

**DURHAM-CHAPEL HILL-CARRBORO  
METROPOLITAN PLANNING ORGANIZATION  
METHODOLOGY FOR IDENTIFYING AND RANKING NEW  
TRANSPORTATION IMPROVEMENT PROGRAM  
PROJECT REQUESTS**

**INTRODUCTION**

According to U.S. Code 23 Section 134, Metropolitan Planning Organizations (MPOs) are required to develop a Transportation Improvement Program (TIP) in cooperation with the State and public transportation providers through a performance-driven, outcome-based approach to planning. The TIP should contain projects consistent with the Metropolitan Transportation Plan (MTP) and should reflect the investment priorities established in the current MTP. There should be the opportunity for public participation in developing the TIP including consultation, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation.

Furthermore, as a Transportation Management Area (TMA), according to U.S. Code 23 Section 134, all federally funded projects within the Durham-Chapel Hill-Carrboro (DCHC) MPO (excluding projects carried out on the National Highway System) shall be selected for implementation from the approved TIP by the MPO in consultation with the State and any public transportation provider or operator. Projects on the National Highway System shall be selected for implementation from the TIP by the State in cooperation with the MPO.

North Carolina's Strategic Transportation Investments (STI) legislation, passed in 2013, establishes a formula and process by which transportation funding is distributed across the state and across transportation modes. The outcome of the STI process is the draft State Transportation Improvement Program (STIP). The STI legislation applies uniformly across the state regardless of the boundaries of MPOs and TMA's. The STI legislation requires the identification and submittal of potential transportation projects by the North Carolina Department of Transportation (NCDOT) and the MPO, the evaluation of projects according to a NCDOT-developed quantitative scoring methodology, and the allocation of ranking points among certain projects by NCDOT and the MPO.

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) *Methodology for Identifying and Ranking TIP Project Requests* describes the processes that the DCHC MPO will follow to identify projects that will be submitted for evaluation to NCDOT during the NCDOT Strategic Prioritization Office of Transportation's (SPOT) Prioritization process. When the results of the SPOT Prioritization process are made available, the DCHC MPO will follow this Methodology to rank projects and assign Local Input Points to high priority projects. This Methodology is designed to address the federal requirement that the TIP be consistent with the projects and investment priorities of the MPO's MTP while being compatible with the state's STI process.

The DCHC MPO retains the authority to develop the TIP for the MPO area as required by federal regulations. Participation in the STI process through submitting projects for evaluation and/or allocating Local Input Points to projects does not require the MPO to include these projects in the TIP.

**OBJECTIVE**

The Methodology described herein is designed to address multi-modal transportation needs, ensure regional balance, and prioritize projects that are needed based on technical criteria. The goal is to

produce a project priority ranking which satisfies MPO goals, is simple enough for project-level analysis without requiring unnecessary data collection, and is understandable by the general public.

The DCHC MPO's Technical Committee (TC) will use the Methodology to generate a list of priority projects to submit to the NCDOT SPOT for quantitative scoring. While the Methodology is designed to comprehensively address the DCHC MPO's transportation needs, there will always be factors that are not easily measured but should still be considered in the development of the DCHC MPO's priorities. The DCHC MPO TC will make its technical recommendation for the prioritization of projects based on the methodology described in this document, and the DCHC MPO Board will then be afforded the opportunity to make changes with appropriate documentation. All public involvement for this process will be conducted in accordance with the DCHC MPO's adopted [Public Involvement Policy](#).

**Steps and schedule for submission of DCHC MPO projects to NCDOT for evaluation:**

|                |   |
|----------------|---|
| Summer 2015    | DCHC MPO reviews existing projects and makes a recommendation to the DCHC MPO Board   |
| Summer 2015    | DCHC MPO Board votes on any proposed changes to existing projects   |
| September 2015 | Deadline to modify or delete an existing project.   |
| October 2015   | DCHC MPO Board votes on new highway, public transportation, rail, and bicycle/pedestrian projects to submit for Prioritization 4.0. |
| November 2015  | Highway, rail, bicycle/pedestrian, public transportation project submission deadline for Prioritization 4.0.                        |

**Steps and schedule for updating the DCHC MPO's Methodology for Identifying and Ranking TIP Project**

**Requests:**

|             |   |
|-------------|---|
| Summer 2015 | MPO TC approves a local project prioritization methodology for projects being submitted to NCDOT SPOT On!ine  |
| Summer 2015 | TC forwards local project prioritization methodology to DCHC MPO Board for review and approval  |
| Summer 2015 | DCHC MPO Board approves local project prioritization methodology  |
| Winter 2015 | DCHC MPO develops <i>Methodology for Identifying and Ranking TIP Project Requests</i> document  |
| Winter 2015 | DCHC MPO TC reviews the <i>Methodology for Identifying and Ranking TIP Project Requests</i> and forwards Methodology to the DCHC MPO Board for approval |
| Winter 2015 | DCHC MPO Board releases the <i>Methodology for Identifying and Ranking TIP Project Requests</i> for public review and comment period                    |
| Winter 2015 | DCHC MPO forwards the <i>Methodology for Identifying and Ranking TIP Project Requests</i> to NCDOT for NCDOT Review Committee review                    |
| Spring 2016 | DCHC MPO Board receives public comment on the <i>Methodology for Identifying and Ranking TIP Project Requests</i>                                       |
| Spring 2016 | DCHC MPO Board approves the <i>Methodology for Identifying and Ranking TIP Project Requests</i> with any public comments incorporated                   |

**Steps and tentative schedule for the allocation of Local Input Points:**

|                         |   |
|-------------------------|---|
| February/March 2016     | DCHC MPO receives results of the NCDOT SPOT scoring process for Statewide, Regional, and Division projects                          |
| March 2016              | DCHC MPO ranks Regional projects for the assignment of Local Input Points   |
| June 2016               | DCHC MPO Board holds public hearing for the ranking of Regional projects and the assignment of Local Input Points                   |
| June 2016               | DCHC MPO Board approves assignment of Local Input Points to Regional projects   |
| <b>June 2016</b>        | <b>DCHC MPO submits Regional projects, with Local Input Points assigned to NCDOT</b>  |
| June/July 2016          | DCHC MPO ranks Division projects for the assignment of Local Input Points   |
| August 2016             | DCHC MPO Board holds public hearing for the ranking of Division projects and the assignment of Local Input Points                   |
| August 2016             | DCHC MPO Board approves assignment of Local Input Points to Division projects   |
| <b>August/Sept 2016</b> | <b>DCHC MPO submits Division projects, with Local Input Points assigned to NCDOT</b>  |
| Sept/Oct 2016           | DCHC MPO facilitates open house workshop to present results of MPO project prioritization process and Local Input Points allocation |

## **DCHC MPO GOALS FOR THE METHODOLOGY FOR IDENTIFYING AND RANKING TIP PROJECTS**

The *Methodology for Identifying and Ranking TIP Projects* should result in a list of projects that are a subset of the DCHC MPO Metropolitan Transportation Plan (MTP). For this reason, the goals for the Methodology are the same as the goals of the DCHC MPO, as presented in the adopted 2040 MTP. The goals of the 2040 MTP are as follows:

- A safe, sustainable, efficient, attractive, multi-modal transportation system that: supports local land use; accommodates trip-making choices; maintains mobility and access; protects the environment and neighborhoods; and improves the quality of life for urban area residents.
- An attractive multi-modal street and highway system that allows people and goods to be moved safely, conveniently, and efficiently.
- A convenient, accessible, and affordable public transportation system, provided by public and private operators, that enhances mobility and economic development.
- A pedestrian and bicycle system that: provides a safe alternative means of transportation; allows greater access to public transit; supports recreational opportunities; and includes off-road trails
- A Transportation Plan that is integrated with local land use plans and development policies.
- A multi-modal transportation system which provides access and mobility to all residents, while protecting the public health, natural environment, cultural resources, and social systems.
- An ongoing program to inform and involve citizens throughout all stages of the development, update, and implementation of the Transportation Plan.
- Continue to improve transportation safety and ensure the security of the transportation system.
- Improve mobility and accessibility of freight and urban goods movement.

## **PROCEDURE FOR IDENTIFYING PROJECTS FOR SUBMISSION TO NCDOT SPOT FOR EVALUATION**

### **1) Submission of Local Priority Lists to the MPO**

All MPO member jurisdictions and agencies will submit a local priority list to the MPO. The DCHC MPO requests that the MPO members apply initial screening criteria during the development of their respective lists. The initial screening criteria are listed below in this section. In addition to the initial screening criteria, MPO members may also want to consider reviewing Section 2 of this Methodology for guidance on the NCDOT's SPOT scoring criteria. The DCHC MPO will apply the NCDOT's scoring criteria when considering new project requests from DCHC MPO member jurisdictions and agencies.

#### **Initial Screening Criteria**

- a) Regional Goals - How well does the project meet the adopted regional goals? Is the project an element of the current MTP? Does it implement community objectives? For the intrastate system, does it meet NCDOT mobility objectives? Does the project have a broad base of local support?
- b) Cost Effectiveness - How much benefit does the project offer compared to the estimated cost?
- c) Timing – Is the project needed within the TIP funding cycle? Is timing a critical element for the project (one-time opportunity)? Will the opportunity to do the project be lost if it is not in the current priority cycle?

DCHC MPO member jurisdictions and agencies may also elect to use a ranking methodology to create their local priority lists but only public transportation operators are required to do so. The subcommittee and TC will review local priority lists for adherence to these initial screening criteria and apply the NCDOT scoring criteria listed in Section 2 of this Methodology, before recommending the submission of these projects to the NCDOT SPOT Online tool.

DCHC MPO member jurisdictions and agencies shall provide the DCHC MPO a list of projects. The MPO member jurisdictions and agencies shall provide a short description of the project, including the project limits, name, mileage, and cost. The description should note any essential elements of the project such as bike lanes, sidewalks, transit accommodations, vehicle types, and other important project information. If a project exists in more than one jurisdiction, all jurisdictions must be in agreement on the proposed scope and details of the project.

## **2) Submission of Projects to the STI Process**

For the 2018-2027 TIP, the DCHC MPO will submit projects to NCDOT's SPOT office by November 2015, for the application of the NCDOT's quantitative ranking methodology. The MPO is limited in the number of new projects that may be submitted for each mode (highway, bicycle and pedestrian, public transportation, aviation, ferry and rail), but can submit an additional project for each existing project removed from the system. NCDOT Division Engineers can also submit projects for each of their Divisions but are also limited in the number of new projects per mode that may be submitted.

DCHC MPO will combine the local priority lists into a list that the MPO will use to prioritize projects for submission into the NCDOT's SPOT Online tool. In the event that more highway, bicycle and pedestrian, public transportation, or rail projects are submitted to the MPO than the MPO is allowed submit to NCDOT, the DCHC MPO will score, rank, and select projects based the NCDOT scoring criteria for each mode listed within Section 2 of this Methodology. There are no ferry or aviation projects located in the DCHC MPO area so the DCHC MPO's prioritization efforts are focused on projects in the remaining transportation modes. The DCHC MPO will request that the Division Engineers submit any additional projects that the DCHC MPO may not be able to submit because the MPO is limited in the number of projects that may be submitted.

### ***DCHC MPO Preliminary Project Ranking***

#### **Highway Projects**

Highway projects may be scored and funded by any of the three funding categories (Statewide, Regional, or Division). The NCDOT has developed a different highway project scoring process for each of the three funding categories. The DCHC MPO will utilize the scoring processes developed by NCDOT to preliminarily rank projects to be submitted to NCDOT SPOT for evaluation. A project that is eligible for the Statewide funding category but is not funded under that category can cascade down to the Regional category for evaluation and possible funding. If the project is not funded under the Regional category, the project may cascade down to the Division category for evaluation and possible funding.

The NCDOT SPOT process limits the number of high priority projects that MPOs may submit. In the event that more new project requests are received than the MPO can submit, the DCHC MPO will apply a **preliminary ranking** for each funding category based on the NCDOT scoring criteria for each funding category listed below. Recent data for the ranking criteria must be available for the project

to be evaluated. The scoring criteria were developed by the NCDOT to reflect the SPOT 4.0 Workgroup recommendations that were approved by the NCDOT Board of Transportation in July 2015.

**NCDOT and DCHC MPO Scoring Criteria for Highway Projects**

| Funding Category   | Quantitative Data  | Local Input    |               |
|--------------------|--|----------------|---------------|
|                    |  | Division Input | MPO/RPO Input |
| Statewide Mobility | <p><b>Benefit/Cost = 25%</b></p> <ul style="list-style-type: none"> <li>Measurement of travel time savings and safety benefits the project is expected to provide over 10 years compared to the cost of the project to NCDOT.</li> </ul> <p><b>Congestion = 30%</b></p> <ul style="list-style-type: none"> <li>Measurement of the Peak ADT traffic volume on the roadway compared to the existing capacity of the roadway, weighted by the total traffic volume along the roadway.</li> </ul> <p><b>Economic Competitiveness = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the estimated number of long-term jobs and the % change in economic activity within the county that the project is expected to provide over 10 years.</li> </ul> <p><b>Safety = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number, severity, and frequency of crashes along the roadway.</li> </ul> <p><b>Multimodal [ + Military ] = 5%</b></p> <ul style="list-style-type: none"> <li>Measurement of congestion along routes that provide connections to multimodal passenger terminals.</li> </ul> <p><b>Freight [ + Military ] = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of congestion along routes that provide connections to freight intermodal terminals and routes that have high truck volumes.</li> </ul> <p><b>Total = 100%</b></p> | --             | --            |
| Regional Impact    | <p><b>Benefit/Cost = 20%</b></p> <ul style="list-style-type: none"> <li>Measurement of travel time savings and safety benefits the project is expected to provide over 10 years compared to the cost of the project to NCDOT.</li> </ul> <p><b>Congestion = 20%</b></p> <ul style="list-style-type: none"> <li>Measurement of the Peak ADT traffic volume on the roadway compared to the existing capacity of the roadway, weighted by the total traffic volume along the roadway.</li> </ul> <p><b>Safety = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number, severity, and frequency of crashes along the roadway.</li> </ul> <p><b>Accessibility/Connectivity = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of county economic distress indicators and whether the project upgrades how the roadway functions. Goal of improving access to opportunity in rural and less-affluent areas and improving interconnectivity of the transportation network.</li> </ul> <p><b>Freight [ + Military ] = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of congestion along routes that provide connections to freight intermodal terminals and routes that have high truck volumes.</li> </ul> <p><b>Total = 70%</b> (Division Engineer and Local Input Points account for remaining 30%)</p>   | 15%            | 15%           |

**NCDOT and DCHC MPO Scoring Criteria for Highway Projects - continued**

| Funding Category      | Quantitative Data   | Local Input    |               |
|-----------------------|---|----------------|---------------|
|                       |   | Division Input | MPO/RPO Input |
| <b>Division Needs</b> | <p><b>Benefit/Cost = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of travel time savings and safety benefits the project is expected to provide over 10 years compared to the cost of the project to NCDOT.</li> </ul> <p><b>Congestion = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the Peak ADT traffic volume on the roadway compared to the existing capacity of the roadway.</li> </ul> <p><b>Safety = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number, severity, and frequency of crashes along the roadway.</li> </ul> <p><b>Freight [ + Military ] = 5%</b></p> <ul style="list-style-type: none"> <li>Measurement of congestion along routes that provide connections to freight intermodal terminals and routes that have high truck volumes.</li> </ul> <p><b>Accessibility/Connectivity = 5 %</b></p> <ul style="list-style-type: none"> <li>Measurement of county economic distress indicators and whether the project upgrades how the roadway functions. Goal of improving access to opportunity in rural and less-affluent areas and improving interconnectivity of the transportation network.</li> </ul> <p><b>Total = 50%</b> (Division Engineer and Local Input Points account for remaining 50%)</p> | <b>25%</b>     | <b>25%</b>    |

**Public Transportation Projects**

Public Transportation projects may be scored and funded by the Regional or Division funding categories. Different types of public transportation projects (vehicle, passenger facility, administrative/maintenance/operations facility, and fixed guideway) have different scoring processes for the Regional and the Division categories. Because of the different project types and the different funding categories, the DCHC MPO requested that public transportation operators review the NCDOT scoring criteria and prioritize their own new project requests based on the NCDOT scoring criteria before submitting their project lists to the MPO.

Three of the public transportation operators in the DCHC MPO will have the opportunity to submit 10 projects and Orange Public Transit will have the opportunity to submit five. The SPOT process limits the number of high priority projects that MPOs may submit. If all public transportation operators submit the maximum number of projects, this will result in the DCHC MPO receiving more projects than the MPO can submit to NCDOT. The DCHC MPO will coordinate with the Division Engineers with the hope that the Division Engineers would be able to submit projects that the DCHC MPO cannot submit.

**NCDOT and DCHC MPO Scoring Criteria for Public Transportation Projects**

**Public Transit Scoring (Vehicle)**

| Funding Category       | Quantitative Data   | Local Input    |               |
|------------------------|---|----------------|---------------|
|                        |   | Division Input | MPO/RPO Input |
| <b>Regional Impact</b> | <p><b>Access = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the reported annual hours of operation compared to the number of vehicles in the fleet.</li> </ul> <p><b>System Safety = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the reported annual miles compared to the 3 year average of reported incidents.</li> </ul> <p><b>Impact = 20%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the number of existing passenger trips.</li> </ul> <p><b>Cost Effectiveness = 20%</b></p> <ul style="list-style-type: none"> <li>Measurement of the total projected passenger trips compared to the cost of the project to the state.</li> </ul> <p><b>Market Share = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the population in the service area.</li> </ul> <p><b>Total = 70%</b> (Division Engineer and Local Input Points account for remaining 30%)</p> | <b>15%</b>     | <b>15%</b>    |
| Funding Category       | Quantitative Data   | Division Input | MPO/RPO Input |
| <b>Division Needs</b>  | <p><b>Access = 5%</b></p> <ul style="list-style-type: none"> <li>Measurement of the reported annual hours of operation compared to the number of vehicles in the fleet.</li> </ul> <p><b>System Safety = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the reported annual miles compared to the 3 year average of reported incidents.</li> </ul> <p><b>Impact = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the number of existing passenger trips.</li> </ul> <p><b>Cost Effectiveness = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the total projected passenger trips compared to the cost of the project to the state.</li> </ul> <p><b>Market Share = 5%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the population in the service area.</li> </ul> <p><b>Total = 50%</b> (Division Engineer and Local Input Points account for remaining 50%)</p>   | <b>25%</b>     | <b>25%</b>    |



**Public Transit Scoring (Passenger Facility)**

| Funding Category       | Quantitative Data   | Local Input    |               |
|------------------------|---|----------------|---------------|
|                        |   | Division Input | MPO/RPO Input |
| <b>Regional Impact</b> | <p><b>Impact = 20% (Expansion projects only)</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the number of existing passenger trips.</li> </ul> <p><b>OR</b></p> <p><b>Age = 20% (Non-expansion projects)</b></p> <ul style="list-style-type: none"> <li>Age of the facility divided by 45 years (considered the useful life).</li> </ul> <p><b>Cost Effectiveness = 20%</b></p> <ul style="list-style-type: none"> <li>Measurement of existing annual passenger trips compared to the cost of the project to the state.</li> </ul> <p><b>Market Share = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the population in the service area.</li> </ul> <p><b>Ridership Growth = 15%</b></p> <ul style="list-style-type: none"> <li>Growth trend of ridership over the past 5 years.</li> </ul> <p><b>Total = 70%</b> (Division Engineer and Local Input Points account for remaining 30%)</p>  | <b>15%</b>     | <b>15%</b>    |
| Funding Category       | Quantitative Data   | Division Input | MPO/RPO Input |
| <b>Division Needs</b>  | <p><b>Impact = 15% (Expansion projects only)</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the number of existing passenger trips.</li> </ul> <p><b>OR</b></p> <p><b>Age = 15% (Non-expansion projects)</b></p> <ul style="list-style-type: none"> <li>Age of the facility divided by 45 years (considered the useful life).</li> </ul> <p><b>Cost Effectiveness = 20%</b></p> <ul style="list-style-type: none"> <li>Measurement of existing annual passenger trips compared to the cost of the project to the state.</li> </ul> <p><b>Market Share = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the population in the service area.</li> </ul> <p><b>Ridership Growth = 15%</b></p> <ul style="list-style-type: none"> <li>Growth trend of ridership over the past 5 years.</li> </ul> <p><b>Total = 50%</b> (Division Engineer and Local Input Points account for remaining 50%) passenger trips.</p> <p><b>Cost Effectiveness = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the total projected passenger trips compared to the cost of the project to the state.</li> </ul> <p><b>Market Share = 5%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the population in the service area.</li> </ul> <p><b>Total = 50%</b> (Division Engineer and Local Input Points account for remaining 50%)</p> | <b>25%</b>     | <b>25%</b>    |

**Public Transit Scoring (Admin/Maintenance/Operations Facility)**

| Funding Category       | Quantitative Data  | Local Input    |               |
|------------------------|--|----------------|---------------|
|                        |  | Division Input | MPO/RPO Input |
| <b>Regional Impact</b> | <p><b>Impact = 20% (Expansion projects only)</b></p> <ul style="list-style-type: none"> <li>Measurement of the existing and additional capacity compared to the existing capacity.</li> </ul> <p><b>OR</b></p> <p><b>Age = 20% (Non-expansion projects)</b></p> <ul style="list-style-type: none"> <li>Age of the facility divided by 45 years (considered the useful life).</li> </ul> <p><b>Cost Effectiveness = 20%</b></p> <ul style="list-style-type: none"> <li>Measurement of existing annual passenger trips compared to the cost of the project to the state.</li> </ul> <p><b>Market Share = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the population in the service area.</li> </ul> <p><b>Ridership Growth = 15%</b></p> <ul style="list-style-type: none"> <li>Growth trend of ridership over the past 5 years.</li> </ul> <p><b>Total = 70%</b> (Division Engineer and Local Input Points account for remaining 30%)</p> | <b>15%</b>     | <b>15%</b>    |
| <b>Division Needs</b>  | <p><b>Impact = 15% (Expansion projects only)</b></p> <ul style="list-style-type: none"> <li>Measurement of the existing and additional capacity compared to the existing capacity.</li> </ul> <p><b>OR</b></p> <p><b>Age = 15% (Non-expansion projects)</b></p> <ul style="list-style-type: none"> <li>Age of the facility divided by 45 years (considered the useful life).</li> </ul> <p><b>Cost Effectiveness = 20%</b></p> <ul style="list-style-type: none"> <li>Measurement of existing annual passenger trips compared to the cost of the project to the state.</li> </ul> <p><b>Market Share = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the population in the service area.</li> </ul> <p><b>Ridership Growth = 15%</b></p> <ul style="list-style-type: none"> <li>Growth trend of ridership over the past 5 years.</li> </ul> <p><b>Total = 50%</b> (Division Engineer and Local Input Points account for remaining 50%)</p> | <b>25%</b>     | <b>25%</b>    |

**Public Transit Scoring (Fixed Guideway)**

| Funding Category       | Quantitative Data  | Local Input    |               |
|------------------------|--|----------------|---------------|
|                        |  | Division Input | MPO/RPO Input |
| <b>Regional Impact</b> | <p><b>Mobility = 20%</b><br/>                     • Measurement of the projected annual trips.</p> <p><b>Cost Effectiveness = 15%</b><br/>                     • Measurement of the cost per trip over the life of the project.</p> <p><b>Economic Development = 20%</b><br/>                     • Measurement of the projected new employment and population growth in the fixed guideway corridor over 20 years.</p> <p><b>Congestion Relief = 15%</b><br/>                     • Measurement of the projected travel time savings to a passenger over 30 years.</p> <p><b>Total = 70%</b> (Division Engineer and Local Input Points account for remaining 30%)</p> | <b>15%</b>     | <b>15%</b>    |
| <b>Division Needs</b>  | <p><b>Mobility = 15%</b><br/>                     • Measurement of the projected annual trips.</p> <p><b>Cost Effectiveness = 15%</b><br/>                     • Measurement of the cost per trip over the life of the project.</p> <p><b>Economic Development = 10%</b><br/>                     • Measurement of the projected new employment and population growth in the fixed guideway corridor over 20 years.</p> <p><b>Congestion Relief = 10%</b><br/>                     • Measurement of the projected travel time savings to a passenger over 30 years.</p> <p><b>Total = 50%</b> (Division Engineer and Local Input Points account for remaining 50%)</p> | <b>25%</b>     | <b>25%</b>    |

**Bicycle and Pedestrian Projects**

Bicycle and pedestrian projects are scored and funded by the Division funding category. Unlike highway projects and public transportation projects, the NCDOT utilizes only one scoring process for bicycle and pedestrian projects. The DCHC MPO will utilize the scoring processes developed by NCDOT to preliminarily rank projects to be submitted to NCDOT SPOT for evaluation.

The SPOT process limits the number of high priority projects that MPOs may submit. Therefore, in the event that the DCHC MPO receives more new project request than can be submitted, the DCHC MPO will apply a **preliminary ranking** for each funding category based on the NCDOT criteria for each funding category listed below. The criteria were developed by the NCDOT to reflect the SPOT 4.0 Workgroup recommendations that were approved by the NCDOT Board of Transportation in July 2015.

**NCDOT and DCHC MPO Scoring Criteria for Bicycle and Pedestrian Projects**

| Funding Category | Quantitative Data   | Local Input    |               |
|------------------|---|----------------|---------------|
|                  |   | Division Input | MPO/RPO Input |
| Division Needs   | <p><b>Safety = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of number of bicycle and/or pedestrian crashes, speed limit, and safety benefits to determine adequacy of safety for users of the project.</li> </ul> <p><b>Access = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the quantity and significance of destinations associated with the project as well as the distance to the primary destination. Measures benefit to the community as a result of constructing the project.</li> </ul> <p><b>Demand = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the density of population and employment within a walkable or bike-able distance of the project.</li> <li>Measures user benefit as a result of constructing the project.</li> </ul> <p><b>Connectivity = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the degree of bike/ped separation from the roadway, ADA compliance, and connectivity to a similar or better project type.</li> </ul> <p><b>Cost Effectiveness = 5%</b></p> <ul style="list-style-type: none"> <li>Measurement of combined user benefits of Safety, Access, Demand, and Connectivity criteria compared to the cost of the project to NCDOT.</li> </ul> <p><b>Total = 50%</b> (Division Engineer and Local Input Points account for remaining 50%)</p> | 25%            | 25%           |

**Rail Projects**

Rail projects may be scored and funded by any of the three funding categories (Statewide, Regional, or Division). The NCDOT has developed a different rail project scoring process for each of the three funding categories. Because the MPO does not yet know which rail projects will be scored in which of the funding categories, the DCHC MPO will utilize the NCDOT’s three different preliminary project ranking processes to determine rail project priorities. The MPO will coordinate closely with the NCDOT Rail Division on the identification, prioritization, and submission of rail projects. If the DCHC MPO receives more new rail project requests than the DCHC MPO can submit to NCDOT, the MPO will apply a **preliminary ranking** for each funding category based on the criteria for each funding category listed below. The criteria were developed by the NCDOT to reflect the SPOT 4.0 Workgroup recommendations that were approved by the NCDOT Board of Transportation in July 2015. If the DCHC MPO does not receive more new rail project requests than can be submitted, the DCHC MPO will submit all new rail project requests and will not need to conduct a preliminary ranking process for rail projects.

**NCDOT and DCHC MPO Scoring Criteria for Rail Projects**

| Funding Category                             | Quantitative Data   | Local Input    |               |
|--|---|----------------|---------------|
|  |   | Division Input | MPO/RPO Input |
| Statewide Mobility<br>(Class I Freight Only) | <p><b>Cost Effectiveness = 35%</b></p> <ul style="list-style-type: none"> <li>• Measurement of monetized benefits compared to the project cost to NCDOT, and the jobs created for the region.</li> </ul> <p><b>System Health = 35%</b></p> <ul style="list-style-type: none"> <li>• Measurement of the volume to capacity ratio, and various measurements of accessibility and connectivity provided by the project via vicinity to points of interest, improvements to statewide rail networks, or employment density.</li> </ul> <p><b>Safety and Suitability = 20%</b></p> <ul style="list-style-type: none"> <li>• Measurement of potentially hazardous rail crossings.</li> </ul> <p><b>Project Support = 10%</b></p> <ul style="list-style-type: none"> <li>• Measurement of outside contributions to the project compared to the cost of the project to the state.</li> </ul> <p><b>Total = 100%</b></p> | --             | --            |

**NCDOT and DCHC MPO Scoring Criteria for Rail Projects - continued**

| Funding Category       | Quantitative Data   | Local Input    |               |
|------------------------|---|----------------|---------------|
|                        |   | Division Input | MPO/RPO Input |
| <b>Regional Impact</b> | <p><b>Cost Effectiveness = 25%</b></p> <ul style="list-style-type: none"> <li>• Measurement of monetized benefits compared to the project cost to NCDOT, and the jobs created for the region.</li> </ul> <p><b>System Health = 20%</b></p> <ul style="list-style-type: none"> <li>• Measurement of the volume to capacity ratio, and various measurements of accessibility and connectivity provided by the project via vicinity to points of interest, improvements to statewide rail networks, or employment density.</li> </ul> <p><b>Safety and Suitability = 15%</b></p> <ul style="list-style-type: none"> <li>• Measurement of potentially hazardous rail crossings.</li> </ul> <p><b>Project Support = 10%</b></p> <ul style="list-style-type: none"> <li>• Measurement of outside contributions to the project compared to the cost of the project to the state.</li> </ul> <p><b>Total = 70%</b> (Division Engineer and Local Input Points account for remaining 30%)</p> | <b>15%</b>     | <b>15%</b>    |
| <b>Division Needs</b>  | <p><b>Cost Effectiveness = 20%</b></p> <ul style="list-style-type: none"> <li>• Measurement of monetized benefits compared to the project cost to NCDOT, and the jobs created for the region.</li> </ul> <p><b>System Health = 10%</b></p> <ul style="list-style-type: none"> <li>• Measurement of the volume to capacity ratio, and various measurements of accessibility and connectivity provided by the project via vicinity to points of interest, improvements to statewide rail networks, or employment density.</li> </ul> <p><b>Safety and Suitability = 10%</b></p> <ul style="list-style-type: none"> <li>• Measurement of potentially hazardous rail crossings.</li> </ul> <p><b>Project Support = 10%</b></p> <ul style="list-style-type: none"> <li>• Measurement of outside contributions to the project compared to the cost of the project to the state.</li> </ul> <p><b>Total = 50%</b> (Division Engineer and Local Input Points account for remaining 50%)</p> | <b>25%</b>     | <b>25%</b>    |

## **RECOMMENDED ALLOCATION OF THE MPO'S LOCAL INPUT POINTS**

### **Overview**

As previously explained in this Methodology, the DCHC MPO will utilize the NCDOT SPOT's scoring criteria to preliminarily rank MPO projects for submission to NCDOT SPOT for quantitative evaluation. The highest ranking projects will be submitted to NCDOT SPOT via the SPOT Online tool. Upon submission to NCDOT, projects within the MPO will be evaluated according to NCDOT's quantitative ranking methodology.

The DCHC MPO will receive the results of the NCDOT quantitative evaluation scoring process and the project data used by NCDOT to develop the scores. The NCDOT's raw quantitative scores will be reviewed by the DCHC MPO and staff of MPO member jurisdictions and agencies. The NCDOT's raw quantitative scores serve as the quantitative basis for the MPO's prioritization of projects.

The allocation of the DCHC MPO's Local Input Points to high priority projects serves as the qualitative component of the prioritization process. The DCHC MPO's Local Input Points will be allocated to projects that aim to achieve the goals of the adopted Metropolitan Transportation Plan (MTP) and align with the priorities of the DCHC MPO.

The DCHC MPO's project ranking process and subsequent allocation of Local Input Points must capture the goals of the DCHC MPO and not just be purely based on the results of data-driven processes. The process and results should also capture input received from citizens, elected officials, and stakeholders in the DCHC MPO area. It is important to consider the needs of all communities that are located in the DCHC MPO area in the allocation of Local Input Points to priority projects.

Collaboration with NCDOT Divisions is also an important component of the DCHC MPO's allocation of Local Input Points. Projects that receive the MPO's Local Input Points *and* Division Engineer Points will have an overall better score than projects that don't receive points from both the MPO and a Division Engineer. Coordinating with NCDOT Division Engineers will ensure that priority projects in the DCHC MPO area have the best possible chance to be funded in the next NCDOT STIP and MPO TIP.

It should be noted that projects in the Statewide Mobility category are not eligible for DCHC MPO Local Input Points and therefore, will not be reviewed and prioritized by the DCHC MPO as part of prioritization process for the allocation of the DCHC MPO's Local Input Points. The DCHC MPO will prioritize and allocate Local Input Points to eligible projects in the Regional Impact and Division Needs funding categories.

### **Ranking Processes for the Allocation of Local Input Points**

The NCDOT's raw quantitative scores for each project will serve as the basis of the DCHC MPO's prioritization and subsequent allocation of the MPO's Local Input Points. Each project in each mode will have a raw quantitative score. Each project's score represents the project's competitiveness compared to other projects of the same mode and in the same funding category (Regional Mobility or Division Needs). The raw quantitative scores for each project will be carefully considered by the DCHC MPO staff and the TC members and project lists for each mode will be sorted by the NCDOT raw quantitative scores.

The DCHC MPO staff and TC members will perform a precursory review of project eligibility beginning with the highest scoring project first and then working down the list by decreasing project scores. The precursory review of project eligibility will consider factors, including:

- 1) Is the project in the adopted MTP?
- 2) Is the project in an adopted regional or local plan?
- 3) Has a feasibility study been started or completed for the project?
- 4) Has any preliminary engineering been started or completed for the project?
- 5) Is the cost justified by the project benefits?
- 6) Does the total cost to NCDOT exceed the amount of funding available for the respective funding tier?

It is mandatory that a project be in an adopted MTP or consistent with the MTP and in an adopted regional or local plan to be eligible for Local Input Points from the DCHC MPO. The remaining factors will be considered but are not a mandatory requirement. A project that meets multiple factors would be considered more ready for funding and programming and would be considered more competitive than a project that does not meet multiple factors.

### **Allocation of Local Input Points**

Allocation of the MPO's Local Input Points is based on a combination of the raw quantitative scores from NCDOT, the review of project eligibility factors, and qualitative factors that reflect established regional goals and objectives. The DCHC MPO's methodology is designed to maximize the number of projects that could be competitive for funding and that also meet the DCHC MPO's goals and objectives for the MPO region. **Within each mode and project type, Local Input Points will be assigned in order of the project's raw quantitative score.** Exceptions may be made if the project costs more than the funding available in that category, if the project doesn't meet the two mandatory project eligibility factors or if the project will not be competitive within its Region or Division even with the application of Local Input Points.

NCDOT assigns the number of local prioritization points for each MPO, RPO, and Division based on the area's population. For the most recent round of Strategic Prioritization (SPOT P4.0), DCHC MPO has 1800 points for both the Regional Impacts and Division Needs categories. Each MPO, RPO, and Division can assign a maximum of 100 points and a minimum of 4 points to each project.

For the MPO's 1,800 Regional Local Input Points, the DCHC MPO will assign points among modes and project types according to the distribution below. The distribution below has been structured to reflect the funding goals of the MPO's adopted MTP and the number of eligible Regional category projects in each mode.

- 800 points to Highway
- 300 points to Public Transit
- 700 points could be assigned to any mode and project type

For the MPO's 1,800 Division Local Input Points, the DCHC MPO will assign points among modes and project types according to the distribution below. The distribution below has been structured to reflect the funding goals of the MPO's adopted MTP and the number of eligible Division category projects in each mode.

- 300 points to Highway
- 500 points to Public Transit
- 200 points to Bicycle and Pedestrian
- 800 points could be assigned to any mode and project type



Statewide projects that cascade down to the Regional category will only be considered for Regional Local Input Points if the project is not considered likely to be competitive for Statewide category funding during the next Prioritization cycle. Statewide or Regional projects that cascade down to Division will only be considered for Local Input Points if the project is less than \$5 million. This limitation is due to the very limited amount of funding available in the Division category that is not STP-DA or TAP (funding that is directly allocated to certain MPOs and that is not subject to the Prioritization process but is subject to the STI legislation), and the number of projects that only qualify in the Division category. The minimum number of Local Input Points needed will be assigned to each project to ensure that it maintains its relative position of competitiveness in its Region or Division.

The allocation of Local Input Points in the Regional and Division categories for each mode will be informed by the following factors. Local Input Points will be assigned in priority order based on the goals below with the first goal being the highest priority and the last goal being a lower priority.

1. The likelihood of receiving funding through STI considering the amount of funding available within each Division or Region, historical funding levels for the mode, and the normalization limitations that NCDOT has adopted
2. The priorities of the current MTP including the adopted distribution of funding between modes and the planning horizon year of projects
3. The effect that receiving funding for a project may have on the likelihood of other projects being funded in the Division or Region considering the limitations set by the STI legislation
4. If the project is located within an area of overlapping Environmental Justice Communities of Concern identified in the MPO's 2014 Environmental Justice Report
5. Public input received during public input sessions
6. Geographic and jurisdictional balance

The above factors are difficult to quantitatively measure and will be considered through a qualitative assessment by the DCHC MPO. The DCHC MPO staff will document the reasoning used to justify the proposed assignment of Local Input Points. The DCHC MPO may consider adjustments based on the above factors and in the event that adjustments are made, the reasoning will be documented and made available for public consumption on the DCHC MPO website.

During the period that the draft point assignment is released for public comment, the DCHC MPO may make further adjustments to their recommendation based on the above factors as well as:

- Coordination with the Division Engineers on the assignment of points; and
- Public input and support as evidenced through public comments submitted to the MPO, the MPO's public hearings, public involvement efforts of local governments, and local referenda.

All public involvement for this process will be conducted in accordance with the DCHC MPO's [Public Involvement Policy](#). Details of the DCHC MPO public involvement policy are described below.

### **1) Approval of the Allocation of Local Input Points**

The DCHC MPO Board will release the draft Project Priority Ranking and application of Local Input Points for public comment and hold a public hearing at a MPO Board meeting. After review and public

comment, the MPO Board will approve the final application of Local Input Points. The MPO Board's approval will be informed by the following:

- The likelihood of receiving funding through STI considering the amount of funding available within each Division or Region, historical funding levels for the mode, and the normalization limitations that NCDOT has adopted;
- The number of eligible projects within the MPO within each funding mode /project type/category;
- The priorities of the current MTP including the adopted distribution of funding between modes and the air quality horizon year of projects;
- The effect that receiving funding for a project may have on the likelihood of other projects being funded in the Division or Region considering the limitations set by the STI legislation;
- If the project is located within an area of overlapping Environmental Justice Communities of Concern identified in the MPO's 2014 Environmental Justice Report;
- Geographic and jurisdictional balance;
- Coordination with the Division Engineers on the assignment of points;
- Public input and support as evidenced through public comments submitted to the MPO, the MPO's public hearing, public involvement efforts of local governments, and local referenda;
- The MPO Board members' knowledge of the urban area and the policies of their communities; and
- Other factors as identified. If the MPO Board varies from the recommended allocation of points, MPO staff will document the rationale and will post the documentation on the MPO's website.

After the DCHC MPO Board approves the allocation of Local Input Points to projects in the DCHC MPO area, MPO staff will submit the projects with the Local Input Points applied to NCDOT for use in the STI process.

### **Public Involvement**

All public involvement for this process will be conducted in accordance with the DCHC MPO's [Public Involvement Policy](#).

As is the MPO's standard practice for all DCHC MPO Board and TC agenda items, all relevant materials, documentation of this process, and TC and MPO Board meeting materials and minutes will be posted on the DCHC MPO's website [www.dchcmmpo.org](http://www.dchcmmpo.org). Documentation of the process will include a description of the MPO Board's rationale for assigning Local Input Points to projects.

The DCHC MPO Public Involvement Policy sets a minimum 21-day public comment period for this process and requires a public hearing at a MPO Board meeting. This public comment period and public hearing will be advertised to the public in accordance with the Public Involvement Policy. Public comments will be documented, summarized, and responses will be provided. In addition, all DCHC MPO Board and TC meetings are public meetings and include the opportunity for public comment. Comments provided at any meeting will be considered.

Comments on the DCHC MPO's *Methodology for Identifying and Ranking TIP Project Requests* or any information contained within may be submitted in writing to the DCHC MPO using the contact information below. Comments may also be offered during any DCHC MPO Board or DCHC MPO TC meeting. All meetings are open to the public and meeting schedules are available on the DCHC MPO's website [www.dchcmo.org](http://www.dchcmo.org).

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