Local Bicycle Network Planning

Connected Bike Networks in Suburban Areas

- Shared Use Path
- Shared Use Path Along Roadway (Sidepath)
- Separated Bike Lane
- Bike Boulevard
- Buffered or Conventional Bike Lane

School
Shopping
Intermodal Transit Center

Continuous high-comfort routes can be created by linking otherwise disconnected neighborhood streets with short segments of shared use paths.

Suburban shopping areas may be best served by separated bike lanes or sidepaths depending on context such as pedestrian volumes, transit access needs, and land use configuration.

Separated bike lanes provide local access to homes and shopping.

Shared use paths provide connections between neighborhoods and improve regional connectivity.

Bike boulevards can be a cost-effective solution to create routes on quiet neighborhood streets.

Buffered or conventional bike lanes can provide comfortable connections on moderate volume, low-speed streets.

Existing utility corridors may provide opportunities for shared use paths.

Existing school pathways often link neighborhood streets which would otherwise be disconnected.

Schools should be connected with high-comfort bikeways, providing access to homes within the school catchment area.

Neighborhoods can be connected to major corridors with short shared use path segments in easements or existing rights-of-way to increase access.

Figure 5. Connected Bike Networks in Suburban Areas
Why create a local bikeway network plan?

• Help visualize connectivity.
• Show what assets the routes connect. How residents and visitors can go to the corner store or library and parks.
• Promote a shared vision of where and why.
• Engage advocates
• Advance priority projects
• Overlay bike plan on routine roadway maintenance plan to show how inexpensive routine maintenance can advance a network of bike lanes.
• Can be helpful if there is redevelopment in your community, working with developers and say "this facility was part of a public planning process"
• Get funding and build infrastructure
• Make the political case "this is what our network is now, this is what it could be."
• Showing progress can convince funders of the value of each project.
Six Principles of Connected Networks

- **Safety and Security**: the network provides routes that minimize risk of injury, danger, and crime.

- **Comfort**: the network appeals to a broad range of age and ability levels and consideration is given to user amenities.

- **Cohesion**: the network is connected in terms of its concentration of destinations and routes.

- **Directness**: the network provides direct and convenient access to destinations.

- **Access**: the network accommodates travel for all users, regardless of age, income level, or ability.

- **Alternatives**: there are numerous different route choices available within the network.
Local priorities may differ.
Create an inclusive process that engages people with a variety of perspectives
Bikeway Types in the Network

- Major Street Shared Use Lane: 1%
- Painted Bicycle Lane: 2%
- Paint Buffered Bike Lane: 3%
- Local Street Bikeway: 5-15%
- Separated Bike Lane: 5-15%
- Off-Street Pathway: 5-15%
1. Average score of all evaluation criteria

- Vision Zero
- Traffic Calming
- Complete Streets
- Community Support
- Proximity to Schools
- Proximity to Business Districts
- Linkage
- Connectivity
- Safety

2. Number of people who selected each evaluation criterion as the most important
Trip length by purpose

- WORK: 2.5 Miles
- ERRANDS: 1 Mile
- LEISURE: 1 Mile
- SCHOOL: 1.5 Miles
Who is the network for?

**BICYCLIST DESIGN USER PROFILES**

**Interested but Concerned**
- 51%-56% of the total population
- Often not comfortable with bike lanes, may bike on sidewalks even if bike lanes are provided; prefer off-street or separated bicycle facilities or quiet or traffic-calmed residential roads. May not bike at all if bicycle facilities do not meet needs for perceived comfort.

**Somewhat Confident**
- 5-9% of the total population
- Generally prefer more separated facilities, but are comfortable riding in bicycle lanes or on paved shoulders if need be.

**Highly Confident**
- 4-7% of the total population
- Comfortable riding with traffic; will use roads without bike lanes.

**LOW STRESS TOLERANCE**

**HIGH STRESS**
Preferred Bikeway Type for Urban, Urban Core, Suburban and Rural Town Centers

- Separated Bike Lane or Shared Use Path
- Bike Lane (Buffer Pref.)
- Shared Lane or Bike Boulevard
Local Access Score Tool

Local Access
Active Transportation Network Utility Scores
Return to Local Access website

1 Local Access Score: Composite

2 Local Access Score: Walking

3 Local Access Score: Bicycle

The Bicycle Local Access Scores emphasize longer trips than the Walking Local Access Scores, since people are generally willing to bike further than they are willing to walk.
PVPC Bicycle Linkages Map
South Hadley Average Daily Traffic

Vehicle Traffic Volumes (and use data)
Identifying low stress connections

West Springfield, MA
Low stress options for higher speed/volume streets

East Hadley Rd. Amherst

Pleasant St. Northampton
No insignificant projects

Thank you