Planning, Policy, and Programming

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Project Title:
Data Presentation on Transportation Agency Websites: Trends and Best Practices

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Data Presentation on Transportation Agency Websites: Trends and Best Practices

To determine whether the data content, organization, and delivery methods in use on the Division of Research, Innovation and System Information (DRISI) website serve Caltrans' goals, and, if not, how they can be improved.

WHAT IS THE NEED?

The Division of Research, Innovation and System Information (DRISI) within California's Department of Transportation (Caltrans) provides solutions and knowledge that improves California's transportation system. The Division recently sought to determine whether the data it provides on the agency's website, the way it's organized, and how it's delivered, serve the division's goals and the agency's priorities of sustainability, active transportation, livability, and economic vibrancy. As agencies increasingly look to ensure that data is accessible to the public, it is important to understand how best to present that data through public websites.

WHAT WAS OUR GOAL?

The purpose of this research was to:
- Discover the variety of practices for structuring, organizing, and presenting such data currently in use by other transportation-related websites;
- Determine "best practices" that offer the greatest potential to engage, illuminate, and provide practical application for the transportation community; and
- Determine which of these reasonably could be implemented on the Caltrans DRISI (research) library website and identify areas for further exploration and discussion.

DRISI
Caltrans Division of Research,
Innovation and System Information

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Research Results

WHAT DID WE DO?

The purpose of this research was to:
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• Determine "best practices" that offer the greatest potential to engage, illuminate, and provide practical application for the transportation community; and
• Determine which of these reasonably could be implemented on the Caltrans DRISI (research) library website and identify areas for further exploration and discussion.

WHAT WAS THE OUTCOME?

The research identified the following key findings:
1. States have been slow to implement open data. Most state and local transportation agency websites offer little data on their websites, and what they do offer falls far short of the trend toward "open data." Crash data is the most commonly covered topic.
2. System usage data is more common than system inventory data. The breadth of data topics on agency sites is small and often incomplete, with gaps or overlaps in timespans and topic areas.
3. Data discoverability and accessibility vary but are generally poor. Most state sites provide no obvious path from the home page to data, and no agency provides direct access to, or even lists, all data in a single, central location.
4. Data structure, presentation, and appearance vary widely. PDF files, which have serious drawbacks and cannot be considered a "best practice," are the most commonly used data presentation medium on state sites, but this is fortunately starting to change as more agencies embrace open data.
5. Reusability is standard on federal sites but lacking on state sites. Data on state DOT sites is generally reusable only by investing considerable time and effort in exporting and reformatting text from PDF files. Federal sites, however, are embracing concepts of reusability.
6. Agencies that offer open data are valuable resources. Such websites are both a rich source of ready-to-reuse data on dozens of topics of interest to Caltrans' customers, and a generous source of guidance and support for agencies just getting started with open data.

WHAT IS THE BENEFIT?

Caltrans' primary interest was in learning which topics other agencies were covering and how the data was organized and presented; therefore, that was the primary focus of the research. However, unlike print media, which has been part of the American landscape for centuries, the content delivered by digital media is only one component that determines its impact. The discoverability of a website as well as its usability are critical to its ability to effectively transfer knowledge and understanding to the populace.

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http://transweb.sjsu.edu/project/1501.html