FHWA Performance Reporting Prototype Technical Report

Final Report

August 2014

U.S. Department of Transportation
Federal Highway Administration

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1.0 Introduction

For public agencies, the ability to connect to and communicate with the public is no longer a "good" thing to do, it is an absolute necessity if the public agency is to develop and retain the credibility that is critical to accomplishing its mission. The public may not use the same language as transportation professionals, but performance is what the public cares about. The key questions they want answered are, what is being spent and what has it bought? Has there been an improvement and is it an improvement that matters? While there are many formats for presenting answers to these questions – text, spreadsheets, graphs, even pictures – the complicated trick is getting it right. This is information design and when information design is done well, it grabs attention and educates more effectively than other approaches.

The Federal Highway Administration (FHWA) has been working for several years to prepare their organization – as well as state departments of transportation (DOT) and metropolitan planning organizations (MPO) – for transitioning to performance management of the Federal program. The FHWA is working with the American Association of State Highway and Transportation Officials (AASHTO) and its Standing Committee on Performance Management (SCOPM) in a coordinated effort to define the limited number of measures appropriate for a national performance system. The FHWA also has created a partnership with the Federal Transit Administration (FTA), the American Public Transit Association (APTA), the National Association of Regional Councils (NARC), the Association of Metropolitan Planning Organizations (AMPO), and AASHTO to host three very effective national workshops that have been used to define a performance-based planning and programming process. The partnership is now engaged in holding regional workshops to continue the process of preparing DOTs and MPOs for transitioning to a performance management system.

With Congress' recent passage of Moving Ahead for Progress in the 21st Century (MAP-21) and its numerous performance reporting requirements, one critical next step on the path of fully implementing a national performance program is to build the foundation for national performance reporting. Effective communication of data – engaging audiences, promoting understanding, encouraging reuse and speeding decision-making – is essential to converting findings to action. Converting findings to action is the ultimate goal of a performance reporting system and this foundational project gets us started down that path.

This document summarizes the initial development of a comprehensive list of website content, and identifies all of the key data features to be incorporated into the website prototype. This content draws on the following:

- The performance reporting requirements of MAP-21, including any information from the rulemaking process that FHWA can share with the consultant team;

- The completed Performance Reports Study, which identified necessary performance reporting elements as well as areas of interest to key stakeholder groups; and

- A thorough review of any new developments in the area of performance reporting which point to additional elements of value for integration into the website prototype.

Lessons from the prior phase of this study are covered in Section 2 of this report. National performance reporting examples are discussed in Section 3, while state performance reporting examples are covered in Section 4.

Section 5 describes the website prototype developed in this phase of the project. The prototype is best viewed in a browser, but this section contains screenshots of the website pages, a description of the purpose of each, and a table with the data elements for each page and recommended sources. Note the current website is a prototype intended to showcase potential website and performance report design. It does not have full functionality as a website and is not, in its current state, 508 compliant. When developed as a full website 508 compliant features can be added.

Section 6 provides some technical guidance for site data management and update processes. It includes discussion of the web maintenance roles and key functions of FHWA staff.

Performance reporting websites for each state—including a description of the report, the data source, update schedule, and ease of data—are detailed in Appendix A, as are the national performance reporting sites.

2.0 Lessons from Prior Phase

The FHWA initiated the first phase of the Performance Reports Project to build the foundation of a performance reporting system. A performance-driven approach focuses attention on results and puts the tools in place so that FHWA, transportation stakeholders, elected officials, and the public can determine if FHWA's stated goals of providing a safe, reliable, sustainable highway system are being met. Key findings from this phase of the project are discussed below.

2.1 Audience Engagement

An important component of presenting data to an audience is that the graphic design and visualization of data should be relevant to its viewers. The successful engagement of varying audiences in transportation system performance will require that data is portrayed in a way that is both interesting and easily understandable.

2.1.1 Audience Reactions to Performance Reporting

Below is a summary of the lessons learned from a series of audience outreach meetings conducted by the project team during the first phase of this project.
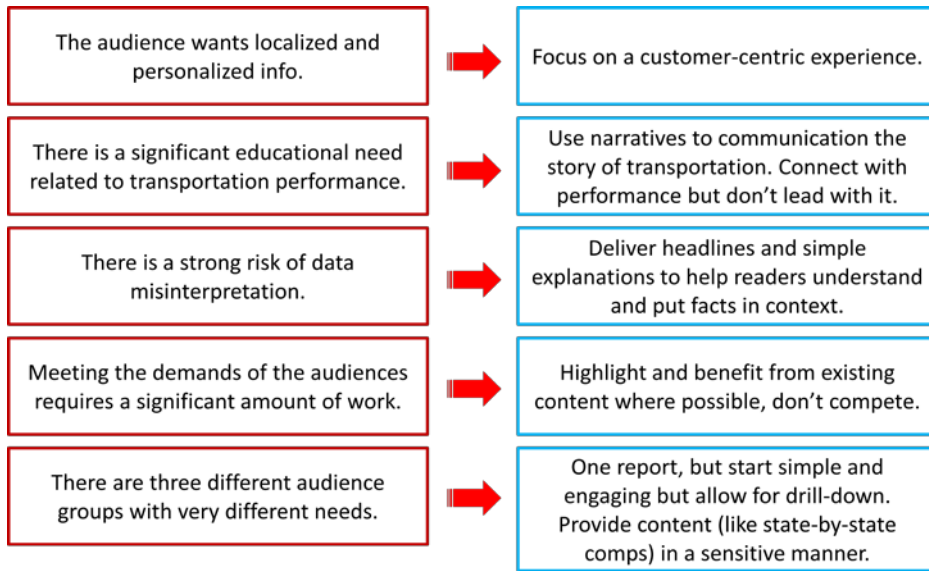
- **A single style doesn't work.** A mix of options is needed. For the general public, reports must be kept engaging but simple. Greater complexity should only be introduced for the benefit of the transportation professionals audience.

- **Personalize reports.** Reaching the audience will require reports to be as personalized and local as possible. Though data constraints may provide a challenge, local information and a story of how transportation impacts the everyday citizen is needed to spark interest.

- **Snapshots are not enough.** Performance reports cannot stop with a snapshot of conditions. They also need to provide the trends, a way to mark progress or contextualize the meaning of the performance, and a link to the actions that are being taken to address and improve performance issues.

- **State-by-state comparisons matter.** Legislators and the general public are both very interested in state-by-state comparisons. State-by-state comparison tools appear essential though to capturing the legislative and public audience but must be done with great care, recognizing the potential for misinterpretation.

- **Don't emphasis appearance at expense of effectiveness.** Reports need to avoid an overemphasis on appearance at the expense of effectiveness.

- **View of advocacy varies.** A successful report mechanism may need to provide education without delving into advocacy.

- **Public cares about accountability.** Agency missions, goals, and values should be included in transportation performance reports. The public is highly interested in accountability and wants to know who is making the decisions and why.

- **Public cares about quality of life.** Members of the general public indicated that they are interested in transportation topics that relate to their overall quality of life. In particular, they have a desire to learn about safety, traffic conditions, funding, and the ways transportation departments are being proactive and planning for future transportation needs.

- **Relevant, easy to understand graphics are likely to be shared.** "Single issue, single page" graphics-heavy infographics are a valuable tool to draw in a larger audience.

- **Safety topic is of most interest.** Successful transportation performance reports need to include or feature this topic . Another topic that was recognized as engaging and important was funding.

- **Tell a story so the data comes alive.** Crafting the data's story requires time and analysis. It must be delivered at the right technical level for the audience and targeted on an area of interest.

- **Build in complexity as your audience becomes more selective.** The front page of a website should target simple messages and easy to comprehend graphics. As the visitor shows interest in pursuing specific questions, they can be rewarded with greater data detail, interactive capabilities, and complex statistics and statistical relationships. By carefully crafting tools to speak to different audiences at different points in their visit, FHWA can satisfy multiple segments of their target audiences.

- **Focus on what the audience wants, rather than institutional and/or traditional divisions.** In order to be effective, a transportation report needs to focus on how the audience experiences transportation rather than how FHWA manages it internally.

- **To keep the audience interested, avoid red light language and preconceived perceptions.** Certain phrases can detract from the message of transportation performance if they are associated in the mind of the audience with unrelated (or only marginally related) negatives. It is important to recognize and avoid the words and phrases that will detract from the message and can be easily replaced with less loaded terms of similar meaning.

2.2 Performance Report Framework

One of the primary goals of Phase I's performance report was to find the best possible solution to the many significant challenges identified in the audience research and feedback tasks. Figure 2.1 highlights five of the most significant problems and links them to potential solutions. Staying aligned with these solutions will be very important to the overall success of FHWA's performance reporting effort.

Figure 2.1 Addressing Problems with Solutions

The audience wants localized and personalized info.	→	Focus on a customer-centric experience.
There is a significant educational need related to transportation performance.	→	Use narratives to communication the story of transportation. Connect with performance but don't lead with it.
There is a strong risk of data misinterpretation.	→	Deliver headlines and simple explanations to help readers understand and put facts in context.
Meeting the demands of the audiences requires a significant amount of work.	→	Highlight and benefit from existing content where possible, don't compete.
There are three different audience groups with very different needs.	→	One report, but start simple and engaging but allow for drill-down. Provide content (like state-by-state comps) in a sensitive manner.

2.3 Performance Report Website Mock-Up

A website was selected as the principle organizing structure for the performance report. One of the main reasons was that this platform will allow FHWA to "cast a wide net" and attract all of the major audience groups. FHWA can prepare, incorporate, and house a variety of performance reporting content in a single location. Figure 2.2 shows a conceptual diagram of the various components that can all be fit together to make a single performance report platform.

Figure 2.2 Putting the Pieces Together
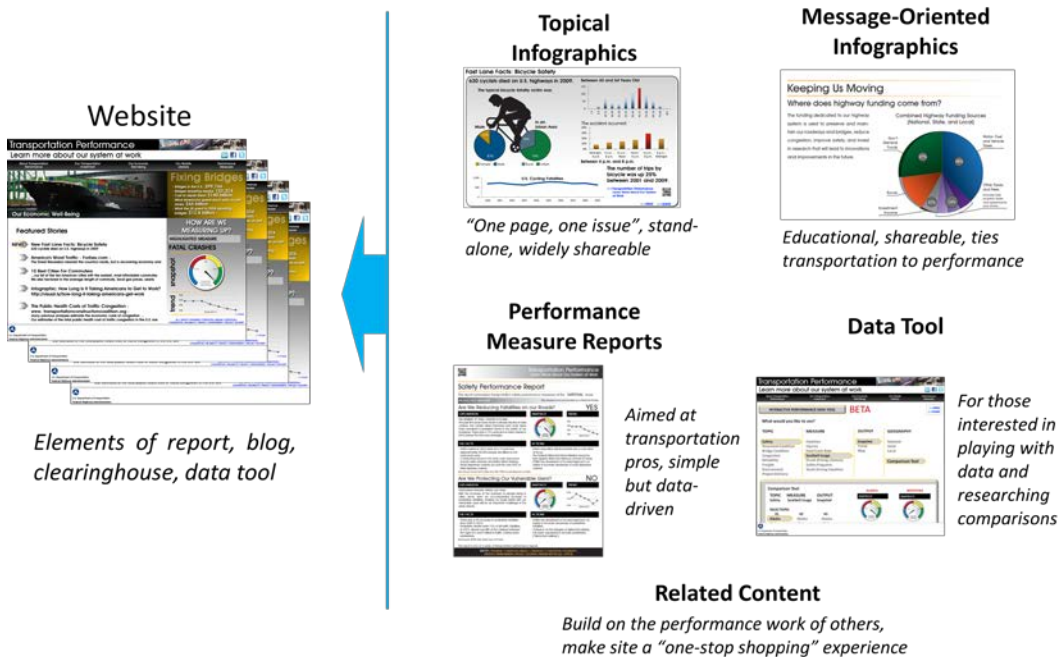
The Mobile Moments Infographic Page (Figure 2.3) shows the recommended mechanism for including and sharing "single page, single topic" infographics such as the one on bicycle safety shown. It is designed to be attractive, interesting, and easily shareable. It includes a scannable QR code. It is hoped that this type of infographic would be widely distributed across the internet through social media and other outlets. This Page is included in part because of the strong response from audiences to the "single page, single topic" format.

Figure 2.3   Mobile Moments Infographic Page Snapshot from Phase I
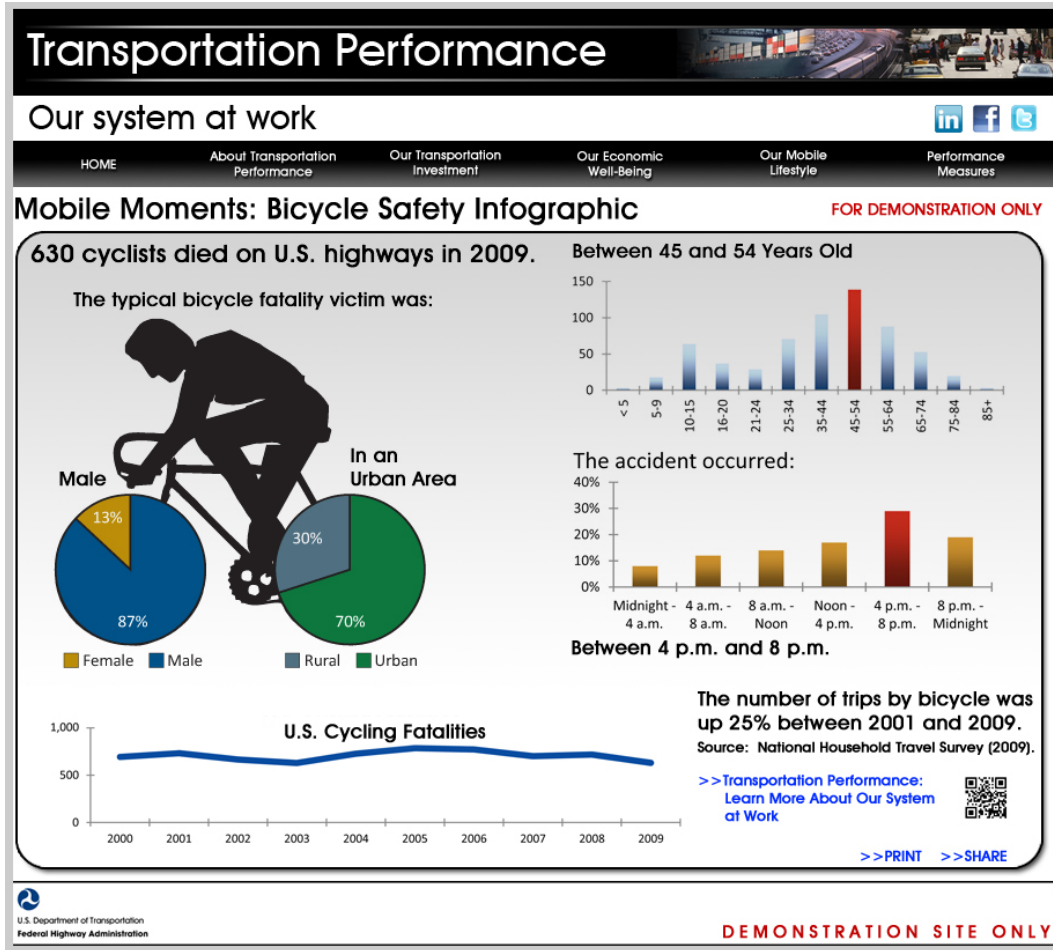
The technical transportation performance report shown in the Snapshot (Figure 2.4) is a national report that covers all performance measures. When all measures are chosen, the Report can begin with "highlighted measures" which may be identified as national priorities as part of the ongoing rule-making process. So the report may begin with seven measures (one for each potential national priority) as an example.

Figure 2.4   Performance Measures Page Snapshot from Phase I

The model of the technical transportation performance report could potentially be a guide for the development and shaping of transportation performance reports in the future. The key principles are asking-answering a question and providing as much context as possible so that the results are not viewed in isolation. This model may support state by state reporting because if states follow a similar template, it will allow for comparisons while not removing the context that makes each state unique.

3.0 National Reporting Examples

At present, national-level performance data is made available by a number of peer-review organizations. These sites present performance data to the public with a focus on advocacy. These sites offer high-level overviews of the transportation issue at hand, and most allow individuals to compare various elements of transportation system performance among states. The study team's review of these national-level websites focused on the performance websites of the American Society of Civil Engineers (ASCE) and Transportation for America.

3.1.1 ASCE Report Card for America's Infrastructure

Released every four years, the ASCE Report Card uses familiar A to F grades to assess current infrastructure conditions and needs and makes recommendations for how to improve these grades. The latest (2013) version of the report card features many interactive infographics and "success stories" that help to convey the organization's message.

Figure 3.1   ASCE Report Card for America's Infrastructure

Source: http://www.infrastructurereportcard.org/a/#p/home

Figure 3.2   ASCE Report Card for America's Infrastructure

Source: http://www.infrastructurereportcard.org/a/#e/bridge-repair-costs
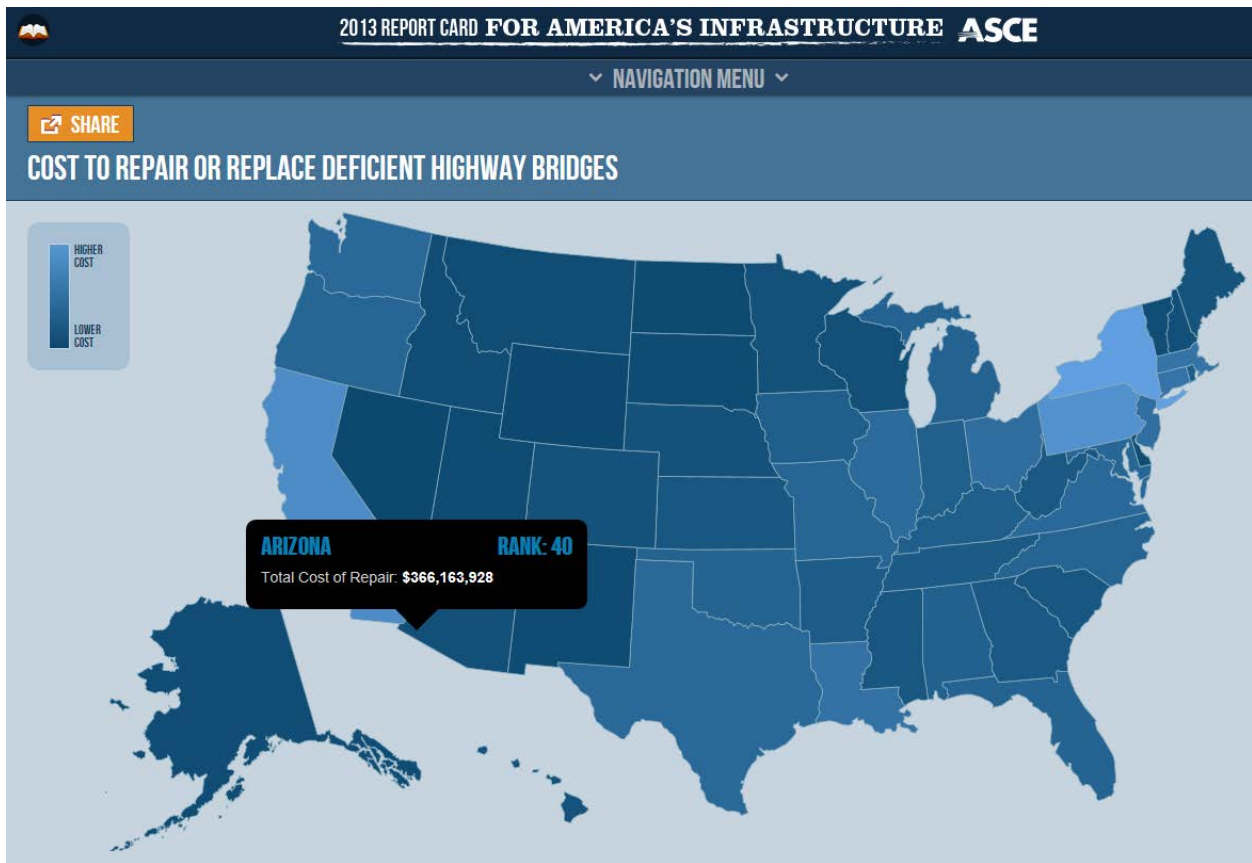
3.1.2 Transportation for America

Transportation for America, an advocacy organization "eager to reform how we spend transportation dollars at the federal, state and local level to create a safer, cleaner and smarter transportation system that works for everyone," offers a number of interactive infographics and more detailed reports on the performance of the nation's infrastructure.

Figure 3.3   Transportation for America Reports

Source: http://t4america.org/maps-tools/

Figure 3.4 Transportation for America "The Fix We're In For" Infographic

Source: http://t4america.org/maps-tools/bridges/
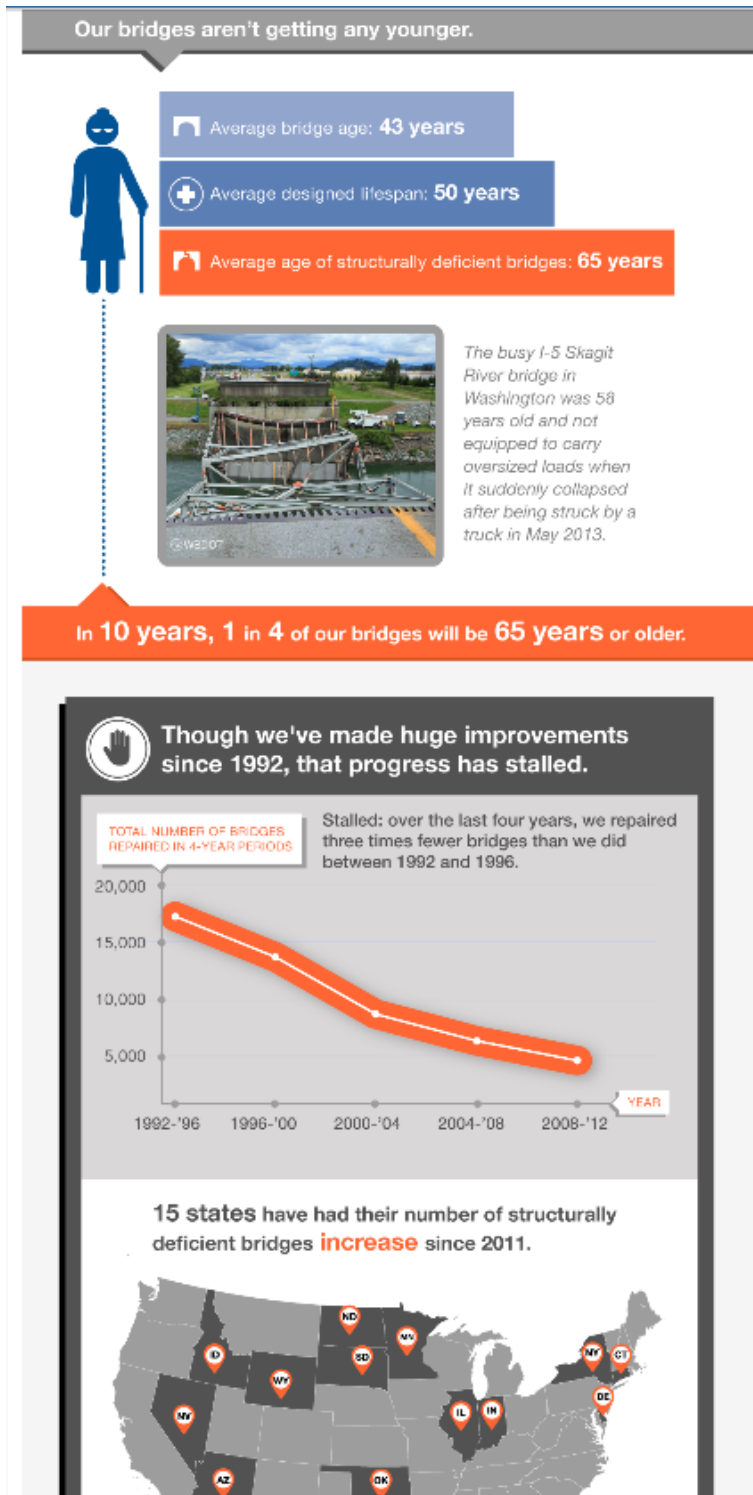
4.0 State Reporting Examples

The study team reviewed state dashboards and other performance reporting methods to look for:

- Good resources to which to link;

- Data to incorporate into the prototype performance reporting website; and

- Exemplary sites to use as models.

4.1 State DOT Dashboard/Performance Reporting Websites

These performance reporting websites present data to the public in a way that is both easily digestible and informative. Website viewers can drill down and obtain more information (these DOTs generally include quarterly, annual, or biennial reports on their sites).

Highlighted state DOT performance reporting websites include Alaska DOT&PF, Florida DOT, Minnesota DOT, Oregon DOT, and Washington State DOT.

4.1.1 Alaska Department of Transportation and Public Facilities

Alaska DOT&PF's performance dashboard offers a high-level glimpse at performance across the state's transportation system. Clicking on one of the dials reveals more information on the given performance measure, including its importance, work being done to improve performance, how performance is measured, and the performance trend over time.

Figure 4.1   Alaska DOT&PF Performance Dashboard

Source: http://dot.alaska.gov/performance-dash/index.shtml
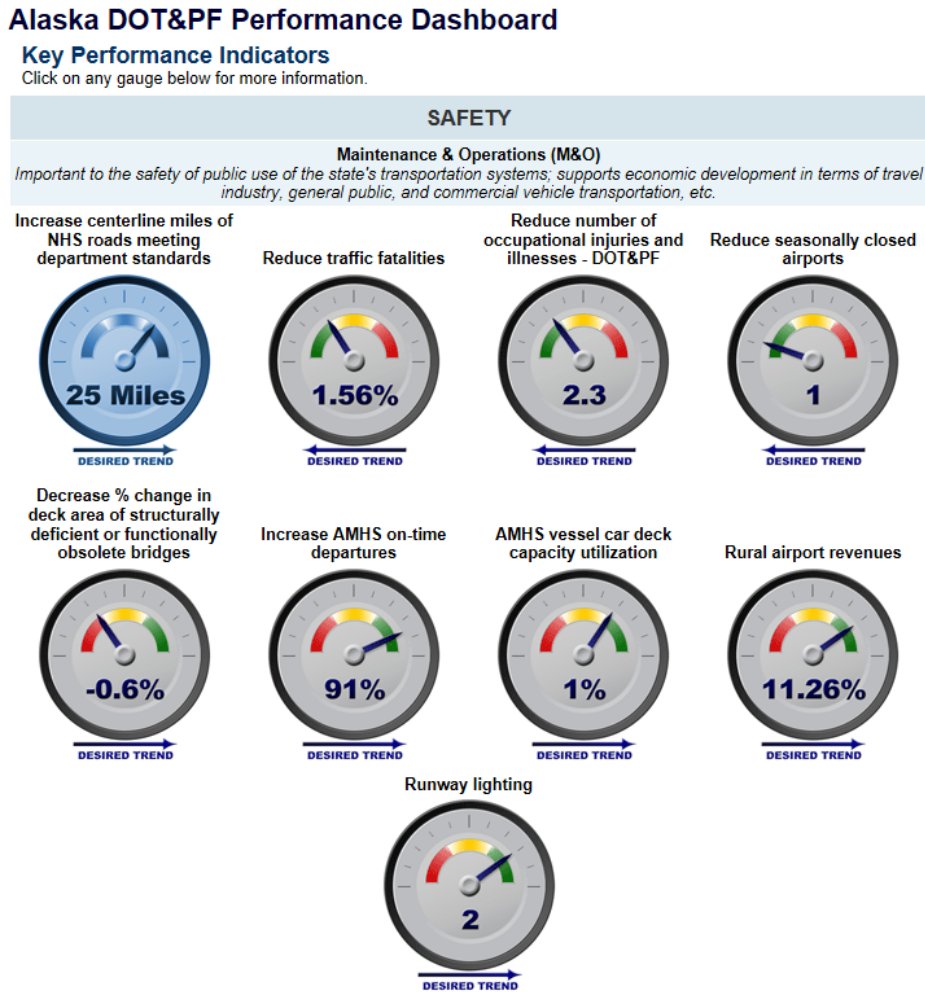
Figure 4.2   Alaska DOT&PF Performance Dashboard: Safety

SAFETY

Maintenance & Operations
Important to the safety of public use of the state's transportation systems; supports economic development in terms of travel industry, general public, and commercial vehicle transportation, etc.

Increase centerline miles of NHS roads meeting department standards

25 Miles

DESIRED TREND

Why This is Important
The National Highway System (NHS) is an interconnected system of routes that serve important national functions, e.g., security, commerce, and travel. The Alaska NHS includes routes to airports, ports, and ferry terminals. Road condition can impact the operating costs of passenger and commercial vehicles as well as emergency responsiveness. By increasing the number of centerline miles that meet department standards, we are fulfilling our department mission.

What's Being Done
The department monitors and tracks NHS road condition in order to strategically schedule preventative maintenance and preservation projects across the state. This allows the department to prioritize projects and maximize the use of funding. For more information, please visit our Highway Performance Monitoring System.

How We Measure It
Each year, the department identifies the construction projects on the NHS System that have been completed. That list of projects is then reviewed to determine which projects brought the roads up to department standards and the total centerline mileage improved is calculated.

Period	Actual	Target	
2004	1,344	1,318	●
2005	1,385	1,359	●
2006	1,420	1,400	●
2007	1,431	1,435	◇
2008	1,446	1,446	●
2009	1,521	1,461	●
2010	1,550	1,536	●
2011	1,590	1,565	●
2012	1,607	1,605	●
2013	1,632	1,622	●

Source: http://dot.alaska.gov/performance-dash/safety-mno1.shtml
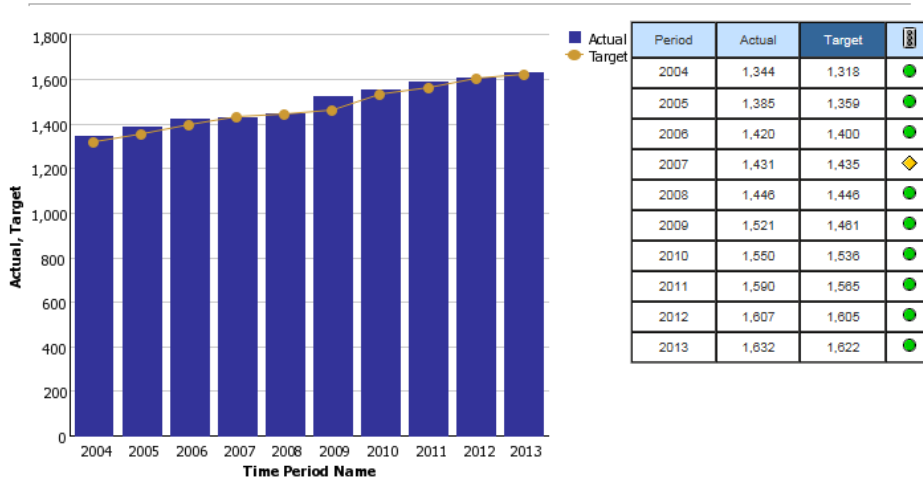
4.1.2 Florida Department of Transportation

Two websites, http://www.dot.state.fl.us/planning/performance/ and http://www.floridatransportationindicators.org/ , communicate performance information about Florida's transportation system. The "at-a-glance" summary (pictured below) highlights the most important information in the DOT's annual performance report, which contains more detailed information. The state also publishes a MAP-21 performance report. Additionally, floridatransportationindicators.org features interactive data visualizations on a wide variety of state transportation data, including both supply and demand factors.

Figure 4.3   Florida DOT Performance Report "At-A-Glance" Summary
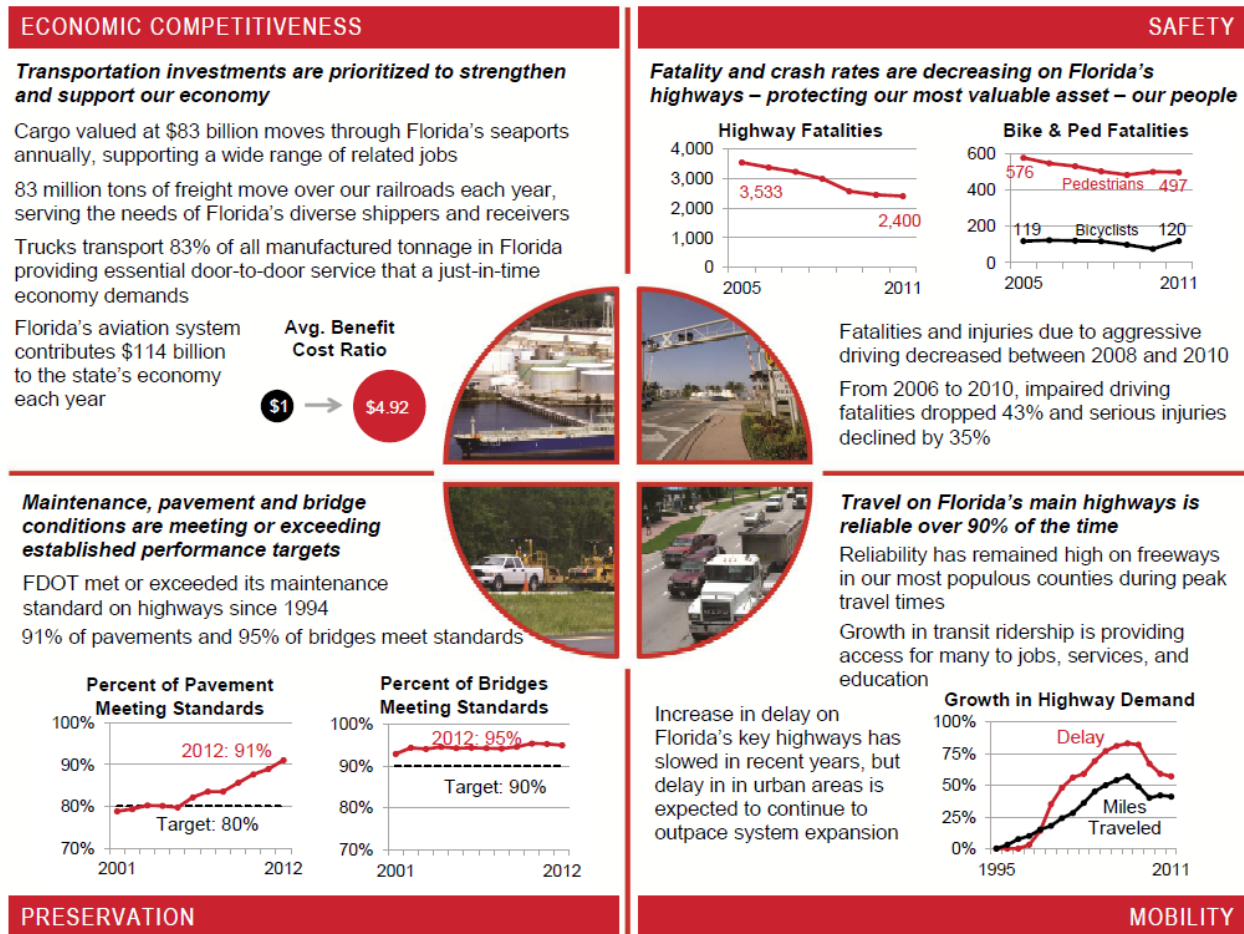
Source: http://www.dot.state.fl.us/planning/performance/

Figure 4.4   Florida Transportation Indicators Website

Source: http://www.floridatransportationindicators.org/
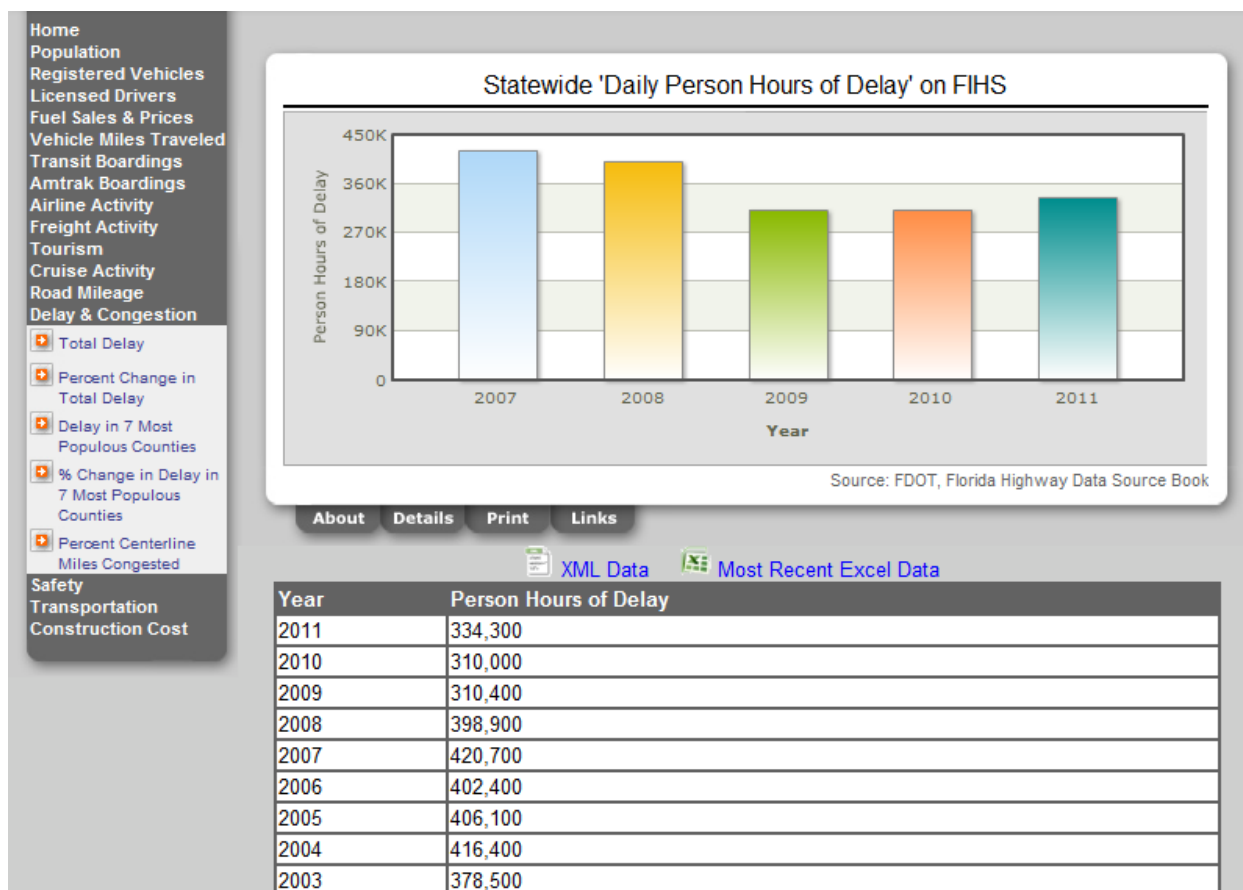
4.1.3 Minnesota Department of Transportation

The Minnesota Department of Transportation's (MnDOT) performance measures website features links to the state's annual performance report. The Transportation Results Scorecard (Figure 4.5) highlights transportation performance results, targets, trends, and analysis in an easy-to-read format. The more detailed performance reports convey information in a clear and concise manner (Figure 4.6).

Figure 4.5   MinnDOT Transportation Results Scorecard

Minnesota 2012 Transportation Results Scorecard

Meeting target   Moderately off target   Seriously off target   Target   MnDOT Primarily Responsible

Measure	Target	Result	Score	Multi-year Trend	Analysis
ACCOUNTABILITY, TRANSPARENCY & COMMUNICATION					
Public Trust: % of survey respondents agreeing with the statement "MnDOT can be relied upon to deliver Minnesota's transportation system"	Tracking Indicator	88% (2012)	N/A	Stable ('09-'12) — 86, 85, 84, 88 (2009–2012) Better	The vast majority of Minnesotans trust MnDOT's ability to deliver the transportation system. This result has been relatively stable over the last four years.
TRAVELER SAFETY					
Minnesota Traffic Fatalities: Total number of fatalities resulting from crashes involving a motor vehicle	350 by 2014	395 (2012)	△	Improving ('08-'12) — 455, 421, 411, 368, 395 (2008–2012) Better	Fatalities resulting from vehicle crashes increased from 368 in 2011 to 395 in 2012. This increase represents a departure from the dramatic decline in recent years.
ASSET MANAGEMENT					
Ride Quality: Share of system with "Poor" ride quality in the travel lane	Inter-states ≤ 2%	2.4% (2012)	△	Improving toward target ('09-'12) — 5.0, 7.0, 3.4, 3.9, 2.4 (2008–2012) Better	Ride quality improved on Interstates, the non-Interstate NHS, and all state highways in 2012. This improvement pushed ride quality on Interstates and the rest of the NHS to within 1 percentage point of statewide targets. Across all state highways, the number of miles of highway with Poor ride quality was comfortably within MnDOT's targeted range of 5-9 percent.
	Other NHS ≤ 4%	4.3% (2012)	△	Stable and near target ('09-'12) — 2.9, 5.0, 3.8, 5.1, 4.3 (2008–2012) Better	**Outlook** — Without new sources of revenue, MnDOT expects ride quality to resume a long-term decline. By 2033, the share of non-Interstate NHS with Poor ride quality is projected to be 11-13%, roughly three times what it is today.
	All state highways 5-9%	5.6% (2012)	●	Meeting target — 4.6, 6.9, 5.2, 6.6, 5.6 (2008–2012) Better	Bridge condition improved in 2013 after a 2012 uptick in the percent of NHS bridge deck area on Poor condition bridges. This spike occurred when the Blatnik Bridge connecting Duluth and Superior was assigned a Poor rating following a 2011 inspection. MnDOT has since carried out a major rehabilitation that improved the bridge's condition and extended its useful life.
Bridge Condition: NHS bridges in "Poor" condition as a percent of total NHS bridge deck area	≤ 2%	3.3% (2013)	△	Stable and near target ('09-'13) — 3.5, 3.2, 3.3, 4.7, 3.3 (2009–2013) Better	**Outlook** — By 2033, the share of NHS bridge deck area in Poor condition is expected to approach the federally established threshold of 10 percent.

Source: http://www.dot.state.mn.us/measures/pdf/2011_Scorecard_10-19-12.pdf

Figure 4.6   Annual Minnesota Transportation Performance Report

AT A GLANCE......
ASSET MANAGEMENT

Ride Quality

Measure Explanation: Ride quality is assessed using MnDOT's Ride Quality Index, which is a measure of pavement smoothness as perceived by the typical driver. Pavement rated "Poor" can still be driven on, but the ride is sufficiently rough that most people would find it uncomfortable and may decrease their speed.

System Description: MnDOT measures ride quality on the Interstate system, the non-Interstate National Highway System and on all state highways.

Why this is Important: Market research has found that Minnesotans' satisfaction with overall state highway maintenance is greatly affected by the smoothness of highway pavements. Smooth pavement enhances mobility, improves fuel economy and reduces the amount of money spent on vehicle repair and maintenance.

Target	Result (2012)	Multi-year Trend
Interstates No more than 2% of system miles with Poor ride quality	Poor ride quality experienced on 2.4% of Interstate miles	Improving toward target (2009-2012)
Non-Interstate NHS No more than 4% of system miles with Poor ride quality	Poor ride quality experienced on 4.3% of NHS miles (excluding Interstates)	Stable and near target (2009-2012)
All State Highways Limit the share of state highways with Poor ride quality to between 5-9%	Poor ride quality experienced on 5.6% of all state highways	Meeting target

Percent of Interstate System with "Poor" ride quality

TARGET ≤ 2%   Better

5.0	7.0	3.4	3.9	2.4	2.5	2.1	2.7	3.3
2008	2009	2010	2011	2012	2013	2014	2015	2016

Percent of the Non-Interstate NHS with "Poor" ride quality

TARGET ≤ 4%   Better

2.9	5.0	3.8	5.1	4.3	3.5	3.8	4.6	4.1
2008	2009	2010	2011	2012	2013	2014	2015	2016

Percent of state highway system with "Poor" ride quality

TARGETED RANGE 5%-9%   Better

4.6	6.9	5.2	6.6	5.6	5.5	5.2	6.1	6.9
2008	2009	2010	2011	2012	2013	2014	2015	2016

■ Historic results
▬ Projected results based on investments in the 2013-2016 STIP

Source: MnDOT Office of Materials

Ride quality improved on Interstates, the non-Interstate NHS and all state highways in 2012. Overall, there were 150 fewer miles of highway with Poor ride quality in 2012 compared to 2011. This improvement reduced the percentage of Poor highways on Interstates and the rest of the NHS to within 1 percentage point of statewide targets. The number of miles of highway with Poor ride quality across the entire state highway system was within a targeted range of 5-9 percent for the fourth year in a row.
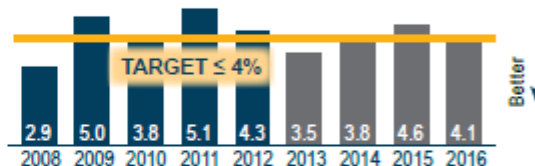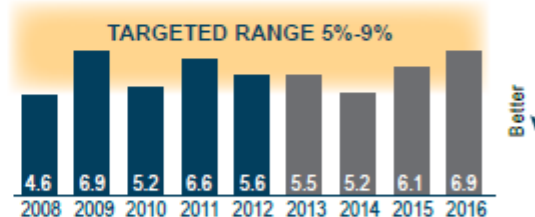
Source: http://www.dot.state.mn.us/measures/

4.1.4 Oregon Department of Transportation

ODOT's performance measures website features a series of reports with data on the department's performance measures available to the public. Its two-page "Key Performance Measures" status overview uses the familiar green/yellow/red format to quickly convey the progress made on various measures, with additional comments offered in a separate column. ODOT also provides detailed one-page descriptions of each performance measure, which shows trends over time, and describes related strategies and explanations for these trends.

Figure 4.7   ODOT Two-Page Key Performance Measure Status Overview

Source: http://www.oregon.gov/ODOT/CS/PERFORMANCE/OnePagers/KPM%20Rollup.pdf

Figure 4.8   ODOT Individual Performance Measure "One Pager"

Source: http://www.oregon.gov/ODOT/CS/PERFORMANCE/Pages/PerformanceMeasureSummaries.aspx
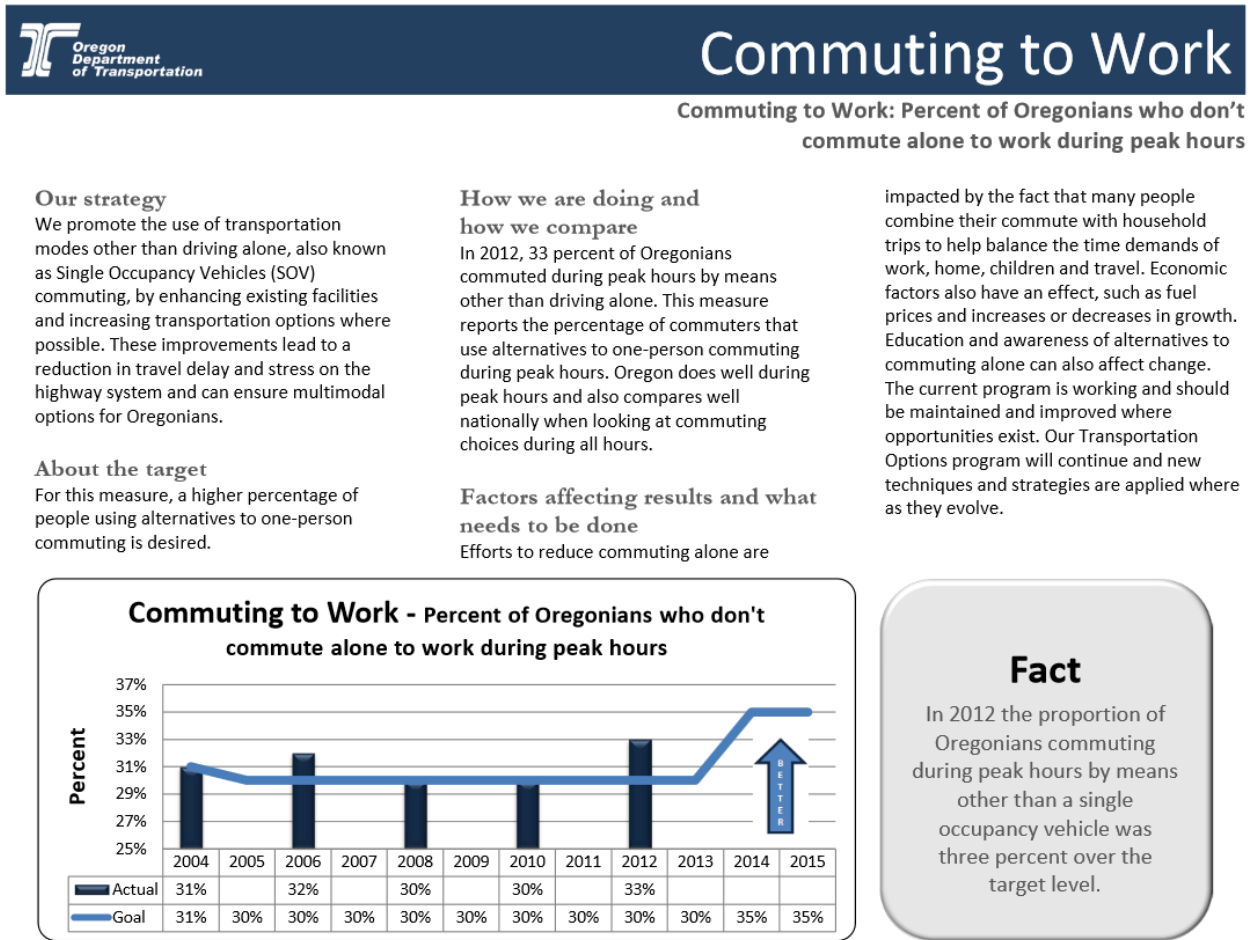
4.1.5 Washington State Department of Transportation

Washington State DOT's performance highlights page displays quarterly performance information in a manner that is unique among state DOTs. The biennial Transportation Attainment Report contains a dashboard that summarizes the progress of the 18 performance measures detailed within the report. WSDOT's accountability website has a wealth of performance resources available, including the Corridor Capacity portion of the annual Congestion Report shown in Figure 4.10.

Figure 4.9   WSDOT Performance Highlights

PERFORMANCE HIGHLIGHTS reported for the quarter ending June 30, 2013

3,129 WSDOT-owned bridges are in fair or better condition

$ 273.6 M bridge preservation planned funds for 2013-2015 biennium

$ 1.07 B bridge preservation funds needed in the next 10 years

2,000 estimated staff hours saved using programmatic permits

95 OF 131 construction contracts awarded below engineer's estimates

$ 310 M amount of WSDOT construction contracts, down since FY2012 by ↓ **48%**

80.2% of state-supported Amtrak Cascades trains reached their destinations on time

5.74 M ferry riders this quarter

$ 43 M ferry farebox revenues this quarter

↓ **33%** reduction in traffic fatalities in Washington since 2005

50 issues of the *Gray Notebook* published in 12.5 years

344 Nickel and TPA projects complete since 2003

NO NEW PROJECTS COMPLETED Q2

36 OF 56 scheduled Pre-existing Funds projects advertised Q2 2013

9 projects added to Watch List

$ 5.6 B Nickel and TPA projects completed since 2003

77 PROJECTS IN THE CURRENT TRANSPORTATION BUDGET ARE NOT YET COMPLETE

↓ **68%** reduction in the collision record data entry backlog achieved through the Lean process

WSDOT HAS MORE THAN A DOZEN LEAN PROJECTS

↓ **675,000** the number pounds of carbon dioxide avoided through transit use in Puget Sound area daily

$ 17.4 M economic benefit provided by WSDOT Incident Response

12.1 average number of minutes WSDOT teams took to clear roadway incidents

11,784 INCIDENTS CLEARED BY WSDOT

6,573 WSDOT permanent employees as of June 30, 2013

2,258 FTE employees in WSDOT's highway construction program as of June 30, 2013

10 of the nation's top vanpool programs operate here

73.3% Washington commuters drive alone to work

Source: http://www.wsdot.wa.gov/Accountability/

Figure 4.10   WSDOT 2013 Corridor Capacity Summary

Central Puget Sound area I-5 corridor performance

Annual miles traveled per person[1]

2007	2010	2012	
4,973	4,901	4,955	▲ 1%
Baseline	in miles traveled	2010 vs. 2012	

Annual delay[2] per person

2007	2010	2012	
6.8	4.4	6.4	▲ 45%
Baseline	in hours of delay	2010 vs. 2012	

Annual emissions per person

2007	2010	2012	
N/A	5,022	4,986	▼ 1%
Baseline	in pounds of CO_2	2010 vs. 2012	

Commute trip travel times
Average and Reliable[3] travel times in minutes; For single occupancy vehicle (SOV) trips and high occupancy vehicle (HOV) trips; Peak period transit ridership; Average percent of transit seats occupied

Routinely congested segments
⚠ *2012; Weekday morning and evening peak periods (5-10 a.m. and 2-8 p.m.); Direction of travel; Length in miles; Duration of congestion in hours*

Everett to Seattle morning commute
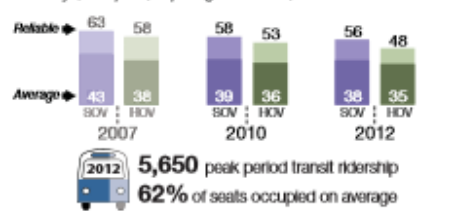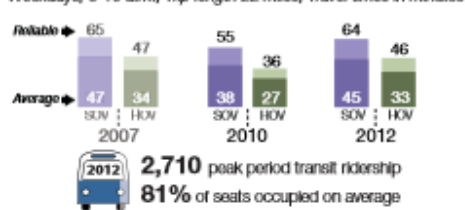*Weekdays; 5-10 a.m.; Trip length 24 miles; Travel times in minutes*

Reliable ➤ 76 / 65 | 72 / 55 | 76 / 63
Average ➤ 47 / 41 (SOV/HOV) 2007 | 43 / 36 (SOV/HOV) 2010 | 44 / 37 (SOV/HOV) 2012

2012 🚌 **5,770** peak period transit ridership
63% of seats occupied on average
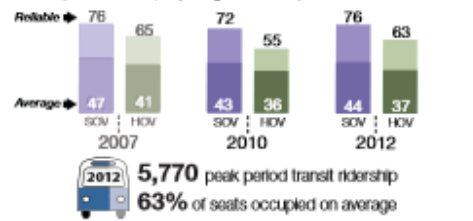
Seattle to Everett evening commute
Weekdays; 2-8 p.m.; Trip length 23 miles; Travel times in minutes

Reliable ➤ 63 / 58 | 58 / 53 | 56 / 48
Average ➤ 43 / 38 (SOV/HOV) 2007 | 39 / 36 (SOV/HOV) 2010 | 38 / 35 (SOV/HOV) 2012

2012 🚌 **5,650** peak period transit ridership
62% of seats occupied on average

Federal Way to Seattle morning commute
Weekdays; 5-10 a.m.; Trip length 22 miles; Travel times in minutes

Reliable ➤ 65 / 47 | 55 / 36 | 64 / 46
Average ➤ 47 / 34 (SOV/HOV) 2007 | 38 / 27 (SOV/HOV) 2010 | 45 / 33 (SOV/HOV) 2012

2012 🚌 **2,710** peak period transit ridership
81% of seats occupied on average

Seattle to Federal Way evening commute
Weekdays; 2-8 p.m.; Trip length 22 miles; Travel times in minutes

Reliable ➤ 55 / 48 | 41 / 36 | 46 / 40
Average ➤ 37 / 32 (SOV/HOV) 2007 | 30 / 27 (SOV/HOV) 2010 | 32 / 29 (SOV) 2012

2012 🚌 **2,530** peak period transit ridership
77% of seats occupied on average

Created in partnership with
communitytransit   **King County METRO**   Puget Sound Regional Council PSRC   **SOUNDTRANSIT**

Person throughput[4] at South Everett
HOV 17,300
SOV 39,400

Person throughput at Northgate
HOV 33,000
SOV 45,400

Person throughput at Southcenter
HOV 25,200
SOV 58,200

Morning commute

Everett

Southbound
8.5 miles
2.5 hours daily

Southbound
7.5 miles
2 hours daily

Northbound
6 miles
3.5 hours daily

Northbound
8 miles
2.5 hours daily

Federal Way

Evening commute

Everett

Northbound
1 mile
3 hours daily

Northbound
0.5 miles
2.5 hours daily

Southbound
9 miles
5 hours daily

Seattle

Northbound
17.5 miles
4 hours daily

Southbound
4 miles
3 hours daily

Federal Way

Park and ride capacity[5]
2012; Parking spaces and average percent occupied

Everett–Seattle commute route

Park and ride	Spaces	Percent occupied
Everett Station	1,107	75%
Mariner P&R	644	75%
S. Everett Freeway Station	397	97%
Ash Way P&R	1,022	100%
Lynnwood Transit Center	1,378	100%
Mountlake Terrace P&R	869	95%
Kenmore area	693	92%
Northgate area	1,024	99%

Federal Way–Seattle commute route

Park and ride	Spaces	Percent occupied
Lakewood area	1,093	69%
Sumner train station	286	100%
Puyallup area	583	93%
Tacoma Dome station	2,283	95%
Federal Way area	2,067	75%
Auburn area	634	99%
Kent area	996	98%
Tukwila area	915	98%

Source: http://wsdot.wa.gov/publications/fulltext/graynotebook/CCS13.pdf#page=7

5.0 Website Tool Prototype

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6.0 Technical Guidance for Site Data Management and Update Processes

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Appendix A. Summary of State Dashboards/Data/Performance Reports Websites

State	Data Item(s)	Description of Data/Report	Source	Update Schedule	Available Today?	Data Format	Link
Alabama	Annual report	Various statistics on transportation finance, projects, VMT, and descriptive data on state's highway system	Alabama DOT	Annual	Yes	PDF	http://www.dot.state.al.us/tpweb/2012%20Annual%20Report.pdf
Alaska	Dashboard	Safety, commercial vehicle enforcement, & infrastructure performance indicators	Alaska DOT&F		Yes	Dashboard	http://dot.alaska.gov/performance-dash/index.shtml
	Key Performance Indicators	Performance indicators for maintenance and operation of state transportation systems, measurement standards/commercial vehicle enforcement, and transportation & facilities construction programs	Alaska Office of Management and Budget	N/A	Yes	Website/ HTML	https://omb.alaska.gov/html/performance/program-indicators.html?p=157&r=1

State	Data Item(s)	Description of Data/Report	Source	Update Schedule	Available Today?	Data Format	Link
	Safety data	Traffic safety statistics	Alaska DOT&PF Highway Safety Office	Annual	Yes	Multiple PDFs	http://dot.alaska.gov/stwdplng/hwysafety/stats.shtml
Arizona	Data page	Includes data such as AADT, State Highway System Log, HPMS, and Transportation Data Management System	Arizona DOT	N/A	Yes	Multiple PDFs and/or online GIS tool	http://www.azdot.gov/planning/DataandAnalysis
Arkansas	Annual Report	Mostly includes construction highlights	AHTD	Annual	Yes	PDF	http://www.arkansashighways.com/annual_report/annual_reports.aspx
California	Performance Measures Report / Dashboard	Safety, mobility (e.g. hours of delay), project delivery, infrastructure condition	Caltrans	Quarterly	Yes	PDF	http://www.dot.ca.gov/perf/docs/2013_Q2_Quarterly_Performance_Report_FINAL.pdf
Colorado	Annual Performance Report	Measures performance in the past fiscal year against goals including those set by CDOT. Topics: road quality, bridges & tunnels, mobility, safety, program delivery	CDOT	Annual	Yes	PDF	http://www.coloradodot.info/library/AnnualReports/2012-cdot-annual-performance-report/view

State	Data Item(s)	Description of Data/Report	Source	Update Schedule	Available Today?	Data Format	Link
Connecticut	Performance Report	Focuses on following priorities: Provide Safe and Secure Travel, Reduce Congestion and Maximize Throughput, Preserve and Maintain our Transportation Infrastructure, Provide Mobility Choice, Connectivity and Accessibility, Improve Efficiency and Reliability, Preserve and Protect the Environment, Support Economic Growth, Strive for Organizational Excellence	CTDOT	Quarterly	Yes	PDF	http://www.ct.gov/dot/cwp/view.asp?a=3815&q=448402

State	Data Item(s)	Description of Data/Report	Source	Update Schedule	Available Today?	Data Format	Link
Delaware	2011 Fact Book	Covers performance indicators in customer satisfaction, technology & safety, roads & bridges, traffic safety, walking & biking, parking & ridesharing, transit, aviation & nautical, transportation planning, and transportation funding.	DelDOT	Annual	Yes	PDF	http://www.deldot.gov/information/pubs_forms/#current
Florida	MAP-21 Performance Report	Documents the Department's accomplishments toward advancing the national goals set forth in MAP-21	FDOT	Annual	Yes	PDF	http://www.dot.state.fl.us/planning/performance/
	2012 Performance Report	Covers performance measures in Safety and Security, Maintenance and Operations, Economic Competitiveness and Mobility, and Quality of Life & Environmental Stewardship	FDOT	Annual	Yes	PDF	http://www.dot.state.fl.us/planning/performance/

State	Data Item(s)	Description of Data/Report	Source	Update Schedule	Available Today?	Data Format	Link
	Florida Transporta-tion Indicators	Current information regarding statewide transportation trends. In addition to providing a wide array of transportation records, facts, and figures, this information is presented in a highly accessible, user friendly search and retrieve format.	FDOT	Continuous	Yes	Website/ HTML; Underlying data available in Excel format	http://www.floridatransportationi ndicators.org/
Georgia	GDOT Performance Management Dashboard	Measures cover topics such as safety investment & improvements, "taking care of what we have," and planning & constructing	GDOT	N/A	Yes	Dashboard	http://www.dot.ga.gov/informati oncenter/statistics/performance/ Pages/default.aspx
	Transporta-tion Statistics and Reports	Portal provides the latest traffic, road and performance information about Georgia's transportation system. Includes crash, roadway, and traffic data.	GDOT	N/A	Yes	Varies	http://www.dot.ga.gov/informati oncenter/statistics/Pages/default. aspx
Hawaii	N/A	N/A	N/A	N/A	N/A	N/A	N/A

State	Data Item(s)	Description of Data/Report	Source	Update Schedule	Available Today?	Data Format	Link
Idaho	ITD Dashboard	Dashboard showing various measures (fatality rate, pavement condition, bridge condition, project delivery, etc.)	ITD	N/A	Yes	Dashboard	http://itd.idaho.gov/Dashboard/
	Pavement Performance Report	The Idaho Transportation Department's (ITD's) Idaho Transportation System Performance Report is a summary of the status of ITD-jurisdiction pavements	ITD	Annual	Yes	PDF	http://itd.idaho.gov/highways/pm/ITD%202012%20Performance%20Report.pdf
Illinois	Annual Report	Covers various topics, mostly high level overview of finance and system extent	IDOT	Annual	Yes	PDF, data mostly embedded in text	http://dot.state.il.us/annualreports.html
Indiana	Annual Report	Covers finance, preservation, operations, multimodal, safety, and customer satisfaction	INDOT	Annual	Yes	PDF	http://www.in.gov/indot/3045.htm

State	Data Item(s)	Description of Data/Report	Source	Update Schedule	Available Today?	Data Format	Link
Iowa	Performance Report	Covers Enforcement and Investigation, Regulation and Compliance, Resource Management, Transportation Systems, and Performance Plan results	IDOT	Annual	Yes	PDF	http://www.dom.state.ia.us/planning_performance/plans_reports/reports.html
Kansas	Performance Measures Page/Dash-board	Covers safety, system condition, program delivery, economic development, operations, and multi-modal	KDOT	Annual	Yes	Dashboard	http://kdotapp.ksdot.org/perfmeasures/
	Annual Report	Similar to above but in report format	KDOT	Annual	Yes	PDF	http://www.ksdot.org/publications.asp
Kentucky	Web portal	Traffic counts and roadway asset info	KYTC	N/A	Yes	Varies	http://transportation.ky.gov/planning/Pages/default.aspx
Louisiana	Louisiana Performance Account-ability System	Performance reporting on certain measures	LA Division of Administ-ration	Annual	Yes	Website/ HTML	http://wwwprd.doa.louisiana.gov/Lapas/public/

State	Data Item(s)	Description of Data/Report	Source	Update Schedule	Available Today?	Data Format	Link
Maine	Tri-State Performance Measures Report	Joint performance measures report with Vermont and New Hampshire		Annual	Yes	PDF	http://vtrans.vermont.gov/sites/aot/files/documents/other/2012TriStatePMReport.pdf
Maryland	Annual Attainment Report & Dashboard	Focuses on Quality of Service, Safety & Security, System Preservation & Performance, Environmental Stewardship, Connectivity, and Induced Travel	Maryland DOT	Annual	Yes	PDF	http://www.mdot.maryland.gov/Office_of_Planning_and_Capital_Programming/Dashboard/AR_Highlights.html And http://www.mdot.maryland.gov/Office_of_Planning_and_Capital_Programming/Plans_Programs_Reports/Index.html#Attainment_Report
Massachusetts	Performance Report/Dashboard	Performance measures focus on Safety, Customer Service, Fiscal Responsibility, and Innovation	MassDOT	Monthly	Yes	PDF	http://www.massdot.state.ma.us/InformationCenter /PerformanceManagementAccountability.aspx
Michigan	Performance Dashboard	Performance dashboard focuses on pavement condition, bridge condition, traffic, safety, maintenance, and finance	MDOT	Annual	Yes	Dashboard	http://www.mcgi.state.mi.us /MITRP/Data/PaserDashboard.aspx

State	Data Item(s)	Description of Data/Report	Source	Update Schedule	Available Today?	Data Format	Link
	System Performance Measures Report	Similar to above but in report format	MDOT	Annual	Yes	PDF	http://www.michigan.gov/documents/mdot/MDOT-Performance_Measures_Report_289930_7.pdf
Minnesota	Annual Performance Report	Detailed report on performance for a wide variety of measures	MnDOT	Annual	Yes	PDF	http://www.dot.state.mn.us/measures/
	Transporta-tion Results Scorecard	Scorecard (score and trend) for selected performance measures	MnDOT	Annual	Yes	PDF	http://www.dot.state.mn.us/measures/
Mississippi	Annual Report	Some performance-related data (e.g. MDOT by the numbers, financial information)	MDOT	Annual	Yes	PDF	http://sp.mdot.ms.gov /Fiscal%20Year%20Reports/Forms/AllItems.aspx
Missouri	MoDOT Tracker	Focuses on safety, bridge condition, customer service, project delivery, system reliability, resource management, and economic development	MoDOT	Quarterly	Yes	PDF	http://www.modot.org/about/Tracker.htm
Montana	MDT Statistics and Data portal	Access to data on aviation, bridges, crashes, and traffic	MDT	N/A	Yes	Multiple PDFs	http://www.mdt.mt.gov/publications/datastats.shtml

State	Data Item(s)	Description of Data/Report	Source	Update Schedule	Available Today?	Data Format	Link
Nebraska	NDOR Performance Report	Performance report (w/dashboard) focusing on a wide range of performance measures	NDOR	Annual	Yes	PDF	http://www.transportation.nebraska.gov /performance/index.htm
Nevada	Performance Management Report	Performance measures focus on workplace safety, employee satisfaction, public outreach, congestion, project delivery, pavement condition, safety, and bridge maintenance	Nevada DOT	Annual	Yes	PDF	http://www.nevadadot.com/About_NDOT /NDOT_Divisions/Planning/Performance_Analysis /Performance_Analysis_Division.aspx
	Transporta-tion Facts & Figures	Overview statistics about Nevada's transportation system	Nevada DOT	Annual	Yes	PDF	http://www.nevadadot.com/About_NDOT /NDOT_Divisions/Planning/Performance_Analysis /Performance_Analysis_Division.aspx

State	Data Item(s)	Description of Data/Report	Source	Update Schedule	Available Today?	Data Format	Link
New Hampshire	NHDOT Balanced Scorecard	Performance measures fall under the following objectives: improve asset condition, increase mobility, improve system safety and security, and improve department efficiency. Additional objectives fall under the goals of effective resource management and employee development.	NHDOT	Annual	Yes	PDF	http://www.nh.gov/dot/org /commissioner/balanced-scorecard/
	Annual Report	Similar to above but in report format	NHDOT	Annual	Yes	PDF	http://www.nh.gov/dot/media/publications.htm
	Tri-State Performance Measures Report	Joint performance measures report with Vermont and New Hampshire	NHDOT, VAOT, Maine DOT	Annual	Yes	PDF	http://vtrans.vermont.gov/sites/aot /files/documents/other/2012TriStatePMReport.pdf
New Jersey	NJDOT Asset Management Performance Report	Performance measures focus on safety, infrastructure preservation, mobility, project delivery, and finance	NJDOT	Semi-Annual	Yes	PDF	http://www.state.nj.us/transportation /about/asset/centerline.shtm

State	Data Item(s)	Description of Data/Report	Source	Update Schedule	Available Today?	Data Format	Link
New Mexico	NMDOT Report Card	Performance measures focus on programs & infrastructure, transportation & highway operations, and business support	NMDOT	Quarterly	Yes	PDF	http://www.nmlegis.gov/lcs /lfc/lfcreportcards.aspx
New York	Trends and Statistics Portal	Contains links to reports on various New York state transportation trends, surveys, and statistics	NYSDOT	Varies	Yes	Multiple PDFs	https://www.dot.ny.gov/divisions /policy-and-strategy/darb/dai-unit/ttss
North Carolina	NCDOT Performance Dashboard	Dashboard focuses on fatality rate, incident duration, infrastructure health, delivery rate, and employee engagement	NCDOT	N/A	Yes	Dashboard	https://apps.dot.state.nc.us/dot/ dashboard/
	Annual Performance Report	Report provides detailed information about performance measures as well as a performance scorecard	NCDOT	Annual	Yes	PDF	http://digital.ncdcr.gov/cdm/ref /collection/p249901coll22/id/622 639
North Dakota	Biennial Report	Includes updates on each division's activities	NDDOT	Biannual	Yes	PDF; numbers embedded in text	http://www.dot.nd.gov/manuals /manuals-publications.htm#plans-reports

State	Data Item(s)	Description of Data/Report	Source	Update Schedule	Available Today?	Data Format	Link
Ohio	ODOT Strategic Plan Progress Report	Critical Success Factors Scoreboard includes measures under the categories of People, Safety, System Conditions, Capital Program, and Operations	Ohio DOT	N/A	Yes	PDF	http://www.dot.state.oh.us/policy /ODOTStrategicPlan/Pages/default.aspx
Oklahoma	System Status	Overview statistics about Oklahoma's transportation system	Oklahoma DOT	N/A	Yes	PDF; numbers embedded in text	http://www.okladot.state.ok.us /newsmedia/index.php
Oregon	Key Performance Measure Summaries	Focuses on Safety, Mobility/Economy, Preservation, Sustainability, and Stewardship	Oregon DOT	Varies	Yes	PDF	http://www.oregon.gov/ODOT /CS/PERFORMANCE/Pages/index.aspx
	Key Performance Measure Summaries	Individual summaries of each performance measure	Oregon DOT	Varies	Yes	PDF	http://www.oregon.gov/ODOT/CS /PERFORMANCE/Pages/index.aspx
	Annual Performance Report	Detailed look at progress on performance measures	Oregon DOT	Annual	Yes	PDF	http://www.oregon.gov/ODOT/CS /PERFORMANCE/Pages/index.aspx

State	Data Item(s)	Description of Data/Report	Source	Update Schedule	Available Today?	Data Format	Link
Pennsylvania	Transporta-tion Performance Report	Focuses on safety, mobility, preservation and renewal, accountability, and funding	PennDOT	Annual	Yes	PDF	ftp://ftp.dot.state.pa.us/public/Bureaus /Cpdm/STC/TPR%20FINAL%202-7-13.pdf
Rhode Island	Annual Report	Includes updates on each division's activities	RIDOT	Annual	Yes	PDF; numbers embedded in text	http://www.dot.ri.gov/news/annrpts.asp
South Carolina	Dashboard/ Report	Dashboard reports on transportation system status, maintenance activities, and construction activities. Separate report/dashboard for roadway fatalities.	SCDOT	Annual	Yes	PDF	http://www.scdot.org/inside/dashboard.aspx
	State of the SCDOT	Report focuses on management, highway system condition and safety, finance, and transportation infrastructure/economic development	SCDOT	Annual	Yes	PDF	http://www.scdot.org/inside /state_of_scdot.aspx

State	Data Item(s)	Description of Data/Report	Source	Update Schedule	Available Today?	Data Format	Link
South Dakota	Annual Report	Focus areas include bridges, pavements, safety, public transit, railroads, aeronautics, economic development, winter maintenance, and research. High level initiatives include employee development, asset preservation, transportation system improvement, and fiscal responsibility	SDDOT	Annual	Yes	PDF	http://www.sddot.com/resources/reports/
Tennessee	Transporta-tion Measure-ment Report (TMR)	Measures organized into categories: customer-oriented measures, financial-oriented measures, organizational effectiveness-oriented measures, transportation system-oriented measures, and workforce-oriented measures	TDOT	Annual	Yes	PDF	http://www.tdot.state.tn.us/publications.htm

State	Data Item(s)	Description of Data/Report	Source	Update Schedule	Available Today?	Data Format	Link
Texas	2013-2017 Strategic Plan	Outlines agency performance measures. Does not list actual performance for many.	TxDOT	5-year cycle	Yes	PDF	http://ftp.dot.state.tx.us/pub /txdot-info/oeo/strategic_plan2013.pdf
Utah	Performance Dashboard	Focuses on pavement preservation, bridges, snow and ice control, incident management, fatalities, and travel time	UDOT	Annual	Yes	Dashboard	http://performance.utah.gov /agencies/udot.shtml
	Executive Dashboard	The Executive Dashboard consists of performance indicators/measures that assist executives in assessing the health of the Federal-Aid Highway Program (FAHP).	UDOT	Varies	Yes	Multiple PDFs	http://www.udot.utah.gov /main/f?p=100:pg:0:::1:T,V:207 3,

State	Data Item(s)	Description of Data/Report	Source	Update Schedule	Available Today?	Data Format	Link
Vermont	Tri-State Performance Measures Report	Joint performance measures report with Vermont and New Hampshire	VAOT, NHDOT, Maine DOT	Annual	Yes	PDF	http://vtrans.vermont.gov/sites/aot/files /documents/other/2012TriStatePMReport.pdf
Virginia	VDOT Dashboard	Performance reporting system for projects and programs. Topical areas include performance (e.g. congestion), safety, condition, projects, citizen survey, finances, and management.	VDOT	N/A	Yes	Dashboard	http://dashboard.virginiadot.org/
	Annual Performance Report	Same as above but in scorecard format	VDOT	Annual	Yes	PDF	http://www.vtrans.org /performance_reports.asp
Washington	The Gray Notebook	Performance report (w/dashboard) focusing on a wide range of performance measures including safety, mobility, and stewardship	WSDOT	Quarterly	Yes	PDF	http://www.wsdot.wa.gov/Accountability/

State	Data Item(s)	Description of Data/Report	Source	Update Schedule	Available Today?	Data Format	Link
	Biennial Transporta-tion Attainment Report	The Attainment Report contains a Dashboard that summarizes the progress of all 18 performance measures within the report.	WSDOT	Biannual	Yes	PDF	http://www.wsdot.wa.gov/Accountability/PerformanceReporting/Attainment.htm
West Virginia	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wisconsin	MAPSS Performance Improve-ment Program	Performance measures focus on 5 key goal areas: mobility, accountability, preservation, safety, and service	Wisconsin DOT	N/A	Yes	Website/ HTML	http://www.dot.wi.gov/about/performance/index.htm
Wyoming	WYDOT Annual Report	Contains overview of performance measures results	WYDOT	Annual	Yes	PDF	http://www.dot.state.wy.us/home/administration/strategic_performance.default.html
	Wyoming Transporta-tion Factbook	Contains statistics on the state's transportation system, including some performance-related statistics	WYDOT	Annual	Yes	PDF	http://www.dot.state.wy.us/home/administration/strategic_performance.default.html

State	Data Item(s)	Description of Data/Report	Source	Update Schedule	Available Today?	Data Format	Link
District of Columbia	DDOT Dashboard	Dashboard featuring safety, roadway condition, % of projects on-time, transit on time performance, finance, and customer service	DDOT	N/A	Yes	Dashboard	http://dashboard.ddot.dc.gov /ddotdashboard/#Home
Puerto Rico	N/A	N/A	N/A	N/A	N/A	N/A	N/A