



**ITD**



**INNOVATIVE TECHNOLOGY  
DEPLOYMENT**



U.S. Department  
of Transportation

Federal Motor  
Carrier Safety  
Administration

# FMCSA's ITD Program

Empowering States to apply technology to the challenge of improving roadway safety.

## Today you will learn about:

- Purpose and Benefits
- Core Compliance
- Expanded ITD
- Planning and Deployment
- Certification Process
- Roles and Responsibilities





# Purpose and Benefits

## ITD provides States with:



Grant funding



Technical support

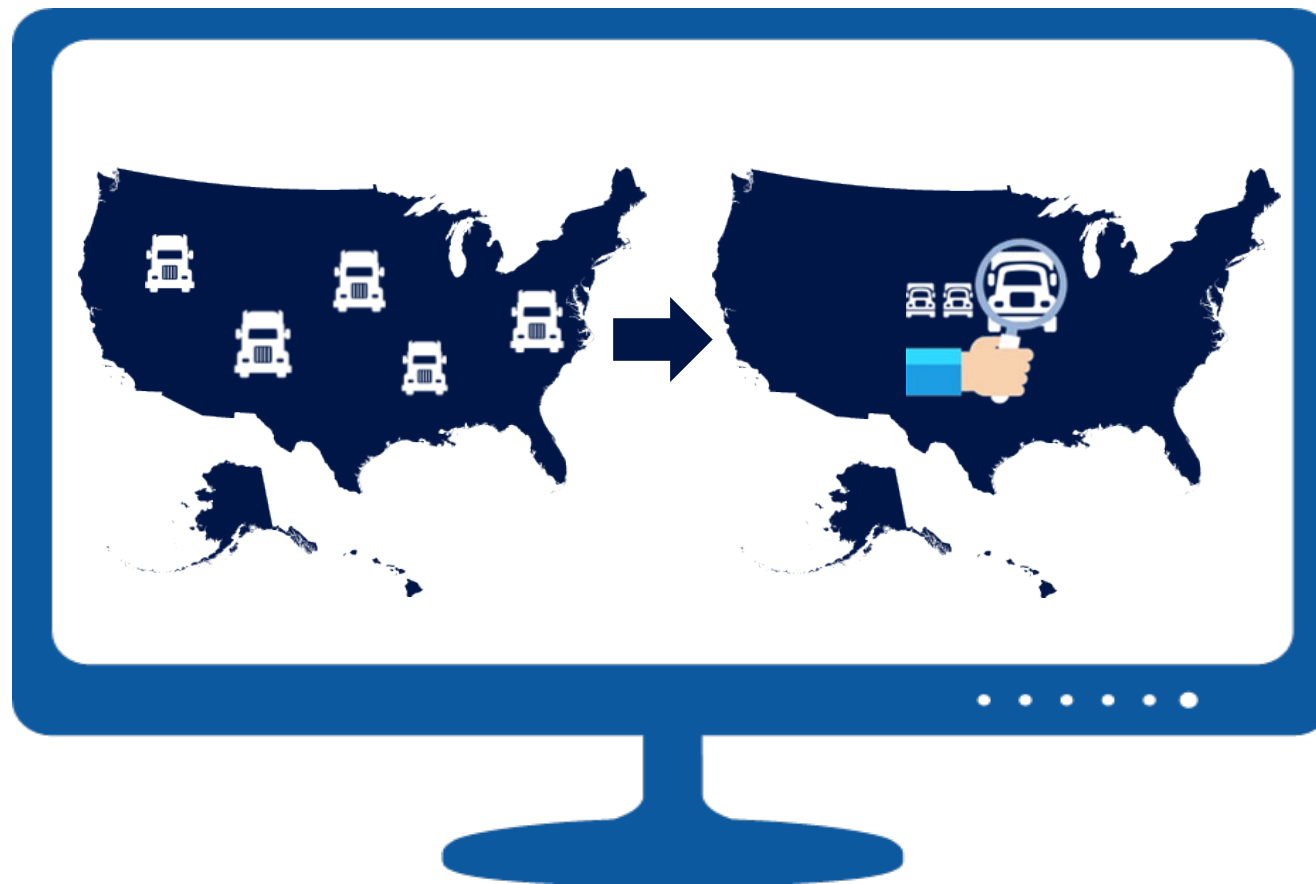


implement technologies

share data more effectively

improve roadway safety

# ITD enables effective, efficient sharing of motor carrier safety and compliance data to inform safety-based decisions



# ITD Program Goals



Improve motor carrier  
safety and productivity



Simplify enforcement operations



Increase efficiency/effectiveness  
of CMV safety programs



Reduce administrative costs



Enhance security/sharing of CMV  
data within States, among States  
and FMCSA



Achieve nationwide program  
deployment

## How States Participate in ITD



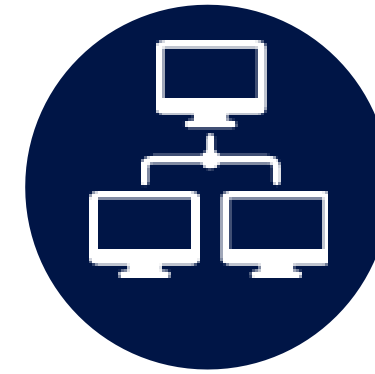
### ■ MAKE A PLAN

Develop and maintain an ITD Program Plan/Top Level Design (PP/TLD) identifying technology efforts and needs



### ■ CORE COMPLIANCE

Maintain technology framework that facilitates data sharing, credentialing, and e-screening among enforcement agencies



### ■ EXPANDED ITD

After achieving Core Compliance, deploy additional technologies in alignment with the State's goals  
*(e.g., virtual weigh stations, license plate readers)*



## The ITD Program Offers States



### Grant Funding

To deploy, operate, and maintain road safety technologies



### Expertise

To use roadside screening and data integration tools to improve efficiency and effectiveness



### Forums for Collaboration

To drive faster adoption of effective technologies



The logo for Innovative Technology Deployment (ITD) features the letters 'ITD' in a bold, white, sans-serif font. To the right of the letters are three small, solid yellow squares arranged horizontally. The background of the top-left corner is a blue-toned aerial view of a highway interchange with a network of white lines and dots overlaid, suggesting a digital or data network.

**ITD**

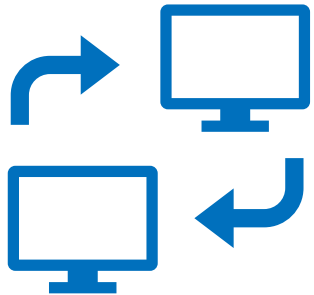
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# ITD Core Compliance

# ITD Core Compliance Capabilities



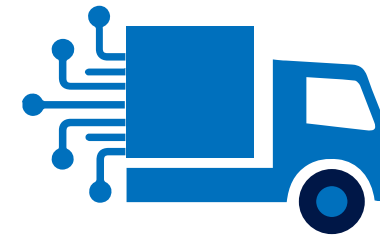
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**Safety  
Information  
Exchange**



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**Electronic  
Credentials  
Administration**



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**Electronic  
Screening**

## ITD CORE CAPABILITY

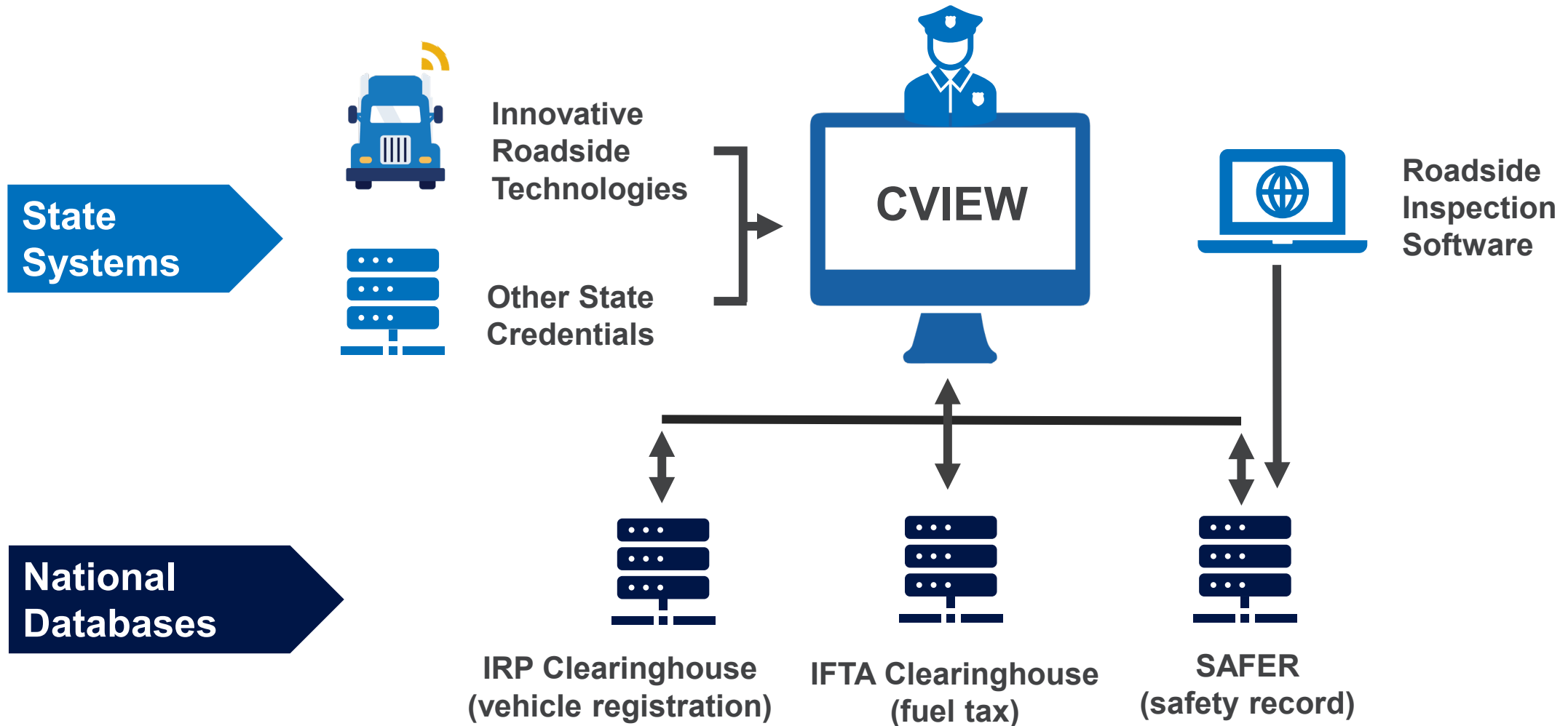
# Safety Information Exchange

Collect and exchange safety performance and credentials information within each State and among States, Federal agencies, and motor carriers.





# Safety & Credential Information Exchange Process



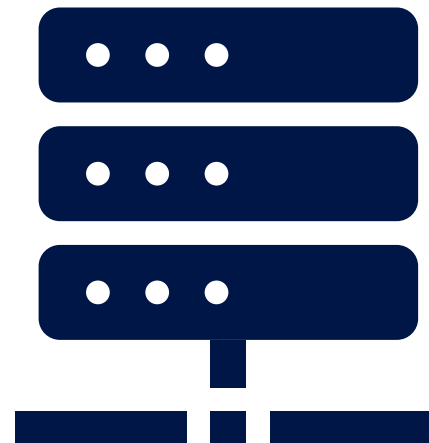
**ITD** CORE CAPABILITY

# Safety Information Exchange - Requirements

**1** USE ROADSIDE  
INSPECTION  
SOFTWARE



**2** CONNECT TO  
SAFER TO  
EXCHANGE DATA



**3** USE A CVIEW



**ITD CORE CAPABILITY**

## Electronic Credentials Administration - Requirements



- ✓ Enable online registration and renewal of International Registration Plan (IRP) & International Fuel Tax Agreement (IFTA) credentials
  - Conduct at least 10% of transactions electronically
  - Be ready to extend electronic processing to other credentials
  
- ✓ Connect IRP/IFTA Clearinghouses electronically to share vehicle registration data and automate funds settlement



## ITD CORE CAPABILITY

# Electronic Screening

Electronically verify vehicle size, weight, and credential information while the vehicle is traveling at roadway speeds ahead of an inspection facility.

1

CMV location triggers data transfer to inspection point

2

If compliant, driver receives bypass notice

If flagged, driver receives message to stop for safety inspection

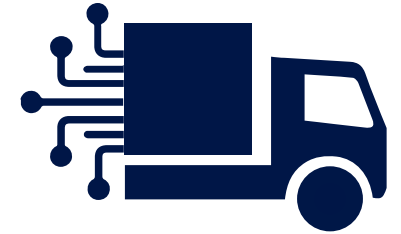


Inspection  
Exit Here



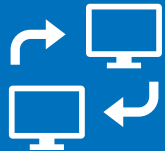
**ITD** CORE CAPABILITY

## Electronic Screening - Requirements



- ✓ Implement e-screening at one fixed or mobile inspection site
- ✓ Be ready to replicate this functionality at additional sites

# ITD Core Compliance Capabilities



## Safety Information Exchange

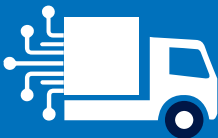
- Implement FMCSA's roadside inspection software or equivalent inspection system and CVIEW to share information uniformly

**Backbone of  
ITD Program**



## Electronic Credentials Administration

- Enable online registration and renewal of International Registration Plan (IRP) & International Fuel Tax Agreement (IFTA) credentials
- Connect IRP/IFTA Clearinghouses electronically to share vehicle registration data and automate funds settlement



## Electronic Screening

- Use wireless technology to identify and screen commercial motor vehicle compliance at mainline speeds at one or more inspection sites





# Expanded ITD

## Expanded ITD

**Core compliant States are eligible to participate in Expanded ITD**



**This gives States the flexibility to:**

- ✓ Choose what technology to adopt
- ✓ Customize ITD to meet their needs

# Project Example: Driver Information Sharing

## CVIEW and SAFER



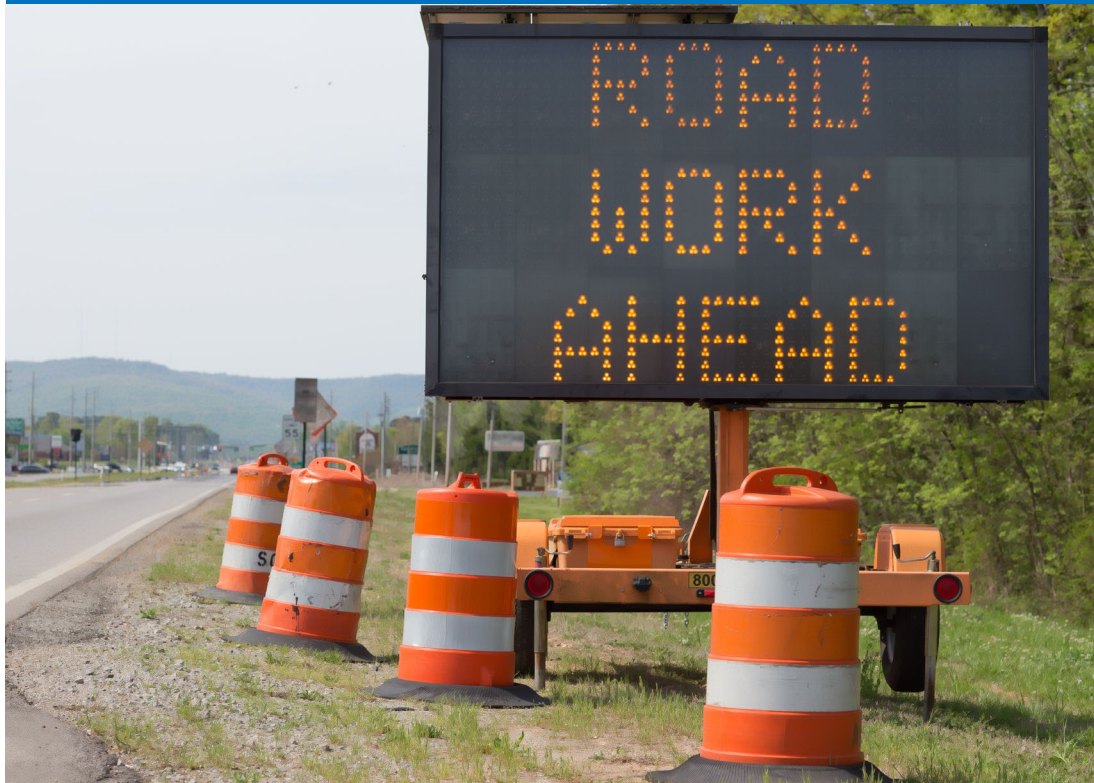
**A State's CVIEW communicates with FMCSA's SAFER system to provide:**

- ➔ Improved efficiency and safety impact
- ➔ Real-time data to enable enforcement decisions



# Project Example: Enhanced Safety Information Sharing

## Work Zone Detection



Technology notifies CMV drivers of work zone:

- Presence
- Congestion
- Incident
- Roadway modifications



# Project Example: Smart Roadside

## Virtual Weigh Stations



Roadside facility monitored\* with:

- Camera Systems
- Wireless Communications
- Weigh-in-motion (WIM) installations

\*Examples of sensor components that can be utilized

# Project Example: Expanded E-Credentialling

## One-Stop Shops and Electronic Portals



**States may offer an electronic one-stop shop to provide access to:**

-  International Registration Plan (IRP)
-  International Fuel Tax Agreement (IFTA)
-  Unified Carrier Registration (UCR)
-  Oversize/Overweight (OS/OW) permitting systems

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# ITD Planning and Deployment Process


## Overview of State engagement with ITD Program



**ACHIEVE CORE ITD**



**MAINTAIN CORE ITD**

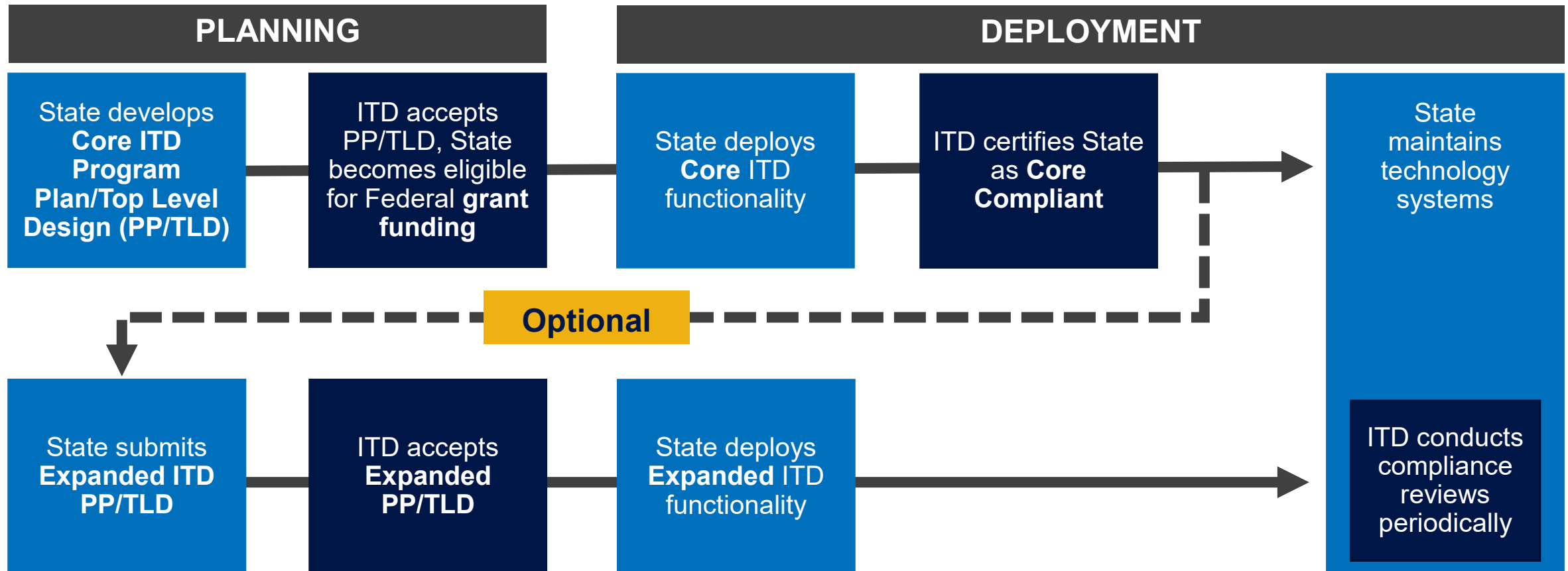
Optional 



**EXPANDED ITD**

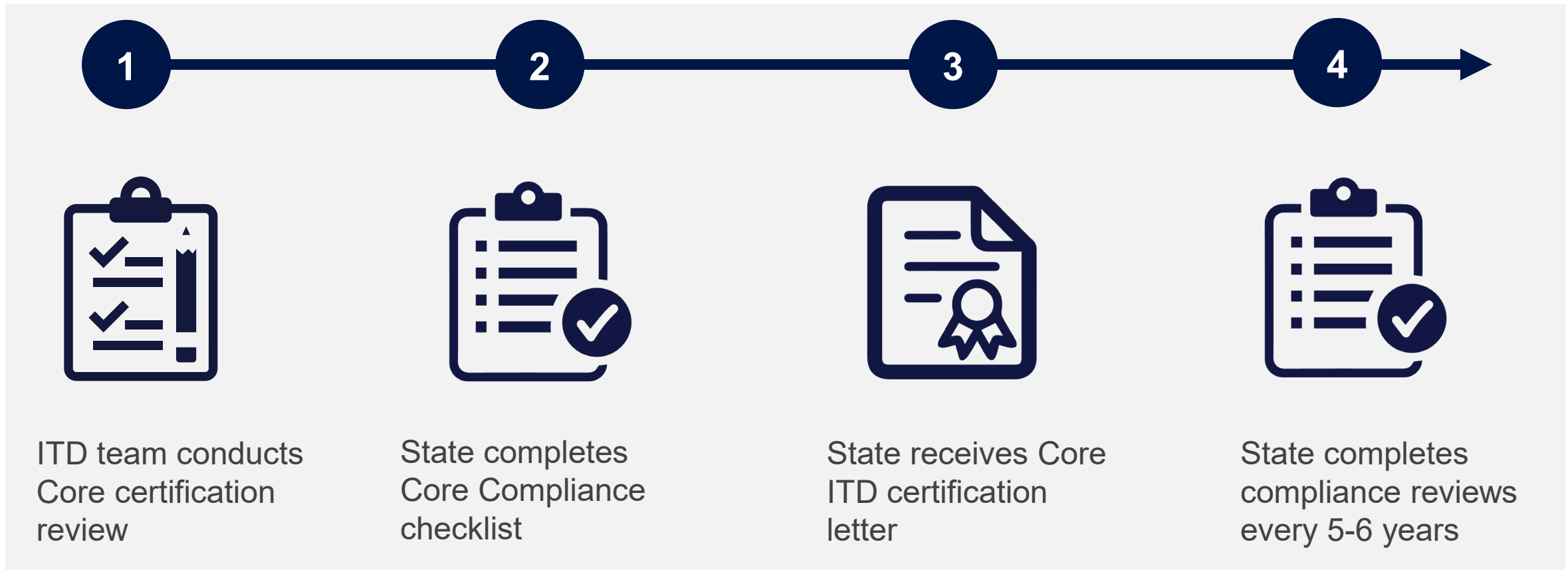


# ITD Planning and Deployment Process



# ITD Certification and Compliance

# ITD Core Certification Process



# Data Quality



# The critical importance of high-quality data



**Accurate, complete, and timely data enables States to make informed decisions to:**

- Identify high-risk carriers and vehicles for intervention
- Prioritize enforcement resources on the highest risk hazards
- Improve safety

# Roles and Responsibilities

**Various entities within a State may leverage the ITD Program to support specific needs, such as:**

Department of  
Revenue (IFTA)



Registry of Motor  
Vehicles (IRP)

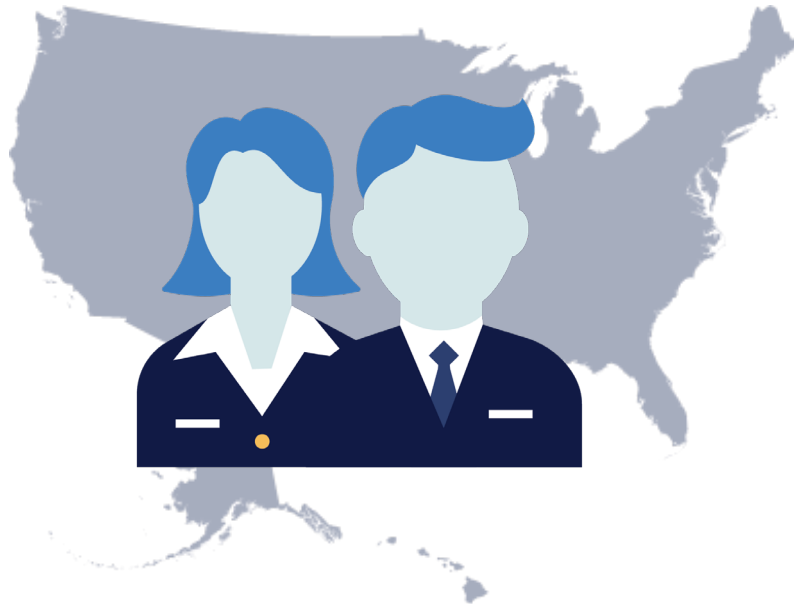


Roadside Safety  
Compliance



**Despite different systems, data is collected and viewable  
in a central location through the State's CVIEW**

# Role of the State's ITD Program Manager



- ✓ Track program budget
- ✓ Submit quarterly activity reports
- ✓ Connect State leads to ITD resources



## How FMCSA Supports States' ITD Efforts



### FMCSA ITD Team

- Administers grant program
- Maintains ITD architecture and standards (SAFER)
- Provides technical expertise to States and vendors
- Hosts meetings and workshops to facilitate idea sharing



### FMCSA Division Offices

- Help State submit its ITD program plan and grant application
- Ensure that State submits quarterly progress reports
- Monitor State's use of Federal ITD grant funding

## For more information



### ITD Program Website

<https://itd.fmcsa.dot.gov/>

### HP-ITD Grant Information

<https://ai.fmcsa.dot.gov/Grants/HighPriority.aspx>