

DATA & ANALYTICS FOR ASSESSING THE NEEDS OF VULNERABLE ROAD USERS

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A lack of comprehensive data about biking and walking makes it difficult to advocate for, plan for, and implement facilities where they help our communities most.

Vietnam





Alaska, USA

USA in 2002:

- No consistent, uniform data collection and analysis for active mobility
- Multiple, inconsistent methodologies across agencies and country
- No sharing of data at a national level
- Result = difficult to justify funding, document benefits, understand what influences walking and bicycling

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Goals of the National Bicycle and Pedestrian Documentation Project (2002):

- Develop a consistent national methodology for conducting counts and surveys
- Establish a national database of count information

Alaska, USA

 Use database to begin analysis on the correlations bicycle and pedestrian activity and local characteristics



What to Count?





When to Count?

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When to Count?



- Official National Count Dates (USA): Second week of September (one weekday, one weekend day)
- Locations: previous count location, bicycle facility, mixed land uses, high crash corridor
- Select & train surveyors
- Conduct survey
- Analyze results

Annual Count Methodology





More than just count data: surveys and interviews add dimension and insights to the data



"I bike because it saves time - I get where I need to go while getting exercise."







"I love being able to bike my five- and eight-year old to



"I enjoy the health benefits of walking – not just the physical health benefits also the mental health benefits. I like taking in the sights and sounds around me ... It's nice to walk in Midtown but in South Fulton we need wider sidewalks that don't stop all the sudden."

KAYLA, SOUTH FULTON COUNTY NEAR THE AIRPORT





'Even though I drive to work, I like to walk to get lunch because there are a lot of places to go near the office. I could imagine biking to work if the roads were friendlier."

Surveys & Interviews

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National Bicycle and Pedestrian Documentation Project



Count Dates for 2019:

· Sept 9-15, 2019

The next count/survey days are

ongoing data for use by planners, governments, and bicycle and pedestrian professionals.

Methodology

About

The basic assumptions of the methodology are that, in order to estimate existing and future bicycle and pedestrian demand and activity, agencies nationwide need to start conducting counts and surveys in a consistent manner similar to those being used by ITE and other groups for motor vehicle models.

One of the greatest challenges facing the bicycle and pedestrian field is the lack of documentation on usage and demand. Without accurate and consistent demand and usage figures, it is difficult to measure the positive

benefits of investments in these modes, especially when compared to the other transportation modes such as the private automobile. An answer to this need for data is the National Bicycle & Pedestrian Documentation

Project, co-sponsored by and Alta Planning and Design and the Institute of Transportation Engineers (ITE) Pedestrian and Bicycle Council. This nationwide effort provides a consistent model of data collection and

NBPD to Provide Free Summary Reports!

The National Bicycle and Pedestrian Documentation Project has developed a summary report that highlights the valuable information that can be gained from year-long automatic bicycle and pedestrian counts. If your community uses Eco-Counter automatic count technology, the National Bicycle and Pedestrian Documentation Project will provide a free summary report of the data in exchange for submission of the annual automatic count data to the project. This report puts valuable information regarding usage and trends at your fingetips which can be used in grant applications, press releases, annual count reports, etc. Sample reports are available here and here. Email your Eco-Counter data in excel format to data@bikepeddocumentation org. Please indicate the exact location of the automatic counter and tell us a bit about the bicycle or pedestrian facility.

News

 Have walking and bicycling increased in the US?A 13-year longitudinal analysis of traffic counts from 13 metropolitan areas. Recent scholarship from Virginia Tech that used NBPD data to create a unational direct demand model. Huyen Le, Ralph Buehler, and Steve Hankey are the lead authors of the study.

www.bikepeddocumentation.org

- Info about count and survey methodology
- Original site

National Database



BikePed Portal: National Bicycle and Pedestrian Count Archive



BikePed Portal: Jurisdictions around the country are collecting non-motorized traffic count data, but the lack of a centralized database inhibits data sharing and greatly reduces the utility of this important and growing dataset. In response, we created a national online non-motorized traffic count archive. This archive allows users to upload, view and download data. Access to a centralized non-motorized traffic data archive opens the door to innovation in research, design, and planning.

With the BikePed Portal we aim to:

---Provide safety researchers with a measure of exposure to collisions

---Give educators data to include cycling and walking in their curricula

---Enable local agencies to seasonally adjust estimates they gather from short-duration count sites

---Provide policymakers with basic information on cycling and walking, including performance metrics, to inform planning and funding decisions

---Allow transportation professionals to better support the public's desire for livable communities

BikePed Portal is currently under development and available to demo. The next step is to improve its usability for both data providers and data users, specifically transportation professionals. Click here to be notified when account access is opened, or to submit your bike-ped data.

www.trec.pdx.edu

- Info about count methodology
- Current host for national database









Gender Breakdown of Bicyclists + Pedestrians/Joggers Over the 5-year count period, the ratio of male to female cyclists remained 2:1. The ratio of male to female pedestrians/joggers remained 1:1

Basin Wide Growth by Mode Over the 5 years, each mode of travel increased, as shown by the percentages on the right. Joggers increased by the largest percentage.



Bridge: 62

WEEKDAY COUNT VOLUME AND PERCENT CHANGE



BU Bridge: 436

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Harvard Bridge: 832

Count Data





Infrastructure Planning







Infrastructure Implementation

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Calgary Downtown Cycle Track



Data from the first 6 months

50% increase in the number of people arriving by bicycle

Infrastructure Implementation





Infrastructure Implementation





Infrastructure Implementation



Health Benefits of Walking & Biking



What would be the annual benefits from doubling biking in Minneapolis by 2020?



Active Mobility Benefits





Motorized Two- and Three- Wheelers are disproportionately impacted by crashes



- Motorcycles
- Motorized Two- and Three- Wheelers
- Pedestrians / Bicyclists

What to count in Asia?



What mode: walk / bicycle / other?
Why: commuting to work or school / visiting friends / shopping / leisure
Where: what routes? Different routes for different modes?
When: is there a peak time? Does it change during the week or year?
Other considerations: does weather change behavior?
Goals: increase number of people accessing transit by walking or bicycling?

How do people access transit?



Kuala Lumpur Car Free Day during Ramadan

- Holidays
- Diversity of calendars
- School schedules

Cultural considerations?

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Vietnamese people do walk if they are provided a safe and convenient place.



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