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**Integration and Streamlining  
Transportation Development and  
Decision Making:**

**Recommendations Report**

**Final Report**

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# TABLE OF CONTENTS

1.	INTRODUCTION .....	1
2.	BACKGROUND AND REVIEW .....	2
2.1	State of the Practice Synthesis Report .....	2
2.2	Best Practices Report .....	4
3.	RECOMMENDATIONS .....	5
3.1	WORKSHOPS/SEMINARS.....	5
3.1.1	Broad Topic Workshops/Seminars .....	5
3.1.2	Topic Based Workshops/Seminars .....	6
3.1.3	Project Based Workshops/Seminars .....	7
3.2	TRAINING .....	8
3.2.1	Training Topics That Will Require Further Research .....	8
3.2.2	Training Topics That Can Be Identified Now .....	9
3.3	CREATION OF DOCUMENT TEMPLATES .....	10
3.3.1	Guidance Manuals .....	10
3.3.2	Monographs of Discipline Roles .....	11
3.4	ADDITIONAL RESEARCH.....	12
4.	CONCLUSIONS .....	14

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## 1. **INTRODUCTION**

Federal transportation and environmental policy in the 1990s, as embodied in the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, the Clean Air Act Amendments (CAAA) of 1990 and the Transportation Equity Act for the 21<sup>st</sup> Century (TEA21), has prompted the need for new planning and decision-making processes in the development of transportation solutions by State Departments of Transportation (STDs) and Metropolitan Planning Organizations (MPOs). These transportation and environmental policies have focused attention on the efficiency of coordinated, multimodal planning to meet the need for transportation services.

Multimodalism ensures that all potential solutions to transportation problems – ranging from those that increase supply of transportation to those that manage demand – are considered within the context of the planning process. Multimodalism also emphasizes comprehensive and integrated planning as a way to better equilibrate supply and demand while concurrently minimizing externalities such as air pollution, energy consumption, safety and congestion. This new emphasis on utilizing multimodal solutions to achieve our overall societal goals highlights the need for integration among the disciplines of planning, engineering, real estate and environment in the transportation planning process.

Jack Faucett Associates (JFA), an economics and public policy consulting firm, is conducting a project for the United States Department of Transportation’s Federal Highway Administration (FHWA) Planning, Environment, and Real Estate Core Business Unit (CBU) entitled, "Integrating and Streamlining Transportation Development and Decision-Making." The goal of the project is to identify successful practices currently employed in the development of transportation solutions by means of integrating the disciplines of planning, environment, real estate, and engineering. The three main products of this project are:

1. A “State of the Practice” synthesis report which identifies current practices in State Departments of Transportation (STDs) and other transportation agencies.
2. A “Best Practices” report developed from site visits to 5 transportation agencies that illustrate outstanding examples of integration and streamlining in the transportation development and decision-making process.
3. A “Recommendations Report” that provides recommendations for how the process of transportation decision-making can be improved by better integrating the different disciplines in transportation agencies and how FHWA can facilitate that process.

## **2. BACKGROUND AND REVIEW**

This Recommendations report represents the third of the three project deliverables listed above. The recommendations presented here on how FHWA could encourage and foster further integration in the area of transportation decision making are based on information and insight gained through development of the State of the Practice and Best Practices reports. This section provides a review of those efforts and presents the major findings from those reports that contributed to the formulation of the recommendations contained in this document.

### **2.1 State of the Practice Synthesis Report**

The survey conducted as the basis for the State of the Practice report provided general information on the types of processes STDs are utilizing in developing transportation solutions. The survey also provided some indication of the level and type of interaction that currently takes place between the four disciplines in the course of making transportation decisions. Finally, the survey shed light on the views and opinions of the various disciplines on the concept of integration in the transportation decision-making process and their opinions on its utility and desirability.

The State of the Practice report presented the survey results and synthesized the responses in order to create an outline of the steps states follow in developing transportation solutions and the primary roles of the various disciplines in that process. The synthesis report also provided examples, based on survey responses and a review of current literature, of successful integration practices. Similarly, the State of the Practice report presented examples of the challenges faced in implementing an integrated approach. These findings are presented below. Many of these examples of successful practices and implementation challenges were confirmed and reiterated through the case studies conducted under the Best Practices phase of the project.

#### Examples of Successful Integration Practices

- More involvement, earlier in the process (all disciplines)
- Disciplines work concurrently and meet specified milestones
- Multidisciplinary project development teams
- “Cradle to grave” project management approach
- Combine project development with asset management
- Integration of land use and transportation planning
- More public involvement

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Examples of Implementation Challenges

- Conflicts between NEPA and Planning -  
The roles of planners in establishing needs versus engineering and environmental disciplines in finding solutions
- Priority of completing projects quickly -  
Pressure to build project quickly, but integrated approach requires more involvement and time commitment in the initial stages.
- Difficulty obtaining public involvement -  
Difficult to involve community members in the process and gather public input in a time-efficient manner
- Integration of land use and transportation planning -  
Frustration in merging the two – land use is considered a local government issue.

Additional key findings from the State of the Practice report that contributed to the development of the recommendations presented in this report include:

- A literature review revealed that no research has been done specifically on the integration of the four disciplines in the transportation solution development process.
- A literature review and the survey revealed that there is a disparity between the states in their approach to transportation decision-making and in their level of integration.
- There is a core group of Federal, state and regional transportation professionals dedicated to the concept of integration
- Certain states are in the forefront of practicing and promoting integration
- The majority of survey respondents identified their approach to transportation decision making as integrated.
- Survey respondents from all disciplines using an integrated approach indicated that the approach has a positive impact on their effectiveness and efficiency in delivering transportation solutions.
- Survey respondents from all disciplines using an integrated approach indicated that the approach positively impacts their contribution to the development of transportation solutions.
- Survey respondents from all disciplines using an integrated approach indicated that the need for training and an increase in workload are the two largest impediments faced in implementing an integrated process.
- Eighty-eight percent of survey respondents from all disciplines *not* using an integrated approach indicated they believe an integrated approach would be useful in the development of transportation solutions.

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- Of those respondents *not* using an integrated approach, but who believe an integrated approach would be useful, the environmental and planning disciplines felt the most strongly.
  - The two most frequently cited reasons for *not* adopting an integrated process are perceived increase in workload and need for information/training.
  - Only three percent of respondents from non-integrated agencies indicated that the reason for *not* adopting an integrated approach is that their current approach is effective.

## 2.2 Best Practices Report

The Best Practices report took a closer look at the practices of five state departments of transportation that were found to possess innovative or somehow noteworthy practices in the area of integration between the real estate, planning, environment, and engineering disciplines. Case studies of these states were developed based on site visits and follow-up discussions with both decision-makers and staff level individuals in each of the five states. These site visits and the resulting case studies were then used to derive best practices that could hopefully be adopted by other state departments of transportation in their efforts to become more integrated. The case study states were Florida, Ohio, Maryland, Pennsylvania and Oregon.

The key findings from the Best Practices report that contributed most significantly to the recommendations presented in this report include:

- Developing a conflict resolution process and using a multidisciplinary team approach to project management were two key points to an integrated process identified through the case studies.
- Establishing an automated project management system of some kind and establishing formalized documentation of roles – both internally and for stakeholders – were identified through case studies as key points to the management of an integrated process
- Complete and accessible documentation including procedural manual, meeting minutes, training, etc. and centralized oversight of the process regardless of organizational structure were identified as key quality assurance points to an integrated process.
- Need for improved communication – internal and/or with the public – was identified as a primary reason for developing an integrated process
- Time commitment of senior staff, resistance to change, perceived threat to job, need for creative or new interpretation or application of state laws and differing levels and sophistication of staffing in field offices or MPOs were identified as primary impediments to the implementation of an integrated process.
- Promoting an understanding within an agency of the roles of each discipline, training and consistent manuals, and consulting with a lawyer regarding MOUs were identified as key successful strategies in the development and implementation of an integrated process.

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- Insufficient internal education on roles of each discipline in the process and insufficient education for partner agencies on the new process and how it will impact them were identified as common pitfalls in the implementation of an integrated approach.

### **3. RECOMMENDATIONS**

Several recommendations emerged from the survey and case study exercises. The recommendations include both an idea for further research that would supplement and enhance what has already been accomplished through this project, and recommendations for various activities that FHWA could undertake immediately or after conducting only very little follow-on research.

With the exception of the idea for further research, the recommendations fall under the following three main categories: workshops/seminars, training, and guidance manual/ procedural templates. Though there is some overlap in these three areas, generally the workshops are intended to be less structured than training modules and to cover broader topics. Training is intended to include development of instructional manuals or guidebooks and to require an instructor. Both may include sample exercises and some of the procedural templates that are the subject of the third type of recommendation could be included in the training manuals or guidebooks.

#### **3.1 WORKSHOPS/SEMINARS**

There are three types of workshops/seminars that could be pursued. Each could be pursued alone or in combination with the others. The recommendation would be to pursue all three types because of the wide-range of experience with integration found in the states, *i.e.* there appears to be an audience for each type of session. If funding or other issue dictates that only one type of workshop/seminar can be pursued, the recommendation would be to pursue the project-based seminars.

##### **3.1.1 Broad Topic Workshops/Seminars**

FHWA could host a full-day seminar covering broad integration topics. The seminar would be structured around the issues and section/sub-section headings found in Chapter 3 of the Best Practices Report entitled, *What We Learned*. Unlike the other workshops/seminars suggested below, a facilitator would not be necessary for this session and it would not require targeting participation or limiting the size of the audience (within reason). It would be assumed that only

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those states not already heavily involved in integration efforts would attend, but any agency could find it useful.

Case study states could be used as sources of information for each topic area. Professionals from these states could be called on for presentations on their experiences on specific topics. Though all five of the case study states are candidates to speak on any of these topics, ideas are provided in the outline below for particular states to speak on particular topics. The outline of Chapter 3 from the Best Practices Report is provided below. Information from that chapter could be used to develop the seminar.

- Integrated Process
  - Project Development – Oregon DOT, Maryland DOT
  - Management – PennDOT, Florida DOT
  - Quality Assurance - PennDOT
- Development and Implementation
  - Impetus – Ohio DOT
  - Impediments – Ohio DOT
  - Successful Strategies – Oregon DOT
- Attributes that Impact Integration – Maryland DOT
- Common Pitfalls – Florida DOT

### 3.1.2 Topic Based Workshops/Seminars

The topic based workshops/seminars would cover more specific topics than the broad topic seminars. Topics, selected from a review of the needs expressed through both the survey and the Best Practices report, would be presented through facilitated information sharing type workshops. These workshops should be small (around 15 participants representing all disciplines), include role playing exercises and be very hands-on and informal. Participation should be targeted. States with common attributes applicable to the topic area would be invited to attend in order to promote pertinent information sharing and to ensure discussion is particularly relevant to each participant. The topics should be fairly specific and consequently could be held to shorter presentations, perhaps half day sessions are most appropriate. This could depend on the topic, however.

Possible topics could include:

- Automated project management systems
- Working With Stakeholders under an Integrated Process –



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Workshop would cover what the agency should provide, how to communicate what you want and how to establish what you need including preparing MOUs

- Integration in the decentralized agency –  
Workshop would cover who should be responsible for what, how to gain buy-in, and tools to deal with varying levels of staffing in field offices.
- Roles of the various disciplines in project development
- Project management styles under an integrated approach –  
Workshop would cover the differences from project management under traditional approach and discuss a multi-disciplinary team approach
- How to develop an effective conflict resolution process
- Staffing, HR and management issues under integrated approach –  
Workshop would include strategies on how to free up senior level staff to develop approach, strategies for reorganizing duties, strategies for gaining buy-in to new approach
- Linking integrated project development approach and asset management techniques
- Integration of land use and transportation planning

### 3.1.3 Project Based Workshops/Seminars

In various geographical areas, projects that are regionally significant and/or recognized in some way would be selected as the subject for a full-day seminar. Projects could be selected for reasons such as: 1) some exemplary aspect of the development process followed, *e.g.* utilized context sensitive design, 2) was delivered within an uncommonly quick timeframe, 3) received some award for design excellence or innovation, 4) received some recognition for environmental excellence, or 5) any other project that is nominated based on the fact that the agency followed an integrated process to get it done.

Projects for presentation could be selected through a multi-phase approach. This approach could include: 1) states could be surveyed to nominate projects, 2) AASHTO or other transportation organizations that give awards could be surveyed to nominate or suggest projects, 3) regional FHWA offices could be surveyed to nominate/suggest projects, 4) the Sounding Board

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established for this project (or other sounding board convened just for this purpose) could be surveyed to nominate/suggest projects. Projects should be selected carefully to include various types, *e.g.* both major and minor projects, covering various modes, addressing particular concerns such as a significant environmental hurdle or community impact issue.

Organizers should encourage a wide range of individuals from the agency under which the project was constructed to participate in the presentation. At a minimum, individuals from each of the four disciplines should be involved. The presentation should cover at a minimum:

- Description of project covering brief history, purpose and need, mode, special considerations, alternatives considered, etc.
- Outline of project development process followed
- Description of project management procedures used
- Discussion of public involvement efforts
- Discussion of stakeholder involvement
- Discussion of issues and decisions reached at various concurrence points
- Discussion of any conflicts and the conflict resolution process followed at concurrence points.
- Discipline specific discussions of procedures followed and any issues of particular relevance to each discipline
- Lessons learned

## 3.2 TRAINING

Training, like other areas in the development of transportation solutions, has been largely stove-piped. Therefore, the proposed training should be provided across disciplines. There are two levels of training discussed in this section – training topics that will require some additional research to identify, and training topics that can be identified based on the current research.

### 3.2.1 Training Topics That Will Require Further Research

Two avenues for further research to identify training topics are explained below.

#### Work in Conjunction With Topic-Based Seminars/Workshops

Some of the issues and topics explored in the workshops could be furthered by training. The workshops would serve to fully explore the topic and to possibly break the issues down into smaller pieces more appropriate for a training module.

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For example, one of the proposed workshop topics is automated project management tools. The workshop could include presentations by states on a variety of types of project management tools currently in use under various circumstances, *e.g.* GIS tools, other automated systems, *etc.* Once the workshop has identified a few types of project management tools and the appropriate situation(s) in which to apply that tool, training could be developed on how to implement those particular types of tools.

### Survey Follow-up

Follow-up telephone, email and/or in-person interviews with targeted respondents to the survey should be conducted. Follow-up should target those respondents who identified training as an impediment to implementing a more integrated approach or as a reason they believe an integrated approach has not been implemented in their agency (questions 15 and/or 18 of Integration Solutions Survey). This contact would be used to identify the types of training and skills these agencies feel they need. Training modules would then be developed to fill those specific needs.

A list of the states that identified training as a specific need is included as Appendix A to this document.

## **3.2.2 Training Topics That Can Be Identified Now**

### Discipline Roles

One area of training that could be developed based on the information gained so far is similar to one of the areas included in the proposed topic-based workshops and in Section 3.3.2 below. A course could be developed introducing the roles of each discipline in the development of transportation solutions. Because a full discussion of the roles of each discipline is a topic best covered in a workshop format or through the development of a monograph, the training could be focused more on anticipating the needs and outputs of the planning, environment, engineering and real estate disciplines in the transportation development process.

The training course could lay the ground work for the discussion of discipline roles by presenting applicable laws and Federal regulations that shape the activities of each discipline, *e.g.* NEPA, the Uniform Act, applicable portions of TEA21 and subsequent upcoming transportation reauthorization. The course could include a state-specific module that includes discussion of various state rules and regulations that affect how each discipline participates in the process. If this is too extensive, the training could at least highlight those areas that frequently fall under state or local control to create awareness of these issues. For example, different states handle

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acquisition of utilities and coordination with utility-related entities differently. This can affect how the real estate and engineering disciplines handle certain activities.

Generally, the training session would cover the types of information each discipline requires and the types of outputs each discipline generates. For example, various required transportation planning documents could be explained. Various engineering or design drawings and NEPA documentation could be explained. Real Estate cost estimates could be described including the various types of information these estimates can be based on, *e.g.* auditor records (tax roll information) versus Comp books, *etc.*

### Project Management

Project management is an integral part of an integrated process. Training could be developed geared towards project managers on the subject of assembling and managing multi-disciplinary teams. The training would provide introductory information on the importance of a multi-disciplinary team approach to project management and its contribution to an integrated approach. Further, the training would assist project managers in learning to identify the disciplines and specific positions within those disciplines, both from within their agency and amongst their other stakeholders, to involve in the process and when.

The training would include a brief discussion of available automated project management tools, the importance of documentation and communication of project management decisions and methods of dissemination of that type of information.

## **3.3 CREATION OF DOCUMENT TEMPLATES**

The Best Practices report highlighted the need for clear, concise, consistent and readily available procedural manuals. Similarly, the Best Practices report revealed the need for each discipline under an integrated approach to understand the role of the other disciplines involved in the process. This section presents recommendations on assisting states to develop workable documents to address these needs. As the case studies revealed, creating these documents is no small task. Some states hired consultants to assist in the process. Some states have created an entire library of procedural manuals and training documents. Providing an outline of what should be included in these types of documents could significantly decrease a state's efforts in preparing them.

### **3.3.1 Guidance Manuals**

There are two basic types of guidance manuals required under an integrated approach – an overall process manual and discipline specific manuals. Most states likely have in existence

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some sort of procedural manual describing the process the agency follows in developing transportation solutions. The case study states each recommended, however, that these documents be revisited after development of a new approach to ensure they are consistent with the new process and with each other. A good process is useless if not effectively communicated to those who have to use it and work with it. Moreover, emphasizing the commitment to the process through the exercise of formally developing a new manual solidifies the process in the organization and makes it “real” to all employees.

### Overall Process Manual

The overall process manual template would include examples of the topics to be covered in an internal guidance manual as well as ideas on brief pamphlets, flowcharts and/or graphics to be developed for dissemination internally and to stakeholders. The template would include discussion of the use of consultants in the process and a presentation of the pros and cons of doing so.

Examples from case study states and other manuals referenced by states in the survey and a short review of other states’ manuals could be used to develop the template. A few of these manuals were included in the Best Practices report. A list of a few available state guidance manual examples is included in Appendix B. This effort should be expanded to include review of additional manuals if time and funds allow.

### Individual Discipline Manuals

Individual discipline process manuals must be consistent with the overall process manual with respect to terminology and general organization. The individual discipline process manual templates would include examples of the topics to be covered in each discipline’s procedural manual. Emphasis would be placed on encouraging coordination between the disciplines in the preparation of the manuals in order to minimize the use of discipline specific language and to ensure a similar organizational structure that relates clearly to the overall process manual.

Examples from case study states could be used to develop the templates. A number of these manuals were included in the Best Practices report and a list of the states from which examples could be used is included in Appendix B. This effort could also be expanded to include review additional manuals if time and funds allow.

### **3.3.2 Monographs of Discipline Roles**

Monographs would provide an overview of the expertise of the various disciplines and the roles each plays in the project development process. It would include discussion of the inputs each discipline requires in order to perform its function, from whom these inputs must/should come,

and the outputs of each discipline. The monographs could be presented as both a textual description and in a flowchart type of diagram. The diagram would show the overlap of various information sources and provide a graphical representation of the manner in which the outputs of one discipline serve as the inputs for one or more other disciplines. The diagram will also illustrate the iterative nature of many of these inputs/outputs.

Again, the monographs will focus on the *expertise* of each of the disciplines as opposed to the specific steps each discipline follows under any specific process. In this way, the monographs will be generic enough to apply to most states as opposed to being reflective of any particular state's transportation solution development process. Survey responses and case study state discussions would be used to develop the monographs.

### 3.4 ADDITIONAL RESEARCH

Beyond the follow-up research required to pursue some of the training topics suggested above,

“Care should be taken to avoid applying whatever comes out of this effort across the board in a rulemaking process. Benefits of a multi-disciplinary approach should be quantified and demonstrated. Transportation agencies will respond to new opportunities more readily if convinced of the benefit.” – Georgia Department of Transportation

“This approach, while allowing for the widest amount of input and the least chance for problems, is extremely staff intensive. We will need to see some real success stories from our process in order to justify all of the time spent.” – Illinois Department of Transportation

“The trick is to have enough coordination between disciplines at the right time and with the right priority. Economy of scale (we can only afford so many staff in each discipline) must be achieved.” – Texas Department of Transportation

“The one thing that comes to mind, the more involvement into a process increase the project cost. Funds are always a major concern.” – Virginia Department of Transportation

an area for additional research related to but separate from the current project has also been identified. The paragraphs below provide a basic statement of the research idea and a broad description of the possible approach. Further effort would be required to develop an actual statement of work and research methodology.

The research topic is to identify and develop quantifiable measures of success related to integration efforts. Certain qualitative measures of success could be documented as well. As illustrated by a few select quotes taken from the Integration Solutions survey, there are several reasons to

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undertake the effort to quantify and measure the impacts of an integrated approach. Some respondents apparently believe an integrated approach may be a good idea, but are skeptical about the ultimate returns of such a process given the extensive upfront efforts. Some appear to feel the only way to overcome the inertia of the status quo is to provide a quantifiable measure of the success of a new approach of any kind. Some transportation professionals would like some more definitive evidence that such an approach would actually provide positive results in the long run. The survey and the case studies addressed this issue to some degree, but it was not the focus of either effort.

The proposed research would be focused on first identifying the possible measures of success and then investigating whether or not enough states have actually measured these things in order to be able to create quantifiable examples of successes. This could be achieved through a two-phased approach. First, follow-up interviews would be conducted with states that indicated in the survey they have made some attempt to measure the results of their integrated approach (states that answered yes to Question 12 of the Integration Solutions Survey are listed in Appendix C). Interviews with the current (or newly convened) Sounding Board could also be used to identify quantifiable success factors. Second, new case study states would be selected based on the factors identified in Phase I. (Many of the current case study states are new to integration and would not yet be able to quantify results.) The case study states would be visited in an attempt to actually measure results. It may be found that such measures do not yet exist, but at a minimum, the project would identify the factors that can/should be measured and how to do so.

Possible measurement factors could include:

- Quality assurance review ratings – most states likely have some sort of quality review or quality assurance process. The factors addressed in these existing reviews could be evaluated for relevance to their being impacted by an integrated process. Reviews, or the appropriate portions of these reviews, from pre and post process implementation could be compared.
- Time and cost reviews – *e.g.* number of cost overruns, number of projects missing various milestones and/or final completion date. Analysis could be performed on projects completed pre and post new process implementation.
- Customer satisfaction surveys - percent increase or decrease in satisfied customers, by stakeholder category, *e.g.* public, resource agencies, political entities.
- Internal agency staff job satisfaction surveys – percent increase or decrease in job satisfaction measured by discipline.

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## 4. CONCLUSIONS

The ultimate goal under this project is to understand the issues faced by the state transportation agencies in the area of transportation decision-making and to foster use of an approach that promotes integration between the planning, environment, engineering and real estate disciplines. This project has provided insight into the circumstances under which the states are operating, the processes they are following and why. This project has also pinpointed examples of best practices in integrating these disciplines for the development of transportation solutions. Finally, this report concludes the project by provided ideas on how FHWA can share these best practices to the right people and, thereby, perpetuate their use.

As with integration efforts themselves, the recommendations on how to promote these activities hinge on appropriate and effective communication. The recommendations presented in this report provide a variety of methods to communicate the lessons learned through the State of the Practice and Best Practices reports. Certain topics lend themselves to one form of communication or another and others could be expressed in a variety of ways. With relatively minimal additional effort, FHWA could turn the information gained through this project into training modules, hands-on workshops or seminars and written guidelines or monographs that will provide a road map for state transportation agencies seeking to become more integrated.



APPENDIX A

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STATES MENTIONING NEED FOR TRAINING  
IN SURVEY RESPONSE

**Appendix A: List of Survey Respondents that Selected “Need for Training/New Skills” in Response to Either Question 15 or Question 18 of the Integration Solutions Survey**

Question #15: “To your knowledge, did your agency face any impediments when implementing the new, more integrated approach?”

Alaska	Missouri
Arizona	Nevada
California	New Jersey
Colorado	Ohio
Delaware	Pennsylvania
Finnish Road Administration	Rhode Island
Florida	South Carolina
Idaho	South Dakota
Indiana	Tennessee
Iowa	Utah
Kentucky	Vermont
Louisiana	Virginia
Maine	Washington (state)
Maryland	West Virginia
Portland Metro (Portland, Oregon MPO)	
Michigan	
Minnesota	

Question #18: “Do you have an opinion as to why your agency has not adopted such a process?”\*

Arizona  
FHWA  
Hawaii  
Illinois  
Iowa  
Louisiana  
Massachusetts  
Mississippi  
National Capital Regional Transportation Planning Board (DC MPO)  
New York  
Oklahoma  
South Dakota  
West Virginia

\*States can appear on both lists if a response was received from more than one discipline and one discipline described the state’s approach as integrated and the other as non-integrated.

**APPENDIX B**

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**STATES THAT COULD PROVIDE  
GUIDANCE MANUAL EXAMPLES**

## **Appendix B: States That Could Provide Guidance Manual Examples\***

Oregon  
Pennsylvania  
Ohio\*\*  
Florida  
Maryland  
Iowa  
South Dakota  
California

\*This is not an exhaustive list

\*\*Ohio guidance manuals are not yet complete, but some of the draft documents are available and their development process was exemplary.

APPENDIX C

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STATES THAT HAVE MADE EFFORTS TO MEASURE RESULTS

**Appendix C: List of Respondents that Answered “yes” to Question 12 of Integration Solutions Survey**

Question 12

“Have any efforts been taken to measure the results of this new, more integrated approach?”

Alaska  
Colorado  
Finnish Road Administration  
Illinois  
Iowa  
Kentucky  
Maine  
Minnesota  
New Jersey  
New York  
North Carolina  
Ohio  
Oregon  
Pennsylvania  
South Carolina  
South Dakota  
Utah  
Virginia  
Wisconsin\*

\*Wisconsin did not answer “yes” to question 12, but the state has had an integrated approach in place for a relatively long period of time and other responses indicate they may have something to add to the discussion.