4205 N. Lincoln Blvd. | OKC

2019

STBG-UZA

APPLICATION GUIDEBOOK

OPENS: NOVEMBER 1

CLOSES: DECEMBER 20

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INTRODUCTION

BACKGROUND

Current federal surface transportation legislation, known as the Fixing America's Surface Transportation Act (FAST Act), was signed into law on December 4, 2015. The FAST Act retained the Surface Transportation Program, renaming it the Surface Transportation Block Grant Program (STBG-UZA, formerly STP-UZA). The term STBG-UZA refers to the Surface Transportation Block Grant Program funds sub allocated to the Oklahoma City Urbanized Area called for by the FAST Act. The Surface Transportation Program Urbanized Area (STP-UZA) funds were originally made available as a part of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). ISTEA was replaced by the Transportation Equity Act for the 21st Century (TEA-21) on June 9, 1998, TEA-21 was replaced by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) on August 10, 2005, and SAFETEA-LU was replaced by Moving Ahead for Progress in the 21st Century (MAP-21) on July 6, 2012.

The ACOG *Surface Transportation Block Grant Program Procedures for the Oklahoma City Urbanized Area Funds* (STBG-UZA Procedures) call for this evaluation criteria to be used when the requests for STBG-UZA funds for a given federal fiscal year exceed the funds available for planning purposes. The STBG-UZA Procedures were originally adopted by the ITPC on May 28, 1992 following passage of ISTEA, and subsequently amended to reflect changes resulting from TEA-21, SAFETEA-LU, MAP-21, the FAST Act, and as desired by the ITPC. On January 25, 2018, the ACOG Intermodal Transportation Policy Committee (ITPC) approved, and the ACOG Board of Directors endorsed, an amended version of the *Surface Transportation Block Grant Program Procedures for the Oklahoma City Urbanized Area Funds*.

PURPOSE

The purpose of this evaluation criteria is to assist the Intermodal Transportation Technical and Policy Committees in assessing regional project priorities and in developing a financially reasonable program of STBG-UZA projects. Implementation Guidance from the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) stresses financial constraint and regional prioritization of projects as two of the basic requirements for Metropolitan Planning Organizations (MPOs) developing the Transportation Improvement Program (TIP). Additionally, the evaluation criteria are recommended as a means of addressing the long-range regional ENCOMPASS 2040 priorities and goals: Economic strength, Safety and Security, Equity and Options, Healthy Communities, Connectivity, System Performance, and System Preservation.

RELATIONSHIP TO TIP DEVELOPMENT

Each November, entities in the Oklahoma City Area Regional Transportation Study (OCARTS) area are requested to submit projects to ACOG for consideration of inclusion in the Transportation Improvement Program (TIP). The TIP covers a four-year period, and a new TIP is prepared biennially. The TIP is required to list any projects receiving federal aid through FHWA or FTA, or those that are regionally significant. The evaluation criteria will be used when the requests for STBG-UZA funds for a given federal fiscal year exceed the amount of funds available for planning purposes. Once selected and prioritized, the STBG-UZA projects

will be included in either a new TIP, or the TIP update, which occurs in the year between new TIP development.

FEDERAL SHARE

- Construction costs for the project categories described in detail on page 8 are eligible for funding with **80 percent STBG-UZA funds and 20 percent local.**
- Federal law allows **certain safety projects to be constructed with 100 percent federal funds**, eligible safety projects are listed on page 5.
- Any project that consists of a combination of 80 percent eligible and 100 percent eligible safety improvements, shall be submitted at an overall 80 percent federal / 20 percent local funding ratio (otherwise, such safety improvement(s) shall be submitted and scored as separate project(s)).
- Bicycle and/or pedestrian improvements constructed independently, or as incidental features of an 80 percent eligible roadway project shall be constructed at an 80 percent federal share with 20 percent local match.

Note: The federal share requested for a proposed STBG-UZA project shall be maintained throughout the project development process and federal authorization. Any request to modify a project in order to separate it into two or more projects, with varying funding ratios, shall require an amendment of the TIP and submittal of a new project ranking worksheet, supporting documentation and programming resolution for each new separate project.

SUBMISSION POLICIES AND ELIGIBILITY

Each project selected for STBG-UZA funding in the **current year** being allocated, must be programmed through ACOG and ODOT once the new fiscal year project listing is finalized and approved by the MPO boards. Projects proposing STBG-UZA funding for **any year** of a new TIP must be accompanied by the documentation required by this criterion to receive consideration. In accordance with 23 CFR and O.S.47, governing all federal-aid projects, each proposed project must meet the state and federal minimum standards and the most recent edition of the FHWA *Manual on Uniform Traffic Control Devices (MUTCD)* to be considered for STBG-UZA funding.

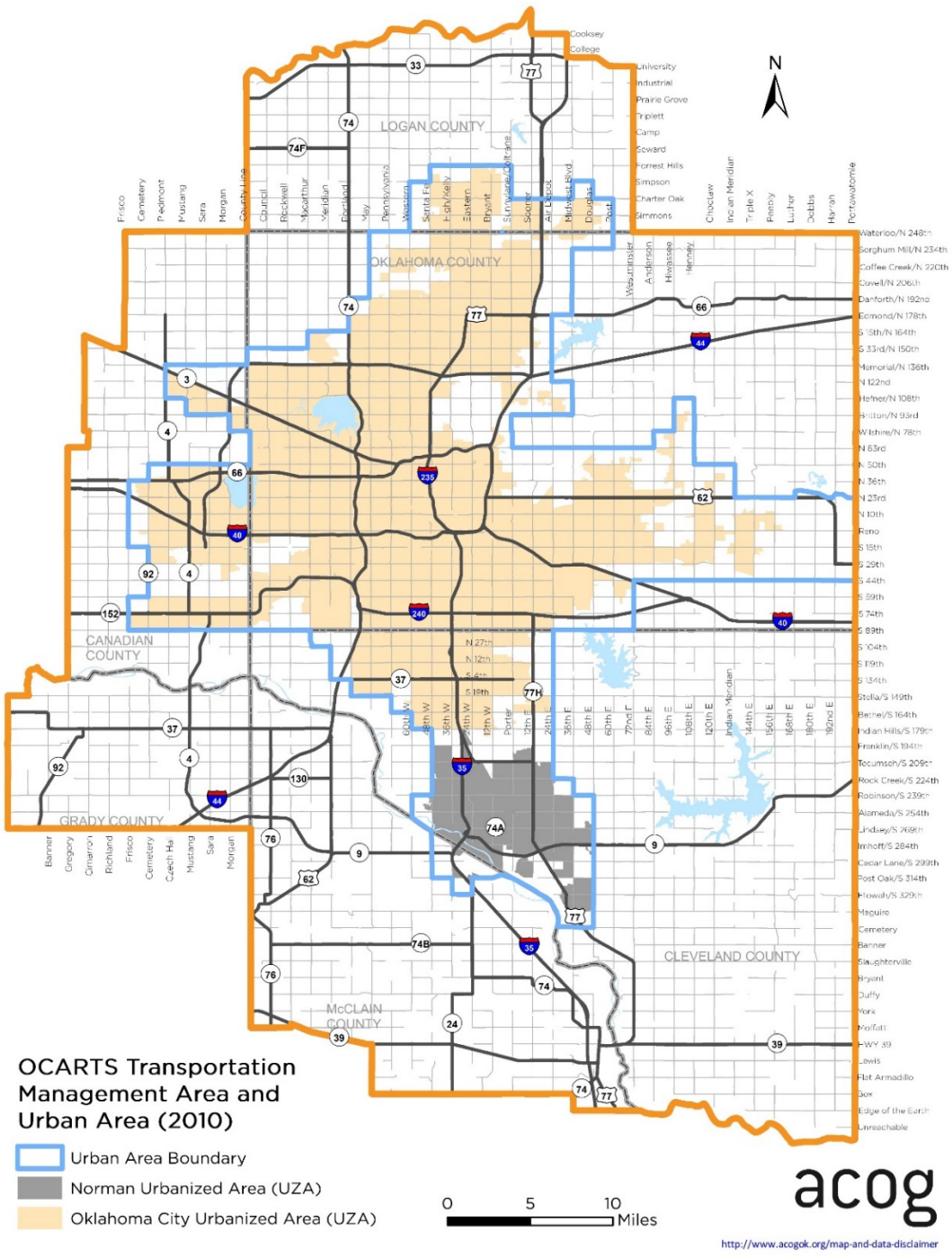
PROJECT SUBMISSION POLICIES

Projects proposed for STBG-UZA funding must comply with the following items (as stated in the STBG-UZA Procedures):

- Included in, or be consistent with, **the Metropolitan Transportation Plan (MTP).**
- Submit a **STBG-UZA application form** in eTRACKER for inclusion in the Transportation Improvement Program with a detailed explanation of the project location, description of improvement, proposed funding sources, estimated cost of project by funding source, and total project cost.
- Submit projects for which **local match funds** and other local expenses associated with the projects **will be available**, and environmental clearance, right-of-way acquisition, and utility and encroachment clearance (for construction projects) have been, or will be, accomplished within the federal fiscal year that the STBG-UZA funds are made available for obligation (approved by ODOT and FHWA).
- Provide the MPO with a **preliminary cost estimate** for each STBG-UZA project, prepared, signed, and stamped by a registered professional engineer licensed in the State of Oklahoma, and shall include information on materials, quantities, unit prices, etc. Cost estimates must be **current within 6 months** of the date of submission.
- The maximum amount of STBG-UZA funds authorized per project shall be **capped at $7,500,000.**
- No one entity may receive more than **56% of the region's STBG funds** in each TIP year**.**
- The cumulative total for transit and stand-alone bike/ped projects shall not exceed 10% of the region's STBG-UZA funds in each TIP year.
- Each entity will be limited to a **maximum of 20 total STBG-UZA project applications** over the TIP timeframe.
- No entity shall submit more than **10 projects for a single TIP year**.
- All projects which receive funding through the STBG-UZA program, cannot exceed the engineering estimate (plus inflation) amount stated in their application for the current Call for Projects year. Therefore, no projects can exceed their estimated cost (plus inflation), nor request an amendment to exceed that amount. **Any project cost overruns will be borne by the sponsoring entity(ies).**

WHO IS ELIGIBLE TO SUBMIT PROJECTS?

- Cities, counties, and transportation agencies located within the OCARTS area (see the STBG-UZA Project Scoring Criteria map for more detail).
- All projects must be located on a **functionally classified** road (see the STBG-UZA Project Scoring Criteria map for more detail) - all bridge projects are eligible regardless of classification.
  - Projects located on any federal or state highways, interstates or toll roads, are ineligible.



WHAT TYPE OF PROJECTS ARE ELIGIBLE?

Widening	The addition of travel lanes, turn lanes, or widening of existing travel lanes to an existing facility, thus resulting in an increase in vehicle capacity, including the widening of any bridges associated with the roadway improvement and railroad/highway grade separations associated with a widening project.
New Construction	New construction of a roadway on a new alignment, or on an existing alignment on which no road surface (other than dirt or gravel) has previously existed, including new bridge and intersection construction, if applicable.
Intersection/Safety	Widening at an intersection for turning lanes, installation of traffic signals (including school zone signals), improving sight distances, signal synchronization, improvements on approaches to intersections, and installation of barrier curbs. (An intersection is defined as extending 500 feet from the intersection of the centerlines or 450 feet from the stop bars for each leg of the intersection, whichever is greater).
Resurfacing	Includes resurfacing, reconstruction, rehabilitation, or restoration; Overlays with a minimum of an 8-year life as required by ODOT on existing pavements plus addition of material to bring shoulders to grade. Also includes bridge resurfacing, reconstruction, rehabilitation, or restoration associated with a roadway improvement, or intersection resurfacing.
Bridges	Replacement of a structurally deficient or functionally obsolete bridge or rehabilitation of an existing bridge to restore its structural integrity or to correct major safety defects, not associated with a roadway widening, new construction, or resurfacing project.
Independent Bicycle and Pedestrian Facilities/Projects	Includes bikeways, bike paths, bike routes, and pedestrian walkways that are physically separated from motorized vehicular traffic by an open space or barrier, located within the roadway right-of-way or separate right-of-way, and intended principally for transportation rather than recreational use. An independent bicycle project may include construction of bicycle facilities, signage, pavement markings, and bicycle parking facilities. This category does not include bikeway or walkway maintenance or any administrative costs.
Transit, Park-and-Ride Facilities, HOV Lanes	Procurement of transit vehicles, exclusive lanes for transit/HOV, park-and-ride lots, signal preemptions for transit/HOV, and bus shelters.
Carpool/Vanpool	Carpool/Vanpool Administration, Other.
Safety Projects (100% STBG-UZA)	Traffic lights and control signalization (new, upgrades, left turn signal phase, timing or interconnects), pedestrian signals, pedestrian crosswalks, raised reflective pavement markers, traffic circles (roundabouts), safety rest areas, pavement marking, school zone markings, commuter carpooling and vanpooling, rail-highway crossing closure, installation of traffic/warning/guide signs, guardrails, impact attenuators, concrete barrier end treatments, breakaway utility poles, and priority control systems for emergency vehicles or transit vehicles at signalized intersections.

SCORING CRITERIA

The scoring criteria for STBG-UZA project evaluation and selection was approved by ITPC on August 16, 2018, and **revisions were approved on September 26, 2019**. The following table is the STBG-UZA Scoring Criteria Breakdown. The scoring criteria tie directly to the ENCOMPASS 2040 long range plan goals and objectives. For more detailed information regarding scoring methodology, please see the STBG-UZA Scoring Criteria Breakdown sheet.

Encompass 2040 Goals	STBG-UZA Scoring Criteria	Widening	New Construction	Intersection/Safety	R,R,R&R	Bridges	Bike/Ped	Transit	Safety (100% Fed)
Economic Strength	Supports a regional activity center.	10	20	5	5	5	20	15	5
Safety and Security	Addresses safety at high crash severity locations.	10	5	25	10	10	5	10	50
Equity and Options	Provides options for Environmental Justice (E.J.) areas or underserved communities.	5	10	5	5	5	15	20	5
Healthy Communities	Improves air and water quality.	10	15	10	5	5	10	10	
Connectivity	Integrates multiple transportation modes.	15	15	5	5	10	30	15	
	Leverages other investments.	5	5	5	5	5	5	5	
System Performance	Addresses areas of high Volume to Capacity Ratio.	20	10	15	5	5	5	5	25
	Addresses congested or unreliable corridors.	5		5	5	5		5	5
	Contains strategies that reduce travel time delay.	20	20	25	5		5	10	10
System Preservation	Improves infrastructure condition.				50	50	5	5	
Highest Possible Score		100	100	100	100	100	100	100	100

Note: Some project types are not scored using certain criteria. These sections have been grayed out.

SCORING REVIEW

Once the proposed projects are submitted by the entities in eTRACKER for inclusion in the TIP, ACOG staff will review all projects for completeness and accuracy. Staff will ensure project submissions meet the STBG-UZA project application requirements and documentation.

STEPS IN THE REVIEW PROCESS

- ACOG staff review for completeness, accuracy, and documentation (if more information is needed, ACOG may contact entity to request).
- ACOG staff will compare the total amount of STBG-UZA funds requested, plus inflation for each federal fiscal year, to the total amount available for project prioritization.
- ACOG will convene a special ITTC meeting to review projects submitted for evaluation, members assist ACOG staff in verifying the scoring process.
- ITTC special committee will prepare a STBG-UZA project priority list for each year under consideration (recommended for inclusion in the TIP) for the ITPC (the total amount of STBG-UZA funds anticipated to be available for each year will be considered in determining the cut-off point for fundable projects).

CALL FOR PROJECTS SCHEDULE

Event	Date
Call for projects workshop	11/01/2019 - 10:00am-12:00pm
Call for projects open	11/01/2019
Call for projects closed	12/20/2019
ACOG staff analysis	12/21/2019-2/13/2020
Special ITTC meeting	2/13/2020

APPLICATION AND SUBMISSION PROCESS

STBG-UZA PROJECT SCORING DASHBOARD AND WORKSHEETS

All scoring criteria maps, document links, including the application worksheets, can be found in the STBG-UZA Project Scoring Criteria Dashboard. Please create a new excel file for each project submission using the correct worksheet for the project type. For scoring and calculations, fill in the light orange shaded areas with the requested information. When a measure is selected, and/or requested information is filled in, scores will automatically populate.

eTRACKER ONLINE SUBMISSION

eTRACKER log-in

https://etracker.acogok.org/secure/login. *If you have not already signed up for a log-in, please sign up immediately to ensure timely approval and access to the system.*

eTRACKER submission process

- Log-in as a sponsor or CFP user
- Select the CFP or 'Call for Projects' submission button
- Add/create new project for each application, be sure to identify the correct TIP year
- Fill in all required information fields
- Map project location(s) in eTRACKER system (if applicable) – or upload map
- Upload one calculation worksheet per project and all other required documentation
- Submit all project applications in the system by deadline

Please see the *eTRACKER Guidebook* for a detailed outline of online submission process.

Required documents for each project

- Local resolution
- Engineering cost estimate (+ 6% for ODOT E&C) (signed and stamped within the last six months)
- Calculation worksheet (create (save as) a new worksheet for each project)
- V/C ratio calculation methods and input
- Bridge sufficiency rating and/or PCI index score or coring results (if applicable)
- ODOT Scoping Form

PROJECTS WITH MULTIPLE ASPECTS AND LOCATIONS

For the purpose of determining if a project involves multiple aspects, an **intersection shall be defined as extending 500 feet from the intersecting centerlines or 450 feet from the stop bars for each leg** of the intersection, whichever is greater. Widening projects which extend significantly beyond this distance will be considered a separate aspect, and not a part of the typical widening at an intersection for turn lanes.

If a project has **multiple aspects** such as widening and intersection improvements, the project cost estimate should be itemized by the appropriate categories. Then the project scores from each category will be factored on a percentage basis (e.g. 40% widening, 60% intersection improvement) to allow the project scoring to reflect the blend of the two aspects.

Project sponsors are encouraged to construct bicycle and/or pedestrian improvements as incidental features of roadway, intersection and bridge projects. Such projects will be scored based on the evaluation criteria and weights applicable to the appropriate roadway category, and all improvements will be funded at the federal share applicable to the roadway improvement.

For projects that **have multiple aspects in multiple locations** (i.e. safety projects that involve striping or improvements at multiple intersections around a city), locations shall be clearly defined and mapped. For the purposes of scoring, please identify the location of the greatest need (highest V/C ratio and highest crash severity), and supply documentation for that individual location.

SAFETY PROJECTS (100% FEDERAL FUNDING)

Please note, on page 5, the types of projects eligible to receive safety funding at 100% federal. Additionally, projects must be in an area that has had at least one preventable accident to be eligible, unless the project is located within a school zone. All school zone projects are eligible. Eligible safety projects will compete separately from the 80/20 projects for funding in each TIP year.

PROJECT EVALUATION CRITERIA

ECONOMIC STRENGTH

C1. Does this project support a regional activity center?

Select one of the following measures:	
Project is not within an Activity Zone	0%
Project is wholly or partially within the ¼ mile Activity Zone buffer	50%
Project is wholly or partially within an Activity Zone	100%

Refer to the online criteria map within the STBG-UZA Project Scoring Criteria Dashboard to help answer this question.

Note: All criteria that require maps can be found using the same link. Once the map is accessed, each question is represented by a layer in the map and can be turned off and on in the map legend. If the project spans two zones, points will be given for the higher of the two. On the border is considered in.

Please see Appendix A for calculation methods and information on data.

SAFETY & SECURITY

C2. Does this project address safety issues in a regional high crash severity location?

Select one of the following measures and identify safety countermeasure strategy:	
Project is not in an elevated regional high crash location	0%
Project is wholly or partially in an elevated regional high crash location and improves safety at that location	30%
Project is wholly or partially in a moderate regional high crash location and improves safety at that location	60%
Project is wholly or partially in a severe regional high crash location and improves safety at that location	100%

Stand-alone bike/ped crashes are scored using a Bike/Ped Crash Severity Map in addition to the regular Crash Severity Map. Crash severity (elevated, moderate, or severe) is not considered when scoring bike/ped crashes.

Refer to the online criteria map within the STBG-UZA Project Scoring Criteria Dashboard to help answer this question. If the project spans two zones, points will be given for the higher of the two. Projects located in an elevated, moderate, or severe regional high crash location but do not identify a safety countermeasure strategy will receive zero points.

Please see Appendix A for calculation methods and information on data.

Safety countermeasure strategies

1. Install/upgrade traffic signals, signal timing and interconnection, left turn signal phase, priority control systems at signalized intersections
2. Roundabouts
3. Corridor access management
4. Backplates with retroreflective borders, stop signs, warning/guide signs
5. Longitudinal rumble strips and stripes on 2-Lane Roads
6. Enhanced delineation and direction for horizontal curves
7. Medians and pedestrian crossing islands in urban and suburban areas
8. Pedestrian hybrid beacon/signals/crosswalks/markings
9. "Road Diets" (roadway reconfiguration)
10. Improvement of sharp hills/steep curves
11. Cable/concrete barriers or guardrails, impact attenuators
12. Pavement markings, edge markings, safety edge
13. Lighting improvements
14. Transit stop improvements/signals/signs
15. Grade separation (all modes)
16. School zone improvements
17. Safety treat utility poles Install breakaway utility poles
18. Other (please specify)

EQUITY & OPTIONS

C3. Does the project increase access in an area of Environmental Justice concern?

Select one of the following measures and identify project improvement type:	
Project does not improve access or is not located in an E.J. area	0%
Project is wholly or partially in an area of moderate E.J. concern	50%
Project is wholly or partially in an area of significant E.J. concern	100%

Refer to the online criteria map within the STBG-UZA Project Scoring Criteria Dashboard to help answer this question. If the project spans two levels of E.J. Concern, points will be given for the higher of the two. Projects bordering an area of E.J. Concern are considered in.

Please see Appendix A for calculation methods and information on data.

Types of eligible E.J. project improvements

1. Improves transit service
2. Increases modal options
3. Improves access to jobs
4. Shortens commute time
5. Other (please specify)

HEALTHY COMMUNITIES

C4. Does the project support efforts to improve air and water quality?

Select one of the following measures and identify strategies utilized:	
Project does not include any of the following strategies or N/A	0%
Project includes 1 of the following strategies	10%
Project includes 2 of the following strategies	40%
Project includes 3 of the following strategies	60%
Project includes 4 or more of the following strategies	100%

Air or water quality strategies

1. Storm water management techniques: bioswales, rain gardens, rainwater harvesting, detention ponds, constructed wetlands, wide grass ditches, catch basins
2. Reduced street width, and/or permeable pavement
3. Streetscapes: street trees, native/drought landscaping, street lights, and/or street furniture
4. Complete Street techniques or policies
5. Promotes ridesharing
6. Promotes truck idle reduction
7. CMAQ – Bike/Ped Facilities (non-road or pavement construction and not strictly recreational)
8. AQ[1] – Transit improvements
9. AQ[1] – Traffic flow Improvements (ITS)
10. AQ[1] – Travel demand management
11. Other (please specify)

AQ[1] – Projects eligible for funding under ACOG's Air Quality Small Grant Program (formally CMAQ).

Note: The strategies used must account for at least 1% of the total project cost to be eligible to earn points.

CONNECTIVITY

C5. Does this project integrate multiple transportation modes?

Select one of the following measures and identify how project integrates multiple modes:	
Project design includes 1 mode or N/A	0%
Project design includes 2 modes	20%
Project design includes 3 modes	60%
Project design includes 4 modes	100%

Definition of modes

- Automobile or truck - street and highway
- Public transit – bus facility AND/OR rail facility (just a route running through does not qualify)
- Bicycle - bicycle facility AND/OR on-street bike lane AND/OR multi-use trail
- Pedestrian - sidewalk AND/OR trail

Note: Two facilities using the same mode only counts as one mode. Ex. Bus stop and train station along the project counts as one additional mode. Integrated facilities should be context appropriate for the road type as demonstrated through a local plan/study or local resolution or letter of support. Transit projects receive full points for this criterion.

C6. Does this project provide benefits for multiple communities or leverage other investments?

Select one of the following measures and identify the communities that will benefit and how:	
Project does not benefit multiple communities or N/A	0%
Project supports multiple communities	100%

Examples of projects that meet this criterion:

- A project that ends at the boundary of another city or county.
- A joint project between two entities and ODOT (leverages ongoing project by ODOT).
- Projects that are implemented in phases, even if some of the phases do not physically connect with other jurisdictions. (phases must be supported by the entity – supporting documents required).

Note: This list is not exhaustive. Contact ACOG for questions.

SYSTEM PERFORMANCE

C7. Is this project located in an area where volume meets or exceeds capacity identified through a Volume to Capacity Ratio?

Select one of the following measures:	
Project has a V/C ratio below .5	0%
Project has a V/C ratio between 1.3 and .5	Varied
Project has a V/C ratio above 1.3	100%

For projects that have V/C ratios that fall between 1.3 and .5, points will be assigned based on the following calculation: subtract .49 from the V/C ratio and multiply by criteria score for project type.

Please see Appendix A for full calculation methods and information on data.

Note: MUST provide documentation.

C8. Is this project located on a regionally congested or unreliable corridor?

Select one of the following measures and identify the strategy utilized:	
Project is not located on a congested or unreliable corridor or N/A	0%
Project is located wholly or partially on a congested or unreliable corridor (cannot cross)	100%

Refer to the online criteria map within the STBG-UZA Project Scoring Criteria Dashboard to help answer this question. Projects must utilize at least one strategy, which excludes widening, from the Congestion Management Toolbox or architecture deployment plan to receive full points.

Please see Appendix A for calculation methods and information on data.

C9. Does the project utilize strategies that help improve reliability of travel times?

Select one of the following measures and identify strategies utilized:	
Project design includes 1 strategy or N/A	0%
Project design includes 2 strategies	20%
Project design includes 3 strategies	60%
Project design includes 4 strategies	100%

Strategies to improve travel time reliability

1. Improves traffic signal timing
2. Improves access management
3. Improves intersection geometry
4. Adds capacity
5. Deploy Intelligent Transportation Systems (ITS)
6. Promotes use of alternate modes of transportation
7. Increases transit services, coverage area, and access
8. Promotes carpooling and park-and-ride
9. Improves sight distance
10. Improves traffic incident management and/or reduces clearance times
11. Relieves a bottleneck
12. Road assets (e.g. roadside cameras, dynamic message signs, vehicle speed detectors)
13. Traffic signals with emergency and/or transit vehicle preemption
14. Pedestrian crossing detection
15. Traveler information systems
16. Incident detection technologies
17. Electronic toll systems
18. Ramp metering
19. Transit Automated Vehicle Location/Computer-Aided Dispatch
20. Work Zone Management Systems
21. Commercial Vehicle Information Systems and Networks
22. Transportation Management Centers (TMC)
23. Other (please specify)

SYSTEM PRESERVATION

C10. Does the project help improve infrastructure condition?

Select one of the following measures for bridge projects:	
Project has a bridge with sufficiency rating above 81 or N/A	0%
Project has a bridge with a sufficiency rating between 50 and 81	50%
Project has a bridge with a sufficiency rating below 50	100%

Select one of the following measures for pavement projects:	
Project has pavement condition with no degree of stress or N/A	0%
Project has pavement condition with low degree of stress	25%
Project has pavement condition with medium degree of stress	50%
Project has pavement condition with a high degree of stress	100%

If the project includes both a bridge and pavement aspect, please select one measure from each section.

Note: MUST PROVIDE DOCUMENTATION in the form of a bridge sufficiency rating and/or a Pavement Coring Index (PCI) value or coring sample results.

QUESTIONS?

For assistance with eligibility, online submission, data and resources, or other issues, please contact ACOG at **tip@acogok.org** or **(405) 234-2264**.

APPENDIX A - CALCULATIONS AND DATA

C1. Does this project support a regional activity center?

These areas were compiled from existing land use and employment data and contain an employment density of at least 5,000 (or 10,000) employees per square mile. Some areas that generate large amounts activity not represented by their employment were added by staff. If the project spans two zones, points will be given for the higher of the two.

Data source: Land use data is created by ACOG staff with help from local communities and the employment data is compiled by ACOG staff from the Oklahoma Employment Security Commission (OESC).

Data and map updates: Data and map will be updated *about* every five years to reflect updated data analyzed as part of the long-range transportation plan.

C2. Does this project address safety issues in a regional high crash location?

Regional high crash locations were determined by analyzing vehicle crashes for a five-year period, from 2013-2017. A weighted severity index was calculated for crashes that occurred in a location for the given period. A 500-foot buffer was created around the locations that met the three designated crash severity levels.

Weighted Severity Index = (2 * number of fatalities) + (1.25 * number of injuries) + (number of vehicles)

Using the Natural Breaks (Jenks) classification, severity groupings are:

- Elevated: 19.75-82.25
- Moderate: 82.26-245.5
- Severe: 245.6+

Data source: Downloaded from Oklahoma Department of Transportation's (ODOT) SAFE-T Crash database and analyzed by ACOG staff. (https://oksafe-t.org/)

Data and map updates: Data and map will be updated annually to reflect the previous five years of crash data available.

C3. Does the project increase access in an area of Environmental Justice Concern?

Environmental Justice (E.J.) Concern areas were created by calculating the percentage per Census block group for each of six disadvantaged populations: low income, minority, elderly (over 65), disabled, limited English speakers, and households without vehicle access. The block groups were divided into three groups based on the degree of disadvantage populations they contain: Significant E.J. Concern, and Moderate E.J. Concern.

Data source: Data compiled by ACOG staff from U.S. Census Bureau.

Data and map updates: Data and map will be updated *about* every five years to reflect updated data analyzed as part of the long-range transportation plan.

C7. Is this project located in an area where volume meets or exceeds capacity?

Street Segment Projects Volume to Capacity Ratio:

The measure of the degree of traffic congestion on a street segment based on 24-hour volume/capacity[1], is to be calculated **using the capacities listed on the following tables regardless of functional classification.** The capacities listed are applicable to all street projects except intersection improvements. For route specific projects, the same ADT count, or average, used for the ADT evaluation measure shall be used in calculating the V/C ratio. For transit projects, use the average V/C ratio per mile for the applicable facilities served by the transit routes. For new construction projects, use the model simulation data.

Rank	Definition
3	1.30 or higher
varies	Sliding scale to be used to rank projects with V/C ratio between 1.30 and .49. *
0	.49 or lower

Note: If a proposed project has a V/C ratio lower than 1.30 but higher than .49, it will be evaluated and rated on a percentage basis. The rating points will be rounded to the third decimal place.

Calculations:

- Let the proposed project V/C ratio = R
- Subtract .49 from R, and multiply by 1.235. The result = D
- Multiply D x project type criteria score from worksheet. The results = N

Example calculation:

- Proposed project has V/C ratio of 1.23 — R = 1.23
- 1.23 - .49 = .74 x 1.235 = .9139 — D = .9139
- .9139 x 20 (widening project) = 18.278 — N= 18.278

[1] Capacity measures will be defined at Level of Service C.

Non-access controlled facility capacities (Level of Service C)

Two-way streets:

Total Travel Lanes	Through Lanes per Direction of Travel	Undivided	Plus Continuous Center Turn Lane	Divided with Median
2	1	10,000	12,000	14,000
3	2 & 1	16,000	18,000	20,000
4	2	22,000	24,000	26,000
5	2 & 3	28,000	30,000	33,000
6	3	32,000	36,000	40,000

One-way streets:

Total No. of Lanes	Total Capacity
2	12,000
3	18,000
4	24,000
5	30,000
6	36,000

Note: Use of this chart assumes that the project being evaluated meets STBG-UZA functional classification requirements. Capacities for the above facilities are estimated according to total number of lanes for a 24-hour period (including continuous left turn lane, if present).

Intersection Projects Volume to Capacity Ratio:

The measure of the degree of peak hour traffic congestion at an intersection will be based on the Transportation Research Board's latest edition of the *Highway Capacity Manual* or other recognized computer program for calculations of volume/capacity. Peak hour is typically defined as the one hour between 4:00 p.m. and 6:00 p.m. with the highest traffic volume. Data should be provided in 15-minute increments. The assumptions and/or variables used in estimating intersection volume/capacity ratios must be documented. If two different V/C ratios are involved at an intersection, use the statistics that demonstrate the strongest need and therefore correspond to be highest rank.

Note: Intersection projects will use the same scoring calculation methods as the segment projects.

The documentation to be submitted for the V/C ratio evaluation measure is:

Segment projects:

- The 24-hour ADTs for the area that the project covers
- The existing number of lanes
- V/C ratio

Intersection projects:

- One-hour peak hour (typically between 4:00 p.m. and 6:00 p.m., although a different peak hour may be applicable to certain locations) turning movement volumes for individual legs.
- Geometry of the intersection: number of lanes and lane widths in feet for individual lanes.
- Adjustment factors: grade, percentage of heavy vehicles, parking, number of buses which stop at the intersection per hour, peak hour factor, number of pedestrians, pedestrian buttons, and traffic arrival types as described in the *Highway Capacity Manual*.
- Signal settings: green/yellow/red times in seconds.
- Signal phase plan.

If project has *multiple locations*, please only provide information for the segment or intersection with the greatest need/scores the highest. For entities which do not have access to the *Highway Capacity Manual* or Software for determining the V/C ratio for intersection projects, ACOG can provide technical assistance if the above intersection requirement data is submitted in its entirety with sufficient lead time.

Data source: Entities provide data for these calculations. ADT's for some locations can be found on ACOG's traffic count database.

Data and map updates: Provided by entity annually.

C8. Is this project located on a regionally congested or unreliable corridor?

Commonly derived from various travel time datasets including the National Performance Management Research Dataset (NPMRDS), the travel time index (TTI) quantifies and summarizes congestion by comparing the amount of time it takes vehicles to traverse links in the system at peak travel times to the amount of time it takes under free-flow conditions. This metric is usually presented as a ratio: if a link has a TTI of 2.0, it takes twice as long to traverse that link during peak times as it does during free-flow conditions. A TTI of around 1.0 essentially means that free-flow conditions exist during peak travel times. Congested corridors were created by identifying segments of road that have a ratio of 1.1 or higher and reflects travel times greater than free flow conditions during peak times.

The NPMRDS data covers only the enhanced National Highway System (NHS), which generally consists of roads included in older versions of the NHS plus roads functionally classified as Principal Arterials. These roads are of greater regional importance than others, so it is therefore acceptable that these roads are eligible for more points under this and other criteria. Highways, freeways, interstates, and toll routes were excluded from the analysis because they are not eligible for ACOG's STBG-UZA funding.

Note: For ACOG's analyses, peak periods are defined as 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM on weekdays, widely-observed holidays excluded.

Data source: Travel time data from the FHWA/RITIS NPMRDS dataset.

Data and map updates: Data and map will be updated annually to reflect the latest travel time data.