The way we were…
Where we have been...
Where we have gone
The Pieces of the Puzzle

Meeting the Challenges
Making the Right Investments
Embracing A New Approach
(Smart Transportation and Right-Sizing)
Learning From Others
Right-Sizing

Our Approach
Right-Sizing

• A “best fit” transportation program or project (all modes) that meets transportation needs and considers:

  • community and regional goals
  • quality of life
  • economic development initiatives
  • fiscal constraint
  • social/environmental issues
“Efficient and Effective Use of Resources”

- System Preservation
- Statewide and Regional Transportation Priorities
- Fiscal Responsibility
March 2004 - 26 projects identified

- Fiscal Challenges
  - 14 projects deferred  $2 Billion
  - 12 projects reevaluated  $3 Billion

- Reevaluations Underway

- Savings Directed to System Preservation
Planning Process (23 CFR 450)

• Ideally, projects would be sized correctly through the comprehensive planning process

• Later scope changes need to be consistent with Plan/TIP, or formally amended.
Interstate 79 Missing Ramps

Total project savings: $9.3 million
Books Covered Bridge

- Covered Bridge in Perry County
- Rehabilitated covered bridge versus replacement
- Cost savings $1,092,000

Rehab existing structure versus replacement
Mortonville Bridge
A New Approach
US 202 Section 700 – Montgomeryville to Doylestown
Four-lane Freeway
Routes 23 and 41
Route 23 – Lancaster County
Right-Sizing

A National and International Effort
1) Best value for every dollar spent.
2) Innovative transportation solutions.
3) Safe transportation system.
4) Fast projects that are of great value.
• Route 54 in Camden County will be realigned around Osage Beach.

• Original scope: four lanes, divided highway, retaining walls.
• Revised scope: narrower median widths, concrete barriers
• Minimized grading and right of way costs.

• Original estimate: $136.5 million
• Redesign: $ 99.0 million
• Savings: $ 37.5 million
Route I-64, St. Louis
Redevelopment project

Original Estimate
$8.2 million

Redesign $6.1 million

Savings $2.1 million
Linking Land Use & Transportation

Executive Seminar
Transportation and Land Use
State of the Practice

New Jersey, Tennessee, California, Michigan, Pennsylvania
10-county region surrounding Nashville

“QUALITY GROWTH”
A Comparison of the Two Scenarios:

<table>
<thead>
<tr>
<th></th>
<th>BASE CASE</th>
<th>ALTERNATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land we will consume:</td>
<td>365,000 acres</td>
<td>91,000 acres</td>
</tr>
<tr>
<td>Infrastructure costs:</td>
<td>$6,957,085,995</td>
<td>$3,406,798,045</td>
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<tr>
<td>New road miles:</td>
<td>4,544 miles</td>
<td>2,225 miles</td>
</tr>
<tr>
<td>Acres of new impervious surface:</td>
<td>62,444 acres</td>
<td>35,033 acres</td>
</tr>
<tr>
<td>Vehicle Miles Traveled per day:</td>
<td>39 miles</td>
<td>35.9 miles</td>
</tr>
</tbody>
</table>

Alternative scenario saves tax dollars AND land.
The Michigan Land Use Leadership Council - Recommendations

- Main Street Program - management assistance for downtowns
- Cool Cities Program - catalyst grants to attract the “creative class”
- Tax-increment Financing and Downtown Development Authorities
- Joint planning commissions, distributing land uses between cities
Michigan Transportation Recommendations

Provide a Wide Variety of Transportation Choices.

Strengthen and direct development toward existing Communities.

• Fix-It First
• Asset Management
• Divisive debate over suburban interchanges
China Experience
China Statistics

- 1.3 billion population
  - 800 million rural ($400/year income)
  - 400 million urban ($1,000/year income)
- 9% economic growth (GDP) rate for 25 years
- Accounted for 45% of world-wide cement demand in 2004
- Contains 9 of 10 worst air-polluted cities in world
Roadway Safety

- 8 million bicycles
- 2.4 million vehicles
- 64% increase in auto registrations in 2004
- 100,000 annual fatalities (vs. 47,000 in U.S.)
Shanghai Development

- 20% of world’s construction cranes in China
  (half are in Shanghai)
- 3500 office skyscrapers built in last 10 years
- 2000 high-rise apartments & office buildings under construction
Shanghai Open Space

- Now 15%
- Goal 35%
Shanghai Transportation

- Freeways - three ring roads/twelve radials:
  - 660 km by end of 2005
  - 853 km by end of 2010
- Public Transportation
- Pudong Airport
- Port of Shanghai
- Rail Freight System
- High Speed Maglev (“toy” or real component?)
Right-Sizing

Advancing The Practice
Right-Sizing Pro-Teams

- Right Scope
- Right Cost
- Right Schedule
Context Sensitive Solutions

Pennsylvania's Guide to Context Sensitive Solutions

"Balancing safety and mobility while preserving scenic, aesthetic, historic, environmentally sensitive areas, the community, and community valued resources."
Context Sensitive Solutions

- FHWA Flexibility in Highway Design
- AASHTO Guide for Achieving Flexibility in Highway Design
- International Symposium on Geometric Design
- TRB Seminar on Land Use and Transportation
- 2006 CSS Conferences
  - AASHTO/FHWA
  - ASCE
Strong Partnerships Needed

- Local Leadership
- PA Planners
- Counties
- Municipalities
Our Goal: Affordable and Quality Transportation That Serves Everyone