UNIVERSITY OF MINNESOTA | EXTENSION

Assessing the Economic Impact of Bicycling in Minnesota

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OVERVIEW

- Funding: Minnesota Department of Transportation
- Support: Center for Transportation Studies
- Implementation: U of M

Research team from University of Minnesota:

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MnDOT Project Coordinator: Sara Dunlap, MPH, Principal Planner, MnDOT

Co-Investigators:

Dr. Greg Lindsey, Professor, Humphrey School of Public Affairs
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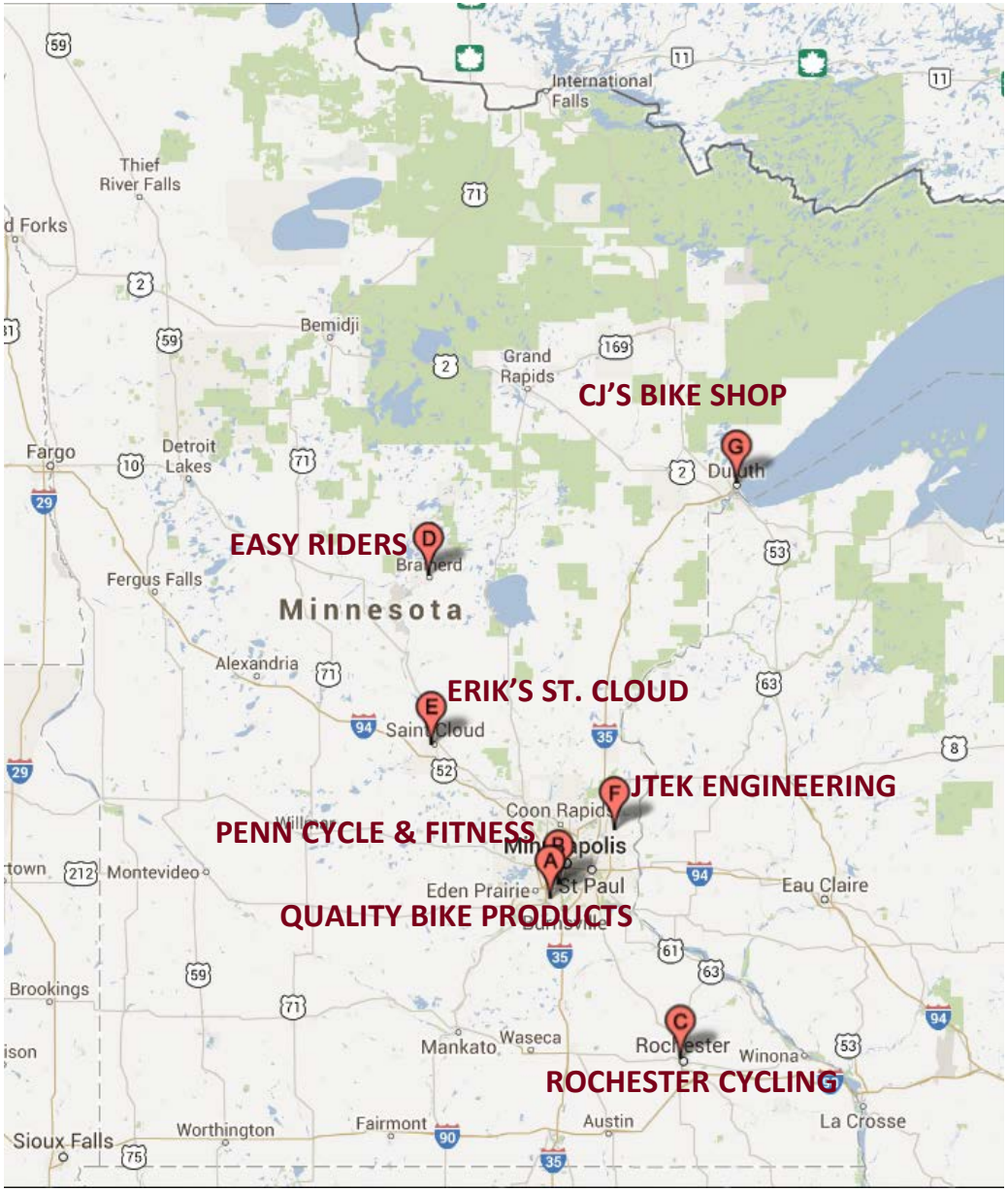
Brigid Tuck, Senior Analyst, U of M Extension
Dr. Mark Pereira, Associate Professor, School of Public Health

PROJECT GOALS

- Estimate the economic impact of the bicycling industry in MN
- Estimate the economic impact of bicycling events in MN
- Examine the health effects and related economic impact of bicycling in Twin Cities Metropolitan Area
- Estimate volumes of bicycling and use of bicycling infrastructure in MN

ESTIMATE THE ECONOMIC IMPACT OF BICYCLING INDUSTRY



ESTIMATE THE ECONOMIC IMPACT OF BIKING INDUSTRY

- Interview of key informants
- Online survey of bicycling businesses

- $778 million economic activity in 2014:
  - $617 million from manufacturers & wholesalers
  - $209 million in wages, salaries & benefits
  - 5,519 jobs

ECONOMIC IMPACT OF BIKING INDUSTRY: IMPLICATIONS

- Strong bicycle-related manufacturing
- Specialty bicycle retail stores
- Local suppliers

ESTIMATE THE ECONOMIC IMPACT OF BICYCLING EVENTS

- Online survey of bicycling event attendees
- IMPLAN

ESTIMATE THE ECONOMIC IMPACT OF BICYCLING EVENTS

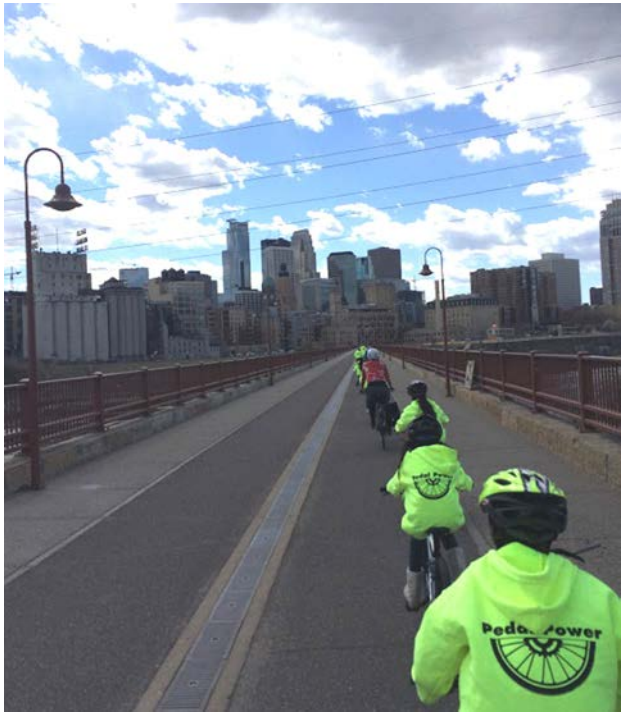
- $14.3 million economic activity in 2015:
  - $4.6 million in wages, salaries & benefits
  - 150 jobs
- An estimated 50,212 visitors traveled for bicycling events
- Average spending per person per day: $121

ESTIMATE THE ECONOMIC IMPACT OF BICYCLING EVENTS

- Capture more spending from a captive audience
- Use events to promote bicycling facilities

EXAMINE THE HEALTH EFFECTS OF BICYCLE COMMUTING & ITS ECONOMIC IMPACT

- Economic value of reduced death rate (mortality)



WHAT IS HEAT?

- Health Economic Assessment Tool (HEAT):
  - World Health Organization
  - Estimating the economic value of reduced death rate (mortality) due to bicycling or walking (Rutter et al. 2007)

- HEAT's applicability:
  - NOT for illness rate (morbidity)
  - Habitual behavior at population level
  - 20-64 year olds
  - NOT for physically active population

EXAMINE THE HEALTH EFFECTS OF BICYCLE COMMUTING & ITS ECONOMIC VALUE

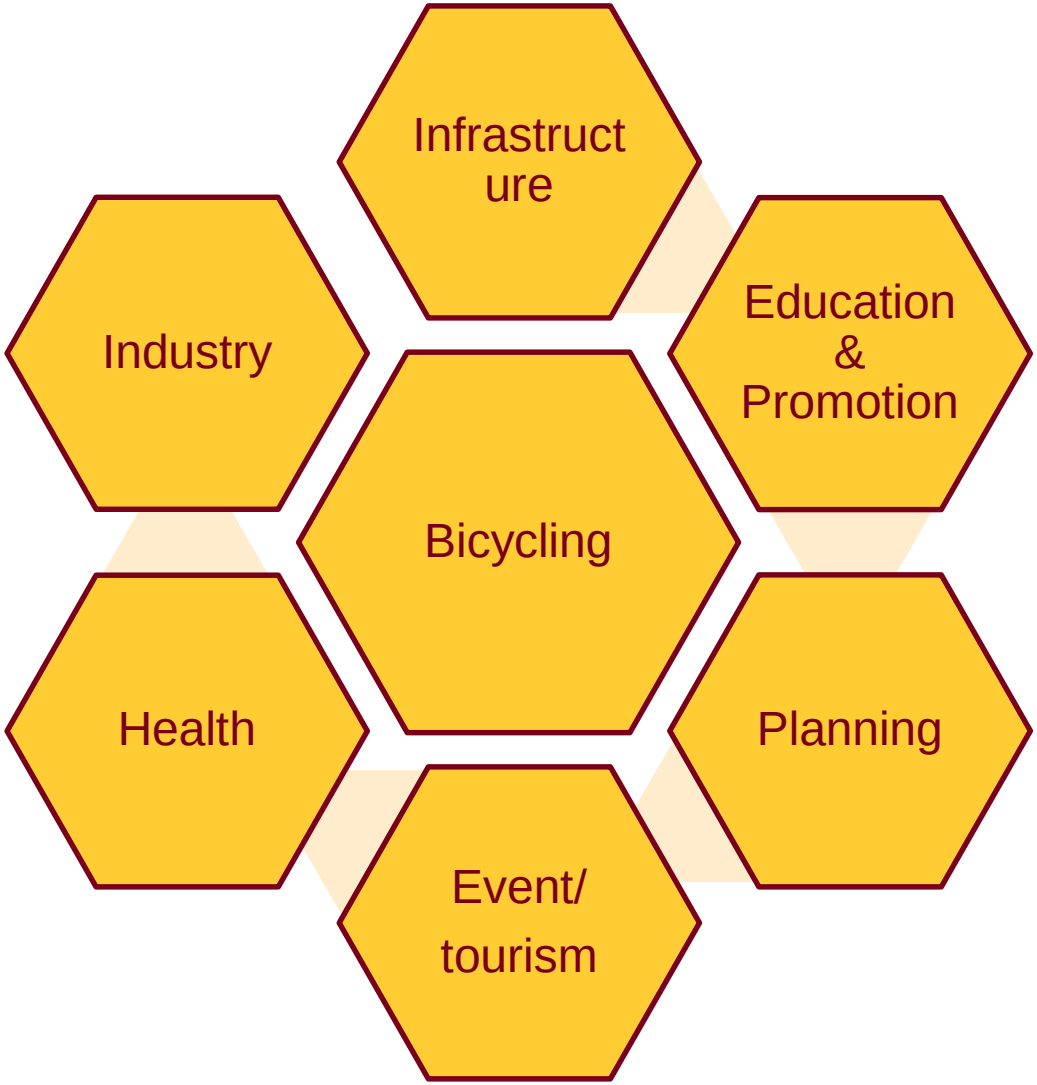
- Reduced mortality per year:
  - Prevents 12 – 61 deaths
  - Saving $100 million - $500 million

EXAMINE THE HEALTH EFFECTS OF BICYCLE COMMUTING & ITS ECONOMIC VALUE

- Promote active transportation via bicycling
- Safety education
- Safe bicycling to school
- Youth's bicycle access

Safe Routes to School
National Partnership

TO SUMMARIZE



Thank you!
Questions & Comments?

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INPUT DATA NEEDED TO USE HEAT

- Number of people who bike commute
- Average time spent bike commuting
- Population death rate (i.e., mortality rate)
- Value of a statistical life (VSL)
- Period of time for benefits to be calculated
- A discount rate