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Advanced Freight Planning

Sample Instructor Guide



U.S. Department of Transportation
Federal Highway Administration 

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I. Introduction

The National Highway Institute (NHI) course Advanced Freight Planning is a two-day course intended to provide advanced, in-depth, hands-on understanding of freight transportation and how freight can be incorporated into state and MPO planning and project programming processes. The course is designed to cover:

- The impact of freight and goods movement on state and local economies;
- The role of transportation in modern business logistics / supply chain management;
- Freight planning and programming best practices with an emphasis on techniques that have been successfully used by other public agencies to bring freight projects from planning to reality; and
- Freight stakeholders and how they can benefit from the public sector planning process.

This course is designed to build upon previous freight planning efforts by providing advanced knowledge about freight planning, such as:

- Why freight is important to local and regional economic competitiveness;
- How non-highway freight modes, such as expedited air cargo, container ship and intermodal rail operate, and what are the trends affecting these modes;
- How to identify, prioritize, develop, and implement freight supportive projects; and
- Global issues affecting modal trends and technology development in the freight transportation environment.

II. Course Overview

Today state and regional planning agencies are increasingly reliant on international trade to support local economic development. Public transportation agencies are being challenged to support modern business supply-chain management through investments and policy actions affecting transportation service providers across all modes. To help American businesses succeed in the global trade environment, government agencies responsible for transportation planning must foster integrated modal systems by supplying infrastructure and info-structure that can support responsive, reliable transportation for goods in motion.

Over the past several decades there has been growing interest and understanding among federal, state and local governments, as well as the greater business community regarding the impact of freight movements on economic vitality, and the consequences of inadequate or unreliable transportation systems. However, due to a multiplicity of issues and barriers, state and local transportation agencies

have struggled to identify, incorporate, and implement freight supportive projects into their planning and project implementation programs.

Historically, private sector stakeholders responsible for material and product transportation and public officials responsible for transportation infrastructure investment, have had little or no interaction aside from economic and safety regulation. While most economic regulation has been dissolved, lingering attitudes have fostered public sector resistance to seek business involvement in the planning process (and resistance within the private sector to get involved). Providing planners with a better understanding of private sector operations and the importance of freight to regional economic success, may foster more interaction between public and private transportation planners and practitioners, and help address the nation's freight transportation needs.

The supply of courses focusing on freight planning is inadequate. Most college level logistics programs cater to the private sector. Developing and marketing this training course is crucial to the advancement of the goals and objectives put forth by FHWA.

Advanced Freight Planning is a two-day course aimed at transportation professionals involved in multi-modal planning and program management. The course provides techniques and strategies designed for those individuals directly involved in the implementation of transportation planning, programming and allocation of resources. The course will be structured to explain to participants why an understanding of freight is important. It will provide participants with the skills needed to identify, prioritize, develop and implement freight supportive projects. It will identify tools and teach skills focusing on:

- "Selling" a freight plan;
- "Doing" a freight plan; and
- "Using" a freight plan.

The "selling" session will focus on identifying to whom, why and how planners need to sell the benefits of freight planning; the "doing" session will focus on adapting planning activities to integrate freight by providing an in-depth examination of supply chain management and its impact on transportation planning; and, the "using" session will focus on implementing a freight plan in coordination with a long range transportation plan and identifying projects through the planning process that will be programmed into the State or MPO Transportation Improvement Program (S/TIP).

III. Course Organization

Two qualified FHWA-approved instructors will present this two-day course using the curriculum materials, which includes an Instructor Guide, a Participant Workbook, a Resource Information CD, visual aids, and case studies for both rural and metropolitan environments. In addition, the instructors need at least five flip charts and sets of markers, one Internet connection and cable (if available), and audiovisual equipment.

All participants receive copies of the Resource Information CD, and Advanced Freight Planning Participant Workbook. The Resource Information CD is a comprehensive desktop reference, including website resources and scenarios. The instructors also refer participants to it throughout the conduct of the course.

The course is designed to run for twelve instructional hours, typically from 8:30 AM to 4:30 PM over two consecutive days. Other time frames can be accommodated, provided the State gives notice at the time the course is requested. Each day will include a one hour lunch break. The instructional time may vary plus or minus 30 minutes depending on the Optional Modules selected by the course sponsor. A preliminary agenda is shown in Section IX.

The complete lesson plan is composed of:

- Introduction lessons (both Day 1 and Day 2)
- A review and conclusion lesson (Day 1)
- Seven required lessons
- A review and end-of-course test lesson (Day 2)

Table 1 displays the standard composition and timing of the course. Detailed lesson plans can be found in Section XII.

Table 1- Course Outline for NHI 139003

Advanced Freight Planning Course Outline		
Day 1 Lessons	Lesson Description	Est. Time (minutes)
Introduction Lesson	Lesson 1: Introductions and Course Overview	45
Selling Freight	Lesson 2: Selling the Importance of Freight in the Planning Process - Presentation and Exercise	110
Supply Chain Dynamics	Lesson 3: Supply Chain Dynamics and Public Planning Presentation and Exercise	105
Doing Freight Planning	Lesson 4: Doing a Freight Plan: Understanding Global Trends and Local Impacts - Presentation	70
Review	Lesson 5: Day 1 Wrap up Presentation	30
Total Contact Time Day 1 (in minutes)		360

Day 2 Lessons		
Day 2 Overview	Lesson 6: Review and Overview - Day 2	30
Doing Freight Planning	Lesson 4: Doing Freight Planning Exercise	40
Using Freight Planning	Lesson 7: Using Your Freight Plan for Project Development - Presentation and Exercise	80
Implementing Freight Planning	Lesson 8: Freight Project Implementation and Funding Alternatives - Presentation and Exercise	90
Review/ Test Lesson	Lesson 9: Individual Exercise: Freight Planning Action Plan	60
	Lesson 10: Review and End-of-Course Test	60
	Total contact time Day 2 (in minutes)	360

The course will include overarching capstone exercises that will be part of each module. The objective of the capstone exercises is to allow participants to gain hands-on experience by completing the tasks necessary to implement the learned material upon returning to work. Course exercises will be designed to demonstrate the importance of learning the material via application. The series of exercises developed as part of the capstone format will provide the components of a freight planning toolkit that will mimic the tasks that the participants will be required to complete in the workplace. To maximize the usefulness of the hands-on format of the exercise, it will be set up using data and information relevant to the participants' home jurisdiction. Through the capstone exercise series, the participants will perform the following:

- Explain how freight planning can be used to support economic development;
- Demonstrate the key transportation linkages in an industry supply chain;
- Discuss a framework for identifying and prioritizing freight projects;
- Develop strategies for funding freight projects;
- Discuss the benefits and challenges of multi-jurisdictional freight planning; and
- Prepare an action plan for implementing or enhancing freight planning activities within the participants' agency.

IV. Course Coordination

The NHI Training Program Coordinator, course contractor, course instructors, FHWA Division Staff and State DOT Training Coordinator will work together to coordinate the delivery of this course. Usually, a State DOT Training Coordinator will submit a request for the course using form FHWA-1530 with requested dates and training sites to the NHI course scheduler, who, in turn, will contact the course contractor. The contractor will then contact the State DOT Training Coordinator and FHWA Division Staff to discuss possible dates for the course. Once a list of potential dates is compiled, the contractor will check on the availability of the instructors. The contractor will confirm the delivery date with the State DOT Training Coordinator, FHWA Division Staff, NHI Course Scheduler, and instructors.

The NHI Course Scheduler will then submit the FHWA-1530 with the agreed dates to the NHI Training Program Manager for approval. Once the NHI Training Program Manager approves the FHWA-1530, the course session is formally scheduled for the agreed dates and training site. This also will authorize the contractor to conduct the course. A confirmation is mailed to the instructors.

The contractor will communicate with the host State DOT Coordinator to:

- Confirm times of instruction
- Obtain directions to training facility
- Discuss host State requirements (see Section V)

The contractor will communicate with the FHWA Division Staff to:

- Obtain lodging recommendations for the instructors
- Check the course material

The host State FHWA Division Office Staff should provide the State Strategic Plan and/or any other State documentation that addresses the issues of freight in the planning process. That documentation will enable the instructors to gauge the State's current activities related to multimodal freight planning and project implementation.

The State DOT and the FHWA Division Staff will also be requested to submit recommendations on the types of freight policy, planning and programming issues they would like covered in the rural and metropolitan case studies lesson. The contractor will contact the FHWA Freight Professional Development Program coordinator to get a list of the course previously hosted in the requesting state.

The contractor will fax the roster to NHI within two weeks after the course has been provided, and mail the original Class Registration Form, course evaluations, and student registration forms to the NHI Training Program Manager. The contractor will also send a thank you note to the State DOT Coordinator.

V. Class Size

The maximum class size permitted by NHI is 30 people; however, the smaller the class sizes the better, with a minimum of 20. NHI will ship 30 copies of the Resource Information CD, Participant Workbooks and the Administrative Package to the State DOT Training Coordinator to the address shown on the Course Request form (1530). The Resource Information CD along with the Participant Workbook should be placed at each participant's seat by the State DOT Training Coordinator prior to the beginning of the first day of class. A writing pad should be provided for each participant. NHI will provide rosters and sign-in sheets, tent cards, course evaluation forms, participant registration forms, name tags, pencils and course certificates. The State coordinator must notify the NHI Course Scheduler concerning any changes to the number of manuals or to the shipping address.

VI. Host Agency Responsibilities

Audiovisual Equipment Requirements

Visual aids for this course are comprised of PowerPoint presentations and flip charts. The instructors may also identify and walkthrough websites relevant to freight planning and logistics if possible.

The following audiovisual equipment is necessary for delivery of this course:

- LCD projector compatible with a notebook computer and cables for proper connection (e.g., InFocus or similar make)
- Spare projector bulb
- Electronic remote device to advance slides in PowerPoint presentation (if available)
- Projection screen (at least 6' x 6')
- Laser pointer (if available)
- Twenty-foot or longer extension cord
- Whiteboard with dry erase pens and eraser
- Flip charts (at least five)
- Tape for posting of flip chart responses
- Large markers, assorted colors (at least five sets)
- Large black markers for participant tent cards (one per every two participants)

All equipment should be placed in the room for the instructors to check at least one hour prior to the first day of the course. The host State should provide technical assistance during this time and contact information for technical assistance during the presentation of the course.

Room Requirements

The room will be large enough to accommodate workspace and chairs for up to 30 participants and 2 instructors plus equipment—a large conference room or classroom.

Instructors will arrange the classroom, as they deem most appropriate given the number of participants. (The ideal arrangement allows participants to interact with the instructors and each other; e.g., a U- or V-shape arrangement, clusters of work areas, etc. Avoid "lecture hall" type of arrangements.) All participants should be able to see the screen and instructors. Participants and instructors should be able to move about the room without obstruction.

A preparation table and presentation table should be provided for the instructors. The presentation table will be for the audiovisual equipment and the preparation table will be for the instructors' materials. The room should be in a quiet area and have a lighting system that permits convenient dimming of the lights, especially where the screen is located.

Local Coordinator's Responsibilities

The local coordinator is responsible for preparing the site prior to the instructors' arrival. Below is a checklist of the items the local coordinator should prepare prior to the instructors' arrival. It is recommended that the instructors contact the local coordinator to ensure these steps have been taken.

Training Site

Before the instructors' arrival, the local coordinator should verify the following accommodations are in place for the training site:

- Selection of a training room is critical to the success of the course. Great care should be taken to select a room that is handicap accessible and will not be overcrowded, too hot or too cold, or subject to outside distractions. The instructors should provide any specific requirements for the training facility so that the training coordinator may:
- Reserve a training room for the duration of the course
- Check to see if anyone else will be using the room for nighttime functions
- Determine if books and equipment can be left in the room. Training courses, requiring special equipment or computers, must have after hours security
- Visit the classroom to make certain it meets all of the instructors'

requirements

Other considerations for a training room:

- Heat or air conditioning; find out if the instructors can control these
- Adequate shape and size with no poles or obstructions
- Special arrangements for demonstrations, labs and experiments
- Seating arrangements
- Away from kitchen, construction area or other noise distractions
- Electrical outlets
- Lighting controls - almost every training course uses visual aides that require a projection screen. It is important to have a room where lighting can be controlled to prevent glare on the screen while not placing the room in total darkness

The following points will be considered for using visual aides:

- Will shades completely darken all windows?
- Can the lights be selectively dimmed when showing slides or viewgraphs?
- Will overhead lights shine directly on the screen?
- Can a bulb be removed above the screen or will the whiteboard be too dark?

Participants and Instructors

If needed, a block of hotel/motel rooms will be reserved for the course participants and instructors. Some hotels will provide a free meeting room if a minimum number of participants stay at the hotel.

Participants and instructors should be:

- Informed of course starting and ending times
- Advised on hotel accommodations and room rates, check out times
- Furnished with maps
- Advised on parking arrangements

Final Arrangements

Two Weeks before the Course:

An approved copy of COURSE REQUEST AND CONFIRMATION (Form FHWA 1530) will be sent to NHI. If not, instructors will call the NHI Course Scheduler at (703) 235-0528.

Instructors will be responsible for checking that all training materials have arrived:

- Participant workbooks
- Tent cards (large felt tip markers will be needed)
- Evaluation forms
- Class roster form

- Student registration form
- Certificates
- Inflatable beach ball

Other Checks:

- Reconfirm the training facilities
- Discuss the seating arrangements and who will set-up the room
- Discuss what time the room is unlocked/locked
- Check to make sure a technician is available in case there are problems setting up the room or if something goes wrong during the course

One Week Before the Course:

- Prepare directional signs to classroom
- No smoking in the classroom. Signs should be posted or written on the whiteboard
- Identify smoking areas
- Determine if snacks are available
- Identify where telephones are - both for participants to make outgoing calls and to receive incoming messages
- Decide who will welcome the participants and introduce the instructors
- Special check out arrangements may be made to coincide with the course completion time
- Determine who will prepare the certificates of training and who will pass them out at the end of the course

One Day Before the Course:

- Set-up the Classroom
- Organize the participant materials
- Post directional signs
- Test all equipment

During the Course:

- The instructor will identify whom they should contact if he/she needs assistance
- Instructors will provide a copy of the class roster for all course participants
- Instructors will ensure that certificates of training have been prepared

After the Course:

The instructors will check to make sure they have the class roster, course evaluation forms, and student registration forms. The instructors will be responsible for sending these items to NHI within two weeks.

Participant Requirements

In addition to the Resource Information CD and Participant Workbook, the State DOT and/or FHWA Field Office should provide notepads and pens, or instruct participants to bring notepads and pens with them.

VII. Target Audience

Advanced Freight Planning is a two-day course for transportation planning staff, including:

- Mid-level State DOT transportation and freight planners
- City and County Planners who deal with freight issues
- MPO Staff
- Mid- and high-level public sector transportation and freight planners
- Consultants
- Private Sector Freight Managers
- Economic Development Analysts
- FHWA Employees

This course is designed for those individuals seeking to supplement and expand their basic knowledge and understanding of freight issues and planning. This is an advanced level course and it focuses heavily on resources and solutions, and how those solutions can be applied to developing plans and programs for the participants' agencies. For example, the course will focus on the technical aspects of "how-to" sell, do and use freight planning and will require an understanding of freight planning basics. Participants will learn methods and move from understanding why freight is important to implementation of freight projects. Time will not be devoted to definitional and introductory material; therefore, participants are expected to have a working knowledge of the public sector transportation planning process and freight planning basics. It is recommended that participants have completed one or more of the following courses or workshops: Integrating Freight into the Planning Process, Engaging the Private Sector in Freight Planning, Freight Data Made Simple, and/or the Freight Studies Seminar.

Please note that initial course delivery is aimed at State DOT, MPO and FHWA field staff, but the course is equally suitable for State and local economic development staff, local government staff and other private or public agencies involved in freight logistics.

VIII. Course Goal and Outcomes

Course Goal

The purpose of this course is to:

Provide advanced, in-depth understanding about the role of freight transportation in the economy; examine the importance of transportation in supporting private sector supply chain management strategies; examine key freight customers and the variety of modal freight stakeholders; explore the mega-trends affecting freight capacity; and examine the issues affecting freight in the planning process so that public sector transportation planners will be better able to incorporate freight into their respective transportation planning processes and programs.

Again, since this is an advanced course, participants should be familiar with basic information and understanding of freight issues. This course will focus on using the presented KSA's (knowledge, skills and abilities) to effectively address issues.

The goal of this course is to:

Promote the development of more multi-modal transportation systems by providing public and private sector transportation planners with tools, techniques, and noteworthy practices to further integrate freight and more effectively engage the private sector in the public sector transportation planning and programming processes.

Course Outcomes

At the end of this course, participants will be able to:

- Describe the importance of freight mobility to the economy
 - Discuss how freight transportation needs differ for major industry sectors
 - Describe the role of the freight transportation systems in supporting economic competitiveness
- Discuss major trends affecting various modes of freight transportation, and their potential impacts on regional transportation systems
 - List the economic drivers that influence private sector freight transportation decisions
 - Discuss how private sector needs can inform public sector performance measures
- Demonstrate methods for freight project selection and implementation
 - Summarize methods for identifying and prioritizing freight projects

- Discuss the benefits of engaging private sector stakeholders in project identification
- List potential funding mechanisms for freight projects

IX. Course Agenda

The course agenda is provided in Table 2.

Table 2: Course Agenda

Day 1		Length
Time	Lesson Title	(minutes)
8:30 - 9:15	Lesson 1: Introduction and Overview	45
9:15 - 10:05	Lesson 2: Selling the Importance of Freight Planning	50
10:05- 10:25	Break	20
10:25 - 11:25	Lesson 2: Selling Freight Planning (cont.)	60
11:25 - 12:25	Lunch	60
12:25 - 1:25	Lesson 3: Supply Chain and Private Sector Dynamics	60
1: 25-1:45	Break	20
1:45 - 2:30	Lesson 3: Supply Chain and Private Sector Dynamics	45
2:30-3:15	Lesson 4: Doing Freight Planning	45
3:15- 3:35	Break	20
3:35 - 4:00	Lesson 4: Doing Freight Planning (cont.)	25
4:00 - 4:30	Lesson 5: Day 1 Wrap-up Presentation	30
Day 2		Length
Time	Lesson Title	(minutes)
8:30 - 9:00	Lesson 6: First Day Review	30
9:00 - 9:40	Lesson 4: Doing Freight Planning (Exercise)	40
9:40 - 10:00	Break	20
10:00 - 11:20	Lesson 7: Using Freight Planning	80
11:20 - 12:20	Lunch	60
12:20 - 1:10	Lesson 8: Freight Project Implementation	50
1:10 - 1:30	Break	20
1:30 - 2:10	Lesson 8: Freight Project Implementation (cont.)	40
2:10 - 3:10	Lesson 9: Individual Exercise: Action Plan	60
3:10 - 3:30	Break	20
3:30 - 4:30	Lesson 10: End of Course Test Review and Wrap-up	60

X. Instructors Checklist

- **Request for Training**

NHI hosts request training by completing a host request form on-line at the NHI Website <http://www.nhi.fhwa.dot.gov/>. When you receive notice from NHI that a session has been requested, you must contact the designated individual within two weeks to firm up the session date.

- Once the session is confirmed and you have received the session confirmation email from NHI - here are some suggestions for preparation.

- If you are not listed in the NHI system as the main point of contact for the course, be sure that individual forwards you the session confirmation email. It contains important information like the course number and session number
- Be sure that you are registered with NHI as an instructor and that you have your four-digit instructor code. You may register on the NHI Website or contact Carolyn Eberhard (Carolyn.eberhard@fhwa.dot.gov or (703) 235-0010), the NHI Instructor Liaison, if you have problems registering on the website.

- **Course Instruction and Content**

Work with the Local Host/Coordinator to set the start and end times for the session - and ask for any local examples or concerns that will help you provide relevant examples for the local environment. Also confirm the training dates, location, and number of participants (30 maximum participants).

Ask the Local Host/Coordinator for any equipment or room set up that you need. Normal items to request include:

- Videotape/DVD player
- LCD Projector compatible with a notebook computer (Like an InFocus Machine)
- Cables necessary to connect projector to computer, if possible
- Spare projector bulb, if possible
- Projection screen
- Electronic remote device to advance slides in PowerPoint presentation, if available
- Power strip and a 20 foot extension cord
- Lectern or instructor table
- Whiteboard with dry-mark pens and eraser
- Flip charts (at least 5) and large markers, assorted colors (at least 5 sets)
- Large black markers for participant name tents (one per two participants)
- Masking tape (at least two rolls)

- **Three Weeks Before the Course**

- Confirm logistical information with the Local Host/Coordinator and make any final travel arrangements
- Confirm that all the course material and the administrative package has been received
- We also recommend you identify a potential back-up instructor in case you have any issues getting to the session

- Review your course materials and prepare local examples

Ensure you have the following materials:

- Instructor Guide (IG), one copy for each instructor
 - PowerPoint Presentation
 - Resource Information CD
 - Read and study the IG, PowerPoint Presentation, Resource Information CD and the Host issues
 - Computer loaded with at least Windows 98 and PowerPoint 2000 or higher
 - LCD projector compatible with a notebook computer (i.e. InFocus or similar make), if the Host cannot provide one
 - Cables necessary to connect projector to computer, if the Host cannot provide the projector
 - Spare projector bulb, if the Host cannot provide one
 - Electronic remote device to advance slides in the PowerPoint presentation, if available
 - List of participants with profiles summarizing their positions, responsibilities, and experience, if available
 - Case study materials
 - Copies of the course assessment for each participant
 - A watch or clock
- **One Week Before the Course**
 - Answer any emails from NHI or the Local Host/Coordinator
 - Get directions to the training site
 - Review the instructions for having the participants complete the scannable forms <http://fhwa.breezecentral.com/scan/>
 - **First Day of the Course**
 - Arrive at least an hour before the session starts
 - Help set-up the classroom (tables and chairs are arranged to maximize interaction, projectors do not block participants' lines of sight, flip charts are convenient to instructors and visible to participants, etc.)
 - Test all equipment
 - Help organize the participant material: (Participant Workbook/Resource Information CD, Tent Card, Sign-In Sheet, Participant Registration Forms, Pencils), how they need to complete them, and why they need to be completed)
 - Explain that the participants will need to initial the sign-in sheet in the a.m. and p.m. and score at least a 70% on the assessment in order to receive CEUs
 - Write your instructor code, the course number, and the session number on a flip chart page; post it on the wall so that participants can properly complete the forms
 - Prepare the ground rules on a flip chart page. Cover the ground rules with the flip chart pad's cover or a blank flip chart page, and leave it covered until you review it during the training event. Ask if they have anything they would like to add to the ground rules, and post it on the wall so it is visible during the entire session

- **During the Course**
 - Allow plenty of time to get organized
 - Start on time and stay on track. Always start on time, even if only one participant is in the room. Keep exercises within their time limits. End discussions when they cease to be productive. Lead participants away from digressions and tangents, and back to the lesson
 - Be available during breaks and after class of questions
 - Walk among groups as they work on their case studies or exercises and answer question or offer guidance as appropriate. Ensure participants are on track as they work. Give constructive feedback during the case study solutions presentations and discussions
 - Review Questions: Throughout and at the end of each lesson, review questions should be asked to reinforce the learning outcomes for that lesson and to connect to upcoming material. As a general rule, review or discussion questions should be asked every six to eight slides. Avoid YES or NO questions and try to use open-ended questions to draw participants into the material. Sample review questions are available in the IG; however, the instructor can also develop additional questions. Make sure all questions directly relate and support the learning outcomes
 - Lesson Outcomes: At the beginning of each lesson, review that lesson's outcomes by introducing the outcomes by saying: "At the end of this lesson, you will be able to...." Make sure participants are fully aware of the topics to be addressed in the lesson. Then, at the end of each lesson, review the outcomes once again using review questions or an activity/exercise to ensure the outcomes were met.
 - Enjoy teaching your session
 - Tell participants about other associated NHI courses
 - Prepare participants for the final exam
 - Proctor the final exam (including Pennsylvania exams)

- **After the Course**
 - Have participants complete evaluations
 - Take down all posted flip chart pages
 - Clean up the room
 - Complete the bottom section of each participant registration forms with session attendance, score from the final exam, and whether the participant passed or failed the exam
 - Return the complete package to NHI including the NHI Session Roster, the NHI Sign-In sheet(s), and the final exams, original of the NHI Participant Registration and Course Evaluation Forms within 10 days of the course. The instructor is responsible for sending these items to NHI
 - Instructors will not be paid until the completed package is received by NHI and deemed complete. If the package or forms are not filled out correctly - or you've used old forms- the material will be returned to you for remediation

Lesson 7:
Using Freight Planning: Freight
Project Identification

80 - Minutes
(1 Hour 20 minutes)

Lesson 7: Using Freight Planning: Freight Project Identification

Lesson Number:	7
Lesson Title:	Using Freight Planning: Freight Project Development
Performance-Based Learning Outcomes:	<ul style="list-style-type: none"> Summarize methods for identifying freight projects Discuss the benefits of engaging private sector stakeholders in project identification
Instructional Method: Lecture / Presentation	<p>Instructors Presentation/Interactive Discussion (50 minutes) The instructors will use a slide presentation to discuss various methods that can be used to identify freight specific projects focusing on using data, private sector stakeholders and system inventories. They will:</p> <ul style="list-style-type: none"> Describe how to identify freight projects including Quick Start and Quick Fix projects. Illustrate data driven techniques for identifying freight projects transportation improvement programs. Ask participants to describe methods they may have employed to identify and rank freight projects. Discuss private sector involvement (Engaging the Private Sector) <p>Examples from peer agencies will be presented to reinforce each of the key methods.</p> <p>Small Group Exercise (30 minutes) This lesson employs builds on the overarching exercise. Building on the overarching scenario, participants will use their scenario profile and partial datasets to:</p> <ul style="list-style-type: none"> Prepare a list of potential long-range and short-range freight projects, including a short list of potential “jump start” projects. Outline a plan to engage the private sector. Develop potential criteria for prioritizing project
Instruction Day:	Day 2: A.M.
Time Allocation:	Instructors Presentation/Interactive Discussion - 50 minutes Exercise - 30 minutes
Evaluation Plan:	Participants’ learning will be evaluated by their participation, questions or activity/exercise.
References:	<ul style="list-style-type: none"> Engaging the Private Sector Workshop Materials FHWA Presentations on SAFETEA-LU NCHRP: 8-47 Guidebook for Freight Policy, Planning, and Programming for Small and Medium Metro Area NCHRP 8-36: Best Practices in Statewide Freight Planning

Lesson 7: Using Freight Planning - Identifying Projects





Key Message:	NA
Background Information:	NA
Interactivity:	Tell: In this lesson we will focus on using freight planning to identify projects.
Notes:	NA

Learning Outcomes

- Summarize methods for identifying freight projects
- Discuss the benefits of engaging private sector stakeholders in project identification

7-2

Key Message:	This lesson has 2 learning outcomes.
Background Information:	NA
Interactivity:	<p>Tell: At the end of the this lesson and the exercise lesson that follows, you will be able to:</p> <ul style="list-style-type: none"> • Summarize methods for identifying freight projects, and • Discuss the benefits of engaging private sector stakeholders in project identification.
Notes:	NA

Identifying Freight Projects

- Identifying freight needs
- Translating needs into projects




7-3

Key Message:	Identifying freight projects can be thought of as a three step process- identifying needs, translating needs into projects and considering impact of projects on freight movement.
Background Information:	This slide sets the agenda for the lesson. Each of the three topics will be discussed in more detail.
Interactivity:	<p>Tell: Identifying freight projects can be thought of a three step process. The first step is identifying freight needs. We covered what some of the private sector needs might be yesterday and we will expand on sources for identifying needs in this lesson. Second, we will talk about how to translate those needs into actual projects.</p> <p>Tell: Finally, we discuss considering the impact of freight projects. The remainder of the lesson discusses each of these items in more detail.</p>
Notes:	You should be no more than 2 minutes into the lesson at this point.

Identifying Freight Needs

- Review existing transportation plans
- Interview freight stakeholders
- Observe freight routes and facilities
- Analyze existing and new data to identify deficiencies
- Consult economic development agencies

7-4

<p>Key Message:</p>	<p>Here are several sources for identifying freight projects, many of which are already part of the day-to-day job of public sector planners.</p>
<p>Background Information:</p>	<p>NA</p>
<p>Interactivity:</p>	<p>Ask: How many of you have actually have a process for identifying freight specific needs in your planning process?</p> <p>The instructor will choose one or more of the respondents and ask a follow-up question.</p> <p>Ask: Can you summarize your process?</p> <p>The instructor will then go over any items on the list that the participants did not cover. For each of the items on the list not covered by a participant, the instructor should ask:</p> <p>Ask: Can anyone give me an example of how you use or could use the information from the supply chain and the knowledge of industry needs to identify freight needs?</p> <p>Example responses: Existing plans - most all projects will have an impact on freight movement but many times the merit of the projects is evaluated based on impacts to passenger movement. Freight stakeholders - provide insight into day to day bottlenecks and chokepoints as well as systematic issues. Observation of routes - by observing</p>

	<p>vehicles actually operating in key freight routes and corridors, one can identify issues such as design deficiencies, signal timing issues, congestion, safety concerns etc. Review of existing and new data - Reviewing data such as truck classification counts, employment by industrial sector, crash data and volume to capacity ratios, planners can begin to identify potential freight issues and concerns. Once identified, mitigation strategies can be developed and vetted. Economic development officials - consulting with economic development officials can provide insight into regional development patterns and potential business recruitment targets as well as their transportation needs.</p>
Notes:	<p>This slide should take no more than 3 minutes.</p>

Translating Freight Needs to Freight Projects

- Define what constitutes a freight project
- Existing and new data use
- Stakeholder input
- Inventory of freight routes and facilities
- Existing plans

7-5

Key Message:	Identifying needs are a means to an end and not the end itself. The real goal is to use those needs to inform project identification.
Background Information:	This slide provides a framework for using freight needs to drive the freight project identification process. This framework is not set in stone and meant to serve as a guideline so it is good for participants to suggest alternatives to this framework.
Interactivity:	<p>Tell: Identifying needs are means to an end and the end itself. The real goal is to use those needs to inform project identification. The following is a proposed framework to translate freight needs into freight projects. This framework consists of five steps:</p> <ul style="list-style-type: none"> • Defining freight projects • Relating freight needs to possible solutions • Collecting and analyzing data for technical analysis • Engaging private sector stakeholders to solicit their input regarding potential solutions. The last thing we want to do is to create an even larger deficiency with our solutions. Stakeholders can be instrumental in identifying day-to-day operational bottlenecks (which often fall under the domain of local public works departments) as well as larger, more systematic issues impacting freight mobility. These folks can also be your freight champions when approaching elected officials. • Testing solutions to see how they impact the performance of the freight system. What impact would the projects have on our performance we discussed yesterday? <p>Ask: Does anyone have anything to add to this framework?</p>
Notes:	NA

Defining a Freight Project

- Does not have to be explicitly freight oriented
- Any project that has direct impact on improving freight movements
- Evaluating impact on freight of all projects as part of planning process

7-6

Key Message:	There are probably already freight projects that have been or are being implemented in almost all regions. They just have not labeled as such.
Background Information:	In addition to those projects, this course, along with the other training opportunities offered, are aimed to expanding the types and number of freight specific projects being implemented.
Interactivity:	<p>Tell: The first step to identifying freight projects to define what constitutes a freight project. This may vary from agency to agency in terms of specifics but there are some general guidelines.</p> <p>Ask: Does anyone have a specific definition of what constitutes a freight project in your organization?</p> <p>Tell: Typically, a freight project is thought of as any project whose primary goal is improved efficiency of freight movement. Efficiency can refer to mobility, safety, operations or environmental aspects. However, freight projects do not necessarily have to be freight oriented to have positive effects on freight efficiency. In many cases, using this broader measure of freight projects, identifying freight projects can be as simple as evaluating the impact of existing projects in terms of freight efficiency.</p>
Notes:	NA

Example- Florida DOT

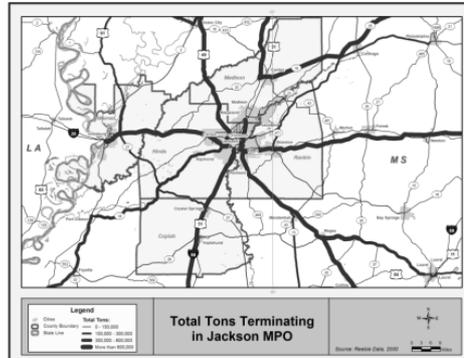
- All projects requests subject to same documentation
- Documentation requires information on impacts on freight movement
- Projects with freight benefits receive additional consideration in screening process

7-7

Key Message:	There are examples of States and MPOs who are already practicing recognizing the impact of all projects on freight movement.
Background Information:	Florida DOT has been very aggressive in recognizing the intermodal freight needs of their State’s economy and they have revolutionized the way in which transportation planning occurs in the State to reflect these needs.
Interactivity:	<p>Tell: Florida provides an excellent example of how States and MPOs can objectively evaluate all projects for a variety of impacts, including freight movement. The creation of the Strategic Intermodal System (SIS) was the first step. Now all projects go through an objective evaluation of how they contribute to meeting the pre-defined goals and objective of the department.</p> <p>Tell: They have developed a GIS tool that automates the evaluation and ranking process. A few of the freight specific factors used in the system include:</p> <ul style="list-style-type: none"> • Connectivity to SIS seaport or airport • Freight intensive employment centers served • Reduction in truck/passenger vehicle interaction <p>Ask: Does anyone have other examples being used in your agency?</p>
Notes:	NA

Using Data for Identifying Freight Projects

- Commodity flow data
- Origin-destination data
- Establishment data
- Crash data
- Bottleneck and chokepoint identification



7-8

<p>Key Message:</p>	<p>Data is a means to an end and it is always good to know what that end is before starting the data collection process. Ultimately, the end for freight data is to be able to identify and measure performance of projects on freight movements.</p>
<p>Background Information:</p>	<p>If the class has taken the data track, they will have had exposure to much of this material already on day 1; therefore, the instructor may not need to go over all of the detail for this slide.</p>
<p>Interactivity:</p>	<p>Tell: Data is a means to an end and it is always good to know what that end is before starting the data collection process. Ultimately, the end for freight data is to be able to identify and measure performance of projects on freight movements.</p> <p>Tell: Let's go around the room and have each of you give one example of how you might use data to identify freight projects. I will record your responses. Before we start, let's review the listed data sources.</p> <ul style="list-style-type: none"> • Commodity flow data is detailed data on what commodities are moving on what mode. • Origin-destination data is typically data collected via intercept surveys where truckers are surveyed regarding their origin, destination and routes. • Freight generator data refers to establish data that lists the location of specific facilities that generate significant freight trips. • Crash data provides information regarding crashes involving freight vehicles. • Operational data generally refers to day of week, time of day and seasonal operating patterns.

	<ul style="list-style-type: none">• Bottleneck and chokepoint identification is just that-data that reveals recurring slow-downs in freight movements. <p>Class Discussion: Now it's your turn. Can you give me an example of how one of these categories of data may be used to identify projects? Pay attention here because you will be doing this in the next installment of the overarching exercise.</p> <p>Record: Instructor should start by calling on a participant by name and then indicating the direction in which the process will go around the room.</p>
Notes:	Resource material can be found in the Engaging the Private Sector in freight Planning workshop and NHI 139002, using Freight Forecast. <p>This exercise should take 7 minutes.</p>

Using Stakeholder Input to Identify Projects

- Identify key transportation infrastructure
- Develop list of safety hotspots
- Identify bottlenecks
- Discuss operational issues
- Respond to public sector analysis

7-9

Key Message:	Private sector stakeholders are the most valuable source of information and input for project identification.
Background Information:	FHWA offers a one day workshop, Engaging the Private Sector in Freight Planning from which the information for this slide is taken.
Interactivity:	<p>Tell: You all identified many of these as we went around the room. Let's talk about the ones not mentioned.</p> <p>Compare: The instructor should compare this list to the ones the participants identified and note any differences.</p> <p>Tell: There are many ways to engage private sector including interviews, surveys, regional freight forums, etc. One method that has been used very effectively by Atlanta Regional Commission was the placement of regional maps in driver break rooms at major freight generators including Coca-Cola, Publix (a regional supermarket chain), FedEx and UPS. Drivers were asked to identify bottlenecks and safety hotspots. The maps were then collected and projects mapped on a single map. Let's review a State DOT example. (The next slide is an example on MS DOT)</p>
Notes:	Source: FHWA's Engaging Private Sector Stakeholders in the Freight Planning Process.

Example: Mississippi DOT

- Intermodal Committee comprised of short line railroad and river port managers
- Meet quarterly to discuss project needs
- Committee votes on what projects get funded
- DOT funds the program out of programming budget

7-10

Key Message:	Mississippi has a program that is in its third year of funding where the stakeholders identify the needs and projects and vote on which projects receive funding.
Background Information:	Mississippi implemented their intermodal fund three years ago and has grown the fund substantially each year based on the program's success.
Interactivity:	<p>Tell: Mississippi has a program that is in its third year of funding where the stakeholders identify the needs and projects and vote on which projects receive funding. The committee is comprised of the managers from all the State's short-line railroads and river ports. The committee meets quarterly to discuss needs. From these needs, projects are recommended. Once the list of projects is finalized, the committee then votes on which projects get funded given the funds available.</p> <p>Tell: Example projects of this program include widened access roads to river ports, upgraded rail spurs to accommodate heavier cars, and extension of rail spurs into ports. The program does not have a dedicated funding stream but the DOT funds the program as a set aside from its traditional funds.</p> <p>Ask: Does anyone have similar programs in your agencies?</p>
Notes:	Source: www.gomdot.com

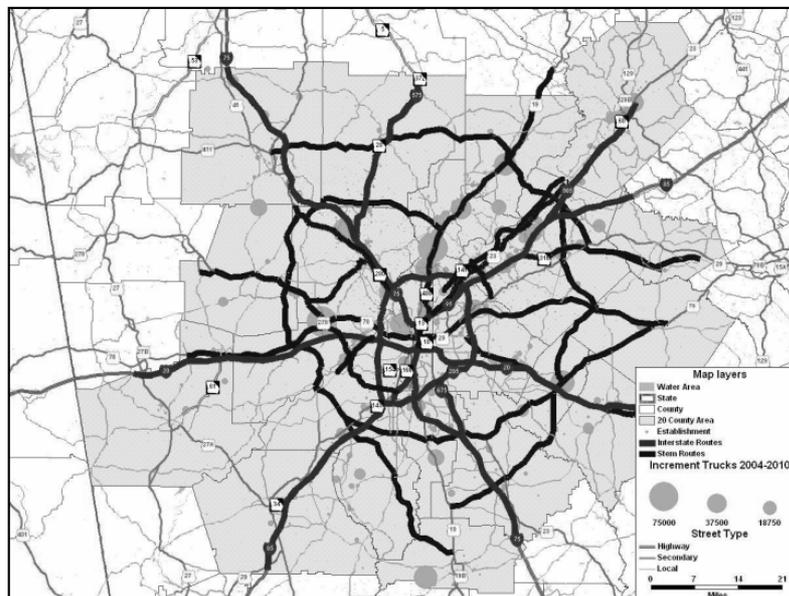
Using Inventory to Identify Freight Projects

- Designating a freight sub-system
- Documenting connectors to major freight generators
- Integrating land use inventories

7-11

Key Message:	Inventorizing and designating a freight sub-system can be used to identify freight projects by enhancing the understanding of infrastructure and regions that are key to efficient freight movement and identifying any associated deficiencies of that infrastructure.
Background Information:	This relates to the fact that projects do not have to be specific to just freight movement to be considered a freight project. Refer to slide 7.6.
Interactivity:	Tell: Another important tool in identifying freight projects to conduct an inventory of the key freight routes and facilities. This inventory should be multimodal and include significant rail yards, air cargo facilities, water ports, trucking terminal, distribution and warehouse facilities and major shippers. This inventory can then be used to designate a freight sub-system on which all projects will be evaluated with regards to their impact on freight movement.
Notes:	NA

Example – Atlanta Regional Commission



7-12

<p>Key Message:</p>	<p>Inventorizing and designating a freight sub-system can be used to identify all transportation projects that will impact freight mobility.</p>
<p>Background Information:</p>	<p>This relates to the fact that projects do not have to be specific to just freight movement to be considered a freight project. Refer to slide 12.6.</p>
<p>Interactivity:</p>	<p>Tell: The Atlanta Regional commission, through the input of their Freight Task Force made up of private and public sector freight stakeholders have identified a freight subsystem. The freight subsystem represents all the routes in the MPO region that are vital to regional goods movement. As you can see, the freight subsystem consists of all interstate routes and key US, State and local routes serving major freight generators such as intermodal terminals, the airport and key industrial and warehousing districts. Once the system was identified, the projects in the TIP were reevaluated and given additional weight if they impacted the regional freight subsystem.</p> <p>Ask: Has anyone identified a freight subsystem within your region?</p> <p>Follow-up: What was the process for identifying what would be included?</p>
<p>Notes:</p>	<p>NA</p>

Impact of Existing Plans on Freight Movements

- Include all transportation projects
- Develop methods for recognizing projects that direct benefits on freight movement
- Incorporate both quantitative and qualitative measures

7-13

Key Message:	Again, the message is that freight planning does not and should not have to be a separate process. Conversely, it should be an integral part of the day-to-day planning process.
Background Information:	NA
Interactivity:	<p>Tell: We cannot stress enough that freight planning does not and should not have to be a separate process. Conversely, it should be an integral part of the day-to-day planning process. Therefore, your process for evaluating and prioritizing projects should be developed in a manner that allows for the impact of every project on freight movement to be recognized and evaluated.</p> <p>Tell: This may be as simple as assigning additional points in the evaluation process that have notable benefits to freight movement and even subtracting points from projects that have recognizable negative impacts on freight movement. Also, both quantitative and qualitative measures can be used. Many of the methods and data necessary to quantify the impact may not be available but that does not mean you can factor it in.</p> <p>Tell: As an alternative, qualitative measures can be employed. For example, you may be able to recognize that a specific project would increase commercial vehicle</p>

	<p>throughput through a border or at an intermodal facility but you may not be able to quantify by how much. You could still elect to assign additional points to the project even though you have no quantified measure of the impact.</p> <p>Tell: Recall the FI DOT example presented a few slides ago.</p>
Notes:	NA

Potential Objectives of Freight Projects

- Safety and security
- Mobility/system performance
- Economic development and land use
- Growth management
- Intermodalism
- Environment impacts

7-14

Key Message:	Freight projects can often be categorized to fit into the overall goals and objectives of the organization. Categorizing freight projects allows for a clearer linkage between the project and the benefits.
Background Information:	This is meant to be an example framework for categorizing freight project and can be modified to fit the goals and objectives of the participants' own organizations. The main point is that by categorizing freight projects based on the organization goals and objectives, the linkage between the projects and the benefits become clearer.
Interactivity:	<p>Tell: Freight projects can often be categorized to fit into the overall goals and objectives of the organization. This is meant to be an example framework for categorizing freight project and can be modified to fit the goals and objectives of the participants' own organizations. The main point is that by categorizing freight projects based on the organization goals and objectives, the linkage between the projects and the benefits become clearer.</p> <p>Tell: For example, if an at-grade crossing project is categorized as a safety project, the performance measure may include statistics regarding incidents at the crossing. The same project may also have mobility implications depending on the frequency and timing of traffic interruptions.</p>

	<p>Ask: What's another example for one of the other objectives?</p> <p>Other examples include improvements to intermodal connectors ranging from signage to facilities to added capacity; ITS applications; double-tracking rail lines; bridge enhancements and tunnel clearances; and better geometric designs specifically geared to operating requirements of commercial vehicles.</p>
Notes:	You should plan on spending about 3 minutes on this slide.

Short-Term Freight Projects

- “Quick start projects”
- Relatively small investments can yield significant returns
- Important because demonstrate commitment
- Often stakeholder driven so build support
- Tend to be localized

7-15

Key Message:	Projects don't have to be major investments to have a notable impact on freight movement.
Background Information:	Quick-start projects refer to low-hanging fruit and represent short-term projects that can be implemented with notable results for the private sector. They may be called other names such as quick fix, rapid response and jump start just to name a few.
Interactivity:	<p>Tell: Projects should be categorized as short, medium and long term. Short-term projects are an integral part of freight planning and are most often identified by private sector stakeholders. These projects are often called “quick-start” projects to reflect the relatively low resource requirement of many of these projects. They represent low-hanging fruit and are important in that they can be very effective at gaining the interest and commitment from private sector stakeholders in your planning process. However, often these projects fall under the domain of local public works departments so the ability to act upon stakeholder input hinges on the cooperation of multiple levels of government.</p> <p>Tell: These projects are often localized projects that are likely to be the domain of local jurisdictions as opposed to the MPO or DOT. Therefore, it will be important to involve local planners in the process. The ability to act on the input from the private sector demonstrates a return on the time investment by the private sector and makes it more likely they will continue to participate.</p>
Notes:	NA

Medium and Long Term Projects

- Larger investments
- More likely to be multi-modal
- Incorporated in TIP and STIPs
- Opportunity for public-private partnership

7-16

Key Message:	Many projects will require significant resources and time to implement but this should not discourage planners from advancing them in their planning processes.
Background Information:	NA
Interactivity:	<p>Tell: Many projects will require significant resources and time to implement but this should not discourage planners from advancing them in their planning processes. These projects are more likely to be multi-modal and require larger investments. Therefore, they are more likely to be under the jurisdiction of MPOs and DOTs and as such, end up in the S/TIPs. Some may require public private partnerships. Examples include rail related projects; truck only lanes, and ITS applications.</p> <p>Tell: The same methods and sources used to identify short-term or quick start projects are also effective for identifying medium and long-term projects. Let's discuss some of those sources.</p>
Notes:	NA

Example- Nashville, TN

Problem:
Proposed Actions:

Interim –Install a vehicle height detector system in advance of the overpass

Long-term- Improve clearance by lowering road bed.



Design attributes of bridge create inadequate bridge height

7-17

Key Message:	This slide represents a real-world example of a quick-start project that also has medium and long term solutions.
Background Information:	This is an example from a regional freight study conducted for the Nashville Regional MPO in Tennessee in 2004.
Interactivity:	<p>Tell: This slide depicts an example of a quick start project from a regional freight study conducted by the Nashville regional MPO. All the projects identified in the study were a result of stakeholder interviews. This specific project was related to a bridge crossing for CSX’s mainline going through downtown Nashville.</p> <p>Ask: Would anyone like to take a stab at identifying the issue?</p> <p>Click: The bridge was inaccurately posted and there was no forewarning of the low clearance until vehicles arrived at the bridge. There is no room for a truck to turnaround if they cannot clear and so many trucks would try and actually strike the bridge. This would force the bridge to close for inspection, shutting down the entire line. The stakeholders voted to advance this particular project to the next evaluation phase.</p> <p>Ask: Any suggestions for solutions? How about short-term?</p> <p>Click: Better signage and vehicle detection technology</p>

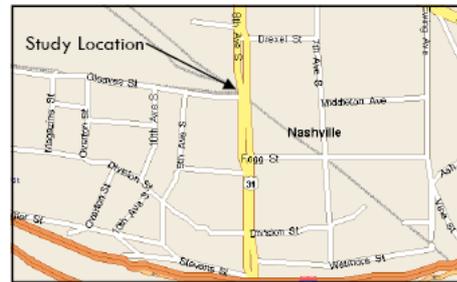
	<p>Ask: How about long-term?</p> <p><u>Click:</u> Lowering the bed of the road to increase clearance height.</p> <p>Tell: That concludes the presentation portion of this lesson.</p> <p>Ask: Any questions?</p> <p>Tell: Let's take a 20 minute break and then reconvene in your small groups to complete another installment of the over arching exercise.</p>
Notes:	NA

NASHVILLE AREA MPO - REGIONAL FREIGHT STUDY
FAST ACTION PROJECTS

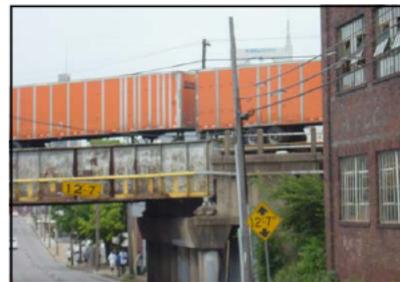
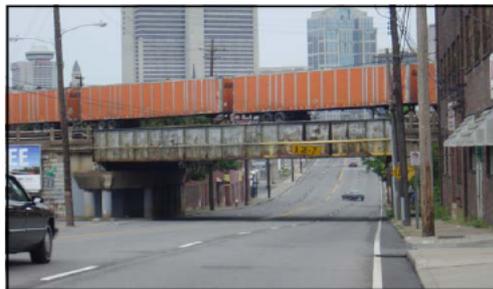
PROJECT #2	BTH AVENUE RAIL BRIDGE
SOURCE	MOTOR CARRIER SURVEY
LOCATION	DAVIDSON COUNTY (NASHVILLE, TN)
JURISDICTION	T.D.O.T.
PROBLEM	DESIGN ATTRIBUTES OF THE BRIDGE CREATE INADEQUATE HEIGHT CLEARANCE FOR TRUCKS.
PROPOSED ACTIONS	<u>INTERIM SOLUTION:</u> STUDY TO DETERMINE THE FEASIBILITY AND DESIGN PARAMETERS FOR THE INSTALLATION OF A VEHICLE HEIGHT DETECTION SYSTEM IN ADVANCE OF OVERPASS IN BOTH DIRECTIONS TO WARN OF CLEARANCE PROBLEMS. <u>LONG-TERM SOLUTION:</u> DETERMINE FEASIBILITY OF IMPROVING CLEARANCE HEIGHT BY LOWERING ROADWAY SECTION.



Eight Avenue South looking south at railroad overpass



Location Map



Eight Avenue South looking north at railroad overpass looking south on

Using Freight Planning Exercise: Identification of Projects





Key Message:	NA
Background Information:	NA
Interactivity:	<p>Tell: Before the break, we discussed how you can use your understanding of private-sector needs to identify freight projects. We also discussed the importance of engaging the private sector and other public sector stakeholders in this process. For this exercise, you will use what you have learned about private sector needs to identify freight projects for your scenario region. Break back into your small groups.</p>
Notes:	NA

For This Installment

- Identify freight stakeholders for your scenario region- both private and public sector
- Identify a method for engaging those stakeholders
- Identify one short-term and one long-term freight project

7-19

Key Message:	NA
Background Information:	NA
Interactivity:	<p>Instruct: Using information in your scenario and the work completed to this point, you need to:</p> <ul style="list-style-type: none"> • Identify private sector stakeholders for your scenario region to be engaged in the planning process. • Identify other non-DOT or MPO public sector stakeholder agencies. • Identify a method for engaging those stakeholders. • Identify at least one short term and one long-term freight project to address the concerns and issues for your scenario.
Notes:	NA

Completing the Exercise

- Use Worksheet E-5, your scenario profile and its partial dataset
- Time allotted: 20 minutes



7-20

Key Message:	The class has 40 minutes to complete the work.
Background Information:	Each of the scenario profiles contains information regarding freight needs and issues. These should serve as the basis for project identification.
Interactivity:	<p>Assign: You will have 20 minutes for this exercise. Use worksheet E-5 to record your work. The instructors will be observing progress of the groups so ask for assistance if you get stuck.</p> <p>Observe: Instructors should visit each group shortly after the start of the exercise to make sure everyone understands the instructions and that the groups are making progress.</p> <p>Assist: Be prepared to assist if groups are struggling.</p> <p>Examples include:</p> <p>Gateway state scenario - <i>Short term project</i> - The scenario profile states that the commercial crossing is only open between 5 am and 10 pm. By engaging the Custom and Border Protection (CBP) as well as border shippers, the DOT could investigate the feasibility of extending the hours of operation. Conducting a 6 to 12 month PILOT study where key private sector and public sector officials agree to alter operational schedules could provide the DOT with enough information to evaluate whether a permanent change in hours would have significant impacts on peak hour delay and congestion. This was recently accomplished in New Mexico where the governor agreed that the state would pay the additional cost of</p>

	<p>keeping the border open.</p> <p><i>Long term project</i> - The state's freight flows is driven in large part by its border trade. Although both the DOT and the CBP have an ITS system, there is no communication between the two systems. Working with the CBP, the DOT could undertake a study to examine the feasibility to develop a common ITS infrastructure system that would provide operators with updated border conditions as well as any anticipated delay getting to the border.</p> <p>Bridge State - Long term project - Bridge State's profile indicates that increasing rail capacity could offer some relief to the highways and provide logistical efficiencies. The State could work with the private sector rail and trucking companies to determine the feasibility of truck to rail conversion, especially for the through traffic. This may include state investment in additional rail capacity which would require substantial analysis of public and private sector benefits.</p> <p><i>Short term projects</i> - The state could update the statewide truck route plan and invest in new signage. Since the estate has 70% through traffic, many of the drivers may not be familiar with the state's system and thus they rely on signs which may or may not be sufficient. This may result in truck traffic diverting to undesirable facilities such as those going through small downtowns or residential neighborhoods.</p> <p>MPO- Long term project - The MPO experiences significant overhead traffic as a result of the key east-west truck corridor. Currently, the loop bypassing the central city is incomplete. Stakeholders have expresses a willingness to use this route upon completion but funding is currently not available. The MPO could explore the possibility of a public private partnership to complete this loop.</p> <p><i>Short term project</i>- Interviews with stakeholders have revealed that signal timing is an issue for truck operations in numerous locations throughout the MPO region. The MPO could meet with local officials to discuss the possibility of undertaking a signal timing study with an emphasis on truck operations at key intersections.</p> <p><i>After 15 minutes:</i></p> <p>Announce: You have 5 minutes. Does everyone have stakeholders and projects identified?</p> <p>Assist: If necessary</p>
Notes:	Instructors should provide a 5 minute warning and make sure all groups have at least one project identified.

Lesson 7- Worksheet E-5

1. Identify private sector stakeholders in your region and list ways in which you might engage them in the planning process.

2. Identify short-term and long-term projects to address the freight issues in your region.

Team Reports

- One long term and one short term project
- List stakeholders that you would involve
- Discuss how would you get them engaged



7-21

Key Message:	NA
Background Information:	Instructors should flip charts available for participants to record their report for presentation purposes.
Interactivity:	<p><i>After 40 minutes:</i></p> <p>Announce: Time is up. The teams will now provide their report.</p> <p>Ask: Who are the team spokespersons?</p> <p>Invite: Spokesperson for each team to take no more than 2 minutes to report:</p> <ul style="list-style-type: none"> • One long term and one short term project • Who from the private sector should be involved? • How would you get them engaged?
Notes:	Instructors should encourage participants to take notes and use this report period as an opportunity for peer exchange.

Review Learning Outcomes

- Summarize methods for identifying freight projects
- Discuss the benefits of engaging private sector stakeholders in project identification

7-22

Key Message:	Make sure participants have accomplished the learning outcomes.
Background Information:	Ask:
Interactivity:	<p><i>Following the reports, test the lesson learning outcomes;</i></p> <p>Ask: What are some methods for identifying freight projects?</p> <p>Ask: Why is private sector participation important?</p> <p>Tell: It is now time for lunch. We will take 1 hour for lunch. Please be back in the seat by [Insert Time] so we can stay on schedule.</p>
Notes:	NA

Acronym and Abbreviation List

AASHTO	American Association of State Highway and Transportation Officials
AADT	Annual Average Daily Traffic
ATA	American Trucking Association
ATRI	American Transportation Research Institute
BTS	Bureau of Transportation Statistics
CBP	Custom and Border Protection
CCC	Chairs Coordinating Committee
CEU	Continuing Education Unit
CFS	Commodity Flow Summary
CSCMP	Council of Supply Chain Management Professionals
DC	Distribution Center
DMV	Department of Motor Vehicles
DOT	Department of Transportation
EIS	Environmental Impact Statement
EIT	Engineer In Training
EJ	Environmental Justice
ELAPP	Environmental Land Acquisition and Protection Program
EMS	Emergency Medical Service
EWGCC	East-West Gateway Coordinating Council
FAC	Freight Advisory Council
FAF	Freight Analysis Framework
FHWA	Federal Highway Administration
GAO	Government Accountability Office
GARV	Grant Anticipation Revenue Vehicle
GDP	Gross Domestic Product
GIS	Geographic Information System
GPS	Global Positioning System
IACET	International Association for Continuing Education and Training
IG	Instructors Guide
ITS	Intelligent Transportation Systems
JIT	Just In Time

KSA	Knowledge, Skills, Abilities
LA/LB	Los Angeles Long Beach
LOS	Level Of Service
L RTP	Long Range Transportation Plan
LTL	Less than Truckload
MAROps	Mid-Atlantic Rail Operations Initiative
MPO	Metropolitan Planning Organization
NAFTA	North American Free Trade Agreement
NCHRP	National Cooperative Highway Research Program
NHI	National Highway Institute
NHS	National Highway System
PE	Professional Engineer
PGMN	Primary Goods Movement Network
PIERS	Port Import Export Reporting Service
PW	Participant Workbook
RFID	Radio Frequency Identification
RIPTA	Rhode Island Public Transit Authority
RISPP	Rhode Island Statewide Planning Program
ROA	Return On Assets
RRN	Regional Research Network
SAFTEA-LU	Safe Accountable Flexible Efficient Transportation Equity Act a Legacy for Users
SAT	Stanford Achievement Test
SCM	Supply Chain Management
SE	Standard Edition
SIB	State Infrastructure Banks
SIS	Strategic Inter-modal System
STB	Surface Transportation Board
STIP	State Transportation Improvement Program
STRAHNET	Strategic Highway Network
TAC	Transportation Advisory Committee
TAZ	Transportation Analysis Zone
TD	Travel Demand
TEU	Twenty-foot Equivalent Unit

TIFIA	Transportation Infrastructure Finance and Innovations Act
TIP	Transportation Improvement Program
TPC	Transportation Processing Performance Council
TRB	Transportation Research Board
VCR	Volume Capacity Ratio
VMT	Vehicle Miles Traveled

Glossary

Term	Definition
Fast Cycle Logistics	The replacement of inventory with information and high performance transportation options
Fishbowl Exercise	Fishbowls are used for dynamic group involvement. The most common configuration is an "inner ring", which is the discussion group, surrounded by an "outer ring", which is the observation group.
Flow Volumes	Freight traffic volumes that flow between facility locations
Freight Planning Toolkit	The tools necessary to start building freight planning practices within your own organization
Freight Turnaround	The process of ending one work cycle and beginning another
ITS	Intelligent Transportation System (ITS) means electronics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system. (23 CFR Part 940)
Just-in-Time Delivery	A business model created to reduce overall inventory time delays
Mode Optimization	Freight stakeholders selecting specific transportation modes to effectively maximize profits
Multi-jurisdictional Freight Planning	Effectively planning freight initiatives that are not bounded within any specific observed jurisdiction
National ITS Architecture	A general framework for planning, defining, and integrating ITS. It was developed to support ITS implementations over a 20-year time period in urban, interurban, and rural environments across the country. The National ITS Architecture is available as a resource for any region and is maintained by the USDOT independently of any specific system design or region in the nation.
Point Volumes	The traffic volume that moves in and out of a specific address location
Project ITS Architecture	A framework that identifies the institutional agreement and technical integration necessary to interface a major ITS project with other ITS projects and systems.
Pull Logistics	When product sales pull products through the supply chain
Quick-start Projects	Short-term projects that can be implemented with notable results for the private sector
Route Volumes	Traffic born by a specific route segment of infrastructure
Strategic Planning	The act of following a structured process that leads to a clear and concise definition of a framework for accomplishing the goals and objectives identified during the process.

Supply Chain	The optimal flow of product from site of production through intermediate locations to the final site
Trade Lanes	The directional flow of global trade
Transloading	Emptying or stripping of international containers and transferring the goods into domestic trailers or containers
Wolfe's Paradox	As supply chains become more efficient, they also become more fragile