999( )	Tran SEC.	Lease Vans in S L	Air Quality - FTA Fund Transfer	1994	\$ 1,855,411	\$ 1,453,400	\$ 188,439	\$ 1,141,600	\$ 276,200	\$ 276,200	\$ 325,000	\$ 300,000	\$ -	\$ 276,000				
Salt Lake	UTA	Var	New	13127	Depot District Service Center (DDSC); 669 West 200 South	Construct the CNG Facilities of the DDSC	2014	\$ 57,000,000	\$ 950,000	\$ 68,985	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 450,000	\$ 500,000				
Salt Lake	UTA\UDOT	172	F-0172(18)	7650	5600 West Bus Rapid Transit (BRT) Phase I; 2700 South to 6200 South	ROW & Construction of Bus Rapid Transit (BRT) (Not to be used for Bus Purchase)	2010	\$ 5,000,000	\$ 2,000,000	\$ 145,232	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000,000	\$ -				
Salt Lake	UTAH/ Local Governments	Var		7947	Traffic Adaptive Control System	Traffic Signal Adaptive Control	2009	\$ 5,485,000	\$ 5,110,000	\$ 371,068	\$ 4,148,735	\$ 961,265	\$ -	\$ -	\$ -	\$ -	\$ -				
Salt Lake	W. Valley	LC35	CM-LC35(158)	5296	Cross Town Trail, West Valley City	Air Quality - Bike Ped Facility	2003	\$ 1,038,000	\$ 730,000	\$ 53,010	\$ 730,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
Salt Lake	West Jordan		New	11094	7800 South & 1300 West	Intersection Improvements	2012	\$ 847,000	\$ 450,000	\$ 32,677	\$ -	\$ 10,000	\$ -	\$ 240,000	\$ 200,000	\$ -	\$ -				
Salt Lake	West Jordan		New	11095	9000 South & 4000 West	Intersection Improvements	2012	\$ 1,000,000	\$ 750,000	\$ 54,462	\$ -	\$ 10,000	\$ -	\$ 240,000	\$ 250,000	\$ 250,000	\$ -				
Salt Lake	West Jordan	LC35	New	11097	Jordan River Trail (Gardner Village TRAX Station)	Pedestrian/ Bike Trail	2012	\$ 321,785	\$ 300,000	\$ 21,785	\$ -	\$ 10,000	\$ -	\$ 290,000	\$ -	\$ -	\$ -				
Funds Apportioned											\$ 15,617,870	\$ 5,263,241	\$ 5,263,241	\$ 5,263,241	\$ 5,263,241	\$ 5,263,241	\$ 5,263,241	\$ 5,263,241			
Funds Available											\$ 4,148,735	\$ 4,519,379	\$ 6,636,422	\$ 8,848,729	\$ 7,472,237	\$ 6,026,745	\$ 6,026,745	\$ 5,379,892			
Funds Scheduled											26 Mar 2014	Project Completed	Amount Oblig FY2013	\$1,889,070	\$ 3,146,198	\$ 3,050,933	\$ 6,639,733	\$ 6,708,733	\$ 5,910,094	\$ 5,483,462	\$ 5,506,609
Running Balance											Total Obligated	\$ 29,382,966	\$ 1,373,181	\$ 3,585,488	\$ 2,208,996	\$ 763,504	\$ 116,651	\$ 543,283	\$ (126,717)		

2015 – 2020 Transportation Improvement Program (TIP)

SALT LAKE/ WEST VALLEY and the OGDEN/ LAYTON TRANSPORTATION IMPROVEMENT PROGRAM  
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					Location/ Limits	Concept/ Type of Improvement						2014	2015	2016	2017	2018	2019	2020	
<b>OGDEN/ LAYTON URBAN AREA</b>																			
Davis	Bountiful		New	12002	400 North & 500 South Intersection	400 North 500 West Dedicated Right Turn Lane Construction	2013	\$ 1,300,000	\$ 1,200,000	\$ 133,614	\$ -	\$ 1,200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Davis	Centerville	106	F-0106(11)3	7194	Main Street (SR-106) & Parrish Lane	Intersection Improvements	2008	\$ 660,000	\$ 1,207,876	\$ 86,985	\$ 1,197,876	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Davis	Centerville		New	12003	Frontage Road Bike Lanes; 638 North to 2200 North (Lund Lane)	Construct Bike Lanes along Westside of Frontage Road	2013	\$ 1,215,000	\$ 970,000	\$ 133,614	\$ -	\$ 10,000	\$ -	\$ -	\$ 250,000	\$ 710,000	\$ -		
Weber	UDOT	Var	CM-9999( )	5981	Region 1 Commuter Link	ITS/ATMS - Commuter Link	2000	\$ 6,650,220	\$ 6,200,000	\$ 450,220	\$ 1,100,000	\$ 1,100,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 1,100,000	\$ 1,100,000		
Davis	UDOT	68		8593	500 South; I-15 to 200 West	Intersection Improvements	2010	\$ 5,363,081	\$ 5,000,000	\$ -	\$ -	\$ 3,300,000	\$ 1,700,000	\$ -	\$ -	\$ -	\$ -		
Weber	UDOT	Var		10018	TravelWise	Comprehensive Travel Demand Management Program. (For Private & Public Partnership)	2011	\$ 2,400,000	\$ 320,000	\$ 14,523	\$ 64,000	\$ 64,000	\$ 64,000	\$ 64,000	\$ 64,000	\$ 64,000	\$ -		
Davis	UDOT		New	11092	650 North & I-15 Interchange/ Intersections	Intersection Improvements	2012	\$ 4,636,000	\$ 2,840,000	\$ 133,614	\$ -	\$ 10,000	\$ -	\$ 2,200,000	\$ 630,000	\$ -	\$ -		
Davis	UDOT		New	12004	I-15 - 200 North Kaysville NB On-Ramp Ramp Meters	Install Ramp Meters on NB On-Ramp	2013	\$ 250,000	\$ 224,000	\$ 133,614	\$ -	\$ 10,000	\$ -	\$ 214,000	\$ -	\$ -	\$ -		
Weber	UDOT	39	CM-0039(12)6	4400	Wall Ave 12th Street, Ogden	Intersection - Improvements P.E.	2003	\$ 8,700,000	\$ 4,125,000	\$ 299,456	\$ 4,123,826	\$ 1,177	\$ -	\$ -	\$ -	\$ -	\$ -		
Weber	UDOT	97	New	13132	SR-97 (5600 South); Hill Field Air Force Base to 2050 West	Intersection/ Operational Improvements	2014	\$ 3,037,700	\$ 750,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 750,000		
Davis	UDOT		New	13133	US-89 VMS; Just North of Shepard Lane	Install Variable Message Sign (VMS)	2014	\$ 462,900	\$ 431,562	\$ 31,338	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 431,562		
Davis	UTA	89		10021	Fruit Heights/ Kaysville 400/200 North Park n Ride Lot	Expand Park n Ride Lot	2011	\$ 1,498,000	\$ 1,233,000	\$ 89,536	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,233,000		
Weber	UTA	Var	CM-9999( )	Tran SEC.	ITS/APTS Deployment in Weber Co	Air Quality - FTA Fund Transfer	1999	\$ 923,522	\$ 861,000	\$ 62,522	\$ 240,000	\$ -	\$ -	\$ -	\$ 430,500	\$ 430,500	\$ -		
Weber	UTA	Var	CM-9999( )	Tran SEC.	Lease Vans in Weber Co	Air Quality - FTA Fund Transfer	1994	\$ 708,356	\$ 660,400	\$ 47,956	\$ 504,400	\$ 118,800	\$ 118,800	\$ 118,800	\$ 118,800	\$ 66,400	\$ 118,800		
Weber	UTA	Var	CM-9999( )	Tran SEC.	WFRC Area	Air Quality - Rideshare & Vanpool Management	1993	\$ 1,179,781	\$ 1,099,910	\$ 79,871	\$ 585,390	\$ 157,130	\$ 157,130	\$ 157,130	\$ 157,130	\$ 157,130	\$ 157,130		

2015 – 2020 Transportation Improvement Program (TIP)

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				PIN	Location/ Limits						Concept/ Type of Improvement	2014	2015	2016	2017	2018	2019	2020			
<b>OGDEN/ LAYTON URBAN AREA</b>																					
Weber	UTA		New	Tran. SEC.	Bus Service from Downtown Ogden to Ogden Valley	Purchase Canyon Service Buses	2013	\$ 1,027,000	\$ 950,000	\$ 89,536	\$ -	\$ -	\$ -	\$ -	\$ 450,000	\$ 500,000	\$ -	\$ 958,000			
Weber	West Haven	LC11	STP-LC11(25)	5143	River Parkway Trail; D&RGW Rail to 1800 So, Weber	Air Quality - Bike Ped Facility	2003	\$ 8,000,000	\$ 2,250,000	\$ 153,510	\$ 2,113,991	\$ 136,009	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
<b>Funds Apportioned</b>										\$ (419,399)	\$ 10,340,001	\$ 2,851,022	\$ 2,851,022	\$ 2,851,022	\$ 2,851,022	\$ 2,851,022	\$ 2,851,022	\$ 2,851,022			
<b>Funds Available</b>											New Project	\$ 9,929,402	\$ 6,538,174	\$ 3,282,080	\$ 3,493,172	\$ 2,990,264	\$ 3,140,856	\$ 2,963,848	\$ 4,438,940		
<b>Funds Scheduled</b>											26 Mar 2014	Project Completed	Amount Oblig FY2013	\$1,439,930	\$ 6,107,116	\$ 2,639,930	\$ 3,353,930	\$ 2,700,430	\$ 3,028,030	\$ 1,375,930	\$ 4,629,692
<b>Running Balance</b>												Total Obligated	\$ 13,348,881	\$ 431,058	\$ 642,150	\$ 139,242	\$ 289,834	\$ 112,826	\$ 1,587,918	\$ (190,752)	

# **Salt Lake/ West Valley Urbanized Area**

# **Projects**

**14600 SOUTH (SR-140); PONY EXPRESS ROAD TO UPRR BRIDGE - 13130**  
**Bicycle & Pedestrian Facility**  
**New Project**

This project will construct a bicycle/ pedestrian shoulder along 14600 South to provide adequate space out of the travel lane for bicycles and pedestrians, provide safety and viability. SR-140 connects the east Salt Lake County to the Jordan River Trail and eventually the Bonneville Shoreline Trail on the west side. This facility has been identified as a major bicycle route (WFRC Regional Plan) with no bicycle lanes. This facility is also the major east-west route to the Bluffdale, Redwood Road and Mountain View Corridor bike facilities and it links Herriman, Saratoga Springs, Lehi and Eagle Mountain. Currently SR-140 lacks or has very narrow shoulders with severe drop-offs, with failing asphalt pavement, and inconsistent striping.

**Reduced emissions estimate (kg/day):** 0.0 CO, 0.01 VOC, 0.02 Nox.  
 This equates to an estimated reduction of 0.193 tons per year.

**PROJECT COST**

Estimated Total Cost:	\$ 669,700
Federal Funds Available:	\$ 624,361
Federal Funds Already Used	\$ -0-
Federal Funds Available in FY 2016:	\$ 10,000
Federal Funds Available in FY 2018:	\$ 614,361

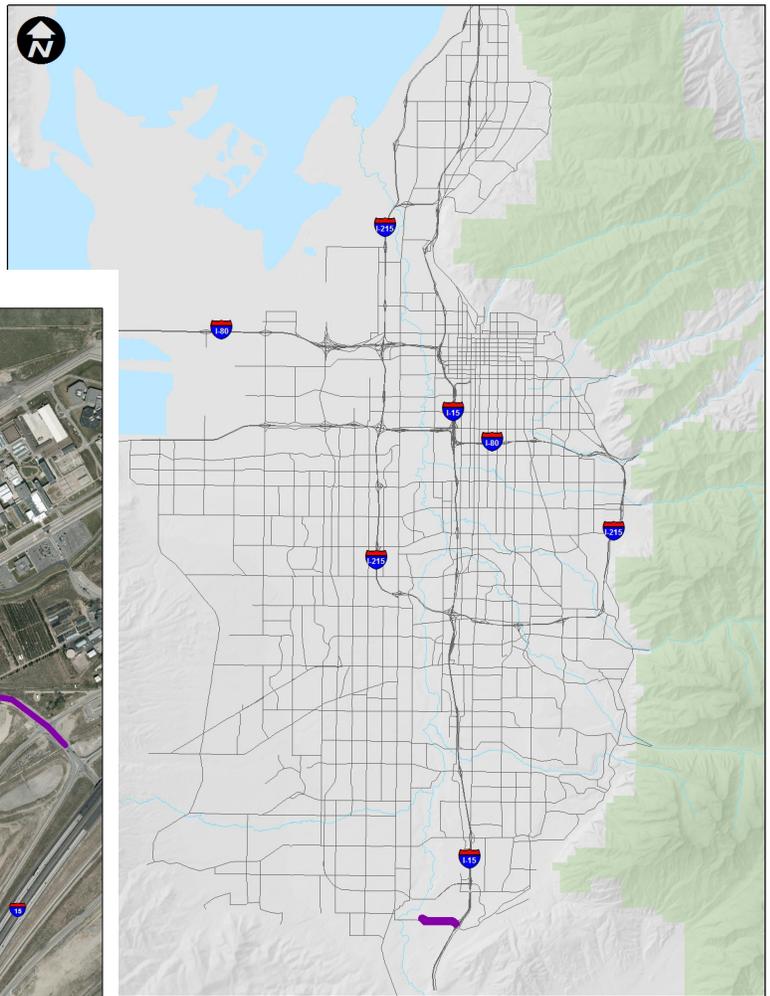
**Average Weekday**

Daily Traffic (AWDT):	Current (2011)	Projected (2030)
14600 South	3,815	12,000

Year added to TIP: 2014

**SOURCE OF FUNDS**

Federal: Congestion Mitigation/ Air Quality  
 Non-Federal: Bluffdale



**WASATCH BOULEVARD & 7650 SOUTH - 8601**  
**Park-n-Ride Lot**

This project will provide a new park and ride lot on Wasatch Boulevard. Access to the parking lot will be from Wasatch Boulevard with bus stops and pedestrian access on Wasatch Blvd. This project is strongly supported by UDOT, UTA, Brighton & Solitude Ski Resorts

This project will provide additional access for the UTA Ski Buses serving Brighton and Solitude Ski Resorts. Existing Park & Ride lots are at full capacity. Encouraging the use of car pooling and expanded bus ridership will improve air quality and traffic safety on State Road 190. Cottonwood Heights has coordinated with the county to secure one of the few undeveloped parcels along Wasatch Blvd. The site plan has been designed to deliver the maximum number of parking stalls (131 stalls) possible on the buildable area of the property.

**Reduced emissions estimate (kg/day):** PM<sub>10</sub> 0.07, CO 11.63, VOC 0.31, and Nox 1.13.  
 This equates to around 5.3 tons / year.

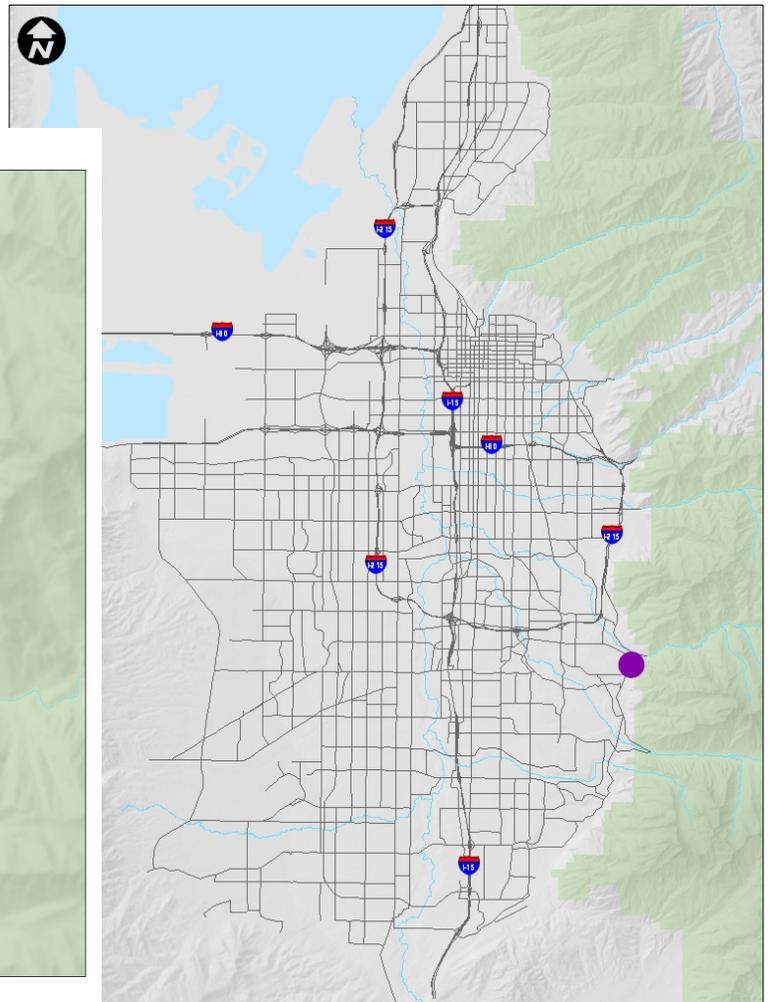
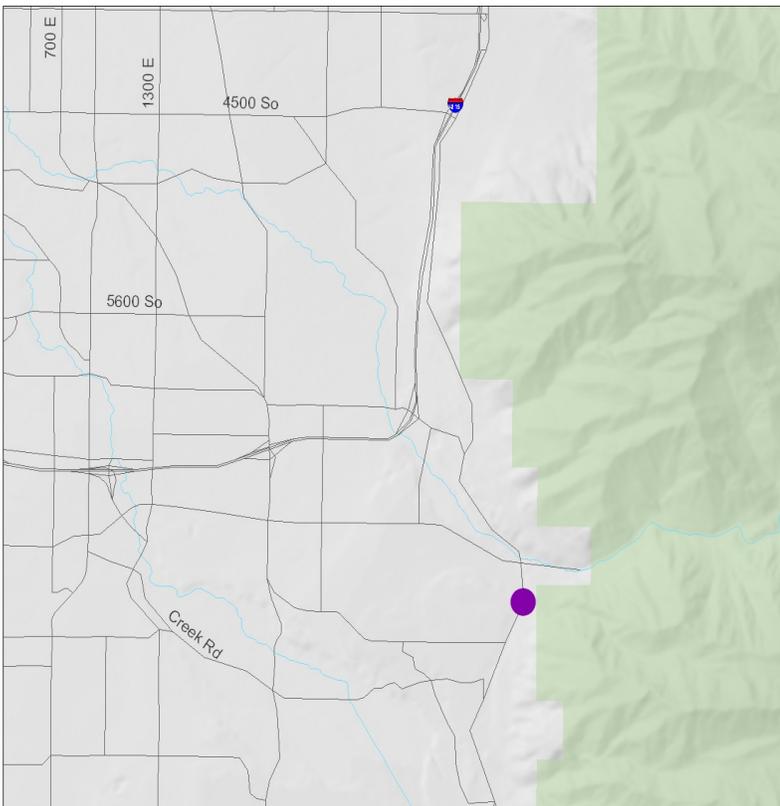
**PROJECT COST**

Estimated Total Cost:	\$ 1,600,000
Federal Funds Available:	\$ 1,486,000
Federal Funds Already Used:	\$ - 0 -
Federal Funds Available in FY 2014:	\$ 10,000
Federal Funds Available in FY 2015:	\$ 150,000
Federal Funds Available in FY 2016:	\$ 326,000
Federal Funds Available in FY 2017:	\$ 1,000,000

Year added to TIP: 2010

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/Air Quality
Non-Federal:	Cottonwood Heights/ Utah Transit Authority (UTA)



**BENGAL BOULEVARD & 2300 EAST INTERSECTION - 12000**  
**Intersection Improvement**

The city has proposed a round-a-bout to accommodate the traffic from 2300 East/ 2325 East & Bengal Boulevard. 2300 East and 2325 East are two offset intersections whose proximity creates significant travel delay. Bengal Boulevard is the city's second largest east-west arterial. Significant traffic congestion in the vicinity of the intersection is observed before and after school hours at Brighton High School. The city has proposed an offset round-a-bout to accommodate the traffic from the offset alignment of both 2300 East and 2325 East. Brighton High School will re-route their main entrance to the original alignment so that it has a direct connection to the round-a-bout.

This project facilitates implementation of the Wasatch Choices 2040 plan. The proximity of the two existing signals creates substantial delay. Bengal Blvd cannot accommodate the 2030 ADT without realigning the intersections or constructing the round-a-bout. Realignment of the two intersections would require a substantial amount of private property, including the elimination of up to 5 houses. However, the round-a-bout provides an ingenious solution that does not impact any existing structures. As transit develops along Fort Union Boulevard, Bengal Boulevard will play a larger role in alleviating east-west traffic demand. Enhancement to this corridor is essential to accommodate light rail, park and rides and other alternative transportation modes that service the canyon ski industry. The round-a-bout eliminates left hand turns and modeling has shown that this option will substantially reduce delay, increase safety and eliminate the inefficiency of the existing dual signal system..

**Reduced emissions estimate (kg/day):** 0.07 CO, 0.27 VOC, 0.06 Nox., 1.43 PM<sub>10</sub>  
 This equates to an estimated reduction of 0.74 tons per year.

**PROJECT COST**

Estimated Total Cost:	\$ 2,848,000
Federal Funds Available:	\$ 2,655,000
Federal Funds Already Used	\$ - 0 -
Federal Funds Available in FY 2014:	\$ 10,000
Federal Funds Available in FY 2018:	\$ 1,000,000
Federal Funds Available in FY 2019:	\$ 1,645,000

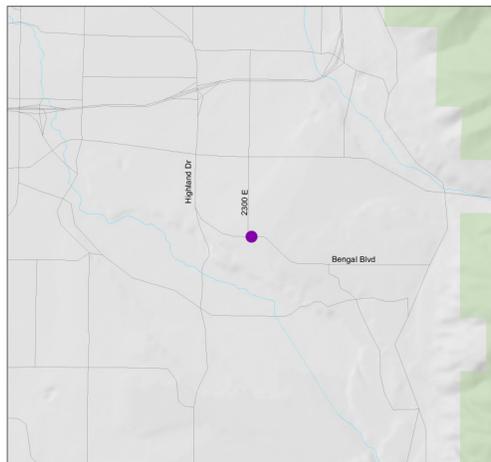
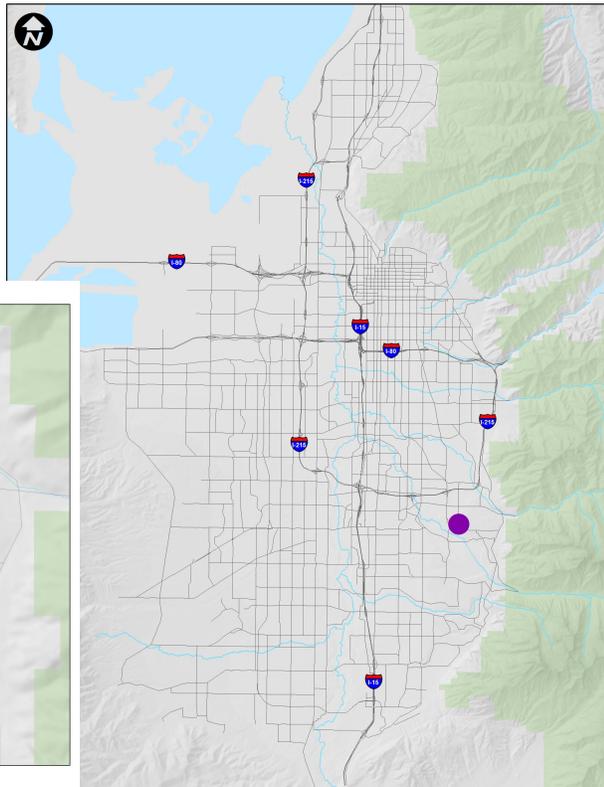
Average Weekday

Daily Traffic (AWDT):	Current (2011)	Projected (2030)
Bengal Blvd	8,000	14,000
2300 East	7,500	15,000

Year added to TIP: 2013

**SOURCE OF FUNDS**

Federal: Congestion Mitigation/ Air Quality  
 Non-Federal: Cottonwood Heights



**PARK AND RIDE SMART BOARDS - 13128**  
**Live Parking Availability Signs for Park n Ride Lots**

“Smart Boards” will be constructed at (2) existing park and ride lots, two (2) proposed park and ride lots, and one (1) east of the I-215 interchange along EB 6200 South at a location to be determined. Each of the park and ride lots will be equipped with radar to monitor vehicles that enter and leave the lot. Parking space availability data will be displayed on each of the Smart Boards installed and interconnected with the UDOT system. Besides the display at each of the Smart Board locations users will be able to access this data on computer and smart phone applications. This will allow users to efficiently locate a parking space closest to their destination without driving back and forth from lot to lot hoping to find a space. This will reduce travel time and associated emissions.

**Reduced emissions estimate (kg/day):** 0.07 CO, 0.23 VOC, and 0.05 Nox.  
 This equates to around 0.64 tons / year reduced.

**PROJECT COST**

Estimated Total Cost:	\$	706,900
Federal Funds Available:	\$	659,043
Federal Funds Already Used:	\$	- 0 -
Federal Funds Available in FY 2017	\$	10,000
Federal Funds Available in FY 2019	\$	349,043
Federal Funds Available in FY 2020	\$	300,000

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/Air Quality
Non-Federal:	Cottonwood Heights
Year added to TIP:	2014



**6200 SOUTH & HOLLADAY BOULEVARD INTERSECTION - 8555**  
**Intersection Improvements**

6200 south is a major connection between I-215, Holladay Blvd., and Highland Drive. This historic intersection has long been known as Knudsen’s Corner. It is a gateway into the City of Holladay from I-215. Alignment problems at this busy intersection also create a significant traffic safety concern. The concerns are aggravated by confusing lane configurations, and encroachment of the signal pole on the northwest corner. That antiquated signal also needs to be upgraded or replaced to allow for coordinated left turn movements. The Holladay Blvd signal is a span-wire system with each approach leg independently operated. There is no ability to isolate dedicated turn movements, thus creating stacking, congestion, and safety problems.

Problems are also expected to worsen in the future with increased traffic volumes associated with the establishment of Knudsen’s Park to the south, increased commercial development, and the renovation of Cottonwood Mall to the north.

**Reduced emissions estimate (kg/day):** PM<sub>10</sub> 0.07, CO 53.18, VOC 1.98, and Nox 3.21.

This equates to around 23.4 tons / year reduced.

**PROJECT COST**

Estimated Total Cost:	\$ 1,500,000
Federal Funds Available:	\$ 1,300,000
Federal Funds Already Used:	\$ 10,000
Federal Funds Available in FY 2015:	\$ 250,000
Federal Funds Available in FY 2016:	\$ 1,040,000

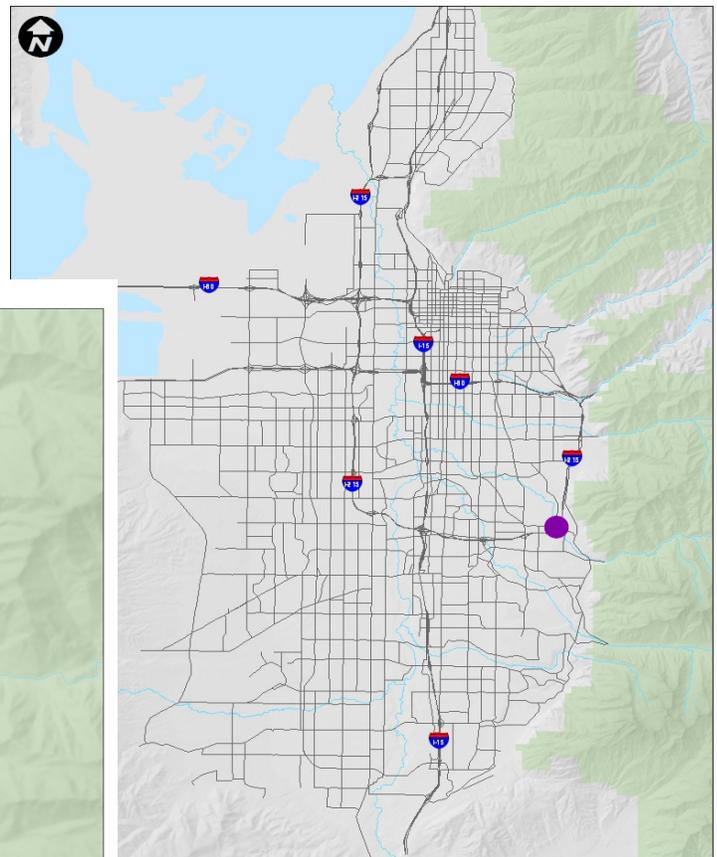
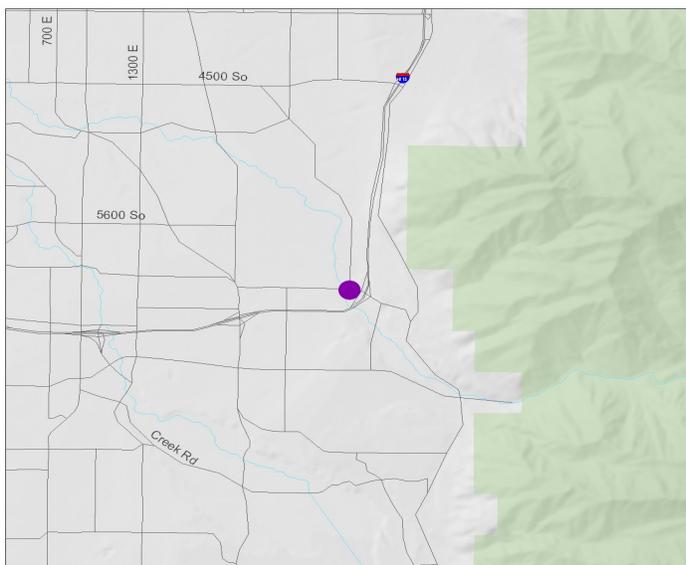
Average Weekday

Daily Traffic (AWDT):	Current	Projected
	(2010)	(2030)
6200 South	13,000	16,000
Holladay Blvd	13,000	14,000

Year added to TIP: 2010

**SOURCE OF FUNDS**

Federal: Congestion Mitigation/Air Quality  
 Non-Federal: Holladay City



**6200 SOUTH & 2300 EAST - 10020**  
**Intersection Improvements**

6200 South is an east-west roadway in the southern portion of Holladay City. It has an interchange with I-215 on the east, thus making it a significant arterial. Traffic counts and observations of travel patterns confirm that 6200 south is a major connection between I-215, Holladay Blvd., and Highland Drive. 2300 East provides access to Holladay from the Fort Union area.

As part of the city’s transportation study, this intersection was modeled using the Synchro software program. Under existing conditions, the intersection operates at an overall LOS level of “C” approaching “D”. The worst movement is the westbound left turn lane on 6200 South. Because the signal is set up with permissive left turns, these vehicles must find sufficient gaps in the eastbound traffic to make the maneuver. The modeling shows this movement as an LOS “F”. This project is intended to mitigate serious traffic congestion and safety problems on this important connector road.

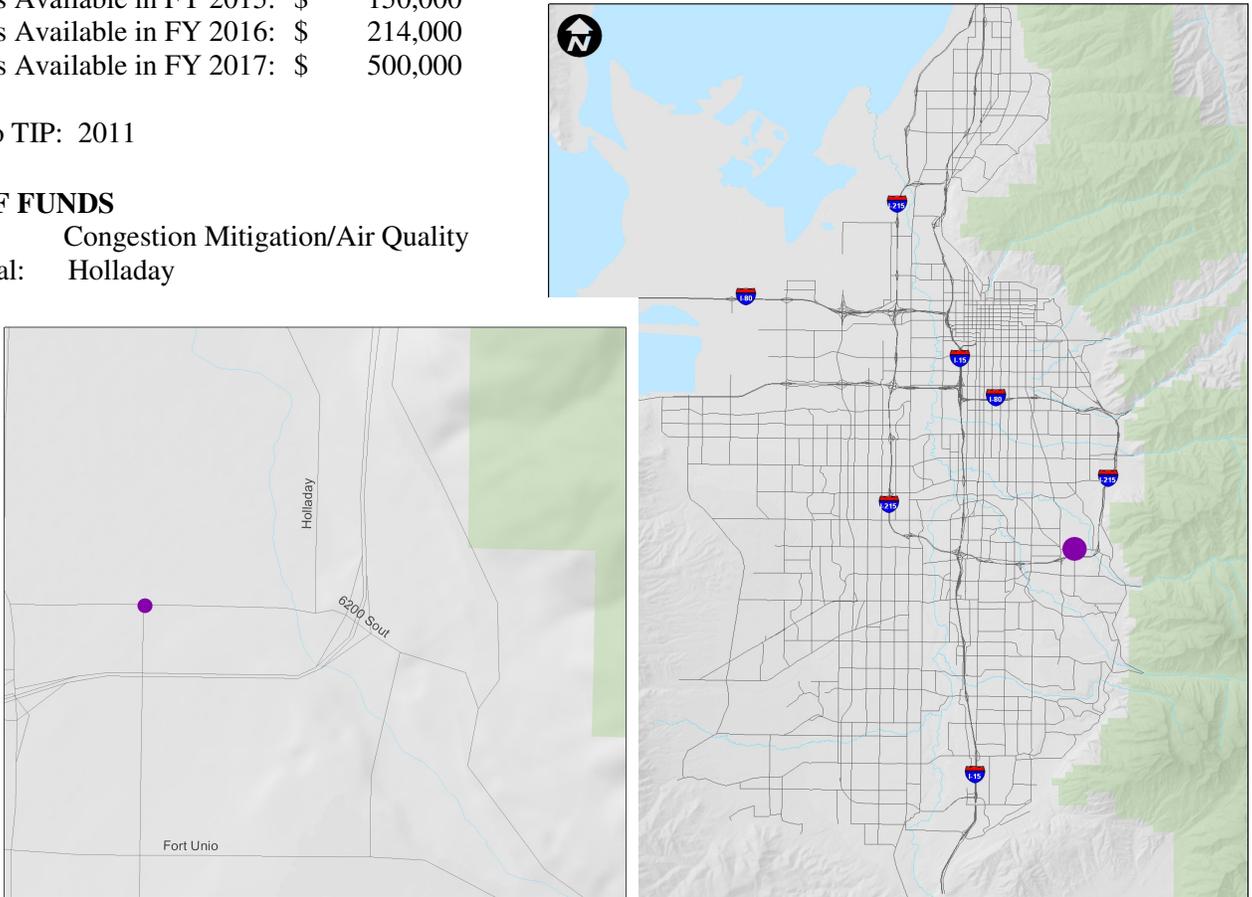
**Reduced emissions estimate (kg/day):** 4.28 CO,0.16 VOC,0.29 Nox and 0.01 PM<sub>10</sub>  
 This equates to around 1.9 tons / year reduced.

<b>PROJECT COST</b>	Average Weekday		Current	Projected
		Daily Traffic (AWDT):	(2010)	(2030)
Estimated Total Cost:	\$ 938,000	6200 South	11,000	15,000
Federal Funds Available:	\$ 874,000	2300 East	13,000	14,000
Federal Funds Already Used:	\$ -0-			
Federal Funds Available in FY 2014:	\$ 10,000			
Federal Funds Available in FY 2015:	\$ 150,000			
Federal Funds Available in FY 2016:	\$ 214,000			
Federal Funds Available in FY 2017:	\$ 500,000			

Year added to TIP: 2011

**SOURCE OF FUNDS**

Federal: Congestion Mitigation/Air Quality  
 Non-Federal: Holladay



**SUGAR HOUSE STREETCAR - 13125**  
**Double Track; 500 East to 600 East**  
**New Project**

The Sugar House Streetcar currently operates on a single trackway that limits train frequency to 20-minute service. This project adds a second trackway, which will support 15-minute headways, mobility and transportation choices in one of Salt Lake City's fastest growing neighborhood and where road capacity cannot be added.

The Streetcar will support mobility for existing residents, workers, and visitors, as well as those within the 1,014 residential units and nearly 2 million square feet of transit-oriented redevelopment recently completed or under construction on 7 sites near the eastern terminus. A 2007 traffic study reports that 4 intersections within a ½ mile “walkshed” of the project drop to LOS E or F with the addition of only two of those projects, and by 2020 all drop to LOS F in the PM peak. A circulation plan adopted this year acknowledges that the area lacks opportunities for capacity increases and that Supports ridership levels, VMT reductions, and air quality benefits consistent with planning projections that assumed a double tracked corridor, maximizing investments already made in the corridor. As Utah’s first streetcar project during this century, supporting its success improves continued investment in sustainable, multimodal transportation in Utah..

**Reduced emissions estimate (kg/day):** 6.08 CO, 0.25 VOC, 0.12 Nox and 0.02 PM<sub>10</sub>  
This equates to around 2.6 tons / year reduced.

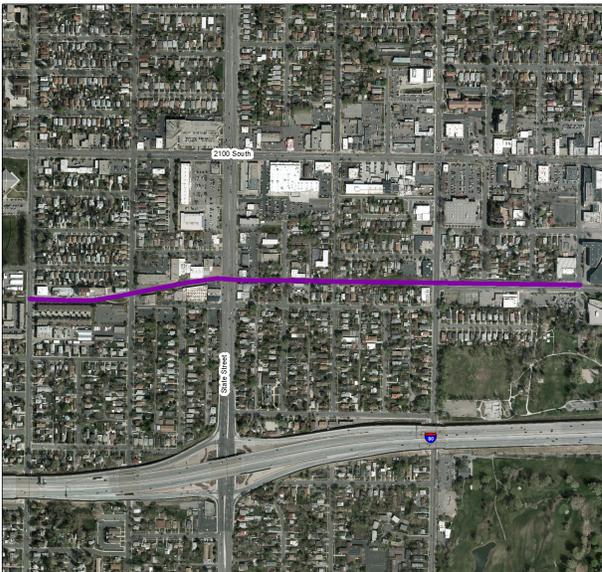
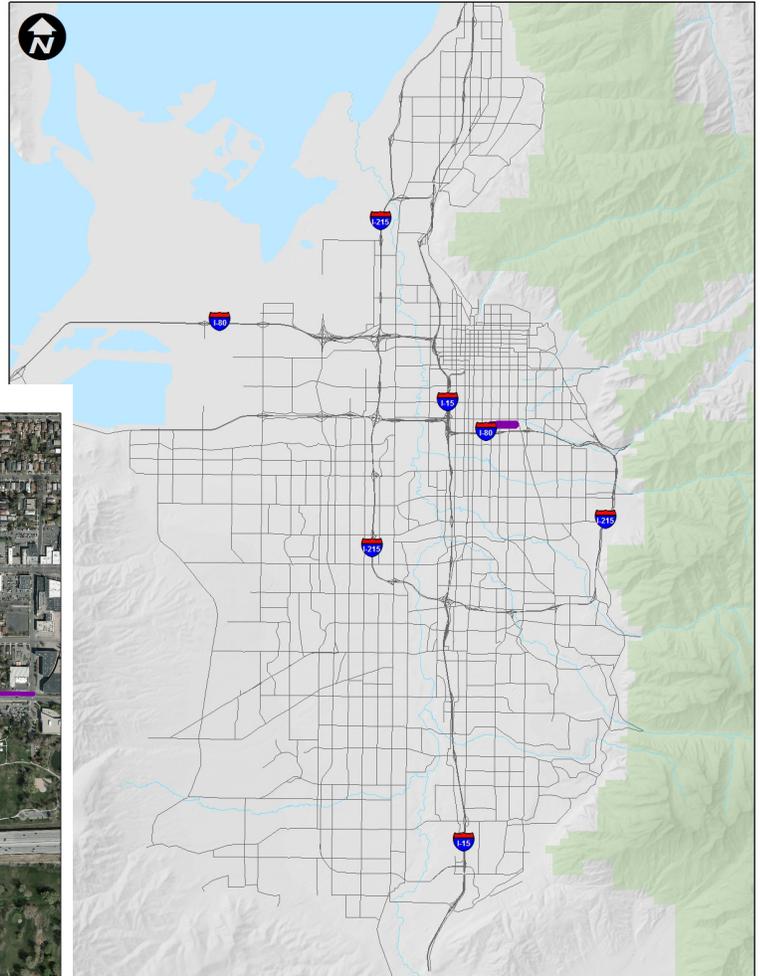
**PROJECT COST**

Estimated Total Cost:	\$ 3,016,100
Federal Funds Available:	\$ 900,000
Federal Funds Already Used:	\$ -0-
Federal Funds Available in FY 2020:	\$ 900,000

Year added to TIP: 2014

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/Air Quality
Non-Federal:	Salt Lake/ UTA



**BLACK LINE TRAX SERVICE - 11999**  
**Central Station to University of Utah**  
**Light Rail Service & Operations**

Project includes TRAX service from the SL Central Station to the University of Utah. The East to West connection will support travel patterns between SLC and U of U areas and destinations. Re-establishing this service provides direct access for both neighborhoods and FrontRunner rail to the U and downtown services.

This project is anticipated to generate approximately 7500 daily riders, over 2300 of which would be new riders to the UTA system. This is comparable to the Sugar House Streetcar Phase 1 project, but is an even more cost-effective investment because it entails very little capital cost and instead primarily requires operational funds. It is also a service with a proven track record; since it was previously in operation, we have seen it succeed in the past. We also know from both national studies and local polling that increased frequencies encourage ridership and enhance the traveller experience. Finally, it improves the capacity of both TRAX and the 400 South corridor without increasing VMT.

**Reduced emissions estimate (kg/day):** 1.16 CO, 8.67 VOC, 20.23 Nox., 440.90 PM<sub>10</sub>  
 This equates to an estimated reduction of 191 tons per year.

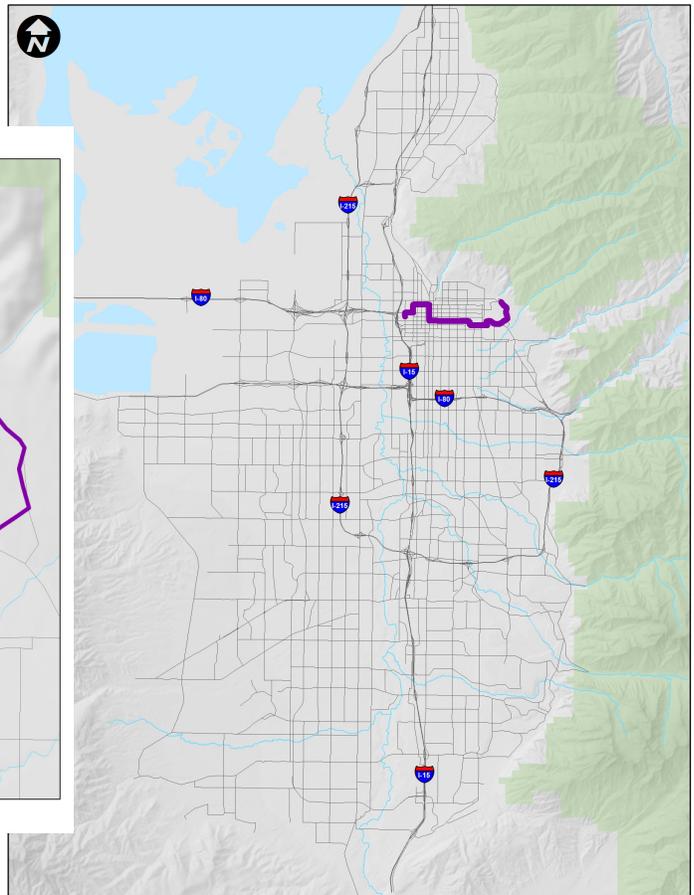
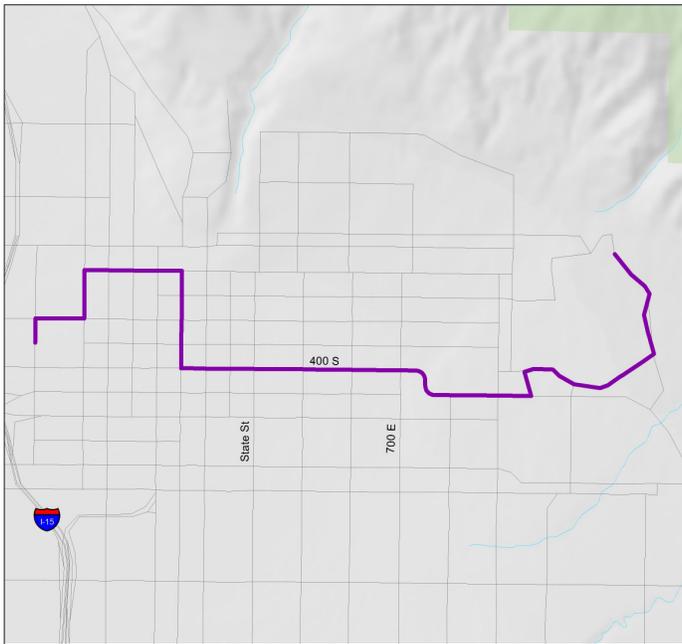
**PROJECT COST**

Estimated Total Cost:	\$ 7,240,000
Federal Funds Available:	\$ 2,000,000
Federal Funds Already Used	\$ - 0 -
Federal Funds Available in FY 2014:	\$ 10,000
Federal Funds Available in FY 2019:	\$ 1,990,000

Year added to TIP: 2013

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/ Air Quality
Non-Federal:	UTA



**HILLSBOROUGH POND - PARK AND RIDE LOT – 13126**  
**Park-n-Ride Lot**

With the high demand of activity along the Wasatch Front and up and down the canyons, traffic is becoming more congested and negatively impacting the surrounding areas. This project will improve parking capacity at the mouth of the canyons and reduce the number of trips up the canyons by providing enhanced transit and by either expanding or replacing the existing lot with a new lot.

This particular park n ride is one of many projects described in the 'Canyon Parking Study' completed in 2012. The mouth of the canyons always pose a traffic problem, especially in the winter, and by providing additional parking some of those issues could be alleviated. This study will look at expanding the existing parking lot and compare it to replacing it with a lot in another location which could have better access for all modes of traffic.

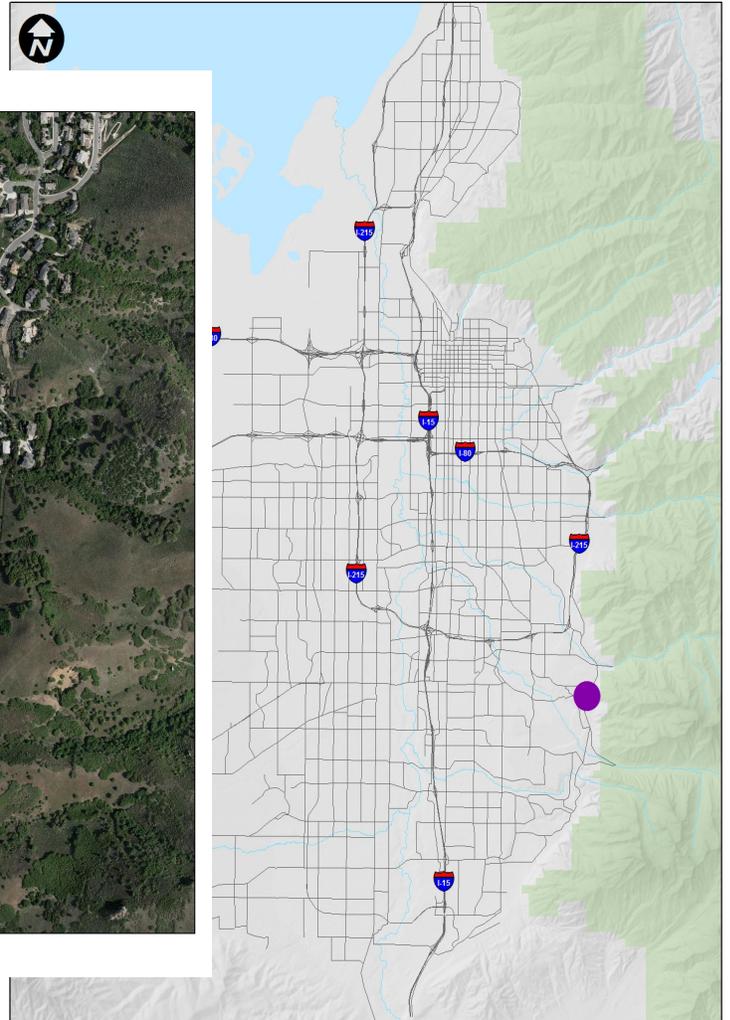
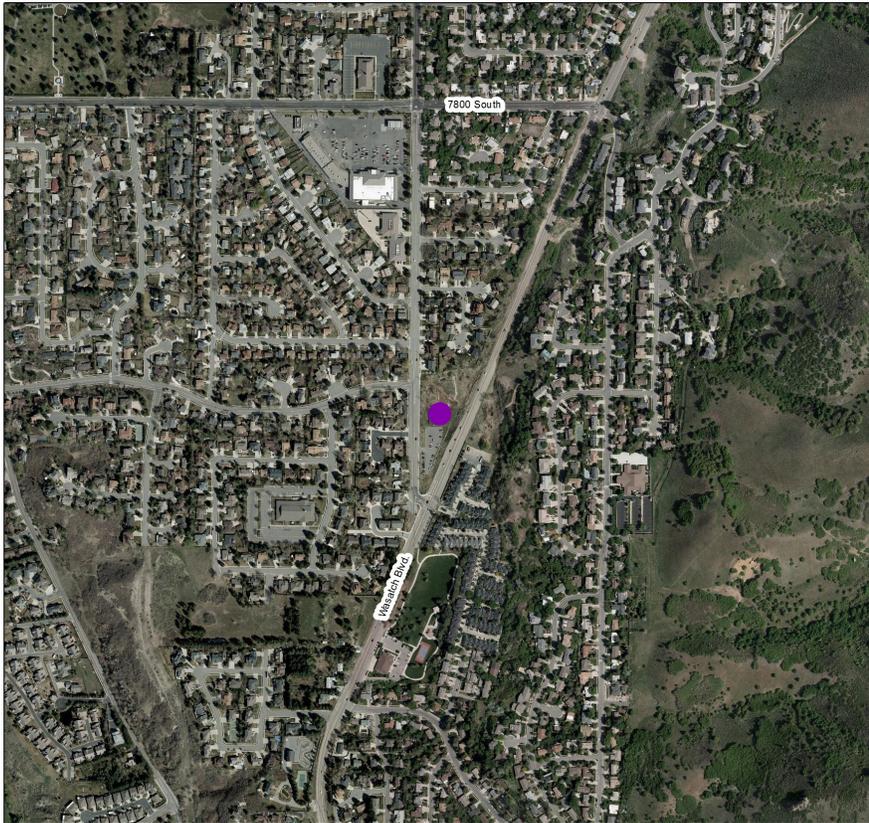
**Reduced emissions estimate (kg/day):** 0.08 CO, 0.23 VOC, 0.08 Nox, and 4.11 PM<sub>10</sub>  
This equates to around 1.81 tons / year reduced.

**PROJECT COST**

Estimated Total Cost:	\$ 1,784,700
Federal Funds Available:	\$ 1,663,876
Federal Funds Already Used:	\$ - 0 -
Federal Funds Available in FY 2019:	\$ 500,000
Federal Funds Available in FY 2020:	\$ 1,163,876

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/Air Quality
Non-Federal:	Salt Lake County
Year added to TIP:	2014



**1300 EAST BUTTERCUP PEDESTRIAN BRIDGE - 11093**  
**Pedestrian Bridge and Intersection Improvement**

This project will construct a pedestrian bridge over 1300 East at Buttercup Drive. This bridge will facilitate pedestrian movements from Eastmont Middle School and neighborhoods to the east. The bridge will be constructed on Canyons School District property and Salt Lake County Library Systems property. This bridge will allow for removal of the traffic signal at Buttercup Drive and 1300 East. The proximity of this signal to the traffic signal at Segó Lily creates inefficient movements on 1300 East and complicates timing efforts. Preliminary study of the 1300 East corridor shows a 30 second per vehicle improvement in travel times with the signal removed.

The pedestrian bridge and traffic signal removal at Buttercup Drive on 1300 East provides significant benefits to pedestrian safety and flow, as well as traffic safety and flow. The bridge is a key component of a school safe walk route. Currently students must cross 1300 East, an arterial road. There have been two pedestrian incidents in the recent traffic history. In addition to the pedestrian benefits, the traffic signal can be removed. This affords the opportunity for significant corridor capacity improvements through streamlined corridor timing. The current spacing of Buttercup and Segó Lily is too tight for efficient timing plans; this will allow a decrease in vehicle delay of over 30 seconds during PM peak. All rerouted traffic can be handled by Segó Lily drive signal, according to intersection modeling. This project is a win on all counts; air quality, traffic flow, pedestrian enhancements.

**Reduced emissions estimate (kg/day):** 0.20 CO, 0.68 VOC, 0.14 Nox., 3.76 PM<sub>10</sub>

This equates to an estimated reduction of 1.94 tons per year.

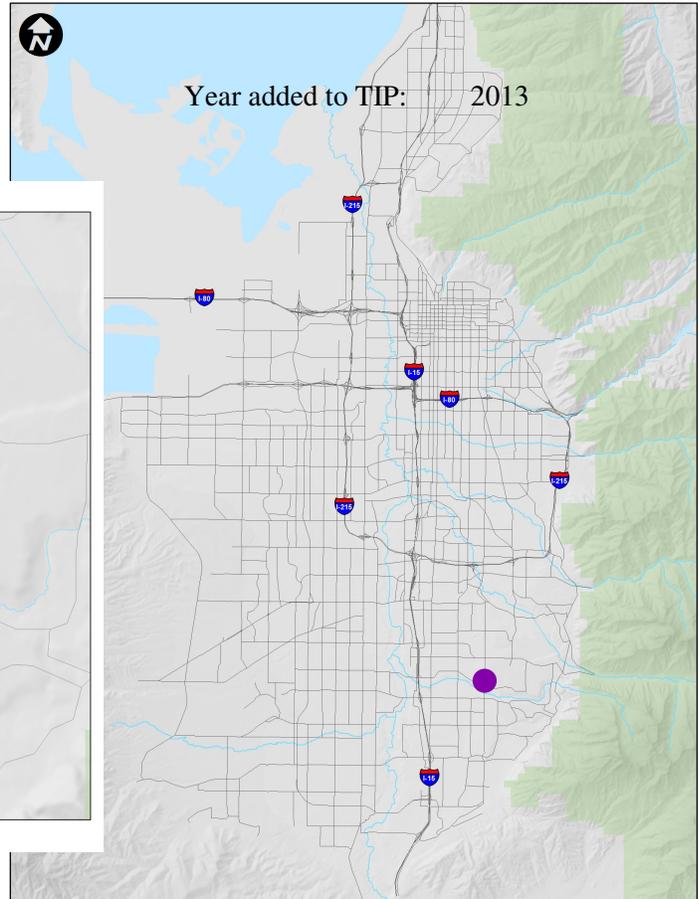
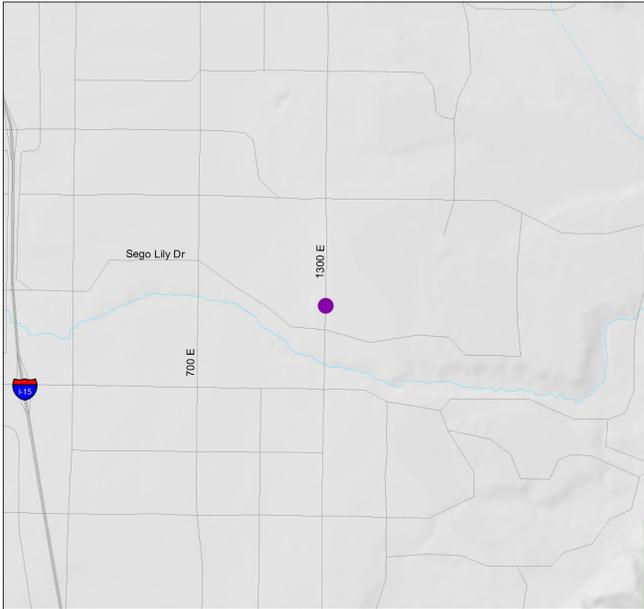
**PROJECT COST**

Estimated Total Cost:	\$ 3,116,000
Federal Funds Available:	\$ 2,000,000
Federal Funds Already Used	\$ - 0 -

Federal Funds Available in FY 2015:	\$ 10,000
Federal Funds Available in FY 2016:	\$ 1,000,000
Federal Funds Available in FY 2017:	\$ 990,000

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/ Air Quality
Non-Federal:	Sandy City



**REDWOOD ROAD AND 4700 SOUTH INTERSECTION - 5262**  
**Intersection Improvement**  
**PROJECT COMPLETE**

The intersection of Redwood Road and 4700 South has heavy traffic on the weekdays and Saturdays. The significant commercial development in the area and the close proximity to the I-215 interchange is making the existing left turn storage and capacity inadequate. The proposed intersection improvements include capacity by providing dual left turn lanes on the all four movements of each intersection. Additionally, the project would provide for right turn pockets for the northbound and southbound movements. By making the improvements to the intersection, the intersection capacity will increase to meet current demands. As is, the intersection is not capable of handling peak traffic flows.

**Reduced emissions estimate (kg/day):** 7.38 CO, 0.28 VOC, 0.52 Nox.

This equates to an estimated reduction of 2.26 tons per year.

**PROJECT COST**

Estimated Total Cost:	\$ 2,130,537
Federal Funds Available:	\$ 2,263,727
Federal Funds Already Used	\$ 2,263,727

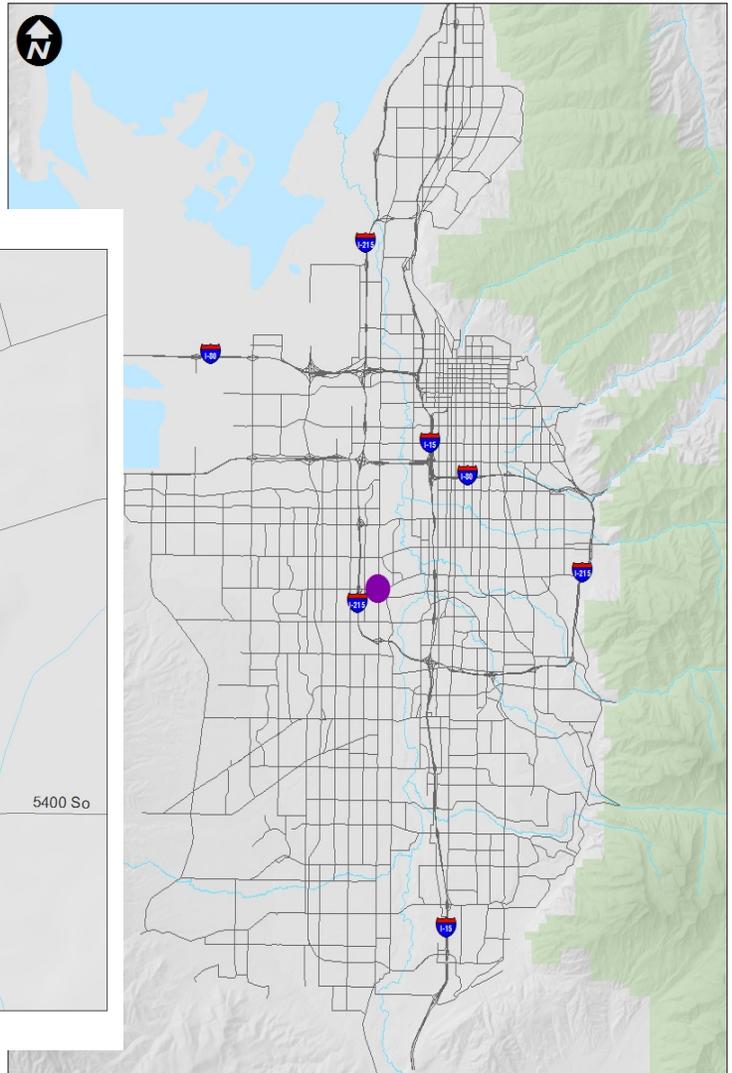
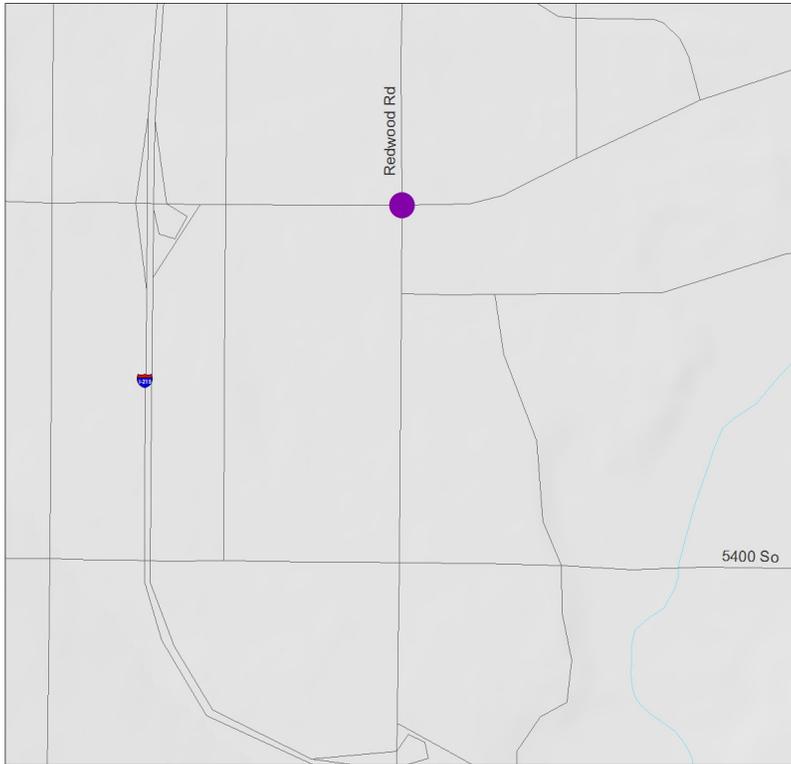
**Average Weekday**

Daily Traffic (AWDT):	Current (2003)	Projected (2030)
Redwood Road	62,505	71,000
4700 South	38,315	56,000

Year added to TIP: 2005

**SOURCE OF FUNDS**

Federal: Congestion Mitigation/ Air Quality  
 Non-Federal: Utah Department of Transportation



**REDWOOD ROAD AND 5400 SOUTH INTERSECTION - 5264**  
**Intersection Improvement**  
**PROJECT COMPLETE**

The intersection of Redwood Road and 5400 South has heavy traffic on the weekdays and Saturdays. The significant commercial development in the area and the close proximity to the I-215 interchange is making the existing left turn storage and capacity inadequate. The proposed intersection improvements include capacity by providing dual left turn lanes on the all four movements of each intersection. Additionally, the project would provide for right turn pockets for the northbound and southbound movements. By making the improvements to the intersection, the intersection capacity will increase to meet current demands. As is, the intersection is not capable of handling peak traffic flows. Additional funds from a separate source will be sought to include additional thru lanes in the eastbound and westbound directions.

**Reduced emissions estimate (kg/day):** 24.10 CO, 0.92 VOC, 1.70 Nox.  
 This equates to an estimated reduction of 7.37 tons per year.

**PROJECT COST**

Estimated Total Cost:	\$ 2,958,390
Federal Funds Available:	\$ 2,758,107
Federal Funds Already Used	\$ 2,758,107
Federal Funds Available	\$ -0-

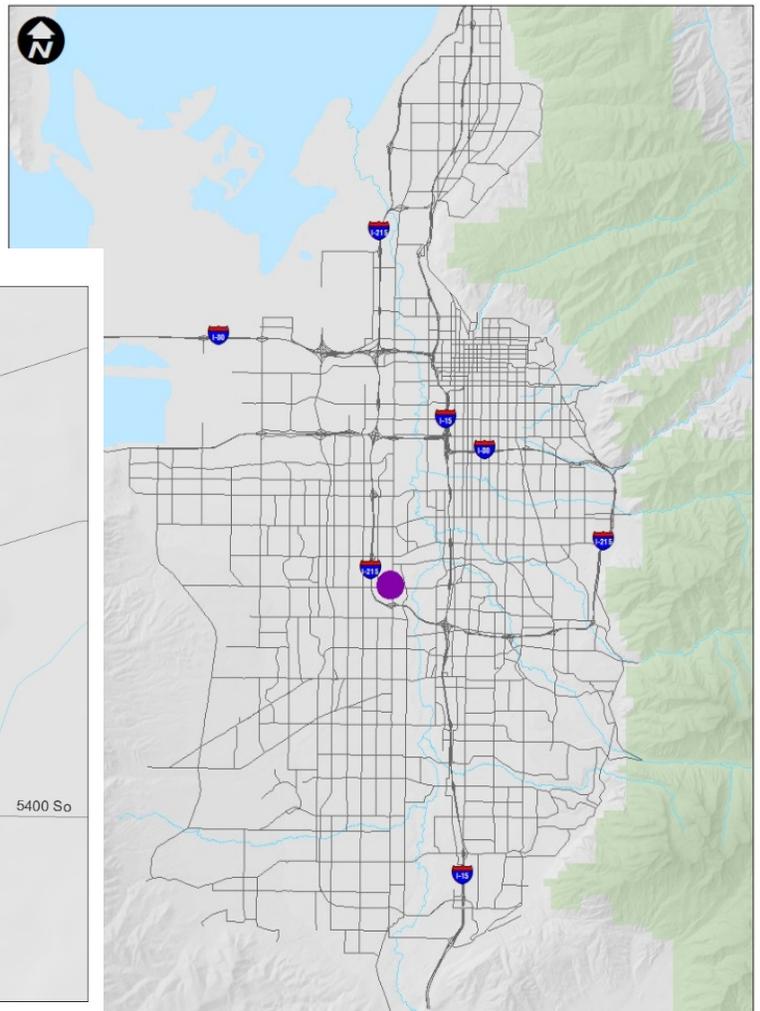
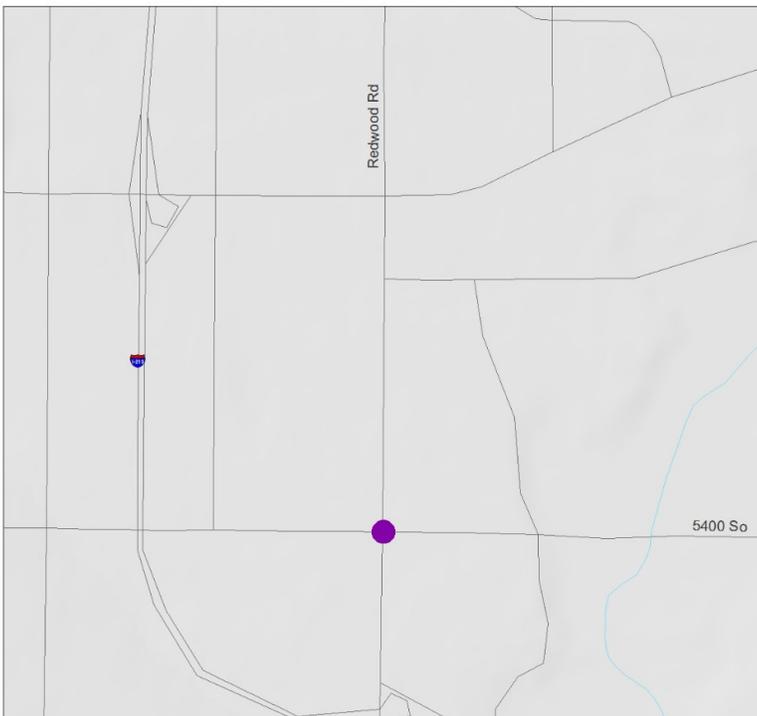
**Average Weekday**

<b>Daily Traffic (AWDT):</b>	<b>Current (2003)</b>	<b>Projected (2030)</b>
Redwood Road	62,505	71,000
5400 South	41,321	48,000

Year added to TIP: 2005

**SOURCE OF FUNDS**

Federal: Congestion Mitigation/ Air Quality  
 Non-Federal: Utah Department of Transportation



**ITS - ADVANCED TRAFFIC MANGEMENT SYSTEM (CommuterLink) - 5996**  
**Salt Lake Urban Area**  
**ARRA FUNDS OBLIGATED ON THIS PROJECT**

UDOT constructed the Advanced Traffic Management System (ATMS) or CommuterLink as part of the Salt Lake County I-15 reconstruction project. CommuterLink is an Intelligent Transportation System (ITS) that uses technology to save lives, time, and money. It is a computer-controlled system designed to monitor and manage traffic flow on freeways and surface streets. System components include closed-circuit television (CCTV) cameras, electronic roadway signs (ERS), the 511 Travel Information Line, coordinated traffic signals, ramp meters, traffic speed and volume sensors, pavement sensors, and weather sensors. The initial deployment of CommuterLink consists of three control centers, 550 traffic signals interconnected with fiber optic lines, and numerous CCTV cameras and variable message signs. The initial deployment assists in signal coordination improvements, early incident detection, and travelers avoiding congestion with the aid of real-time information. The cost for this initial deployment is approximately \$77,000,000. Most of the funding was provided by UDOT as part of the I-15 project. CMAQ funds were used to pay for the city and county portions of the project.

A total of \$ 10,040,689 in CMAQ funds are programmed in the next five years for capital expansion beyond the initial deployment. The funds will be used for traffic signal coverage expansion, freeway system expansion, ramp metering improvements, and other improvements as shown below.

**A reduced emission for the expansion is estimated at (kg/day):** 95.8 CO, 3.3 VOC, 10.7 Nox, 0.12 PM<sub>10</sub>. This equates to an estimated reduction of 30.3 tons per year.

**SOURCE OF FUNDS**

Year added to TIP: 1999

Federal: Congestion Mitigation/Air Quality, **American Recovery and Reinvestment Act of 2009**, and Federal ITS Apportionments

**PROJECT COST**

Estimated Total Cost:	\$ 30,223,447
Federal Funds Available:	\$ 7,714,000
Federal Funds Available in FY 2014:	\$ 1,500,000
Federal Funds Available in FY 2015:	\$ 1,500,000
Federal Funds Available in FY 2016:	\$ 1,500,000
Federal Funds Available in FY 2017:	\$ 1,500,000
Federal Funds Available in FY 2018:	\$ 1,314,000
Federal Funds Available in FY 2019:	\$ 400,000

Non-federal: UDOT & Local Governments

**ATMS PROJECTS WITH ITEMIZED ESTIMATED TOTAL COSTS**

<b>FUNDING CATEGORY</b>	<b>TOTAL COST</b>
Hardware/ Software Support	\$ 600,000
Fiber Optic Support	\$ 400,000
System Enhancements	\$ 3,550,000
Expansion	\$ 3,800,000
ATIS Enhancements	\$ 1,000,000
Public Relations and Evaluation	\$ 250,000
Ramp Metering Expansion	\$ 900,000
Hardware Upgrades	\$ 500,000



**TRAVELWISE - 10018**  
**Travel Demand Management Program**

TravelWise is a comprehensive travel demand management program that encourages, promotes, and supports travel strategies other than driving alone. These strategies include such things as using transit, carpools, vanpools, active transportation, trip chaining, teleworking, shifting of travel times, flexible work hours, compressed workweeks and more. As drivers integrate TravelWise tactics into their routines, the transportation system in Utah functions more efficiently, air quality is improved, energy consumption and traffic congestion is reduced, ultimately leading to maintaining our great quality of life.

The UDOT TravelWise (TW) Program is a comprehensive travel demand management program. For the purposes of this CMAQ request, the focus will basically encourage and increase partnerships and education for both private and public employees.

**Estimated Reduced emissions in the Salt Lake/ West Valley Area (kg/day):** 125.31 CO, 2.31 VOC, 1.28 Nox, and 0.56 PM<sub>10</sub>

This equates to around 52.08 tons / year.

**Estimated Reduced emissions in the Ogden/ Layton Area (kg/day):** 67.01 CO, 1.57 VOC, 1.18 Nox and 0.57 PM<sub>10</sub>

This equates to around 28.29 tons / year.

**SALT LAKE AREA PROGRAM**

Estimated Total Cost: \$ 1,631,320  
 Federal Funds Available: \$ 816,000  
 Federal Funds Already Used: \$ 202,077

Federal Funds Available in FY 2015: \$ 136,000  
 Federal Funds Available in FY 2016: \$ 136,000  
 Federal Funds Available in FY 2017: \$ 136,000  
 Federal Funds Available in FY 2018: \$ 136,000

**OGDEN AREA PROGRAM**

Estimated Total Cost: \$ 767,680  
 Federal Funds Available: \$ 384,000  
 Federal Funds Already Used: \$ 64,000

Federal Funds Available in FY 2015: \$ 64,000  
 Federal Funds Available in FY 2016: \$ 64,000  
 Federal Funds Available in FY 2017: \$ 64,000  
 Federal Funds Available in FY 2018: \$ 64,000

Year added to TIP: 2011

**SOURCE OF FUNDS**

Federal: Congestion Mitigation/Air Quality  
 Non-Federal: Utah Department of Transportation (UDOT)

**I-215 RAMP METERS – (Between 6200 South and State Street) – 11096  
Construction & Implement Ramp Meters**

This project will construct ramp meters on I-215 between the 6200 South interchange and State Street. The proposed ramp meters will reduce peak delay on mainline I-215 and the south interchange at I-15.

The southbound collector-distributor ramp at the I-15/I-215 south interchange routinely experiences high levels of delay and congestion during the p.m. peak period. The resulting queues regularly back onto I-215 mainline, causing safety concerns and additional congestion. UDOT has studied traffic flow on I-215 with traffic simulation modeling. Analysis results indicate that ramp meters would improve traffic flow on I-215 and at the I-15/I-215 interchange by smoothing out traffic flow. Ramp meters have been proven to provide safety, overall delay reductions, and environmental benefits for I-15 and other corridors throughout the country. The traffic analysis results show they would also provide a significant benefit on I-215.

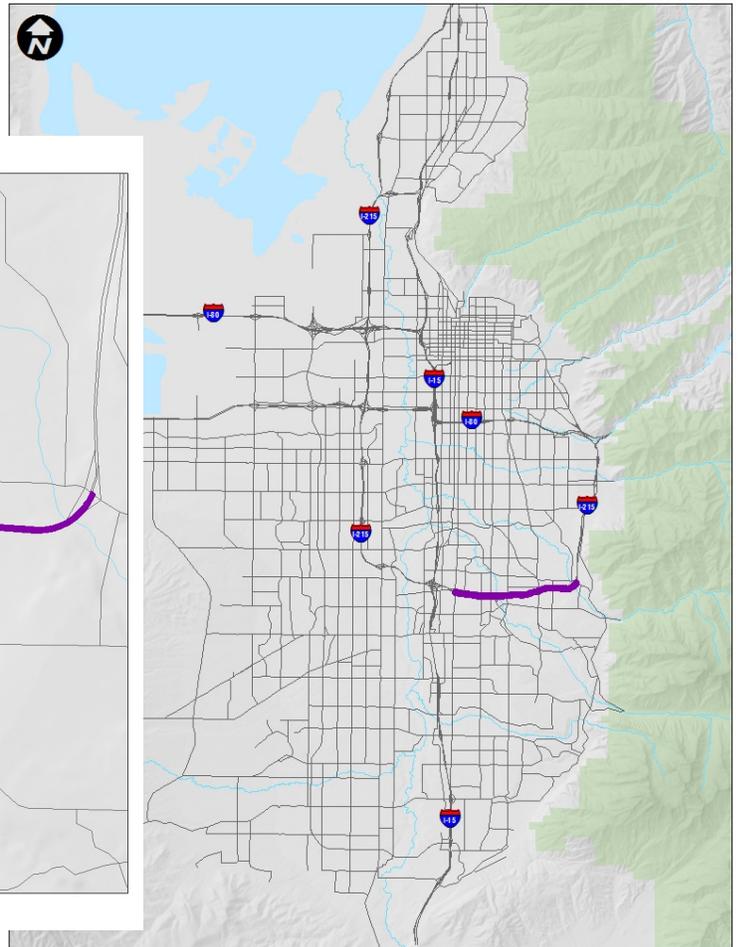
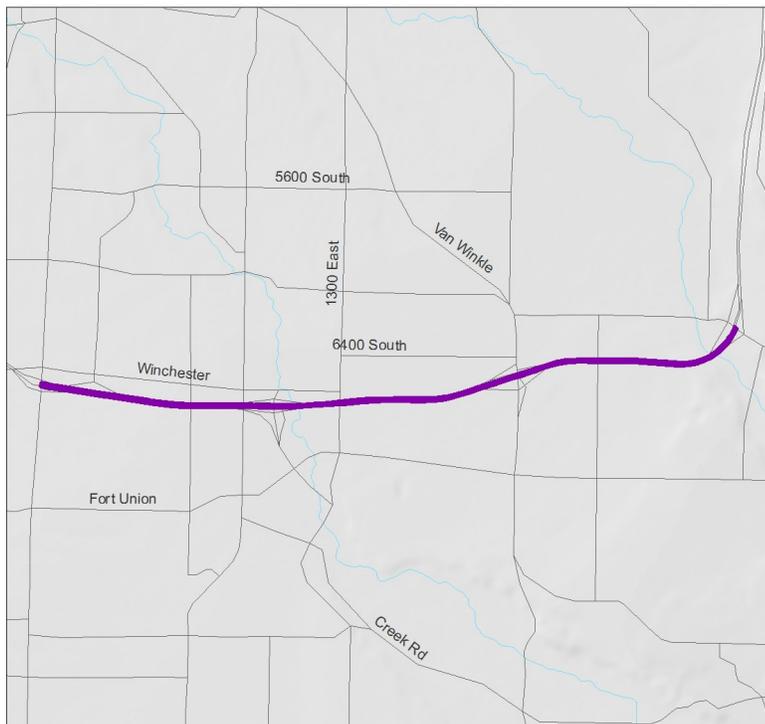
**Reduced emissions estimate (kg/day):** 9.26 CO, 0.27 VOC, 0.37 Nox. , 0.01 PM<sub>10</sub>  
This equates to an estimated reduction of 3.99 tons per year.

**PROJECT COST**

Estimated Total Cost:	\$ 3,813,000
Federal Funds Available:	\$ 924,000
Federal Funds Already Used	\$ - 0 -
Federal Funds Available in FY 2014:	\$ 10,000
Federal Funds Available in FY 2017:	\$ 914,000

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/Air Quality
Non-Federal:	Utah Department of Transportation
Year added to TIP:	2012



**LITTLE COTTONWOOD CANYON & SNOWBIRD ENTRY-1 INTERSECTION - 11998  
Intersection Improvement**

In Little Cottonwood Canyon, much of the activity that generates the majority of the traffic, concludes at about the same time of day thus creating long queues of waiting traffic to exit the parking lots and proceed down the canyon. The further down the canyon the parking lot is, the smaller the headway gaps in the traffic are to allow new traffic to enter the mainstream leaving the canyon. Often times this creates a dangerous situation with cars taking chances of squeezing in the gaps or cars entering traffic traveling at slower speeds. This project will construct a High-T intersection (an improved intersection with a receiving lane and extended merge area) which will allow the through traffic to proceed while enabling a car from the parking facility a protected lane to accelerate then merge into traffic while eliminating conflict points from the traffic going up the canyon.

This project will help reduce congestion by minimizing delay and improve safety at Snowbird Entry 1 in Little Cottonwood Canyon. This project will improve the out load of the canyon traffic by creating an improved intersection with a receiving lane and extended merge area.

**Reduced emissions estimate (kg/day):** 0.37 CO, 1.25 VOC, 0.26 Nox., 6.85 PM<sub>10</sub>  
This equates to an estimated reduction of 3.54 tons per year.

**PROJECT COST**

Estimated Total Cost:	\$ 953,000
Federal Funds Available:	\$ 350,000
Federal Funds Already Used	\$ - 0 -
Federal Funds Available in FY 2014:	\$ 10,000
Federal Funds Available in FY 2017:	\$ 340,000

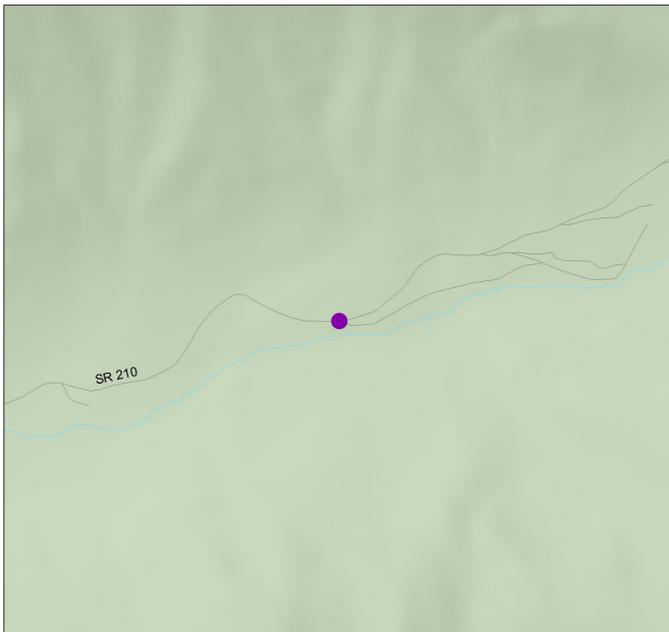
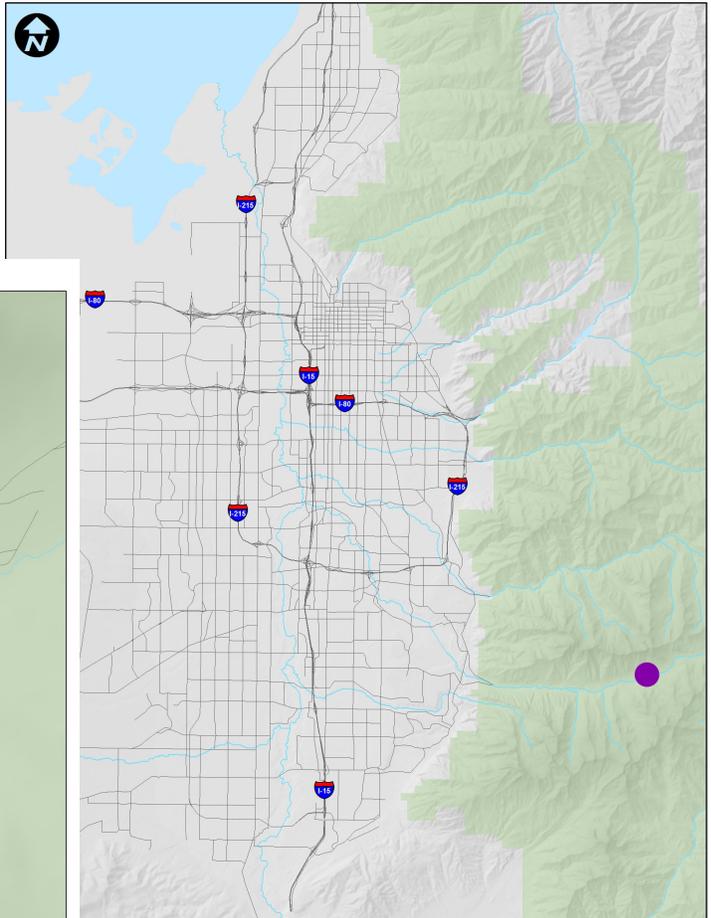
Average

Daily Traffic (ADT):	Current (2011)	Projected (2030)
Cottonwood Canyon	5,575	6,500
Snowbird Entry #1	440	440

Year added to TIP: 2013

**SOURCE OF FUNDS**

Federal: Congestion Mitigation/ Air Quality  
Non-Federal: UDOT



**GREENbike BIKE SHARE EXPANSION – PIN 12008**  
**Construct Additional Bike Docking Stations and Purchase Additional Bicycles**

This project will build new stations, expand docks at existing stations, and purchase additional bikes. By providing a convenient and fast way to travel between transit stops and local destinations without needing a car, this project demonstrates an innovative approach to accommodating the first-mile and last-mile public transit trips. This system also avoids the time drain of a long walk, the cost of a taxi ride, and the hassle of lugging a bicycle on a bus or train.

SLC Bike Share programs provide high-quality bicycles for commuters to link local destinations with regional transit with a fast, flexible, and affordable option. The system will connect multiple satellite systems by rail transit, extending the project's reach. The functional city bikes are regularly redistributed to be available for commuters throughout the day. This project accommodates pedestrian traffic providing a supplement to walking, allowing pedestrians to easily cover greater distances as part of a walking trip. A person can walk to a Bike Share station, cover a portion of their journey by bicycle, and then resume their walking trip after dropping off the bike. Bike Share also fosters an environment that deters excessive motor vehicle usage, creating a more walkable and pedestrian friendly community in which to live, work and play. The resource also allows for individuals to continue to use their car if they so desire, but offers a hassle-free alternative that can eliminate the redundant and therefore unnecessary short-distance local automobile trips after they have traveled their main daily commute in a personal vehicle. Bike Share allows individuals that would never consider giving up their car for the day to experience the best possible scenario of riding a bike for transportation.

**Reduced emissions estimate (kg/day):** 0.02 CO, 0.17 VOC, 0.40 Nox., 8.80 PM<sub>10</sub>  
 This equates to an estimated reduction of 1.94 tons per year.

**PROJECT COST**

Estimated Total Cost:	\$ 14,200,000
Federal Funds to be Obligated:	\$ 69,923
Federal Funds Obligated to Date:	\$ 0
Federal Funds Available FY 2014:	\$ 69,923

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/ Air Quality
Non-Federal:	Salt Lake City



**10400 SOUTH & BANGERTER HIGHWAY - 13129**  
**VMS; Northbound & Southbound**

This Variable Message Sign (VMS) will provide alternate route and general traveler information (travel times) for northbound and southbound traffic on Bangerter that will increase their traveling options during heavy congestion. This area is currently experiencing heavy traffic delays during peak hours.

These VMSs will be valuable tools during normal congestion as well as during future construction, incidents and special events. VMS with proper messaging have proven to result in a 20% diversion; this diversion helps reduce slow traffic and idling which results in decreased air quality impacts.

**Reduced emissions estimate (kg/day):** 0.07 CO, 0.24 VOC, 0.05 Nox, and 1.35 PM<sub>10</sub>.  
This equates to around 0.69 tons / year reduced.

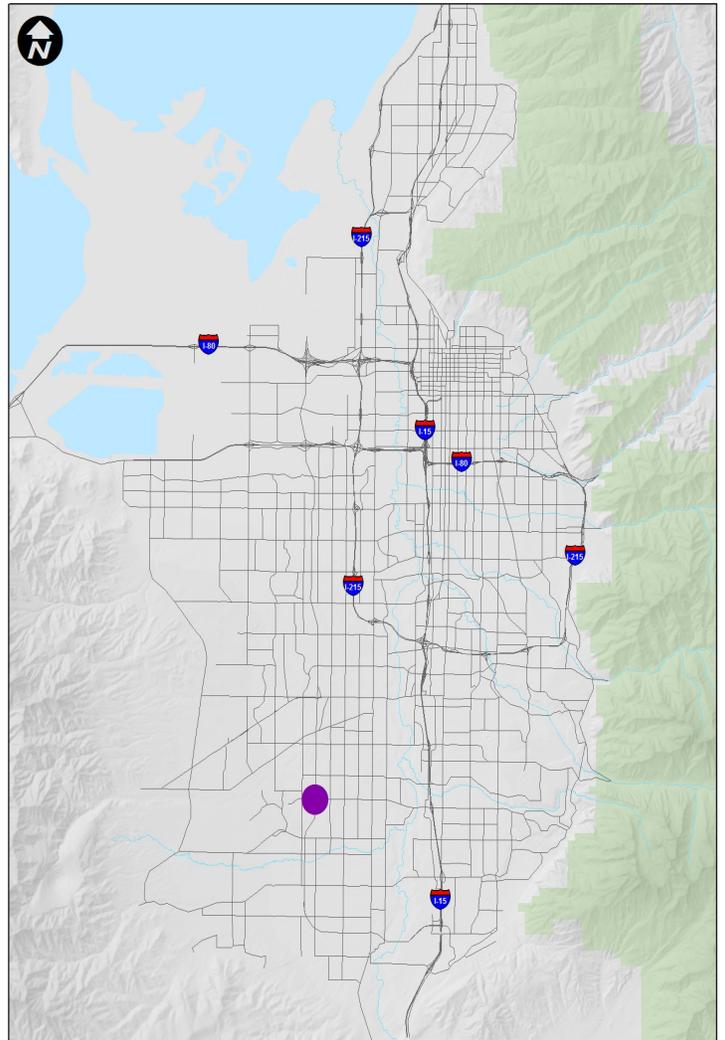
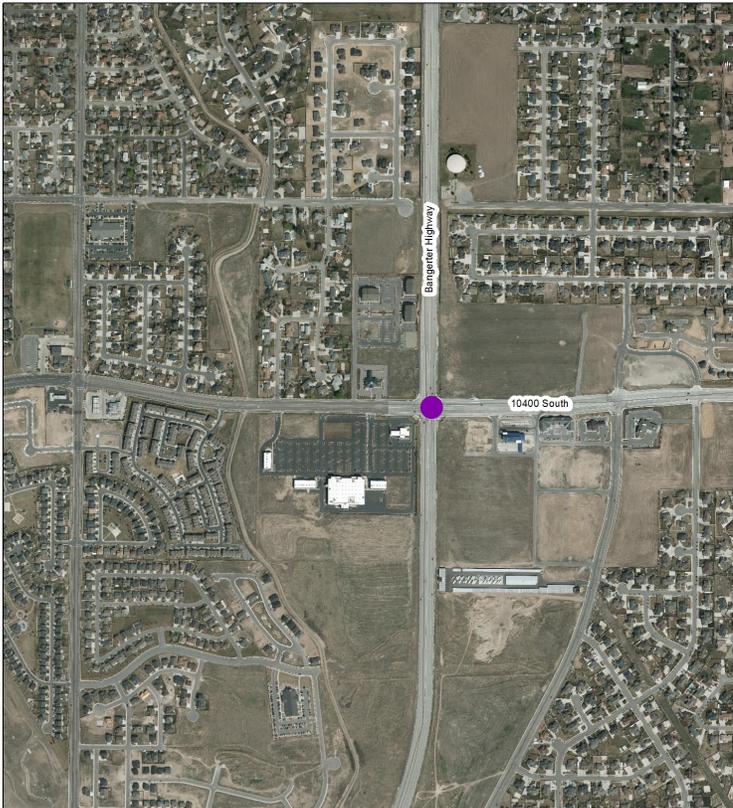
**PROJECT COST**

Estimated Total Cost:	\$ 915,200
Federal Funds Available:	\$ 863,124
Federal Funds Already Used:	\$ - 0 -
Federal Funds Available in FY 2019	\$ 863,124

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/Air Quality
Non-Federal:	UDOT

Year added to TIP: 2014



**FOOTHILL VARIABLE MESSAGE SIGN - 13131**  
**VMS; Installation**

This Variable Message Sign (VMS) will provide alternate route and general traveler information (travel times) for southbound traffic on Foothill Drive that may either be going east or westbound on I-80 or southbound on I-215. This area is currently experiencing heavy traffic delays during peak hours.

This VMS will be a valuable tool during normal congestion as well as during future construction, incidents and special events. VMS with proper messaging have proven to result in a 20% diversion; this diversion helps reduce slow traffic and idling which results in decreased air quality impacts.

**Reduced emissions estimate (kg/day):** 0.01 CO, 0.03 VOC, 0.01 Nox, and 0.18 PM<sub>10</sub>.  
This equates to around 0.69 tons / year reduced.

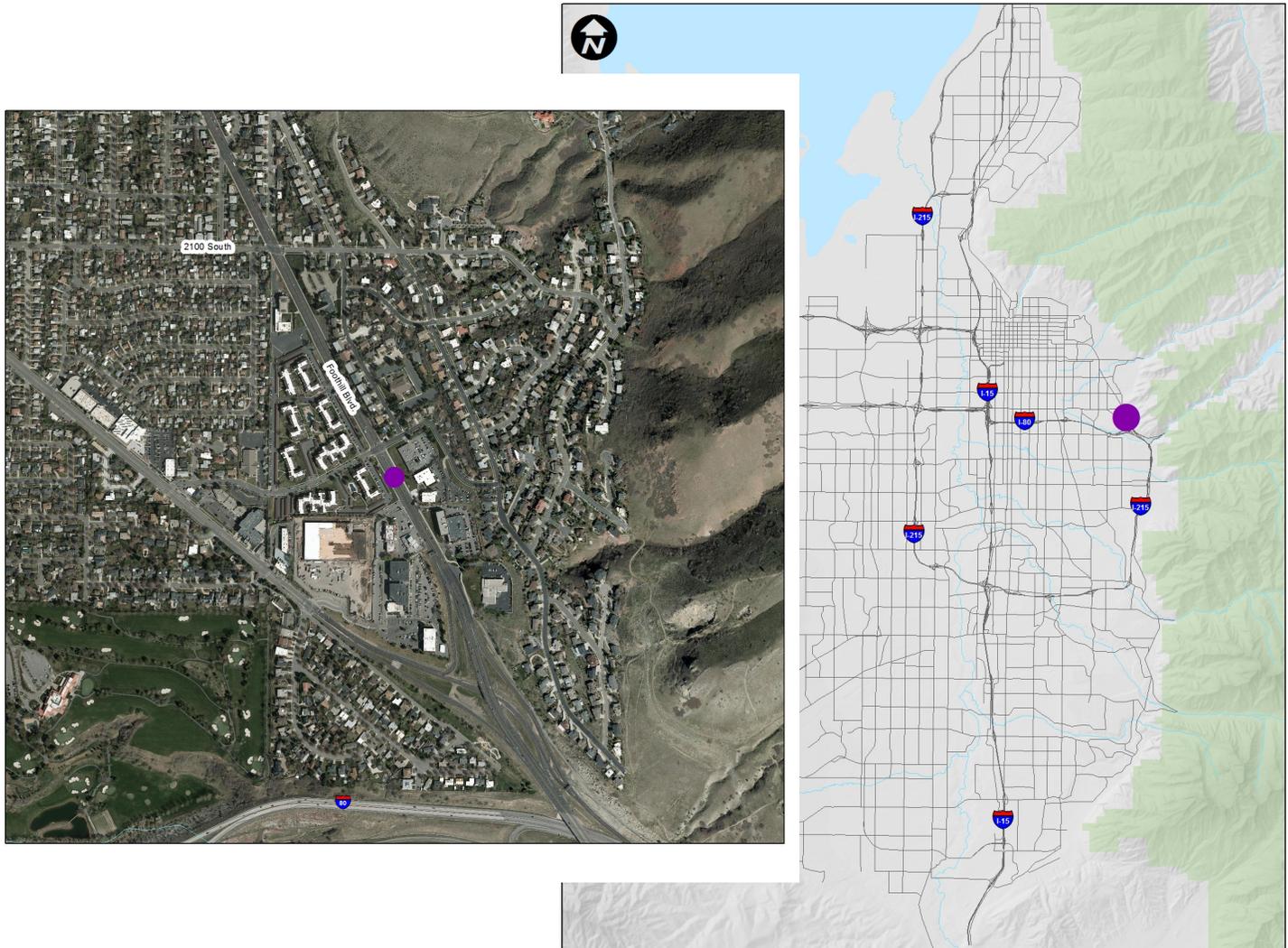
**PROJECT COST**

Estimated Total Cost:	\$ 462,900
Federal Funds Available:	\$ 431,562
Federal Funds Already Used:	\$ - 0 -
Federal Funds Available in FY 2019	\$ 431,562

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/Air Quality
Non-Federal:	UDOT

Year added to TIP: 2014



**TOOELE (STANSBURY PARK) - PARK AND RIDE LOT - 8597**  
**Park-n-Ride Lot**

Tooele Park and Ride - Proposed PNR lot for routes 451, 453, & 454 in Tooele area. Proposed lot is located on NW corner of Highway 36 & Highway 138 crossroads in Stansbury Park area.

Tooele Valley generates many trips to SLC and will benefit from improved transit facilities. Current riders are using a church bldg lot as a PNR. LDS Facilities Managers have expressed concerns as the usage of this lot continues to increase. The construction of a PNR facility less than ½ mile from this existing lot will allow for more patrons to use transit.

**Reduced emissions estimate (kg/day):** PM<sub>10</sub> 0.19, CO 30.32, VOC 0.81, and Nox 3.69.  
This equates to around 14 tons / year.

**SOURCE OF FUNDS**

**PROJECT COST**

Estimated Total Cost: \$ 2,219,000

Federal Funds Available: \$ 1,458,222

Federal Funds Already Used: \$ 1,025,500 (WFRC)

\$ 334,000 (Tooele)

Federal Funds Available:

Federal Funds Available:

\$ 0.0 (Tooele)

\$ 0.0 (WFRC)

Federal Sources:

WFRC Area Congestion Mitigation/Air Quality

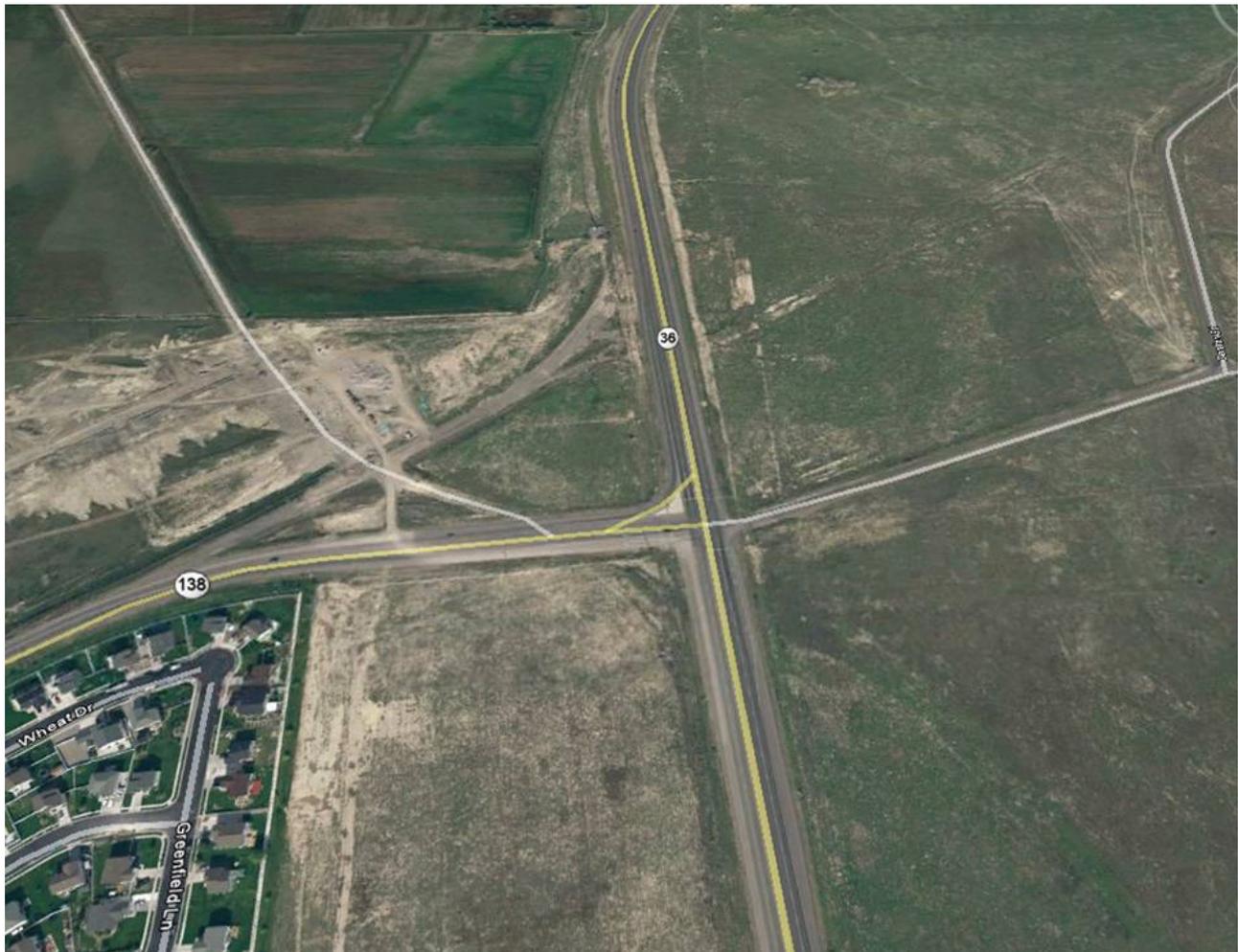
Tooele Area Congestion Mitigation/Air Quality

Non-Federal:

Utah Transit Authority (UTA) and Tooele County

Year added to TIP:

2010



**KEY NORTH TEMPLE PROJECT - 10019**  
**500 WEST; FROM NORTH TEMPLE TO 300 NORTH**  
**Multimodal Connections to FrontRunner, TRAX, Bus, Bicycle, and Pedestrian**

This project will build several important connections to the proposed FrontRunner and TRAX rail stations at North Temple Street in Salt Lake City. These key connections include bus, kiss & ride (drop-off and pick-up), bicycles, and pedestrians, through the construction of 500 West Street in Salt Lake City. This street currently terminates at North Temple, and the proposed project would extend it to 300 North, allowing for the convenient and multi-modal connections aforementioned.

To date, UTA and SLC have each invested substantial local money for transit (TRAX) and roadway improvements (N. Temple Viaduct), as well as other infrastructure investments to help revitalize the downtown area. Local property owners and businesses have also expressed a desire to participate, for example through land donations. This project would increase modal connectivity and ease of transfers including improved local bus routes such as direct routes from this location to the University of Utah.

**Reduced emissions estimate (kg/day):** 18.19 CO, 0.48 VOC, 0.32 Nox and 0.08 PM<sub>10</sub>  
 This equates to around 7.67 tons / year reduced.

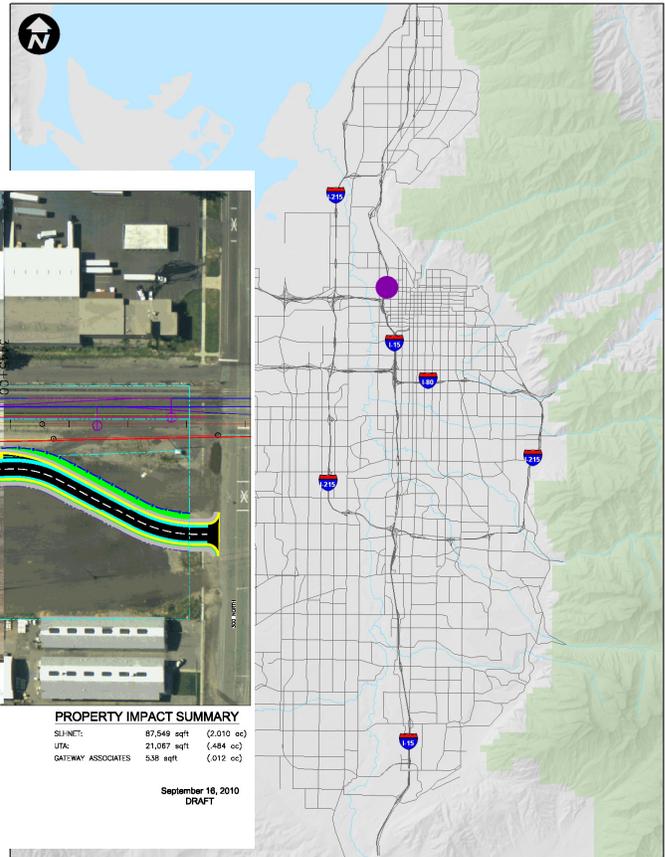
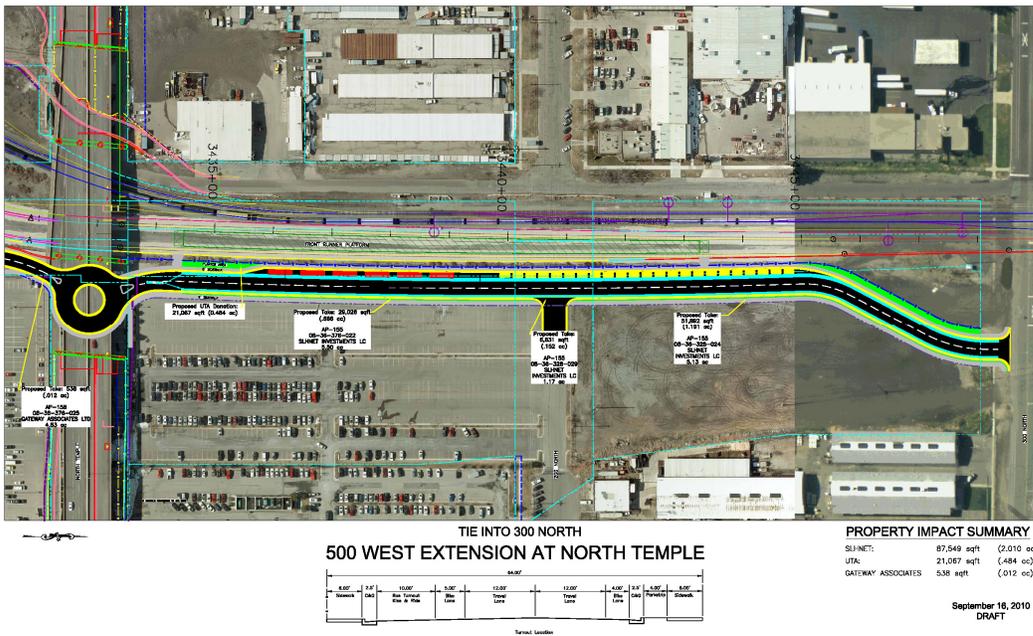
**PROJECT COST**

Estimated Total Cost:	\$ 3,064,000
Federal Funds Available:	\$ 1,400,000
Federal Funds Already Used:	\$ 130,000
Federal Funds Available in FY 2015:	\$ 270,000
Federal Funds Available in FY 2016:	\$ 1,000,000

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/Air Quality
Non-Federal:	Utah Transit Authority (UTA)

Year added to TIP: 2011



**UTA RIDESHARE - 2351**  
**Transportation Demand Management (TDM)**

UTA’s Rideshare Program is an on-going CMAQ funded program that promotes alternatives to single-occupant vehicles in the Salt Lake and Ogden areas. The program includes carpool match lists, advertising campaigns, zero-interest loans for vanpools, management of the vanpool leasing program, and the Ecopass program. In the Ecopass program employees receive discounted monthly bus passes. This is possible through employer benefits packages and Rideshare subsidies.

Rideshare will also stress more outreach with several TDM coordinators who will work with agencies and private employers which are impacted by the state Division of Air Quality's proposed Trip Reduction Program. This ordinance is in the Ozone Maintenance Plan for Salt Lake and Davis counties. In addition, this project will provide support to the Transportation Management Association established by the Salt Lake Area Chamber of Commerce. The WFRC CMAQ funds scheduled for this program are to come 68 percent from the Salt Lake area and 32 percent come from the Ogden/ Layton area. UTA RideShare is expected to focus their efforts in the two areas proportionally.

Positive effects are reduced single-occupant vehicle usage, reduced congestion, increased transit usage, and higher car pooling rates in the region. The program is one of the most successful at improving air quality.

**Estimated Reduced emissions in the Salt Lake/ West Valley Area (kg/day):** 32.85 CO, 0.70 VOC, 2.22 Nox, and 0.21 PM10. This equates to around 14.48 tons/ year.

**Estimated Reduced emissions in the Ogden/ Layton Area (kg/day):** 25.91 CO, 0.71 VOC, 5.32 Nox and 0.28 PM10. This equates to around 12.96 tons/ year.

**SALT LAKE AREA PROGRAM**

Estimated Total Cost:	\$ 3,073,880
Federal Funds Available:	\$ 2,911,864
Federal Funds Available in FY 2014:	\$ 318,733
Federal Funds Available in FY 2015:	\$ 318,733
Federal Funds Available in FY 2016:	\$ 318,733
Federal Funds Available in FY 2017:	\$ 318,733
Federal Funds Available in FY 2018:	\$ 318,733
Federal Funds Available in FY 2019:	\$ 318,733

**OGDEN/ LAYTON AREA PROGRAM**

Estimated Total Cost:	\$ 1,450,911
Federal Funds Available:	\$ 1,099,910
Federal Funds Available in FY 2014:	\$ 157,130
Federal Funds Available in FY 2015:	\$ 157,130
Federal Funds Available in FY 2016:	\$ 157,130
Federal Funds Available in FY 2017:	\$ 157,130
Federal Funds Available in FY 2018:	\$ 157,130
Federal Funds Available in FY 2019:	\$ 157,130

Year added to TIP:	1993	Year added to TIP:	1993
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**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/Air Quality
Non-federal:	Utah Transit Authority (UTA)

**ITS - UTA ITS ADVANCED PUBLIC TRANSIT SYSTEM DEPLOYMENT**

UTA will use the funds programmed for this project to implement several transit related Intelligent Transportation System (ITS) applications. This project will purchase several global positioning units (automated vehicle location) and automated passenger counters to be installed on existing buses. This will allow UTA to evaluate the effectiveness of their route plan and modify inefficient routes to acquire more riders. More efficient routing is expected to attract potential riders to transit and improve air quality. UTA also plans on implementing an ATMS Interface and Fiber Optic Network, which will allow dispatchers to access and provide real-time traffic, weather, road conditions, incidents and transportation system status through the Commuterlink network and its partners. Another project UTA will be working on is the Bus Transit Traffic Signal Priority. This is a prototype project to test the effectiveness of transit signal priority on bus schedule performance and determine impacts on traffic service. UTA will also be conducting an evaluation study to determine the functionality and usefulness of bus Automated Vehicle Location (AVL) data for traffic management purposes by UDOT. Support for the development and installation of variable message signs at bus stop locations at ski resorts in Big and Little Cottonwood Canyons, is under UTA’s Canyon Traveler Information project. UTA will also be implementing projects including a Data Management Study, a Telephone Voice Response Unit, and a Bus/Rail Integration and Customer Information (ATIS) Deployment. The Data Management Study will identify the impacts and issues that will result from ITS program deployment. The Telephone Voice Response Unit will support the development, integration and implementation of an automated telephone voice-response system for UTA’s customer information department. This deployment will provide critical integration of bus-to-rail and particularly rail-to-bus system transfers.

**Reduced emissions estimate in the Salt Lake Area (kg/day):** 24.71 CO, 0.48 VOC, 0.74 Nox., 0.13 PM<sub>10</sub>  
 This equates to around 10.48 tons/ year.

**Reduced emissions estimate in the Ogden/ Layton Area (kg/day):** 10.55 CO, 0.25 VOC, 0.35 Nox., 0.05 PM<sub>10</sub>  
 This equates to around 4.50 tons / year.

**SALT LAKE AREA PROGRAM**

Estimated Total Cost: \$ 12,000,000  
 Federal Funds Available: \$ 840,000  
  
 Federal Funds Available in FY 2017: \$ 250,000  
 Federal Funds Available in FY 2018: \$ 250,000

**OGDEN/ LAYTON AREA PROGRAM**

Estimated Total Cost: \$ 7,500,000  
 Federal Funds Available: \$ 1,101,000  
  
 Federal Funds Available in FY 2014: \$ 200,000  
 Federal Funds Available in FY 2017: \$ 330,500  
 Federal Funds Available in FY 2018: \$ 330,500

Year added to TIP: 1999

Year added to TIP: 1999

**SOURCE OF FUNDS**

Federal: Congestion Mitigation/Air Quality  
 Non-Federal: Utah Transit Authority (UTA)

**EXPANSION OF UTA VANPOOL LEASING PROGRAM  
Transportation Demand Management (TDM)**

As part of the RideShare program, UTA maintains a vanpool leasing program. Since UTA does not seek a profit from leasing vans, they structure the lease rate to replace the van at the end of its useful life. As a result, large companies can lease a van at below average rates. An employee who lives furthest out will then drive the van -- picking up co-workers (usually at park-and-ride lots) along the way. This is attractive to employees because they get first class parking, a low-cost ride, and an opportunity to socialize with colleagues on the way. Each van's capacity is 15. Currently the UTA-leased vans average 12 riders.

Since lease rates are designed only to replace existing vans, there is no extra money for expanding the total number of vans. The program was initiated in 1992 using CMAQ funds and has since expanded to include approximately 400 vans in the Salt Lake and Ogden/ Layton areas. Funding in this TIP will allow UTA to purchase approximately 20 vans per year for five years. The funding and the vans purchased will be apportioned 68 percent to the Salt Lake area and 32 percent to the Ogden/ Layton area. With these additions, it is expected that UTA's vanpool fleet in 2010 will be about 275.

**Estimated Reduced emissions in the Salt Lake/ West Valley Urban Area (kg/day):** 21.49 CO, 0.47 VOC, 1.64 Nox., 0.15 PM<sub>10</sub> This equates to around 9.55 tons / year.

**Estimated Reduced emissions in the Ogden/ Layton Urban Area (kg/day):** 14.11 CO, 0.39 VOC, 5.983.25 Nox., 0.16 PM<sub>10</sub> This equates to around 7.21 tons / year.

**SALT LAKE AREA PROGRAM**

Estimated Total Cost:	\$ 3,546,069
Federal Funds Available:	\$ 3,306,000
Federal Funds Available in FY 2014:	\$ 276,200
Federal Funds Available in FY 2015:	\$ 276,200
Federal Funds Available in FY 2016:	\$ 325,000
Federal Funds Available in FY 2017:	\$ 300,000
Federal Funds Available in FY 2019:	\$ 276,000

**OGDEN AREA PROGRAM**

Estimated Total Cost:	\$ 1,590,690
Federal Funds Available:	\$ 1,483,000
Federal Funds Available in FY 2014:	\$ 118,800
Federal Funds Available in FY 2015:	\$ 118,800
Federal Funds Available in FY 2016:	\$ 118,800
Federal Funds Available in FY 2017:	\$ 118,800
Federal Funds Available in FY 2018:	\$ 66,400
Federal Funds Available in FY 2019:	\$ 118,800

Year added to TIP: 1994

**SOURCE OF FUNDS**

Federal: Congestion Mitigation/Air Quality  
Non-Federal: Utah Transit Authority (UTA)



**SALT LAKE CENTRAL BUS MAINTENANCE FACILITY – PIN 13127**  
**Construct the CNG Facilities of the DDSC**  
**New Project**

**PROJECT DESCRIPTION**

Sponsor: UTA  
 Type of Work: New Construction  
 Year added to TIP: 2014

UTA will construct a facility that will meet existing and future transit ridership demand through the year 2040. It will provide the maintenance and storage needs of an expanding bus fleet powered by alternative fuels needed to serve Utah’s growing demands for more and cleaner transit. The Salt Lake Central Bus Maintenance Facility will provide UTA with a leadership role in the use of alternative fuels while ensuring inner-city development through technological innovation, environmental responsibility and global competitiveness in the bus components of a mass transit system in a major metropolitan area dealing with rapid population growth.

The construction includes a CNG fueling station for the buses. Other alt. fuel vehicles can also operate out of the DDSC. This facility will improve transportation in SLC, SL Co., Davis Co. and surrounding areas over the next 40 plus years by increasing transit ridership by 4,880 average riders per day, reducing the annual VMT by 4.3 million miles, thus reducing crashes, deaths and losses from accidents. Also, it will help reduce our dependence on foreign oil, provide for 595 construction jobs, and save millions of dollars in fuel costs over the 40-year life. Per analysis for the recent TIGER application, the benefits of the project result in \$1.46 of savings for every \$1.00 in cost.

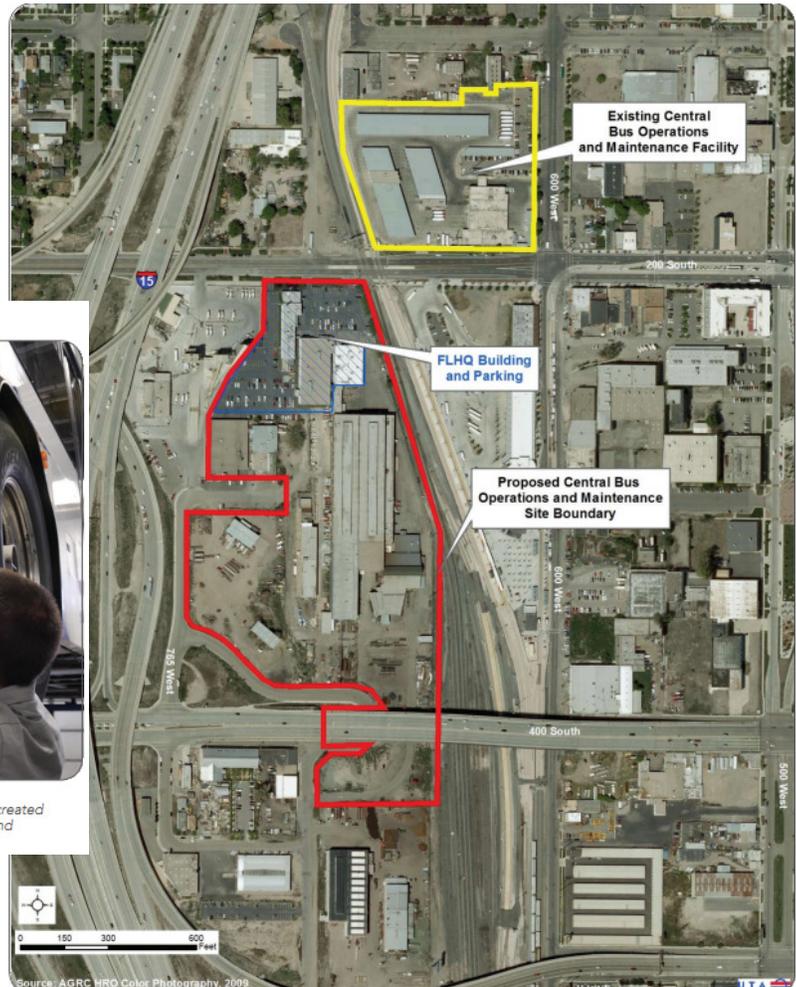
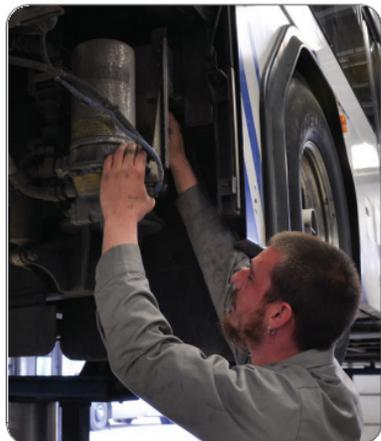
**PROJECT COST**

Estimated Total Cost: \$ 56,400,000  
 Federal Funds to be Obligated: \$ 950,000  
 Federal Funds Obligated : \$ - 0 -  
 Federal Funds Available FY 2019: \$ 450,000  
 Federal Funds Available FY 2020: \$ 500,000

**SOURCE OF FUNDS**

Federal: Congestion Mitigation/ Air Quality Funds  
 Non-Federal: UTA

*Regional Setting*



\* The Executive Office of the President's Council of Economic Advisers estimates that one job-year is created for every \$92,000 of government spending. (Estimates of Job Creation from the American Recovery and Reinvestment Act of 2009, May 2009, Section II, pp 4-6)

**5600 WEST BUS RAPID TRANSIT (BRT) PHASE I - 7650**  
**Construction of Bus Rapid Transit (BRT)**  
*(Not to be used for Bus Purchase)*

**PROJECT DESCRIPTION**

Sponsor: UTA  
 Type of Work: New Construction

Functional Classification:	Principal Arterial	Facility Width	Existing	Proposed
Route Identification:	F-0172(18)	Roadway (I-15)	82'	82'
Length:	5 miles	ROW (I-15)	106'	106'

Year added to TIP: 2009

The Preferred Transit Alternative presented in the Mountain View Corridor EIS would be built in phases, as funding became available, consistent with the phasing time frames identified in WFRC’s Regional Transportation Plan (RTP):

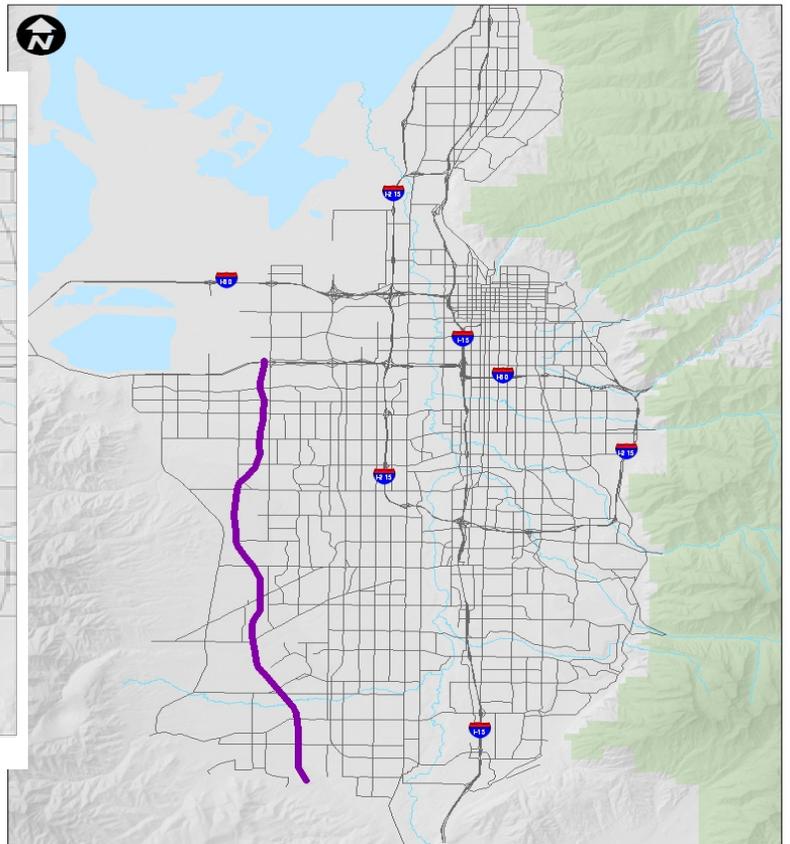
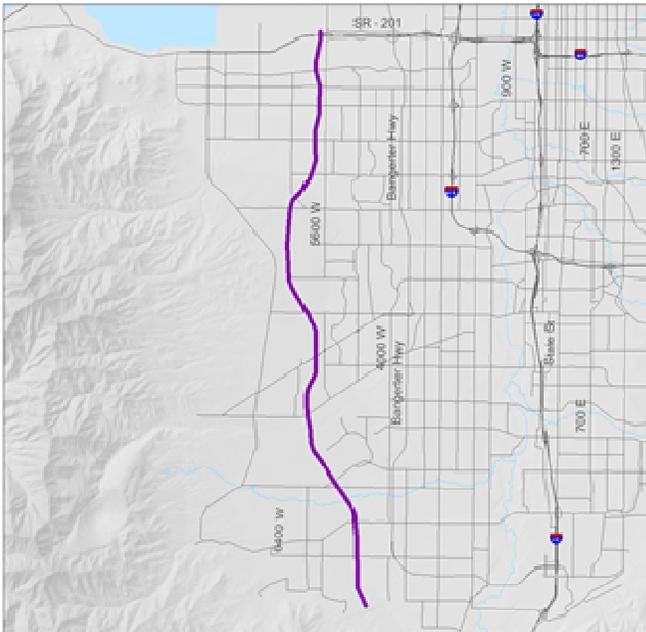
- Phase I (2007-2015), construct BRT in a fixed-guideway (Type 3 BRT) along 5600 West, from 2700 South to 6200 South. UTA also intends to acquire the necessary right-of-way to construct a fixed guideway transit system along 5600 West from Herriman to Interstate 80, and along I-80 from 5600 West to the Salt Lake City International Airport.
- Phase 2 (2016-2025), extend BRT in a fixed guideway along 5600 West from 6200 South southbound to Herriman and from 2700 South northbound to I-80, and continuing along I-80 to the airport.
- Phase 3 (2026-2030), implement a rail transit system along the entire length of 5600 West.

**PROJECT COST**

Estimated Total Cost:	\$	5,616,000
Federal Funds to be Obligated:	\$	2,000,000
Federal Funds Obligated :	\$	- 0 -
Federal Funds Available FY 2018:	\$	2,000,000

**SOURCE OF FUNDS**

Federal: Congestion Mitigation/ Air Quality (CMAQ)  
 Non-Federal: UTA/ UDOT



**TRAFFIC ADAPTIVE CONTROL SYSTEM - 7947**  
**Traffic Signal Adaptive Control**

This Project will implement an adaptive signal control system in the Union Park area and other areas of Salt Lake County that, on a cycle-by-cycle basis, recalculates cycle length, movement green times, and intersection offsets to maximize signal operations based on measured traffic volumes.

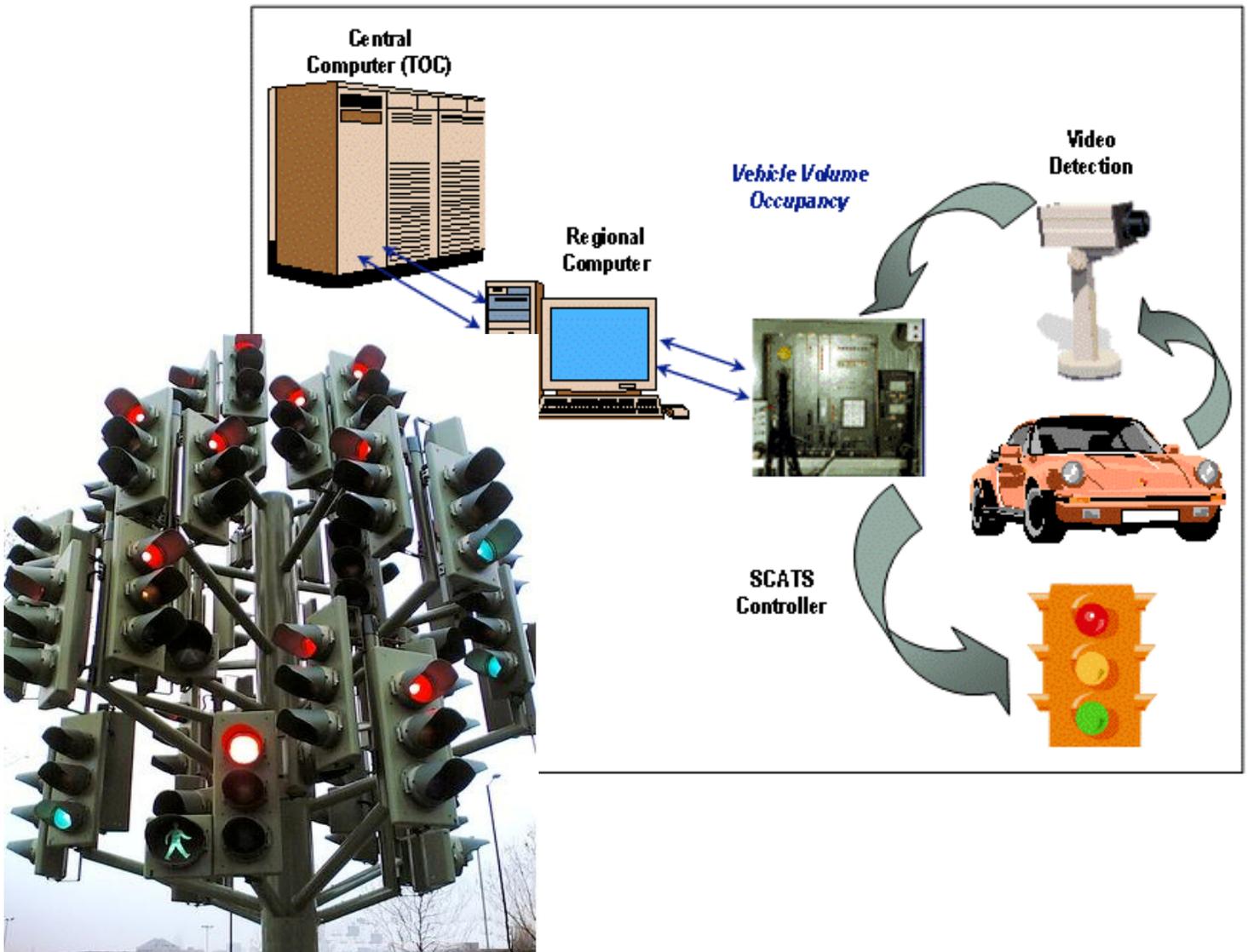
**Reduced emissions estimate (kg/day):** 176.14 CO, 6.43 VOC, and 11.78 Nox.  
This equates to around 78.3 tons / year reduced.

**PROJECT COST**

Estimated Total Cost:	\$ 5,485,000
Federal Funds Available:	\$ 5,110,000
Federal Funds Already Used:	\$ - 0 -
Federal Funds Available in FY 2014	\$ 1,510,000
Federal Funds Available in FY 2015	\$ 3,600,000

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/Air Quality
Non-Federal:	Local Governments & UDOT
Year added to TIP:	2008



**CROSTOWN TRAIL - ROAD TRAIL - 5296**  
**2700 South/ Parkway Blvd. from 2700 West/Constitution Blvd. to Redwood**

This project is for a portion of the Crosstown Trail, from Redwood Road to 2700 West. It is a distance of about 1.25 miles, generally following a 2700 South/Parkway Boulevard alignment but using the public property around Decker Lake to accomplish a Class 1 facility. This section is the most developed portion of the trail but has the needed right-of-way and it connects to an existing north/south trail on 2700 West/Constitution Boulevard. To the west of this section, the trail will eventually follow a canal and continue generally as a Class 1 facility to the Lake Park Business Park which has provided a multi-purpose trail on the north side of Parkway Boulevard. The City eventually expects to make the trail connection to 5600 West as development occurs in that area. At the east end of the City, connections to the paved Jordan River Trail create options to continue eastward using existing bridges or to travel south via the Jordan River trail. It is planned for the Jordan River Trail to continue north connecting into Salt Lake City. The trail is shown on the WFRC Bike plan, the Salt Lake County Tail plan, and the West Valley City Bike plan.

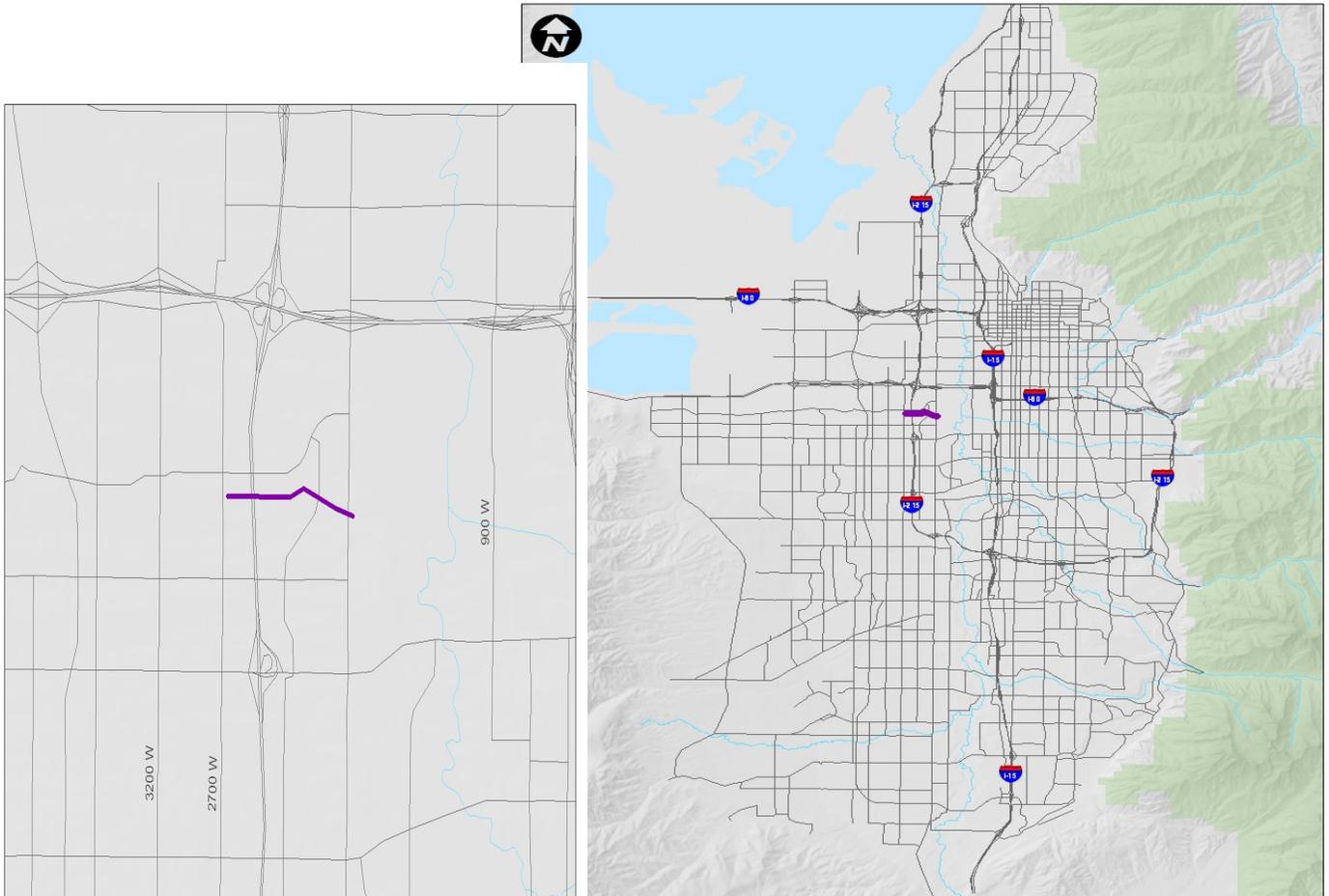
**Reduced emissions estimate (kg/day):** 0.08 CO, 0.23 VOC, 0.08 Nox, and 4.11 PM<sub>10</sub>  
 This equates to around 1.81 tons / year reduced.

**PROJECT COST**

Estimated Total Cost:	\$ 1,784,700
Federal Funds Available:	\$ 1,663,876
Federal Funds Already Used:	\$ - 0 -
Federal Funds Available in FY 2019:	\$ 500,000
Federal Funds Available in FY 2020:	\$ 1,163,876

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/Air Quality
Non-Federal:	Salt Lake County
Year added to TIP:	2014



**7800 SOUTH & 1300 WEST INTERSECTION - 11094**  
**Intersection Improvement**

This project will reconstruct the intersection and improve the traffic signals at 7800 South and 1300 West. This intersection is skewed and needs a southbound right turn only lane and improve access control.

Because this intersection is one of the original intersections of the City there are several improvements necessary to increase safety and traffic movement. Currently there is a considerable skew in the east-west direction. This project will realign the intersection geometry and install curb and gutter and replace access control islands on the east/west and south legs to control traffic patterns. A right turn lane in the southbound direction on 1300 West will also be included.

**Reduced emissions estimate (kg/day):** 0.32 CO, 0.01 VOC, 0.01 Nox., 0.00 PM<sub>10</sub>

This equates to an estimated reduction of 0.14 tons per year.

**PROJECT COST**

Estimated Total Cost:	\$ 847,000
Federal Funds Available:	\$ 450,000
Federal Funds Already Used	\$ - 0 -
Federal Funds Available in FY 2014:	\$ 10,000
Federal Funds Available in FY 2016:	\$ 240,000
Federal Funds Available in FY 2017:	\$ 200,000

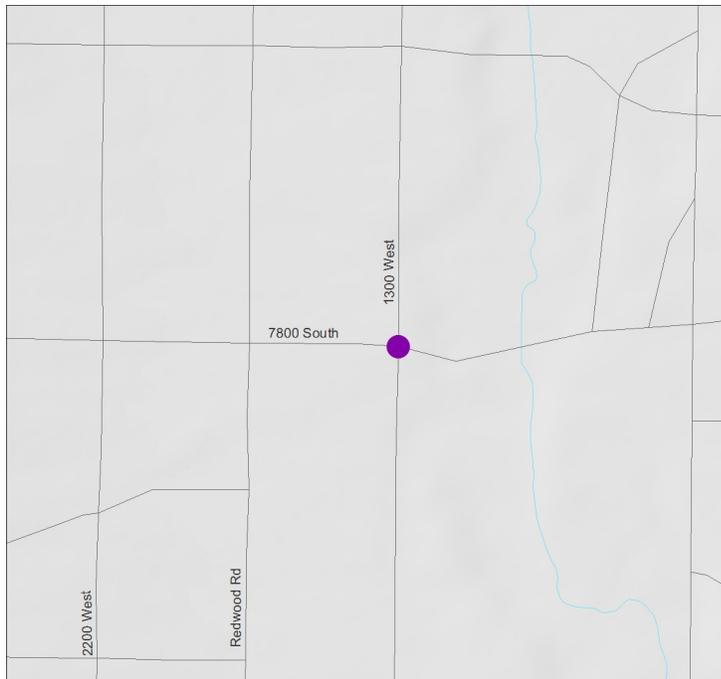
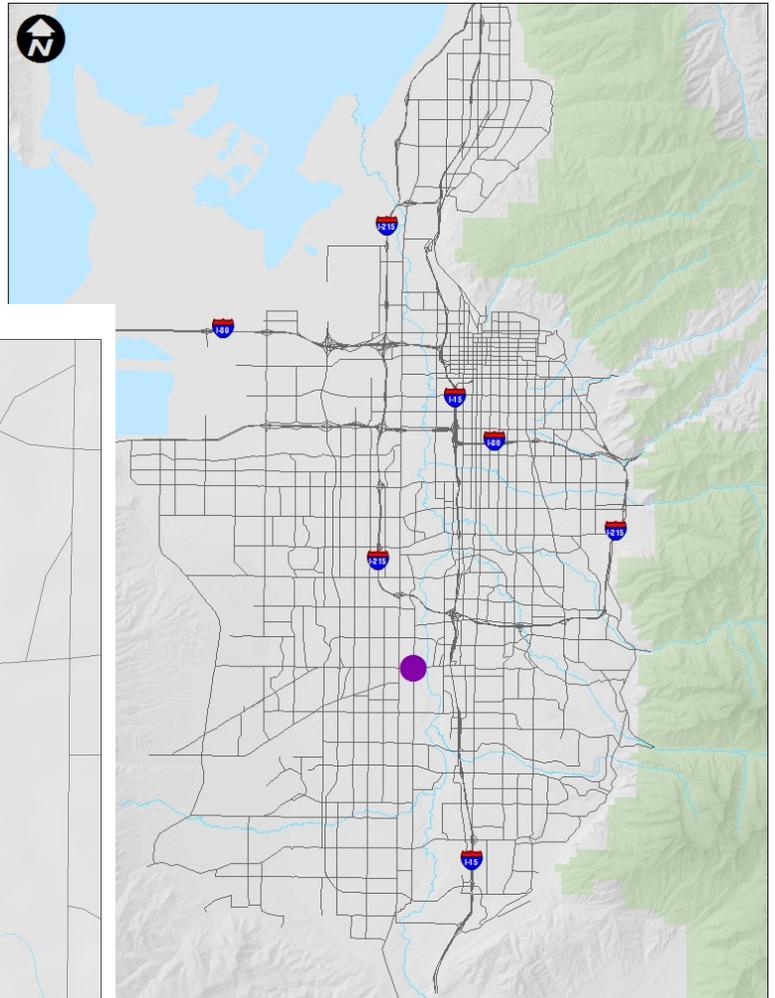
**Average Weekday**

Daily Traffic (AWDT):	Current (2003)	Projected (2030)
7800 South	30,085	39,000
1300 West	10,000	14,000

Year added to TIP: 2012

**SOURCE OF FUNDS**

Federal: Congestion Mitigation/ Air Quality  
 Non-Federal: West Jordan City



**9000 SOUTH & 4000 WEST - 11095**  
**Intersection Improvement**

The objective of this project is to rebuild the intersection and the traffic signal. This project also has a significant safety factor being adjacent to the UTA TRAX crossing and the Jordan School district main bus access. Improvements will create an escape lane for traffic southbound that may be stuck at the crossing. This intersection experiences severe congestion during peak periods.

This intersection is adjacent to the new UTA light rail crossing at 4000 West. During peak periods, traffic is often at a standstill between the tracks, and the intersection often backs traffic onto the tracks creating a significant safety concern when a train is approaching. In addition, all the buses for the Jordan School District use the intersection to access their bus parking and gas pumps. This intersection is also a school crosswalk on two sides for the nearby elementary school, Terra Linda. This project will improve safety by creating a southbound escape lane from the tracks crossing and rebuild the intersection to enable large vehicles like buses and trucks to turn without conflicts with other vehicles.

**Reduced emissions estimate (kg/day):** 1.30 CO, 0.04 VOC, 0.05 Nox., 0.00 PM<sub>10</sub>  
 This equates to an estimated reduction of 0.56 tons per year.

**PROJECT COST**

Estimated Total Cost:	\$ 1,000,000
Federal Funds Available:	\$ 750,000
Federal Funds Already Used	\$ - 0 -
Federal Funds Available in FY 2014:	\$ 10,000
Federal Funds Available in FY 2016:	\$ 240,000
Federal Funds Available in FY 2017:	\$ 250,000
Federal Funds Available in FY 2018:	\$ 250,000

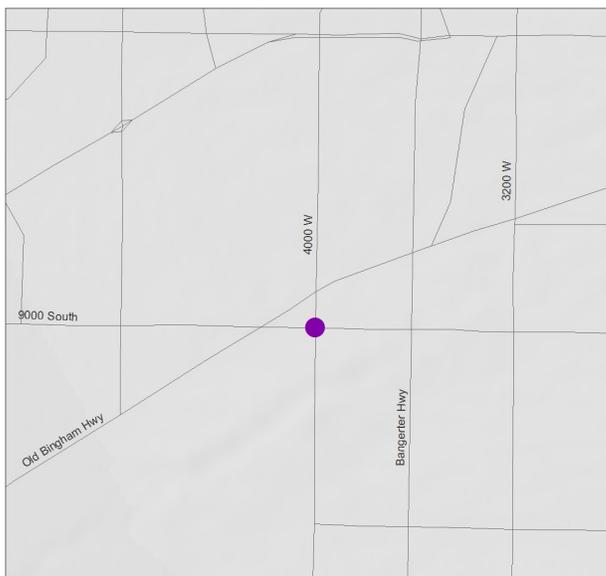
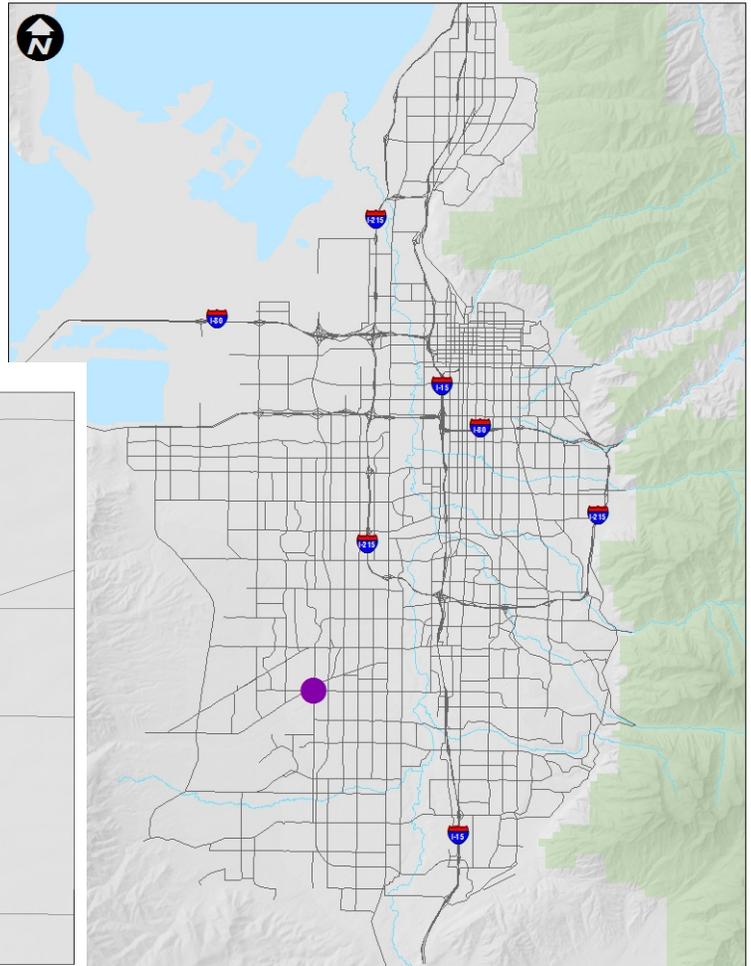
Average Weekday

Daily Traffic (AWDT):	Current (2009)	Projected (2030)
9000 South	20,000	40,000
4000 West	13,000	16,000

Year added to TIP: 2012

**SOURCE OF FUNDS**

Federal: Congestion Mitigation/ Air Quality  
 Non-Federal: West Jordan City



**JORDAN RIVER TRAIL (Gardner Village TRAX Station) – 11097  
Pedestrian/ Bike Trail**

This project adds a trail connection to the south side of the TRAX Gardner Village Station platform directly to the Jordan River Parkway trail. Bike traffic and pedestrians could gain direct entry onto the platform without needing to cross under 7800 South, enter Gardner Village, and cross back over the top of 7800 South.

Although no traffic counts are presently available, thousands of pedestrians and bicyclists use the Jordan River Parkway annually. West Jordan is working in partnership with multiple agencies to acquire funding for the necessary funding to finish the Jordan River Parkway through West Jordan. This portion of the trail is an essential element in the completion of the overall project and interacting the trail with the commuter rail.

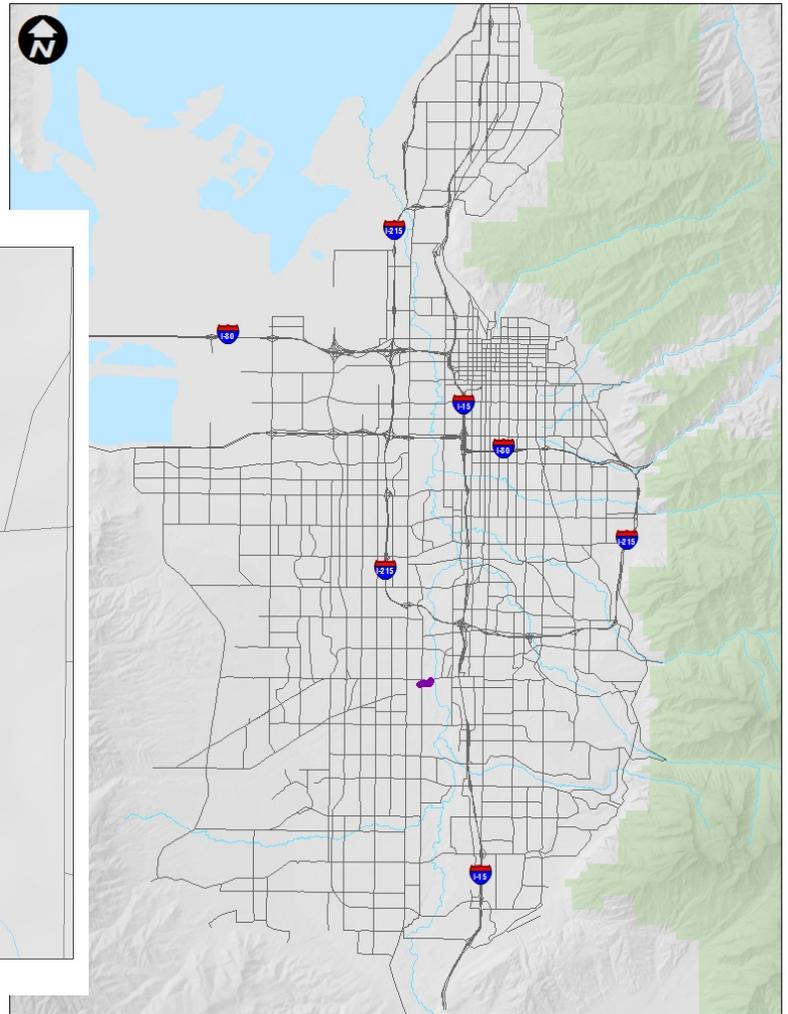
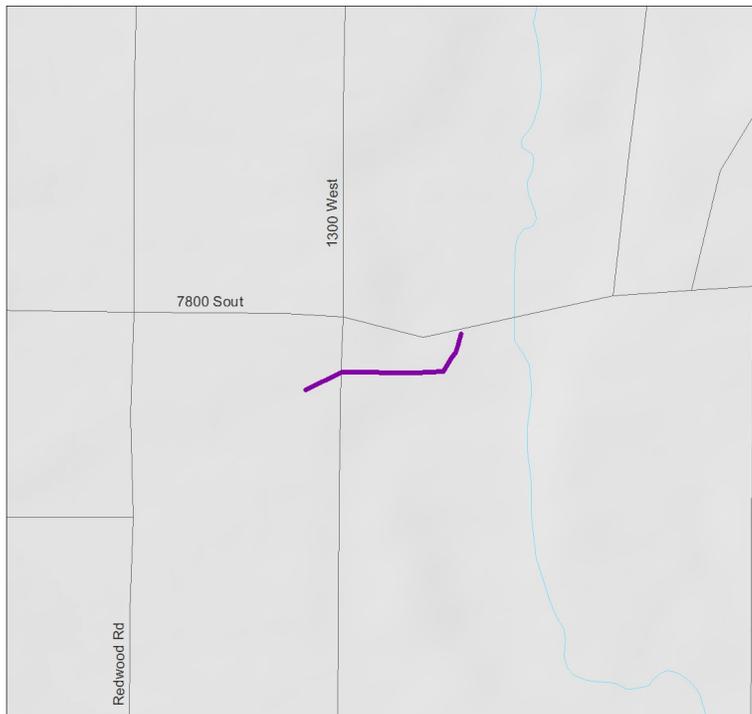
**Reduced emissions estimate (kg/day):** 2.36 CO, 0.04 VOC, 0.02 Nox., 0.01 PM<sub>10</sub>  
This equates to an estimated reduction of 0.98 tons per year.

**PROJECT COST**

Estimated Total Cost:	\$ 321,785
Federal Funds Available:	\$ 300,000
Federal Funds Already Used	\$ - 0
Federal Funds Available in FY 2014:	\$ 10,000
Federal Funds Available in FY 2016:	\$ 290,000

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/Air Quality
Non-Federal:	West Jordan City
Year added to TIP:	2012



## **Ogden/ Layton Urbanized Area**

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# **Projects**

**400 NORTH & 500 SOUTH INTERSECTION - 12002**  
**Intersection Improvement**

This project will add dedicated right turn lanes in the east-bound and north-bound directions to improve the level of service to the entire intersection.

Increased demand along 400 North (SR-106, a major I-15 on/ off ramp for Bountiful and West Bountiful) and 500 West (US-89) has resulted in this intersection operating at a failing level of service. This project is a concrete and asphalt intersection improvement which will not only provide intersection delay improvements but also air quality improvements. Described as “low hanging fruit” this project is a relatively inexpensive way to achieve the goals of the CMAQ program. It provides a rare opportunity to use the program money for actual hard improvement. Our traffic counts show that these two right turn lanes can improve flow in an intersection that had over 44,000 approaches in 2012 and that number continues to grow.

**Reduced emissions estimate (kg/day):** 0.06 CO, 0.20 VOC, 0.04 NO<sub>x</sub>, 1.08 PM<sub>10</sub>  
 This equates to an estimated reduction of 0.56 tons per year.

**PROJECT COST**

Estimated Total Cost:	\$ 1,300,000
Federal Funds Available:	\$ 1,200,000
Federal Funds Already Used	\$ - 0 -
Federal Funds Available in FY 2014:	\$ 10,000
Federal Funds Available in FY 2017:	\$ 500,000
Federal Funds Available in FY 2018:	\$ 690,000

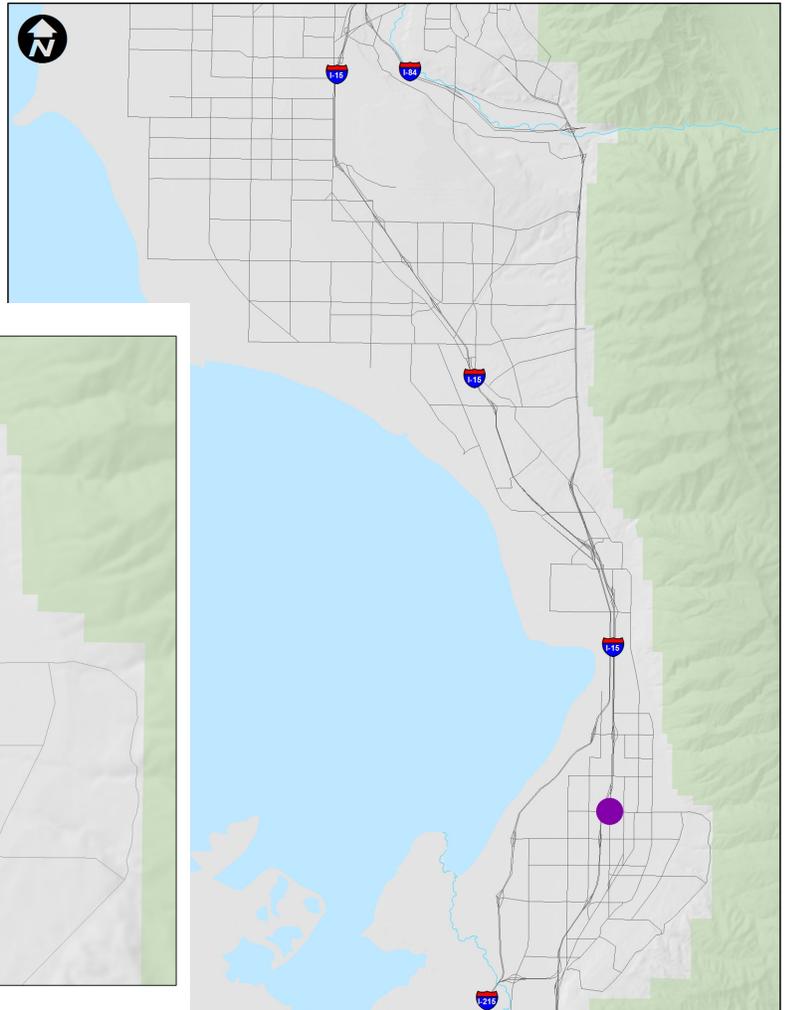
Average

Daily Traffic (ADT):	Current (2011)	Projected (2030)
500 West (US-89)	17,000	37,500
400 North (SR-106)	17,500	28,000

Year added to TIP: 2013

**SOURCE OF FUNDS**

Federal: Congestion Mitigation/ Air Quality  
 Non-Federal: Bountiful/ West Bountiful



**MAIN STREET (SR-106) & PARRISH LANE - 7194**  
**Intersection Improvements**

This project will widen the east and west side of Main Street just south of Parrish Lane. The improvements are to develop a second northbound left turn lane to allow for a more efficient intersection. The project will also include some improvements to curb-gutter and sidewalk, and signal and striping improvements.

The intersection has in excess of 300 left turns and there are frequent times when the northbound left turn lane fails, meaning the northbound left turns do not clear. The results of the modeling indicate that for the 2015 analysis year, the addition of the second northbound left turn lane and re-optimizing the timing will, reduce the overall intersection LOS from an E to a D. This would result in an approximate five vehicle hours of reduced delay in PM peak, 50 vehicle hours for the day and 12,400 vehicle hours for the year.

**Reduced emissions estimate (kg/day):** 2.65 CO, 0.099 VOC, and 0.160 Nox.  
This equates to around 1.17 tons / year.

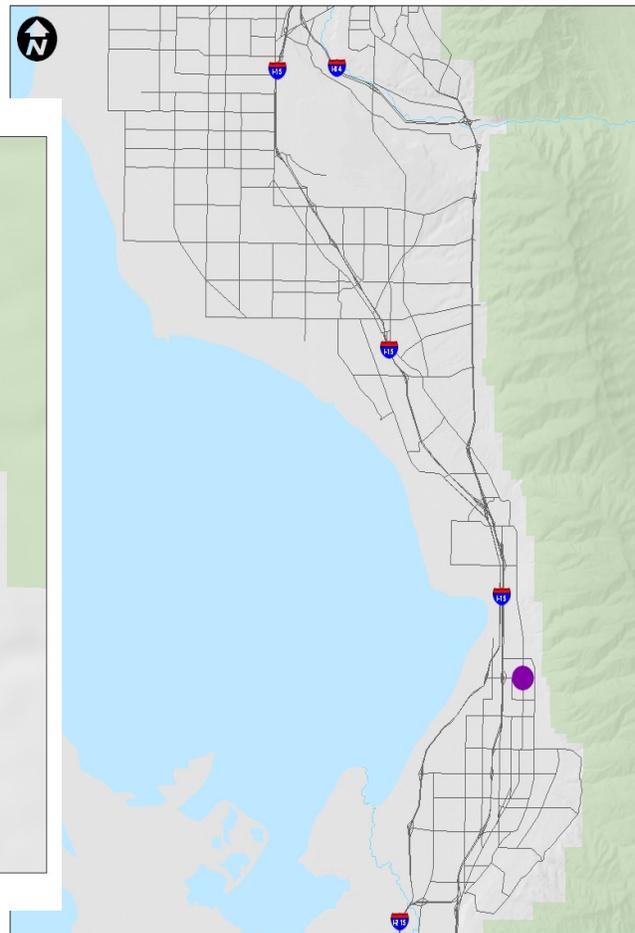
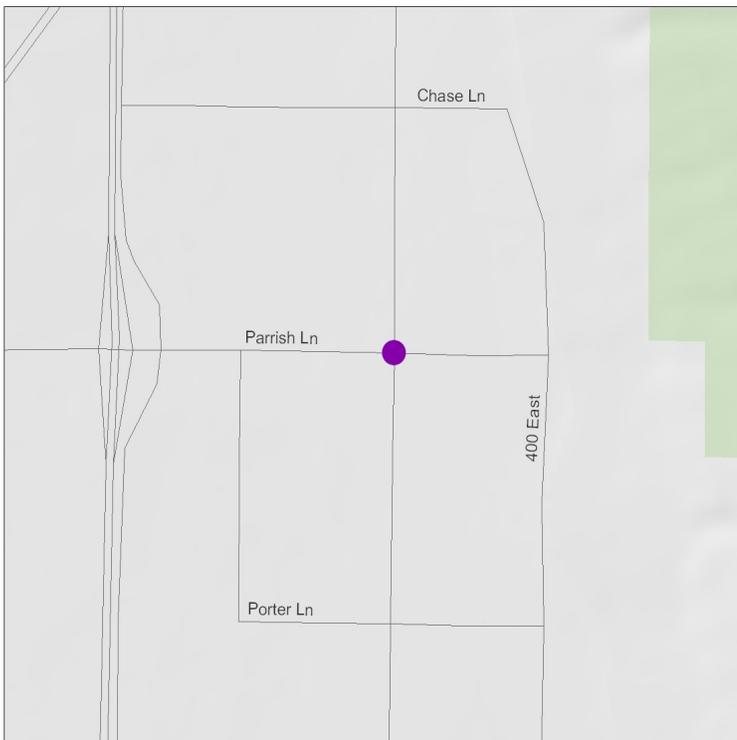
**PROJECT COST**

Estimated Total Cost:	\$ 1,500,000
Federal Funds Available:	\$ 1,207,876
Federal Funds Already Used:	\$ 533,276
Federal Funds Available FY 2014:	\$ 664,600

**SOURCE OF FUNDS**

Federal: Congestion Mitigation/Air Quality  
Non-Federal: Centerville City

Year added to TIP: 2008



**CENTERVILLE - FRONTAGE ROAD BIKE LANES - 12003**  
**638 North to 2200 North (Lund Lane)**

The project purpose is to reduce the risk and greatly improve safety to current cyclists, to improve connectivity of bicycle routes through South Davis County, to encourage more bicycle use of the Frontage Road and relieve the bicycle traffic on Main Street (Highway 89).

Reasons for this project include; 1. This project route is currently being used by individual cyclists, cycling teams and large cycling events and organizations and is very dangerous in sections. 2. This project will create a safe connection and greater access to multiple destinations both immediate and future as listed previously in the "Project details" section. 3. This project benefits surrounding communities as a transportation corridor for all of South Davis County. 4. This project is well supported by all stakeholders including the citizens as represented on the, all volunteer member, Centerville trails committee and Farmington Trails Committee. 5. This project will fill in a gap that is lacking in all regional, county and local master plans.

**Reduced emissions estimate (kg/day):** 0.01 CO, 0.07 VOC, 0.17 Nox., 3.49 PM<sub>10</sub>  
This equates to an estimated reduction of 1.52 tons per year.

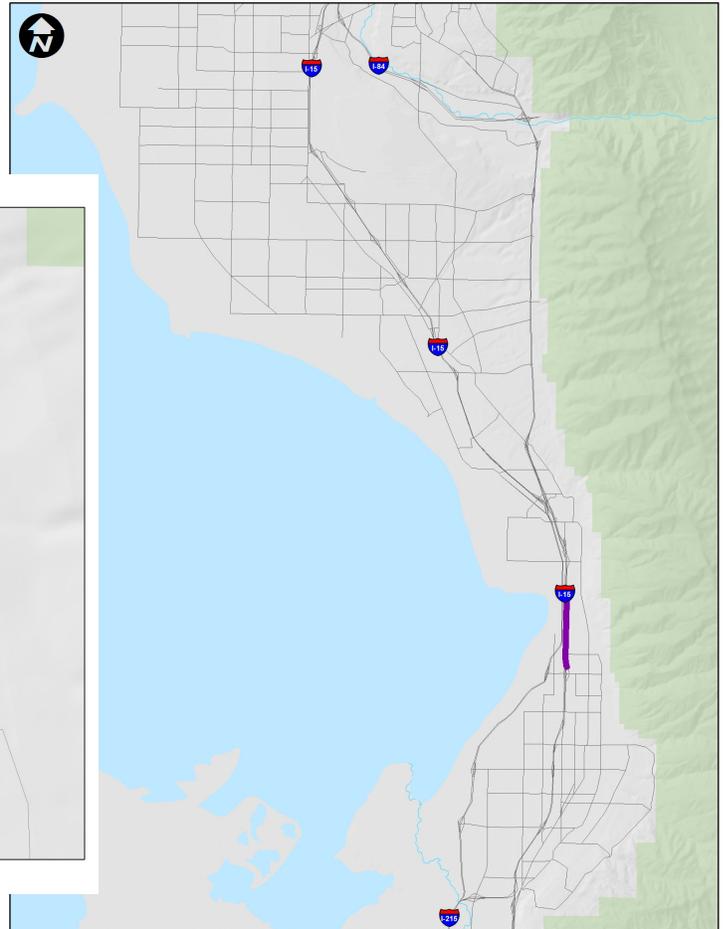
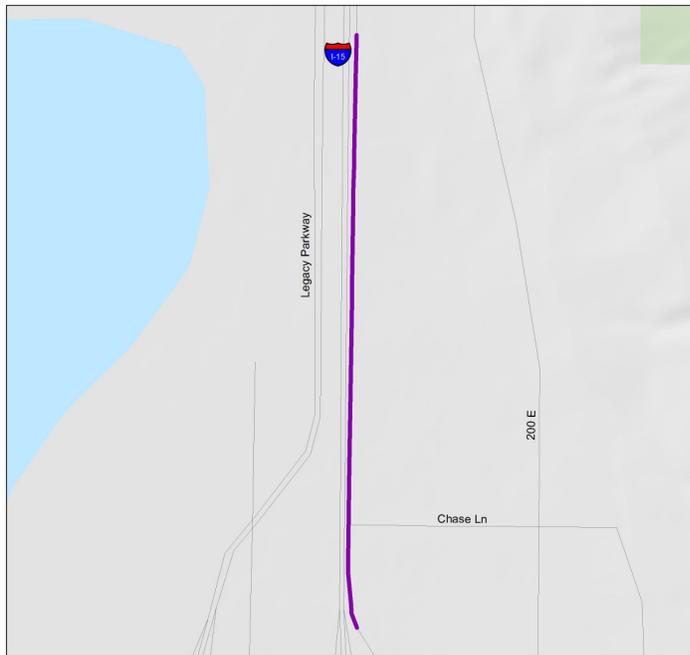
**PROJECT COST**

Estimated Total Cost:	\$ 1,300,000
Federal Funds Available:	\$ 1,200,000
Federal Funds Already Used	\$ - 0 -
Federal Funds Available in FY 2014:	\$ 10,000
Federal Funds Available in FY 2017:	\$ 250,000
Federal Funds Available in FY 2018:	\$ 710,000

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/ Air Quality
Non-Federal:	Centerville City

Year added to TIP: 2013



**ITS – UDOT ADVANCED TRAFFIC MANAGEMENT SYSTEM (ATMS) - 5981**  
**Ogden/ Layton Urbanized Area**  
**ARRA FUNDS OBLIGATED ON THIS PROJECT**

This project will extend the Advanced Traffic Management System (ATMS) improvements implemented in the Salt Lake Area into the Ogden/ Layton Area. The project will install various Intelligent Transportation System (ITS) technologies to help manage traffic on freeways and surface streets. Some of these technologies may include CCTV surveillance, traffic incident data with the various agencies responsible for managing traffic including Utah Department of Transportation (UDOT), local municipalities and the Department of Safety.

UDOT Traffic counts for 1998 estimate that sections on I-84 and I-15 in the Ogden/ Layton Area carry between 13,000 and 102,500 vehicles per day. All of these vehicles can potentially be impacted by recurring and non-recurring congestion on the freeways. The ATMS program will seek to reduce the impacts of this congestion for all vehicles on the freeway network.

Estimates of reduction in stopped delay are as follows:

- Reduce Freeway Delay by 30%
- Reduce Freeway Accidents by 15%
- Increase peak Hour Freeway Speeds by 15%

**Reduced emissions estimate (kg/day):** 80.4 CO, 2.7 VOC, 8.9 Nox.

This equates to an estimated reduction of 37 tons per year.

Year added to TIP: 2000

**PROJECT COST**

Estimated Total Cost:	\$ 15,000,000
Federal Funds Available:	\$ 7,600,000
Federal Funds Available in FY 2014:	\$ 1,100,000
Federal Funds Available in FY 2015:	\$ 1,100,000
Federal Funds Available in FY 2016:	\$ 1,100,000
Federal Funds Available in FY 2017:	\$ 1,100,000
Federal Funds Available in FY 2018:	\$ 1,100,000
Federal Funds Available in FY 2019:	\$ 700,000

**SOURCE OF FUNDS**

Federal: Congestion Mitigation/ Air Quality and  
**American Recovery and Reinvestment Act of 2009**

Non-Federal: Utah Department of Transportation

**ATMS PROJECTS WITH ITEMIZED ESTIMATED  
TOTAL COSTS FOR FY-2006 TO FY-2010**

<b>FUNDING CATEGORY</b>	<b>TOTAL COST</b>
System Enhancements	\$ 1,100,000
Expansion	\$ 3,750,000
Public Relations and Evaluation	\$ 150,000

**500 SOUTH; I-15 TO 200 WEST - 8593**  
**Intersection Improvements**

This project will reconstruct the I-15/500 S interchange and convert it into a Diverging Diamond Interchange. The 500 W and 200 W intersections along 500 S will require addition of turn lanes as follows: 500 W - add exclusive right turn lanes for WB (100'), NB (150') and SB (140') approaches; 200 W - add 100' EB right turn lane. These improvements will provide an interim solution. The cost estimate provided here and the vehicle hours of delay reduced are for the whole project.

Some of the traffic movements at the interchange and at 500 W intersection are currently failing. The whole section of 500 South from the interchange to 200 W is expected to experience travel demand that exceeds capacity in the future. If the interim improvements indicated in this report are not implemented, more than half of all the movements will be operating at level of service E or F by 2013. If the proposed interim geometry modifications are made, total delays and stops for the whole section will be reduced by 31% in 2013 compared with the do nothing condition.

**Reduced emissions estimate (kg/day):** PM<sub>10</sub> 0.04, CO 34.60, VOC 1.29, and Nox 2.09.  
 This equates to around 15.2 tons / year.

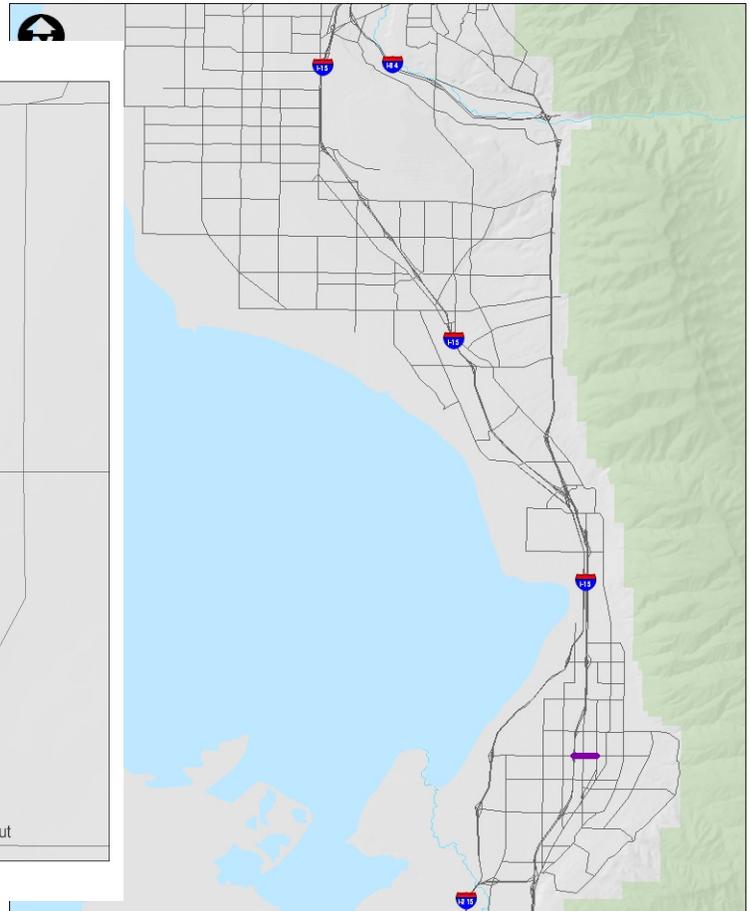
**PROJECT COST**

Estimated Total Cost:	\$ 5,363,081
Federal Funds Available:	\$ 5,000,000
Federal Funds Already Used:	\$ - 0 -
Federal Funds Available in FY 2014:	\$ 3,300,000
Federal Funds Available in FY 2015:	\$ 1,700,000

Year added to TIP: 2010

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/Air Quality
Non-Federal:	Bountiful, West Bountiful, Woods Cross, and UDOT



**650 NORTH & I-15 INTERCHANGE/ INTERSECTION - 11092**  
**Intersection Improvement**

The proposed improvements at 650 North & I-15 include: adding a WBT lane under I-15 which transitions to a second right turn lane at Main Street. The additional width also allows for another westbound left turn lane onto I-15. The reconfiguration of the lanes and signals greatly improves the operational performance.

The improvement of this interchange provides exceptional user benefit per dollar invested. In 2018 alone, annual user-delay savings for this project are expected to be \$21.6 M versus a total project cost of only \$4.6 M (2018 dollars). These benefits will be applied to an area with high traffic volumes and dynamic growth

The 650 North interchange also serves Hill AFB, which is a major economic driver for the region. Improved operations at the interchange will benefit the proposed Falcon Hill development, which is estimated to bring many additional jobs to the region.

The project is supported by Clearfield City and is consistent with the ongoing EIS at 1800 North. These improvements will improve the intersection and interchange to 2020 and beyond.

**Reduced emissions estimate (kg/day):** 69.43 CO, 2.17 VOC, 2.60 Nox., 0.09 PM10

This equates to an estimated reduction of 29.89 tons per year.

**PROJECT COST**

Estimated Total Cost:	\$ 4,636,000
Federal Funds Available:	\$ 1,840,000
Federal Funds Already Used	\$ - 0 -
Federal Funds Available in FY 2014:	\$ 10,000
Federal Funds Available in FY 2016:	\$ 250,000
Federal Funds Available in FY 2017:	\$ 790,000
Federal Funds Available in FY 2018:	\$ 790,000

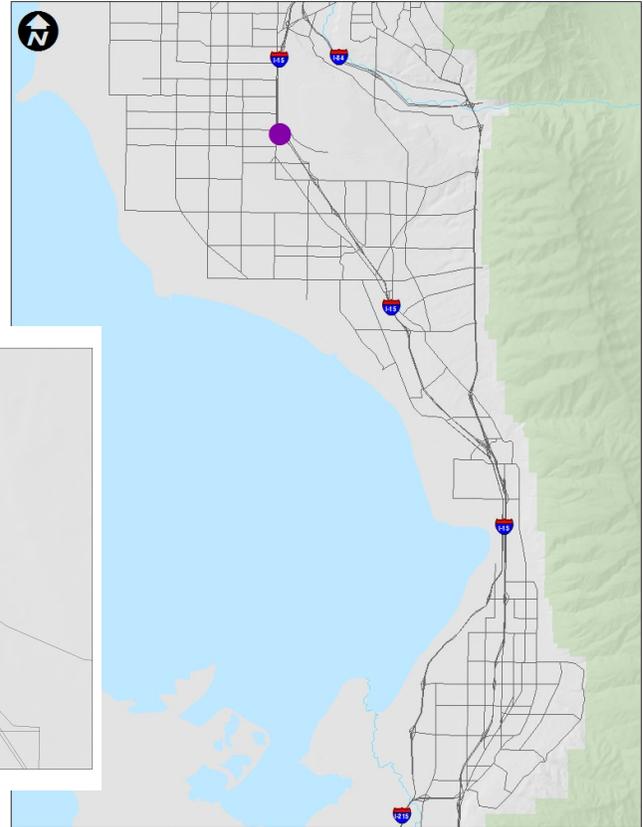
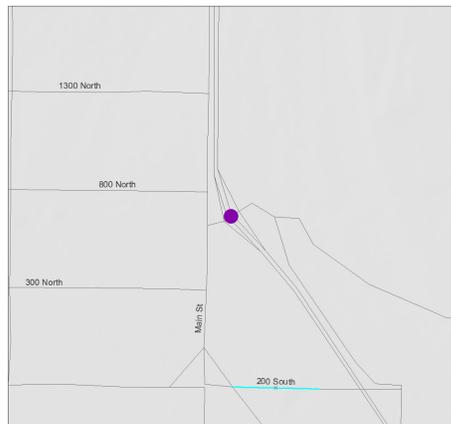
Average Weekday

Daily Traffic (AWDT):	Current (2003)	Projected (2030)
650 North	16,405	30,000
I-15 Main Line	114,365	160,000

Year added to TIP: 2012

**SOURCE OF FUNDS**

Federal: Congestion Mitigation/ Air Quality  
 Non-Federal: Utah Department of Transportation



**I-15 – 200 NORTH NB RAMP METERS - 12004**  
**Kaysville North-Bound Ramp Meters**

This project will install ramp meters on the Kaysville 200 North North-Bound On-ramp to I-15.

Ramp meters are proven to provide safety, travel time, speed, throughput, and environmental benefits for interstate systems. UDOT has installed ramp meters successfully at over 50 locations on I-15.

Installing this ramp meter will significantly reduce delay as well as the user cost for the traveling public and improve safety by reducing queuing on mainline I-15.

**Reduced emissions estimate (kg/day):** 0.06 CO, 0.21 VOC, 0.04 Nox., 1.14 PM<sub>10</sub>

This equates to an estimated reduction of 0.59 tons per year.

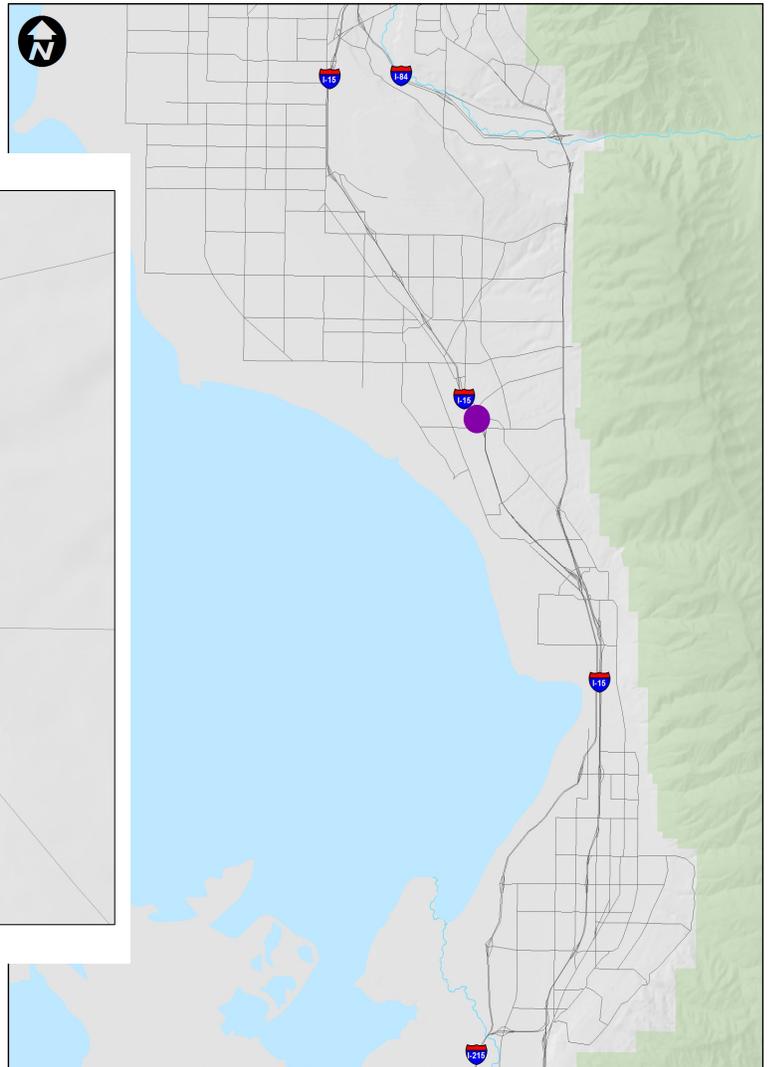
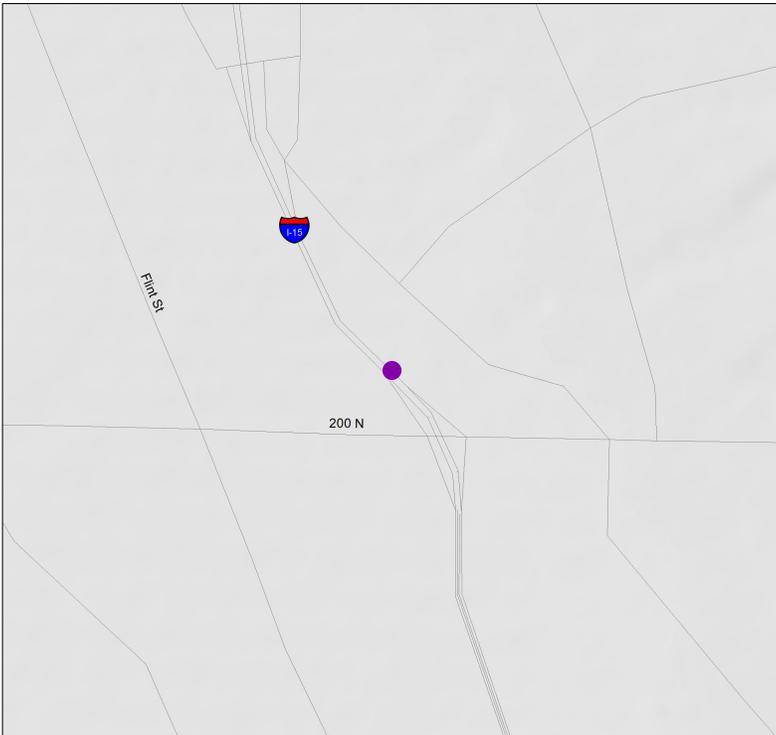
**PROJECT COST**

Estimated Total Cost:	\$	250,000
Federal Funds Available:	\$	224,000
Federal Funds Already Used	\$	- 0 -
Federal Funds Available in FY 2014:	\$	10,000
Federal Funds Available in FY 2017:	\$	214,000

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/ Air Quality
Non-Federal:	UDOT

Year added to TIP: 2013



**WALL AVENUE AND 12<sup>TH</sup> STREET INTERSECTION - 4400**  
**Intersection Improvement**  
**PROJECT COMPLETE**

The initial money for this project in FY2004 will include the study and development of concept to make the necessary improvements that will improve the safety and operational characteristics of the intersection for the least amount of money. The improvements will include providing double left turns, improving intersection geometry, and improve the right turn movements. This intersection has been perceived by the locals and reported in the press as one of the most dangerous intersections in the area.

**Reduced emissions estimate (kg/day):** 105.83 CO, 3.64 VOC, 11.82 Nox.  
 This equates to around 33.4 tons / year.

**PROJECT COST**

Estimated Total Cost:	\$ 25,957,775	Average Weekday		
CMAQ Federal Funds Available:	\$ 4,125,000	Daily Traffic (AWDT):	Current	Projected
CMAQ Federal Funds Already Used:	\$ 4,123,826	Wall Ave	23,825	35,000
CMAQ Federal Funds Available in FY 2014:	\$ 1,174	12 <sup>th</sup> Street	22,766	33,000

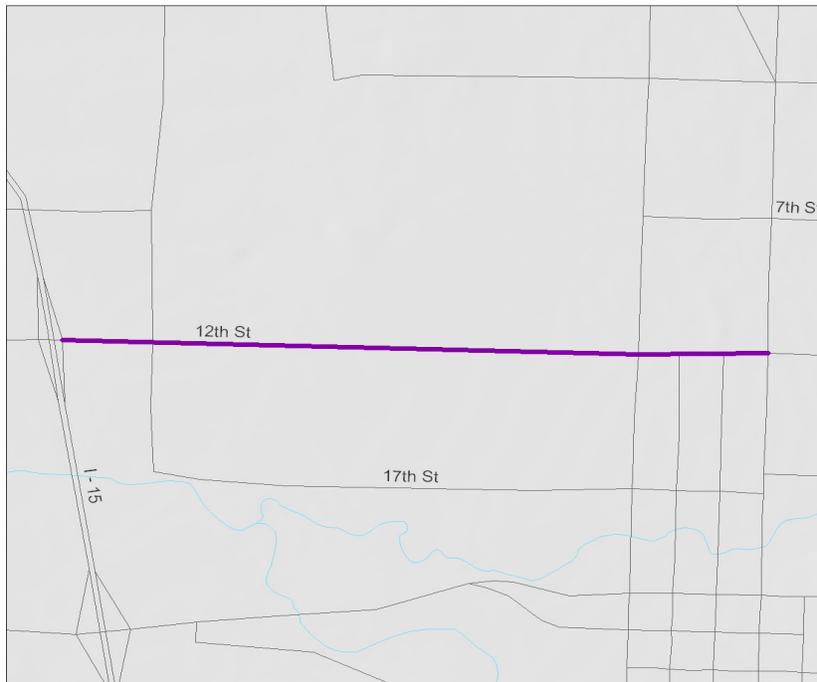
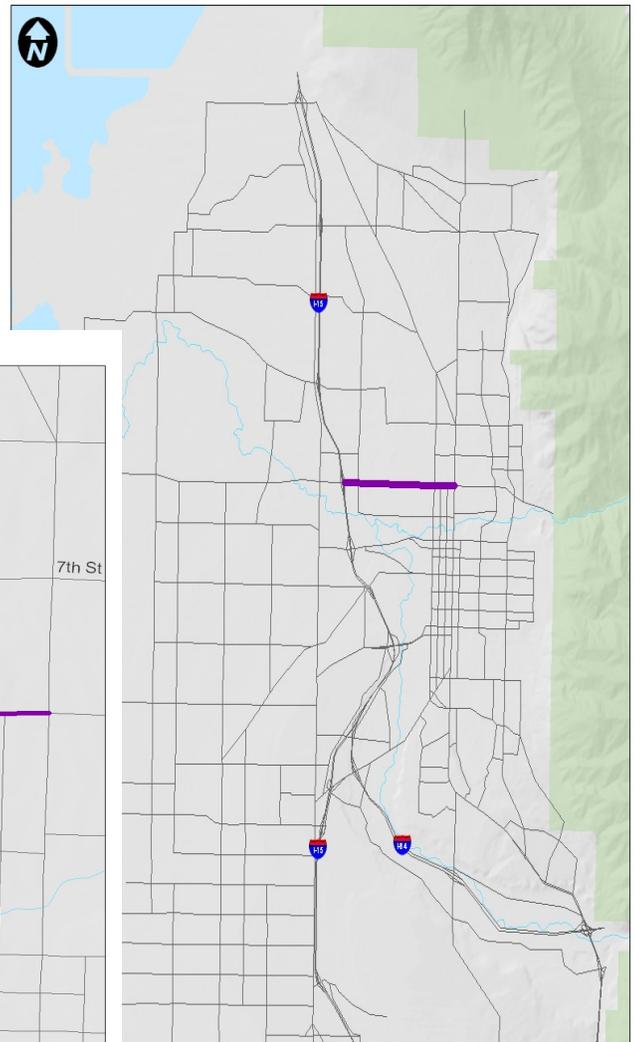
Year added to TIP: 2003

**Other Funds Programmed**

Surface Transportation Program Funds:	\$ 2,000,000
National Highway System Funds:	\$ 17,340,000
Local Government Funds:	\$ 2,048,000

**SOURCE OF FUNDS**

- Federal: Congestion Mitigation/Air Quality  
 Surface Transportation Program  
 National Highway System
- Non-Federal: Utah Department of Transportation (UDOT)



**SR-97 (5600 SOUTH); HILL FIELD AIR FORCE BASE TO 2050 WEST - 4400**  
**Intersection Improvements**  
**New Project**

This project is to improve operations at a very congested intersection (SR-97 & SR-126) which impacts operations at the I-15 interchange nearby as well as a major commuting route.

The intersection of SR-97 (5600 S) and SR-126 (1900 W) is highly congested due to the proximity of I-15 and the Hill Air Force Base. This project is designed to modify this intersection as well as some of the adjacent intersections to improve operations.

**Reduced emissions estimate (kg/day):** 0.57 CO, 1.93 VOC, 0.41 Nox., and 10.64 PM<sub>10</sub>  
 This equates to around 5.5 tons / year.

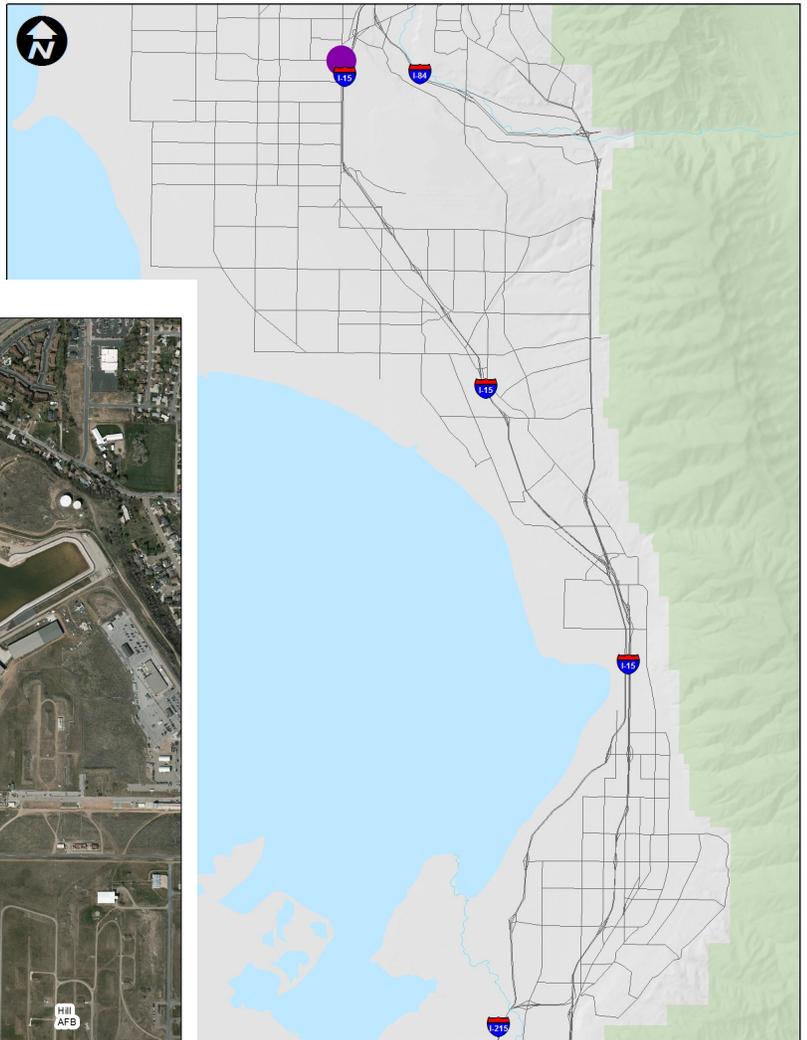
**PROJECT COST**

Estimated Total Cost:	\$ 3,037,700	Average Weekday		
CMAQ Federal Funds Available:	\$ 750,000	Daily Traffic (AWDT):	Current	Projected
CMAQ Federal Funds Already Used:	\$ - 0 -	5600 South	23,855	44,000
CMAQ Federal Funds Available in FY 2020:	\$ 750,000			

Year added to TIP: 2014

**SOURCE OF FUNDS**

Federal: Congestion Mitigation/Air Quality  
 Non-Federal: Utah Department of Transportation (UDOT)



**US-89 VARIABLE MESSAGE SIGN – 13133**  
**Just North of Shepard Lane**  
**VMS; Installation**  
**New Project**

This Variable Message Sign (VMS) will provide alternate route and general traveler information (travel times) for westbound traffic on US-89 that could possibly route via US-89, I-15 or Legacy Parkway. Proper messaging would reduce the vehicle delay that currently results from a lack of road information in this area.

This VMS will be a valuable tool during normal congestion as well as during future construction, incidents and special events. VMS with proper messaging have proven to result in a 20% diversion; this diversion helps reduce slow traffic and idling which results in decreased air quality impacts.

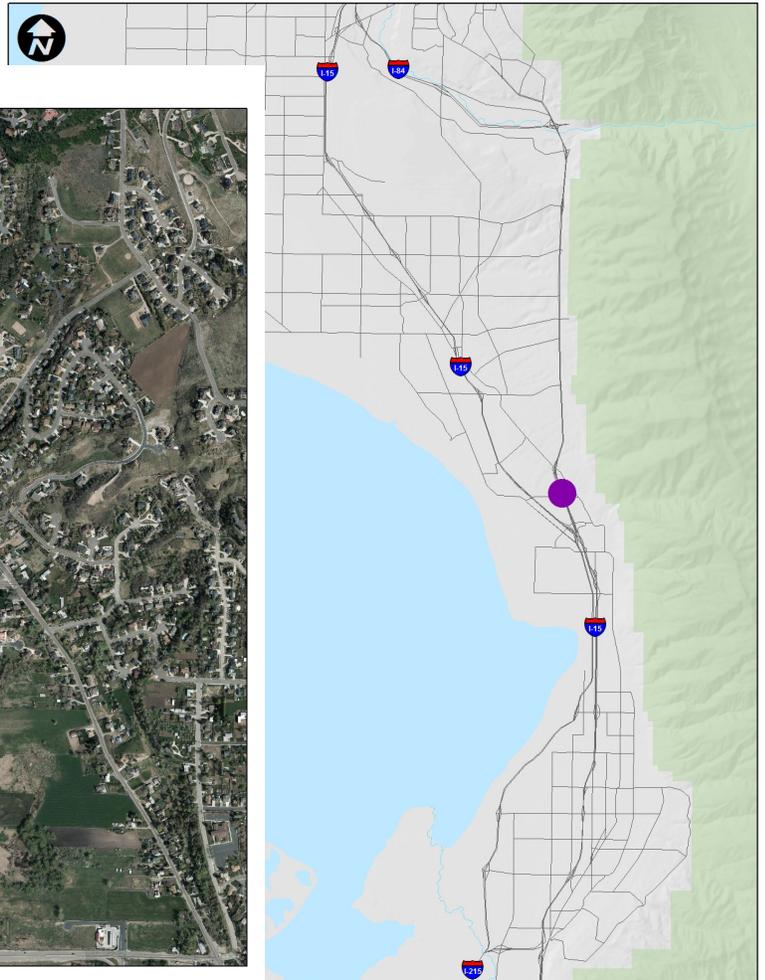
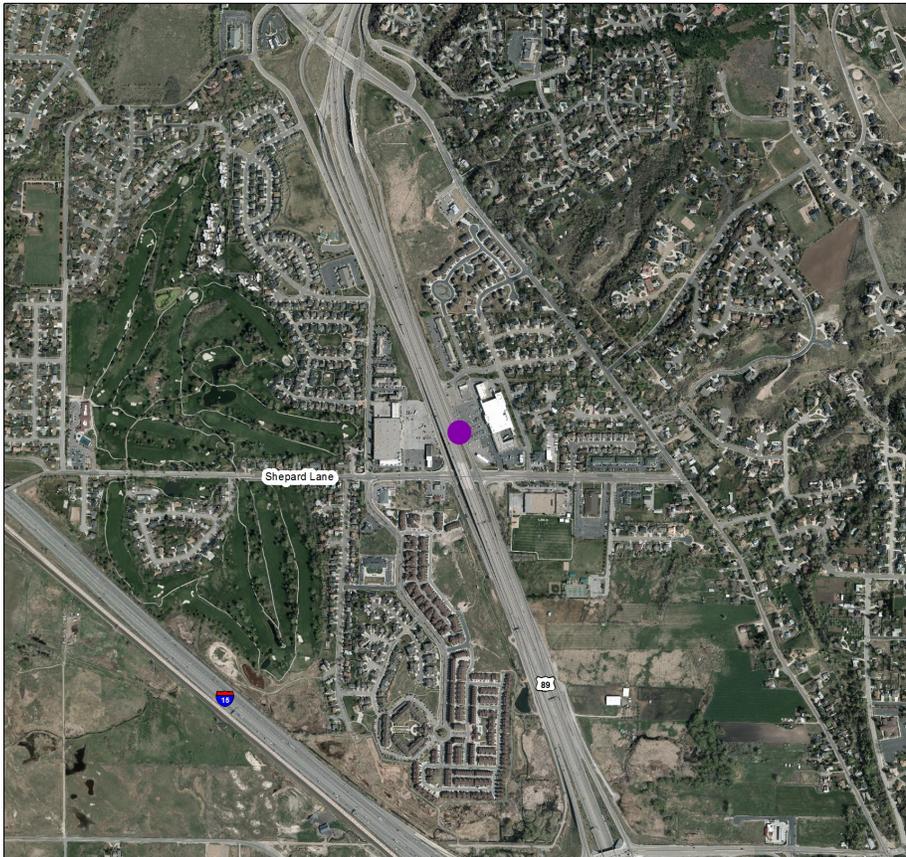
**Reduced emissions estimate (kg/day):** 0.01 CO, 0.04 VOC, 0.01 Nox, and 0.23 PM<sub>10</sub>.  
This equates to around 0.12 tons / year reduced.

**PROJECT COST**

Estimated Total Cost:	\$ 462,900
Federal Funds Available:	\$ 431,562
Federal Funds Already Used:	\$ - 0 -
Federal Funds Available in FY 2020	\$ 431,562

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/Air Quality
Non-Federal:	UDOT
Year added to TIP:	2014



**FRUIT HEIGHTS/ KAYSVILLE 400/200 NORTH – 10021**  
**PARK N RIDE LOT**  
**Park n Ride Lot Expansion**

Due to growth, additional parking stalls are already necessary to maintain the current usage. The turnover ratio shows a demand that would constitute 80-100 additional stalls, and more as LOS increases.

**Reduced emissions estimate (kg/day):** 9.67 CO, 0.26 VOC, 1.37 Nox and 0.06 PM<sub>10</sub>  
This equates to around 4.57 tons / year reduced.

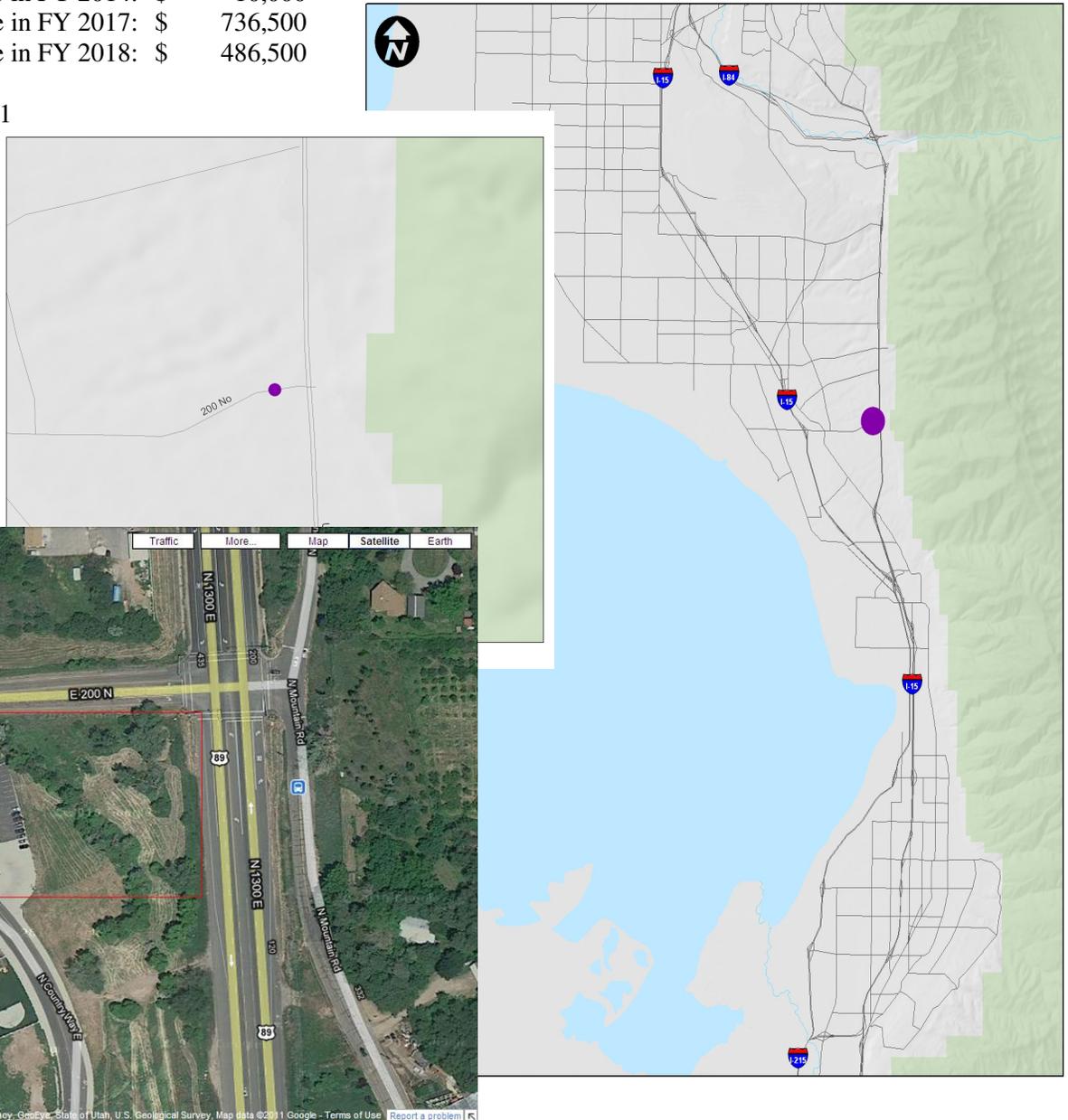
**PROJECT COST**

Estimated Total Cost:	\$ 1,498,000
Federal Funds Available:	\$ 1,233,000
Federal Funds Already Used:	\$ -0-
Federal Funds Available in FY 2014:	\$ 10,000
Federal Funds Available in FY 2017:	\$ 736,500
Federal Funds Available in FY 2018:	\$ 486,500

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/Air Quality
Non-Federal:	Utah Transit Authority (UTA)

Year added to TIP: 2011



**BUS SERVICE FROM DOWNTOWN OGDEN TO OGDEN VALLEY – Transit Transfer  
Purchase Two Buses**

Air quality benefits come from this new service by directly reducing the number of vehicles traveling in the Ogden urban area, and up Ogden Canyon. Ogden City, Weber County, Powder Mountain, Snow Basin, and UTA have started pilot seasonal local bus service from Ogden City to ski areas via Ogden Canyon. This now uses older ski buses from the SLC area that have met the requirements for retirement. New buses are needed if this service is to be made permanent.

Winter service to Ogden area ski areas is needed to reduce pollution and congestion in the Ogden urbanized area created by those traveling to the canyon, and in Ogden Canyon itself (which filters into and supports the urban area). Bus service is great for those skiing in the area, but is vital for the employees who work there. Ogden City, Weber County, Powder Mountain, Snow Basin, and UTA have started pilot seasonal local bus service from Ogden City to ski areas via the canyon. These partners are looking for ways to make service permanent. Operating assistance for 2014-2015 will help this effort. From Dec. 15-31, 2012 the pilot ski bus service has served an average of more than 160 riders (boardings) per day. Most of these are employees of the resorts. Skiers using the service will increase as hotels promote the service, and word gets out to locals that it is available. Both resorts are financially supporting the pilot, which is planned to continue if the service becomes permanent.

**Reduced emissions estimate (kg/day):** 0.04 CO, 1.21 VOC, 2.04 Nox., 49.97 PM<sub>10</sub>  
This equates to an estimated reduction of 20.62 tons per year.

**PROJECT COST**

Estimated Total Cost:	\$ 1,027,000
Federal Funds Available:	\$ 950,000
Federal Funds Already Used	\$ - 0 -
Federal Funds Available in FY 2017:	\$ 450,000
Federal Funds Available in FY 2018:	\$ 500,000

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/ Air Quality
Non-Federal:	UTA
Year added to TIP:	2013



**D&RGW RAILROAD CORRIDOR TRAIL – 5143**  
**West Haven Section from Hinckley Crossing to SR-108**

UTA has ownership of the D&RGW Railroad Corridor. The Corridor will be preserved through the development of a multi-use trail from West Bountiful to Roy. Several groups are interested in making this a pedestrian friendly corridor by improving it and topping it with an environmentally and user-friendly covering. Union Pacific has already removed the rails and ties. It is considered a Class I facility, that is a right-of-way completely separated from travel lanes and highways. This trail is currently on the Wasatch Front Regional Council’s Long Range Bicycle Plan.

In August 2009, an additional amount of \$ 2,000,000 was approved to assist with the completion of the Rail-Trail in Farmington, Layton, Roy and West Haven.

**Reduced emissions estimate (kg/day):** 11.76 CO, 1.05 VOC, 1.29 Nox.  
This equates to around 2.9 tons / year.

**PROJECT COST**

Estimated Total Cost:	\$ 8,000,000
Federal Funds Available:	\$ 2,250,000
Federal Funds Already Used:	\$ 2,113,991
Federal Funds Available FY 2014:	\$ 136,009

Year added to TIP: 2003

**OTHER FUNDING**

Transportation Enhancement Funding

**SOURCE OF FUNDS**

Federal:	Congestion Mitigation/Air Quality
Non-Federal:	Utah Transit Authority (UTA)

