Social Equity & Infrastructure
What Engineers Need to Know
ACEC – Wednesday, February 6, 2019
Increasing specialization of practice, combined with new disruptions in transportation service and mobility needs (demographics, technology, modal diversity, etc).

The GAP is between the have and the have nots is at risk of getting wider.

Engineers play an important role in preventing further inequities and isolations of people from transportation services. It starts with:

1) Understanding the risks
2) Asking the right questions
3) Getting the information and data
4) Understanding the metrics to use to achieve inclusion.
Over last few decades, there has been significant progress to advance the understanding of the need to consider inclusion.

- **Policies:** Title VI, EJ, and ADA
- **Tools:** GIS, Asset Management Data bases
- **New Data and Emerging Tools:** Engage Portal, MaPIT and others to come.

**Policy, Tools and Data**
Originally an offline Environmental data viewer.

Expanded into a comprehensive project screening tool.

Other data layers were added to provide planners with a holistic vision of a project’s unique character.

MaPIT tool
How to Access MassDOT/MBTA Data Sets to better understand, plan and design projects... **GO TO**
http://massdot.maps.arcgis.com/home/index.html

That will take you to Engage and to MaPIT
http://gis.massdot.state.ma.us/engage/projectimpact/

Other Critical Data Links:
**MBTA Better Bus Project Site**
https://www.mbta.com/projects/better-bus-project

**Rail Plan and links to other Plans**
https://www.mass.gov/service-details/rail-plan

Governor’s Report on the Future of Transportation
https://www.mass.gov/orgs/commission-on-the-future-of-transportation

**MassDOT/MBTA is a RESOURCE for YOU**
Planning: Steve Woelfel at OTP
Equity: John Lozada & Greg Sobczynski at ODCR

Planning Portal at MassDOT
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Preservation</td>
<td>Projects should contribute to a state of good repair on the transportation system.</td>
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<tr>
<td>Mobility</td>
<td>Projects should provide modal options efficiently and effectively.</td>
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<tr>
<td>Cost Effectiveness</td>
<td>Projects should result in benefits commensurate with costs and should be aimed at maximizing the return on the public’s investment.</td>
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<tr>
<td>Economic Impact</td>
<td>Projects should support strategic economic growth in the Commonwealth.</td>
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<tr>
<td>Safety</td>
<td>Projects should contribute to the safety and security of people and goods in transit.</td>
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<tr>
<td>Social Equity &amp; Fairness</td>
<td>Projects should equitably distribute both benefits and burdens of investments among all communities.</td>
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<tr>
<td>Environmental &amp; Health Effects</td>
<td>Projects should maximize the potential positive health and environmental aspects of the transportation system.</td>
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<tr>
<td>Policy Support</td>
<td>Projects should get credit if they support local or regional policies or plans; or state policies not addressed through the other criteria.</td>
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**Holistic Approach is Needed To Consider Growing and Changing Needs**
## Sample Metrics to Consider

<table>
<thead>
<tr>
<th>Category</th>
<th>Sample Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Impacts</td>
<td>Priority development areas; improvements to existing labor market; workforce commuting and accessibility; freight corridors and roadways of economic significance</td>
</tr>
<tr>
<td>Social Equity</td>
<td>Environmental Justice; Title VI; air quality and GHG reduction; regional equity</td>
</tr>
<tr>
<td>Mobility</td>
<td>Effects on motor vehicle, pedestrian, bicycle and transit mobility and congestion; and connectivity</td>
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</tbody>
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