



Projects Evaluation Methodology

The evaluation of regional transportation projects is specialized for the following types of transportation improvements:

1. Bridge Rehabilitation/Replacement (pages 2-3)
2. Traffic Management Technologies (Roadway System Mgmt.) (pages 4-5)
3. Roadway Reconstruction/Modernization/Automation (pages 6-7)
4. Roadway Expansion (pages 8-11)
5. Multiuse Trails & Bicycle Facilities (pages 12-13)
6. Pedestrian Facilities/Safe Routes To School (pages 14-17)
7. Transit Expansion/Transit Modernization (pages 18-19)

Evaluation criteria for regional transportation projects are based on federal goals, as well as regional goals.

The Moving Ahead for Progress in the 21st Century Act (MAP-21), enacted in 2012, included provisions to make the U.S. surface transportation system more streamlined, performance-based, and multimodal, and to address challenges facing the transportation system, including safety, infrastructure condition, traffic congestion, efficiency of freight movement, environmental impacts, and delays in project delivery. The Fixing America's Surface Transportation (FAST) Act builds on the changes made by MAP-21, including providing a dedicated source of federal dollars for freight projects.

The federal-aid highway program primarily focuses on the following goals:

- **Safety** - To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- **Infrastructure Condition** - To maintain the highway infrastructure asset system in a state of good repair.
- **Congestion Reduction** - To achieve a significant reduction in congestion on the National Highway System.
- **System Reliability** - To improve the efficiency of the surface transportation system.
- **Freight Movement and Economic Vitality** - To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- **Environmental Sustainability** - To enhance the performance of the transportation system while protecting and enhancing the natural environment.
- **Reduced Project Delivery Delays** - To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

The above types of transportation projects and evaluation criteria are described further in the following sections.

1. Bridges – Prioritizing Criteria and Measures

Definition: A bridge rehabilitation or replacement project located on a non-freeway principal arterial or minor arterial functionally-classified roadway, consistent with the latest approved functional classification map. Bridge structures that have a separate span for each direction of travel can apply for both spans.

The bridge must carry vehicular traffic, but may also include accommodations for other modes. Bridges that are exclusively for bicycle or pedestrian traffic, are evaluated under one of the Bicycle and Pedestrian Facilities categories. Completely new bridges, interchanges, or overpasses fall under the Roadway Expansion scoring evaluation category.

Examples of Bridge Rehabilitation/Replacement Projects:

- Bridge rehabilitation of 20 or more feet, with a bridge condition classified as 'Poor', based on 'lowest condition rating' of the primary components of a bridge or culvert.
- Bridge replacement of 20 or more feet, with a bridge condition classified as 'Poor', based on 'lowest condition rating' of the primary components of a bridge or culvert.

Bridge Projects Scoring			
Criteria and Measures		Points	%
1	<i>Role in the Regional Transportation System and Economy</i>		25
1a	Measure - Distance to the nearest alternate crossing bridge		10
1b	Measure - Project Location Relative to Jobs, Manufacturing, Transit Routes, and Education		10
1c	Measure - Transit Routes, Freight, Bike and Trail Corridors, and Bike/Ped. Network		5
2	<i>Usage</i>		10
2a	Measure - Current daily traffic		5
2b	Measure - Forecast 2040 average daily traffic volume		5
3	<i>Equity</i>		5
3a	Measure – No disproportionate impacts & connection to disadvantaged populations and project's benefits, impacts, and mitigation		5
4	<i>Infrastructure Condition</i>		20
4a	Measure – Bridge Rating		10
4b	Measure – Load-Posting		10
5	<i>Multimodal Elements and Existing Connections</i>		10
5a	Measure - Transit, bicycle, or pedestrian project elements and connections		10
6	<i>Consistency with Regional Plans</i>		10
6a	Consistent with Plans, Studies, Goals, Policies, Strategies		10
7	<i>Public Engagement/Risk Assessment (ROW acquisition, proximity to historic properties)</i>		10
7a	Measure - Public engagement/municipal support/KDOT Consult/Railroad Involvement		5
7b	Measure - National Environmental Protection Act, National Historic Protection Act (e.g. historic resources area, ROW easements, flood risk)		5
8	<i>Cost Effectiveness</i>		10
8a	Measure – Cost effectiveness (total points/total project cost)		10
			100
	TOTAL	0	

2. Traffic Management Technologies (Roadway System Management) – Prioritizing Criteria and Measures

Definition: An Intelligent Transportation System (ITS) or similar project that primarily benefits roadway users. Traffic Management Technology projects can include project elements along a single corridor, multiple corridors, or within a specific geographic area, such as a downtown. To be eligible, projects must make improvements to at least one minor arterial or non-freeway principal arterial. Projects that are more transit-focused are in the Transit Modernization scoring evaluation category.

Examples of Traffic Management Technology Projects:

<ul style="list-style-type: none">• Flashing yellow arrow traffic signals• Traffic signal retiming projects• Integrated corridor signal coordination• Traffic signal control system upgrades• New/replacement detectors• Passive detectors for bicyclists and pedestrians	<ul style="list-style-type: none">• New/replacement traffic mgmt. centers• New/replacement traffic communication• New/replacement CCTV cameras• New/replacement variable message signs & other info improvements• Incident management coordination
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Traffic Management Technology Projects Scoring		Points	%
Criteria and Measures			
1	Role in the Regional Transportation System and Economy		20
1a	Measure - Functional classification of project, movement of people and goods		7
1b	Measure - Transit Routes, Freight, Bike and Trail Corridors, and Bike/Ped. Network		
1c	Measure - Integration within existing traffic management systems		7
2	Usage		10
2a	Measure - Current daily person throughput		5
2b	Measure - Forecast 2040 average daily traffic volume		5
3	Equity		5
3a	Measure - No disproportionate impacts & connection to disadvantaged populations and project's benefits, impacts, and mitigation		5
4	Infrastructure Condition/Age		10
4a	Measure - Upgrades to obsolete equipment		10
5	Congestion Reduction/Air Quality		10
5a	Measure - Congested corridor		5
5b	Measure - Emissions and congestion benefits of project		5
6	Safety		15
6a	Measure - Crashes reduced		7.5
6b	Measure - Safety issues in project area (e.g. signage, facility geometry)		7.5
7	Multimodal Elements and Existing Connections		10
7a	Measure - Transit, bicycle, or pedestrian project elements and connections		10
8	Consistency with Regional Plans		10
8a	Consistent with Plans, Studies, Goals, Policies, Strategies		10
9	Public Engagement/Risk Assessment (ROW acquisition, proximity to historic properties)		5
9a	Measure - Public engagement/municipal support/KDOT Consult/Railroad Involvement		2
9b	Measure - National Environmental Protection Act, National Historic Protection Act (e.g. historic resources area, ROW easements, flood risk)		3
10	Cost Effectiveness		5
10a	Measure - Cost effectiveness (total points/total project cost)		5
			100
	TOTAL	0	

3. Roadway Reconstruction/Modernization and Spot Mobility– Prioritizing Criteria and Measures

Definition: A roadway project that does not add thru-lane capacity (with the exception of roundabouts), but reconstructs, reclaims, modernizes, or adds new spot mobility elements (e.g., new turn lanes, traffic signal, or roundabout). Projects must be located on a non-freeway principal arterial or a minor arterial functionally-classified roadway, consistent with the latest functional classification map.

Examples of Roadway Reconstruction/Modernization and Spot Mobility Projects:

<ul style="list-style-type: none"> • Intersection improvements or alternative intersections such as unsignalized or signalized reduced conflict intersections. • Interchange reconstructions that do not involve new ramp movements or added thru lanes • Turn lanes • Two-lane to three-lane conversions (with a continuous center turn lane) • Lane conversion to on street parking, or bike lanes addition • Four-lane to three-lane conversions 	<ul style="list-style-type: none"> • Roundabouts • Addition or replacement of traffic signals • Shoulder improvements • Strengthening a non-10-ton roadway • Raised medians, frontage roads, access modifications, or other access management • Roadway improvements that add multimodal elements • New alignments that replace an existing alignment and do not expand the number of lanes • Resurfacing roadway projects
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Roadway Reconstruction/Modernization and Spot Mobility Projects Scoring			
Criteria and Measures		Points	%
1	<i>Role in the Regional Transportation System and Economy</i>		20
1a	Measure - Level of Congestion, movement of people and goods		7
1b	Measure - Project Location Relative to Jobs, Manufacturing, and Education		7
1c	Measure - Transit Routes, Freight, Bike and Trail Corridors, and Bike/Ped Network		
2	<i>Usage</i>		10
2a	Measure - Current daily traffic		5
2b	Measure - Forecast 2040 average daily traffic volume		5
3	<i>Equity</i>		5
3	Measure - No disproportionate impacts & connection to disadvantaged populations and project's benefits, impacts, and mitigation.		5
4	<i>Infrastructure Condition/Age</i>		15
4a	Measure – Date of construction		7.5
4b	Measure – Geometric, structural, or infrastructure improvements		7.5
5	<i>Congestion Reduction</i>		10
5a	Measure - Vehicle delay reduced		10
6	<i>Safety</i>		10
6a	Measure - Crash history		5
6b	Measure - Safety issues in project area (e.g. signage, facility geometry)		5
7	<i>Multimodal Elements and Existing Connections</i>		10
7a	Measure - Transit, bicycle, or pedestrian project elements and connections		10
8	<i>Consistency with Regional Plans</i>		10
8a	Consistent with Plans, Studies, Goals, Policies, Strategies		10
9	<i>Public Engagement/Risk Assessment (ROW acquisition, proximity to historic properties)</i>		5
9a	Measure - Public engagement/municipal support/KDOT Consult/Railroad Involvement		2
9b	Measure - National Environmental Protection Act, National Historic Protection Act (e.g. historic resources area, ROW easements, flood risk)		3
10	<i>Cost Effectiveness</i>		5
10a	Measure – Cost effectiveness (total points/total project cost)		5
			100
	TOTAL	0	

4. (a) Roadway Expansion – Prioritizing Criteria and Measures

Definition: A roadway project that adds thru-lane capacity as a primary objective. Projects must be located on a minor arterial or above, functionally-classified roadway, consistent with the latest functional classification.

Examples of Roadway Expansion Projects:

<ul style="list-style-type: none">• Two-lane to four-lane expansions• Other thru-lane expansions (excludes additions of a continuous center turn lane)• Four-lane to six-lane expansions	<ul style="list-style-type: none">• New interchanges with or without associated frontage roads• Expanded interchanges with either new ramp movements or added thru lanes• New bridges, overpasses and underpasses
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Roadway Expansion Projects Scoring			
Criteria and Measures		Points	%
1	Role in the Regional Transportation System and Economy		20
1a	Measure - Level of Congestion, movement of people and goods		7
1b	Measure - Project Location Relative to Jobs, Manufacturing, Transit Routes, and Education		7
1c	Measure - Transit Routes, Freight, Bike and Trail Corridors, and Bike/Ped Network		
2	Usage		10
2a	Measure - Current daily traffic		5
2b	Measure - Forecast 2040 average daily traffic volume		5
3	Equity		5
3	Measure - No disproportionate impacts & connection to disadvantaged populations and project's benefits, impacts, and mitigation		5
4	Infrastructure Condition/Age		15
4a	Measure – Date of construction		7.5
4b	Measure – Geometric, structural, or infrastructure improvements		7.5
5	Congestion Reduction/Air Quality		10
5a	Measure - Vehicle delay reduced		10
6	Safety		10
6a	Measure - Crash history		5
6b	Measure - Safety issues in project area (e.g. signage, facility geometry)		5
7	Multimodal Elements and Existing Connections		10
7a	Measure – Transit Routes, bicycle, or pedestrian project elements and connections		10
8	Consistency with Regional Plans		10
8a	Consistent with Plans, Studies, Goals, Policies, Strategies		10
9	Public Engagement/Risk Assessment (ROW acquisition, proximity to historic properties)		5
9a	Measure - Public engagement/municipal support/KDOT Consult/Railroad Involvement		2
9b	Measure - National Environmental Protection Act, National Historic Protection Act (e.g. historic resources area, ROW easements, flood risk)		3
10	Cost Effectiveness		5
10a	Measure – Cost effectiveness (total points/total project cost)		5
			100
	TOTAL	0	

4(b) Roadway Expansion – Prioritizing Criteria and Measures

Definition: New roadways that would be classified as Minor Arterial or above once the project is built.

Examples of New Roadway Expansion Projects:

<ul style="list-style-type: none">• New roadways connecting communities	<ul style="list-style-type: none">• New Bridge connections providing trip connectivity between two or more communities
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Roadway Expansion Projects Scoring			
Criteria and Measures		Points	%
1	Role in the Regional Transportation System and Economy		25
1a	Measure - Level of Congestion, movement of people and goods		8
1b	Measure - Project Location Relative to Jobs, Manufacturing, Transit Routes, and Education		10
1c	Measure - Transit Routes, Freight, Bike and Trail Corridors, and Bike/Ped Network		7
2	Usage		10
2	Measure - Forecast 2040 average daily traffic volume		10
3	Equity		5
3	Measure - No disproportionate impacts & connection to disadvantaged populations and project's benefits, impacts, and mitigation		5
4	Connecting Communities in the region		10
4	Promotes regional roadway connections		10
5	Congestion Reduction		10
5a	Measure - Vehicle delay reduced		10
6	Safety		10
6	Is the project addressing safety concerns		10
7	Multimodal Elements and Existing Connections		10
7a	Measure – Transit Routes, bicycle, or pedestrian project elements and connections		10
8	Consistency with Regional Plans		10
8a	Consistent with Plans, Studies, Goals, Policies, Strategies		10
9	Public Engagement/Risk Assessment (ROW acquisition, proximity to historic properties)		5
9a	Measure - Public engagement/municipal support/KDOT Consult/Railroad Involvement		2
9b	Measure - National Environmental Protection Act, National Historic Protection Act (e.g. historic resources area, ROW easements, flood risk)		3
10	Cost Effectiveness		5
10a	Measure – Cost effectiveness (total points/total project cost)		5
			100
	TOTAL	0	

5. Multi-use Trails and Bicycle Facilities – Prioritizing Criteria and Measures

Definition: A project that benefits bicyclists and/or other non-motorized users. All projects must have a transportation purpose (i.e., connecting people to destinations). A facility may serve both a transportation purpose and a recreational purpose. Multiuse trail bridges or underpasses is eligible in this category.

Examples of Multi-use Trail and Bicycle Facility Projects:

<ul style="list-style-type: none">• Multi-use trails• Trail Bridges/underpasses	<ul style="list-style-type: none">• On-street bike lanes, improved signalization detectors for bicycles• Filling multiple gaps, improving multiple crossings, or making other similar improvements along a trail corridor
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Multiuse Trails and Bicycle Facilities Projects Scoring			
Criteria and Measures		Points	%
1	Role in the Regional Transportation System and Economy		20
1a	Measure - Level of Congestion, Principal Arterial Intersection Conversion Study Priorities, and Congestion Management and Safety Plan Opportunity Areas		5
1b	Measure - Project location relative to the Regional Bicycle Transportation Network, Bicycle commuting corridors		5
1c	Measure - Connection to Jobs, Transit Routes and Educational Institutions		5
1d	Measure - connectivity to Transit Routes, trail connectivity, bike corridor connectivity, Bike/Ped. Network connectivity		5
2	Potential Usage		15
2a	Measure - Existing population and employment within 1 mile (potential usage), population density and employment density		10
2b	Measure – Snow and ice control		5
3	Equity		5
3a	Measure - No disproportionate impacts & connection to disadvantaged populations and project's benefits, impacts, and mitigation		5
4	Deficiencies and Safety		10
4a	Measure – Gaps closed/barriers removed and/or continuity between jurisdictions improved by the project		5
4b	Measure - Deficiencies corrected or safety problems addressed		5
5	Multimodal Elements and Existing Connections		20
5a	Measure - Transit or pedestrian/bicycle elements of the project and connections, level of traffic stress		20
6	Consistency with Regional Plans		10
6a	Consistent with Plans, Studies, Goals, Policies, Strategies		10
7	Public Engagement/Risk Assessment (ROW acquisition, proximity to historic properties)		10
7a	Measure - Public engagement/municipal support/KDOT Consult/Railroad Involvement		5
7b	Measure - National Environmental Protection Act, National Historic Protection Act (e.g. historic resources area, ROW easements, flood risk)		5
8	Cost Effectiveness		10
8a	Measure – Cost effectiveness (total points/total project cost)		10
			100
	TOTAL		

6. Pedestrian Facilities (Sidewalks, Streetscaping, and ADA) /Safe Routes to School Infrastructure – Prioritizing Criteria and Measures

Definition:

Pedestrian Facilities: A project that primarily benefits pedestrians and the mobility impaired. All projects must relate to surface transportation. A facility may serve both a transportation purpose and a recreational purpose; a facility that connects people to recreational destinations may be considered to have a transportation purpose. Multi-use trail bridges or underpasses and bicycle facilities should be in the category of the 'Multi-use Trail and Bicycle Facilities' instead of this Pedestrian Facilities.

Examples of Pedestrian Facility Projects:	
<ul style="list-style-type: none">• Sidewalks• Streetscaping• Americans with Disabilities Act (ADA) improvements	<ul style="list-style-type: none">• Making similar improvements in a concentrated geographic area, such as sidewalk gap closure throughout a defined neighborhood or downtown area

Pedestrian Facilities (Sidewalks, Streetscaping, and ADA) Prioritizing Criteria and Measures		Points	%
1	Role in the Regional Transportation System and Economy		30
1a	Measure - Project location relative to the Regional Bicycle Transportation Network, Bicycle Commuting Corridors (BCC), and Pedestrian Areas (PA)		10
1b	Measure - Connection to Jobs and Educational Institutions		10
1c	Measure - connectivity to Transit Routes, trail connectivity, bike corridor connectivity, Bike/Ped. Network connectivity		10
2	Potential Usage		20
2a	Measure - Existing population and employment within 1/2 mile (potential usage)		10
2b	Measure - Snow and ice control		10
3	Equity		5
3a	Measure - No disproportionate impacts & connection to disadvantaged populations and project's benefits, impacts, and mitigation		5
4	Deficiencies and Safety		15
4a	Measure - Gaps closed/barriers removed and/or continuity between jurisdictions improved by the project		7.5
4b	Measure - Deficiencies corrected or safety problems addressed		7.5
5	Consistency with Regional Plans		10
5a	Consistent with Plans, Studies, Goals, Policies, Strategies		10
6	Public Engagement/Risk Assessment (ROW acquisition, proximity to historic properties)		10
6a	Measure - Public engagement/municipal support/KDOT Consult/Railroad Involvement		5
6b	Measure - National Environmental Protection Act, National Historic Protection Act (e.g. historic resources area, ROW easements, flood risk)		5
7	Cost Effectiveness		10
7a	Measure - Cost effectiveness (total points/total project cost)		10
			100
	TOTAL		

6a. Pedestrian Facilities (Sidewalks, Streetscaping, and ADA)/Safe Routes to School Infrastructure – Prioritizing Criteria and Measures

Definition:

Safe Routes to School Infrastructure: An infrastructure project that is within a two-mile radius and directly benefiting a primary, middle, or high school site.

Examples of Safe Routes to School Infrastructure Projects:	
<ul style="list-style-type: none">• Sidewalks benefiting people going to the school• Multi-use trails benefiting people going to the school	<ul style="list-style-type: none">• Improved crossings benefiting people going to the school• Multiple improvements

Safe Routes To School Infrastructure – Prioritizing Criteria and Measures		Points	%
1	Relationship between Safe Routes to School Program Elements		25
1a	Measure - Describe how project addresses 5 Es (Evaluation, Engineering, Education, Encouragement, and Enforcement) of SRTS program		15
1b	Measure - connectivity to Transit Routes, trail connectivity, bike corridor connectivity, Bike/Ped. Network connectivity		10
2	Potential Usage		20
2a	Measure - Average share of student population that bikes or walks; or student registrations		15
2b	Measure - Student population within school's walkshed		5
3	Equity		5
3a	Measure - No disproportionate impacts & connection to disadvantaged populations and project's benefits, impacts, and mitigation		5
4	Deficiencies and Safety		20
4a	Measure – Gaps closed/barriers removed and/or continuity between jurisdictions improved by the project		10
4b	Measure - Deficiencies corrected or safety problems addressed		10
5	Consistency with Regional Plans		10
5a	Consistent with Plans, Studies, Goals, Policies, Strategies		10
6	Public Engagement/Risk Assessment		10
6a	Measure - Public engagement/municipal support/KDOT Consult/Railroad Involvement		5
6b	Measure - National Environmental Protection Act, National Historic Protection Act (e.g. historic resources area, ROW easements, flood risk)		5
7	Cost Effectiveness		10
7a	Measure – Cost effectiveness (total points/total project cost)		10
			100
	TOTAL		

7. Transit Expansion and Modernization – Prioritizing Criteria and Measures

Definition: A transit project that provides new or expanded transit service/facilities with the intent of attracting new transit riders to the system. Expansion projects may also benefit existing or future riders, but the projects are evaluated primarily on the ability to attract new riders. A transit project that makes transit more attractive to existing riders by offering faster travel times between destinations or improving the customer experience. Modernization projects may also benefit new or future riders, these projects are evaluated primarily on the benefit to existing riders.

Routine facility maintenance and upkeep is not an evaluation criteria.

Examples of Transit Expansion and Modernization Projects:

<p>Examples of Transit Expansion Projects:</p> <ul style="list-style-type: none"> • Operating funds for new or expanded transit service • Transit vehicles for new or expanded service • Customer facilities for new or expanded service, new transit centers or stations, along a route • Park-and-ride facilities or expansions • Bus/transit vehicle purchases 	<p>Examples of Transit Modernization Projects:</p> <ul style="list-style-type: none"> • Improved boarding areas, lighting, or safety and security equipment, real-time signage; • Passenger waiting facilities, heated facilities or weather protection • New transit maintenance and support facilities/garages or upgrades to existing facilities • ITS measures that improve reliability and the customer experience on a specific transit route or in a specific area • Improved fare collection systems • Multiple eligible improvements along a route
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Transit Expansion and Modernization Projects Scoring			
Criteria and Measures		Points	%
1	<i>Role in the Regional Transportation System and Economy</i>		15
1a	Measure - Level of Congestion, Principal Arterial Intersection Conversion Study Priorities, and Congestion Management and Safety Plan Opportunity Areas		5
1b	Measure - Project Location Relative to Population Density, Jobs, Manufacturing, Transit Routes, and Education		5
1c	Measure - connectivity to Transit Routes, trail connectivity, bike corridor connectivity, Bike/Ped. Network connectivity		5
2	<i>Usage – Demonstration of Need</i>		20
2a	Measure - New Annual Riders (for Expansion Projects)		10
2b	Measure - Total existing annual riders (for Modernization Projects)		10
3	<i>Equity</i>		5
3a	Measure - No disproportionate impacts & connection to disadvantaged populations and project's benefits, impacts, and mitigation		5
4	<i>Air Quality Emissions Reduction</i>		15
4a	Measure - Emissions and congestion benefits of project, Kg of emissions reduced		15
5	<i>Multimodal Elements and Existing Connections</i>		15
5a	Measure - Bicycle and pedestrian elements of the project and connections		15
6	<i>Consistency with Regional Plans – Accessibility & Collaboration of MPO's Transit coordinated plan</i>		10
6a	Consistent with Plans, Studies, Goals, Policies, Strategies		10
7	<i>Public Engagement/Risk Assessment (ROW acquisition, proximity to historic properties)</i>		10
7a	Measure - Public engagement/municipal support/KDOT Consult/Railroad Involvement		5
7b	Measure - National Environmental Protection Act, National Historic Protection Act (e.g. historic resources area, ROW easements, flood risk)		5
8	<i>Cost Effectiveness</i>		10
8a	Measure – Cost effectiveness (total points/total project cost)		10
			100
	TOTAL	0	