Draft “Non-Transportation” Performance Measures Including Related Qualitative Assessment of Example Sections

Phil Erickson
Community Design + Architecture

Mike Johnson
HDR Engineering

CTF Charrette Approach

• Charrette – an intensive and focused series of meetings and working sessions to advance major work items for Broadway Boulevard

• This week’s charrette is mainly a planning charrette not a heavily design-oriented charrette

• We do not plan to use small group or interactive working sessions

• We will focus on facilitated discussions and decision-making with the full CTF as a group

CTF Charrette Approach

• Tuesday night focused on discussion and refinement of
  – Draft Transportation Performance Measures
  – Draft Example Cross Section Concepts

• Wednesday and Thursday the Planning Team
  – Made revisions to the Performance Measures and Example Cross Section Concepts
  – Prepared initial assessments based on the Performance Measures

• Tonight is focused on discussion and refinement of
  – Draft Non-Transportation Performance Measures
  – Updated Transportation Performance Measures
  – Initial assessments of updated Example Cross Section Concepts

• Thursday, May 30th CTF Meeting will finalize a set of work products for Stakeholder Agency review and comment:
  – Draft Transportation and Non-Transportation Performance Measures
  – Example Cross Section Concepts
  – Initial assessment of Cross Section Concepts

Overview Performance Measures

• Tonight we will discuss potential Non-Transportation Measures organized by topic areas
  – Sense of Place
  – Environment/Public Health
  – Economic Vitality
  – Project Cost

• Later discussion of updated Transportation Measures

Broadway’s Planning & Design Phase
Assessment of Example Cross Section Concepts

- At this level of design development most assessment will be qualitative
- Impacts related to alignment cannot be fully evaluated as alignment is not included in design concepts at this point. But future width allows for some qualitative comparisons.
- We plan on assessment report out being similar to the following—

<table>
<thead>
<tr>
<th>Cross Section Concept</th>
<th>Perf. Measure 1</th>
<th>Perf. Measure 2</th>
<th>Perf. Measure 3</th>
<th>Cost Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>. . .</td>
<td>.</td>
<td>.</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>. .</td>
<td>.</td>
<td>. . .</td>
<td>$$</td>
</tr>
<tr>
<td></td>
<td>.</td>
<td>. . .</td>
<td>.</td>
<td>$$$</td>
</tr>
<tr>
<td></td>
<td>. . .</td>
<td>. .</td>
<td>.</td>
<td>$$</td>
</tr>
</tbody>
</table>

Legend
Best Performance Neutral Worst Performance Highest Cost Lowest Cost

Refined Schedule

- Assessment of Street Section Concepts not until May 30th Meeting
- June 20th CTF to include
  - Informational Presentation — BRT Update
  - Review and Endorse potential cross sections and assessments for Stakeholder Agency review
- July 25th CTF to include
  - Informational Presentations
  - Universal Design and ADA
  - Corridor Economic Development & TOD
  - Update on Stakeholder Agency review
  - Discussion of September Public Meeting format

CTF Discussion

- Initial discussion will occur for each of the 4 topic areas covering 2 performance measures (we will “bank” any additional time to return to this or other items if there is time)
- Followed by overall discussion of potential additional measures, refinements, etc.

Sense of Place

5a. Historic Resources
5b. Visual Quality
5c. Broadway as a Destination
5d. Gateway to Downtown
5e. Conduciveness to Business
5f. Walkable Community
5g. Certainty

Sense of Place

<table>
<thead>
<tr>
<th>5a. Historic Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Measurement</strong></td>
</tr>
<tr>
<td><strong>Factors</strong></td>
</tr>
<tr>
<td><strong>Ability to Effect</strong></td>
</tr>
<tr>
<td><strong>Ability to Evaluate</strong></td>
</tr>
</tbody>
</table>
### Ability Factors

<table>
<thead>
<tr>
<th>Description</th>
<th>Measurement</th>
<th>Factors</th>
<th>Ability to Effect</th>
<th>Ability to Evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability of the roadway design to enhance visual quality using a mix of features</td>
<td>Qualitative assessment,(project team and input from CTF)</td>
<td>Design of median and streetside landscaping</td>
<td>High</td>
<td>Moderate at current level of design</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number and location of placemaking features (including public art, wayfinding, lighting, furniture, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Width of roadside areas for streetscape elements and landscaping</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Sense of Place

#### 5b. Visual Quality

<table>
<thead>
<tr>
<th>Description</th>
<th>Measurement</th>
<th>Factors</th>
<th>Ability to Effect</th>
<th>Ability to Evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual quality, ease of mobility, and similar features that improve connection to downtown</td>
<td>Qualitative evaluation</td>
<td>To be determined through discussions with CTF</td>
<td>Moderate</td>
<td>Low to Moderate at current level of design</td>
</tr>
</tbody>
</table>

#### 5c. Broadway as a Destination

<table>
<thead>
<tr>
<th>Description</th>
<th>Measurement</th>
<th>Factors</th>
<th>Ability to Effect</th>
<th>Ability to Evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote development and civic spaces that would be attractive to users from surrounding neighborhoods, the city, and the region</td>
<td>Qualitative evaluation</td>
<td>Factors related to 5b Visual Quality</td>
<td>Moderate</td>
<td>Low for current level of design and planning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coordinate facade improvement, parking management, and other programs and improvements</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Land use regulations supporting development sought</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 5d. Gateway to Downtown

<table>
<thead>
<tr>
<th>Description</th>
<th>Measurement</th>
<th>Factors</th>
<th>Ability to Effect</th>
<th>Ability to Evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sense of Place</td>
<td>Qualitative evaluation</td>
<td>To be determined through discussions with CTF</td>
<td>Moderate</td>
<td></td>
</tr>
</tbody>
</table>

#### 5e. Conduciveness to Business

<table>
<thead>
<tr>
<th>Description</th>
<th>Measurement</th>
<th>Factors</th>
<th>Ability to Effect</th>
<th>Ability to Evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td>The type and size of businesses that would be drawn to the corridor under various development approaches</td>
<td>Qualitative evaluation</td>
<td>To be determined through discussions with CTF and professional experience</td>
<td>Moderate</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Site access and parking location</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Building size and design accommodated</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other TBD</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 5f. Walkable Community

<table>
<thead>
<tr>
<th>Description</th>
<th>Measurement</th>
<th>Factors</th>
<th>Ability to Effect</th>
<th>Ability to Evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td>How well the improvements and land use plan place businesses within walking distance for a viable number of residences</td>
<td>Qualitative evaluation</td>
<td>See measures under &quot;1. Pedestrian Access and Mobility&quot;</td>
<td>Varies</td>
<td>Varies</td>
</tr>
</tbody>
</table>

#### 5g. Certainty

<table>
<thead>
<tr>
<th>Description</th>
<th>Measurement</th>
<th>Factors</th>
<th>Ability to Effect</th>
<th>Ability to Evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modicate to High at current level of design</td>
<td>Qualitative evaluation</td>
<td>Capacity projections</td>
<td>Moderate to High</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Riderhip projections (bus transit, BRT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flexibility to meet changing transportation needs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Sense of Place

#### 5a. Functionality

- 1a: Functionality of Streets for Pedestrian Activity
- 1b: Functionality of Streets for Bicycle Mobility
- 1c: Functional Design
- 1d: Bike Facility Improvements
- 1e: Accommodation of Future High-Capacity Transit
- 1f: Movement of Through Traffic
- 2f: Pedestrian Trips
### Environment/Public Health

**6a. Greenhouse Gases**
- Description: Corridor design features that can reduce CO₂ emissions
- Measurement: Quantitative analysis
- Factors:
  - Proportion alternative modes of transportation
  - Level of congestion
  - Quality of vehicle fleet, fuel, etc.
- Ability to Effect: Moderate
- Ability to Evaluate:
  - Not at current level of design
  - Some factors ultimately not affected by this project

**6b. Other Tailpipe Emissions**
- Description: Identification and reduction of other important tailpipe emissions, such as particulates
- Measurement: Quantitative evaluation
- Factors:
  - Proportion alternative modes of transportation
  - Level of congestion
  - Quality of vehicle fleet, fuel, etc.
- Ability to Effect: Moderate
- Ability to Evaluate:
  - Not at current level of design
  - Some factors ultimately not affected by this project

**6c. Heat Island**
- Description: Determine comparative heat island effect of various alternatives
- Measurement: Qualitative and quantitative evaluation
- Factors:
  - Reduce roadway and sidewalk pavement contribution to heat gain through a combination of shade, solar reflectivity (high albedo) of materials, and area of pavement
  - Increase landscaped area
  - Increase amount of shade
- Ability to Effect: High
- Ability to Evaluate:
  - Moderate at current level of design (amount of landscaped area & number of trees)
  - High with more detailed design and selection of building materials

**6d. Water Harvesting**
- Description: Retain rainfall onsite to benefit project landscaping
- Measurement: TDOT Active Practice Guideline “Green Streets” [draft]
- Factors:
  - Width and depth of median and streetside areas
  - Amount of reduction in runoff on paved areas
  - Types of materials used (pervious pavement)
- Ability to Effect: High
- Ability to Evaluate:
  - Moderate at current level of design
  - High as design is developed further

**6e. Walkability/Bikability**
- Description: Design elements that will encourage biking and walking over driving
- Factors:
  - Number of bike and pedestrian facilities and features
  - Continuity of treatments
  - Comfort and security features
- Ability to Effect: High to Moderate depending on performance measure
- Ability to Evaluate:
  - High to not viable at current level of design depending on performance measure
  - High to Low depending on performance measure

**6f. Land Use Mix**
- Description: Identify and amount of quantitative and qualitative evaluation
- Factors:
  - Proportion alternative modes of transportation
  - Level of congestion
  - Quality of vehicle fleet, fuel, etc.
- Ability to Effect: Moderate
- Ability to Evaluate:
  - Not at current level of design
  - Some factors ultimately not affected by this project

**6g. Affordability**
- Description: Identify and amount of quantitative and qualitative evaluation
- Factors:
  - Proportion alternative modes of transportation
  - Level of congestion
  - Quality of vehicle fleet, fuel, etc.
- Ability to Effect: Moderate
- Ability to Evaluate:
  - Not at current level of design
  - Some factors ultimately not affected by this project
### Economic Vitality

**7a.-7b. Change in Economic Potential**

**7c.-7d. Change in Business Revenue**

**7e.-7f. Change in Sales Tax Revenue**

**7g.-7h. Change in Property Tax Revenue**

**7i. Business Impacts**

**7j. Job Impacts**

### Ability to Effect

- Low to indirect

### Ability to Evaluate

- Not at current level of design
- Moderate as design is developed in more detail (i.e., alignment) and policy issues are discussed

### Ability to Effect

- Moderate

### Ability to Evaluate

- Not at current level of design and planning

### Environment/Public Health

**6f. Land Use Mix**

**Description**

- Ability to accommodate mixed use development within walking and biking distance of the Broadway corridor, and to support transit ridership

**Measurement**

- Qualitative analysis

**Factors**

- Support of mixed use by current/future zoning
- Determine if, and what type of policy and procedural changes are needed
- Court and size of parcels conducive to accommodate desired land use mix

**Ability to Effect**

- Low to indirect

**Ability to Evaluate**

- Not at current level of design
- Moderate as design is developed in more detail (i.e., alignment) and policy issues are discussed

---

### Economic Vitality

**7a.-7b. Change in Economic Potential**

**7c.-7d. Change in Business Revenue**

**7e.-7f. Change in Sales Tax Revenue**

**7g.-7h. Change in Property Tax Revenue**

**7i. Business Impacts**

**7j. Job Impacts**

### Ability to Effect

- Moderate

### Ability to Evaluate

- Not at current level of design and planning (cross section width is an indicator; but in some cases remnant parcels may have more economic potential than existing parcels)
### Economic Vitality

#### 7g. – 7h. Change in Property Tax Revenue

<table>
<thead>
<tr>
<th>Description</th>
<th>Measurement</th>
<th>Factors</th>
<th>Ability to Effect</th>
<th>Ability to Evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Amount of current and anticipated future property tax generated from the properties along the corridor</td>
<td>• County Assessor data</td>
<td>• New land use policy and strategic planning for the disposition of remnant parcels (not part of current project scope of work)</td>
<td>• To be determined</td>
<td>• Not at current level of design and planning (see 7a-7b Change in Economic Potential)</td>
</tr>
</tbody>
</table>

#### 7i. Business Impacts

<table>
<thead>
<tr>
<th>Description</th>
<th>Measurement</th>
<th>Factors</th>
<th>Ability to Effect</th>
<th>Ability to Evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The absolute number and size in terms of annual revenue</td>
<td>• Quantitative assessment based on InfoUSA data and alignment impact evaluation</td>
<td>• Limit impacts to businesses/properties to one side of roadway at any particular location</td>
<td>• To be determined</td>
<td>• Not at current level of design and planning (see 7a-7b Change in Economic Potential)</td>
</tr>
</tbody>
</table>

### Economic Vitality

#### 7j. Job Impacts

<table>
<thead>
<tr>
<th>Description</th>
<th>Measurement</th>
<th>Factors</th>
<th>Ability to Effect</th>
<th>Ability to Evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Potential change in number of jobs</td>
<td>• Estimate of current and potential future employment in project area (may be challenging to track given business relocations and/or job creation under various alternatives)</td>
<td>• To be determined</td>
<td>• To be determined</td>
<td>• Not at current level of design and planning (see 7a-7b Change in Economic Potential)</td>
</tr>
</tbody>
</table>

### Project Cost

#### 8a. Construction Cost

<table>
<thead>
<tr>
<th>Description</th>
<th>Measurement</th>
<th>Factors</th>
<th>Ability to Effect</th>
<th>Ability to Evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Cost of construction</td>
<td>• Approximate quantity takeoffs of major cost items (pavement, curb)</td>
<td>• Width of roadway cross-section</td>
<td>• High (ROW acquisition is also a significant cost)</td>
<td>• Moderate at current level of design (estimates made based on cross sections)</td>
</tr>
</tbody>
</table>

#### 8b. Acquisition Cost

<table>
<thead>
<tr>
<th>Description</th>
<th>Measurement</th>
<th>Factors</th>
<th>Ability to Effect</th>
<th>Ability to Evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Cost to acquire needed ROW, including the cost of the property, relocation, and other qualified costs</td>
<td>• Federal and State relocation requirements</td>
<td>• Number and size of property acquisitions</td>
<td>• High</td>
<td>• Low at current level of design and planning (estimates made based on cross sections)</td>
</tr>
</tbody>
</table>

#### 8c. Income for Reuse of City-owned Property

<table>
<thead>
<tr>
<th>Description</th>
<th>Measurement</th>
<th>Factors</th>
<th>Ability to Effect</th>
<th>Ability to Evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Value of property after improvements, including the cost of the property, relocation, and other qualified costs</td>
<td>• Current level of design and planning (estimates made based on cross sections)</td>
<td>• High</td>
<td>• Moderate as intersections and other design elements are established, and impacts and ability to maintain use of properties can be estimated</td>
<td></td>
</tr>
</tbody>
</table>
### Project Cost

<table>
<thead>
<tr>
<th>8c. Income for Reuse of City-Owned Parcels</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Measurement</strong></td>
</tr>
<tr>
<td><strong>Factors</strong></td>
</tr>
<tr>
<td><strong>Ability to Effect</strong></td>
</tr>
</tbody>
</table>
| **Ability to Evaluate**                 | • Not at current level of design and planning  
                                | • Moderate at future point in design and planning  
                                | • See 7a-7b Change in Economic Potential |