

The Safety Measurement System (SMS) Methodology Enhancements and SMS Preview

 **Get Road Smart.**



The Safety Measurement System (SMS)
Methodology Enhancements and SMS
Preview
Fall 2016

 U.S. Department of Transportation
Federal Motor Carrier Safety Administration

 **Get Road Smart.**

Today's Presenters



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The Safety Measurement System (SMS) Methodology Enhancements and SMS Preview

Get Road Smart.

Today's Presentation

1. Review Compliance, Safety, Accountability (CSA) Safety Measurement System (SMS) and its improvement process
2. Outline primary objectives for the proposed SMS Methodology enhancements
3. Provide an overview of the proposed SMS Methodology enhancements
4. Outline the timeline for the SMS Preview
5. Frequently Asked Questions (FAQs)



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CSA's Safety Measurement System (SMS)

- Provides motor carriers and other safety stakeholders with more comprehensive, informative, and regularly updated safety performance data
 - Quantifies the on-road safety performance and considers prior investigation findings of motor carriers to prioritize enforcement resources
 - Helps determine the safety problems a motor carrier is exhibiting
 - Monitors motor carrier's safety problems for improvement or interventions



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SMS Improvement Process

- SMS is continually improved based on:
 - Availability of new data and additional analyses
 - Feedback from enforcement and other stakeholders, including industry

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SMS Improvement Process, Cont.

- The Federal Motor Carrier Safety Administration (FMCSA) applies a systematic approach to implementing improvements
 - Includes announcing the proposed changes in a Federal Register Notice and providing a preview and comment period
- FMCSA prioritizes and packages changes as needed
 - Includes public preview period prior to implementation of major changes

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Why an SMS Preview?

- Gives stakeholders an opportunity to view and comment on the proposed enhancements, verify data, and educate all stakeholders BEFORE the enhancements are implemented and become publicly available
- Enables FMCSA to make final refinements to the package of enhancements BEFORE public release



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SMS Methodology Enhancement Objectives

1. Make the SMS more effective at prioritizing carriers that pose the greatest safety risk for interventions
2. Improve FMCSA's focus on carriers with high crash rates and serious safety problems
3. Focus FMCSA's investigative resources on carriers with more crash involvement



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SMS Methodology Enhancement Objectives

Objective: Make the SMS more effective at prioritizing carriers that pose the greatest safety risk for interventions

Enhancements that meet this objective:

- Expanding the range over which the Utilization Factor (UF) is applied
- Simplifying the data sufficiency standards to only assign Behavior Analysis and Safety Improvement Categories (BASIC) percentiles to companies that have had an inspection with a violation in the last year
- Segmenting the Hazardous Materials (HM) Compliance BASIC by cargo tank and non-cargo tank operations

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SMS Methodology Enhancement Objectives

Objective: Improve FMCSA's focus on carriers with high crash rates and serious safety problems

Enhancements that meet this objective:

- Adjusting the Intervention Thresholds for the Vehicle Maintenance, Controlled Substances/Alcohol, Driver Fitness and HM Compliance BASICs
- Moving operating while out-of-service (OOS) violations to the Unsafe Driving BASIC

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SMS Methodology Enhancement Objectives

Objective: Improve FMCSA's focus on carriers with high crash rates and serious safety problems

Current and Proposed Intervention Thresholds

BASIC	Passenger Carrier	HM Carrier	General Carrier	Passenger Carrier	HM Carrier	General Carrier
Vehicle Maintenance	65%	75%	80%	60%	70%	75%
Controlled Substances/ Alcohol Driver Fitness HM Compliance	65%	75%	80%	75%	85%	90%


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SMS Methodology Enhancement Objectives

Objective: Focus FMCSA's investigative resources on carriers with more crash involvement

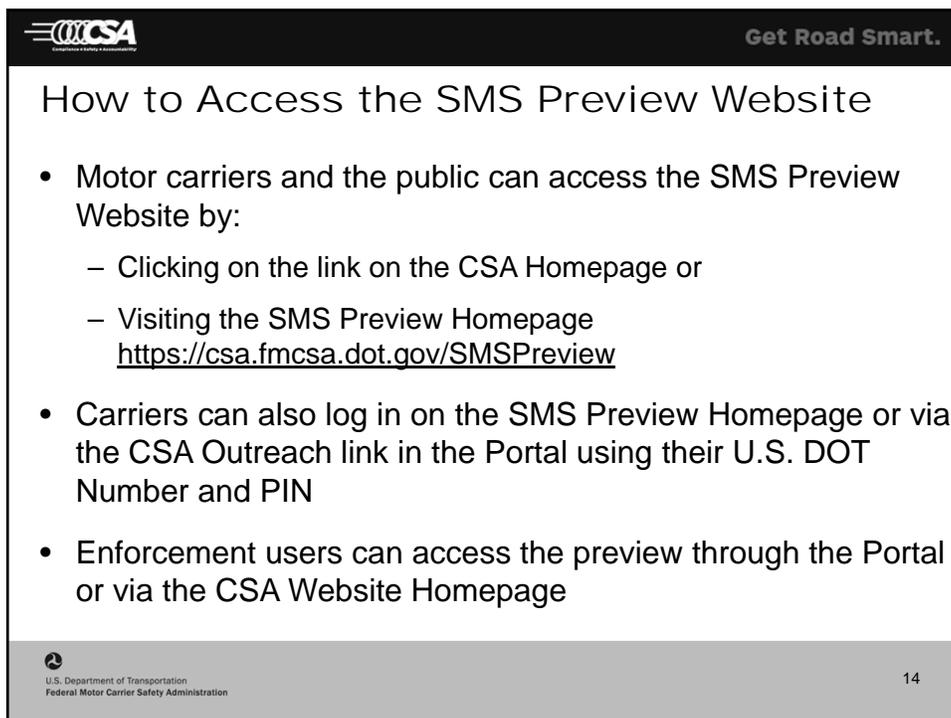
Enhancements that meet this objective:

- Increasing the number of crashes required to assign a percentile in the Crash Indicator BASIC from two to three


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The screenshot shows the homepage of the SMS Preview Website. At the top left is the CSA logo with the tagline "Compliance & Safety & Accountability". At the top right is the slogan "Get Road Smart.". The main content area is white with the text "SMS Preview Website" centered. At the bottom left is the U.S. Department of Transportation Federal Motor Carrier Safety Administration logo. At the bottom right is the page number "13".



The screenshot shows the "How to Access the SMS Preview Website" page. At the top left is the CSA logo with the tagline "Compliance & Safety & Accountability". At the top right is the slogan "Get Road Smart.". The main content area is white with the title "How to Access the SMS Preview Website" and a bulleted list of instructions. At the bottom left is the U.S. Department of Transportation Federal Motor Carrier Safety Administration logo. At the bottom right is the page number "14".

How to Access the SMS Preview Website

- Motor carriers and the public can access the SMS Preview Website by:
 - Clicking on the link on the CSA Homepage or
 - Visiting the SMS Preview Homepage
<https://csa.fmcsa.dot.gov/SMSPreview>
- Carriers can also log in on the SMS Preview Homepage or via the CSA Outreach link in the Portal using their U.S. DOT Number and PIN
- Enforcement users can access the preview through the Portal or via the CSA Website Homepage

The Safety Measurement System (SMS) Methodology Enhancements and SMS Preview

This slide shows the top portion of the SMS Preview website. At the top left is the FMCSA logo with the tagline "Get Road Smart." The main content area is a large white rectangle with the text "SMS Preview Website Features" centered in a large, black, sans-serif font. At the bottom left, there is a small circular icon and the text "U.S. Department of Transportation Federal Motor Carrier Safety Administration". At the bottom right, the number "15" is displayed.

This slide shows a detailed screenshot of the SMS Preview website interface. The top navigation bar includes the FMCSA logo, the text "Get Road Smart. Road Smart.", and a dropdown menu labeled "Select an Example Carrier". The main content area features a "Welcome to the SMS Enhancements Public Preview!" message. Below this message are two buttons: "Motor Carrier Log in to Preview Your Changes" and "Enforcement Log in to Preview the Changes". Two white arrows point from the text "carriers that post the greatest safety risk." to these two buttons. A white box on the left contains a list of links: "> Watch this presentation for a primer on the proposed changes and the preview", "> Visit the Help Center to get your questions answered", and "> Submit your comments on the Federal Register Notice". Below the welcome message is a list of four items, each with a right-pointing arrow and two sub-links: "Sharpening Our Focus on Carriers with Recent Violations" (See in Action, Learn More), "A More Accurate Picture of Carrier Exposure on Our Roads" (See in Action, Learn More), "A More Effective HM Compliance BASIC" (See in Action, Learn More), and "More Effectively Identifying Driver Safety Problems Related to OOS" (See in Action, Learn More). At the bottom left, there is a small circular icon and the text "U.S. Department of Transportation Federal Motor Carrier Safety Administration". At the bottom right, the number "16" is displayed.

The Safety Measurement System (SMS) Methodology Enhancements and SMS Preview

Get Started

FMCSA proposes an enhancement to the Hazardous Materials (HM) Compliance Behavior Analysis and Safety Improvement Category (BASIC) to make it more effective at identifying carriers with HM compliance problems for interventions. This enhancement includes:

- Segmenting the HM Compliance BASIC by cargo tank and non-cargo tank operations
- [Adjusting this BASIC's Intervention Threshold](#)

1 Tour this Change

See the proposed enhancement to the HM Compliance BASIC in action. This tour uses an example carrier to walk you through the proposed change to the HM Compliance BASIC and show you how that change may impact SMS results. You can [Tour this Change](#), return to the [SMS Preview Homepage](#) to tour another change, or explore each change on your own by hovering over the blue and red flags.

[Start Tour of this Change](#) [Return to the Preview Homepage](#)

2 Need Help?

Get your questions about the proposed SMS enhancements and the preview answered in the [Help Center](#). Once there, you can learn more about the proposed changes by reading the [Foundational Document](#) or the [Federal Register Notice](#). You can also check out FAQs and other preview resources.

If you have additional questions, call our CSA InfoLine team at 1-877-254-5365, or [fill out this form](#).

3 Submit Comments

Comment on this proposed change through the [Federal Register Notice](#).

Wondering Why Parts of this Page Are Gray?

For your convenience, we grayed out information that will not be impacted by these proposed changes.

A More E

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Proposed Enhancement to the HM Compliance BASIC

FMCSA proposes an enhancement to the Hazardous Materials (HM) Compliance Behavior Analysis and Safety Improvement Category (BASIC) to make it more effective at identifying carriers with HM compliance problems for interventions. This enhancement includes:

Segmenting this BASIC by Cargo Tank and Non-Cargo Tank Operations

Cargo tank and non-cargo tank operations often result in different violations. Segmenting these carriers will enable the SMS to account for these differences when assigning percentiles in this BASIC.

Adjusting this BASIC's Intervention Threshold

We will adjust the Intervention Threshold for this BASIC from 80% to 90% to reflect its lower correlation to crash risk.

To learn more about how this proposed change will make this BASIC more effective, review the [Foundational Document](#). You can also [Tour this Change](#) to see this proposed enhancement in action.

A More E

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The Safety Measurement System (SMS) Methodology Enhancements and SMS Preview

The screenshot shows the 'Help Center' page of the SMS PREVIEW website. At the top, there is a navigation bar with the CSA logo (Compliance • Safety • Accountability) on the left and the slogan 'Get Road Smart. rt.' on the right. Below the navigation bar, the page title 'SMS PREVIEW Safety Measurement System' is displayed, followed by links for 'CSA', 'SMS', 'SMS PREVIEW', and 'HELP CENTER'. A dropdown menu labeled 'Select an Example Carrier' is also present.

The main heading is 'Help Center', with a sub-heading: 'Get your questions about the proposed SMS enhancements and the preview answered here. You can find preview resources or check out FAQs. Don't know where to start on the preview site? Click on Get Started to find out how to tour each proposed change and learn how to submit comments after your tour.'

Below the heading is a navigation bar with three icons: 'GET STARTED', 'RESOURCES', and 'FAQS'. Underneath, a message reads: 'Learn what you need to know about the proposed SMS enhancements. Select a resource below that you can download, print, and share.'

Four resource cards are displayed in a row:

- Proposed SMS Enhancements Key Terms Glossary**: A document defining key terms related to the proposed changes.
- Proposed SMS Enhancements Presentation Materials**: A presentation featuring a photo of a man and a woman, with the title 'The Safety Measurement System (SMS) Methodology Enhancements and SMS Preview'.
- Proposed SMS Enhancements Factsheet**: A concise summary of the proposed changes.
- Proposed SMS Enhancements Foundational Document**: A detailed document providing the background and rationale for the enhancements.

This slide features the CSA logo and 'Get Road Smart. rt.' slogan at the top. The main content is the title 'Proposed Enhancements' centered on the page. At the bottom left, there is a small circular logo and the text 'U.S. Department of Transportation Federal Motor Carrier Safety Administration'. At the bottom right, the number '20' is displayed.

The Safety Measurement System (SMS) Methodology Enhancements and SMS Preview


Get Road Smart.

Improving FMCSA's Focus on Carriers with High Crash Rates by Adjusting Intervention Thresholds

Proposed Enhancement



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Intervention Thresholds Example

U.S. DOT# 123456789
Address: 123 Main St
City: Anytown, NY 12345
Number of Vehicles: 50
Number of Drivers: 10
Number of Inspections: 10

Safety Rating & OOS Rates

U.S. DOT# 123456789 (updated every 90 days)

Not Rated

Out of Service Rates

Type	DOT#	Intervention
Vehicle	30.9	20.7
Driver	1.2	0.6

Licensing and Insurance

U.S. DOT# 123456789 (updated every 90 days)

Type	Active	Yes/No	IC/State
Passenger	Yes	Yes	IC/State
Household Goods	No	No	No
Broker	No	No	No

BASIC Status

Behavior Analysis & Safety Improvement Categories (BASICS)

Based on a 24-month record ending March 25, 2016

UNSAFE DRIVING

CRASH INDICATOR

HOURS-OF-SERVICE COMPLIANCE

VEHICLE MAINTENANCE

CONTROLLED SUBSTANCE/ALCOHOL

HAZARDOUS MATERIALS COMPLIANCE

DRIVER FITNESS

Select a BASIC icon above to get details.

Denotes this carrier exceeds the FMCSA Intervention Threshold relative to its safety event grouping based upon roadside data and/or has been cited with one or more violations.

Overview of Proposed Changes to Vehicle Maintenance BASIC
(Current and proposed SMS results are based on March 25, 2016 snapshot)

INTERVENTION THRESHOLD
PROPOSED 75%
CURRENT 80%

On-Road Performance

Measure: 5.57

Percentile: 54th

Scale 0 to 100, 0 indicates the best safety performance.

54th of motor carriers in the same safety event group have better on-road performance than this motor carrier.

WHO IS IN THE SAFETY EVENT GROUP?

Investigation Results

Carrier violations or crashes are weighted by time and severity to produce a measure for that carrier in each BASIC. The measure is then used to assign that carrier to a percentile rank containing carriers' information in similar safety event groups. [Expand](#) for more information.



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VIOLATION SUMMARY

Vehicle Maint. Violations: 20

INSPECTION HISTORY

Vehicle Inspections: 10

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Intervention Thresholds Example

U.S. DOT# 12345
Address: 123 Main St.
City: Anytown, NY 12345
Number of Vehicles: 15
Number of Drivers: 27
Number of Inspections: 11

Safety Rating & OOS Rates
(As of 03/25/2016 calculated daily from 03/25/15)
 Not Rated
 Out of Service Rates
 Type: OOS % National Avg %
 Vehicle: 30.0 20.7
 Driver: 5.0 5.5

Licensing and Insurance
(As of 03/25/2016 calculated weekly from 03/25/15)
 Active Public Authority: Yes No N/A/None
 Property: Yes No N/A/None
 Passenger: No No
 Household Goods: No No
 Broker: No No

CHANGED

BASIC Status
 Behavior Analysis & Safety Improvement Categories (BASICS)
Based on a 24-month record ending March 25, 2016

UNSAFE DRIVING

CRASH INDICATOR

HOURS-OF-SERVICE COMPLIANCE

VEHICLE MAINTENANCE

CONTROLLED SUBSTANCES/ALCOHOL

HAZARDOUS MATERIALS COMPLIANCE

DRIVER FITNESS

CHANGED

Select a BASIC icon above to get details.

⚠ Denotes this carrier exceeds the FMCSA Intervention Threshold, relative to its safety event grouping based upon roadside data and/or has been cited with one or more

Overview of Proposed Changes to Controlled Substances/Alcohol BASIC
(Current and proposed SMS results are based on March 25, 2016 snapshot)

INTERVENTION THRESHOLD	PROPOSED	90%
CURRENT	80%	

On-Road Performance
Measure: 0.00
Percentile: 0%



Scale 0 to 100. 0 indicates the best safety performance.

This carrier has 115 driver inspections from the past 24 months and no violations related to this BASIC were discovered.

Investigation Results
No State Critical Violations Discovered

CARRIER MEASURE OVER TIME | **MEASURE VS. PERCENTILE** | **INSPECTION RESULTS**

+ VIOLATION SUMMARY Drugs/Alcohol Violations: 0

+ INSPECTION HISTORY Driver Inspections: 11

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Intervention Thresholds Example

U.S. DOT# 12345
Address: 123 Main St.
City: Anytown, NY 12345
Number of Vehicles: 15
Number of Drivers: 27
Number of Inspections: 11

Safety Rating & OOS Rates
(As of 03/25/2016 calculated daily from 03/25/15)
 Not Rated
 Out of Service Rates
 Type: OOS % National Avg %
 Vehicle: 30.0 20.7
 Driver: 5.0 5.5

Licensing and Insurance
(As of 03/25/2016 calculated weekly from 03/25/15)
 Active Public Authority: Yes No N/A/None
 Property: Yes No N/A/None
 Passenger: No No
 Household Goods: No No
 Broker: No No

CHANGED

BASIC Status
 Behavior Analysis & Safety Improvement Categories (BASICS)
Based on a 24-month record ending March 25, 2016

UNSAFE DRIVING

CRASH INDICATOR

HOURS-OF-SERVICE COMPLIANCE

VEHICLE MAINTENANCE

CONTROLLED SUBSTANCES/ALCOHOL

HAZARDOUS MATERIALS COMPLIANCE

DRIVER FITNESS

CHANGED

Select a BASIC icon above to get details.

⚠ Denotes this carrier exceeds the FMCSA Intervention Threshold, relative to its safety event grouping based upon roadside data and/or has been cited with one or more

Overview of Proposed Changes to Driver Fitness BASIC
(Current and proposed SMS results are based on March 25, 2016 snapshot)

PERCENTILE	INTERVENTION THRESHOLD
PROPOSED	84%
PROPOSED	90%
CURRENT	84%
CURRENT	80%

On-Road Performance
Measure: 1.05
Percentile: 84%



Scale 0 to 100. 0 indicates the best safety performance.

84% of motor carriers in the same safety event group have better on-road performance than this motor carrier.

WAS IN THE SAFETY EVENT GROUP!
No State Critical Violations Discovered

Investigation Results
No State Critical Violations Discovered

CARRIER MEASURE OVER TIME | **MEASURE VS. PERCENTILE** | **INSPECTION RESULTS**

+ VIOLATION SUMMARY Driver Fitness Violations: 0

+ INSPECTION HISTORY Driver Inspections: 11

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Get Road Smart.

Focusing FMCSA's Investigative Resources on Carriers with More Crash Involvement

Proposed Enhancement



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Crash Data Sufficiency Example

123 100th Ave
Anytown, NY 12345
Number of Vehicles: 4
Number of Drivers: 4
Number of Inspections: 1

Safety Rating & OOS Rates

SAFETY RATING: 2016 snapshot: Not Rated

Out of Service Rates

Type	2016%	Vehicle Out of Service
Vehicle	80.0	25.7
Driver	7.7	5.5

Licensing and Insurance

Annual Renewal Authority: Active

Type	Yes/No	Other State
Property	Yes	Yes/No
Passenger	Yes	Yes/No
Household Goods	Yes	Yes/No
Driver	Yes	Yes/No

BASIC Status

BASIC: Crash Indicator

On-Road Performance

Measure: 2.23 ?

Percentile: Less than 3 crashes

0

65%

100

Intervention Threshold

Scale 0 to 100; 0 indicates the best safety performance.

This carrier has (2) crashes. A carrier must have at least three crashes to be assessed in this BASIC.

SAFETY EVENT GROUP

COMBINATION SEGMENT	PROPOSED	NONE
CURRENT	COMBINATION SEGMENT	2-3 CRASHES

CRASH RESULTS

Displays the number of crashes that the carrier has received for a selected period of time.

Note: The Crash Indicator BASIC is not currently available to the public. It is only available to enforcement users or carriers that are logged into their own safety profiles. The SMS Preview uses an example carrier to show you how this proposed enhancement may impact these stakeholders.

Overview of Proposed Changes to Crash Indicator BASIC (Current and proposed SMS results are based on March 25, 2016 snapshot)	PERCENTILE	SAFETY EVENT GROUP
	PROPOSED LESS THAN 3 CRASHES	PROPOSED COMBINATION SEGMENT NONE
	CURRENT 89%	CURRENT COMBINATION SEGMENT 2-3 CRASHES



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Sharpening Our Focus on Carriers with Recent Violations

Proposed Enhancement



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Data Sufficiency Standards Example

DOT# 123456789
Address: 123 Main St.
City: Anytown, NY 12345
Number of Vehicles: 2
Number of Drivers: 2
Number of Inspections: 3

Safety Rating & OOS Rates
(% of 06/30/2018 updated daily from 02/28/18)

Not Rated

Out of Service Rates

Type	OOS%	Outdated Avg. %
General	35.0	35.7
Driver	0.0	0.0

Licensing and Insurance
(% of 06/30/2018 updated hourly from 06/11/18)

Active Permit Authority

Type	Permit	IC#
Property	Yes	IC-12345
Passenger	No	
Insured Goods	Yes	
Storage	No	

BASIC Status
BASIC Analysis & Safety Improvement Categories (BASICs)
Based on a 24-month record ending March 15, 2018

BASIC: Vehicle Maintenance

On-Road Performance

Measure: 8.60 ?

Percentile: No violations in the past year

IN-INTERVENTION THRESHOLD

PERCENTILE	MEASURE
0	100
75%	75%
100	80%

Intervention Threshold **CHANGED**

Scale 0 to 100; 0 indicates the best safety performance.

This carrier did not have any Vehicle Maintenance BASIC violations in the last year.

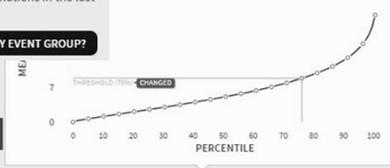
WHO IS IN THE SAFETY EVENT GROUP?

This carrier did not have any Vehicle Maintenance BASIC violations in the last year.

Vehicle data and/or has been cited with one or more violations for an intervention action and roadside inspection.

MEASURE VS. PERCENTILE

Crashes are weighted by time and severity to produce a measure for that carrier in each BASIC, used to assign that carrier to a percentile rank containing carriers' information in similar safety categories for more information.





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• VIOLATION SUMMARY

• INSPECTION HISTORY

Vehicle Maint. Violations: 10

Vehicle Inspections: 5

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A More Accurate Picture of Carrier Exposure

Proposed Enhancement



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Utilization Factor Example

U.S. DOT# 44444
Address: 123 Main St.
City: Anytown, NY 12345
Number of Vehicles: 35
Number of Drivers: 45
Number of Inspections: 100

Safety Rating & OOS Rates

PS or OOS (2018) Update only from (2018)

Out of Service Rates

Type	2018	2017
Vehicle	8.4	10.7
Driver	2.5	3.3

Licensing and Insurance

Valid (24/24/2018) Update from (2018)

Type	Yes/No	ICCA/Other
Property	Yes	NO/Other
Passenger	No	
Recruitment Goods	No	
Driver	No	

BASIC Status
Behavior Analysis & Safety Improvement Categories (BASICs)
Based on a 24-month record ending March 25, 2018

BASIC: Unsafe Driving

VEHICLE
EQUIPMENT

CONTROLLED
SUBSTANCE/ALCOHOL

NOT PLACED
HAZARDOUS
MATERIALS
COMPLIANCE

DRIVER
FITNESS

On-Road Performance

Measure: 2.07 ? **CHANGED**
Percentile: 33% **CHANGED**

(based on data and/or has been cited with one or more violations for an intervention action and roadside inspection.)

0 65% 100

Intervention Threshold

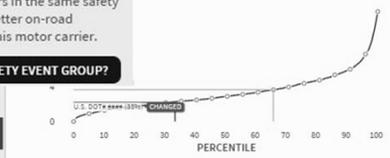
Scale 0 to 100; 0 indicates the best safety performance.

33% of motor carriers in the same safety event group have better on-road performance than this motor carrier.

WHO IS IN THE SAFETY EVENT GROUP?

performance than this motor carrier.

U.S. DOT# 44444 100% CHANGED



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+ VIOLATION SUMMARY
+ INSPECTION HISTORY

INSPECTION RESULTS

Unsafe Driving Violations: 25

Driver Inspections with Unsafe Driving Violations: 25

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A More Effective HM Compliance BASIC Proposed Enhancement


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HM Compliance BASIC Example

U.S. DOT# 123456
Address: 123 Main St.
City: Anytown, CA 94567
Number of Vehicles: 1,000
Number of Drivers: 1,000
Number of Properties: 1,000

Safety Rating & OOS Rates

HM Compliance BASIC (example only) from 12/15/15

Next Rated: Satisfactory

Out of Service Rates

Type	OOS %	National Avg %
Vehicle	22.3	28.7
Driver	1.2	1.3

Licensing and Insurance

HM Compliance BASIC (example only) from 12/15/15

Type	Yes/No	ICC/State
Property	Yes	ICC/State
Passenger	No	
Household Goods	No	
Driver	No	

[TOUR THIS CHANGE](#) [NEED HELP?](#) [SUBMIT COMMENTS](#) [CHANGED](#)

How does this relate to crashes?

BASIC Status

Behavior Analysis & Safety Improvement Categories (BASICs) Based on a 24-month record ending March 25, 2016

UNSAFE DRIVING

CRASH INDICATOR

HOURS OF SERVICE COMPLIANCE

VEHICLE MAINTENANCE

CONTROLLED SUBSTANCES/ALCOHOL

HAZARDOUS MATERIALS COMPLIANCE

DRIVER FITNESS

Note: The HM Compliance BASIC is not currently available to the public. It is only available to enforcement users or carriers that are logged into their own safety profiles. The SMS Preview uses an example carrier to show you how this proposed enhancement may impact these stakeholders.

Overview of Proposed Changes to Hazardous Materials Compliance BASIC
(Current and proposed SMS results are based on March 25, 2016 snapshot)

CARRIER SEGMENT	PERCENTILE	INTERVENTION THRESHOLD
NON-CARGO PROPOSED TANK	PROPOSED 63%	PROPOSED 90%
CURRENT NO SEGMENT	CURRENT 81%	CURRENT 80%

ON-ROAD PERFORMANCE

Measure: O.D.# CHANGED

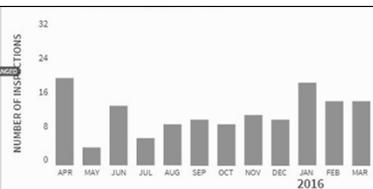
Percentile: 63% CHANGED

Scale: 0 to 100; 0 indicates the best safety performance.

63% of motor carriers in the same safety event group have better on-road performance than this motor carrier.

Investigation Results

Number of Violations/Inspections



INSPECTION RESULTS


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More Effectively Identifying Driver Safety Problems Related to OOS

Proposed Enhancement



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Operating While OOS Example

U.S. DOT Name: [REDACTED]
 Address: 22 Main St.
 City: [REDACTED]
 State: [REDACTED]
 ZIP: [REDACTED]
 Number of Vehicles: 5
 Number of Drivers: 5
 Number of Inspections: 25

Safety Rating & OOS Rates

No. of OOS (2015 Updated Data from [REDACTED])

No. Rated: [REDACTED]

Out of Service Rates

Type	OOS %	National Avg. %
Vehicle	20.0	20.7
Driver	17	15.8

Licensing and Insurance

No. of Ins. (2015 Reported Data from [REDACTED])

Type	Yes	No	MC#
Property	Yes	Yes	MC# [REDACTED]
Personal	No	No	
Household Goods	No	No	
Broker	No	No	

TOUR THIS CHANGE
NEED HELP?
SUBMIT COMMENTS
CHANGED!

– VIOLATION SUMMARY
CHANGED: 1 violation has been moved to the Unsafe Driving BASIC
Unsafe Driving Violations: 4

Violations	Description	# Violations	# OOS Violations	Violation Severity Weight
392.16	Failing to use seat belt while operating CMV	1	0	7
392.2-SLLS3	State/Local Laws - Speeding 11-14 miles per hour over the speed limit	1	0	7
392.2C	Failure to obey traffic control device	1	0	5
395.13(d)	Driving after being declared out-of-service MOVED from the HOS Compliance BASIC	1	1	10

Overview of Proposed Changes to Unsafe Driving BASIC

Current and proposed SMS results are based on March 28, 2015 snapshot.

VIOLATIONS MOVED	MEASURE	PERCENTILE
1 OPERATING WHILE OOS VIOLATIONS MOVED TO THE UNSAFE DRIVING BASIC	PROPOSED 10.25	PROPOSED 77%
	CURRENT 7.75	CURRENT 68%

BASIC Unsafe Driving

On-Road Performance

Measure: 10.25 **CHANGED**

Percentile: 77% **CHANGED**

Scale 0 to 100. 0 indicates the best safety performance.

77% of motor carriers in the same safety event group have better on-road performance than this motor carrier.

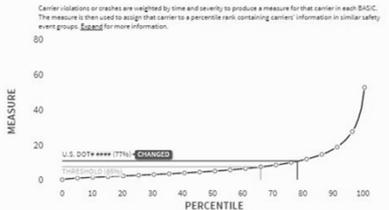
What is the safety event score?

Investigation Results

All State Critical Violations Encountered

MEASURE VS. PERCENTILE

Carrier violations or crashes are weighted by time and severity to produce a measure for that carrier in each BASIC. The measure is then used to assign that carrier to a percentile rank containing carriers' information in similar safety event groups. [Expand](#) for more information.



CARRIER MEASURE OVER TIME

MEASURE VS. PERCENTILE

INSPECTION RESULTS

– VIOLATION SUMMARY
CHANGED: 1 violation has been moved to the Unsafe Driving BASIC
Unsafe Driving Violations: 4

+ INSPECTION HISTORY
CHANGED: 1 violation has been moved to the Unsafe Driving BASIC
Driver Inspections with Unsafe Driving Violations: 4



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The Safety Measurement System (SMS) Methodology Enhancements and SMS Preview



Operating While OOS Example
U.S. DOT# XXXX
Address: 221 Main St.
City: Anytown, NY 12345

Safety Rating & OOS Rates
As of 04/27/2016 updated daily from 1/2/2016
Not Rated

Licensing and Insurance
As of 04/27/2016 updated hourly from 1/2/2016
Active Authority



+ VIOLATION SUMMARY CHANGED: 1 violation has been moved to the Unsafe Driving BASIC

- INSPECTION HISTORY CHANGED: 1 violation has been moved to the Unsafe Driving BASIC

Unsafe Driving Violations: 4

Driver Inspections with Unsafe Driving Violations: 4

Report			Vehicle			Measure = $\frac{\text{Sum of the Total Weight (TotW)}}{\text{Avg. PU} \times \text{UF} = 4}$		
Inspection Date	Number	State	Plate Number	Plate State	Type	Severity Weight (SW)	Time Weight (TW)	Total Weight (TotW)
7/25/2015	XX5555555555	XX	888888	XX	Truck Tractor	5	2	10
Violation: 392.2C Failure to obey traffic control device								
5/2/2015	XX8888888888	XX	888888	XX	Truck Tractor	7	2	14
Violation: 392.2-SLLS3 State/Local Laws - Speeding 11-14 miles per hour over the speed limit								
3/24/2015	XX4444444444	XX	000000	XX	Truck Tractor	10	1	10
Violation: 395.13(d) Driving after being declared out-of-service (OOS) - MOVED from the HOS Compliance BASIC								
4/3/2014	XX2222222222	XX	222222	XX	Truck Tractor	7	1	7
Violation: 392.16 Failing to use seat belt while operating CMV								
Sum of measure weights						29	6	41

PERFORMANCE MEASURE LAST MONTH As of 2/26/2016 $\frac{\text{TotW}}{\text{Avg. PU} \times \text{UF}} = \frac{51}{4} = 12.75$

MORE INFO

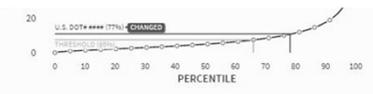
PERFORMANCE MEASURE THIS MONTH As of 3/25/2016 $\frac{\text{TotW}}{\text{Avg. PU} \times \text{UF}} = \frac{41}{4} = 10.25$

*** The sum of all violation severity weights (violation weight + out-of-service) for this inspection has been capped at 30.

77% of motor carriers in the same safety event group have better on-road performance than this motor carrier.

WHO IS IN THE SAFETY EVENT GROUP?

Investigation Results
No Unsafe Critical Violations Documented



U.S. DOT# XXXX 77% CHANGED

PERCENTILE

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+ VIOLATION SUMMARY CHANGED: 1 violation has been moved to the Unsafe Driving BASIC

- INSPECTION HISTORY CHANGED: 1 violation has been moved to the Unsafe Driving BASIC

Unsafe Driving Violations: 4

Driver Inspections with Unsafe Driving Violations: 4

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Operating While OOS Example
U.S. DOT# XXXX
Address: 221 Main St.
City: Anytown, NY 12345

Safety Rating & OOS Rates
As of 04/27/2016 updated daily from 1/2/2016
Not Rated

Licensing and Insurance
As of 04/27/2016 updated hourly from 1/2/2016
Active Authority



TOUR THIS CHANGE **NEED HELP?** **SUBMIT COMMENTS**

CHANGED

How does SMS relate to crashes?

Based on a 24-month record ending March 25, 2016

BASIC: Unsafe Driving

More Info

CONTROLLED SUBSTANCE/ALCOHOL

NOT PUBLIC HAZARDOUS MATERIALS COMPLIANCE

DRIVER FITNESS

On-Road Performance

Measure: 2.07 ? **CHANGED**

Percentile: 33% **CHANGED**

33%

0 65% 100

Intervention Threshold

PERCENTILE

0.25 PROPOSED ▲ 77%

.75 CURRENT ▲ 68%

Scale 0 to 100; 0 indicates the best safety performance.

33% of motor carriers in the same safety event group have better on-road performance than this motor carrier.

WHO IS IN THE SAFETY EVENT GROUP?

Investigation Results
No Unsafe Critical Violations Documented



U.S. DOT# XXXX 77% CHANGED

PERCENTILE

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+ VIOLATION SUMMARY CHANGED: 1 violation has been moved to the Unsafe Driving BASIC

- INSPECTION HISTORY CHANGED: 1 violation has been moved to the Unsafe Driving BASIC

Unsafe Driving Violations: 4

Driver Inspections with Unsafe Driving Violations: 4

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The Safety Measurement System (SMS) Methodology Enhancements and SMS Preview

Operating While OOS Example
 U.S. DOT# 123456
 Address: 123 Main St
 Syracuse, NY 12345
 Number of Vehicles: 5
 Number of Drivers: 8
 Number of Inspections: 25

Safety Rating & OOS Rates
 (As of 04/27/2016 updated daily from [DOT](#))
 Overall Rating: **CHANGED**
 Out of Service Rates: 0.00% National Avg: 0.00%

Licensing and Insurance
 (As of 04/27/2016 updated hourly from [FMCSA](#))
 Type: Active Permitting Authority
 Property: Yes (10/2014)
 Passenger: Yes (10/2014)
 Hazardous Goods: No
 Broker: No

BASIC: Hours-of-Service Compliance

On-Road Performance
 Measure: 0.62 ? **CHANGED**
 Percentile: 33% **CHANGED**

33% | 0 | 65% Intervention Threshold | 100

Scale 0 to 100; 0 indicates the best safety performance.

33% of motor carriers in the same safety event group have better on-road performance than this motor carrier.

WHO IS IN THE SAFETY EVENT GROUP?

U.S. DOT# 123456 **CHANGED**

PERCENTILE

Measure	Proposed	Current
0.62	33%	33%
0.73	38%	38%

SURE VS. PERCENTILE

U.S. DOT# 123456 **CHANGED**

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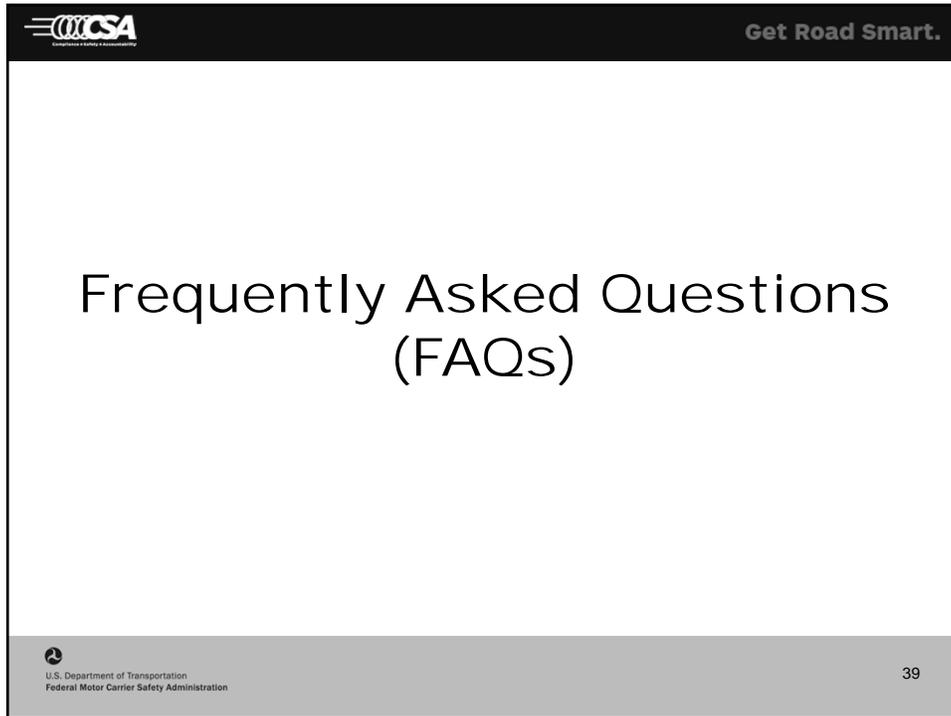
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What's Next: SMS Preview Timeline

- October 2016 (Public Preview)
 - 60-day comment period with the publication of the Federal Register Notice
- Following Preview
 - Participate in online question and answer (Q&A) sessions for industry
 - Submit questions at:
https://csa.fmcsa.dot.gov/CSA_feedback.aspx?defaulttag=SMSPREVIEWQA
- Implementation
 - Enhancements to the SMS Methodology will be implemented following the completion of the Correlation Study required by Section 5221 of the FAST Act

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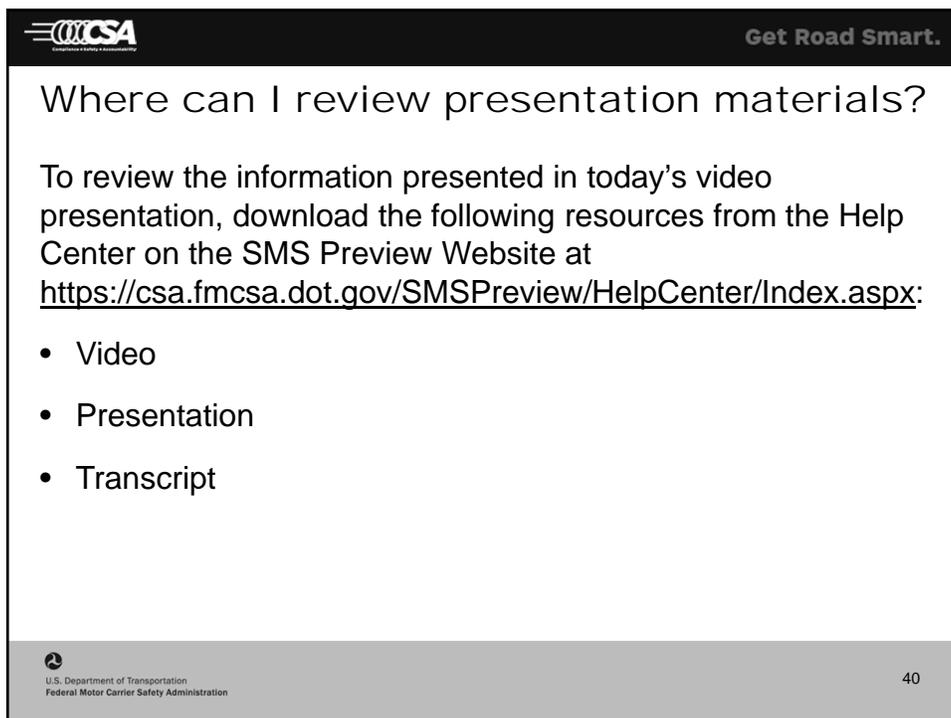
Slide 39 features a black header with the FMCSA logo on the left and the slogan "Get Road Smart." on the right. The main content area is white and contains the title "Frequently Asked Questions (FAQs)" in a large, black, sans-serif font. The footer is a grey bar with the FMCSA logo and text on the left, and the number "39" on the right.

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Frequently Asked Questions (FAQs)

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Slide 40 features a black header with the FMCSA logo on the left and the slogan "Get Road Smart." on the right. The main content area is white and contains the question "Where can I review presentation materials?" followed by a paragraph of text and a bulleted list. The footer is a grey bar with the FMCSA logo and text on the left, and the number "40" on the right.

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Where can I review presentation materials?

To review the information presented in today's video presentation, download the following resources from the Help Center on the SMS Preview Website at <https://csa.fmcsa.dot.gov/SMSPreview/HelpCenter/Index.aspx>:

- Video
- Presentation
- Transcript

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Why did FMCSA propose these changes to the SMS Methodology?

FMCSA is committed to continually improving the SMS methodology in response to new data, analyses, and stakeholder feedback to make our roads safer for everyone.

These enhancements allow FMCSA to:

- More effectively prioritize those motor carriers that pose the greatest safety risk for interventions
- Focus our investigative resources on carriers with more crash involvement
- Sharpen our focus on carriers with high crash rates
- More accurately account for the carriers that are driving on our roads the most
- More effectively identify driver safety problems and HM compliance problems



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Where can I get more detailed information about the proposed enhancements?

- For more detailed information about the proposed enhancements, you may review the SMS Enhancements Foundational Document in the Help Center on the SMS Preview Website:
<https://csa.fmcsa.dot.gov/SMSPreview/HelpCenter/Index.aspx>
- You may also review the Federal Register Notice and submit your comments: <https://www.federalregister.gov/>



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What should motor carriers and the public do during the preview of the proposed SMS methodology enhancements?

During the SMS Preview, motor carriers and the public should:

1. **Submit comments on the proposed SMS enhancements via the Federal Docket Website at:** <https://www.federalregister.gov>
2. **Try out the “Tour This Change” feature**, which provides detailed information on each of the proposed enhancements
3. **Visit the Help Center** to download preview resources, browse FAQs, and learn how to get started on the preview site

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Can a motor carrier still see all of its SMS data?

- Yes. To view their current SMS data, motor carriers may still log in through the SMS Website:
<http://ai.fmcsa.dot.gov/sms>
- To view how their data would be affected by these proposed enhancements, motor carriers may log in on the SMS Preview Homepage:
<https://csa.fmcsa.dot.gov/SMSPreview>

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SMS Preview Website: Additional Resources

- Visit the SMS Preview Help Center at <https://csa.fmcsa.dot.gov/SMSPreview/HelpCenter/Index.aspx>
 - Searchable FAQs
 - Key Terms Glossary for user-friendly definitions
 - Foundational Document
- Review the Federal Register Notice for more information on the proposed enhancements
- Contact our CSA InfoLine Team at 1-877-254-5365 or online at http://csa.fmcsa.dot.gov/CSA_Feedback.aspx



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Get Road Smart.

Help Us Build A Nationwide Commitment to Safety

- **Educate carriers and drivers**
 - Understand the SMS and the BASICS
 - Sign up for important updates via the CSA Website at: <http://csa.fmcsa.dot.gov/subscription.aspx>



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 **Get Road Smart.**

Help Us Build A Nationwide Commitment to Safety, Cont.

- **Ensure compliance and check and update records**
 - Monitor and review all inspection and crash data, and address safety problems immediately at <http://ai.fmcsa.dot.gov/SMS/Default.aspx>
 - Question potentially incorrect data (DataQs: <https://dataqs.fmcsa.dot.gov>)
 - Update your MCS-150 form and VMT data

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The Safety Measurement System (SMS) Methodology Enhancements and SMS Preview **Fall 2016**

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