

Long Range Transportation Plan Task Force
November 8, 2010 Meeting Recap

Welcome & Introductions

PC - Richard Martin, Susie Johnson

TAC - Lew May, Kurt Babcock, Jane Fleig, Adrien Reid

CAC - Ted Miller, Jack Baker, Sarah Ryterband

Staff - Josh Desmond, Scott Robinson, Raymond Hess

Existing Data Summary

MPO staff reviewed data currently available to the MPO related to vehicle counts, transit data, demographic data, bike/ped data, land-use data, and other data sources. Attached is a memo which outlines each of these data sets in more detail (it includes an updated Monroe County Vehicular Count section and a School Corporation bike/ped data section).

Mr. Martin stated it was important to understand historic trends. Ms. Ryterband would like to see what effect peak oil would have on travel behaviors.

Peer Community Research

MPO staff reviewed the communities identified by Task Force members as peer communities which we may work with to learn best practices. These include Iowa City IA, Corvallis OR, Lawrence KS, Ithaca NY, Columbia MO, Lafayette IN, Champaign-Urbana IL, Gainesville FL, Fort Collins CO, Ann Arbor MI, and State College PA. Staff quickly reviewed aspects of each community's LRTP to determine if the plan addresses freight, land use, transit, bike/ped, and rail, among others. Distinctions were made if the community was a Bicycle Friendly Community, had a complete streets policy, was near an interstate, was near a major metropolitan area, or had a high student concentration. Staff asked the Task Force to further refine this list to 3 or 4 communities that staff can contact directly.

Mr. Martin requested that a summary of staff's work be sent to Task Force members (note: Scott Robinson sent a follow-up email with this information on 11/12/10).

MEMORANDUM



To: LRTP Task Force
From: Raymond Hess
Date: November 8, 2010
Re: Existing Data Sets for the Travel Demand Model

As the Task Force embarks upon its charge to update the Travel Demand Model and subsequently the Long Range Transportation Plan, it is important to understand what data is available. The Travel Demand Model in particular is a data intensive tool and its desired complexity will dictate what data will be needed. This memo is intended to provide a brief (non-exhaustive) synopsis of the data that is currently available. As staff and the Task Force begin to identify best-practices, the gaps in our existing data sets can be identified and hopefully be filled.

Vehicular Counts

- City of Bloomington
 - Highway Performance Monitoring System Counts – The Indiana Dept. of Transportation requests the City to conduct approximately 100 counts every 3 years, mostly on primary arterials. About 1/3 of the counts (30+) are submitted to the State annually. The City collects the average daily traffic (ADT), the [vehicle classification](#), and speed. Starting in 2011, INDOT will request that road characteristics also be submitted as part of the count (curve radius, grade, shoulder, pavement condition/width, last time resurfaced, etc.)
 - Local counts – The City conducts approximately 200+ local vehicle counts per year. The count locations are determined by: Cartegraph (the City's road management software) identifies locations which have not been conducted recently; staff requests special counts in conjunction with a project; or third parties (citizens, the University) make requests.
 - Turning Movement – The City tries to count every signalized intersection every 3 years. Turning movement counts include bike and ped counts.
 - Permanent Traffic Count Stations – The City recently decommissioned 9 permanent traffic count stations due to cost. However the City still has several years of continuous counts that span several years.
- Monroe County
 - Local counts – The number of counts vary from year to year - minimal to 100. Counts are driven by traffic engineering requests to establish speed limits or multi-way stop locations and resident complaints. Count data is entered into Cartegraph.
 - Turning Movement – The County rarely conducts turning movement counts. It is done to establish warrants for traffic signal installation.
- Town of Ellettsville
 - Local counts – The Town has conducted approximately 55 counts over the past three years at various locations.

Transit Data

- **Bloomington Transit**
 - Total ridership - Bloomington Transit collects ridership data by route on an annual, monthly, and daily basis from 1989 to present. Individual route ridership is by route number.
 - Ridership by fare category - full fare, reduced fare, passes, IU students, transfers, and single ride tickets data is available on a daily basis from 2002 to present.
 - Ridership ons/offers – Data of boarding and alighting by route, trip, and stop is available from 2007 (1-3 day sample data). Data can be sorted by route, trip time, and day.
 - Load factor - The data of passengers carried versus the seating capacity is available for a survey conducted in 2007 over 1-3 day sample. Data can be sorted by route, trip time, and day.
 - Passenger mile data – Data for the cumulative sum of the distances ridden by each passenger is available on a system-wide annual basis.
- **Rural Transit**
 - Total ridership – Rural Transit collects total ridership on an ongoing basis. Data is available on a per County basis (RT covers Putnam, Owen, Monroe, & Lawrence Counties). Statistics are kept on certain user groups such as the number of users +60 years of age or those with disabilities.
- **IU Campus Transit**
 - Total ridership – Total ridership data available from the beginning of IU Transit to present. Route level data is available in more recent years. On-board surveys were conducted in 2007 and provide some information on rider characteristics.

Demographic Data

- **Census**
 - [Census 2000](#) – Census 2000 still used the “long form” and includes expanded data on social characteristics (education, disability, etc), economic characteristics (commute to work data, income, type of employment), and Housing characteristics (# of vehicles per household, type of residence)
 - [Census Transportation Planning Products](#) (CTPP) - CTPP is a set of special tabulations from decennial census demographic surveys designed for transportation planners. The CTPP is divided into 3 parts: 1) residence end data summarizing worker and household characteristics; 2) place of work data summarizing worker characteristics; 3) journey-to-work flow data.
 - [American Community Survey](#) (ACS) - The ACS is a continuous sample survey begun in 2005. These data sets are available in one year, three year (2006-2008), and five year estimates (2005-2009 available in December). The ACS has been substituted for the long form and includes social, economic, and housing characteristics data similar to that of the Census 2000.
 - [Census 2010](#) – Data will begin to be released by the end of 2010 (e.g. total population by state). More refined data is expected by 2011. The population distribution per census block, block groups, and tracts will determine the transportation analysis zones (TAZs) of the travel demand model.

- [National Household Travel Survey](#) – The latest NHTS was conducted in 2009. The data collected includes purpose of trip, mode of transportation, travel time, time of day & day of week of trip, and private vehicle trip characteristics. About 3,000 IN households were surveyed, approximately 100 in Monroe County (the data could be used to validate a model).

Bike/Ped Data

- City of Bloomington
 - Trail counts – The Parks and Recreation Department has total count studies of the Clear Creek Trail for 2005 and 2007. The Planning Dept. has also experimented with electronic counters on various trails but the results are mixed. Trail counts do not distinguish between users (bicyclist vs. pedestrian)
 - Volunteer bike counts – The Planning Department has organized volunteered counts of bicyclists in the Spring and Fall of 2010 at dozens of locations around Bloomington. Data was typically collected over a 2 hour period and can be sorted by intersection, gender, or 15 minute time interval.
- School Corporations
 - Safe Routes to School Data – Any school which has received or hopes to receive Safe Routes to School funding must conduct student surveys. These are typically head counts or in-class hand surveys as to how many children walked, biked, bussed, or were driven to school.

Land-Use Data

- Monroe County
 - [Comprehensive Plan](#) – The County’s Comprehensive Plan identifies both the existing land uses and sets the future land uses as well. The County is in the midst of a multi-year effort to update its Comprehensive Plan.
- City of Bloomington
 - [Growth Policies Plan](#) (GPP) – The GPP establishes the future land uses for the City of Bloomington.
 - [Downtown Land Use Study](#) – The Planning Dept. updated the downtown land use inventory in 2008. The study analyzed the parcel characteristics of the commercial downtown zoning district. Specifically it looked at land use, ownership, parcel area, rental status, and parking characteristics, among others.
- Town of Ellettsville
 - [Comprehensive Plan](#) – Ellettsville’s Comprehensive Plan establishes future land uses for the Town.
- Indiana University
 - [Campus Master Plan](#) – IU updated its Master Plan in 2010. It outlines the University’s existing land uses and the desired future land uses.

Other Data Sources

- Employment – Private data sets are available for purchase from various sources. For example, [Infogroup](#) maintains the business profiles of more than 15.5 million business. The employment data includes contact information, location coordinates (lat/long), employment characteristics, and financial data.

- Land Use – The Area Plan Commission of Tippecanoe County (the Lafayette MPO) uses numerous other sources to verify land use. These include building and demolition permits, foreclosure info from the sheriff’s sale, occupancy surveys (# of people in cars at certain locations), student information from the University (total student population, where students work, live, and park), apartment association vacancy information, delivery information from the Post Office, sewer and water line expansion plans, and new subdivision plans.
- Traffic flow - [INRIX](#) delivers real-time traffic flow using 2 million GPS-enabled vehicles.
- Freight – [American Transportation Research Institute](#) (ATRI) is a non-profit organization funded by the trucking industry. They can provide truck trip tables which include truck travel times. This data can be used for speed data, destination choice data, time of day distribution, and truck route choice.