



Ashland TSP Work Session October 26, 2010

Work Session Agenda

- Goals and Benchmarks
- Alternative Level-of-Service and/or Alternatives to Level-of-Service
- Pedestrian and Bicycle Toolbox

Goals and Benchmarks

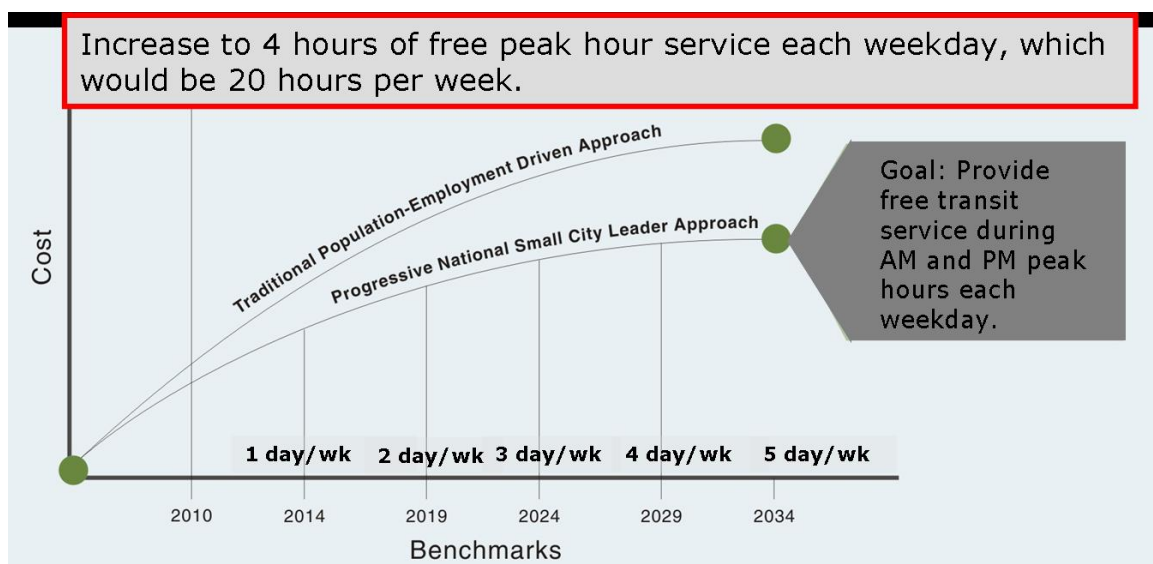
Need to set goals and benchmarks that result in desired mode split shifts.

Example Goals/Benchmarks

Example 1

Goal: Provide free transit service during morning and afternoon peak hours each weekday; 20 hours per week.

- Current fare is \$1.00 within Ashland; \$2.00 outside of Ashland.
- Currently provide free bus passes to senior citizens and high school students.
- Establish benchmarks for expanding free bus service to weekdays during two morning peak hours and two afternoon peak hours.



Desired Outcome: Increase transit mode split.



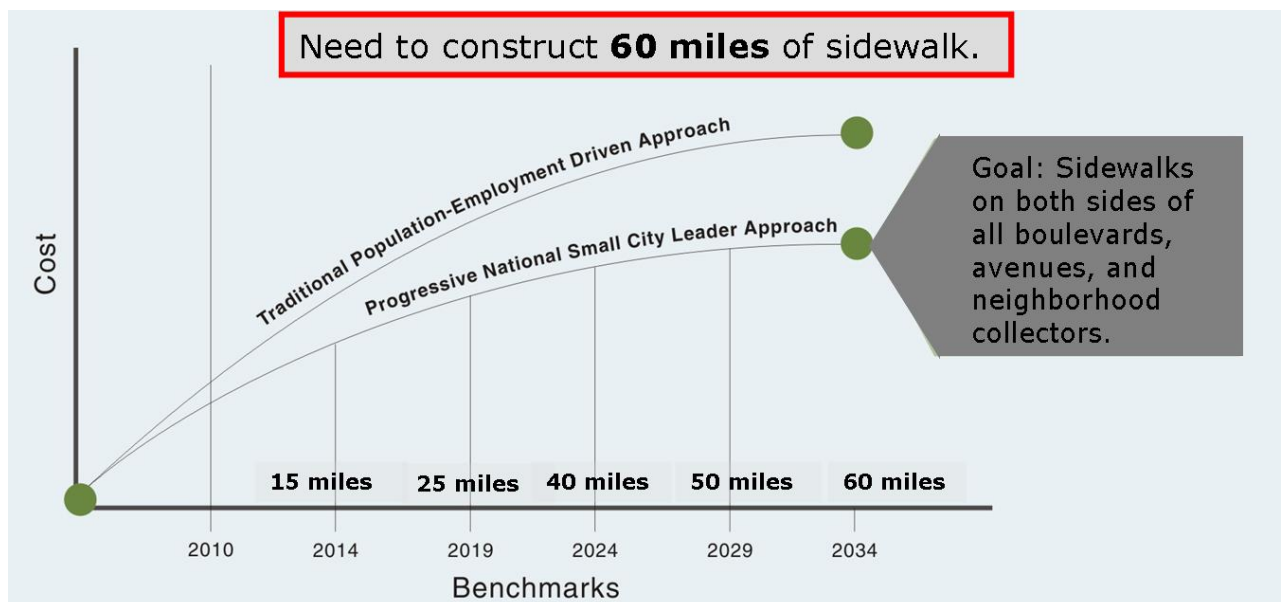
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Example 2

Goal: Complete sidewalk network on neighborhood collectors, avenues, and boulevards.

- Currently 60 miles of missing sidewalk on neighborhood collectors, avenues, and boulevards.
- Establish benchmarks to construct 60 miles of sidewalk.

Desired Outcome: A complete sidewalk network will facilitate travel as a pedestrian and travel to transit stops helping to increase walking and transit mode split.



Example 3

Goal: Construct buffered or protected bicycle lanes on boulevards. to attract “interested but concerned” residents to travel by bicycle.

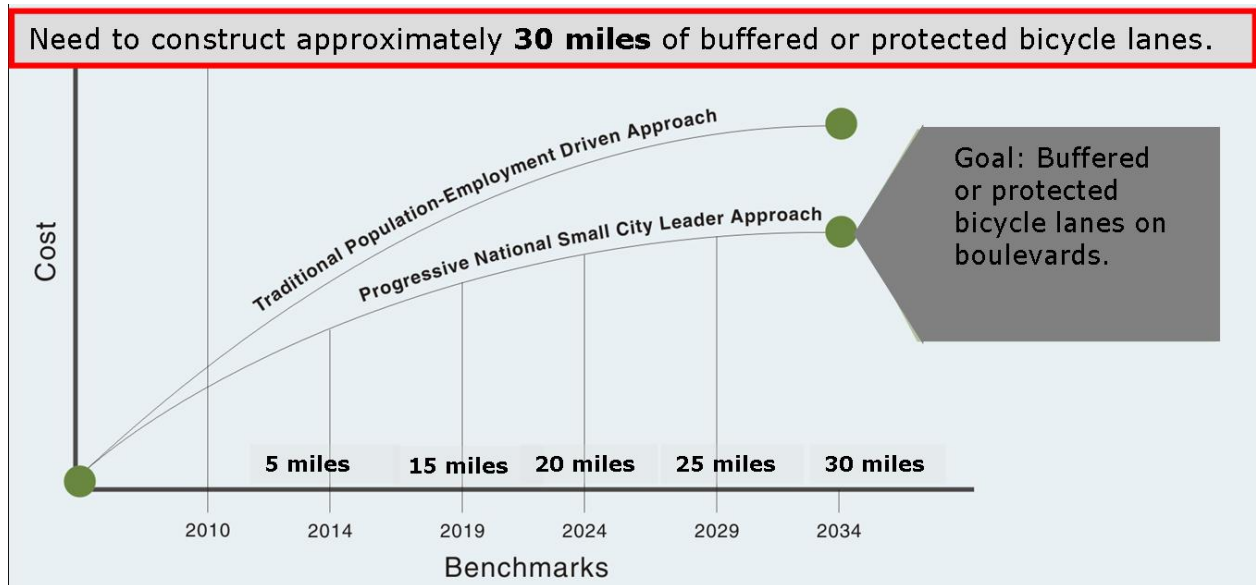
- Currently 15 centerline miles of boulevards; therefore need 30 miles of buffered or protected bicycle lanes.
- Establish benchmarks to construct 30 miles of buffered or protected bicycle lanes.



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Desired Outcome: Buffered and/or protected bicycle lanes on boulevards will attract “interest but concerned” residents to travel by bicycle by providing increased protection from automobile travel.



Example 4

Goal: No net new automobile lane miles.

- Current statistics
 - Approximately 103 lane miles of neighborhood collectors, avenues, and boulevards
- Build a mile of neighborhood collector (i.e., two automobile lane miles); offset it by....
 - a. Building two miles of sidewalks
 - b. Converting two miles of automobile travel lanes to...
 - i. bicycle shared roadway
 - ii. bicycle boulevard
 - iii. buffered bicycle lane
 - c. Building two miles of off-street multiuse path for active travelers (e.g., pedestrians and bicyclists)

Desired Outcome: Facilitate and encourage non-auto travel by bringing quantity and quality of pedestrian and bicycle facilities up to par with or better than automobile facilities.



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Other Examples of Measureable Goals

- City adopts policy of requiring a Highway Safety Manual (HSM) safety analysis for projects considering changes to the physical roadway (e.g., modifying cross-section, changing intersection control, adding turn lanes to an intersection, modifying horizontal or vertical alignment).
- City adopts policy of conducting annual (or reoccurring) safety network screening analysis (using methods in the HSM) to identify locations for improvement as part of reoccurring maintenance and/or scheduled projects.
- Additional miles of exclusive bike facilities per year
 - Currently, approximately 24 miles of exclusive bike lane
- Additional lane miles of bike boulevards per year
- Limits on new parking
 - No new unmanaged or non-shared parking (i.e. no new parking that can not be managed by time limits or pricing in the future)
 - Cap and trade concept for parking
- Other goal ideas?

Alternative Level-of-Service and/or Alternatives to Level-of-Service

Are we ready to explore options that move us away from LOS?

Current Practice

- Developer is required to perform a TIA (\$15,000 to \$25,000)
- Developer must mitigate intersections with vehicle LOS deficiencies (e.g., right-turn lane = \$100,000, traffic signal = \$250,000)
- Developer pays a transportation SDC (covers 15% to 18% of identified system needs)

Result

- Wider roadways
 - Accommodating and facilitating more automobiles
 - Creating longer crossings for pedestrians and bicyclists
- System improvements are...
 - Piecemeal, isolated
 - Conducted unsystematically
- Uncertainty of cost for the developer
- Uncertainty of improvements for the City



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Potential Alternatives

Alternative 1: MMLOS standards for evaluating and conditioning development.

- Consider LOS per mode (pedestrian, bicyclist, transit and auto).
- Provides opportunity to place more emphasis on serving non-auto modes well based on travelers' perspectives.

Result

- Opportunity to implement pedestrian, bicycle and transit improvements in vicinity of development.
- System improvements remain...
 - Piecemeal, isolated
 - Conducted unsystematically
- Uncertainty in cost for the developer remains
- Uncertainty of improvements for the City remains

Alternative 2: Develop project lists based on achieving desired benchmarks and goals; require developers to do a safety assessment and pay a multimodal SDC.

- Developer does a safety assessment
- Developer only mitigates safety issues
- Developer pays multimodal SDC which funds benchmark related improvements

Result

- City able to apply money and fund improvements on a systematic basis
 - Funds can be used to fill-in sidewalk gaps
 - Funds can be used to construct buffered and protected bicycle lanes
 - Funds can be set aside for larger multimodal projects (e.g., bike share program, multiuse paths, transit stop improvements)
- Higher level of certainty for developer
- Higher level of certainty, control and flexibility for the City

What Pedestrian and Bicycle tools are we willing to work with?

See handouts with pedestrian and bicycle facilities and treatments.

- Are there any tools in the toolbox that are not appropriate for Ashland?
- Are there additional tools/treatments you wish to add or explore?

Innovative Bicycle Facilities

Colored Bike Lanes

Colored bike lanes are used in areas where automobiles and bicycles cross paths and it is not clear who has the right-of-way. Colored bike lanes and accompanying signs assign priority to the bicyclist. Studies showed that motorists yield more often to cyclists once colored lanes were installed.



Signs and Pavement Markings

Destination signs can be located around a city's bikeway network to tell cyclists how to get to popular destinations, and how long it will take at a certain pace. Pavement markings can be used on bicycle boulevards, which are low-traffic bike routes without bike lanes.



Shared Lane Marking

Shared-lane markings or “sharrows” are designed to inform motorists to expect cyclists to be in the middle of the travel lane, and to inform cyclists that they should be in the travel lane and away from parked cars. Studies have shown that shared-lane markings improve both cyclist positioning and motorist behavior.



Cycle Tracks

A cycle track is a bicycle facility that combines a separated path with the on-street infrastructure of a conventional bike lane. They are intended primarily for cyclists and are separated from vehicle travel lanes, parking lanes, and sidewalks.



Bike Boxes

Bike boxes give cyclists priority on bicycle streets by allowing them to go to the head of the line at a red light. This also makes it easier and safer for bicyclists to proceed once the signal turns green.



On-Street Bike Parking

High-volume, on-street bicycle parking removes an auto parking spot and fills it with bike racks. These projects can be very popular with bicyclists and merchants. In places with narrow sidewalks and many bicyclists, it frees up the sidewalk for pedestrians while also accommodating parked bikes.



Innovative Bicycle Facilities

Bike Left-Turn Lanes

Bike left-turn lanes help bicyclists through a dog-leg in the bike route. They are created by removing vehicle parking spaces and re-distributing that space to the center of the street.



Buffered Bike Lane

Bicycle lane with a buffer to increase the space between the bicycle lanes and auto lane or parked cars.



Bike-Only Signals

There are a variety of signal options available for cyclists. One option allows the user to press a signal actuator, so that auto traffic will stop to allow the cyclist to go. At some locations, a bicycle-only signal tells the cyclist when it is safe to cross.



Bike Share/Hire

Bicycle sharing is gaining momentum globally, helping cities become greener, quieter and healthier places to live. It is a unique opportunity to convert non-bicyclists to cycling, and to increase visibility of bicycles. Funding for the initial capital outlay is the key planning step. Options include public funds, private sponsors and advertising.



Bike-Only Entry

Intersections and neighborhood streets can be designed to allow only bicycles to pass through the entry to the street. These intersections are marked with "Do Not Enter Except Bicycles" signs.



Automatic Counters

Utilized in places such as Copenhagen, automatic counters provide a highly visible display of the number of bicycles that have passed a given point.



Innovative Pedestrian Facilities

Sidewalks

Good sidewalks are continuous, accessible to everyone, provide adequate travel width and feel safe. Sidewalks can provide social spaces for people to interact and contribute to quality of place.



ADA Curb Ramps

Curb ramps are a fundamental element of an accessible public realm. A sidewalk without a curb ramp can be useless to someone in a wheelchair, forcing them back to a driveway and out into the street for access. Truncated domes provide a cue to visually-impaired pedestrians that they are entering a street or intersection.



Transit Stop Enhancements

Providing amenities at transit stops, such as benches, trash receptacles, shelters, and lighting can significantly increase user comfort and willingness to wait. Enhancing transit stops may increase transit usage.



Pedestrian Refuge Islands

Refuge islands allow pedestrians to cross one segment of the street to a relatively safe location out of the travel lanes, and then continue across the next segment in a separate gap in traffic. A median refuge island allows the pedestrian to tackle each direction of traffic separately.



Curb Extensions

Curb extensions reduce the crossing distance for pedestrians. They allow pedestrians to move safely beyond a lane of parked cars to a position where they can see and be seen as they begin their crossing. Curb extensions can also provide an area for accessible transit stops and other pedestrian amenities and street furnishings.



Enhanced Pedestrian Signals

Enhanced pedestrian signals include features designed to make crossing easier, specifically for people with a disability (e.g., audible signals) or in areas where crossing is difficult due to limited traffic gaps or long block lengths (e.g., pedestrian only signals at mid-block crossings).



Innovative Pedestrian Facilities

Streetscape Improvements

Streetscape improvements are features that enhance the pedestrian experience. These include public art, pocket parks, ornamental lighting, gateway features and street furniture. Many of these improvements can easily integrate environmentally-friendly “green” elements.



HAWK Signals

An emerging signal technique, HAWK signals stop vehicle traffic when activated by a pedestrian or bicyclist (either by a push button or in-pavement loop detector). This technique is useful at trail/roadway crossings and other intersections experiencing frequent pedestrian crossing movements.



Grade Separated Crossing

Grade separated crossings physically separate the crossing of pedestrian traffic from motor vehicle flow. They may eliminate vehicular-pedestrian conflicts but are necessarily limited to selected locations where the benefits clearly balance the public investment.



Pedestrian Countdown Signals

Countdown signals display the number of seconds remaining for a pedestrian to complete a crossing, enabling users to make their own judgment whether to cross or wait. The allotted time can be adjusted to accommodate slower pedestrians, such as seniors or children.



Colored/Textured Crosswalks

Colored or textured crosswalks heighten driver awareness of pedestrian crossings by providing an additional visual cue beyond traditional crosswalk markings.



Driveway Consolidation

Consolidating driveways along a roadway reduces the number of conflict points between pedestrians on the sidewalk and vehicles entering or leaving driveways. This strategy may also improve vehicle traffic flow on the roadway.