

# New study gives insight into crowd-sourced commuting

December 11 2012

---

The New Cities Foundation today unveiled the results of its Connected Commuting Task Force, charged with helping cities all over the world better understand how real-time social networking among commuters can enhance the overall commuting experience and improve traffic management. The unprecedented study was conducted in the city of San Jose, California, in partnership with Ericsson, the City of San Jose's Department of Transportation and the University of California's Mobile Millennium team from the Center for Information Technology Research in the Interest of Society (CITRIS). The study used two of the most innovative commuter smartphone applications available, Waze and Roadify.

The Task Force conducted an analysis of commuter sentiment from data retrieved from over 15,000 user commentaries in the San Jose area. This was complemented with several focus group interviews comparing the experience of 'connected' and 'unconnected' [commuters](#).

The study found that commuters' ability to receive or share information in real time with other travelers during the commute can effectively reduce transport-related stress and provide a sense of community, which ultimately results in an improved commute experience. "One of the novel aspects of the work is the use of crowd-sourced content, which goes beyond GPS traces and which, in the future, will constitute a significant source of mobility information in [urban environments](#)," said CITRIS researcher Alexandre Bayen, a professor at UC Berkeley's Department of Electrical Engineering and Computer Sciences.

"The daily commute is one of the most painful parts of urban life. This is true in most cities around the world, rich and poor, old and new. Our vision for this study is to determine how real-time information sharing between commuters can influence the development of new technologies, policies and other innovations that improve commuting in metropolitan areas throughout the world. We are excited about the results and we hope that cities, research labs and companies will use the findings as a starting point for further urban innovations in this important field," said Naureen Kabir, Director of the New Cities Foundation Urban Lab.

"In today's ICT-enabled environment and with the widespread use of smartphones and [social networking](#) tools, information can be transferred among individuals more seamlessly than ever before," says Patrik Cerwall, Head of Strategic Marketing and Intelligence, Business Unit Networks, Ericsson. "In the networked society, where everything that benefits from a connection will have one, these types of information sharing will help cities reduce commute times and commuters' energy consumption which benefits the environment, the cities and the citizens over the long term."

The Connected Commuting Task Force presents an opportunity to identify alternative ways in which cities, transport agencies and local governments could improve the commute experience rapidly and effectively. "As cities like San Jose move forward in implementing their transportation vision for residents and commuters, partnerships between public and private organizations create new and exciting opportunities to further enhance how we benefit from the potential that technology offers to improve urban mobility," said Manuel Pineda, Deputy Director, City of San Jose, Department of Transportation."

The [Task Force](#) revealed several key insights, including:

- Connecting commuters improves the commute by allowing users to share or receive real-time information on traffic issues from an extended commuter community, offering commuters greater control over their commute and also the opportunity for them to provide a valuable service to others by sharing information.
- The use of commuter sentiment analysis tools has the potential to help cities and local transportation authorities define their priorities, planning and investments in the area of transportation by indicating accurately, almost in real time, areas or routes that are particular points of frustration for commuters.
- Technology plays a significant role for both connected and unconnected commuters, whether during the planning stage or the actual commute. The types of planning and commuting tools used by commuters varied significantly depending on the individuals' priorities and habits which were specifically influenced by their choice of transportation and overall trust in the information source.
- Connected car commuters tended to be happier than unconnected car commuters as a result of being able to predict their commute conditions, which resulted in less stress. Additionally, connected car commuters expressed satisfaction about their ability to help other commuters by sharing relevant and timely commute-related information.

**More information:** [bit.ly/ncfCCexec](http://bit.ly/ncfCCexec)  
[bit.ly/ncfCCfull](http://bit.ly/ncfCCfull)

Provided by University of California - Berkeley

Citation: New study gives insight into crowd-sourced commuting (2012, December 11) retrieved 19 April 2024 from <https://phys.org/news/2012-12-insight-crowd-sourced-commuting.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.