

KATS Metropolitan Transportation Plan

Project Ranking Process

This scoring process is intended to assist in the ranking of worthy roadway, public transportation, bicycle, pedestrian, freight and operational projects for the KATS 2045 Metropolitan Transportation Plan (MTP). This process provides a systematic approach to ranking the numerous projects which will need to be evaluated in the development of a financially constrained Metropolitan Transportation Plan.

A numeric ranking for each project allows for a relative comparison between projects. This scoring process is meant to guide decision-making. Since the Metropolitan Transportation Plan does not directly assign funding to projects, this ranking is for planning purposes in developing the fiscally constrained and illustrative project lists.

Several criteria are evaluated in the scoring process. The first five criteria apply to all projects and provide a potential of 30 points. A project is then scored under the roadway or transit sections, all of which provide a potential for another 20 points for a total possible 50 points. A description of the criteria and the KATS 2045 Metropolitan Transportation Plan project scoring process follows.

OVERALL CRITERIA

There are five criteria that provide a potential of 30 points to each transportation project recommendation:

Environmental Justice

The environmental justice criterion addresses the possible transportation impacts on minority, elderly, low income, disabled and/or zero-car household populations. Impacts could include such things as effects on travel times, division of neighborhoods, and change in noise and/or air pollution, which may occur as a result of project implementation. Projects are awarded point values as follows:

Positive impact	5 points
No impact	0 points
Negative impact	-5 points

Economic Vitality

The economic vitality criterion awards points for projects that serve to support existing, expanding or new non-retail employment centers. Projects are awarded point values by demonstrating:

Significant positive impact for new/expanding economic activity	5 points
Support for existing economic activity	2 points
Projects not demonstrating a significant positive impact	0 points

Air Quality/Congestion

The air quality/congestion criterion relates to continued efforts to improve the region’s air quality and encourage investment in more environmentally friendly forms of fuel use. Reduction in vehicle miles of travel (VMT), vehicle hours of travel (VHT), and the use of cleaner vehicles will be considered in the allocation of up to 10 points based on anticipated reduction of vehicle emissions. A maximum score of 10 points could be awarded for projects involving a location with high average daily traffic (ADT), a high percentage of trucks, high current congestion, and a potential for a large improvement in congestion due to project implementation. Examples of potential improvements include construction of a new roadway link reducing circuitous travel (VMT reduced) consistent with the KATS Congestion Management Process, additional intersection turn lanes (VHT reduced), addition of a new bus on an existing route reducing headway (VMT and VHT reduced), or the replacement of older diesel buses with new hybrid electric buses (cleaner vehicles). Projects are awarded point values as follows:

Significant VMT/VHT reduction and increase cleaner vehicles	10 points
Moderate VMT/VHT reduction and/or increase in cleaner vehicles	5 points
Low VMT/VHT reduction and/or increase in cleaner vehicles	1 point
Increase in VMT/VHT or decrease in clean vehicles	-5 points

Complete Streets/Multimodal/Intermodal

The complete streets/multimodal/intermodal criterion awards points based on the project’s ability to include or enhance more than the primary mode or specifically address freight intermodal needs. If the proposed project facilitates intermodal integration and connectivity, or includes design elements for more than one transportation mode up to 5 points may be awarded. An example of multimodal integration as well as a complete street improvement would be a roadway reconstruction project that creates adequate space for bicycle use, even though a formal bike path is not part of the design. Another example would be a bus purchase by a transit operator where the specifications called for bicycle racks to be included. An example of multimodal investment is a roadway project that provides bus turnouts at designated bus stops, or a bus preemption feature in the traffic signal design. If a transit operator proposed a project for a park-and-ride lot/transfer center that included a linkage to an existing bike path and provided bike racks, the maximum of 5 points could be scored for this intermodal project. Projects are awarded point values as follows:

Three or more modes or intermodal freight project	5 points
Two mode design	3 points
Primary mode only included in project proposal	0 points

Environmental Impact

The environmental impact criterion addresses the impact transportation projects may have on environmentally sensitive areas. Input received through the environmental consultation process informs the score for this element. Up to five points are awarded. Projects are awarded point values as follows:

Project avoids environmentally sensitive area(s)	5 points
Any environmental impact(s) will be mitigated	3 points
Environmental impact(s) will not be mitigated	-5 points

ROADWAY PROJECTS

There are four criteria that provide a potential of 20 points to each roadway-specific transportation project recommendation:

Impact on Safety

The scoring process also takes into consideration the extent to which the project will have a positive impact on improving the level of safety for roadway travelers. The impact on safety criterion ranges from one to five points and is based off the most recent five year average number of crashes per million vehicle miles traveled (MVMT) and the overall impact on safety. New facilities will be scored based on existing routes that the project is designed to alleviate, if any. Projects are awarded point values as follows:

Step 1

5 or more crashes per MVMT	2 points
4 or less crashes per MVMT	1 point

Step 2

High positive impact on improving safety	3 points
Medium or low positive impact on improving safety	2 points
No positive impact on improving safety	0 points

Average Daily Traffic (ADT)/Facility Type

The average daily traffic (ADT) or facility type criterion combines two features which are a barometer of a roadway's significance in the regional system. This combination allows for the consideration of both current volume and functional hierarchy. This combination permits the roadways with high volumes to be assigned a high score even if the facility is not high on the functional class system. ADT and functional class are both readily available data. High volume roadways on the interstate system will score highly (up to 5 points) and low volume local roads will be scored zero. Projects are awarded the highest point value of either data source as follows:

40k+ or Freeway/Expressway	5 points
30k+ or Principal Arterial	4 points
20k+ or Minor Arterial	3 points
10k+ or Collector	2 points
Less than 10k or Local	0 points

Preservation of the Transportation System

The extent to which the proposed project preserves the functional, structural, and operational integrity of the transportation network. Up to five points are awarded. Projects are awarded point values as follows:

Preservation Project with Operational Improvements	5 points
Preservation project only	3 points
Capacity project (as defined by the Interagency Workgroup)	1 point

Freight Volume

The freight volumes criterion provides points for roadway projects based on *the current or projected* percentage of truck traffic within the project area. Up to five points are awarded. Projects are awarded point values as follows:

Twelve percent truck traffic or greater	5 points
Nine percent to <12% truck traffic	4 points
Six percent to <9% truck traffic	3 points
Three percent to <6% truck traffic	2 points
One percent to <3% truck traffic	1 point
Less than 1% truck traffic	0 points

TRANSIT PROJECTS

There are four criteria that provide a potential of 20 points to each public transportation or transit-specific transportation project recommendation:

Type

The type of project being sought relates to the score assigned. The term “type” may include but not necessarily be limited to vehicle replacement, service support, fixed facilities such as park and ride, stations or bus barns and vehicle expansion. The range reflects the importance of maintaining and supporting the existing service, as opposed to expansion activities. Projects can receive up to 5 points in this category as follows:

Bus replacement	5 points
Service support	4 points
Fixed facility	3 points
Vehicle expansion	2 points
Other	1 point

Ridership Impact

An important component of transit projects is their ridership impact. Investments should be oriented to at least maintaining the existing ridership, if not increasing it. The point values assigned the different measures of this criterion echo this philosophy and are awarded as follows:

Increases ridership	5 points
Maintains ridership	0 points
Negative impact on ridership	-5 points

Safety/Security

The safety and security criterion awards points to projects that can be linked to improving safety conditions. The existing safety and security problem must be documented along with a plan to address these problems. Up to 5 points are available and are awarded as follows:

Essential to safety/security	5 points
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Moderately impacts safety/security	3 points
No to minimal impact on safety/security	0 points
Decrease level of safety/security	-5 points

Timing and Analysis Level

The sooner a proposal can be put in place, the sooner its impact will be felt in the region. Improvements to, or expansion of the system, such as opening new transit hubs, that are anticipated to be implemented within ten years are awarded 5 points. Those projects anticipated to be implemented after ten years and are included in a local planning study or transit development plan are awarded three points. Those that are anticipated to be implemented after ten years and are not included in a local planning study or transit development plan are awarded zero points. The point values for timing and analysis level are summarized as follows:

Near term (<10 years)	5 points
Mid/long term and part of local plan (10+ years)	3 points
Mid/long term and not part of local plan (10+ years)	0 points