

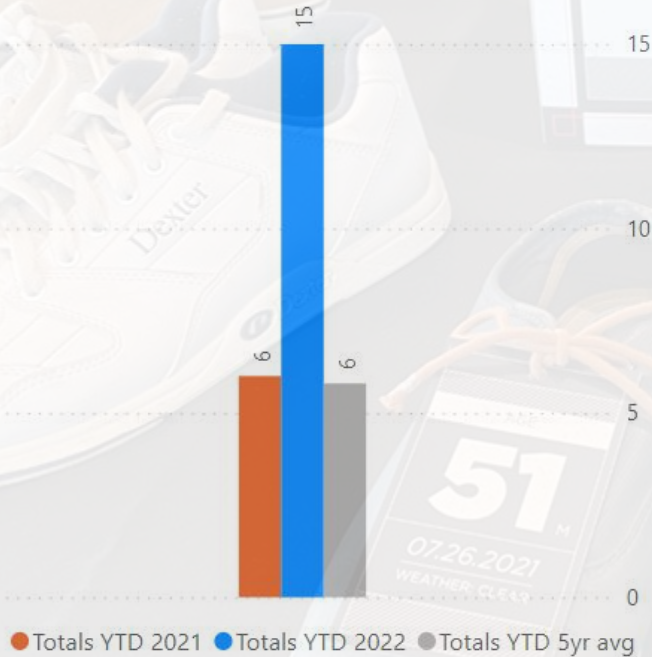
Walking and Bicycling Safety Resources



Trans Com TAC 18 January 2023

Safety Snapshot

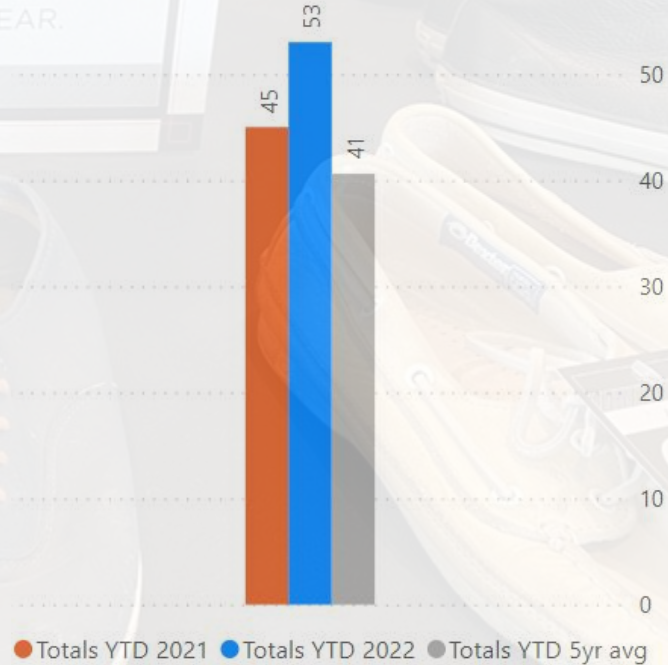
Bicyclist Fatalities 2022



**TAKE STEPS
TOWARD
SAFER STREETS**

45 PEDESTRIAN LIVES
WERE LOST ON OUR
ROADS LAST YEAR.

Pedestrian Fatalities 2022



THE SAFE SYSTEM APPROACH



THE 6 SAFE SYSTEM PRINCIPLES



**Death/serious injury
is unacceptable**



**Humans make
mistakes**



**Humans are
vulnerable**



**Responsibility is
shared**



Safety is proactive



**Redundancy
is crucial**

THE 5 SAFE SYSTEM ELEMENTS



Safe road users



Safe vehicles



Safe speeds



Safe roads



Post-crash care

WHERE ARE YOU ON THE SAFE SYSTEM JOURNEY?

Traditional approach

Prevent crashes



Improve human behavior



Control speeding



Individuals are responsible



React based on crash history



Safe System approach

Prevent death and serious injuries

Design for human mistakes/limitations

Reduce system kinetic energy

Share responsibility

Proactively identify and address risks



Safe Transportation for Every Pedestrian (STEP)

Proven Safety Countermeasures

PEDESTRIAN/BICYCLIST



Crosswalk Visibility Enhancements



Bicycle Lanes



Rectangular Rapid Flashing Beacons



Leading Pedestrian Interval



Medians and Pedestrian Refuge Islands in Urban and Suburban Areas



Pedestrian Hybrid Beacons



Road Diets (Roadway Reconfiguration)



Walkways

Roadway Configuration	Posted Speed Limit and AADT								
	Vehicle AADT <9,000			Vehicle AADT 9,000–15,000			Vehicle AADT >15,000		
	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph
2 lanes (1 lane in each direction)	① 2 4 5 6	① 5 6 7 9	① 5 6 ⑦ ⑨	① 5 6 4 5 6	① 5 6 7 9	① 5 6 ⑦ ⑨	① 5 6 4 5 6	① 5 6 7 9	① 5 6 ⑦ ⑨
3 lanes with raised median (1 lane in each direction)	① 2 3 4 5	① 5 ③ 7 9	① 5 ③ ⑦ ⑨	① 5 3 4 5	① 5 ③ 7 9	① 5 ③ ⑦ ⑨	① 5 ③ 4 5	① 5 ③ 7 9	① 5 ③ ⑦ ⑨
3 lanes w/o raised median (1 lane in each direction with a two-way left-turn lane)	① 2 3 4 5 6 7 9	① 5 ③ 7 9	① 5 ③ ⑦ ⑨	① 5 3 4 5 6 7 9	① 5 ③ 7 9	① 5 ③ ⑦ ⑨	① 5 ③ 4 5 6 7 9	① 5 ③ 7 9	① 5 ③ ⑦ ⑨
4+ lanes with raised median (2 or more lanes in each direction)	① 5 ③ 7 8 9	① 5 ③ 7 8 9	① 5 ③ 8 ⑨	① 5 ③ 7 8 9	① 5 ③ ⑦ 8 ⑨	① 5 ③ 8 ⑨	① 5 ③ 7 8 ⑨	① 5 ③ 8 ⑨	① 5 ③ 8 ⑨
4+ lanes w/o raised median (2 or more lanes in each direction)	① 5 ③ 7 8 9	① 5 ③ 7 8 9	① 5 ③ 8 ⑨	① 5 ③ 7 8 9	① 5 ③ ⑦ 8 ⑨	① 5 ③ 8 ⑨	① 5 ③ 7 8 ⑨	① 5 ③ 8 ⑨	① 5 ③ 8 ⑨

Given the set of conditions in a cell,

- # Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
- Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
- Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.*

The absence of a number signifies that the countermeasure is generally not an appropriate treatment, but exceptions may be considered following engineering judgment.

- 1 High-visibility crosswalk markings, parking restrictions on crosswalk approach, adequate nighttime lighting levels, and crossing warning signs
- 2 Raised crosswalk
- 3 Advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line
- 4 In-Street Pedestrian Crossing sign
- 5 Curb extension
- 6 Pedestrian refuge island
- 7 Rectangular Rapid-Flashing Beacon (RRFB)*
- 8 Road Diet
- 9 Pedestrian Hybrid Beacon (PHB)*

Pedestrian Crash Countermeasure for Uncontrolled Crossings	Safety Issue Addressed				
	Conflicts at crossing locations	Excessive vehicle speed	Inadequate conspicuity/ visibility	Drivers not yielding to pedestrians in crosswalks	Insufficient separation from traffic
Crosswalk visibility enhancement	✓	✓	✓	✓	✓
High-visibility crosswalk markings*	✓		✓	✓	
Parking restriction on crosswalk approach*	✓		✓	✓	
Improved nighttime lighting*	✓		✓		
Advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line*	✓		✓	✓	✓
In-Street Pedestrian Crossing sign*	✓	✓	✓	✓	
Curb extension*	✓	✓	✓		✓
Raised crosswalk	✓	✓	✓	✓	
Pedestrian refuge island	✓	✓	✓		✓
Pedestrian Hybrid Beacon	✓	✓	✓	✓	
Road Diet	✓	✓	✓		✓
Rectangular Rapid-Flashing Beacon	✓		✓	✓	✓

*These countermeasures make up the STEP countermeasure "crosswalk visibility enhancements." Multiple countermeasures may be implemented at a location as part of crosswalk visibility enhancements.

FHWA Bikeway Selection Guide

Bill Schultheiss, PE
Director of Sustainable Safety



U.S. Department of Transportation
Federal Highway Administration

BIKEWAY SELECTION GUIDE



U.S. Department of Transportation
Federal Highway Administration

FEBRUARY 2019

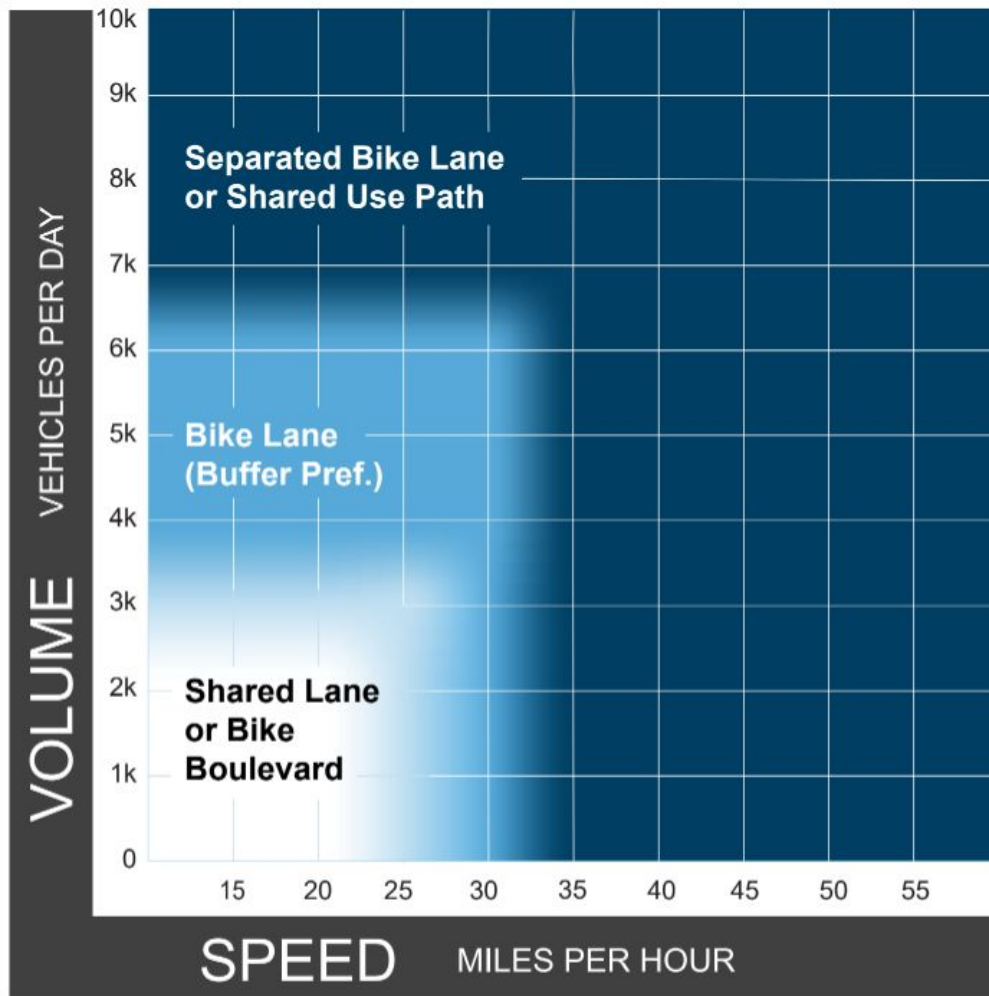
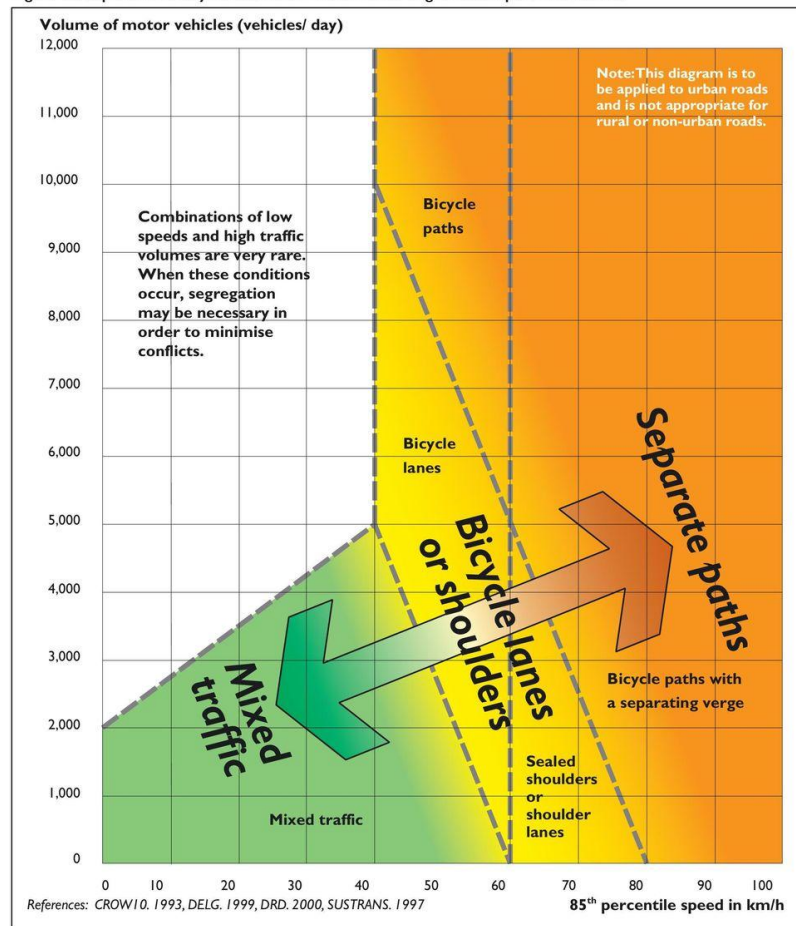
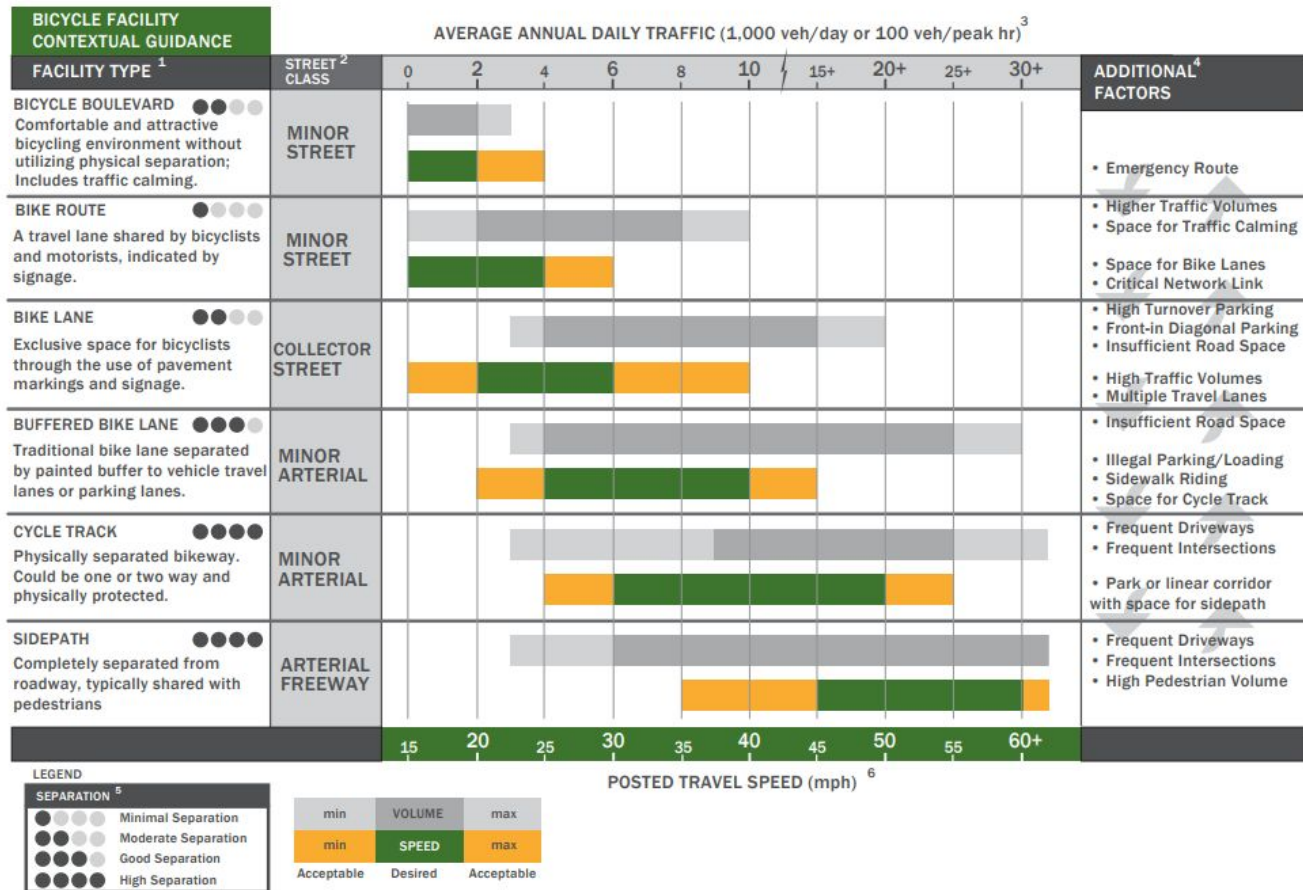


Figure 3.2: Separation of bicycles and motor vehicles according to traffic speed and volume.

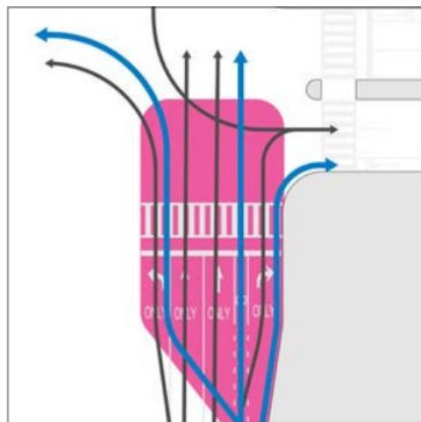




Contextual Guidance for Selecting All Ages & Abilities Bikeways

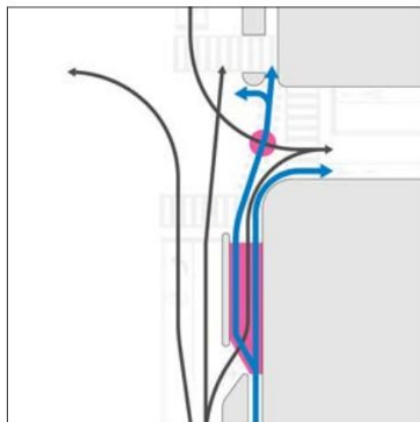
Roadway Context				All Ages & Abilities Bicycle Facility
Target Motor Vehicle Speed ¹	Target Max. Motor Vehicle Volume (ADT)	Motor Vehicle Lanes	Key Operational Considerations	
Any		Any	Any of the following: high curbside activity, frequent buses, motor vehicle congestion, or turning conflicts ¹	Protected Bicycle Lane
< 10 mph	Less relevant	No centerline, or single lane one-way	Pedestrians share the roadway	Shared Street
≤ 20 mph	≤ 1,000 – 2,000		< 50 motor vehicles per hour in the peak direction at peak hour	Bicycle Boulevard
≤ 25 mph	≤ 500 – 1,500	Single lane each direction, or single lane one-way	Low curbside activity, or low congestion pressure	Conventional or Buffered Bicycle Lane, or Protected Bicycle Lane
	≤ 1,500 – 3,000			Buffered or Protected Bicycle Lane
	≤ 3,000 – 6,000			Protected Bicycle Lane
	Greater than 6,000			Protected Bicycle Lane
Greater than 26 mph ¹	≤ 6,000	Single lane each direction	Low curbside activity, or low congestion pressure	Protected Bicycle Lane, or Reduce Speed
		Multiple lanes per direction		Protected Bicycle Lane, or Reduce to Single Lane & Reduce Speed
	Greater than 6,000	Any	Any	Protected Bicycle Lane, or Bicycle Path
High-speed limited access roadways, natural corridors, or geographic edge conditions with limited conflicts		Any	High pedestrian volume	Bike Path with Separate Walkway or Protected Bicycle Lane
			Low pedestrian volume	Shared-Use Path or Protected Bicycle Lane

Exposure Level:
High



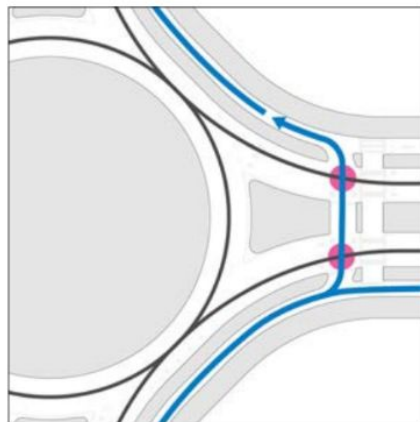
**CONVENTIONAL BIKE LANES
AND SHARED LANES**

Exposure Level:
High to Medium



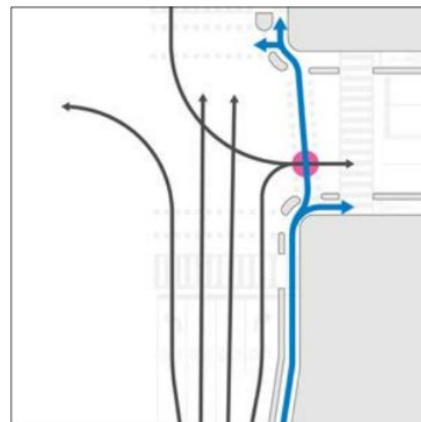
**SEPARATED BIKE LANES WITH
MIXING ZONES**

Exposure Level:
Medium to Low



**SEPARATED BIKE LANES
THROUGH ROUNDABOUTS**

Exposure Level:
Low



PROTECTED INTERSECTIONS

	Shared Lanes	Boulevards	Shoulders	Bike Lanes	One-Way Separated Bike Lanes with Mixing Zones	Separated Bike Lanes and Sidepaths with Protected Intersections
Forgiveness (Safety) - Infrastructure can be designed to accommodate human error						
Relies upon perfect user (driver and bicyclist) behavior to avoid crashes	✓	✓	✓	✓		
Minimal: bicyclists operating in shared space with vehicles	✓					
Moderate: application of traffic calming treatments and lower operating speeds can improve safety		✓				
Moderate: bicyclists operate in separated space from vehicles, however vehicles can encroach into the facility at any location			✓	✓		
Moderate: bicyclists operate in separated space from vehicles except for defined entry point, followed by shared operating space					✓	
High: bicyclists operate in separated space from vehicles except for defined conflict point which can be designed to reduce motorist speed, but contraflow movement from two-way operation can increase risk						✓

	Shared Lanes	Boulevards	Shoulders	Bike Lanes	One-Way Separated Bike Lanes with Mixing Zones	Separated Bike Lanes and Sidepaths with Protected Intersections
Key Crash Types Associated with Bikeway Type						
Right and left hooks	✓	✓	✓	✓	✓	✓
Sideswipes	✓	✓	✓	✓		
Overtaking	✓	✓	✓	✓		
Hit from behind	✓	✓	✓	✓		
Merging	✓	✓	✓	✓	✓	
Failure to yield at conflict point	✓	✓	✓	✓	✓	✓

Safety Efforts

- Safe Streets and Roads For All (SS4A) grant application - WFRC
- Vulnerable Road User Safety Assessment - UDOT
- Vision Zero - Salt Lake City

Resources

- [FHWA Safe System](#)
- [Safe Transportation for Every Pedestrian \(STEP\)](#)
- [Proven Safety Countermeasures](#)
- [FHWA Bikeway Selection Guide](#)



STRIPED BUFFER

1.5 ft. additional width; \$8k-\$16k per lane-mile

PROTECTION LEVEL	+	+	+	+	+
INSTALLATION COST	\$	\$	\$	\$	\$
DURABILITY	⊖	⊖	⊖	⊖	⊖
AESTHETICS	👁	👁	👁	👁	👁



DELINEATOR POSTS

1.5 ft. additional width; \$15k-\$30k per lane-mile

PROTECTION LEVEL	+	+	+	+	+
INSTALLATION COST	\$	\$	\$	\$	\$
DURABILITY	⊖	⊖	⊖	⊖	⊖
AESTHETICS	👁	👁	👁	👁	👁

Credit: Green Lane Project



TURTLE BUMPS

1.5 ft. additional width; \$15k-\$30k per lane-mile

PROTECTION LEVEL	+	+	+	+	+
INSTALLATION COST	\$	\$	\$	\$	\$
DURABILITY	⊖	⊖	⊖	⊖	⊖
AESTHETICS	👁	👁	👁	👁	👁



LARGE BUMPS

1.5 ft. additional width; \$15k-\$30k per lane-mile

PROTECTION LEVEL	+	+	+	+	+
INSTALLATION COST	\$	\$	\$	\$	\$
DURABILITY	⊖	⊖	⊖	⊖	⊖
AESTHETICS	👁	👁	👁	👁	👁

Credit: Green Lane Project



PARKING STOPS

6 in. additional width; \$20k-\$40k per lane-mile

PROTECTION LEVEL	+	+	+	+	+
INSTALLATION COST	\$	\$	\$	\$	\$
DURABILITY	⊖	⊖	⊖	⊖	⊖
AESTHETICS	👁	👁	👁	👁	👁



LINEAR BARRIERS

6 in. additional width; \$25k-\$75k per lane-mile

PROTECTION LEVEL	+	+	+	+	+
INSTALLATION COST	\$	\$	\$	\$	\$
DURABILITY	⊖	⊖	⊖	⊖	⊖
AESTHETICS	👁	👁	👁	👁	👁

Credit: Green Lane Project



PARKED CARS

11 ft. for parking + buffer; \$8k-\$16k per lane-mile

PROTECTION LEVEL	+	+	+	+	+
INSTALLATION COST	\$	\$	\$	\$	\$
DURABILITY	⊖	⊖	⊖	⊖	⊖
AESTHETICS	👁	👁	👁	👁	👁



JERSEY BARRIERS

2 ft. additional width; \$80k-\$160k per lane-mile

PROTECTION LEVEL	+	+	+	+	+
INSTALLATION COST	\$	\$	\$	\$	\$
DURABILITY	⊖	⊖	⊖	⊖	⊖
AESTHETICS	👁	👁	👁	👁	👁

Credit: Green Lane Project



RIGID BOLLARDS

2 ft. additional width; \$100k-\$200k per lane-mile

PROTECTION LEVEL	+	+	+	+	+
INSTALLATION COST	\$	\$	\$	\$	\$
DURABILITY	⬮	⬮	⬮	⬮	⬮
AESTHETICS	👁	👁	👁	👁	👁



CAST IN PLACE CURB

12 in. additional width; \$25k-\$80k per lane-mile

PROTECTION LEVEL	+	+	+	+	+
INSTALLATION COST	\$	\$	\$	\$	\$
DURABILITY	⬮	⬮	⬮	⬮	⬮
AESTHETICS	👁	👁	👁	👁	👁

Credit: Green Lane Project



12" PRECAST CURB

1.5 ft. additional width; \$400k-\$600k per lane-mile

PROTECTION LEVEL	+	+	+	+	+
INSTALLATION COST	\$	\$	\$	\$	\$
DURABILITY	⊖	⊖	⊖	⊖	⊖
AESTHETICS	👁	👁	👁	👁	👁



RAISED BIKEWAY

No additional width; \$8m-\$26m per lane-mile

PROTECTION LEVEL	+	+	+	+	+
INSTALLATION COST	\$	\$	\$	\$	\$
DURABILITY	⊖	⊖	⊖	⊖	⊖
AESTHETICS	👁	👁	👁	👁	👁

Credit: Green Lane Project

Congestion Mitigation/ Air Quality (CMAQ), Carbon Reduction Program (CRP), and Surface Transportation Program (STP) Concept Reports Received																	
Unique Proj ID	Program ming Year	UDOT Region	County	City	Project Improvement	Funding Type	Agency	Name of Project	From	To	Project Length	2029 Estimated Project Cost	Federal Funds Requested	Local Funds	Project Description -	Type of Project	Project Priority
Porjects Submitted for CMAQ Funding Consideration																	
O_CMAQ_1	2029	1	Davis	Clinton	Intersections & Signals	CMAQ	Clinton City	1300 North 1500 West Roundabout	1300 North 1500 West Intersection	0	0.3	\$ 2,780,800	\$ 1,800,000	\$ 130,800	The 1300 N 1500 W intersection is a four-way stop controlled intersection. The intersection sight distances are inadequate and shoulders are undeveloped. The project would remove the obstructions and construct a roundabout at the intersection to improve traffic flow and enhance pedestrian safety and mobility.	Operations	1
O_CMAQ_2	2029	1	Davis	South Davis County to SLC	Transit Capital	CMAQ	Utah Transit Authority	Davis Salt Lake Connector Construction - OL UZA	Davis County	Salt Lake City	12.4	\$ 75,597,183	\$ 5,000,000	\$ 726,162	The Davis-SLC Community Connector has been identified as a phase 1 project in the regional transportation plan. It will provide an essential transit connection between Davis and Salt Lake County, improving upon existing service. Environmental work is currently underway. The requested funds will be used for construction.	Transit	2
O_CMAQ_3	2029	1	Davis	West Point	Intersections & Signals	CMAQ	West Point	1800 N/4500 W Round-About	1800 N	4500 W	0	\$ 2,087,300	\$ 1,013,690	\$ 1,073,610	This is a busy intersection of two state highways. Currently the north and sound legs of the intersection are offset by abou 100 ft. This project is needed to align the intersection and create a more efficient intersection to eliminate delays.	Operations	2
O_CMAQ_4	2029	1	Weber	Ogden	Bicycle	CMAQ	Ogden City Corporation	Ogden City Bike Share	CBD Area +0.5 Miles	CBD Area +0.5 Miles	N/A	\$ 678,500	\$ 632,566	\$ 45,934	A bikeshare program is an alternate mode of transportation designed for urban centers. It is a way of linking already in place infrastructure and transit systems together. The program can be used by residents or visitors to the City. This program is a way to improve air quality, and the overall health of its users.	Active Transportation	2
O_CMAQ_5	2029	1	Weber	Ogden	Transit Capital	CMAQ	Utah Transit Authority	On-Route Charging Infrastructure Round 2	0	0	0	\$ 1,500,000	\$ 1,398,450	\$ 101,550	Electric bus procurements are arriving, and future orders will be coming. A network of high-power on-route chargers at key locations enables these buses to be deployed in more locations without concerns about a bus being limited by charge range. This request will pay for two more of those locations (see them listed below).	Transit	3
O_CMAQ_6	2029	1	Weber	Roy City	Reconstruction	CMAQ	Roy City Corporation	4300 West 6000 South Roundabout	4300 West	6000 South	0.1	\$ 1,350,000	\$ 1,258,605	\$ 91,395	The proposed project includes the construction of a roundabout at the intersection of 6000 South and 4300 West. This busy intersection connects multiple cities in Weber and Davis Counties. The project will include property acquisition, roadway improvements, sidewalk, bicycle facilities, drainage, and lighting improvements.	Reconstruct	1
O_CMAQ_7	2029	1	Weber	Roy City	Other CMAQ	CMAQ	Roy City Corporation	Roy Municipal Building Electric Vehicle Charging Stations	5051 South 1900 West	5051 South 1900 West	N/!	\$ 100,500	\$ 93,696	\$ 6,804	This project will include the installation of four (4) electric vehicle charging stations at the Roy City Municipal Building. The charging stations will be metered and are intended to be used by Roy City Employees and residents visiting the Municipal Building. The installation of charging stations will encourage the use of electric vehicles and reduce carbon emissions associated with traditional gas vehicles.	Other	2
Porjects Submitted for CRP Funding Consideration																	
O_CRP_1	2029	1	Davis	Clinton	Intersections & Signals	CRP	Clinton City	1300 North 1500 West Roundabout	1300 North 1500 West Intersection	0	0.3	\$ 2,780,800	\$ 1,800,000	\$ 130,800	The 1300 N 1500 W intersection is a four-way stop controlled intersection. The intersection sight distances are inadequate and shoulders are undeveloped. The project would remove the obstructions and construct a roundabout at the intersection to improve traffic flow and enhance pedestrian safety and mobility.	Operations	1
O_CRP_2	2029	1	Davis	Clinton	Pedestrian	CRP	Clinton City	2050 North Pedestrian Underpass	2050 North 2000 West	0	0.2	\$ 5,500,000	\$ 2,750,000	\$ 2,750,000	The purpose of the 2050 North pedestrian underpass is to construct underground pedestrian infrastructure to facilitate active transportation crossings of the 2000 West roadway. The underpass would complete the city-wide 2050 North trail that currently has a gap at 2000 West.	Active Transportation	2
O_CRP_3	2029	1	Davis	North Salt Lake	Other CRP	CRP	City of North Salt Lake	Center Street Widening & AT Facilities	Foxboro Drive	Jordan River Trail	0.59	\$ 593,400	\$ 504,390	\$ 89,010	The Jordan River Trail has been extended to Center Street, and there is a need to create active transportation connections from that trail to other trail systems and bike lanes. This project will make those connections in addition to widening the road in anticipation of future development on the west side of the river.	Active Transportation	1
O_CRP_4	2029	1	Davis	South Davis County to SLC	Transit Capital	CRP	Utah Transit Authority	Davis Salt Lake Connector Construction - OL UZA	Davis County	Salt Lake City	12.4	\$ 75,597,183	\$ 5,000,000	\$ 726,162	The Davis-SLC Community Connector has been identified as a phase 1 project in the regional transportation plan. It will provide an essential transit connection between Davis and Salt Lake County, improving upon existing service. Environmental work is currently underway. The requested funds will be used for construction.	Transit	2

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O_CRP_5	2029	1	Davis	Syracuse	Other CMAQ	CRP	Syracuse City	Antelope Trail, Phase 1	Causeway gatehouse	Doral Drive	1.25	\$ 2,246,700	\$ 350,000	Remaining	Antelope Island experiences over a million visitors annually. The narrow Antelope Drive restricts the option of safe non-motorized access to the island for events, recreation, fitness, or leisure use. Trail connection along Antelope (WDC to Causeway) provides an alternative to users who drive to the island and cycle. This 2 mile stretch Along Antelope Drive between WDC and the causeway can be phased in 2 or more sections for affordability.	Active Transportation	1
O_CRP_6	2029	1	Davis	West Point	Intersections & Signals	CRP	West Point	1800 N/4500 W Round-About	1800 N	4500 W	0	\$ 2,087,300	\$ 1,013,690	\$ 1,073,610	This is a busy intersection of two state highways. Currently the north and sound legs of the intersection are offset by abou 100 ft. This project is needed to align the intersection and create a more efficient intersection to eliminate delays.	Operations	2
O_CRP_7	2029	1	Weber	Ogden	Bicycle	CRP	Ogden City Corporation	Ogden City Bike Share	CBD Area +0.5 Miles	CBD Area +0.5 Miles	N/A	\$ 678,500	\$ 632,566	\$ 45,934	A bikeshare program is an alternate mode of transportation designed for urban centers. It is a way of linking already in place infrastructure and transit systems together. The program can be used by residents or visitors to the City. This program is a way to improve air quality, and the overall health of its users.	Active Transportation	2
O_CRP_8	2029	1	Weber	Ogden	Transit Capital	CRP	Utah Transit Authority	On-Route Charging Infrastructure Round 2	0	0	0	\$ 1,500,000	\$ 1,398,450	\$ 101,550	Electric bus procurements are arriving, and future orders will be coming. A network of high-power on-route chargers at key locations enables these buses to be deployed in more locations without concerns about a bus being limited by charge range. This request will pay for two more of those locations (see them listed below).	Transit	3
O_CRP_9	2029	1	Weber	Roy City	Reconstruction	CRP	Roy City Corporation	4300 West 6000 South Roundabout	4300 West	6000 South	0.1	\$ 1,350,000	\$ 1,258,605	\$ 91,395	The proposed project includes the construction of a roundabout at the intersection of 6000 South and 4300 West. This busy intersection connects multiple cities in Weber and Davis Counties. The project will include property acquisition, roadway improvements, sidewalk, bicycle facilities, drainage, and lighting improvements.	Reconstruct	1
O_CRP_10	2029	1	Weber	Roy City	Other CRP	CRP	Roy City Corporation	Roy Municipal Building Electric Vehicle Charging Stations	5051 South 1900 West	5051 South 1900 West	N/I	\$ 100,500	\$ 93,696	\$ 6,804	This project will include the installation of four (4) electric vehicle charging stations at the Roy City Municipal Building. The charging stations will be metered and are intended to be used by Roy City Employees and residents visiting the Municipal Building. The installation of charging stations will encourage the use of electric vehicles and reduce carbon emissions associated with traditional gas vehicles.	Other	2
Porjects Submitted for STP Funding Consideration																	
O_STP_1	2029	1	Box Elder	Brigham City	Widening	STP	Brigham City Corporation	1200 West Roadway Widening (600 North to Industrial Way)	600 North	Indusrial Way	0.68	\$ 8,895,400	\$ 6,547,911	\$ 475,484	Widening of about a section of 1200 West between 600 North and Industrial Way.	Capacity	1
O_STP_2	2029	1	Box Elder	Brigham City	Widening	STP	Brigham City Corporation	1200 West Roadway Widening (Forest to 400 South)	Forest Street	400 South	0.729	\$ 5,944,300	\$ 5,158,035	\$ 374,556	Construction of about a one mile section of 1200 West between Forest Street and SR-91. The purpose of the projet is to further the corridor between the 1100 West / SR-91 intersection and Forest Street.	Reconstruct	1
O_STP_3	2029	1	Box Elder	Brigham City	Widening	STP	Brigham City Corporation	1200 West Roadway Widening (Forest Street to Industrial Way)	Forest Street	Indusrial Way	0.335	\$ 2,495,000	\$ 579,264	\$ 42,064	Widening of about a section of 1200 West between Forest Street and Industrial Way.	Capacity	3
O_STP_4	2029	1	Box Elder	Perry City	Widening	STP	Perry City Corporation	1200 West Roadway Widening Phase 1	1600 South	2250 South	0.521	\$ 5,564,500	\$ 3,459,660	\$ 251,227	This project proposes to extend 1100 West from 1100 South intersection to Perry's 1200 West Corridor. This corridor is a critical connective element, will improve north/south movement, help alleviate congestion on US-89, connects SR-315 in Willard to SR-13 in north Brigham City, and joins Wasatch Front's trail systems.	Capacity	1
O_STP_5	2029	1	Davis	Centerville	Other STP	STP	Centerville City	1250 W Project	Highway 105 (Parrish Ln)	200 North	0.18	\$ 752,100	\$ 503,907	\$ 248,193	This stretch of road deteriorates quickly, this project will address the deficiencies and rebuild the road. We are anticipating higher truck traffic in this area in the near future with new development planned just to the south of this project.	Reconstruct	1

Congestion Mitigation/ Air Quality (CMAQ), Carbon Reduction Program (CRP), and Surface Transportation Program (STP) Concept Reports Received

Unique Proj ID	Program ming Year	UDOT Region	County	City	Project Improvement	Funding Type	Agency	Name of Project	From	To	Project Length	2029 Estimated Project Cost	Federal Funds Requested	Local Funds	Project Description -	Type of Project	Project Priority
			Porjects Submitted for STP Funding Consideration														
O_STP_6	2029	1	Davis	Clinton	Intersections & Signals	STP	Clinton City	1300 North 1500 West Roundabout	1300 North 1500 West Intersection	0	0.3	\$ 2,780,800	\$ 1,800,000	\$ 130,800	The 1300 N 1500 W intersection is a four-way stop controlled intersection. The intersection sight distances are inadequate and shoulders are undeveloped. The project would remove the obstructions and construct a roundabout at the intersection to improve traffic flow and enhance pedestrian safety and mobility.	Operations	1
O_STP_7	2029	1	Davis	Farmington	Widening	STP	Farmington City	SR - 106 (200 East) Improvements	Glovers Lane	Lund Lane	0.88	\$ 3,916,100	\$ 3,650,980	\$ 265,120	The proposed project is intended to improve drainage and add pedestrian facilities to the section of SR-106 (200 East Street) between Glovers Lane and Lund Lane on the east side of the road. The project includes acquiring right of way, storm drain, curb and gutter, sidewalk, retaining walls, and pavement widening.	Reconstruct	1
O_STP_8	2029	1	Davis	Layton	Other STP	STP	Layton City	Layton Parkway Signal Project	1700 West	2700 West	1	\$ 825,000	\$ 725,000	\$ 100,000	Layton is proposing the construction of three traffic signals along Layton Parkway at the following intersections: 1700 West, 2200 West and 2700 West. This project would support the City's population growth and UDOT's West Davis Corridor. The signalized intersections would reduce delay and improve the operational capacity.	Operations	1
O_STP_9	2029	1	Davis	Layton	Widening	STP	Layton City	West Hill Field Road Widening	2400 West	3400 West	1	\$ 5,020,000	\$ 4,015,000	\$ 1,005,000	This project will widen the existing narrow two-lane facility on West Hill Field Road to a uniform 5-lane facility between 2400 West and 3400 West. It will increase the capacity of this corridor and enable Layton City to expand its transportation services to West Layton and support the economic development in this area.	Capacity	3
O_STP_10	2029	1	Davis	North Salt Lake	Other STP	STP	City of North Salt Lake	Center Street Widening & AT Facilities	Foxboro Drive	Jordan River Trail	0.59	\$ 593,400	\$ 504,390	\$ 89,010	The Jordan River Trail has been extended to Center Street, and there is a need to create active transportation connections from that trail to other trail systems and bike lanes. This project will make those connections in addition to widening the road in anticipation of future development on the west side of the river.	Active Transportation	1
O_STP_11	2029	1	Davis	Ogden/Layton Metro Area	Other STP	STP	Utah Department of Transportation	Surface Street Variable Message Signs	On SR193 WB East of I 15 near MP 4.65	near MP 4.2 EB West of I 15	0.45	\$ 650,000	\$ 605,995	\$ 44,005	Install (2) Surface Street Variable Message Signs on SR193 (E700S) to warn travelers of traffic incidents and impact to travel time on I-15 prior to entering the Interstate. A possible suggested alternate route would be State Street to by pass the bottleneck or incident.	Operations	0
O_STP_12	2029	1	Davis	Ogden/Layton Metro Area	Other STP	STP	Utah Department of Transportation	Fwy Variable Message Sign w/ CCTV Camera	I 84 EB West of US 89 (vicinity of MP 87)	0	0.1	\$ 800,000	\$ 745,840	\$ 54,160	Install a new Variable Message Sign and CCTV camera on I84 EB to warn travelers of traffic incidents ahead and off load at the US 89 interchange if needed.	Operations	0
O_STP_13	2029	1	Davis	South Davis County to SLC	Transit Capital	STP	Utah Transit Authority	Davis Salt Lake Connector Construction - OL UZA	Davis County	Salt Lake City	12.4	\$ 75,597,183	\$ 5,000,000	\$ 726,162	The Davis-SLC Community Connector has been identified as a phase 1 project in the regional transportation plan. It will provide an essential transit connection between Davis and Salt Lake County, improving upon existing service. Environmental work is currently underway. The requested funds will be used for construction.	Transit	2
O_STP_14	2029	1	Davis	South Weber	Widening	STP	South Weber City Corporation	Cottonwood Drive Roadway Widening	I-84	Weber River Bridge Crossing	0.53	\$ 2,508,700	\$ 2,222,324	\$ 161,376	Widening of the existing asphalt roadway and install curb, gutter, and sidewalk. (trail) The new trail will connect the existing Weber River Parkway Trail system to the south and trail systems south to I-84 and the US-89 junction existing trailheads.	Reconstruct	2
O_STP_15	2029	1	Davis	West Bountiful	Other STP	STP	West Bountiful City	1100 West street Widening and Curb/Gutter	200 N / 1100 W	400 N / 1100 W	0.15	\$ 1,225,000	\$ 753,224	\$ 439,519	Improves surface drainage with curb/gutter, inlets and piping. Improves pedestrian and vehicle safety with asphalt widening. Completes alt. transportation route to the Woods Cross Frontrunner Station. This project completes the final 0.15 miles of infrastructure on the east side of 1100 west from 500 South to 400 North.	Active Transportation	1
O_STP_16	2029	1	Davis	West Point	Other STP	STP	West Point City	700 South Widening	3500 West	4000 West	0.5	\$ 4,170,600	\$ 2,955,950	\$ 1,214,650	This road is adjacent to the new off ramp of the West Davis Highway near SR193. It is currently a very narrow two land section with high traffic volumes. With the West Davis Highway soon to be completed the traffic volumes will increase significantly. This road needs to be widened to a three lane section.	Capacity	1

Congestion Mitigation/ Air Quality (CMAQ), Carbon Reduction Program (CRP), and Surface Transportation Program (STP) Concept Reports Received																	
Unique Proj ID	Program ming Year	UDOT Region	County	City	Project Improvement	Funding Type	Agency	Name of Project	From	To	Project Length	2029 Estimated Project Cost	Federal Funds Requested	Local Funds	Project Description -	Type of Project	Project Priority
			Porjects Submitted for STP Funding Consideration														
O_STP_17	2029	1	Weber	Farr West City	Widening	STP	Farr West City Corporation	3300 North Widening and Roundabout	2000 West (SR-126)	West end of city limits (approx. 2700 W)	0.817	\$ 10,215,300	\$ 9,407,187	\$ 6,823,113	The project will improve the 3300 North corridor from 2000 West (SR-126) to the west end of city limits. The project include a bridge widening over the canal and a roundabout at the intersection of 3300 North and 2575 West.	Capacity	1
O_STP_18	2029	1	Weber	Harrisville City	Widening	STP	Harrisville City Corporation	750 West Widening Phase 1	West Harrisville Road	US-89	0.804	\$ 6,784,300	\$ 6,245,757	\$ 453,543	The project will improve the 750 West cooridore from West Harrisville Road to US-89 from the narrow 2 lane road to the full city standard collector road.	Capacity	0
O_STP_19	2029	1	Weber	Harrisville City	Widening	STP	Harrisville City Corporation	750 West Widening Phase 2	West Harrisville Road	US-89	0.485	\$ 2,461,100	\$ 2,215,238	\$ 160,862	The project will improve the 750 West corridor from West Harrisville Road to US-89 from the narrow 2 lane road to the full city standard collector road.	Capacity	2
O_STP_20	2029	1	Weber	Ogden	Reconstruction	STP	Ogden City Corporation	2nd Street Reconstruction Phase 1	E/o Washington Boulevard	E/o Monroe Boulevard	0.748	\$ 7,549,500	\$ 7,038,399	\$ 511,101	Average Daily Traffic (ADT) has increased on 2nd Street since the intersection of 2nd Street/Harrison Blvd in 2017. Structurally, the pavement is distressed and is rated as poor. Severe cross-slopes, deep gutters and antiquated storm drain inlets are out of standard and are liabilities. Missing sidewalk, insufficient space for bike lanes and small queues at signalized intersections are also issues.	Reconstruct	1
O_STP_21	2029	1	Weber	Ogden	Reconstruction	STP	Ogden City Corporation	2nd Street Reconstruction Phase 2	Wall Avenue	Washington Boulevard	0.426	\$ 5,101,800	\$ 4,756,408	\$ 345,392	Average Daily Traffic (ADT) has increased on 2nd Street since the intersection of 2nd Street/Harrison Blvd in 2017. Structurally, the pavement is distressed and is rated as poor. Intersection lane lengths and spacing are substandard; there is insufficient space for bike lanes and clear zone is also problematic.	Reconstruct	3
O_STP_22	2029	1	Weber	Ogden	Transit Capital	STP	Utah Transit Authority	Mt. Ogden Facility Expansion	135 West 17th Street	0	0	\$ 15,000,000	\$ 5,000,000	\$ 363,081	This project expands the 35+ yr old Mt. Ogden admin bldg. Expansion is needed for current service and future increases in Box Elder, Weber, and Davis Counties. This expands the admin building to 25,000 - 30,000 sf and makes site improvements. The project is larger than last year so other service modes can be accommodated.	Transit	1
O_STP_23	2029	1	Weber	Ogden	Transit Capital	STP	Utah Transit Authority	On-Route Charging Infrastructure Round 2	0	0	0	\$ 1,500,000	\$ 1,398,450	\$ 101,550	Electric bus procurements are arriving, and future orders will be coming. A network of high-power on-route chargers at key locations enables these buses to be deployed in more locations without concerns about a bus being limited by charge range. This request will pay for two more of those locations (see them listed below).	Transit	3
O_STP_24	2029	1	Weber	Ogden/Layton Metro Area	Other STP	STP	Utah Department of Transportation	Surface Street Variable Message Signs	On SR39 (1200S) WB East of I 15 near MP 4.23	near MP 3.82 EB West of I 15	0.43	\$ 650,000	\$ 605,995	\$ 44,005	Install (2) Surface Street Variable Message Signs on SR39 (1200S) to warn travelers of traffic incidents and impact to travel time on I-15 prior to entering the Interstate.	Operations	0
O_STP_25	2029	1	Weber	Roy City	Reconstruction	STP	Roy City Corporation	4300 West 6000 South Roundabout	4300 West	6000 South	0.1	\$ 1,350,000	\$ 1,258,605	\$ 91,395	The proposed project includes the construction of a roundabout at the intersection of 6000 South and 4300 West. This busy intersection connects multiple cities in Weber and Davis Counties. The project will include property acquisition, roadway improvements, sidewalk, bicycle facilities, drainage, and lighting improvements.	Reconstruct	1
O_STP_26	2029	1	Weber	Weber County	Other STP	STP	Weber County	Widen 12th Street	10000 West	7100 West	2	\$ 10,396,714	\$ 10,196,714	\$ 200,000	Currently there is no continuous turning lane or shoulder. This is the last phase of the proposed widening from the end of the previous phase to Little Mountain. By improving the shoulder and drainage, pedestrian use will be safer.	Capacity	1

Transportation Alternatives Program (TAP) Concept Reports Received

Region	County	City	Agency	Funding Type	Project Name	From Street	To Street	Project Improvement	Length	Description	Tot Cost	Fed Fund	Local Funds	Sponsor Priority
1	Davis	Centerville	Centerville City	TAP	Porter Lane Multi-Use Trail (1 of 2)	400 West	S Frontage Rd	Capital Improvement	0.26	Davis County will be enclosing a channel in the next year or two on the south side of the road. We would like to put in a multi-use trail to connect 400 West to the Frontage Road on top of the enclosed channel. This will be part 1 of 2. We intend to extend the trail east to Main Street soon after.	302500	151250	151250	2
1	Davis	Clinton	Clinton City	TAP	2050 North Pedestrian Underpass	2050 North 2000 West		Capital Improvement	0.2	The purpose of the 2050 North pedestrian underpass project is to construct an underground pedestrian trail that crosses the 2000 West roadway. The underpass would complete the city-wide 2050 North trail that currently has a gap at 2000 West.	5500000	2750000	2750000	2
1	Davis	Layton	Layton City	TAP	Davis Weber Canal Trail PH I	Near the intersection of Univeristy Park Blvd & 1300 S.	Near the intersection of 2225 N. & 525 W.	Capital Improvement	0.64	The purpose of this project is to extend the Davis Weber Canal Trail (a regional trail) into Layton City. Connections to Weber State University Davis Campus, Northridge High School and Layton's Midtown Mixed Use Urban District would provide more choices for active transportation and less dependence on automobiles.	654600	327300	327300	2
1	Davis	South Weber	South Weber City Corporation	TAP	Weber River Parkway Trailhead Connection Phase 5	End of phase 3	End of phase 4	Capital Improvement	1.193	The project will improve the surface and alignment of the trail for a more safe path.	732400	682817	49583	2
1	Davis	Syracuse	Syracuse City	TAP	Antelope Trail, Phase 1	Causeway gatehouse	Doral Drive	Capital Improvement	1.25	Antelope Island experiences over a million visitors annually. The narrow Antelope Drive restricts the option of safe non-motorized access to the island for events, recreation, fitness, or leisure use. Trail connection along Antelope (WDC to Causeway) provides an alternative to users who drive to the island and cycle. This 2 mile stretch Along Antelope Drive between WDC and the causeway can be phased in 2 or more sections for affordability.	2246700	350000	Remaining	1
1	Weber	Farr West City	Farr West City	TAP	2575 West Sidewalk and Bike Lane	3300 North	2975 North	Capital Improvement	0.513	The project will widen one side of the roadway to place a 6' wide bake lane. It also consists of constructing an asphalt path on the other side of the roadway for pedestrian use.	1013300	893423	64877	2
1	weber	South Ogden	South Ogden City	TAP	Adams Avenue Sidewalk	40th Street	42nd Street	Capital Improvement	0.31	This project will add 1,300 lineal feet of new sidewalk and curb and gutter, which will fill a gap in the existing sidewalk. This will create a safe place for students, pedestrians and bicyclists to travel while using this route. This project is consistent with the RTP Pedestrian/Bike Route.	2063000	1881381	181619	1
1	Weber	South Ogden	South Ogden City	TAP	850 East Sidewalk Connection	US Highway 89	Chambers Street	Capital Improvement	0.03	This project will bridge a gap between existing sidewalk along Glasmann Way between US Highway 89 and Chambers Street. This project is part of the bike and pedestrian route in phase 2 of the Regional Transportation Plan.	143700	115326	8374	2