#4: INFRASTRUCTURE FOR WALKING & BICYCLING

OPTIONAL METRIC FOR CATEGORY **A**, **B** & **C** CITIES

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

DATA ELEMENTS

4.1 Miles of new or reconstructed sidewalks & trails completed in the past year
4.2 **% of housing within 1 mile of a bicycle route**
4.3 Walk Score for your city or downtown

DEFINITIONS

- **Miles of new or reconstructed sidewalks & trails** include lengths of sidewalks added along streets and in parks where previously there were none, lengths of existing sidewalks that were substantially reconstructed (not just patched or repaired) and replaced, and lengths of new and reconstructed walking trails. (Element 4.1)

- **Bicycle routes** include marked on-road bicycle routes, marked/mode-separated bicycle lanes, and off-road bicycle paths (which include multi-use and unpaved paths). (Element 4.2)

- **Housing** includes residential housing units. (Element 4.2)

- **Walk Score** attempts to calculate and express with a number between 0 and 100 the degree to which a city (either on average, or in a specific address such as the 'center of downtown') facilitates people to walk/shop in it. It is an imperfect (especially for smaller cities) measure of walkability (existence of sidewalks) and mixed uses (existence of various commercial/civic destinations that one can walk to). Imperfections include Walk Score's inability to factor in the walking experience: we know for example that walkers rarely use an unshaded sidewalk closely sandwiched between a busy road and windowless building walls, despite useful commercial destinations close by. Additionally, Walk Score fails to count all businesses (such as home-based businesses, new businesses) and civic/useful destinations (such as family daycares). See details at https://www.walkscore.com/methodology.shtml (Element 4.3)
- **Alternative data elements**: if you have been gathering different data, report those and explain how they differ from these GreenStep elements and why you feel they are a better fit for your city.

DATA SOURCES

- City public works/engineering/parks records (Elements 4.1 and 4.2)
- GIS maps and/or city plat maps and census track data (Element 4.2)
- http://www.walkscore.com (Element 4.3)

CALCULATION AND PUBLIC REPORTING

- **Count sidewalk and trail lengths added in the year** ending December 31st before the reporting year. While this element counts non-motorized routes, if including new snowmobiling trails makes sense for your city, report that in the notes section of the GreenStep reporting spreadsheet.

- **Sidewalk miles will be normalized** and reported on the GreenStep web site as annual new miles per 1000 residents. (Element 4.1)

- **Using a GIS system**, map a boundary (or zones if multiple bike routes) within which street biking (or, as the crow flies) is within 1 mile of a bike route/lane/path. Then calculate the number of residential dwelling units within the

boundary or zones. Finally, compare the number of units to total units in the city and express the ratio as a percent, which is a gauge of people's access to a minimum quality biking experience. (Element 4.2)

- **For smaller cities**, dwelling units in census tracts within a mile of bike routes can provide rough estimations. Or estimation from a city plat map may work fine. (Element 4.2)

- **At the Walk Score website** either type in your city name and report the resulting score, or type in the street address of what you consider the heart of your city and report that score. Other approaches could be used – for example, averaging the scores resulting from street addresses in the middle of each of your defined neighborhoods or each zoning district. The overall city average number will change if, for example, a large superblock is split by walkways/streets and if new businesses open. But usually the number will not change much from year to year. Yet the number remains as a reminder that the city can take actions to change the number. (Element 4.3)

RATIONALE

These three data points attempt to show the degree to which a city has and is building physical infrastructure – sidewalks, trails and bicycle routes – and mixed used development that allow, facilitate and encourage walking and bicycling. Reasons for city action in this area are many:

1) Forty percent of Minnesotans do not have a driver's license, cannot afford a car, or are either too young or old or too disabled to drive a car. As stated by Gil Penalosa, proponent of the "8-to-80 city" (http://880cities.org), *If you create a city that's good for an 8-year old and good for an 80-year old, you will create a successful city for everyone.*

2) Forty percent of U.S. auto trips are less than 2 miles, and 28% are less than 1 mile - a healthful, walkable distance for many people much of the year in Minnesota - yet most of these trips are taken by car.

3) Walking and bicycling options and supportive city infrastructure that allow a household to eliminate one of two cars saves an average of $7,000/yr. which, if applied to a home mortgage or home equity loan, could finance $108,000 (assuming a 30-yr. fixed 5% mortgage).

4) The National Association of Realtor's 2011 Community Preference Survey reveals that most Americans would like to live in walkable communities - where walking is desirable because of shops, restaurants, and local business within an easy walk from their homes - as long as those communities can provide detached single-family homes.

However, not every street and not every part of a city warrants sidewalks and bicycle routes, and streets that do may not warrant them on both sides of the street. So as is often the case, cities must view these data elements within the context-sensitivity of their own city and think more of comparing one's own numbers over time, not so much comparing your city to another city.

STEP 5 GOALS

A statewide Bicycle Plan and Pedestrian Plan exist, but at present there are no state-wide goals for cities. Therefore, individual cities are best equipped to set realistic goals for improvement. For example, in some small towns, no new/reconstructed sidewalks nor additional bicycle routes over time may be just fine, as the facilities are at 100% already. Or, a low Walk Score may simply represent a small town that can support only a handful of businesses/civic destinations.

NEED HELP? CONTACT

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