The Kansas City Region’s
Long Range Transportation Plan

Conference on Transportation Performance Measures for
Transportation and Livable Communities
9/08/11   Tom Gerend
OUTLINE

1. Transportation Outlook 2040
   Development Process & Plan Structure
2. Performance Measurement Element
3. Implementation and Feedback
PLAN OVERVIEW

- Developed over 2-year period, adopted June, 2010
- Extensive Public Input
- Segmented Approval Process*
  - Policy Framework
  - Financial Assumptions and Evaluation Framework
  - Projects & Measures
POLICY FRAMEWORK

- Policy Framework Components
  - Regional Vision Statement
  - Regional Policy Goals

- Served as structure/foundation for:
  - Plan’s Content Development
  - Project Evaluation and Prioritization
  - Identification of Performance Measures
2040 POLICY GOALS

- System Performance
- System Condition
- Safety and Security
- Vital Economy
- Accessibility

- Place-making*
- Healthy Living*
- Climate Change and Energy Use*
- Environment*

* New Plan Goals
SYSTEM PERFORMANCE

Manage the system to achieve reliable and efficient performance.
ACCESSIBILITY

Maximize mobility and access to opportunities for all area residents.
PUBLIC HEALTH

Facilitate healthy, active living.

PHOTO BY
KENNETH WALKER
CLIMATE CHANGE & ENERGY USE
Decrease use of fossil fuels through reduced travel demand, technology advancements, and transition to renewable energy.
PERFORMANCE MEASUREMENT ELEMENT

- Used policy goals as outline for measurement report
- Solicited feedback on potential measures to help define measures and track progress
- Screened all available existing data sources for 1) reliable and 2) continuous sources
# Measuring Progress

<table>
<thead>
<tr>
<th>Category</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility</td>
<td>Level of Transit Service - Revenue Service Hours, Ridership</td>
</tr>
<tr>
<td>Environmental Justice</td>
<td>Percent of transportation investments in EJ tracts</td>
</tr>
<tr>
<td>Economic Vitality</td>
<td>Transportation Costs - Combined transportation and housing costs as a % of median income</td>
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<tr>
<td>Climate Change/Energy Use</td>
<td>Vehicle Miles Traveled / CO₂ - System wide daily VMT/CO₂ Emissions</td>
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<td></td>
<td>Vehicle Occupancy - Vehicle occupancy rate</td>
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<tr>
<td>Environment</td>
<td>MetroGreen Network - Percent/Miles of MetroGreen Network Completed</td>
</tr>
<tr>
<td>Place Making</td>
<td>Multi-Modal Options - Modal Balance (mode-share)</td>
</tr>
<tr>
<td>Public Health</td>
<td>Ozone - Ozone Levels</td>
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<tr>
<td></td>
<td>Physical Health - Obesity Rate</td>
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<tr>
<td>Safety and Security</td>
<td>Crash Fatality and Injury Rate - Annual crash fatalities and disabling injuries</td>
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<tr>
<td>System Condition</td>
<td>Bridge &amp; Pavement Condition - Pavement Condition, Bridge Condition</td>
</tr>
<tr>
<td>System Performance</td>
<td>Level of Service - Observed speed vs. posted speed on CMS Network</td>
</tr>
<tr>
<td></td>
<td>Congestion - Percent of CMS Network Congestion</td>
</tr>
<tr>
<td></td>
<td>Travel Time - Average Commute Time</td>
</tr>
<tr>
<td></td>
<td>On-Time Performance - On-Time Performance of Transit System</td>
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## Transit Ridership & Vehicle Revenue Hours

![Transit Ridership & Vehicle Revenue Hours](chart.png)
Accessibility: Level of Transit Service

Ridership and Vehicle Revenue Hours

Source: National Transit Database – Annual Transit Profiles
Climate Change/Energy Use:
Vehicle Miles Traveled

Daily Vehicle Miles Traveled

Source: Federal Highway Administration – Highway Statistics
Environment: MetroGreen® Network

Portion of MetroGreen® Network Completed

Source: MARC Environmental Services Department
Placemaking: Multimodal Options

Balance between Modes of Transportation

Source: American Community Survey – 1-Year Estimates
IMPLEMENTATION AND FEEDBACK

- Used policy framework and related performance measures to serve as project evaluation and prioritization tool (STP, CMAQ, TE)
- Developed Annual Performance Measurement Report to track regular progress, report to policy makers, and serve as feedback loop for Plan objectives and strategies
2011 Progress Report

Annual check-up on meaningful progress towards reaching the region’s transportation goals

- Accessibility
- Economic Vitality
- Climate Change/Energy Use
- Environment
- Place Making
- Public Health
- Safety & Security
- System Condition
- System Performance
## Accessibility: Level of Transit Service

### Percent of Population within ½ Mile of Fixed Route Transit Service

<table>
<thead>
<tr>
<th></th>
<th>2000 Census*</th>
<th>% Within ½ Mile of Transit Routes</th>
<th>% Within ½ Mile of Transit Stops</th>
<th>2010 Census*</th>
<th>% Within ½ Mile of Transit Routes</th>
<th>% Within ½ Mile of Transit Stops</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Population</strong></td>
<td>1,724,051</td>
<td>56%</td>
<td>43%</td>
<td>1,862,808</td>
<td>51%</td>
<td>37%</td>
</tr>
<tr>
<td><strong>Total Housing Units</strong></td>
<td>719,277</td>
<td>60%</td>
<td>47%</td>
<td>807,291</td>
<td>56%</td>
<td>42%</td>
</tr>
<tr>
<td><strong>Total Households</strong></td>
<td>674,725</td>
<td>59%</td>
<td>46%</td>
<td>733,002</td>
<td>55%</td>
<td>40%</td>
</tr>
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Source: US Census Bureau – 2000 and 2010 Census Data
WHAT OUR REPORT SAYS

- Majority of measures are trending in the preferred direction
- Challenge areas related to accessibility and growth & development where expected:
  - HUD Sustainable Communities
  - TIGER, Transit AA Studies, etc.
- Intended to help inform discussion regarding strategies and priorities
- Full report is available: www.marc.org/2040
LESSON LEARNED

- This is new territory. Surprise, we have data gaps!
- Local versus regional sensitivity
- Targets versus no targets (?)
- Solidify your foundation
THANK YOU

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