

2005 Midwest Region Context Sensitive Design and Solutions Workshop

“Overcoming Roadblocks to Project Excellence”

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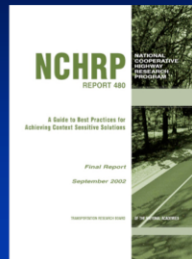
Every project has a context -- The CSD/CSS approach applies everywhere.



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NCHRP Report 480 Documents 'Best Practices' for CSD/CSS

- Review of Literature
- Phone and personal interviews
- Visits to Pilot States
- Synthesis of documents and studies
- Collection of Case Studies
- Development of 'Best Practices' Guide and CD



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Too often managers “jump to solutions” and the solution to Problem A becomes Problem B

- Jump!



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Best Practices for Development of Transportation Solutions

- Consider all viable transportation modes and technologies
- Consider design and operational/policy solutions
- Follow a logical screening process w/ screening criteria
- Document all decisions for later reference



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Alternatives should align solutions to the underlying causes

Typical Problem

- Demand that exceeds system capacity
- Through traffic on residential streets
- Lack of system or route continuity
- Safety
- Infrastructure in disrepair

Transportation Solutions

- Transit improvements
- Bicycle and pedestrian facilities
- Traffic control improvements
- Law Enforcement
- Access management
- Transportation demand management strategies
- Traffic calming
- Increased capacity along existing facility
- Construction of new roads

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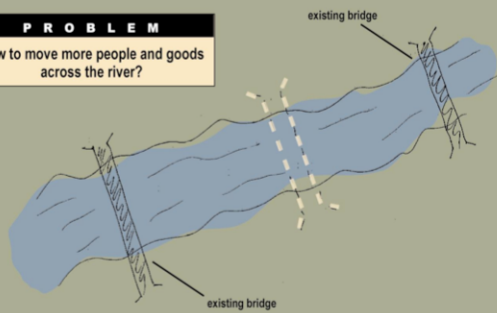
Defining problems in ways that lead to solutions

- Stated in terms of underlying causes
- Not mode specific
- Linked to travel markets
- Derived from existing and future conditions

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Alternatives Development

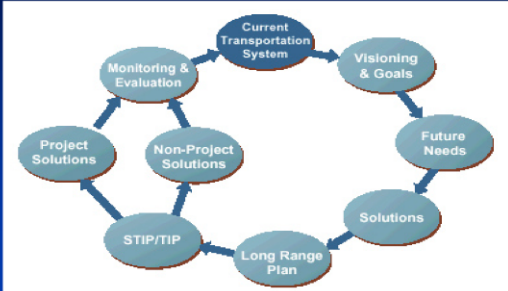
PROBLEM
How to move more people and goods across the river?



Strategy Table - River Crossing Problem

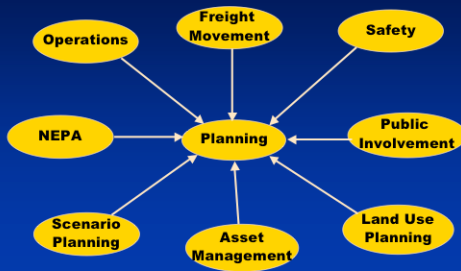
Waterborne Travel	Pedestrian & Bikes	Transit	Traffic Capacity	Freight Railroad	TDM	TSM
None	None	None	None	None	None	None
Passenger Ferry Service	Pedestrian Walkway/ Bikerway	Improved Bus Service	Expand One Bridge with 2 Lanes	New Railroad Bridge	Telecommute Program	Optimize Signal Operations
Freight Barge Operations	Sidewalks Added to Existing Bridges	Expand One Bridge with 2-Lane Busway	Expand One Bridge with 4 Lanes	Railroad Added to Existing Bridge	Freight Traffic in Off-Peak	Peak Period Traffic on Shoulder Lanes
	Sidewalks on New Bridge	New Bridge with 2-Lane Busway	Expand Two Bridges with 2 Lanes		Parking Taxes	Reversible Lanes
	Bike Lanes Added to Existing Bridges	New Bridge with Rail Transit	New 2-Lane Bridge		Employer Subsidies for Non-SOV Modes	Convert 2 GP Lanes to HOV
	Bike Lanes on New Bridge		New 4-Lane Bridge			

Transportation Planning Process



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Linking Transportation Planning



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“Programmatic” Case Study

Ohio’s 14-Step Project Development Process (PDP)

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Why did ODOT need to improve?

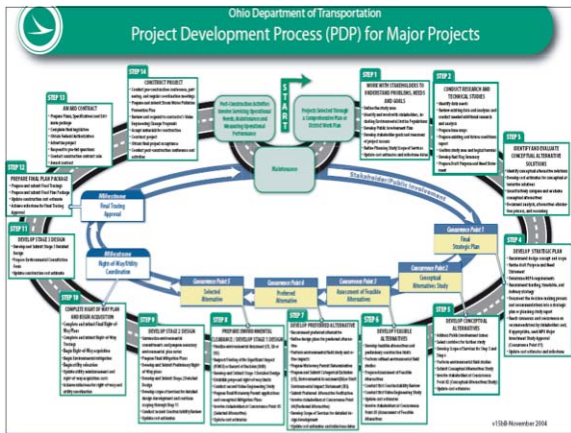
- Blown estimates and timeframes,
- Scope creep...
- Poor or incomplete decisions.

Overall Goal

- Need the right level of information to make the right decisions at the right time!



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Step 1 - Work with Stakeholders to Understand Problems, Needs, and Goals

- Define the study area
- Identify and work with stakeholders, including environmental justice populations
- Develop Public Involvement Plan
- Develop stakeholder goals and measures of project success
- Refine Planning Study Scope of Services

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Step 2 - Conduct Research and Technical Studies

- Identify data needs
- Review existing data and analyses and conduct needed additional research and analysis
- Prepare base maps
- Prepare existing and future conditions report
- Confirm study area
- Develop Red Flag summary
- Prepare Draft Purpose and Need Statement

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Step 3- Identify and Evaluate Conceptual Alternative Solutions

- Identify conceptual alternative solutions
- Develop cost estimates for conceptual alternative solutions
- Quantitatively compare and evaluate conceptual alternatives
- Document analysis, alternatives elimination process, and reasoning

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Step 4 - Develop Strategic Plan or Planning Study Report

- Recommend design concept and scope
- Revise draft Purpose and Need Statement
- Determine NEPA requirements
- Recommend funding, timetable, and delivery strategy
- Reach consensus and concurrence on recommendations by stakeholders and, if appropriate, seek MPO Major Investment Study approval (Concurrence Point #1)
- Update cost estimates and milestone dates

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