Expediting Planning and Environmental Review of Transportation Projects

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Outline

• Research Intent and Methods
• Case Study Approach
• Causes of Delay (Constraints)
• Expediting Strategies
• Expediting Assessment Tool
• Questions/Discussion
Intent of the Research

1. Identify causes of transportation project delay
2. Focus on select project development phases:
   – Long range planning to NEPA and permitting
3. Look at transportation and other sectors
4. Identify expediting strategies
5. Make products useful to practitioners
Research Approach

1. Literature search
   - Past research
   - Award programs
   - Various federal and state programs
2. Identify expedited transportation EISs
3. Identify other successful case studies
4. Interviews
5. Evaluate the expediting strategies
Observations on Literature Review

Expediting dominated by Transportation

Gaps in existing literature:

- Many case studies
- Less information on specific strategies
- Lack of accessibility

Can major projects actually be expedited?
Case Studies

- 13 case studies
- Geographic distribution
- Mostly large projects and programs
What do we mean by Constraints?

- Constraints are factors that lead to delay
  - Conditions
  - Actions
  - Direct or indirect causes
What are the Constraints to Expediting?

- Avoiding policy decisions through continual analysis
- Conflicting resource values
- Difficulty agreeing on impacts or mitigation
- Inability to maintain agreements
- Ineffective internal communication
What are the Constraints to Expediting?

- Inefficient Section 106 consultation
- Inordinate focus on singular issue
- Insufficient public engagement or support
- Issues arise late in process
- Lengthy review/revision cycles
- Negative or critical coverage from the media
What are the Constraints to Expediting (cont)?

- Relocation process delays
- Revising past decisions
- Shortage of dedicated staff
- Slow decision making
- Stakeholder controversy and opposition
- Unusually large or complex project
Defining the Constraints

• Leading and lagging indicators

• Example – Leading Indicators for *Inability to Maintain Agreements*
  – Undefined structure and process for decision making
  – No clear champion or convener
  – Agreements not being clearly documented

• Indicators of severity

• Each constraint linked to strategies
The search for the Silver Bullet
Expediting Strategies

- Requires
  - Picking the right tool
  - Skillful implementation
  - Approach

- Mix of
  - Well known
  - Relatively new
  - Unique applications

Source: Scienceblog.com
Expediting Strategies

24 Strategies
Organized in Six Groups

1. Improve internal coordination and communication
2. Streamline decision-making
3. Improve resource agency involvement and collaboration
4. Improve public involvement and support
5. Demonstrate real commitment to the project
6. Coordinate work across phases of delivery
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• Strategy Definition
• Phase and decision points applied
• Effectiveness, Risks, Benefits
• Examples or Citations
• Applicability
Strategies:
Improve Internal Coordination and Communication
To establish teamwork and direction. To reduce:

- Issues arising late
- Lengthy review/revision cycles
- Inability to maintain agreements
- Difficulty agreeing on impacts/mitigation

What it is

- Facilitator leads early, structured discussions with parties
- Identify ideas, priorities, critical or fatal-flaw issues
- Establish procedural and other agreements

Schedule Effects

- Reduces delays through better communication and less conflict
Cost Effects
   – Upfront costs for facilitation
   – Reducing delay reduces costs
Risks
   – May not be ready to make commitments
Other Benefits
   – Team building and better communication
Applicability/Transferability
   – Highly transferable: any agency or project
   – Most benefit to agencies with conflicts or “history”
   – Requires skilled and knowledgeable facilitator
Strategy: Risk Management

Purpose
- Identify/ manage risks that can delay project or raise costs

What it is
- Risk Def: Uncertain events with positive or negative effect on project objectives (scope, schedule, budget, quality)
- Actively dealing with project risk: assess, predict; develop risk responses; monitor and update
- Take action to reduce the probability or impact of a risk

Schedule Effects
- Increases schedule predictability; reduces surprises
Strategy: Risk Management

Cost Effects
- Adds a line-item to project budgets
- Substantial cost savings when risks are mitigated

Risks
- Reduces risks, does not cause any substantive new risks

Other Benefits
- Builds internal trust
- Better predictability builds external relationships

Applicability/Transferability
- Transferable, on a program or large project basis
- Models available: Caltrans, WSDOT
Strategy: Change Control Practices

Purpose
- to minimize unnecessary delays and costs associated with untimely changes in project design

What it is
- Dedicated group to review potential changes
- Consider timing and effect of change

Schedule Effects
- Can reduce extension of NEPA process
Strategy: Change Control (continued)

Cost Effects
- Minor cost to run reviews
- Reducing delay reduces costs

Risks
- May appear insensitive to stakeholder concerns
- May increase risk of re-opening NEPA after decision document

Other Benefits
- Enhanced ability to honor delivery commitments
- More accurate workload estimating

Applicability/Transferability
- Highly transferable: any agency or project
- Ensure group represents broad concerns
Strategy: Team Co-location

Purpose
- Bring project team to a common location to speed coordination

What it is
- Physical sharing of work space for project team
- May include DOT and contracted staff

Schedule Effects
- Improve internal review and coordination time
Strategy: Team Co-location (continued)

Cost Effects
- Requires additional space to DOT offices
- Can reduce travel costs from contracted staff

Risks
- May require managing new space or locking in lease agreements
- May blur line between contractor and employee

Other Benefits
- Builds and maintains team relationships

Applicability/Transferability
- Highly transferable: any agency or project
- Generally requires a larger project
Strategies: Streamlining Decision-making
Strategy: Decision Council

Purpose
- To expedite and improve high-level decision making
- Improve durability of those decisions
- Reduce delaying conflict; improve resolution of conflicts

What it is
- Leadership level representatives from key agencies
- Regular “decision meetings” with focused agendas
- Clear organization, structure and process

Schedule Effects
- Faster high-level decisions
- Demonstrated commitment can speed other decision-making and inter-agency coordination
Strategy: Decision Council (continued)

Cost Effects
- Minimizing delay reduces costs
- Opportunity costs for leadership members

Risks
- Reduces most risks; adds some risk if council doesn’t deliver
- Forced decisions can increase risk of reopening

Other Benefits
- Can help build transparency
- Can help build relationships and trust

Applicability/Transferability
- For larger, controversial or high priority projects
- Highly transferable but customize to fit project and agencies
- Independent facilitator may be critical
Strategy: Expedited Internal Review and Decision-making

Addresses following constraints:
- Slow, unclear internal decision-making or communication
- Lengthy internal reviews
- Unusually large scale and complex projects or program
- Avoiding policy decisions through analysis

What it is
- Departmental commitments
- Clear decision-making procedure
- Clear assignments and authority for decisions
- Accountability to meet or beat internal deadlines

Schedule Effects
- Takes time up front to effectively change procedures and roles
- Faster internal decisions
- Demonstrated commitment can speed other internal work
Cost Effects
- Reduced project planning and design costs; reduced inflation effects
- Need to spend effort up-front to establish commitments

Risks
- Reduces most risks
- Risks forcing decisions before they are ready

Other Benefits
- Can help build transparency
- Can help build relationships and trust

Applicability/Transferability
- Highly transferable but customize to fit project and agencies
- Most cost effective for large project or program of projects
- Address internal opposition to changing procedures and roles
- Leadership directive may improve success
Strategies: Improve Resource Agency Involvement and Collaboration
Strategy: Coordinated and Responsive Agency Involvement

Purpose
- Avoid risks in complex permitting processes
- Improve decision speed and durability
- Reduce delaying conflict; improve resolution of conflicts

What it is
- Identify agencies’ concerns and objectives
- Design process to address both
- Develop clear and collaborative involvement strategy
- Respond to input

Schedule Effects
- More labor upfront, can extend time to initiate coordination
- Time savings through quicker NEPA permitting, and less redo
Strategy: Coordinated and Responsive Agency Involvement (continued)

Cost Effects
- Faster delivery reduces costs
- Substantial effort to change roles and procedures

Risks
- Unrealistic expectations

Other Benefits
- Builds transparency and trust, from the start of the process

Applicability/Transferability
- Requires leadership and organizational commitment
- Larger, controversial or high priority projects
Strategy: Dispute Resolution Process

Purpose
- Provide clear process for managing issues and disputes
- Define types of issues and types of tools to address them

What it is
- A pre-defined and pre-agreed to process for handling disputes before any have occurred
- An inter-agency process that identifies decision makers and several levels to escalate issues through
Strategy: Dispute Resolution Process (continued)

Schedule Effects
- When conflict arises, resolution process already known, saving time
- Resolution can be achieved sooner

Cost Effects
- Upfront effort to develop process and agreements with agencies

Risks
- Some agencies are adverse to acknowledging conflict

Other Benefits
- Can build better inter-agency relationships

Applicability/Transferability
- Agreements can be adapted from project to project
Strategy: Performance Standards

Purpose
- Avoid getting permitting process fixated on design details
- Avoid getting stuck debating speculative impacts
- Avoid expensive, sometimes unworkable overdesign
- Compel earlier resolution of conflicts

What it is
- Decide standards/conditions to achieve programmatically
- Make standard agreeable to design, construction, maint.

Schedule Effects
- Streamlines/avoids project-specific negotiations
- Helps ensure adequate staffing, expertise, monitoring
Cost Effects
  – Cost savings: efficient communication, avoid bogging down in detail

Risks
  – DOT carries more risk; resource agencies less
  – Less risk of resource agency dictating design, means

Other Benefits
  – Can help build transparency
  – Can help build relationships and trust

Applicability/Transferability
  – Beneficial where resource agencies are esp. risk averse
  – Best where DOT is concerned about resource agencies’ dictating technologies/approaches
Strategy: Programmatic Sec. 106 Agreement

Purpose
- Streamline 106 decision making while ensuring quality

What it is
- Develop Programmatic Agreement on 106 consultation
- Delegate some authority to the state DOT to: conduct reviews, determine eligibility, findings of effect and resolution of effects
- Certain classes of projects or activities may use reduced or less formal review process with the SHPO, or simply be reviewed by qualified DOT staff

Schedule Effects
- Reduce timeline for 106 consultation, by following expedited process or avoiding review outside the DOT
Strategy: Programmatic Sec. 106 Agreement (Continued)

Cost Effects
- Cost commitment for upfront collaboration and continued work
- Cost savings from reducing the amount of formal consultation and avoiding delay that can sometimes occur from this consultation.

Risks
- DOTs must maintain an organizational culture that supports professional decisions about historic and archaeological resources

Other Benefits
- Allows agencies to focus time and resources on projects most likely to affect Section 106 resources.
- Improves consultation approaches, analytical techniques, and data sources

Applicability/Transferability
- Anywhere, requires close relationships
Strategy: Programmatic or Batched Permitting

Purpose

– Increases certainty and saves time in future project permitting
– Allows more resources to go to “on the ground” benefits

What it is

– A “batched permit or approval” typically covers a set of specific actions that are identified in advance of the permit
– A programmatic permit typically covers a collection of future actions that can meet specific conditions specified in the permit (404 RGP).
– Limits magnitude of impacts, specifies the types of actions covered, and outlines the process and documentation required to ensure that any ensuing action is covered by the permit or approval.

Schedule Effects

– Saves permitting and consultation time on the project level
Strategy: Programmatic or Batched Permitting (continued)

Cost Effects
- Costs to develop, but significant time and associated cost savings (3:1) through collective expediting of the individual projects
- Reduces redundant efforts, increasing permitting efficiency
- Minimizing delay reduces costs

Risks
- Reduces most risks, increases project predictability/assurance

Other Benefits
- Reduces demand on resource agency staff time. Can improve relationships with resource agencies (if commitments are fulfilled)
- Can allow more funding for environmental enhancements that benefit the resource and can further expedite project or program delivery

Applicability/Transferability
- Regional, Statewide
Strategy: Real-Time Collaborative Interagency Review

Purpose
- Expedite document review and limit number of rounds of review
- Resolve comments and concerns in collaborative concurrent process

What it is
- Group review, comment, and response process with all reviewers in one location at one time
- As simple as a workshop to edit a document, or can be more involved facilitated process
- Quickly resolves conflicting review comments

Schedule Effects
- Reduces number of review cycles
Cost Effects
- Can require some initial additional funds or time to convene reviewers, but in general savings from reduced review cycles much greater
- Minimizing delay reduces costs

Risks
- Concurrent reviews can lead to concerns about conflicting feedback
- Is different from normal approach

Other Benefits
- If team co-location is used, this is a logical accompanying tool

Applicability/Transferability:
- Easily applied in many project settings
Strategy: Regional Environmental Analysis Framework

Purpose

– To agree on impacts, cumulative effects, and mitigation, without inordinate focus on single issue
– Streamline cumulative impact analysis and project mitigation

What it is

– Establishes standardized approach for evaluating impacts to resources, with common formats, techniques, issues specific to certain resource types, past actions, etc.
– Involves all agencies likely to consider actions affecting the same resources, so that each agency abides by framework
Schedule Effects

– Minimizes time spent making cases and negotiating differences
– Reduces redundancy and fosters consistency across projects
– Common methods reduce project learning curve

Cost Effects

– Requires initial investment
– Reduces costs on projects going forward

Risks

– Reduces uncertainty and legal challenges for individual projects
– Reviews from resource agencies less likely to cause delay as agencies will already understand the data and methodology

Other Benefits

– Progressively more useful as common techniques and data build foundation for future projects’ assessment of the cumulative effects on resources
Strategy: DOT-funded Resource Agency Liaisons

What it is
– DOT-funded employees at the resource agency who know the DOT’s process

Purpose
– Establish a better, more workable and efficient process
– Complete better quality reviews, more quickly, to achieve scheduled project deadlines, speedier consultations
– Eliminate potential bottlenecks which could result from an agency’s inability to respond to DOT
– Keep things on track and get back on schedule quickly when the unexpected occurs
– Improve project delivery & predictability

Schedule Effects
– Accelerated and more tailored reviews.
Strategy: DOT-funded Resource Agency Liaisons (continued)

Cost Effects
- Cost for position, but DOTs convinced of benefits (AASHTO, 2005)

Risks
- Additional scrutiny of DOT projects
- Concerns about DOT funding

Other Benefits
- Better attendance at meetings, access to resource agency input when needed, more comprehensive agency responses
- Prioritized review of transportation projects within resource agency.
- Can help build relationships and trust, develop new/innovative processes

Applicability/Transferability
- Highly transferable; over 2/3 of DOTs fund positions
- Share expectations during the hiring process and reviews
Strategies: Improve Public Involvement and Support
Strategy: Highly Responsive Public Involvement

To improve constructive public involvement. To reduce:

- Issues arising late in process
- Stakeholder controversy and opposition
- Insufficient public engagement or support
- Negative or critical coverage from the media
- Inability to maintain agreement

What it is

- Beyond just communicating – make engagement worthwhile
- Effect on process, documentation, design, etc. builds trust
- CIA example

Schedule Effects

- Reduces delay from conflict, opposition
Strategy: Highly Responsive Public Involvement (continued)

Cost Effects
- Higher planned PI costs, but may reduce unplanned costs
- Reducing delay reduces costs

Risks
- Could result in higher mitigation costs
- May raise unrealistic expectations

Other Benefits
- Builds public trust; gains public supporters

Applicability/Transferability
- Highly transferable: any agency or project
- Most benefit for controversial and large projects
Purpose:
- To develop and design a project that integrates with the surrounding environmental and community resources and the stakeholders’ interests and concerns.

What it is
- Collaborative, interdisciplinary approach
- Involves all stakeholders
- Considers the total context
- Early, continuous, and meaningful involvement

Schedule Effects
- Takes early effort; can reduce conflict and delay
Cost Effects
- Possible higher design costs and process costs
- Reduced delay can reduce costs

Risks
- Could reduce transportation benefits
- Could result in unrealistic public expectations

Other Benefits
- Builds public trust; gains public supporters

Applicability/Transferability
- Highly transferable: any agency or project
- May come easier for agencies that already actively engage stakeholders and are responsive to stakeholder input.
Strategy: Media Relations Manager

Purpose:
- To implement expert media relations strategy, to minimize negative and promote positive press coverage

What it is
- Specialist in public affairs, media relations, journalism
- Works closely with project team; understanding of the technical issues
- Ability to communicate with press; extensive contacts

Schedule Effects
- Reduces public conflict and/or apathy and delay
Cost Effects
  – Added cost for dedicated position
  – Possible reduced cost through reduced delay

Risks
  – Could mischaracterize or over commit project

Other Benefits
  – More constructive public dialogue

Applicability/Transferability
  – Transferable: most cost effective for larger projects
  – Most suited to high profile or controversial projects.
Strategies: Demonstrate Real Commitment
Purpose:
  – to demonstrate high commitment & priority

What it is
  – Secure construction funding early in the project development process

Schedule Effects
  – Substantial indirect reduction in delay
Cost Effects
- Cost of effort to secure early funding
- Expedited delivery reduces project costs

Risks
- Funding commitment from early estimates may be too low
- NEPA risk if pre-determined outcome

Other Benefits
- Making project “real” can improve involvement, responsiveness and urgency

Applicability/Transferability
- Highly transferable but not easy to achieve
- Most benefit to larger projects
Strategy: Upfront Environmental Commitments

Purpose:
- to avoid delays from protracted debate on environmental impacts and mitigation

What it is
- Early and substantial commitment to environmental protection, restoration, mitigation

Schedule Effects
- Reduces negotiation and other process delays
- Allows faster decision-making
Strategy: Upfront Environmental Commitments (continued)

Cost Effects
- May increase direct mitigation costs
- Reduces costs associated with process and delay

Risks
- More mitigation than regs require; precedent
- Violate avoidance, minimization requirements

Other Benefits
- Better relationships; positive press coverage

Applicability/Transferability
- Highly transferable
- Early funding commitments may not be allowed in some states
Strategies: Coordinate Work Across All Phases of Project Delivery
Strategy: Strategic Oversight, Readiness Assessment

Purpose

- Address agency’s potential difficulty gathering, rallying, managing resources to initiate a major project or program of projects
- Prepare to avoid lengthy review/revision cycles
- Identify all parties’ relevant responsibilities

What it is

- Interagency agreements to assess staffing needs and provide project management oversight.
- Assess capacity of each agency to provide resources, identify where additional resources needed
- Install common oversight function for interagency project or program
Strategy: Strategic Oversight, Readiness Assessment (continued)

Schedule Effects
  – Helps project stay on schedule by ensuring agencies have adequate staffing, availability, expertise to handle workloads and avoid delays

Cost Effects
  – Additional cost at outset, but can save by reducing delay

Risks
  – Reduces risk from inadequate or unavailable staff resources and by mobilizing expertise. Anticipated staffing may not be fully needed.

Other Benefits
  – Preserves or improves relationships
  – Facilitates approach to roll-up cumulative effects.

Applicability/Transferability
  – For major endeavors, multiple lead agencies, complex mechanical and technical challenges
Strategy: Planning-Level Environmental Screening Criteria

Purpose
– Identify environmental issues early, areas to avoid or enhance, projects that can be cleared, environmental studies needed

What it is
– Integrating environmental screening into planning
– Example: Florida DOT’s ETDM (uses GIS data, pre-negotiated analyses and thresholds, screening tool) on both 20 year plan and pre-programming screens and interagency comments/clearance

Schedule Effects
– ETDM generated cumulative time savings of more than 38 years, across 50 projects, 47 of which are now in Project Development and Environment (PD&E)
Cost Effects
- Up front costs to develop environmental data, re-engineer existing procedures, maintain coordination with local jurisdictions and keep data gathering up to date
- ETDM generated benefits in the 4:1 to 5:1 range, across 50 projects

Risks
- Reduces risk, increases certainty regarding project issues and needs

Other Benefits
- Can enable broader level planning assessment as well
- Facilitates meaningful interagency involvement, early & helpfully

Applicability/Transferability
- Highly transferable, but requires up-front investment
- Requires collaboration and trust
Strategy: Tiered NEPA Process

Purpose

– Avoid late-arising issues on large, complex projects
– Avoid delay from demands for more detail that cannot be developed
– Leverage work done in planning in NEPA level analyses

What it is

– Perform planning studies under NEPA via a Tier 1 EIS or EA looking at a large problem or series of related problems programmatically; project-level studies follow in second tier, either as a direct continuation of the first tier study, or as multiple separate projects
– The Tier 1 EA/EIS can function very similarly to typical corridor or concept plans, but with more formal engagement by other agencies
– Introduces an interim decision point memorialized in a Record of Decision at the conclusion of the first tier
Strategy: Tiered NEPA Process (continued)

Scheduling Effects
- Greater agency involvement can ensure this work is more easily and effectively leveraged & time saved during subsequent second tier studies
- Can effectively narrow range of alternatives and increase project certainty

Cost Effects
- Can save costs through time savings, reduced involvement later

Risks
- Can confuse stakeholders, requires explanation and clear communication
- Requires larger investment earlier

Other Benefits
- Schedule, cost, agency and public relationships (also risk areas)

Applicability/Transferability
- Effective for large geographic extent requiring multiple levels of decision, and/or those that are likely to split into multiple separate projects
Strategy: Planning and Environmental Linkages

Purpose

- Leverage data, analysis, decisions from planning in NEPA
- Reduce time and effort to develop range of alternatives, evaluate alternatives, and produce environmental documentation

What it is

- Conduct planning studies with data and decisions that can be relied upon during NEPA process (appropriate public and stakeholder outreach; environmental part of early planning work)
- Lead agency(ies) must decide at the outset of the NEPA (scoping) process to utilize data from prior planning efforts

Schedule Effects

- Can reduce re-doing analysis or re-visiting prior decisions
- Increases likelihood that NEPA will begin with concepts responsive to public and environmental concerns
Strategy: Planning and Environmental Linkages (continued)

Cost Effects
- Additional costs in planning phase
- Cost savings result with time savings and reduced repetition when planning studies are leveraged in the NEPA, minimizing delay & cost

Risks
- Reduces uncertainty and risk of uncovering new environmental issues
- Risk that work conducted may “expire” and need to be redone

Other Benefits
- Can make process more transparent, intelligible if doesn’t “expire”

Applicability/Transferability
- Funding up front can be a challenge
- SAFETEA-LU requires consideration of environment in both statewide and metro planning, consultation and consideration of environmental mitigation
Strategy: Incentive Payments to Expedite Relocations

Purpose
– Reduce time delays due to relocations

What it is
– Awarding additional incentive payments above normal costs and values in return for expedited resolution and move

Schedule Effects
– Can greatly speed relocation if the negotiations are successful
– Can reduce stakeholder conflicts and opposition as well
Strategy: Incentive Payments to Expedite Relocations (continued)

Cost Effects
- Incentive payments must be related to the costs of delay on the project
- Incentive payment should result in lower total project costs

Risks
- Dependent on successful negotiations

Other Benefits
- Quicker negotiations can reduce overall demand on staff time

Applicability/Transferability
- Funding can be a challenge
- Only useful if relocation is on critical path
- Tends to be a special case solution
Using the Information:
Website and Expediting Assessment Tool
Access to the Information

Narrative Intro

Index

Expediting Assessment

- Strategies
- Constraints
Expediting Assessment Tool

Wondering why your project is continually delayed, and what can be done to expedite delivery?

This **Expediting Assessment** identifies the causes, and identifies specific strategies and tools you can use to address these causes and expedite project and program delivery.
Entering the Expediting Assessment

Constraints to Transportation Project Delivery Constraints, Severity & Strategies

Constraints Survey:
- Add new project:
- Review/Edit existing project response

Create/Print Reports:
- For all projects in database:
  - Identified constraints:
  - Severity of identified constraints:
  - Strategies to address identified constraints:

Select specific project:
- Identified constraints:
- Severity of identified constraints:
- Strategies to address identified constraints:
3.2 There is considerable concern or conflict regarding the project's adverse effects.
4.1: After the range of alternatives has been deliberately narrowed through analysis and decision-making, more alternatives are added to the process, causing delay.

- Disagree
- Mildly Agree
- Moderately Agree
- Strongly Agree

4.2: Decisions that have been previously made are re-opened, causing project delays.

- Disagree
- Mildly Agree
- Moderately Agree
- Strongly Agree

4.3: What stakeholder group(s) were integral to the controversy, concern or delay noted in your responses to Questions 4.1 and 4.2 (select all that apply)?

- Resource Agencies
- Local Jurisdiction
- Environmental Stakeholders
- Community Organizations
- Unknown/Other
- All of the above

5.1: Project staff doesn’t feel adequately involved or informed about project direction.

- Disagree
- Mildly Agree
- Moderately Agree
- Strongly Agree

5.2: Even when design work or analysis has been completed, it needs to be re-done because out-of-date information or assumptions were used.

- Disagree
- Mildly Agree
- Moderately Agree
- Strongly Agree
11.1: Reviews of draft reports or other products take too long, are repetitive or have no clear way to resolution.

- Disagree
- Mildly Agree
- Moderately Agree
- Strongly Agree

11.2: What kind of reviews were integral to the delay noted in your response to Question 11.1 (select all that apply)?

- Sponsor Agency
- NEPA Lead Agency
- Cooperating Agency
- Regulatory Agency
- Unknown/Other
- All of the above

12.1: Media coverage misinterprets issues or is oppositional towards the project. It is difficult to get the right message out.

- Disagree
- Mildly Agree
- Moderately Agree
- Strongly Agree

13.1: Property acquisition and relocation of residences and business are delaying the project.

- Disagree
- Mildly Agree
- Moderately Agree
- Strongly Agree
Constraints to Transportation Project Delivery
Constraints, Severity & Strategies

Constraints Survey:
- Add new project:
- Review/Edit existing project results:

Create/Print:

Select specific project:
- Identified constraints:
- Severity of identified constraints:
- Strategies to address identified constraints:

Select the type of output you want from your survey results:
- Constraints
- Severity of Constraints
- Strategies to address the constraints
C-2 Conflicting resource values

Strategies to address the constraint

Facilitation to align expectations upfront

Interagency dispute resolution process

Leveraging planning during NEPA

Performance standards

Planning level environmental screening criteria

Regional environmental analysis framework
C-3 Difficulty agreeing on impacts/mitigation strategies to address the constraint based on the following stakeholder(s):

Local Jurisdiction

- Facilitation to align expectations upfront
- Leveraging planning during NEPA
- Planning level environmental screening criteria

C-4 Inability to maintain agreement

Strategies to address the constraint based on the following stakeholder(s):

Resource Agencies and Environmental Stakeholders

- Aligning expectations up front
- Decision council
- DOT funded liaisons
• Strategy Definition
• Phase and decision points applied
• Effectiveness, Risks, Benefits
• Examples or Citations
• Applicability
Other Lessons and Observations

• Expertise vital, but being open to new approaches just as important
• Commit to and prioritize implementation
• Many of the successful case studies:
  – Rigorously identified their key schedule risks
  – Implemented strategies to address those risks
  – Monitored progress and adjusted as needed
Next Steps

• TRB publish report Spring 2011
• Integrate findings on TCAPP website Spring 2011
  – www.transportationforcommunities.com
• FHWA HQ reviewing TCAPP tools for potential integration
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Links
  – SHRP 2 website: www.TRB.org/SHRP2
  – SHRP 2 email list: www.TRB.org/SHRP2/News
  – SHRP 2 Capacity web page: www.TRB.org/SHRP2/Capacity
  – Transportation for Communities: Advancing Projects through Partnerships (TCAPP) http://www.transportationforcommunities.com/