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Community Outreach Tools and Strategies for Accelerated Highway Construction Projects

Implementation Guide

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Introduction

The goal of this guide is to recommend a process for formulating outreach strategies during the construction phase of accelerated highway projects. Outreach strategies are categorized based on project characteristics (traffic impact and capacity loss) and types of travelers (passenger vehicles and commercial trucks). Three tiers of strategies are recommended in each situation. The five-step process explained in this guide allows the recommendation of three-tiered strategies for projects with multiple characteristics.

Overview of Outreach Strategies and Tools

Here are 16 different outreach tools and strategies that were commonly used by state transportation agencies:



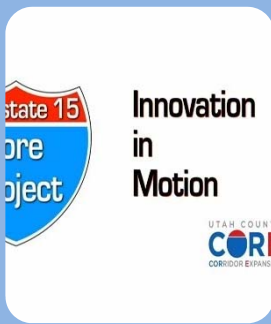
Static Temporary Signage

- Static signs are used to describe the situation in and around the work zone
- The content of the signs should reflect what action should be taken by motorists and provide relevant and current information
- Construction signs such as "Construction Ahead" or "Entering a Construction Zone" are used to notify the motoring public of the work zone and/or offer options for alternative routes (CDOT, 2014).



Variable Sign Boards

- Variable sign boards are placed along roadways to notify travelers of incidents, travel time information, road closures, and potential hazards in and around the work zone.
- They are used when the condition of the work zone is changing and where a static sign is not sufficient to provide information to travelers (CDOT, 2014)



Name Branding for the Construction Project

- Name branding is often used on projects that are expected to have a significant impact on a large population over an extended period of time.
- Project is branded by using distinctive project name, logo and catchphrases to enable people to easily recognize any information related to the project
- Some examples of branded projects are I-64 improvements in St. Louis, expansion of I-15 in Utah County, and West County Connectors project which link the high-occupancy vehicle (HOV) lanes between the SR-22, I-405 and I-605 freeways in California (Warne, 2011).



Flyer Distribution

- Flyers are commonly used to communicate with local communities and provide advance information on upcoming closures, alternative routes, and general information about the project.
- They are easy to mail, hand out at community meetings and events, and make available for downloading from a web site.
- The I-95 Corridor Coalition which includes eastern seaboard states from Maine to Florida produced a brochure twice a year for distribution to travelers in welcome centers, rest areas, transportation agencies, private companies, and individuals and could also be downloaded from the Coalition's web site (Mallett et al., 2005).



Door to Door Visits by Project Personnel

- Door to door visits provide personal contact with businesses and individuals located adjacent to the project.
- This method can be used to explain the positive impacts of the completed project, what to expect (work hours, type of work, and nuisance duration), actions to mitigate nuisances, where to get more information, and how to voice complaints (Shane et. al, 2012).



Town Hall Meetings

- Town hall meetings are used to provide detail information of the project such as the status of the project, schedule, cost and budget, risk management and health and safety issues.
- Meetings can facilitate the communication with stakeholders of the project including the local community and the local press and media.
- Town hall meetings can be held in person or virtually on the phone (telephone town halls) or digitally through interactive web sites.



Project Specific Newspaper Advertisements

- Paid advertising may be necessary in the case of dramatic changes to the road network such as full closure of an interstate
- Kentucky Transportation Cabinet (KTC) engaged in an extensive media campaign using both newspaper and radio advertisements to create traffic avoidance during I-64 rehabilitation project in Louisville which led to eight weekends of full closure of the highway (Mallett et al., 2005).



Project Specific Radio Advertisements

- Paid radio advertising is relatively expensive, but can be a cost-effective way to reach a wide audience.
- Before and during the Upgrade I-74 project in Peoria, Illinois, IDOT developed and ran a successful radio advertisement by using a fictional character Jack Hammer to increase awareness of the project and remind adults to drive safely and slowly while in a work zone (Mallett et al., 2005).



Project Specific Television Advertisements

- Paid television advertising can reach many people at one time, but the timing, frequency, and size of the television market will have a significant impact on the advertisement costs.



Planned Interviews with Newspaper Journalists

- Large projects are typically considered newsworthy by local media outlets, so free media coverage in form of interviews with newspapers can be used to provide the media with accurate, up-to-date, and consistent information (Mallett et al., 2005).



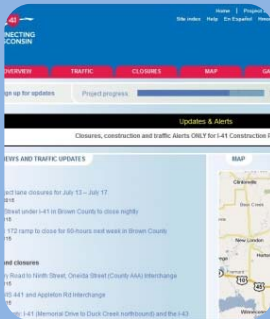
Planned Interviews with Radio News Media

- Similarly, free media coverage in form of interviews radio news media can be used to provide the media with accurate, up-to-date, and consistent information (Mallett et al., 2005).



Planned Interviews with Television News Media

- Similarly, free media coverage in form of interviews with television news media can be used to provide the media with accurate, up-to-date, and consistent information (Mallett et al., 2005).



Project Specific Websites or Webpages

- Project specific websites are often used for projects and offer comprehensive and up-to-date information about the project status, traffic, and closures in multiple formats including text, photographs, videos, maps, etc.
- Examples are US 41(Wisconsin) and I-70 Mountain Corridor (Colorado) project specific websites (FHWA, 2015).



Project Specific Social Media Account

- Social network platforms help broaden outreach, provide up-to-date information, and create engagement opportunities.
- One example is Willow Road reconstruction project, in which Illinois DOT used Facebook page and Twitter feed to share information about the project and Instagram account to share project photos (FHWA, 2015d).



Text Message Alerts

- Recipients voluntarily sign up for text message service to get project related information.
- Colorado DOT uses text message alerts to inform motorists about road conditions and delays on Colorado highways.
- Recipients are reminded that it is unsafe and illegal to text while driving in Colorado (CDOT, 2015).



Mobile Application

- Applications are used to make information more accessible to mobile devices like smart phones and tablet computers by offering mobile-friendly websites and mobile applications.
- Virginia DOT developed a mobile application (511 VDOT app) for both iOS and Android devices to provide travelers with real-time traffic information. Users are reminded to not use mobile applications while driving (VDOT, 2015).

Outreach Strategies' Plan for Accelerated Highway Construction Projects

Figure 1 illustrates the process for formulating outreach strategies during the construction phase of accelerated highway projects.

1. Reviewing the project description and goals

2. Defining the goals of community outreach activities

3. Identifying project stakeholders

4. Identifying project characteristics and the types of travelers

5. Developing outreach strategies

Figure 1: Recommended Process for Selecting Outreach Tools

1 – Reviewing the project description and goals:

Understanding overall project goals is perhaps the most critical aspect of creating an effective outreach effort. Project attributes and goals should determine the goals of outreach activities and selecting appropriate outreach tools and strategies. Typically, teams can categorize overarching project goals into categories related to project schedule, cost, quality, and functional performance. Forms 1 and 2 in the Appendix are designed to help the outreach team to document the main project attributes and the appropriate goals.

2 – Defining goals of community outreach activities:

During construction, there are four general outreach goals: (1) reducing traffic demand; (2) increasing driver awareness; (3) decreasing driver impatient behaviors; and (4) building trust with the public. Each project will likely have more specific goals for its outreach activities. Form 3 in the Appendix can help outreach team to define the project communication goals.

3 – Identifying project stakeholders:

Stakeholders refer to the individuals, groups, and organizations that a project may directly or indirectly affect. The goals of identifying and working with stakeholders include: (1) establishing lines of communication; (2) distributing information; (3) improving outreach activities by considering stakeholders' perspectives; (4) and sharing the costs of communication strategies (Maryland State Highway Administration, 2006). Form 4 helps to identify possible stakeholders. Inclusiveness of the list of stakeholders is dependent on project characteristics, work zone location, and business and residential environment.

4 – Identifying project characteristics and the types of travelers:

Project characteristics and travelers' types are key factors in selecting the most appropriate outreach tools. Two factors of mobility, impact time and levels of closure, are considered in categorizing accelerated highway construction projects.

According to FHWA, the mobility impact time is any period of time that the traffic flow of transportation network is reduced due to on-site construction activities. This metric is classified into five tiers:

- T1: Traffic impacts within 1 to 24 hours
- T2: Traffic impacts within 3 days
- T3: Traffic impacts within 2 weeks
- T4: Traffic impacts within 3 months
- T5: Overall project schedule is significantly reduced by months to years (Culmo, 2011)

The types of closure caused by accelerated highway construction projects can vary as well. In this study, we developed the following levels of highway closure:

- L1: Loss of single or both shoulders
- L2: Loss of part of travel lanes
- L3: Nighttime closure
- L4: Full closure less than one month
- L5: Full closure more than one month

In this step, various types of travelers (passenger vehicles and commercial trucks) which are targeted for communication should be also identified.

5 – Develop outreach strategies:

The goal of this step is to identify three tier strategies based on project characteristics, types of travelers and other considerations. Tier 1 strategies have high effectiveness and high frequency of usage based on the survey data. They are highly recommended to be applied for the accelerated projects. Tier 2 strategies are either highly effective or most common, but using them in different projects needs a more thorough analysis. Factors such as outreach goals, budget, internal and external resources, and work zone location may influence the decision to employ them. Tier 3 strategies have low effectiveness and low frequency. They might be used in certain situations for specific purposes.

When the outreach team identifies project characteristics and the types of travelers, the team can use Tables A1, A2, and A3 to identify the recommended strategies in the Appendix. As an example, a team may be interested in knowing the recommended strategies for a project with a T3 traffic impact, L3 capacity loss, and primary passenger vehicles traffic. Table 2 combines different sets of strategies that fall under Tiers 1, 2, and 3. In combining different sets of strategies based on the tables, there are some cases where one strategy belongs to two different tiers. As an example, town hall meeting is in both tier two and three (see Table 1). Our recommendation for dealing with these situations is to place that strategy in the higher tier. So, we classified town hall meeting in tier two strategies (see Table 2).

Table 1: Selected Parts from the Tables A1, A2, and A3

Project Traffic Impact	Outreach Tools & Strategies		
	Tier1	Tier2	Tier3
T3: 4 Days to 2 Weeks of Traffic Impact	Variable Sign Boards	Interview with Newspaper	Newspaper Ad
	Interview with TV	Interview with Radio	Flyer
	Social Media	Door to Door Visit	Website
	Text Message	Mobile App	Town Hall Meeting
	Radio Ad	TV Ad	Name Branding
	Static Temporary Signage		
L3: Nighttime Closure	Variable Sign Boards	Website	Newspaper Ad
	Social Media	Interview with Newspaper	Name Branding
	Text Message	Interview with Radio	Town Hall Meeting
	Radio Ad	Flyer	
	Static Temporary Signage	Interview with TV	
		Mobile App	
		TV Ad	
Passenger Vehicles	Variable Sign Boards	Website	Interview with Radio
	Social Media	Town Hall Meeting	Newspaper Ad
	Radio Ad	Interview with Newspaper	Name Branding
	Interview with TV	Text Message	Flyer
	Static Temporary Signage	Door to Door Visit	
		TV Ad	
		Mobile App	

Table 2: Three-Tier Strategies for a Project with T3 Traffic Impact, L3 Capacity Loss, and Primary Passenger Vehicles Traffic

Outreach Tools & Strategies		
Tier1	Tier2	Tier3
Interview with TV	Door to Door Visit	Name Branding
Radio Ad	Flyer	Newspaper Ad
Social Media	Interview with Newspaper	
Static Temporary Signage	Interview with Radio	
Text Message	Mobile App	
Variable Sign Boards	Town Hall Meeting	
	TV Ad	
	Website	

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Appendix:

Form-1: Project Description

Project Attributes
Project Name:
Location:
Estimated Budget:
Estimated Project Delivery Period:
Required Delivery Date (if applicable):
Source(s) of Project Funding:
Project Corridor:
Major Features of Work – pavement, bridge, sound barriers, etc.:
Major Schedule Milestones:
Major Project Stakeholders:
Major Obstacles (as applicable)
With Right of Way, Utilities, and/or Environmental Approvals:
During Construction Phase:
Main Identified Sources of Risk:
Safety Issues:
Sustainable Design and Construction Requirements:

Form-2: Project Goals

Project goals can be defined in three to five items and need to be reviewed here. Example goals are provided below, but the report should include project-specific goals. These goals should remain consistent over the life of the project.

Project-Specific Goals
Goal #1:
Goal #2:
Goal #3:
Goal #4:
Goal #5:

General Project Goals (for reference)

Schedule

- Minimize project delivery time
- Complete the project on schedule
- Accelerate start of project revenue

Cost

- Minimize project cost
- Maximize project budget
- Complete the project on budget
- Maximize the project scope and improvements within the project budget

Quality

- Meet or exceed project requirements
- Select the best team
- Provide a high quality design and construction constraints
- Provide an aesthetically pleasing project

Functional

- Maximize the life cycle performance of the project
- Maximize capacity and mobility improvements
- Minimize inconvenience to the traveling public during construction
- Maximize safety of workers and traveling public during construction

Form-3: Project Outreach Goals

Outreach Goals
Goal #1:
Goal #2:
Goal #3:
Goal #4:
Goal #5:

Examples of Outreach Goals

- Informing the public regarding traffic delay at adjacent intersections, corridors, and travelling routes
- Providing information regarding alternative traveling routes
- Changing travel habits to decrease traffic congestion near work zone
- Increasing driver awareness of work zone safety issues
- Encourage drivers to maintain appropriate driving behavior in construction zone
- Alerting the public of special traffic and safety conditions such as heavy truck traffic, steep grades, bad weather, and planned special events
- Increasing public awareness and understanding of the project
- Promoting support across different stakeholders in society

Form-4: Possible Stakeholders of the Project

Possible Stakeholders and Interested Parties*
Community residents(e.g. people living in the neighborhood)
Elected officials/city, county and regional governments/commissions
Emergency service providers(e.g. law enforcement agencies and fire departments)
Internal partners (e.g. office of communications and district public information rep.)
Jurisdictional partners(e.g. city agencies, transit providers and school districts)
Local business community
Property owners and property residents affected by the project
Shipping/freight industry(e.g. trucking industry, ports and railroads)
Special interest groups(e.g. motor truck association and bicycle associations)
Travel information providers(e.g. radio, television and newspaper)
Work zone personnel(e.g. contractors and traffic control providers)
Other possible stakeholders

* Adopted from Public Information and Outreach Plans, Maryland State Highway Administration (2006)

Table A1: Outreach Tools and Strategies for Various Project Traffic Impact

Project Traffic Impact	Outreach Tools & Strategies		
	Tier1	Tier2	Tier3
T1: 1 to 24 Hours of Traffic Impact	Variable Sign Boards	Interview with Radio	Interview with Newspaper
	Social Media	TV Ad	Website
	Text Message	Door to Door Visit	Newspaper Ad
	Interview with TV		Flyer
	Radio Ad		Name Branding
	Mobile App		Town Hall Meeting
	Static Temporary Signage		
T2: 1 to 3 Days of Traffic Impact	Variable Sign Boards	Interview with Radio	Website
	Social Media	Interview with Newspaper	Newspaper Ad
	Text Message	Mobile App	Flyer
	Interview with TV	TV Ad	Name Branding
	Radio Ad	Door to Door Visit	Town Hall Meeting
	Static Temporary Signage		
T3: 4 Days to 2 Weeks of Traffic Impact	Variable Sign Boards	Interview with Newspaper	Newspaper Ad
	Interview with TV	Interview with Radio	Flyer
	Social Media	Door to Door Visit	Website
	Text Message	Mobile App	Town Hall Meeting
	Radio Ad	TV Ad	Name Branding
	Static Temporary Signage		
T4: 2 Weeks to 3 Months of Traffic Impact	Variable Sign Boards	Interview with Newspaper	Website
	Social Media	Town Hall Meeting	Newspaper Ad
	Door to Door Visit	Interview with Radio	Name Branding
	Interview with TV	Flyer	
	Static Temporary Signage	Radio Ad	
		Text Message	
		TV Ad	
		Mobile App	
T5: More than 3 Months of Traffic Impact	Social Media	Website	Newspaper Ad
	Variable Sign Boards	Town Hall Meeting	
	Interview with TV	Name Branding	
	Static Temporary Signage	Interview with Newspaper	
		Flyer	
		Interview with Radio	
		Door to Door Visit	
		Radio Ad	
		Text Message	
		TV Ad	
		Mobile App	

Notes:

Tools in in each tier are sorted based on frequency of usage.

Static temporary signage was categorized in tier 2 based on the data, but strategies since it is mandatory, we have to categorize it in tier 1.

Table A2: Outreach Tools and Strategies for Various Levels of Capacity Loss

Level of Capacity Loss	Outreach Tools & Strategies		
	Tier1	Tier2	Tier3
L1: Loss of Single or Both Shoulders	Variable Sign Boards	Website	Interview with Radio
	Social Media	Flyer	Name Branding
	Text Message	Newspaper Ad	Interview with Newspaper
	Mobile App	Door to Door Visit	Town Hall Meeting
	Radio Ad	TV Ad	
	Static Temporary Signage	Interview with TV	
L2 : Loss of Part of Travel Lanes	Variable Sign Boards	Website	Newspaper Ad
	Social Media	Interview with Radio	Flyer
	Text Message	Mobile App	Town Hall Meeting
	Radio Ad	Door to Door Visit	Name Branding
	Interview with TV	TV Ad	
	Static Temporary Signage	Interview with Newspaper	
L3: Nighttime Closure	Variable Sign Boards	Website	Newspaper Ad
	Social Media	Interview with Newspaper	Name Branding
	Text Message	Interview with Radio	Town Hall Meeting
	Radio Ad	Flyer	
	Static Temporary Signage	Interview with TV	
		Mobile App	
		TV Ad	
		Door to Door Visit	
L4: Full Closure Less than One Month	Variable Sign Boards	Interview with Newspaper	Flyer
	Interview with TV	Interview with Radio	Town Hall Meeting
	Social Media	Website	Newspaper Ad
	Radio Ad	Text Message	Name Branding
	Static Temporary Signage	Door to Door Visit	
		Mobile App	
		TV Ad	
L5: Full Closure More than One Month	Variable Sign Boards	Website	Newspaper Ad
	Interview with TV	Town Hall Meeting	Name Branding
	Social Media	Interview with Newspaper	
	Static Temporary Signage	Flyer	
		Interview with Radio	
		Door to Door Visit	
		Radio Ad	
		Text Message	
		TV Ad	
		Mobile App	

Notes:

Tools in in each tier are sorted based on frequency of usage.

Static temporary signage was categorized in tier 2 based on the data, but strategies since it is mandatory, we have to categorize it in tier 1.

Table A3: Outreach Tools and Strategies for Various Types of Travelers

Types of Travelers	Outreach Tools & Strategies		
	Tier1	Tier2	Tier3
Passenger Vehicles	Variable Sign Boards	Website	Interview with Radio
	Social Media	Town Hall Meeting	Newspaper Ad
	Radio Ad	Interview with Newspaper	Name Branding
	Interview with TV	Text Message	Flyer
	Static Temporary Signage	Door to Door Visit	
		TV Ad	
		Mobile App	
Commercial Trucks	Variable Sign Boards	Website	Newspaper Ad
	Social Media	Interview with Radio	Town Hall Meeting
	Radio Ad	Interview with Newspaper	Name Branding
	Interview with TV	TV Ad	Flyer
	Text Message	Mobile App	
	Static Temporary Signage	Door to Door Visit	

Notes:

Tools in in each tier are sorted based on frequency of usage.

Static temporary signage was categorized in tier 2 based on the data, but strategies since it is mandatory, we have to categorize it in tier 1.