OKI-Allocated Federal Funds: Project Application Guidance for 2023 Project Prioritization Process

Surface Transportation Block Grant Program (STBG) – OHIO

Congestion Mitigation/Air Quality (CMAQ) - Ohio

Surface Transportation Block Grant Program for Northern Kentucky (SNK) – KY

OKI
Ohio · Kentucky · Indiana
Regional Council of Governments

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Introduction

The purpose of this document is to provide information about the process used by the Ohio-Kentucky-Indiana Regional Council of Governments (OKI) to prioritize and award OKI-allocated federal Surface Transportation Block Grant Funds (STBG) and Congestion Mitigation/Air Quality (CMAQ) funds to projects that further the goals of the continuing, coordinated and comprehensive nature of transportation planning towards implementation. This process discusses only awards over which OKI has direct ability and duty to make, including federal STBG funds in Ohio, CMAQ funds in Ohio, and STBG for Northern Kentucky (SNK). This packet also includes the application and guidance for applicants.

This document is divided into three sections:

Project Eligibility Requirements - this section covers eligible project types identified in Title 23 of the USC and OKI requirements

Prioritization Process – the description of the OKI Board-adopted procedure

Guidance for Applicants and Project Scoring Process – explanation of overall process details, listing and description of factors, measures used in project scoring and listing of potential points awarded.

Project Eligibility Requirements

OKI funds may be used within the OKI urbanized area (UZA). Roadway projects are limited to the functionally classified (FC) roadway network. Bike, pedestrian, transit and non-highway freight projects are not limited to the FC network but are limited to the UZA. **Use the OKI Project Application Assistant (PAA) software** for data and maps showing these elements: https://gis.oki.org/paa/.

Eligible activities

STBG eligibilities are described below:

- Construction, reconstruction, rehabilitation, resurfacing, restoration, preservation, or operational improvements for highways, including designated routes of the Appalachian Development Highway System (ADHS) and local access roads under 40 USC 14501.
- Replacement, rehabilitation, preservation, protection, and anti-icing/deicing for bridges and tunnels on any public road, including construction or reconstruction necessary to accommodate other modes.
- Construction of new bridges and tunnels on a Federal-aid highway.
- Inspection and evaluation of bridges, tunnels and other highway assets as well as training for bridge and tunnel inspectors.
- Capital costs for transit projects eligible for assistance under chapter 53 of title 49, including vehicles and facilities used to provide intercity passenger bus service.

- Carpool projects, fringe and corridor parking facilities and programs, including electric and natural gas vehicle charging infrastructure, bicycle transportation and pedestrian walkways, and ADA sidewalk modification.
- Highway and transit safety infrastructure improvements and programs, installation of safety barriers and nets on bridges, hazard eliminations, mitigation of hazards caused by wildlife, railway-highway grade crossings.
- Highway and transit research, development, technology transfer.
- Capital and operating costs for traffic monitoring, management and control facilities and programs, including advanced truck stop electrification.
- Surface transportation planning.
- Transportation alternatives --newly defined, includes most transportation alternatives eligibilities. [See separate "Transportation Alternatives" fact sheet]
- Transportation control measures.
- Development and establishment of management systems.
- Environmental mitigation efforts (as under National Highway Performance Program).
- Intersections with high accident rates or levels of congestion.
- Infrastructure-based ITS capital improvements.
- Environmental restoration and pollution abatement.
- Control of noxious weeds and establishment of native species.
- Congestion pricing projects and strategies, including electric toll collection and travel demand management strategies and programs.
- Construction of ferry boats and terminals.
- Border infrastructure projects.
- Truck parking facilities.
- Development and implementation of State asset management plan for the NHS, and similar activities related to the development and implementation of a performance based management program for other public roads.
- Surface transportation infrastructure modifications within port terminal boundaries, only if necessary to facilitate direct intermodal interchange, transfer, and access into and out of the port.
- Construction and operational improvements for a minor collector in the same corridor and in proximity to an NHS route if the improvement is more cost-effective (as determined by a benefit-cost analysis) than an NHS improvement and will enhance NHS level of service and regional traffic flow.
- Two eligibilities formerly covered by the repealed Highway Bridge Program (HBP)—
    - Construction of a bridge that replaces a low water crossing of any length, a bridge that was destroyed prior to January 1, 1965, a ferry that was in existence on January 1, 1984, or any road bridge rendered obsolete by a Corps of Engineers (COE) flood control or channelization project and not rebuilt with COE funds.
    - Actions to preserve or reduce the impact of a project on the historic integrity of a historic bridge under specified conditions. [§1111; 23 USC 144(f)-(g)]
- The Bipartisan Infrastructure Law (BIL) STBG Program continues all prior STBG eligibilities (see in particular 23 U.S.C. 133(b)(22), as amended, which carries forward all pre-FAST Act eligibilities). It also adds the following new eligibilities: [Except as noted, § 11109(a)(1)]

- Privately-owned, or majority-privately owned, ferry boats and terminal facilities that, as determined by the Secretary, provide a substantial public transportation benefit or otherwise meet the foremost needs of the surface transportation system [23 U.S.C. 133(b)(1)(B)];
- Wildlife crossing structures, and projects and strategies designed to reduce the number of wildlife-vehicle collisions [23 U.S.C. 133(b)(1)(G); 23 U.S.C. 133(b)(14)];
- The addition or retrofitting of structures or other measures to eliminate or reduce crashes involving vehicles and wildlife [23 U.S.C. 133(b)(3)];
- Projects eligible under 23 U.S.C 130 and installation of safety barriers and nets on bridges [23 U.S.C. 133(b)(5)];
- Maintenance and restoration of existing recreational trails [23 U.S.C. 133(b)(7)];
- Installation of electric vehicle (EV) charging infrastructure and vehicle-to-grid infrastructure [23 U.S.C. 133(b)(15)];
- Installation and deployment of current and emerging intelligent transportation technologies [23 U.S.C. 133(b)(16)];
- Planning and construction of projects that facilitate intermodal connections between emerging transportation technologies, such as magnetic levitation and hyperloop [23 U.S.C. 133(b)(17)];
- Protective features, including natural infrastructure, to enhance resilience of an eligible transportation facility [23 U.S.C. 133(b)(18)];
- Measures to protect an eligible transportation facility from cybersecurity threats [23 U.S.C. 133(b)(19)];
- Conducting value for money analyses or similar comparative analyses of public-private partnerships [§ 11508(d)(2); 23 U.S.C. 133(b)(21)]
- [Up to 5% of STBG apportionment] rural barge landing, docks, and waterfront infrastructure in a rural community or Alaska Native village that is off the road system; [§ 11109(a)(7);
  23 U.S.C. 133(b)(23) and (j)];
- Projects to enhance travel and tourism [23 U.S.C. 133(b)(24)];
- Replacement of low-water crossing with a bridge not on a Federal-aid highway [§ 11109(a)(2)(D); 23 U.S.C. 133(c)(4)];
- Capital projects for the construction of a bus rapid transit corridor or dedicated bus lane [§ 11130; 23 U.S.C. 142(a)(3)]; and
- [Up to 15% of STBG apportionment] may be used on otherwise STBG-eligible projects or maintenance activities on roads functionally classified as rural minor collectors or local roads, ice roads, or seasonal roads, may be transferred to the Appalachian Highway System Program or the Denali Access System Program [§ 11109(a)(7); 23 U.S.C. 133(k)].

- Link to the FHWA website for the STBG program: https://www.fhwa.dot.gov/bipartisan-infrastructure-law/stbg.cfm
- Some STBG eligible activities may also qualify and be eligible to receive CMAQ funding in Ohio. CMAQ eligible activities include transit vehicle replacement, intermodal freight projects, and certain congestion relief strategies. A complete listing of CMAQ eligible activities can be found at https://www.fhwa.dot.gov/environment/air_quality/cmaq/ . Discussion of the prioritization process, project conditions and application guidance

below also apply to any CMAQ eligible project. CMAQ projects are further subjected to review by the Ohio Urban CMAQ Committee.

Prioritization Process

OKI receives a sub-allocation of federal STBG funds and has the authority and responsibility as the MPO to allocate these to transportation projects in the region. OKI also receives suballocated CMAQ funds in Ohio for which this application is used as well. Typically this occurs every other year as prescribed by the Ohio Statewide Urban CMAQ Committee. The OKI Board of Directors has established the following process for soliciting, reviewing and ranking highway, transit, bicycle/pedestrian and non-highway freight projects funded with OKI-allocated STBG funds. The Prioritization Subcommittee, a subcommittee of the OKI Intermodal Coordinating Committee (ICC), reviews and revises the scoring process for applications on an "as needed" basis.

1. **Establish a project solicitation period** based on a TIP/STIP development schedule responsive to the needs of local and state transportation agencies.
2. **Advertise the project solicitation period** via the OKI website, social media, etc.
3. **Hold a workshop** for prospective applicants to inform them of the application process, deadlines and scoring procedures developed by the OKI Prioritization Subcommittee.
4. **Accept completed applications until the advertised deadline**. Once the application has been submitted to OKI, the project request is fixed—no changes in cost, scope or other aspect will be allowed. The only exception to this requirement will be if non-OKI funding becomes available to the applicant and the requested amount of OKI funding can be reduced.
5. **Hold ICC Prioritization Subcommittee Review Meetings**. These meetings allow for discussion of individual highway and transit projects by the subcommittee and the eventual ranking of projects funded with OKI-allocated funds. The ranking of projects is based on the ICC adopted scoring process shown later in this document.
6. **Recommendation by the ICC.** The ICC reviews the findings of the Prioritization subcommittee. The ICC will review the recommendations to determine that "Regional Priorities" are achieved through the suggested rankings and recommends a list of funded projects to the OKI Board of Directors.
7. **Adoption by OKI Board of Directors.** Funding awards for projects are approved.
8. **Added to the OKI Transportation Improvement Program (TIP).** Projects and funding amounts are added to the TIP and submitted for inclusion in the Statewide TIPs (STIPs).

Project Conditions

The following funding limitations will be applied to each project requesting OKI STBG/CMAQ funding in Ohio.

1. Eligible Phases

   Ohio: Preliminary Engineering--Right-of-Way Services (PE-RWS), Right-of-Way (ROW), Utilities (UT) and Construction (CON) phases are eligible for funding. Preliminary engineering (not associated with PE-RWS), environmental and contract plans are the responsibility of the applicant.

Kentucky: Design (D) (includes Preliminary Engineering (PE) and right-of-way services (PE-RWS), Right-of-Way (ROW), Utilities (UT) and Construction (CON) phases are eligible for funding.

2. Applicants who receive funding through OKI should work closely with OKI and the district office on a coordinated schedule. Strict adherence to schedule milestones is a fundamental requirement. PE-RWS funds may be used for limited right-of-way services (such as title searches, appraisals and appraisal reviews) prior to approval of the environmental document with approval from the OKI TIP Manager.
3. The standard local match requirement for OKI allocated federal funds is 20%. Applicants may commit a higher percentage to gain additional points as shown in the Planning Factors section of the adopted scoring process.
4. Applicants must provide a certified or otherwise official cost estimate for each project request. At the applicant's discretion, the cost estimate may include an additional 10% contingency for construction activities. All cost estimates should be in current year dollars. OKI will apply a standard inflation factor.
5. The maximum to be awarded will be the amount listed in the application, as adjusted for inflation, or as determined by the OKI Board of Directors. The Cost Estimate sheet in the application will apply a compounded growth rate to the construction costs based on the ODOT inflation calculator. Applicants should make sure their request is sufficient to cover the cost of the activities shown in their application, including inflation. Applicants may include the addition of a 10% contingency for the construction phase. Each phase of funding requested must include at least 20% non-federal match.
6. The following scope limitations will apply to each project request:

    - Each applicant is limited to a total of two project applications requesting STBG/CMAQ funds in Ohio or limited to two project applications requesting Kentucky SNK funds. If an applicant is making an application on behalf of another entity, that application will not count towards the total number of applications allowed. For example, if a county makes an application on behalf of a township, which is ineligible to apply directly to ODOT, that application will not count towards the county's total applications allowed.

    - Total funding request per Ohio application cannot exceed $8,000,000 for STBG/CMAQ funds (the cap). Total funding request per Kentucky application cannot exceed $6,500,000 for SNK funds (the cap). If a project slips from its original programmed year, the project may not request additional funds for the same project. Larger projects may initially be broken into different segments for funding purposes provided there is logical termini/independent utility; if one segment slips past its originally programmed year, that segment may not request additional funds. However, if another segment of the project is on schedule, that segment may request additional funds up to the cap. The total project funding for a single application is capped at the approved amount. The OKI TIP Manager may approve one-time requests for additional funding up to 10%. Additional funds are subject to fund balances and normal OKI procedures for amending and modifying the TIP.

    - Projects must be located within the OKI urbanized boundary. OKI has historically not funded projects outside the urbanized area since other funding sources, such as the County Engineers Association of Ohio, are available.

- Projects must be listed or consistent with the OKI 2050 Metropolitan Transportation Plan. Roadway projects must be located on functionally-classified collectors or higher.

Performance-Based Planning and Programming

The OKI Project Prioritization Process continues to address the Planning Factors identified in USC 23 CFR 134 Metropolitan Planning and responds to the BIL requirements for performance-based planning and programming. To the extent practical, the OKI process includes metrics that allow for assessment of the progress towards achieving measurable progress towards targets for safety, pavement and bridge condition, travel time reliability, freight reliability, traffic congestion, mobile source emissions reductions and transit asset management.

Guidance for Applicants

The **Prioritization Process** is a competitive application process that is used to allocate OKI federal surface transportation block grant funds in Ohio and Kentucky. As part of the process, a workshop will be held for potential applicants where OKI staff provides background and is available to answer specific questions about procedures.

The **Application Form** is to be filled out by the applicant. Supplemental information/attachments may be included at the end of the application if absolutely necessary. They should be as condensed as possible. Incomplete applications may be rejected. The application can be found at https://funding.oki.org/

The **Project Scoring Process** is the method under which the Prioritization Subcommittee reviews and ranks the individual applications. A detailed explanation of the revised scoring process follows. An application is first scored using Transportation Factors (highway, transit, non-highway freight factors, or bike/ped) depending on the mode. Transportation factors take into account a variety of measures related to performance and condition and are mode-specific. A subtotal of 45 points is available. All projects are then scored on Planning Factors, which are non-mode specific and are standard elements against which all projects regardless of mode are scored. A subtotal of 65 points is available with the planning factors. The overall total score is the sum of the Transportation and Planning factors. Applications for Transportation Alternatives (TA) funding follow a separate Project Scoring Process. The TA Project Scoring Process is documented in the TA Project Application Guidance Document.

Transportation Factors for Roadway Projects (45 points)

1. (5) The score for safety is based on the cost of excessive expected crashes in dollars per mile for roadway segments or per intersection. Safety performance functions are derived using data from the OKI region and are based on roadway geometry, traffic volumes and area type (urban vs rural) for roadway segments. For intersections, functions are based on stop control, traffic volume and area type (urban vs rural). Crash costs are estimated using FHWA and Center for Disease Control (CDC) national values. High cost indicates the project area is experiencing a high magnitude and/or number of severe crashes. Only segments or intersections that have excess expected costs would score 1 to 5 points all others are zero. The score can be obtained through the Project Application Assistant (PAA). New roads will be estimated by staff.

2. (5) **Impact on Safety** assesses the impact the proposal will have on the existing situation, ranging from 0 to 5 points depending on the estimated crash reduction factor and improvement type (see Appendix A).

3. (5) The **Average Daily Traffic (ADT)** measures the current traffic volumes in the project area. Volumes from less than 5,000 vehicles per day (VPD) to 40,000 VPD equate to a scoring range of 0 to 5 points. The ADT can be obtained from the PAA. If the applicant has more current data, it may be provided. If the project involves numerous roadway segments, an average may be used and documented.

4. (5) **Travel Time.** Level of Travel Time Reliability (LOTTR) is used to measure the extent of unexpected delay. This data is provided to OKI through the National Performance Measure Research Data Set (NPMRDS). The measure compares the longer travel time (80th percentile) with the "normal" travel time (50th percentile) over three weekday time periods (6-10 AM, 10 AM – 4 PM, 4-8 PM) and one weekend time period (6 AM – 8 PM). PAA has data available for locations on the National Highway System. Travel time index will be used where LOTTR is unavailable.

   For example, a roadway segment with a free-flow speed of 60 mph where the observed peak period travel speed is 40 mph would have a LOTTR value of 1.5. When a roadway segment has an LOTTR value of 1.5 or greater, that segment is considered unreliable. When peak period travel speed is greater than free-flow speed, LOTTR is recorded as 0.00, and considered reliable. Refer to https://gis.oki.org/paa/. For links without a LOTTR staff will assist the applicant and may revert to travel time index (TTI) as a secondary source.

Level of Travel Time Reliability		Score
Unreliable	>= 1.5	5 points
Moderately reliable	>= 1.25 to < 1.5	3 points
Reliable	1.0 to < 1.25	0 points

5. (5) **Impact on Travel Time** provides points based on how the proposal alleviates the current level of congestion. A high impact score cannot be awarded to a project that does not document an existing problem. Applicants should provide an analysis or explanation documenting how they arrived at the anticipated congestion.

6. (5) The **Freight Volumes** factor provides points for corridors with a high volume of truck traffic. This figure is based upon the percentage of truck traffic within the project area.

7. (5) The **Existing Conditions** factor will award up to 5 points based on the roadway pavement condition or bridge sufficiency rating.

   Pavement condition is measured by the International Roughness Index (IRI), a standardized pavement measurement indicating the overall smoothness of a roadway. Both pavement and bridge condition ratings can be found in the Project Application Assistant.

Pavement Condition

IRI Range	Score
Greater than 170	5 points
95-170	3 points
Less than 95	0 points

Bridge Condition

Sufficiency Rating	Score
Less than 30	5 points
30 - 50	4 points
50 – 80	3 points
Greater than 80	0 points

8. (5) The **Complete Streets** factor will award up to 5 points. All projects will comply with the adopted OKI Complete Streets Policy (https://www.oki.org/wp-content/uploads/2022/12/OKI-Complete-Streets-Policy-Adopted-11.10.22.pdf). A complete street is a public thoroughfare that allows current and expected users of the public right-of-way to safely and conveniently reach their destinations along and across a street or road, regardless of their mode. Projects that advance the concept of complete streets will be judged by the modes improved or added as part of the project. Eligible modes include motor vehicles, transit, bicycles, and pedestrians. One point will be awarded for each mode improved or added. In addition, points can be earned for improving or adding traffic calming related safety improvements (See the "terminology" section below). Applicants are required to evaluate opportunities for their project to include complete streets elements but are not required to include elements that may be incompatible and may be granted an exception, including:
   - Where bicyclists, pedestrians, or another particular use is prohibited by law from using a roadway. Accommodations should be made to ensure that all users can still cross these areas, so they do not become barriers.
   - Where the street or road is already adequately designed to accommodate all users and is, therefore, a complete street without further enhancements.
   - Where cost would be excessively disproportionate to probable use or need considering economic conditions, cost, and economic benefit (20% or more of the total project cost).
   - Where a project consists primarily of the installation of traffic control safety devices. All new pedestrian crossing devices must meet the most current accessibility standards for controls, signals, and placement.
   - Where lack of population or other factors indicate an absence of need under both current and future conditions.
   - Where roadway standards or bicycle and pedestrian standards cannot be met due to constraints excessively difficult to mitigate. The feasibility of alternative routes of similar or better quality to accommodate all users and connect to the transportation network shall be studied.
   - Where all improvements would be very likely removed in the near-future due to projects in the same area.
   - Where transit service is non-existent and not planned, therefore there is no need for direct public transit accommodations.

Examples:

1) An existing roadway that has fixed route transit is repaved and adds a multi-use sidepath earns 1 point for improving the road plus 2 points for adding the sidepath.
2) An existing roadway that has fixed route transit is repaved and adds a multi-use sidepath and bus shelters earns 1 point for improving the road plus 2 points for adding the sidepath, plus 1 point for improving the (fixed route) transit facilities.
3) Reconstruction of existing sidewalks earns 1 point.
4) Construction of a new roadway with sidewalks earns 2 points for new road and 2 points for the new sidewalks for a total of 4 points.
5) Widening of an existing roadway from 2 to 4 lanes with no accommodation for other modes scores 1 point for improving the roadway.
6) Intersection improvement such as a roundabout construction to replace an existing intersection earns 1 point.
7) Projects that do not meet the OKI Complete Streets Policy and are not granted an exception will be penalized 5 points.

Project design should conform to available guidelines including– AASHTO, FHWA, ADA, ITE MUTCD and respective state DOT design manuals.

Terminology:
Motor vehicles: cars, trucks
Fixed transit route: scheduled fixed route transit service uses this road.
Pedestrian facilities: provisions for sidewalks of appropriate design, normally 5 ft concrete pavement (wider for commercial areas) and a planting/utility strip.
Bicycle facilities: May be striped bike lanes, shared lane markings (sharrows) wide curb lanes or sidepaths (shared or multi-use paths within a street's right-of-way), according to local public input, or shoulders on rural roads.
Transit: facilities that complement existing transit service such as pull outs, paved waiting areas, shelters, bike parking and transit centers.
Traffic Calming: a variety of treatments intended to slow vehicle traffic such as sidewalk curb extensions, reduced turn radii, roundabouts, pedestrian refuge islands.

9. (5) The **Status of Project** factor awards points based on the existing status of the project. The closer the project is to the construction phase, the more points it will receive. If the project is seeking initial funds for construction and right-of-way phases (no work completed), the project will receive 2 points. If right-of-way and/or construction plans are complete, the project is ready to begin and will be awarded 5 points. In Ohio, utilities, ROW and construction phases are eligible for funding; in Kentucky, design, utilities, ROW and construction phases are all eligible for funding.

Transportation Factors for Transit Projects (45 points)

10. (10) The **Type** factor awards points based on the type of project requesting funding. Expansion of bus or bus rapid transit (BRT) vehicles or facilities, scores the highest points (10) and demonstrates the objective of improving the system. Replacement bus or bus rapid transit (BRT) will score 7 points, fixed guideway facilities and transit centers will score 6 points and Park and Ride lots 5 points. Maintenance facilities will score 4 points and, fare collection equipment, etc. will be scored up to 2 points.

11. (10) **Ridership Impact** factor awards points for a project's ability to increase ridership. A high increase in ridership will be awarded 10 points, a medium increase 6 points, a low increase 2 points and maintaining (no increase) ridership 0 points. Applicants will provide an estimated amount of ridership change.

12. (5) **Impact on Safety and Security** factor awards points for the impact the project will have on safety and security. For example, a new bus or rail transit vehicle may be equipped with video and audio equipment to increase security. In addition, the new bus or rail transit vehicle may have additional safety features not found on the vehicle it is replacing. A high impact will result in 5 points.

13. (10) **Existing Asset Physical Condition** for a transit element is a subjective measure provided by the transit professional and will be scored up to 10 points for an asset in poor condition. This element was combined with the previous element Capital Utilization. The FTA guidelines will be used as a reference. For example, a large transit coach generally has a useful life of 12 years and 500,000 miles. Projects that exceed the useful life and in poor condition will score high in this category. New projects, such as a new park-and-ride or new coaches for expansion of service, will not receive any points under this criterion. FTA software TERM Lite may be used as a reference. https://www.transit.dot.gov/TAM/TERMLite

14. (10) **Geographic Scope** evaluates projects on their ability to be impactful at scale. Projects with regional impacts will score up to 10 points. Projects at the multi-county, county, corridor and local levels will score 8, 6, 4 and 0 points respectfully.

Transportation Factors for Bike and Pedestrian Projects (45 points)

16. (5) **Safety** is an important consideration in project selection process. The annual average number of crashes in the project area over a five-year period involving bike or pedestrians is used as the metric for assigning up to 5 points.

17. (5) **Impact on Safety** assesses the impact the proposal will have on the existing situation, ranging from 0 to 5 points.

18. (10) The OKI process seeks to give priority to regional connections. The **Network Connections** element awards up to 10 points for regional network components to 2 points for non-network components.

19. (10) **Feasibility** is a subjective measure indicative of the ability to implement the project considering a range of factors that could include such things as constructability, right of way, public support, unusual cost, environmental or other circumstances.

20. (5) The **Existing Surface Conditions** factor awards points for the physical conditions of the pathway, sidewalk, etc. Poor conditions can be scored up to 5 points. New facility or those in good condition will receive 0 points.

21. (5) The **Complete Streets** factor will award up to 5 points. All projects will comply with the adopted OKI Complete Streets Policy (https://www.oki.org/wp-content/uploads/2022/12/OKI-Complete-Streets-Policy-Adopted-11.10.22.pdf) A complete street is a public thoroughfare that allows current and expected users of the public right-of-way to safely and conveniently reach their destinations along and across a street or road,

regardless of their mode. Projects that advance the concept of complete streets will be judged by the modes improved or added as part of the project. Eligible modes include motor vehicles, transit, bicycles, and pedestrians. One point will be awarded for each mode improved or added. In addition, points can be earned for improving or adding traffic calming related safety improvements (See the "terminology" section below). Applicants are required to evaluate opportunities for their project to include complete streets elements but are not required to include elements that may be incompatible and may be granted an exception, including:

- Where bicyclists, pedestrians, or another particular use is prohibited by law from using a roadway. Accommodations should be made to ensure that all users can still cross these areas, so they do not become barriers.
- Where the street or road is already adequately designed to accommodate all users and is, therefore, a complete street without further enhancements.
- Where cost would be excessively disproportionate to probable use or need considering economic conditions, cost, and economic benefit (20% or more of the total project cost).
- Where a project consists primarily of the installation of traffic control safety devices. All new pedestrian crossing devices must meet the most current accessibility standards for controls, signals, and placement.
- Where lack of population or other factors indicate an absence of need under both current and future conditions.
- Where roadway standards or bicycle and pedestrian standards cannot be met due to constraints excessively difficult to mitigate. The feasibility of alternative routes of similar or better quality to accommodate all users and connect to the transportation network shall be studied.
- Where all improvements would be very likely removed in the near-future due to projects in the same area.
- Where transit service is non-existent and not planned, therefore there is no need for direct public transit accommodations.
- Projects that do not meet the OKI Complete Streets Policy and are not granted an exception will be penalized 5 points.

Examples:

1) An existing roadway that has fixed route transit is repaved and adds a multi-use sidepath earns 1 point for improving the road plus 2 points for adding the sidepath.
2) An existing roadway that has fixed route transit is repaved and adds a multi-use sidepath and bus shelters earns 1 point for improving the road plus 2 points for adding the sidepath, plus 1 point for improving the (fixed route) transit facilities.
3) Reconstruction of existing sidewalks earns 1 point.
4) Construction of a new roadway with sidewalks earns 2 points for new road and 2 points for the new sidewalks for a total of 4 points.
5) Widening of an existing roadway from 2 to 4 lanes with no accommodation for other modes scores 1 point for improving the roadway.
6) Intersection improvement such as a roundabout construction to replace an existing intersection earns 1 point.

Project design should conform to available guidelines including– AASHTO, FHWA, ADA, ITE MUTCD and respective state DOT design manuals.

Terminology:
Motor vehicles: cars, trucks
Fixed transit route: scheduled fixed route transit service uses this road.
Pedestrian facilities: provisions for sidewalks of appropriate design, normally 5 ft concrete pavement (wider for commercial areas) and a planting/utility strip.
Bicycle facilities: May be striped bike lanes, shared lane markings (sharrows) wide curb lanes or sidepaths (shared or multi-use paths within a street's right-of-way), according to local public input, or shoulders on rural roads.
Transit: facilities that complement existing transit service such as pull outs, paved waiting areas, shelters, bike parking and transit centers.
Traffic Calming: a variety of treatments intended to slow vehicle traffic such as sidewalk curb extensions, reduced turn radii, roundabouts, pedestrian refuge islands.

22. (5) The **Status of Project** factor awards points for the existing status of the project. The closer the project is to the construction phase, the more points it will receive. If the project is seeking initial funds for construction and right-of-way phases (no work completed), the project will receive 2 points. If right-of-way and/or construction plans are complete, the project is ready to begin and will be awarded 5 points. In Ohio, ROW and construction phases are eligible for funding; in Kentucky, design, utilities, ROW and construction phases are all eligible for funding; in Indiana, PE, ROW and construction phases are eligible for funding.

Transportation Factors for Non-Roadway Freight Projects (45 points)

23. (5) The **Mode Specific Traffic Flow** factor awards points based on volume to capacity ratios in the project area. Projects greater than a 1.0 ratio indicate a high level of congestion and will receive up to 5 points.
24. (20) The **Impact on Roadway Congestion** factor provides points based on the extent to which large trucks will be removed from roadways in the OKI region, thereby alleviating the current level of congestion. A high reduction in trucks cannot be awarded to a project that does not document an existing congestion problem. Applicants should provide an analysis documenting how they arrived at their anticipated truck reduction value. Consideration will be given to identification of primary or representative roadway facilities impacted, their current peak period capacity and congestion levels and the effect of large trucks equivalent reductions to impacted roadways.
25. (5) The **Safety** factor awards points to projects that can be linked to improving safety conditions in the project area. The existing safety problem must be documented along with a plan to address these problems.
26. (5) The **Status of Project** factor awards points for the existing status of the project. If right-of-way and/or construction plans are complete, the project is ready to begin and will be awarded 5 points. The project will receive fewer points based on additional steps that are needed prior to construction.

27. (5) The **Reliability** factor awards points to projects that can demonstrate that they will result in an improvement to on-time deliveries. The existing on-time delivery problem must be documented with an explanation of how the project will improve reliability of freight arrivals and/or departures. Up to 5 points are available.

28. (5) The **Existing Asset Physical Condition** factor awards points to projects based on demonstrated need from its physical condition perspective. Facilities in poor physical condition will be awarded up to 5 points. Facilities in fair condition will be awarded 3 points and those in good condition will be awarded zero. Applicants should provide industry accepted standards for the basis for their evaluation.

Planning Factors for All Projects (65 points)

29. (10) The **Local Share** factor rewards applicants that increase their local share to "overmatch" the required rate for local participation. The standard match rate for OKI-allocated funds is 20 percent; however, the applicant can gain up to a maximum of 10 points through overmatching.

30. (5) The **Air Quality Cost Effectiveness** factor relates to continued efforts to improve the regional air quality and encourage investment in more environmentally friendly forms of fuel use. A project may receive points if it contributes to a reduction in in VMT (vehicle miles of travel), VHT (vehicle hours of travel), or results in cleaner vehicle emissions. Projects elements that have historically been evaluated as producing larger emission reductions per dollar invested will receive more points. The cost-effectiveness is based largely on a FHWA/EPA study of nationwide CMAQ projects. Results of that study have been modified to include a more diverse range of project elements, as may be expected in a call for STBG and CMAQ projects. Projects elements will be categorized into strong, mixed, weak or no impact. Scoring values are reflected in Appendix B: Air Quality Cost-Effectiveness Table. Point values range from 5 points (strong) to 0 points (no impact). Project elements that contribute to reduced emissions cannot be combined to receive a higher score, but the most cost-effective element will be considered.

31. (5) The **Intermodal Connections** factor awards up to 5 points for projects that involve new interactions or direct connections between modes. Examples of this are such things as new or direct connections between barge and rail facilities, new roadway access to a port or new pedestrian accommodation to access transit. Replacement features are not awarded points under this element.

32. (5) The **Replacement/Expansion** factor gives preference to projects that invest in replacement rather than new facilities, reflecting the expressed priority in OKI's Metropolitan Transportation Plan to maintain what currently exists before investing in new infrastructure. The points associated with this criterion take into account that some expansion projects involve a certain amount of replacement; the points for this criterion are awarded based on percentage of replacement versus percentage of expansion associated with the project.

33. (10) **Technology** – This element was added in 2018 to prepare for and encourage the implementation of new technologies, automation, advanced materials, etc. in transportation. The applicant will be required to explicitly state the component(s) of their project that justify award of points.

Roadway	Score
Equipment, infrastructure and technologies that optimize existing traffic operations/capacity/travel times without the need for additional right-of-way. May include TSMO strategies such as incident detection devices and Active Transportation and Demand Management (ATDM improvements such as hard shoulder running, variable speed limits, bus on shoulder, ramp metering, etc.	10
Equipment, infrastructure and technologies to advance adoption of connected and autonomous vehicles. May include 5G, DSRC devices, fiber optic, etc.	10
Equipment and infrastructure to promote electric vehicle adoption	8
Traffic Signal Upgrade/Optimization. (Does not include physical upgrade to LED)	7
Complete mobility applications (software + hardware) that lead to improved and efficient, traveling, parking or data collection	7
High performance structural roadway building materials leading to significant roadway lifecycle cost savings	5

Transit	**Score**
Equipment, infrastructure or technologies to advance adoption of connected and autonomous transit vehicles, may include 5G and or DSRC devices.	10
Equipment or technologies that optimize existing transit operations/capacity/schedule adherence. May include microtransit solutions for first and last mile	8
Equipment or technologies that create seamless connectivity for travelers using multiple transit agencies, ridesharing and/or other travel modes/services	7
Real time bus arrival/departure notification systems (Customer focused ("smart") signage at bus stops/stations/hubs/park and rides, mobile applications, etc.)	7
Signal Preemption devices and technologies	7
Off-board fare payment technologies	5
Automated passenger counters	5
Bike/Ped	**Score**
Equipment or technologies that reduce reliance on motorized travel or enhance public accessibility and usage (i.e., bike-sharing facilities, services, mobile applications (Apps), payment systems (cash and credit card). May also include pedestrian crossing technology or data collection improvements such as permanent count stations	5- 10
High performance building materials leading to significant facilities lifecycle cost savings and/or other public benefits related to emissions, noise, etc.	5
Non-Roadway Freight	**Score**
Equipment or technologies to advance adoption of connected and autonomous vehicles, automated or ultra-high efficiency freight and commodity delivery systems. May include dedicated short range communication devices	10
Equipment or technologies that optimize existing traffic operations without the need for additional right-of-way	10
High performance building materials leading to significant facilities lifecycle cost savings and/or other public benefits related to emissions, noise, etc.	5

Devices must be consistent with IEEE connected and smart technologies standards.
Transit applicants are required to produce the General Transit Feed Specification (GTFS) data.

34. (0) The **Applicant's History of Project Delivery** takes into account whether an applicant has had projects slip from one fiscal year to a later year after the project has been programmed or if the project has been canceled. While external factors can affect the delivery of a project, it is important for OKI to maintain a balanced budget of projects to be delivered each fiscal year. The potential for slippage needs to be addressed when a project is initially programmed. Projects not yet awarded for construction and listed in the current TIP as of September 1st will be evaluated for history of project delivery. Penalties for slippage will continue into subsequent application cycles until the project is awarded for construction. Sponsors with a canceled project will receive the penalty once, occurring during the next application cycle where they have a submitted application. An applicant who has had one project slip to a later year will be penalized -3 points; an applicant who has had two or more projects slip to a later year will be penalized -5 points; an applicant who has had one or more projects cancelled will be penalized -10 points.
35. (10) The **Environmental Justice** factor awards points to projects that will have an overall net benefit to minority and low-income population groups per Executive Order 12898 issued by President Clinton in February 1994. The basis for Environmental Justice is Title VI of the Civil Rights Act of 1964. The OKI Environmental Justice Advisory Committee, which reviews project applications for funding and awards points for this factor, also examines a project's impact on zero-car households, elderly persons and persons with disabilities. The overall net benefit in the scoring indicates a subjective consideration of both POSITIVE and NEGATIVE impacts. It is understood that when federal funds are involved there are federal guidelines that must be met to ensure that services and benefits are fairly distributed to all people, regardless of race, national origin or income, and that they have access to meaningful participation. Refer to Title 42 of the United States Code. A response to this section is required in order for the project to be funded even if the project is not located within one of the designated Environmental Justice (EJ) communities.
36. (5) **Economic Vitality: Existing Employment within ½ mile:** The link between transportation and the benefits of commerce is well established. Applications will be scored from 0 to 5 points based on the number of existing jobs within ½ mile of the project area. OKI staff will perform the scoring of this element.
37. (5) **Economic Vitality: Investment Bonus / Employment Bonus:** Applicants will also have the opportunity to earn up to 5 bonus points for documented job creation and/or real or capital investment within the transportation project area. The applicant will provide clear evidence of the relationship between the proposed transportation project and the (permanent) jobs and/or investment criteria to earn the bonus points. Jobs related to the construction itself is not included in the number of jobs created.
38. (5) The **Strategic Regional Policy Plan** (SRPP) Implementation factor examines the ability of the project to help implement the policies of OKI's *How Do We Grow From Here* Strategic Regional Policy Plan. The policies within the SRPP were envisioned by the Land Use Commission to be implemented concurrently by OKI, local governments and other organizations. Implementation of these policies will help bring about more consistency between local land use planning and regional transportation planning to create a more

efficient and more accessible regional transportation network that serves the needs of individual communities. Up to 5 points will be awarded for this question.

39. (5) The **Local Planning** factor awards up to 5 points and examines the degree to which a project helps to implement the Strategic Regional Policy Plan (SRPP) through effective local comprehensive planning. A central objective of OKI's SRPP is for each local government to have an up-to-date comprehensive plan that links transportation, land use, economic development, public facilities, housing, natural resources, recreation, intergovernmental coordination and capital improvements. The SRPP emphasizes complete and current local government comprehensive plans as a means to a more efficient multi-modal regional transportation system. The SRPP responds to the Land Use Commission's mission to bring more consistency between regional transportation planning and local land use planning.

    Equivalent Plans: Since not all communities have complete and up-to-date comprehensive plans, OKI will consider and award up to 5 points to proposed transportation projects that are consistent with a comprehensive plan **or** other discrete studies or plans such as thoroughfare plans, corridor studies, small area plans or other planning documents if the applicant can demonstrate that the plan meets similar analysis and content criteria.

    Routine Maintenance: Comprehensive plans typically do not address routine maintenance projects; however, routine maintenance is a key factor in preserving the region's existing transportation system. A project that is predominantly comprised of routine maintenance will receive 5 points regardless of the status of the jurisdiction's comprehensive plan because of its inherent system preservation function.

Factors for Other Projects

In some cases, OKI will receive applications for projects that do not fit the highway, transit, bike/ped or non-freight highway project definition. In these cases, the Prioritization Subcommittee will examine each application and subjectively rank the application in comparison to the highway, transit, bike/ped and non-highway freight applications received. This ranking will be accomplished through a thorough review and discussion of the application and comparison of the estimated benefits to the region with the estimated cost of the project.

Transportation Factors for Roadway Projects (45 points available)

Factor	Measure	Points
Safety	Urban Roadway Segments	
	Excess Expected Cost	
	>$1,500,000	5
	$650,001 - $1,500,000	4
	$275,001 - $650,000	3
	$120,001 - $275,000	2
	$1 – $120,000	1
	$0	0
Safety	Rural Roadway Segments	
	Excess Expected Cost	
	>$200,000	5
	$80,001 - $200,000	4
	$40,001 - $80,000	3
	$15,001 - $40,000	2
	$1 – $15,000	1
	$0	0
Safety	Urban Intersection	
	Excess Expected Cost	
	>$60,000	5
	$25,001 - $60,000	4
	$13,001 - $25,000	3
	$5,001 - $13,000	2
	$1 – $5,000	1
	$0	0
Safety	Rural Intersection	
	Excess Expected Cost	
	>$20,000	5
	$11,001 - $20,000	4
	$5,001 - $11,000	3
	$2,001 - $5,000	2
	$1 – $2,000	1
	$0	0
Impact on Safety	Points range from	0 to 5
	based on the crash reduction factor (see Appendix A)	
Average Daily Traffic (ADT)	Over 40,000	5
	Over 30,000	4
	Over 20,000	3
	Over 10,000	2
	Over 5,000	1

	Less than 5,000	0
Level of Travel Time Reliability	Unreliable >= 1.5	5
	Moderately Unreliable 1.25 – 1.5	3
	Reliable 1.0 to <1.25	0
Impact on Travel Time Reliability	High Impact	5
	Medium Impact	3
	Low Impact	1
	No Impact	0
Freight Volumes (Truck Traffic Percentages)	12% or Greater	5
	8 to < 12%	4
	5 to < 8%	3
	3 to < 5%	2
	1 to < 3%	1
	<1%	0
Existing Conditions	Pavement Conditions (IRI Range)	
	Greater than 170	5
	95-170	3
	Less than 95	0
	Bridge Condition (Sufficiency Rating)	
	Less than 30	5
	30-50	4
	50-80	3
	Greater than 80	0
Complete Streets	Score 1 point for each mode improved or added	
	Motor vehicle	1
	Fixed transit route	1
	Pedestrian facility	1
	Bicycling facility	1
	Traffic calming	1
	Project does not result in a complete street & no exception	-5
Status of Project	Construction and/or ROW plans complete	5
	P/E and Environmental complete	4
	Initial request for construction funding only	3
	Initial request for construction and ROW funding	2
	Initial request for CON, ROW, and PE/Design (KY, IN)	1

Transportation Factors for Transit Projects (45 points available)

Factor	Measure	Points
Type	Expansion of bus or bus rapid transit vehicles or facilities	10
	Replacement of transit vehicles	7
	Rail Transit	6
	Transit Center	6
	Park and Ride	5
	Maintenance Facility	4
	Fare collection or other support equipment	2
Ridership Impact	High increase in ridership	10
	Medium increase in ridership	6
	Low increase in ridership	2
	No increase in ridership	0
Impact on Safety & Security	High impact	5
	Medium impact	3
	Low impact	1
	No impact	0
Existing Asset Physical Conditions	Poor	10
	Fair	6
	Good	0
Geographic Scope	Regional	10
	Multi-county	8
	County	6
	Corridor	4
	Local	0

Transportation Factors for Bike/Pedestrian Projects (45 points available)

Factor	Measure	Points
Safety (# of Bike/Ped Crashes in project area)	Annual average crashes over 5-year period	
	Greater than 5	5
	3 – 5	3
	1 – 3	1
	None	0
Impact on Safety	High impact	5
	Medium impact	3
	Low impact	1
	No impact	0
Network Connections	Regional network component	10
	Connection to regional network	6
	Local network component	4
	Non-network component	0
Feasibility	High	10
	Moderate	5
	Marginal	3
	Not Feasible	0
Existing Surface Conditions	Poor	5
	Fair	3
	Good/New Facility	0
Complete Streets	Score 1 point for each mode improved or added	
	Motor vehicle	1
	Fixed transit route	1
	Pedestrian facility	1
	Bicycling facility	1
	Traffic calming	1
	Project does not result in a complete street & no exceptions	-5
Status of Project	Construction and/or ROW plans complete	5
	P/E and Environmental complete	4
	Initial request for construction funding only	3
	Initial request for construction or ROW funding	2
	Initial request for CON, ROW & PE Design (KY)	1

Transportation Factors for Non-Roadway Freight Projects (45 points available)

Factor	Measure	Points
Mode Specific Traffic Flow	Mode V/C > 1.0	5
	Mode V/C .75 to < 1.0	4
	Mode V/C .50 to < .75	3
	Mode V/C .25 to < .50	2
	Mode V/C < .25	0
Impact on Roadway Congestion	High number of large trucks removed/day	20
	Medium number of large trucks removed/day	10
	Low number of large trucks removed/day	5
	No trucks removed/day	0
Safety	High positive impact	5
	Medium positive impact	3
	Low positive impact	1
	No impact	0
Status of Project	Construction and/or ROW plans complete	5
	P/E and Environmental complete	3
	Initial request for construction and/or ROW funds	1
	No plans completed	0
Reliability	High positive impact	5
	Medium positive impact	3
	Low positive impact	1
	No impact	0
Existing Asset Physical Conditions	Poor	5
	Fair	3
	Good	0

Planning Factors for All Projects (60 points available)

Factor	Measure	Points
Local Share	50% or above of estimate	10
	45% to 49% of estimate	8
	40% to 44% of estimate	6
	35% to 39% of estimate	4
	30% to 34% of estimate	2
	21% to 29% of estimate	1
	20% of project estimate (Required local amount)	0
Air Quality (Cost-effectiveness See Appendix B)	Strong cost-effectiveness	5
	Mixed cost-effectiveness	3 or 4
	Weak cost-effectiveness	1 or 2
	No air quality impact	0
Intermodal Connections	New interactions and/or direct connections of 3 or more modes	5
	New interactions and/or direct connections of 2 or more modes	3
	No new interactions or direct connections between modes	0
Replacement/ Expansion	100% Replacement	5
	75% Replacement/25% Expansion	4
	50% Replacement/50% Expansion	3
	25% Replacement/75% Expansion	2
	100% Expansion	0
Technology	Very High Impact	10
	High Impact	7
	Moderate Impact	5
	Low Impact	3
History of Project Delivery	1 project sale slipped past programmed year	-3
	2 or more projects slipped past programmed year	-5
	project canceled	-10

Environmental Justice	Overall net benefits (good to excellent) ……8 - 10 Overall net benefits (fair to good) ..... 4 - 7 Overall net benefits (none to fair) ..... 0 - 3 Note: NET benefit for Environmental Justice indicates a subjective consideration of both POSITIVE and NEGATIVE impacts.
Economic Vitality	<u>Existing Employment[1]</u> Existing employment within ½ mile of project 5000+..... 5 Existing employment within ½ mile of project 2500 to 4999..... 4 Existing employment within ½ mile of project 1000 to 2499..... 3 Existing employment within ½ mile of project 750 to 999..... 2 Existing employment within ½ mile of project 500 to 749..... 1 Existing employment within ½ mile of project 0 to 499..... 0 *And*
Economic Vitality	<u>Investment Bonus[2]</u> New Investment in the project area more than $20M ..... 5 New Investment in the project area $15M to $20M..... 4 New Investment in the project area $10M to$15M ..... 3 New Investment in the project area $5M to $10M ..... 2 New Investment in the project area $1M to $5M ..... 1 New Investment in the project area less than $1M..... 0 *Or*
Economic Vitality	<u>Employment Bonus[2]</u> New employment within ½ mile of project 200+..... 5 New employment within ½ mile of project 100 to 200..... 4 New employment within ½ mile of project 75 to 100..... 3 New employment within ½ mile of project 50 to 75..... 2 New employment within ½ mile of project 25 to 50..... 1 New employment within ½ mile of project 0 to 25..... 0
SRPP	Based on answers, up to 5 points .....0 to 5
Local Planning	Consistent--comprehensive plan complete & current ..... 5 Consistent--comprehensive plan needs improvement ..... 3 Inconsistent--no comprehensive plan..... 0

1 OKI staff will provide this figure using GIS applications.

2 Applicant must provide evidence from a study using generally accepted principals of economic analysis. Higher significance will be placed on the percentage of employment with earnings above the state median income.

Appendix A

Highway Crash Reduction Factors (CRF) Used for Impact on Safety

Improvement Type	Crash Reduction Factor	Definition	Score
Highway/Railroad Crossing	90	Improving existing highway and railroad crossing intersections primarily by constructing grade separations.	5
2 lane to 4 lane divided	55	The upgrade of an existing 2-lane highway to a 4-lane divided facility to increase traffic flow. Widen 2 an existing divided highway to 4 lanes.	5
Arterial to Full Control	40	Upgrading a road serving major traffic movements (high-speed, high volume) for travel between major points to a limited access divided arterial highway.	5
Grade Separation	40	Improving an intersection by separating traffic through physical means such as an overpass to allow different flows of traffic.	5
Arterial to Partial Control	35	Upgrading a road serving major traffic movements (high-speed, high volume) for travel between major points to alleviate congestion and reduce impediments to traffic flow. Include indirect left turn or similar movements. Add access management	4
Add medians	35	Replace TWTL with a divided median cross section with no additional capacity. Add non-traversable median. Access management.	4
Improve Intersection	30	Install turn lane (s), roundabout installation, major horizontal realignment	4
Improve Interchange	25	Improving traffic flow at an existing interchange by changing the ramp configuration or type of interchange. Convert diamond to diverging diamond, modifying left-turn phasing on one intersection approach etc.	3
Add Lane to Full Control Fac.	25	The addition of a full lane of travel to an Interstate or existing full access-controlled facility.	3
Geometric improvements	20	Realignment or reconstruction to bring geometric (vertical, horizontal) deficiencies up to modern standards. To include minor widening of lanes and shoulders, reconstruction, safety hazard eliminations, spot improvements	3
Install Two-way Left Turn Lane	20	Widening existing pavement through addition of two way left turn lane to reduce turning related crashes such as rear-end and head-on on two lane roads.	3
Add Closed Loop Signal System	15	Add coordinated closed loop signal system	2
Intelligent transportation system projects	15	Install ramp meters, cameras, dynamic message signs, queue detection and alerts	2
Full Control to Interstate	10	Improving an existing freeway to interstate design standards primarily by increasing shoulder width and/or bridge clearances.	1
Auxiliary Lanes or Operational Improvement	10	Add continuous auxiliary lane for weaving between entrance ramp and exit ramp or other interchange improvements.	1
Add Signal System	5	New or upgraded signals	1

Construct Road in new location	0	Bypass, new route, new interchange, route relocation	0
Interchange Ramps	0	The addition of lanes to ramps of an existing grade separated interchange.	0
Maintenance Improvement	0	Drainage improvements, rock fall, landslides, rest area rehab, resurfacing, rock fall mitigation, signs, signals, weigh station rehab	0
Transportation Studies	0	Scoping studies, feasibility studies, PE & environmental, phase 1 design, small urban area, strategic corridor	0
Other improvement types	0	Any improvement types not included previously. Bike/ped, miscellaneous widening not specifically mentioned.	0

Appendix B

Air Quality Cost-Effectiveness

Modified from FHWA CMAQ Cost-Effectiveness Summary Table – Updated July 2020
https://www.fhwa.dot.gov/environment/air_quality/cmaq/reference/cost_effectiveness_tables/index.cfm#toc37055060

Strong	**Points**
Idle Reduction (diesel engines)	5
Diesel Engine Retrofits	5
Intermodal Freight Facilities	5
Incident Management	5
Transit Service Expansion	5
Mixed	
Traffic signal synchronization (high volume corridor >40k ADT or major ITS)	4
Electric Vehicle Charging	4
Rideshare programs	4
Park-n-Ride	3
Transit amenity	3
Roundabouts	3
Bus replacements (CNG, electric, hybrid)	3
Traffic signal synchronization	3
Weak	
Bicycle/pedestrian facility (regional network component)	2
Intersection improvement (intersection LOS D or F)	2
Bikeshare	2
Access management	2
Bus replacements (diesel)	1
Bicycle/pedestrian facility (non-regional network component)	1
Intersection improvement (intersection LOS A-C)	1
New road or major widening (not CMAQ eligible)	1
No Impact	
Roadway resurfacing/reconstruction and minor widening	0
Lighting/guardrail replacement	0
Replacing existing sidewalks	0
Resurfacing existing bike/pedestrian facility	0
Bridge replacement	0
Transit maintenance and facility renovation	0