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

## INTRODUCTION

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 the North Carolina Department of Transportation (NCDOT) during the 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 Transportation Improvement Program (TIP) be consistent with the projects and investment priorities of the MPO's Metropolitan Transportation Plan (MTP) while being compatible with the state's STI process.

According to U.S. Code 23 Section 134, Metropolitan Planning Organizations (MPOs) are required to develop a 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 MTP and should reflect the investment priorities established in the current MTP. There should be an 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 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 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

This methodology 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 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 2019 | DCHC MPO staff work with local jurisdiction staff to develop potential new projects for Prioritization 6.0; DCHC MPO staff review projects to ensure they meet minimum requirements and are in the MTP. |
| November 2019 | DCHC MPO staff and Technical Committee review carryover projects and make recommendations to the Board to either have those projects scored in Prioritization 6.0 as is, propose changes to projects to then be scored in Prioritization 6.0, or remove projects from consideration; DCHC MPO Board reviews and provides input on potential new projects |
| January 2020 | 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 |
| February 2020 | DCHC MPO Board reviews proposed list of new projects for Prioritization 6.0; new project list is released for public comment |
| April 2020 | DCHC MPO Board approves project submittals for Prioritization 6.0 |

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

| | |
|---|---|
| Spring 2021 | DCHC MPO staff updates *Methodology for Identifying and Ranking TIP Project Requests* document |
| April 2021 | DCHC MPO TC reviews the *Methodology for Identifying and Ranking TIP Project Requests* and forwards Methodology to the DCHC MPO Board for public release |
| May 2021 | DCHC MPO Board releases the *Methodology for Identifying and Ranking TIP Project Requests* for public review and comment period; DCHC MPO TC makes final review and recommendation to DCHC MPO Board |
| June 2021 | DCHC MPO holds public hearing on *Methodology*, forwards for NCDOT Review Committee review |
| August 2021 | DCHC MPO Board approves the *Methodology for Identifying and Ranking TIP Project Requests* |

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

| | |
|---|---|
| August 2021 | DCHC MPO receives results of the NCDOT SPOT scoring process for Statewide, Regional, and Division projects |
| September 2021 | 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 |
| October 2021 | DCHC MPO Board holds public hearing on initial assignment of Local Input Points for Regional projects and approves assignment of Local Input Points to Regional projects |
| **November 2021** | **DCHC MPO submits Regional projects with Local Input Points assigned to NCDOT** |
| January 2022 | DCHC MPO ranks Division projects for the assignment of Local Input Points |
| February 2022 | DCHC MPO Board releases initial assignment of Division projects and the assignment of Local Input Points for public comment |
| March 2018 | DCHC MPO Board holds public hearing on initial assignment of Local Input Points for Division projects and approves assignment of Local Input Points to Division projects |
| **April 2022** | **DCHC MPO submits Division projects with Local Input Points assigned to NCDOT** |
| **August 2022** | **Draft FY2023-2032 STIP released** |

## DCHC MPO GOALS FOR THE *METHOLDOGY 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 newly adopted goals for the 2050 MTP.[1] The goals of the 2050 MTP are as follows:

- Protect the human and natural environment and minimize climate change
- Ensure equity and participation
- Connect people and places
- Ensure that all people have access to multimodal and affordable transportation choices
- Promote safety, health, and well-being
- Improve infrastructure condition and resilience
- Manage congestion and system reliability
- Stimulate inclusive economic vitality

## 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?

**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 a TC 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 6.0.

[1] The 2045 MTP was in effect at the time of submission to Prioritization 6.0; the 2050 MTP is scheduled to be adopted in January 2022.

## 2) Submission of Projects to the STI Process

For the 2023-2032 TIP, the DCHC MPO submitted projects to NCDOT's SPOT office by August 2020 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 6.0 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 may be scored and funded by any of the three funding categories (Statewide, Regional, or Division), dependent on the criteria as set forth in the STI law. The SPOT Workgroup has developed a different highway project scoring process for each of the three funding categories.

For SPOT 6.0, highway projects have been broken out into two specific improvement types, modernization and mobility. Modernization projects have a different set of default criteria and weights, and primarily consists of roadway modernization projects and projects to upgrade freeways to interstate standards. All other projects are mobility projects, which add capacity to roadways.

The DCHC MPO will use 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 calculate preliminary scores based on the scoring criteria developed by the SPOT 6.0 Workgroup that were submitted to the NCDOT Board of Transportation in summer 2019. This will provide a set of preliminary scores that can be used to rank projects.

For Prioritization 6.0, Divisions 5 and 7 each adopted a set of alternate criteria for highway projects at the Division Needs tier. Those alternate criteria are shown below. Division 8 will use default weights. Alternate criteria are not an option for non-highway projects.

# NCDOT and DCHC MPO Scoring Criteria for Highway Projects

## Mobility Projects

| Funding Category | Quantitative Data | Local Input | |
|---|---|---|---|
| | | Division Input | MPO/RPO Input |
| **Statewide Mobility** | **Congestion = 30%**<br>• Measurement of the traffic volume on the roadway compared to the existing capacity of the roadway, weighted by the traffic volume along the roadway.<br>**Benefit/Cost = 25%**<br>• 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.<br>**Freight = 25%**<br>• Measurement of existing truck volume and whether or not the roadway is part of a future interstate highway.<br>**Economic Competitiveness = 10%**<br>• Measurement of the estimated percent change in economic activity within the county and the percent change in the number of long term jobs that the project is expected to provide over 10 years.<br>**Safety = 10%**<br>• Measurement of the existing severity, frequency, and rate of crashes along the roadway and the safety benefits the project is expected to provide over 10 years.<br>**Total = 100%** | -- | -- |
| **Regional Impact** | **Benefit/Cost = 20%**<br>• 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.<br>**Congestion = 20%**<br>• Measurement of the traffic volume on the roadway compared to the existing capacity of the roadway, weighted by the traffic volume along the roadway.<br>**Accessibility/Connectivity = 10%**<br>• 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.<br>**Freight = 10%**<br>• Measurement of existing truck volume and whether or not the roadway is part of a future interstate highway.<br>**Safety = 10%**<br>• Measurement of the existing severity, frequency, and rate of crashes along the roadway and the safety benefits the project is expected to provide over 10 years.<br>**Total = 70%** (Division Engineer and Local Input Points account for remaining 30%) | **15%** | **15%** |

## Modernization Projects

| Funding Category | Quantitative Data | Local Input | |
|---|---|---|---|
| | | Division Input | MPO/RPO Input |
| **Statewide Mobility** | **Freight = 25%**<br>• Measurement of existing truck volume and whether or not the roadway is part of a future interstate highway.<br>**Safety = 25%**<br>• Measurement of the number, severity, and density of crashes along the roadway and calculate future safety benefits.<br>**Paved Shoulder Width = 20%**<br>• Measurement of paved shoulder width deficiencies compared to the NCDOT standard for each roadway facility type<br>**Congestion = 10%**<br>• Measurement of the traffic volume on the roadway compared to the existing capacity of the roadway, weighted by the traffic volume along the roadway.<br>**Lane Width = 10%**<br>• Measurement of lane width deficiencies compared to the NCDOT standard for each roadway facility type.<br>**Pavement Condition = 10%**<br>• Measurement of overall pavement condition using the NCDOT's pavement condition rating (PCR).<br>**Total = 100%** | -- | -- |
| **Regional Impact** | **Safety = 25%**<br>• Measurement of the number, severity, and density of crashes along the roadway and calculate future safety benefits.<br>**Freight = 10%**<br>• Measurement of existing truck volume and whether or not the roadway is part of a future interstate highway.<br>**Lane Width = 10%**<br>• Measurement of lane width deficiencies compared to the NCDOT standard for each roadway facility type.<br>**Pavement Condition = 10%**<br>• Measurement of overall pavement condition using the NCDOT's pavement condition rating (PCR).<br>**Paved Shoulder Width = 10%**<br>• Measurement of paved shoulder width deficiencies compared to the NCDOT standard for each roadway facility type<br>**Congestion = 5%**<br>• Measurement of the traffic volume on the roadway compared to the existing capacity of the roadway, weighted by the traffic volume along the roadway.<br>**Total = 70%** (Division Engineer and Local Input Points account for remaining 30%) | **15%** | **15%** |

## Division Needs - Mobility

| Funding Category | Quantitative Data | Local Input | |
|---|---|---|---|
| | | Division Input | MPO/RPO Input |
| **Division 5** | **Benefit/Cost = 15%**<br>• 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.<br>**Congestion = 15%**<br>• Measurement of the traffic volume on the roadway compared to the existing capacity of the roadway, weighted by the traffic volume along the roadway.<br>**Safety = 20%**<br>• Measurement of the number, severity, and frequency of crashes along the roadway.<br>**Total = 50%** (Division Engineer and Local Input Points account for remaining 50%) | **25%** | **25%** |
| **Divisions 7** | **Benefit/Cost = 15%**<br>• 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.<br>**Congestion = 15%**<br>• Measurement of the traffic volume on the roadway compared to the existing capacity of the roadway, weighted by the traffic volume along the roadway.<br>**Safety = 15%**<br>• Measurement of the number, severity, and frequency of crashes along the roadway.<br>**Accessibility/Connectivity** = 5%<br>• Measurement of county economic distress indicators and the degree the project upgrades mobility of the roadway, with the goal of improving access to opportunity in rural and less-affluent areas and improving interconnectivity of the transportation network.<br>**Total = 50%** (Division Engineer and Local Input Points account for remaining 50%) | **25%** | **25%** |
| **Division 8 (Default)** | **Benefit/Cost = 15%**<br>• 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.<br>**Congestion = 15%**<br>• Measurement of the traffic volume on the roadway compared to the existing capacity of the roadway, weighted by the traffic volume along the roadway.<br>**Safety = 10%**<br>• Measurement of the number, severity, and frequency of crashes along the roadway.<br>**Accessibility/Connectivity = 5%**<br>• Measurement of county economic distress indicators and the degree the project upgrades mobility of the roadway, with the goal of improving access to opportunity in rural and less-affluent areas and improving interconnectivity of the transportation network.<br>**Freight = 5%**<br>• Measurement of truck volume and truck percentage of total traffic on the roadway, and the degree the project is helping to complete a future interstate corridor (if applicable).<br>**Total = 50%** (Division Engineer and Local Input Points account for remaining 50%) | **25%** | **25%** |

## Division Needs - Modernization

| Funding Category | Quantitative Data | Local Input | |
|---|---|---|---|
| | | Division Input | MPO/RPO Input |
| **Division 5** | **Safety = 25%**<br>• Measurement of the number, severity, and frequency of crashes along the roadway.<br>**Pavement Condition = 10%**<br>• Measurement of overall pavement condition using the NCDOT's pavement condition rating (PCR).<br>**Paved Shoulder Width = 10%**<br>• Measurement of paved shoulder width deficiencies compared to the NCDOT standard for each roadway facility type.<br>**Lane Width = 5%**<br>• Measurement of lane width deficiencies compared to the NCDOT standard for each roadway facility type.<br>**Total = 50%** (Division Engineer and Local Input Points account for remaining 50%) | **25%** | **25%** |
| **Divisions 7** | **Safety = 25%**<br>• Measurement of the number, severity, and frequency of crashes along the roadway.<br>**Pavement Condition = 10%**<br>• Measurement of overall pavement condition using the NCDOT's pavement condition rating (PCR).<br>**Paved Shoulder Width = 10%**<br>• Measurement of paved shoulder width deficiencies compared to the NCDOT standard for each roadway facility type.<br>**Lane Width = 5%**<br>• Measurement of lane width deficiencies compared to the NCDOT standard for each roadway facility type.<br>**Total = 50%** (Division Engineer and Local Input Points account for remaining 50%) | **25%** | **25%** |
| **Division 8 (Default)** | **Safety = 20%**<br>• Measurement of the number, severity, and frequency of crashes along the roadway.<br>**Pavement Condition = 10%**<br>• Measurement of overall pavement condition using the NCDOT's pavement condition rating (PCR).<br>**Paved Shoulder Width = 10%**<br>• Measurement of paved shoulder width deficiencies compared to the NCDOT standard for each roadway facility type.<br>**Freight = 5%**<br>• Measurement of truck volume and truck percentage of total traffic on the roadway, and the degree the project is helping to complete a future interstate corridor (if applicable).<br>**Lane Width = 5%**<br>• Measurement of lane width deficiencies compared to the NCDOT standard for each roadway facility type.<br>**Total = 50%** (Division Engineer and Local Input Points account for remaining 50%) | **25%** | **25%** |

## 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.

### 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 |
| **Regional Impact** | **Cost Effectiveness = 25%**<br>• Measurement of the trips generated by the project in 10 years compared to the cost of the project to NCDOT (annualized by the lifespan of the project).<br>**Demand/Density = 20%**<br>• Measurement of the total operating hours of the system in 10 years compared to the service area population for the system.<br>**Efficiency = 15%**<br>• Measurement of the number of vehicles in maximum service by the system compared to the total number of vehicles in the fleet (utilization ratio).<br>**Impact = 10%**<br>• Measurement of the number trips generated by the project in 10 years.<br>**Total = 70%** (Division Engineer and Local Input Points account for remaining 30%) | **15%** | **15%** |
| **Division Needs** | **Cost Effectiveness = 15%**<br>• Measurement of the total projected passenger trips compared to the cost of the project to the state and lifespan of the project.<br>**Demand/Density = 15%**<br>• Measurement of the number of service hours devoted to the project compared to the service population.<br>**Efficiency = 10%**<br>• Measurement of the vehicle utilization ratio.<br>**Impact = 10%**<br>• Measurement of the number trips affected by the project.<br>**Total = 50%** (Division Engineer and Local Input Points account for remaining 50%) | **25%** | **25%** |

**Public Transit Scoring (Facilities)**

| Funding Category | Quantitative Data | Local Input | |
|---|---|---|---|
| | | Division Input | MPO/RPO Input |
| **Division Needs** | **Cost Effectiveness = 15%**<br>• Measurement of the trips generated by the project in 10 years compared to the cost of the project to NCDOT.<br>**Impact = 15%**<br>• Measurement of the trips generated by the project in 10 years.<br>**Demand/Density = 10%**<br>• Measurement of the total operating hours of the system in 10 years compared to the service area population for the system.<br>**Efficiency = 10%**<br>• Measurement of the number of vehicles in maximum service by the system compared to the total number of vehicles in the fleet (utilization ratio).<br>**Total = 50%** (Division Engineer and Local Input Points account for remaining 50%) | **25%** | **25%** |

**Public Transit Scoring (Mobility)**

| Funding Category | Quantitative Data | Local Input | |
|---|---|---|---|
| | | Division Input | MPO/RPO Input |
| **Regional Impact** | **Cost Effectiveness = 25%**<br>• Measurement of the trips generated by the project in 10 years compared to the cost of the project to NCDOT.<br>**Demand/Density = 20%**<br>• Measurement of the total trips along the project route in 10 years compared to the service area population for the project route.<br>**Impact = 15%**<br>• Measurement of the trips generated and relieved by the project in 10 years.<br>**Efficiency = 10%**<br>Measurement of the total trips along the project route in 10 years compared to the total revenue seat hours of the project route in 10 years.<br>**Total = 70%** (Division Engineer and Local Input Points account for remaining 30%) | **15%** | **15%** |
| **Division Needs** | **Cost Effectiveness = 20%**<br>• Measurement of the trips generated by the project in 10 years compared to the cost of the project to NCDOT.<br>**Demand/Density = 10%**<br>• Measurement of the total trips along the project route in 10 years compared to the service area population for the project route.<br>**Impact = 10%**<br>• Measurement of the trips generated and relieved by the project in 10 years.<br>**Efficiency = 10%**<br>• Measurement of the total trips along the project route in 10 years compared to the total revenue seat hours of the project route in 10 years.<br>**Total = 50%** (Division Engineer and Local Input Points account for remaining 50%) | **25%** | **25%** |

**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 use the scoring processes developed by the P6.0 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 calculate preliminary scores based on the scoring criteria developed by the SPOT 6.0 Workgroup that were submitted to the NCDOT Board of Transportation in summer. 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** | **Safety = 20%**<br>• Measurement of the number of bicycle and pedestrian crashes, severity of the crashes, crash risk based on existing surroundings, and safety benefit the project is expected to provide.<br>**Accessibility/Connectivity = 15%**<br>• Measurement of the quantity of destinations near the project, the quantity of connections to existing or planned bicycle/pedestrian facilities, and whether the project improves or connects to a designated bicycle route.<br>**Demand/Density = 10%**<br>• Measurement of the population and employment density within a walkable or bikeable distance of the project.<br>**Cost Effectiveness = 5%**<br>• Measurement of combined user benefits of Safety, Access, Demand, and Connectivity criteria compared to the cost of the project to NCDOT.<br>**Total = 50%** (Division Engineer and Local Input Points account for remaining 50%) | **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 P6.0 Workgroup that were submitted to the NCDOT Board of Transportation in summer 2019.

## NCDOT and DCHC MPO Scoring Criteria for Rail Projects

| Funding Category | Quantitative Data | Local Input | |
|---|---|---|---|
| | | Division Input | MPO/RPO Input |
| **Statewide Mobility** (Class I Freight Only) | **Benefit-Cost = 35%**<br>• Measurement of monetized benefits compared to the project cost to NCDOT.<br>**Safety = 30%**<br>• Measurement of crash potential at highway/rail crossings, based on the NCDOT Rail Division's Investigative Index.<br>**System Opportunities = 15%**<br>• Measurement of the project's degree of access to industrial/commercial development or nearby points of interest, and the degree of interaction between Rail and other modes.<br>**Capacity and Diversion = 10%**<br>• Volume/Capacity = 75%<br>• Highway Diversion = 25%<br>**Economic Competitiveness = 10%**<br>• Measurement of the estimated number of full time jobs created in 20 years.<br>**Total = 100%** | -- | -- |
| **Regional Impact** | **Benefit-Cost = 25%**<br>• Measurement of monetized benefits compared to the project cost to NCDOT.<br>**Safety = 15%**<br>• Measurement of crash potential at highway/rail crossings, based on the NCDOT Rail Division's Investigative Index.<br>**System Opportunities = 10%**<br>• Measurement of the project's degree of access to industrial/commercial development or nearby points of interest, and the degree of interaction between Rail and other modes.<br>**Capacity and Diversion = 10%**<br>• Volume/Capacity = 75%<br>• Highway Diversion = 25%<br>**Economic Competitiveness = 10%**<br>• Measurement of the estimated number of full time jobs created in 20 years.<br>**Total = 70%** (Division Engineer and Local Input Points account for remaining 30%) | **15%** | **15%** |

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

| Funding Category | Quantitative Data | Local Input | |
|---|---|---|---|
| **Division Needs** | **System Opportunities = 15%**<br>• Measurement of the project's degree of access to industrial/commercial development or nearby points of interest, and the degree of interaction between Rail and other modes.<br>**Benefit-Cost = 10%**<br>• Measurement of monetized benefits compared to the project cost to NCDOT.<br>**Safety = 10%**<br>Measurement of crash potential at highway/rail crossings, based on the NCDOT Rail Division's Investigative Index.<br>**Capacity and Diversion = 10%**<br>• Volume/Capacity = 75%<br>• Highway Diversion = 25%<br>**Economic Competitiveness = 5%**<br>• Measurement of the estimated number of full time jobs created in 20 years.<br>**Total = 50%** (Division Engineer and Local Input Points account for remaining 50%) | **25%** | **25%** |

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

### Overview

As previously explained in this *Methodology*, DCHC MPO will utilize the NCDOT Prioritization 6.0 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 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 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 do not 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.

New to SPOT 6.0, DCHC MPO has the option to apply the Local Input Point Flexing Policy. This means that up to 500 Local Input Points can be transferred from between the Regional Impact and Division Needs project tiers. If the organization chooses to flex Local Input Points, the MPO or the Division will provide written documentation to the SPOT Office prior to assigning Regional Impact Local Input Points.

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 (though these projects will be reviewed should they cascade down to the Regional Impact and Division Needs levels). 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, at least two criteria, one of which must be qualitative, will be used 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 | | |
| Project planned for near-term (by MTP 2040 Threshold) | 2 | |
| Project planned for mid-term (by MTP 2045 Threshold) | 1 | |
| Project planned for long-term (by MTP 2050 Threshold) | 0 | |
| Consistent with Adopted Regional or Local Plan | | 2 |
| Preliminary Engineering or Engineering Study Completed or Underway | | 1 |
| Project is in a high-crash area as designated by a local jurisdiction. | 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[2] | 1 | 1 |
| **TOTAL MAXIMUM** | **6** | **6** |

[2] For the purposes of this Methodology, an Environmental Justice Community of Concern is an Overlapping Community of Concern as identified in the 2020 DCHC MPO Environmental Justice Report.

**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 of 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 1,900 points for the Regional Impacts (Regional) and Division Needs (Division) categories for Prioritization 6.0. 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 1,900 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
- 600 points could be assigned to any mode and project type

For the MPO's 1,900 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 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
- 600 points could be assigned to any mode and project type

Deviations from this methodology may be made for various reasons, including:

- 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 2020 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 6.0.

**Public Involvement**

All public involvement for this process will be conducted in accordance with the DCHC MPO's current 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.dchcmpo.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 FY2023-2032 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:

April 2021 – 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

May 2021 – DCHC MPO Board reviews Draft Methodology and releases for 21-day public comment period; TC has second review and makes recommendation to the Board

June 2021 – 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

August 2021 – 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.dchcmpo.org.

Anne Phillips
Principal Planner
DCHC MPO
City of Durham DOT
101 City Hall Plaza
Durham, NC 27701
(919) 560-4366 x36443
email: aaron.cain@durhamnc.gov