MPO Equity-Oriented Criteria for Project Prioritization
MPC Foundational Work

The Cost of Segregation

Lost Income. Lost Lives. Lost potential.
The steep costs all of us in the Chicago region pay by living so separately from each other.

OUR EQUITABLE FUTURE: A Roadmap for the Chicago Region

A response to The Cost of Segregation
Economically Disconnected Areas (EDAs) and major employment centers

- EDAs
- Major employment centers
- Metra lines
- Interstates

To improve transportation equity...

- Environmental Justice analyses are insufficient
- Need to influence how future investments are made
What is Transportation Equity?

• Concerned with the **distribution of benefits and burdens** of transportation projects, plans and policies **between individuals and groups** that differ by race, income and ability;

• Aims to **protect and increase the benefits**—with an emphasis on accessibility—**for historically marginalized populations**, especially low-income communities of color;

• **Allocates resources based on communities’ needs**, with the aim of correcting existing differences and removing the effects of past discrimination;

• Provides effective **opportunities for disadvantaged populations to participate in the transportation decisions** that will affect them.
Methodology

• Analysis of project selection methodologies publicly available for the Metropolitan Planning Organizations that serve the 40 largest urbanized areas in the U.S.

• Determination of inclusion of equity criteria in available methodologies.

• Analysis of equity criteria types.

• Classification of criteria in categories.

• Analysis of strengths, weaknesses, and alignment of each criterion type with the definition of transportation equity.

• Development of recommendations to improve transportation equity in project prioritization.
Transportation Benefits and Burdens

**Benefits**

- Travel time savings
- Cost savings
- Congestion mitigation
- Reduction of pollution
- Reduction in traffic injuries and fatalities
- Increased access to social, educational and economic opportunities
- Increased access to high-quality mobility options
- Improved connectivity within communities
- Opportunities for physical activity through active transportation modes
- Local hiring and job training for jobs in construction, maintenance, and operation

**Burdens**

- Reduced access to essential opportunities and services
- Restricted or no access to high quality transportation
- Long/increased travel times
- Financial burdens
- Traffic congestion
- Increased pollution
- Physical division of communities
- Creation of barriers to bicycling and walking
- Exposure to traffic-related safety risks
- Vulnerability to climate impacts
- Inequitable enforcement
### Chicago Metropolitan Agency for Planning

#### Project readiness

<table>
<thead>
<tr>
<th>ENG and ROW completion</th>
<th>Inclusion in plans</th>
<th>Financial commitments</th>
<th>READINESS SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>10</td>
<td>5</td>
<td>25</td>
</tr>
</tbody>
</table>

#### Regional transportation impact

<table>
<thead>
<tr>
<th>Existing condition/need</th>
<th>Jobs + HHs</th>
<th>Improvement</th>
<th>IMPACT SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>10</td>
<td>20</td>
<td>50</td>
</tr>
</tbody>
</table>

#### Planning factors

<table>
<thead>
<tr>
<th>Green infrastructure</th>
<th>Freight movement</th>
<th>Inclusive growth</th>
<th>Complete streets</th>
<th>Transit supportive land use</th>
<th>PLANNING FACTOR SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>5</td>
<td>10</td>
<td>5 or 10</td>
<td>10</td>
<td>25</td>
</tr>
</tbody>
</table>

#### Bonus

<table>
<thead>
<tr>
<th>Council support</th>
<th>TOTAL + Council Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>125</td>
</tr>
</tbody>
</table>

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Chicago Metropolitan Agency for Planning Surface Transportation Program Shared Fund Project Prioritization Criteria
MPO Research

- 34/40 MPOs used prioritization methodologies
- 24/30 MPOs included an equity criterion for allocating transportation resources.
- Weightings < 10% of overall score in most methodologies.

Three implementation approaches:
- Same criterion and weight for all project types
- Same criterion for different project types but different weights
- Different criterion and different weight for different project types

Five categories of MPOs’ equity criteria

Spatial Component as a proxy for marginalized users

- Location Burdens-Based
- Location Benefits-Based
- Impact Benefits-Based
- Access to Destinations-Based
- User-Based

Potential Equity Impact

Community-Engagement Based
Location Burdens-Based

- Awards points if projects are not located within areas with high concentrations of marginalized populations or if measures to mitigate harm are integrated
  - Acknowledges potential negative impacts of projects, especially in areas with a high marginalized population.
  - Easy to calculate. Only requires demographic data and mapping

Example: Awards 10 points if project is not located in or near an EJ area, or if it incorporates mitigation measures

Source: Houston-Galveston Area Council
Location Benefits-Based

- Awards points if projects are located within areas with high concentrations of marginalized populations
  - Acknowledges potential benefits of transportation projects physically proximate to marginalized populations – but assumes benefits
  - Does not measure burdens

Example: Awards points if project is in an area with high concentration of
  - low income persons or minorities (4 points)
  - zero vehicle households (3 points)
  - seniors/people with a disability (1 point)
  - Not in EJ area or imposes a burden (0 Points)

Source: East-West Gateway Council of Governments
Impact-Based

• Awards more points to projects that will provide benefits (besides geographic proximity) to areas with high concentrations of marginalized populations.
  – **Assesses** the positive effects of a project instead of assuming them, i.e.,
    • Traffic safety
    • Improved pedestrian, transit, bicycle or vehicle network connectivity
    • Reduction in noise, emissions
    • Community cohesion/mitigates impacts
  – May also assess potential negative impacts
Access to Destinations-Based

- Awards more points to projects that will provide greater increases in access to key destinations for areas with high concentrations of marginalized populations.
  - Acknowledges access to key destinations as the most important benefit of transportation systems.

Example: Change in number of low income and minority workers that can access job centers during peak period via transit

Source: Atlanta Regional Commission
Transportation Improvement Program framework
User-Based

- Awards more points to projects with greater number of projected marginalized users.

Example: All projects are evaluated based on the percent of travelers using a facility that are people of color below the poverty line as modeled by CMAP travel demand model.

Source: Chicago Metropolitan Agency for Planning criteria for regional distribution of Surface Transportation Program funds
Community Engagement

Two approaches (used in combination with other criteria):

• Points based on influence of public participation on stages of project development (Mid-America Regional Council)

• Sponsors describe engagement methods and influence of community feedback on projects (Metropolitan Council)
Example: Metropolitan Council (St. Paul, MN)

- Equity Population Engagement (up to +20)
  - Describe what engagement methods and tools were used and how the input is reflected in the project’s purpose and need and design.

- Equity Population Benefits/Impacts (up to 30 points)
  - **Benefits**: Ped/bike safety, public health, access to destinations, travel time savings, gap closures, new modal options, community connection/cohesion (up to +30)
  - **Impacts**: Describe negative impacts (up to -10)

- Bonus points for high scoring projects based on location in area of concentrated poverty (up to +25)
<table>
<thead>
<tr>
<th>Category</th>
<th>Assessment Scoring</th>
<th>Scoring Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Distribution of Transit Service Frequency</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+2</td>
<td>Project will add high-quality transit service to multiple new communities.</td>
<td></td>
</tr>
<tr>
<td>+1</td>
<td>Project will add high-quality transit service to one new community.</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Project will not add high-quality transit to any new communities.</td>
<td></td>
</tr>
<tr>
<td>-1</td>
<td>Project may degrade transit service to a community.</td>
<td></td>
</tr>
<tr>
<td><strong>Transit Services within Equity Areas</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+2</td>
<td>Project will provide more direct transit service between equity area and key activity center(s).</td>
<td></td>
</tr>
<tr>
<td>+1</td>
<td>Project will provide new transit service within equity area.</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Project will not provide new transit service within equity area.</td>
<td></td>
</tr>
<tr>
<td>-1</td>
<td>Project may degrade transit service within an equity area.</td>
<td></td>
</tr>
<tr>
<td><strong>Travel Time Savings within Equity Areas</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+2</td>
<td>Project may improve peak period travel time between equity area and key activity center(s).</td>
<td></td>
</tr>
<tr>
<td>+1</td>
<td>Project may improve peak period travel times within equity area.</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Project has no impact on travel times within equity area.</td>
<td></td>
</tr>
<tr>
<td>-1</td>
<td>Project may degrade travel times within equity area.</td>
<td></td>
</tr>
<tr>
<td><strong>Multimodal Safety within Equity Areas</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+2</td>
<td>Project will directly improve safety through improvements at a high-crash location within an equity area.</td>
<td></td>
</tr>
<tr>
<td>+1</td>
<td>Project may directly improve safety through improvements (regardless of existing crash situation) within an equity area.</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Project has no impact on safety within an equity area.</td>
<td></td>
</tr>
<tr>
<td>-1</td>
<td>Project may introduce factors (higher speeds, higher traffic volumes, design features) that could adversely impact multimodal safety within an equity area.</td>
<td></td>
</tr>
<tr>
<td><strong>Community Impacts</strong></td>
<td>0</td>
<td>This is a planning-level GIS assessment of a project. Physical: project’s typical cross-section will likely exceed current public right-of-way. Example: Project would widen roadway to 6-lanes with median, and separated sidewalks. In other parts of Broward County, this requires 100’ right-of-way. Corridor only has 90’ right-of-way. This would be a likely physical impact. Economic: project would significant limit access to a business district. Example might be conversion of arterial to freeway, limited access to neighborhood commercial.</td>
</tr>
<tr>
<td>-1</td>
<td>Project may have disproportionate impacts (physical and/or economic) on existing residences or businesses.</td>
<td></td>
</tr>
<tr>
<td>-2</td>
<td>Project may have disproportionate impacts (physical and/or economic) on existing residences or businesses with an equity area.</td>
<td></td>
</tr>
</tbody>
</table>
Key Findings

Current weightings are not high enough to significantly influence investment decisions.

Some MPOs only apply equity criteria for some types of projects and not for others.

Most equity criteria do not clearly identify concrete benefits that projects will confer to marginalized populations.

Most criteria ignore burdens projects impose on marginalized populations.

- If so, they do not assess negative impacts.

Equity criteria weights must be higher.

Apply equity-related criteria to all project types.

Carefully analyze potential benefits of proposed projects for historically marginalized populations and specify which ones are a priority.

Evaluate burdens so that projects with potential negative effects are clearly flagged and penalized with point subtraction.

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Key Findings

Most criteria aggregate the groups they define as “disadvantaged” into one for their analyses.

Avoid aggregation of “disadvantaged” groups into one as their lived experiences and travel behavior are different, and projects will impact them differently too.

Few scoring methodologies reviewed had community participation in the development of proposed projects or in decision-making.

Consider for awarding points, at least, the extent of community support or opposition, and whether projects address needs defined by community members.
Equity-Oriented Performance Measures in Transportation Planning

By Audley Wennink and Agustina Krapp

Transportation conditions have a significant impact on community residents’ quality of life. Planners should be aware of how, where, and what types of transportation investments are being planned within their jurisdictions, because transportation is intimately connected to all facets of community planning, including land use, economic development, housing, and the environment.

Economic stability and wealth accrual are highly related to one’s ability to access employment and services via transportation. Most of America’s communities have been developed so that housing is located a significant distance from jobs, stores, and medical care, meaning that transportation needs to cover long distances and more destinations are accessible only by car. Federal and state policies have prioritized investment in auto-oriented transportation for decades.

As a result, people of color and those with lower incomes, who are less likely to own cars and may not live in areas well served by transit, experience worse transportation outcomes, often having to travel farther and experience more difficult trips to access employment and other critical needs. The National Bureau of Economic Research has shown that long commute times play a significant role in predicting residents’ upward mobility (Chery et al., 2014).

As an example, in the greater Chicago region, communities where black residents are the largest racial group experience the longest commute times. Chicago consistently ranks among America’s most segregated regions. As in many U.S. metropolitan areas, historical and ongoing systemic racism has blurred the lines between racial and economic segregation; today, Chicago’s poorest residents are disproportionately people of color living in communities of concentrated poverty.

As shown in Figure 1, of the 100 census tracts in the Chicago region with the longest commutes (shown in red), with an average of 44 minutes each way, 95 are majority black or Latino. The median income for those 95 tracts is $33,667. By comparison, 53 of the 100 tracts with the shortest commutes (shown in green), averaging only 23 minutes, are majority white. The median annual household income for those 53 tracts is over $75,000.