

2013-14 STP/BR Project Solicitation Manual

I. Introduction

The application procedure conducted by the Mid-America Regional Council (MARC) for STP/BR funds is completely electronic. Applicants submit project proposals for consideration through the use of an on-line submission form and database. Information collected through this process is used by MARC staff to evaluate all eligible proposals and to develop numerical project scores for use by the Kansas and Missouri STP/Bridge Priorities Committees in determining funding priority recommendations. The project scores developed through this process are intended to provide meaningful information about how each project relates to regional transportation policy goals and objectives, but are not intended to be the sole factor in developing funding recommendations. More information regarding project eligibility and approved uses of funds is available in the following locations:

- Kansas – <http://www.marc.org/transportation/pdf/stpbridgeks-roles.pdf>
- Missouri - <http://www.marc.org/transportation/pdf/stpbridgemo-roles.pdf>

Although similar to the electronic application forms MARC has used in the past, revisions to the STP/BR evaluation methodology necessitated a change in the application as well. The revised application consists of the following items:

- Applicant Registration
- General Project Information
- Category Specific Information
 - Bridge Restoration, Rehabilitation, and Replacement Projects
 - Bicycle Pedestrian, Livable Communities, and Other Projects
 - Public Transportation Projects
 - Roadway Capacity Projects
 - Transportation Operations and Management Projects
 - Transportation Safety Projects
- Financial and Phase Information

This format follows the general direction of the evaluation methodology by starting with general, project level data from all projects submitted and moving toward information more specific to each individual project category. These items will be discussed in greater detail in the next section.

II. Project Proposal Submittal Process

To begin the process of submitting an application, the applicant should navigate to www.marc.org/transportation/stp-br. This web address contains information regarding the active call for projects, the application user manual, resources, and noteworthy information about the form.

Before beginning the form, it is important to note the following:

- Applicants have 90 minutes to move through each of the four sections of the application
- Submitted applications may be edited and updated before the end of the application period
- Some fields contain default values. If a default value does not need revision, do not change or delete it.

- Ranges or other text characters should not be entered in numeric fields. Only single numbers should be entered.

Once familiarized with this information, the applicant may begin the application process.

A. Applicant Registration

The first step in the application process is applicant registration. Registration provides access to the form and allows the applicant to edit and update previously submitted projects before the application deadline. An individual applicant need only register once. To register, please take the following steps:

1. Navigate your internet browser to <http://www.marc.org/transportation/stp-br>
2. At the bottom left of the page, click on **Register**.
3. Complete the information on the following page. All information is required.
4. Once all fields have been completed, click on **Submit Registration**.

Please be sure to note the email address and password used during this registration, they will act as your login information and are necessary to view/edit the application(s) submitted.

Once registered, applicants may begin the application submission process by performing the following steps:

1. Click the **Submit/Edit Applications** button found at the bottom right of <http://www.marc.org/stp-br>
2. Enter the email address and password specified during the applicant registration process
3. Click **Login**
4. On the next screen, click on **File a New Application**
5. Choose **View/Edit Your Current Applications** to modify a previous submittal

B. General Project Information

At this point, the applicant will be requested to provide general information regarding their project. **All project proposals must complete this portion of the application:**

1. Project proposals must be classified into one, and only one, of six different categories. Specify the project category by clicking the appropriate circle. Your choice here will dictate the category specific questions to be answered in the next section. To assist in the classification of projects, more information about each category is available by clicking on the category name.
2. Is this project listed in the current Transportation Improvement Program (TIP)? If so, please enter the 6-digit TIP number in the space provided. If not, you may leave the space blank. The current TIP may be viewed at the following: <http://www.marc.org/transportation/tip/TIP10-14.htm>
3. Please enter the state in which the project is located or choose Regional for bi-state projects.

4. Please specify the county(s) in which the project is located. You may specify up to 3 counties. If the project includes more than 3 counties, choose **Region Wide** in the first box.
5. Please specify the municipality in which the project is located. You may specify up to 3 municipalities. If the project includes more than 3 municipalities, choose **Multi-City** in the first box.
6. Is this project funded by multiple agencies/jurisdictions? If yes, identify the project partners in the space provided.
 - To qualify as a project partner, **an agency/jurisdiction must be a financial contributor** to the project.
 - The agency/jurisdiction sponsoring the project must provide documentation of the project partner's involvement by submitting a letter from the mayor, city manager, county administrator or equivalent of the partner agency/jurisdiction verifying their support and commitment to MARC.
7. Please specify a brief, descriptive title for your project. Phased projects should include the phase number.
8. Please provide a brief description of the project including: scope of work, goals, and rationale for the project.
9. Please describe the purpose and need for this project.
10. If your project involves a route, please identify it and enter the termini and length (in miles) of the project.
11. To assist MARC in accurately depicting the project in our geographic information system, please submit an ESRI shapefile or location map (.jpg, .pdf, etc.) of each project to tip@marc.org. Please label major streets.
12. Please specify the functional classification. Roadway projects must be on facilities functionally classified as **urban collector, rural minor collector or higher**.
13. The current MARC functional classification map may be accessed at, http://www.marc.org/2040/Plan/Project_Solicitation/Map.aspx?mapid=2. **This is the only map MARC staff will utilize when verifying functional class status.**
14. Is this project listed in the long-range transportation plan for the region, *Transportation Outlook 2040*? If yes, please specify in which decade. *Transportation Outlook 2040* may be referenced by visiting: <http://www.marc.org/2040/>.
15. Other than/or in addition to Transportation Outlook 2030, does this project implement a multi-agency plan? If yes, please explain in the space provided.

Examples of multi-agency plans include:

- 135th St Corridor Management Plan
- MetroGreen

- Major Investment Studies

16. Is this project included in a local capital improvement plan (CIP)? If yes, please explain in the space provided.
17. Please specify the status of the project plan development using the drop-down menu.
18. Have the project plans been reviewed by the appropriate state DOT?
19. Please specify the status of right-of way acquisition using the drop-down menu.
20. Have project plans and/or ROW acquisitions been developed in accordance with the appropriate local public agency process manual?
21. Does this project promote other unique local goals and objectives not identified in *Transportation Outlook 2040*? If yes, please explain in the space provided.
22. Does this project leverage other funds? If yes, please identify them in the space provided.

Examples of other funds include:

- Non-Federal Public Funds
- Private Funds
- Non-Transportation Federal Funds

23. Does this project improve access to or from environmental justice tracts? If so, please indicate how in the space provided.

Low-income and minority populations in the region must be identified to ensure nondiscrimination in federal programs. The U.S. Department of Transportation objectives from the federal mandate for environmental justice analysis in transportation include:

- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by low-income and minority populations.
- To avoid, minimize or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on these populations.

The region's identified environmental justice tracts will be available in the online map viewer to help locate these areas in relation to proposed projects. These tracts are identified using 2000 Census data and calculations of average percentages of these populations within the metropolitan planning boundary. Census tracts with minority or low-income populations above the regional average are identified as environmental justice areas. Low-income populations are identified using Census data for median household income with U.S. Department of Health and Human Services poverty guidelines.

24. Does this project reduce greenhouse gas emissions and/or the use of carbon-based fuels? If so please indicate how in the space provided.

The climate change and energy use goal is focused on reducing transportation-generated carbon dioxide (CO₂) emissions. The principal greenhouse gases defined by the U.S. Environmental Protection Agency (EPA) are CO₂, methane, nitrous oxide and fluorinated gases. The transportation sector accounts for 28 percent of man-made carbon dioxide emissions, second only to energy generation. The EPA conducts a national greenhouse gas inventory on a yearly basis, from which a portion of the MARC staff analysis will be derived.

Greenhouse gas evaluation and mitigation strategies are still in their infancy. In an effort to recognize this evolution, while still responding to the adopted policy goal, project sponsors will be asked to provide any information available about how projects may help reduce greenhouse gas emissions and/or reduce the consumption of carbon-based fuels.

Example strategies include reductions in vehicle miles traveled, improved access for bicycle/pedestrian/transit users, shifting freight from trucks to rail, increased enforcement of speed limits, among others. Strategies embedded into project concepts (ITS, signal timing, etc) will also be considered. Points will be awarded based on the sponsor's response and a corresponding staff analysis.

25. Identify local land-use plans that support or include the project. Please explain.

Sponsors are asked to identify and describe how adopted local land-use plans support or include the proposed project. Land-use plans are typically included in a municipality's comprehensive or master plan. Additional land-use plans, such as adopted area, corridor or neighborhood plans may also be suggested.

26. Identify Creating Quality Places factors supported by the project:

Homes and Neighborhoods

- Choice and Diversity
- Linkages
- Reinvestment
- Identity
- Green Space
- Pedestrian/Bike Friendly
- Live/Work

Commercial Development

- Mixed Use
- Scale
- Durability
- Walkability
- Parking

Transportation and Public Places

- Multimodal
- Local Streets
- Bicycle/Pedestrian Access
- Transit-Supportive Development
- Public Spaces

Environmental Quality

- Water and Air Quality
- Resource Efficiency
- Natural Elements

These 20 factors represent components of creating successful neighborhoods, vibrant mixed-use commercial areas and efficient transportation systems within a healthy natural environment. The principles were identified as part of a process that was led by a steering committee in 1999.

Creating Quality Places: www.marc2.org/cqp

At this point, you will automatically be forwarded to appropriate category-specific page, based on the classification selected in the previous section.

C. Category Specific Information

As indicated in the previous section, each project proposal must be classified into one, and only one, of six distinct categories. This section of the application is aimed at determining more detailed information about the project as it relates to the category.

Bridge Restoration, Rehabilitation, and Replacement Projects

2.1 Accessibility/Public Health

2.1.1 Modes addressed by project design features (check all that apply)

2.1.2 Elimination of bicycle/pedestrian barriers.

Does this project improve a **bicycle** connection between complimentary land uses (e.g. between commercial, institutional, and residential uses) or between complimentary land uses and transit stops? If so, please explain in the space provided.

Does this project improve a **pedestrian** connection between complimentary land uses (e.g. between commercial, institutional, and residential uses) or between complimentary land uses and transit stops? If so, please explain in the space provided.

2.2 Economic Vitality

Does this project serve a regional activity and/or employment center? If so, how?

MARC encourages economic development throughout the region that is consistent with adopted comprehensive plans; promotes economic opportunity for all citizens of the region — especially for unemployed and for disadvantaged persons — promotes the retention and expansion of existing businesses and recruitment of new businesses; recognizes regional differences impacting economic development opportunities; and encourages growth in areas experiencing insufficient economic growth, all within the capacities of the region's natural resources, public services, and public facilities.

Regional activity and employment centers, as identified through the work of the Technical Forecast Committee, are available in the online map viewer.

Does the project have elements that improve freight movement? If so, how?

The economic well-being of the region depends in large part on the reliable and efficient movement of freight and goods between producers and markets. Sponsors will be asked to describe project elements that are specifically designed to support freight movement throughout the region and/or regional freight connections to and from markets outside of the region.

Project elements that would address this element may include, but are not limited to: freight congestion bottleneck improvements, grade separations, improving access to intermodal facilities, and freight related ITS improvements. The Regional Freight Outlook Study will be used by staff to help verify planned facilities and impact of projects on freight movement.

Regional Freight Outlook Study: www.marc.org/transportation/freightoutlook

2.3 Environment

Does this project preserve or restore environmentally sensitive lands, cultural resources and/or rural areas? If so, how?

Where environmentally sensitive, cultural and agricultural areas are present, projects that incorporate them into their designs will receive more points than those that do not. In addition to identifying whether the project preserves or restores these areas, sponsors will be asked to explain how it does so.

MARC staff will conduct an analysis of a project's impact using a regional conservation index, which ranks the environmental significance of areas identified in the regional Natural Resources Inventory.

Natural Resources Inventory: www.marc.org/nri

Does the project include an environmental impact mitigation plan? If so, please explain.

Sponsors should note whether a proposed project includes an environmental mitigation plan if — after determining the natural environment could not be avoided or restored — a project would impact these resources. Sponsors should also include a brief explanation of the plan. Projects that affect environmentally sensitive, agricultural, and cultural resources and have strategies or a plan in place to mitigate these impacts will receive points.

Does the project implement or connect to MetroGreen®? If so, please explain.

MetroGreen® is an interconnected system of public and private natural areas, greenways and trails linking communities throughout the Kansas City metro area. The 1,144-mile proposed greenway plan covers Leavenworth, Johnson and Wyandotte counties in Kansas and Cass, Clay, Jackson and Platte counties in Missouri. The plan identifies more than 75 separate corridors that will form a regional network to connect many of the area's most valuable natural assets. The online map viewers (see Section IX) include the MetroGreen® system.

MetroGreen®: www.marc.org/metrogreen

2.4 Safety

2.4.1 Enter the number of fatal crashes in the past 3 years.

2.4.2 Enter the number of injury crashes in the past 3 years.

2.4.3 Enter the number of property damage only (PDO) crashes in the past 3 years.

2.5 System Preservation

Every bridge has three condition ratings: one for the bridge deck, one for the substructure, and one for the superstructure. The deck bridge condition rates the overall condition of the bridge deck on a scale of “1” through “9”, with “1” being the worst condition and “9” being the best condition. The substructure bridge condition rates the physical condition of piers, abutments, piles, fenders, footings and other components using the same scale. The superstructure bridge condition rates the condition of structural members, also using the same “1” through “9” scale.

2.5.1 Specify the bridge deck rating using the drop-down menu.

2.5.2 Specify the bridge substructure rating using the drop-down menu.

2.5.3 Specify the bridge superstructure rating using the drop-down menu.

2.6 System Performance

2.6.1 Please enter the Average Annual Daily Traffic (AADT)/Lane for both current and 2040.

- AADT is defined as the average 24-hour traffic volume at a given location over a full 365-day year—that is, the total number of vehicles passing the site in a year divided by 365.

2.6.2 Please enter the number of current and proposed thru lanes.

2.6.3 If applicable, please enter the number of current and proposed turn lanes.

2.6.4 Please enter the length (in miles) of the shortest practical detour available for the bridge.

2.6.5 Please identify the source and year of AADT data in the space provided.

3.0 Livable Communities Pilot Projects

3.1 Accessibility/Public Health

Does this project have elements that will encourage non-motorized travel? If so, how?

Access to active modes of transportation — walking and bicycling— can help promote healthy living and increase our overall quality of life. Project elements that would address this factor may include, but are not limited to: the addition of sidewalks, bicycle lanes, shared-use paths, signs, traffic calming such as curb extensions, or educational campaigns to promote bicycling and walking. The regional bikeway inventory may be used by staff to verify planned facilities.

Elimination of bicycle/pedestrian barriers.

Does this project improve a **bicycle** connection between complimentary land uses (e.g. between commercial, institutional, and residential uses) or between complimentary land uses and transit stops? If so, please explain in the space provided.

Does this project improve a **pedestrian** connection between complimentary land uses (e.g. between commercial, institutional, and residential uses) or between complimentary land uses and transit stops? If so, please explain in the space provided.

3.2 Economic Vitality

Does this project serve a regional activity and/or employment center? If so, how?

MARC encourages economic development throughout the region that is consistent with adopted comprehensive plans; promotes economic opportunity for all citizens of the region — especially for unemployed and for disadvantaged persons — promotes the retention and expansion of existing businesses and recruitment of new businesses; recognizes regional differences impacting economic development opportunities; and encourages growth in areas experiencing insufficient economic growth, all within the capacities of the region's natural resources, public services, and public facilities.

Regional activity and employment centers, as identified through the work of the Technical Forecast Committee, are available in the online map viewer.

Does the project have elements that improve freight movement? If so, how?

The economic well-being of the region depends in large part on the reliable and efficient movement of freight and goods between producers and markets. Sponsors will be asked to describe project elements that are specifically designed to support freight movement throughout the region and/or regional freight connections to and from markets outside of the region.

Project elements that would address this element may include, but are not limited to: freight congestion bottleneck improvements, grade separations, improving access to intermodal facilities, and freight related ITS improvements. The Regional Freight Outlook Study will be used by staff to help verify planned facilities and impact of projects on freight movement.

Regional Freight Outlook Study: www.marc.org/transportation/freightoutlook

3.3 Environment

Does this project preserve or restore environmentally sensitive lands, cultural resources and/or rural areas? If so, how?

Where environmentally sensitive, cultural and agricultural areas are present, projects that incorporate them into their designs will receive more points than those that do not. In addition to identifying whether the project preserves or restores these areas, sponsors will be asked to explain how it does so.

MARC staff will conduct an analysis of a project's impact using a regional conservation index, which ranks the environmental significance of areas identified in the regional Natural Resources Inventory.

Natural Resources Inventory: www.marc.org/nri

Does the project include an environmental impact mitigation plan? If so, please explain.

Sponsors should note whether a proposed project includes an environmental mitigation plan if — after determining the natural environment could not be avoided or restored — a project would impact these resources. Sponsors should also include a brief explanation of the plan. Projects that affect environmentally sensitive, agricultural, and cultural resources and have strategies or a plan in place to mitigate these impacts will receive points.

Does the project implement or connect to MetroGreen®? If so, please explain.

MetroGreen® is an interconnected system of public and private natural areas, greenways and trails linking communities throughout the Kansas City metro area. The 1,144-mile proposed greenway plan covers Leavenworth, Johnson and Wyandotte counties in Kansas and Cass, Clay, Jackson and Platte counties in Missouri. The plan identifies more than 75 separate corridors that will form a regional network to connect many of the area's most valuable natural assets. The online map viewers (see Section IX) include the MetroGreen® system.

MetroGreen®: www.marc.org/metrogreen

3.4 Public Health

Will this project use strategies to reduce ozone-forming emissions? If so, how?

Ground-level ozone forms when sunlight causes a chemical reaction between volatile organic compounds (VOCs) and nitrous oxides (NOx) emitted from motor vehicles and industrial plants. On-road mobile sources account for 35 percent of the Kansas City area VOC emissions and 40 percent of the area NOx emissions. The health impacts of ground-level ozone are varied and wide-ranging. Of particular concern is the impact on the young and the elderly; however, on high ozone days, even healthy adults can feel the effects of ozone.

Projects that include native landscaping, which reduces the need for mowing, and multimodal options can help reduce ozone precursor emissions. Other strategies addressing this question include, but are not limited to: expansion of regional transit service, integrated bicycle/pedestrian facilities, and congestion relief improvement projects.

Clean Air Action Plan: [www.marc.org/Environment/airQ/pdf/clean air action plan.pdf](http://www.marc.org/Environment/airQ/pdf/clean_air_action_plan.pdf)

3.5 Will this project improve safety at this location? If so, how?

It is common practice for agencies that oversee extensive road infrastructure to identify and address locations with significantly higher-than-average crash counts. Agencies frequently use a two-phase process to prioritize intersections and corridors for further evaluation. Phase one requires a historic review of crash data for the entire network of intersections to narrow the focus to a limited number of locations. The second phase involves a more detailed evaluation of this list to determine cost-effective engineering countermeasures.

3.6 System Condition

Age of facility/asset (in years)

Lifespan of facility/asset (in years)

Current condition of the facility/asset:

Excellent

Good

Fair

Poor

Very Poor

The physical condition of the transportation system — including streets, highways, bridges, transit, sidewalks and bikeway facilities — is crucial to system efficiency. A system that is not well maintained can pose barriers for residents' safety and reliability, access to opportunities, and the efficient movement of goods.

3.7 System Performance

Check categories from MARC's Congestion Management Toolbox that will be deployed as part of this project to help reduce traffic congestion:

- Highway Strategies
- Transit Strategies
- Bicycle and Pedestrian Strategies
- Transportation Demand Management (TDM) Strategies
- Intelligent Transportation System (ITS) and Transportation System Management
- Access Management Strategies
- Land Development Strategies
- Parking Management Strategies

A Congestion Management Process (CMP) is required by federal regulations in metropolitan areas with populations exceeding 200,000, known as Transportation Management Areas (TMAs). A CMP should include alternative strategies for alleviating congestion and enhancing the mobility of persons and goods to levels that meet state and local needs. At the core, a CMP should include a data collection and monitoring system, a range of strategies for addressing congestion, performance measures or criteria for identifying when action is

needed, and a system for prioritizing which congestion management strategies would be most effective. Federal guidelines prohibit projects that increase capacity for single occupant vehicles unless the project comes from a CMP.

In 2001, MARC developed a Congestion Management Toolbox comprising a set of strategies for reducing congestion, which were organized into categories: highway, transit, bicycle/pedestrian, travel demand management (TDM), intelligent transportation systems/transportation system management (ITS/TSM), access management, land use, and parking management. Project sponsors are asked to indicate which congestion management categories and strategies are included in the project. Please refer to the MARC Enhanced Congestion Management System CMS Toolbox for more detail (<http://www.marc.org/transportation/cms/toolbox.pdf>)

Will the project reduce traffic congestion? If so, how?

While the MARC region tends to experience less overall congestion on its transportation system than metropolitan areas of similar size, there are facilities that do not currently achieve desirable performance levels. Project sponsors will be asked to identify these facilities, and to provide data and performance measures that demonstrate existing congestion.

Include data such as traffic and/or passenger volumes, measures of capacity, travel times, average speed/delay, etc. This information should identify and describe the causes of current congestion, and how the project will reduce congestion and improve system performance. When appropriate, describe project benefits in terms of user benefits (e.g., travel delay reduction per person).

Is the project part of the current Congestion Management Network? If so, please explain.

Transportation Outlook 2040 will prioritize investment strategies that seek to avoid or address congestion on transportation facilities that serve the greatest number of users. Through the MARC CMP, a series of routes have been designated as the Congestion Management Network (See online map viewer, Section IX). The network comprises routes that: (1) are included on the National Highway System (NHS); (2) carry daily traffic volumes of 25,000 or greater; and/or (3) carry significant transit service.

4.0 Public Transportation Projects

4.1 Accessibility/Public Health

Does this project facilitate multiple transportation modes? (if no, please move ahead to 4.2)

Does this project improve roadway or sidewalk facilities?

(if yes, please answer the questions in the table beginning with 4.1.1. Please skip 4.1.12)

(if no, please move ahead to 4.1.12 and use the space provided)

All of the following must be answered for both current conditions and future conditions with the proposed improvements.

4.1.1 Number of thru lanes (both directions) – Select from drop-down menu.

4.1.2 Median Type (choose from the following)

- Restrictive – a raised or grassed area at least 10 feet in width separating opposing mid-block traffic lanes and includes left turn lanes
- Non-Restrictive – a painted at-grade area at least 10 feet in width separating opposing mid-block traffic lanes, and for arterials, allows mid-block left-turning vehicles to exit from thru lanes. Continuous two-way left turn lanes are considered a non-restrictive median.
- None – Situations in which restrictive or non-restrictive medians are less than 10 feet are considered as having no median.

4.1.3 Posted Speed

4.1.4 Presence of Left Turn lanes

4.1.5 Paved Shoulder/Bicycle Lane – To be considered a paved shoulder/bicycle lane, at least 3 feet of paved shoulder must exist outside the painted line.

4.1.6 Outside Lane Width – Does not include the gutter. Select from the drop-down menu.

4.1.7 Pavement Condition (choose from the following)

- Desirable – New or recently resurfaced pavement. The pavement maintains a dark black color, is free of cracks, and rides smoothly
- Typical – Most common type of condition. The pavement has a light gray color, may appear worn, and may have some cracks; however, the ride for the bicyclist and motorist is fairly smooth.
- Undesirable – Pavement with noticeable cracks, broken pavement and/or ruts in it. There may be existing or partially filled potholes or it may have drainage grates hazardous to bicycles.

4.1.8 Presence of Sidewalks – Paved roadway shoulders are not considered sidewalks.

4.1.9 Sidewalk/Roadway Separation – Select distance from drop-down menu.

4.1.10 Sidewalk/Roadway Protective Barrier – Presence of physical barriers separating motorized vehicles and pedestrians. Examples include trees and on-street parking.

4.1.11 Obstacle to Bus Stop – Presence of a situation where there is a physical barrier such as a swale, fence or guard rail, between the sidewalk and the bus stop.

4.1.12 In the space provided, describe how the project facilitates other transportation modes.

4.2 Economic Vitality

Does this project serve a regional activity and/or employment center? If so, how?

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Does this project preserve or restore environmentally sensitive lands, cultural resources and/or rural areas? If so, how?

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MARC staff will conduct an analysis of a project's impact using a regional conservation index, which ranks the environmental significance of areas identified in the regional Natural Resources Inventory.

Natural Resources Inventory: www.marc.org/nri

Does the project include an environmental impact mitigation plan? If so, please explain.

Sponsors should note whether a proposed project includes an environmental mitigation plan if — after determining the natural environment could not be avoided or restored — a project would impact these resources. Sponsors should also include a brief explanation of the plan. Projects that affect environmentally sensitive, agricultural, and cultural resources and have strategies or a plan in place to mitigate these impacts will receive points.

Does the project implement or connect to MetroGreen®? If so, please explain.

MetroGreen® is an interconnected system of public and private natural areas, greenways and trails linking communities throughout the Kansas City metro area. The 1,144-mile proposed greenway plan covers Leavenworth, Johnson and Wyandotte counties in Kansas and Cass, Clay, Jackson and Platte counties in Missouri. The plan identifies more than 75 separate corridors that will form a regional network to connect many of the area's most valuable natural assets. The online map viewers (see Section IX) include the MetroGreen® system.

MetroGreen®: www.marc.org/metrogreen

4.4 Public Health

Will this project use strategies to reduce ozone-forming emissions? If so, how?

Ground-level ozone forms when sunlight causes a chemical reaction between volatile organic compounds (VOCs) and nitrous oxides (NOx) emitted from motor vehicles and industrial plants. On-road mobile sources account for 35 percent of the Kansas City area VOC emissions and 40 percent of the area NOx emissions. The health impacts of ground-level ozone are varied and wide-ranging. Of particular concern is the impact on the young and the elderly; however, on high ozone days, even healthy adults can feel the effects of ozone.

Projects that include native landscaping, which reduces the need for mowing, and multimodal options can help reduce ozone precursor emissions. Other strategies addressing this question include, but are not limited to: expansion of regional transit service, integrated bicycle/pedestrian facilities, and congestion relief improvement projects.

Clean Air Action Plan: www.marc.org/Environment/airQ/pdf/clean_air_action_plan.pdf

4.5 Safety

Does this project include elements that improve transit safety or security? If so, how?

4.6 System Condition

Of the following, check all that apply:

- 4.6.1 Replaces obsolete transit vehicles
- 4.6.2 Enhances existing transit fleet maintenance facilities
- 4.6.3 Improves existing transit stop facilities
- 4.6.4 Includes preventive maintenance activities

4.7 System Performance

4.7.1 Please enter the number of current daily riders

4.7.2 Please enter the estimated number of future daily riders

(if the project does not involve ridership, please enter 0 for both 4.1.1. and 4.1.2)

Check all that apply:

4.7.3 Project will increase ridership on existing routes

4.7.4 Project will reduce operating costs without reducing ridership

4.7.5 Project will improve coordination with other transit providers or services

5.0 Roadway Capacity Projects

Is this a new road?

If yes, please submit a copy of the applicable traffic study to MARC and ignore all fields seeking current information.

5.1 Accessibility/Public Health

All of the following must be answered for both current conditions and future conditions with the proposed improvements.

5.1.1 Number of thru lanes (both directions) – Select from drop-down menu.

5.1.2 Median Type (choose from the following)

- Restrictive – a raised or grassed area at least 10 feet in width separating opposing mid-block traffic lanes and includes left turn lanes
- Non-Restrictive – a painted at-grade area at least 10 feet in width separating opposing mid-block traffic lanes, and for arterials, allows mid-block left-turning vehicles to exit from thru lanes. Continuous two-way left turn lanes are considered a non-restrictive median.
- None – Situations in which restrictive or non-restrictive medians are less than 10 feet are considered as having no median.

5.1.3 Posted Speed

5.1.4 Presence of Left Turn lanes

5.1.5 Paved Shoulder/Bicycle Lane – To be considered a paved shoulder/bicycle lane, at least 3 feet of paved shoulder must exist outside the painted line.

5.1.6 Outside Lane Width – Does not include the gutter. Select from the drop-down menu.

5.1.7 Pavement Condition (choose from the following)

- Desirable – New or recently resurfaced pavement. The pavement maintains a dark black color, is free of cracks, and rides smoothly
- Typical – Most common type of condition. The pavement has a light gray color, may appear worn, and may have some cracks; however, the ride for the bicyclist and motorist is fairly smooth.
- Undesirable – Pavement with noticeable cracks, broken pavement and/or ruts in it. There may be existing or partially filled potholes or it may have drainage grates hazardous to bicycles.

5.1.8 Presence of Sidewalks – Paved roadway shoulders are not considered sidewalks.

5.1.9 Sidewalk/Roadway Separation – Select distance from drop-down menu.

5.1.10 Sidewalk/Roadway Protective Barrier – Presence of physical barriers separating motorized vehicles and pedestrians. Examples include trees and on-street parking.

5.1.11 Obstacle to Bus Stop – Presence of a situation where there is a physical barrier such as a swale, fence or guard rail, between the sidewalk and the bus stop.

5.2 Economic Vitality

Does this project serve a regional activity and/or employment center? If so, how?

MARC encourages economic development throughout the region that is consistent with adopted comprehensive plans; promotes economic opportunity for all citizens of the region — especially for unemployed and for disadvantaged persons — promotes the retention and expansion of existing businesses and recruitment of new businesses; recognizes regional

differences impacting economic development opportunities; and encourages growth in areas experiencing insufficient economic growth, all within the capacities of the region's natural resources, public services, and public facilities.

Regional activity and employment centers, as identified through the work of the Technical Forecast Committee, are available in the online map viewer.

Does the project have elements that improve freight movement? If so, how?

The economic well-being of the region depends in large part on the reliable and efficient movement of freight and goods between producers and markets. Sponsors will be asked to describe project elements that are specifically designed to support freight movement throughout the region and/or regional freight connections to and from markets outside of the region.

Project elements that would address this element may include, but are not limited to: freight congestion bottleneck improvements, grade separations, improving access to intermodal facilities, and freight related ITS improvements. The Regional Freight Outlook Study will be used by staff to help verify planned facilities and impact of projects on freight movement.

Regional Freight Outlook Study: www.marc.org/transportation/freightoutlook

5.3 Environment

Does this project preserve or restore environmentally sensitive lands, cultural resources and/or rural areas? If so, how?

Where environmentally sensitive, cultural and agricultural areas are present, projects that incorporate them into their designs will receive more points than those that do not. In addition to identifying whether the project preserves or restores these areas, sponsors will be asked to explain how it does so.

MARC staff will conduct an analysis of a project's impact using a regional conservation index, which ranks the environmental significance of areas identified in the regional Natural Resources Inventory.

Natural Resources Inventory: www.marc.org/nri

Does the project include an environmental impact mitigation plan? If so, please explain.

Sponsors should note whether a proposed project includes an environmental mitigation plan if — after determining the natural environment could not be avoided or restored — a project would impact these resources. Sponsors should also include a brief explanation of the plan. Projects that affect environmentally sensitive, agricultural, and cultural resources and have strategies or a plan in place to mitigate these impacts will receive points.

Does the project implement or connect to MetroGreen®? If so, please explain.

MetroGreen® is an interconnected system of public and private natural areas, greenways and trails linking communities throughout the Kansas City metro area. The 1,144-mile proposed greenway plan covers Leavenworth, Johnson and Wyandotte counties in Kansas and Cass, Clay, Jackson and Platte counties in Missouri. The plan identifies more than 75 separate corridors that will form a regional network to connect many of the area's most valuable natural assets. The online map viewers (see Section IX) include the MetroGreen® system.

MetroGreen®: www.marc.org/metrogreen

5.4 Public Health

Will this project use strategies to reduce ozone-forming emissions? If so, how?

Ground-level ozone forms when sunlight causes a chemical reaction between volatile organic compounds (VOCs) and nitrous oxides (NOx) emitted from motor vehicles and industrial plants. On-road mobile sources account for 35 percent of the Kansas City area VOC emissions and 40 percent of the area NOx emissions. The health impacts of ground-level ozone are varied and wide-ranging. Of particular concern is the impact on the young and the elderly; however, on high ozone days, even healthy adults can feel the effects of ozone.

Projects that include native landscaping, which reduces the need for mowing, and multimodal options can help reduce ozone precursor emissions. Other strategies addressing this question include, but are not limited to: expansion of regional transit service, integrated bicycle/pedestrian facilities, and congestion relief improvement projects.

Clean Air Action Plan: www.marc.org/Environment/airQ/pdf/clean_air_action_plan.pdf

5.5 Safety

5.5.1 Enter the number of fatal crashes in the past 3 years.

5.5.2 Enter the number of injury crashes in the past 3 years.

5.5.3 Enter the number of property damage only (PDO) crashes in the past 3 years.

5.6 System Condition

5.6.1 Age of facility/asset (in years)

5.6.2 Lifespan of facility/asset (in years)

5.6.3 Current condition of the facility/asset:

Excellent

Good

Fair

Poor

Very Poor

The physical condition of the transportation system — including streets, highways, bridges, transit, sidewalks and bikeway facilities — is crucial to system efficiency. A system that is not well maintained can pose barriers for residents' safety and reliability, access to opportunities, and the efficient movement of goods.

5.7 System Performance

5.7.1 Please enter the Average Annual Daily Traffic (AADT)/Lane for both current and 2030.

- AADT is defined as the average 24-hour traffic volume at a given location over a full 365-day year—that is, the total number of vehicles passing the site in a year divided by 365.

5.7.2 Please identify the source and year of AADT data in the space provided.

5.7.3 Current roadway level of service (select from drop-down menu)

5.7.4 Future roadway level of service with improvement (select from drop-down menu)

5.7.5 Source of LOS methodology In the space provided, indicate method by which LOS was calculated, e.g. Highway Capacity Manual 2000.

5.7.6 Check categories from MARC's Congestion Management Toolbox that will be deployed as part of this project to help reduce traffic congestion:

- Highway Strategies
- Transit Strategies
- Bicycle and Pedestrian Strategies
- Transportation Demand Management (TDM) Strategies
- Intelligent Transportation System (ITS) and Transportation System Management
- Access Management Strategies
- Land Development Strategies
- Parking Management Strategies

A Congestion Management Process (CMP) is required by federal regulations in metropolitan areas with populations exceeding 200,000, known as Transportation Management Areas (TMAs). A CMP should include alternative strategies for alleviating congestion and enhancing the mobility of persons and goods to levels that meet state and local needs. At the core, a CMP should include a data collection and monitoring system, a range of strategies for addressing congestion, performance measures or criteria for identifying when action is needed, and a system for prioritizing which congestion management strategies would be most effective. Federal guidelines prohibit projects that increase capacity for single occupant vehicles unless the project comes from a CMP.

In 2001, MARC developed a Congestion Management Toolbox comprising a set of strategies for reducing congestion, which were organized into categories: highway, transit, bicycle/pedestrian, travel demand management (TDM), intelligent transportation systems/transportation system management (ITS/TSM), access management, land use, and parking management. Project sponsors are asked to indicate which congestion management categories and strategies are included in the project. Please refer to the MARC Enhanced Congestion Management System CMS Toolbox for more detail (<http://www.marc.org/transportation/cms/toolbox.pdf>)

6.0 Transportation Operations and Management Projects

6.1 Accessibility/Public Health

Does this project facilitate multiple transportation modes? (if no, please move ahead to 6.2)

Does this project improve roadway or sidewalk facilities?

(if yes, please answer the questions in the table beginning with 6.1.1. Please skip 6.1.10)

(if no, please move ahead to 6.1.10 and use the space provided)

All of the following must be answered for both current conditions and future conditions with the proposed improvements.

6.1.1 Median Type (choose from the following)

- Restrictive – a raised or grassed area at least 10 feet in width separating opposing mid-block traffic lanes and includes left turn lanes
- Non-Restrictive – a painted at-grade area at least 10 feet in width separating opposing mid-block traffic lanes, and for arterials, allows mid-block left-turning vehicles to exit from thru lanes. Continuous two-way left turn lanes are considered a non-restrictive median.
- None – Situations in which restrictive or non-restrictive medians are less than 10 feet are considered as having no median.

6.1.2 Posted Speed

6.1.3 Paved Shoulder/Bicycle Lane – To be considered a paved shoulder/bicycle lane, at least 3 feet of paved shoulder must exist outside the painted line.

6.1.4 Outside Lane Width – Does not include the gutter. Select from the drop-down menu.

6.1.5 Pavement Condition (choose from the following)

- Desirable – New or recently resurfaced pavement. The pavement maintains a dark black color, is free of cracks, and rides smoothly
- Typical – Most common type of condition. The pavement has a light gray color, may appear worn, and may have some cracks; however, the ride for the bicyclist and motorist is fairly smooth.
- Undesirable – Pavement with noticeable cracks, broken pavement and/or ruts in it. There may be existing or partially filled potholes or it may have drainage grates hazardous to bicycles.

6.1.6 Presence of Sidewalks – Paved roadway shoulders are not considered sidewalks.

6.1.7 Sidewalk/Roadway Separation – Select distance from drop-down menu.

6.1.8 Sidewalk/Roadway Protective Barrier – Presence of physical barriers separating motorized vehicles and pedestrians. Examples include trees and on-street parking.

6.1.9 Obstacle to Bus Stop – Presence of a situation where there is a physical barrier such as a swale, fence or guard rail, between the sidewalk and the bus stop.

6.1.10 In the space provided, describe how the project facilitates other transportation modes.

6.2 Economic Vitality

Does this project serve a regional activity and/or employment center? If so, how?

MARC encourages economic development throughout the region that is consistent with adopted comprehensive plans; promotes economic opportunity for all citizens of the region — especially for unemployed and for disadvantaged persons — promotes the retention and expansion of existing businesses and recruitment of new businesses; recognizes regional differences impacting economic development opportunities; and encourages growth in areas experiencing insufficient economic growth, all within the capacities of the region’s natural resources, public services, and public facilities.

Regional activity and employment centers, as identified through the work of the Technical Forecast Committee, are available in the online map viewer.

6.3 Environment

Does this project preserve or restore environmentally sensitive lands, cultural resources and/or rural areas? If so, how?

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MARC staff will conduct an analysis of a project’s impact using a regional conservation index, which ranks the environmental significance of areas identified in the regional Natural Resources Inventory.

Natural Resources Inventory: www.marc.org/nri

Does the project include an environmental impact mitigation plan? If so, please explain.

Sponsors should note whether a proposed project includes an environmental mitigation plan if — after determining the natural environment could not be avoided or restored — a project would impact these resources. Sponsors should also include a brief explanation of the plan. Projects that affect environmentally sensitive, agricultural, and cultural resources and have strategies or a plan in place to mitigate these impacts will receive points.

Does the project implement or connect to MetroGreen®? If so, please explain.

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6.5 Safety

6.5.1 Enter the number of fatal crashes in the past 3 years.

6.5.2 Enter the number of injury crashes in the past 3 years.

6.5.3 Enter the number of property damage only (PDO) crashes in the past 3 years.

6.6 System Condition

6.6.1 Age of facility/asset (in years)

6.6.2 Lifespan of facility/asset (in years)

6.6.3 Current condition of the facility/asset:

Excellent

Good

Fair

Poor

Very Poor

6.7 System Performance

Non-Intersection Projects Only

6.7.1 Please enter the Average Annual Daily Traffic (AADT)/Lane for both current and 2040.

- AADT is defined as the average 24-hour traffic volume at a given location over a full 365-day year—that is, the total number of vehicles passing the site in a year divided by 365.

Intersection Projects Only

6.7.2 Please enter the total entry volume for both current and 2040.

6.7.3 Calculate and enter the critical volume ratio (CVR) for both current and 2040.

All Projects

6.7.4 Enter the number of current and proposed thru lanes.

6.7.5 Enter the number of current and proposed turn lanes.

6.7.6 Enter the source and year of projected AADT data.

6.7.7 Does this project implement a corridor/access management plan?

If yes, please submit a copy of the plan to MARC

7.0 Transportation Safety Projects

Transportation safety projects must be classified as either education or engineering.

- Education projects should answer 7.1, 7.4, 7.5, and 7.6
- Engineering projects should answer 7.1, 7.2, 7.3, 7.5, and 7.6

7.1 Stakeholder Engagement

In the space provided, discuss the extent to which the project will engage multiple professional sectors and their stakeholders (engineering, education, enforcement, emergency response).

7.2 Safety

7.2.1 Enter the number of fatal crashes in the past 3 years.

7.2.2 Enter the number of injury crashes in the past 3 years.

7.3.3 Enter the number of property damage only (PDO) crashes in the past 3 years.

7.3 System Performance

7.3.1 Please enter the Average Annual Daily Traffic (AADT)/Lane for both current and 2030.

- AADT is defined as the average 24-hour traffic volume at a given location over a full 365-day year—that is, the total number of vehicles passing the site in a year divided by 365.

7.3.2 Please enter the number of current and proposed thru lanes.

7.3.3 Please enter the number of current and proposed turn lanes.

7.3.4 Please identify the source and year of AADT data in the space provided.

7.4 Effectiveness

7.4.1 Does this project address an identified high priority safety issue? If yes, please explain in the space provided.

Of the following, check all that apply:

7.4.2 The project addresses all crash severity types (PDO, injury, fatal).

7.4.3 The project is targeted at drivers under age 21.

7.4.4 The project is targeted at drivers age 65 and over.

7.4.5 The project is targeted at drivers on local roads.

7.4.6 The project addresses increasing seat belt usage.

7.5 Accessibility/Public Health

7.5.1 Project improves highway-rail grade crossing safety.

7.5.2 Project improves pedestrian or bicycle safety.

7.5.3 Project improves bus transit safety or transit rider safety .

7.5.4 Please describe how your project improves the area(s) selected in 7.5.1 thru 7.5.3

7.6 Economic Vitality

Does this project serve a regional activity and/or employment center? If so, how?

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Regional Freight Outlook Study: www.marc.org/transportation/freightoutlook

D. Financial and Phase Information

The final step in the application submittal process is the detailing of financial and phase information for the project. After completing the general information and category specific information sections, you are automatically directed to the input screen for financial and phase information.

The input screen consists of two rows.

- Row 1 - you must enter the phase, year, type of federal funds requested, and the amount (in thousands) requested.
- Row 2 – you must enter the phase year, type of required matching funds, and the amount of matching funds.

Please note the amount of required matching funds must be at least 20% of the total project cost in order to submit the application.

A space is provided to list any additional financial information relevant to the project.

Breakdown of cost in percent:

- Highway ____%
- Transit ____%
- Bike ____%
- Pedestrian ____%
- Other ____%

Improving access for different modes helps maximize mobility and access to opportunity for all area residents. Sponsors will be asked to identify the percentage of their project cost that applies to each mode listed on the submission form. Modes may include automobiles, public transit, bicycles, pedestrians, and rail or truck freight.

Click on the ***submit*** button at the bottom of the page to complete the application submission process.

Please submit all required documentation by the application deadline to the following:

Marc Hansen, AICP
Transportation Planner III
Mid-America Regional Council
600 Broadway, Suite 300
Kansas City, MO 64105

Any questions regarding the on-line project application process may be directed to Marc Hansen at 816-701-8317 or mhansen@marc.org.