Minnesota TH 38
Edge of the Wilderness National Scenic Byway

2005 AASHTO Best Practices in CSS Award Winner
Minnesota TH 38

- **Context**
  - 47 mile, substandard and deteriorated 2-lane minor arterial mainly serving four communities (Grand Rapids, Marcell, Bigfork and Effie)
  - ADT of 370 (north end) to 4500 (south end) with 8% commercial trucking
  - Northwood's experience with lakes, rivers, wetlands and over 22 miles of TH 38 within the Chippewa National Forest
Minnesota TH 38

• **Context** (continued)
  – Great recreation and travel experience … essential as a commuter route … critical for moving forest products
  – Designated a State Scenic Byway (1994) and a National Scenic Byway (1996)
  – Reconstruction issues … safety, efficiency, economics, and the valued intrinsic qualities of the people, place and byway
Minnesota TH 38 Location
Minnesota TH 38 Location
TH 38 Reconstruction & Management Strategies

- Use public and stakeholder involvement to define problems, needs, vision, and opportunities
- Form multidisciplinary and interagency teams (23 NEPA-aligned teams) focused on social, economic, and environmental resource inventories, analysis, and recommendations
TH 38 Reconstruction & Management Strategies

- Partner with the stakeholders to co-create plans and opportunities
- Develop a Corridor Management Plan to coordinate and guide the development and management activities of responsible agencies, governments & partners
Minnesota TH 38

- **Status** (continued)
  - The stakeholder developed Corridor Management Plan articulated a Vision, prioritized schedules and budgets, and implementation strategies for 39 improvement projects at an estimated cost of over $25 million … more than half of these projects have been funded and constructed 10 years in advance of any anticipated reconstruction funding.
Minnesota TH 38

- **Status** (continued)
  - Road & bridge reconstruction projects and related facilities (11 projects @ $23 million+)
  - Trail projects (4 projects @ $900,000)
  - Interpretive projects (7 projects @ $250,000)
  - Recreation projects (9 projects @ $500,000)
  - Signing projects (6 projects @ $140,000)
  - Vegetation Management Plan (@ $5,000)
  - Wildlife enhancement (1 project @ $5,000)
Minnesota TH 38

- What makes this a CSS approach?
  - Planning and reconstruction processes and outcomes demonstrate all 15 CSS Principles
  - Safety & mobility was improved along with preservation & enhancement of community and environmental assets
  - Early and continuing multi-disciplinary, stakeholder, and public involvement
  - Flexibility in design to achieve multiple objectives and balanced solutions that mattered most to the collective stakeholders
• What makes this a CSS approach?
  – Efficient and effective use of resources (time, budget, community)
  – Stakeholder partnering and collaboration to accomplish more without excessive cost
  – Integration of community values to minimize disruptions and adverse impacts
  – Measures of success in meeting CSS goals
Stakeholder Involvement

Stakeholder Involvement

• 3-Tier Approach
  – Monthly ad hoc public forums
  – Interagency resource teams & collaboration
  – Formal public meetings and hearings
Project Vision

Transportation-Community-Environmental Needs

• Project Vision (expressed as goals)
  – Improve roadway safety and efficiency
  – Provide a year-round 10-ton road
  – Enhance experiences for all users
  – Increase economic development, tourism and access to recreation
  – Conserve valued intrinsic resources (natural, cultural, historic, scenic, recreational)
Project Vision

Transportation-Community-Environmental Needs

• Project Vision (expressed as goals)
  – Market, promote and interpret unique attributes and opportunities
  – Facilitate ongoing public involvement in planning, implementation and management
  – Develop a sense of “joint ownership” among all stakeholders
TH 38 Early Design Study

- 60 to 70 mph design speed with standard straightening, leveling, passing lanes and paved shoulders
- The adverse impacts were unacceptable ... re-grading 90% of the roadway ... up to 85% on new alignment ... massive vegetation clearing and 20 ft plus vertical cuts & fills
TH 38 Flexibility in Design

- Accidents occurred at problem spots and intersections or under specific situations (animal crossings, bad weather, etc.)
- Upgrading geometrics on the entire roadway was not the main problem or a sure safety solution

We don’t need to get to the mill 10 minutes faster a day, we need a 10 ton road every day ... we can drive around swamps and over hills ... just fix the road to support commerce and tourism
TH 38 Flexibility in Design

- 50-55 mph design speed maximized geometric flexibility
- Upgrading to a 10-ton road … maintaining much of the existing horizontal and vertical alignments with strategic intersection / spot improvements in areas of documented accident frequency
TH 38 Flexibility in Design

- Two 12’ lanes, 4’ paved shoulders with 2’ of added reinforced soft shoulder, rumble strips, steeper back slopes and variable ditch cross-sections to minimize the environmental impacts

Existing

Proposed
TH 38 Solutions
TH 38 Solutions

Grand Rapids Gateway to TH 38 Edge of the Wilderness National Scenic Byway with landscaped “Rustic Style” theme and interpretive plaza area
TH 38 Solutions

Big Fork River Bridge, interpretive kiosk and multi-use trailhead with “Rustic Style” of design and materials selected for “sense of place”
TH 38 Solutions

Interpretive wayside pull-off sites and facilities at Effie and Laurentian Divide
TH38 Lessons Learned

- Reconstruction advanced 10 years ahead of schedule while greatly reducing adverse impacts and costs (> 40%)

- Total accidents were reduced 55% in the 5-year analysis after completion of the first reconstruction segment ... the accident reductions in the second reconstruction segment are even greater so far
TH38 Lessons Learned

- The extensive resource analyses, inventories, documentation, and mapping informs and streamlines environmental documents and approvals for future corridor improvement projects.

- Let stakeholders and the public help you define and defend your projects and how funds might be spent in the best public interest.
TH38 Lessons Learned

- Make “regulators” part of project development teams and responsible for co-creating solutions
- Determine and clarify what is and is not negotiable early on
- Apply flexibility in design to address problems, needs, tradeoffs, and balanced solutions that matter most to people
TH38 Lessons Learned

Relationship & Partnership Building created more political will and funding opportunities:

- Federal Transportation Demo Project funding
- State Highway improvement funding
- Federal Transportation Enhancement funding
- Federal Forest Recreation funding (trails, rest areas, interpretive pull-offs, boat access sites)
- Local Government funding for urban improvements (streetscapes, etc.)
- Private Utility funding to bury utility lines
TH 38 CSS Success Measures

1) Community acceptance
2) Environmental compatibility
3) Technical function
4) Financial feasibility
5) Timeliness of delivery
6) Commitment beyond projects
Contact Information

Balanced Process and Outcomes

for more info contact:

scott.bradley@dot.state.mn.us