#6: TRANSPORTATION MODES & MILES

CORE METRIC FOR CATEGORY A & B CITIES; OPTIONAL FOR CATEGORY C CITIES

Bold, green font indicates data elements that are eligible to be recognized at Step 5 if improvement is demonstrated.

DATA ELEMENTS

- Vehicle Miles Traveled
  - **6.1 City Population: Vehicle miles traveled per person, per day**
  - **6.2 City Employees in Single Occupancy Vehicles: Vehicle miles traveled per person, per day**
  - 6.3 Percent of city population commuting 20 or fewer minutes
  - 6.4 Percent of city employees commuting 20 or fewer minutes

- Transportation mode of commuters
  - 6.5 Percent using single-occupancy vehicle
  - 6.6 Percent using a car/van pool & ride sharing
  - 6.7 Percent using transit
  - 6.8 Percent who bike or walk
  - 6.9 Percent working from home/telecommuting

DEFINITIONS

- VMT (vehicle-miles traveled) within city boundaries totals all miles measured and estimated to have been traveled by all road vehicles annually. Normalizing this total by a city's population and dividing by 365 gives an average VMT per person per day. (Element 6.1)
- Percent of city population, and of city employees, who commute to work in fewer than 20 minutes from home roughly captures the extent to which a city has a close and socially/personally beneficial mix of housing and employers, and thus the relative need for roads, transit and other transportation infrastructure like sidewalks. (Elements 6.3 and 6.4)
- Transportation modes of commuters in the city are estimated averages, counting journey-to-work trips by all employed people within the city, 16 years and older. (Elements 6.5-6.9)
- Carpools include van pools and ride sharing services (taxis, Uber, Lyft). (Element 6.6)
- Alternative data: If you have been gathering or want to gather different data, report those and explain why they are a better fit for your city. For example, you may want a different commuting time break point – perhaps under/over 15, or 30 minutes, or more than one percentage break point - to better reflect local conditions and commuting factors.

DATA SOURCES

- Regional Indicators Initiative has VMT per person, per day for selected cities, at http://www.regionalindicatorsmn.com/travel-chart (Element 6.1)
- Annual VMT for all city roads (federal, State, county, local) is MnDOT data, http://www.dot.state.mn.us/roadway/data/ (Element 6.1)
- Percent of city population commuting by time from the Census' American Community Survey (ACS) table S0801: Travel Time to Work (Element 6.3)

- Commute mode for all workers is found in the Census' American Community Survey (ACS) table B08301: 3-year estimates through American FactFinder 2 at http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml (Elements 6.5-6.9)
- City mapping data, city employee survey data, timesheet data for employee commuting trips (Elements 6.2 and 6.4)

CALCULATION AND PUBLIC REPORTING

- Report VMT using the annual MnDOT data, which totals all miles traveled by all road vehicles annually and normalizes it for each city by population to yield VMT/capita/day. Use data for a one-year period ending before the GreenStep reporting year. (Element 6.1)
- Percent of city population commuting fewer than 20 minutes is from the American Community Survey (ACS). Go to your city, click "Business and Industry" on the left, then go to "Commuting Characteristics by Sex." It displays table S0801. Use the latest data before the GreenStep reporting year. (Element 6.3)
- Travel mode for all workers comes from ACS table B08301, 3-year estimates. Use the dataset Community Characteristics by Sex for the appropriate city or county. Use the most recent 5-year estimate if a 3-year estimate is not available. (Elements 6.5-6.9)
- Percent of city employees commuting fewer than 20 minutes from home requires either estimates using employee home addresses and Google Maps or data from an employee survey. (Element 6.2)

RATIONALE

Vehicles are typically a significant expense for individuals, roads are usually a significant expense for city budgets, and vehicle emissions exact documented high health care costs and are a key contributor to greenhouse gases. In 2012, on-road transportation accounted for 27% of the average total of GHG emissions for the 22 cities participating in Minnesota's Regional Indicators Initiative.

Cities - through what they directly administer and in what they influence - can lower these transportation costs by providing and incentivizing more transportation options to their residents, businesses, and employees. Data on VMT, commute time and modal split is an essential first step, because it's hard to manage changes in what you don't measure.

STEP 5 GOALS

Among the Minnesota Department of Transportation's legislatively delegated authorities and purposes are the goals of: (1) promoting and increasing bicycling and walking as a percentage of all trips as energy-efficient, nonpolluting, and healthy forms of transportation, and (2) reducing greenhouse gas emissions from the state's transportation sector. Supporting these goals are Statewide Health Improvement Program (SHIP) dollars from the Minnesota Department of Health to increase active transportation in communities and work sites.

There are no statewide goals for this metric nor any useful guidance at this point in time for all cities in Minnesota. However, the national STAR Community Rating System (http://www.starcommunities.org) challenges cities to set a drive-alone maximum mode share of 60% and a bike + walk + transit minimum mode share of 25%. At this point in time GreenStep thinks individual cities are best equipped to set realistic goals for improvement, and any improvement in this metric – lower VMT, shorter commutes, mode-shifting away from single-occupancy car use – has multiple clear, quantifiable benefits.

NEED HELP? CONTACT

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