


PHASING THE PREFERRED ROADWAY SCENARIO



PROCESS

1. All projects will be evaluated based on the phasing criteria and weighing described below.
2. Projects will be categorized in three scales based on intent of the project: Within Community, Community to Region, Region to Region. All projects will be scored with the same criteria and methodology, but the weighing of criteria will change between the three scales. Examples of each scale are below.
 - a. Within Community: These projects serve more localized needs or are within one or two communities such as 900 East in Salt Lake County or Country Hills Drive in Weber County.
 - b. Community to Region: These projects tie communities to the region and serve both localized and regional needs such as Redwood Road or SR-193.
 - c. Region to Region: These projects serve regional trips that traverse multiple communities such as Mountain View Corridor or US-89 in Davis County.
3. The travel demand model will be run with all projects evaluated to be needed in Phase 1 of the plan and year 2030 socioeconomic data, creating a Phase 2 evaluation run. All projects that are evaluated to not be needed in Phase 1 of the plan will be evaluated based the Phase 2 evaluation run and the phasing criteria and weighing described below. A few measures may be evaluated differently for Phase 2 evaluation and are noted as such.
4. The total score for each project and the total score for each project divided by cost will be compared.

PHASING CRITERIA (TIMING-BASED EVALUATION)

Safe, user-friendly streets				
<i>2019 – 2050 Proposed Objective</i>		<i>Within Community</i>	<i>Community to Region</i>	<i>Region to Region</i>
	Improves safety issues	15 points	15 points	15 points
 <i>Measure</i>	Project is on facility with high Safety Index score and would reduce serious and/or fatal crashes	15 points	15 points	15 points
<i>Methodology</i>	For existing facilities, project receives 0 to 15 points based on UDOT’s Safety Index. The higher the Safety Index, the more points the project gets. If the project’s Safety Index varies throughout the length of the project, a weighted average will be used. For new construction, project receives 0 to 15 points based on the Safety Index of parallel, similar facilities. If new construction is an extension of an existing facility, that facility’s Safety Index will be used.			
<i>Data Needs</i>	Safety index data			

Manageable and reliable traffic conditions

<i>2019 – 2050 Proposed Objective</i>	Reduces vehicle hours of delay	<i>Within Community 10 points</i>	<i>Community to Region 15 points</i>	<i>Region to Region 20 points</i>
<i>Measure (Phase 1)</i>	Vehicle hours per mile and delay saved using the 2030 socioeconomics on the 2019-2023 Transportation Improvement Program (for existing roads) <i>or</i> Roadway increases connectivity or provides redundancy in the network (for new roads)	10 points	15 points	20 points
<i>Measure (Phase 2)</i>	Vehicle hours per mile and delay saved using the 2040 socioeconomics on phase 1 needed projects (for existing roads) <i>or</i> Roadway increases connectivity or provides redundancy in the network (for new roads)	10 points	15 points	20 points
<i>Methodology</i>	<p>For phase 1 phasing, the travel demand model will be run with 2030 socioeconomic data on 2019-2023 TIP and compared to a travel demand model run with 2030 socioeconomic data and the preferred scenario network. For phase 2 phasing, the travel demand model will be run with 2040 socioeconomic data on phase 1 needed projects and compared to a travel demand model run with 2030 socioeconomic data and preferred scenario network.</p> <p>Within Community: Project receives 0 to 5 points based on reduction in vehicle hours per mile. Points are normalized to the project with the highest reduction in volume hours for this project scale.</p> <p>Community to Region and Region to Region: Project receives half of score (0 to 7.5 or 0 to 10 points) based on reduction in vehicle hours per miles and half of score (0 to 7.5 or 0 to 10 points) based on reduction in overall delay as compared to free flow speeds. Points are normalized to the project with the highest reduction in vehicle hours and the highest savings of delay for the project scale.</p> <p>For new roadways, project will receive points (0 to 5, 15, or 20 points) based on future projected traffic volumes per mile. Points will be normalized to the project with the highest assigned volume per mile for the project scale.</p>			
<i>Data Needs</i>	Vehicle load, delay per segment, length of segment, travel time per segment, free flow speed/travel time			



Access to economic and educational opportunities

<i>2019 – 2050 Proposed Objective</i>	Improvement in Access to Opportunity	<i>Within Community</i> 15 points	<i>Community to Region</i> 15 points	<i>Region to Region</i> 15 points
<i>Measure (Phase 1)</i>	Project improves number of total jobs and education that can be accessed in defined travel shed using 2030 socioeconomics on the 2019-2023 Transportation Improvement Plan	15 points	15 points	15 points
<i>Measure (Phase 2)</i>	Project improves number of total jobs and education that can be accessed in defined travel shed 2040 socioeconomics on phase 1 needed projects	15 points	15 points	15 points
<i>Methodology</i>	Each project is assigned representative TAZs. Total number of jobs and educational opportunities, weighed by population, between projected year with and without draft preferred projects is calculated. Points assigned relative to highest performing project in project scale.			
<i>Data Needs</i>	Jobs and education accessible by TAZ			



Access to economic and educational opportunities

<i>2019 – 2050 Proposed Objective</i>	Enhances freight mobility	<i>Within Community</i> 5 points	<i>Community to Region</i> 10 points	<i>Region to Region</i> 15 points
<i>Measures</i>	Project connects to an industrial area or freight-dependent cluster	2.5 points	5 points	7.5 points
	Project is on UDOT Freight Plan	2.5 points	5 points	7.5 points
<i>Methodology</i>	Project receives full points (2.5, 5, or 7.5 points) if the project intersects with an industrial area or freight-dependent cluster or is within a mile and provides direct access to area/cluster. No points received otherwise. Freight-dependent clusters are freight centers as defined in the UDOT Freight Plan or as defined by WFRC’s GOED cluster analysis.			
	Project receives full points (2.5, 5, or 7.5 points) if it is on UDOT Freight Plan. No points received if project is not on UDOT Freight Plan.			
<i>Data Needs</i>	Freight cluster locations, projects on UDOT Freight Plan			





Fiscally efficient communities and infrastructure

<i>2019 – 2050 Proposed Objective</i>		<i>Within Community 10 points</i>	<i>Community to Region 10 points</i>	<i>Region to Region 10 points</i>
<i>Measures</i>	Project readiness			
	Project is part of a planning/environmental study	7 points	7 points	7 points
	Efforts underway to preserve the project’s corridor	3 points	3 points	3 points
<i>Methodology</i>	<p>Project receives full points (7 points) if environmental study is underway or completed. Project receives partial points (3.5 points) if a planning study that can be moved into environmental work is underway or completed, but environmental work has not begun. Otherwise, project receives no points.</p> <p>Project receives full points (3 points) if project corridor is preserved or completed right-of-way is purchased. Project receives full points (3 points) if it is an operational or re-stripe project. Otherwise, project receives no points.</p>			
<i>Data Needs</i>	Information from community inventory			

Fiscally efficient communities and infrastructure



<i>2019 – 2050 Proposed Objective</i>		<i>Within Community 10 points</i>	<i>Community to Region 10 points</i>	<i>Region to Region 10 points</i>
<i>Measures</i>	Asset management/state of good repair			
	Project replaces or improves deficient bridge	5 points	5 points	5 points
	Project replaces or improves deficient pavement	5 points	5 points	5 points
<i>Methodology</i>	<p>It is assumed all widening and interchange improvement projects will replace or repair deficient bridges. Widening and interchange improvements that replace a structure rated up to 65 by the UDOT Bridge Deficiency Score, or local community survey, receive full points (5 points). A project that replaces a structure rated between 65 and 80 receives partial points (2.5 points). Otherwise, a project receives no points.</p> <p>It is assumed all widening and interchange improvement projects will replace or repair deficient pavement. Widening and interchange improvement projects that contain a poor pavement rating, based on UDOT or local community survey, receive full points (5 points). Widening and interchange improvement projects that contain a fair pavement rating, based on UDOT or local community survey, receive partial points (2.5 points). Otherwise, a project receives no points.</p>			
<i>Data Needs</i>	UDOT bridge and pavement information and information from community inventory			



Livable and healthy communities

<i>2019 – 2050 Proposed Objective</i>		<i>Within Community 20 points</i>	<i>Community to Region 15 points</i>	<i>Region to Region 10 points</i>
<i>Measures</i>	Project improves access to or within a WC2050 urban or town center or job area	10 points	10 points	10 points
	Project is keeping within community character by being in an area plan, corridor plan, or visioning process	10 points	5 points	0 points
<i>Methodology</i>	Project receives full points (10 points) if within a WC2050 urban or town center or job area. Project receives partial points (5 points) if within 1 mile of WC2050 urban or town center or job area.			
	Project receives full points (5 or 10 points) if included in adopted area plan, corridor plan, or vision. Otherwise, a project receives no points.			
<i>Data Needs</i>	WC2050 center locations; information from community inventory			



Quality transportation choices

<i>2019 – 2050 Proposed Objective</i>		<i>Within Community 10 points</i>	<i>Community to Region 8 points</i>	<i>Region to Region 5 points</i>
<i>Measures</i>	Project is compatible with an existing or planned transit route	5 points	3 points	3 points
	Project supports active transportation	5 points	5 points	2 points
<i>Methodology</i>	Projects receives full points (5 or 3 points) if it is a future joint corridor with transit or if it accommodates existing transit route. Otherwise, project receives no points.			
	Projects receives full points (5 or 2 points) if it is on the regional bike plan. Project receives partial points (2.5 or 1 point) if it is on the base bike plan. Otherwise, project receives no points.			
<i>Data Needs</i>	Transit route information; regional bike plan information			

Housing choices and affordable living



2019 – 2050 Proposed Objective	Supports affordable transportation costs	Within Community 5 points	Community to Region 2 points	Region to Region 0 points
Measure	Provides multi-modal options to vulnerable communities	5 points	2 points	0 points
Methodology	Project receives full points (5 or 2 points) if within a quarter-mile of a vulnerable community and accommodates a transit route or active transportation facility. Project receives partial points (2.5 or 1 point) if it is within a quarter-mile of a vulnerable community and provides increased street connectivity.			
Data Needed	Vulnerable community locations; transit route; active transportation network			

Goals Not Evaluated for Phasing

Ample parks, open spaces, and recreational opportunities



2019 – 2050 Proposed Objective	Not evaluated for phasing but evaluated for scenario development and project selection			
Measure	N/A			
Methodology	N/A			

Clean air



2019 – 2050 Proposed Objective	Not evaluated for phasing but evaluated for scenario development			
Measure	N/A			
Methodology	N/A			

A sustainable environment including water, agricultural, and other natural resources



2019 – 2050 Proposed Objective	Not evaluated for phasing but evaluated for scenario development and project selection			
Measure	N/A			
Methodology	N/A			