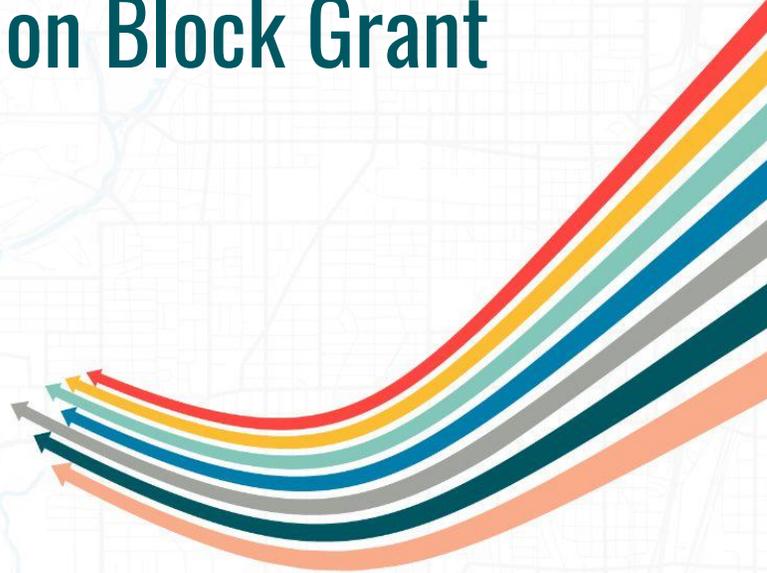




Surface Transportation Block Grant Project Selection



Guidance Document for STBG-MAPA Funding
FY2023-2028 Transportation Improvement Program

Approved:

ProSeCom 10/06/2021

TTAC 10/22/2021

Board 10/28/2021

Table of Contents

Table of Contents	2
Definitions	3
Schedule for STBG-MAPA Project Selection	11
Eligibility of Projects	12
Federal Eligibility Requirements	12
Additional Eligibility Requirements for STBG Funding	14
Figure 1: Map of the MAPA Transportation Management Area	14
MAPA Project Selection Process	15
Project Selection Committee Membership	15
Project Submission Guidelines	15
Evaluation of Project Applications	16
Project Selection Process and Funding Implementation	16
Evaluation Criteria	17
Figure 2: MAPA 2050 Long Range Transportation Plan Priority Corridors	18
Existing Reliability Data Network through the Probe Data Analytics Suite (INRIX Speed Data)	20
2050 AM Existing + Committed Network Predicted Level of Service	21
2050 PM Existing + Committed Network Predicted Level of Service	22
Project Application Categories	32
System Preservation	32
Planning & Leverage	33
Capital Projects (Urban or Rural)	33
Alternative Transportation Projects	34



INSERT COMMITMENT TO EQUITY GRAPHIC HERE

New for the FY2023 TIP

Definitions

- Updated
 - Cycle Track changed to Separated Bike Lane
- Added
 - Crash Modification Factors (CMF)
 - Community Factor
 - Corridors (Heartland 2050 and LRTP 2050 designations)
 - Equivalent Property Damage Only (ePDO)
 - Million Entering Vehicles
 - Million Vehicle Miles Traveled
 - Nodes (Heartland 2050 and LRTP 2050 designations)
 - Number of Expected Crashes (N_{expected})
 - Safety Performance Functions (SPF)
- Removed
 - Crash Severity Index (CSI)

Evaluation Criteria

- Updated
 - Redevelopment and Environmental Justice
 - Safety - broken out into separate categories
- Added
 - Safety Equity
 - Public Involvement
- Removed

Schedule

Other Application Items

- Public Involvement Questions
- Phase Questions



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 destinations increases the amount of mobility needed to access goods, services and activities, reducing accessibility.

Access Control/Consolidation - Access control/consolidation are defined as the act of controlling access to specific roadways by acquiring rights of access from abutting property owners and selectively limiting approaches to the roadway in order to preserve the highway's safety and efficiency.

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.

Air Quality Impacts - Air quality impacts are defined as the level to which a project will positively or negatively impact the ambient air quality of the MAPA region as related to the National Ambient Air Quality Standards set forth in The Clean Air Act.

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.

CMAQ - Congestion Mitigation and Air Quality is a federal funding category designed to reduce traffic congestion. These funds are apportioned to states to use in urban and rural areas. HSIP funding is not apportioned specifically to MPOs, but jurisdictions within the MAPA region can apply for it from the states of Nebraska and Iowa.

Community Development Block Grant (CDBG) - Census tracts with over 51% of residents are low-to-moderate income (LMI).

Community Factor - For the *Identified Populations* this factor refers to percentage of the population within each census tract compared to the TMA using a normal range of one standard deviation above and below the average (Adult Ages 65+ and People with Disabilities) or the square root value (Communities of Color, Non-Vehicle Households, and Populations in Poverty) due to the positively skewed data. A ZScore is then calculated for each tract, given by:



$$([\text{indicator}] - [\text{TMA mean}]) / [\text{TMA standard deviation}]$$

The following qualitative and quantitative values are returned for each score:

Identified Population ZScore for the Census Tract				
≤ -2	> -2 and ≤ -1	> -1 and ≤ 1	> 1 and ≤ 2	≥ 2
Well Below Average	Below Average	Average	Above Average	Well Above Average
0	1	2	3	4

Corridor - Heartland 2050 planning identifies corridors as major connections between nodes facilitating multiple modes of transportation, often with more intensive transit investment along them.

Crash Rate (Nebraska) - Crashes Rate is a ratio of the total number of crashes (except non-reportable crashes) that have occurred on a segment or at a simple or complex junction, per one million vehicles. Also expressed as Crash Rate (CR). This crash rate is expressed in terms of societal cost by crash type, which is reflected in the Hazardous Location Analysis as well as the Highway Safety Manual Part C Predictive Method. When analyzing locations which do not correspond to HLA locations, project submissions will require a request to NDOT for crash types for the 3-year analysis period to conduct the pre-improvement CR assessment.

Crash Modification Factor - A crash modification factor (CMF) is used to determine the effect of countermeasures implemented on a road or intersection on subsequent crashes. CMFs used within Highway Safety Manual Part C Predictive Method are prescribed and will be used as defined by the Highway Safety Manual and the HSM Spreadsheets. For situations where the HSM Spreadsheets do not apply, the CMF Clearinghouse can be used to identify and apply these factors as most applicable given local conditions.

Context-Sensitive Design - I don't even know who / how many jurisdictions have established policies, but this is something I think we should consider in future years.

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

Designated Truck Route - Truck routes are auxiliary routes of a U.S. or state highway that is the preferred (or sometimes mandatory) route for commercial truck traffic. Such restrictions may be imposed because of weight or hazardous material restrictions on the primary route or because of a community request that commercial trucks be routed around their area.



Discretionary Programs/Discretionary Funding - Federal award programs, usually competitive in nature, that are not apportioned to states and/or MPOs fall under the discretionary heading. Examples include programs like TIGER and BUILD.

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 meanings, 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.

Equity Focus Area - Areas where identified communities live which, due to disinvestment and other barriers to mobility create increased burdens or transportation barriers which result in disproportionate impacts of traffic crashes. These areas are identified at the census tract level, and are the result of a cumulative ranking of five *identified populations* and the subsequent *community factor* based on statistical analysis.

Federal Functional Classification - Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide. Basic to this process is the recognition that individual roads and streets do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads. It becomes necessary then to determine how this travel can be channelized within the network in a logical and efficient manner. Functional classification defines the nature of this channelization process by defining the part that any particular road or street should play in serving the flow of trips through a highway network.

Federal Functional Classification shall be determined by viewing the MAPA FFC map available here (<https://mapacog.org/data-maps/federal-functional-classification/>)

HSIP - Highway Safety Improvement Program, a federal funding category designed to improve safety on the National Highway System. These funds are apportioned to states to use in urban and rural areas. HSIP funding is not apportioned specifically to MPOs, but jurisdictions within the MAPA region can apply for it from the states of Nebraska and Iowa.

ITS Infrastructure - Intelligent Transportation Systems (ITS) infrastructure is defined as the use of information and communications technology to enhance the management, operation and use



of a transportation system. ITS infrastructure must be applicable to the MAPA Regional ITS Architecture.

Identified Population - Communities which due to disinvestment or other barriers to mobility are potentially disproportionately affected by crashes. For the 2015-2019 Safety Report, these communities include: 1) Adults Ages 65+, 2) Communities of Color, 3) Zero-Vehicle Households, 4) People with Disabilities, and 5) Population in Poverty.

Left-turn Lane - Left-turn lanes are used to provide space for the deceleration and storage of turning vehicles. They may be used to improve safety and/or operations at intersections. Multiple left-turn lanes may be used to accommodate high peak hour left-turn volumes. A left-turn lane includes both deceleration and storage.

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.

Million Entering Vehicles (MEV) - When evaluating intersections (or simple/complex junctions), this value is used as the denominator to calculate the Crash Rate (CR) for a given location.

$$MEV = \frac{(AADT \times 365)}{1,000,000}$$

Million Vehicle Miles Traveled (MVM) - When evaluating segments or sections of roadway, this value is used as the denominator to calculate the Crash Rate (CR) for a given location.

$$MVM = \frac{(AADT \times 365 \times \text{Segment Length}(in\ miles))}{1,000,000}$$

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.

Number of Expected Crashes (N_{expected}) - The resultant number of crashes found by applying either the HSM spreadsheet or CMF methodology estimated by the implementation of safety countermeasures.



Pavement Condition - Pavement condition refers to the status of the existing pavement of a facility that is being considered for an improvement project. Pavement conditions will be scored against the categories of: good, fair and poor.

For roadway segments which are measured using the Nebraska or Iowa pavement collection processes, this measured pavement condition shall be used. Details on pavement condition collection and reporting can be found in the respective state's Transportation Asset Management Plan.

Nebraska (<https://dot.nebraska.gov/media/13303/ndot-tamp.pdf>)

Iowa (https://iowadot.gov/systems_planning/fpmam/lowaDOT-TAMP-2019.pdf)

For jurisdictions using their own pavement data collection and pavement management program, details on classification and pavement condition determination shall be provided and scored using the corresponding levels: good, fair, and poor.

For roadway projects on segments not otherwise collected, an assessment of the pavement condition using the PASER pavement surface evaluation rating and evaluation procedure shall be conducted and condition provided with the project submittal. PASER documentation can be found at:

<https://epd.wisc.edu/tic/document-type/publications/paser-manuals/>

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.

Potential for Crash Reduction (Intersections) - Analysis conducted by the Iowa DOT for 11 types of paved intersections resulted in *Safety Performance Functions (SPFs)* for each type. A statewide analysis of observed crashes (corrected using the Empirical Bayes method to an *expected* number of crashes) is compared to the *SPF predicted crashes*. The difference between the expected and predicted is the Potential for Safety Improvement (PSI) which is also the PCR. Intersections were then placed into one of three tiers.



Tier 1 - intersections with a PCR > 1 for all crashes or PCR > 0.25 for injurious crashes. Projects at these locations require a consultation with Traffic and Safety to determine potential safety improvements, and may qualify for safety funds.

Tier 2 - intersections with a PCR < 1 and > 0 for all crashes or PCR < 0.25 and > 0 for injurious crashes. These locations have potential for safety improvement but may not qualify for safety funds.

Tier 3 - These intersections have PCR < 0 and are performing better than predicted.

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.

Ramp - Ramps are the access points to freeway and expressway type transportation facilities. As a component of the transportation facility, ramps are eligible for STBG-MAPA but do not easily fit into the standard FFC categories.

Redevelopment - Redevelopment is any new construction on a site that has pre-existing uses on it such as the redevelopment of an industrial site into a mixed-use development. Typically redevelopment repurposes land use from low density development to a higher density. Projects that qualify for this category have binding commitments and binding agreements in place (between the developer and sponsoring jurisdiction).

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.

Safety Tiers (Iowa) - Ranking of intersections following a statistical safety analysis:¹

Tier 1 intersections will now replace the "above the statewide average" classification. Projects at these intersections may qualify for safety funds and will require a consultation with Traffic and Safety to determine potential safety improvements.

Tier 2 intersections have room for improvement but may not qualify for safety funds.

¹ Iowa DOT. Potential for Crash Reduction (PCR) of Intersections. Accessed July 25, 2021 at <https://iowadot.maps.arcgis.com/apps/MapSeries/index.html?appid=6920b9b36fa54caa90c25bd6dcdd0c7e>



Tier 3 intersections are performing better than predicted.

Safety Performance Function (SPF) (Iowa) - The Iowa DOT has identified safety performance functions for 11 types of paved intersections. 'A safety performance function (SPF) is an equation used to predict the average number of crashes per year at a location as a function of exposure and, in some cases, roadway or intersection characteristics. For intersections, exposure is represented by traffic volumes on the major and minor intersecting roads.'²

Separated Bike Lane - A separated bike lane is an exclusive facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. A separated bike lane is physically separated from motor traffic and distinct from the sidewalk. They 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, separated bike lanes are located to the curb-side of the parking (in contrast to bike lanes). Separated bike facilities 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 lane 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, separated bike lanes can offer a higher level of security than standard bike lanes and are attractive to a wider spectrum of the public.

Sharrows - 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.

Signal Interconnection - Signal interconnection refers to the development of a coordinated, integrated, communications and monitoring system for traffic control devices.

State Average Crash Rate (Nebraska) - Statewide average crash rates are calculated for urban and rural roadway types for: 1) Complex Junctions, 2) Simple Junctions, and 3) Sections. These averages are used as a denominator to determine the ratio of the project Crash Rate (CR) to the State Average Crash Rate (SA) for the subject road or intersection. Safety locations are ranked by this ratio, CR/SA. Junctions are expressed as crashes over Million Entering Vehicles (MEV), and sections by Million Vehicle Miles Traveled (MVM).

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

² Iowa DOT. Potential for Crash Reduction (PCR) of Intersections. Accessed July 25, 2021 at <https://iowadot.maps.arcgis.com/apps/MapSeries/index.html?appid=6920b9b36fa54caa90c25bd6dcdd0c7e>



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.

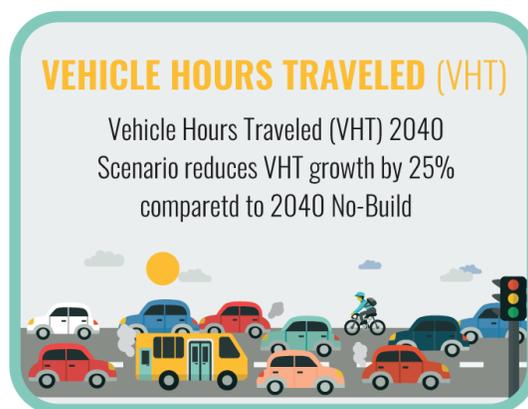
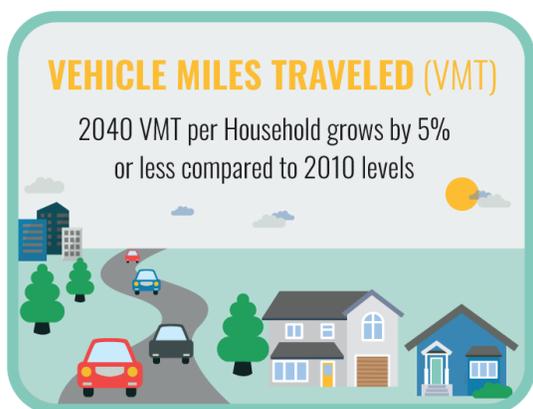
Transit Operation Features or Amenities - Transit operation features or amenities refer to enhancements that directly improve the operation or aesthetics of transit in the MAPA region.

Transportation System Management (TSM) - Actions or construction that control or improve the movement of cars and trucks on the highway system and buses on the transit system. TSM also includes the coordination of the available transportation systems for more efficient operation.

Volume/Capacity ratio - Volume to capacity ratios can be used to determine the level of congestion on a transportation facility. This ratio is calculated by dividing the actual traffic volume that the facility carries by the capacity of the road as planned.

Vehicle Hours Traveled (VHT) - The total number of hours vehicles travel within a given region annually. This estimated value is a performance measure and provides a means to assess network performance. As this directly impacts the cost of travel and shipping, with indirect impacts such as air quality, projects which can be shown to reduce VHT locally have a positive regional impact.

Vehicle Miles Traveled (VMT) - The total miles traveled by vehicles within a given area in a year. VMT is calculated within the TMA to determine crash rates for measuring federal safety performance. VMT is also measured at the census tract to provide a means of measuring the relative impacts of traffic (emissions, safety, and mobility) to the residents who live within these neighborhoods.



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 STBG-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
ProSeCom	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 Surface Transportation Program Apportionment (STBG). This methodology does not apply to other federal funding sources or classes and should not be utilized by jurisdictions seeking funding from any other source.

Federal Eligibility Requirements

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

- Construction, reconstruction, rehabilitation, resurfacing, restoration, preservation, or operational improvements for highways, including construction of designated routes of the Appalachian development highway system and local access roads under section 14501 of title 40.
- Replacement (including replacement with fill material), rehabilitation, preservation, protection (including painting, scour countermeasures, seismic retrofits, impact protection measures, security countermeasures, and protection against extreme events) and application of calcium magnesium acetate, sodium acetate/formate, or other environmentally acceptable, minimally corrosive anti-icing and deicing compositions for bridges (and approaches to bridges and other elevated structures) and tunnels on public roads of all functional classifications, including any such construction or reconstruction necessary to accommodate other transportation modes.
- Construction of a new bridge or tunnel at a new location on a Federal-aid highway.
- Inspection and evaluation of bridges and tunnels and training of bridge and tunnel inspectors (as defined in section 144), and inspection and evaluation of other highway assets (including signs, retaining walls, and drainage structures).
- Capital costs for transit projects eligible for assistance under chapter 53 of title 49, including vehicles and facilities, whether publicly or privately owned, that are used to provide intercity passenger service by bus.
- Carpool projects, fringe and corridor parking facilities and programs, including electric vehicle and natural gas vehicle infrastructure in accordance with section 137, bicycle transportation and pedestrian walkways in accordance with section 217, and the modifications of public sidewalks to comply with the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.).
- Highway and transit safety infrastructure improvements and programs, installation of safety barriers and nets on bridges, hazard eliminations, projects to mitigate hazards caused by wildlife, and railway-highway grade crossings.
- Highway and transit research and development and technology transfer programs.
- Capital and operating costs for traffic monitoring, management, and control facilities and programs, including advanced truck stop electrification systems.
- Surface transportation planning programs.



- Transportation alternatives.
- Transportation control measures listed in section 108 (f)(1)(A) (other than clause (xvi)) of the Clean Air Act (42 U.S.C. 7408 (f)(1)(A)).
- Development and establishment of management systems [1]
- Environmental mitigation efforts relating to projects funded under this title in the same manner and to the same extent as such activities are eligible under section 119(g).
- Projects relating to intersections that—
 - have disproportionately high accident rates;
 - have high levels of congestion, as evidenced by—
 - interrupted traffic flow at the intersection; and
 - a level of service rating that is not better than “F” during peak travel hours, calculated in accordance with the Highway Capacity Manual issued by the Transportation Research Board; and are located on a Federal-aid highway.
- Infrastructure-based intelligent transportation systems capital improvements.
- Environmental restoration and pollution abatement in accordance with section 328.
- Control of noxious weeds and aquatic noxious weeds and establishment of native species in accordance with section 329.
- Projects and strategies designed to support congestion pricing, including electric toll collection and travel demand management strategies and programs.
- Recreational trails projects eligible for funding under section 206.
- Construction of ferry boats and ferry terminal facilities eligible for funding under section 129 (c).
- Border infrastructure projects eligible for funding under section 1303 of the SAFETEA-LU (23 U.S.C. 101 note; Public Law 109-59).
- Truck parking facilities eligible for funding under section 1401 of the MAP-21.
- Development and implementation of a State asset management plan for the National Highway System in accordance with section 119, including data collection, maintenance, and integration and the costs associated with obtaining, updating, and licensing software and equipment required for risk based asset management and performance based management, and for similar activities related to the development and implementation of a performance based management program for other public roads.
- A project that, if located within the boundaries of a port terminal, includes only such surface transportation infrastructure modifications as are necessary to facilitate direct intermodal interchange, transfer, and access into and out of the port.
- Construction and operational improvements for any minor collector if—
 - the minor collector, and the project to be carried out with respect to the minor collector, are in the same corridor as, and in proximity to, a Federal-aid highway designated as part of the National Highway System;
 - the construction or improvements will enhance the level of service on the Federal-aid highway described in subparagraph (A) and improve regional traffic flow; and
 - the construction or improvements are more cost-effective, as determined by a benefit-cost analysis, than an improvement to the Federal-aid highway described in subparagraph (A).

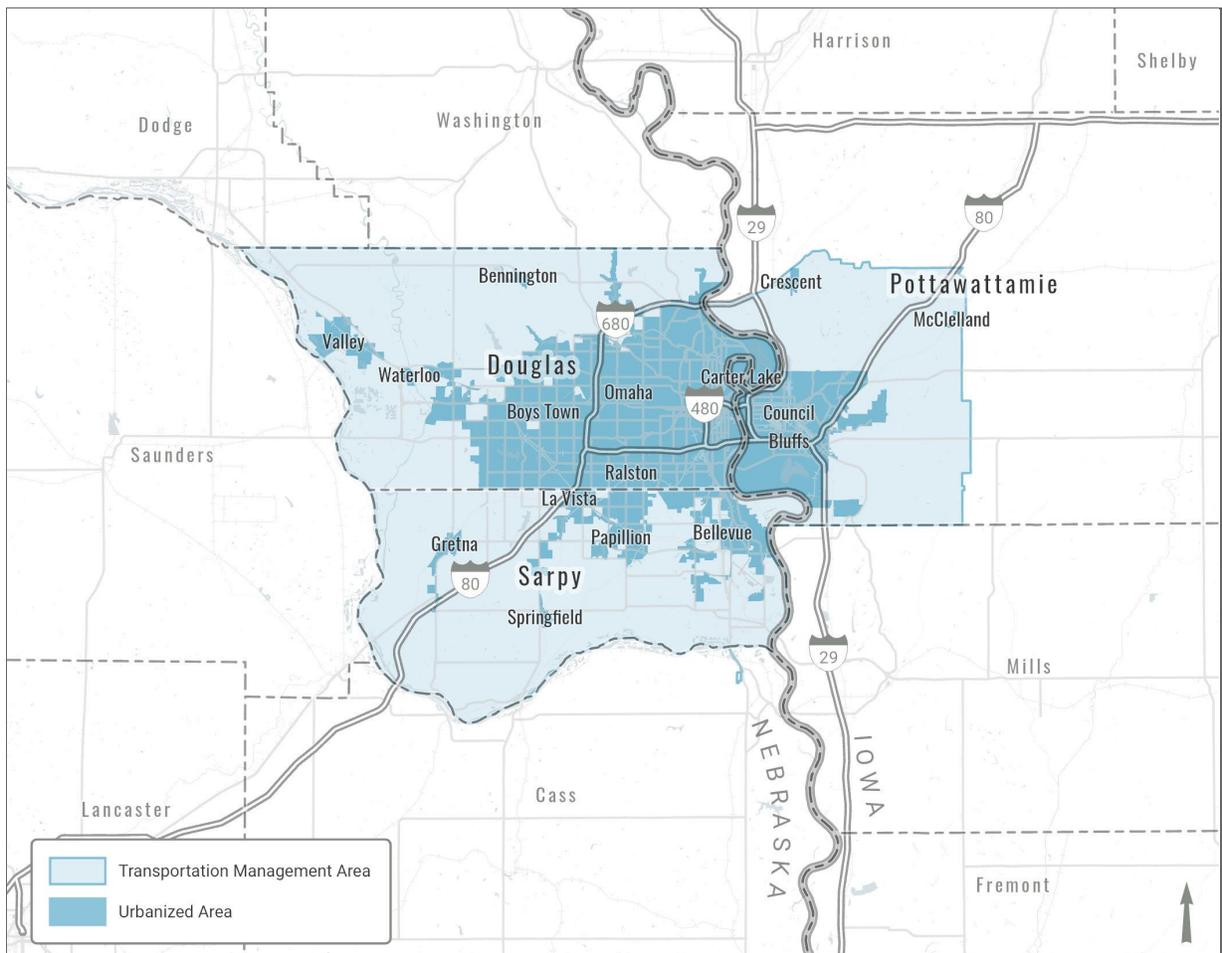


Additional Eligibility Requirements for STBG Funding

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

- Project must be listed in and/or consistent with 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.
- Minimum total project cost of \$1,000,000.00 (STBG-MAPA Capital Projects Only).
- STBG-MAPA Surface Transportation Projects must occur on Federal-Aid eligible routes (FFC Rural Minor Collector/Urban Collector and above).
- Projects must be submitted by local public agencies (LPAs) 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.

Figure 1: Map of the MAPA Transportation Management Area



Projects selected and implemented using MAPA STBG funds should directly contribute to one or more of the LRTP 2050 goals in a meaningful and measurable way.

<p>ACCESS TO OPPORTUNITY</p> <ul style="list-style-type: none">• Our multimodal transportation system will enable people to reach their preferred destinations in a reasonable amount of time, regardless of age, ability, or neighborhood• We will maximize access to education, employment, and health care for people traveling by any mode	<p>ECONOMIC GROWTH THROUGHOUT THE REGION</p> <ul style="list-style-type: none">• Our transportation system will help us all prosper as individuals, as communities, and as a region.• Our transportation system will safely and reliably move freight, as well as people.• We will catalyze higher value real estate development and neighborhood revitalization through strategic infrastructure investment.
<p>TALENT ATTRACTION & RETENTION</p> <ul style="list-style-type: none">• Our transportation system will contribute to a quality of life that is appealing to local residents and attractive to people living elsewhere.• Greater Omaha will support a diverse range of lifestyles by offering a variety of enjoyable neighborhoods, from rural to urban	<p>STEWARDSHIP OF THE TRANSPORTATION SYSTEM</p> <ul style="list-style-type: none">• We will take pride in the condition of our existing transportation infrastructure, prioritizing its maintenance and rehabilitation.• We will account for long-term operations and maintenance costs when planning for future projects

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

MAPA Project Selection Process

Project Selection Committee Membership

Transportation improvement projects in the MAPA TMA are subject to the review and approval of the MAPA Project Selection Committee (ProSeCom). ProSeCom is a twelve member sub-committee to the Transportation Technical Advisory Committee (TTAC) that includes planners, engineers, and other staff from local and state jurisdictions. Membership of the Project Selection Committee is composed of members of the larger MAPA TTAC. Appointments to ProSeCom are made by the President of TTAC.

ProSeCom was charged with creating and administering Project Selection Criteria for the MAPA region in late 2011 and meets periodically. ProSeCom representative slots are shown below:



- Iowa DOT District 4 Representative
- Nebraska DOR District 2 Representative
- Metro Transit Representative
- Douglas County Engineer (Also represents Douglas County 2nd Class Cities)
- Sarpy County Engineer
- Sarpy County Municipalities Public Works Representative
- Omaha/Douglas County Municipalities Public Works Representative
- Omaha/Douglas County Municipalities Planning Representative
- Council Bluffs Public Works Representative
- All Metro Open Planning Representative
- Bicycle-Pedestrian Representative

ProSeCom’s membership has remained unchanged through the first two cycles of the program as substantial updates have been made. ProSeCom membership will be reevaluated to determine turnover strategies for the membership of the rotating spots.

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 STBG-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 the FY2022 Transportation Improvement Program should be submitted no later than 4:30 PM on January 8, 2021 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 transportation@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 then present the scores to ProSeCom for review along with the project applications.

MAPA staff will recommend a prioritization of projects to ProSeCom for approval at the Final Selection Workshop. **The committee will assess funding availability, project schedules and**



phasing, and regional participation as part of its recommendation to the MAPA Board of Directors. 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

Once a project has gone through scoring, ranking, and is selected for an award, MAPA will typically allocate funding for it in year six of the program. The implementation year, or year 1, of the TIP is the fiscal year during which funding for a 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. MAPA will coordinate with NDOT and local project sponsors to ensure projects with funding in the implementation year have reasonable schedules and are likely to be ready for obligation.

Each project that will be programmed in the TIP must submit an attainable timeline, will be ranked by MAPA staff, and approved by ProSeCom before it will be placed in the TIP. ProSeCom will have flexibility in selecting projects that are deemed higher priority to the committee. Projects will be allowed to present an argument for implementation before ProSeCom 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 Project Selection Committee, TTAC, and MAPA's Board of Directors.

Evaluation Criteria

Priority Corridors & NHS

The Metropolitan Travel Improvement Study assessed the MAPA region's transportation network and determined the corridors shown on the following map to be the most important facilities supporting the movement and access of people and goods. This finding is supported by MAPA's 2050 Long Range Transportation Plan and these corridors will be the focus of future investment in the MAPA region.

Corridors were further broken into a high, medium and low priority of importance for investment of STBG-MAPA funding. The corridors have been segmented based upon the importance to the regional transportation system. Therefore, a corridor may change in priority level as one moves along the corridor.

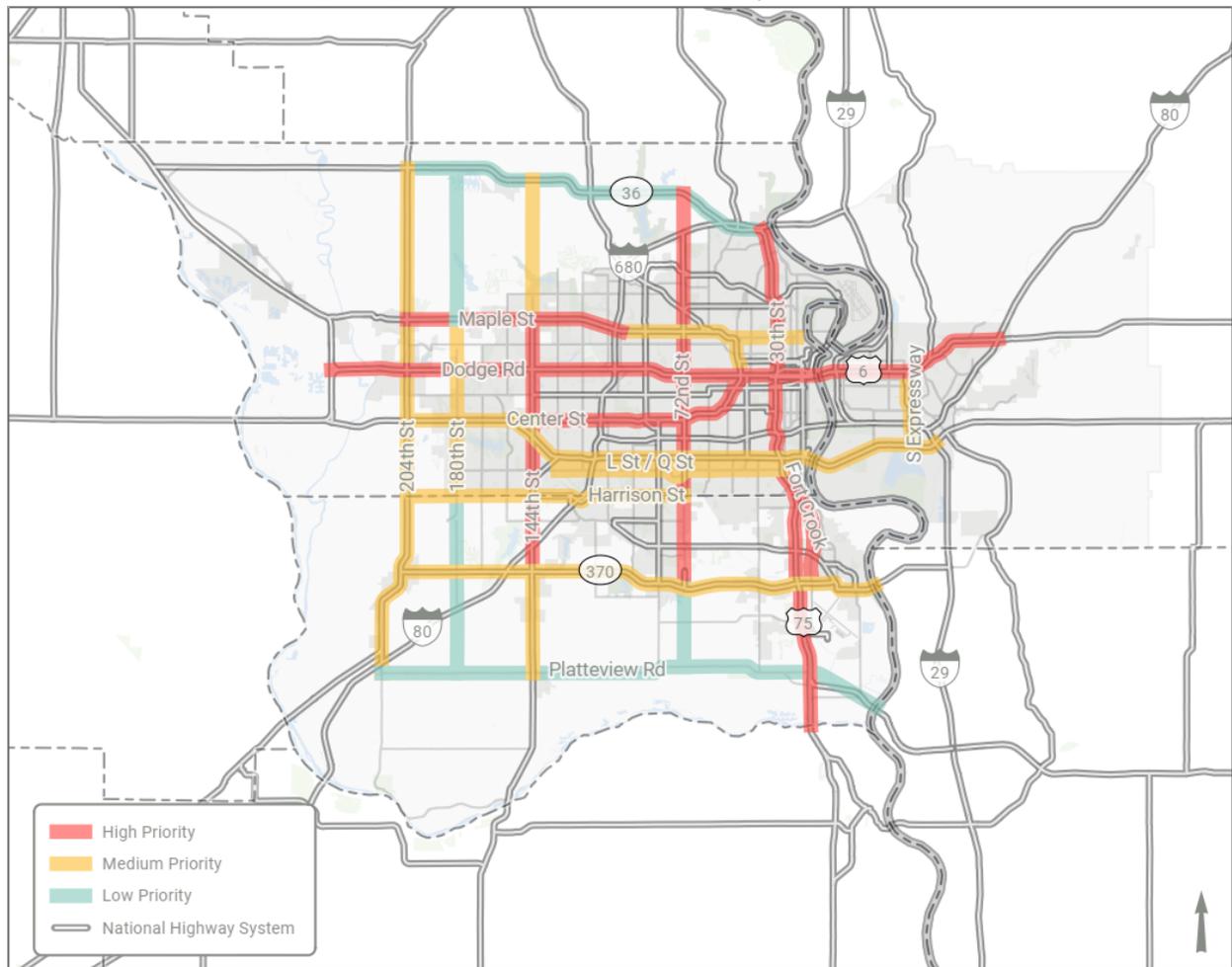
Scoring for a project that is located on a corridor is related to the relative importance of that corridor. The scoring breakdown is shown below:



- High Priority Corridor – 15 Points
- Medium Priority Corridor – 10 Points
- Low Priority Corridor – 5 Points

The corridors include a buffer to allow for intersection improvement, side paths, et cetera and should not be assumed to simply mean the specific roadway they are identified with. The intent of this buffer is to allow for the transportation infrastructure to work as a system in allowing greater access and mobility for people and goods in the MAPA region. Projects that are not located directly on or adjacent to the MAPA Priority Corridors seeking to qualify for points under this criteria must show a direct impact to a Priority Corridor. If a project not on a corridor demonstrates a positive impact to a priority corridor, the project will receive the points for the grade of corridor impacted.

Figure 2: MAPA 2050 Long Range Transportation Plan Priority Corridors



2050 Level of Service

Level of Service outputs from MAPA's Travel Demand Model will be evaluated based on the output of the no-build Travel Demand Model. This model projects traffic flows throughout the MAPA region based on the distribution of population, employment, and Existing and Committed infrastructure investments.

2050 Future Year No Build Level of Service

No Build LOS (V/C)	Points
C (0.71 – 0.80)	2
D (0.81 – 0.90)	4
E (0.91 – 1.00)	6
F (> 1.00)	8

ITS Deployment Delay Reduction

Submitting jurisdictions are asked to quantify the delay reduction by means of a level of service impact at intersections or along corridors resulting from a successful ITS deployment. ITS focused level of service improvements will be scored on the below matrix:

No Build LOS vs Deployment LOS	Points
E to D	4
F to E	6
F to D	8

Projects that have an identified Level of Service issues in the 2050 model output will be prioritized over those that are projected to have more stable operations. A map of the 2050 no build model output is included on the next page.

Planning Time Index (PTI)

Travel reliability captures the variability of travel time across a corridor. The more reliable a corridor, the less travel time varies from day to day. Travel Time data is available through the Probe Data Analytics Suite for many of the larger roadways within the TMA. FHWA recommends that the Planning Time Index be used as it easily illustrates the buffer or planning time which



drivers must add to account for congestion during the peak AM or PM periods. More information about the Planning Time Index can be found at the following link (https://ops.fhwa.dot.gov/publications/tt_reliability/brochure/ttr_brochure.pdf).

The Planning Time Index captures the variability a commuter might encounter during a month, producing a ratio of the worst travel time during a month (95th percentile) to the typical daily travel time (median). It is intended to reflect the extra time a traveler should budget to account for recurring travel variability. MAPA will identify if reliability coverage is available and calculate the PTI for submitted projects.

A map of existing corridors for which reliability data is available is included below. Segments in gray are those 'not-available' in the National Performance Management Research Dataset (NPMRDS) as they are off the NHS, but which still have sufficient speed data that they can be analyzed using the Probe Data Analytics Suite. The remainder are roadways which contribute to the Federal Interstate and Non-Interstate Travel Time Reliability, or Truck Travel Time Reliability performance measures, as applicable. Current Level of Travel Time Reliability maps follow. This network includes most of ProSeCom's Regional Priority corridors and other major roadways throughout the MAPA region. Projects will not receive points under this measure if they do not fall on or along a corridor in the figure below.

Planning Time Index	Points
1.01 – 1.50	1
1.51 – 1.75	3
1.76 – 2.00	5
>2.00	7



Figure 3: Existing Reliability Data Network - Probe Data Analytics Suite (INRIX Speed Data)

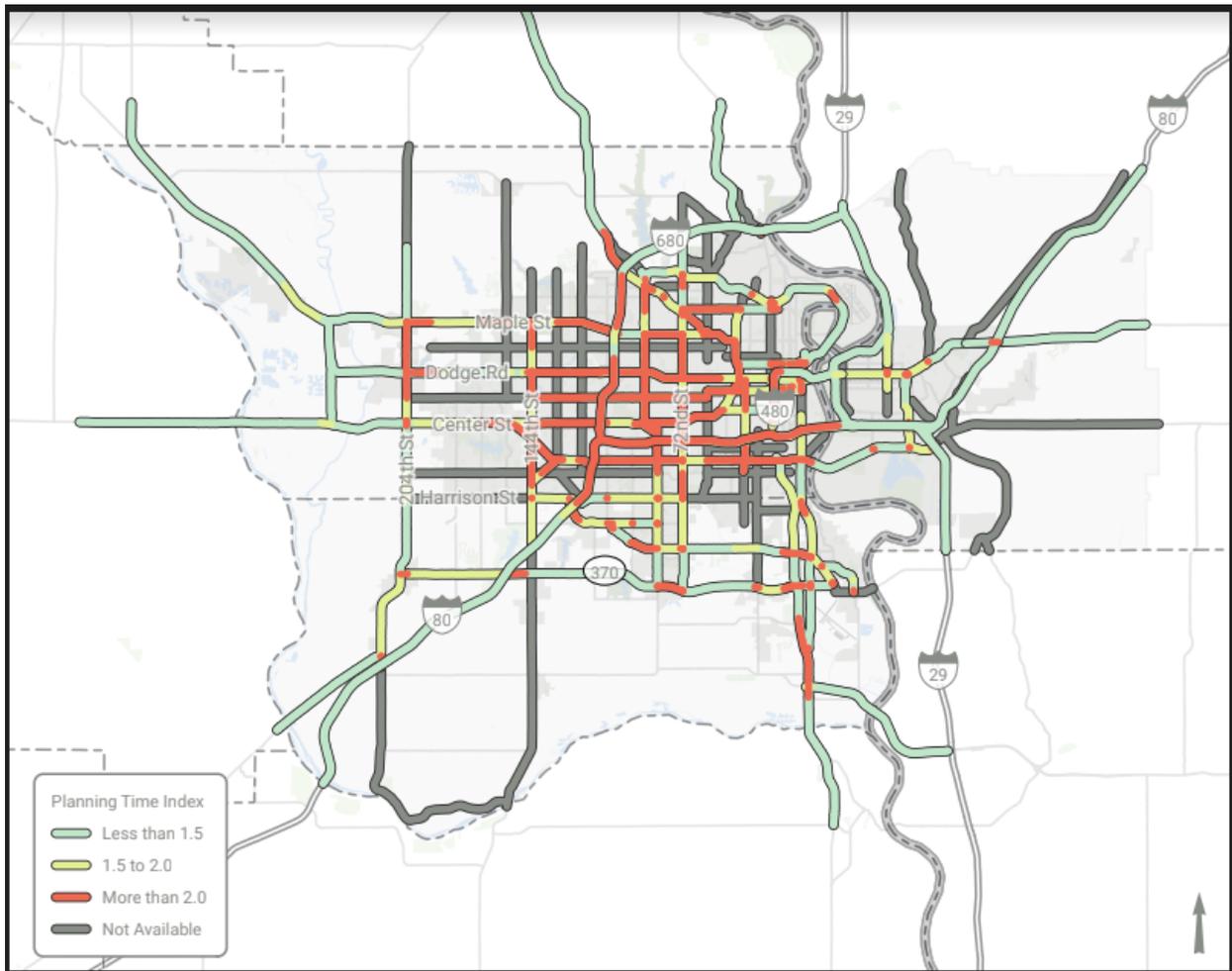


Figure 4: 2050 AM Existing + Committed Network Predicted Level of Service

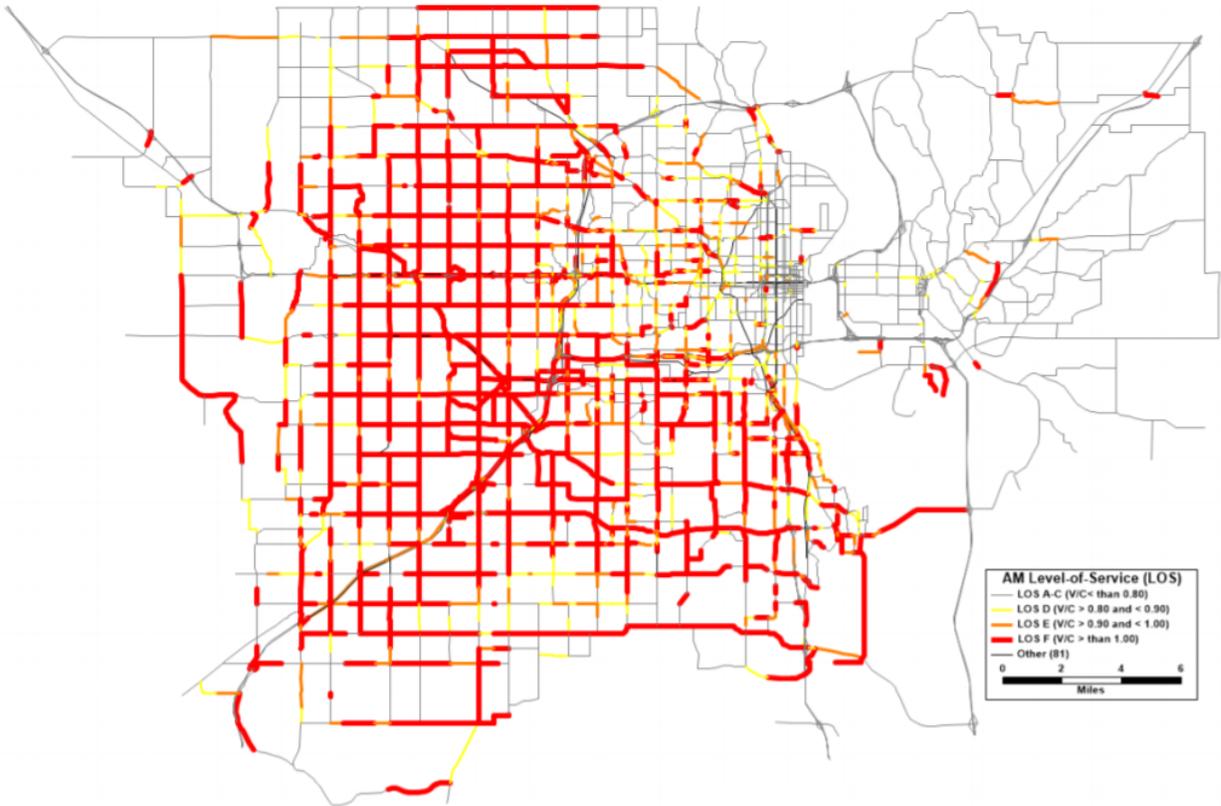


Figure 5: 2050 PM Existing + Committed Network Predicted Level of Service

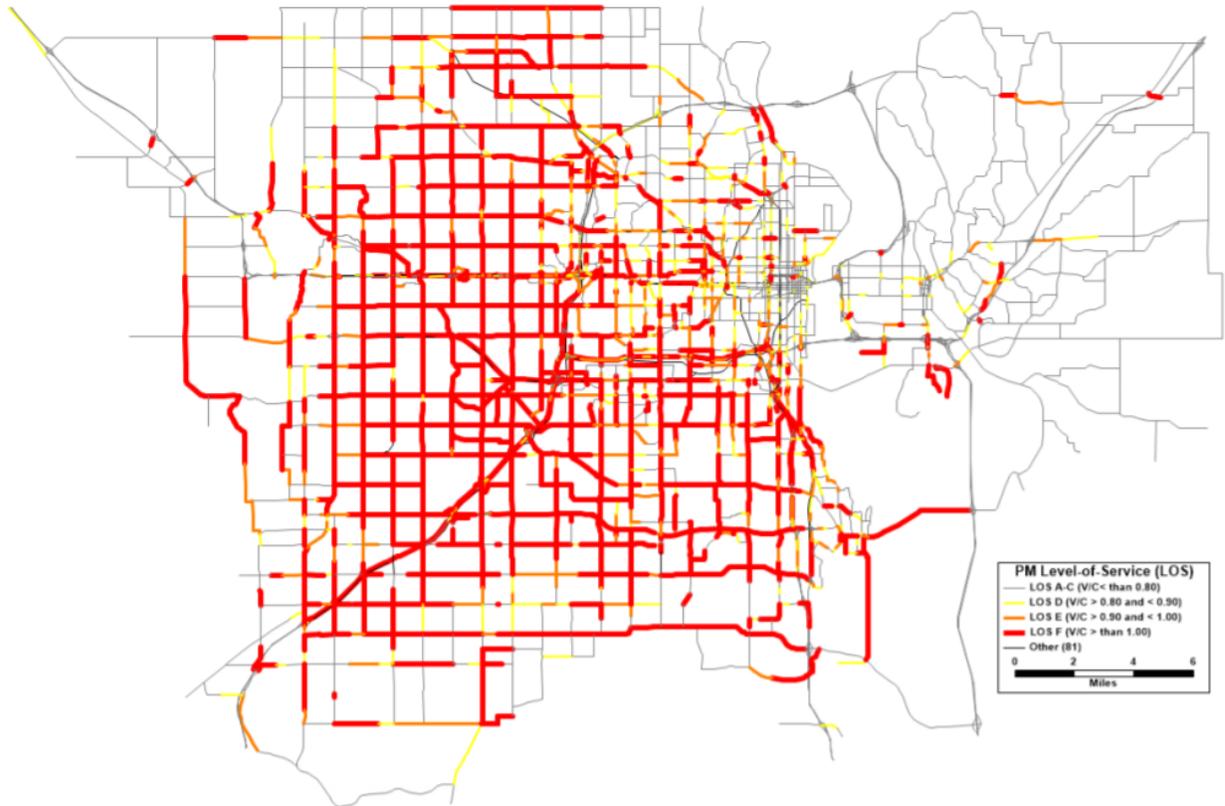
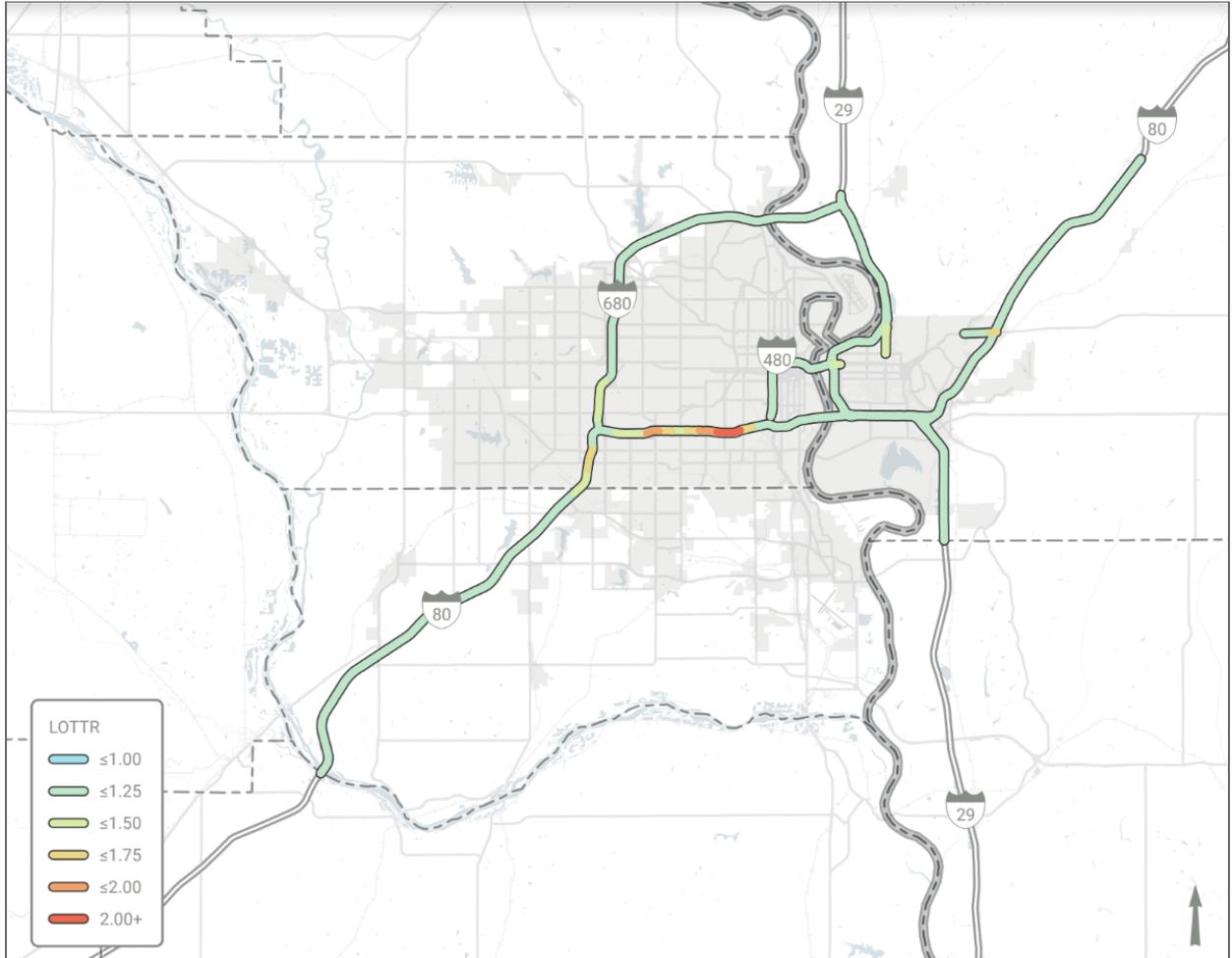


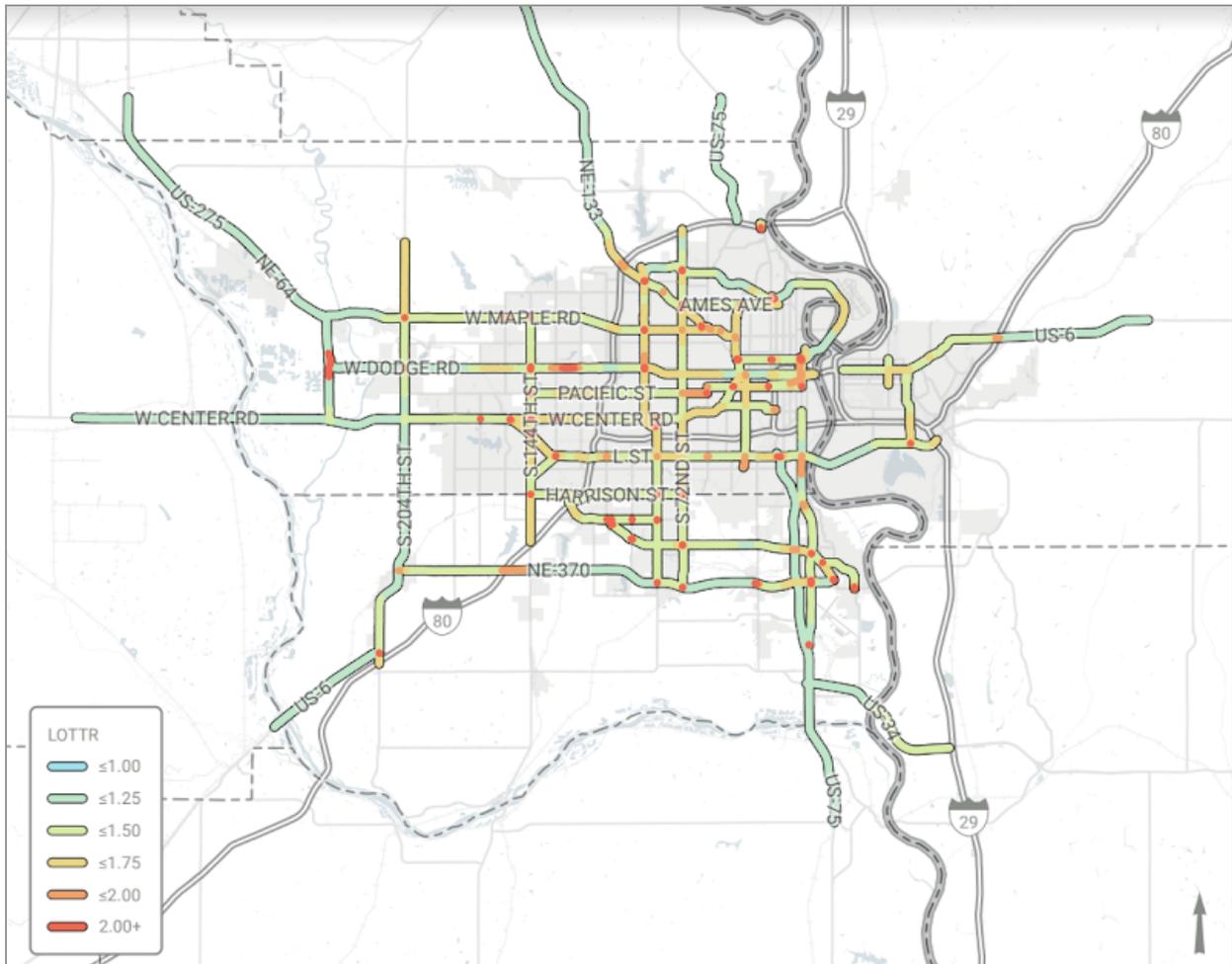
Figure 6: Level of Travel Time Reliability, Interstate Corridors, 2019



As 2020 saw an uncharacteristic reduction in travel projects submitted will be scored against the 2019 travel time reliability metrics.



Figure 7: Level of Travel Time Reliability, Non-Interstate NHS Corridors, 2019



Infill and Redevelopment

Infill development and redevelopment of existing infrastructure is a key focus of the 2050 MAPA LRTP. Future corridors identified by Heartland 2050 and MAPA LRTP coordination which provide regional benefits are highlighted in the figure below, and projects which contribute to the node and corridor goals will receive points as indicated in the table below.

About Nodes and Corridors

Nodes and Corridors:
an integrated approach to land use and transit that focuses development based on existing patterns in our region

Nodes

Nodes are areas where a lot of things are happening close together. Neighborhoods with residential, shopping, restaurants, and business like The Old Market, The 100 Block, and Blackstone are a few examples.

Our Goals:

- Encourage **regulatory flexibility** for development in nodes
- Create best practices for **infill development**
- Create opportunities for **public and private partnerships** for infill development
- Encourage **adaptive reuse, rehabilitation, and restoration** of existing structures

Corridors

Corridors are well traveled paths between nodes: connecting schools, hospitals, cultural centers, and businesses along the way.

Key Corridors Include:

- East/West: Dodge-Farnam-Broadway; Center, Maple, and Ames Street
- North/South: 24th Street and 72nd Street

Our Goals:

- Bus routes with **fewer stops** so you get where you're going quickly, **direct routes** that are easy to understand, and **shorter waits** so you can use public transit without scheduling a whole day around it
- Complete streets that take into account **all modes of transportation**: buses, cars, bikes, and pedestrians
- **New technology** like Bus Rapid Transit systems with dedicated bus lanes and tickets instead of cash that will make public transit **faster and more convenient**

Heartland 2050
Heartland2050.org

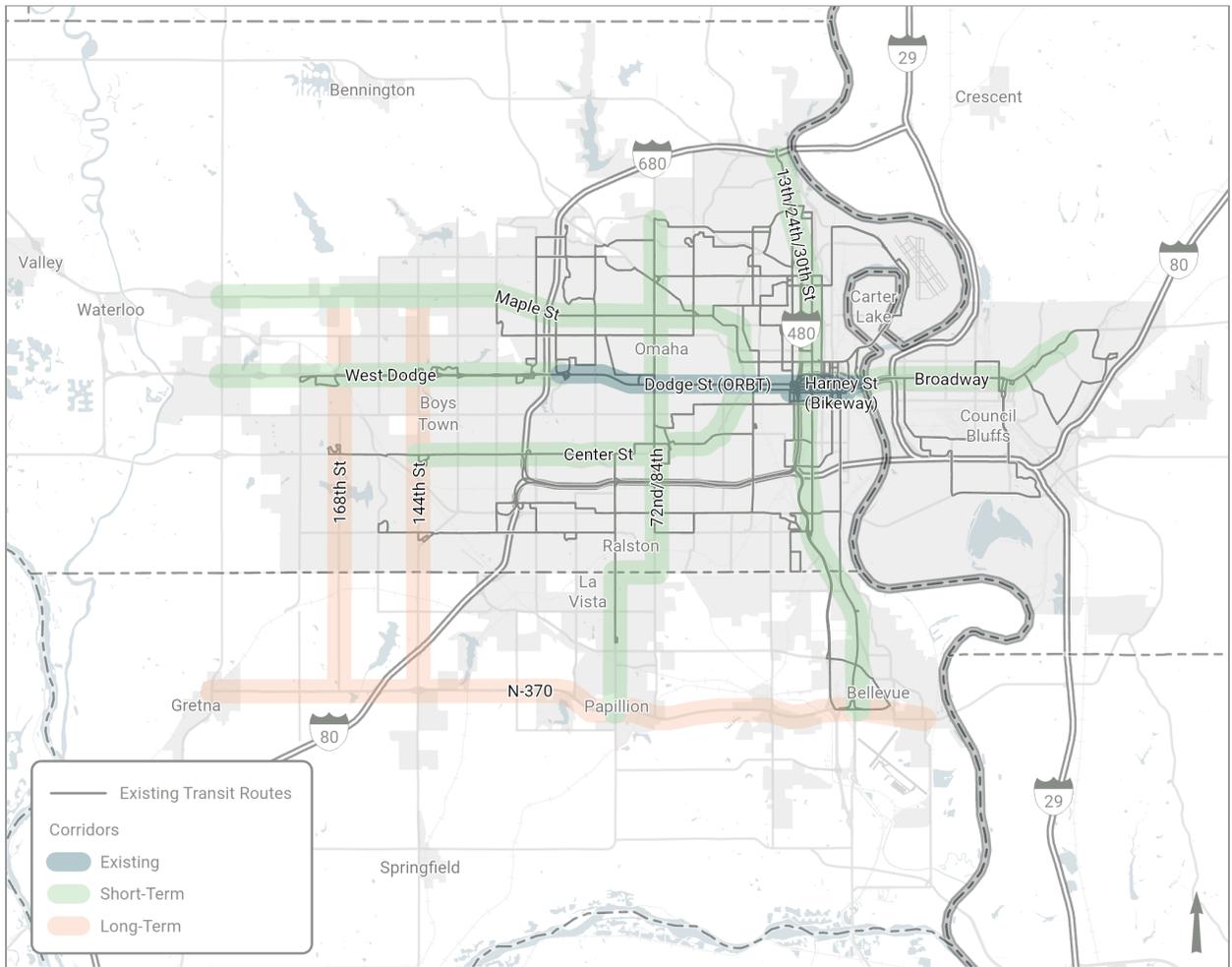
CLOSE THE gap

A clear plan for a more walkable, livable region

Projects that directly support the redevelopment of an area designated for redevelopment in local planning documents will receive 5 points. Applicants should document this linkage and reference the planning documentation within the project application.



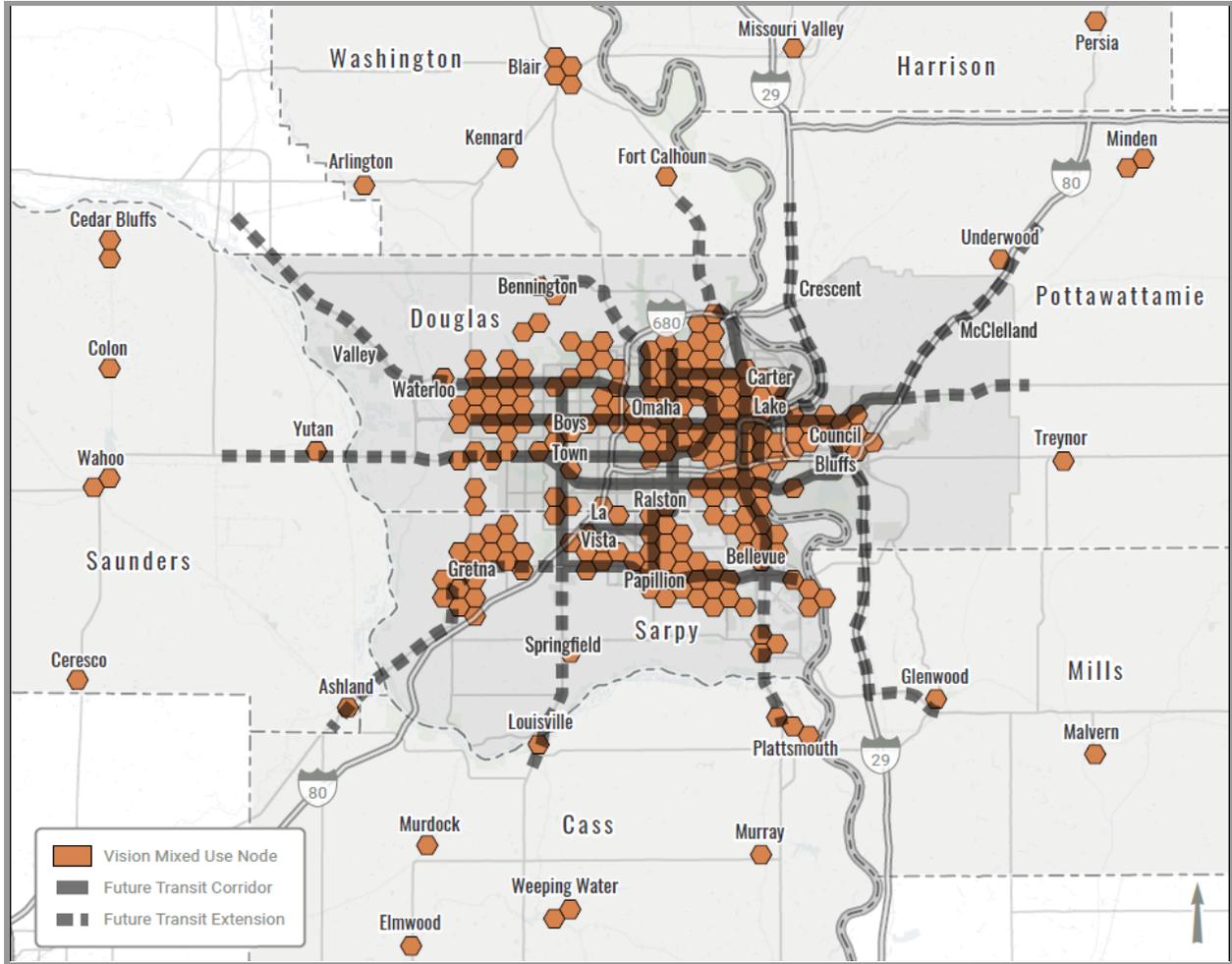
Figure X. Heartland 2050 and LRTP 2050 Corridors



The scoring in the table below applies if projects contribute to the highlighted corridors.

Corridor Contributions	Points
Transit service improvements	5
Complete Streets improvements	5
Technology improvements	5





Or is this the figure we should use? If so, we need some scores for mixed use. Or maybe I just make my corridors match this map, and leave off the mixed?



Asset Condition (pavement, transit, and bridge)

Where available, pavement condition will be graded on the Nebraska Serviceability Index (NSI) which is to be collected annually for NHS system roadways. See the Definitions section for more information on Good, Fair, and Poor pavement categorization.

Pavement

Iowa Roadways will utilize the Iowa Pavement Condition Index (PCI)

PCI/NSI Rating	Points
Good Condition (NSI 70.0+, PCI 60.0+)	0
Fair Condition (NSI 50.0 to 69.9, PCI 40.0 to 59.9)	5
Poor Condition (NSI 49.9 and under, PCI 39.9 and under)	10

For roadways that do not have a NSI or PCI rating, pavement condition shall be assessed using the PASER method. Applicants should follow the PASER guidance appropriate to the surface material of the existing asset. Based on the asset's PASER rating, the following points will be awarded:

PASER Rating	Scoring Condition	Points
Excellent (PR 8 to 10)	Good	0
Good (PR 6 to 7)		
Fair (PR 4 to 5)	Fair	5
Poor/Very Poor (2 to 3)	Poor	10
Failed (PR 1)		

Bridge Sufficiency

Maintaining safe and structurally sound bridges is a key focus for the MAPA region. Projects that included improvements to bridges shall be given points based upon the condition of the existing structure that is to be improved. The National Bridge Inventory (NBI) contains information on bridge sufficiency ratings on all structures over 20 feet. The NBI will serve as the standard source for bridge sufficiency data in the MAPA region. Point breakdowns for bridge sufficiency rating are shown below.



Sufficiency	Points
Good Condition (SR 75.00+)	0
Fair Condition (SR 25.00 to 74.99)	5
Poor Condition (SR 24.99 and below)	10

Bridge Status

Projects that are intended to improve or replace bridges that are structurally deficient or functionally obsolete also receive additional consideration through this score area. The National Bridge Inventory maintains data on the structural deficiency and functionality of the bridges in the MAPA region and will serve as the source for this data. A breakdown of scoring for this category is below:

Status	Points
Structurally Deficient	10
Functionally Obsolete	5

Transit

Vehicles, equipment, and facilities must be evaluated using the FTA's TERM condition ratings. Based on that rating, scoring is broken down to align with other assets:

TERM Rating	Scoring Condition	Points
Excellent	Good	1
Good		
Adequate	Fair	5
Marginal		
Poor	Poor	10



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. Points awarded for overmatching are shown below.

Percent Local Match	Points
Less than 30%	0
30-39%	5
40-49%	10
Greater than 50%	15

Safety (HSM Predictive Analysis)

In an effort to quantify safety deficiencies of the transportation system, MAPA and ProSeCom recommend using the Highway Safety Manual Part C Predictive Method. Primarily, there are [spreadsheets](#) for the rural two-lane roads, rural multilane highways, and urban arterial segments. These tools allow for projects to consider treatments to both segments and intersections. These tools are maintained by AASHTO and undergo occasional updates and improvements.

Applicants will use HSM predictive analysis to the number of expected crashes before and after project improvements have been made. The reduction in crashes will be used by MAPA to score based upon each state's project categories listed in the following sections. Detailed instructions on how to use the spreadsheets can be found in Appendix A. Projects submitted in Nebraska will include a three-year crash history from 2017-2019 (analysis period for the HLA), and Iowa projects will include a crash history from 2014-2018 (for intersection safety improvements).

For projects which do not have an applicable HSM spreadsheet, applicants may either use the HSM Part C Predictive Method or applicable CMF(s) from the CMF Clearinghouse. For either method provide with the project application in Knack a description of the analysis conducted with the subsequent results. Guidelines for the use of CMFs can be found in [CMF User Guide](#).

Nebraska Safety-Related Projects and Studies

MAPA shares the NDOT goal of reducing fatal and serious injury crashes. Safety scoring considers the following criteria for projects located within Nebraska:

1. Listing and overall rank in the Hazardous Locations Analysis (HLA)
2. Special emphasis areas (if not on the HLA):
 - 4-lane, non-interstate sections in urban areas
 - 2-lane sections without shoulders in rural areas



- Overall reduction in the fatal/injury crash rate (CR) compared to the statewide average for the given roadway type (CR/SA)

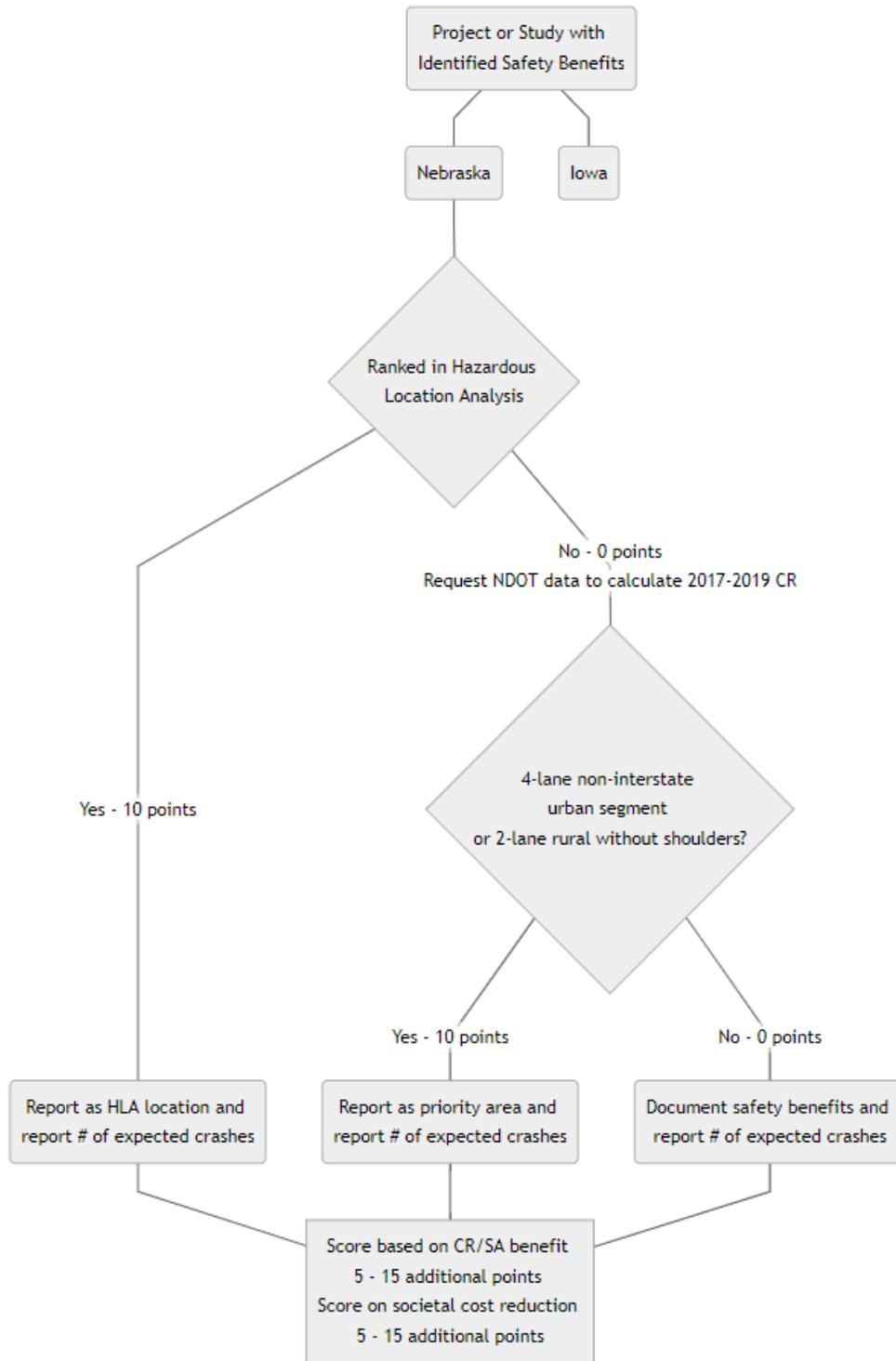
Percent Reduction in CR/SA (Nebraska)	Points
0 to 5%	3
5% to 10%	6
10% to 15%	9
15% to 20%	12
> 20%	15

Percent Reduction in Severity (Nebraska)	Points
0 to 5%	3
5% to 10%	6
10% to 15%	9
15% to 20%	12
> 20%	15

Use the decision tree shown in Figure 8 to provide the required information and understand the scoring methodology for Nebraska safety-related projects.



Figure 8: Nebraska Safety-Related Project and Study Scoring Decision Tree



Reporting Nebraska Results

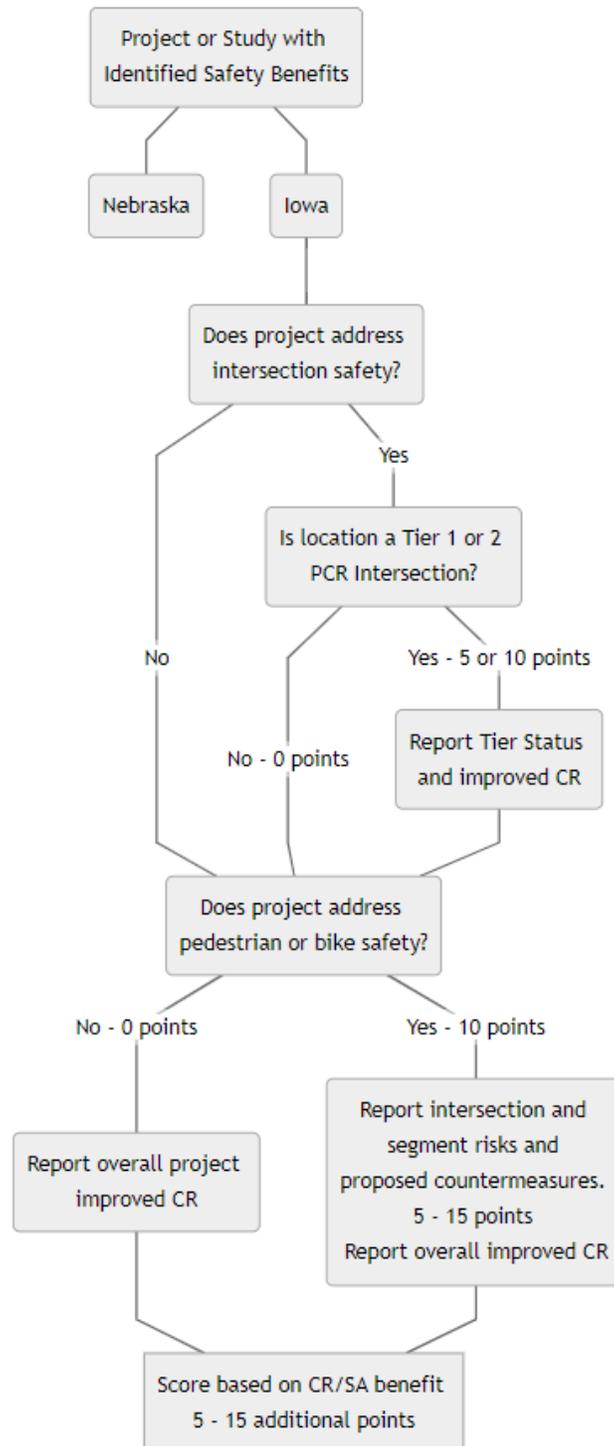
Nebraska determines the societal cost of crashes by collision type. For improvements to locations in the HLA, MAPA will use the data already calculated in the NDOT-provided worksheets, so the application will not require a crash analysis for these overlapping segments or intersections. For locations not on the HLA, crash data must be requested from NDOT to include the following:

1. Single or multi-vehicle
2. Crash severity
3. Collision type
 - a. Single vehicle types
 - i. Overturn
 - ii. Fixed object
 - iii. Animal
 - iv. Pedestrian
 - v. Bicyclist
 - vi. Parked vehicle
 - b. Multi-vehicle types
 - i. Right angle
 - ii. Left turn leaving
 - iii. Rear end
 - iv. Side swipe opposite
 - v. Side swipe same
 - vi. Head-on
 - vii. Backing
 - c. Single or multi-vehicle type
 - i. Other
4. AADT
5. State average crash rate (for roadway type)

The following figures show the location and rank (by CR/SA) for the 2020 HLA simple junctions, clusters, and segments. Assuming local projects will not be making improvements to freeway interchange locations, the complex junctions are not shown in this figure, but can be found in the summary tables in Knack.

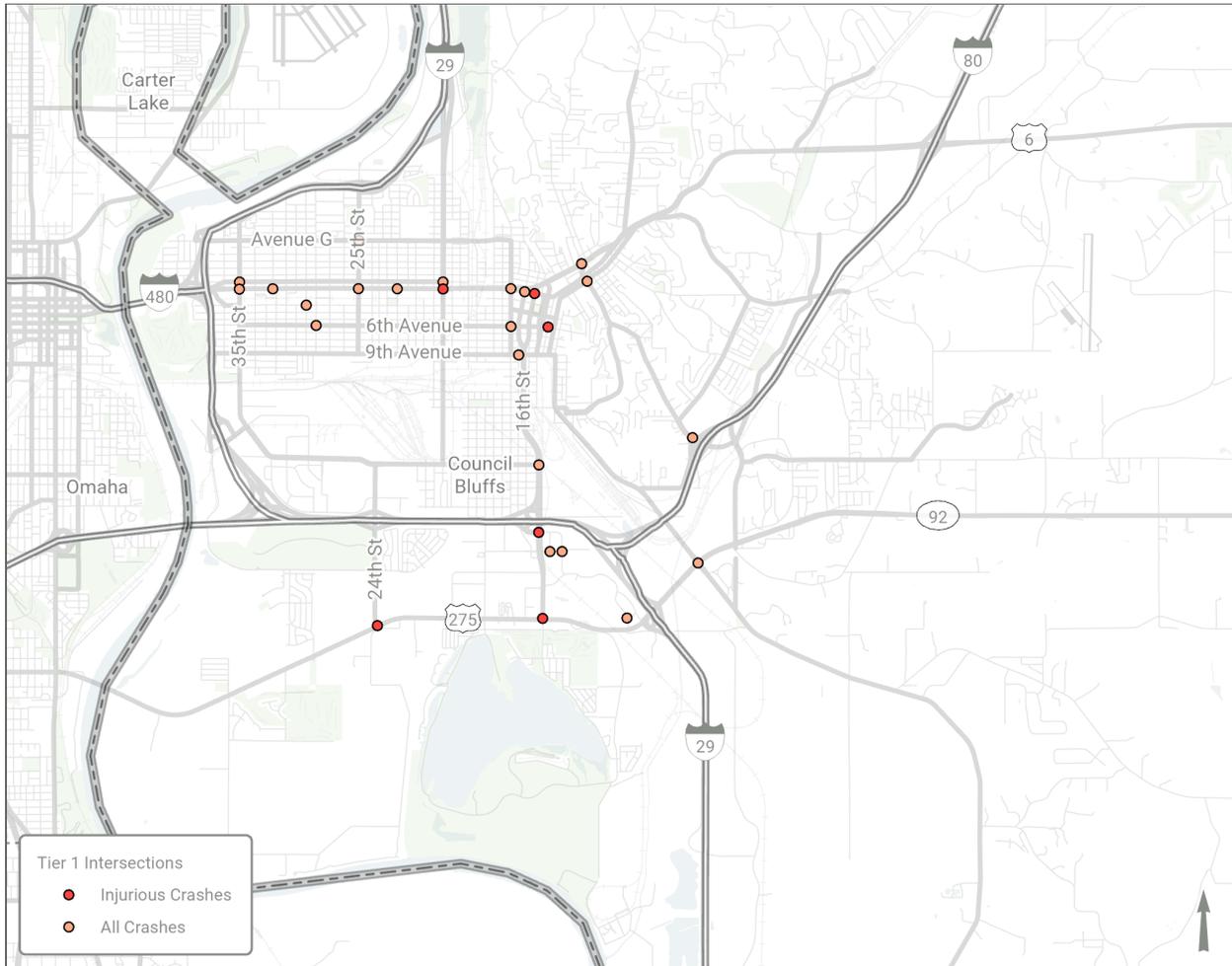


Figure 11: Iowa Safety-Related Project and Study Scoring Decision Tree



The previous figure is to be used to identify the applicability of the project to each of these safety-related initiatives. A map of the Tier 1 intersections from the Intersection PCR analysis can be found below, and a detailed description of the analysis along with interactive maps showing Tier 1-3 locations is available in this ArcGIS [StoryMap](#).

Figure 12: Map of Regional Tier 1 Intersections



Intersection PCR Score	Points
Tier 3	0
Tier 2	5
Tier 1	10



The Iowa DOT Systemic Bicycle and Pedestrian Safety Analysis process and results are detailed in the following ArcGIS [StoryMap](#). The following [bicycle](#) and [pedestrian](#) interactive maps can be used to identify project submission details. The project selection score is based on the project's positive impact to the riskiest (lowest composite score) segment or intersection within the project boundaries. (For example, if treatments to an intersection improve safety for bicyclists with a composite score of 41, the overall project score for this section would be 15.)

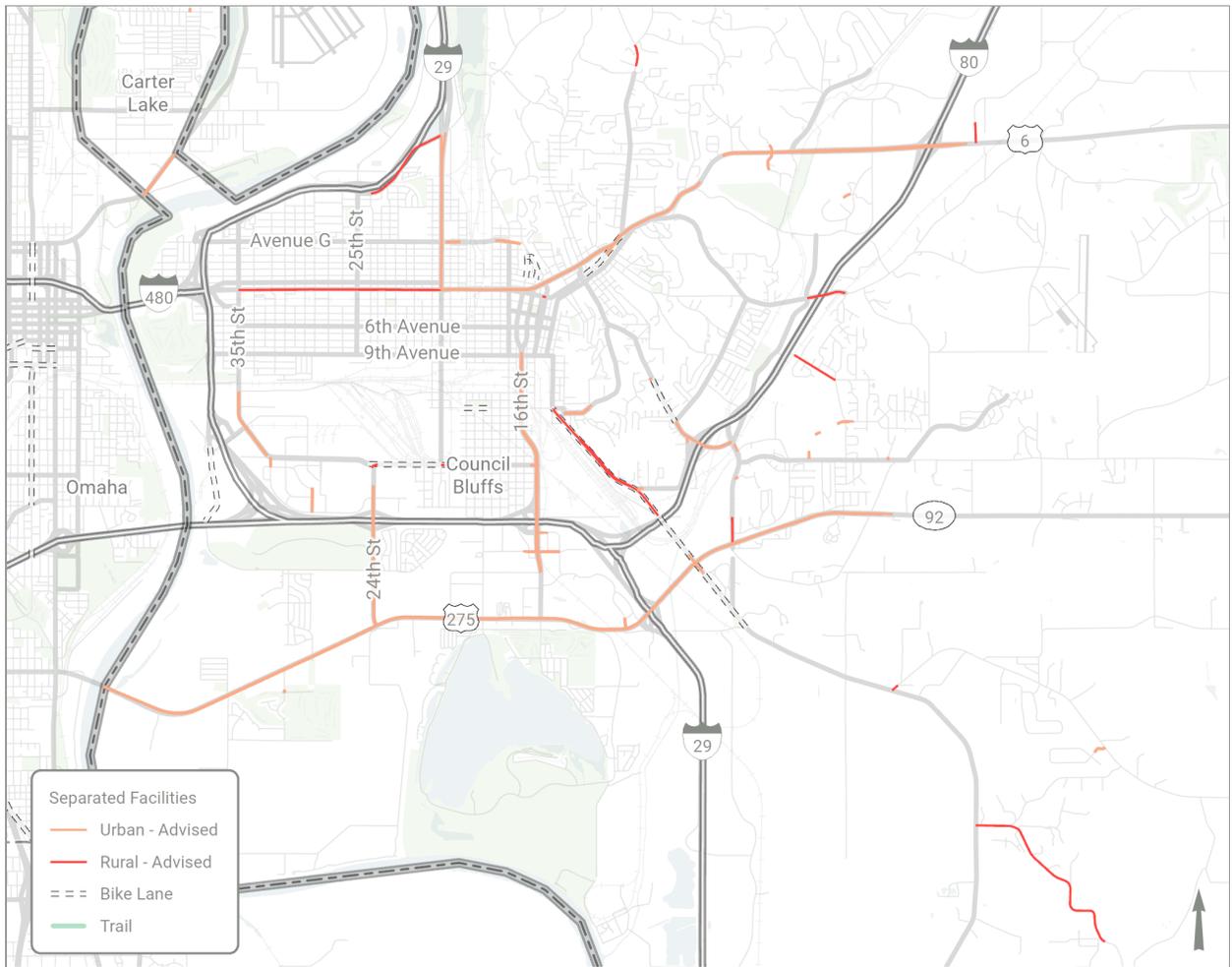
Bicycle / Pedestrian Composite Score	Points
Greater than 75	0
66-75	5
50-65	10
Less than 50	15

A score is also provided for project crash reduction. This score is not normalized to a state average as was the case in Nebraska.

Percent Reduction in CR (Iowa)	Points
0 to 5%	3
5% to 10%	6
10% to 15%	9
15% to 20%	12
> 20%	15



Figure 13: Map of Roadways where Separated Facilities are Advised



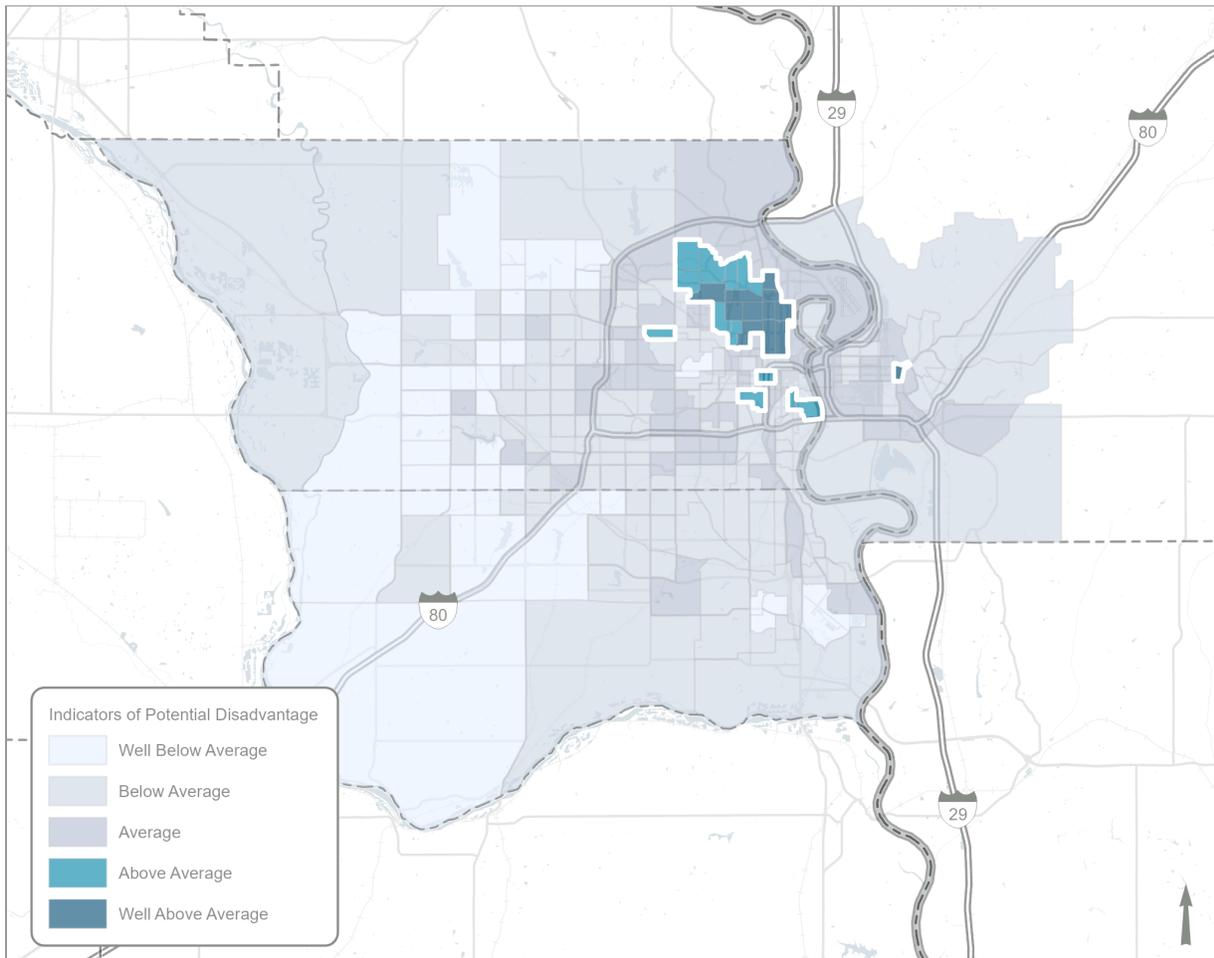
Separated Bicycle / Pedestrian Facility	Points
Application does not include separated facility as advised	0
Application includes separated facility as advised	15

Centering Safety Investments on Equity

For the 2015-2019 MAPA Safety Report, MAPA conducted an Equity Analysis which identified Equity Focus Areas (EFAs). These EFAs often experience significantly higher fatal injury, fatal and serious injury, and non-motorist fatal and serious injury crash rates. The figure below presents the current EFAs.



Figure 14: MAPA Equity Focus Areas (2015-2019)

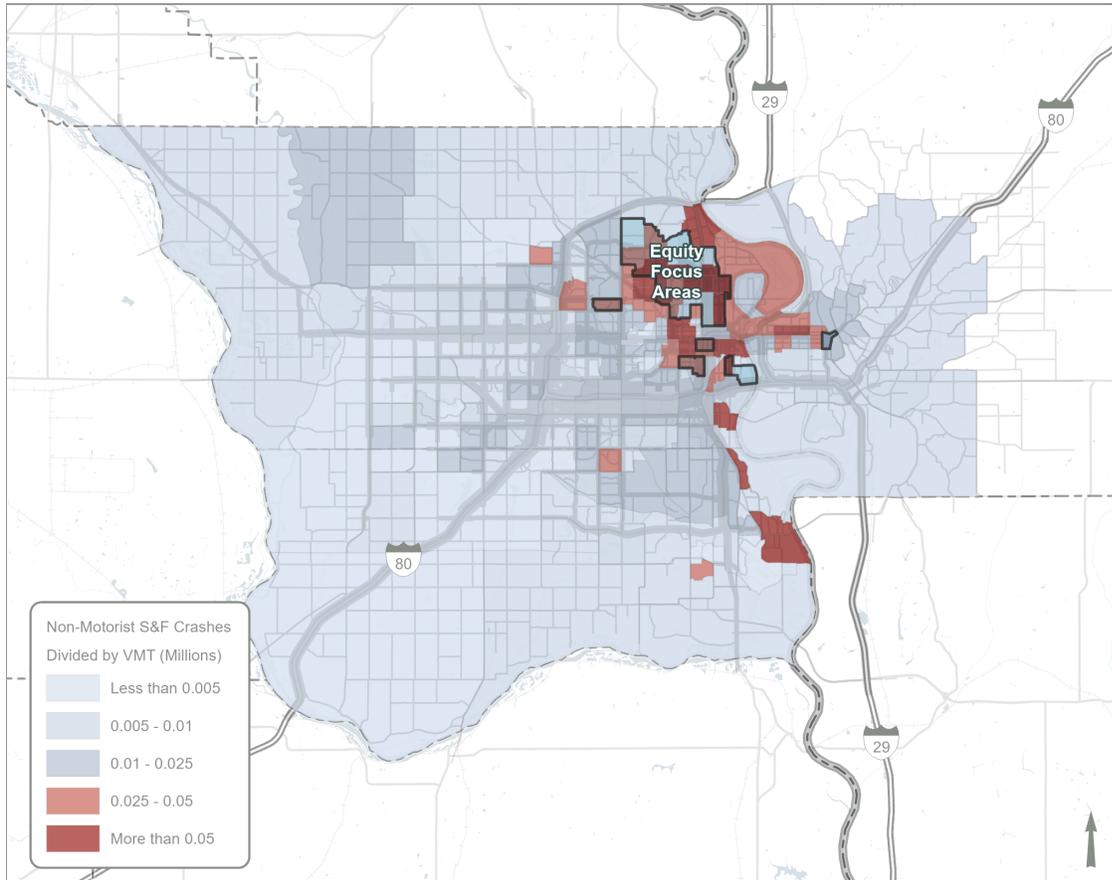


Projects which improve safety within these EFAs will receive additional points as listed in the table below. Communities outside the higher-density areas of Omaha and Council Bluffs, where analysis at the census tract level may not adequately highlight inequalities, are encouraged to provide justification with local data in the project narrative as to the safety benefit provided to local underserved or disadvantaged populations.

EFA or Local Equity Group Safety Benefit	Points
Above Average (Indicator of Potential Disadvantage)	5
Well Above Average	10
Documented Local Community Benefit	10



Figure 15: Non-Motorist Serious & Fatal Injury Crash Rate by Census Tract (2015-2019)



Submissions should identify the area in which the greatest impact is made (fatal, fatal and serious injury, or non-motorist fatal and serious injury) and the following scoring will be applied.

Crash Rate Scale (use linked mapping tool)	Points
Less than 0.005	1
0.005 - 0.01	3
0.01 - 0.025	5
0.025 - 0.05	7
More than 0.05	9



Environmental Justice & Equity

MAPA's transportation planning is informed by the work of the Heartland 2050 Engagement & Equity Committee as well as the equity planning activities of state, local, and federal agencies, and are implementing additional considerations for projects to understand and document anticipated project outcomes and impacts to underserved or disadvantaged communities. An environmental justice analysis is performed on all projects in the Transportation Improvement Program. Beginning with the FY2023 TIP, project applications will undergo this analysis as part of the project selection process.

For a detailed description of the Environmental Justice guidelines, please see the documentation in the MAPA Transportation Improvement Plan. Projects will be considered for both their proximity to these areas, as well as the possible or expected outcomes. Include in your application narrative any planned or assessed outcomes from the project design.

The analysis concludes with MAPA placing the project into one of the following categories based on the outcomes we foresee:

- No impact on Environmental Justice or Equity Focus Areas
- Limited Negative Impact on Environmental Justice or Equity Focus Areas
- Significant negative Impact on Environmental Justice or Equity Focus Areas
- Limited Positive Impact on Environmental Justice or Equity Focus Area
- Significant positive Impact on Environmental Justice or Equity Focus Area

Project applications with no impacts will simply be noted as such. Project applications with positive impacts will be noted as such and receive a recommendation of priority over projects that score similarly.

Project applications with the potential for limited negative impacts will have their scores reduced by 10%. Project applications with the potential for significant negative impacts will have their scores reduced by 20%.



MAPA Environmental Justice Areas

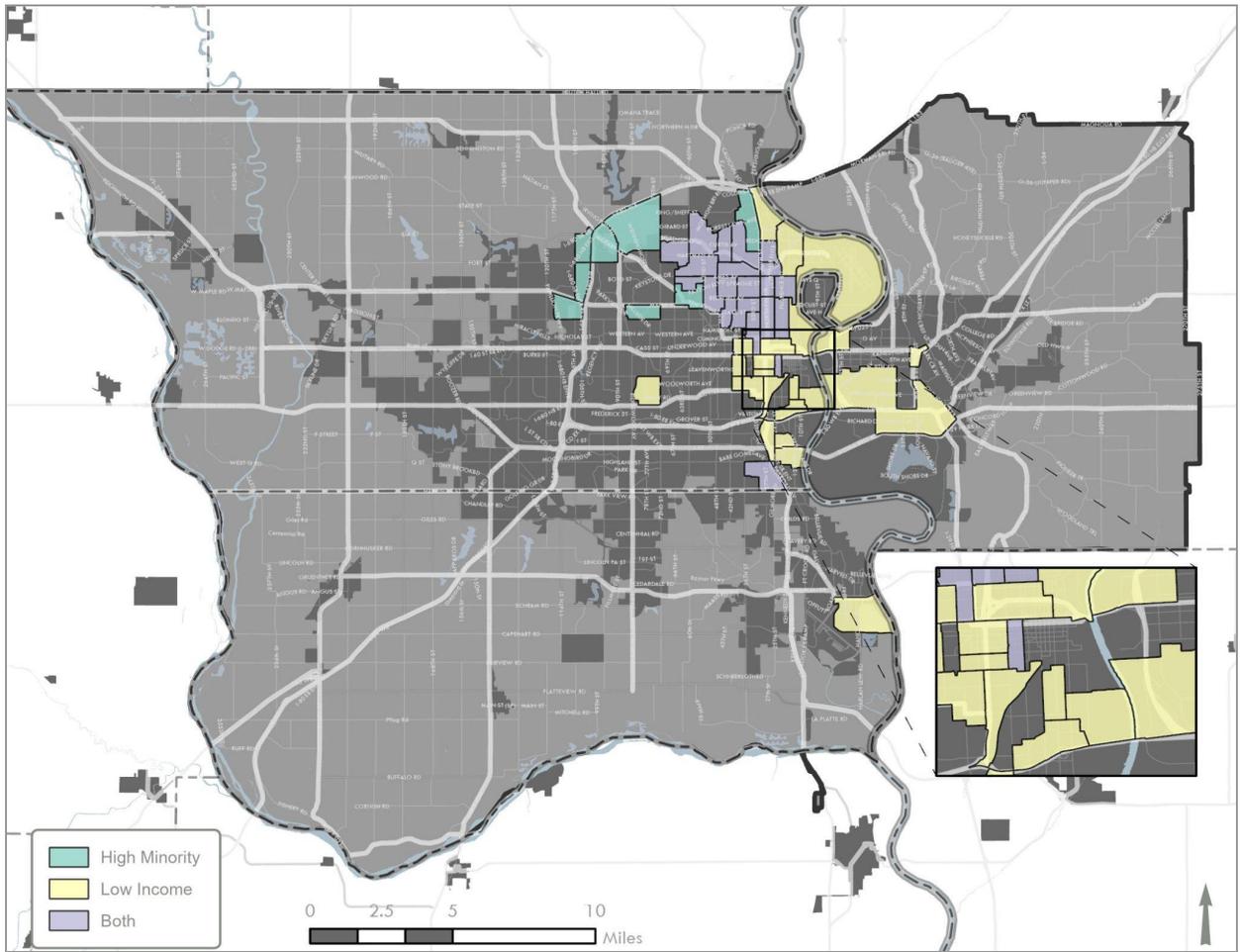
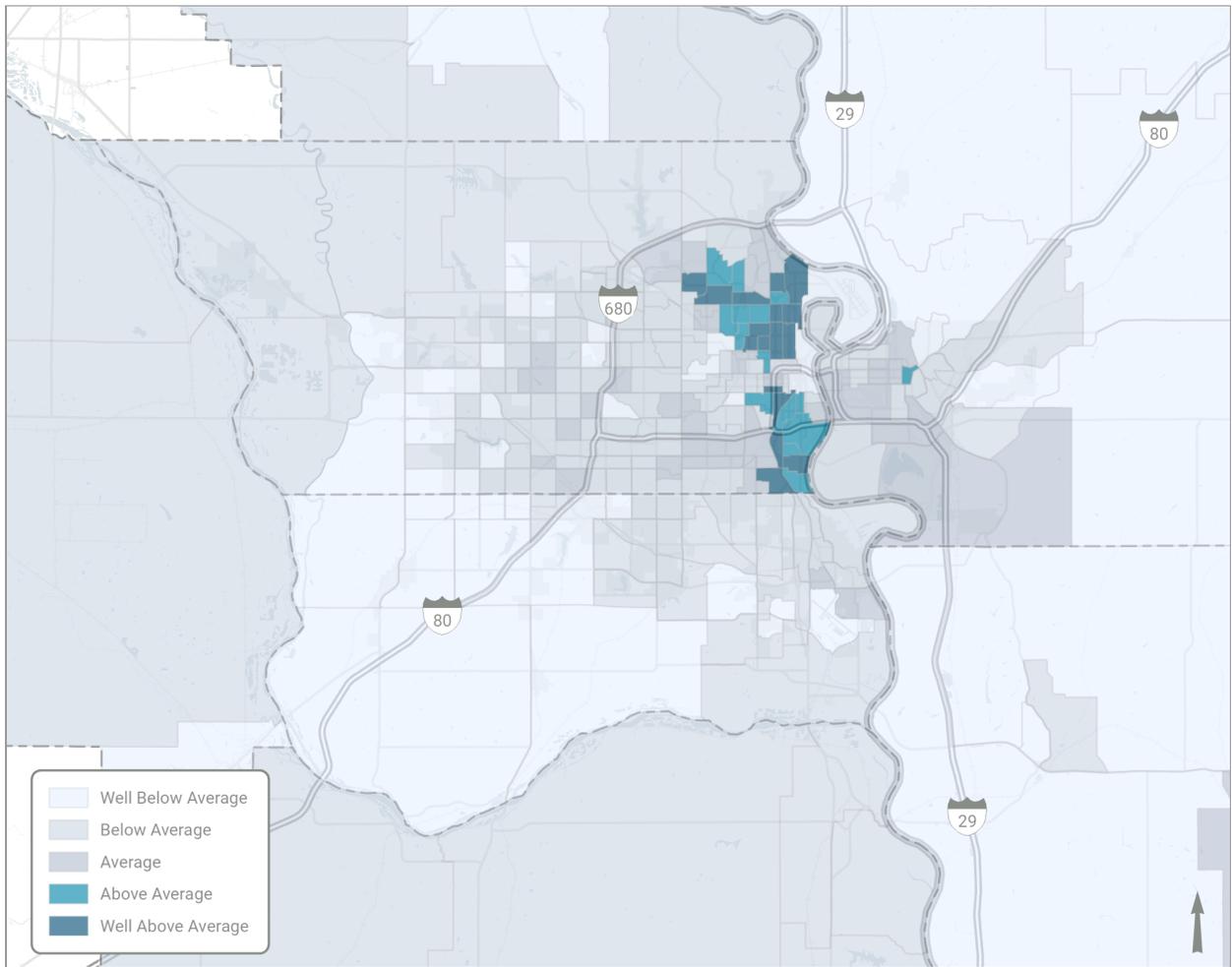


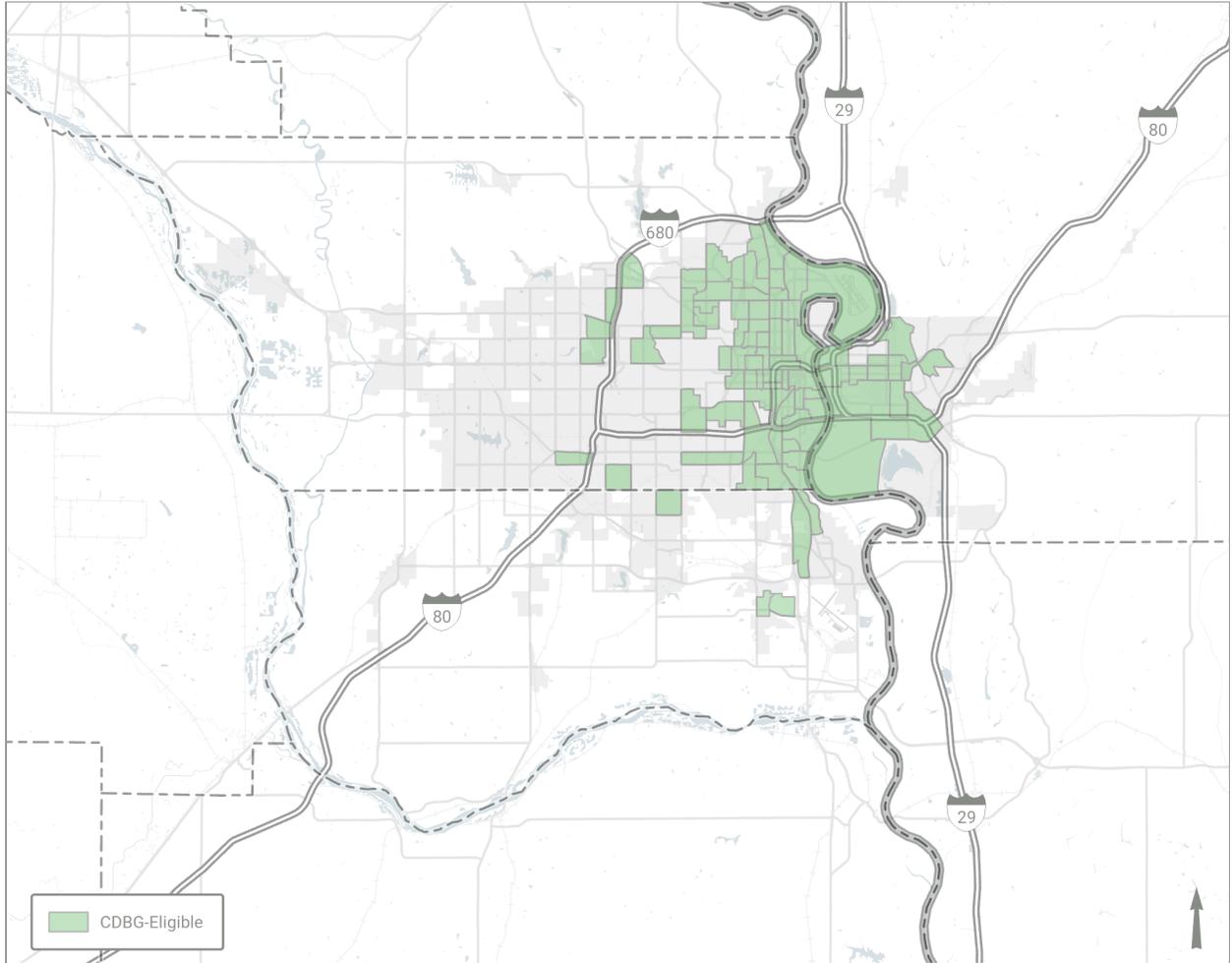
Figure X. MAPA Equity Focus Areas



Projects will be identified by their proximity to EFAs, and consideration be given to both the equitable distribution of funds, as well as the acknowledgement of outcomes. Project submitters should also consider the individual *Identified Populations* and their relative scoring for the project area. These populations as well as the EFAs can be found in this interactive [dashboard](#).



Figure X. MAPA CDBG Eligible Census Tracts



The census tracts above shown as CDBG-eligible indicate that over 51% of the population are low-to-middle income (LMI) households. Projects which provide positive benefits in these areas will receive additional consideration.

Bridge Detour Length

Bridges represent critical crossings to support the movement and access of people and goods inside and through the MAPA region. For projects that improve or replace a bridge that may otherwise be closed MAPA will award points in relation to the detour length to make the crossing if the bridge were permanently closed.

Detour length shall be calculated as the length of the alternative crossing route on a similar transportation facility as the one to be closed. For example, if a bridge on a minor arterial is deficient and in jeopardy of being closed without repair or replacement, the detour would be routed on the next closest minor arterial (or higher) facility that would provide a link across the bridged terrain.



Detour lengths are to be calculated for a one-way direction trip.

Detour Length	Points
0 to 2.00 miles	0
2.01 to 4.99 miles	5
5 miles and over	10



Transportation Emphasis Areas

The 2050 LRTP places a great deal of importance on expanding transportation options and multi-modal infrastructure improvement. Transportation alternatives are encouraged to be added to any and all infrastructure improvement projects in the appropriate context.

Transportation emphasis areas for consideration are as follows:

Transit/HOV	
Criteria	Points
BRT Dedicated Lanes	Full Corridor: 4
	Partial: 2
BRT Stations	4
Bus Signal Priority/Preemption	Full Corridor: 4
	Partial: 2
Queue Jump Infrastructure	Full Corridor: 4
	Partial: 2
Striped Transit Lane	Full Corridor: 2
	Partial: 1
Park and Ride Lot	2
Enhanced Bus Shelters	2
HOV Lanes	2

Intelligent Transportation Systems	
Criteria	Points
Adaptive Traffic Control Systems	Full Corridor: 4
	Partial: 2
Traffic Signal Coordination	Full Corridor: 4
	Partial: 2
Dynamic Message Board Display	2
Video/Infrared detection equip	2
Permanent traffic count equip	2
Ramp Meters/Gates	2
Bicycle traffic signal detection	Full Corridor: 4
	Partial: 2

Bicycle/Pedestrian	
Criteria	Points
Separated On-Street Bike Lane	Full Corridor: 4
	Partial: 2
Off-Street Bicycle Trail	4
On-Street Bicycle Lane	Full Corridor: 2
	Partial: 1
Bicycle Parking Amenities/Racks	2
Enhanced Bicycle Crossings	2
Sidewalks	All Sides: 2
	Partial: 1
Crosswalk Islands/Shelters	All Intersection Legs: 2
	Partial: 1
Shared Lane Markings	1



Description of Multi-Jurisdictional Impacts

The submitting jurisdiction is asked to describe the project's positive multi-jurisdictional impacts and the total number of partnering jurisdictions that the project will include. This may include municipalities, utilities, agencies, special districts, and neighborhood associations or other community organizations. In an effort to foster collaboration and regionalism more credence will be given to projects that impact a greater number of partners.

Number of Partners	Points
Applicant Alone	0
2	3
3	6
4	9
5	12
6+	15

Description of Effort

In the case of a transportation related study, the submitting jurisdiction is asked to describe how the project will benefit the MAPA Region. This should be a brief description of facts. To the extent possible, applicants seeking to fund a study with STBG-MAPA funding should pursue proposed studies that have been listed in local or regional planning documents.

- Up to 25 points can be awarded for the description of a planning study. Points will be awarded based on the expected outcomes of the study and how well these align with the goals of the 2050 Long Range Transportation Plan and MAPA's commitment to equity in the region.

TAM Plan Alignment

The Nebraska and Iowa Departments of Transportation maintain transportation asset management plans in which maintenance and reconstruction priorities are identified for assets on the National Highway System. Meeting these targets set by Iowa DOT and NDOT is a priority for MAPA and projects will be given special consideration during the application process.

- Applications for projects specifically identified in these plans will be awarded 10 points.



Employment Accessibility

Accessibility is one of the four goals established by the 2050 LRTP outreach process as being a community priority for transportation overall in the MAPA region. In developing priorities for federal funding for transportation projects it is vital to consider how residents travel to and from services, and what projects will improve access to employment.

Proximity will be used for measuring STBG project accessibility impacts in our region. Proximity will measure the access to jobs within a specified distance buffer surrounding the project location. This analysis measures the direct impact of the project as a destination. Applications will be evaluated based on the number of accessible jobs:

Number of Accessible Jobs	Points
5,000 and under	3
5,001 to 11,000	6
11,001 to 18,000	9
18,001 to 25,000	12
More than 25,000	15

Public Involvement

As a part of the federal aid process projects in the TIP should already have undergone preliminary public involvement to determine the public interest in the project, get initial concepts and consultation done, and raise awareness of the upcoming changes. This is often done through implementation of previous studies and plans, projects may also be part of a larger outreach effort relating to system updates.

Past Public Involvement

Has there been a public process documented as a part of this proposed project	5
Have previous plans and studies included this project in their outreach	3
Has there been any prior public notification of this project to those living adjacent to the affected area/users	2

Ongoing Public Involvement/ Involvement done for this application



Have you done any outreach relating to this project	5
Do you have plans to collaborate with MAPA on a joint outreach strategy for receiving feedback as a part of the federal aid process	3

Proposed Public Involvement

Does this project have a public involvement proposal already	5
Is this project part of another ongoing outreach effort	3

Ability to Fund Phases Locally

Project applications that include only UTIL-CON-CE costs, locally funding the PE-NEPA-FD and ROW phases, will be awarded additional points. For an applying jurisdiction to receive credit for advance construction on a project they must submit a letter from their governing body certifying the ability and commitment to locally fund a specific project phase (while following all federal regulations). Only local funding of PE-NEPA-FD and ROW acquisition will be given credit under this section.

Phase Certified for Local Funding	Points
PE-NEPA-FD	5
ROW	5

DOT and USDOT Applications & Awards

Projects applying for or awarded federal funding by a state DOT partner or USDOT (including HSIP, CMAQ, discretionary programs, etc.) can apply for STBG-MAPA funding to cover costs that are not eligible for reimbursement under these programs. For example, NDOT's Highway Safety Committee no longer makes awards for PE-NEPA-FD or ROW activities under the Nebraska HSIP program. These types of projects can be awarded STBG-MAPA funds under the Planning & Leverage category to maximize the amount of federal funding available to communities to deliver regionally significant projects.

Applications will be scored based on the amount of funding awarded to the project by state or US DOTs.



Award Amount	Points
\$1,000,000 to \$3,000,000	3
\$3,000,001 to \$6,000,000	6
\$6,000,001 to \$9,000,000	9
\$9,000,001 to \$12,000,000	15
\$12,000,001 to \$15,000,000	20
More than \$15,000,000	25

Project Application Categories

System Preservation

General Guidelines

MAPA's 2050 Long Range Transportation Plan emphasizes the maintenance of the region's existing transportation system. In the interest of delivering projects quickly and efficiently, and meeting targets as part of performance-based planning, System Preservation projects will be preferred over others.

Evaluation Criteria

System Preservation applications will be evaluated based on the following:

- Priority Corridors & NHS
- Asset Condition
 - Pavement Condition (roadway & bridge projects)
 - Bridge Sufficiency (bridge projects)
 - Bridge Status (bridge projects)
 - Vehicle/Facility Condition (transit projects)
- TAM Plan Alignment
- Environmental Justice & Redevelopment
- Transportation Emphasis Areas
- Percent of Local Match
- Multi-Jurisdictional Support
- Local Funding of PE/NEPA & ROW

Planning & Leverage

Planning Studies

Applicants seeking to use STBG-MAPA funding for planning purposes can apply by providing MAPA with a description of the proposed study. Applicants can apply for up to 80% of the study cost with 20% of the cost coming from a local match amount.



Leverage Projects

Applicants should provide MAPA and ProSeCom the application and award information from the state DOT or USDOT along with the amount of funding needed to enable construction of the project. Potential funding sources include:

Nebraska

HSIP
CMAQ
Freight-Related Funding
TAP (state-directed)
STBG (state-directed)
Bridge Funding
Discretionary Funding

Iowa

HSIP
CMAQ
Freight-Related Funding
TAP (state-directed)
STBG (state-directed)
Bridge Funding
Discretionary Funding
TSIP

Evaluation Criteria

Planning & Leverage applications will be evaluated based on the following:

- Description of Effort
- Priority Corridors
- TAM Plan Alignment
- Description of Multi-Jurisdictional Impacts
- Extra-regional Application Information
- Extra-regional Award
- Percent of Local Match

Capital Projects (Urban or Rural)

General Guidelines

Capital Projects generally include those that expand the region's transportation infrastructure. Traditionally this has been through road widening, new road construction, and deployment of Intelligent Transportation System infrastructure.

Evaluation Criteria

Capital Project applications will be evaluated based on the following:

- Priority Corridors & NHS
- Planning Time Index



- Redevelopment & Environmental Justice
- Asset Condition
 - Pavement Condition (roadway & bridge projects)
 - Bridge Sufficiency (bridge projects)
 - Bridge Status (bridge projects)
 - Vehicle/Facility Condition (transit projects)
- TAM Plan Alignment
- Employment Accessibility
- Safety (HSM Predictive Analysis)
- Transportation Emphasis Areas
- 2050 LOS
- Percent of Local Match
- Local Funding of PE/NEPA & ROW
- Description of Multi-Jurisdictional Impacts

Advance Construction (AC) Resurfacing

MAPA allows communities to program AC resurfacing projects which follow all Federal-Aid guidelines for project development and delivery, but for which federal-aid reimbursement is not immediately sought for costs incurred. To apply for a project under AC Resurfacing, applicants will follow the normal process for Capital Project applications, but will indicate the intent to use AC resurfacing and include potential resurfacing projects to be done in advance. For an applying jurisdiction to receive credit for advance construction on a project they must submit a letter from their governing body certifying the ability and commitment to locally fund the resurfacing project (while following all federal regulations) and complete the proposed regionally-significant capital project once the resurfacing project is reimbursed.

While projects performed under advance construction are reimbursable immediately, the sponsoring jurisdiction waits to request reimbursement of costs until subsequent fiscal years. This allows project development to continue in a timely manner while ensuring that MAPA utilizes its entire STBG apportionment in a given year. Advance construction can apply to a portion of a project's cost or the entire project (up to 80%). Advance construction projects and the associated local capital improvements will be shown in the MAPA TIP and documented accordingly.

Alternative Transportation Projects

Projects seeking funding as Alternative Transportation Projects under MAPA's Surface Transportation Program funding should apply for Transportation Alternatives Program (TAP) funding. If the annual requests for TAP-MAPA funding exceed what is available, the Transportation Alternatives Program Committee will make a recommendation of projects to the Project Selection Committee for consideration along with other requests to STBG. These recommendations will be evaluated and considered along with System Management projects for approximately 10-25 percent of any allocation of funding available for STBG-MAPA projects. This process ensures that all applications for regional funding are competitive and are evaluated against similar projects seeking regional funding.



