Access Management and NEPA

MoDOT’s Experience with the I-70 Second Tier Studies

TRB Access Management Conference
August 31, 2004
AGENDA

- I-70 Decision Making
  - First Tier Study
  - Second Tier Studies

- MoDOT's Access Management Guidelines

- Access Management and NEPA
  - Purpose and Need
  - Public Involvement
  - Alternatives Development
  - Alternatives Evaluation
Overview

- Nation’s First Interstate – Built in the 1950s and 1960s
- 200 Miles (Kansas City to St. Louis)
- 130 Bridges
- 53 Interchanges
First Tier Study (2000 - 2002)

- Define problems
- Develop and evaluate corridor-wide improvement strategies
- Identify preferred strategy
- Identify short-term improvements
- Define next steps
Cross Section of I-70 Today

Characteristics of a typical section of rural I-70:

- Four lanes of pavement
- Narrow shoulders and median
- Poor pavement conditions
Preferred Strategy: Widen and Reconstruct I-70

Characteristics of a typical rural section of a widened I-70:

- Six lanes of pavement
- Wide shoulders and median
- Ability to add lanes in the future
- Future transportation corridor
Second Tier Studies (2002 – present)

- Seven separate studies
Second Tier Studies

- Apply preferred strategy on local level

- Types of decisions
  - Widen to the north or south
  - Interchange improvements

- Environmental documentation

- Local issues and involvement
MoDOT Guidelines (1999)

- As second tier studies began, MoDOT finalized access management guidelines to:
  - Improve roadway safety
  - Improve traffic operations
  - Protect taxpayers’ investment
  - Create better conditions for non-automobile modes
MoDOT Guidelines

- Guidelines apply to:
  - Long-range planning
  - Project planning and design
  - Right of way acquisition
  - Redesign of existing highway corridors
  - Driveway permitting

- Guidelines encourage statewide uniformity and establish clear access requirements
Impact on I-70

- Guidelines for intersections and interchanges include:
  - Interchange spacing
  - Clearance of functional areas for interchanges
  - Spacing for public road intersections
  - Spacing of traffic signals
# Impact on I-70

## Interchange Clearance

<table>
<thead>
<tr>
<th>Distance</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>To first R in R out (X)</td>
<td>750 ft.</td>
<td>1320 ft.</td>
</tr>
<tr>
<td>To first major intersection or left turn (Y)</td>
<td>1320 ft.</td>
<td>1320 ft.</td>
</tr>
<tr>
<td>From last R in R out to On-Ramp (Z)</td>
<td>750 ft.</td>
<td>1320 ft.</td>
</tr>
</tbody>
</table>
Typical I-70 Interchange
Impact to I-70

No Access
Right In/Right Out Only
Reasonable Application

Challenge: How to apply MoDOT’s new access management guidelines in a developed interstate corridor?

- Case-by-case analysis of each interchange
- Apply guidelines “by the book” where possible
- Make adjustments within reason and consistently with other areas of the corridor
- Integrate access management considerations throughout NEPA process
Access Management and NEPA

- Second tier studies must satisfy requirements of the National Environmental Policy Act
- Decisions about improvements must consider:
  - Engineering / Traffic
  - Environment
  - Social and Economic Conditions
  - Public Input
Access Management and NEPA

- Second tier studies would incorporate access management throughout NEPA process
  - Purpose and Need
  - Public Outreach and Education
  - Alternatives Development
  - Alternatives Evaluation
Purpose and Need

- Defines the problems to be addressed by the proposed action
- Access management incorporated in this phase through I-70 technical team workshop
  - Two-day event
  - Featured Virgil Stover on AM basics
  - MoDOT personnel explained new guidelines
  - Ensured all team members would take consistent approach in applying MoDOT guidelines
Public Outreach and Education

- Helped public understand access management and why it’s important BEFORE alternatives development
- Video
  - Shown at initial public meetings
  - Available by request
- Web Site
  - Information about access management
  - Video clips
After initial educational push, used small group and committee meetings to work through AM details

- Met regularly with area business owners and other stakeholders
- Used simulations
- Facilitated discussions
- Collaborative decision making
SHOW VIDEO
Alternatives Development

- Each interchange must be rebuilt to accommodate a wider I-70
- Interchange locations unchanged
- No new interchanges
- Develop range of improvement alternatives
- At least one alternative to apply MoDOT’s access management guidelines “by the book”
Partial Implementation
Constrained Implementation
Bypass Implementation
Next three slides are Foristell. Jerry/Kathy need to determine which two to eliminate before presentation.
Partial/ Constrained/ Bypass Implementation
Partial/ Constrained/ Bypass Implementation
Partial/ Constrained/ Bypass Implementation
Alternatives Evaluation

- Methodology
  - Integrated into NEPA evaluation
  - Measurable
  - Appropriate level of detail

- Evaluation Factors
  - Land use
  - Displacements
  - Business Access
  - Floodplains and Wetlands
  - Cultural Resources
  - Public Lands
  - Noise Impacts
  - Construction Cost ($)
Access Management + NEPA = Balancing Act
QUESTIONS
&
ANSWERS