

Park-and-Ride Guidelines

Source: Metropolitan Council
St. Paul, MN

The following guidelines are intended for use in planning, designing, and evaluating proposed park-and-ride facilities served by regular route bus transit. The guidelines can also be used for park-and-ride lots without bus service and at rail stations.

Park-and-Ride Development Guidelines

Locate park-and-ride facilities in congested travel corridors. Priority should be given to park-and-ride facilities concentrated along and/or serving congested metropolitan highway corridors.

Locate park-and-ride facilities in advance of areas experiencing major traffic congestion. By diverting vehicles off the roadways, the amount of congestion can be lessened in areas already experiencing congestion and slow the extension of congested corridors.

Locate park-and-ride lots in areas with high levels of travel demand to the major activity center or centers served by the facility.

Locate park-and-ride lots within one-half mile of an access point to the metropolitan highway system or a planned access point to the metropolitan highway system. Drivers do not want to travel far from a major roadway to access a park-and-ride lot. It will add too much time to their trip. In addition, park-and-rides in close proximity to the highway system allow buses quicker access and reduce travel time to and from the park-and-ride.

Locate park-and-ride lots in areas with less dense populations, where full coverage with transit service is not feasible. Priority should be given to areas categorized as Transit Market Area III. Priority should be given to locations within the Metropolitan Urban Service Area (MUSA).

Locate park-and-ride lots with primary service areas that do not overlap those of other lots. Separating park-and-lots by appropriate distances will help ensure that services and facilities are not duplicated. The average spacing between park-and-ride lots in the Twin Cities metro area is three to five miles.

Locate park-and-ride facilities so commuters do not have to backtrack to reach the lot. Providing the majority of commuters with a direct route to the lot, rather than taking them in the direction opposite their ultimate destination, will enhance the potential success of the facility.

All new park-and-ride facility proposals will use the regionally accepted park-and-ride demand estimation methodology for determining the need and size of new facilities. This methodology is described in Appendix N.

The need for park-and-ride facilities at stations on dedicated transitways should be studied with each corridor. Some stations may be appropriate for park-and-ride, while others may be appropriate for denser transit-oriented development.

Park-and-Ride Design Guidelines

Give sufficient consideration to the capacity of existing roadways that provide access to the lot. Unless there is sufficient capacity of existing access roadways, heavily utilized lots could cause congestion at points that are remote from the lot itself. Traffic signals may be required at the access point of a large park-and-ride facility onto a major street to provide safe and efficient use of the facilities.

Include preferential transit service to enhance park-and-ride facility ridership levels.

Priority should be given to park-and-ride lots that have peak-period express bus service consistent with the Transportation Policy Plan or locations where express bus service can be provided without a significant increase in operating costs.

Providing users with travel time savings and travel time reliability with transit advantages such as HOV and bus-only shoulder lanes makes park-and-ride services more attractive to potential customers.

Orient park-and-ride facilities to ensure good accessibility and visibility. Lots need to be highly visible to potential users to increase their awareness of the facility. The guide signs should be placed to intercept potential users on their normal travel paths and guide them directly to the facility.

Park-and-Ride Cost/Benefit Guidelines

All economic implications of implementing park-and-ride facilities should be considered even though benefit/cost ratios cannot be used as a single factor in judging the merits of proposed lots.

Economic impacts on neighborhoods and environmental constraints should be considered when comparing park-and-ride locations.

Look for opportunities for establishing compatible joint-use lots that meet these guidelines.

Amenities should be included when estimating the cost of various locations. Amenities may include lighting, passenger shelter, bench, telephone, trash receptacle, information displays, security, bicycle storage, and sidewalk or bikepath.

Balance the number of spaces in a park-and-ride lot with the number of seats available on the transit service. The Metropolitan Council's policy for transit service is a minimum of three trips per peak period. A park-and-ride lot served by express bus service should have a minimum of 150 spaces to accommodate three full buses.

Surface lots should be constructed where reasonably feasible. Structured ramps as park-and-ride facilities could be constructed in areas of high land acquisition cost, high potential park-and-ride demand, or where a complementary, shared parking joint-use venture is feasible.

Commuting by Bike Benefits

Source: League of American Bicyclists

Commuting and Public Health

1. American epidemic
 - In 1991, 4 states reported obesity rates of over 15%; in 1997, it rose to 37 states
 - Over 50% of the adult US population is overweight; 25% of the US is obese
 - The result of this condition is over \$22 billion in health care and living costs
2. Risks
 - 29% of Americans are sedentary which causes an increase in disease and death
 - 80% do not get the recommended 30 minutes of moderate activity 5 days a week
 - Inactivity is a factor in 10% of total deaths and 25% of chronic disease related deaths
3. Recommendations
 - Bike commuting is moderate physical activity 5 times a week
 - Recreational bike riding is a safe, low-impact, aerobic activity for Americans of all ages
 - 25% of all trips are within a mile of home; ride your bike for your health
4. Communities
 - Residents of pre-1960's communities are more likely to walk, bike and use transit
 - Typical infrastructure in American cities is designed for efficient auto use
 - Americans spend 75 minutes a day in their car; 89% of all trips are by car
5. Challenge
 - 60% of Americans want bikeways between home and stores
 - 55% want more bike paths and improved road conditions for cycling
 - Sustainable transport is the future; support cycling as transportation and recreation

Why Commute by Bike

1. Fight pollution
 - Automobiles produce toxic substances that pollute the ground, air and water
 - Burning fossil fuels creates CO2 that contributes to global warming
 - Automobiles also produce noise pollution
2. Stay fit
 - Bicycle commuting allows you to include your workout in your daily schedule
 - Riding a bike instead of your car sitting in traffic is less stressful
 - Staying in better shape will decrease your chances of getting sick
3. Avoid traffic delays
 - Off-road trails, bike lanes and wide curb lanes allow you to ride past traffic
 - Bike commuting takes less time when you account for car parking and traffic
 - Longer rides can result in less traffic and more enjoyment of your commute
4. Save money
 - Maintenance costs for your automobile will decrease, as will your gas bill
 - You will save money on parking (and tickets)
 - You won't have to have a membership to a gym to workout
5. Enjoy your commute

- Arrive at work refreshed and full of energy; ride off stress after work
- Commuting under your own power gives you a sense of accomplishment
- Take the long way home and ride through a park or along a local river

Encourage Bike Commuting Employees

1. Commuting nightmare
 - It costs \$3000 a year to own, operate and maintain a motor vehicle
 - Employees demand higher wages and benefits to compensate for commuting costs
 - Transit can be expensive, unreliable or non-existent
2. Health hazards
 - Exposure to traffic congestion increases heart rate, blood pressure, negative moods
 - Long, arduous commutes to work, air pollution and a sedentary lifestyle are unhealthy
 - Healthy employees are hardworking, on-time employees who take less sick time
3. The bottom line
 - Supporting bike commuting is less expensive than an in-office fitness facility
 - Employers who appreciate workers' personal needs have less employee turnover
 - Healthier employees can reduce health insurance costs; check with your carrier
4. Better employees
 - Employees will see commuting as personal time to relax instead of increasing stress
 - Fit employees are more alert, more productive, perform better and more efficiently
 - Bike commuting can be substituted for the gym, saving employees personal time
5. Bike facilities
 - Showers and private changing rooms are ideal
 - Arrange for shower use at a local health club for your employees
 - Hanging space or a standing wardrobe will provide ample storage for work clothes
6. Parking and storage
 - Indoor, secure bike parking near changing rooms on the ground floor is ideal
 - For bike parking outdoors, use bike lockers or covered bike racks
 - Bike parking should be accessible, visible and secure
7. Route coordination
 - Appoint a bike commuting coordinator to procure local bike route maps
 - Help employees plan routes to work using low-traffic but direct roads and paths
 - Encourage cyclist education among employees; educated riders are safe riders
8. Financial incentives
 - Partner with a local bike shop to offer employee discounts or maintenance clinics
 - Offer subsidies for bike commuters who don't use car parking spaces
 - Provide lunch for bike commuters; offer extra vacation time for daily bike commuters
9. Promote it
 - Form a company bicycle club or race team; increase your own exposure locally
 - Allow bike commuters to dress more casually at work; organize a lunchtime race
 - Ask the local bike shop to showcase new bike models during lunch
10. Outreach
 - Get local news media to cover your events
 - Offer tips on how to start a bike commuting program to other local businesses
 - Encourage employees to help co-workers make the switch to bike commuting

Complete the Streets Brochure

Source: www.completestreets.com



The streets of our cities and towns ought to be for everyone, whether young or old, motorist or bicyclist, walker or wheelchair user, bus rider or shopkeeper. But too many of our streets are designed only for speeding cars, or worse, creeping traffic jams. They're unsafe for people on foot or bike — and unpleasant for everybody.

Now, in communities across the country, a movement is growing to complete the streets. States, cities and towns are asking their planners, engineers and designers to build road networks that welcome all citizens.

www.completestreets.org

Become part of the movement toward complete streets. For more information, visit www.completestreets.org

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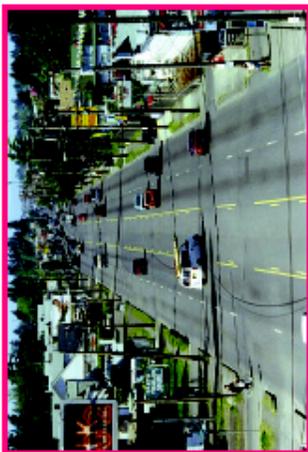
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Highway Statistics, 2001

Sponsored by the Complete the Streets Steering Committee



NOT COMPLETE



COMPLETE

Complete the streets.

Streetscape courtesy of Michael Ronkin/ODOT

Complete streets are designed and operated to enable safe access for all users. Complete streets

direct transportation planners and engineers to consistently design with all users in mind. They have been adopted by a few states (OR, VA, SC), and a number of regions and cities. Places that adopt complete streets policies are making sure that their streets and roads work for drivers, transit riders, pedestrians, and bicyclists, as well as for older people, children, and people with disabilities.

There is no prescription for a complete street. But look for:

- sidewalks
- bike lanes
- wide shoulders
- plenty of crosswalks
- refuge medians
- bus pullouts
- special bus lanes
- raised crosswalks
- audible pedestrian signals
- sidewalk bulb-outs

Complete streets improve safety.

A Federal Highways Administration safety review found that designing the street with pedestrians in mind — sidewalks, raised medians, better bus stop placement, traffic-calming measures, and treatments for disabled travelers — all improve pedestrian safety.

One study found that designing for pedestrian travel by installing raised medians and redesigning intersections and sidewalks reduced pedestrian risk by 28%.

Complete streets encourage walking and bicycling for health.

The National Institutes of Medicine recommends fighting childhood obesity by changing ordinances to encourage construction of sidewalks, bikeways, and other places for physical activity.

A report of the National Conference of State Legislators found that the most effective policy avenue for encouraging bicycling and walking is complete streets.

One study found that 43% of people with safe places to walk within 10 minutes of home met recommended activity levels, while just 27% of those without safe places to walk were active enough.

Complete streets help ease transportation woes.

About one-third of Americans do not drive. Complete streets help provide safe access for people who use wheelchairs, have vision impairments, and for older people and children.

More than one quarter of all trips are one mile or less — and almost half are under five miles. Most of those trips are now made by car. Streets that provide travel choices give people the option to avoid traffic jams and increase the overall capacity of the transportation network.

Complete streets make fiscal sense.

Integrating sidewalks, bike lanes, transit amenities, and safe crossings into the initial design of a project spares the expense of retrofits later.



BEFORE



AFTER

Photos courtesy of Mike Davis

Become part of the movement toward complete streets. For more information, visit www.completestreets.org