MAPA Omaha - Council Bluffs Metropolitan Area Planning Agency

Transportation Alternatives Program Project Selection

Guidance Document for TAP-MAPA Funding

FY2023-2028 Transportation Improvement Program

Approved:

TAP-C: 10/14/2021

TTAC: 10/22/2021

Board: 10/28/2021

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Definitions

Access - is the ability to reach desired goods, services, activities and destinations (together called opportunities).

> Four general factors affect physical accessibility:
> Mobility, that is, physical movement. Mobility can be provided by walking, cycling, public transit, ridesharing, taxi, automobiles, trucks and other modes.
>
> Mobility substitutes, such as telecommunications and delivery services. These can provide access to some types of goods and activities, particularly those involving information.
>
> Transportation system connectivity, which refers to the directness of links and the density of connections in path or road network.
>
> Land use, that is, the geographic distribution of activities and destinations. The dispersion of common destination increases the amount of mobility needed to access goods, services and activities, reducing accessibility.

Advance Construction - Advance construction and partial conversion of advance construction are cash flow management tools that allow states to begin projects with their own funds and only later convert these projects to Federal-aid. Advance construction allows a state to request and receive approval to construct Federal-aid projects in advance of the apportionment of authorized Federal-aid funds. Under normal circumstances, states "convert" advance-constructed projects to Federal aid at any time sufficient Federal-aid funds and obligation authority are available, and do so all at once. Under partial conversion, a state may obligate funds for advance-constructed projects in stages.

Alternative Transportation - Refers to modes of travel other than private single-occupancy vehicles such as walking, bicycling, carpooling, or transit.

Bicycle Signal - A bicycle signal is an electrically powered traffic control device that should only be used in combination with an existing conventional or hybrid signal. Bicycle signals are typically used to improve identified safety or operational problems involving bicycle facilities. Bicycle signal heads may be installed at signalized intersections to indicate bicycle signal phases and other bicycle-specific timing strategies. In the United States, bicycle signal heads typically use standard three-lens signal heads in green, yellow, and red lenses. Bicycle signals are typically used to provide guidance for bicyclists at intersections where they may have different needs from other road users (e.g., bicycle-only movements, leading bicycle intervals).

Bike Box - A bike box is a designated area at the head of a traffic lane at a signalized intersection that provides bicyclists with a safe and visible way to get ahead of queuing traffic during the red signal phase.

Bike Lane - A Bicycle Lane is defined as a portion of the roadway that has been designated by striping, signage, and pavement markings for the preferential or exclusive use of bicyclists.

Buffered Bike Lane - Buffered bike lanes are conventional bicycle lanes paired with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane. A buffered bike lane is allowed as per MUTCD guidelines for buffered preferential lanes.

Cycle Track - A cycle track is an exclusive bike facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. A cycle track is physically separated from motor traffic and distinct from the sidewalk. Cycle tracks have different forms but all share common elements—they provide space that is intended to be exclusively or primarily used for bicycles, and are separated from motor vehicle travel lanes, parking lanes, and sidewalks. In situations where on-street parking is allowed cycle tracks are located to the curb-side of the parking (in contrast to bike lanes). Cycle tracks may be one-way or two-way, and may be at street level, at sidewalk level, or at an intermediate level. If at sidewalk level, a curb or median separates them from motor traffic, while different pavement color/texture separates the cycle track from the sidewalk. If at street level, they can be separated from motor traffic by raised medians, on-street parking, or bollards. By separating cyclists from motor traffic, cycle tracks can offer a higher level of security than bike lanes and are attractive to a wider spectrum of the public.

Description - A brief description of the project; should include location information, limits of construction, impacts, etc

Eligible Applicants - Project applications may be submitted by eligible sponsors located within the MAPA Transportation Management Area (TMA), including: Douglas County and its cities, Sarpy County and its cities, the City of Council Bluffs, City of Crescent, City of McClelland, and Pottawattamie County (within the TMA Boundary).

Environmental Justice - The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

> The three fundamental principles for Environmental Justice for US DOT programs are shown below:
>
> To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.

To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.

To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

Equity - Refers to the distribution of resources and opportunities. Transportation decisions can have significant equity impacts. Transportation represents a major portion of consumer, business and government expenditures. It consumes a significant portion of public resources, including taxes and public land. Transportation activities have external impacts (noise and air pollution, crash risk and barrier effects) that affect the quality of community and natural environments, and personal safety. Transport determines where people can live, shop, work, go to school and recreate, and their opportunities in life. Adequate mobility is essential for people to participate in society as citizens, employees, consumers and community members. It affects people's ability to obtain education, employment, medical service and other critical goods.

Equity impacts can be difficult to evaluate, in part because the word "equity" has several meaning, each with different implications. There are four general types of equity related to transportation:

Egalitarianism- This refers to treating everybody the same, regardless of who they are. For example, egalitarianism might be used to justify charging every passenger pay the same fare (regardless of trip length), that each transit rider receive the same subsidy (regardless of income or need), that each resident pays the same amount or tax support transportation services (regardless of income or use), or that roads are unpriced.

Horizontal Equity (also called "fairness")- This is concerned with the fairness of impact allocation between individuals and groups considered comparable in ability and need. Horizontal equity implies that consumers should "get what they pay for and pay for what they get," unless a subsidy is specifically justified.

Vertical Equity With Regard to Income and Social Class- This focuses on the allocation of costs between income and social classes. According to this definition, transportation is most equitable if it provides the greatest benefit at the least cost to disadvantaged groups, therefore compensating for overall social inequity.

Vertical Equity With Regard to Mobility Need and Ability- This is a measure of how well an individual's transportation needs are met compared with others in their community. It assumes that everyone should enjoy at least a basic level of access, even if people with special needs require extra resources and subsidies. Applying this concept requires establishing a standard of Basic Access. This tends to focus on two issues: access for people with disabilities, and support for transit and special mobility services.

Local Match - Local match is defined as the portion of total project cost to be covered by the local sponsoring jurisdiction or other non-federal contributor (i.e. the development community). For STBG-MAPA projects, the minimum match percentage is 20 percent.

MAPA 2050 LRTP - The MAPA 2050 Long Range Transportation Plan was finalized in 2020 and is the applicable long range transportation plan for the MAPA region. Capital Improvement projects must be listed in the MAPA 2050 LRTP in order to be eligible for STBG-MAPA funding.

Multi-modal Connectivity - Multi-modal connectivity refers to enhancing the opportunity to connect between various modes of transportation (i.e. automobile, bus, walking, cycling, etc.).

New Bike Lane/Path - New bike lanes or paths refer to the establishment (via on-street striping or separated facilities) of dedicated means of transportation for cyclists and other non-motorized modes of transportation.

Node - The endpoint of a link or intersection of two or more links of a transportation network.

PE/NEPA/Final Design - PE/NEPA/Final Design refers to the phase of a project per Federal guidelines. For applicable projects, the project sponsor must determine the anticipated budget for this phase when submitting an application for STBG-MAPA.

Pedestrian Countdown Signal - The countdown signal displays flashing numbers that count down the time remaining until the end of the flashing "DON'T WALK" (FDW) interval. The countdown display, which can start at the onset of either the WALK or the FDW display, reaches zero and blanks out at the onset of the steady "DON'T WALK" (DW) display. When the countdown starts at the beginning of the FDW, the duration of the countdown is approximately equal to the pedestrian clearance interval for the crosswalk (the duration may vary according to local signal timing practice).

Pedestrian Signal - Pedestrian signals are special types of traffic signal indications installed for the exclusive purpose of controlling pedestrian traffic. They are frequently installed at signalized intersections when engineering analysis shows that the vehicular signals cannot adequately accommodate the pedestrians using the intersection.

Public Health Impacts - Public health impacts refer to the manner and consequences a project incurs on the general public's health. For example, a project that would enhance public health could offer multi-modal connections that encourage active transportation.

Raised or Depressed Barrier Medians - Raised or depressed barrier medians refer to the separation of a transportation facility by an island, Jersey barrier, or other means of separation.

ROW - Right of Way (ROW) refers to a project development phase during which land is purchased by a sponsoring jurisdiction. The sponsor jurisdiction is responsible for denoting the amount of funding requested for Right of Way acquisition during project development.

Sharrow - Shared Lane Markings (SLMs), or "sharrows," are road markings used to indicate a shared lane environment for bicycles and automobiles. Among other benefits shared lane markings reinforce the legitimacy of bicycle traffic on the street and recommend proper bicyclist positioning. The shared lane marking is not a facility type, it is a pavement marking with a variety of uses to support a complete bikeway network. The MUTCD outlines guidance for shared lane markings in section 9C.07.

Share the Road Signage – Share the Road signage refers to signs place along designated bike routes to remind and inform motorists that cyclists may be present. For project applications, this type of signage applies to "Bikes May Use Full Lane" signs that are often used in combination with painted sharrows. The MUTCD outlines guidance for the placement of these kinds of signage and other pavement markings.

Trail/Path (sometimes referred to Multi-use Trail/Path) - A bicycle path allows for two-way, off-street bicycle use. If a parallel pedestrian path is not provided, other non-motorized users are legally allowed to use a bicycle path. These facilities are frequently found in parks, along rivers, creeks, and in rail rights-of-way greenbelts or utility corridors where right-of-way exists and there are few intersections to create conflicts with motorized vehicles.

Transit Operation Features or Amenities - Transit operation features or amenities refer to enhancements that directly improve the operation or aesthetics of transit in the MAPA region.

Walkability - The measure of the overall walking and living conditions in an area; the extent to which the built environment is friendly to the presence of people walking, biking, living, shopping, visiting, enjoying or spending time in an area.

Schedule for TAP-MAPA Project Selection

Call for Projects Released	Oct 29, 2021
Submittal Deadline for Applications	Jan 7, 2022
Send Applications to Committees	Jan 21, 2022
Publication of Applications and Survey	Feb 1, 2022
Public Survey Summarized	Mar 15, 2022
TAP-C Meeting	Mar 18, 2022
Publication of Selected Projects & Distribution of Award Letters	Mar 18, 2022
Incorporation into Draft TIP	May 13, 2022
TTAC Review of Draft TIP	May 20, 2022
State Review & Public Comment Period	May 20, 2022
MAPA Board of Directors Review of Draft TIP	May 26, 2022
TTAC Review of Final TIP	Jun 17, 2022
MAPA Board of Directors Approval of Final TIP	Jun 23, 2022

Eligibility of Projects

This project selection methodology applies only to those projects that are seeking to be funded via MAPA's annual Transportation Alternatives Program (TAP) apportionment. This methodology does not apply to other federal funding source or class and should not be utilized by jurisdictions seeking funding from any other source.

Federal Eligibility Requirements

The Fixing America's Surface Transportation Act (FAST) maintained the following activities as eligible projects for funding under the Transportation Alternatives Program (TAP):

> Construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other nonmotorized forms of transportation, including sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act of 1990 (42 USC 12101 et seq.).
>
> Construction, planning, and design of infrastructure-related projects and systems that will provide safe routes for non-drivers, including children, older adults, and individuals with disabilities to access daily needs.
>
> Conversion and use of abandoned railroad corridors for trails for pedestrians, bicyclists, or other nonmotorized transportation users
>
> Construction of turnouts, overlooks, and viewing areas.
>
> Community improvement activities, which include but are not limited to:
> inventory, control, or removal of outdoor advertising;
> historic preservation and rehabilitation of historic transportation facilities;
> vegetation management practices in transportation rights-of-way to improve roadway safety, prevent against invasive species, and provide erosion control; and
> archaeological activities relating to impacts from implementation of a transportation project eligible under title 23.
>
> Any environmental mitigation activity, including pollution prevention and pollution abatement activities and mitigation to-
>
> - address stormwater management, control, and water pollution prevention or abatement related to highway construction or due to highway runoff, including activities described in sections 133(b)(11), 328(a), and 329 of title 23; or
> - reduce vehicle-caused wildlife mortality or to restore and maintain connectivity among terrestrial or aquatic habitats.
>
> The recreational trails program under section 206 of title 23

The safe routes to school program eligible projects and activities listed at section 1404(f) of the SAFETEA-LU:

Infrastructure-related projects.

Non infrastructure-related activities.

Safe Routes to School coordinator.

Planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.

Per the requirements of the FAST Act, Transportation Alternatives Program funds cannot be used for the following activities:

State or MPO administrative purposes, except for SRTS administration, and administrative costs of the State permitted for RTP set-aside funds.

Promotional activities, except as permitted under the SRTS.

General recreation and park facilities, playground equipment, sports fields, campgrounds, picnic areas and pavilions, etc.

Routine maintenance and operations.

Additional Eligibility Requirements for TAP Funding

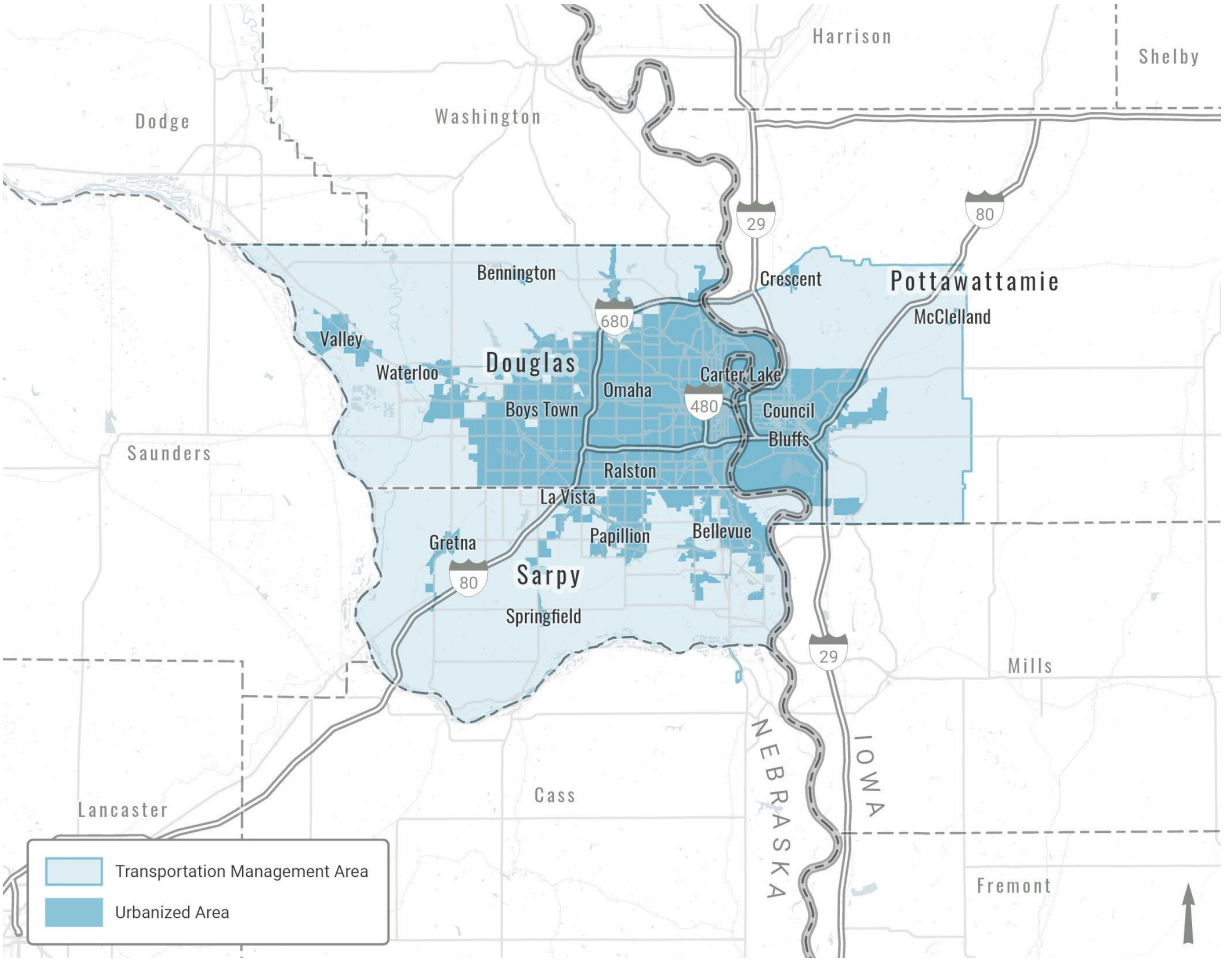
In addition to the above eligibility standards, projects seeking TAP-MAPA funding must meet the following minimum eligibility requirements:

Project must be listed in the MAPA 2050 Long Range Transportation Plan as required by the FAST Act.

Minimum match of 20 percent local (non-federal) funding as required by the FAST Act. Projects must be submitted by local public agencies (LPAs) (including school districts) in the MAPA Transportation Management Area (MAPA TMA). The TMA encompasses Douglas and Sarpy Counties in Nebraska and the urbanized area surrounding Council Bluffs in Pottawattamie County, Iowa.

Failure to meet any of the above criteria will result in immediate disqualification of the submitted project for TAP-MAPA funding.

Figure 1: Map of the MAPA Transportation Management Area



MAPA Project Selection Process

MAPA Transportation Alternatives Program Committee (TAP-C)

Transportation alternatives projects in the MAPA TMA are subject to the review and approval of the MAPA Transportation Alternatives Program Committee (TAP-C). TAP-C is an eighteen member stakeholder committee of the Transportation Technical Advisory Committee (TTAC) that includes planners, engineers, advocates, and other staff from local and state jurisdictions. Membership of the Transportation Alternatives Program Committee includes members of the larger MAPA TTAC and outside organizations and representatives. Appointments to the Transportation Alternatives Program Committee are reviewed and approved by the Transportation Technical Advisory Committee

TAP-C membership was formalized through the adoption of bylaws in late 2013 with review and approval by TTAC and the MAPA Board of Directors. Organizations and individuals currently represented on the TAP Committee are as follows:

City of Omaha Public Works
City of Omaha Planning
City of Omaha Parks
City of Council Bluffs
City of Bellevue
City of Springfield
City of La Vista
City of Papillion
Douglas County
Sarpy County
Papio-Missouri River Natural Resources District (PMRNRD)
Metro Transit
Nebraska Department of Transportation (NDOT)
Iowa Department of Transportation (Iowa DOT)
Douglas County Health Department
Transportation Advocates (BikeWalk Nebraska)
Public Health Advocate (WellBeing Partners)
Public Representative

TAP-C membership will be reevaluated to determine turnover strategies for the membership of any rotating positions that are identified.

Project Submission Guidelines

Jurisdictions submitting applications must abide by the timeline listed in this guidance document. Applications for three project types have been created in order to evaluate each project class. Jurisdictions must select a project category and prepare the required documentation to the best of their abilities.

The final application for a TAP-MAPA project may include a one-page narrative of the project that may include details outside those requested in the application forms. This one page narrative should be submitted in Times New Roman 12pt font with one (1) inch margins. Additional pages or documentation will not be considered in the final scoring of the application.

Project applications for FY 2026 TAP-MAPA funding should be submitted no later than 4:30pm on January 8, 2022 to:
MAPA Project Selection
Metropolitan Area Planning Agency
2222 Cuming Street
Omaha, NE 68102

Project applications and questions concerning this process may also be emailed to mapa@mapacog.org.

Evaluation of Project Applications

Following an initial eligibility determination, project applications are evaluated and scored by MAPA staff based upon their particular project type and the information supplied. MAPA staff will recommend a prioritization of projects to TAP-C for approval at the Final Selection Workshop. Projects selected during this workshop will be incorporated into the Draft FY2023 MAPA Transportation Improvement Program as allowed by fiscal constraint.

The Draft MAPA TIP is then presented to and voted on by the MAPA TTAC and MAPA Board of Directors. After approval of the draft and the duration of the public comment period, the TIP is again presented to TTAC and the Board of Directors as a final document. Once the final TIP is approved it is submitted to MAPA's state and federal partners for approval and inclusion in the State Transportation Improvement Programs (STIPs).

Project Selection Process and Funding Implementation

The implementation year, or year 1, of the TIP is the fiscal year during which funding for a project of project phase can be obligated. In addition to ranking projects based on criteria, projects will also be evaluated based on each project's timeline of implementation and fiscal constraint within the TIP.

Each project that will be programmed in the TIP must submit an attainable timeline, will be ranked by MAPA staff, and approved by the TAP Committee before it will be placed in the TIP. The TAP Committee will have flexibility in selecting projects that are deemed to be a higher priority to the committee. Projects will be allowed to present an argument for implementation before the TAP Committee if the project sponsor wishes to challenge the points total or scoring of the project. No project will be allowed to move into the implementation year unless the project timeline has been approved by the TAP Committee, TTAC, and MAPA's Board of Directors.

Transportation Improvement Program (TIP) Fee

Beginning July 1, 2018, MAPA collects a "TIP Fee" for federal-aid projects in the Transportation Improvement Program (TIP) funded through the regional Surface Transportation Block Grant Program (STBG) and the regional Transportation Alternatives Program (TAP).These funding sources are identified in the TIP as STBG-MAPA and TAP-MAPA, respectively. The fee will be collected from members that are within the Transportation Management Area (TMA), also referred to as the Metropolitan Planning Organization (MPO). The amount of the TIP fee and the specific federal funding programs for which the fee is required shall be identified in the TIP annually and approved by the Board of Directors.

The TIP fee applies to all project phases programmed in the implementation year of the TIP. The implementation year refers to the first year of the TIP program, which begins on October 1 of each year. Total obligations for implementation year projects will be identified by end of year reports from the Nebraska and Iowa Departments of Transportation. Invoices for TIP fees will be issued no later than November 30th of the following fiscal year. Therefore, TIP fees related to obligations in FY2020 will be assessed by November 2020. Failure to pay the TIP fee could result in project removal from the TIP or reprogramming to an illustrative year of the TIP program.

The TIP fee shall apply to projects included in the TIP that are part of the Federal-aid swap in Iowa. The amount of the TIP fee assessed shall be the ratios identified in sections 2.3.5.1 and 2.3.5.2 toward the federal funds swapped for the local project. For example, if a local jurisdiction swaps $1 million in federal funds for state funds, then the TIP fee would be $10,000, or 1%, of $1 million.

The Executive Director shall have the ability to provide payment terms of up to 2 years of the assessed TIP fee. Any adjustments to the payment terms beyond 2 years or change in the assessed amount shall be presented to the MAPA Board of Directors for approval.

The TIP fee does not apply to projects utilizing other funding sources that are included in the TIP (State projects, transit projects, HSIP/TSIP, CMAQ, etc.). STBG-MAPA and TAP-MAPA projects with total project costs less than $100,000 and all planning studies shall be exempt from the TIP fee.

The amount of the TIP fee shall be one percent (1%) of the federal funds on a project up to $10,000,000. Projects with more than $10,000,000 of federal funding will be assessed one percent (1%) of the first $10,000,000 and one-half percent (0.5%) for the amount over $10,000,000.

The TIP fee must be paid with non-federal funds according to federal matching requirements. The TIP Fee is not an eligible cost for Federal aid or Swap reimbursement.

Prioritization Model for Regional TAP Funding

General Overview

The Transportation Alternatives Program Committee has identified the need for the construction of additional alternative transportation facilities throughout the region. Eligible construction activities under the Fixing America's Surface Transportation law are noted in Section 1 of this Policy Guide.

As a part of its Regional Bicycle Pedestrian Plan, MAPA developed a prioritization tool to evaluate and select TAP projects for the region. The Transportation Alternatives Program

Committee identified new criteria and variables that are appropriate measures to prioritize TAP funding for the Omaha-Council Bluffs region. A summary of the revised TAP criteria and variables is shown below:

Table 1: Overview of Transportation Alternatives Program (TAP) Criteria for the FY2023 TIP

Factor	Weight	Selection Criteria	Data Source	Buffer (if applicable)
Support	5	Local Match %	Project Application	–
		Multi-Jurisdictional/ Partnerships	Project Application and Documentation	–
Safety	7	Physical Separation of Proposed Facility	Project Application and MAPA Review	–
		Density of Pedestrian Crashes (Pedestrian Crashes (2011-2013)/Route Length)	NDOR Highway Safety Improvement Database; INTRANS Crash Database	–
		Posted Speed Limit	Project Application and MAPA Review	–
		Future Traffic Volume (ADT)	MAPA Travel Demand Model	Volume within Project Corridor
Demand	6	Population density within 1/2 mile	MAPA Land Use Activity Allocation Model (LUAAM)	1/2 Mile
		Employment density within 1/2 mile	MAPA Land Use Activity Allocation Model (LUAAM)	1/2 Mile
		Proximity to Schools (Including Universities)	INFOGROUP data and MAPA Review	1/4 Mile
Connectivity	9	Level of Transit Service	Metro Transit	1/4 Mile
		Connectivity to Existing Facilities	MAPA Regional Bicycle-Pedestrian Master Plan	1/4 Mile
		Connectivity to MAPA Priority Corridors	MAPA Project Selection Committee (ProSeCom)	1/4 Mile
Equity	6	Proximity to Environmental Justice Areas	MAPA Transportation Improvement Program (TIP)	Within EJ Area; partially within EJ area
		Community Access to a Vehicle (% No Vehicle Households)	2012 American Community Survey	1/2 Mile

Scaling of Scores for Selection Variables

Scaling of criteria variables allows the characteristics of projects to be compared directly. Many variables were scaled based on whether they satisfied a particular criteria (e.g. connecting to a priority corridor). For these kinds of variables, projects which do satisfy the criteria will be scaled to a value of ten (10); conversely, projects which did not satisfy the criteria will be scaled to a value of zero (0).

In order to account for the wide ranges of values that can be expected for other types of variables, the TAP-C elected to use two methods of proportional scaling to directly compare projects. This method of scaling directly compares a project's "raw" value to the distribution of other values from the other projects being considered. The formulas for this method of scaling is shown below:

$$Proportionate\ Scaling\ =\ 10\ *\ \frac{Project\ Value-Minimum}{Maximum-Minimum}$$

Proportionate scaling is useful for when a higher "raw" value is preferred (e.g. employment density) but where the range of values for a set of projects could be very broad and difficult to compare directly. Proportional scaling allows projects that far exceed the other comparison projects to receive a greater share of the points.

Weighting of Factors

Factors weights are based on stakeholder input through the Regional Bicycle Pedestrian Plan and the development of initial TAP criteria for the MAPA region in 2013. These weights establish the relative priority given to various measures and characteristics of a TAP project.

Ultimately, these weights are utilized to calculate a projects total score. The scaled values for each variable are multiplied by the factor weight for that category to provide a total score for that factor. This process is illustrated in Figure 2 below.

Figure 2: Overview of the Scoring Process for TAP Projects

The total scores calculated through this process will be presented to the TAP-C for review and discussion. Because the factor weights differ, a project's score in categories may vary greatly and still rank high among its peer projects. Ultimately, programming recommendations are made by the TAP-C and the Transportation Technical Advisory Committee (TTAC) to the MAPA Board of Directors.

Overview of Criteria for Construction & Infrastructure Projects

A detailed discussion of the criteria and variables summarized in Table 1 is included within this section. MAPA has included a discussion of the intent behind each measure, the data source utilized for each criteria, and the method of scaling applied within the TAP Prioritization Model.

Support (Weight = 5)

Percentage of Local Match
While there is a minimum requirement of 20 percent local match for Federal-Aid projects, MAPA encourages submitting jurisdictions to take a greater stake in their projects. MAPA will calculate the percentage local match for a project based on the information submitted in the project application. For projects which exceed 30% local match, the percentage value of match for that project will be used as the data.

Data Source: Project Application
Method of Scaling: Proportional

Multi-Jurisdictional Projects & Partnerships
The TAP-C identified funding diversity and partnerships as important measures of community support for a project. Project sponsors will be asked to identify and document funding partnerships in the project application through letters of support. MAPA will tabulate the number of supporting agencies and organizations submitted with the application

Data Source: Project Application
Method of Scaling: Proportional

Safety (Weight = 7)

Physical Separation of Proposed Facility
The level of protection afforded by a particular infrastructure improvement quantifies the impact that a project will have on the safety of cyclists, pedestrians, and motorists. The TAP-C quantified this "Conflict Factor" based on the level of physical separation between motorized vehicles and non-motorized modes of transportation. Physical separation will be measured with high, medium, and low values based on the matrix illustrated in Table 2 below.

Table 2: Matrix of Physical Separation for Bicycle and Pedestrian Facilities

Conflict Factor	Bicycle Infrastructure	Pedestrian Infrastructure	Points
Physically Separated Facilities	Cycletracks, protected bike lanes, bike lanes buffered by parking, grade separated crossings	Pedestrian safety barriers, grade separated crossings,	3
Buffered Facilities & Intersection Improvements	Bicycle boulevards, on-street buffered bike lanes, multi-use trails, bike boxes, new signalized bicycle crossing	Curb extensions, mid-block crossings, new signalized pedestrian crossings, pedestrian countdown signals	2
On-Street Facilities	Bike lanes, wide curb lanes, sharrows, share the road signage	Pedestrian sidepaths, Safe Routes to School signage	1

Data Source: Project Application
Method of Scaling: Proportional

Density of Pedestrian Crashes (2016-2018)

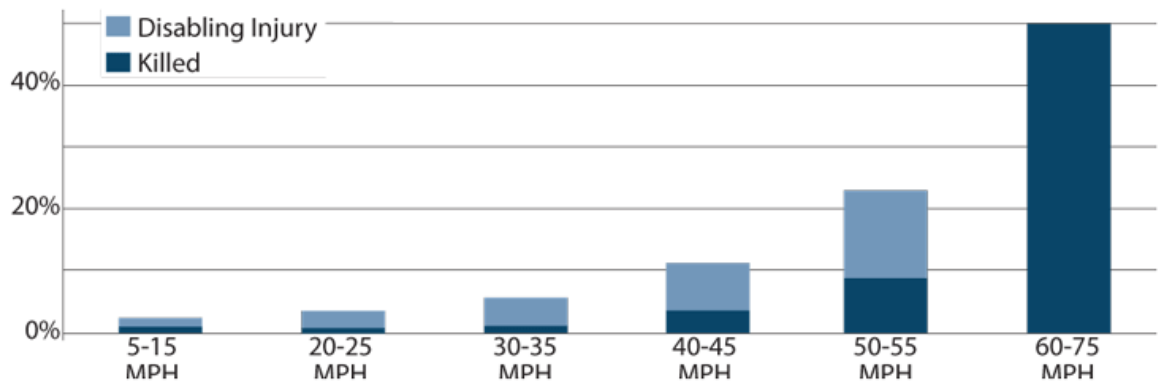
The number of pedestrian crashes occurring at a project's location allows the TAP-C to quantify the safety risks to both motorists and users of non-motorized vehicles as well. The total number of pedestrian crashes for three years along a project route will be calculated in ArcGIS using the crash databases from state partners. This crash total will be converted to a measure of crash density by dividing the total number of crashes by the project's length (in miles).

Data Source: State Crash Databases (NDOR Highway Safety Improvement Database; Iowa DOT SAVER Database)
Method of Scaling: Proportional

Posted Speed Limit

Cyclists and pedestrians are at the greatest risk for injury and death when an accident occurs where speed limits are high. FHWA has collected data on these risks and these risks are illustrated in Figure 3 below.

Figure 3: Risk of Disabling Injury and Death for Cyclists in Traffic Accidents with Motor Vehicles



MAPA will identify the average speed limit for the proposed facility based on either 1) the proposed route or 2) a parallel route that makes a similar connection (in the case of trails or other off-street facilities). The values in Table 3 will be assigned to projects based on the identified speed limit for a project:

Table 3: Risk of Pedestrian and Cyclist Fatality in Traffic Accidents by Speed Limit

	15 MPH & Under	20-25 MPH	30-35 MPH	40-45 MPH	50-55 MPH
Risk of Fatality	0%	.76%	1.52%	3.81%	8%

Data Source: Project Application & MAPA Review
Method of Scaling: Proportional

Future Traffic Volume

In order to estimate the value of safety improvements in the future, estimates of future Average Annual Daily Traffic (AADT) along project routes will be considered in the prioritization process. MAPA will utilize its Travel Demand Model to estimate AADT on either 1) the proposed route or 2) a parallel route that makes a similar connection (in the case of trails or other off-street facilities)

Data Source: MAPA Travel Demand Model
Method of Scaling: Proportional

Demand (Weight = 6)

Population Density
The density of population along a project's route is a good indicator of demand for a project and the potential for usage of a facility. MAPA will calculate the average population density within

one-half (1/2) mile of a project corridor in ArcGIS using the population estimates utilized in MAPA's Land Use Activity Allocation Model.

Data Source: MAPA LUAAM (based on 2010 Census population)
Method of Scaling: Proportional

Employment Density
The density of employment along a project's route is another indicator of demand for a project and its connection to job centers and other areas of activity. MAPA will calculate the average employment density within one-half (1/2) mile of a project corridor in ArcGIS using the population estimates utilized in MAPA's Land Use Activity Allocation Model.

Data Source: MAPA LUAAM (based on INFOGROUP database)
Method of Scaling: Proportional

Proximity to Schools
Schools are important generators and attractors of bicycle and pedestrian activity. The total number of school facilities (including universities) within one-quarter (1/4) mile of a project corridor will be tabulated for each project.

Data Source: MAPA GIS Database (based on INFOGROUP and county databases)
Method of Scaling: Proportional

Connectivity (Weight = 9)

Enhancing connectivity within the multimodal transportation network is a critical goal of the 2050 MAPA LRTP. The TAP-C identified investments that make connections between modes and activity centers within the MAPA region as key priorities of the program.

Level of Transit Service
The second metric of connectivity is Transit Connectivity. The TAP-C determined that alternative transportation projects occurring along corridors with a high frequency of transit service provide important multimodal connections for the region. The level of transit service for a particular project will be measured by accounting for the total number of bus trips scheduled to provide service within 1/4 mile of the project's location on an average weekday. This measurement accounts for both the number of bus lines intersecting the project area and the frequency of transit service on each of those lines.

Access to transit routes will be measured at the following types of existing facilities: transit centers, park and ride lots, transit stops, or new facilities proposed for completion prior to 2021.

Data Source: Metro Transit
Method of Scaling: Proportional

Connectivity to Existing Facilities
The TAP-C noted that leveraging investments in the existing multi-modal transportation network is an important priority of MAPA's TAP program. MAPA has compiled a GIS database of existing bicycle facilities (including trails, bike lanes, and other on-street facilities) as a part of its Regional Bicycle-Pedestrian Master Plan. Projects will receive the maximum scaled value (10 points) if there are existing bikeway and recreational trail facilities within one-quarter (1/4) mile of the project route.

Data Source: MAPA GIS Database (based on Regional Bike-Ped Master Plan)
Method of Scaling: Full Points or No Points

Connectivity to MAPA Priority Corridors
The priority corridors shown in Figure 4 (next page) were identified by the MAPA Project Selection Committee (ProSeCom) to be the most important transportation facilities that support the movement and access of people and goods in the MAPA Region. These corridors also represent key activity centers within the MAPA region and are important connections in the multi-modal transportation network. Projects will receive the maximum scaled value (10 points) if it is located within one-quarter (1/4) mile of an identified priority corridor.

Data Source: MAPA GIS Database (based on Project Selection Committee Criteria)
Method of Scaling: Full Points or No Points

Equity (Weight =6)

Accessibility for Environmental Justice Populations

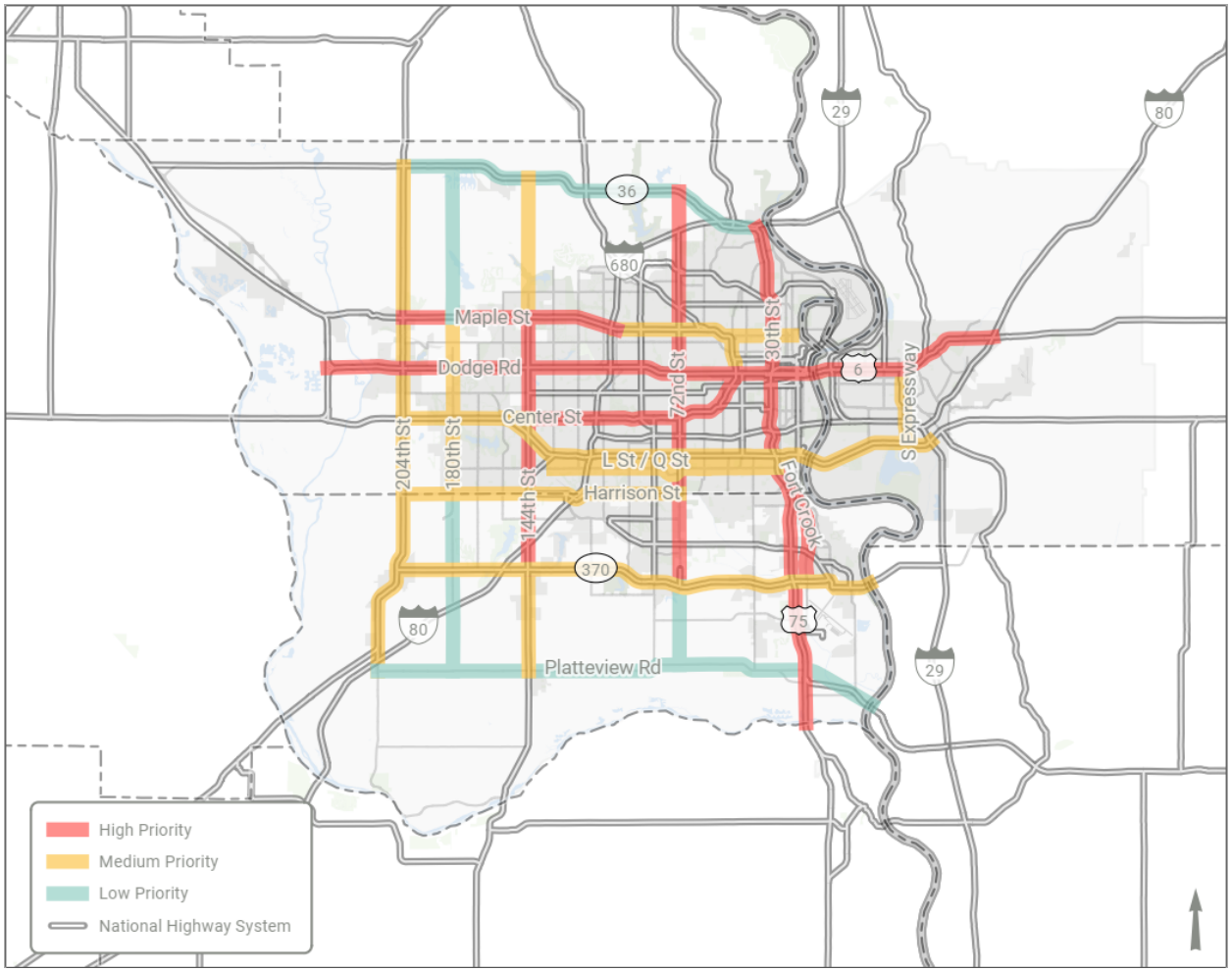
Table 4: Distribution of Points for Proximity to Environmental Justice Areas

Location	Points
Completely Within EJ Areas	2
Partially within EJ Area	1
Completely Outside EJ Area	0

Projects that invest in areas with disproportionately high-minority and low income populations will receive additional consideration through this process. Areas of high-minority concentration, low income concentration and those areas that are both high-minority and low income are shown in Figure 4 (next page). These areas were identified by an analysis of socioeconomic data conducted by MAPA which was accepted by the MAPA Policy Board. The allocation of points under this metric is based on the location of projects in relation to Environmental Justice areas, describe in Table 4 above.

Data Source: MAPA GIS Database (based on approved EJ Areas)
Method of Scaling: Proportional

Figure 4: MAPA 2050 Long Range Transportation Plan Priority Corridors



Community Access to a Vehicle

Access to an automobile is varied across the MAPA region. In order to prioritize investments in areas where bicycle and pedestrian investments can have the greatest impact, the TAP-C noted that the percentage of households with no access to a vehicle should be calculated. The average percentage of non-vehicle households within one-half (1/2) mile of a project corridor will be calculated for each project.

Data Source: American Community Survey (ACS)
Method of Scaling: Proportional

Overview of Criteria for Non-Infrastructure Projects

General Guidelines

The Transportation Alternatives Program Committee determined that non-infrastructure investments are an important aspect of meeting MAPA's LRTP goals related to complete streets and mode shift. Education initiatives focused on modes of travel other than private single-occupancy vehicles such as walking, bicycling, and Safe Routes to Schools were identified as the primary needs of the MAPA region.

Eligible construction activities under the Fixing America's Surface Transportation law are noted in Section 1 of this Policy Guide. Notable differences from previous transportation authorization bills include the ineligibility of bicycle or pedestrian safety education for adults.

The TAP-C does not anticipate many applications for non-infrastructure projects at present. As such, no quantitative measures for efficacy or need have been developed at this time. Applicants interested in applying for TAP funding for non-infrastructure projects should submit a narrative proposal not to exceed seven (7) pages in length. Narratives should be organized to address the key priority areas identified by the TAP-C below:

Accessibility for Environmental Justice Populations

Projects that invest in areas with disproportionately high-minority and low income populations will receive additional consideration through this process. Areas of high-minority concentration, low income concentration and those areas that are both high-minority and low income are shown on the MAPA Priority Corridors Map (included in this Policy Guide). These areas were identified by an analysis of socioeconomic data conducted by MAPA which was accepted by the MAPA Policy Board. The allocation of points under this metric is based on description of the project activities in relation to Environmental Justice areas. Projects which take place at facilities within an environmental justice area or has clear benefits for environmental justice populations will be recognized and prioritized by the TAP-C.

Comprehensiveness

The Transportation Alternatives Program Committee determined that the comprehensiveness of the education programs offered was a key factor in the evaluation of potential projects. In order to have the greatest impact, points are allocated based on the comprehensiveness of the content delivered by the proposed education program. Projects which address both bicycling and walking safety education are more favorable than those that only focus on one mode.

Need for the Proposed Project

As resources for bicycle safety education and Safe Routes to School activities are limited, the TAP-C wanted to ensure that there was little or no duplication between

programs across the region. The need for the proposed project is quantified based on the geographic reach of the project and whether a similar program has been offered recently. A brief description of the project's impact and its relationship to other education programs in the region will be provided by applicants. Projects which enhance educational opportunities available to residents within the community are more favorable than those that duplicate existing services and programs

Percentage of Local Match

While there is a minimum requirement of 20 percent local match for Federal-Aid projects, MAPA encourages submitting jurisdictions to take a greater stake in their projects. Projects with a non-federal share of funding over 30% are more favorable than those meeting minimum matching requirements.

School District Impacts

Safe Routes to School education activities were identified by the Transportation Alternatives Program Committee as an important activity to encourage within the MAPA region. In order to encourage regionally significant education programs, the TAP-C felt non-infrastructure projects should promote collaboration within and between school districts in the region. Projects that engage multiple school districts and/or multiple school facilities are more favorable than those targeted at a single school facility.

Educational Materials

In order to ensure that high quality education programs are implemented throughout the region, the TAP-C determined that the source of educational materials for proposed projects was an important factor to consider. Projects which will utilize best practices from national organizations such as the League of American Bicyclist, the Alliance for Walking & Biking, or an equivalent organization will receive priority over those that do not identify the source of educational materials.