

## Pattern 4: Transit Stops

**“Build bus stops so that they form tiny centers of public life. Build them as part of the gateways into neighborhoods...Locate them so that they work together with several other activities, at least a newsstand, maps, outdoor shelter, seats...”**

**–Christopher Alexander**



Public transit is a vital part of the circulation system in New Jersey. Every day, millions of people depend on transit for access to jobs, shopping, recreation, and school. Commuter railroads, subways, light rail, express buses, local buses, shuttles, and jitneys are all part of the mix. While, in general, municipalities are not direct providers of transit service, they have a crucial role in making sure that it works well locally. Local decisions greatly influence success in attracting riders – indeed, the viability of transit at all – and the quality of passenger access to rail stations, bus stations, and bus stops. Local land use planning in the vicinity of transit stations determines in significant measure how many riders are likely to use each station and, therefore, the contribution of that station to overall system efficiency. Municipal

investment in transit stops and surrounding areas can help ensure that these facilities are safe and comfortable, that they meet passenger needs, and that they contribute to the overall vision for the community. Large transit stations and interchange points can become centers of civic life. Even individual bus stops can become tiny community centers, as Christopher Alexander noted. For these reasons, each municipal Circulation Element should include a community-based vision for transit.

## Community Form and Mobility Principles

Four key principles define mobility-friendly planning for transit stations and stops:

- Access,
- Identity,
- Comfort, and
- Supportive Density.

### *Access:*

*Provide for safe and convenient pedestrian and bicycle access to transit stops and stations.*

One of local government's most critical functions in relation to transit is to help facilitate safe passenger access to and egress from transit stops and stations. As a general rule, passengers will walk up to one-quarter mile (5 minutes) to bus transit and up

to one-half mile to rail transit (10 minutes). In New Jersey, rail passengers often walk farther than these national averages, but a lack of sidewalks and curb ramps, poor street lighting or other basic amenities can significantly reduce the pedestrian-shed. Municipalities should pay attention to every detail of pedestrian amenities within these service areas, seeking to make the walk not just safe, but enjoyable.



**Planned pedestrian crossings at a transit station (left) and well-used bicycle racks at the South Orange rail station (right) make transit convenient for all.**

before boarding and after departing the bus or train. For passengers arriving and leaving on foot, providing and effectively maintaining a complete network of sidewalks and safe pedestrian crossings in the station area is key. Crosswalks should be

Every transit passenger is a pedestrian, for at least a short distance

placed as close to bus stops or station entrances as possible, for pedestrian convenience and to discourage passengers from jaywalking. These pedestrian access routes and crosswalks should be well lit at night, as many passengers will need to traverse these areas in complete darkness.



**This rail station in Camden County is ½ mile from the nearest public street and hidden behind a shopping center. Parking for the station is in an unused corner of the shopping center lot, approximately 100 yards away from the platform. Pedestrians must traverse the loading and trash area while competing with big rigs and delivery trucks for roadway space as there are no sidewalks leading to the station.**

Bike-access passengers need safe cycling conditions on local access roads or suitable off-road alternatives. They also need secure bike parking facilities, as discussed in the previous section. Bicycle and pedestrian safety should be considered in determining the location and design of station area parking and passenger drop-off and pick-up areas. Passengers arriving on foot should not have to walk through a vast parking area or dodge vehicles to reach the station.

Bike access to transit is greatly facilitated by the bike-on-bus service available in some parts of New Jersey. Since a cyclist using bike-on-bus service can handle a longer access trip at either end of the bus journey, this service greatly expands the market area from which a bus route can draw riders. Local governments can support bike-on-bus service by ensuring safe bicycle access on local streets leading to and from bus routes, or providing alternative off-road paths between primary bus stop locations and key passenger origins and destinations.



**Bike-on-bus service provided in Burlington County.**

By providing excellent pedestrian and bicycle access to transit stations, the number of auto-access passengers and the corresponding parking impacts in the station area can often be reduced. New riders may also be attracted to use the system. Improving pedestrian connections in a station area also helps to integrate transit stops with surrounding neighborhoods and public places and can help to create a livelier environment. Well-designed streetscapes have

helped to increase transit usage in several New Jersey communities. Municipalities such as Riverside, Red Bank, Metuchen, Westfield, Rahway, South Orange, and Summit have leveraged state and federal funds to create interesting streetscapes that encourage walk-on transit usage, which in turn reduces dependence on park-and-ride. On the RiverLine, the Boroughs of Riverton and Palmyra worked with Burlington County to reduce speeds on Broad Street which makes it easier for transit passengers to cross to their respective stations.



**The areas surrounding the Rahway rail station (left) and Palmyra RiverLine station (right) have undergone pedestrian improvements.**

Municipalities are largely responsible for the upkeep of local bus stops and the amenities provided. A paved sidewalk is a must at all bus stops. Bus pullout areas, often combined with curb extensions, may be helpful in sheltering passenger boarding operations from adjacent traffic.

## Summit: A Classic Example of Transit Compatible Design in New Jersey

Located on NJ TRANSIT's busy Morris & Essex Line, Summit has many components of transit compatible design: a high-quality pedestrian environment, a wide variety of retail shops and services near the station, and an unobtrusive park-and-ride deck.



All stops should meet Americans with Disabilities Act (ADA) regulations. A wide sidewalk, if possible running the full length of the bus, is advisable so that the driver can conveniently lower the lift from any position. Sidewalks at a bus stop should be wide enough to provide space for waiting, boarding, and passing. Shelters should be placed so that they do not interfere with wheelchair and pedestrian access along the sidewalk.



In addition to improving pedestrian access to existing transit services, municipalities can adopt regulations that “build in” transit access to future developments. For example, site plan and subdivision ordinances can specify standards for bus access and internal circulation that will enable a transit provider to operate effectively in all future commercial and residential developments. This can prevent the unfortunate situation in which a shopping center owner, for example, allows the bus to operate only at a remote corner of the parking lot rather than dropping passengers at the mall entrance.

This crosswalk in Metuchen has user activated lights that increase visibility under poor conditions.

## Local Transit Services

Local transit services operated by counties, municipalities or nonprofit organizations play an important role in providing local mobility, particularly for passengers with special needs and those in lower density suburban and rural areas of the state without regular NJ Transit service. Specialized transit service needs should be discussed in the local Master Plan.

Shuttle services, usually run by municipalities or county Transportation Management Authorities (TMAs) with a small fleet of buses or vans, are particularly useful at connecting isolated rail stations with nearby residential, retail, office, and industrial locations. Edison, Metuchen and Maplewood are among the New Jersey communities with local shuttle programs. Shuttle service frequency should be determined by primary trip purpose. If the nature of the service is to connect a major bus and rail facility with a large employment center (e.g., an office or industrial park), then peak-period service will usually suffice. In residential neighborhoods that lack traditional fixed-route transit but demonstrate a need for connections to shopping, medical centers, and other services, midday as well as peak-period service will be necessary.

All New Jersey counties provide specialized transit services for aging and disabled persons—known as paratransit service—with support from NJ Transit. Paratransit services use smaller vehicles and operate on flexible schedules tailored to individual service needs. To complement these services, several communities are investigating the formation of Independent Transportation Networks (ITNs), in which volunteers are organized to provide rides for senior citizens. Several car-sharing services are also operating in New Jersey. These services allow members to use cars from a common fleet on a short-term basis, allowing households with an infrequent need for a second (or primary) vehicle to avoid the cost of owning one. Programs are also available to help low-income households purchase and maintain vehicles needed for work or medical transportation. Transportation Management Associations (TMAs) operating throughout the state are a resource for ridesharing and car-sharing programs.

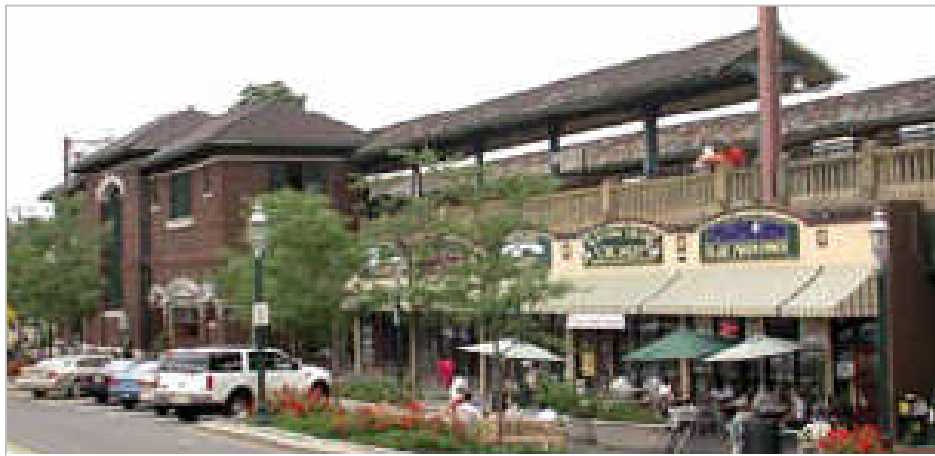


***Identity:***

***Make transit stops distinctive and recognizable from a distance.***

In addition to helping to ensure safe passenger access to transit, local governments can help to create a distinctive identity for the transit stops within their borders, enhancing the image of the transit stop and surrounding area, providing a sense of security to passengers, and orienting visitors who are using the stop for the first time. Distinctive transit stops also help to advertise the availability of transit service, thus promoting new ridership. Readily identifiable bus stops are more visible to motorists, who are less likely to park illegally in the stop zone.

**“Bus stops must be easy to recognize, and pleasant, with enough activity around them to make people comfortable and safe.”  
– Christopher Alexander**



**South Orange station, with its canopied platform above the station shops, is recognizable from a distance and welcoming to passengers.**



Stops and stations should also be recognizable at a glance from within the transit vehicle, to aid passengers in knowing where to get off. Iconic station signs and public art on station walls provide for station recognition, and also add to the visual quality of these facilities. Community murals and other station art can help promote an identity for the overall destination area.



Station art and signage, clockwise from top left: Newark Penn Station, Newark Warren Street Station, Delanco RiverLine Station, Hudson-Bergen Light Rail 22<sup>nd</sup> Street Station, HBLR 34<sup>th</sup> Street Station.

Orienting information near station exits, such as trail blazing signs and a wayfinding map showing local destinations, is also important to guide alighting passengers. Surrounding streets should also have clearly marked street signs to aid visitors in finding their destinations.





### ***Comfort:***

***Make each transit stop or station a comfortable, attractive and inviting place to wait for the bus or train; encourage provision of supportive activities and services.***



**Edison rail station offers seating and refreshments in an attractive environment.**

A transit stop is much more accommodating to passengers, more likely to be used, and more likely to become a center of civic activity, when it is comfortable, attractive, and inviting. Attention to the quality of the passenger's experience while waiting for the bus or train helps passengers to feel included and valued rather than neglected; it validates their choice of the transit mode and helps to promote transit use.

Comfortable environments with shelter and seating also tend to promote social interaction among passengers and may lead to regular commuters forming their own small social networks. On a city bus route, passengers often come to know the drivers and one another and look out for each other.

On-board communities spring up on NJ Transit trains and on express buses, with daily card games taking place on certain routes. In this way, the experience of using transit contributes to collective life.

Areas around transit stations become focal points for civic life and local commerce, helping to strengthen local economies. Amenities such as information kiosks, newsstands, and food vendors improve the quality of transit stops as public places in their own right, while on-site services, such as dry cleaning, allow for trip chaining. Several communities have experimented with a "concierge" service to provide local goods and services to commuters at the station. Lighting and trash receptacles are also important amenities for transit stops.

NJ Transit's Transit-Friendly Communities program has helped several municipalities improve their station areas and thereby strengthen their downtowns. In addition to becoming a focal point for redevelopment, these stations and surrounding public spaces have been used for concerts, craft fairs and other community events.



**This bus shelter in Metuchen is simple, yet elegant, with a light, airy open design, side openings so seated patrons can watch for the bus, a curbside tactile strip to help prevent falls, adjacent lighting and a trash receptacle.**



**Neglect of bus stop environments reflects poorly on municipalities.**  
(Image courtesy of Michael Ronkin, Oregon DOT)

The cleanliness and attractiveness of transit stations and stops has a direct impact on the passenger's experience and ultimately on transit ridership. In many cases, the upkeep of stations and stops is the responsibility of the municipality rather than the transit provider. (In New Brunswick, for example, day-to-day maintenance of the NJ Transit rail station is performed by the New Brunswick Parking Authority.) Local business and civic organizations can be instrumental in maintaining station areas.

At bus stops, the responsibility of installing shelters, seating, and lighting is almost always left to municipalities. Shelters should be kept tidy and free of graffiti; benches should be comfortable and freshly painted, and lighting should be bright enough to ensure passengers' sense of security at the stop. Municipalities may elect to provide higher quality, context-sensitive shelter designs in lieu of standard NJ Transit shelters by assuming the cost of purchase and maintenance.

### ***Supportive Density:***

***Encourage density of housing and employment around transit stations.***

The “D-word” can be the third rail of community development, but it need not raise the ire of local citizens. In fact, low density is the enemy of community development, favoring no mode of transport except the auto, consuming large swaths of land, growing sterile bedroom ‘burbs and creating city-less highways.

NJ Transit’s “Transit Score” index, used by transportation planners to determine what public transportation services would be appropriate for a community, considers four different density indicators: housing density, population density, employment density, and zero and one-car household density. Increasing the density of any or all of these factors increases the range of transit options available to a community. Clearly, working to increase more than one of the factors will lead to much greater increases in transit viability.

But focusing on density when considering community development is like buying a car based solely on the size of the engine: it only tells part of the story because it misses all of the other attributes that make up the package. Once threshold densities have been identified, considering the *form* of development around transit facilities is probably more appropriate for the broad community development discussion. In chapter 4, *Putting It All Together*, we show some tools for thinking about the form of development.

In fact, just creating density is not enough. There is a significant difference between “transit adjacent development,” which may be dense and well sited but ignores the potential of transit, and the more supportive land use known as Transit-Oriented Development (TOD). TOD refers to a development node that is focused on a rail, bus, or ferry station; it is compact, mixed-use, and pedestrian friendly. TOD nodes can be of any size, as is appropriate to the community context and the local transit system. TOD attracts users to new or strengthened activity centers around transit stations and encourages shifts from auto to transit or from auto-access to walk-access transit use. Over time, as the number of TOD centers in the state increases, so does the likelihood that any particular commute trip can be served by transit at both ends, tending to promote increased ridership.

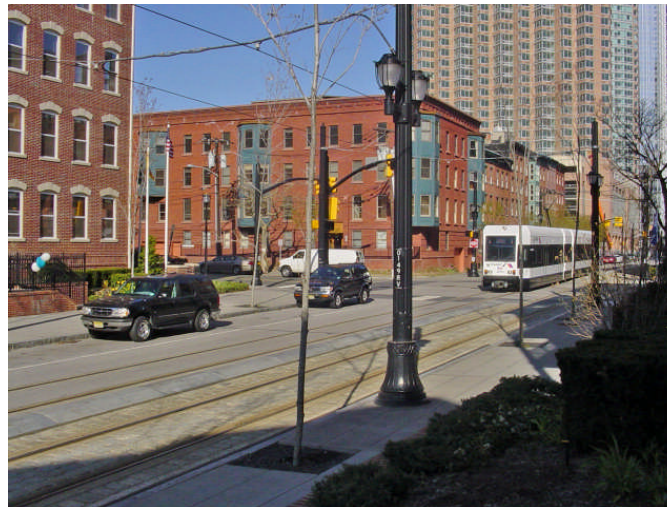


**New townhomes in Metuchen**



**Burlington's compact core surrounds the RiverLine light rail service.**

Redevelopment of the area around a train station can be an important aspect of a city or town's overall downtown redevelopment strategy. For instance, in Hackensack, station area redevelopment is part of a major redevelopment plan that includes a medical district, industry, and housing. In Rutherford, new development around the rail station includes housing, offices, retail, and day-care facilities. In Camden, a strategic plan for downtown development is guiding several projects around the RiverLine light rail station.



**Transit-supportive housing along Hudson-Bergen Light Rail line in Jersey City. Over 7,000 residential units have been built within walking distance of the route.**



**New housing in South Orange (Gaslight Commons) is designed**

Local governments can facilitate transit-supportive development either by revising development regulations to allow higher densities, encourage mixed uses, or support different forms of development around stations or along light rail and bus lines, or by creating Station Area Plans for transit stations, with associated development regulations. A Station Area Zone overlay, a Planned Development District for a station area, or a redevelopment plan that focuses on infill and rehabilitation may specify a mix of uses appropriate to the zone and provide standards for building massing, sidewalks, parking, signage, and lighting. Consider use of a “form based code” to achieve very specific community design goals (see Chapter 4).



**Transit-supportive housing under construction in South Amboy (left) and mixed use development at the station (right).**



## **Transit Village Initiative**

NJDOT and NJ Transit have developed the Transit Village Initiative to encourage Transit-Oriented Development (TOD). Under this program, the State recognizes as Transit Villages certain municipalities that have taken aggressive steps to revitalize the quarter-mile to half-mile radius around a transit station. The Transit Village designation provides eligibility for various types of grants.

A potential Transit Village must meet 13 criteria. Among the most crucial are: (1) a strong residential component with a wide variety of housing choices within walking distance of Transit, (2) a commitment to implement regulatory measures, such as a redevelopment plan, zoning ordinance, master plan, overlay zone, or land use strategy, that support compact, transit-supportive, mixed-use development, (3) an understanding that the transit station is a focal point of the community and can be used as a gathering place for community activities, such as festivals, concerts, public ceremonies, and farmers markets, and (4) a desire to emphasize amenities that minimize automobile use by maximizing the appeal of transit.

The most important benefit of becoming a Transit Village is that a town receives special treatment from a variety of state agencies. This may come in the form of funding priorities, technical assistance, support for creating shuttle services, and aid in rehabilitating historic train stations. Another benefit of Transit Village designation is the achievement of a high level of certainty and security. Since these communities have already made provisions for revised zoning and have shown that they are willing to grow—and are backed by the State—they are very attractive places for developers to plan investments. Since 1999, the following 17 communities have been designated as Transit Villages: Pleasantville, Morristown, Rutherford, South Amboy, South Orange, Riverside, Rahway, Metuchen, Belmar, Bloomfield, Bound Brook, Collingswood, Cranford, Matawan, New Brunswick, Jersey City, and Netcong.

## Resources for Transit Stops

*Building a Transit Friendly Community.* NJ TRANSIT, NJOSG, Downtown New Jersey, Inc., New Jersey Future, Project for Public Spaces, Regional Plan Association, Rutgers Voorhees Transportation Policy Institute.

*Guidelines for the Location and Design of Bus Stops.* National Research Council, Transportation Research Board, Transit Cooperative Research Program, Report 19, 1996.

*Increasing Intermodal Access to Transit.* Delaware Valley Regional Planning Commission, August 2004.

*NJDOT and NJTRANSIT Transit Village Initiative.* [www.state.nj.us/transportation/community/village](http://www.state.nj.us/transportation/community/village)

*Pedestrian- and Transit-Friendly Design: A Primer for Smart Growth.* International City/County Management Association, EPA, and Smart Growth Network, 1998.

*Planning for Transit Friendly Land Use: A Handbook for New Jersey Communities.* NJ TRANSIT, June 1994.

*The Redevelopment Handbook: A Guide to Rebuilding New Jersey's Communities.* NJ Department of Community Affairs and NJAPA, 2003.

*Ten Principles for Successful Development Around Transit.* Robert Dunphy, Deborah Myerson, and Michael Pawlukiewicz. Washington, D.C.: ULI—the Urban Land Institute, 2003.

*Transit-Friendly Streets: Design and Traffic Management Strategies to Support Livable Communities.* TCRP Report 33, TRB, 1998.

*Transportation Management Associations (TMAs).* Information on the eight TMAs in New Jersey. <http://www.state.nj.us/transportation/commuter/smartmoves/tmaprograms.shtm>

*Waiting for the Bus.* Project for Public Spaces, 1986. Videocassette.