U.S. Department of Transportation
Federal Motor Carrier Safety Administration
Office of Analysis, Research, and Technology

CVSA and FMCSA
Data Quality Training

CVSA Annual Workshop
Information Systems Users Workshop
April 7, 2014

SSDQ
State Safety Data Quality Program

Office of Research and Information Technology

Data Quality Supports FMCSA Safety Programs

Crash and inspection data are critical to FMCSA's data-driven safety systems that help the Agency prevent crashes, injuries, and fatalities related to commercial motor vehicles

Data-Driven Safety Systems

- Safety Measurement System (SMS)
- New Applicant Screening (NAS)
- Inspection Selection System (ISS)
- Driver Information Resource (DIR)
- Pre-Employment Screening Program (PSP)
- Driver Safety Measurement System (DSMS)

Safer Roads

SSDQ
State Safety Data Quality Program

State Safety Data Quality (SSDQ) Program

The FMCSA Data Quality Program offers a toolbox of improvement tactics to meet States' varying needs

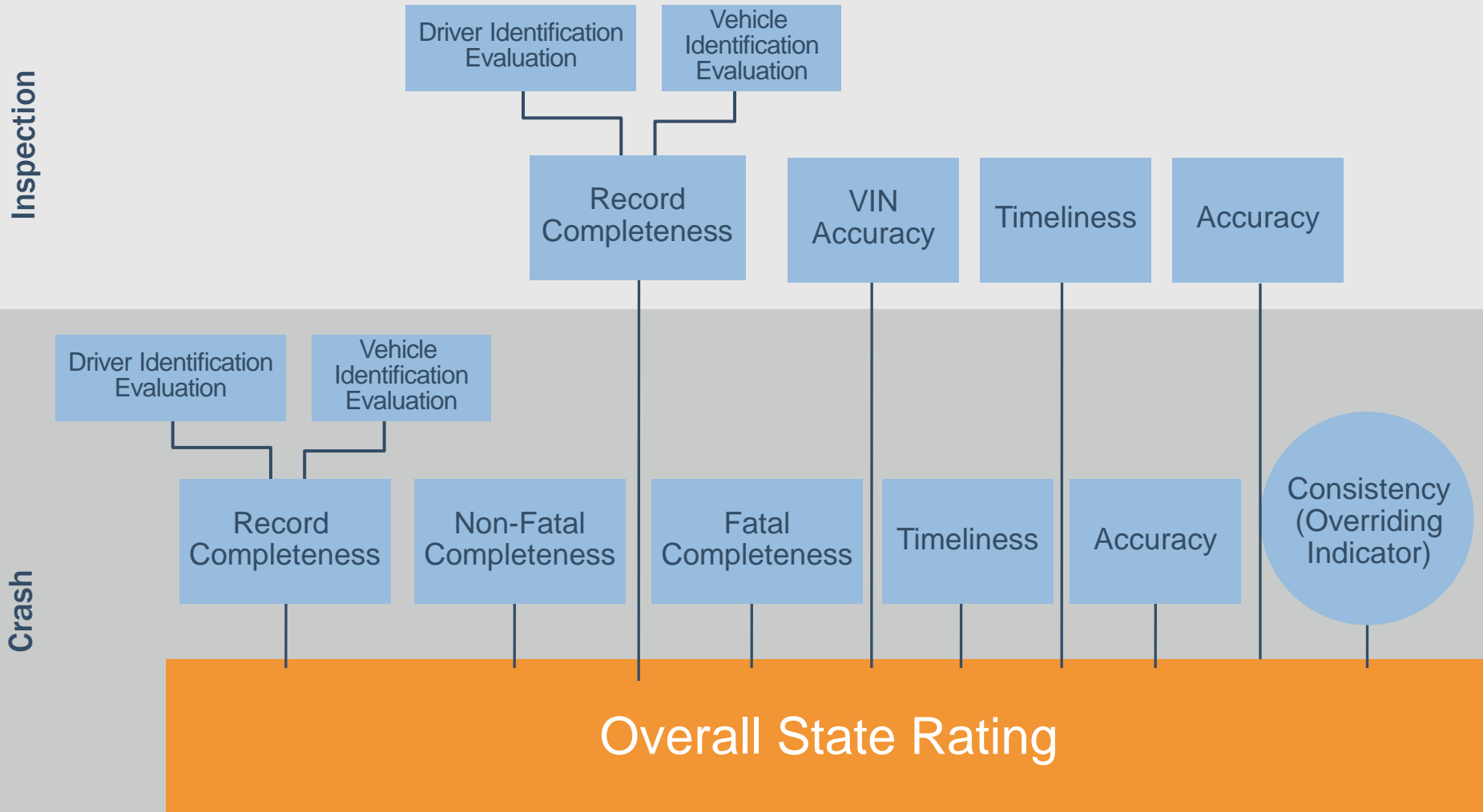## FMCSA Data Quality Program

- SSDQ Measures
- Training
- Technical Assistance
- DataQs
- Grants

Data Quality

SSDQ
State Safety Data Quality Program

SSDQ Measures

The SSDQ Measures that Support SMS BASICs

1. Inspection Accuracy
2. Inspection Timeliness
3. Non-Fatal Crash Completeness
4. Fatal Crash Completeness
5. Crash Accuracy
6. Crash Timeliness
7. Crash/Inspection Record Completeness

Driver Information

1 2 3 4 5 6 7

BASICs

Unsafe Driving
1 2

Hours-of-Service Compliance
1 2

Driver Fitness
1 2

Controlled Substances/Alcohol
1 2

Vehicle Maintenance
1 2
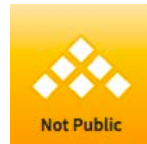
Hazardous Materials Compliance
Not Public
1 2

Crash Indicator
Not Public
3 4 5 6

SSDQ
State Safety Data Quality Program
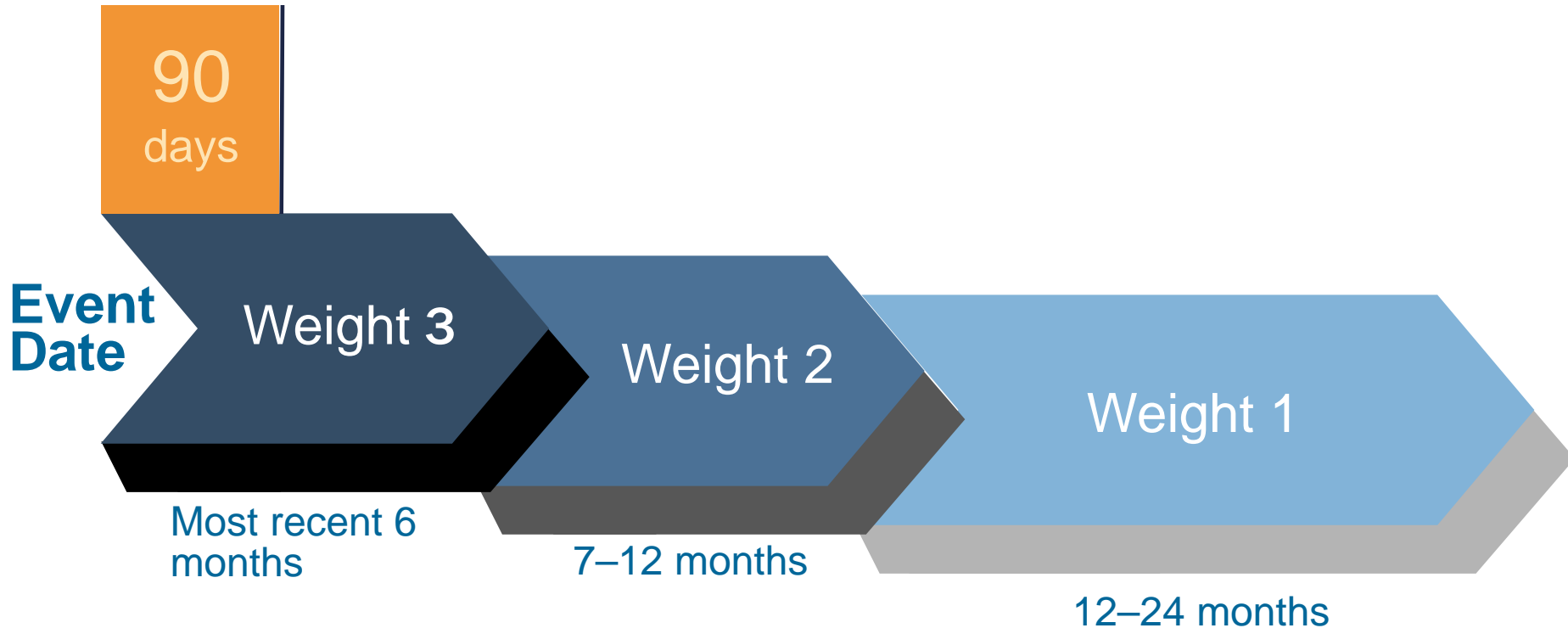
Why Timeliness Matters

SMS Weights Crashes by Time

SSDQ Crash Timeliness Measure: submit records within 90 days

90 days

Event Date

Weight **3**

Weight 2

Weight 1

Most recent 6 months

7–12 months

12–24 months

SSDQ Results

- SSDQ results updated monthly and available online (February 2014)

- Map changes monthly and is a barometer for national data quality

Rating	# States
Good	42
Fair	8
Poor	1

Alaska Hawaii D.C. US Map

Data Quality Trends

- Data quality is improving, but we still have work to do

- The table below shows ratings according to SSDQ measures

Measures	2004* Rating	2008* Rating	2013* Rating	2013* Record Counts
Crash Timeliness	69%	88%	91%	**12,483** late (>90 days)
Crash Accuracy	87%	96%	98%	**1,846** not matched to a carrier
CRC – Vehicle	*N/A*	87%	96%	**5,548** missing vehicle data
CRC – Driver	*N/A*	81%	95%	**6,935** missing driver data

* Fiscal Year

Training and Technical Assistance

FMCSA provides training to State
law enforcement agencies
collecting data and technical
assistance to State
organizations
that send data
to FMCSA

DataQs

Grants – SaDIP

Safety Data Improvement Program (SaDIP) is available to States, the District of Columbia, and territories to help States with the completeness, timeliness, and accuracy of the crash and inspection data reported to FMCSA
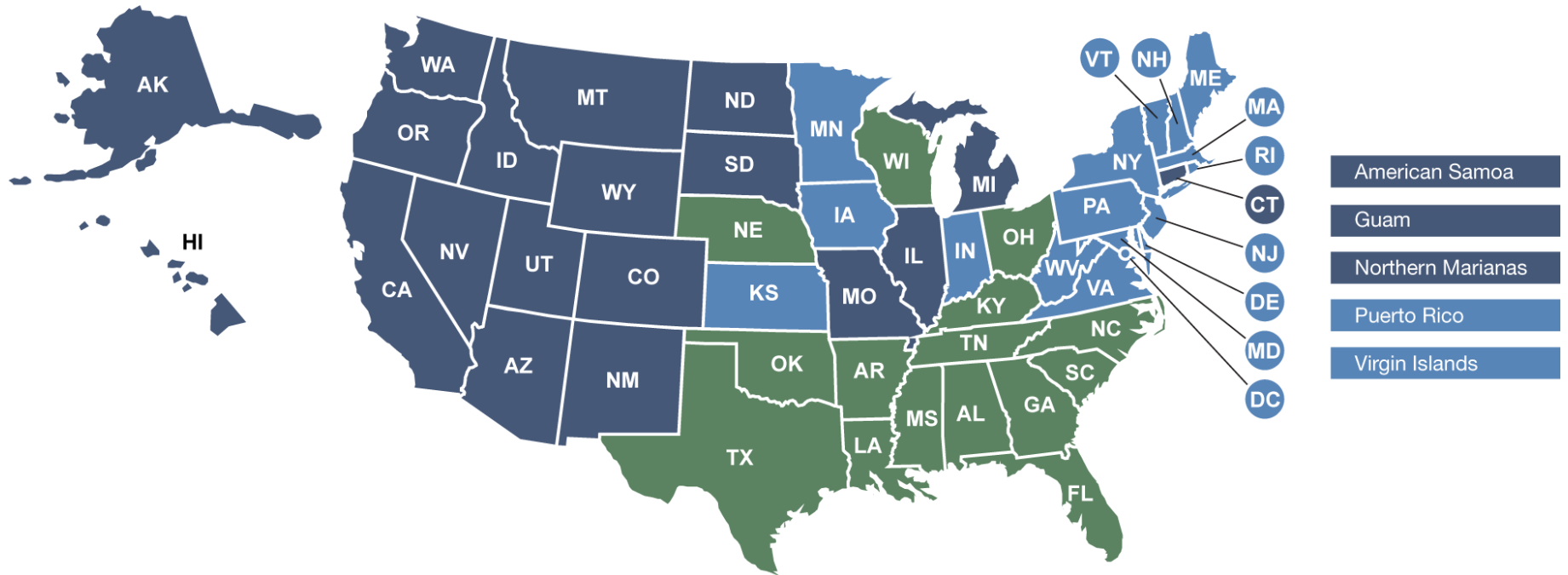
- $3,000,000 per year in grants

- Typically, 9–15 grants awarded per year

- 97 SaDIP grants awarded to 36 States since the program began in 2006

Meet Your DQ Specialist

Training Overview

Today's training covers:

- Reports and resources to help monitor SSDQ measures

- Examples of how States identified and improved their SSDQ

- Possibilities to improve the SSDQ ratings and the challenges we face

- Responding to Requests for Data Review received through DataQs

Visit the Data Quality Website

For more information about FMCSA's Data Quality Program, please contact:

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Data Quality Website:

http://ai.fmcsa.dot.gov/DataQuality/dataquality.asp

DataQs:

http://dataqs.fmcsa.dot.gov/

SSDQ
State Safety Data Quality Program