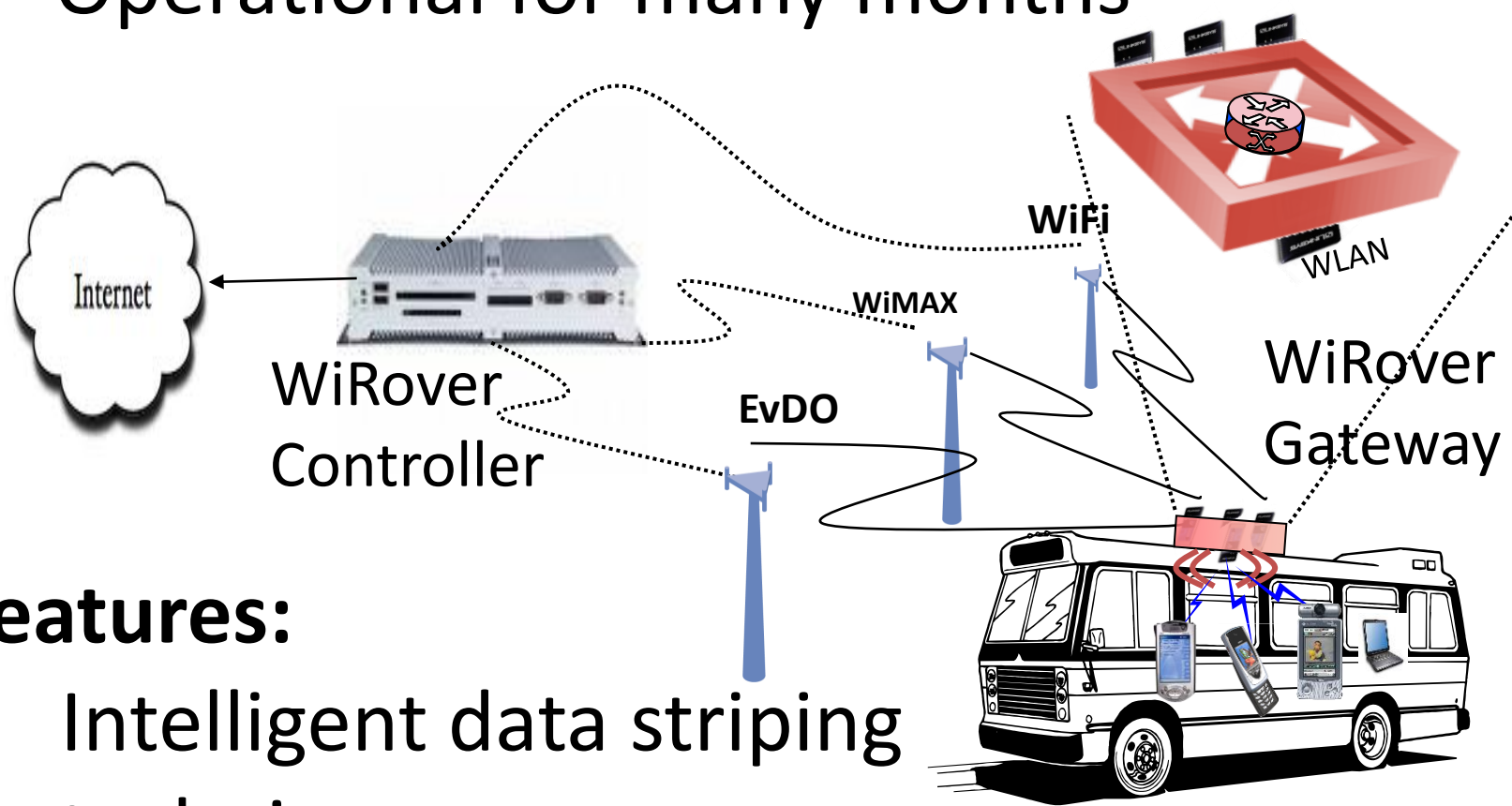# Continuous Vehicular Connectivity through Multiple Wide-area Interfaces

Joshua Hare, Lance Hartung, Wes Miller, Derek Meyer, Suman Banerjee

Wisconsin Wireless and NetworkinG Systems (WiNGS)
Laboratory, UW-Madison

WiROVER

- A vehicular system to provide Internet access to riders
- Currently deployed on multiple Madison Metro Transit buses and a single Van Galder (CoachUSA) bus
- Operational for many months

Features:

- Intelligent data striping techniques
- Automated management tools to collect system, link, and user data
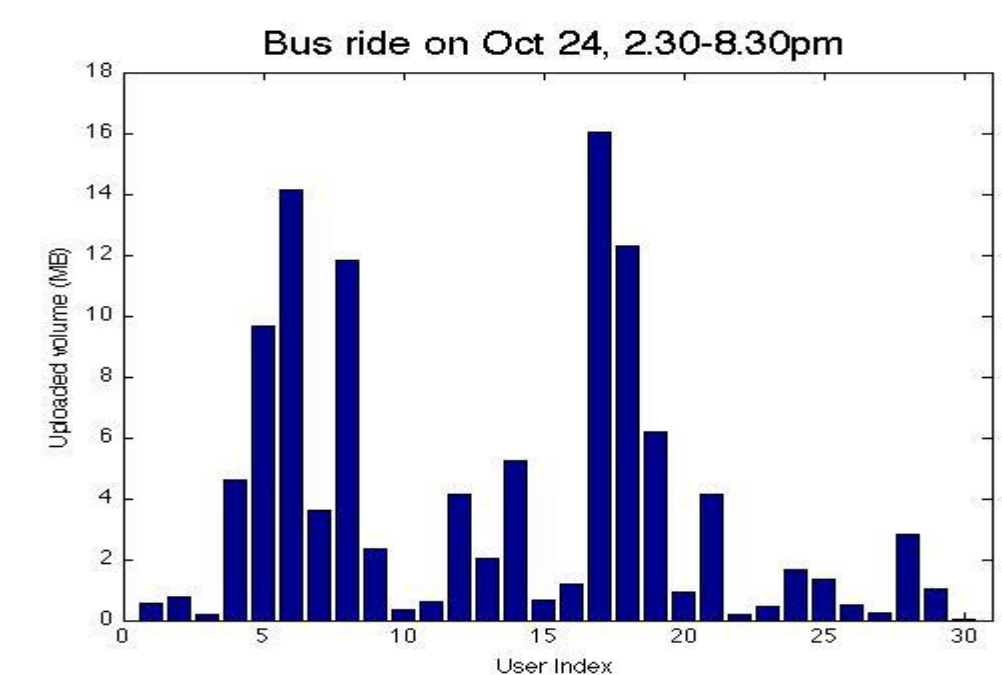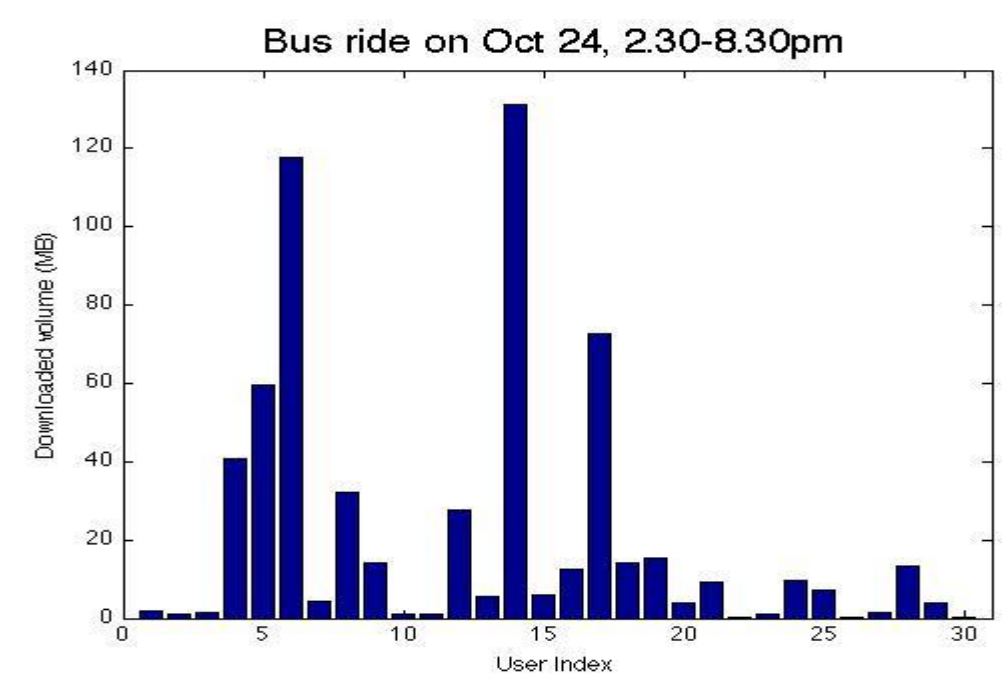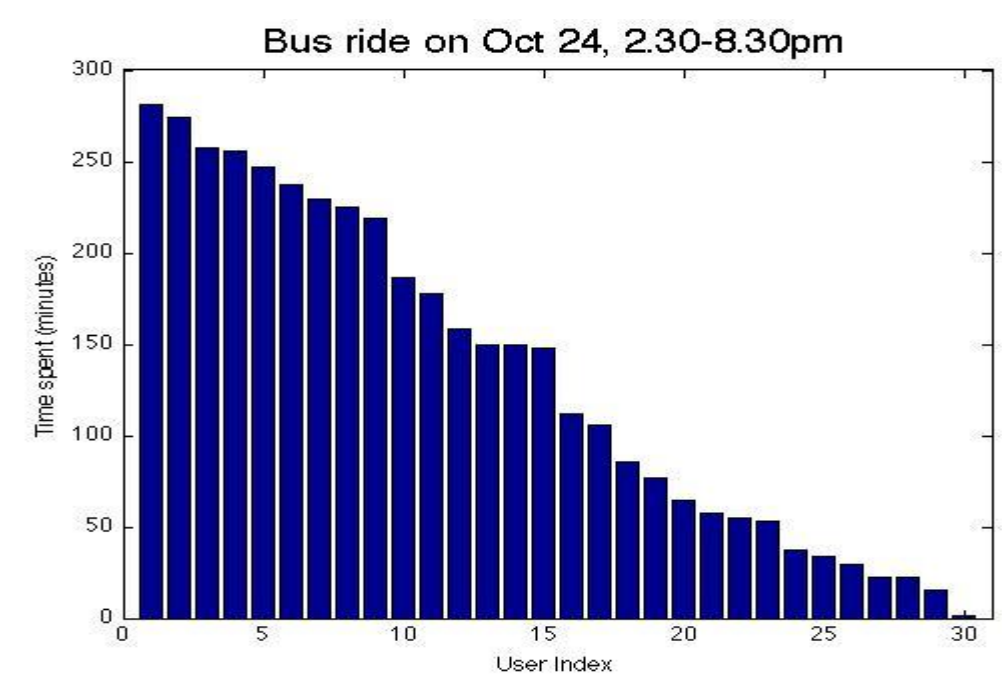- Aggregate data collection exceed 2 million data points per month

OBSERVING WIDE-AREA NETWORK BEHAVIOR

Performance of cellular network 1 (~ 60. sq. miles)

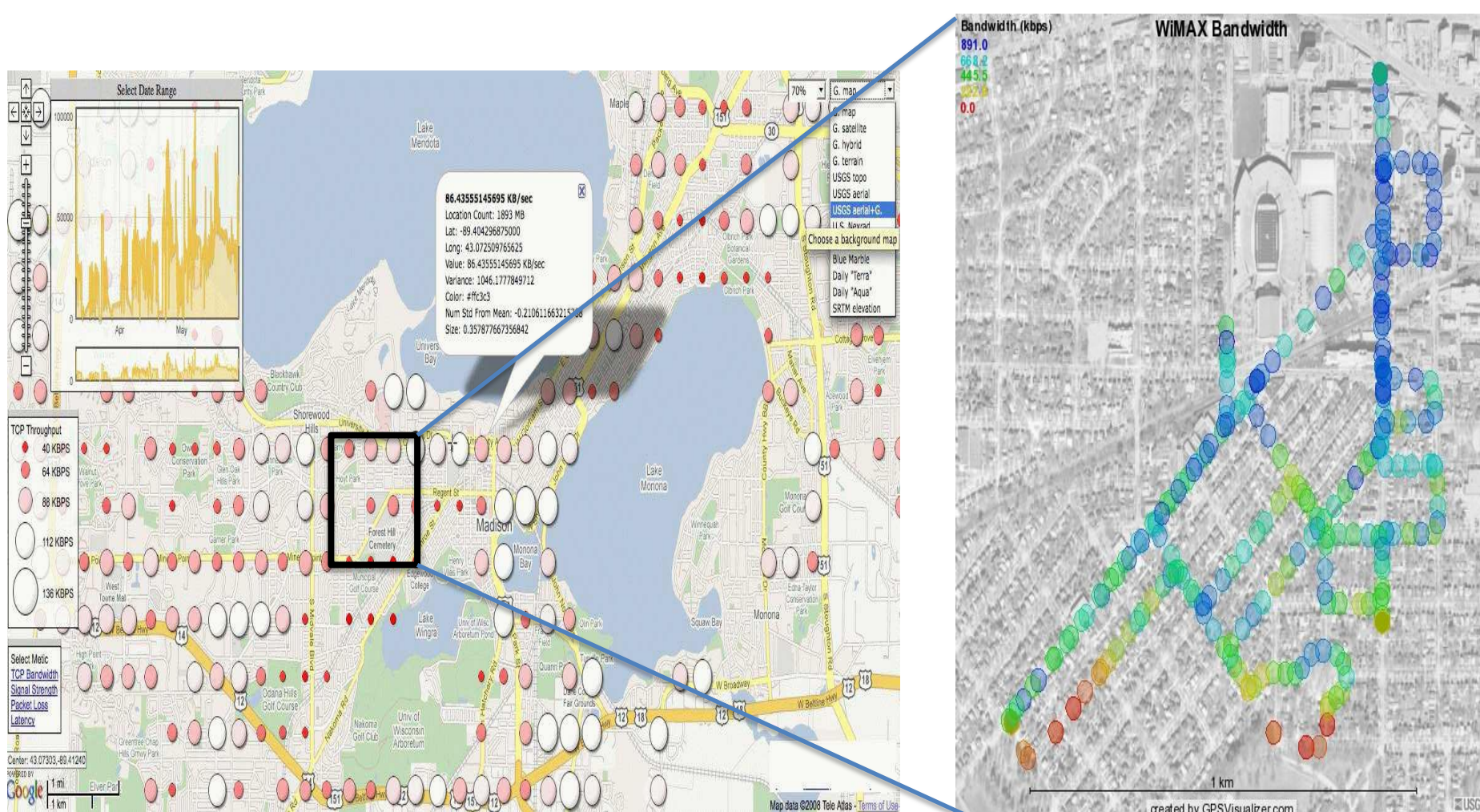Performance of GENI WiMAX Network (1.25 sq. miles)

IMPACT

"Thank you!! I really hope this is permanent and gets installed on more buses. I was able to get work done at an otherwise lame point of my day. Thanks again!"

--- WiRover user comment

6 hrs, 30 users, 609 MB