I-35
Integrated Corridor Management
KDOT + MARC
Welcome

Ron Achelpohl, MARC, Director of Transportation and Environment
KDOT’s Support
Mike Floberg,
KDOT, Bureau Chief,
Traffic Safety and Technology
KC Scout

Randy Johnson,
Traffic Mgmt Center Manager
## Why I-35?

Jim Hubbell, MARC, Transportation Planner

### Figure 7.5: Potential ICM corridors

<table>
<thead>
<tr>
<th>Route</th>
<th>Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-70</td>
<td>Downtown to I-470</td>
</tr>
<tr>
<td>I-35</td>
<td>Edgerton to 7th Street</td>
</tr>
<tr>
<td>I-435 / I-470</td>
<td>K-10 to US-50</td>
</tr>
</tbody>
</table>

A newer strategy puts all of these elements together to manage corridors rather than larger, more individualized networks. Through Integrated Corridor Management (ICM), various partner agencies manage the transportation corridor as a system rather than the more traditional approach of managing individual assets. System partners manage the corridor as an integrated asset to improve travel time reliability and predictability, help manage congestion and empower travelers with better information and more choices. Metropolitan
On-going I-35

- I-35 Optimization
- 5-County Study
- TSMO & KS ITS Program
- KCATA – Bridj
ICM Refresh

- Multi-modal
- Pro-active
- Max use of existing capacity
- System-wide perspective

- Reduce congestion
- Efficient flow
- Cooperation

Discussion
• Investigate forming an ad-hoc subcommittee under the MARC banner to look at the institutional processes and track progress for an ICM program. OGL cities would need to consider adding parallel arterials to an ICM, noted as new thinking for the OGL program. OGL recently revised its strategic plan so this would need to be revisited to consider goals from an ICM perspective.

• MARC fully supported, as did workshop participants, the need to continue investigating ICM for the Kansas City Region. Kansas noted an interest in the I-35 corridor, and several other potential corridors were brought forward.
What it means to I-35

- Consider Corridor as one system
- Each organization is part of system
- Within existing plans
  - Use technology
  - Agree on coordinated response plans

Source: I-35 Moving Forward
Finding Alternatives

SB I-35 BETWEEN 20TH STREET AND 23RD STREET TFWY

Source: Operation Green Light
Previous Studies Identified Needs

- Transportation Outlook 2040, 5-County Study, I-35 Moving Forward studies agree on needs:
  - Coordination between:
    - Disciplines
    - Agencies & governments
  - Prepare for major change in transportation behavior
  - Create a framework to ensure a sustainable & equitable future for the corridor
Evaluate Solutions with Use Cases

- Determine Appropriate Use Cases with:
  - Demographics
  - Trip Purposes
  - User Needs
  - Future Land Use Planning

Source: MARC Transportation Outlook 2040
Evaluate Solutions with Use Cases

- Future Land Use Planning:
  - Future demographic shifts?
  - New O–D Pairs?
  - New Trip Purposes?

Source: MARC Transportation Outlook 2040
Evaluate Solutions with Use Cases

- Greatest Transit Needs Identified
- Many areas with transit needs along I–35 Corridor

Source: MARC Transportation Outlook 2040
Potential Use Cases

- Person traveling from Olathe to downtown Kansas City, MO for work
- Person traveling from downtown Kansas City, KS to College Blvd Corridor for work
- Person traveling from 75th & Antioch area to BNSF Intermodal Center for work
- Person driving commercial truck from BNSF Intermodal Center to Armourdale
Scope of this project

- Planning doc
- Use Cases
- Build on existing plans

- Create supportive case for funding
  - Federal grants
  - Smart Cities (?)
# ICM Capability Maturity Model

## ICM CMM Model

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Level 5</th>
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<tbody>
<tr>
<td><strong>Silo</strong></td>
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<td><strong>Multimodal Optimized</strong></td>
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<td><strong>Inter-agency Cooperation</strong></td>
<td>Agencies do not coordinate their operations</td>
<td>Some agencies share data, but operate their networks independently</td>
<td>Agencies share data, and some cooperative responses are done</td>
<td>Agencies share data, and implement multimodal incident response plans</td>
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<td><strong>Funding</strong></td>
<td>Single Agency</td>
<td>MPO tracks funding</td>
<td>Coordinated funding through MPO</td>
<td>Cooperatively fund deployment projects</td>
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<td><strong>Traveler Information</strong></td>
<td>Static information on corridor travel modes</td>
<td>Static trip planning with limited real-time alerts</td>
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<td>Location-based, on-journey multimodal information</td>
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<td><strong>Data Fusion</strong></td>
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<td>Some ad-hoc performance measure based on historic data</td>
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<td>Tool selection of pre-agreed plans</td>
<td>Model based selection of pre-agreed plans</td>
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## Institutional

### Inter-agency Cooperation
- **Level 1 (Silo)**
  - Agencies do not coordinate their operations
- **Level 2 (Centralized)**
  - Some agencies share data, but operate their networks independently
- **Level 3 (Partially Integrated)**
  - Agencies share data, and some cooperative responses are done
- **Level 4 (Multimodal Integrated)**
  - Agencies share data, and implement multimodal incident response plans
- **Level 5 (Multimodal Optimized)**
  - Operations are centralized for the corridor with personnel operating the corridor cooperatively

### Funding
- **Level 1 (Silo)**
  - Single Agency
- **Level 2 (Centralized)**
  - MPO tracks funding
- **Level 3 (Partially Integrated)**
  - Coordinated funding through MPO
- **Level 4 (Multimodal Integrated)**
  - Coordinatively fund deployment projects
- **Level 5 (Multimodal Optimized)**
  - Coordinatively fund deployment and operations and maintenance of projects
## Technical Integration

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Operational

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Homework

- Self assessment of ICM CM
- Be honest
- Not to be publicized
- Can use for internal focus
- Will be rolled up into I-35 specific assessment

Regional Goal:
Advance ICM CMM

Complete self assessment – return to David Church
Church@PBWorld.com
By May 13, 2016
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**ICM CMM Model**

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**Organizational Self-Assessment**

Input to the I-35 Corridor Assessment.

Mark an “X” in the box that reflects your organizational perspective on the factors described below. Consider your organization in relation to others in the region. Mark an “O” in the box you think we can achieve in 5 years.

Include a short (1-2 sentence) justification for selection.

Return Assessment to David Church (Church@PRWorld.com) by May 13, 2016