

# Appendix D: MTP Project Solicitation and Ranking Process

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*GCLMPO 2045 MTP Project Solicitation and Ranking Process*



**Gaston-Cleveland-Lincoln MPO  
2045 Metropolitan Transportation Plan (MTP)  
Project Solicitation and Ranking Process**

**Adoption Date: May 25, 2017**

The **Metropolitan Transportation Plan (MTP)** for the GCLMPO is the locally-adopted, fiscally-constrained, long-range transportation plan for Cleveland, Gaston, and Lincoln counties. The MTP is also a comprehensive plan that defines the multi-modal transportation network that will serve both present and projected volumes of vehicular traffic, public transportation use, bicycle, pedestrian, aviation and freight travel in and around the urban area. The MTP is based on the most accurate and complete information available including, but not limited to, population and economic development growth and land development patterns in and around the urban area.

### **Schedule**

**Call for Projects:** The MPO solicited candidate projects for 30 days in April 2017. The results of this call for projects will be presented to the MPO Board at its July 2017 meeting.

**Project Ranking Timeline:** Upon approval of the ranking methodology set forth in this document, MPO staff will evaluate candidate projects for the three counties in June 2017 and will present a draft fiscally constrained project list to the TCC and MPO Board at their July 2017 meetings.

**Public Comment Period:** Upon the MPO Board's approval of the fiscally constrained project list at their July 2017 meeting, a public comment period will be held for 30 days in August 2017.

### **Public Input Process**

**Project Solicitation:** The MPO announced a 30-day project solicitation period to all member governments and interested persons. The MPO issued press releases in newspapers of general circulation in Cleveland, Gaston, and Lincoln counties soliciting candidate projects. The MPO also held a public input session in each of the three counties in April 2017. Information regarding the public input sessions and this solicitation period was also advertised through the MPO website.

### **Ranking Process**

**Regional Level Highway Projects:** All NC routes, US 29, and US 74 east of I-85 in Gaston County are found on the Regional Level. These highway projects will be evaluated by the criteria and scoring as detailed in the following table:

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<b>Regional Level Highway Projects (Max Total Score: 110 points)</b>					
<b>Criteria</b>	<b>0 points</b>	<b>5 points</b>	<b>10 points</b>	<b>15 points</b>	<b>20 points</b>
<b>Existing Congestion (20 max)</b>	Volume to capacity less than 0.6	Volume to capacity btw 0.6 and 0.85	Volume to capacity btw 0.86 and 1.0	Volume to capacity btw 1.01 and 1.1	Volume to capacity over 1.1
<b>Existing Safety (20 max)</b>	SPOT safety points less than 30	SPOT safety points btw 31-50	SPOT safety points btw 51-65	SPOT safety points btw 66-80	SPOT safety points over 80
<b>Cost-Effectiveness (15 max)</b>	Cost per vehicle/equivalent greater than \$1,500 per mile	Cost per vehicle/equivalent btw \$1,000-\$1,500 per mile	Cost per vehicle/equivalent btw \$500-\$999 per mile	Cost per vehicle/equivalent less than \$499 per mile	-----
<b>Freight Volume (10 max)</b>	Less than 500 trucks/equivalent per day	Btw 500-1,000 trucks/equivalent per day	More than 1,000 trucks/equivalent per day	-----	-----
<b>Transportation Plan Consistency (10 max)</b>	Project is not in the CTP	Project type, such as intersections, not considered in plans	Project is in the CTP	-----	-----
<b>Cost (10 max)</b>	Cost over \$50 million	Cost \$25-49 million	Cost less than \$25 million	-----	-----
<b>Multimodal Accommodation (5 max)</b>	Project does not include bike/ped/transit/rail facilities	Project includes bike/ped/transit/rail facilities	-----	-----	-----
<b>Supports Environmental Justice (EJ) (5 max)</b>	Project adds capacity or accessibility where growth is not encouraged	Project adds new capacity or accessibility in support of EJ	-----	-----	-----
<b>Supports Land Use (5 max)</b>	Project could negatively impact the land use of the area and does not support an adopted Land Use Plan	Project will have no impact or make positive improvements to the area's land use and supports an adopted Land Use Plan	-----	-----	-----
<b>Supports Economic Development (5 max)</b>	Project does not support economic development	Project supports economic development	-----	-----	-----
<b>Local Funding Contribution (5 max)</b>	No local funding	At least 5% local funding of total project cost (or 25% for locally-administered projects)	-----	-----	-----

## GCLMPO 2045 MTP Project Solicitation and Ranking Process (Continued)

**Division Level Highway Projects:** All highway projects on SR roads and local roads will be evaluated by the criteria and scoring as detailed in the following table:

<b>Division Level Highway Projects (Max Total Score: 105 points)</b>					
<b>Criteria</b>	<b>0 points</b>	<b>5 points</b>	<b>10 points</b>	<b>15 points</b>	<b>20 points</b>
<b>Existing Lack of Capacity (20 max)</b>	Volume to capacity less than 0.5 (roads and rail), existing facilities available (other modes)	<b>X</b>	Volume to capacity btw 0.51 and 0.75 (roads and rail), intermittent or incomplete facilities/transit available (other modes)	<b>X</b>	Volume to capacity over 0.75 (roads and rail), no facilities/transit available (other modes)
<b>Cost-Effectiveness (20 max)</b>	Cost per daily user greater than \$4,000 per user per mile	Cost per daily user btw \$2,000-\$4,000 per user per mile	Cost per daily user btw \$1,500-\$1,999 per user per mile	Cost per daily user btw \$1,000-\$1,499 per user per mile	Cost per daily user less than \$999 per user per mile
<b>Total Cost (10 max)</b>	Cost over \$10 million	Cost \$5-10 million	Cost less than \$5 million	-----	-----
<b>Plan Consistency (10 max)</b>	Project is not in an adopted land use, transportation, transit or other plan	Intersections not improving recommended corridors	Project supports an adopted land use, transportation, transit or other plan	-----	-----
<b>Project Readiness (10 max)</b>	Significant ROW, EJ or environmental impacts	Moderate ROW, EJ or environmental impacts	No ROW, EJ or environmental impacts	-----	-----
<b>Multimodal Accommodation (10 max)</b>	Project does not include bike/ped/transit/ rail facilities	<b>X</b>	Project includes bike/ped/transit/ rail facilities	-----	-----
<b>Supports Environmental Justice (EJ) (5 max)</b>	Project adds capacity or accessibility where growth is not encouraged	Project adds new capacity or accessibility in support of EJ	-----	-----	-----
<b>Supports Land Use (5 max)</b>	Project could negatively impact the land use of the area and does not support an adopted Land Use Plan	Project will have no impact or will make positive improvements to the area's land use and supports an adopted Land Use Plan	-----	-----	-----
<b>Supports Economic Development (5 max)</b>	Project does not support economic development	Project supports economic development	-----	-----	-----
<b>Local Funding Contribution (10 max)</b>	No local funding	At least 5% local funding of total project cost (or 25% for locally-administered projects)	At least 10% local funding of total project cost (or 30% for locally-administered projects)	-----	-----

## GCLMPO 2045 MTP Project Solicitation and Ranking Process (Continued)

**Division Level Bicycle/Pedestrian Projects:** The ranking criteria for bicycle/pedestrian projects for the 2045 MTP are illustrated in the table below. It is important to note that all future bicycle and pedestrian projects submitted to the MPO for State funding must be specifically identified in a locally-adopted bicycle plan, pedestrian plan, greenway/multi-use plan, or Safe Routes to School Action Plan.

**MTP Bicycle/Pedestrian Project Ranking Criteria**

Measure	Points Possible
Safety	20
Connectivity	20
Residential and Employment Density	20
Benefit/Cost	20
Social Equity	10
Constructability	10
<b>Total</b>	<b>100</b>

**Safety Measure (20 points possible)**

- Bike/Pedestrian Crashes (Up to 10 points)
  - o Bicycle or pedestrian crashes within last 5 years along the corridor. For multi-use projects, both bike and pedestrian crash data will be used. For new, off-road facilities, crash data for parallel routes will be used.
    - 5 or more crashes – 10 points
    - 4 crashes – 8 points
    - 3 crashes – 6 points
    - 2 crashes – 4 points
    - 1 crash – 2 points
- Posted Speed Limits (Up to 10 points)
  - 55 and over – 10 points
  - 40 to 50 – 5 points
  - 30 to 40 – 2.5 points
  - 25 – 1 point

**Connectivity Measure (20 points possible)**

- Destination Type (up to 10 points)
  - o Primary centers: municipal/transit center, employment center, schools, universities, mixed-use commercial, parks, national/state tourist destinations, high-density residential/multi-family (1 point each, maximum of 7 points)
  - o Secondary centers: lower-density residential developments, fixed-guideway facilities, minor employment centers, municipal building, sports venue (0.5 points each, maximum of 3 points)
- Distance to Prime Destination (Up to 10 points)
  - o Pedestrian
    - Points calculated on a scale for distances up to 0.5 miles. Pedestrian facilities further

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than 0.5 miles to destination receive 0 points. Formula =  $10 - [(Distance\ in\ miles/0.5\ miles)*10]$

- o Bicycle
  - Points calculated on a scale for distances up to 1.5 miles. Bicycle facilities further than 1.5 miles to destination receive 0 points. Formula =  $10 - [(Distance\ in\ miles/1.5\ miles)*10]$

**Residential and Employment Density Measure (20 points possible)**

- Residents per Square Mile (Up to 10 points)
  - o Points calculated on a scale using a radial 0.5 mile buffer for pedestrian facilities and 1.5 miles for bicycle facilities. Formula =  $[(buffered\ population/buffered\ area)/1000] * 3$ . Population data is from 2010 Census block data.
- Employees per Square Mile (Up to 10 points)
  - o Points calculated on a scale using a radial 0.5 mile buffer for pedestrian facilities and 1.5 miles for bicycle facilities. Formula =  $[(buffered\ population/buffered\ area)/1000] * 3$ . Population data is from 2010 Local Employment Dynamics block data.

**Benefit/Cost Measure (20 points possible)**

- Formula = (Accessibility Points + Residential and Employment Density Points) / (Estimated Project Cost/\$100,000)
  - o Value of 8 or higher – 20 points
  - o Value between 6 and 8 – 15 points
  - o Value between 4 and 6 – 10 points
  - o Value between 2 and 4 – 5 points
  - o Value between 1 and 2 – 2.5 points
  - o Value under 1 – no point

**Social Equity Measure (10 points possible)**

- Points calculated in this measure are calculated on a scale using a radial 0.5 mile buffer for pedestrian facilities and a radial 1.5 mile buffer for bicycle projects. Block group data from the American Community Survey is the source.
  - o Households below Poverty Rate per Square Mile (Up to 4 points)
    - Formula =  $(buffered\ number\ of\ households/buffered\ area)/250$ .
  - o Households without Access to a Vehicle per Square Mile (Up to 3 points)
    - Formula =  $(buffered\ number\ of\ households/buffered\ area)/50$ .
  - o Density of Residents aged 5 to 14 and 65 and older (Up to 3 points)
    - Formula =  $(buffered\ population/buffered\ area)/250$ .

**Constructability Measure (10 points possible)**

- Estimated Right-of-Way Acquired (Up to 5 points)
  - o 100% - 5 points
  - o At least 75% - 2.5 points
- Preliminary Engineering/Project Design (Up to 2.5 points)

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- o Completed PE/Design receives 2.5 points
- Estimated Environmental Documentation Required (Up to 2.5 points)
  - o Categorical Exclusion I/II – 2.5 points
  - o Environmental Assessment – 1 point
  - o EIS – 0 points

**Destination Definitions for Bicycle/Pedestrian Projects**

**Major Centers**

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**municipal center**- local, state or federal government building or site including a council or judicial chamber, such as a town hall or courthouse

**transit station**- hub or main terminal for fixed-route or passenger rail service

**major employment center** – contiguous property(s) which have businesses employing 50 or more part- time or full-time employees; or property(s) within a designated Central Business District or town center

**mixed use commercial** – contiguous property(s) developed with a vertical or horizontal mix of land uses

**university or college** – building or campus associated with a public or private secondary school institution

**schools** – any public or private school for primary education or pre-school education

**parks** – any locally owned and managed public park or recreation center

**tourist destinations**- any designated historic property or district (local, state or national) with a publicly accessible visitor’s center; any publicly-accessible park or property managed by the NC Department of Environment and Natural Resources or NC Department of Cultural Resources; any publicly accessible park or property managed by the US Department of the Interior or US Department of Agriculture

**multi-family residential (high-density)** – contiguous property(s) that have a collective gross density of 8 multi-family units/acre or more, approved building permits may be included within the total (Note: threshold figure is an averaged measure developed through review of typical land use/development policies/ordinances.)

**high-density residential (high-density)** – contiguous property(s) that have a collective gross density of 4 single-family housing units/acre or more, approved building permits may be included within the total (Note: threshold figure is an averaged measure developed through review of typical land use/development policies/ordinances.)

**Secondary Centers**

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**minor employment center** - contiguous property(s) which have businesses employing fewer than 50 part-time or full-time employees

**municipal site** – local, county, state or federal government office or property not including council or judicial chambers, such as a police station, fairgrounds, or state agency regional office

**fixed-guideway and fixed-route systems** – any part of a route providing for fixed-route services (buses, light-rail or commuter rail), including bus stops and park-n-ride lots

**multi-family residential community (low-density)** – contiguous property(s) that have a collective gross density of less than 8 multi-family units/acre, approved building permits may be included within the total (Note: threshold figure is an averaged measure developed through review of typical land use/development policies/ordinances.)



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**residential neighborhood (low-density)** – contiguous property(s) that have a collective gross density of fewer than 4 single-family housing units/acre, approved building permits may be included within the total (Note: threshold figure is an averaged measure developed through review of typical land use/development policies/ordinances.)

**arts, entertainment or sports venue-** any property(s) developed as a major sporting (professional, semi-professional or post-secondary team facility) or entertainment venue. (Note: for post-secondary facilities, project may select this destination type category or university/college destination type category, but not both.)

**other local destination** – churches or medical offices

**Division Level Aviation Projects:** All aviation projects will be evaluated by the criteria and scoring as detailed in the following table:

Aviation Projects (Max Total Score: 100 points)					
Criteria	0 points	5 points	10 points	15 points	20 points
<b>Economic Development (20 max)</b>	Does not improve aircraft size capacity or space availability for based aircraft	X	X	Increases capacity for heavier aircraft and/or increases space available for new based aircraft	Creates capacity for larger aircraft and/or creates employment
<b>Safety (20 max)</b>	No safety improvements	X	Improves safety requirements outside of the runway and taxiway areas	Improves taxiway/taxilane safety area grades and obstacle free zones	Improves required runway safety area grades and runway approach obstruction clearing
<b>Cost of Project (20 max)</b>	Total Project Cost is greater than \$500,000	X	Total Project Cost is between \$250,000 and \$499,999	X	Total Project Cost is less than \$250,000
<b>Local Funding Contribution (10 max)</b>	No local match above the required 10%	Local match exceeds the minimum requirement of 10% and is between 11-19%	Local match exceeds the minimum requirement by at least 20% of project cost	-----	-----
<b>Plan Consistency (20 max)</b>	Project is not in an adopted plan	X	Project is included in the adopted MTP OR local aviation plan	X	Project is included in the adopted MTP AND local aviation plan
<b>Project Readiness (10 max)</b>	Significant ROW, EJ and/or environmental impacts	Moderate ROW, EJ and/or environmental impacts	No ROW, EJ or environmental impacts	-----	-----

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**Division Level Public Transportation Projects:** Public transportation projects will be evaluated by the criteria and scoring as detailed in the following table. The following public transportation projects will be scored:

- **Operations** – includes funding for administration of a system, as well as maintenance and operation of a transit system.
- **Expansion Vehicles** – project types are focused on increasing efficiency. Example projects include:
  - New bus routes and/or services (demand response, headway reductions)
  - Purchase of new buses or vans
- **Facilities** – project types are focused on replacing, improving, or constructing new transit-related facilities. Examples of projects include:
  - Transit-related facilities
  - Park and Ride Lots
  - Bus Shelters

Public Transportation Projects (Max Total Score: 100 points)					
Criteria	0 points	5 points	10 points	15 points	20 points
<b>Interagency Coordination (10 max)</b>	Project does not involve more than one transit/municipal agency	<b>X</b>	Project involves two or more transit/municipal agencies	-----	-----
<b>Ridership Impact (15 max)</b>	Project does not increase or has no impact on ridership	Project increases ridership by 0-5%	Project increases ridership by 5.1-10%	Project increases ridership by more than 10%	-----
<b>Capacity Impact (15 max)</b>	Project does not decrease headway or increase frequency on an existing transit route that is near or at capacity	<b>X</b>	<b>X</b>	Project decreases headway or increases frequency on an existing transit route that is near or at capacity	-----
<b>Serves Activity Center(s) (10 max)</b>	Project does not serve an activity center	<b>X</b>	Project does serve activity center(s)	-----	-----
<b>Multimodal Accommodation (10 max)</b>	Project does not include bike/ped facilities	<b>X</b>	Project includes bike/ped facilities	-----	-----
<b>Plan Consistency (20 max)</b>	Project is not in an adopted plan	<b>X</b>	Project is included in the adopted MTP OR local transit plan	<b>X</b>	Project is included in the adopted MTP AND local transit plan
<b>Local Support (5 max)</b>	Project does not have local support as evidenced by public input or elected Board support	Project does have local support as evidenced by public input or elected Board support	-----	-----	-----
<b>Local Funding Contribution (15 max)</b>	No local match above the required 10%	Local match exceeds the minimum requirement of 10% and is between 11-19%	<b>X</b>	Local match exceeds the minimum requirement by at least 20% of project cost	<b>X</b>