Reaching Your Audience

With Transportation Performance Reporting

Presented to:
Transport Chicago 2013

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Goal of this Presentation

Provide some insight and tools to support reaching your audience in transportation performance reporting and other areas
FHWA Project Overview

Design an ideal transportation performance report that tells transportation stories that matter in a visually compelling way that the target audiences care about (general public, transportation professionals, elected officials).
Project Context

The project was driven by...

- Approaching new performance reporting requirements as part of MAP-21
- Limited success in connecting with key audience groups on performance
- Need for a vision to shape FHWA direction and provide value to state and MPO partners
What We Did

Key Steps

- Studied the masters
- Explored our options
- Talked to the audiences
Studying the Masters

Edward Tufte
Ben Schneiderman
David Nelson and Bradford Hesse
Julie Steele and Noah Iliinsky
Fernanda Viegas and Martin Wattenberg
Nathan Yau

Charles Joseph Minard from Tufte’s Beautiful Evidence
## Studying the Masters

### Words That Work in Transportation

<table>
<thead>
<tr>
<th>Green Light Language</th>
<th>Red Light Language</th>
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<tbody>
<tr>
<td>Accountability, responsibility</td>
<td>Maintenance, fixing</td>
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<tr>
<td>Choice</td>
<td>Public spending, spending money</td>
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<tr>
<td>Comprehensive strategy</td>
<td>Washington Stimulus</td>
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<tr>
<td>Economy</td>
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<td>Efficient traffic</td>
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<td>Long-term plan</td>
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<td>State and local controlled</td>
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<tr>
<td>Sustainable mobility</td>
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</tbody>
</table>

Source: AASHTO’s *The New Language of Mobility*
Exploring Our Options

Infographics
Data Visualization Tools
Video
Newspaper/Magazine
Dashboard

Source: VDOT Performance Measures website, front page.
http://dashboard.virginiadot.org/default.aspx
Exploring Our Options

Infographics
Data Visualization Tools
Video
Newspaper/Magazine
Dashboard

Screenshot from “Higgs Boson for Dummies, sort of”

Source: Youtube, “Higgs Boson for Dummies, sort of (PhD Comics)”. (http://www.youtube.com/watch?v=Imom5WPrSA)
Talking to the People

And they said...

- Personalize and localize
- Not just snapshots, trends and context
- State-by-state comparisons
- Safety and funding primary interest
- Provide headlines and simple explanations
- Include an interactive tool

Report Samples
What We Learned

Addressing Challenges with Solutions

1. The audience wants localized and personalized info.
   - Focus on a customer-centric experience.

2. There are often significant educational needs in transportation.
   - Use narratives to communicate the stories. Provide context.

3. There is a strong risk of data misinterpretation.
   - Deliver headlines and simple explanations to help readers understand and put facts in context.

4. Meeting audience demand requires a significant amount of work.
   - Highlight and benefit from existing content where possible, don’t compete.

5. There are different audience groups with very different needs.
   - Start simple and engaging but allow for drill-down.
Addressing Challenges with Solutions – Example 1

1. The audience wants localized and personalized info.
2. Focus on a customer-centric experience.

FROM REWRITING CODE TO RECHARGING BATTERIES.
Like Alex, bringing home the groceries

Which he drives to in his hybrid car with batteries developed at UC-managed Lawrence Berkeley National Laboratory.

Source: Onward California website.
Addressing Challenges with Solutions – Example 2

There are often significant educational needs in transportation.

Use narratives to communicate the stories. Provide context.

Source: Washington Post, Wonkblog
Addressing Challenges with Solutions – Example 3

There is a strong risk of data misinterpretation.

Deliver headlines and simple explanations to help readers understand and put facts in context.

Bicycle Fatalities

630 cyclists died on U.S. highways in 2009, even though the number of trips by bicycle was up 25% between 2001 and 2009.

The typical bicycle fatality victim was:

- Male: 87%
- Female: 13%
- Urban: 70%
- Rural: 30%

The crash occurred:

- Age: 41 years old
- Time: During the Afternoon Commute Home

U.S. Cycling Fatalities


Source: Cambridge Systematics, data sited in image
Addressing Challenges with Solutions – Example 4

Meeting audience demand requires a significant amount of work.

Highlight and benefit from existing content where possible, don’t compete.

Source: http://now.sprint.com/nownetwork/
Addressing Challenges with Solutions – Example 5

There are different audience groups with very different needs.

Start simple and engaging but allow for drill-down.

Performance Report Vision

Website

Elements of report, blog, clearinghouse, data tool

Topical Infographics

“One page, one issue”, stand-alone, widely shareable

Message-Oriented Infographics

Educational, shareable, ties transportation to performance

Performance Measure Reports

Aimed at transportation pros, simple but data-driven

Data Tool

For those interested in playing with data and researching comparisons

Related Content

Build on the performance work of others, make site a “one-stop shopping” experience
Featured Stories

NEW! New Fast Lane Facts: Bicycle Safety
630 cyclists died on U.S. highways in 2009

America's Worst Traffic - Forbes.com
The Great Recession cleared the country's roads, but a recovering economy and

10 Best Cities For Commuters
...our list of the ten American cities with the easiest, most affordable commutes. We also factored in the average length of commute, local gas prices, yearly

Infographic: How Long Is It Taking Americans to Get to Work?

The Public Health Costs of Traffic Congestion -
www.transportationconstructioncoalition.org -
many previous analyses estimate the economic costs of congestion ...
Our estimates of the total public health cost of traffic congestion in the U.S. are
Safety Performance Report

This report summarizes transportation safety performance measures at the "NATIONAL" level.

HIGHLIGHTED MEASURE

Are We Reducing Fatalities on our Roads?

YES

EXPLANATION

THE NUMBER OF FATAL CRASHES IS DOWN.
The past five years have shown a steady decline in fatal crashes, but certain driver behaviors and crash types have remained a persistent threat to the safety of our roadways. There was a 19% reduction in fatal crashes in 2010 (versus the five-year average).

SNAPSHOT

TREND

- Driver education advancements are a core area of focus.
- The Federal Distracted Driver Initiative has led to laws against distracted driving in at least 30 states.
- FHWA has developed a Focused Approach on Safety to increase awareness of road departure crashes.

THE FACTS

- Fatal crashes in 2010 were at a 15-year low.
- Approximately 40,000 people are killed on the road every year.
- Contributing factors in the fatal crash reductions include safer vehicles and better driver training.
- Road departure crashes account for over 50% of fatal highway crashes.

Data Sources: Annual Fatal Crashes from FARS, FHWA Focused Approach on Safety

Are We Protecting Our Vulnerable Users?

NO

EXPLANATION

PEDESTRIAN FATALITIES SPIKED LAST YEAR.
With the increase of the numbers of people living in cities, we’ve seen an accompanying increase in pedestrian fatalities. Sharing our roads safely with our

SNAPSHOT

TREND

- Driver education advancements are a core area of focus.
- The Federal Distracted Driver Initiative has led to laws against distracted driving in at least 30 states.
- FHWA has developed a Focused Approach on Safety to increase awareness of road departure crashes.
Applying the Principles to Your Work

Step 1: Make the content magnificent

Step 2: Ask yourself...

- Am I telling an engaging story with my content?
- Am I telling the story from the audience’s point of view?
- Am I providing enough context?
- Am I benefitting from the work of others?
- Have I structured/formatted to engage all my key audiences?
THANKS FOR YOUR TIME!

SAM VAN HECKE
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FOR AN INTERACTIVE DEMO OF A SAMPLE NATIONAL TRANSPORTATION PERFORMANCE REPORT,
PLEASE VISIT
HTTP://CAMSYS.COM/FHWA_PERFORMANCE_REPORT_DEMO/INDEX.HTM