



2008 GLOBAL EXCELLENCE AWARDS

Location

Seattle, Washington, USA

Client

Washington State
Auditor's Office

Project Manager

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Officer in Charge

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METROPOLITAN SEATTLE CONGESTION PERFORMANCE REVIEW

Traffic congestion in the Seattle metropolitan area is bad and becoming worse. During the typical afternoon peak period in 2006, 48% of travel on the major freeways was below 45mph, compared to 35% just three years prior. The area's highway network is very fragile—small problems can trigger large delays.

Delcan conducted a performance review of traffic congestion management in the Seattle area. This review assessed congestion management practices used by state, regional and local transportation agencies, reviewed policies set by the state legislature, conducted an international best practices review, and identified ways for the region to reduce congestion over the next five years. Delcan made 22 recommendations that combined traditional approaches to congestion management such as:

- **Adding or enhancing highway capacity.**
- **Optimizing existing highway capacity, e.g. enhanced traffic operations and improved incident response.**
- **Managing travel demand to shift single occupant cars to carpools, vanpool, telecommuting, and transit.**

...with more innovative approaches that included:

- **Restructuring of regional governance with an enhanced focus on congestion.**
- **Changes to the strategic planning, programming, and project prioritization processes.**
- **Performance-based management.**
- **A 200-mile HOT-lane network to give priority to high-value trips.**
- **Use of private finance.**

Delcan identified near-term actions that could reduce traffic delays by 15% to 20% over the next five years saving the region more than \$500 million a year in reduced delays and related costs. Additional benefits could come from reduced emissions and economic gains by improved access to jobs and employees.

Client Impact/Value

The Seattle project came about because local citizens in Washington State told the State Auditor, our client, that congestion is the most important transportation issue they face.

“My hope is that our report will trigger thinking that leads to action and helps find solutions to our compounding traffic problems,” says Brian Sonntag, the Washington State Auditor.

Traffic congestion is now a leading topic of discussion in the region – a big change from a year earlier – and a focus of the 2008 local and state elections. Our report was even the subject of an editorial cartoon.

In 2006, the Washington State Legislature passed a bill directing the State Auditor’s Office to conduct independent, comprehensive performance audits of transportation related agencies. These audits were chosen based in part on extensive outreach with citizens, including focus groups and town hall meetings, in which they identified traffic congestion and accountability for projects as their concern.

Industry Impact/Value

Traffic congestion is the foremost transportation issue in the United States. Our report has attracted widespread local, regional and national attention, because we showed that traffic congestion can be reduced in the near term, by combining a variety of approaches rather than simply focusing on a single strategy. Delcan has been invited to present project briefings to United States Department of Transportation officials, and representatives of several state departments of transportation, national associations, the business community, and legislative groups.

Community Impact/Value

Delcan’s recommendations, if implemented, will reduce congestion and reduce emissions. Congestion is wasteful, and makes travel unpredictable. Also, there is growing recognition that transportation in general and congestion in particular, contributes to global warming and climate change. A recent study estimated that carbon dioxide, a greenhouse gas responsible for global warming and climate change, can be reduced by as much as 45% if traffic flow is smoothed to a steady-state condition.

Areas of Innovation

The Seattle project was innovative in many ways, but three in particular are significant: **First**, the overall project approach was ground-breaking, in that Delcan looked at congestion independently of the state, regional, and local agencies that plan, manage, and operate the different components of the transportation system. Working directly for the Washington State Auditor meant that we were able to take a more holistic view of how congestion affects travelers and businesses in the Seattle area, and what could be done to improve conditions. This meant looking beyond actions in the control of the Washington State Department of Transportation and including policies set by the legislature.

Second, we looked at congestion in different ways. One of the most surprising findings was that vehicle throughput on freeways was not only much lower than we had expected (and well below the standards expected for modern freeways) but was also deteriorating over a relatively short period of years. In some parts of the freeway system, the potential for an all-day peak period (where travel conditions during the morning peak period do not fully recover before the onset of the afternoon peak period) appeared to be a real possibility.

Third, our 22 recommendations embraced a broad range of strategies that combined traditional approaches to reducing congestion with more innovative measures that sought to both reduce congestion within five years and to create a new culture for managing congestion. Our research, including the international best practices review, showed that transportation agencies such as the Washington State Department of Transportation are among the best in the nation. At the same time, it seems likely that unless fundamentally new approaches are adopted, the way that congestion is managed in the Seattle area, and indeed across the United States, will, at best, only slow the rate at which congestion is worsening.

