

Presenting:

Kari Edison Watkins, PE
 UW Civil and Envir. Engineering
 kariwat@uw.edu

Public transit plays important role in providing mobility, combating congestion, reducing carbon emissions, and promoting sustainable communities.

BUT potential customers can be confused or intimidated by complexity of transit systems.

OneBusAway provides simple real-time information for Seattle-area bus riders.

Conducted a survey of OBA users that showed:

- Increased satisfaction with transit
- Decreased wait time
- Increased trips per week
- Increased feeling of safety
- Increased distance walked

<http://onebusaway.org>

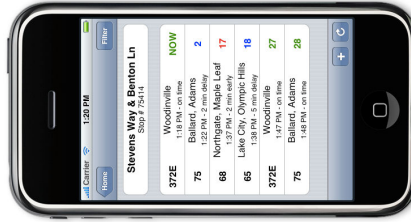
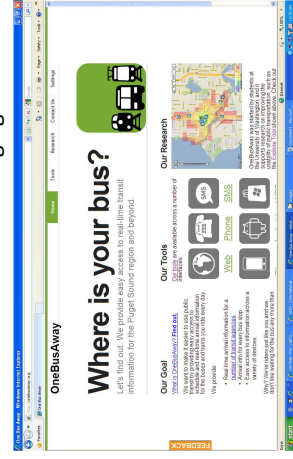
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 Brian Ferris, UW Computer Science & Eng.
 Kari Edison Watkins, UW Civil & Envir. Eng.
 Dr. Alan Borning, UW Computer Science & Eng

OneBusAway: Behavioral and Satisfaction Changes Resulting from Providing Real-Time Arrival Information for Public Transit

OBA TOOLS

OneBusAway provides trip planning tools and real-time next bus countdown information for transit riders in greater Seattle via multiple interfaces. It serves 40,000 unique users per week.

- Website: 15k users
- iPhone and Android apps: 25k users
- Standard telephone number: 2k users
- SMS interface for text-messaging: 1k users

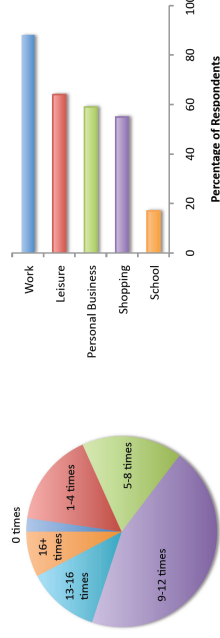


Smart phone applications include automatic localization of information using phone's GPS capabilities. Other interfaces use stop ID or route/address search to access information.

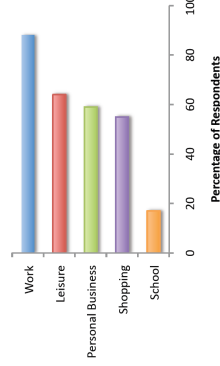
OBA EVALUATION

Two web-based surveys conducted in Aug 2009. First survey had 488 Respondents (10% of the daily OBA users at the time). A 139-respondent follow-up survey about walking was conducted based on the initial survey results. The majority of respondents were daily users who were commuting to work.

Average Trips Per Week By Bus Purpose



Purpose of Bus Trips

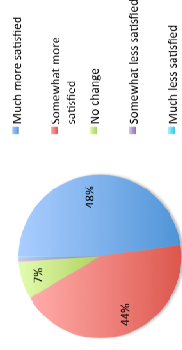


SURVEY RESULTS

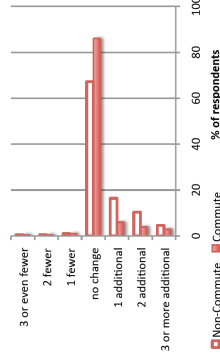
Respondents indicated that:

- 92% were more satisfied with transit
- 91% spent less time waiting
- 31% took additional transit trips
- 21% felt safer waiting

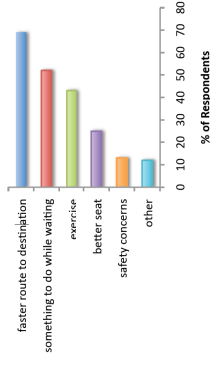
Change in Overall Satisfaction with Public Transit



Change in Average # of Trips



Why do Respondents Walk?



- 78% are more likely to walk to a different stop, either on a different route or further up or down the same route
- Average 6.9 additional blocks

POLICY IMPLICATIONS

Survey shows promise of mobile real-time information, which is substantially cheaper to the agency than providing real-time signage. In addition, 73% of respondents indicated they use OneBusAway information exclusively to determine when to access the bus. The changing nature of information access could eventually allow transit agencies to operate more headway-based service saving the slack time required to maintain a schedule.

OBA RESEARCH

The initial OBA survey was self-reported data with no control group of non-users. We are therefore conducting several additional studies:

1. To determine the influence of real-time information on people's perceived wait times and actual wait times
2. To determine if people actually take additional transit trips as a result of better rider information
3. To investigate the impact of information tools on bus drivers
4. To use crowd-sourcing correction of real-time and trip planning data