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Principles

BICYCLE SYSTEM PLANNING



1. There is no “bicycle/pedestrian” user. The two modes have different mobility characteristics, travel sheds, trip purposes, and facility design preferences. Non-motorized planning must address each as a **unique transportation mode**.
2. Planning for bicycles must address that there are different **types of bicyclists** with different skill sets and needs. Type A, advanced cyclists, are experienced riders comfortable sharing roadways with motor vehicles. Type B/C includes basic/child bicyclists who are less confident of their riding abilities. Although some will progress to the advanced level, nationally there will always be millions of basic bicyclists who prefer well-defined separation from motor vehicles.
3. Streets provide the principal infrastructure network for all modes of travel. Sustainable transportation systems require significant investments in **complete streets**, including bicycle facilities appropriate to **type of street**. Bicycles and motor vehicles can share the road when vehicle speeds are low and traffic volumes are low to moderate. Extra operating space and designated bicycle facilities are appropriate and needed within corridors with heavier traffic.
4. Appropriate bicycle facility types vary with **land use context**. Well-designed communities include a variety of place types, and well-designed street systems change in character and cross-section as they pass through and connect different areas within the community.
5. Bicycles, like motor vehicles, benefit from enhanced street network connectivity. A **well-connected network** of narrow streets is safer, more efficient and provides better mobility than a poorly-connected network of wide streets. Arterial street widening projects often create barriers, limit non-motorized crossing opportunities, and rarely improve bicycle mobility.
6. **Multi-use paths** are a key component of most urban bicycle systems and offer benefits to bicyclists and pedestrians alike. However, development of a greenway trail system alone will not likely meet the needs of commuter bicyclists. Seamless transitions between a community’s on-street and off-road systems are necessary.
7. Utilitarian cyclists benefit from a system-level planning approach. Community infrastructure investments must therefore prioritize **completion of gaps** in the bicycle network to create a system of continuous, barrier-free primary bike corridors. Secondary corridors and neighborhood connections can be added over time to create a finer grain to the network.
8. Integration of bicycling with public **transit systems** improves personal travel choices and economic vitality. Flexible personal mobility is a realistic objective for both modes, achievable through enhanced access to transit stops and stations, allowing bikes on buses and rail, and providing ample quantities of well-designed and well-sited bicycle parking.
9. High quality walking and bicycling environments enable **active living**, which improves community and individual health and well-being. Children benefit when bicycle planning includes **Safe Routes to School** projects and programs.
10. Good transportation planning requires the direct, committed and continuing involvement of a broad cross-section of **empowered community members and stakeholders**. This can be expensive, time-consuming and difficult. It is also essential, and must involve local bicyclists.