NASCIO Recognition Award Nomination

Title: *Good to Go!* Electronic Toll Payment Program
for the Washington State Department of Transportation

Category: Government to Citizen category

State: Washington

Executive Summary

Washington State needed to find methods to reduce traffic congestion across the four-lane Tacoma Narrows Bridge, which connects the Kitsap Peninsula to the East Sound/Tacoma Metro area. The state settled on building a new, second bridge parallel to the first, with the majority of funding for the project to come from bond sales. The bond payments would be made by toll revenues once the new bridge was opened.

Washington State drivers have limited experience navigating toll lanes and using toll booths. The Washington State Department of Transportation (WSDOT) needed to collect the tolls required to pay for the bridge, without contributing to traffic delays that the second bridge was intended to eliminate.

The state launched *Good to Go!*, which urged Tacoma Narrows Bridge commuters to set up an account via a user friendly website, or at a Department of Transportation office. Drivers with accounts would then attach a small wireless transponder sticker that contained a radio frequency identification tag to their windshields. Amplified receptors on the bridge would receive the unique reference number signals from the transponders. The unique reference numbers are tied to encrypted database account information, which allows automatic debiting of the toll as a user crosses the bridge.

WSDOT relied on a number of innovative advertising and marketing strategies, and the convenience of online purchasing and account management, to convince consumers to use the transponders. The campaign was a huge success and vastly exceeded the rate of participation goal – a feat that national tolling experts doubted could be achieved.

Description

Business problem

Washington State needed to find methods to reduce traffic congestion across the four-lane Tacoma Narrows Bridge, which connects the Kitsap Peninsula to the East Sound/Tacoma Metro area. The state settled on building a new, second Tacoma Narrows Bridge parallel to the first. The $847 million project was contentious from the start since most of its construction costs would ultimately be funded by toll revenues. Given that Washington State hadn't operated a toll bridge in more than twenty years, stakeholders were extremely apprehensive regarding the project's success.

Paying for the new Tacoma Narrows Bridge hinged on convincing 50 percent of morning commuters to use electronic tolling by opening day. Meeting the goal would provide a good forecast for future electronic tolling use and revenue stream. A 50 percent adoption rate would also keep traffic flowing, further enhancing the appeal of electronic tolling to Washington citizens. National tolling experts doubted this ambitious goal was achievable.

Electronic toll paying, a technology never used in Washington State before this project, was branded by the Washington State Department of Transportation (WSDOT) as *Good To Go!* WSDOT developed and deployed an advertising campaign that included public relations, traditional marketing, and grassroots word-of-mouth marketing. The *Good To Go!* mobile van visited large businesses, busy retail centers, and community events to sign up large numbers of drivers for the electronic toll paying system.

Every speaking engagement and outreach event was designed to stimulate conversation among friends, relatives, and neighbors. By arming key individuals and groups with information they could share with others, WSDOT expanded their message exponentially. Community members came to understand that the success of the new bridge was dependent on signing up as many drivers as possible to use electronic tolling. *Good To Go!* conversations could be heard throughout the community. Friends were reminding each other to set up accounts, and the public was interested in the milestones being reached in the program.

Solution

Tacoma Narrows Bridge commuters set up an account via a user friendly website or at a Department of Transportation office. Drivers with accounts would then affix a small wireless transponder with a radio frequency identification tag to the windshields of their vehicles. The bridge is equipped with amplified receptors that receive the unique reference number signals from the transponders. These unique reference numbers are tied to encrypted database account information, which allows automatic debiting of the toll as a user crosses the bridge. These two items were the technology cornerstones of the toll program.

WSDOT was quick to emphasize the savings available to Tacoma Narrows Bridge commuters. Not only does the transponder reduce a user's commute time, each trip paid electronically using *Good to Go!* saves a standard vehicle commuter $1.25 over cash paying customers at the toll booths. As an incentive to encourage drivers to establish their accounts well before bridge opening, *Good To Go!* customers were eligible to win a year of free tolls and $50 gasoline cards in monthly drawings. WSDOT designed a user-friendly website, which made establishing an electronic toll paying account convenient and easy. Over 60 percent of new accounts were established online.

In addition to the multi-faceted marketing and advertising campaign undertaken by WSDOT, a significant grassroots campaign was also deployed targeting neighborhoods surrounding the Tacoma Narrows Bridge. Transponder use by drivers in these key zip codes reached 96 percent by April of 2008, just nine months after the opening of the new bridge.

WSDOT activated the transponder receptors a month ahead of the new bridge opening so that users could ensure their transponders were functioning correctly, and verify their account statements showed a $0 charge for each Tacoma Narrows Bridge trip made during the testing period. The testing period also allowed those who had installed their transponders improperly to correct the error, and permitted WSDOT to monitor the adoption rate of electronic toll lane use by morning commuters.

More than 60,000 customers established *Good To Go!* accounts by the first day of tolling, and more than 130,000 electronic tolling transponders had been distributed. On the first day of non-testing, actual live use, smooth-flowing traffic heralded the commute as **73 percent of peak commute drivers used the electronic toll lanes**. Traffic zipped along at freeway speeds for the first time in years, and the project was a huge success.

Length of time in operation

The new Tacoma Narrows Bridge, complete with electronic tolling capabilities, opened to vehicle traffic on July 16, 2007.

Current metrics

Today, nearly two years after the project began 117, 042 citizens and businesses have established *Good To Go!* accounts, and more than 256,230 transponders have been distributed – **nearly six times the initial goal.** Seventy percent of all tolls collected are paid using the electronic tolling system, which accounts for almost $36 million in two years.

Traffic congestion on the Tacoma Narrows Bridge has been greatly reduced, and **eight-five percent of the peak commute drivers use the electronic toll lanes**.

Accident rates on the Tacoma Narrows Bridge have dropped seventy-four percent since the new bridge project was completed.

Washington drivers have embraced electronic tolling in record numbers and the $847 million Tacoma Narrows Bridge is considered a huge success. *Good to Go!* has become part of the WSDOT's pilot project for high occupancy lane tolling (HOT) capabilities on Washington State roads and highways.

Significance

Good to Go! was such a huge success that it has become part of the WSDOT's pilot project for high occupancy lane tolling (HOT) capabilities on other Washington State highways. With electronic toll lane use on the bridge far exceeding the original fifty percent goal, WSDOT avoided operational issues at the toll plaza and in mainline traffic lanes. Before the second bridge opened, morning backups typically began at 6 a.m. and lasted until after 9 a.m., with speeds averaging 20 m.p.h. on most mornings. Speeds are now at a steady 60 m.p.h. throughout the day. Overall morning commute times have shrunk in duration as drivers adjusted their schedules for a significantly shorter commute. Many drivers report saving at least 30 minutes per trip, which also cuts down on carbon emissions and fuel consumption, resulting in cleaner air and water levels. The new one-way design of the two bridges is also providing a safer commute for Tacoma-area/East Sound residents, by dramatically reducing traffic accidents on the bridges.

The high rate of electronic tolling adoption has also contributed to lower violation rates than predicted. Original projections called for toll violations exceeding 10 percent or more of total bridge traffic. Toll violators on the Tacoma Narrows Bridge make up less than two percent of bridge users.

Benefit of the project

The benefits of the project include reduced traffic congestion, reduced commute times, increased commuter safety, a reduction in environmental impact, a dependable revenue stream from toll payments which aids in project funding, and a verifiable pilot study that is applicable to future electronic toll projects on additional Washington State highways.