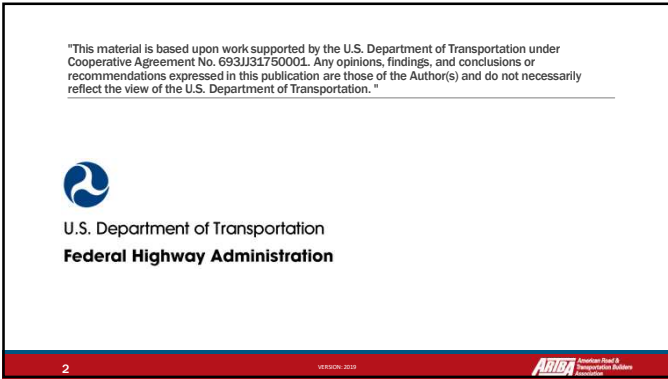
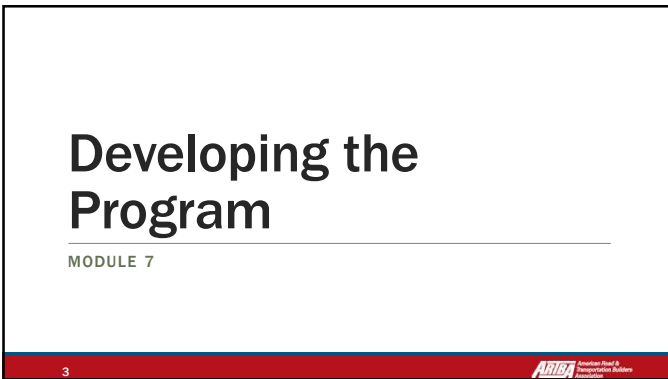




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Learning Objectives

- Explain each step of the development of an ITCP
- Explain the parts of an ITCP diagram
- Demonstrate how to create an ITCP diagram




4

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When Should an ITCP be Developed?

Different aspects of the ITCP will be identified and developed during the various construction phases of a project.

Depending on the phase, different people will be involved in the process.

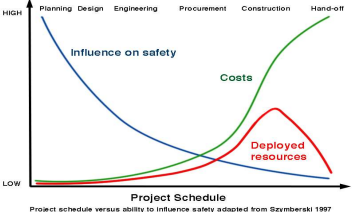


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Planning and Construction Phases



Project schedule versus ability to influence safety adapted from Szymberki 1997

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When Should an ITCP be Developed?

Bidding and Planning Stages

- Right of Way
- Temporary Traffic Control
- Risk Assessment
- Equipment Selection/ Identification
- Subcontractor Selection and Coordination



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Contractor Planning Phase



Negotiation of Responsibilities

Assigning Duties

- Meeting Participation
- Use of Law Enforcement
- Location of Access/ Egress Points
- Lane Encroachments

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Construction Phase

Responsibilities

- The safety professional employees; assists in developing the ITCP; performs audits
- The site supervisor assists in developing the ITCP
- The fore/lead person develops and implements the ITCP



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Construction Phase *(continued)*

- Subcontractor selection, buy-in and communications (e.g. trucking, excavation, etc.)
- Owner/agency coordination and communications
- Selection of equipment
 - Smaller blind spots
 - Adding cameras/proximity warning



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What Are the ITCP Elements



1. ITCP Diagram(s)
2. ITCP Notes
 - Injury Reduction Measures
 - Site Specific Conditions/Provisions
 - Duties
 - Equipment/Personnel List
 - Notes on Safety Points

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What Are the ITCP Elements

3. ITCP Key

- | | |
|----------------------|--------------|
| Worker-Free Zone= | Paver= |
| Construction Barrel= | Roller= |
| Grader= | Tack Truck= |
| Full Truck= | Water Truck= |
| Empty Truck= | Car= |

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Creating the Plan

Identify project scope and plan scope, as these vary from job-to-job

Identify the operation that will take place (Paving, Trenching, Earthmoving, etc.)

Identify the individuals who will be involved (safety professional, foreman, superintendent, truck boss, DOT inspector, visitors)



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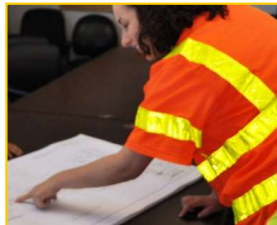


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Creating the Plan

Review the site plan:

- Where will the operation take place?
- What equipment will be involved?
- Where will workers on foot need to be located?
- What is the traffic control plan?



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Creating the Plan

Review the site plan (continued):

- Where are the access/egress points?
- How often will deliveries be made or loads removed?
- How quickly will the work progress?



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Creating the Plan



Implement Communications Plan:

- Who will develop the ITCP?
- Who will execute the ITCP?
- Who will instruct project leaders? Site employees? Operators? Subcontractors? Truck Drivers?

Once communications are in order, your plan is complete

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Creating the Plan

Identify sub-operations, such as:

- Asphalt Sampling
- Watering Rollers
- Loading/Off Loading Equipment
- Equipment Maintenance



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Site Specific ITCP

Draw the basic work area layout

- May be taken from the Temporary Traffic Control Plan

The drawing need not be to scale, but should be sufficient size all drawing of vehicle and pedestrian worker paths

Plot the pedestrian worker and vehicles paths using ITCP principles

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Site Specific ITCP

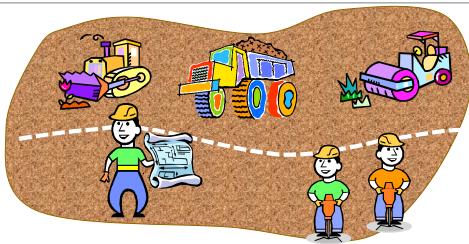
- Plot worker on foot locations
- Plot equipment and vehicle locations
- Plot vehicle and equipment paths including access/egress points for dump trucks and other site visitors
- Plot location of utilities, storage areas and other obstacles or hazards

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Worker Free- & Equipment Free Zones



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Site Specific ITCP

- Create plan "notes" explaining the diagram.
- Specify duties of all involved personnel
 - Consider posting signs indicating "worker free zones" and "equipment free zones"
 - Consider posting speed limits inside the work space
 - Include other injury-reducing measures

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Can TCDs Be Used in an ITCP?

No specific devices or signs are needed in an ITCP, though some may be useful

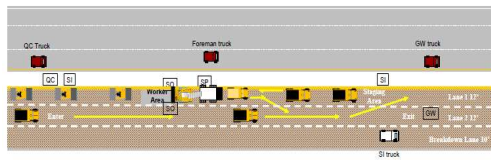


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Internal Traffic Control Diagram

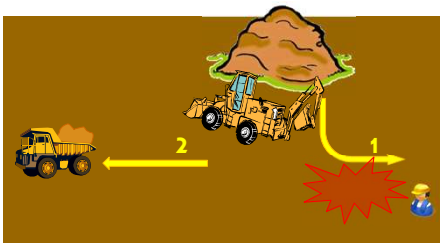


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Basic Model for Earth Moving

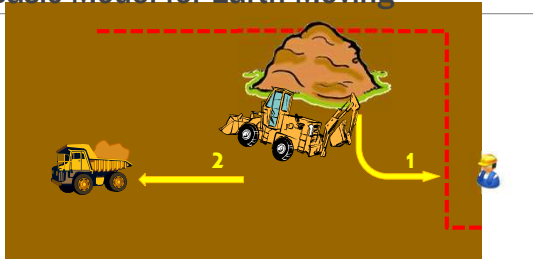


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Basic Model for Earth Moving

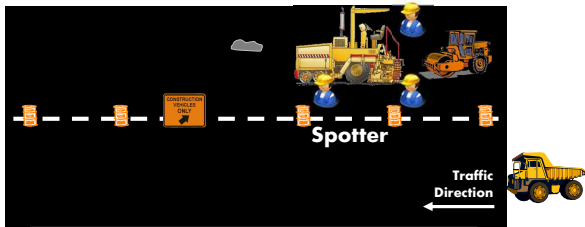


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Basic Model for Paving



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Activity

DRAW AN ITCP FOR A SIMPLE PAVING OPERATION

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ITCP Example

Internal Traffic Control Diagram 1 Lane 1

Personnel List

- 2 Roller Operators
- 1 Paver Operator
- 1 Screenshot Operator
- 1 Ground Worker
- 1 Foreman
- 2 Quality Control
- 2 State Inspector

Equipment List

- 2 Rollers
- 1 Paver/Pick-up Machine
- 1 Tack Truck
- 1 Water Truck
- 1 Mechanic Truck
- 1 Broom
- 2 Quality Trucks
- 2 State Trucks
- 8 Dump Trucks

Safety Notes

- Stay in trucks except at lunch
- Wear your seat on site
- Reduce speed near paver and rollers to 15 mph, never enter high range
- Caution entering and exiting site on to active traffic
- Ticket taker shall wait until the truck is at the window to take the load ticket
- When possible, stay on the driver's side of the vehicle
- Park pick-up trucks out of active truck travel lane, or equipment path, if possible on the shoulder
- Park behind the operation
- Place samples off the side of the road

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Creating an ITCP

Determine locations for equipment and personnel

- Work Activity Sites
- Worker Paths to Rest Areas
- Large Equipment Paths
- Utilities
- Site Visitors/Parking
- Material Storage Locations and Movement

Determine where workers on foot are likely to face hazards:

- Backing Zones
- Access/Egress Points

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Enforcing an ITCP

ITCP should be a team effort:

- Safety Officers
- Site Supervisor

Discipline should be given for violations

Should be treated as a violation of the company safety policy (and possibly state/federal regulations)

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Enforcing an ITCP

Inspectors, Truck Drivers and Site Visitors:

- All who enter the work space should be given instructions regarding the ITCP
- Instructions should include parking, staging and pedestrian work areas as well as vehicle paths and speed limits.

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Review

Watch the following video to review major ITCP concepts. Make notes of anything you missed or forgot during the training program.

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Review Video

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Creating and ITCP

Internal Traffic Control Plan Development Check List - Issues to Consider for ITCP Drawing
Internal Traffic Control Plan Drawing

Name: _____ Date: _____ Job Location: _____

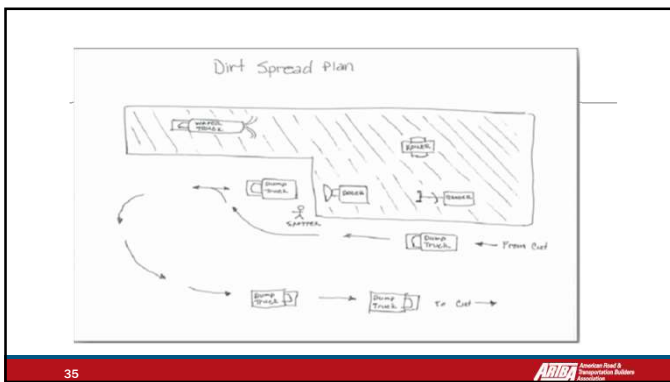
- Draw basic work area layout, which can be taken from project drawings or the traffic control plan
- Plot where work activities will take place
- Plot the vehicle access points
- Identify where equipment will be backing and create prohibition free zones
- Plot how workers will get to and from work areas
- Draw the traffic flow for large equipment
- Determine the storage areas
- Plot how materials will get to and from staging areas
- Establish parking areas for workers and visitors
- Establish restroom and break areas
- Plot utilities
- Write notes to explain the diagram and specify dates of personnel
- Write in speed limits.

INTERNAL TRAFFIC CONTROL PLAN DRAWING
 Name: _____ Date: _____ Job Location: _____

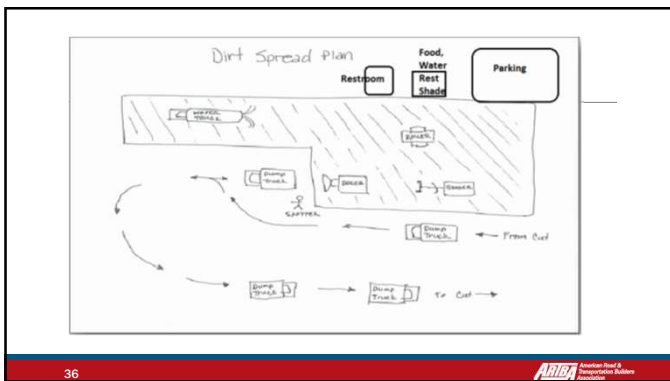
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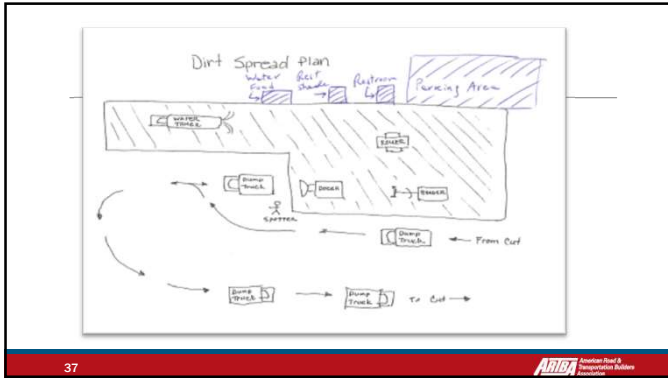
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Discussion and Questions

END MODULE SEVEN

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