

Communicating the Value of Preservation: A Playbook

DETAILS

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NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM

NCHRP REPORT 742

**Communicating the Value of
Preservation: A Playbook**

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TRANSPORTATION RESEARCH BOARD

WASHINGTON, D.C.
2012
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NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM

Systematic, well-designed research provides the most effective approach to the solution of many problems facing highway administrators and engineers. Often, highway problems are of local interest and can best be studied by highway departments individually or in cooperation with their state universities and others. However, the accelerating growth of highway transportation develops increasingly complex problems of wide interest to highway authorities. These problems are best studied through a coordinated program of cooperative research.

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FOREWORD

By **Andrew C. Lemer**

Staff Officer

Transportation Research Board

This report presents guidance for communicating the value of highway system maintenance and preservation. The guidance includes numerous examples and models that transportation agency staff members can use to present—succinctly and persuasively to agency leadership, elected officials, and the public—the case for allocating budgetary and other resources to preserve and maintain the public’s investment in highway infrastructure.

A stitch in time saves nine. This old proverb delivers crisply and memorably its message that making a small effort to deal immediately with a problem can forestall the need for a more substantial fix in the future. The message applies to highway maintenance and preservation, but more information typically is needed for the message to resonate with today’s taxpayers and the government officials responsible for allocating adequate funding to do now what it takes to prevent future failures.

Budget constraints and continued public demand for transportation services put pressure on state departments of transportation (DOTs) to “do more with less.” In some cases, this has led to deferral or other changes in activities to maintain and preserve surface transportation facilities and equipment, and consequently to deterioration of current performance, accelerated aging and deterioration, and reduced service life for pavements, bridges, and other system components. Transportation professionals recognize these consequences and can forecast both their severity and the levels of maintenance and preservation effort that would optimize the public’s return on their transportation system investment. However, competing interests in the resource allocation process may constrain these professionals’ ability to take effective action.

Experience in other areas of public policy suggests that improving transportation agencies’ ability to communicate effectively with stakeholders can enhance public understanding of the consequences of deferring maintenance and preservation efforts and help decision makers facing difficult resource-allocation choices. The objective of NCHRP Project 14-24 was to develop guidance that state DOTs and other transportation agencies can use to formulate and implement strategies for communicating the role and importance of maintenance and asset-preservation in sustaining highway system performance.

A research team led by High Street Consulting Group, Pittsburgh, PA, conducted the research. The research team reviewed literature and current practices for communicating the importance of system maintenance and preservation in DOTs and a range of fields facing facility management issues similar to those of DOTs. Subsequent analysis focused on (a) how such entities identify and characterize their stakeholders, develop communication strategies, and create and refine messages; (b) communication strategies, media, and communication methods used; and (c) criteria for evaluating the effectiveness of the

communication. Based on their analysis of effective strategies, the team described methods that can be used to create messages (surveys or focus groups, for example) about highway system maintenance and preservation for stakeholders and developed specific examples that can serve as models or templates that a DOT can use to communicate about their own particular situation.

This document is written as a guide that agency staff can use in formulating an effective strategy for communicating the importance of highway maintenance and preservation, applying criteria and methods for evaluating the effectiveness of a communication strategy, and adjusting a strategy if necessary to ensure its effectiveness. Applying the methods and examples presented in the guide can help an agency's stakeholders—including the general public, elected officials, and senior agency managers—to understand the scope, scale, and urgency of their highway system's preservation and maintenance needs.

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1. Playbook Welcome

This Playbook is for engineers, planners, policymakers, public affairs officials, and anyone else in a state transportation agency who seeks guidance on how to close the gap between understanding the importance of highway preservation and being able to successfully communicate that value to leaders inside their agency and to the agency’s most important outside stakeholders.

By following the Playbook’s strategies, you can learn how to use effective market research to target critical audience segments with creative messages that resonate via “surround sound” content delivery methods. Ultimately, you will help your department of transportation (DOT) to:

- **Show Preservation Matters**—You will be able to spotlight a topic that rarely gets center stage;
- **Get Preservation Recognized**—You will achieve recognition of preservation as a priority in the minds of key persons of influence;
- **Incubate a Network of Preservation Supporters**—You will form a group of internal and external supporters who can help you achieve your goals; and
- **Orchestrate a Call to Action**—You can motivate your supporters to advocate for action.

The Playbook teaches you how to sharpen your communication skills by getting organized around four simple and connected building blocks: (1) audience identification, (2) message design, (3) message delivery and (4) market research. And it provides creative ideas for setting up your own preservation campaign. You won’t find pre-packaged communication solutions that are customized to the needs of your DOT in this Playbook, because the unique factors that should shape a DOT’s communications—like infrastructure conditions, transportation funding levels, and political considerations—vary too much from state to state for that. It does offer lots of tips, templates, and techniques you can use to craft your own campaign.

“**Preservation**

encompasses work to extend the life of existing facilities (and associated hardware and equipment) and to repair damage that impedes mobility or safety. The purpose of system preservation is to retain the existing value of an asset and its ability to perform as designed. Preservation counters the wear and tear of physical infrastructure that occurs over time due to traffic loading, climate, crashes, and aging. It is accomplished through both capital projects and maintenance actions.”

Source: NCHRP Report 551: Performance Measures and Targets for Transportation Asset Management (Cambridge Systematics, Inc.; PB Consult, Inc.; and Texas Transportation Institute; 2006)

Before you read more about the building blocks, you'll probably find it helpful to get a quick refresher about the value of preservation and why DOTs sometimes struggle to communicate that value:

- **Preservation Is a Growing Issue Across the Nation**—Recent studies of highway preservation in the United States reach similar conclusions; the costs to individual users and to the nation of inadequate maintenance of America's highway system are high and they continue to increase. According to the American Association of State Highway and Transportation Officials (AASHTO) 2009 *Rough Roads Ahead* report, one-third of the nation's highways are in poor or mediocre condition and they add an average of \$335 each year to the personal cost of owning a car—and, in some cities, it's as much as \$740 more—due to damaged tires and suspensions and reduced fuel efficiency. In a similar vein, the American Society of Civil Engineers (ASCE) gives America's highways a D- grade in its 2009 study of infrastructure conditions (*Report Card for America's Infrastructure*). In a survey conducted as part of this Playbook's preparation (described in full in Appendix D), 97 percent of DOT respondents agreed that preservation is a top priority for their agencies.
- **Preservation Challenge Is a Hard Sell for Audiences**—While preservation is a logical and cost-effective way to address declining infrastructure conditions—every \$1 spent on keeping a good road in good condition saves \$6 to \$14 when compared to rebuilding a deteriorated road—the public's lack of awareness about and enthusiasm for highway preservation is frightening to many in the industry. Maslansky Luntz + Partners capture the public's attitude well in the summary of its 2011 set of focus groups with members of the public, which is presented in *The New Language of Mobility: Talking Transportation in a Post-Recession World*:

“Maintenance is table stakes. They [the public] already pay for maintenance. They're not willing to pay more money for what they're convinced you should already be providing.”

Several factors make gaining support for preservation difficult, including a declining level of public trust in government and a growing cacophony of competing messages that make cutting through the clutter tough. Bringing about a change in attitudes toward highway maintenance and preservation actions will require thoughtful and ongoing communications campaigns by DOTs.

- **DOTs Must Rethink Preservation Communication Practices**—DOT staff sometimes grumble that the lack of public, or even internal, support for preservation contradicts the powerful evidence for its importance. But, the hard truth is that the DOT community does not forcefully press the preservation case. The DOT survey results (described in full in Appendix D) make clear that many DOTs still communicate much as they did in the pre-digital era: sending out one-size-fits-all, factual information through narrow channels in stand-alone blocks, with little regard for stakeholders' differing perspectives or the need for concerted, comprehensive, and continuous messaging. Most agencies—if they are communicating about this topic at all—tend to rely on infrequent and haphazard distribution of overly technical messages. They rarely use all message delivery channels—particularly new media options—in a coordinated surround sound fashion; and their communication tends to be sporadic rather than a constant drum beat. Tremendous opportunity exists for DOTs to update these communication habits.

Easy Building Blocks for Communicating Preservation

The Playbook is anchored by a simple set of four building blocks for overhauling preservation communications:

- **Audience Identification**—Communication is audience-centric, yet many in the transportation arena make the mistake of being so focused on what they want to say or how they want to say it that the most important part is forgotten: what will the message's receiver respond to, remember, and act on? As a DOT, you should start early to identify and segment your audiences so you can find out: what motivates them to action, what words resonate with them, who their trusted sources of information are, and which methods of communication are most effective for reaching them.
- **Message Design**—Unfortunately, facts and logic alone aren't enough to move key audience segments to action. Your DOT already collects immense amounts of technical data about preservation; you must use this information to create concise and compelling messages that not only deliver compelling facts clearly, but also appeal to the emotions and interests of your most important audience segments and work in multiple delivery channels;
- **Message Delivery**—More communication mechanisms are available today than ever before. You need to figure out what channels people are using to gather information about transportation

issues. Message delivery should be continuous and will be most effective when you use all three major avenues of delivery including traditional, one-on-one, and new internet media opportunities to effectively communicate messages to your most important audience segments.

- **Market Research**—In particular, primary research that connects your DOT directly to what stakeholders are thinking, feeling, and saying is the mortar that holds the building blocks of good communication together. A DOT wouldn't use a new maintenance treatment without first testing its performance or subsequently monitoring results—communication is the same.

Dissection of Two Communications Campaigns

Ultimately, the Playbook aims to equip you to create your own preservation communications using the four building blocks. But starting out with lessons on theory gets dull fast! Therefore, the next section of the Playbook dissects two different hypothetical preservation campaigns side-by-side so you can see upfront how an affordable and effective campaign comes together.

The two campaign dissections offer snapshots of campaign material accompanied by brief annotations that reveal how audiences are identified, messages are developed, and surround sound delivery is used to communicate across multiple channels with a constant drumbeat.

Full-length versions of the raw materials highlighted in the campaign dissections are included as a series of sub-appendices in Appendix A of the Playbook. The sub-appendices are organized by message delivery method for easy reference and they include detailed annotations so that you can create your own materials.

Context for the Two Campaigns

Scenario 1: Penny Saved. Scenario 1's campaign features a (hypothetical) state that has always maintained its roads and bridges well, but that faces a future with lower funding for transportation, which threatens to compromise good work in the past and future agency credibility. The DOT needs to ensure it maintains a steady focus on preservation, but leaders and stakeholders have grown accustomed to good roads and are unaware of the effort and resources this takes. As a result, the DOT technical staff is proposing a greater emphasis on actions to preserve the system.

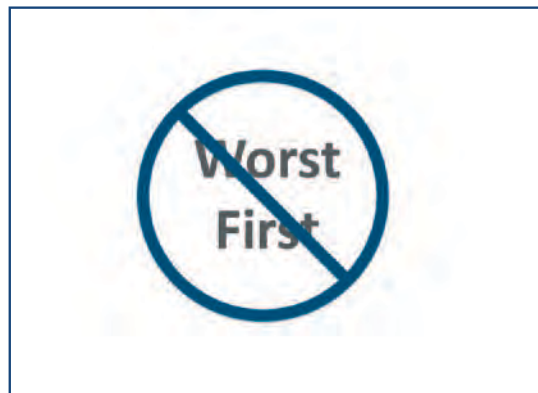
Scenario 2: The Phoenix Project. Scenario 2's campaign features a (hypothetical) state that has road and bridge conditions at crisis levels and a decline in DOT funding due to falling state and federal revenues. This situation has generated bad press, dissatisfied customers, and loss of credibility with political leaders. The DOT seeks to rebuild trust and secure the focus needed to rectify its preservation problems.

Internal Presentations

Scenario 1: Scenario 1 starts with the DOT technical staff making a presentation to the executive leadership. (Selected slides follow; the full version can be found in Appendix A.)



1 A clean design, memorable image, and catchy title speak to the audience.



2 Don't assume your audience knows what you know—this is a common misperception, even in DOTs.

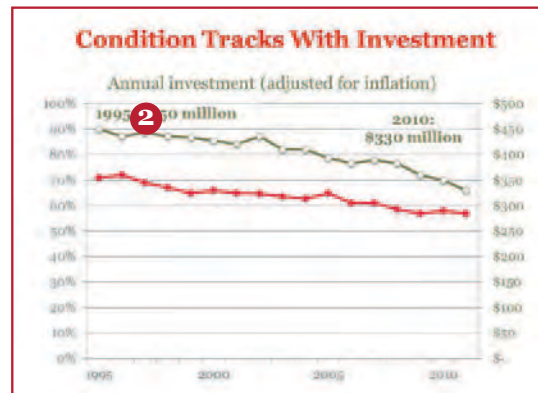


3 The theme of this slide, that preservation is cost effective, is a point that DOT executives care about.

Scenario 2: Scenario 2 likewise begins with DOT technical and public affairs staff making a presentation to the leadership team. (Selected slides follow; the full version can be found in Appendix A.)



1 A clean design, memorable image, and catchy title speak to the audience.



2 The point that conditions track with spending is important for DOT leadership to understand.

Handout

Scenario 1: Rather than just copies of the slides, a handout is developed to support the executive staff presentation.

THE DUCT TAPE WON'T LAST FOREVER

Executive Staff Briefing
1/12/12

Where We Are

We've come a long way since the mid-80's when less than half of our roads were in good condition. During the 1980's and 1990's, we invested in the reconstruction of nearly 4,000 highway miles. However, that trend has been declining steadily since 2003.

Over the past four months, DOT has gathered feedback from users all across the state through surveys and road rallies. We have learned our customers expect 85% of our roads to be in good condition at all times. As the graph above indicates – we're dropping below that target.



Changing Our Approach

Meeting our target performance levels is about balancing three questions:

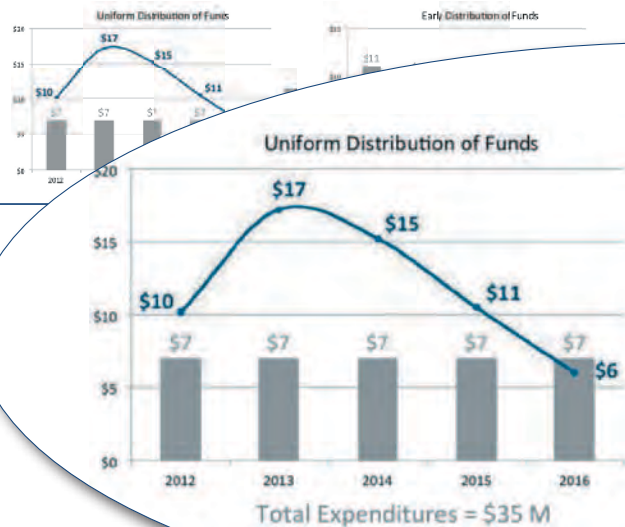
- Where should we spend?
- What should we spend it on?
- When should we spend it?

Some will advocate for a worst first approach. Although "Worst First" sounds reasonable, it's a horrible strategy – one that if followed for too long will eventually bankrupt a DOT. Prioritizing treatment of the worst pavement first means serious damage must be done before repairs are made. Every road in the system will descend to that level before it receives attention, making it the most expensive strategy possible. The focus should be on applying the *right treatment to the right pavement at the right time*.

We Can Save Money and Improve the System

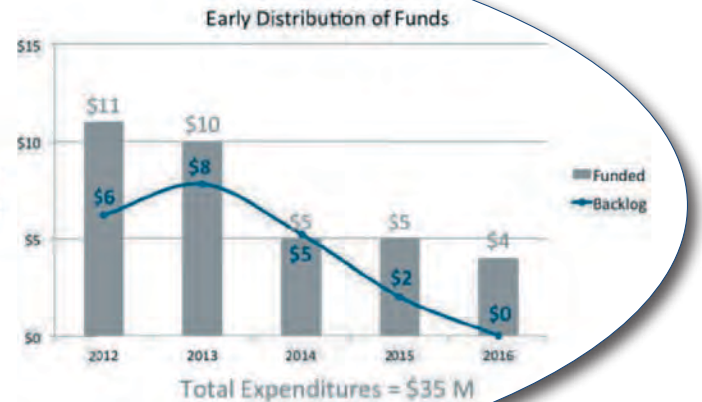
Preservation is cheaper per lane mile and it's also cheaper in the long run. By treating roads before they need to be rehabilitated, we can save 35-40 percent on our preservation program.

When we act also matters. As demonstrated in the graph below, front-loading our program will help reduce our backlog of needs.



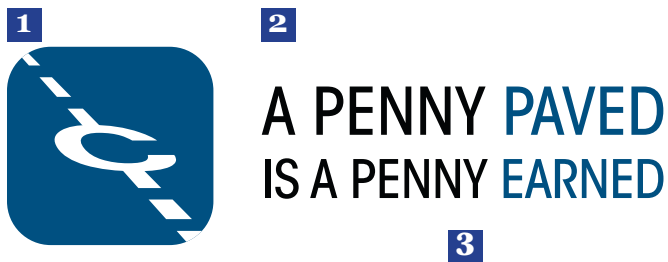
A fact sheet that accompanies a presentation can be very powerful. It can provide more context and detail than can fit onto a slide, and it serves as a take-home piece for the audience.

DOT leadership needs information that can help and support their decision making. Although executive staff members often have a technical background, it is still important that data be clear and helpful in the decision-making process. In this case, these graphs demonstrate that by front-loading the distribution of preservation funds, the backlog of needs can be eliminated.



Logos

Scenario 1: Although “The Duct Tape Won’t Last Forever” caught the attention of the executive staff, it is decided that a more positive and active message is needed for external audiences. With that in mind, a slogan and logo are developed.



- 1 A refined logo will give external audiences something to identify with.
- 2 The slogan and logo invoke a sense of responsibility and efficiency (market research often helps identify values like these that audiences relate to well).
- 3 The slogan is memorable and interesting and audiences will instinctively agree with the premise, making it more likely to inspire them to support preservation.

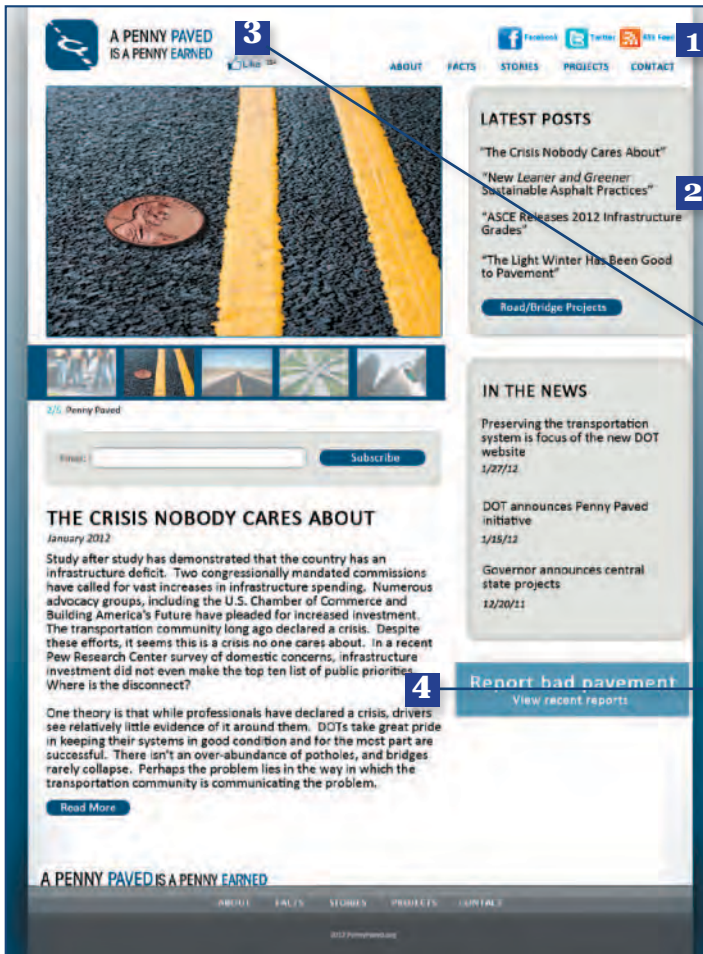
Scenario 2: Given the negative perceptions of the public, logos and slogans must establish a clear link between preservation investment levels and resulting performance.



- 4 A refined logo will give external audiences something to identify with.
- 5 The Phoenix Project slogan makes the connection between investment and performance inescapable.
- 6 The Phoenix brand is a clear reference to rising up from ashes—a metaphor for the goal of reconstructing crumbling pavement.

Website

Scenario 1: As a result of the DOT's decision to increase its focus on preservation, a website is developed to support and promote the initiative.



1 — Links to social media.

2 — Blog posts by DOT professionals and supporters of the initiative.

Initiative-focused website offers news directly related to the initiative and other preservation information from around the country.

A website can serve as the home for a preservation initiative. It can provide a one-stop shop for all of the materials and news related to the effort and allow the DOT to communicate with citizens and stakeholders in an inexpensive way.

Fact Sheet

Scenario 2: The DOT leadership understands that they will need support from the governor’s office. The governor appoints a task force to examine and recommend performance targets and investment levels. A fact sheet is developed for the first task force meeting that provides important technical information linking investment to performance and a meeting timeline which explains the stakeholder process.

Information about appointees is linked to a map and a variety of communication channels are opened.

A website is established to support task force communication.

The task force has strong and balanced membership. Note the state chamber and senate transportation chair are co-leading the task force and the DOT secretary puts her stamp of approval on the process as well.

It’s important to establish the link between investment and performance in the first info piece.

A timeline demonstrates the connection between technical data, citizen input, and investment.

1 Map showing location of John Smith.

2 Website screenshot for www.phoenixproject.org with social media links.

3 List of task force members:

- President of State of the Chamber
Address, City, State Zip, Phone
- Senate Transportation Chair
Address, City, State Zip, Phone
- Department of Transportation Public Affairs
Address, City, State Zip, Phone


4 Projected Decline at \$300 M Preservation Investment. Bar chart showing 55% Good Condition Today vs 42% Projected Good Condition in 2020.

5 PHOENIX PROJECT OVERVIEW timeline from 2012 to 2013, detailing stages: PRE-SET MEETINGS, MEETINGS, and MEETING 6.

Press Releases

Scenario 1: A press release is used to announce the start of the initiative and to promote the website.

MEDIA CONTACT
Name
Title
Direct Phone or Cell Phone
E-mail



PRESERVING THE TRANSPORTATION SYSTEM IS FOCUS OF THE NEW (STATE) DEPARTMENT OF TRANSPORTATION WEB SITE

City, State – January 17, 2012– With an eye towards the future of transportation in (State), the Department of Transportation is pleased to announce the launch of a new web site dedicated to preservation of the state’s transportation system.

The new site – www.pennypaved.org – features important information about the transportation system and ongoing preservation efforts in (State). Visitors can track specific transportation project progress, learn about upcoming projects and view firsthand the importance of preservation.

“Over the past several decades, (State) has spent billions of dollars to build one of the best transportation systems in the country. It is also one of the most expensive to maintain,” said John [Name], (State) Transportation Secretary. “We want to ensure the public is informed about our efforts to protect the investments of the past, and the new web site provides an opportunity to provide information as well as gather feedback from those who use the system.”

The new web site is based upon a culmination of meetings the (State) Department of Transportation has held throughout (State) over the past two years. Through continued outreach to key citizens and communities across (State), the web site has been developed to highlight the importance of the transportation system and to educate citizens on areas where the system has played a role in economic development, community growth, and safety.

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- 1** Previous market research has indicated that the state’s citizens take great pride in the quality of the state’s transportation system, so this is highlighted in the DOT secretary’s quote.
- 2** Promotion of the site through the press can help drive traffic to the DOT’s website.

Scenario 2: Because of the disconnect between the DOT and the public, a series of road rallies is conducted so that customers can experience and rate highway conditions and then immediately talk about condition targets and how willing they might or might not be to fund additional preservation efforts. A press release is used to explain the results—and a video news release is also distributed.

MEDIA CONTACT
Name
Title
Direct and/or Cell Phone Number
E-mail Address



ROAD RALLIES REVEAL CITIZENS DISSATISFIED WITH HIGHWAY SYSTEM CONDITIONS; SET COURSE FOR DOT COMMUNICATION EFFORTS

City, State – March 13, 2012 – A series of recent road rallies conducted by the (State) Department of Transportation revealed high levels of dissatisfaction with the condition of the highway system.

“Public input from the regional road rallies was clear – citizens are not satisfied with the current condition of our highways and are willing to pay more to have it fixed.”

Eight road rallies were held in various regions across the state earlier this year, in both rural and urban areas. The events consisted of six vans carrying 16 passengers each, running four times per day along various pre-determined routes. Participants were recruited to represent a wide variety of perspectives, including area residents, regional leaders, media and other stakeholders. Each was asked to complete a satisfaction survey regarding various kinds of highways including interstates, major and minor highways on issues such as pavement condition, condition of shoulders, and whether striping was bright enough. Results were then correlated with highway data to understand what participants considered to be “good” condition.

“During the (insert City Name or Region) road rally, I was shocked by the jarring ride and poor condition of some of our most heavily-trafficked areas. In taking the time to ride along and evaluate the condition, it was evident where our system is quickly deteriorating,” said (Name), (City)-area resident.

Discussion groups were held in each region to discuss the results of the rallies. About system decline projections and funding levels. An overwhelming majority of participants said (Name), (City)-area resident.

(continued)

- 3** Find a key message and draw attention to it consistently.
- 4** It’s more effective to localize quotes and distribute press releases regionally so that stakeholders and the public can more easily identify with the results.

Social Media

Scenario 1: To harness the power of social media, a Twitter account is started that is associated directly with the initiative.



- 1 Use the power of social media to broadcast. Layer simple and complex content to set it up, and continue to update content. Social channels quickly become stale and must be updated on a regular basis.
- 2 Building a following can take time and resources but is important for any social media campaign to be effective.
- 3 Tweets don't always have to be directly about the initiative. Providing links to other places on the web that are related can help promote interest and awareness.
- 4 Twitter provides a way to quickly and informally engage directly with citizens and stakeholders.

Scenario 2: To expand the reach of the task force beyond key stakeholders, popular social media channels are employed and populated with materials that are well suited for the medium.



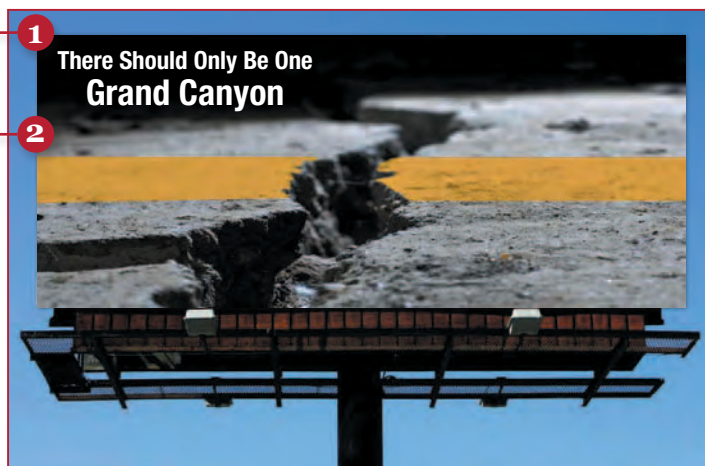
- 5 You can publicize events and results by cross-posting information in multiple locations. A post on Facebook can encourage more direct and casual discussion of a topic.
- 6 "Crazy Bad" is an example of a contest a partner group sponsors to highlight the poor conditions of the state's highways and is ideally suited for the informal nature of YouTube. You can cross-post the link to this video on the website and Facebook page.
- 7 Use the logo so that viewers can quickly associate the information with your initiative.

Billboards

Scenario 2: Given the financial restrictions of the DOT, it is decided that purchasing billboard space would be seen as wasteful, irresponsible, or frivolous. However, it is also recognized that a broader campaign about the deplorable conditions of the highways is needed. Industry partners offer to develop and pay for billboards across the state.



Partners can advocate and spend money in ways DOTs cannot, so leverage strong relationships.



Tag lines need to be brief, powerful, and tied to the image—use about seven words or less.

External Presentations

Scenario 1: As part of the initiative, a presentation is developed for delivery to external partners and audiences.



A presentation slide with a white background and a blue border. At the top left is a blue square logo with a white stylized road or path. To its right is the text "A PENNY PAVED IS A PENNY EARNED" in blue and black. Below this is the text "Contractors Association Meeting" in grey, "Joe Spalling" in bold blue, and "DOT Pavement Professional" in grey.

1

Branding effort begins as slogan and logo is utilized in title of presentation.



A presentation slide with a white background and a blue border. The text is centered and reads: "Rough roads cost the average driver" in grey, "\$335 per year" in large bold blue font, and "due to tire and suspension damage and reduced fuel efficiency" in grey.

2

Use clear, personal language to connect with your audience.



A presentation slide with a white background and a blue border. The text at the top reads: "We must also prevent the good roads from going bad" in bold black. Below the text is a photograph of a young child with light brown hair, smiling and brushing their teeth with a toothbrush.

3

Use strong images with a clear analogy.

External Presentations (continued)

Scenario 2: An external presentation is developed to explain the recommendations of the Phoenix task force. A speakers' bureau is established of task force members and DOT leaders and the presentation is used to ensure consistent messaging. It serves as the basis for other info pieces. These recommendations demonstrate the extent to which the DOT and task force listened and incorporated input.

The presentation has an urgent tone.

1



THE TIME IS NOW

Use the words of stakeholders, especially those in the business sector.

2

<STATE> BUSINESSES

"I can't get any new businesses to seriously consider relocating here after they drive on I-XX. They won't subject their employees or anything they manufacture to that miserable experience."

John Smith, XXX County, Economic Development Corp.

Demonstrate that investment is tied to performance and request a conscious decision.

3

WHICH WAY WILL <STATE> GO?

By combining technical data and financial forecasting, the cost to close the funding gap is translated into an easy-to-understand 25 cents per day per taxpayer rather than the \$150 million annually needed to close the gap.

4



Handouts

Scenario 1: A professional looking brochure is developed as a companion piece for an external presentation.

1 A fact sheet or brochure that accompanies a presentation can be very powerful. It can provide more context and detail than can be fit onto a slide, and it serves as a take-home piece for the audience.

2 Comparison of performance with customer expectations can be established through market research and highlighted with external audiences to demonstrate the DOT's commitment to listening to its customers.

3 Historical data shows past progress and the current challenge.

Scenario 2: A handout highlighting the task force's efforts is developed to support the presentation.

4 It's important to select and emphasize only the most important points—usually three to five key points is all that stakeholders will remember. If interested, stakeholders or the public can always read the full report.

5 Use quotes from business leaders to support the data indicating drivers are highly dissatisfied and the business community supports increased investment in preservation.

Email Blasts

Scenario 1: The DOT maintains a robust database of stakeholders that the secretary uses to regularly engage with the stakeholder community.

DOT Secretary

From: DOT Secretary [mailto:DOT@...]
Sent: Tuesday, February 7, 2012 1:20 PM
To: Stakeholders
Subject: A Penny Paved is a Penny Earned

1 **Sent:** Tuesday, February 7, 2012 1:20 PM
To: Stakeholders
Subject: A Penny Paved is a Penny Earned

Good morning:

On behalf of the Department of Transportation, I'm pleased to announce a new initiative regarding the importance of preserving our system. This new initiative – called "A Penny Paved is a Penny Earned" – is focused on communicating the ongoing efforts by the DOT to protect our state's investment.

As you know, over the past several decades, (State) has invested billions of dollars to build one of the best transportation systems in the country. While our system is in good condition today, it is growing more expensive to maintain. The goal behind our "Penny Paved" campaign is to ensure the public is informed about the ongoing efforts to protect the investments of the past, and wisely invest for the future.

To that end, we're launching a new website at www.pennypaved.org which **2** provides important information about the project. Based upon input gathered from stakeholders, the new site highlights the importance of the transportation system and ongoing preservation efforts. Visitors can learn about upcoming projects, track progress and view first-hand the importance of preservation. The new site offers a great opportunity to provide information as well as gather feedback from the very citizens who use the transportation system every day.

Support from our stakeholders is critical to maintaining our infrastructure and we're glad to have you on our side. The "Penny Paved" initiative is based upon a culmination of meetings the (State) Department of Transportation has held throughout (State) over the past two years – in which many of you participated! We hope you'll find the new Web site informative – and welcome any feedback along the way.

Thank you,
 John

John Smith
 Secretary
 (State) Department of Transportation
 888-555-5000
 jsmith@dot.gov
www.pennypaved.org

1 In an email blast about recommendations, go directly to stakeholders. Don't forget to thank people for their participation.

2 Providing links is an inexpensive, easy way to drive stakeholders to your messages.

Scenario 2: To publicize the recommendations of the task force, a variety of spokespeople are engaged and all communication channels are used. Note the consistent messaging across all materials.

DOT Secretary

From: DOT Secretary [mailto:DOT@...]
Sent: Wednesday, March 21, 2012 1:20 PM
To: Stakeholders
Cc: Phoenix Task Force
Subject: Phoenix Task Force Recommendations

1 **Sent:** Wednesday, March 21, 2012 1:20 PM
To: Stakeholders
Cc: Phoenix Task Force
Subject: Phoenix Task Force Recommendations

Dear Stakeholders and Partners:

As many of you are aware, over the past eight months the <State> DOT has been working to develop a responsible and supportable plan for preserving our transportation system. Thank you to each of you for providing feedback through survey responses, road rallies, focus group sessions and phone calls. Thank you also to the Phoenix Task Force members for their role in reviewing responses and preparing a recommendation. In listening to community leaders, business executives, drivers and citizens, we have heard the message clearly – <State> is ready to rebuild roads and invest in our highway system.

Based upon the information gathered, the Phoenix Task Force has made the following recommendations:

- It's time to reverse the declining condition of our highways. We've reached the point where highway conditions are negatively impacting travelers and our economy.
- The legislature should explore ways to fund preservation at \$150M more per year, which roughly equates to an increase of 25 cents per day per taxpayer. The Phoenix Task Force further recommends that increase be implemented in the next legislative session. Though this falls short of the target level, the increase would allow for major system improvements and continued maintenance efforts critical at this time.
- Although 25 cents per day will not improve all highways to the condition the DOT recommends, it would allow <State> to improve the condition of our major highways to good condition. As shared by <Name>, Phoenix Task Force co-chair, "We can't afford to have highways in excellent condition everywhere right now, but we can make strategic investments to improve our most important trade and travel corridors. When the economy improves, we'll work to bring the rest of our highways into good condition."

For more information on the Phoenix Task Force recommendations, please visit www.phoenixproject.org or download the brochure here (hyperlink). **2**

We look forward to your continued feedback as we work to improve the state's transportation system.

Sincerely,
 DOT Secretary

First Name Last Name
 Secretary
 Department of Transportation
 Mobile (555) 555-5555
 Direct (555) 555-5555
 Main (555) 555-5555
Secretary@DOT.org

1 In an email blast about recommendations, go directly to stakeholders. Don't forget to thank people for their participation.

2 Providing links is an inexpensive, easy way to drive stakeholders to your messages.

Op-eds

Scenario 2: To promote the Phoenix recommendations, members of the task force write a series of op-eds to local newspapers.

Reference other prominent issues of the day for an effective op-ed piece.

Op-eds should be authored by a respected local business leader.



2. Building Blocks for Effective Communications

The remainder of the Playbook guides you through the process of using the following four building blocks to construct an effective communications campaign comparable to those profiled in the previous chapter:



- **Audience Identification**—Learn to identify audiences so you can find out what motivates them, what words resonate with them, who their trusted sources of information are, and which communication methods are most effective;
- **Message Design**—Translate technical data about preservation into concise and compelling messages that not only deliver facts, but also appeal to the emotions and interests of your most important audience segments and work in multiple delivery channels;
- **Message Delivery**—How you deliver your message should be continuous and will have the most impact when you use all three major avenues—traditional, one-on-one, and new internet media opportunities—to effectively communicate messages to your most important audience segments; and
- **Market Research**—Utilizing research—particularly primary research that connects your DOT directly to what stakeholders are thinking, feeling, and saying—is the mortar that holds the building blocks of good communication together.

Within each building block chapter, occasional Tie-In discussions identify areas of synergy across individual blocks; you are encouraged to pay particular attention to these tie-ins in order to learn more about the way all four blocks work together.

The Playbook's emphasis on following four building blocks implies a rigid formula for creating a campaign. Also emphasized, however, is the importance of customizing your agency's approach to each block. A small **A or B Customization Choice** icon denotes particular options for customization.



For inexperienced message developers, or those that are developing preservation messaging for the first time, all four building blocks will be helpful. For those experienced in message development or those that have a specific issue of interest, individual blocks or steps within those blocks might be consulted.

3. Audience Identification



Identifying and segmenting your audience is the first building block for creating and delivering successful preservation messages.

Audience identification and segmentation is shorthand for pinpointing distinct audience groupings that are important to the success of your message and that have distinct differences in the factors that motivate them to action, the words that resonate with them, their trusted sources of information, and the methods of communication that are most effective for reaching them.

Audience identification and segmentation not only helps you design and send tailored messages that will resonate with the interests, values, and emotions of your stakeholders, but also ensures your agency spends its time and dollars efficiently. In the Phoenix campaign described in Chapter 1, the audience identification process helps the DOT put together its Phoenix task force, around which the DOT's subsequent communications efforts are focused.

Audience identification matters because success for public agencies means satisfying key stakeholders according to their definition of what is valuable. If those stakeholders are not satisfied, something will change, whether budgets, priorities, or staffing.

This chapter of the Playbook gives step-by-step guidance for identifying and segmenting audiences. Watch for tie-ins to other building blocks that are noted by the blue icons. Opportunities for customization of your own audience identification process are highlighted throughout the section with a blue A or B choice icon.



Checklist of Critical Activities

- Set up audiences brainstorming session
- List potential audience elements
- Divide audiences into segments
- Assess audience segments
- Use stakeholder interview-based market research
- Prepare refined final list of audience segments
- Prepare interest/influencer matrix (optional)

Step 1: Set the Stage for an Audiences Brainstorming Session

The purpose of an audiences brainstorming session is to develop an initial list of potential audience categories and segment the audience according to characteristics that might have an impact on communication about preservation and maintenance issues. Brainstorming will help you systematically consider the range of motivations, messages, and trusted sources of information for different parts of your audience. The time you invest in this brainstorming session will give you a richer, more nuanced understanding of your audiences that will pay dividends in the long run.

As audience identification champion, you should recruit representatives from across your agency to participate as a team in the brainstorming session. Be sure to invite experts from policy and planning, maintenance and preservation, communications, and government relations at your DOT. Bring in experts from districts and headquarters, as appropriate.

When you invite staff to the brainstorming session, ask them to bring whatever lists of stakeholders they may have. Preservation and maintenance staff, for example, will likely have connections within the material supplier and construction contractor industry, while public affairs professionals will likely have relationships with legislators, community leaders, and the media.

If possible, ask an experienced facilitator to lead the session because managing and participating in the discussion at the same time is hard. Meet with the facilitator first to review the goals of the brainstorming session and to develop an agenda that can be shared in advance.

Building Block Tie-In: Market Research

Gather Any Past Market Research on Audience Segments—Be sure to ask your invitees to bring any market research to the brainstorming meeting, e.g., customer satisfaction surveys or focus groups information. Even if it isn't directly related to maintenance and preservation, it might provide insights into other issues that could affect stakeholders' perspectives about preservation issues. For example, stakeholders in one region of the state might have had negative experiences with snow and ice removal that could negatively affect the credibility of the DOT on a host of other issues and services.



Step 2: List Potential Audience Elements

Start your brainstorming by listing all the audiences your team can think of. There's no need to evaluate suggested audiences—that will come later. Be broad in your thinking because a DOT's potential audience for its messages about the value of maintenance and preservation has many members and constituencies. A wide swath of the audience is formed by millions of direct customers who use a DOT's highways daily: these customers might be local residents making short recreational trips, commuters, or travelers crossing a region or state, but they also include businesses whose truck drivers complete local deliveries, provide services, or make long-haul freight trips. The DOT's audience, however, also includes an array of governmental, political, business, and community leaders who speak for many different constituencies that rely on a good transportation network.

Figure 1 shows the potential breadth of a typical DOT's audience list for its maintenance and preservation messages. While your DOT may have more or fewer audiences, this list provides a good starting point.

Figure 1. Potential Audiences for Preservation Communication

| | | |
|---|--|---|
| <p>Elected Officials</p> <ul style="list-style-type: none"> • Statewide elected officials • Federal legislators • State legislators • City officials • County officials | <p>Freight-Dependent Industries</p> <ul style="list-style-type: none"> • Agriculture/food processing • Logistics • Mining • Forestry • Manufacturing | <p>Transportation Advocacy Coalitions</p> <ul style="list-style-type: none"> • Corridor coalitions • Transportation coalitions • Road user groups (e.g., AAA) |
| <p>Local Officials (Non-elected)</p> <ul style="list-style-type: none"> • Public works directors • County engineers • Economic development authorities • Metropolitan planning organizations • Law enforcement/emergency services | <p>Business Groups</p> <ul style="list-style-type: none"> • Local chambers of commerce • Regional business associations • State chamber of commerce <p>Industry Partners</p> <ul style="list-style-type: none"> • Contractors • Engineering consultants • Material suppliers | <p>General Public</p> <ul style="list-style-type: none"> • Residents • Commuters |



Step 3: Divide Audiences into Segments

Once you have brainstormed a basic list of audiences, it's time to discuss how the audience groups on your list can be either (1) segmented in terms of the interests, values, and emotions that drive their support of maintenance and preservation or (2) grouped together in terms of common interests, values, and emotions.

Segmenting audiences is like dividing fruit into apples, oranges, bananas, and grapes. Some groups you initially thought of as a single block may actually have separate interests. For example, a block like state residents may include residents in a region with higher truck traffic and lower pavement performance who think differently from residents in other parts of the state. Some audience blocks, however, may have a common thread; for example, rural constituencies—whether elected officials or agricultural producers—may all want bridges to be maintained at a level to carry heavy loads of crops at harvest time. Potential audience segmentation methods for the group to consider include the following:

- **Geographic Segmentation**—Segment audiences based on geographic interests and locations, such as urban, suburban, ex-urban, and rural regions.
- **Elected Official Segmentation**—No group has more influence than elected officials, but they often have differing perspectives. This group might be segmented by party affiliation, political views, or office, such as local, state, or federal office.
- **Industry Sector Segmentation**—Business interests are often underrepresented in DOT outreach efforts. These groups can be segmented by their industrial sector, such as construction, manufacturing, logistics, services, agriculture, or other transportation-dependent sectors.
- **Advocacy Group Segmentation**—Many advocacy groups have an interest in transportation issues, but those interests are often diverse and conflicting. These groups can be segmented by their advocacy focus, such as environmental, labor, economic development, freight, or modal issues.
- **Demographic Segmentation**—Some demographic groups are more inclined to show interest in transportation issues. They might be segmented by income, age, sex, education level, employment, or other criteria.

Communicating the Value of Preservation: A Playbook

- **General Public Segmentation**—DOTs have a tendency to view this segment as a catchall category, which may not be appropriate. Options for segmenting the general public include geographic and demographic criteria or primary use of the highway system, such as commuters, recreational travelers, or through travelers.
- **Local Leader Segmentation**—Local leaders can be a powerful influence when communicating an initiative. This group might be segmented by (1) local elected officials, executives, staff, business, and thought leaders and (2) the extent to which the local transportation system is owned and operated at the local level or at the state level.
- **Internal DOT Segmentation**—This is an incredibly important stakeholder group that is often overlooked. If preservation doesn't rank as important among the myriad issues that DOTs communicate about—such as safety, congestion, or accountability—then getting the resources you need to communicate effectively about the need for preservation will be difficult. Stakeholders in this group may include the DOT's chief executive officer, executive staff, public affairs group, and technical professionals.

Step 4: Assess Audience Segments

For each audience segment your team identifies, continue the brainstorming effort by characterizing the segment in terms of its unique attributes. Use the following questions to guide your team's discussion:

- What might be a segment's motivation for action—and is anything unique about that motivation?
- What words resonate with a segment—and is anything unique about those words?
- Who or what might be a segment's trusted sources of information—and is anything unique about those sources?
- What might be the most effective methods of communication for reaching a segment—and is anything unique about those methods?
- How might that segment perceive the preservation and maintenance issue—and is anything unique about that perception?

To help you understand how audience assessment works, review the example audience segmentation results in Appendix C, which show how these questions might be answered for hypothetical segments of



the elected officials audience group. Use this stage of the brainstorming session as a chance to consolidate your list. Make sure audience subsets are really different enough to warrant segmentation. If there aren't characteristics unique to that segment, then consolidate segments within the audience. For example, the interests and motivations of state senators and state representatives might not really be different enough to create separate communication strategies; however, the differences in investment philosophies may differ dramatically within each of those groups.

Step 5: Use Market Research to Validate Your Audience Segment List

On its own, DOT staff knowledge about audiences is not complete enough to reliably segment and assess audiences. Audience segment interviews and other market research will reveal issues, concerns, and suggestions that are not known or understood by DOT staff and clarify assumptions made about audience characteristics.

This step of the audience identification process is covered in detail within the market research building block, which provides options for market research you can use to validate your brainstorming. Remember, your market research effort should be scaled to the objective of your communication effort. If your goal is primarily to educate stakeholders, then conducting stakeholder interviews is sufficient. If your goal, however, is to create a compelling call to action then you will likely need to add a more extensive research effort, which could include conducting statistically valid surveys and focus groups whose design is informed by initial interviews.



Building Block Tie-In: Market Research

Step 6: Refine Segmentation Assessment

After you've validated your audience segment list with market research and summarized the results, team members who developed the initial brainstorm list in Step 2 should gather to refine their initial assessment and to identify overlapping issues and themes. If possible, provide results of the interviews to team members in advance for review along with the original results of the initial audience identification and segmentation work.

You'll likely want to have a facilitator lead this session. It's appropriate at this time to discuss whether additional market research is necessary or would be helpful.

Customization Opportunity

Interest/Influence Matrix—Development of an interest/influence matrix is optional. It provides a more comprehensive audience analysis than a list of audience segments and will help your DOT move toward stakeholder support and coalition building efforts.



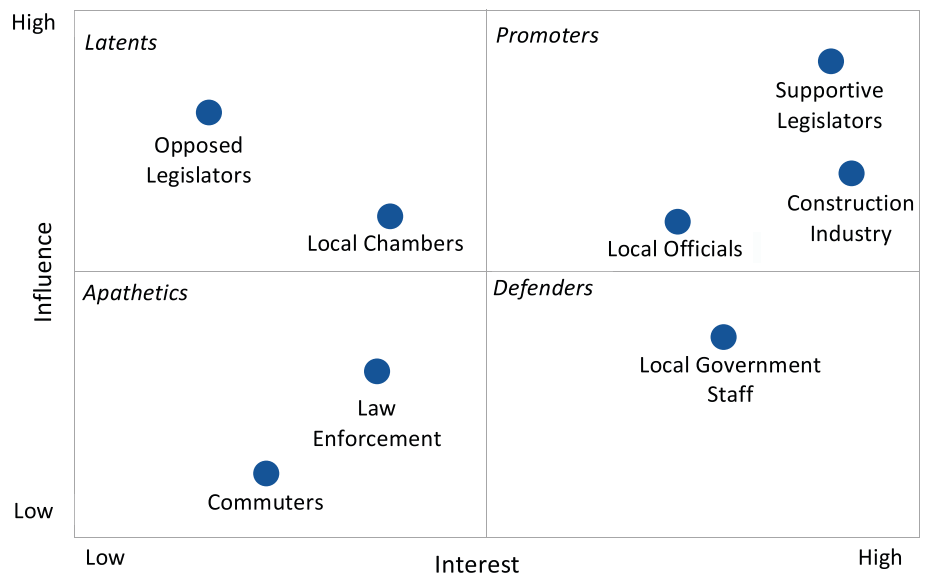
Step 7: Build Interest/Influence Matrix (Optional)

Set the Stage for an Interest/Influence Matrix—When you create an interest/influence matrix, audience segments identified via the basic brainstorming/market research process (Steps 1 through 6) are “mapped” in a matrix that compares stakeholders’ interest levels relative to their influence. The concept of an interest/influence matrix is shown in Figure 2. This matrix can be an invaluable tool for helping prioritize communication efforts. You may want to consider expanding the team for this exercise. At least a few of your participants should have a broad understanding of the relationships between audience segments; this perspective may not have been present in earlier working sessions.

Build Interest/Influence Matrix—Using the audience segments you’ve already identified, assessed, and based on stakeholder interview results if available, map stakeholder segments according to their interest level in preservation along the horizontal axis. Do this by assigning stakeholder groups a score according to the strength of their support for, or interest in, preservation. Scores can range from one to ten: for example, assign a score of one for a group that is opposed to preservation (or perhaps, more generally doesn’t support transportation funding or might want to decrease transportation funding to help address the state budget deficit); assign a score of five for an audience that is not interested in the topic of highway preservation; and assign a score of ten for a segment that is highly supportive. This process provides a visual impression of the “lay of the land,” illuminating clusters of groups that support, oppose, or are indifferent to preservation issues. This exercise demonstrates why it is important to conduct more than one stakeholder interview for every audience segment.

Next, map stakeholder groups along the vertical axis according to the strength of their power and influence on issues that are important to preservation. A one to ten scale should be used here as well.

Using the interest and influence scores described above, you can create a matrix that maps the two together. The audience interest/influence matrix helps you swiftly identify audience segments that are likely to support the need for highway preservation and can significantly affect the process. To guide strategic communication and support building efforts, audience segments are categorized by their interest and power in


Figure 2. Hypothetical Audience Interest/Influence Matrix


a grid according to four distinct groups: promoters, defenders, latents, and apathetics:

- **Promoters**—Audience segments that attach a high priority to preservation and whose actions can have an impact on the implementation.

In terms of preservation, promoters external to the agency are most likely to be construction contractors and industry material suppliers. Clearly, they attach a high priority to preservation due to business interests and these groups regularly exert influence in the political arena. They can be very helpful partners in delivering messages to elected officials but, because of their business interests, may not be credible spokespeople to the general public. Because these groups are most effective in their conversations with elected officials, it's most helpful to provide them with very clear and short messages about the need for preservation and its impact on the state's economy. Assume that whatever you share with them will be shared with legislators and prepare that information accordingly.

Another external group that is likely to be interested in preservation and able to exert influence is legislators who are often particularly concerned about transportation issues. Legislators typically respond best to short, concise messages—tailored specifically to provide information relevant to their constituents—best delivered face to face so you can answer questions or provide more context if the legislator has time available to meet with you.

For audiences internal to the DOT, the leadership team is expected to fall in the promoter category for preservation. However, if their

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interests don't match up with their influence, it will be important to try to convince them of the value of preservation and perhaps move them into the promoter category. Some example presentations geared toward an internal executive audience can be found in Appendix A.

- **Defenders**—Audience segments that attach a high priority to preservation, but whose actions do not significantly affect implementation.

This group might be made up of local government staff. The trick here is to help this group see beyond “preaching to the choir” and try to leverage relationships they have with state legislators. Arm them with specific information for their community or region so that they then have information that they can share with legislators effectively. DOTs typically have the opportunity to meet with local government staff through association meetings like those sponsored by the American Public Works Association; providing coaching at that time can be very helpful although it's important to follow up with area-specific information.

- **Latents**—Audience segments whose actions can affect the implementation of preservation, but who attach a low priority to the issue.

Commuters are a great example of an audience that you might be able to shift from latent to promoter if you can educate them about the consequences of not adequately maintaining the highway system and then motivate them to contact their legislators. The trick here is to make messages super easy to understand and deliver those messages in a surround-sound sort of way.

You could also include some legislators here—and along a continuum; for example, those who have taken “no taxes” pledges or are trying to reduce state government expenditures could attach high priority to the issue and seek to minimize investment in preservation thereby negatively affecting implementation. If that's the case, it's important to mobilize your promoters to counteract their actions behind the scenes and become much more vocal in your efforts to publicize the need for preservation.

- **Apathetics**—Stakeholders whose actions do not affect the implementation of preservation and who attach a low priority to the issue.

Uneducated and unmotivated commuters are a great example of apathetics when it comes to preservation. Your challenge, as outlined in the above bullet, is to educate and motivate them to action.

The audience/influence matrix can be a powerful tool to identify and focus on the key audiences that both care about preservation and have the ability to influence the opinion of others. However, you shouldn't



focus on just the promoters; you should also try to find ways to engage high-influence, but moderate- or low-interest audience segments who may be on the fence about highway preservation.

Audience Identification Conclusions

Audience identification is an underutilized component of most DOTs' communication practices. You should start early to identify and segment audiences so you can find out more about what motivates them to action, what words resonate with them, who their trusted sources of information are, and which methods of communication are most effective for reaching them. Audience identification is the foundation for message development and delivery.

The interest/influence matrix technique for mapping audience segments according to their level of interest in preservation and their ability to influence outcomes helps you focus on moving audience segments into the top right corner of the matrix and keeping them there—these are the medium- or high-interest/high-influence audience elements and they include:

- Stakeholders who are already supportive but need buttressing with resources and information and
- Stakeholders with enough common interests to become part of a support coalition.

Think of this group as the basis from which to develop an ongoing coalition of support for maintenance and preservation.

Identifying and segmenting audiences is a relatively straightforward process that enables a DOT to hone its messages and message delivery mechanisms. Some of the most common mistakes to avoid include the following:

- **Oversegmenting**—Make sure audiences are really different enough to warrant segmentation. For example, are the interests and motivations of state senators and state representatives really different enough to require separate communication strategies?
- **Underestimating the Value of Audience Identification**—DOT staff may not know how, or when, to conduct a stakeholder analysis, or they may think they already know all they need to know about stakeholders and therefore can see no benefit from doing stakeholder analyses.
- **Penny-pinching on Resources for Audience Identification**—The truth is that audience identification and segmentation is actually relatively inexpensive in terms of time and resources when compared to the cost of potential failure, so don't skip it!

4. Message Design

“Creation of communication materials is as much an art as a science.” This was the finding of the 2009 Parsons Brinckerhoff-authored report *Making the Case for Transportation Investment and Revenue*. In that study, the authors found that “in an era of fierce competition for attention ... messages [must] be both concise and compelling.” The study also noted that transportation professionals often resist this approach, preferring a more comprehensive and technical strategy.



The lesson for your DOT is that effective preservation messages should be built on a strong analytic foundation, but, to cut through the clutter, they must also be succinct and resonate with the audience on an emotional level. Some basic tips for creating good messages are shown in the discussion block “How to Make Messages that Stick” on page 31.

The preservation messages that will work for your DOT will be driven by many variables that are unique to your agency, such as infrastructure condition, available revenues, customer values, political environment, and the DOT’s technical capabilities. No single message or group of messages will work in every state or in every situation, but, in this chapter of the Playbook, a simple set of message content creation steps is provided that will help you create customized messages of your own.

Checklist of Critical Activities

- Survey existing messages
- Consider your DOT’s environment
- Adapt technical information for use in messages
- Translate data into messages by factoring in your customers’ values
- Seek out strategic tie-ins with other messages from your DOT



Step 1: Survey Existing Messages

Chances are your DOT already has several preservation messages. Before creating new ones, gather any already in use. Do not only search for messages, but also try to explore how preservation is being discussed inside and outside your agency. This will give you a baseline from which to further develop and enhance messages. Look in the following places, among others, for existing messages that offer a foundation for your efforts:

- **Long-Range Transportation Plan Materials** often discuss the long-term preservation needs of the transportation system and include relevant facts, data, and graphics.
- **Strategic Plans or Visions** will often identify system preservation as a priority and provide an agency-approved discussion of why it is important.
- **Annual Reports** can discuss system preservation in a variety of ways including performance, projects, program spending, and needs.
- **DOT Performance Measures** almost always include measures related to system preservation and provide lots of data and visualizations.
- **Presentations** given by agency staff to external audiences such as industry partners, elected officials, or other groups often include messages about system preservation.
- **Other Preservation Communication Materials**, such as brochures, press releases, and videos.

You will also find it helpful to coordinate with others within the DOT to see what preservation messages they may be using:

- **Public Affairs Staff**—Are there any preservation messages they use in press releases, presentations, brochures, videos, or project-specific materials?
- **Performance Measures Staff**—What measures are being used and how are they being communicated?
- **Asset Management Staff**—How do they describe the preservation needs and the importance of infrastructure preservation?
- **Executive Director's Office**—Does the secretary or director talk about preservation needs often? If so, how do they do it?

How to Make Messages that Stick

Today we are bombarded by thousands of messages a day. DOTs must cut through the clutter and deliver preservation messages that resonate. Four basic principles underpin messages that stick. The Penny Paved theme and USDOT's Click It or Ticket message provide good examples of these principles at work:

Be relevant: Audiences should relate to the message. They should instinctively agree with the premise and feel that the message is directed toward and applies to them.



Offer a call to action: The message should inspire the audience to do something or feel a certain way.

Stay positive: Don't turn off your audience with negative messages that criticize or invoke fears; try to inspire.



**A PENNY PAVED
IS A PENNY EARNED**

Be engaging: Messages should draw attention and be interesting to the audience; otherwise, they will be ignored and forgotten.



Building Block Tie-Ins: Market Research, Audience Identification, Message Delivery

You will wish to consider the other building blocks as you are beginning message content design:



Review Audience Identification Efforts to determine how your key audiences might affect the messages you create. A basic understanding of whom the messages are intended for plays a critical role in content development. Evaluate the intended audiences based on their interests, technical and historical understanding of preservation issues, and what motivates them.



Review any Existing Market Research, incorporate it into message content, and determine if any additional market research is necessary. At this early stage of content development, a broad review of existing research can inform how audiences perceive issues of infrastructure preservation. If a particular audience has been identified for which no market research currently exists, some simple market research, such as stakeholder interviews, might be helpful.



Consider the Most Likely Message Delivery Methods and their impacts on message design. In the early stages of content development, you don't need to identify and select a comprehensive list of intended message delivery methods; however, you will probably find it helpful to at least consider what the most likely methods of delivery might be. This will benefit the content creation phase by informing the type and level of detail that will likely be needed.

Step 2: Consider Your DOT's Environment

At the outset of message development, think about how the content of your preservation messages could and should be shaped by state-specific situational factors:

- **Credibility with Audiences**—Do your audiences trust the DOT? It's never a bad idea to include content that builds credibility with audiences, but this can be particularly important if your agency faces a lack of trust. You can build credibility in part by including messages that show how the DOT is using its resources efficiently or that show how your audience's values correspond directly with the DOT's commitments to infrastructure preservation.
- **Infrastructure Condition**—The condition of the transportation system itself can have a direct impact on the types of preservation messages you develop. Messages about a system in good condition could vary greatly from those about a system that is severely deteriorated. The historical trend of system condition could also affect the message.

Customization Opportunity

Environmental Factors—Aligning messages with the specific environment in which your DOT operates is the first major opportunity you have to customize your message. Consider situational factors when you develop a message so that it accurately represents and addresses the issues that your DOT is facing and it is framed in a tone that resonates well.



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- **Funding Levels**—Not all preservation messages are related to funding, but they are often developed with the intent to secure new funding, to protect current funding, or just to provide input into programmatic allocation decisions. If a message is targeted toward influencing funding decisions, an understanding of how the current funding situation relates to preservation needs is important.
 - **Technical Capabilities**—The level of technical expertise available in your DOT can affect your approach for developing preservation messages. Some DOTs have robust asset management programs that can be used to estimate program needs and to support project selection criteria. Others are able, in addition, to provide scenario-based predictive estimates of system conditions. The level of sophistication of these and other technical tools, as well as the faith that the agency has in them, will shape the options available to those developing preservation messages. For more on this subject and to see example messages based on technical input, see Step 3.
 - **Size of System**—The size and nature of the system your DOT oversees will affect your message. Some states have responsibility for a relatively modest fraction of their state’s highways and bridges, but others are responsible for nearly every public road mile within a state’s borders. The scope of this responsibility could very well affect the scale of the preservation challenge and the tone of the messages themselves.
 - **Reasons for Infrastructure Deterioration**—Every DOT faces variations in climate, geomorphology, and traffic conditions that uniquely affect the way their transportation facilities deteriorate and subsequently how they are preserved. This point is a subtle one, but there may be opportunities for some DOTs to bring this element into their preservation messages.



Step 3: Adapt Technical Data for Use in Messages

Your DOT is rich with technical expertise, data sets, and analysis methods that provide a strong foundation of facts from which to build communication messages. This expertise is particularly well established in the arena of infrastructure preservation, so take advantage of it!

Converting technical data into simple and coherent messages is challenging, especially considering that those with the engineering expertise are often not the ones crafting or delivering the messages. It requires open communication and a trusting relationship between those with the technical knowledge and the communicators that will create and deliver the messages. The communicators must rely on technical experts to provide sound and trustworthy information and the technical experts must trust that the communications staff will use the information in an appropriate manner and in the proper context. In this section, some of the commonly available classes of technical data that you will find most useful for supporting your communication about preservation are described; please note that data referenced in this section is used for illustrative purposes—you will need to collect specific data for your own state:

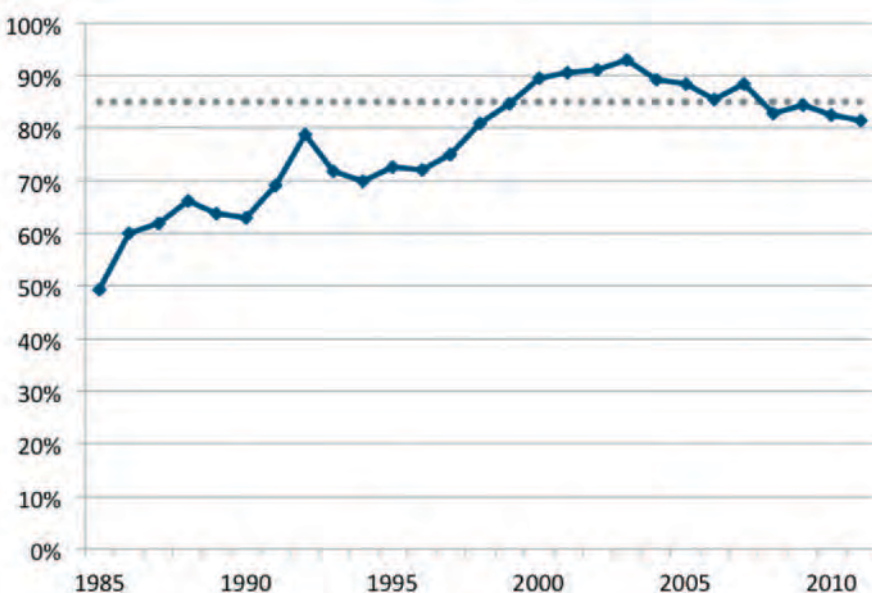
- **System Attributes**—Facts about the size and scope of the transportation system are often used in preservation messages. Describing the number of highway miles or bridges can give a sense of your transportation system’s scale and importance. Identifying the age of your transportation system or its elements can convey the historical significance of the system and the sense of urgency that is required to protect these critical infrastructure investments. Examples include:
 - “The average bridge age is 33 years old and carries 21,000 vehicles a day”;
 - “State highways accommodate 1.5 million miles of travel every day”; and
 - Illustrative maps such as the one in Figure 3 from the Montana DOT.
- **System Condition**—DOTs are awash in data about the condition of their transportation systems. All states measure pavement smoothness, bridge conditions, remaining asset life, and many other system condition attributes. As a result, nearly all system preservation messages include or are underpinned by these facts. Your DOT’s system condition data can help communicate how condition relates to customer expectations, how the condition has improved or declined over time, and the scale of the preservation task at hand. Examples include:
 - “750 miles of highway are in poor condition”;
 - “26 percent of bridges are structurally deficient”; and

Figure 3. Montana Highways Last Reconstructed Before the 1960s



- Asset condition charts like the one in Figure 4 that comes from the Penny Paved campaign.
- **Economic Value**—Conveying how the transportation system provides economic value to communities is becoming increasingly important to DOTs. This information is usually compiled through the use of an economic modeling package, case studies, and industry-standard economic multipliers. These relationships can convey a sense of the importance of your transportation system and therefore imply the importance of preserving it. Examples include:

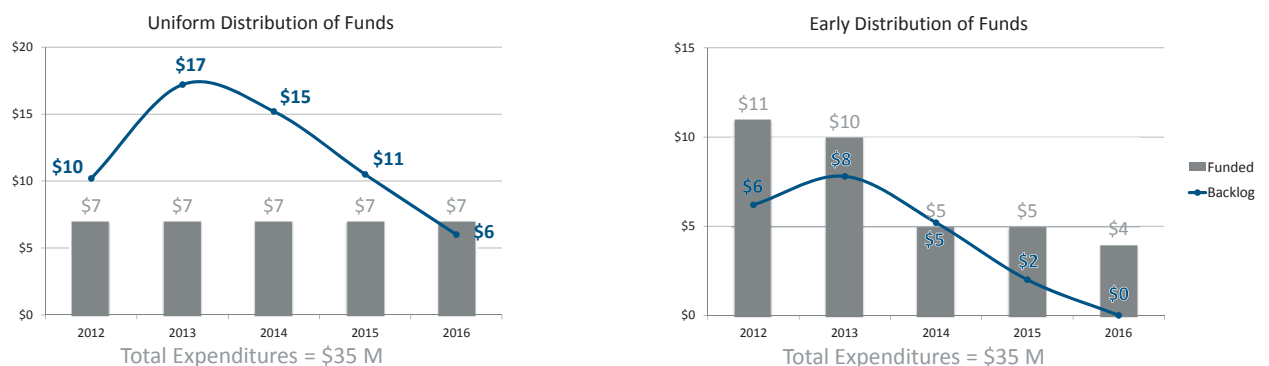
Figure 4. Percentage of Pavement in Good Condition (Example)





- “According to the Federal Highway Administration, every \$1 billion invested in preservation supports 27,800 jobs in the state”;
 - “The asset value of the US highway system is estimated at \$17.5 trillion”; and
 - “Five months’ groceries for a family of four. A year’s worth of textbooks for a college student. One thousand sixty dollars. That’s how much inadequate infrastructure spending cost the average American family last year.”
- **Asset Management Data and Models**—“Transportation asset management” is defined as a strategic and systematic process of operating, maintaining, upgrading, and expanding physical assets effectively through their life cycle. The data and analysis techniques used in asset management can often provide information about your current system conditions; the costs of maintaining and preserving existing assets; the predictive conditions of the system based on any number of funding scenarios and management strategies; and the optimum timing of necessary preservation, rehabilitation, and reconstruction actions. The analytic methods used in asset management are often complicated and can be difficult to translate into a simple message, but when it is done effectively it can make a compelling case for system preservation. Examples include:
 - “The number of highway miles in poor condition is anticipated to increase from 750 to 1,900 by 2020 without additional investment” and
 - Examples of how funding distribution matters, such as the graphics in Figure 5 from the Penny Paved campaign preservation presentation.
 - **Performance Measures and Targets**—Most DOTs have established performance measures and targets in the area of system preservation, and they often are developed in a way that results in a clear and simple measure that can be communicated effectively

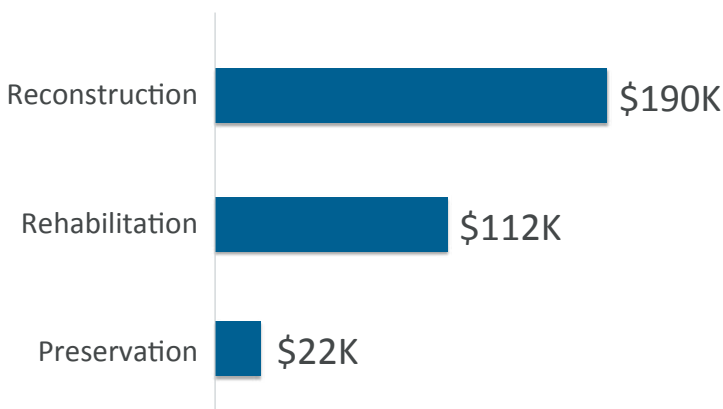
Figure 5. Impact of Funding Distribution on Preservation Backlog (Example)



to customers. In addition, public expectations are often among the considerations when establishing measures and targets, providing a good opportunity to relate the technical data to the customer. Examples include:

- “78 percent of the state’s bridges are in good condition” and
 - “Citizens have told us they expect 90 percent of the state’s major roads to be in good condition, which falls perfectly in line with our targets.”
- **Needs Versus Revenues**—DOTs often communicate about preservation in terms of the costs of system preservation needs versus projected available revenues. This information can imply the scale of the challenge that DOTs face, particularly if preservation funding falls well short of expected needs. An explanation of the elements that have contributed to the increased costs of preservation, such as inflation and stagnant revenues, can also be effective. Examples include:
 - “\$500 million is needed over 10 years to repair and replace major bridges” and
 - “Since 1997, revenues have grown by 36 percent, but asphalt cost per ton has increased by 97 percent, concrete by 48 percent, steel by 57 percent, and fuel by 204 percent.”
 - **Life-Cycle Cost Data**—Some DOTs have developed messages around explanations of preventative maintenance and its life-cycle cost benefits, such as how it is cheaper to preserve a road than to rebuild it and how spending the right amount now saves money in the long run. Examples include:
 - “\$10 million in preventative maintenance is the equivalent of \$125 million in rehabilitation and reconstruction” and
 - Charts demonstrating how preventative maintenance is more cost effective than rehabilitation or reconstruction, such as the one in Figure 6 from the Penny Paved campaign.

Figure 6. Preservation Costs vs. Reconstruction and Rehabilitation Costs (Example)





Step 4: Translate Data into Messaging by Factoring in Your Customers' Values

Data by itself, even data that has been translated into a simple and clear message, rarely resonates. The best messages do not rely entirely on the numbers; instead they build on data to tell a story in a way that resonates with audiences personally and emotionally. As Maslansky Luntz + Partners say in *The New Language of Mobility*:

“The discussion should be about the benefits you can add to people’s daily experience. If you can convince them that you’re providing them with real value, like more efficient roads and highways, they’re willing to pay a price for it.”

Building Block Tie-Ins: Market Research, Audience Identification



Cutting through the clutter requires you to find ways to cast the message so that it aligns with the values of the intended audience. You must know your audience and build from market research to create a message that fits.

The following actions can help you use data effectively in your message:

- **Find Instances Where Customer Expectations Align with Targets and Priorities**—Using market research, you should aim to figure out where customer expectations align with what your data says. Through simple surveys, prioritization exercises, or use of more elaborate techniques like the road rallies used in Kansas and Missouri¹, you can craft messages that demonstrate people want their roads preserved. Examples include:
 - “Citizens have told us that they expect 85 percent of Interstates to be in good condition, and this aligns with our performance targets” and
 - “We’ve traveled the state and talked to thousands of people and one thing is consistent no matter where we go. Preservation of the existing system has to be our number one priority.”

¹“Road rallies” are an approach used to gauge stakeholders’ perceptions about pavement conditions by taking them on carefully monitored van trips along roads in different states of repair and tracking their reactions.

- **Incorporate What People Want and Expect from Their Government**—Maslansky Luntz + Partners’ work says that DOTs should use language that reflects what people expect from their government. The words they use are “smart,” “efficient,” and “modern.” You should seek to cast preservation messages in this light where possible. Examples include:
 - “We are on the cutting edge in terms of pavement preservation techniques. We are using pavements that cost less and last longer” and
 - “We are using computer models to optimize our resources and get the biggest bang for our preservation buck.”
- **Invoke the Broad Values of the Audience**—Although what is important to individuals varies, it is possible to find values that can speak to large swaths of an audience. These values will vary from place to place; what works in California might not resonate in Louisiana, and what works in an urban environment may differ greatly from what speaks to people in rural areas. One example from a state DOT is:
 - The Kansas DOT discovered Kansans were proud that their highways were rated as some of the best in the country. The DOT was able to effectively capture this sentiment in a preservation message with the phrase “We must protect our past investments.”
- **Communicate at a Personal Level**—Large numbers can provide a sense of scale and introduce a concept, but, for people to remember the message, it must mean something to them on a personal level. This concept can be incorporated into preservation messages. Examples include:
 - “Bad roads cost the average family over \$335 per year in car repairs and wasted fuel” and
 - “Inadequate infrastructure spending cost the average American family as much as a month’s groceries last year.”

Step 5: Seek Out Strategic Tie-ins to Other Messages

Your preservation messages must compete for attention with other messages from state governments and even with other messages from the DOT itself. One way to elevate the issue of preservation is to broaden the scope of the message and find ways to mesh preservation with other initiatives that are receiving more attention. Every mention of preservation helps and, by blending the preservation story with other high-profile initiatives, DOTs can strengthen support and awareness for preservation without demanding the spotlight.



The ways you might weave preservation into other messages that are important to your agency and state will vary greatly depending on the unique and specific circumstances your DOT faces. No strict formula exists for how to blend the message of preservation in, and it can require an awareness of the issues and a creative approach. Below are a few examples that illustrate how it might be done with today's more popular issues:

- **Jobs and the Economy**—Include references to the idea that preservation of our roads and bridges is essential to keep goods and people moving and that this is vital to growing the national, regional, or local economy.
- **More Efficient Government**—Mention that preventative maintenance of our transportation system saves money and prevents the waste of taxpayer dollars.
- **Sustainability**—Describe the process and benefits of recycling pavement and materials.

Message Design Conclusions

Every DOT already collects immense amounts of technical data about preservation; your goal should be to become better at using this information to create concise and compelling messages that not only deliver facts, but also appeal to the emotions and interests of your most important audience segments, and work in multiple delivery channels.

Message design can be a fun but challenging process that enables a DOT to move from possessing technical information to changing attitudes and building support. The following mistakes are some of the most common to avoid:

- **Getting Too Technical**—Messages about preservation invariably build on data that is extensive and complex; you must work hard to transform it for your audiences and remember—they don't usually share an interest in, or technical understanding of, this data;
- **Going Too Negative**—The best messages don't use fearsome scare tactics to alarm (although a gentle nudge may be needed), but tap into aspirational behavior, i.e. "we want to be proud of our roads" not "our bridges are falling down."
- **Lacking a Call to Action**—Don't forget to give audiences a sense of how they can influence the future, i.e. a call to action.

5. Message Delivery



No matter how clever your preservation messages are, without the right delivery tactics, they won't reach the minds of your audience at the right time and motivate them to action. This is true whether you're trying to elevate preservation's priority within the minds of DOT leadership or to raise awareness with the public at large. The volume of messages Americans receive each waking hour continues to skyrocket and DOTs that deliver preservation messages on autopilot are likely to find few paying attention.

Luckily, message delivery options come in many shapes and sizes. This chapter of the Playbook explores practical delivery options and tactics for packaging your preservation messages so they get heard, seen and remembered. Today, getting heard and remembered either inside or outside of your DOT requires building a surround sound presence for your messages that establishes a constant drumbeat across multiple delivery channels ranging from one-to-one conversations, speaking engagements, press articles, and editorial opinions to blog entries, social media conversations, and websites.

Unfortunately, the 2011 DOT survey results (Appendix D) suggest most DOTs stick with a limited palette of tried and true message delivery options: 96 percent of the DOTs responding say they use press releases and 84 percent use presentations, but only 40 percent use YouTube and even fewer use blogs. With the resulting irregular drumbeat, preservation remains largely off the radar screen for all but the DOT community's most interested stakeholders.

This chapter presents a step-by-step set of message delivery guidelines for helping you get started on expanding the ways you get your preservation messages out using a combination of:

- Internal buy-in on the importance of preservation;
- Direct audience contact strategies;
- Traditional media strategies, particularly brochures and print and broadcast media; and
- New media strategies based around online communication tools.

Message delivery goes hand-in-hand with message creation. Most messages feature a combination of visual, narrative, and detailed technical attributes. Depending on which aspect your message favors, you will find some message delivery methods work better than others.

None of the message delivery options discussed in this chapter of the Playbook are particularly costly; however, they all take staff time to do well. You should expect to invest significant amounts of staff time if you move forward with an integrated surround sound approach to message delivery.



Checklist of Critical Activities

- Create foundation with internal message delivery strategy
- Create or refine direct audience contact strategy
- Create or refine traditional media strategy
- Create or refine new media strategy

Step 1: Internal Message Tactics

Most of this Playbook’s guidance is about communicating beyond the doors of your own state DOT. However, achieving early buy-in about the importance of preservation from key DOT policy- and decision-makers is a vital precursor to taking your messages public. By securing leadership support for your preservation communication strategies, you can ease the challenges of securing resources to support large-scale external message delivery tactics. You can also secure the roles of your agency’s leaders as vital advocates for preservation who are actively engaged in subsequent message delivery efforts.

In contrast to delivery of external messages, delivery methods for internal messages targeted to DOT staff are likely to be rougher and more informal. The primary task of message delivery in this foundational step is to reach and engage senior leadership in a positive conversation about preservation; slideshow and fact sheet materials are a natural aid in this process. Internal forums that may provide appropriate opportunities for delivering messages include regular executive leadership meetings, strategic plan development meetings, long-range plan development meetings, or district-wide staff meetings. Both of the Playbook’s campaign scenarios in Chapter 1 provide templates for internal slideshows and handouts, which are included in Appendix A.

Unlike your materials for external audiences, internal presentations may get more in-depth about the rationales for your agency’s preservation policies. Your internal presentations and fact sheets should have sufficient detail to help build the case for moving forward and to nurture a set of DOT personnel who can carry the message for the agency.

Building Block Tie-In: Audience Identification



Identify Desirable Audience Segments—Be sure you know which audience segments you wish to target and save direct audience contact primarily for high-impact, high-interest audience segments and high-impact, but low- or moderate-interest audience segments who can be shifted to the former group. These groups most typically include supportive state legislators, receptive local government leaders, business leaders, and local elected officials. The audience identification chapter of the Playbook provides lots more ideas about how to identify audience segments.

Step 2: Create/Refine

Direct Audience Contact Strategy

Message delivery options for direct audience contact are easy to implement, low cost, and very much a part of successful preservation message delivery; they range from formal speaking engagements to looser formats like open dialogue sessions or “closed door” meetings. If used on a regular basis, direct audience contact is a powerful delivery tool because no filter comes between you and the audience, you usually have time to explain your message in depth, and you get immediate feedback on whether your messages are working.

At many DOTs, direct audience contact is already the primary method for delivering preservation messages and this step is about refining strategy. Depending on the scale of preservation as an issue in your state, you may wish to undertake intensive, dedicated direct audience contact efforts or you may opt for a lower intensity strategy of piggybacking them onto other direct audience contact efforts.

If you plan carefully, direct audience contact tactics will round out other elements of a surround sound message delivery package. Remember, however, that direct audience contact can be time and labor intensive, so you need to reach the right people. Don't save direct contact efforts only for high-influence/interest audiences; use them to help sway high-influence, but moderate- or low-interest audience segments who might be on the fence about highway preservation.

You should consider direct audience contact to be among your essential baseline delivery methods for any preservation message. The secret to success is to field an agency-wide team of messengers who know how to sing from the same sheet music and repeat their message regularly:

- **Tap Suitable Messengers**—Think about who within your agency should be tapped as spokespeople to deliver preservation messages, based on their credibility outside the agency and their range of contacts. Obvious candidates include your secretary, chief engineer, and district engineers. Other important messengers may include public affairs staff, the legislative liaison, and technical staff in maintenance and operations roles. Don't stop at the doors of the DOT: third-party spokespeople like business leaders or a supportive governor may be willing to carry the message; local government public works directors or metropolitan planning organization (MPO) staff may also be credible messengers who help you reach a bigger audience and—perhaps more important—get your message repeated. Spokespersons should be:
 - Well versed regarding the preservation message;
 - Familiar with all the campaign tools provided; and
 - Credible, prepared, accessible, effective communicators.



- **Seek Out Speaking Opportunities**—Engagement opportunities for reaching your audience directly vary widely; look for opportunities not just in the state capitol, but across the state:
 - Feature Preservation at “Grasstops” Forums—Your strategy should emphasize regular contact with grasstops audiences, either as special preservation events or as part of other functions. These are the transportation leaders and organizers in a community who are connected to different constituencies. They have lots of resources at their disposal and are in a position to make a pivotal change happen through their positions in the community. Look for opportunities to piggyback preservation messages on events with these groups. In Texas, for example, the annual Texas Transportation Forum—now in its sixth year—creates a unique environment for attendees from public agencies, industry groups, advocacy organizations, academic institutions, and the political sector to examine and exchange ideas regarding the future of transportation in Texas and the forum regularly includes presentations on preservation issues.
 - Feature Preservation at Grassroots Forums—Your strategy should also include grassroots outreach. If grasstops support forms the apex of the audience pyramid, grassroots support from a broad cross section of the public forms the wide base of support for the pyramid. Community forums and town hall sessions allow you to deliver your DOT’s message on maintenance and preservation directly to citizens, with no filter or editorial commentary. Hosting town hall meetings on maintenance and preservation allows you to engage local officials, community and business leaders, parents, and local policymakers on this important issue, while demonstrating that all stakeholders play a role in the preservation of transportation infrastructure.
 - Feature Preservation at Partner Forums—DOTs work with many partners to ensure adequate maintenance and preservation of their highway systems. Natural partners to meet with include local governments, MPOs, construction businesses, freight haulers and logistics firms, and road users groups. It is critical to have the ongoing support of these stakeholders. Participate in regular meetings with partners across the state, updating them on preservation and maintenance efforts and highlighting how they can continue to be involved. These discussions can occur at regularly scheduled conferences and meetings of such partners or can be scheduled separately.

California’s Pavement Preservation Task Group (PPTG) is a good example of a forum where California’s state DOT can share preservation messages with its partners. The PPTG includes representatives from the California Department of Transportation (Caltrans), local government, industry, and the Federal Highway Administration (FHWA). It describes

itself as a “partnering platform for all issues related to pavement preservation.” The PPTG meets about twice a year. Another example is Wisconsin’s Transportation Development Association, which is a statewide alliance of 400-plus transportation stakeholders that has as its mission development and maintenance of a strong, interconnected transportation network that will support a robust economy and enhance the quality of life for everyone in Wisconsin.

- **Mix in Other Media Delivery Methods**—When planning a public or stakeholder event, consider how to best create lasting impressions of your messages: Public and stakeholder meetings often work best when supported by other delivery mechanisms—perhaps showcase a new video or provide a leave-behind fact sheet; be sure to mention your website and blog if you have one. Press releases can be used to announce upcoming events.
- **Provide Slideshows and Talking Points**—To keep control of your message in a direct audience contact setting, you will want to assemble slideshows and/or talking points for your messengers. These message delivery tools help keep the conversation focused on the message and ensure it is delivered as clearly as possible. The content of slideshows and talking points will vary by audience, but it is likely to include more detail than you put into your new or traditional media strategies.

The National Center for Pavement Preservation, for example, has developed a presentation that communicates the cost-effectiveness of a preventative maintenance philosophy, which it succinctly describes as “applying the right treatment, to the right pavement, at the right time.” The presentation makes effective use of clear graphics to illustrate how preventative maintenance assures lower life-cycle costs and better pavement condition.

Both of the Playbook’s campaign scenarios in Chapter 1 include templates for external slideshows, which are included in Appendix A.

Customization Opportunity

- **Level of Effort**—If preservation is a major issue in your state, dedicated presentations, slides and fact sheets make sense, but if preservation needs are manageable then piggybacking on other issues makes sense.
- **Take Advantage of Unique Opportunities**—Tie in your direct audience contact tactics to unique but related efforts such as development of a new long-range transportation plan, annual program development outreach, or legislative activities to raise funding for transportation.
- **Working with Partners**—Partner up with strong grassroots or grassroots organizations that share a common interest in preservation.
- **Tie in to Other Delivery Methods**—If you have strong traditional or new media delivery mechanisms, don’t be afraid to link them with your direct audience contact tactics, e.g., use press releases to promote events, then write about them afterward on your DOT blog. Another idea would be to include a YouTube clip in your presentation.





- **Blend Preservation Messages into Other Events—** Maintenance and preservation of highways casts a wide shadow, with real impacts on and benefits for travel safety, mobility, and economic development. DOT officials can, where appropriate, refer to preservation messages in public speeches, thus strengthening the linkages between preservation and a given issue with the media, the general public, and specific audiences.

Step 3: Create or Refine Your Traditional Media Strategy

Traditional media strategies range from printed fact sheets and brochures to orchestrated media events designed to land stories in newspapers and on radio and television stations that have delivered information to our communities for decades. The continued power of traditional media as a communications medium necessitates that you include them as a core delivery method for your messages.

Traditional media—such as newspapers or television channels—confer status on your messages because they offer recognizable and credible branding. They also offer the potential to reach a much larger audience than direct audience contact or new media methods. Furthermore, traditional media often feeds new media, i.e., blogging and other new media channels often focus on what is going on in traditional media. If your DOT’s message airs in traditional media, it is likely to catch the attention of social media as well. Alternatively, you can post in your own blogs and in social networks about stories appearing in traditional media.

Traditional media message delivery methods are well suited to transmitting your messages in visual or succinct narrative formats; they are less appropriate for detailed technical explanations. Here is how you can put traditional media to work on your messages:

- **Print Materials—**Brochures and fact sheets are a great way to summarize your message, particularly if you don’t have a chance to speak directly with your audience. They are often used as leave-behind materials at direct audience contact events, but they can also be mailed or emailed to a wide audience and posted on your website.

Print material’s content and style can be geared to a general audience or customized to audience segments and they work well for either highly technical information or a general overview. Good design and high-quality printing strengthen the effectiveness of printed products as a delivery mechanism. Print materials can be informative and inexpensive and allow messages to be left with the recipient. Printed materials are typically either mailed or handed out at various meetings, public places, or events. Be sure to have a plan for distributing materials—whether via mailing lists for targeted audiences or forums—otherwise printed materials will be a waste of money. Print materials also provide an opportunity to

Communicating the Value of Preservation: A Playbook

direct audiences to new media communication channels like your website or a news-sharing service.

Some examples of print materials from DOTs and other organizations are included in Appendix B. ASCE has prepared a series of infrastructure condition fact sheets that are among the best-known and most compelling examples of print materials that address preservation issues. An eight-page brochure prepared by the Missouri DOT (MoDOT) makes the case for greater preservation funding by likening the consequences of an anticipated shortfall in Missouri's transportation funding to falling off a cliff that will lead to drastically eroded highway conditions. In addition, Appendix C includes templates developed as part of the Chapter 1 campaigns.

- **Media Releases and Events**—Use media releases and events to launch a specific new communications initiative or to sustain interest in preservation stories on an ongoing basis. Your DOT's public affairs staff can help you design media events that create or sustain interest among traditional media in your messages; however, you have to provide new information or a new “angle” on an issue to receive ongoing attention in traditional media.

This is a time to get creative in how you tell your preservation story: Maybe you've just experienced an unusually harsh winter and you can showcase the damage your highways have sustained. Or perhaps a study has just been conducted showing that your state has significantly improved or fallen in national performance metrics. Examples of actual DOTs' press releases are included in Appendix B; in addition, Appendix A includes press release templates developed as part of the Chapter 1 campaigns. Combining some or all of the following types of media releases will increase your DOT's exposure to audiences and help them better understand your story—and using print materials or advertising at the same time can increase the effectiveness of your media event:

- **Print news releases**—Press releases represent the standard approach for providing information to traditional media outlets. Well-produced news releases provide a succinct version of the details about the story's “who,” “what,” “when,” “where,” and “how,” so they can be picked up for publication or radio broadcast. Examples in Appendix B include press releases for Minnesota DOT's launch of its Better Roads for a Better Minnesota program; Tennessee DOT's 2011 national award for its preservation program; the Building America's Future Education Fund's Falling Apart and Falling Behind report, and others.
- **Video news releases**—Video news releases are becoming a more common type of news release. It is a short (20 to 60 second) video that promotes a particular event or issue and is distributed to television news organizations. Most news directors, however, prefer “B roll” or “B clips” that present



background video footage, which can be voiced over from an accompanying fact sheet. As an example, Kansas DOT released “The Rough Road Ahead,” which is a 4-minute video press release—distributed via YouTube—that warns about the importance of additional funding for keeping the state’s highways in good repair. The video includes narration, footage of preservation work, compelling statistics, simple graphics, and remarks from the secretary of transportation.

- **Press conferences**—Your DOT can include preservation in regular press conferences and briefings. Citing the importance of preservation in answers to questions on transportation safety improvements or economic development keeps the issue visible. If there’s a new problem, success, or issue to highlight related to preservation, your DOT may hold a press conference. The City of Los Angeles, for example, recently held a press conference featuring the Los Angeles chamber and Mayor Antonio Villaraigosa calling upon Congress to act to “fix our aging infrastructure and to fund transportation.”
- **Op-eds and Editorials**—Writing and having op-ed pieces and letters to the editor published allows you to get your DOT’s message to key audiences virtually unfiltered by the media. In addition, plan to meet with newspaper and television station editorial boards to discuss preservation and maintenance issues. If those boards don’t understand the financial constraints of your DOT, you are much more likely to be the target of negative editorials about insufficient preservation and maintenance efforts, which eats away at your credibility. On the other hand, if editorial boards do understand your financial constraints, they may still call out the poor condition of your highways but are much more likely to acknowledge that more funding is needed to preserve highways in acceptable conditions. Some example op-eds and editorials from actual DOTs are included in Appendix B; in addition, Appendix A includes op-ed templates developed as part of the two campaign scenarios described in Chapter 1.

Customization Opportunity

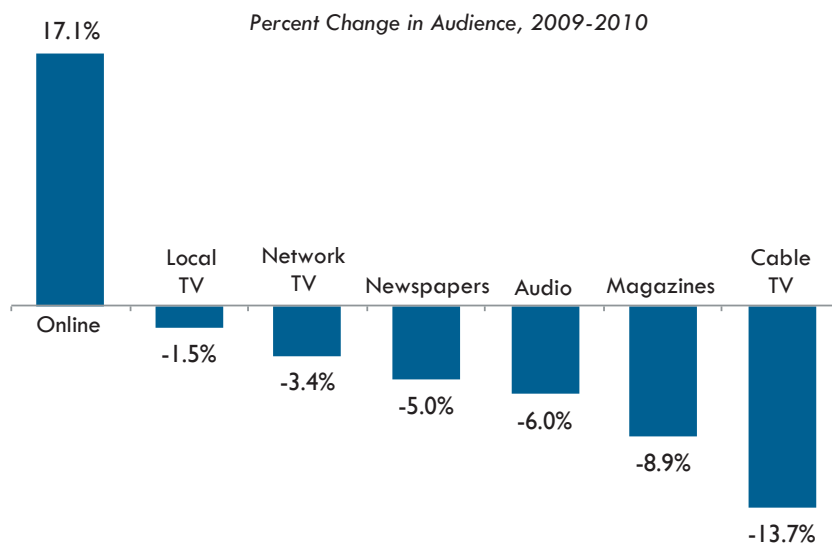


- **Take Advantage of Unique Opportunities**—Tie in your traditional media tactics to unique efforts, such as the release of annual pavement or bridge performance data.
 - **Work with Partners**—Partner up with supportive legislators or strong grassroots organizations that share a common interest in preservation to produce press releases and media events.
-

Step 4: Create or Refine Your New Media Strategy

New media channels are a rapidly evolving way for DOTs to communicate. Commonly defined as internet-based media, new media has evolved over the last decade from an emphasis on email and modest websites into a much wider portfolio of information channels including blogs, YouTube, podcasts, Twitter, Facebook, and other electronic tools. New media tools offer a low-cost alternative to traditional media that also allows DOTs to enter into more of a two-way conversation with their stakeholders that can help strengthen connections. It can be used to convey visual or succinct narrative messages, but it also supports dissemination of more detailed technical information. As audiences' reliance on new media grows, use of traditional media sources for information is declining. (See Figure 7.)

Figure 7. New versus Traditional Media Audience Trends: Results of Pew Research Center's Project for Excellence in Journalism Survey



For many DOTs, new media increasingly offer a powerful message delivery platform that complements direct audience contact and traditional media strategies. Common components you will want to consider or refine include:

- **Email Lists**—In the rapidly changing field of new media, email lists that contain up-to-date contact information for important audience segments are still a valuable message delivery mechanism. Find out what mailing lists your DOT maintains and use or improve them. Email lists can be used in many ways: to share electronic versions of traditional media strategies, such as print materials or press releases; to alert stakeholders to upcoming direct audience contact opportunities, or to complement your other new media strategies, such as alerting stakeholders to changes on your website.



- **Websites**—Your DOT’s website offers the potential to communicate preservation messages in a wide range of styles. It can feature both detailed technical information and succinct visual and narrative elements. Your website is only as useful as the traffic it generates. You may wish to use a banner or other graphic on your DOT’s homepage to attract viewers to visit the preservation page. To sustain audience interest, your website should also include features that can be updated on a regular basis (such as miles of preservation completed on a regional basis or a blog on preservation-related developments in the state). Blog, Twitter, or Facebook posts can be used to draw attention to new content. Sites could include buttons that direct specific audiences to targeted messages and content or to sign up for email alerts. Appendix A offers a potential website template. Examples of preservation-related websites used by DOTs and other organizations include the following:
 - **Minnesota DOT: Better Roads for a Better Minnesota**—At Minnesota DOT’s Better Roads for a Better Minnesota website (<http://www.dot.state.mn.us/betterroads>), a simple web page contains a press release, a one-page fact sheet, and two maps showing project locations. The site emphasizes that the new program will not be paid for by an increase in taxes and that it will help support Minnesota jobs. The site was designed by MnDOT to promote its efforts to designate \$398 million in transportation funding to its preservation program by creating the Better Roads for a Better Minnesota program that will improve ride quality on more than 700 miles of highways over four years.
 - **AASHTO: Rough Roads Ahead**—AASHTO’s Rough Roads Ahead website (<http://roughroads.transportation.org/>) is designed to educate a range of audiences about the condition of the nation’s major highways, costs to preserve the highway system, added costs to motorists due to poor pavement, and states’ solutions to maintain their highways. Rough Roads Ahead is part of AASHTO’s broader Are We There Yet? campaign to build awareness and support for the nation’s transportation system.
 - **ASCE: Infrastructure Report Card**—ASCE launched its Infrastructure Report Card website in 2005 and updated it in 2009. The report card is made up of a series of 15 brief fact sheets that profile transportation, water, energy, and public schools infrastructure conditions across the United States. Each fact sheet presents and discusses a letter grade for infrastructure condition, an example of which is in Appendix B.
 - **South Carolina DOT (SCDOT) Preservation Website**—SCDOT’s preservation website (http://www.scdot.org/inside/Pavement_Preservation/default.shtml) offers a basic primer on the DOT’s preservation activities.

- **YouTube Clips**—You can use short video or audio clips to communicate the value of preservation and related issues in succinct sound bites. Generally, these materials can work either as stand-alone products or as part of a wider campaign. With the advent of YouTube, internet video and audio is becoming a practical, low-cost method for communicating with a wide audience using information that previously might have been contained only in a presentation, press release, or print product with limited opportunity for distribution. Viewers of these types of media are counted in the thousands or tens of thousands, instead of tens or hundreds. While YouTube clips can easily be produced in-house at most DOTs, they can be time-consuming to script and plan. Examples of preservation-related YouTube clips include the following:
 - “Life Cycle of a Highway” (MoDOT)—MoDOT created an educational two-minute video that uses simple terms and visuals to explain how and why pavement conditions deteriorate over time and why repairs are costly. (<http://www.youtube.com/watch?v=vd8rT7iZgAk>).
 - Preservation Report (Wyoming DOT)—90-second news correspondent-style video that explores the state of preservation spending in the state of Wyoming. One of more than 50 YouTube videos posted by Wyoming DOT. (<http://www.youtube.com/watch?v=1q3ABytYbBY>).
 - “The Rough Road Ahead” (Kansas DOT)—This 4-minute video press release, distributed via YouTube, warns that without additional funding the state’s highways will fall into disrepair. The video includes narration, footage of preservation work, compelling statistics, simple graphics, and remarks from the secretary of transportation. (<http://www.youtube.com/watch?v=cJV09-Pbbao>).
 - “Pennsylvania Bridges: Maintaining the Past, Preserving the Future” (Pennsylvania DOT)—This 8-minute video provides an overview of the importance of bridge preservation in Pennsylvania. (<http://www.youtube.com/watch?v=mx-4yY7oxAs&feature=related>).

Appendix A offers a sample YouTube video script from the two scenarios described in Chapter 1.

- **Social Media**—Emerging social networking platforms are fundamentally changing the way many corporations and organizations work with their stakeholders, offering new ways to engage that allow DOTs to build more successful communication strategies—and ultimately stronger, more active relationships. The most popular and widely adopted examples of social media platforms include Facebook and Twitter, though new platforms are being developed and tested constantly (e.g., Google+):



- **Facebook**—Facebook has more than 750 million active users sharing over 30 billion pieces of content each month. As it grows, companies and organizations are learning and experiencing the value of using Facebook as a tool for sharing information, engaging in dialogue with supporters, and monitoring issues.
- **Twitter**—Twitter has more than 106 million users who send one billion tweets in one week. Twitter allows users to share status updates and links in 140 characters or less, and works from a variety of platforms and with other sites as well. Most frequently compared to sending a text message, Twitter enables users to share “quick hits” of information with followers.

Facebook and Twitter are exciting tools with lots of potential; however, you should have guidelines and standards in place before launching, so that content managers have a clear understanding of expectations. For example:

- Who is responsible for managing the platform, monitoring conversations, and developing relationships with your online community?
 - How frequently will you post or update information and what will you use for content?
 - How will you respond to criticism or negative posts?
 - What voice will be used for consistency?
 - Will there be an approval process in place and how will it function to ensure prompt and real-time response/dialogue?
- **Blogs and Podcasts**—These can be used to engage audiences in an ongoing, informal two-way discussion of preservation topics. For example, bloggers may ask readers to send descriptions or tell stories of some of their best (or worst) highway experiences or podcasters might interview working professionals—such as highway engineers or construction workers—about the nature of their careers and the educational pathways that led them there. Blogging software (such as WordPress, Typepad, or Tumblr) is relatively inexpensive and easy to use, as is the software used for producing podcasts (some, such as Audacity, can even be downloaded for free). In addition, blogs and podcasts can be used as content in Facebook and Twitter updates, linking and leveraging all methods to reach as many audiences as possible.

Customization Opportunity

- **Take Advantage of Blog Opportunities**—Tie into your DOT’s regular blog if it has one.
 - **Work with Partners**—Partner up with supportive legislators or strong grassroots organizations that share a common interest in preservation to enhance your initiative’s social media presence through “liking,” following, and retweeting each other’s content.
-

Message Delivery Conclusions

Message delivery options come in many shapes and sizes. You must use all or many of them to create a surround sound campaign that gets your message heard and seen and remembered. This means getting your message out via traditional media, on the Internet, and on the ground in face-to-face settings. Some versions of your message will be delivered visually—in pictures, video, charts, and graphs; other versions will be in the form of words like a newspaper op-ed or a presentation from the DOT secretary; and some will be a combination of both visuals and words, such as on a blog posting or in a brochure. Catchy slogans delivered via your website, in email, or on slides will resonate with your high-impact/high-interest audiences, but they can also get more detail when they hear a full presentation at a stakeholder forum or visit your website. This is what a surround sound message delivery approach looks like.



6. Market Research

Market research, the fourth building block of effective communication, is really more like the mortar that cements together the audience identification, message design, and message delivery blocks.

It would be poor practice for a DOT to use new preservation or maintenance materials or techniques without having first researched and tested their application and put in place a plan to monitor their performance over time. The same is true for communication—to plan and execute any important communication effort requires some level of market research and testing if you hope to cut through the communication clutter. The survey of DOTs shows that transportation agencies, which are driven by data and research, have been slow to embrace the idea of using customer research to inform their communication efforts, as shown in Figure 8.

The top three market research tools used by DOTs—although cost efficient—often miss opportunities for gathering deeper insights into customers’ thoughts or feelings and do not allow for interaction or dialogue. Without those insights, it is very difficult to craft specific and effective preservation/maintenance messages.

Market research is a broad term that can be defined as the gathering of audience or stakeholder data, input, and feedback, ranging from simple comment cards used at a public meeting for measuring audience response, to elaborate focus group efforts or polls used to test words that work across a wide variety of audiences.

Market research can be helpful at all stages in a communications campaign, including the formative phase of developing messages, during pre-testing of proposed messages, and in evaluating effectiveness of messages and message delivery. This chapter explores market research practices that you can easily integrate into your highway system maintenance and preservation communication efforts.

Figure 8. Methods DOTs Use to Track Stakeholder Opinions (Number of Responses per Method Type)



Market Research 101

Market research can be broken into three categories:

- **Formative Phase Research**—This is market research conducted in the early stages of preparing a communication campaign. It is used to help form communication strategies. It focuses on identifying audience barriers and motivators. Phone interviews, online surveys, and existing data are all techniques for conducting formative phase research. Examples of how it could be used include to assess issues such as the reasons why citizens do not want to pay more for improved preservation, or reasons why good roads are important to people.
- **Pre-test Phase Research**—This is market research used to test strategies and tactics prior to producing and delivering messages and materials. Focus groups and surveys are the primary pre-test market research techniques. Examples of how pre-testing could be used include to reveal if messages about the higher cost of vehicle maintenance resulting from poor preservation are more effective than talking about protecting the state's investments.
- **Monitoring/Evaluation Phase Research**—This is market research used to gauge performance of communication efforts and make any necessary course corrections midstream such as to measure change in public opinion via surveys or the number of positive stories in the media.

Market Research Techniques

Many market research techniques are available for gathering data and feedback from stakeholders. While the list in this section is not exhaustive, it is representative of the techniques currently being used by DOTs or that would be useful for DOTs to use in developing a comprehensive preservation and maintenance communication plan.

In-person interviews are probably the most effective market research technique if your goal is to establish or improve your communication efforts so that stakeholders better understand preservation and maintenance efforts. However, if your objective is to create a compelling call to action and motivate stakeholders to undertake some action, then you will likely need a more extensive research effort, which could include conducting statistically valid surveys and/or focus groups.

Representative market techniques include the following:

- **Stakeholder In-Person Interviews**—This research tool is the most flexible method of market research. It can be labor intensive, but it often provides valuable information. It removes concerns about group influence (that can exist with focus groups) and provides greater opportunity for in-depth questioning.
 - Prepare for Stakeholder Interviews—You'll likely want to tap specific DOT staff who have relationships with individual



stakeholders as interviewers. In general, seek out interviewers who are good listeners, are able to remain neutral, can focus on communication issues rather than technical issues, and are willing to “go off script” and ask more probing questions if a response is unclear.

Scale the number of interviews you plan to undertake to reflect the number and size of segments your team identified during audience brainstorming (See Chapter 3). Don’t plan to interview just one representative for each segment because members of a segment rarely hold exactly the same views, react consistently to the same words and delivery channels, and provide the same insights and recommendations for communication efforts.

You should prepare and use an interview script to ensure consistency across conversations and interviewers. An example script is provided in Appendix C. You may want to conduct additional, follow-up interviews based on interviewee recommendations or if you uncover issues or concerns around which you think additional information would be helpful. If possible, contingent interview time should be set aside so that additional interviews can be conducted based on suggestions and data gathered in the initial interviews. Of course, constraints like access to stakeholders, time, and staff availability may limit the number of interviews that can be conducted.

- **Conduct Stakeholder Interviews**—Using the recruitment script, contact stakeholders to set up interview times. To the extent possible, face-to-face interviews are preferred, but time and location don’t always allow for face-to-face interviews. Phone calls are certainly a good way to gather input efficiently and should not be discounted.

To the extent possible, try to conduct interviews in a reasonably short amount of time. It’s possible for an interview effort to extend over several weeks, but to keep momentum going for your effort, try not to let the interview schedule extend beyond a month. There’s a balance to be struck here and you probably won’t gather significantly more or better insights beyond a month. If you haven’t mustered the momentum or resources necessary to complete interviews within a month, you should carefully examine whether you have enough resources to make significant and sustained improvements to preservation and maintenance communication efforts.

- **Focus Group Research**—This research tool provides insights into customers’ thoughts, feelings, and even recommendations for potential communication strategies. Your DOT likely already knows key stakeholders and other participants who could provide valuable

Building Block Tie-In: Audience Identification

Use In-Person Interviews to Affirm Audience Segment Assumptions—Audience segment interviews and other market research will reveal issues, concerns, and suggestions that are not known or understood by DOT staff and clarify assumptions made about audience characteristics.



feedback through an informal focus group session. Some important steps to follow for successful focus groups include the following:

- Determine goals and objectives: What do you want to know from your stakeholders? How will their feedback guide your decisions moving forward?
- Identify needs: What specifically do you need answered by participants? What do you know and what do you need to know to shape your process moving forward?
- Determine the make-up of groups: How many participants will you engage? Where will you host them and in how many sessions? Who is your target audience and what kind of participant will best be able to provide you the information you need?
- Develop a guide for the discussion: Are any materials needed to provide information or stimulate discussion?
- Identify a moderator: The moderator should know the objectives and goals of the sessions but remain objective in questioning and guiding the group.

Depending on the desired outcome of focus group sessions, DOTs may wish to hire an outside moderator. An outside moderator will help ensure objective collection of information and will free up DOT staff to observe sessions and gather information.

- **Mail or Telephone Surveys**—Mail surveys as a research tool are cheap and can result in large amounts of data being collected. Response rates, however, are often very low. Phone surveys are a good approach for gathering information quickly and usually have a higher response rate. However, with widespread use of caller identification and no-call lists, response rates are declining. Mail and telephone survey approaches are commonly combined.

When looking for statistically valid results, you should consider hiring a professional firm that specializes in market research. Professional surveys typically take 6 to 10 weeks to complete, from the start date to receipt of results. Questions to consider include: Do you have a list of potential participants or is it necessary to purchase a contact database? How many questions do you plan



to ask? Each of these factors will affect the budget and shape the process moving forward.

- **Online/Internet Surveys**—This research tool is among the fastest growing research approaches, with sub-options including sending surveys via email, including questionnaires on a website, and introducing questions in a chat room or online community. Although relatively inexpensive and fast, responses can be small and skewed. Options include services such as Survey Monkey and Zoomerang.
- **Intercept Interviews**—This research tool involves stopping people in places like shopping malls and airports and on street corners. Though less expensive, respondents can be hurried and extra care is needed so that respondents aren't biased in some way.
- **Web Metrics**—This research tool allows DOTs to learn more about individuals by following how they click through agency websites and move on to others. While this information can provide interesting statistics, such as how much time a person spends on a specific page, assumptions must be made about the meaning of such data (e.g., time spent on page is a proxy for level of interest in a topic):
 - Google Analytics (www.google.com/analytics) provides near real-time information relating to all elements of your website including number of visitors, time-on-site, number of pages visited as well as many more. It's a free service and simply requires creating a Google account.
 - CrazyEgg (www.crazyegg.com) is a tool to improve the micro-conversions on any page or web application. Unlike Google Analytics (which tracks general page views), CrazyEgg can look at a single page and plot exactly where users are clicking on it. This ultimately allows for a better understanding of how users are engaging with your site. It also facilitates continual improvements to the usability of your page through ongoing improvements and testing. Beginning at \$9 a month, CrazyEgg can be a useful tool for understanding what users are doing on your site.
- **Website Comments**—This research tool is a very low-cost way to collect information from customers; however, it is often difficult to generalize the comments to any larger group. Rather, this information should be viewed as more anecdotal. A comment section can be set up on your DOT's website and automatically linked to send inquiries and feedback to one or more email addresses for real-time monitoring and prompt response as appropriate.
- **Comment Cards**—This research tool is usually used to collect information from stakeholders who attend a public meeting. While very low cost, the responses are often skewed.

- **News Clippings**—This research tool is helpful for identifying trends in the attitudes of community members and can be used to assess awareness of an issue. Many DOTs already monitor online and news coverage; however, if your DOT has not done this in the past, it's simple to implement. For online placements, various keywords and search terms can be set up through Google Alerts.

In addition, a quick daily search of online news sites important to your DOT can provide information such as topics being covered, key media contacts, and trending stories. Depending upon budget, your DOT may wish to subscribe to key print publications in order to monitor the print version or have increased access to the online site as well (e.g., local business journals). Professional media-monitoring services are available from companies such as Media Library, Cision, and Critical Mention, though your DOT will likely find other methods of monitoring to be more cost efficient. Professional services can be helpful for advance planning of broadcast monitoring—such as requesting coverage of a planned news conference featuring a major announcement—and typically cost between \$65 to \$400 based upon number and type of clips.

By gathering news clips and continually monitoring media, your DOT can track how effective your message is in cutting through the clutter, and whether it's resonating with your target audience.

Market Research Conclusions

Market research—particularly primary research that connects DOTs directly to what stakeholders are thinking, feeling, and saying—is the mortar that holds the building blocks of good communication together. It can be helpful at all stages in a communications campaign, including in the formative phase of developing messages, during pre-testing of proposed messages, and in evaluating messages.

Tremendous opportunity exists for DOTs in the area of market research. If your DOT is willing to add this tool to your arsenal, you will be able to target audience segments with custom messages that build support at all levels for your initiatives.

7. Go Create a Campaign!

So now you have read the Playbook and you are familiar with the major building blocks for meeting your DOT's preservation communications needs. Good! You are ready to craft specific messages:

- Get to work on creating a powerful presentation that explains your state's infrastructure preservation challenges to internal leadership;
- With leadership buy-in, start identifying your high-interest/high-influence audience segments and understanding what makes them tick with a series of interviews;
- Map out ideas for preservation messages that use technical foundations to create concise and compelling messages that not only deliver facts but also appeal to the emotions and interests of your most important audience segments;
- Create and send your message in surround sound with a brochure, presentations to stakeholders, editorials, press releases, media events, a website, YouTube, a Twitter feed, and a Facebook page; and
- Track the effectiveness of your messages using market research self-assessment techniques (See Appendix C).

Gaining support for preservation has never been more important, nor more difficult, but if you follow the advice of this Playbook, you can overcome declining trust in government, competing attention for mind space, and a stalled economy to get a message to your stakeholders that shows preservation matters, puts it in their minds as a priority, cultivates a network of preservation supporters, and ultimately orchestrates a call to action.

Appendix A

Example Materials Developed for the Project

Each of the following sub-appendices contains full versions of the communications materials described in the two hypothetical campaigns presented in Chapter 1. The versions presented here also offer annotations that can help guide you through developing your own materials.

A-1: Presentations

A-2: Logos, Slogans, and Billboards

A-3: Fact Sheets and Brochures

A-4: Op-eds and Press Releases

A-5: Blast Emails

A-6: Website

A-7: Social Media (Twitter, Facebook, and YouTube)

A-1: Presentations

Scenario 1 Internal Presentation

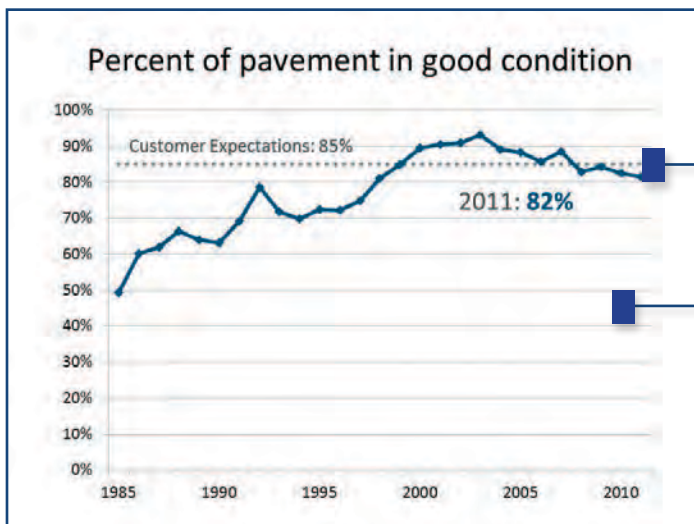


Attention-grabbing title and photo.

DOT executive staff members are an important audience for preservation professionals to engage. It shouldn't be assumed that they understand the value of preservation.

1: I'm here today to talk about our preservation program.

This picture is of course tongue in cheek, but it does capture the essence of the challenge we face.



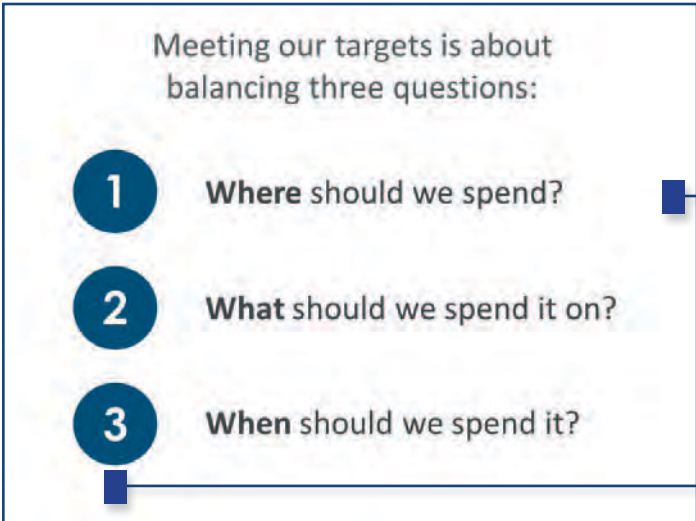
Market research used to establish customer expectations.

Graph is clean and clear and allows audience to focus on the most important points—that things are getting worse and have dropped below the target.

2: We've come a long way since the mid-80's when less than half our roads were in good condition. We reconstructed a lot of highways over the 80's and 90's. But you can see the trend has been going down since 2003.

Surveys and road rallies have told us that our customers expect 85% of our roads to be in good condition; we're dropping below that target.

It's time to change our approach...



Meeting our targets is about balancing three questions:

- 1 Where should we spend?
- 2 What should we spend it on?
- 3 When should we spend it?

Keep the number of words on the slide to a minimum—make the high-level points on the slide and let the speaker fill in the details.

Highlighted numbering helps audience follow along.


3: To get to our targets, it's about balancing these three questions.

Where do the highways need improvements or treatments?

What kinds of improvements or treatments should we do?

When should we apply the improvements or treatments?

It's about maximizing the long-term benefit for the lowest life-cycle cost.

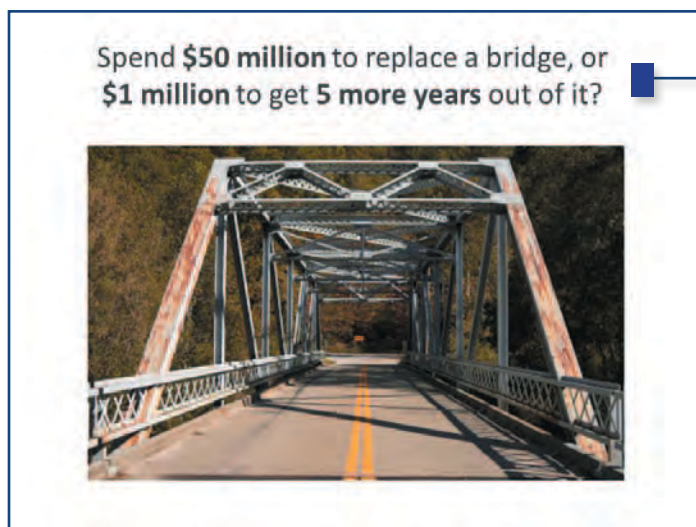


Simple graphical approach grabs attention and makes the point at the same time. Fight the urge to put supporting points on the slide that will force the audience to read instead of listen to the speaker—with this approach the audience will get the high-level point right away and be anxious to hear the explanation.

4: Some will advocate for a worst-first approach.

“Worst first” sounds great, but it’s a horrible strategy. If it’s followed for too long, it will eventually bankrupt a DOT.

When you use the worst-first approach, you wait until serious damage has been done and every road in the system will have to descend to that level before it gets attention, making it the most expensive strategy possible.



Picture captures the challenge in a visual and intuitive way.

5: This question captures one end of the spectrum—When is it no longer cost effective to rehabilitate?



Keep the visual simple and clean—reveal just enough to make the point—leave the details (from Ohio, treatment was a sealant, applied after one year) for the speaker to elaborate on.

6: And here's the other end of the spectrum...

Rather than just focus only on the aging parts of our system, what can we do to prevent them from deteriorating in the first place?

This picture is from a demonstration project in Ohio.

The pavement is just four years old.

The right side was treated with a sealant after the first year—the left side was untreated.

You can visually see the difference.



Use of bold gives weight to the main takeaway of the slide.

7: Obviously we need to reconstruct old pavements and rebuild new bridges, but not at the expense of preventative actions.

It's about balancing these needs in the most cost-effective way over the long term.

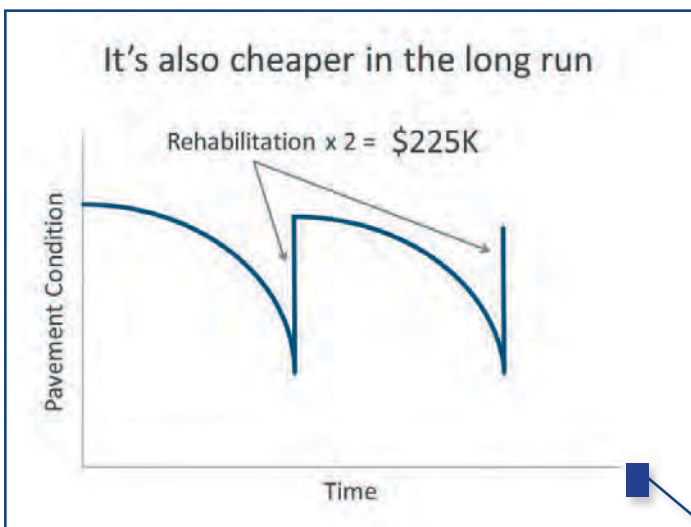
Put another way, it's about "Applying the right treatment to the right pavement at the right time."

The picture gives a clue which way we might want to lean ... toward the preventative maintenance side.



8: A focus on preservation is quite a bit cheaper per mile.

Chart is clean and simple—sometimes it's easier to create a clean-looking graph using free form shapes within Microsoft® PowerPoint rather than using the chart function within Excel.



9: Preservation is also cheaper in the long run. Here's a demonstration of that point:

Condition on the vertical axis, time on the bottom. You can see, as time goes on, the condition declines.

At a certain point, the condition is dropping fast and the right treatment is to rehabilitate it. Waiting any longer and rehabilitation wouldn't do much—you'd have to reconstruct.

So we rehab at \$225K and the condition jumps back up, but not as high as it was originally. And then the process repeats...

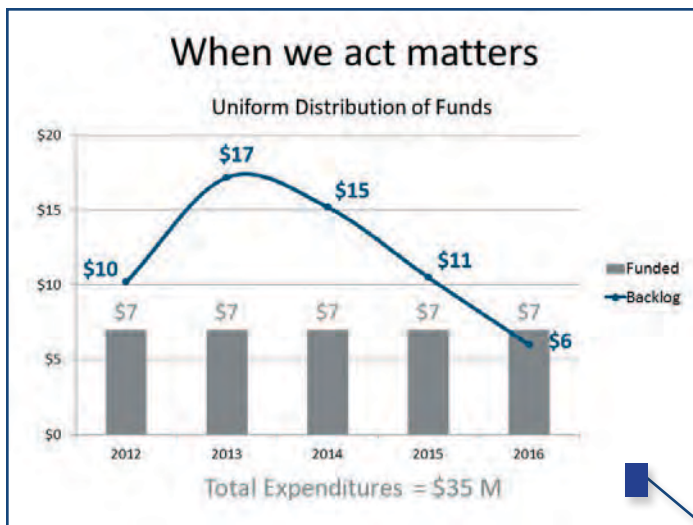
There are versions of this chart that are more complicated. By breaking it up and highlighting a piece at a time, it allows the speaker to more effectively tell the story of the chart in a way that is easier to understand.



10: What if instead of waiting until rehabilitation is needed, we apply some preventative treatments? This time the graph does exactly that—five preservation applications gets us to the exact same spot on the graph but only costs \$110K.

Studies indicate that even when you factor in the time value of money, preservation is 35% to 40% cheaper.*

*Data source: "Preventive Surface Treatments Versus Traditional Corrective Maintenance Measures" Authors: N.M. Jackson, D. Dave, P.E. Sebaaly, G.L. Porrit. Link: http://www.pavementpreservation.org/library/getfile.php?journal_id=512



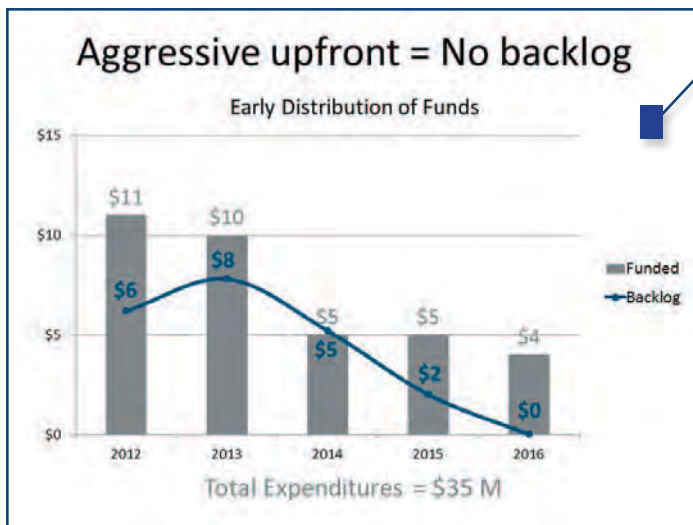
11: How much we spend and when also matters.

In this example we start with \$10 million in backlog of needs, represented by the blue line.

And we spend \$7 million each year—those are the gray bars.

At the end of 5 years, we've spent \$35 million and we're down to \$6 million in needs.

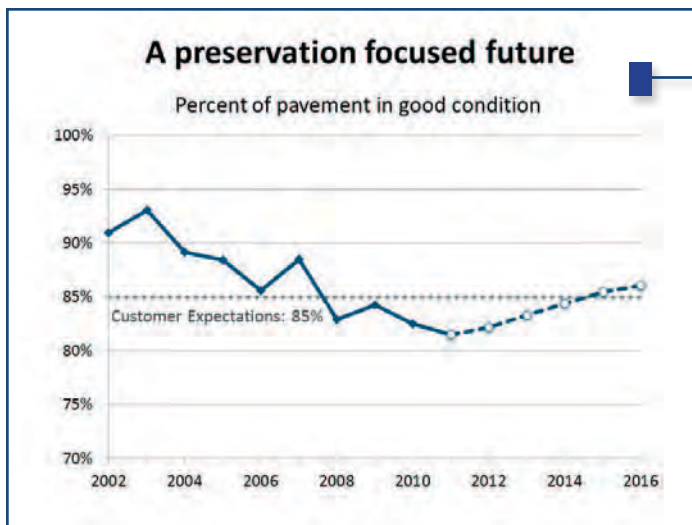
This is another traditional graph broken into two slides to tell the story in a more understandable way.



12: In this example, we front-load the spending—again shown in the grey bars.

The result is that we can make up some ground on our backlog of needs—the blue line again.

At the end of 5 years we've spent \$35 million again, but the backlog is at \$0.



You might be asked to supply scenarios for various funding alternatives, which at most DOTs can be developed using asset management tools.

13: So what does this all mean?

Well here's our pavement chart again...

If we refocus our efforts on preservation we can get back to our targets and stay there.

A final word

Preservation benefits
our roads and our bottom line.

Let's **get aggressive** about it
and let's **tell people** about it.

Slide provides a final thought that summarizes the entire presentation.

Last line plants the seed for the needs and benefits of promoting a preservation-focused program with external partners.

14: A preservation-focused program will benefit both our roads and our bottom line.

We should not only implement it, but also tell the story to our external partners and the citizens of our state—it's a great example of how government can be more efficient and cost effective, and we should promote the fact that we're doing it.

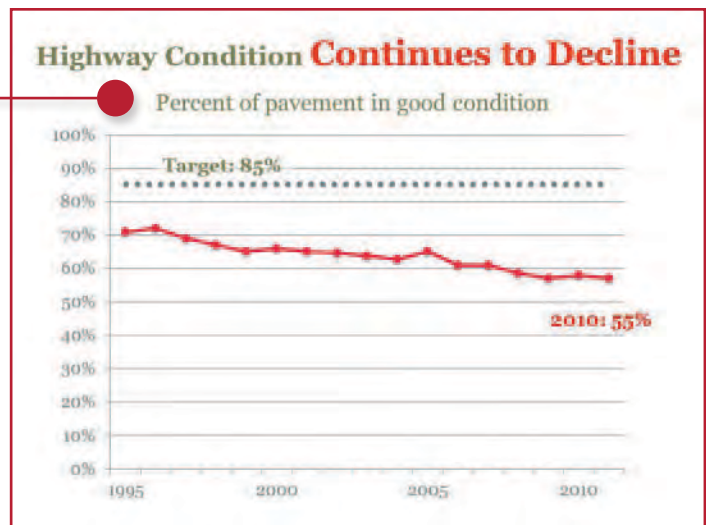
Scenario 2 Internal Presentation

This graphic/tag appeals to an internal audience because it speaks to the complexities of highway preservation and it also lays the foundation to talk about external factors that have to be considered.



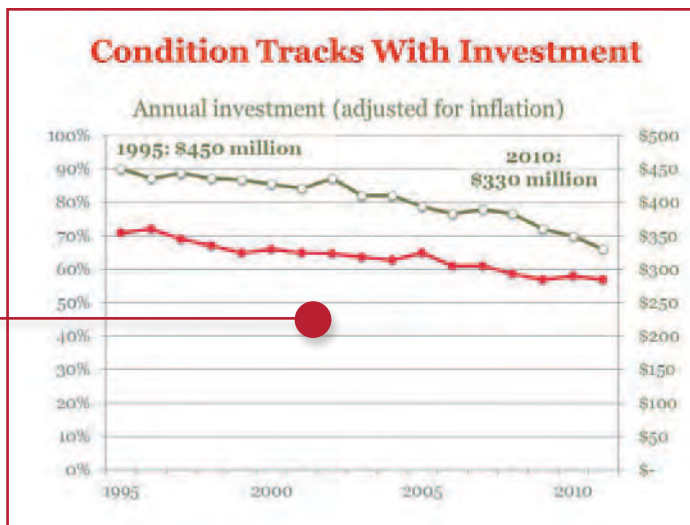
1: We're here today to talk about what it's going to take to maintain—or hopefully improve—the condition of our highways.

Message is clear. Condition of highways does not meet DOT's target and is declining.



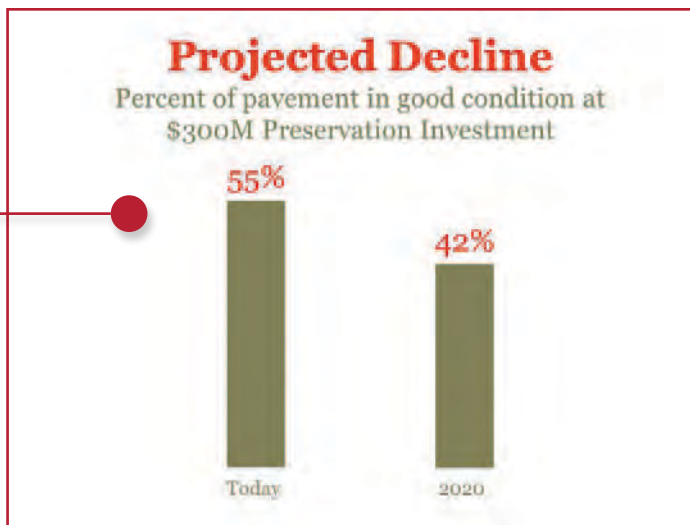
2: We all know that the condition of our highways falls well below our target which is to have 85% of all highways in good condition. Currently 55% of our highways achieve that mark.

Demonstrating link between investment and performance builds credibility externally.



3: You'll remember that in the face of budget reductions, we shifted \$100 million from capacity to shore up preservation investment. Despite the shift, it wasn't enough to make up the overall reduction in preservation spending due to budget reductions.

As operators of the highway system, it's important for this audience to understand the consequences of continued underinvestment. This information also provides the foundation for talking externally.



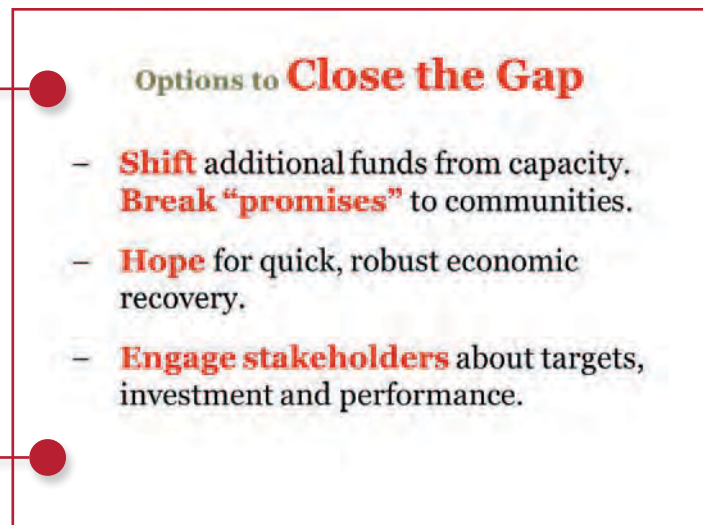
4: This graph demonstrates my serious concern. Even if we're able to continue at our current investment, system conditions are predicted to decline further.

“What we can afford” speaks to balancing competing needs and underscores fiscal responsibility. It’s important to quantify the gap. Vague language like “invest more” isn’t likely to move DOT leadership or the public to action.



5: Essentially, we need to figure out how to close this \$200 million gap in preservation funding to reverse the trend.

For more impact, use a heavy weight font and color to highlight key points, even on a slide with few words.



Use slides to frame a discussion. Clearly there are lots of pros and cons to discuss, but slides are often most effective for getting the discussion started—it will stifle discussion if the audience perceives you’ve already thought through all the issues.

6: \$100 million had been left in capacity for high-profile/priority projects and further reductions would be politically risky. Hoping for a quick recovery would be irresponsible. This discussion represents an opportunity to shift the dynamic from an under-performing system/DOT to what stakeholders expect from their highway system and are willing to pay for.

Balancing perspectives: This slide sets the right tone for decision making and communication. The elements of time, money, and internal/external impacts are considered simultaneously.

Evaluating Options

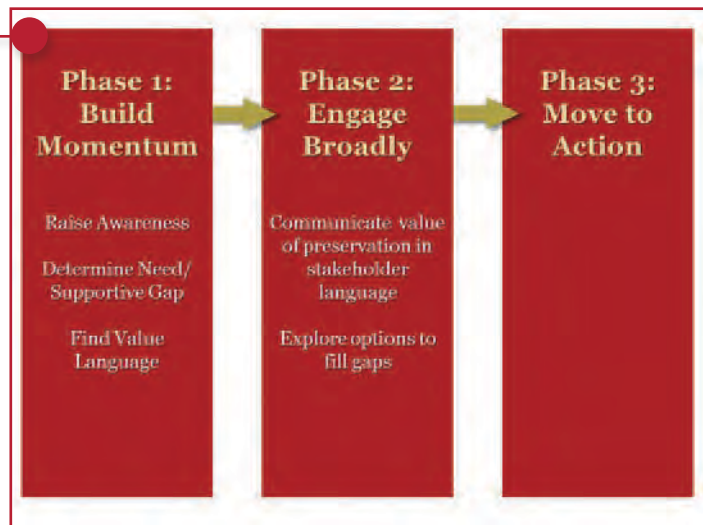
| | Shift Funds | Economic Recovery | Stakeholder Engagement |
|------------------------------|-------------|-------------------|------------------------|
| Impact on Partners/DOT | ↓ | ↓ | ↑ |
| Amount Generated to Fill Gap | \$100 | ? | ? |
| Time Required | Immediate | 2+ Years | 2+ Years |

7: The negative impact of the shifting-funds or waiting-for-an-economic-recovery approach on community partners and the DOT is not acceptable. In looking at our options, the most productive and ultimately sustainable approach is to build support for increased preservation funding through stakeholder engagement.

It Takes More Than Magic

to Effectively Communicate

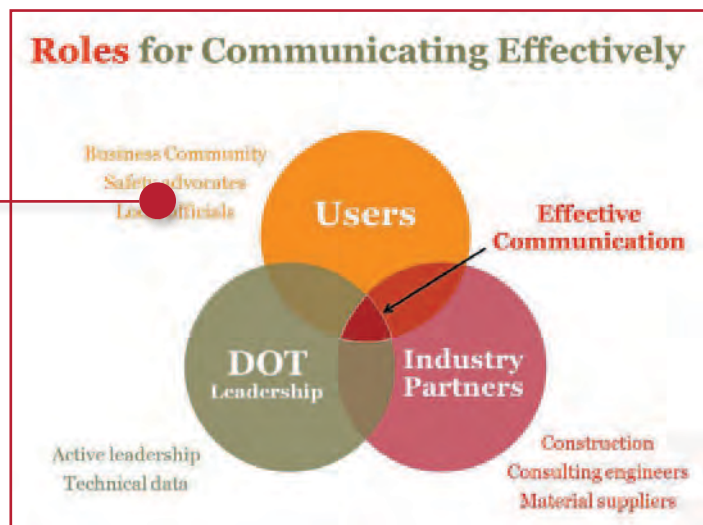
This slide demonstrates that there is no foregone conclusion about resulting actions that will occur in Phase 3. The lack of words provides a great platform for the speaker to make that point clearly.



9: Given the state of disrepair and long-term lack of funding, it will be important to build momentum with key stakeholders and determine what a “supportable” level of investment might be. We recommend that a task force and road rallies be held to create a more public discussion of supportable investment.

A broader public campaign should be launched in Phase 2. It should build on momentum from Phase 1 and coordination with partners should continue. A resulting mandate for the DOT should emerge: shift funds, decrease targets, or find a path toward increased investment.

This slides demonstrates several points from which the speaker can work. First, the various groups have different roles to play and at the intersection of their efforts, effective communication occurs.



10: While the DOT will have an active role, we have to recognize that we’ll be more effective if we work with our partners and leverage the roles they can play. We’ll need to hear from “investors and users” and engage with our industry partners.

This slide is intentionally left visually wide open so that open discussion can occur.



11: Now that we've discussed that an active engagement process should be developed and we need to leverage various partners, let's talk about next steps.

Scenario 1 External Presentation

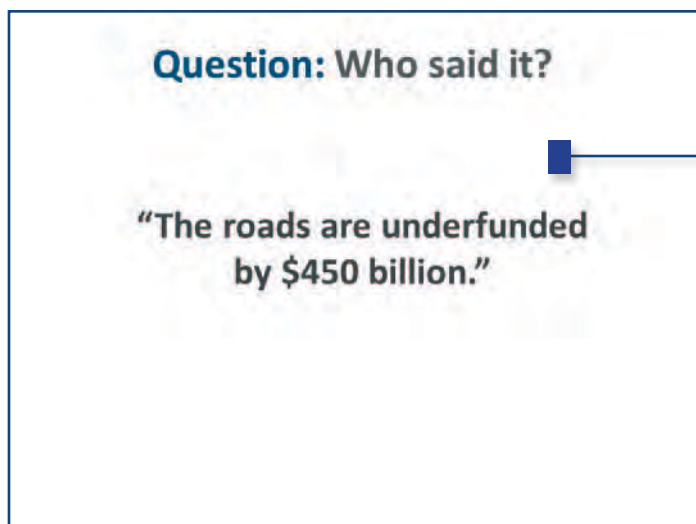


Incorporation of initiative logo.

Audience is an external one that is influential in some states.

1: I'm here today to talk about the need for preservation in our state.

Hopefully when I'm done you'll agree with the title, that "a penny paved is a penny earned."



This slide and the next one serve as a good opening sequence, grabbing the attention of the audience.

2: Any ideas who said this? Was it LaHood? Horsley? Mendez?



This slide and the previous one work as a good attention-grabbing introduction.

3: Audi said it in a full-page ad in the New York Times from September of 2011.

If you can't read it, it says: "The roads are underfunded by \$450 billion. With the right car, you may never notice."

Have the road conditions gotten so bad that the simple fact that they're bad can now help sell cars?

Wouldn't it be cheaper to pay a little more for preservation and maintenance?



Use of bold and larger font calls out the important information on the slide.

Some presenters like to put several examples on the same slide. It can be more effective to pick one example and highlight it on the slide. Other examples can still be used by the speaker to elaborate.

4: ... Especially when you consider that rough roads cost the average driver \$335 per year.

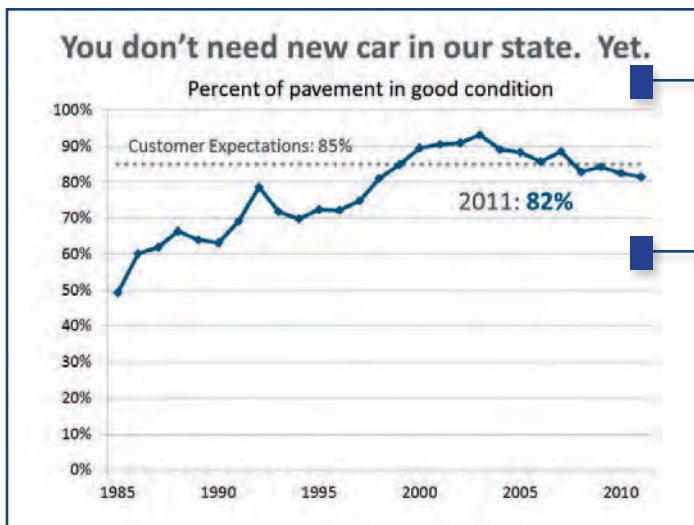


Examples are on a personal level—people can relate to these things.

Audi mention brings it back to the introduction and if done well brings in a little humor.

5: \$335 is a lot of money. Here are some other things that cost \$335.

A month of groceries, 6 months of cable, and 1 lease payment on a new Audi.



Tying performance with the public expectations relates the technical data back to the audience.

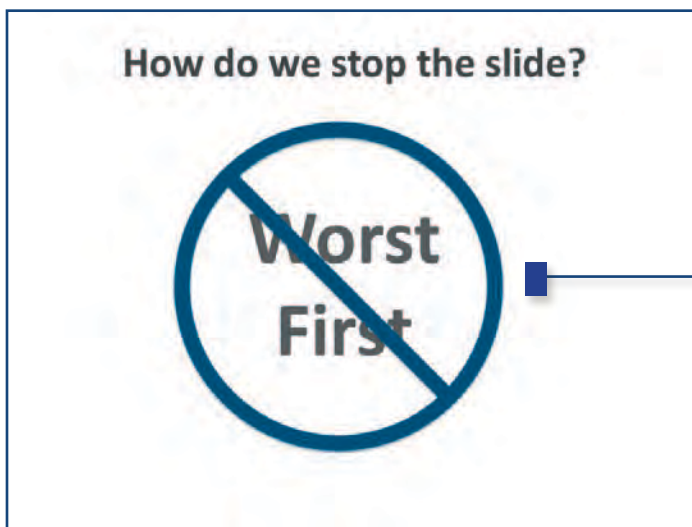
Graph is clean and clear and allows audience to focus on the most important points—that things are getting worse and have dropped below the target.

6: Luckily, in our state you don't need that new car just yet.

As you can see in the graph, our pavement condition has come a long way since the mid-80's when less than half our roads were in good condition. But you can see the trend has reversed in recent years.

Surveys and road rallies have told us that our customers expect 85% of our roads to be in good condition; we're dropping below that target.

It's time to change our approach.



Simple graphical approach grabs attention and makes the point at the same time. Fight the urge to put supporting points on the slide that will force the audience to read instead of listening to the speaker—with this approach the audience will get the high-level point right away and be anxious to hear the explanation.

7: Some will advocate for a worst-first approach where we fix the worst roads first.

“Worst first” sounds great, but it’s a horrible strategy. If it’s followed for too long, it will eventually bankrupt a DOT.

When you use the worst-first approach, you wait until serious damage has been done and every road in the system will have to descend to that level before it gets attention, making it the most expensive strategy possible.



Shocking image grabs attention of the audience.

Brushing teeth provides an excellent analogy to the importance of preserving highways because it’s intuitive and personal (goes with next slide as well).

8: Worst first doesn't work very well with dental care.



Brushing teeth provides an excellent analogy to the importance of preserving highways because it's intuitive and personal.

Some will like to put these two images on the same slide—splitting them up helps the presenter tell the story rather than just relying on the audience to piece it together for themselves.

9: Just like it's important to brush our teeth, it's important to preserve our highways.



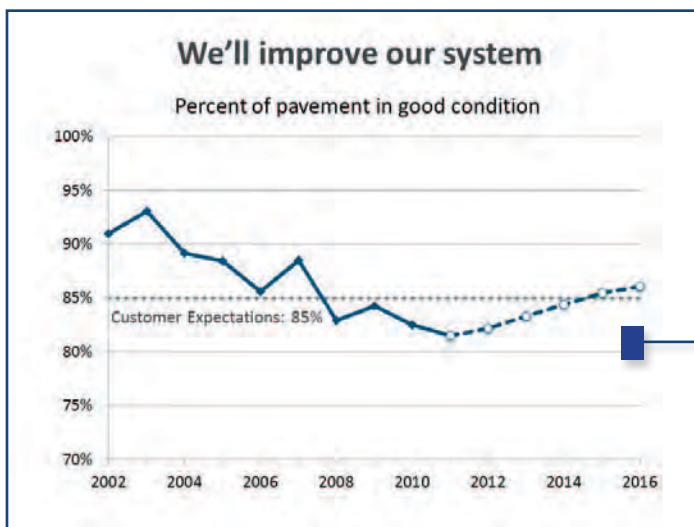
Use of bold gives weight to the main takeaway of the slide.

10: Obviously we need to reconstruct old pavements and rebuild new bridges, but not at the expense of preventative actions.

It's about balancing these needs in the most cost-effective way over the long term.

Put another way, it's about "Applying the right treatment to the right pavement at the right time."

The picture gives a clue which way we might want to lean ... toward the preventative maintenance side.



This is the same graph from earlier in the presentation, but this time the future is zoomed in on to better illustrate the improvement.

11: So what does this all mean?

Well here's our pavement chart again...

If we refocus our efforts on preservation we can get back to our targets and stay there.

And we'll save money

Every \$1 spent keeping a good road good saves \$6 to \$14 to rebuild one that has deteriorated

Language is easy to understand. "Keeping a good road good" makes intuitive sense and is better for an external audience than some of the more typical life-cycle cost language.

12: Not only will we meet our targets, but we'll save money.

Spending money on preservation saves us money down the road: Every \$1 spent keeping a good road good saves \$6 to \$14 to rebuild one that has deteriorated.



Call to action encourages audience to stay in touch and join the effort.

13: As part of our focus we've launched an awareness initiative at pennypaved.com.

We'll be promoting our performance efforts and you can interact and learn more about preservation.

Scenario 2 External Presentation

To build interest or encourage people to take action, your title should convey a sense of urgency.



1: Happy to have the opportunity to share the Phoenix Task Force conclusions and recommendations with you.

Hit the primary point of the presentation early. The first few minutes are known as “gold” so present the key finding first and then back it up with data and other info.



2: The primary recommendation of the Phoenix Task Force is that the condition of <state> highways needs to be improved now.

Messages resonate best when people understand the impact or benefit of a project at a personal level.



3: For you, improved highway conditions mean:

- 1. You and your family will have smoother and safer roads to travel.*
- 2. For the state, we'll be better able to recruit new businesses as access to highways is a key determinant in site selection.*
- 3. The Task Force has estimated that improving 75% of our major highways to good condition will cost each taxpayer about 25 cents per day.*

It's important to demonstrate that multiple audiences support preservation. This slide sets up that demonstration.



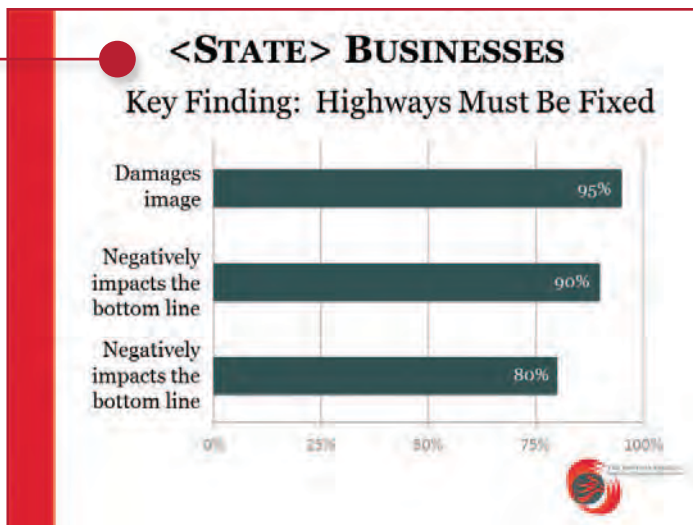
4

Strong quotes from sources outside the DOT are great credibility boosters.



5

Note how the quote on the previous slide brings the data on this slide to life.



6: In a statistically valid survey of state businesses:

1. About 95% of respondents think the condition of our highways hurt business recruitment efforts—just like John Smith said;
2. About 90% of respondents think the condition of our highways hurt their bottom line;
3. And 80% are willing to pay a little more in taxes to improve highways conditions.

It's important to collect quotes and pictures from all events/meetings for later use. Try to capture a broad range of geographies, backgrounds, business interests, and other demographics.

<STATE> DRIVERS

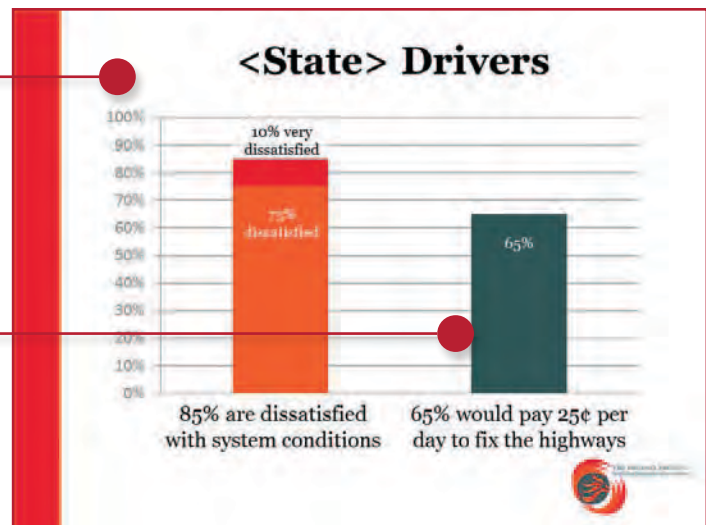
"I have had to fix my tires three times in the last six months. Enough already!"

Jan Smith, Road Rally participant
Southwest Region

7

By putting the very dissatisfied percentage on top of the dissatisfied bar, the total dissatisfied bar equals 85%. The 10% very dissatisfied would have seemed like a small percentage if it had been left as its own bar.

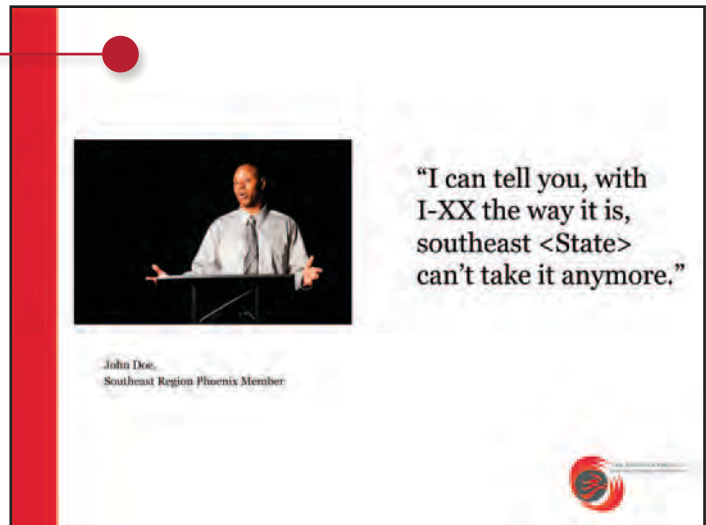
It's more memorable if the willingness to pay bar is a consistent color for the state business and state drivers slide.



8: In a statistically valid survey of state drivers, 85% of respondents are either dissatisfied or very dissatisfied with current highway conditions.

And, 65% of those drivers are willing to pay 25 cents/day to improve conditions of our major highways. While this number lags business responses, it's a significantly positive response.

Tailor presentations for your target audience so that representatives from the region or industry are included. Or, if you don't have time to customize presentations, make sure to have broad geographic and industry representation.



9

Another opportunity to demonstrate urgency.



10

Reusing an image from another part of the communication campaign helps reinforce messages.



11: You may have seen this image on one of the 30 billboards across the state talking about how not much good comes from bad roads. As co-chair of the Phoenix task force challenges, “we can and must do better” and here’s why:

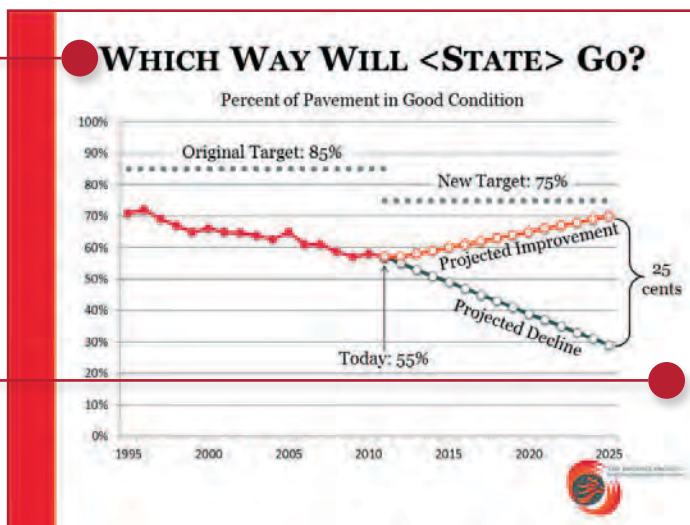
This tag line emphasizes the negative consequences of inaction.



12: As the slide demonstrates, based on current funding levels for preservation, the <state> DOT would anticipate another 13% of our highways would fall out of good condition in the next 8 years.

While this slides provides a significant amount of information, the header poses the most important question as a conscious choice.

Combining technical data and financial forecasting, the cost to close the funding gap was translated into an easy to understand 25 cents per day per taxpayer rather than talking about the \$150 million annually needed to close the gap.



13: Residents, business owners, and community leaders said that, while they'd like 85% of highways in good condition, we can't afford that right now.

Target lowered to a more affordable 75%.

Decision to make: either taxpayers pay 25 cents per day more and condition will improve OR taxpayers won't pay more and conditions continue to decline.

**WAITING WILL JUST
MAKE IT COST MORE**

I-XX will cost **\$30 million** to fix

Five years ago,
preventative maintenance
would have cost **just \$6 million**

It's effective to layer in additional benefits of improved highway conditions—especially in both immediate and long-term timeframes.

NOW is the Time

- Create ## immediate construction jobs
- Strengthen long-term economic competitiveness
- Add \$300M to <state's> GDP

Citizens are ready to rebuild roads and investments

15: Now is the time to invest in better highway conditions. We'll see immediate creation of construction jobs—and more importantly, position our state for better long-term growth because relocating businesses look at good highway access as a key criterion. We also know through economic analysis, that businesses will be able to ship goods more reliably, which has a positive impact on the state's GDP.

We've talked with citizens, businesses, and community leaders—and they have all said—Now is the time to invest.

While a DOT might not encourage stakeholders and residents to contact their legislators, your partners can. Depending on a variety of factors, it might make good sense to provide a link to those sites.

WWW.PARTNER.COM

Which roads are in the worst condition?

Your thoughts?

Contact legislator

16: I encourage you to visit Partner website. They have an interactive map that shows the condition of every highway in the state. You can comment on your highway or the system overall, and they also provide information on how to contact your legislators if you're interested.

Always provide a way for audiences to contact you following the presentation.

The slide features a red vertical bar on the left side. A red circle is positioned at the top of this bar, with a horizontal line extending from it to the left, pointing towards the text 'Always provide a way for audiences to contact you following the presentation.' The main content of the slide is enclosed in a red border. At the top center, the text 'NEXT STEPS' is written in a bold, black, serif font. Below this text is a logo for 'THE PHOENIX PROJECT: Facilitating Highways and Investments'. The logo consists of a stylized orange and red flame-like shape on the left and the text 'THE PHOENIX PROJECT: Facilitating Highways and Investments' on the right. Below the logo, there are two columns of text separated by a vertical black line. The left column is labeled 'Contact DOT' and the right column is labeled 'Contact Co-chairs'.

17

A-2: Logos, Slogans, and Billboards

Scenario 1 Logo and Slogan



A refined logo will give external audiences something to identify with.

The slogan and logo invoke a sense of responsibility and efficiency, which were discovered as important customer values during market research.

**A PENNY PAVED
IS A PENNY EARNED**

The slogan is memorable and interesting and audiences will instinctively agree with the premise, making it more likely to inspire them to support preservation.

Scenario 2 Logo and Slogan



THE PHOENIX PROJECT: Rebuilding Highways and Investments



The Phoenix Project slogan makes the connection between investment and performance inescapable.



A refined logo will give external audiences something to identify with.

Scenario 2 Billboards

Effective billboards require memorable images and striking, short messages—usually seven words or less.



Partners can advocate and spend money in ways DOTs cannot, so leverage strong relationships.

While a DOT might be criticized for spending funds on billboards when highways are in poor condition, industry partners may be very willing to underwrite the costs.



A-3: Fact Sheets and Brochures

Scenario 1 Internal Fact Sheet

THE DUCT TAPE WON'T LAST FOREVER

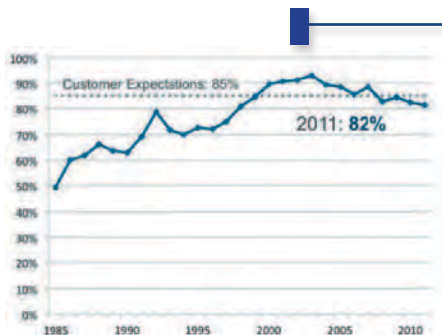
Executive Staff Briefing

1/12/12

Where We Are

We've come a long way since the mid-80's when less than half of our roads were in good condition. During the 1980's and 1990's, we invested in the reconstruction of nearly 4,000 highway miles. However, that trend has been declining steadily since 2003.

Over the past four months, DOT has gathered feedback from users all across the state through surveys and road rallies. We have learned our customers expect 85% of our roads to be in good condition at all times. As the graph above indicates – we're dropping below that target.



Changing Our Approach

Meeting our target performance levels is about balancing three questions:

- Where should we spend?
- What should we spend it on?
- When should we spend it?

Some will advocate for a worst first approach. Although "Worst First" sounds reasonable, it's a horrible strategy – one that if followed for too long will eventually bankrupt a DOT. Prioritizing treatment of the worst pavement first means serious damage must be done before repairs are made. Every road in the system will descend to that level before it will receive attention, making it the most expensive strategy possible. The focus should be on applying the *right treatment to the right pavement at the right time*.

We Can Save Money and Improve the System

Preservation is cheaper per lane mile and it's also cheaper in the long run. By treating roads before they need to be rehabilitated, we can save 35-40 percent on our preservation program.

When we act also matters. As demonstrated in the graph below, front-loading our program will help reduce our backlog of needs.



A fact sheet that accompanies a presentation can be very powerful. It can provide more context and detail than can be fit onto a slide, and it serves as a take-home piece for the audience.

Scenario 1 External Brochure (Outside)

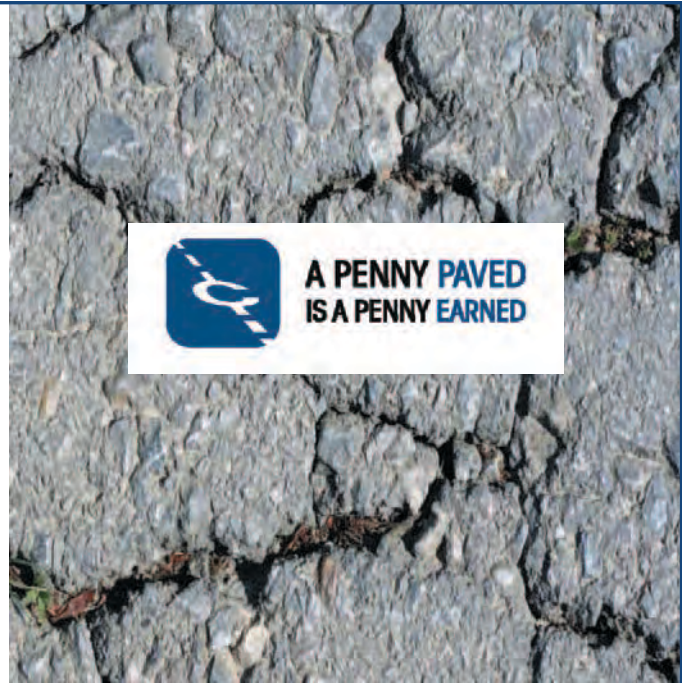


Over the past several decades, <State> has invested billions of dollars to build one of the best transportation systems in the country. Our system is in good condition today, but it's growing more expensive to maintain.

<State DOT> has launched a new web site to highlight the importance of preserving the transportation system and to provide information regarding ways the system has played a vital part in economic development, community growth and civic pride. To learn more, visit:

www.pennypaved.org

For more information,
please contact the DOT Preservation Office:
555.555.1000
joe@dot.org



The Importance of Preservation

(State) DOT
January 2012

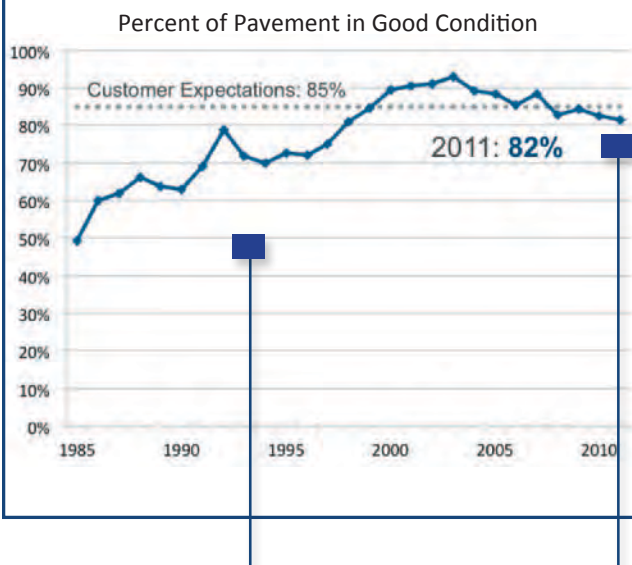
A fact sheet or brochure that accompanies a presentation can be very powerful. It can provide more context and detail than can be fit onto a slide, and it serves as a take-home piece for the audience.

Scenario 1 External Brochure (Inside)

Preserving our Infrastructure

We've come a long way since the mid-80's when less than half of our roads were in good condition. During the 1980's and 1990's, we invested in the reconstruction of nearly 100,000 highway miles.

Over the past eight months, DOT has gathered feedback from users all across the state through surveys and road rallies. We have learned our customers expect 85% of our roads to be in good condition at all times. As the graph below indicates – we're dropping below that target.

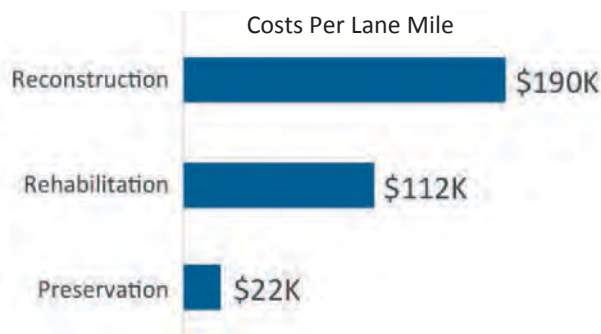


Historical data shows past progress and the current challenge.

Did you know?

Rough roads cost the average driver **\$335 per year** due to tire and suspension damage and reduced fuel efficiency.

Every \$1 spent keeping a good road in good condition **saves \$6 to \$14** over rebuilding one that has deteriorated.



It's about the applying **the right treatment to the right pavement at the right time**

Comparison of performance with customer expectations can be established through market research and highlighted with external audiences to demonstrate the DOT's commitment to listening to its customers.

Scenario 2 Brochure (Outside)

An interactive map on the website allows citizens to learn more about task force members in an uncluttered way.

Use relatively simple graphs to demonstrate key points and short outlines to reinforce the points.

LET'S START THE CONVERSATION

Meet Phoenix Project Members!

Visit our Web site to learn more about the voices all across the state who are participating.

www.phoenixproject.org

Visit our interactive map to:
- Learn about conditions of highways and bridges
- Report problems

Sign up for email updates

@PhoenixProject Facebook.com/PhoenixProject LinkedIn.com/PhoenixProject

Message from the DOT Secretary:

We are pleased the Governor has convened the Phoenix Project Task Force. As part of the task force, it will be important for you to hear from the full spectrum of voices across the state - and provide your input on preservation targets and investment levels to the DOT. We need to understand how preservation ranks as a priority.

As part of this effort, the DOT is excited to launch a series of Road Rallies so we can hear firsthand and in real-time how stakeholders experience our highways, what improvements they want and are willing to fund.

In addition to Road Rallies, the Phoenix Project will convene a series of input sessions across the state. The goal is to examine the tradeoffs between investment and performance levels and resulting impacts to commuters, business owners, freight shippers, and the needs of rural communities in transporting products to larger markets. That way, we as a state, can make fully informed decisions and move forward together to deliver the highway system our citizens expect.

Welcome to the Task Force - and thank you for your participation!

Condition of Highways Continues to Decline

Targets were set based on technical data to result in the maximum performance at the least life-cycle cost. However, performance has declined due to the inability to afford the investment.

Condition Tracks With Investment

Despite shifting funding from new projects to preservation efforts, performance continues to decline.

Projected Decline

Percent of pavements in good condition at \$200M Preservation Investment

Conditions are in dire shape now, but at the continued investment level they will get increasingly worse.

Providing co-chair contact information makes the process more open, but can create messaging conflicts. Think through this option.

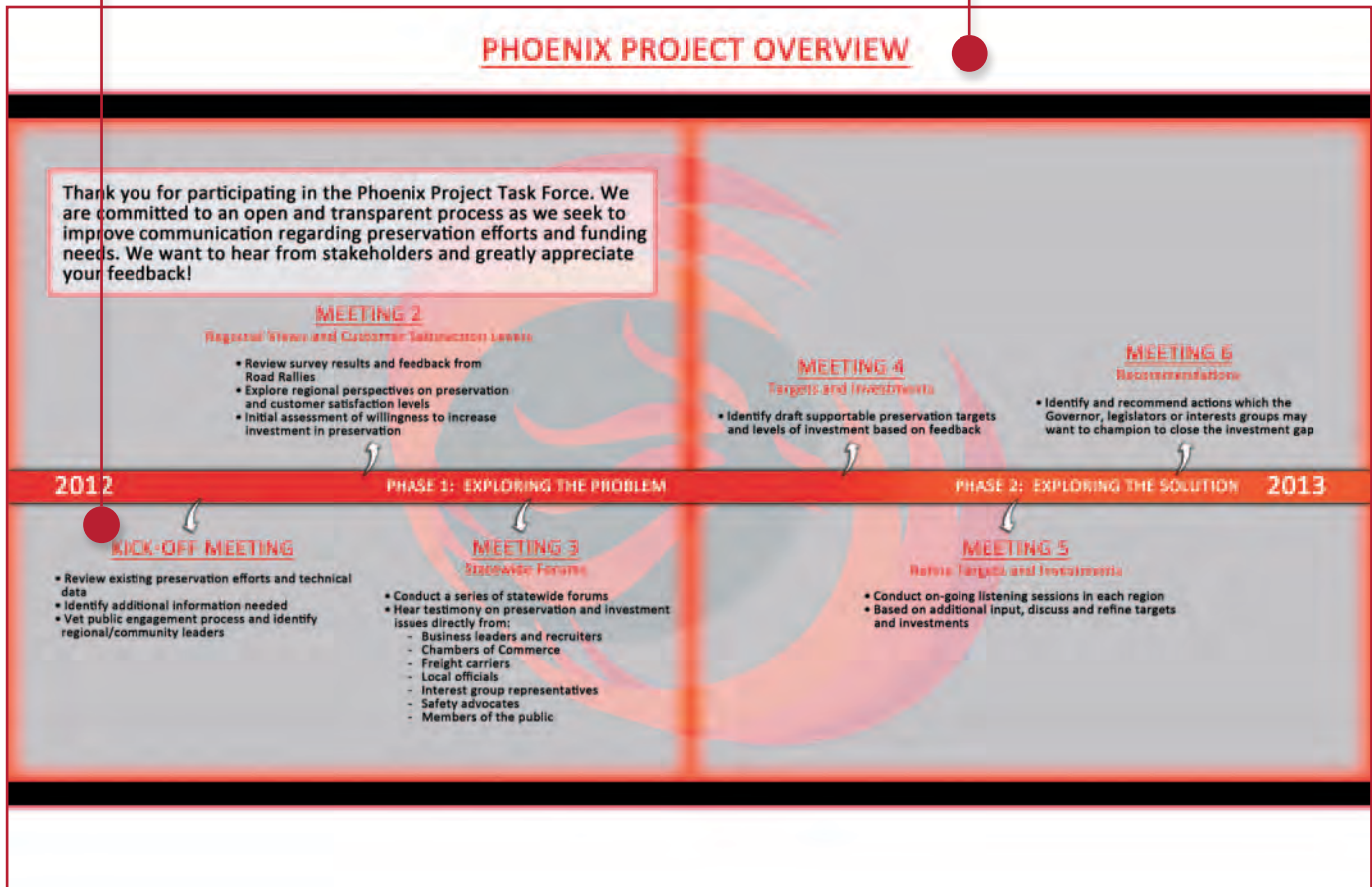
Use a short personal message to convey your "story." You'll be able to use a more conversational, easy-to-understand, and welcoming tone.

Use a variety of social media tools so that the public feels like they can participate in a conversation rather than being bombarded by data.

Scenario 2 Brochure (Inside)

Note that specific dates aren't identified which increases flexibility for the task force work.

The format of this info piece allows participants to understand (in advance) the work flow and how decisions/discussions in one meeting impact future meetings' decisions.



Scenario 2 Fact Sheet (Front)


This handout provides a short but comprehensive summary of the key findings.

Task Force Recommendations:

1. It's time to reverse the declining condition of our highways. We've reached the point where highway conditions are negatively impacting travelers and our economy.
2. The legislature should explore ways to fund preservation at \$150 million more per year, which roughly equates to 25 cents per day more per taxpayer. The Phoenix Task Force further recommends that increase be implemented in the next legislative session.
3. Although 25 cents per day will not improve all highways to the condition the DOT recommends, that increase will allow <state> to improve the condition of our major highways to good condition.

It's important to select and emphasize only the most important points—usually 3-5 key points is all that stakeholders will remember. If interested, stakeholders or the public can always read the full report.

The personal quotes help underscore key findings and connect the findings in personal and meaningful ways to issues beyond transportation.



THE TIME TO FIX OUR HIGHWAYS IS NOW

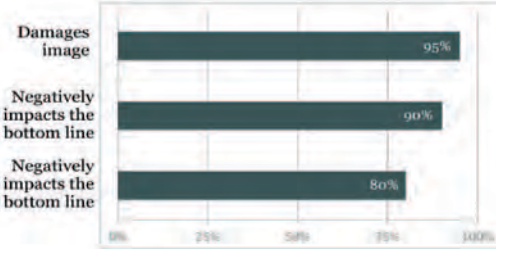
From the beginning, the goal of the Phoenix Project Task Force was to understand how preservation ranks as a priority by listening to the full spectrum of voices across the state. The task force has met for over a year, talked with community leaders, business executives, drivers and citizens to hear what they think of our highways – and what, if anything they're willing to do about it. Through this dialogue, the DOT has learned (State citizens) are ready to rebuild roads and protect investments.

Task Force Recommendations:

1. It's time to reverse the declining condition of our highways. We've reached the point where highway conditions are negatively impacting travelers and our economy.
2. The legislature should explore ways to fund preservation at \$150 million more per year, which roughly equates to 25 cents per day more per taxpayer. The Phoenix Task Force further recommends that increase be implemented in the next legislative session.
3. Although 25 cents per day will not improve all highways to the condition the DOT recommends, that increase will allow <state> to improve the condition of our major highways to good condition.

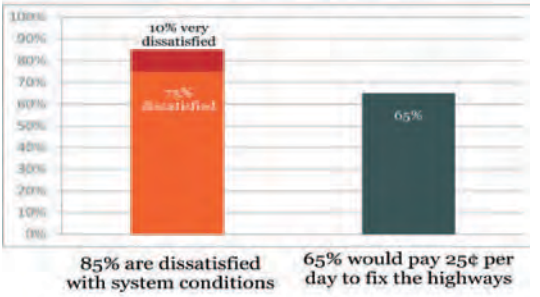
How do we know <state citizens> are ready to invest?

<STATE> BUSINESSES




| Impact | Percentage |
|------------------------------------|------------|
| Damages image | 95% |
| Negatively impacts the bottom line | 90% |
| Negatively impacts the bottom line | 80% |

<State> Drivers



| Metric | Percentage |
|---|------------|
| 85% are dissatisfied with system conditions | 85% |
| 10% very dissatisfied | 10% |
| 75% dissatisfied | 75% |
| 65% would pay 25¢ per day to fix the highways | 65% |

Highways Must Be Fixed. Rough highways are causing too much damage to <state> businesses – and 80% of businesses surveyed are willing to support an initiative asking taxpayers to pay 25 cents per day more to improve highway quality.




“As a business owner myself, I understand the importance of investing in the future. I have had to make tough decisions on how I invest in my company to help meet the challenges we face every day.”

John P. Smith
Founder and CEO, Company Name

Drivers are Willing To Pay for Better Highways. 85% of drivers who participated in the Road Rallies said they are dissatisfied with current highway conditions – and 65% are willing to pay 25 cents per day to fix them.

“Investing 25 cents a day now will save us from a much more costly investment in the future. We can't afford to underestimate that impact.”

Jose C. Hernandez
President and CEO, Major Employer



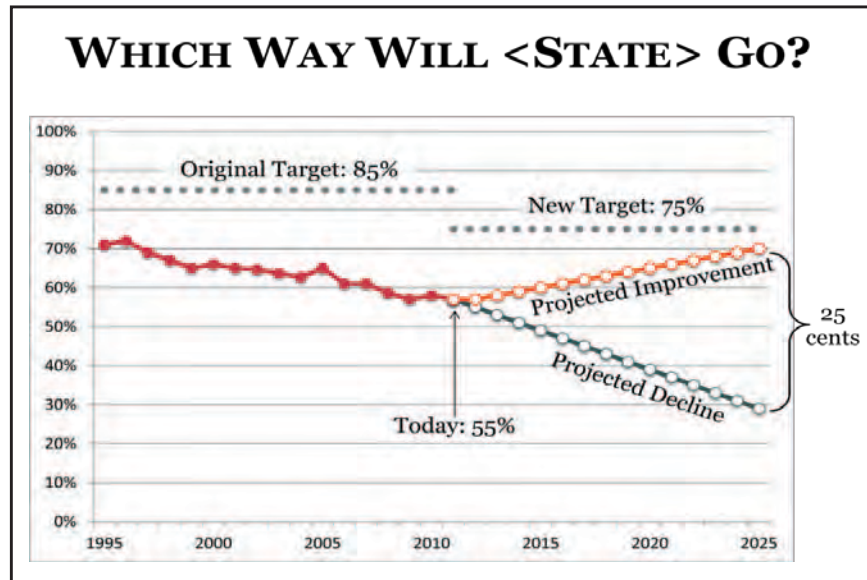
Keep key messages consistent between campaign materials.

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Scenario 2 Fact Sheet (Back)

Rebuild Roads Now to Avoid Costly Increases Later

Start investing as little as 25 cents a day now to reclaim our roads, jump start our economy with immediate construction jobs and make <state> more competitive...OR let our highways and opportunities crumble and pay \$4 per day later.



For More Information

To obtain more information about the Phoenix Project Task Force and its activities, please contact:

| | | |
|--|------------------------------------|---------------------------|
| President of State of the Chamber | Senate Transportation Chair | DOT Public Affairs |
| Street Address, Suite # | Street Address, Suite # | Street Address, Suite # |
| City, State, Zip | City, State, Zip | City, State, Zip |
| Phone | Phone | Phone |
| E-mail Address | E-mail Address | E-mail Address |

Information is also available by visiting the Task Force's Web site and social networks:

<http://phoenixproject.org>
@PhoenixProject

Facebook.com/PhoenixProject
Linkedin.com/Phoenix Project



"As part of the Phoenix Project Task Force, I have been honored to serve with a group of concerned citizens, business owners, taxpayers, and elected officials to convene hearings across the state so we could hear – in people's own words – what they think of our highways and what, if anything they're willing to do about it."

Jane M. Doe
CEO and President, Company Name

Quotes from business leaders are used to support the data indicating drivers are highly dissatisfied and the business community supports increased investment in preservation.

A-4: Op-eds and Press Releases

Scenario 1 Press Release


MEDIA CONTACT

Name _____

Title _____

Direct Phone or Cell Phone _____

E-mail _____



PRESERVING THE TRANSPORTATION SYSTEM IS FOCUS OF THE NEW (STATE) DEPARTMENT OF TRANSPORTATION WEB SITE

City, State – January 17, 2012– With an eye towards the future of transportation in (State), the Department of Transportation is pleased to announce the launch of a new web site dedicated to preservation of the state’s transportation system.

The new site – www.pennypaved.org – features important information about the transportation system and ongoing preservation efforts in (State). Visitors can track specific transportation project progress, learn about upcoming projects and view first-hand the importance of preservation.

“Over the past several decades, (State) has invested billions of dollars to build one of the best transportation systems in the country. While our system is in good condition today, it is growing more expensive to maintain,” said John Smith, (State) Department of Transportation Secretary. “We want to ensure the public is informed about the ongoing efforts to protect the investments of the past, and the new web site offers a great opportunity to provide information as well as gather feedback from the very citizens who use the transportation system every day.”

The new web site is based upon a culmination of meetings the (State) Department of Transportation has held throughout (State) over the past two years. Through continued outreach to key citizens and communities across (State), the web site has been developed to highlight the importance of the transportation system and to educate citizens on areas where the system has played a vital part in economic development, community growth, and civic pride.

The new web site is now live, and visitors are invited to sign up for the (State) DOT monthly newsletter and offer feedback at www.pennypaved.org/comments. For traffic updates, announcements and more information, follow (State) DOT on Twitter at (insert handle) and like us on Facebook.

###

Always make sure the media contact listed will be available for any immediate inquiries or follow-up. If not, you may need to consider revising the timing of distribution.

Get to the main point of the release as quickly and succinctly as possible in the opening paragraph. Then expand with further details and quotes in subsequent paragraphs. Focus on “what” the news is in the first paragraph. Use subsequent paragraphs to highlight the “how,” “when,” and “why.”


The use of quotes is a great way to ensure your key messages are included in the release. Make sure to get approval from the individual(s) you are quoting. Make sure each individual quote focuses on one specific issue and not multiple issues.

Offer opportunities to receive feedback and create dialogues with constituents. Many media look for stories that can include reader participation and feedback given the changing nature of social media.

Provide context for the reader to understand that any new projects or education campaign efforts were developed via significant outreach to citizens and communities. This information helps readers connect with the projects on a personal level.

Scenario 2 Press Release (Page 1)

MEDIA CONTACT
 Name
 Title
 Direct and/or Cell Phone Number
 E-mail Address



THE PHOENIX PROJECT:
 Rebuilding Highways and Investments

ROAD RALLIES REVEAL CITIZENS DISSATISFIED WITH HIGHWAY SYSTEM CONDITIONS; SET COURSE FOR DOT COMMUNICATION EFFORTS

City, State – March 13, 2012 – A series of recent road rallies conducted by the (State) Department of Transportation revealed high levels of dissatisfaction with the condition of the highway system.

“Public input is a critical element as the DOT continues to evaluate system conditions and determine future preservation efforts,” said (insert Name), chair of the Phoenix Project Task Force. “The feedback gathered during each of the regional road rallies was clear – citizens aren’t satisfied with highway system conditions and are willing to pay more to have it fixed.”

Eight road rallies were held in various regions across the state earlier this year, in both rural and urban areas. The events consisted of six vans carrying 16 passengers each, running four times per day along various pre-determined routes. Participants were recruited to represent a wide variety of perspectives, including area residents, regional leaders, media and other stakeholders. Each was asked to complete a satisfaction survey regarding various kinds of highways including interstates, major and minor highways on issues such as pavement condition, condition of shoulders, and whether striping was bright enough. Results were then correlated with highway data to understand what participants considered to be “good” condition.

“During the (insert City Name or Region) road rally, I was shocked by the jarring ride and poor condition of some of our most heavily-trafficked areas. In taking the time to ride along and evaluate the condition, it was evident where our system is quickly deteriorating,” said (Name), (City)-area resident.

Discussion groups were held immediately following each ride, and participants learned about system decline projections and discussed funding needed to improve the condition to target levels. An overwhelming majority from road rallies across the state indicated they would like to see 75% of pavement in good condition with a focus on the interstate and major highways.

(continued)

Note the variety of participants so that readers understand multiple perspectives will be considered.

Prep co-sponsors or others who have partnered with you for media interviews and coordinate in advance or on-site. If media are unable to attend, you may consider shooting B-roll during the rides to distribute along with your release.

If the budget doesn’t accommodate for video news release production, consider using a flip video camera and allow participants to create short video blogs regarding their experiences. These offer an opportunity for more organic, authentic message delivery than a video news release. These could be posted throughout the process to the DOT YouTube channel and on Facebook and linked from Twitter, etc.

Scenario 2 Press Release (Page 2)

Include the outcome of the event and the discussions that follow to set the stage for moving forward.

“Based upon the feedback provided, we anticipate it will cost the average taxpayer about 25 cents per work day – to get pavement conditions to reach the 75% level. We have a lot to consider as we assess future preservation efforts and next steps, and greatly appreciate the feedback provided thus far from citizens all across the state,” said (insert Name), chair of the Phoenix Project Task Force.

For more information regarding the Phoenix Project Task Force or (State) Department of Transportation, please visit www.phoenixproject.org or www.DOT.org.

###

Scenario 2 Op-ed Piece

It's best to get a local person to write the op-ed if possible. You can help facilitate writing op-eds by suggesting topics and providing media outlet contact information to partners.

The impact to economic development can be told through stories and anecdotes. A community leader or someone else outside the DOT typically conveys more credibility.

OPINION

April 20, 2012 | thedailystar.com The Daily Star **A-5**

OP-ED CONTRIBUTOR

Our Highways Are the Best Investment

By John P. Smith

As a business owner myself, I understand the importance of investing in the future. I have had to make tough decisions on how I invest in my company to help meet the challenges we face every day.

It has amazed me the number of business owners and drivers who have talked to me about similar issues with our rough roads and highways. What I had not thought of before, and what I can't get out of my mind, is the number of business owners who believe these rough conditions negatively impact their bottom line – from higher maintenance costs to slower delivery speeds to not really being that interested in expanding into new product lines if delicate manufacturing equipment has to be delivered on our current roads.

As part of the Phoenix Project Task Force, I have been honored to serve with a group of concerned citizens, business owners, taxpayers, and elected officials to convene hearings across the state so we could hear – in people's own words – what they think of our highways and what, if anything they're willing to do about it.

At our last meeting, the issue that resonated most with me was when we heard from more than five Economic Development Directors from across the state – all who told us nearly identical stories. Companies decide to relocate based primarily on 2 factors: labor costs and access to a good transportation system. They simply can't sell our highways as "good" and therefore, <state> doesn't even make the first cut to attract new businesses.

Just like I have to make investment decisions each day with my business, so do we as a community need to prioritize our investments for the future. DOT research indicates an investment of a quarter a day by each taxpayer would get our most important highways back into competitive shape. I can tell you from the Phoenix Project task force meetings I have attended, we have heard from citizens and businesses alike that we need to rebuild road and invest in the highways and we need to do it now!

25 cents a day to get in the game and invest for the future. In my mind, that is an investment we can't afford to ignore.

John P. Smith is a member of the Phoenix Task Force, created by the Governor to examine <state's> highway system. For more information, visit www.morethanmagic.org.

A-5: Blast Emails

Scenario 1 Blast Email

DOT Secretary

From: DOT Secretary [mailto: DOT@pennypaved.org]
Sent: Tuesday, February 7, 2012 11:13 AM
To: Stakeholders
Subject: A Penny Paved is a Penny Saved

Good morning:

On behalf of the Department of Transportation, I'm pleased to announce a new initiative regarding the importance of preserving our system. This new initiative – called "A Penny Paved is a Penny Earned" – is focused on communicating the ongoing efforts by the DOT to protect our state's investment.

As you know, over the past several decades, (State) has invested billions of dollars to build one of the best transportation systems in the country. While our system is in good condition today, it is growing more expensive to maintain. The goal behind our "Penny Paved" campaign is to ensure the public is informed about the ongoing efforts to protect the investments of the past, and wisely invest for the future.

To that end, we're launching a new web site at www.pennypaved.org which features important information about the transportation system and ongoing preservation efforts throughout our state. Based upon input gathered from citizens, communities and stakeholders, the web site has been developed to highlight the importance of the transportation system as well as provide information on how the system plays a vital part in economic development, community growth, and civic pride.

Visitors can learn about upcoming projects, track progress and view first-hand the importance of preservation. The new site offers a great opportunity to provide information as well as gather feedback from the very citizens who use the transportation system every day.

Support from our stakeholders is critical to maintaining our infrastructure and we're glad to have you on our side. The "Penny Paved" initiative is based upon a culmination of meetings the (State) Department of Transportation has held throughout (State) over the past two years – in which many of you participated! We hope you'll find the new Web site informative – and welcome any feedback along the way.

Thank you,

John

John Smith
 Secretary
 (State) Department of Transportation
 888-555-5000
 jsmith@dot.gov
www.pennypaved.org

Email update provided to key stakeholder subscriber group. Overall tone should be more conversational/less formal than press release.

Provide background on the context of the new project or initiative, as well as the goal of fiscal responsibility.

Another opportunity to note the involvement/contributions from stakeholders in the process.

Scenario 2 Blast Email

An email blast provides a personal link between the head of the transportation agency and stakeholders. Email blasts are an effective tool for communicating messages quickly and easily—and are even more effective when links to additional material are embedded in the email.

Gathering and reporting feedback from multiple sources, multiple times increases the credibility of messages.

For credibility's sake, it's important for someone beyond the DOT to talk about how much "improvement" is affordable.

DOT Secretary

From: DOT Secretary [mailto:Secretary@DOT.org]
Sent: Wednesday, March 21, 2012 1:20 PM
To: Stakeholders
Cc: Phoenix Task Force
Subject: Phoenix Task Force Recommendations

Dear Stakeholders and Partners:

As many of you are aware, over the past eight months the <State> DOT has been working to develop a responsible and supportable plan for preserving our transportation system. Thank you to each of you for providing feedback through survey responses, road rallies, focus group sessions and phone calls. Thank you also to the Phoenix Task Force members for their role in reviewing responses and preparing a recommendation. In listening to community leaders, business executives, drivers and citizens, we have heard the message clearly – <State> is ready to rebuild roads and invest in our highway system.

Based upon the information gathered, the Phoenix Task Force has made the following recommendations:

- It's time to reverse the declining condition of our highways. We've reached the point where highway conditions are negatively impacting travelers and our economy.
- The legislature should explore ways to fund preservation at \$150M more per year, which roughly equates to an increase of 25 cents per day per taxpayer. The Phoenix Task Force further recommends that increase be implemented in the next legislative session. Though this falls short of the target level, the increase would allow for major system improvements and continued maintenance efforts critical at this time.
- Although 25 cents per day will not improve all highways to the condition the DOT recommends, it would allow <State> to improve the condition of our major highways to good condition. As shared by <Name>, Phoenix Task Force co-chair, "We can't afford to have highways in excellent condition everywhere right now, but we can make strategic investments to improve our most important trade and travel corridors. When the economy improves, we'll work to bring the rest of our highways into good condition."

For more information on the Phoenix Task Force recommendations, please visit www.phoenixproject.org or download the brochure here (hyperlink).

We look forward to your continued feedback and appreciate your support as we work to preserve the investment in our state's transportation system.

Sincerely,

DOT Secretary

First Name Last Name
Secretary
Department of Transportation
Mobile (555) 555-5555
Direct (555) 555-5555
Main (555) 555-5555

Driving stakeholders and the public to a consistent location for additional information increases message control and can become a convenient one-stop shop for audiences.

A-6: Website

Scenario 1 Website



A website can serve as the home for a preservation initiative. It can provide a one-stop shop for all of the materials and news related to the effort and allow the DOT to communicate with citizens and stakeholders in an inexpensive way.

Initiative-focused website offers news directly related to the initiative and other preservation information from around the country.

Links to social media.

Blog posts by DOT professionals and supporters of the initiative.

A-7: Social Media

Scenario 1 Twitter Account

Tweets don't always have to be directly about the initiative. Providing links to other places on the web that are related can help promote interest and awareness.

Building a following can take time and resources, but is important for any social media campaign to be effective.



Use the power of social media to broadcast. Layer simple and complex content to set it up, and continue to update content. Social channels quickly become stale and must be updated on a regular basis.

Twitter provides a way to quickly and informally engage directly with citizens and stakeholders.

Scenario 2 Facebook Page

The screenshot shows the Facebook page for 'The Phoenix Project', a Government Agency. The page features a blue header with the Facebook logo, a search bar, and navigation links for 'Phoenix Project', 'Find Friends', and 'Home'. The main content area displays the page's profile picture, a cover photo, and a recent post. The post, dated February 4, 2012, at 11:27 AM, includes a photo of a white van and text stating: 'The Phoenix Project Task Force conducted another successful road rally last Saturday, February 4th. A special thanks to all of our participants! Your voice helps us to understand how preservation ranks as a priority.' The post has 12 likes and a comment from Jeff Smith asking about the next rally. The left sidebar contains navigation links (Wall, Info, Friend Activity, Photos, YouTube, Videos, Events), an 'About' section, and a list of likes including Penny Paved and Kansas Department of Transportation. The right sidebar shows 'Recommendations (6)' and a 'Sponsored' section.

Consistently use the logo so that viewers can quickly associate the information with a specific project or initiative.

Post photos and updates often to help the project “come alive.” Provide information in a variety of formats and channels so that people can engage in ways that are most comfortable and convenient for them.

Scenario 2 YouTube Channel

YouTube is the world's second-largest search engine. Develop a YouTube Channel for the initiative to help organize content and make it easier for stakeholders to find new posts.

The screenshot shows the YouTube channel interface for the Phoenix Project. At the top, the YouTube logo and navigation links are visible. The channel header displays the name 'Official Phoenix Project YouTube Channel', a 'Subscribe' button, and statistics for 875 subscribers and 3,452 video views. Below the header, there are navigation tabs for 'Featured', 'Feed', 'Videos', and 'Home', along with a 'Search Channel' box. A horizontal menu lists various content categories: 'Community Involvement', 'Task Force', 'Team Member Stories', 'Public Service Announcements', 'Safety', and 'All Videos'. The main content area features three video thumbnails with titles and descriptions: 'Crazy Bad' (352 views, 8 days ago), 'Road Rally' (328 views, 20 days ago), and 'Safety 1st' (254 views, 42 days ago). The right sidebar contains the Phoenix Project logo, 'About Phoenix Project' with the website URL, and sections for 'Created by', 'Latest Activity', 'Date Joined', 'Featured Playlists', 'Uploaded Videos', and 'Favorite Videos'. The footer includes the YouTube logo and various navigation links.

Even though this video is about a partner's efforts, it is relevant to the effort and by using lots of channels to communicate broadly about preservation, the opportunity for a surround sound experience is created for audiences.

Consistently use the logo so that viewers can quickly associate the information with a specific project or initiative.

Scenario 2 YouTube Script (Page 1)

Scripts for YouTube videos should be short and simple. Use clips of people who are not DOT employees, and provide a mix of education and entertainment to increase views.

YouTube screen shot and Video Script: Crazy Bad

JOHN DOE, commuter:

Quote and footage of John Doe standing by his car: You know it's bad when you throw an axel driving to work – I'm not kidding, I hit a pothole on I-xx and it tore my car up. I'm sick of this.

BOB SMITH, Economic developer:

Quote and footage of Bob Smith and then cut to B-roll of heavy trucks and deteriorating bridges: I tell you, I can't get businesses to think about locating here with highways in this condition. Businesses look at two key factors when deciding whether to locate: labor costs and access to good highways. Sure, they look at lots of other factors too, but if you can't score good on labor and highways, you're out of the game.

NARRATOR with B-roll of more bad highways and then Amtrak:

To find out how bad xxx's highways really are, the XYZ transportation coalition sponsored a "Crazy Bad" contest. Residents were encouraged to submit stories about the worst experience they had had with a bad highway in the last 3 years. Whoever had the worst story would be awarded a weekend get-away trip to xxxx resort, via Amtrak. And the "winning" story comes from Jane Doe:

Jane Doe, new mother

Quote and footage of Jane Doe, holding a young baby, then cut to a picture of XXX hospital: We were driving to the hospital and I swear the bumpy road caused the contractions to speed up. I delivered in the car – at the emergency bay of the hospital. The baby and I are ok, but I swear Highway XXX caused a lot of the trouble. We need to fix our highways, now.

Scenario 2 YouTube Script (Page 2)

NARRATOR with graphic of the map and the website address and then zoom in on the “leave a comment” portion of the site:

www.partner.com

XYZ coalition has created map using these stories along with information from the xDOT so that you can see how bad the highways are that you have to travel on. It’s easy to use, just click on the county where you live or the highway you drive to see how those conditions compare with other highways in the state. There’s a spot where you can leave your comments or share your Crazy Bad Highway Story. XYZ Coalition is now searching for the next Crazy Bad Story – and rest assured, you’ll travel Amtrak for your weekend get-away!


Appendix B

Additional Industry Examples

B-1: Brochure and Fact Sheet Examples

B-2: Press Release and Op-ed Examples

B-1: Brochure and Fact Sheet Examples



Better Roads for a Better Minnesota

May 2011

Background

More than 750 miles of Trunk Highway (TH) roads in Minnesota are currently in "Poor" condition. Despite approximately \$980 million of planned pavement investments from 2012-15, the miles in "Poor" condition is projected to increase to 1,900 by the year 2020. This will have a significant negative impact on the traveling public, the state's economy and quality of life. It will also increase the future cost of maintaining paved roads in Minnesota.

Program Proposal

The Minnesota Department of Transportation is developing a four-year program that will:

- Significantly improve state highway pavement condition – the goal is to improve more than 700 miles of roads and reduce "Poor" pavements
- Provide pavement-focused mobility enhancements and transit advantages in the Twin Cities metro area including MnPASS expansion and shoulder hardening for transit
- Provide pavement-related improvements in the areas of safety and ADA accessibility and other work, such as drainage facilities
- Explore innovative engineering and delivery techniques to best use taxpayer dollars
- Support about 3,400 jobs in the Minnesota road construction industry

Program Cost and Funding

The overall cost of this program is \$398 million and does not require any increase in revenue. The funding sources include: TH Bonds held as contingency for unanticipated cost increases in the Mn/DOT Bridge Program; state funds from the TH Fund; and available federal funds, including bid savings on recent projects.

| Source | FY 2012 | FY 2013 | FY 2014 | FY 2015 | Total |
|-----------------|----------------|---------------|---------------|---------------|----------------|
| TH Bonds | \$68 m | \$50 m | \$35 m | - | \$153 m |
| TH Fund | \$56 m | \$28 m | \$25 m | \$33 m | \$142 m |
| Federal Funds | \$31 m | \$12 m | \$19 m | - | \$62 m |
| Subtotal | \$155 m | \$90 m | \$79 m | \$33 m | \$357 m |
| TH Debt Service | \$5 m | \$9 m | \$14 m | \$13 m | \$41 m |
| Total | \$160 m | \$99 m | \$93 m | \$46 m | \$398 m |

Funding will be allocated statewide to MnDOT's transportation districts based on pavement performance need.

Additional Commitment

MnDOT has already committed an additional \$96 million in FY 2011 towards pavement improvement.


Sustainability

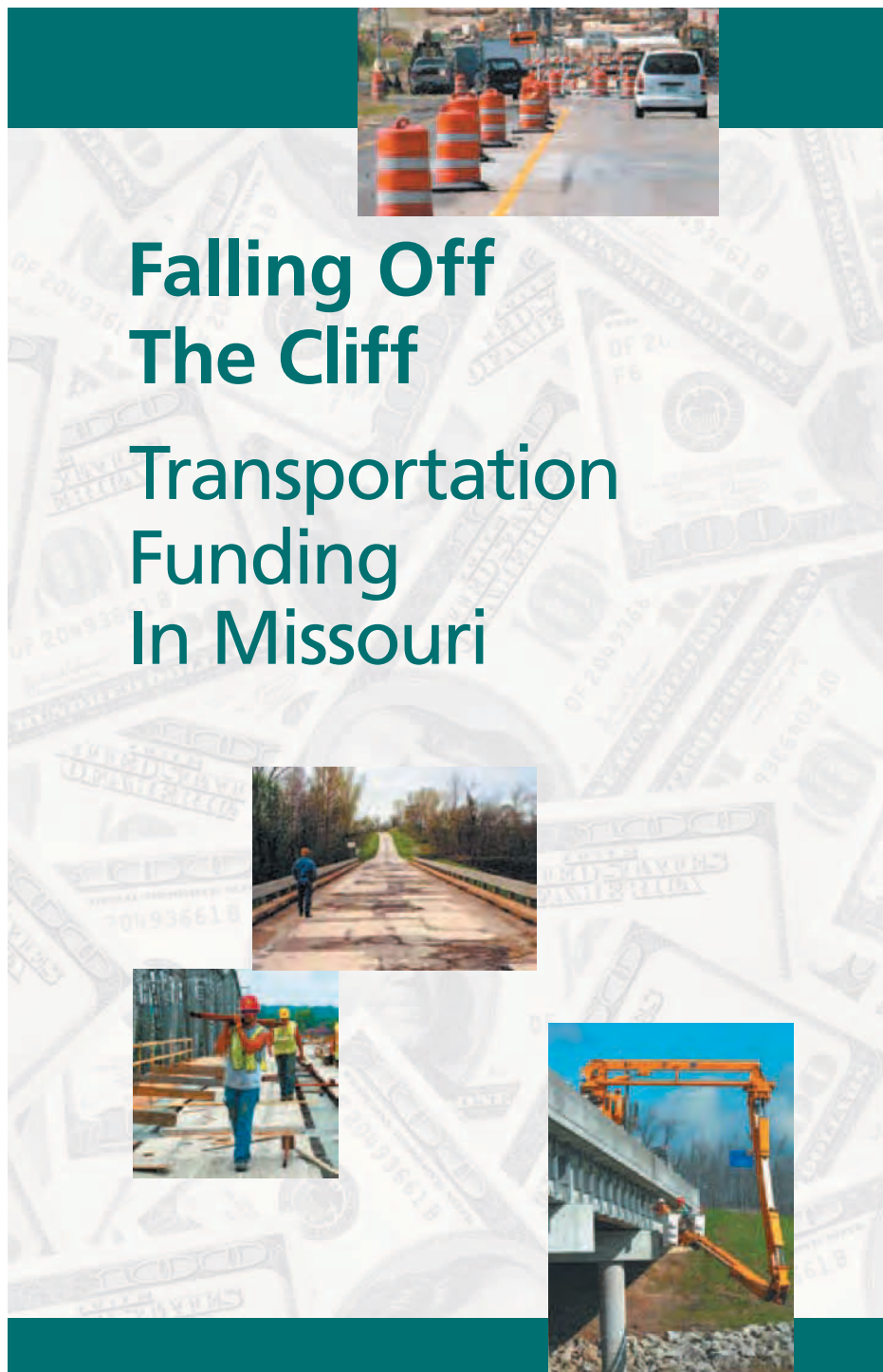
The *Better Roads for a Better Minnesota* program will stem the increase in "Poor" pavements over the next four years, after which, more investments above and beyond the regular program will be needed. These investments will be determined based on MnDOT's risk management approach.

Legislative Authority

Appropriation authority is necessary to use this increased funding from the TH Fund balance, which includes debt service on the TH bonds, as well as federal funds for the *Better Roads for a Better Minnesota* program. No additional authority is needed to use the TH bonds for the program.

Your Destination...Our Priority





Falling Off The Cliff

When Transportation Funding Hits Rock Bottom

“If we do not have a new revenue stream in place by 2010, we go over the cliff. That puts us back in a place where our highway system is deteriorating.” -

*Missouri Department of
Transportation Director
Pete Rahn, June 28, 2007*



The Ascent

In 2004, Missouri voters approved Amendment 3 by an almost four-to-one margin. That move redirected some highway user fees to road construction and improvements. With this additional funding, the Missouri Department of Transportation has been able to tackle a record amount of highway construction projects – about \$3 billion worth in the past three years.

MoDOT has used the extra funding to improve Missouri’s deteriorating highways in three ways:

- Making 2,200 miles of the state’s busiest highways smoother and safer in two years under the Smooth Roads Initiative;



Communicating the Value of Preservation: A Playbook



- Accelerating key projects – some by two to three years; and
- Tackling \$1.6 billion worth of much needed new construction.

The Results

- Missouri has gone from having the third worst pavement on major roads to an estimated ninth best.
- Seventy-eight percent of the state's major roads are now in good condition.
- Missouri jumped from 28th to 17th in overall performance of the state highway system from 2004 to 2005 and from 39th to 17th in overall performance from 2000 to 2005. These figures are from a Reason Foundation report that also showed the state had the third lowest administrative costs per mile.
- The Show Me State recorded the largest drop in traffic-related fatalities of any state in the nation in 2006.
- Customer satisfaction with MoDOT rose to 79 percent in 2006.
- The Excellence in Missouri Foundation presented MoDOT with the 2007 Missouri Quality Award.

“As a result of a recent increase in highway transportation funding, Missouri has been able to address many needed projects to improve road and bridge conditions, enhance highway safety and ease congestion.”

- TRIP Report, June 2007

Not too long ago, the Missouri Department of Transportation (MoDOT) and its governing body – the Missouri Highways and Transportation Commission – were taking much criticism for failing to complete its plan for highway improvements. In fairness, we now must credit the commission and agency for pulling out of that tailspin. The best way to restore credibility is with action, not talk, and the department has done precisely that.”

- Jefferson City News Tribune editorial, January 2007

At The Pinnacle

The construction boom of the past few years might suggest all is well with transportation in Missouri. Unfortunately, that's not the case. Three negative factors are coming together to cause a "perfect storm" to take shape for the funding of Missouri's critical highways:

1 Amendment 3 bonding – With the passage of Amendment 3 in 2004, voters directed MoDOT to use the new revenue to issue bonds for construction in order to fix Missouri's roads fast. Now, future revenues will go to repay the bonds. State funds available for highway maintenance and construction will return to pre-Amendment 3 levels. This level of investment was inadequate then and will be inadequate in 2010.

2 Lagging federal revenue – In 2010, aid from the Federal Highway Trust Fund, which provides funding to state highway, bridge and safety programs, is expected to drop 40 percent. The nation will go from a \$41 billion federal highway program to a \$25 billion program. Missouri's portion of federal aid is expected to drop from \$927 million annually to \$568 million annually.

3 Increasing construction, maintenance and fuel costs – The purchasing power of the dollars MoDOT receives continues to shrink because of the increasing price of doing business. For example, since 1997 state revenue for roads and bridges has grown 36 percent. At the same time, asphalt prices rose 97 percent



- almost three times as much. Concrete has risen 48 percent. Steel has increased 57 percent. And fuel to mow right of way and move dirt has increased an incredible 204 percent.

The Fall

The combination of these three factors – Amendment 3 bond proceeds running out, declining federal aid and rising costs - will cause the amount of money we spend on roads and bridges to fall off a cliff beginning in 2010. In 2008, our construction program will total \$1.23 billion. **By 2010, funding for annual construction will fall to \$569 million.** That means we'll barely be able to maintain our highways, much less address congestion and safety or enhance economic development.

Furthermore, we estimate needing an additional investment of \$300 million to \$500 million over the next 10 years to repair or replace 203 of our aging, major bridges throughout the state. Major bridges are those more than 1,000 feet long. There are 203 of them in the state, 53 of which span either the Missouri or Mississippi rivers. On average they're 33 years old and carry 21,000 vehicles a day. With an additional \$300 million to \$500 million, we could bring all of our major bridges up to satisfactory condition or better.

Over the next 20 years, we project we'll need more than \$37 billion to meet Missouri's most critical transportation needs. The bad news is we will have only \$19 billion to invest - a gap of \$18 billion not including inflation. This gap in what we have and what we have to do seems daunting, but it's not impossible to close.

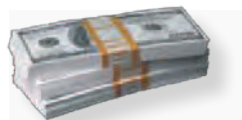
Construction Program

2008



\$1.23 Billion

2010



\$569 Million

Closing the Gap

So what is being done to address this funding shortfall? MoDOT is continuing to bring projects in on time and within budget. The construction contracts awarded in fiscal year 2007 came in 7.4 percent under budget - a \$90 million savings. Since 2003, \$5.5 billion worth of projects have been completed within less than one-tenth of one percent of the budgeted amount.

Examples of Radical Cost Control Measures

Practical Design - Projects are designed to fit specific needs, without the frills. Over the past three years Practical Design has saved nearly \$500 million that has been reinvested in additional improvements.

Keeping bids low - Bids that are too high are bid again. Sixty-seven projects worth \$234 million were re-bid in the past two years, saving \$27.2 million.

Road closings - When practical, roads are shut down if it means getting the project done quickly and saving money. MoDOT has closed 136 roads over the past two years, trimming costs and completing those projects an average of 30 percent faster.

Contractor innovation - MoDOT asks highway contractors to propose innovative solutions, such as using alternate materials, coming up with improved designs and working off-hours. Last year, this effort saved \$3.7 million on 17 projects.

Managing administrative costs - Over the past several years, MoDOT has kept direct administrative costs to only two percent of its annual budget.

Still, these long-term cost control efforts will not be enough to bridge the funding gap and address Missouri's long-range transportation needs.

It's up to the General Assembly to decide how to fund transportation.

It's up to MoDOT to continue to be good stewards of Missourians' money.

It's up to the voters to decide if they want to invest in their children and grandchildren's future through the foundation of our modern economy . . . transportation.

Climbing Back Up the Mountain

Federal and state fuel taxes are the primary source of transportation funding. The first state fuel tax rate was 2 cents per gallon, established in 1924. The state fuel tax was last raised in 1996 to its current rate of 17 cents. The 18.4-cent-a-gallon federal fuel tax has not increased in 15 years.

Funding Options Annual Yield

| | |
|--|----------------|
| One-cent motor fuel tax increase | \$41.5 million |
| One percent motor fuel sales tax | \$72.5 million |
| One percent general sales tax increase | \$700 million |
| One percent motor vehicle sales tax increase | \$69.7 million |
| One percent motor vehicle use tax | \$11.2 million |
| \$5 motor vehicle license fee increase | \$15.8 million |
| \$2 driver's license fee increase | \$1.8 million |

Estimated Highway Construction Costs

| | |
|---|--------------------|
| Estimated cost to build a mile of major highway | \$4 – \$12 million |
| Estimated cost to rebuild Interstate 70 | \$3.1 billion |
| Estimated cost to rebuild Interstate 44 | \$4.1 billion |

20-Year Project Needs

| | |
|---|-----------------------|
| Road and bridge construction | \$16.3 billion |
| Highway maintenance | \$11.8 billion |
| Bridge maintenance | \$3.5 billion |
| Public transportation, aviation, ports and rail | \$5.7 billion |
| Total | \$37.3 billion |

| | |
|--|-----------------------|
| Project needs over 20 years | \$37.3 billion |
| Projected revenue over 20 years | \$19 billion |
| Funding gap over 20 years | \$18.3 billion |

Keep Improving Missouri's Roads
Kansas City Star
 July 5, 2007

... today's snapshot on the state's highways is no assurance that things will continue to improve in the future. Officials warn that in 2010, available revenue in Missouri will drop to \$570 million, down from this year's \$1.2 billion. Lawmakers should begin work now to ensure that the state's road network doesn't begin to deteriorate once again.

Highway Money -- How Long Will We Do Nothing?
Columbia Daily Tribune
 May 17, 2007

In the next 20 years current revenue streams will produce about \$19 billion, but estimated needs come to \$37 billion, probably an overly conservative figure . . . Missouri needs substantially more public transportation funding than anything visible on the horizon . . . Missouri highways must receive more financial support, and tax increases will be necessary.

Dialogue On Roads Opens Up
Springfield News-Leader
 June 17, 2007

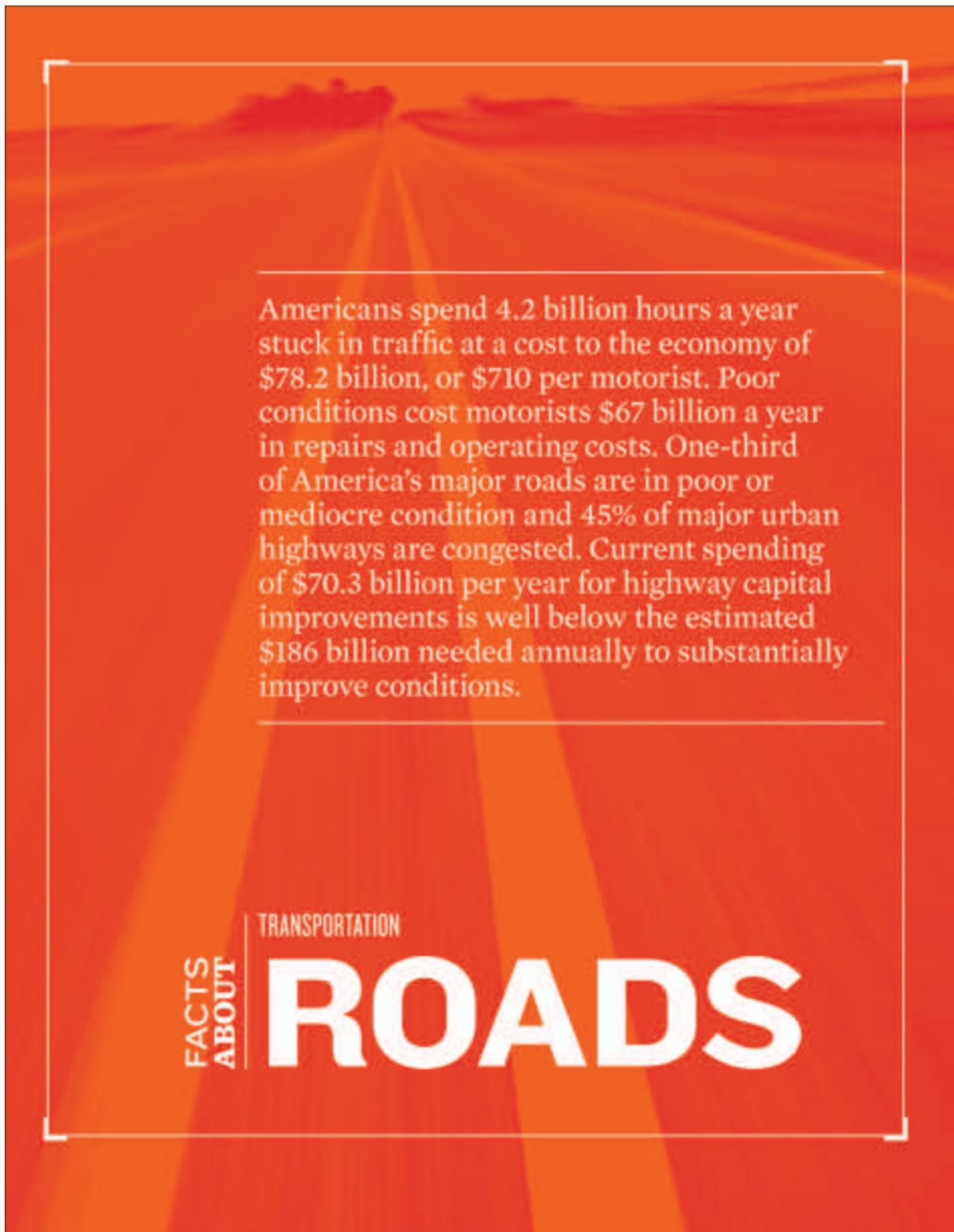
Momentum is building for Missouri to do something about its roads . . . We do have a problem. Our funding sources aren't keeping up with basic maintenance needs. And eventually the bill will become due from the passage of Amendment 3 in 2004. The overwhelming passage of that amendment -- which redirected some money from the state budget back to highways -- should be telling. It said that Missouri voters care about their roads, and they want to do something to make them better . . . It's time to plan ahead so that today's potholes don't become tomorrow's crumbled highways.

 Missouri Department of
 Transportation
 1 888 ASK MODOT
www.modot.org

CR07.063

2009 | **INFRASTRUCTURE
FACT SHEET**

ASCE *American Society
of Civil Engineers*



Americans spend 4.2 billion hours a year stuck in traffic at a cost to the economy of \$78.2 billion, or \$710 per motorist. Poor conditions cost motorists \$67 billion a year in repairs and operating costs. One-third of America's major roads are in poor or mediocre condition and 45% of major urban highways are congested. Current spending of \$70.3 billion per year for highway capital improvements is well below the estimated \$186 billion needed annually to substantially improve conditions.

FACTS
ABOUT
TRANSPORTATION
ROADS

TRANSPORTATION
ROADS | 2009 GRADE | **D-**

RAISING THE GRADES SOLUTIONS
THAT WILL WORK **NOW**

- A** = Exceptional
- B** = Good
- C** = Mediocre
- D** = Poor
- F** = Failing

AMERICA'S INFRASTRUCTURE G.P.A. **D**

ESTIMATED 5-YEAR FUNDING REQUIREMENTS FOR BRIDGES AND ROADS

Total investment needs
\$930 BILLION

Estimated spending
\$380.5 BILLION

Projected shortfall
\$549.5 BILLION



- ★ **REFORM** the federal highway program to emphasize performance management, cost-benefit analysis, and accountability;
- ★ **DIRECT** federal transportation policies, programs, and resources to enhance U.S. global competitiveness, interstate commerce, passenger travel, and emergency preparedness;
- ★ **INCREASE** spending significantly at all levels of government to repair, improve, and expand the nation's surface transportation system;
- ★ **INCREASE** funding for long-term, advanced highway research;
- ★ **ADDRESS** the long-term viability of fuel taxes for transportation funding, and explore the viability of the most promising options to strengthen this funding;
- ★ **ESTABLISH** a national policy goal of achieving zero deaths on America's roadways and **INCREASE** funding in the Highway Safety Improvement Program by 10%.

CONDITION

Our nation's economy and our quality of life require a highway and roadway system that provides a safe, reliable, efficient, and comfortable driving environment. Although highway fatalities and traffic-related injuries declined in 2007, the drop is most likely attributable to people driving less. Still, in 2007, 41,059 people were killed in motor vehicle crashes and 2,491,000 were injured.⁴ Motor vehicle crashes cost the U.S. \$230 billion per year—\$819 for each resident in medical costs, lost productivity, travel delays, workplace costs, insurance costs, and legal costs.¹

Next to safety, congestion has become the most critical challenge facing our highway system. Congestion continues to worsen to the point at which Americans spend 4.2 billion hours a year stuck in traffic at a cost of \$78.2 billion a year in wasted time and fuel costs—\$710 per motorist.¹ The average daily percentage of vehicle miles traveled (VMT) under congested conditions rose from 25.9% in 1995 to 31.6% in 2004, congestion in large urban areas exceeding 40%.² And as a result of increased congestion, total fuel wasted climbed from 1.7 billion gallons in 1995 to 2.9 billion gallons in 2005.⁵

Poor road conditions lead to excessive wear and tear on motor vehicles and can also lead to increased numbers of crashes and delays. According to the Federal Highway Administration, while the percentage of VMT occurring on roads classified as having “good” ride quality has steadily improved, the percentage of “acceptable”

ride quality steadily declined from 86.6% in 1995 to 84.9% in 2004, with the lowest acceptable ride quality found among urbanized roads at 72.4%.³ These figures represent a failure to achieve significant increases in good and acceptable ride quality, particularly in heavily trafficked urbanized areas.

Compounding the problem are steadily increasing demands on the system. From 1980–2005, while automobile VMT increased 94% and truck VMT increased 105%, highway lane-miles grew by only 3.5%. From 1994–2004, ton miles of freight moved by truck grew 33%.⁶ The increase in freight traffic is of particular concern because of the increased dependency of commerce upon the efficiency of the roadways and the added wear and tear caused by trucks. Without adequate investment and attention, the negative trends will continue, as will the adverse consequences.

It is clear that significant improvements and system maintenance will require significant investments.

The National Surface Transportation Policy and Revenue Commission studied the impact of varying investment levels (medium and high) and produced the following ranges of average annual capital investment needs (in 2006 dollars):

- ★ \$130 billion–\$240 billion for the 15-year period 2005–2020;
- ★ \$133 billion–\$250 billion for the 30-year period 2005–2035;
- ★ \$146 billion–\$276 billion for the 50-year period 2005–2055.

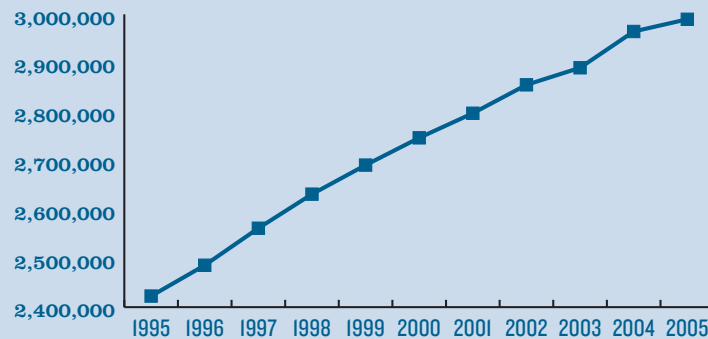
TABLE 11.1 ★ Top 10 Most Congested Cities in the U.S.

| RANK | CITY | HOURS OF DELAY PER TRAVELER |
|------|--------------------------------------|-----------------------------|
| 1 | Los Angeles/Long Beach-Santa Ana, CA | 72 |
| 2 | San Francisco-Oakland, CA | 60 |
| 2 | Washington, DC-VA-MD | 60 |
| 2 | Atlanta, GA | 60 |
| 5 | Dallas-Fort Worth-Arlington, TX | 58 |
| 6 | Houston, TX | 56 |
| 7 | Detroit, MI | 54 |
| 8 | Miami, FL | 50 |
| 9 | Phoenix, AZ | 48 |
| 10 | Chicago, IL-IN | 46 |

SOURCE *Urban Mobility Report*, Texas Transportation Institute, 2007

The lower end of the ranges reflect the estimated costs of maintaining key conditions and performance measures at current levels, while the higher end ranges would allow for an aggressive expansion of the highway system, which would provide improved conditions and performance in light of increasing travel demand.³ Even at the lower range of estimates, an enormous gap exists between the current level of capital investment and the investment needed to improve the nation's highways and roads.

The average daily percentage of vehicle miles traveled (VMT) under congested conditions rose from 25.9% in 1995 to 31.6% in 2004, congestion in large urban areas exceeding 40%.

FIGURE 11.1 ★ Highway Vehicle Miles Traveled: 1995–2005

SOURCE *Transportation Statistics Annual Report: 2007*, U.S. Department of Transportation, Bureau of Transportation Statistics, 2008

RESILIENCY

The Interstate Highway System was constructed as part of the nation's strategic homeland defense, illustrating the important role of transportation in mitigation, defense and recovery.

The ability of our transportation system to withstand threats from hazards of all types, both natural and human-caused, and to restore service promptly following such events, is known as resilience.

Building disaster-resistant roads and highways reduces hazard mitigation costs, limits exposure, and maintains operational continuity. A multihazard approach utilizing next-generation codes, standards, and practices is necessary to minimize the extent of a disaster.

CONCLUSION

The challenges imposed by our highway infrastructure require a large increase in capital investment on the part of all levels of government and other sources as well. The failure to adequately invest in the nation's highways and roads will lead to increased congestion and delays for motorists and the further deterioration of pavement conditions and will pose increased safety concerns. An overstressed infrastructure will also slow freight delivery, create unpredictability in supply chains, diminish the competitiveness of U.S. businesses, and increase the cost of consumer goods. There must also be a significant change in the way we manage the system, which should include

Communicating the Value of Preservation: A Playbook

RAISING THE GRADES CASE STUDIES

FAIRFAX COUNTY, VA ★ I-495 Virginia HOT Lanes Project

Designed to help alleviate congestion on Virginia's busiest highway in the third worst congested region in the country, the I-495 High Occupancy Toll (HOT) lanes project will add 4 lanes to a 12-mile stretch of the Capital Beltway. The estimated \$1.7-billion project will employ electronic tolling and dynamic pricing to manage traffic flow and will replace more than \$260 million in aging infrastructure, including more than 50 bridges, over-



passes, and major interchanges.
ABOVE: Conceptual renderings of the future Capital Beltway HOT Lanes Project. *Photo courtesy of Transurban.*

MISSOURI ★ Median Crash Barriers



Through an analysis of the state's crash data, MoDoT recognized an emerging problem of severe cross-median crashes on its most heavily traveled roadways. To address this safety concern, Missouri began an effort to install median cable barriers system-wide on its major interstates. Simple cable barriers lining all highway medians offered a low cost solution to this problem. The cable barriers have performed successfully in Missouri, catching over 95% of vehicles entering the median. Most importantly, the barriers are saving lives. As an example, Interstate 70 suffered 24 cross-median fatalities in 2002. The installation of system-wide cable barriers since then has virtually eliminated this crash type, as only two cross-median fatalities occurred in 2006. *Photo courtesy of the Roadway Safety Foundation.*

the use of emerging technologies and innovative operational strategies.

Legislation to replace SAFETEA-LU, which expires on September 30, 2009, must address the following issues if it is to set the stage for the major reforms needed to ensure the viability of our surface transportation system. First, it must more clearly define the federal role and responsibilities, and from that definition, the framework for a performance-based and fully accountable system can emerge.

Second, it is clear that the current funding model for the Highway Trust Fund (HTF) is failing. The latest projections by the U.S. Department of Treasury and Congressional Budget Office indicate that by the end of FY 2009, the HTF will have a negative balance of \$4–5 billion if no corrective action is taken. While acknowledging the need to move to a new, sustainable funding system in the long term, the National Surface Transportation Policy and Revenue Study Commission has recommended an increase of 5–8 cents per gallon in the gas tax per year over the next 5 years to address the current projected shortfall.³ We cannot continue to rely upon gasoline and diesel taxes to generate the HTF revenues, when national policy demands a reduction in both our reliance

upon foreign sources of energy and our nation's carbon footprint. An increase in the gas tax is necessary in the short term, but our national policy must move toward a system that more directly aligns fees that a user is charged with the benefits that the user derives.

Finally, the legislation must encourage innovative thinking and solutions from all sectors: public, private, and academia. ★

SOURCES

- 1 The Road Information Project (TRIP), *Key Facts About America's Road and Bridge Conditions and Federal Funding*, August 2008.
- 2 U.S. Department of Transportation, *Status of the Nation's Highways, Bridges and Transit: Conditions and Performance, 2006*.
- 3 Report of the National Surface Transportation Policy and Revenue Study Commission—*Transportation for Tomorrow*, Volume II, December 2007.
- 4 National Highway Traffic Safety Administration, *Motor Vehicle Traffic Crash Fatality Counts and Estimates of People Injured for 2007—DOT HS 811 034*, September 2008, p. 7.
- 5 Texas Transportation Institute, *The 2007 Urban Mobility Report*.
- 6 *The Path Forward—Interim Report of the National Surface Transportation Infrastructure Financing Commission*, February 2008.

**RAISING THE
GRADES**
CASE STUDIES**MILWAUKEE, WI ★ The Marquette Interchange Renovation**

By the early 2000s, the Marquette Interchange, which provides access to 37% of the state's jobs and links to one-third of the state's freeways, carried 300,000 vehicles per day and averaged three crashes daily. The \$810-million improvement project—which is ahead of schedule and under budget—provides additional ramp lanes, increases ramp and merge distances, straightens curves, and places entrances and exits on the right-hand side of the highway to improve safety. The interchange's bridges have been built for a 75-year design life. *Photos courtesy of the Wisconsin Department of Transportation.*



B-2: Press Release and Op-ed Examples

TDOT Achieves 'Excellence in Pavement Preservation'

News release from Department of Transportation:

Nashville, TN - The Tennessee Department of Transportation (TDOT) has been awarded the 2011 James B. Sorenson Excellence in Pavement Preservation Award. This national award focuses on pavement preservation programs and is given annually by the Foundation for Pavement Preservation, Inc., a non-profit trade association that works in close cooperation with the Federal Highway Administration (FHWA) and others promoting the importance of protecting and preserving investments in pavement infrastructure.

TDOT was recognized because of its outstanding support and for the implementation of a Pavement Preservation Program. The program enables the department to develop cost-effective strategies for maintaining each state owned roadway while maximizing the state's investment in Tennessee's entire transportation system. With future budget challenges and increasing materials costs, this approach has become critical in stretching available resources.

“Through this program, TDOT has consistently kept our roadways in the top five in the nation while saving taxpayer dollars,” said Commissioner John Schroer. “It is our goal that we constantly work to improve this program and seek additional ways to maximize our effectiveness and efficiency.”

Pavement preservation includes techniques such as sealing cracks that develop in pavement before further asphalt damage occurs and changing hot mix asphalt specifications. TDOT will continue to work closely with the FHWA and the Tennessee General Assembly to gain additional funding dedicated to pavement preservation.

Administration launches drive to create ‘Better Roads for a Better Minnesota’

May 03, 2011

Smoother rides, thousands of private sector jobs are just some of the 4-year program’s benefits

ST. PAUL, Minn. – Minnesotans will experience smoother rides on more than 700 miles of state highways under the ‘Better Roads for a Better Minnesota’ infrastructure improvement program announced today by Governor Mark Dayton and Transportation Commissioner Tom Sorel. The four-year program, aimed at improving existing highways determined to be in ‘poor’ condition, will result in approximately 9,900 direct and indirect, private sector jobs across our state.

About Better Roads for a Better Minnesota, Governor Dayton said, “This important program will support thousands of private sector jobs for Minnesotans, and through the Better Roads for a Better Minnesota initiative, we will see major improvements in transportation infrastructure. Improved highway conditions will benefit citizens and businesses, making it easier for employees to travel to and from work, and easier for businesses to get goods to and from market.”

Funding for the \$398 million Better Roads program does not require any increased revenue – instead, it will come from current state and federal funds, as well as previously authorized bonds. This Better Roads funding is in addition to the \$980 million the Minnesota Department of Transportation already has committed through June 30, 2014 (FY 2015) for improving pavements.

“Minnesota roads are aging faster than our transportation investments can keep up,” Sorel said. “Investing in roads now will stop the accelerated decline of our infrastructure and allow for more sustainable maintenance in the future.”

State performance measures currently show that about 750 miles of trunk highway in Minnesota are classified as ‘poor’ condition. Without additional investment, the number of miles in ‘poor’ condition is estimated to increase to 1,900 by the year 2020.

Sorel said that a key component of the Better Roads program will be exploring use of innovative methods of contracting, design and construction to get the highest return on investment.

According to Federal Highway Administration estimates, 9.5 direct jobs are supported per million dollars spent on highway construction, or about 3,400 direct jobs. The bulk of the Better Roads work will be concrete and asphalt repaving, requiring heavy equipment operations. Contractors will excavate and then repair or replace culverts and other drainage systems, and electricians will work on light systems and traffic signals as needed. There will also be freeway traffic management system repair work, and American Disabilities Act masonry work such as curb ramps and sidewalks as well as traffic signal crossing enhancements.

More details about the program as it develops will be available at

<http://www.dot.state.mn.us/betterroads>

FOR IMMEDIATE RELEASE

PR- 466-07

December 17, 2007

MAYOR BLOOMBERG MARKS FIVE-THOUSANDTH LANE-MILE PAVED

As Paving Season Ends and Pothole Repair Season Begins, Mayor Reminds New Yorkers to Call 311 to Report Potholes

Mayor Michael R. Bloomberg today announced that Department of Transportation (DOT) crews were on pace this year to pave the 5,000th lane-mile of street since 2002, and to announce the traditional kick off to pothole season in New York. Fully one quarter of City streets have been repaved under the Bloomberg Administration. The Mayor made the announcement on Carlton Avenue in Fort Greene, where the City DOT crews were resurfacing the street after transforming it into a safer, landscaped stretch of road-one of the last paving projects of 2007. DOT is on track to pave 950 lane-miles of roads this year, an Administration high, and has plans to pave more than 1000 miles next year. Keeping streets in a state of good repair has helped result in a 20% decline in traffic fatalities since 2002. The Mayor was joined at the announcement by DOT Commissioner Janette Sadik-Khan

"Keeping our streets in good condition is an important priority for our Administration. Today we are marking a significant milestone for what really is a basic quality of life issue - good, safe streets. The change in weather we've seen over the past few weeks also brings about a change in road conditions with freezing and thawing often resulting in potholes," said Mayor Bloomberg, "As winter officially is upon us in a few days, I want to remind New Yorkers to help us by calling 311 to report potholes, which will allow us to get crews out to repair them quickly. Between 311 and our new SCOUT program, where crews out on the street report problems to specific agencies, we have seen a drastic reduction in the time it takes to repair a pothole."

"DOT pothole repair crews are already out in the streets citywide, filling the potholes that were created by these latest freeze/thaw cycles - more than 70,000 in the past five months," said Commissioner Sadik-Khan. "Throughout the winter, there will be as many as 40 pothole crews available daily for road repair. Our crews fill the equivalent of 22 potholes every hour, 24 hours a day, 365 days a year. In spring, when paving resumes, we will increase the number of paving crews by 20%, from 10 to 12 citywide."

DOT has repaired nearly 1.25 million potholes since 2002, and has 40 pothole crews available daily for road repair in winter months when paving crews are reassigned. There is traditionally a spike in pothole related calls and repair crews dispatched during winter months. The public plays an important role in eradicating potholes by reporting street defects to 311, which allows DOT to respond quickly. The Mayor's newly launched SCOUT program also notifies DOT of potholes - resulting in 1,300 being reported last month. As a result, pothole repair rates have improved substantially. Now, 99% are repaired within 30 days of being reported, up from 65% in 2002.

Once notified of a pothole, DOT dispatches a crew that removes excess debris or material from the hole. Asphaltic cement is poured into the pothole, followed by a hot asphalt mixture. This material is compacted and the hole is again sealed with asphaltic cement to prevent water from penetrating the hole.

This year, the Bloomberg administration increased paving funding by \$11 million, from \$97 million to \$108 million, allowing for additional paving crews in the spring when paving resumes. Carlton Avenue in Brooklyn is one of the last paving jobs of the 2007 season. The DOT transformed the chaotic road into a two-way street with a tree-planted median, flanked by bike lanes to provide safety while calming traffic-all without the loss of street parking for nearby residents and businesses.

For Immediate Release

Bay Area Pavement Conditions Stalled in Fair Territory “Pothole Report” Spotlights Strategies for Safer, Greener Roads; Cites Need for Funding

June 2011

Contact:

John Goodwin - 510.817.5862

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Theresa Romell - 510.817.5772

OAKLAND, CA, June 22, 2011 . . .The condition of pavement on the Bay Area’s 42,500 lane-miles of local streets and roads is only fair at best, with the typical stretch of asphalt showing serious wear and likely to require rehabilitation soon. Data released today by the Metropolitan Transportation Commission (MTC) puts the region’s 2010 pavement condition index (PCI) score at 66 out of a maximum possible 100 points, as computed on a three-year moving average basis. This is unchanged from the 2009 reading, and is within two points of readings going back to 2006, leaving the region mired in a mediocre-quality range.

The 2010 pavement assessment is contained in a new MTC report on the region’s streets and roads. Titled *The Pothole Report: Can the Bay Area Have Better Roads?*, the report supplements the agency’s annual jurisdiction-by-jurisdiction ranking of the PCI scores of the Bay Area’s nine counties and 101 cities with a handy primer on the cost and life-cycle of pavement. The report looks at some of the key factors that affect the condition of our roads, and catalogs the persistent and daunting challenges that confront public works departments in the region, including a serious need for greater funding. On a somewhat brighter note, *The Pothole Report* spotlights trends and technologies that make it possible to imagine a future where roads are not only smoother, but also safer and greener.

“The report documents the difficulties we face in maintaining our pavement, and identifies some promising new approaches,” said MTC Chair and San Mateo County Supervisor Adrienne Tissier. “That’s why we subtitled the report with a question. For a while now, the Bay Area has barely been holding its ground in terms of pavement quality. Clearly, we could do a better job. Whether we take the necessary steps is up to us as a region.”

1.1.1 Leaders and Laggards, by the Numbers

The Bay Area jurisdiction with the highest-ranked pavement in 2010 was the city of Brentwood, with a PCI score of 86. This is the third straight year that this city in eastern Contra Costa County has finished at the top of the regional list. Brentwood’s 2010 score was a one-point improvement over its 2009 score of 85. Other top-ranked cities for 2010 (and their PCI scores) were: Belvedere, in Marin County (84); Dublin, in Alameda County (82); Los Altos, in Santa Clara County (82); and Foster City, in San Mateo County (81).

At the other end of the scale, the Bay Area locality with the lowest-ranked pavement in 2010 was the Solano County city of Rio Vista, which had a PCI score of 42, down three points from its ranking in 2009. Other jurisdictions at the low end of the rankings (and their PCI scores) were Sonoma County (45 – up one point

from 2009's lowest-in-the-region PCI score of 44); Larkspur, in Marin County (45); St. Helena, in Napa County (46); and Orinda, in Contra Costa County (49).

On the positive side, *The Pothole Report* highlights the very impressive efforts undertaken by the city of El Cerrito to improve the quality of its 145 lane-miles of city streets. Thanks to the 2008 passage of a half-cent city sales tax for a Street Improvement Program, plus a combination of bond funds and grant money, El Cerrito reduced its maintenance backlog from \$21.2 million in 2006 to \$500,000 last year, and boosted its one-year PCI score from 48 (poor) to 85 (very good) and its three-year moving average from 53 (at-risk) to 62 (fair).

PCI scores of 90 or higher are considered "excellent." These are newly built or resurfaced streets that show little or no distress. Pavement with a PCI score in the 80 to 89 range is characterized as "very good," and shows only slight or moderate distress, requiring mostly preventive maintenance. The "good" category ranges from 70 to 79, while streets with PCI scores in the "fair" (60-69) range are becoming worn to the point where rehabilitation may be needed to prevent rapid deterioration. Because major repairs cost five to 10 times more than routine maintenance, these streets are at an especially critical stage. Roadways with PCI scores of 50 to 59 are deemed "at-risk," while those with PCI scores of 25 to 49 are considered "poor." These roads require major rehabilitation or reconstruction. Pavement with a PCI score below 25 is considered "failed." These roads are difficult to drive on and need reconstruction.

1.1.2 New Developments, Fresh Thinking

In addition to updating the PCI scores throughout the region, *The Pothole Report* provides a briefing on a couple of exciting developments in the pavement-management field that can help make roads greener and safer. "Cold In-Place Recycling" (CIR) is a highly promising technique, new to the Bay Area, in which specialized machinery cold-planes existing pavement to a depth of two to eight inches, pulverizes this removed pavement, mixes it with additives, and then replaces and smooths the mix back onto the roadway. While not appropriate for all local roadways, this repaving method has been shown to cut asphalt rehabilitation costs by 20 percent to 40 percent, and to reduce greenhouse gas emissions from pavement repair projects by eliminating the need to produce new paving material or transport it to the worksite. MTC recently awarded a \$2 million grant through its Climate Initiatives Program to help finance a CIR demonstration project by Sonoma County and the city of Napa, with the intention of piloting the use of this technology for possible applications elsewhere in the Bay Area.

The Pothole Report also endorses the concept of "Complete Streets," a relatively new design approach for urban neighborhoods in which the entire streetscape, from sidewalk to sidewalk, is geared for safe access and use by pedestrians, bicyclists and transit riders, as well as motorists. Common elements typically include bike lanes, sidewalk bike racks, transit stops, pedestrian signals, street trees and curb ramps. "Building Complete Streets requires a somewhat larger construction investment," commented MTC Chair Tissier, "but the benefits of this spending are spread to a wider spectrum of road users." One study cited by the National Complete Streets Coalition found that designing for pedestrian travel by installing raised medians and redesigning intersections and sidewalks reduced pedestrian injury and fatality risk by 28 percent.

1.1.3 New Funding Needed to Avert Fiscal Pothole

The potential benefits associated with these promising techniques are quite attractive, but with a regionwide average PCI score of 66, the Bay Area's city streets and county roads are already close to the tipping point on the pavement life-cycle curve, after which pavement may decline rapidly and repair costs increase. *The Pothole Report* states that "predictable, long-term funding is imperative if cities and counties are to travel toward a pothole-free future." At current funding levels, the report points out, pavement conditions in the region will deteriorate to an average PCI reading of 45 – in the "poor" range – by the year 2035.

In order to bring Bay Area pavement up to a "good" condition (PCI of 75), the region would need to triple current maintenance expenditures, from the present level of \$351 million a year to nearly \$1 billion annually. "As the various levels of government look to renew and/or reauthorize funding measures and long-range plans," said Tissier, "attention to the cost of maintaining streets and roads at a good state of repair should be a high priority."

MTC is the transportation planning, financing and coordinating agency for the nine-county San Francisco Bay Area.

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The crucial connection between potholes and U.S. jobs

Posted Wednesday, Aug. 31, 2011

BY MATTHEW J. SLAUGHTER

Special to the Star-Telegram

Today in Dallas, the President's Council on Jobs and Competitiveness will convene a Listening and Action Session with local businesses. This session will focus on how American infrastructure supports American jobs. The issues to be discussed are all too familiar to many in Texas and throughout the country.

An estimated 30 million Americans will soon be driving on America's highways en route to Labor Day gatherings with family and friends. Many motorists will encounter potholed on-ramps, rusting bridges, and congested roads. And while idling in these traffic jams, the thoughts of many will drift to America's still-fragile labor market: its 9.1 percent unemployment rate, with nearly 25 million unemployed or under-employed Americans.

There is a crucial connection between potholes and unemployment. America's crumbling infrastructure is eroding America's competitiveness in the global economy by eroding America's ability to attract and retain global corporations and their high-productivity, high-wage jobs.

This was not always so. Over much of the 20th century, America's strong infrastructure investment was a major factor attracting global corporations headquartered in other countries to invest and create jobs here. Rising U.S. standards of living were fueled by a strong infrastructure system that facilitated the growth of companies in America, both global and domestic alike: transportation systems to move people and products, electrical systems to power plants and offices, communications backbones to drive computers and creativity. By 2008, the U.S. subsidiaries of foreign companies employed over 5.6 million Americans -- nearly 2 million in manufacturing -- and exported \$232.4 billion in goods. That's 18.1% of America's total.

Today is very different. America's decaying infrastructure costs the typical American worker hundreds of hours in lost productivity. It also costs companies time and efficiency in moving their products around -- and also out of -- the country. This decay is particularly stark for global companies, whose executives are witness to the dynamism of emerging economies like China and India that present them with ever-widening choices for where to grow jobs and investments around the world.

Yet at the same time, these global companies -- along with their U.S.-based counterparts -- are already on the job helping fund, build and operate infrastructure projects in America that are high-quality, efficient and green. They have a strong interest in a modernized infrastructure to maintain their success in this country and enable them to continue as a source of American job creation into the future.

How global companies support American infrastructure can be seen right here in Texas. Consider the Texas Department of Transportation \$224 million project to reconstruct State Loop 12 and State Highway 114 stretches along Loop 12, a project that is part of a bigger effort to alleviate bottlenecks on the many roads around the site of the former Texas Stadium. A significant number of trucks on the job come from Mack Trucks Inc., a widely recognized part of Sweden's Volvo Group, which employs more than 10,000 people nationwide.

Or take the DFW International Airport Skylink. Supplied by Canada-based Bombardier, the fully automated people-mover system has been maintained by Bombardier since it opened in May 2005. More than 60 Bombardier-built vehicles are in service at DFW, shuttling passengers among connecting flights without needing re-screening and at an average ride time of

less than five minutes. Bombardier operates and maintains similar systems throughout America, including at Houston's George Bush Intercontinental Airport.

America today needs to create more than 10 million new jobs to restore full employment. The 109 million private-sector jobs in the U.S. today is the same number there were in summer of 1999. Whether we address this jobs crisis will depend a lot on whether we address the infrastructure crisis. Not improving America's infrastructure will mean the erosion of America's global competitiveness, and with that the loss of future American jobs and related investments to other countries.

Today's Listening and Action Session will hopefully be one step in avoiding this future. Beyond that, Congress must pass comprehensive infrastructure legislation now to support America's competitiveness. In particular, Congress must ensure that sufficient funds are dedicated to this urgent issue. Americans stuck in Labor Day traffic understand this challenge of building infrastructure to build jobs. This connection should be on the minds of policymakers and business leaders in Dallas today as well.

Matthew J. Slaughter is professor and associate dean at the Tuck School of Business at Dartmouth. He also is economic advisor to the Organization for International Investment, of which Bombardier and Volvo are members.

THE WALL STREET JOURNAL

August 11, 2011

Transportation Spending Is the Right Stimulus

China and Brazil are surpassing us with state-of-the-art ports and roads.

By **ED RENDELL** And **SCOTT SMITH**

During this time of economic uncertainty and record federal deficits, many question why America should invest aggressively in infrastructure. The answer is simple: Whether it involves highways, railways, ports, aviation or any other sector, infrastructure is an economic driver that is essential for the long-term creation of quality American jobs.

Unfortunately, our position as the world leader in infrastructure has begun to erode after years of misdirected federal priorities. When it comes to transportation, Washington has been on autopilot for the last half-century. Instead of tackling the hard choices facing our nation and embracing innovations, federal transportation policy still largely adheres to an agenda set by President Eisenhower.

As a result, American citizens and businesses are wasting time, money and fuel. According to the Texas Transportation Institute, in 2009 Americans wasted 4.8 billion hours sitting in traffic at a cost of \$115 billion and 3.9 billion wasted gallons of gas. Meanwhile, nations around the world are investing in cutting-edge infrastructure to make their transportation networks more efficient, more sustainable and more competitive than ours. These investments have put them on a cycle of economic growth that will improve their standard of living and improve their citizens' quality of life.

Building America's Future Educational Fund, a national and bipartisan coalition of state and local elected officials, of which we are members, recently issued a report on the subject, "Falling Apart and Falling Behind." It offers a sobering assessment of transportation-infrastructure investments in the U.S. as compared to the visionary investments being made by our global economic competitors.

As recently as 2005, the World Economic Forum ranked the U.S. No. 1 in infrastructure economic competitiveness. Today, the U.S. is ranked 15th. This is not a surprise considering that the U.S. spends only 1.7% of its gross domestic product on transportation infrastructure while Canada spends 4% and China spends 9%. Even as the global recession has forced cutbacks in government spending, other countries continue to invest significantly more than the U.S. to expand and update their transportation networks.

China has invested \$3.3 trillion since 2000, for example, and recently announced another \$105.2 billion for 23 new infrastructure projects. Brazil has invested \$240 billion since 2008, with another \$340 billion committed for the next three years. The result? China is now home to six of the world's 10 busiest ports—while the U.S. isn't home to one. Brazil's Açú Superport is larger than the island of Manhattan, with state-of-the-art highway, pipeline and conveyor-belt capacity to ease the transfer of raw materials onto ships heading to China.

To get our nation's economy back on track, we must develop a national infrastructure strategy for the next decade. This policy should be based on economics, not politics. Washington must finally pass a reauthorized multiyear transportation bill; target federal dollars toward economically strategic freight gateways and corridors; and refocus highway investment on projects of national economic significance, such as New York's Tappan Zee Bridge across the Hudson, where capacity restraints impose real congestion and safety costs in an economically critical region.

It is also time we create new infrastructure financing options, including a National Infrastructure Bank. Many of these new programs, using Build America Bonds, for instance, can be paid for with a minimal impact on the federal deficit.

The government's continued neglect of infrastructure will consign our nation and our children to economic decline. Rebuilding America's future cannot be a Democratic or Republican political cause. It must be a national undertaking. And if it is, there will be no stopping us. Let's get to work.

Mr. Rendell, a Democrat, was governor of Pennsylvania from 2003 to 2011. Mr. Smith, a Republican, is the mayor of Mesa, Ariz., and vice chairman of the U.S. Conference of Mayors. Both are members of Building America's Future Educational Fund. A copy of the report can be found at: www.BAFuture.org

Source: Building America's Future Educational Fund (www.BAFuture.org)

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Bipartisan Coalition Releases Infrastructure Report: “Falling Apart and Falling Behind”

*Details Declining State of American Infrastructure and How America is Lagging Behind
International Competitors in Strategic Infrastructure Investments*

*Outlines a Series of Recommendations for Crafting New Innovative Transportation Policies to
Spur Economic Growth*

WASHINGTON, DC – Building America's Future Educational Fund – a bipartisan and national infrastructure coalition co-chaired by Mayor Michael Bloomberg (I-NYC), former Governor Ed Rendell (D-PA) and former Governor Arnold Schwarzenegger (R-CA) – today released a new report that lays out the economic challenges posed by America's ailing infrastructure. “Falling Apart and Falling Behind” also provides a comparative look at the smart investments being made by international economic competitors and suggests a series of recommendations for crafting new innovative transportation policies in the United States that will spur economic growth.

“There are always excuses to delay tough decisions, but the time has come for the U.S. to commit to a long-term infrastructure revitalization plan that invests at least \$200 billion a year,” said former Governor Ed Rendell (D-PA), co-chair of Building America's Future. “It should focus on transportation but should also include our water and wastewater systems, our dams, our electric grid and our broadband system. At a time when our nation is crying out for job creation, this plan can produce millions of good-paying American jobs over a sustained period of time.”

“In Washington, everyone is talking about the need to fix the economy, but our long-term economic prospects will only get weaker the longer Congress allows our infrastructure to crumble,” said Mayor Bloomberg (I-NYC), co-chair of Building America's Future. “As Congress stands idly by, our competitors around the world are racing ahead – especially when it comes to building modern transportation networks. Washington needs to get into gear transforming our infrastructure or else our economy will be stalling out for decades to come.”

“The single most important challenge facing Washington today is making sure that America remains the economic powerhouse that it has been for generations, and to do that, Congress must lay out a bold infrastructure vision,” said former Governor Arnold Schwarzenegger (R-CA), co-chair of Building America's Future. “This issue is as crucial to our future as the national debt and entitlement reform. This report should inspire Congress to take real action on infrastructure and make it a national priority.”

The report explains how international economic competitors are sprinting ahead of the U.S. and outlines the case for creating a blueprint to transition to a high-tech transportation network for the 21st century. The report also contains many sobering statistics detailing how the U.S. is falling behind including:

- U.S. infrastructure has fallen from first place in the World Economic Forum's 2005 economic competitiveness ranking to number 15 today;
- China now boasts six of the world's top ten ports – and none of the top ten are located in the U.S. The Shanghai port now moves more container traffic a year than the top seven U.S. ports combined;
- The U.S. has the world's worst air traffic congestion—a quarter of flights in the U.S. arrive more than 15 minutes late, and the national average for all delayed flights in the U.S. (about 56 minutes) is twice that of Europe's average;
- There are more than 15,000 miles of true high-speed rail in operation around the world – essentially none of which is in the U.S.;
- The U.S. is one of the only leading nations without a national plan for public-private partnerships for infrastructure projects or a National Infrastructure Bank to finance large-scale projects and leverage private capital.

The final section of the report is a set of recommendations for moving the economy forward through strategic investments in infrastructure including:

- Develop a long-term national infrastructure strategy that makes choices based on economics, not politics.
- Pass a robust transportation bill that focuses investment on projects that will increase economic return and mobility while reducing congestion and pollution. Such a bill will put Americans back to work and make the U.S. more competitive in the global economy.
- Be both innovative and realistic about how to pay (including the establishment of a National Infrastructure Bank) and looking at all long-term revenue generating options including congestion pricing, carbon auctions, fees based on miles traveled, and – once the economy recovers – an updated gas-tax.
- Promote accountability and innovation by setting clear criteria for all funding; encouraging innovation by states and the country's largest cities through competitive grants; and carefully auditing the results to ensure projects are completed on time, on budget, and yielding promised results.

For the full report and more information, please visit www.BAFuture.org/Report.

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For more information, please visit www.BAFuture.org. For the latest infrastructure news, please follow us on Twitter (www.twitter.com/BAFuture), Facebook (www.facebook.com/BuildingAmericasFuture), and YouTube (www.youtube.com/BAFInfrastructure)

Appendix C

Supplemental Playbook Material

C-1: Sample Audience Segmentation Analysis

C-2: Stakeholder Interview Guide

C-3: Communication Strategy Self-Assessment

C-1: Sample Audience Segmentation Analysis

| <i>Audience</i> | <i>Segment</i> | <i>Characteristics</i> |
|--|-------------------------------------|--|
| <i>Elected Officials</i> | | |
| <i>Statewide elected officials - governor is really only statewide official interested in transportation</i> | <i>Conservative political views</i> | <p><i>Motivation for action: balance budget; create jobs</i></p> <p><i>Words that resonate: job creation, economic development</i></p> <p><i>Trusted sources of info: cabinet secretaries, political advisors</i></p> <p><i>Most effective delivery: advocates, especially contractor industry regarding job preservation</i></p> <p><i>Perception of preservation/maintenance: something DOTs should do but not a top priority for investment</i></p> |
| <i>Congressional Delegation</i> | <i>Conservative political views</i> | <p><i>Motivation for action: issue tied to state's economy; constituent requests</i></p> <p><i>Words that resonate: job creation, economic development</i></p> <p><i>Trusted source of info: longtime supporters</i></p> <p><i>Most effective delivery: advocates, especially contractor industry regarding job preservation</i></p> <p><i>Perception of preservation/maintenance: something state DOTs should manage</i></p> |
| <i>State legislators</i> | <i>Conservative political views</i> | <p><i>Motivation for action: cut state spending; balance budget</i></p> <p><i>Words that resonate: shrinking or "right-sizing" government</i></p> <p><i>Trusted source of info: constituents</i></p> <p><i>Most effective delivery: constituents</i></p> <p><i>Perception of preservation/maintenance: something DOTs should do but not a top priority for investment</i></p> |
| | <i>Progressive political views</i> | <p><i>Motivation for action: job creation and maintaining social safety net</i></p> <p><i>Words that resonate: job creation, economic development, investment</i></p> |

| | | |
|---|-----------------------|---|
| | | <p><i>Trusted source of info: constituents</i> <i>Most effective delivery: advocates, especially contractor industry regarding job preservation</i> <i>Perception of preservation/maintenance: investment that can help sustain jobs</i></p> |
| <i>State legislators</i> | <i>Urban/suburban</i> | <p><i>Motivation for action: economic development</i> <i>Words that resonate: job creation, economic development, economic incentives</i> <i>Trusted source of info: constituents, esp Chambers of Commerce and business community</i> <i>Most effective delivery: advocates, especially from business community</i> <i>Perception of preservation/maintenance: squeaky wheel. As long as constituents/commuters aren't complaining, then it must be ok.</i></p> |
| | <i>Rural</i> | <p><i>Motivation for action: sustainability/ survival of local communities</i> <i>Words that resonate: economic development, support the rural lifestyle</i> <i>Trusted source of info: longtime supporters and local elected officials</i> <i>Most effective delivery: info exchange at monthly 'eggs and issues' breakfasts</i> <i>Perception of preservation/maintenance: critical that bridges be preserved so that crops can be taken to market during harvest</i></p> |
| <i>City and County Elected Officials (Determined there)</i> | <i>Urban/suburban</i> | <p><i>Motivation for action: sustainability / survival of local communities</i> <i>Words that resonate: economic development, support the rural lifestyle</i></p> |

| | |
|--|--|
| <p><i>isn't enough difference to separate city and county officials)</i></p> | <p><i>Trusted source of info: longtime supporters and local elected officials Most effective delivery: info exchange at monthly eggs and issues breakfasts Perception of preservation/maintenance: critical that bridges be preserved so that crops can be taken to market during harvest</i></p> |
| <p><i>Rural</i></p> | <p><i>Motivation for action: sustainability / survival of local communities Words that resonate: economic development, support the rural lifestyle Trusted source of info: longtime supporters and local elected officials Most effective delivery: info exchange at monthly 'eggs and issues' breakfasts Perception of preservation/maintenance: critical that bridges be preserved so that crops can be taken to market during harvest</i></p> |

C-2: Stakeholder Interview Guide

Interviewing stakeholders is the most flexible method of market research. It can often provide valuable information about stakeholder opinions and it removes the group influence that can sometimes exist in focus group settings. This form of market research provides a great opportunity for in-depth questioning and allows for a better understanding of stakeholder opinions.

When conducting stakeholder interviews, a script should be used to ensure consistency across conversations and interviewers. What follows is an example of such a script.

Introductory Remarks

- Introduce yourself, explain purpose of call or visit
- Explain or define the highway/bridge system to which your questions apply (in other words, interviewees might confuse a highway which is the state's responsibility with a local road so you need to clarify that up front)
- Assure interviewee that comments will be kept confidential
- Ask for contact information

Questions

1. How would you rate the condition of the state's highways and bridges in terms of smoothness?
2. Have you experienced or do you know anyone who has had any problems due to the condition or smoothness of the State's highways and bridges? If so, please explain
3. Compare the need to preserve highways with other transportation needs like improving congestion or creating new access to businesses or communities. Ask the interviewee to rate those issues as more or less important or having more or less need than congestion. Ask why the interviewee holds those opinions.
4. Compared to other investment issues in the State (e.g., education, health care, economic initiatives) how does transportation rank? Ask why the interviewee holds those opinions.

Communication Questions

1. In general, how do you get most of your information?
 - a. Newspaper
 - b. Trade or association sources
 - c. From the DOT
 - d. Television
 - e. Colleagues
 - f. Peers/friends/word of mouth
 - g. Social media channels
 - h. Other
2. Which source do you trust the most?

3. In general, how do you get most of your information about transportation issues?
 - i. Newspaper
 - j. Trade or association sources
 - k. From the DOT
 - l. Television
 - m. Colleagues
 - n. Word of mouth
 - o. Social media channels
 - p. Other

4. What do you think would be the most effective way to receive transportation information?
 - a. Newspaper
 - b. Trade or association sources
 - c. From the DOT
 - d. Television
 - e. Colleagues
 - f. Word of mouth
 - g. Social media channels
 - h. other

5. Test words that you identified as likely to resonate as well as actions you identified would likely motivate.

Other insights

1. What, if anything, worries you about highway preservation in the State?
2. What do you think are the benefits of maintaining highways and bridges in good – but not great – condition?
3. What words of advice do you have for the DOT to help us better communicate the need to preserve highways and bridges?
4. Who else would you recommend we interview?

C-3: Communication Strategy Self-Assessment

A ‘self assessment’ means collection and analysis of communication performance data with the ultimate objective of strengthening communication practices.

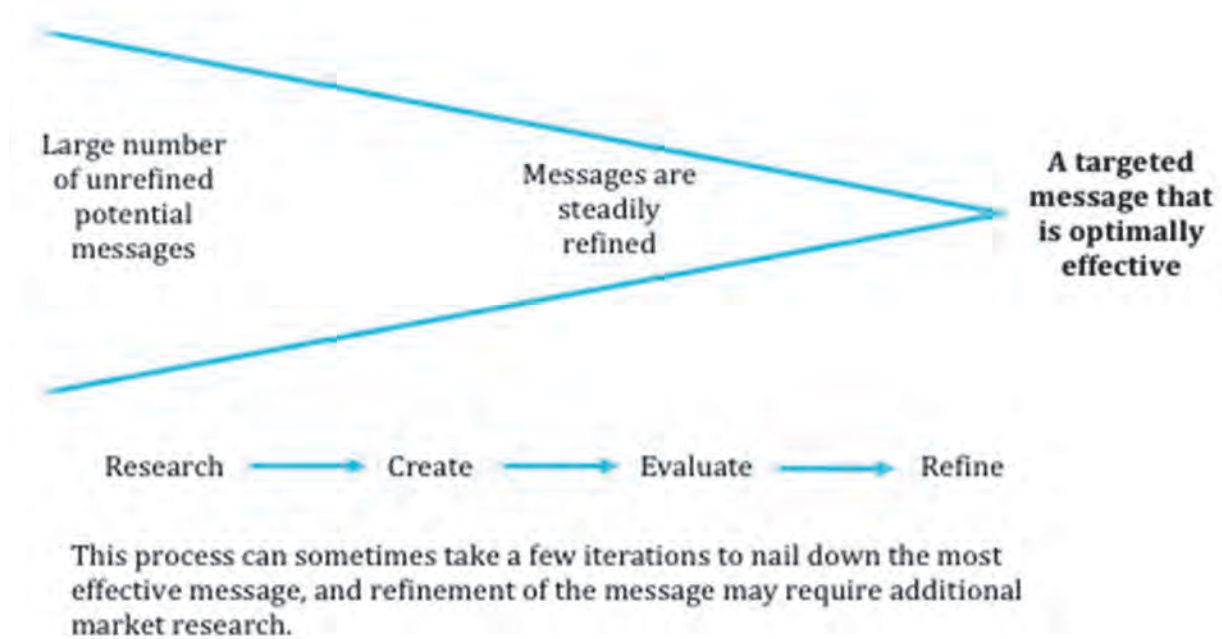
In this Appendix, a three-tiered set of self-assessment practices is presented that state DOTs can choose among to help establish rigorous methods for evaluating the outputs and outcomes of their efforts to communicate the value of pavement maintenance and preservation. The three assessment tiers are intended to guide DOTs toward establishing ‘basic,’ ‘intermediate,’ or ‘expert’ levels of competency in communications self-assessment; depending on their current level of expertise.

Just as engineers check the quality of construction materials and measure the performance of pavement condition, so too must communication practitioners check that communication strategies and tactics are having their intended effect.

Some DOTs are beginning to collect data on the performance of their communications initiatives. Widespread reliance among DOTs on a common set of communications-focused assessment measures, however, lags behind other areas in transportation such as pavement, congestion and safety, where performance is routinely tracked and analyzed. At present, DOTs’ performance communication metrics are mostly used to track: 1) provision of ongoing traveler information, such as road closures, construction zones, or congested conditions; or 2) execution of campaign-style efforts that are limited by time or space to promote specific behaviors, such as seat belt use, construction zone safety, or impaired driving. Metrics used to measure these focus areas provide foundational techniques for measuring progress on communicating about more abstract and ongoing statewide issues such as mobility, sustainability, or the value of preservation.

As shown in Figure C-3-1, a well-structured self-assessment process should naturally feed into the ‘research, create, evaluate, and refine’ pattern that characterizes an effective, market research-driven communications initiative. In particular, good self assessment practices help practitioners use primary research techniques - interviews, statistically valid surveys or focus groups - to determine whether their communications strategies and tactics are appropriately influencing stakeholders’ interest in, or understanding of important preservation issues; and if not, how they must work to decide how to revise or refine their communication tactics.

Perhaps there is no more valuable advice on the cycle of research, create, evaluate and refine than from David Ogilvy, “the father of modern advertising” according to many, who famously said “never stop testing and your advertising will never stop improving.”

Figure C-3-1: ‘Research, Create, Evaluate, Refine’ Process for Communications

One word of warning – no amount of assessment can correct for a failure to align communication practices with agency-wide priorities. For example, saying that preservation is a top priority, but burying information about highway conditions in a hard-to-find part of your agency’s website is incongruent – the stated priority is not supported by the communication approach.

Criteria for Communication Assessment

Thinking about several ‘big picture’ questions helps bring clarity to the kinds of assessment tools communicators and executives within DOTs must pursue:

Message Penetration? How many stakeholders and/or citizens are preservation messages reaching? How many of those are targeted audiences?

Message Reach and Clarity? What preservation messages are being received and are recipients grasping the relevant concepts?

Message Reception? Reception measures whether messages are received in positive, neutral or negative ways.

Message Speed? Is the preservation message being received in a timely manner and how fast is the message propagating?

Message Coordination and Leveraging? Are different communication approaches and messages (e.g., pavement condition is deteriorating, additional funding is needed to maintain the highway system, rough roads cost businesses and commuters a lot of money) well coordinated and working symbiotically?

- **Message Cost?** Are the costs of preservation communications in line with expectations of DOT executives and defensible to the public and legislators?

Principles for Selecting Communications Assessment Tools

Establishing performance metrics for communications often threatens to become an overwhelming task. Several broad principles are useful to keep in mind when selecting specific assessment metrics and tools:

- **Set Clear Objectives** - Set clear communication objectives for preservation communication, such as increasing the frequency with which preservation funding is mentioned as a good use of tax dollars, or increasing the share of stakeholders who think preservation should be the top priority of the DOT;
- **Decide Where to Focus Assessment** – Set clear expectations about which media channels to monitor such as broadcast, print, online media outlets; Face book, Twitter, YouTube, etc.
- **Decide What to Focus Assessment On** – Set clear expectations about what will be monitored, such as news articles, blog posts, comments on the DOT website, Tweets, etc.
- **Prioritize** – What is most important to your DOT and your key messages or initiatives? This is an often overlooked stage of the assessment which can result in frustration for the champions of various transportation issues and causes.
- **Match Monitoring Tools to Delivery Mechanisms** - Select monitoring tools that match your communication delivery mechanisms.

Three-Tier Communication Assessment Approach

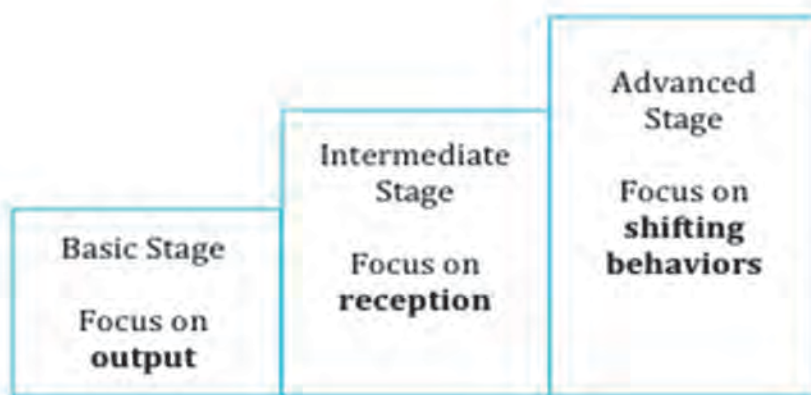
Much like performance measurement in other areas of transportation, our Team observes that the metrics DOTs use to assess communication impacts typically progress over time:

- **‘Measuring Outputs’ Stage** – This early stage is characterized by a **focus on measurement of outputs**. Examples of communication outputs might include the number of times the word “preservation” is mentioned in a newspaper each year, the number of appearances DOT spokespeople make and mention preservation as an issue, or the number of times visitors to a DOT’s website click on preservation information links.
- **‘Measuring Message Reception’ Stage** – At this mid-level stage, practitioners do more than just raw counting, by shifting to an **increased focus on measurement of the quality of message reception**. As an example, measures could include whether preservation issues are tracked in a positive or negative light in media stories.

‘Measuring Behavior’ Stage – As measurement reaches a mature stage, practitioners shift from indirect tracking of messages to **tracking changes in customers’ opinions, attitudes or behaviors**.

Based on the step-wise progression that characterizes DOTs’ use of communication self assessment tools, in this memo we identify and review the traditional and social media assessment tools and techniques that are most relevant to state DOTs and how they fit within a ‘basic,’ ‘intermediate,’ or ‘advanced’ level assessment paradigm, as shown in Figure C-3-2.

Figure C-3-2: Three Tiers of Communication Assessment



Basic-Level Communications Assessment - Our basic-level assessment recommendations are likely to apply to DOTs with limited staff or resources, or those who are taking some initial steps in preservation communication. DOTs operating at a basic-level, for example, are likely to provide most preservation messages through one-way communications such as press releases and website updates, or they may have just launched Twitter and Face book accounts to expand their reach. **At the basic-level, DOTs are likely more focused on measurement of outputs rather than outcomes**, but are learning the importance of evolving in order to track and measure. Basic-level communication evaluation techniques include:

Number of Impressions for Media Placements - Identify the news outlets (print, broadcast or online) where key messages or information appear. Research the number of listeners, viewers or subscribers to get an estimated count of impressions.

Continuous Monitoring of Coverage - Monitor the amount of coverage generated and received (the total volume of articles that have at least one subject mention). Whenever possible, track whether coverage was due to proactive outreach or reactive statements. Subscribe to Google Alerts to receive news “as it happens” based on specific, searchable terms related to campaigns, issues, or DOT officials’ names.

Tally Number of Mentions - How many times is your organization mentioned or are your key messages included? Is each reference positive, negative or neutral?

- **Informal Audience Surveys** - Conduct surveys to assess if your audience is receiving the information they need, or if there are ways to improve. For example, the Minnesota Department of Transportation includes a link on their website inviting users to participate in a brief survey that asks “How can we improve?” and “Did you find the information you were looking for?”
- **Begin Tracking Social Media** - Initial steps for assessing social media efforts could include:
 - Track the number of followers for your Twitter handle and monitor the change;
 - Track the number of Facebook ‘likes’ your DOT maintains and monitor the change;
 - Track the number of positive @ mentions or re-Tweets your handle receives;
 - Monitor followers for their level of interaction and engagement; and
 - Monitor online conversations to determine where your DOT might provide value.

Intermediate-Level Communications Assessment - At the intermediate level, DOTs are likely leveraging communication content in a variety of ways, through traditional and new media including press releases, website updates, Facebook and Twitter pages and are deliberately working toward an integrated approach. **The assessment focus for intermediate level DOTs shifts toward measurement of outcomes versus outputs.** In addition to including various basic-level communication evaluation techniques, intermediate evaluation techniques include:

- **Rating Reception of Media Placements** - In addition to counting the number of media placements generated by outreach efforts, assess whether the placement was positive, negative or neutral. For example, Missouri Department of Transportation rates all media coverage of the agency according to whether it is positive or negative. By graphing the number and types of media placements, it can quickly assess the overall reception of coverage received. To take it a step further, a DOT could also count the number and types of key messages in those placements. For example, if an article references a project underway, does it also include the key messages regarding the particular campaign or issue?
- **Intermediate-Level Tracking of Social Media** - Similar to traditional media, at the intermediate-level, measurement of social media efforts is also focused more on the

Intermediate-Level Assessment Example:

Missouri Department of Transportation recently announced new “Gator Getter” equipment that clears debris from highway lanes while moving between 45-50 mph, thereby reducing the need for workers to stop or block traffic to pick up debris. Local ABC affiliate KMBC featured the equipment in a news story.

Evaluation of the story could include: 1) a tally of the number of times MoDOT is mentioned in the piece, 2) a tally of the number of times MoDOT is mentioned in a positive, neutral, or negative way. If MoDOT was referenced once in a neutral way (i.e. in a list of state DOTs), twice in a negative way (a negative reference to funding, delays, etc.), and three times in a positive way, we would assess the piece overall as being positive for the organization. In addition, an opportunity for message correction could be found in the negative references.

quality of outcomes. In addition to including various basic-level communication evaluation techniques, intermediate evaluation techniques include:

- Analyzing information collected from Facebook & Twitter accounts by creating a database with fields for tracking: ‘Likes,’ ‘Re-tweets,’ ‘Mentions,’ direct messages, increases/decreases in ‘followers,’ and ‘Comments;’
- Monitoring positive, negative, and neutral feedback from social media channels;
- Tracking the types and tones of ‘Re-Tweets’ and graphing the timing and level of activity; and
- Evaluating which topics or types of content are most often ‘Re-Tweeted’ or ‘Liked.’ Are your followers ‘Re-Tweeting’ to serve as a content provider with helpful updates to their colleagues, and as such look to be “first to know” on campaigns or issues? And,
- Use free monitoring tools or paid subscriptions for basic analytic services.

Advanced-Level Communications Assessment – Advanced-level communications assessment usually occurs in DOTs that have a larger staff or greater financial resources dedicated to communications and that are integrating multiple messages with the explicit goal of generating a positive shift in stakeholders’ opinions or support. While advanced-level assessment approaches may exceed the funding or capacity of most DOTs, they are worth keeping in this framework as an end-goal for the state of assessment practices. In addition to including various basic- and intermediate-level communication evaluation techniques, advanced evaluation techniques include:

- **Performance Goals** – Performance goals are an important element of self-assessment. To the extent possible, goals are quantitative and measurement is to be holistic, incorporating changes in awareness among key stakeholders, comprehension, attitude, and behavior.
- **Measure Outcomes** - Outcomes include shifts of awareness, comprehension, attitude and behavior regarding the need for or support of preservation. Direct customer research is often required to measure these effects, including:
 - Conducting informal focus groups by convening groups of stakeholders to discuss their current and previous **perceptions and attitudes toward** preservation, **assess the effectiveness of** specific messages and delivery mechanisms, and **test new messages**. More traditional, formal focus groups can be conducted by objective, third parties such as consultants with DOT staff observing the focus group

Advanced-Level Assessment Example –

Washington State DOT prepares an annual communications report that provides an overall picture of efforts throughout the year, and evaluates ways in which to better integrate efforts and use across multiple platforms.

The report includes the number of news releases distributed – segmented by region; photos from press conferences throughout the year; web site traffic totals and comparison to previous year activity; constituent correspondence; results from an online survey distributed to e-mail subscribers; and tracking of total number of Tweets sent – and the increase of Twitter followers, as well as Blog posts and topic.

interaction from behind mirrors. However, that level of research and cost is probably not warranted for refining preservation messages.

- Conducting telephone or mail surveys. Many DOTs conduct periodic customer satisfaction surveys which are usually statistically valid at the state and regional level. A cost effective way to gather data about the effectiveness of your preservation communication effort is to piggyback with existing survey work by including a few questions about preservation.
- A quick and cost-effective way to gather data about your communication efforts is to use online survey tools **such as “Survey Monkey” or “Zoomerang” to distribute survey questions to targeted participant lists. Surveys can be conducted before and after** specific messaging efforts **to gauge how audiences are responding/reacting.**
- Conducting **interviews with a small group of targeted contacts – though more time consuming than broader assessment tools - can provide more in-depth discussion and honest dialogue.** Not only do interviews allow you to assess the effectiveness of your preservation messages, the interaction allows you to assess shifts in support for or interest in preservation as well as an opportunity to strengthen relationships with key stakeholders. The personal touch matters.
- **Measurement of Social media** - Media content analysis should be supplemented by Web and search analytics. Evaluating quality and quantity is critical, just as it is with conventional media. Measurement must focus on “conversation” and “communities,” not just “coverage.”

Pitfalls to Avoid

- Don't assume any one measurement means you're being effective. Measure multiple attributes of your campaign.
- Don't be afraid of negative feedback. Put it into action and make improvements whenever possible.
- Give it time: Social media in particular is attractive because of its immediacy. Yet, it's easy to be discouraged when your campaign doesn't take off or return immediate results. Be patient – and be persistent.
- Allocate budget: Though DOTs are scrutinized for spending, it's important to evaluate your communication effectiveness so that you can demonstrate value.
- Don't let your ego get in the way: Be prepared to give an honest assessment of what went wrong if your campaign isn't successful. Was the timing off? Did you need to further grow your base of followers before promoting a key message?
- Make sure you're on the right platform: Look for where your advocates are actively engaged. Do they prefer updates via Facebook, YouTube videos or Twitter? Where are they most receptive?

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- **Keep an open mind:** Once you have set your metrics and given it the appropriate attention and amount of time, don't be discouraged if your goals aren't met immediately. Social media especially is unique, and once a message is out there you have little control. Perhaps your followers didn't increase, but the level of engagement of your existing followers did. That is still a success, and there are a wide variety of indicators with social media.

Appendix D

Additional Project Research

D-1: State DOT Survey Results

D-2: Workshop Summary

D-1: State DOT Survey Results

Survey Overview

As part of NCHRP Project 14-24, Task 1, the research team surveyed all 52 AASHTO members electronically in June 2011 to gather baseline information from state DOTs regarding:

- Significance of infrastructure preservation among DOTs and their stakeholders;
- General DOT communications capabilities;
- Infrastructure preservation messages used by DOTs and how they are developed; and
- Who DOTs are communicating with about infrastructure preservation issues and how they deliver messages.

Survey questions designed to explore these topics were developed by the research team and reviewed by the NCHRP 14-24 Panel members. On June 6, 2011, a request for survey responses was sent via an AASHTO staff e-mail from Lloyd Brown to all members of three AASHTO committees including the Standing Committee on Highways (SCOH), SCOH's Subcommittee on Maintenance, and the Standing Committee on Finance and Administration's Subcommittee on Public Affairs. The survey was closed on June 24, 2011.

The survey was administered electronically via a web interface using Survey Monkey, a leading provider of web-based survey solutions.

This Appendix begins with the research team's summary observations about the survey results and their implications for understanding community-wide communications practices among DOTs, followed by a detailed breakdown of question-by-question results.

Ten Summary Observations about Survey Results

With 23 state DOTs represented in the survey, some general observations about the likely state-of-the-practice in infrastructure preservation communication among the broader DOT community may be inferred from the survey results:

1. All DOTs view infrastructure preservation as a top priority and many are struggling to meet desired condition targets;
2. Most DOTs enjoy good credibility with their state legislatures and most think that their stakeholders share a concern about the importance of infrastructure preservation;
3. All DOTs have strong communications capabilities; but in a significant share of DOTs, communications staff may not be actively engaged in crafting communications strategies on infrastructure preservation with this role often being led by executive leadership or engineering staff;

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4. Most DOTs expect their consumers to care more about road smoothness than user cost savings; but they rarely track stakeholder opinions about maintenance and preservation beyond following press clippings, public hearing feedback, or anecdotal evidence;
5. Most, but not all DOTs are communicating externally on a regular basis about infrastructure preservation needs; their messages often emphasize the cost effectiveness of a strong program and the importance of protecting past investments;
6. A healthy share of DOTs remain skeptical about the value of communications in helping to ensure strong infrastructure preservation programs;
7. State legislatures are a primary audience for almost all DOTs; most also communicate with local elected officials and local governments, but communication with business groups or the general public about infrastructure preservation is less common;
8. DOTs' preferred delivery mechanisms for messages include press releases, presentations and web-based materials, but few DOTs have dedicated webpages for infrastructure preservation messages or use newer social media channels to communicate preservation messages;
9. Few DOTs are customizing infrastructure preservation messages to different target audiences; messages usually attempt to be one-size-fits-all; and
10. DOTs usually have limited capability to track the impact of their maintenance and preservation communications.

Survey Methodology and Response Rate

- **Survey Achieved a 44 Percent AASHTO Member Response Rate**

Over a two week period, a total of 40 responses to the survey were collected including one anonymous response, one FHWA Division Office (Oklahoma) response, and responses from the following 23 states, representing 44 percent of all AASHTO members:

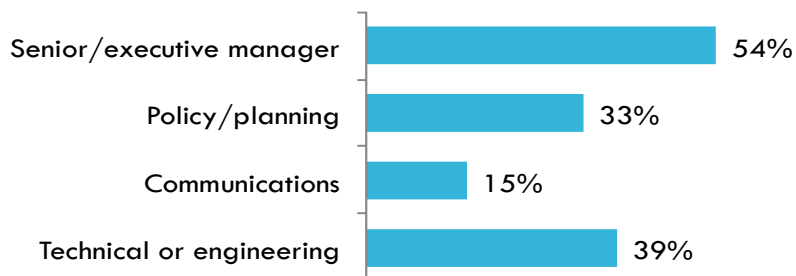
| | | |
|--------------|-----------------|-----------------|
| Alaska (5) | Louisiana | S. Carolina (2) |
| Arkansas (2) | Michigan | Tennessee (2) |
| Colorado (4) | Missouri | Utah |
| Connecticut | Montana (2) | Vermont |
| Delaware | Nevada | West Virginia |
| Idaho (2) | New York | Wisconsin (2) |
| Kansas (2) | N. Carolina (2) | Wyoming |
| Kentucky | Ohio | |

Note: Some DOTs submitted responses from more than one staff person, as indicated in parentheses above.

- **Respondents Most Frequently Categorize Themselves as ‘Senior/Executive Managers’**

Respondents self-identified the type(s) of role they serve within their agency. Results are shown in Figure D-1-1 (39 respondents answered this question.)

Figure D-1-1: Survey Respondents’ Roles



Note: Respondents were given the opportunity to choose more than one role, so results do not tally to 100 percent.

Among the most common categories of titles provided by those who responded were variations of ‘Chief Engineer’ (8 respondents), ‘State Maintenance Engineer’ (6 respondents), and ‘Public Affairs Officer’ or ‘Communications Director’ (6 respondents).

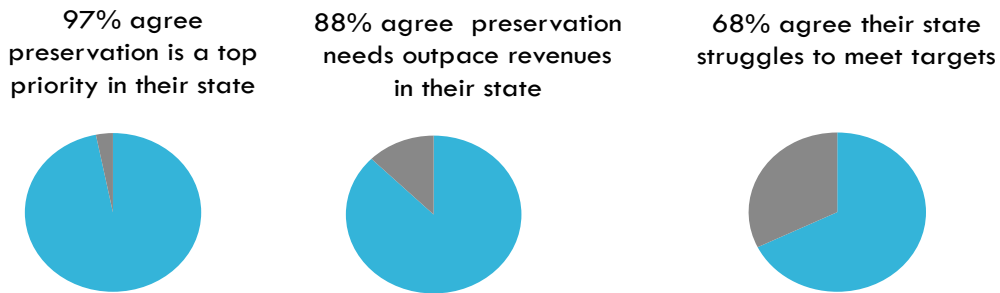
Infrastructure Maintenance and Preservation in DOTs

The survey asked several questions intended to gauge the significance of infrastructure maintenance and preservation as an issue within DOTs:

- **Most Respondents Think Preservation is a Top Priority and a Challenge for their Agency**

Almost all (97 percent) of respondents agree or strongly agree that infrastructure preservation is among their agency’s top priorities (32 respondents answered this question). Most (88 percent) agree or strongly agree that preservation needs outpace their agency’s ability to pay for them (32 respondents answered this question). About two-thirds of respondents, meanwhile, agree or strongly agree that their agency struggles to meet its pavement and bridge condition targets (31 respondents answered this question). These findings are shown in Figure D-1-2.

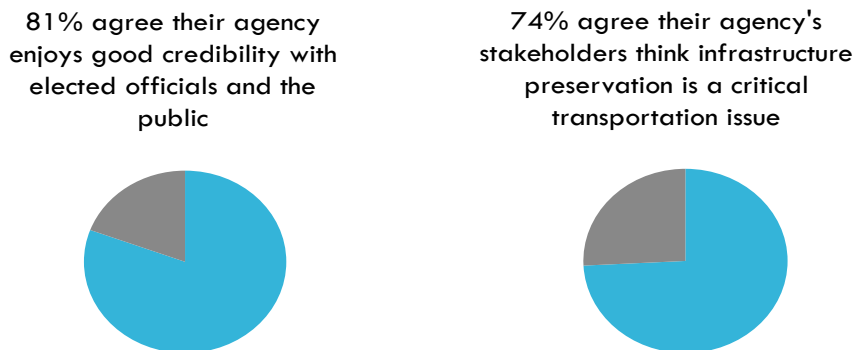
Figure D-1-2: Survey Respondents' Characterization of Preservation Needs



- **Most Respondents Think their Agency Enjoys Good Credibility with Elected Officials and that their Stakeholders See Infrastructure Preservation as a Critical Transportation Issue**

As shown in Figure D-1-3, most (81 percent) respondents agree or strongly agree that their agency enjoys good credibility with elected officials and the public (31 respondents answered this question) and about three quarters (74 percent) of all respondents agree or strongly agree that their stakeholders see infrastructure preservation as a critical transportation issue (31 respondents answered this question).

Figure D-1-3: Survey Respondents' Perceptions of Agency Credibility and Stakeholder Priorities



- **Respondents are Split on Whether Stakeholders are Satisfied with Infrastructure Conditions**

As shown in Figure D-1-4, only about half (52 percent) of all respondents agree or strongly agree that most or all highway users are satisfied with infrastructure conditions. The remainder either disagree or are neutral about stakeholders satisfaction (31 respondents answered this question).

Figure D-1-4: Share of Respondents that Agree Stakeholders are Satisfied with Infrastructure Conditions

52% agree most stakeholders are satisfied with infrastructure conditions

- **A Majority of Respondents Think Consumers See Smoother Roads as the Greatest Value of a Strong Preservation Program, not Cost Savings**

As shown in Figure D-1-5, more than half (60 percent) of all respondents think that consumers value smoother roads as the most important benefit of a strong infrastructure preservation program versus improved safety, lower long-term infrastructure costs, or reduced user costs. (30 respondents answered this question).

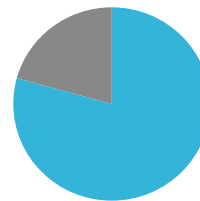
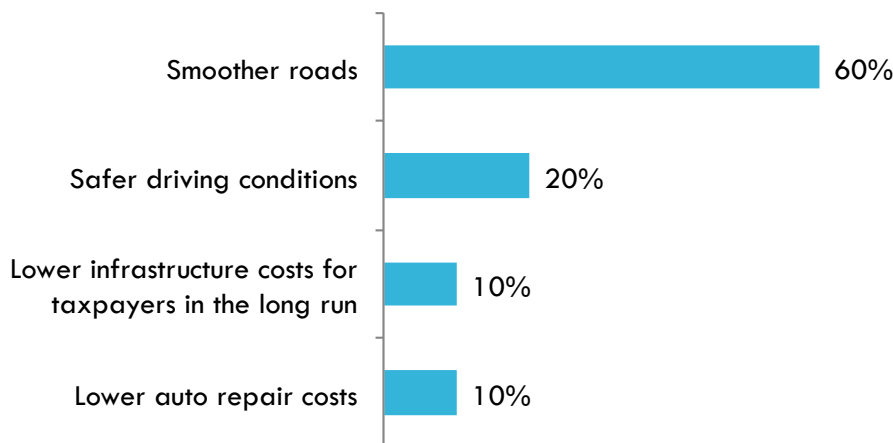


Figure D-1-5: Survey Respondents' Perceptions of What Consumers Value Most About a Strong Infrastructure Preservation Program



General Communications Capabilities at DOTs

The survey asked several questions intended to provide a broad overview of agency communications capabilities:

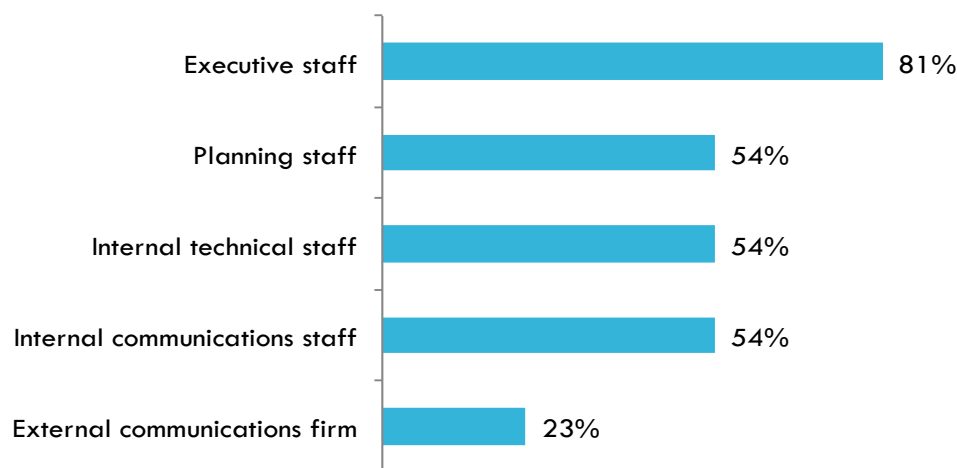
- **Typical Respondent's DOT has 4 to 20 FTE Communications Staff**

According to the survey responses, the median respondent's DOT has between 4 and 10 headquarters FTE staff dedicated to communications and 0 to 10 dedicated communications FTE staff in its district offices.

- **Typical Respondent's DOT Relies on Combination of Staff to Develop Infrastructure Preservation Communications**

As shown in Figure D-1-6, a DOT's executive staff is most likely to be actively engaged in developing infrastructure preservation messages. Internal planning, technical, or communications staff are all equally likely to be involved, according to the survey responses. Use of external communications firms to develop infrastructure preservation messages is not prevalent (28 respondents answered this question).

Figure D-1-6: Survey Respondents' Characterization of Who is Actively Engaged in Developing Infrastructure Preservation Messages



Note: Respondents were given the opportunity to choose more than one category of staff, so results do not tally to 100 percent.

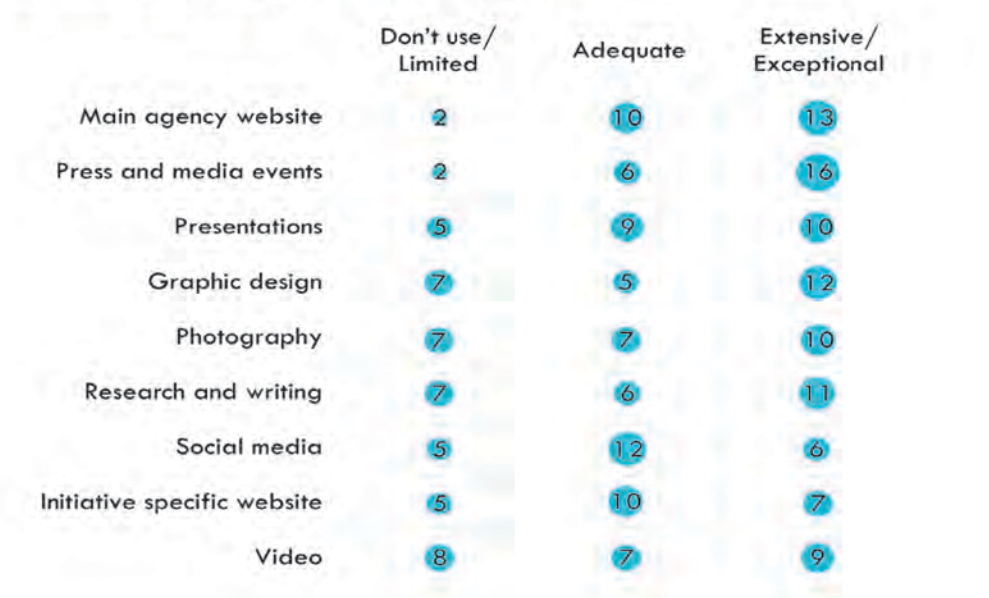
- **Respondents View Press Relations and Websites as Their DOTs' Strongest Communications Capabilities; Expertise in Graphic Design, Photo/Video, and Social Media Perceived as Less Strong**

Survey participants more frequently rated their DOT's website, presentations, and press relations capabilities as adequate or extensive; while they more frequently

rated other communications capabilities, including graphic design, video, photography, and social media as limited or adequate. The results are shown in Figure D-1-7.

Figure D-1-7: Respondents' Rating of Their Agency's In-house Communications Expertise by Category

Note: Numbers represent the number of responses each rating received. The size of the circle is a visual representation of the number.



Many Respondents Regularly Communicate with External Audiences about Infrastructure Preservation Needs

Three quarters (75 percent) of respondents agree or strongly agree that they communicate regularly with external audiences about infrastructure preservation needs, as shown in Figure D-1-8 (32 respondents answered this question.)

Figure D-1-8: Share of Respondents that Communicate Regularly about Preservation Needs

75% agree they communicate regularly about preservation needs



About Half of Respondents Think Communication Helps their Agency Deliver its Infrastructure Preservation Program

About half (59 percent) of respondents agree or strongly agree that infrastructure preservation messages help their agency deliver preservation programs (27 respondents answered this question).

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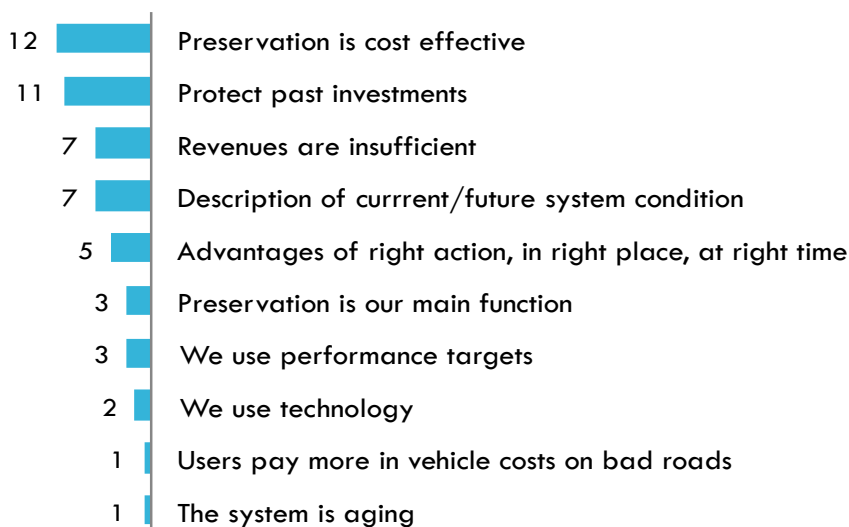
Infrastructure Preservation Message Content

The survey asked several questions about the content of agencies' infrastructure preservation messages, how they are developed, and their perceived impact:

- **Protecting Past Investments/Cost Effectiveness of Preservation are DOTs' Most Common Preservation Message Themes**

All but one of the 23 responding states indicate they have developed one or more messages about infrastructure preservation needs. As shown in Figure D-1-9, most responding states' messages share similar themes, with 'cost effectiveness of preservation' and 'importance of protecting past investments' among the most common message elements.

Figure D-1-9: Frequency and Content of Common DOT Preservation Message Themes



- **Respondents Most Frequently Use a Combination of Budget and Asset Management Systems Data to Develop Infrastructure Preservation Messages; They Don't Usually Use Polling Information or Focus Groups**

When developing infrastructure preservation messages, respondents indicate that they most commonly use pavement and bridge management systems data (29 respondents use) and revenue and budget information (22 respondents use). They are much less likely to use national studies (8 respondents use), focus groups (3 respondents use) or polling (respondents use). Results are shown in Figure D-1-10 (29 respondents answered this question.)

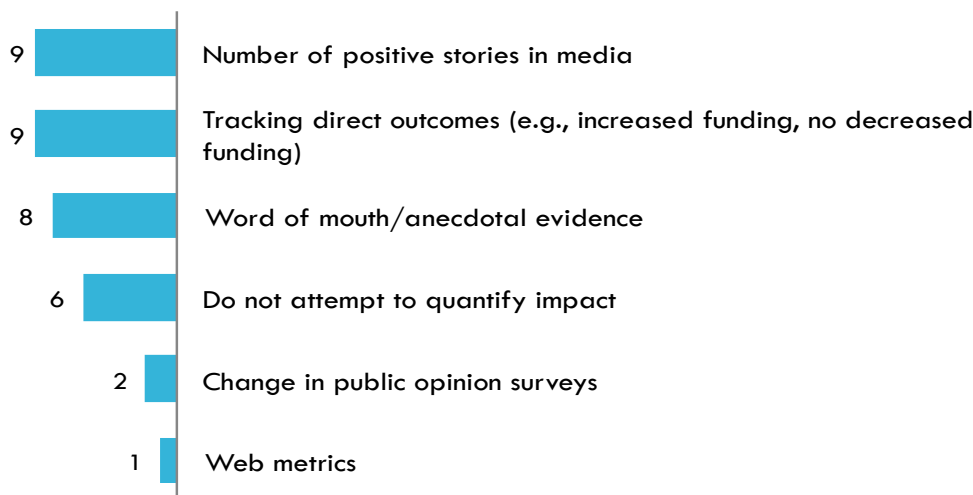
Figure D-1-10: Frequency with Which Respondents Rely on Selected Sources of Information to Develop Infrastructure Preservation Messages



Few Respondents Use Polls or Web Metrics to Track Message Impacts

Only two respondents indicate they use public opinion surveys to quantify the impacts of their preservation messages and only one respondent reports tracking web metrics, like YouTube views. By contrast, a reasonable share of respondents track more qualitative measures such as positive media stories, direct outcomes (such as increased funding), or word of mouth. Some respondents, however, do not make any efforts to track the impacts of their messages. (22 respondents answered this question.) Results are shown in Figure D-1-11 (22 respondents answered this question.)

Figure D-1-11: Survey Respondents’ Use of Message Impact Tracking Metrics



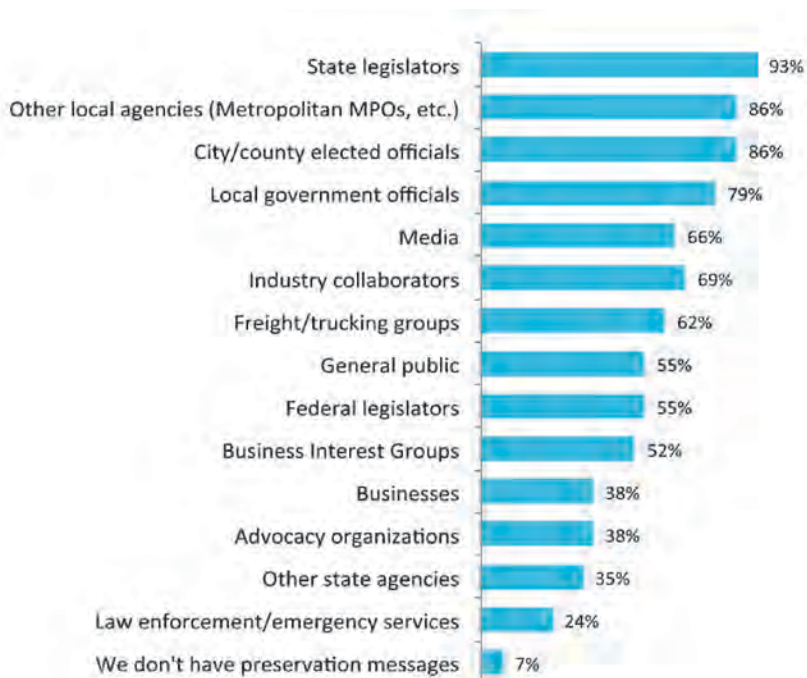
Infrastructure Preservation Message Audiences and Delivery

The survey asked several questions about the audiences for infrastructure preservation messages and how they are delivered:

State and Local Elected Officials, Local Governments are Most Frequently Cited Audiences for Preservation Messages

State legislators top respondents' list of primary audiences for their infrastructure preservation messages, with 93 percent communicating with state legislators. Other popular audiences include local elected officials, and other local agencies. Between half and two-thirds of responding agencies communicate with industry partners, business groups, federal legislators, the media and the public. Less common audiences for infrastructure preservation messages include individual businesses, advocacy organizations, law enforcement, and other state agencies. These results are shown in Figure D-1-12 (29 respondents answered this question.)

Figure D-1-12: Audiences that DOTs are Communicating with About Preservation

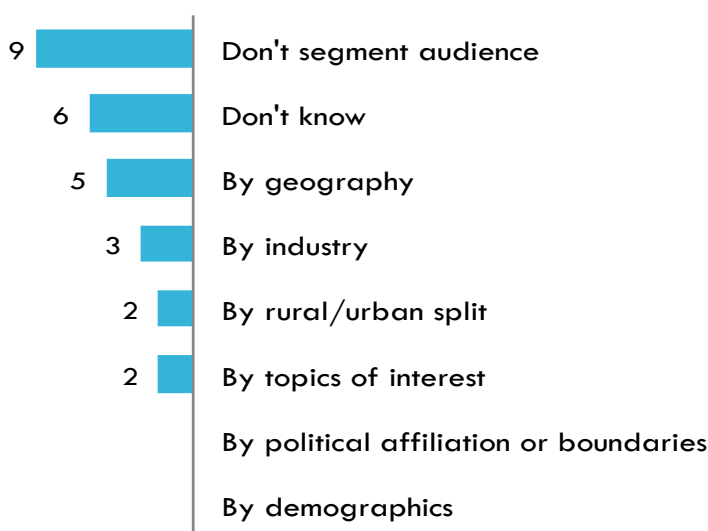


Note: Respondents were given the opportunity to choose more than one category of audiences, so results do not tally to 100 percent.

- **Most Respondents' DOTs do not Segment Infrastructure Preservation Communications by Audience**

No clear practices for segmenting audiences are observable from the survey responses, which was answered by 27 respondents. Most commonly, respondents indicate they either do not segment communications by audience or they do not know if such segmentation occurs. Results are shown in Figure D-1-13.

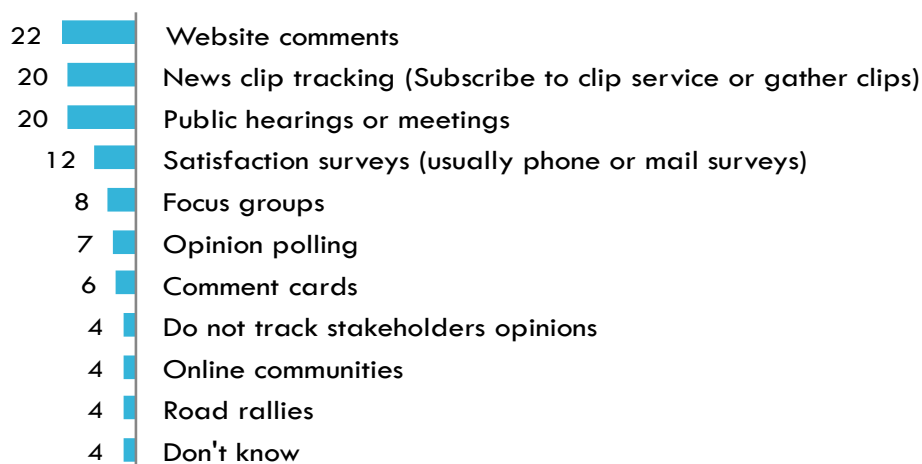
Figure D-1-13: Segmentation of Audiences by Respondents



- **Website Comments, News Clippings, and Public Hearing Comments are Most Common Methods to Track Stakeholders' Opinions**

Respondents' DOTs use a variety of methods to track stakeholder opinions. The most popular methods are website comments, news clippings and public hearings. Opinion polling, focus groups, and satisfaction surveys are less widely used (31 respondents answered this question). These results are illustrated in Figure D-1-14.

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Figure D-1-14: Methods DOTs Use to Track Stakeholder Opinions

- **Press Releases, Presentations, Websites are Top Three Most Frequently Used Message Delivery Mechanisms**

DOTs are using a variety of traditional and contemporary methods to deliver the message about preservation. Press releases, websites, and verbal communication by way of presentation or one-on-one meetings are the most frequently used methods of communication, but new and innovative social networking methods, such as Facebook, Twitter, and YouTube also are quite common. These results are illustrated in Figure D-1-15.

Figure D-1-15: Most Common Communication Delivery Methods



D-2: Workshop Summary

Summary of the Workshop

Members of the consultant team conducted a successful workshop based on the Playbook at the TRB Asset Management Conference in April of 2012. The goals of the workshop were to test the Playbook's concepts with a real audience of DOT practitioners and to provide attendees with an engaging and educational exercise that simulated the process of crafting a successful preservation campaign. The workshop was well attended; approximately 60 attendees participated in the three-hour interactive session.

The agenda for the workshop followed the chapters within the Playbook. It began with an overview presentation that touched on the goals of the overall project, the components of the Playbook, and intended outcomes of the workshop. Attendees were then placed into groups of eight to ten participants and guided through a series of exercises designed to develop a theoretical preservation messaging campaign. Each group was given one of three customized scenarios to serve as the backdrop of their effort: Scenario one in which the State's system was in poor condition and there was little support for transportation, scenario two in which the DOT was just barely meeting their preservation targets and was concerned about future commitment to the cause, or scenario three in which the system was in good condition but the political climate was focused on cutting taxes and shrinking government.

The workshop exercises were split into distinct activities that aligned with the Playbook elements: audience identification, message development, and message delivery. Before each activity, the consultant team walked through the principles of each element and gave guidance on how to approach it.

In the first activity, participants were tasked with identifying their most important audiences, brainstorming what those audiences value, and developing an influence vs. interest matrix. The outcome of the activity was that groups were able to choose a priority audience segment or segments to focus their campaign on. The specific results varied slightly by group, but most often the groups chose to focus at least in some way on elected officials and various stakeholder interest groups.

In the second activity, participants created specific preservation messages. To increase the number of ideas generated, individual participants were first given five minutes to brainstorm ideas on their own. The groups then reconvened and individuals shared their ideas for discussion. The teams began to prioritize and select one or two key themes and some supporting messages or message concepts that they agreed could most effectively communicate with their identified priority audiences. Creativity was in abundance; highlights included the slogans, "No Assets Left Behind," and "Pave Me Now or Pay me Later."

In the third and final group activity, the teams were asked to develop a list of message delivery mechanisms that would most effectively communicate their newly crafted messages to their priority audiences. At this stage of the workshop, the various campaigns began to take shape; some groups focused on presentations and one-on-one meetings with the most influential audience members, others chose full-fledged social media campaigns complete with YouTube scripts and Facebook pages, and still others focused on more traditional media efforts such as press releases and ribbon cuttings at preservation projects.

At the conclusion of the workshop, each team presented to the entire workshop audience a brief overview of their campaign. They also were asked to provide feedback on the workshop or the playbook concepts. Generally the feedback was very positive and there were a few constructive comments. The most poignant observation was that some of the groups focused too much on the symptoms of a failing system (such as potholes), rather than on the importance of taking action before these symptoms come to light. This advice hit home with the workshop participants and was recognized as one of the challenges of effectively delivering an effective preservation communication campaign.

Overall the workshop was successful and demonstrated the benefit that hands-on activities are an effective way to implement and promote the findings of NCHRP projects.

Abbreviations and acronyms used without definitions in TRB publications:

| | |
|------------|--|
| AAAE | American Association of Airport Executives |
| AASHO | American Association of State Highway Officials |
| AASHTO | American Association of State Highway and Transportation Officials |
| ACI-NA | Airports Council International-North America |
| ACRP | Airport Cooperative Research Program |
| ADA | Americans with Disabilities Act |
| APTA | American Public Transportation Association |
| ASCE | American Society of Civil Engineers |
| ASME | American Society of Mechanical Engineers |
| ASTM | American Society for Testing and Materials |
| ATA | American Trucking Associations |
| CTAA | Community Transportation Association of America |
| CTBSSP | Commercial Truck and Bus Safety Synthesis Program |
| DHS | Department of Homeland Security |
| DOE | Department of Energy |
| EPA | Environmental Protection Agency |
| FAA | Federal Aviation Administration |
| FHWA | Federal Highway Administration |
| FMCSA | Federal Motor Carrier Safety Administration |
| FRA | Federal Railroad Administration |
| FTA | Federal Transit Administration |
| HMCRP | Hazardous Materials Cooperative Research Program |
| IEEE | Institute of Electrical and Electronics Engineers |
| ISTEA | Intermodal Surface Transportation Efficiency Act of 1991 |
| ITE | Institute of Transportation Engineers |
| NASA | National Aeronautics and Space Administration |
| NASAO | National Association of State Aviation Officials |
| NCFRP | National Cooperative Freight Research Program |
| NCHRP | National Cooperative Highway Research Program |
| NHTSA | National Highway Traffic Safety Administration |
| NTSB | National Transportation Safety Board |
| PHMSA | Pipeline and Hazardous Materials Safety Administration |
| RITA | Research and Innovative Technology Administration |
| SAE | Society of Automotive Engineers |
| SAFETEA-LU | Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (2005) |
| TCRP | Transit Cooperative Research Program |
| TEA-21 | Transportation Equity Act for the 21st Century (1998) |
| TRB | Transportation Research Board |
| TSA | Transportation Security Administration |
| U.S.DOT | United States Department of Transportation |