

Adopted – March 14, 2018

**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. 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:**

Spring 2017	DCHC MPO staff work with local jurisdiction staff to develop potential new projects for Prioritization 5.0; DCHC MPO staff review projects to ensure they meet minimum requirements and are in the MTP
June 2017	DCHC MPO staff and Technical Committee reviews Carryover projects and makes recommendations to the Board to either have those projects scored in Prioritization 5.0 as is, propose changes to projects to then be scored in Prioritization 5.0, or remove projects from consideration; DCHC MPO Board reviews and provides input on potential new projects
July 2017	DCHC MPO staff performs analysis on proposed new projects; a Technical Committee sub-committee narrows the number of projects to a final recommended list for submittal
August 2017	DCHC MPO Board votes on any proposed changes and deletions of existing projects for Prioritization 5.0; DCHC MPO Board reviews proposed list of new projects for Prioritization 5.0; new project list is released for public comment
September 2017	Project submission deadline for Prioritization 5.0.

**Steps and schedule for updating the DCHC MPO’s Methodology for Identifying and Ranking TIP Project Requests:**

November 2017	DCHC MPO staff updates <i>Methodology for Identifying and Ranking TIP Project Requests</i> document
December 2017	DCHC MPO TC reviews the <i>Methodology for Identifying and Ranking TIP Project Requests</i> and forwards Methodology to the DCHC MPO Board for public release
January 2018	DCHC MPO Board releases the <i>Methodology for Identifying and Ranking TIP Project Requests</i> for public review and comment period; DCHC MPO TC makes final review and recommendation to DCHC MPO Board
February 2018	DCHC MPO holds public hearing on <i>Methodology</i> , forwards for NCDOT Review Committee review
March 2018	DCHC MPO Board approves the <i>Methodology for Identifying and Ranking TIP Project Requests</i>

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

March 2018	DCHC MPO receives results of the NCDOT SPOT scoring process for Statewide, Regional, and Division projects
April 2018	DCHC MPO ranks Regional projects for the assignment of Local Input Points; DCHC MPO Board releases initial assignment of Local Input Points for Regional projects for public comment
May 2018	DCHC MPO Board holds public hearing on initial assignment of Local Input Points for Regional projects
June 2018	DCHC MPO Board approves assignment of Local Input Points to Regional projects
<b>June 2018</b>	<b>DCHC MPO submits Regional projects, with Local Input Points assigned, to NCDOT</b>
July 2018	DCHC MPO ranks Division projects for the assignment of Local Input Points
August 2018	DCHC MPO Board releases initial assignment of Division projects and the assignment of Local Input Points for public comment
September 2018	DCHC MPO Board holds public hearing on initial assignment of Local Input Points for Division projects
October 2018	DCHC MPO Board approves assignment of Local Input Points to Division projects
<b>October 2018</b>	<b>DCHC MPO submits Division projects, with Local Input Points assigned, to NCDOT</b>
<b>January 2019</b>	<b>NCDOT releases Draft STIP</b>

## **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<sup>1</sup>. 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. If a project exists in more than one jurisdiction, all jurisdictions must be in agreement on the proposed scope and details of the project.

#### **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?

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<sup>1</sup> The 2040 MTP was in effect at the time of submission to Prioritization 5.0 and the drafting of this *Methodology*; the 2045 MTP is scheduled to be adopted in February 2018.

- 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 staff, the TC and its subcommittee will review local priority lists for adherence to the initial screening criteria and apply the NCDOT scoring criteria listed in Section 2 of this Methodology, before recommending the submission of these projects to Prioritization 5.0.

## 2) Submission of Projects to the STI Process

For the 2020-2029 TIP, the DCHC MPO will submit projects to NCDOT's SPOT office by September 2017 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. 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 work with a TC subcommittee to select projects based the NCDOT scoring criteria for each mode. For Prioritization 5.0 there were no ferry or aviation projects submitted within the DCHC MPO area. 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 are eligible to be scored and funded in any of the three funding categories (Statewide, Regional, or Division), depending on the characteristics of the project. The P5.0 Workgroup 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 projects that MPOs may submit. In the event that more new project requests are received than the MPO can submit, the DCHC MPO will follow the criteria developed by the SPOT 5.0 Workgroup that were submitted to the NCDOT Board of Transportation in June 2017. This will provide a set of preliminary scores that can be used to rank projects.

For Prioritization 5.0, Divisions 5, 7, and 8 each adopted a set of alternate criteria for highway projects (alternate criteria was not an option for non-highway projects). Those alternate criteria are shown below.

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

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
<b>Statewide Mobility</b>	<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> <li>60% Existing Volume/Capacity Ratio</li> <li>40 Existing Volume</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 = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number, severity, and density of crashes along the roadway and calculate future safety benefits.</li> </ul> <p><b>Freight = 25%</b></p> <ul style="list-style-type: none"> <li>Measurement of existing truck volume and whether or not the roadway is part of a future interstate highway.</li> </ul> <p><b>Total = 100%</b></p>	--	--
<b>Regional Impact</b>	<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> <li>80% Existing Volume/Capacity Ratio</li> <li>20% Existing Volume</li> </ul> <p><b>Safety = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number, severity, and density of crashes along the roadway and calculate future safety benefits.</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 = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of existing truck volume and whether or not the roadway is part of a future interstate highway.</li> </ul> <p><b>Total = 70%</b> (Division Engineer and Local Input Points account for remaining 30%)</p>	<b>15%</b>	<b>15%</b>

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

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
<b>Division Needs – Division 5</b>	<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 = 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. 100% of this indicator at the Division</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>Total = 50%</b> (Division Engineer and Local Input Points account for remaining 50%)</p>	<b>25%</b>	<b>25%</b>
<b>Division Needs – Divisions 7 &amp; 8</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. 100% of this indicator at the Division</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>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 within 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 Division categories.

Four transit operators within DCHC submitted projects through DCHC MPO for Prioritization 5.0. Though DCHC MPO was allotted 23 submittal projects for Prioritization 5.0, only 20 were projects were submitted by the local transit agencies for scoring (GoTriangle 10, Chapel Hill Transit 5, GoDurham 4, and Orange Public Transit 1).

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

**Public Transit Scoring (Demand Response)**

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 the total projected passenger trips compared to the cost of the project to the state and lifespan of the project.</li> </ul> <p><b>Demand/Density = 20%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of service hours devoted to the project compared to the service population.</li> </ul> <p><b>Efficiency = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the vehicle utilization ratio.</li> </ul> <p><b>Impact = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number trips affected by the project.</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 = 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 and lifespan of the project.</li> </ul> <p><b>Demand/Density = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of service hours devoted to the project compared to the service population.</li> </ul> <p><b>Efficiency = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the vehicle utilization ratio.</li> </ul> <p><b>Impact = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number trips affected by the project.</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 (Facilities)**

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 the total projected passenger trips compared to the cost of the project to the state and lifespan of the project.</li> </ul> <p><b>Impact = 20%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number trips affected by the project.</li> </ul> <p><b>Efficiency = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of efficiency of the project.</li> </ul> <p><b>Demand/Density = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the ridership growth trend for the previous five 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>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 and lifespan of the project.</li> </ul> <p><b>Impact = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number trips affected by the project.</li> </ul> <p><b>Demand/Density = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the ridership growth trend for the previous five years.</li> </ul> <p><b>Efficiency = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of efficiency of the project.</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 (Mobility)**

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 the total projected passenger trips compared to the cost of the project to the state and lifespan of the project.</li> </ul> <p><b>Demand/Density = 20%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of total trips as a percentage of the service population.</li> </ul> <p><b>Impact = 15%</b></p> <ul style="list-style-type: none"> <li>Number of trips affected by the project.</li> </ul> <p><b>Efficiency = 10%</b></p> <ul style="list-style-type: none"> <li>Total number of trips as a ratio of the total revenue seat hours.</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 the total projected passenger trips compared to the cost of the project to the state and lifespan of the project.</li> </ul> <p><b>Demand/Density = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of total trips as a percentage of the service population.</li> </ul> <p><b>Impact = 10%</b></p> <ul style="list-style-type: none"> <li>Number of trips affected by the project.</li> </ul> <p><b>Efficiency = 10%</b></p> <ul style="list-style-type: none"> <li>Total number of trips as a ratio of the total revenue seat hours.</li> </ul> <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 within the Division Needs funding category; therefore NCDOT utilizes only one scoring process for bicycle and pedestrian projects. DCHC MPO will utilize the scoring processes developed by the P5.0 Workgroup to preliminarily rank projects to be submitted to NCDOT SPOT for evaluation.

The NCDOT SPOT process limits the number of projects that MPOs may submit. In the event that more new project requests are received than the MPO can submit, the DCHC MPO will follow the criteria developed by the SPOT 5.0 Workgroup that were submitted to the NCDOT Board of Transportation in June 2017. This will provide a set of preliminary scores that can be used to rank projects.

**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.</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> </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, whether or not the project is part of or a connection to a national, state, or regional bike route, 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 within any of the three funding categories (Statewide, Regional, or Division). The MPO will coordinate closely with the NCDOT Rail Division on the identification, prioritization, and submission of rail projects. DCHC MPO will follow the criteria developed by the SPOT 5.0 Workgroup that were submitted to the NCDOT Board of Transportation in June 2017.

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

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
<p><b>Statewide Mobility (Class I Freight Only)</b></p>	<p><b>Benefit-Cost = 35%</b></p> <ul style="list-style-type: none"> <li>Measurement of monetized benefits compared to the project cost to NCDOT.</li> </ul> <p><b>Safety = 30%</b></p> <ul style="list-style-type: none"> <li>Measurement of potentially hazardous rail crossings and other safety benefits.</li> </ul> <p><b>System Opportunities = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of accessibility and connectivity provided by the project, and connections to multimodal opportunities.</li> </ul> <p><b>Capacity and Diversion = 10%</b></p> <ul style="list-style-type: none"> <li>Volume/Capacity = 75%</li> <li>Highway Diversion = 25%</li> </ul> <p><b>Economic Competitiveness = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of economic benefits of the project.</li> </ul> <p><b>Total = 100%</b></p>	--	--
<p><b>Regional Impact</b></p>	<p><b>Benefit-Cost = 25%</b></p> <ul style="list-style-type: none"> <li>Measurement of monetized benefits compared to the project cost to NCDOT.</li> </ul> <p><b>Safety = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of potentially hazardous rail crossings and other safety benefits.</li> </ul> <p><b>System Opportunities = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of accessibility and connectivity provided by the project, and connections to multimodal opportunities.</li> </ul> <p><b>Capacity and Diversion = 10%</b></p> <ul style="list-style-type: none"> <li>Volume/Capacity = 75%</li> <li>Highway Diversion = 25%</li> </ul> <p><b>Economic Competitiveness = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of economic benefits of the project.</li> </ul> <p><b>Total = 70%</b> (Division Engineer and Local Input Points account for remaining 30%)</p> <p><b>Total = 100%</b></p>	15%	15%

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

Funding Category	Quantitative Data	Local Input	
<p><b>Division Needs</b></p>	<p><b>System Opportunities = 15%</b></p> <ul style="list-style-type: none"> <li>• Measurement of accessibility and connectivity provided by the project, and connections to multimodal opportunities.</li> </ul> <p><b>Benefit-Cost = 10%</b></p> <ul style="list-style-type: none"> <li>• Measurement of monetized benefits compared to the project cost to NCDOT.</li> </ul> <p><b>Safety = 10%</b></p> <ul style="list-style-type: none"> <li>• Measurement of potentially hazardous rail crossings and other safety benefits.</li> </ul> <p><b>Capacity and Diversion = 10%</b></p> <ul style="list-style-type: none"> <li>• Volume/Capacity = 75%</li> <li>• Highway Diversion = 25%</li> </ul> <p><b>Economic Competitiveness = 5%</b></p> <p>Measurement of economic benefits of the project</p> <p><b>Total = 50%</b> (Division Engineer and Local Input Points account for remaining 50%)</p>	<p><b>25%</b></p>	<p><b>25%</b></p>

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

### Overview

As previously explained in this *Methodology*, DCHC MPO will utilize the NCDOT Prioritization 5.0 scoring criteria to preliminarily rank MPO projects for submission to NCDOT for quantitative evaluation. Upon submission to NCDOT, projects within the MPO will be evaluated according to NCDOT's quantitative ranking methodology.

DCHC MPO will receive the results of the NCDOT quantitative evaluation scoring process and the project data used by NCDOT to develop the scores. NCDOT's scaled quantitative scores will be reviewed by the DCHC MPO and staff of MPO member jurisdictions and agencies. The quantitative scores will inform DCHC 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 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 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 DCHC MPO as part of the process for allocation of Local Input Points. Projects that cascade down from the Statewide Mobility category are eligible for local input points and will be incorporated into the process described below. DCHC MPO will prioritize and allocate Local Input Points to eligible projects in the Regional Impact and Division Needs funding categories.

### Description of Criteria and Weights

Per the guidance that was provided by the NCDOT SPOT Office, DCHC will utilize at least two qualitative criteria for the purpose of allocation of local points. The table below shows the criteria to be used to rank projects for assignment of local points. Projects will be ranked based on a six-point scale.

Criteria	Maximum Points (Highway)	Maximum Points (Non-Highway)
MTP Prioritization <sup>2</sup>		
Project planned for near-term (by MTP 2025 Threshold)	2	
Project planned for mid-term (by MTP 2035 Threshold)	1	
Project planned for long-term (by MTP 2045 Threshold)	0	
Consistent with Adopted Regional or Local Plan		2
Preliminary Engineering or Engineering Study Completed or Underway		1
Allocation of local tax revenues through a DCHC-member jurisdiction voter supported referendum	1	1
DCHC-member jurisdiction demonstrates local funding towards progress in project	1	
Project complements non-highway transportation facility	1	1
Project supports Environmental Justice Community of Concern <sup>3</sup>	1	1
<b>TOTAL MAXIMUM</b>	<b>6</b>	<b>6</b>

**Total Score and Project Ranking Approach**

All projects will be ranked based on their score using the rubric above. The rankings will be used to inform TC and Board members regarding allocation points using the method described in the next section.

**Point Assignment Process**

Projects deemed to be of top priority to the MPO will be assigned the requisite amount of points necessary in order to maximize the project’s chances of receiving funding through the SPOT process. NCDOT assigns the number of local prioritization points for each MPO, RPO, and Division based on the area’s population. DCHC MPO has been allocated 1,800 points for both the Regional Impacts (Regional) and Division Needs (Division) categories for Prioritization 5.0. 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 Impact Local Input Points, DCHC MPO will assign points to Regional projects 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. Statewide projects that cascade down to the Regional category will generally not be assigned Regional Local Input Points unless the project cost is less than \$5 million. The MPO Board and TC may deviate from this policy on a case-by-case basis.

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

For the MPO’s 1,800 Division Needs Local Input Points, 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. Statewide and Regional projects that cascade down to the Division category will generally

<sup>2</sup> Use designations in 2045 MTP as it will be adopted by the time local allocation points are assigned.

<sup>3</sup> For the purposes of this Methodology, an Environmental Justice Community of Concern is an Overlapping Community of Concern as identified in the 2014 DCHC MPO Environmental Justice Report.

not be assigned Division Local Input Points unless the project cost is less than \$5 million. The MPO Board and TC may deviate from this policy on a case-by-case basis.

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

Deviations from this methodology may be made for various reasons, including but not limited to:

- A project costs more than the funding available in that category
- A project will not be competitive within its Region or Division even with the application of Local Input Points
- Coordination with the Division Engineer or a neighboring MPO or RPO deems a project should not receive points, or will receive points from another MPO, RPO, or Division
- The DCHC MPO Board, based on a recommendation from the Technical Committee (TC), determines that a lower ranking project is of greater priority and therefore should be assigned points (or more points than assigned through application of the Methodology)
- The DCHC MPO Board determines that a higher ranking project is of lesser priority and therefore should be assigned fewer, or no, points than assigned through application of the Methodology
- The DCHC MPO Board determines that projects in another mode are of higher priority
- The DCHC MPO Board determines that points should be awarded to a particular project to support geographic equity
- Based on public input, the DCHC MPO Board decides to deviate from the project rankings

Should a project receive Local Input Points through a deviation, the Board will note the reason for the deviation and that reason shall be published after final adoption.

#### **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 an MPO Board meeting. The initial list of projects proposed to receive Local Input Points will be based on the process described above. 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 final score and list of initial projects using the process described above;
- 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 and neighboring MPOs and RPOs 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 Prioritization 5.0.

### **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.dchcmo.org](http://www.dchcmo.org).

The DCHC MPO Public Involvement Policy sets a minimum 21-day public comment period for this process and requires a public hearing at an MPO Board meeting. This public comment period and public hearing will be advertised 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.

The DCHC MPO web site will include the following on its Local Methodology tab for the FY2020-2029 TIP web page:

- Link to the NCDOT STI Prioritization Resources web site
- Updated drafts of the Methodology as they are available
- Schedule for adoption of the Methodology and Local Points
- Schedule of milestones in the Methodology and Local Input Points adoption process
- Preliminary and final local input point assignment sheets

DCHC MPO will follow the schedule below for public comment and adoption of this Methodology:

December 2017 – Draft Methodology reviewed by the DCHC MPO TC (materials published online for public review); TC recommends that DCHC MPO Board release *Draft Methodology* for public comment

January 2018 – DCHC MPO Board reviews Draft Methodology and releases for 21-day public comment period; TC has second review and makes recommendation to the Board

February 2018 – Board holds public hearing, reviews public comments, and adopts Methodology (including any changes based on public comment); DCHC MPO staff submits the Methodology to NCDOT Review Committee; TC reviews comments from NCDOT Review Committee and recommends changes to Methodology, if necessary

March 2018 – Board adopts revised Methodology, if necessary

**Material Sharing**

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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