2005 Midwest Region Context Sensitive Design and Solutions Workshop

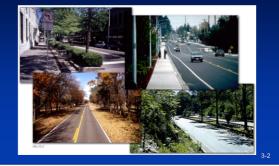
"Overcoming Roadblocks to Project Excellence"

Presented by: Jim Bednar, CH2M HILL

August 25, 2005

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



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

- Review of Literature
- Phone and personal interviews
- Visits to Pilot States
- Synthesis of
- documents and studiesCollection of Case
- Studies

 Development of 'Best
- Practices' Guide and CD





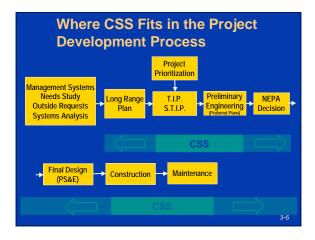
A Framework for Achieving Context Sensitive Solutions

CONTExT SENSITIVE DESIGN/SOLUTIONS								
A Introduction to CSD	B About this Guide	C Effective Decision Making	D Reflecting Community Values	E Achieving Environmental Sensitivity	F Ensuring Safe and Feasible Solutions	G Organizational Needs	H Case Studies	Appendices
Management S			-	-		alt.	Case Study 1 Case Study 2	Appendix C Appendix D
Problem Definition				2	the liter	Part Street	Case Study 3 Case Study 4	
Project Develo Evaluation F		Sector a		and the second	-1		Case Study 5 Case Study 6 Case Study 7	
Alternatives D	evelopment	Cale and	4.1				Case Study 8 Case Study 9	
Alternatives Screening Evaluation and Selection						Mary d	CSD Manual Template	
Implementation		with man		at still		the second	CLICK AN VIEW MOR INFORMAT	

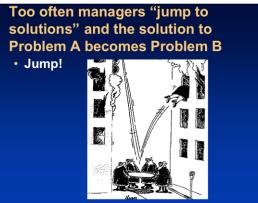
"Transportation planning must reflect the desires of communities, and take into account the impacts on both the natural and human environments"

> Source: A Citizen's Guide to Transportation Decisionmaking (FHWA)

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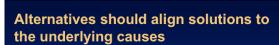


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Best Practices for Development of Transportation Solutions

- 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





Typical Problem -Demand that exceeds system

- capacity -Through traffic on-
- -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 ³⁻⁹

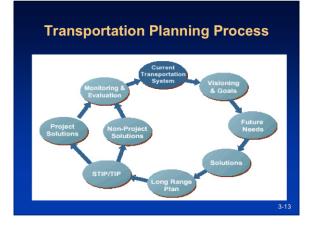
Defining problems in ways that lead to solutions

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

Alternatives Development

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/ Bikeway	Improved Bus Service	Expand One Bridge with 2 Lanes	New Railroad Bridge	Telecommute Program	Optimize Signa 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 Lane
	Sidewalks on New Bridge	New Bridge with 2-Lane Busway	Expand Two Bridges with 2 Lanes		Parking Taxes	Reversable 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			

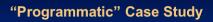












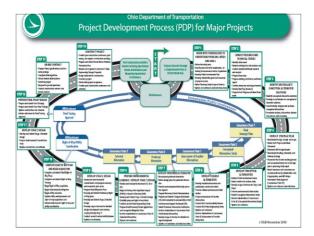
Ohio's 14-Step Project Development Process (PDP)

Why did ODOT need to improve?

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



Overall Goal Need the <u>right</u> level of information to make the <u>right</u> decisions at the <u>right</u> time!



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

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

	Ohio	Department of Transportat	tion	
Θ	Project Developme	ent Process (PDP)	for Major Projects	
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Questions?

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