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THE TRANSIT-FRIENDLY COMMUNITIES PROGRAM

In the last 15 years, NJ TRANSIT has spent over $7.5 billion to repair, rehabilitate, expand, and connect all of the State’s passenger lines—built in the mid 1800’s by competing rail companies—into one seamless transit system. Together, these connections, upgrades, and new light rail lines will result in an interconnected rail network with over 150 commuter rail stations serving the majority of state residents. Despite this massive infusion of transit funding and commitment by NJ TRANSIT, there has been a lack of awareness among many New Jersey communities about how to leverage these transit investments to revitalize their downtowns, encourage business and local economic development, and reduce reliance on the private car. This program—Transit-Friendly Communities for New Jersey (TFC)—is working with diverse community partners to develop specific ways that New Jersey towns and cities can become more "transit-friendly."

Under this effort, NJ TRANSIT is working with a consortium of not-for-profit organizations, the New Jersey Office of State Planning, and local public and private sector partners on a statewide initiative which includes educational workshops, technical assistance, and demonstration projects in eleven communities to shape a new vision for linking train stations to community enhancement. This program allows NJ TRANSIT to leverage the talents and resources of its not-for-profit and government partners—leaders in smart growth, community revitalization, regional planning, and public education—to shape the future of communities around NJ TRANSIT stations well into the 21st Century. The result will be models for other New Jersey communities to follow in future NJ TRANSIT projects; communities that understand how transportation investments can enhance the environment, create strong downtown centers, and improve quality of life.

The TFC program received one of a handful of competitively selected federal grants under the Federal Highway Administration’s Transportation and Community and System Preservation Pilot Project (TCSP) program. The TCSP program supports States, local governments and metropolitan planning organization initiatives “...to plan and implement strategies that
improve the efficiency of the transportation system; reduce environmental impacts of transportation; reduce the need for costly future public infrastructure investments; ensure efficient access to jobs, services, and centers of trade; and examine private sector development patterns and investments that support these goals.\textsuperscript{1} The TCSP Program is authorized for $120 million from Fiscal Year 1999 - 2003, to be used throughout the United States.

WHAT IS A TRANSIT FRIENDLY COMMUNITY?

A TRANSIT FRIENDLY COMMUNITY MAKES THE STATION A PLACE IN ITSELF. At the heart of a transit-friendly community is a station facility surrounded by uses that create a sense of place for commuters and visitors alike. The station is comfortable and convenient for the transit riders who use it every day. Retail uses, which provide a needed service for transit riders also, help animate and make a station more secure. Outdoor public spaces—such as a station plaza—can make the rail station a visible focal point in the community, while creating a venue for community activities and events which reinforce the central role of the station in community life.

A TRANSIT FRIENDLY COMMUNITY LINKS THE RAIL STATION TO KEY DISTRICTS IN THE COMMUNITY. Beyond the immediately adjacent district, there are opportunities to link other commercial, cultural, and mixed-use districts to the station. Often, visitors and tourists arrive by rail. This makes it logical for a rail station to provide a welcoming presence and to act as a focal point for information and activities that are community-wide in focus.

A TRANSIT FRIENDLY COMMUNITY SUPPORTS THE DISTRICT AROUND THE STATION AND ENCOURAGES NEW DEVELOPMENT. Station areas characterized by extensive

\textsuperscript{1} U.S. Department of Transportation Federal Highway Administration, Transportation and Community and System Preservation (TCSP) Pilot Program Description. U.S. DOT FHWA web site: http://www.fhwa.dot.gov/tcsp.
pedestrian/vehicle conflicts and auto-oriented redevelopment discourage walking, shopping, and even thinking about the station area as an attractive place for new development. Extensive vacant or underutilized parcels of land within a quarter to half mile of a rail station are also symptoms that the station area is not viewed as a desirable location for new development. With increasing ridership, and an enhanced station setting, development pressures often also increase, especially if the local economy is healthy. Even if the local economy is less robust, community development programs can take positive steps to encourage new development.

Improving the pedestrian environment around a station creates an opportunity to revitalize a surrounding business district, attracting new businesses and encouraging the rehabilitation of older or historic structures, as well as new construction. These districts can develop an identity of their own and can become popular destinations.

Local communities can shape the kind of development that meets their particular goals for increasing tax ratables, reducing impacts on city services, attracting specific types of uses, and ensuring appropriately scaled and designed buildings -- rather than simply reacting to development proposals. From the perspective of reducing conflicts with access at rail stations, new development that minimizes automobile access has definite advantages. For example, experience has shown that with new office development, 90 percent of its users still drive, rather than take the train. This increases the parking requirements around stations. Residential development, however, encourages transit ridership, as people take advantage of their proximity to the station to reduce or even eliminate their need for a car.

A TRANSIT FRIENDLY COMMUNITY PROVIDES CONVENIENT STATION ACCESS FOR PEDESTRIANS AND BICYCLISTS. Rail stations are centers of communities, where often thousands of people pass through on a daily basis—creating conflicting demands among rail passengers arriving by car, by bus, on foot, or by bicycle. With increasing ridership at many stations, these conflicts are becoming more severe every day. In the past, decisions about improving access to the station have been largely
focused on improving auto access—adding parking and widening roads, for example—to the point where it becomes difficult for people on foot or on bikes to enter or leave the station safely.

While auto access plays a key role in most rail stations, other modes of access should be made equally convenient. A balanced approach "calms" the traffic around the station so that all modes of access are handled equitably, reconnecting the station area to the surrounding community. For commuter rail stations, a half-mile walk is not out of the question for many people, especially if the route is comfortable and relatively direct. Bicyclists will travel even further to reach a commuter rail station, but again, only if the ride is not hazardous and the proper facilities are provided—en route and at the stations.

Indeed, sometimes the streets and sidewalks around a station pose the most problems for pedestrians and bicyclists: once they get a block or two away from the station, the local network of streets and sidewalks often improves. If this is not the case, then these streets too should be made more pedestrian and bicycle friendly.

A TRANSIT FRIENDLY COMMUNITY INTEGRATES COMMUTER PARKING IN A BALANCED WAY. While accommodating improved pedestrian and bicycle access, and serving as a setting for new development, accommodating commuter parking is still a necessity at most stations. Certainly some stations have more space available for commuter parking than others—so the correct amount of parking varies from station to station. Whether the amount of parking is large or small, however, it need not completely aesthetically and physically dominate the station setting. If commuter parking facilities can be used evenings and weekends for other purposes, the costs of construction and operation of a parking facility can also be shared.

In considering commuter parking, facilities for bicycles should play a more important role. Large, secured, and weather protected bike parking areas will elevate the visual presence of the bike facility and encourage wider utilization.
A TRANSIT FRIENDLY COMMUNITY PROVIDES FEEDER LOCAL TRANSIT SERVICE WHICH CONNECTS TO LONG DISTANCE RAIL, REDUCING THE NEED TO REACH A STATION BY CAR. Very often, community bus services are not geared to commuters going to or from a rail station. In many communities, local routes do not serve rail stations at all. This forces many people to drive to the station who might be willing to take a bus as long as the schedule does not involve long waits and there are bus stops conveniently located near their home. NJ TRANSIT is working with communities to purchase local jitney vans, which provide shuttle or circulator services for commuters, and other constituencies the rest of the day. These jitney services also reinforce rail stations as community transit hubs.

A TRANSIT FRIENDLY COMMUNITY INVOLVES AN ONGOING PARTNERSHIP BETWEEN NJ TRANSIT AND THE SURROUNDING COMMUNITY. Building a Transit Friendly Community requires an ongoing partnership between NJ Transit and stakeholders at the local level. This not only affords an opportunity to pool limited resources, but it encourages the coordination and collaboration necessary for all of the pieces of a station district to fit together and to adapt to changes and new challenges over time.

THE ESSEX STREET STATION AND STATION AREA

The Essex Street train station in Hackensack was selected for the TFC program for two major reasons. First, the station, like many others in Bergen, Passaic, Rockland (NY), and Orange (NY) counties is likely to experience major ridership growth in the next few years with the opening of the Secaucus Transfer station in the Hackensack Meadowlands. This new station will make it possible for those who ride the three rail lines that pass through Bergen County to transfer to trains from the Northeast Corridor and travel directly to Penn Station in midtown Manhattan. Today, these three lines take passengers to Hoboken where they must travel circuitously on PATH to reach midtown.
Second, the Essex Street station is located in a key area in Hackensack, one with an opportunity for significant redevelopment. Scarcely one-third of a mile away to the west along Essex Street is the Hackensack University Medical Center (HUMC) and a similar distance to the west is the Bergen County government center.

The Essex Street station is one of 17 stations on the Pascack Valley Line that begins to the north in Spring Valley, New York and terminates in Hoboken at the Hudson River. Six southbound trains stop at Essex Street each weekday morning from 6:18am to 8:42am, with one express train bypassing the station. Nine northbound trains stop at the station, six of these in the peak period, one earlier in the afternoon and two later in the evening. Riders destined for lower Manhattan transfer to the PATH rapid transit system in Hoboken or to the New York Waterways ferry to the World Financial Center to continue their trip to lower Manhattan, while midtown-bound riders transfer to the uptown PATH branch, which stops in Greenwich Village and the West Side on its way to its terminus at 33rd Street and Sixth Avenue. The travel time to and from Hoboken ranges from 22 to 27 minutes for the 13 mile trip.

Unfortunately, there is no other service, either in midday or in the reverse direction, making the service of no value to those commuting to Hackensack from points south. The line does not operate on the weekends either. These limitations in service can, in part, be traced to the single-track nature of the line, which is to be remedied by the installation of five rail "passing sidings" on the line in the near future. This would make it possible to offer "reverse" services. The first phase of this project (three passing sidings and one freight run around siding) will be completed in 2004.

Today, about 260 people board the trains at Essex Street, virtual-

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2 Since the September 11th World Trade Center tragedy this PATH branch and the ferry have not been operating. PATH will likely be out of service for at least two years. Most riders destined for lower Manhattan are now shifting to the uptown branch of PATH and using the New York City subway to reach their destinations.
ly all destined for Manhattan. (Figure 1) The monthly commuter fare to Hoboken is $94; the one-way fare is $5.00. A small number of people travel to Essex Street from points north in the morning and home again in the evening. Approximately fl of these riders drive to the station and park there. One in six are dropped off by car and less than 10 percent walk to the station. Just over half of the riders live in Hackensack, with most of the remainder coming from Bogota, Maywood, and Paramus. Not surprisingly, all of the walkers live in Hackensack. Less than one mile north of the Essex Street station on the Pascack Valley line is the other rail station in Hackensack, at Anderson Street. Its service pattern is similar. About one-third more people board this station, which is in a largely residential neighborhood.

In the mid-1990's, NJ TRANSIT invested in excess of $400,000 to upgrade the station and provide accessibility for people with disabilities. Essex Street is "key" station, designated by NJ TRANSIT under the Americans with Disabilities Act regulations. Parking was paved and expanded, the platforms improved and lighting and a shelter was added. There are now about 190 parking spaces, two-thirds available to monthly parking permit holders, the rest for daily parkers.

The completion of the Secaucus Transfer Station will bring more riders to both the Essex Street and Anderson Street stations. NJ TRANSIT expects that this will create a combined parking deficit at the two stations. Since the Anderson Street station area is largely residential, parking expansion there is more difficult, suggesting that the deficit should be filled at the Essex Street station.

Clearly, development opportunities exist in the station area. However, sufficient parking capacity for commuters will need to be accommodated. The environment in the area is unattractive, lacking in amenity, and difficult to reach on foot or by bicycle. A substantially improved station area environment, which can serve as a prototype applicable to similar station areas in New Jersey and elsewhere, will help create the setting for new development, while better serving the station's increased ridership and revitalizing this section of the City.
THE STUDY PROCESS

SETTING OBJECTIVES

To initiate the study process, the TFC project team held a series of meetings with the Mayor of Hackensack, John Zisa, and the City’s planning consultant, Muller-Bohlin, to discuss the objectives of the Transit-Friendly Communities program and how it might best serve the City’s needs and those of the community surrounding the Essex Street rail station. The result was agreement on the following set of initial objectives:

1. Identify opportunities for development/redevelopment in the Essex Street rail station area that are consistent with existing land uses and that can reflect favorably on the City of Hackensack’s tax base through the creation of ratables;
2. Insure both the retention of existing commuter parking at the station and the potential to increase this parking supply, especially in light of the forthcoming Secaucus Transfer station project which will add significantly to the use of the station;
3. Provide the opportunity for the relocation of the Hackensack City Hall in the vicinity of the rail station;
4. Expand parking at the station in a manner that is sensitive to the community’s needs;
5. Improve the attractiveness of the immediate station area;
6. Improve non-auto access to the station (including walking, biking and bus feeders and/or community shuttle) to relieve the burden on local roads;
7. Strengthen the connections between the station, the station area and the Hackensack Medical Complex to the west and the government center complex to the east along Essex Street; and
8. Upgrade the appearance of the Essex Street in the vicinity of the rail station.

In some of the other municipalities participating in the TFC program, meetings were held during the local demonstration project process with stakeholder groups representative of a range of civic, business, labor, transit users, and developers. In
Hackensack, because these meeting were limited by the sensitive nature of some of the discussions regarding development issues, this report should be viewed as a starting point for broader community discussions.

DATA GATHERING

The initial data gathering portion of the study involved a combination of extensive field observations and examination of existing studies, reports, plans, and data relating to the station and station area. These included data collected by NJ TRANSIT’s Market Research Division on train passenger usage, place of origin, and train station access.

During the fall of 2000, Project for Public Spaces, Inc. studied the areas surrounding in the Essex Street rail station using systematic observations. Station usage and pedestrian and vehicular circulation along Essex Street between the hospital and the county complex were documented through photographs and general observations to understand pedestrian and vehicular access issues, conflicts, and other usage patterns.

Information about potential development sites and opportunities was gathered from field surveys as well as discussions with administration officials from the City of Hackensack. The meeting to establish objectives with the City also was used to gather additional information, discuss concerns, ideas, and opportunities for the station area's public spaces.
The Essex Street station area offers both a significant challenge and a substantial opportunity for the City of Hackensack, neighboring land-owners, transit users, and NJ TRANSIT. On one hand, it exists largely in a void surrounded by marginal uses and underdeveloped properties. On the other hand, its location is highly strategic, both from a transportation planning perspective and from a land-use and urban redevelopment point of view. (Figure 2)

As described below, the immediate surroundings are problematic and give few strong clues as to how the larger station area could be redeveloped. For this reason, the station area is subject to a variety of potentially conflicting agendas and visions.

1. At the time that this project was underway, the City was considering leaving the existing City Hall, which is inadequate in size and has obsolete floor plans and technological infrastructure. A new municipal complex in the area of the Essex Street Station would be a complement to the other two institutional anchors—Hackensack University Medical Center (HUMC) and the County Government Complex.

2. The site could accommodate mixed-use development, jointly implemented by NJ TRANSIT and a private developer or by NJ TRANSIT and the HUMC, or some other combination of partnerships.
3. The site could accommodate structured parking to meet the requirements of NJ TRANSIT plus whatever other uses might occur there.

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**THE LARGER PLANNING FRAMEWORK**

The Essex Street Station is a highly strategic location. It is midway along a mile long corridor, anchored at each end by an important institutional complex. To the west along Essex Street, which is a county road, scarcely one-third a mile away at the top of a hill is HUMC, the largest employer in Hackensack and an institution with regional prestige. Over the years, the hospital has expanded substantially and today is the location of 4,000 workers. To the east is the other anchor, the County Government seat with offices for most county departments and the County judicial system.  

(Figure 3)
The Essex Street corridor is itself, part of a larger framework as shown in Figure 3. The station is part of a loop that includes:

- the downtown core along Main Street from the County complex to Passaic Street;
- Passaic Street from Main Street to Prospect Avenue. Midway along Passaic Street, and just one block north is the Anderson Street Station, the next station north from the Essex Street Station; and lastly,
- Prospect Avenue completes the loop from Passaic Street to the Hospital complex. This street is lined with high-rise residential buildings.

Bisecting this loop in the east-west direction and perpendicular to the NJ TRANSIT line, is the New York, Susquehanna and Western (NYS&W) rail line, currently used only for limited freight service. NJ TRANSIT, Bergen and Passaic Counties are now pursuing plans to expand passenger rail service on this line such that it integrates with the current commuter rail and bus network of services.

LONG TERM STRATEGIC PLAN FOR THE ESSEX STREET STATION AREA

The City of Hackensack envisions significant land-use changes in the areas west of the rail line. South of Essex Street, between the rail line and Polifly Road is a primarily industrial area with large-footprint, single story factories that are used largely for warehousing and distribution. The City is considering replacing these marginal businesses over the long term. Among the long term development potentials for this area are residential with some commercial and retail uses.

On the north side of Essex Street, between the rail line and the hospital complex, the City is interested in transforming this area into a "Health Services District." While the parameters of this dis-
trict are not yet well defined, the concept could allow the HUMC to expand its campus to the east down the hill in the blocks north of Essex Street. This could be a location where allied health services and facilities now found surrounding the hospital on Summit and Prospect Avenues would expand. The transformation of this area to health services-related uses is likely to take place over time. Nevertheless, there are enough sites for the potential expansion of the HUMC campus, including many sites along the north side of Essex Street, so that the area could take on the over-all identity of an urban campus, with a lively mix of new and existing uses and consistent streetscape treatments along important connecting roads. This is described in detail below.

EXISTING LAND USE PATTERNS

THE GREATER STATION AREA

The land-use context for the immediate station area is weak, i.e., there is much vacant and underutilized land and no one set of land uses dominates. Thus, there are no strong clues today as to what the redevelopment program should be. (Figure 4). The area south and west of the station is a mix of uses ranging from professional office buildings of different sizes, to small auto-oriented retail businesses, to older, large industrial properties with one large story "pancake" type warehousing distribution and assembly operations. As described above, the City anticipates that this area will be one of transition to residential and commercial uses over the next 20 years.

The area to the north and west is also an area of transition, with marginal commercial and industrial uses, but also with a number of multi-family housing projects that are likely to remain in place over the next 20 years. This includes the Oratam Court Housing project owned by the Housing Authority. (Figure 6, page 19)

Finally, to the east of the tracks, both to the north and south of Essex Street, there is an apparently stable mix of industrial and
Figure 4: existing land uses

Figure 5: Areas of consolidated land use
KEY ISSUES AND OPPORTUNITIES

idential uses characterizing the neighborhoods. Immediately adjacent to the tracks, along Railroad Avenue, uses are almost exclusively industrial, but elsewhere there are houses and small industrial buildings co-existing side-by-side. A number of new industrial buildings of solid masonry construction are in these areas.

These areas are bounded by areas with more consistent land uses. *(Figure 5, previous page)*

These edges include:

- the multi-family residential developments along Polifly Road and the solid residential neighborhood west of Polifly Road and South of Essex Street.

- industrial uses south of Lodi Street and along Railroad Avenue north and south of Essex Street

- a mixed-use residential and commercial corridor along State Street, with residential neighborhoods southeast of the State Street /Essex Street intersection and commercial uses northeast of the State Street /Essex Street intersection.

Some land uses in the greater station area might suggest a direction for future development. For example, the new medical professional office building on Polifly Road suggests an expansion of hospital related uses. The multi-family housing north of Essex Street suggests completion of the area as a residential neighborhood. But ultimately, there is no clear direction for future development based on extension of current land uses.

THE ESSEX STREET CORRIDOR

Like the area around it, the corridor has no clear identity, either in terms of architecture or land use. The portion of the corridor between Polifly Road and Prospect Avenue is the most established: low-rise apartment buildings create a well-defined edge to the residential neighborhoods on the south side of Essex Street. The north side of Essex Street shows the heavy influence of the
medical center. *(Figure 7)*

The portion of the corridor between the County Complex and the station area is predominantly residential, although the housing stock varies from established low-rise apartment complexes to single and multi-family houses, some of which are in marginal condition. There are also a number of vacant properties, some industrial uses, and a social service institution.

The portion of the corridor between the station and Polifly Road is the most problematic. *(Figure 8)* It is completely inconsistent in terms of land uses which range from strip retail (such as a CVS Pharmacy and McDonald's fast food restaurant), to multi-family housing developments (one of which may be substandard although it appears to be occupied), to small professional office buildings. The architectural context along this segment of the corridor is also generally poor, and for the most part, the buildings are not oriented towards the roadway or are separated from the road by parking lots. The intersection of Polifly Road and Essex Street, which should be one of the significant gateways in this portion of the city, has abandoned gas stations on two of four corners, the CVS parking lot on the third, and a well-established but completely undistinguished diner on the last corner. *(Figure 9)* Moreover, this intersection features high-speed priority right turn lanes for traffic—reinforcing the strip commercial nature of the area.

**LAND USES IN THE IMMEDIATE STATION AREA**

The properties immediately surrounding the station area are underutilized, creating the impression of a great void at this otherwise strategic location. NJ TRANSIT owns land on both sides of the tracks south of Essex Street. The larger parcel, on the west side of the tracks is an odd configuration—narrower at the frontage with Essex Street and wider at the south property line where it abuts a service yard for a local telephone utility. This property is used for surface parking for 190 cars. The raised platform, although new and in good repair, give little identity to
KEY ISSUES AND OPPORTUNITIES

There is no station building per se, only a few bus shelters placed intermittently along the platform. Indeed, the minimal amenities provided for passengers should be upgraded in concert with any future private development. Immediately to the west of the NJ TRANSIT property is a parcel of approximately equivalent size owned by HUMC. It is currently the site of an MRI facility, a one-story building surrounded by surface parking. HUMC has indicated that this facility could be moved to a new location or incorporated into a larger building on the site. (Figure 10)

The NJ TRANSIT property on the east side of the tracks is a narrow strip of land parallel to the tracks. This property of approximately one acre is currently vacant. Adjacent to this narrow property and occupying most of the land between Essex Street, Green Street, and the railroad is the so-called "Falsetto Property." This site, a former factory, is no longer occupied and is now owned by the city. A vacant factory building covers approximately a third of the site. At the time of this study’s initiation, a Wendy’s fast food franchise was negotiating for the property. Currently there are also two marginal, but occupied single family homes at the corner of this block. (Figure 11)

Diagonally across Essex Street, to the northeast of the train station, is an oddly configured block formed by the acute intersection of John Street and Essex Street. On this block at present there are some marginal auto-related businesses and some vacant houses. Behind this block is a stable industrial and residential mixed-use area that is discussed in more detail below.

Finally, immediately opposite the station on the north side of Essex Street is a larger parcel with a one-story automobile-related use surrounded by parking. (Figure 12)
NEARBY MIXED USE MANUFACTURING DISTRICT

One of the most striking land-use patterns in the area of the train station is the industrial/residential mixed-use pattern. It is surprising because it is apparently very stable. In particular in the area southeast of the station, small factory buildings exist side by side with well-kept single family homes. In general, these are masonry buildings—mostly a single high story or two stories with offices on the second floor. The front setbacks are paved for loading and parking of small vans. These are inserted in the otherwise residential blocks in a completely random pattern, side by side with front lawns and car parking at the curb or on driveways. Although it defies conventional planning practice, residential and industrial uses co-exist and it is not possible to characterize the area as one or the other. (Figure 13)

ESSEX STREET AS A PEDESTRIAN CORRIDOR

The overall absence of active building entrances, ground floor retail, and active uses, combine with the poor pedestrian infrastructure and fast-moving traffic to make this an unpleasant, uninteresting place to be. Not only does this make an unattractive setting for retail and new development, but it also discourages pedestrian access to the station from even a short distance away. (Figure 14)

There is little positive about the pedestrian environment on Essex Street. For example, there are few amenities offered to pedestrians walking along Essex Street to the rail station, or to HUMC or the County Complex from the Station. Street trees, which offer
shade, weather protection, and help to reduce carbon monoxide levels, are lacking, particularly in the area of the railroad station and along Railroad Avenue. Sidewalks are too narrow (some as small as two feet wide) and many are in disrepair even with missing curbs. There is no consistent design treatment. For example, some sidewalks have a small, impractical grass edge, while others do not. At the station, the sidewalks are five-foot wide with grassy strips on either side. In addition, pedestrians often have to navigate around obstructions, such as light poles, mailboxes, and electrical boxes, which take up much of the already narrow sidewalks.

Essex Street is a wide street: 70 feet from property line to property line, with four fast moving lanes of traffic and no on-street parking. Consequently, the majority of intersections are very wide and, therefore difficult for pedestrians -- particularly the elderly or those with small children -- to cross. In addition, most Essex Street crossings are unmarked; there also are no crosswalks at Essex Street around the train station. Because the station itself is setback from the street, it feels even more cut off from the rest of downtown. (Figure 15)

Polifly Road is an important north-south axis just two blocks west of the Essex Street station. It connects to Route 80 to the south and to Hackensack High School complex and residential areas to the north. Because of the volume of traffic at the Essex-Polify intersection, the curb-radius are enlarged, with dedicated right turn lanes. However, the result of this design feature is that cars do not have to stop or even slow down if they are making a right-hand turn. Pedestrians crossing this lane during a timed "walk" cycle are often caught by these turning cars and forced to seek refuge on the traffic median. Routing some traffic into this area using Lodi Street and S. Newman Street is a possibility to alleviate the conflicting movements and heavy volumes of traffic found at the intersection of Polify Road and Essex Street at certain times of the day.
A PROPOSED PROGRAM AND DESIGN BRIEF

The following section summarizes the redevelopment and design opportunities for the greater study area. It is a synthesis of the larger planning framework and the analysis of existing land uses and other conditions described above, and of the input received from several productive meetings with the Mayor and the City's consultants, Muller-Bohlin. The Design Brief is the basis for the design studies in the next section. It is based on the following evolving objectives:

• Stabilize and upgrade the industrial-residential mixed-use neighborhoods east of the tracks.

• Manage the transformation of the area north of Essex Street and west of the tracks into a "Health Services District."

• Manage the transition of the area immediately south of Essex Street and west of the tracks into a district for residential development.

• Re-design Essex Street as a significant pedestrian-oriented boulevard linking the County Government complex to the HUMC and the train station area. Redirect some traffic to Lodi Street and S. Newman Street to access area.

• Create a new node of transit-oriented development in the area of the Essex Street station. Parameters for this new node include the following:
  • Explore the massing and design for buildings that would accommodate a new civic center for the City
  • Explore site assembly/joint development opportunities as well as the potential for shared parking
  • Accommodate 800 commuter parking spaces
  • Consider including some complementary retail uses
  • Establish foundation for potential long term residential development

• Apply principles of transit-friendly design and development at the new transit node. These principles include the following:
  • Prioritize land-uses that take advantage of access to transit.
  • Design a station area that is a "place" with a strong sense of
identity and a high level of amenities for pedestrians.

- Orient buildings near the station towards the station, reinforcing the station as a visible and welcoming place by promoting activities.
- Establish a strong relationship between the station and the Essex Street corridor, including excellent visibility and site lines among activities and between the station and Essex Street.
- Prioritize pedestrian movements at both the station and along Essex Street while accommodating automobile parking and access and drop-off movements.
- Link the station to local transit services.

Figures 16 and 17 provide an overview of the design interventions for this program and design brief.

CREATING "ESSEX BOULEVARD"

The centerpiece of any urban design strategy for the area around the train station should be to establish the Essex Street corridor as a boulevard—a well-designed roadway with a distinct identity and clear spatial definition. The strategic role that the Essex Street corridor plays in linking the Hospital to the County Complex, with a transit-oriented redevelopment project at the midway point must be reflected, first in the architecture of the street and, eventually in the quality of the architecture along the road. The County Complex, in turn, is the gateway to the Main Street retail corridor extending north.
Figure 17: Illustrative plan of redevelopment proposal

Figure 18: Existing Plan
A boulevard is more than a wide street. Boulevards evoke images of size and formality, often with an emphasis on grandeur. Countless variations on design are possible. Among their most important functions was that of giving structure and comprehension to the whole city, often as large monumental ways that linked important destinations manifested in the form of large buildings.

Jacobs, Allan B; Great Streets; Cambridge, Mass; MIT Press; 1995

The idea of using Essex Street as the basis for "structure and comprehension" in this part of Hackensack and of "linking important destinations manifested in the form of large buildings" (in this case HUMC and the County Complex) seems clear. There are a variety of models for "boulevards". Typically, in keeping with the description above, one thinks of intensely urban ("formal and grand") places such as Park Avenue in New York City. But there are also boulevards that are in much less dense and less urban environments. Examples include: Monument Avenue in Richmond, Virginia, Fairmount Boulevard in Cleveland Heights, Ohio, and Orange Grove Boulevard in Pasadena, California. Jacobs even documents places where the boulevard is created with trees only, including Royal Palm Way in Palm Beach, Florida. (Figure 19)

Regardless of the density of the surrounding context, in each of these clearly defined space is created. The central issue for an "Essex Boulevard" design is what level of development is required to sustain it. The existing land-use pattern provides a clue: the overall floor area ratio (FAR) of the corridor is approximately 1.0, meaning that on average, the total floor area of the buildings along the corridor is about equivalent to the land area of the properties. (Figure 18, previous page) Given the disparate land ownership patterns and the moderate-to-low-density of the area, it seems unrealistic, even inappropriate, to envision a boulevard in which the corridor is lined for its entire length with buildings all of the same scale and in the same position relative to the sidewalk. Hackensack already has such a street—Main Street—that is supported by the density of the historic downtown core of the city with a much higher FAR.

At the other extreme, would be a well-designed but clearly suburban corridor, not unlike Fairmount Boulevard in Cleveland Heights, Ohio. Here, the identity and definition of the road relies almost exclusively on landscaping and roadway design.

An appropriate vision for Essex Street, given its current land uses, would lie between these two extremes: a corridor design that relies on a balance of 1) landscape and streetscape elements and street design feature to make the street pedestrian-friendly, 2) incorporation of existing properties into unified public
Figure 20: Overall illustrative plan of Essex Street as a boulevard
A unified landscaping and streetscaping plan is the first priority for a boulevard design. Street landscaping at key corners, in combination with raised crosswalks at the Station, at the corner of Polifly and Essex, and other prime intersections, upgrades the pedestrian experience while making intersections more eye-catching. Street trees in single or double rows and pedestrian-scaled architectural lighting fixtures are essential to create and to define the space of the street, both for pedestrians on sidewalks and automobiles in the carriageway. (Figure 21) While a more detailed design study of the road section is required, a median created with a combination of paving and landscape elements would also improve the design of the street. This median, which could be about eight feet wide, could potentially be created by reducing the lane widths to as narrow as ten feet—a feature which will also discourage vehicle speeding through the area. Alternatively, a traffic engineering study could show that a three-lane section is possible, with a center turning lane and on-street parking on one or both sides of the street. Currently, the roadway is 70 feet between property lines with four ten-foot lanes.

Sidewalks on Essex Street should be widened, by reconfiguring the roadway as well as setting back new development to create a boulevard feeling. Redesigned and widened sidewalks should incorporate distinctive paving materials and articulate clearly the edges of lawns, planted areas, and the edge of the roadway. This needs to be "balanced" with the reality that these streets must accommodate a lot of traffic volume. The good news is Hackensack is not a city bisected by a major highway, but this means traffic entering and leaving the city must use these local streets.

At intersections, "neck-downs" and articulated pedestrian crossings should be incorporated which facilitate street crossing by pedestrians and serve to reduce turning radii sufficiently to lower the speed of turning vehicles. The treatment of all north/south side streets should include corner neckdowns and pedestrian
crossings at Essex Street. Specifically, crosswalks and neck-downs should be added to the corners of Essex and Polifly, State, John, and at Railroad Avenue. A splitter island on the south side of the intersection of State and Essex would narrow this wide street while providing a refuge for pedestrians from right turning vehicles. At Essex and Polifly, the high-speed right turn lane should be narrowed and the island enlarged and landscaped. At Essex and Railroad Avenue, the roadway could be repaved with colored pavers to draw attention to this intersection as a pedestrian crossing and to slow passing motorists. The roadway could be striped in the short term. Raised crosswalks should be considered on Essex Street at the station, to slow vehicles as they pass through this important pedestrian area.

At State Street, additional sidewalk and bus waiting areas could be created at the bus stop by eliminating the median to accommodate a wider sidewalk. Bus shelters on the Essex Street side should be enlarged to provide adequate places for passenger waiting and boarding away from the constant flow of traffic.

Development standards and guidelines should prohibit or greatly reduce the number of curb cuts and entry and exit drives permitted for new development. In the short-term, perhaps some existing curb cuts around the McDonalds, the CVS and other businesses could be consolidated, creating more contiguous and consistent sidewalks, which will also have the effect of improving traffic flow and safety. Figure 22 illustrates these short and medium-term improvements.

Incorporation of Existing Properties in the Boulevard Design

The process of transforming the built environment along the boulevard will not happen overnight. Ownership patterns are disparate, and while an ambitious urban renewal process may facilitate the assembly or redevelopment of some of the more marginal uses, there are also a number of established properties along the corridor, especially multi-family residential dwellings, that are likely to remain for some time. However, this does not have to undermine the overall boulevard strategy. The open
Figure 22: Short and medium-term pedestrian improvements along Essex Street.
spaces in front of the existing properties can be incorporated into the design of the boulevard. Where at present a single, narrow pavement now connects the Essex Street sidewalk to a building entrance, a paved and landscaped area can be created using a palate of materials and landscaping compatible with the overall boulevard design. Similarly, the existing landscape setback areas can be upgraded and tied into the design. A somewhat more ambitious and long-term effort would be to relocate paved parking areas by consolidating lots, relocating lots to the sides or backs of buildings, or reconfiguring lots to allow for a generous landscaped buffer that could also be part of a unified design. (Figure 23)

From an implementation standpoint, it is important to describe a comprehensive vision at the outset. In this way, the coherent vision can be completed incrementally as each new redevelopment opportunity, or site improvement opportunity for existing properties, arises. A "Corridor Improvement District" (CID) could provide funds for maintenance and build-out of additional sections of the corridor. Incentives such as density bonuses or relief from parking requirements could also be used.

Strategic Siting of New Buildings

Redevelopment provides the greatest opportunity to create a unified vision for a new "Essex Boulevard." Building massing and placement is the single greatest determinant of the scale and spatial definition of the street. As noted earlier, the model is not a "main street" in which all of the buildings are at the sidewalk line. The pattern in this part of the city is one of generous front setback yards and so should it be with new buildings. In general, along the boulevard, the appropriate scale is six stories with an expression at four stories to help manage the transition to the generally lower scale of the context. Building entrances should be oriented towards Essex Street with a maximum amount of transparency and glazing on the first two stories. Key locations should have retail and other active uses at the ground floors. These could include clinics, cafeterias, public access offices, and the new City Hall, for example. Parking should be located behind
A PROPOSED PROGRAM AND DESIGN BRIEF

the buildings, accessible from curb cuts on the side streets wherever possible. A low speed drive to a building entrance from Essex Street would be permissible contingent on a design compatible with the boulevard streetscape and landscape design. (Figure 24, previous page)

Of course, each redevelopment site is an opportunity to complete a section of the larger boulevard design. Paving materials, lighting and landscaping should create the impression that the space in front of the building is an extension of the boulevard design.

On the properties on the south side of Essex Street proximate to the station, the design of the space in front of any new building should respect sight lines to the station entrance and the portion of the platform closest to Essex Street. Space for convenience retail establishments should be designed for as well.

Finally, the corridor design should reflect the importance of important intersections. In addition to the intersections with Main Street at the County Complex and Prospect Avenue at the Hospital complex (2 of the corners of the larger loop described above) there is an important intersection at Polifly Road. Polifly Road is an important north-south axis, connecting to Route 80 towards the south and to Hackensack High School complex and residential areas to the north. Because of the volume of traffic at this intersection, the curb-radii are larger and the crossing distances seem prohibitive for pedestrians. (Figure 25)

As was mentioned earlier, each of the four corners is undistinguished—two vacant gas stations, a CVS and a diner. In the long term, the redevelopment of the corner sites should include an architectural response to the role of this intersection as a major gateway.

THE HEALTH SERVICES DISTRICT AS AN "URBAN CAMPUS"

As described above, the area on the north side of Essex Street, between Prospect Avenue and the railroad tracks, is envisioned by the City of Hackensack as the primary expansion area for the
Hackensack University Medical Center (HUMC) and related "health services" uses. The likelihood that not all of the properties will be assembled by the HUMC means that a "Health Services District" could and should remain a mixed-use agglomeration of new and existing activities where people will need access to their businesses and homes.

As with other urban campuses, the Health Services District would not be a closed precinct. Existing roads would continue to run through it and the underlying street pattern of the area would remain largely unchanged. It is possible to create a sense of identity for this area without closing more streets. The creation of new "superblocks" would not be in the best interests of both vehicular and pedestrian circulation. Still, the goal of giving this area a discrete identity means trying to articulate the edges, much as traditional downtowns try to identify the edges of their core business districts.

The existing street pattern suggests where the larger district boundaries should be: Prospect Avenue to the west, the railroad line to the east, Essex Street to the south and Atlantic Street to the North. Because Atlantic Street is the first east-west road that is continuous from West Railroad Avenue to Prospect Avenue, it is logical that it becomes the northern boundary. The existing HUMC complex occupies a "superblock" at the top of the hill bounded by Essex Street and Atlantic Street. Similarly, the Oratam Court Housing project is a superblock adjacent to the tracks into which a number of smaller roads dead end. These two superblocks "frame" the internal street network that would be the core of the new Health Services District.

The edges of the District could be articulated in a variety of ways including through the massing of new buildings. But in the shorter-term, streetscape improvements such as paving materials, street furniture and lighting, street trees and signage would signal the limits of the District.

It is inevitable that the long-term redevelopment program of the Health Services District will change over the years. Thus, it is not appropriate to propose a detailed plan here. Nevertheless, a massing strategy can be suggested for three "soft blocks" bounded by First Street (the continuation of Polifly Road), Newman Street, Sussex Street and Atlantic Street. (Figure 26)
A low-density mix of commercial uses characterizes this area of industrial uses, scattered single-family homes, and vacant lots. The schematic organization proposed here is an "edge and core" strategy: the centers of the three blocks would be reserved for low-rise parking structures, which would be accessed from a new north-south road through all three of the blocks. New buildings related to long-term hospital expansion would occupy the ends of the blocks to create primary frontages along Newman Street and First Street. These buildings could be a combination of housing for staff, professional office space, and facilities more directly related to hospital functions. This area may also accommodate expansion of facilities for higher education such as a branch of Bergen County Community College which would offer health care courses. Regardless of the program, building heights should vary between six and eight stories. The frontages along First Street should recognize the importance of this road as a connection between the residential areas along Polifly Road south of Essex Street and the High School campus. These buildings may be in the eight-story range as the residential buildings along Polifly Road and the north side of First Street are that scale. The landscaped front yards of these buildings should be part of a comprehensive streetscaping/landscaping plan that relies on many of the same principles and techniques described above for "Essex Boulevard."

Finally, one can anticipate that a range of street types that will be used to move between the primary hospital entrances at the top of the hill, and the station area. In particular, those bounding the new Health Services District urban campus should be pedestrian friendly, well lit, and promote passive surveillance with clearly marked pedestrian crossings at intersections. (Figure 27)

RE-THINKING URBAN MANUFACTURING

The continued vitality of mixed-use neighborhoods, and the tendency for manufacturers, especially small manufacturers, to thrive when they are part of the so-called "agglomeration economies" of urban locations has caused many cities to rethink the simple proposition that has guided traditional zoning: that urban manufacturing should either be uprooted entirely or com-
completely isolated from all other land uses. At the same time, changes in technology have enabled a variety of manufacturers to co-locate with commercial and residential uses. Examples are electronic assembly, jewelry manufacturers, and graphics/publishing. All of this suggests a more fine-grained approach to urban manufacturing, which are compatible with nearby residential uses. (Figures 28 and 29, previous page)

New York, Portland, and Chicago are making distinctions between the different kinds of manufacturing districts that go beyond the standard coarse classifications of "light, medium and heavy manufacturing". A strategic audit of Hackensack’s manufacturing areas may suggest that some areas should become either 1) industrial preservation zones reserved exclusively for manufacturing, or 2) mixed-use areas, or 3) areas of transition where commercial and residential uses will ultimately replace manufacturing uses. Regulations should reflect this typology by 1) denying variances and special and special permits in industrial preservation areas, 2) promoting performance zoning and increased integration with surrounding neighborhoods in mixed-use areas and, 3) developing special overlay districts for transitional areas.

Certainly there are challenges to managing this kind of pattern. From an urban design point of view, the industrial buildings do not comport well with the one and two story residential buildings. These are unarticulated masonry boxes with little fenestration or transparency and paved areas from the building line the street. Sidewalks are often discontinuous at these properties with asphalt extended to the street as one continuous curb cut. (Figure 30)

There are also challenges from an operational point of view: hours for loading and delivery may be very early or very late in the day as well as noisy. There may be early and later shifts for workers as well. Small trucks and vans, as well as parking for employees, even if in small numbers, can become neighborhood nuisances. Noise levels and odors must be carefully monitored.

To that end, the City of Hackensack should consider the possibility of "performance-based zoning" for the industrial districts east of the tracks. In return for higher environmental standards,
greater safety and community improvements, performance-based criteria provide greater flexibility to the developer by allowing greater siting opportunities for any development that meets specified, state-of-the-art performance standards. Criteria might consider permitted emissions, pollution prevention or control, levels of hazardous substances used or stored, engineering design, enclosure, size, scale, hours of operation, and landscaping. Hackensack could introduce a compatibility index (much like the one successfully developed and implemented in Vancouver) to establish for each zoning district the degree of separation required between commercial, manufacturing and residential activities based on their compatibility with each other.

Hackensack should initiate a study to get a detailed picture of what industrial uses seem to be viable in these neighborhoods and then provide incentives to “grow them.” One intriguing possibility is a bio-medical complex that would build on synergies between the hospital, expanded into the Health Services District, and small manufacturers of products used in research and medical procedures. (A comparable situation exists in Somerset County, New Jersey between the pharmaceutical companies in the Route 28 corridor and a variety of testing laboratories and small manufacturers who produce plastic extrusions for equipment).

As to the physical design of these areas, there are a variety of ways to improve the appearance and function of the industrial properties. The irregular leftover spaces used for parking, loading and storage could be consolidated and rationalized. Some of the new spaces could be dedicated for shared parking and loading operations. Consolidation of these manufacturing-related activities would help manage small truck traffic within the district, minimizing conflicts with nearby residential uses.

Other new spaces could become shared plazas with landscaping. These spaces are not only a shared amenity for the industrial workers, but can become part of a new open space network linking the manufacturing district to the surrounding street network. Gateways to these spaces will give the district a new, positive identity. Pedestrian circulation to the neighborhood, Essex Street, and the train station would be improved. Over time, improved appearance and performance will help attract more
investment. The long-term vision is one in which this becomes a "flex district," an incubator for a variety of small, high value added manufacturers. *(Figure 31, previous page)*

**THE STATION AREA**

The existing Essex Street train station sits within an undefined landscape of surface parking and low-rise buildings that have no relationship to one another. There are also a number of existing and proposed marginal uses that, should they become part of the station area redevelopment plan, (e.g., the Wendy's franchise proposed for the adjacent Falsetto property now owned by the city) should be discouraged, as these uses squander excellent access to an important transit asset and are not commensurate from an architectural point of view with the importance of the Essex Street corridor. The two marginal residential properties on the corner of this block should also be redeveloped to create a regularly shaped development parcel of approximately one and one half acres capable of supporting the civic, commercial or hospital-related programs discussed above. Finally, the oddly configured block formed by the acute intersection of John Street and Essex Street should be redeveloped as it helps create a gateway from the transit station to the County complex. Collectively, the redevelopment opportunities described above present an opportunity to create a "place" at the train station framed by new buildings and new activities. *(Figure 32)*

**A BASIC STRATEGY FOR MEETING PARKING DEMAND**

In the immediate term, NJ TRANSIT can meet its anticipated demand for increased parking resulting from the Secaucus Transfer on NJ TRANSIT property. However, because the NJ TRANSIT properties on both sides of the tracks are surrounded by vacant or underutilized properties, it is possible to speculate on a number of joint redevelopment scenarios to achieve any of the several programs that have been suggested. One site assembly strategy is to combine the NJ TRANSIT property on the west side of the tracks with the adjacent property owned by HUMC, currently the site of an MRI facility. An even more ambi-
The configuration and sizes of these two adjacent parcels create opportunities for joint redevelopment, which have been considered by HUMC, the City, and NJ TRANSIT. The possibilities include a new municipal center, a medical arts office building, a commercial office building, and a mixed-use development combining housing with these other uses. Regardless of the use program, a joint development would take advantage of shared parking opportunities. Joint development has a variety of benefits, and in particular, the creation of a development site that is large enough and regular enough to accommodate a variety of development types and sizes over time. However, if this is not possible, the properties can individually support the programs of the individual landowners.

The NJ TRANSIT property on the east side of the tracks is narrow and more difficult to use. It is wide enough to accommodate only a limited number of parking spaces. As NJ TRANSIT moves forward with its parking feasibility study, a number of alternates are possible: One of these is for a parking structure on the larger NJTRANSIT parcel to bridge the tracks, taking advantage of the air rights over the tracks and the extra dimension gained by the narrow parcel. However, this solution presents a number of design challenges, even if the site assembly possibilities described above do not materialize, and NJ TRANSIT must accommodate its parking needs exclusively on its property.

SITE CONFIGURATION: CREATING A STATION PLAZA

The logical first step given NJ TRANSIT’s parking needs, is to build a parking structure on the NJ TRANSIT property that would create a public space that links to Essex Street and in turn, to other destinations including the County Complex. Site planning around the train station will continue to be influenced by the location and geometry of the property lines, which have the same ori-
Figure 33: Perspective of garage development on NJ Transit property only

Figure 34: Plan alternative for a development on the NJ Transit property only
entation as Essex Street, and the tracks which cross Essex Street and the adjacent properties at an angle. If new buildings are oriented towards Essex Street, the open space in front of the station will have the same geometry as the existing surface parking lot—a space that is narrower at the Essex street frontage and wider at the south end of the site. A new building on the "Falsetto site," oriented towards Essex Street, would frame the eastern edge of the new station area. The result will be a clearly defined rectangular space, with the tracks passing through at a slight angle. The triangular spaces between the tracks and a new building on the Falsetto site can be a combination of landscaping, surface parking, and an access road to the parking structures at the south end of the site.

On the west side of the tracks, a triangular open space between new buildings and the tracks, approximately the size of the existing surface parking lot, could become a new station plaza. A loop road around this space could provide a pick-up and drop-off area along the side of the platform and access to the structured parking at the south end of the site.

The intention is to create a station area that is activated not only by the station, but also by the buildings that frame this new space. The buildings must be designed as if they are on important corner sites; that is, they must simultaneously have two orientations, towards Essex Street and towards the new station plaza. The space of the station plaza must be framed not by the sides of buildings, but by facades activated with entrances and windows into the lower floors. A major bus stop located along Essex Street would be retained there.

The entrance to the station plaza should be clearly marked and clearly visible from several blocks east and west along Essex Street. The curve in Essex Street creates additional and potentially dynamic sight lines into the station area as approached from the east. The building setbacks for the buildings along Essex Street will help create sight lines to the station. In the long term, a more ambitious station structure of some kind could anchor the end of the platform at Essex Street, providing a visible marker for this transportation node along "Essex Boulevard." (Figures 33 and 34, previous page)
APPENDICES

To assist the implementation process, three Appendices are provided in this report. The first, Appendix A, catalogues in chart form the recommendations contained herein by time frame -- short, intermediate, or long-term - and indicates the appropriate entities to both lead and assist in their implementation.

Appendix B offers a list of potential state funding sources that the City of Hackensack could consider in seeking assistance to move forward on the recommendations described in this report. Appendix C is a copy of an April 1999 New Jersey Department of Transportation report detailing funding sources for pedestrian and bicycle planning, programs and projects.

Appendix A: Recommendations and Implementation Chart

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Appendix B: Funding Opportunities

The City of Hackensack can (and should) seek funding from existing grant programs to help them implement some of the recommended strategies contained herein. In particular, the following programs offer possible funding assistance:

New Jersey Department of Transportation

Local Planning Assistance: to help communities create Access Management Plans, local circulation plans and other transportation plans.

Local Bicycle / Pedestrian Planning Assistance: consultant technical assistance to help communities develop plans to enhance bicycle and pedestrian safety.

Corridor and Regional Planning Studies: involving state roads to help communities determine transportation needs and develop proposals to address these needs.

Local Aid for Centers of Place: to help communities who have participated in the State Development and Redevelopment Plan process

Locally Initiated Pedestrian Projects: offers funding to communities and counties to enhance pedestrian access and safety

Locally Initiated Bicycle Projects: offers funding to communities and counties to enhance bicycle access and safety

County Aid, Municipal Aid, and Discretionary Programs: provides funding to communities and counties for improvement of roads, bridges, public transportation, incidental bicycle and pedestrian improvements.
Department of Community Affairs - Office of State Planning

**Smart Growth Planning Grants:** $3 million is available each fiscal year to help communities plan for their growth based on the State Development and Redevelopment Plan.

**The Brownfields Program:** Offers "one stop shopping" for state funds and technical assistance on all phases of brownfields redevelopment.

New Jersey Economic Development Authority

The EDA creates public/private partnerships to bridge financing gaps and to increase access to capital for the State's business community with an emphasis on small and middle size businesses and not-for-profit organizations. Also offered is a full range of real estate development services to stimulate both private and public development projects, particularly in urban areas.

New Jersey Department of Environmental Protection

Two new tree planting and care grants are currently available through the New Jersey Community Forestry Program, with continuing funding for a third grant. Under the New Jersey Tree Planting Grant, the Community Stewardship Incentive Program and the Green Communities Grant, funds can either be awarded to support municipal tree planting plans or to provide funds for a
county or municipality to hire an outside firm to assist in the pro-
duction of a community forestry management plan.

Appendix C: NEW JERSEY DEPARTMENT OF
TRANSPORTATION Compilation of
Funding Sources for Pedestrian and
Bicycle Planning, Programs and
Projects

Introduction/Acknowledgements

What follows below is a compilation and brief description of
sources of funding which have been or could be used to fund
pedestrian improvements in New Jersey. The list is not exhaus-
tive, but there has been an attempt to identify all major funding
sources that can be utilized to fund bicycle and pedestrian plan-
ing and project development activities, as well as funding con-
struction. In some cases these funds may also be used to fund
programmatic activities, as well. There is an emphasis on those
funding sources that have been utilized in or are unique to New
Jersey.

Much of this material was originally taken directly from a
Memorandum on Funding Sources for Innovative Local
Transportation Projects prepared by the Tri-State Transportation
Campaign, and a paper on bicycle and pedestrian funding within
ISTEA prepared by the Bicycle Federation of America. Virtually all
of the funding sources which were available for bicycle or pedes-
trian projects or planning under ISTEA have been continued
under the new Federal transportation funding legislation: the
Transportation Equity Act for the 21st Century (TEA-21).
Additional material has been taken from the USDOT publication
"A Summary; Bicycle and Pedestrian Provisions of the
Federal-Aid Program."

This material should continue to be viewed as a "work in
progress" to be updated as new sources are identified.
Funding of Planning and Programmatic Activities

Federal and/or State Funded Programming Assistance

Technical Studies Program

This program provides federal grants for (consultant based) planning, engineering, design, and evaluation of transportation projects, i.e., studies, not capital improvements or operating costs. Applicants for grants can include state or local governmental entities. Funding can be used to fund pedestrian and bicycle planning activities. Monmouth County has received approval to carry out a planning study to address pedestrian needs and opportunities in several major corridors in the County. Somerset County has received funding for a traffic calming study of selected locations in the county.

Supportive Task Grants

A portion of PL funds passed through to the MPO to support MPO planning activities is, by agreement in the NJTPA passed through to the sub-regions (counties) to fund staff planning activities. Monmouth County has used this funding source to carry out a county-wide pedestrian facilities inventory. The inventory is being used as a basis for developing local lead projects.

Transportation Management Associations

In New Jersey, Transportation Management Associations receive substantial funding assistance through the Department of Transportation. In recent years, these funds have been from Federal sources (CMAQ, or STP). (In the past, funding came from State sources). TMAs have considerable latitude in developing annual work programs to implement Travel Demand Management strategies. TMAs have carried out and are encour-
aged to continue to develop and undertake work program elements involving the promotion of bicycling and walking, development of bicycling suitability maps- promotional efforts aimed at increasing bicycling and walking, effective cycling presentations, etc.

**Local Planning Assistance**

This program provides funding to retain consultant assistance for the purpose of fostering sound transportation planning at the local level. The Department partners with municipalities who desire to develop Access Management Plans, local circulation plans and other transportation related plans SDRP designated centers and target neighborhoods under the Governor’s Urban Strategies Initiatives receive priority. This funding source could be used to develop local pedestrian/bicycle circulation plans and facilities inventories. To date, none of the studies funds have been of this type. This program is administered by the Division of Transportation Systems Planning, Bureau of Mobility Strategies, New Jersey Department of Transportation.

**Local Bicycle/Pedestrian Planning Assistance**

The Department of Transportation has retained the services of consultant teams with expertise in pedestrian and bicycle planning. The consultants are available to provide technical planning assistance to counties and municipalities who wish to develop pedestrian and bicycle local circulation plans and other related studies. Guidelines for participation in the program are available from the Department’s Bicycle/Pedestrian Advocate. This program is administered by Division of Transportation Systems Planning, Bureau of Mobility Strategies, New Jersey Department of Transportation.

**Corridor and Regional Planning Studies (TDM) Component**

The NJDOT Division of Transportation Systems Planning carries out numerous corridor and regional planning studies to determine transportation needs and develop project proposals to address those needs. It is the current policy of the Division to take a multi-modal approach in all planning activities in the Division. The
Department has retained the services of consultant teams with expertise in Travel Demand Management (TDM) strategies, including walking and bicycling, to participate in and support other planning activities in the Division. These consultant teams are available to undertake planning studies which examine multi-modal solutions to transportation needs. This could include the accommodation of bicycle and/or pedestrian travel needs. This program is administered by Division of Transportation Systems Planning, Bureau of Mobility Strategies, New Jersey Department of Transportation.

**Other Sources of Funding**

Bicycle and pedestrian planning activities and programs can and have been funded through local programs included in county and municipal budgets.

**Federal Funding of Capital Projects**

**Federal Funding Under TEA-21**

All the major funding programs under the federal Transportation Enhancement Act (TEA-21) include bicycle and pedestrian facilities and programs as eligible activities.

**National Highway System (NHS)**

The NHS is comprised of the 42,000-mile Interstate system and another 113,000 miles of roads identified by the states based on their importance to the national and regional economy, and their connectivity. NHS funding-for project on NHS roadways- can be used for bicycle and pedestrian improvements on or on land adjacent to any highway on the NHS system, including Interstate highways. This includes incidental improvements within larger projects which enable bicycle compatibility (e.g. paved shoulders, bicycle safe drainage grates, etc., designated bicycle facilities (i.e. bikeways: signed routes, bike lanes, paths), and pedestrian accommodations such as sidewalks, signals, overpasses, crosswalks, etc. It also includes the funding of independent bicycle and pedestrian projects along (within the right of way) or in the vicinity of (associated with) NHS roadways. Independent bicycle and
pedestrian projects would be those initiated primarily to benefit bicycle and pedestrian travel. Projects could include shoulder paving, bicycle safe drainage grates, construction of sidewalks or bikeways, installation of pedestrian signals, crosswalks or overpasses.

**Surface Transportation Program (STP) Funds**

A broadly defined program giving states wide flexibility to invest in a wide variety of transportation activities. Bicycle and Pedestrian facilities and walkways are specifically listed as eligible activities under this program. As with NHS, pedestrian and bicycle improvements may be incidental improvements within larger projects which establish bicycle compatibility (e.g. paved shoulders, bicycle safe drainage grates, etc.), or designated bicycle facilities (i.e. bikeways: signed routes, bike lanes, paths), and pedestrian accommodations such as sidewalks, signals, overpasses, crosswalks, etc. It also can include the funding of independent bicycle and pedestrian projects along (within the right of way) or in the vicinity of (associated with) roadways. Independent bicycle and pedestrian projects would be those initiated primarily to benefit bicycle and pedestrian travel. Projects could include shoulder paving, bicycle safe drainage grates, construction of sidewalks or bikeways, installation of pedestrian signals, crosswalks or overpasses. Under TEA-21, it is specified that these funds may be used for the modification of sidewalks to comply with the Americans for Disabilities Act. A number of projects initiated by NJDOT as bike/pedestrian new starts in FY97 utilizing CMAQ funding (see below) have been programmed (subsequent phases of project development) in out years with STP funds. It should be noted that STP funds may be used for non-construction "projects" (such as maps, brochures, public service announcements) related to safe bicycle use and walking.

**Local Scoping and Local Lead Projects**

The Local Scoping program (in the MPOs) provides a set aside of federal (STP) funds directly to the sub regions for the advancement of project proposals through the NEPA process, ultimately making that project eligible for inclusion in the TIP (as a Local Lead project). Subregions (counties) apply for inclusion in the
program, which are screened through a competitive selection process. Once scoping is completed, projects may advance as local lead projects.

Projects that clearly have no significant adverse environmental impacts may be eligible to move directly to the Local Lead program. Counties (plus municipalities partnering with counties) can receive STP funds for final design and construction of projects that are included in the TIP. Local Lead projects are selected via a competitive selection process.

Each of these sources of funds can be used to advance bicycle or pedestrian projects. As yet, only a handful of local scoping/local lead projects have directly addressed non-motorized needs as independent projects. Local Scoping/Local lead projects can also benefit the non-motorized modes if they incorporate, incidentally, features that address bicycle and pedestrian travel needs.

Transportation Enhancements

This is probably the best known source of federal funds available for pedestrian and bicycle improvements. In each state, ten percent of STP funds must be allocated to a set of 12 specific types of projects known as Transportation Enhancements. Pedestrian and bicycle projects and the conversion of abandoned railway corridors to trails are two of the 12 project types. Other project types, including landscaping/scenic beautification, rehabilitation and operation of historic transportation facilities, such as canals, towpaths, bridges, viaducts, may directly benefit or provide for bicycle and pedestrian needs. A multi-discipline Committee reviews the projects and makes recommendations to the Commissioner of Transportation who makes final selections. The program is administered by NJDOT’s Division of Local Government Services.

Hazard Elimination Program

Another STP program set aside, 10% of the STP program is to be used to fund Safety projects. Funding is provided for safety-oriented improvements. Improvements that either directly or indirectly improve conditions for pedestrians can be funded. In New
Jersey, the program is administered by the NJDOT Bureau of Traffic Engineering and Safety (in the near future it will be transferred to a new Bureau of Safety Programs. In general, projects are selected on the basis of excessive occurrence of a particular accident type at a given location. This often involves some sort of intersection modification such as resurfacing with a skid resistant pavement surface. In some cases safety improvements have included the installation of pedestrian signal heads. NJDOT is revising its project selection process. The new process will include specific accident categories for which projects are to be funded. One of these categories will be pedestrian related accidents.

**Congestion Mitigation and Air Quality (CMAQ)**

As was the case under ISTEA, under TEA-21, pedestrian and bicycle improvements are among the types of projects eligible for CMAQ funding. In New Jersey, for FY97, the NJDOT initiated approximately a dozen independent bicycle and pedestrian projects utilizing CMAQ funding; later phases of the projects were funded with STP funds.

**National Recreational Trails Fund (Symms Trails System Act)**

An annual sum is apportioned to the states for use in developing trails related projects many of which benefit bicyclists and pedestrians. Funding is from federal motor fuels taxes collected on sale of fuel for motorized recreational vehicles (ATV’s, off road motor cycles, snowmobiles) The program (including solicitation of projects and project selection is administered by the Office of Natural Lands Management in the Department of Environmental Protection. State, county, local governments, and non-profit organizations are eligible for funds.

**Scenic Byways**

A small grants program under which pedestrian projects may be funded if they are in fulfillment of a management plan for a designated scenic byway. Designation of the scenic byway must be in accordance with a Scenic Byways program developed and adopt-
New Jersey has adopted a Scenic Byways program, and, as a case study, a management plan for the first proposed scenic byway in the state (State Route 29, in Mercer and Hunterdon Counties along the Delaware River).

Benefits of adoption as a Scenic Byway under the Program could include direct funding of projects (assuming the passage of federal transportation legislation which includes Scenic Byways funding); and, through preferential treatment in the funding/seletion process for other funding sources administered by the Department, for projects which are in fulfillment of a scenic byways management plan.

**Section 402 Safety Funds**

Funds administered by National Highway Traffic Safety Administration (NHTSA) to be spent on non-construction activities to improve the safety of the traveling public. Pedestrian and bicycle projects are on the NHTSA priority list. In each state, the program is administered by a designated Highway Safety representative. In New Jersey, the designated representative is the Director of the Division of Highway Traffic Safety in the Department of Law and Public Safety.

Pedestrian projects have been funded, including the development and dissemination of brochures and PSAs promoting safe pedestrian practices and a 3-E (Engineering, Enforcement, Education) program in cooperation with the City of Trenton which includes road signs and crosswalk marking. Recently, cooperative pedestrian safety programs have been implemented with Jersey City and Elizabeth. This program may be repeated in other communities with high pedestrian accident experiences, where there is local support.

**Federal Transit Administration Funds**

Title 49 U.S.C. (As amended by TEA-21) allows the Urbanized Area Formula Grants, Capital Investment Grants and Loans, and Formula Program/Other than Urbanized Area transit funds to be used for improving bicycle and pedestrian access to transit
facilities and vehicles.

TEA-21 also created a Transit Enhancement Activity program with a 1% set-aside of Urbanized Area Formula Grant funds designated for, among other things, pedestrian access and walkways and bicycle access, including storage equipment and installing equipment for transporting bicycles on mass transit vehicles.

**Federal Community Development Block Grant (CDBG) Program**

Federal block grant funding from the Department of Housing and Urban Development can and has been used to fund pedestrian improvements. Projects must occur in eligible low or moderate income areas (as defined by HUD) or benefit special needs groups. Funding flows directly to counties and municipalities. In Monmouth County, for example, a compact of 49 of the 53 municipalities worked together to identify and select eligible projects (in 1997, $3.854 million was available to fund projects). Some municipalities receive funding directly. Examples of projects funded which benefit pedestrians has included streetscape improvements, sidewalk installation, curb ramps, and building modifications to meets ADA access requirements.

**State Funding of Capital Projects**

**Local Aid for Centers of Place**

A New Jersey Department of Transportation funding program designed to assist municipalities who have formally participated in implementation of the New Jersey State Development and Redevelopment Plan (SDRP). Such participation entails designation as a Center by the State Planning Commission, preparation of a Strategic Revitalization Plan and Program which has been approved by the Commission, or entrance into an Urban Complex, which has been approved by the Commission. The program provides the opportunity to apply for funds to support non-traditional transportation improvements that advance municipal growth management objectives as outlined in the action planning agenda of the municipality.
Participation of municipalities in the SDRP ensures eligibility to compete for funds in the program. Typical projects include:

- pedestrian and bicycle improvements
- adaptive reuse of abandoned railway corridors (pedestrian and bicycle trails)
- scenic or historic transportation improvements
- landscaping/beautification of transportation related facilities (streetscape improvements)
- rehabilitation of transportation structures

In general, eligible projects are similar to Transportation Enhancements projects, but only SDRP municipalities are eligible to apply for funding. Allowable costs include preliminary engineering, design and construction. An annual solicitation for project proposals sent to all eligible municipalities. The program is administered by the NJDOT Division of Local Government Services in cooperation with the Bureau of Statewide Planning.

County Aid Program

This program provides funding to counties for transportation projects. These funds are allocated to New Jersey’s 21 counties by a formula that takes into account road mileage and population. Annually, each county develops a Capital Transportation Program that identifies all projects to be undertaken and their estimated cost. Projects may include improvements to public roads and bridges under county jurisdiction, public transportation or other transportation related work. Funding can be used for design, ROW, and constriction.

Independent pedestrian and bicycle projects can be funded under the county aid program, however, few independent pedestrian and bicycle projects have been funded, to date. The challenge is to encourage counties to include pedestrian and bicycle projects among those that they propose to fund.

As "state funded" projects, all projects funded under county aid program are subject to the NJDOT policy that requires that all
"...bicycle and pedestrian traffic should be incorporated into the planning, design, construction and operation of all projects and programs funded or processed by the NJDOT." The Department of Transportation will continue efforts to encourage counties to comply with this policy mandate.

**Municipal Aid Program**

The Municipal Aid Program provides funding to municipalities for transportation projects. Funding is made available for municipalities in each county based on a formula that takes into account municipal road mileage within the county and county population. These funds are allocated to individual projects within various municipalities through a competitive process. Funding is allotted to municipalities that qualify for Urban Aid under N.J.S.A. 52:D-178, et. seq.

All 566 municipalities may apply. Projects may be improvements to public roads and bridges under municipal jurisdiction. Applications are solicited, evaluated, and rated by NJDOT staff. The results are presented to a Screening Committee comprised of Municipal Engineers and Department Staff appointed by the Commissioner. The Committee evaluates the projects and makes recommendations to the Commissioner for approval.

The Department will pay 75% of the award amount at the time that the award of construction is approved by the Department. The remaining amount is paid upon project completion.

As is the case with the County aid program, independent pedestrian and bicycle projects can be funded under the municipal aid program; however, few if any independent pedestrian and bicycle projects have been funded through this program. Municipalities need to be encouraged to include pedestrian and bicycle projects among those which they propose to fund, and make such adjustments in the program and project selection process so that these projects are ultimately selected and funded.

As with county aid projects, all projects funded under municipal aid program are subject to the NJDOT policy which requires that
all "...bicycle and pedestrian traffic should be incorporated into
the planning, design, construction and operation of all projects
and programs funded or processed by the NJDOT."

**Discretionary Aid Program**

The Discretionary Aid Program provides funding to address
emergency or regional needs throughout the state. Any county or
municipality may apply at any time. These projects are approved
at the discretion of the Commissioner.

As "state funded" projects, all projects funded under the discre-
tionary aid program are subject to NJDOT policy which requires
that all "...bicycle and pedestrian traffic should be incorporated
into the planning, design, construction and operation of all proj-
ects and programs funded or processed by the NJDOT."

The Department will pay 75% of the award amount at the time of
the award of construction with the remaining amount to be paid
upon project completion.

In FY98 and FY99 this program was used a significant funding
source for independent pedestrian and bicycle projects. In FY98,
the Commissioner earmarked a minimum of $1.5 million of
Discretionary Aid to be used for pedestrian projects. In FY99,
$1.5 million was earmarked for pedestrian projects, and $10.0
million was earmarked for bicycle projects.

**Locally Initiated Bicycle Projects**

Provides funds for municipalities and counties for the construc-
tion of bicycle projects. These could include roadway improve-
ments which enable a roadway or street to safely accommodate
bicycle traffic, or designated bikeways (signed bike routes bike
lanes or multi-use trails). The solicitation for project applications
occurs at the same time as the solicitation for municipal aid proj-
ects. Applications are solicited, evaluated, and rated by NJDOT
staff. Based on this evaluation, a list of recommended projects is
proposed to the Commissioner of Transportation, who makes the
final selection. The program is administered by NJDOT’s Division
of Local Government Services.
Locally Initiated Pedestrian Projects

Provides funds for municipalities and counties for the construction of pedestrian access and safety improvements. The solicitation for project applications occurs at the same time as the solicitation for Municipal Aid projects. Applications are solicited, evaluated, and rated by DOT staff. Based on this evaluation, a list of recommended projects is proposed to the Commissioner of Transportation, who makes the final selection. The program is administered by DOT’s Division of Local Government Services.

Livable Communities Pilot Program

This new (2002) program provides additional funding to municipal governments for planning, design and implementation of projects to further investments in the statewide transportation infrastructure and/or to support non-traditional transportation projects developed at the local level to advance community based needs and goals. The framework for the program is based upon the highly successful Transportation Enhancement Program federally funded through TEA-21. NJDOT’s FY03 Budget includes $9 million that has been earmarked to fund "statewide livable communities" initiatives through program. These funds are above and beyond the funding made available through the Transportation Trust Fund and the Transportation Equity Act for the 21st Century (TEA-21). Eligible project costs include planning, strategic planning, design and construction. The program is administered by the NJDOT Division of Local Aid.

County or Municipal Capital (Public Works) Funding

County or Municipal funding can be used to fund pedestrian improvements sidewalks trails crosswalks signals, traffic calming, etc, on rights of way under county or municipal jurisdiction by including the project in the municipal (or county) budget, or bonding for it, just as they are used to fund the construction and rehabilitation of roadway improvements for cars. Pedestrian improvements can be fully or partially assessed against the property
owners along whose frontage the improvement (ordinarily a sidewalk) is placed.

As with other categories of funding, bicycle and pedestrian improvements may be incidental to (a part of) larger, roadway projects; or they can be independent, i.e. solely to address pedestrian needs. Even small amounts of funding in county or municipal sources can be very important since they may be used to leverage or show local commitment in applications for other funding sources (e.g. TE, Local Aid For Centers, etc.).

**Special Assessment Districts**

Another form of municipal funding is through the creation of a local Special Improvement District (SID). The Borough of Fair Lawn (for example) established a Special Improvement District in which assessments are made on those seeking to develop or improve property. The Borough provided $100,000 in matching funds. The funding is used for infrastructure improvements including pedestrian improvements within the district. Here, also, funding can be used to leverage or show local commitment in applications for other funding sources.

**Transportation Development Districts (TDD)**

A Joint state/county program in New Jersey in which transportation improvements within a defined growth area are funded through a combination of public funding and developer contributions (for new developments) within the district. Theoretically, independent pedestrian improvements can be included in the infrastructure improvement plan developed through a joint planning process for the district, and funded through the TDD.

**Green Acres**

State Green Acres grants and loans can and have been used to fund pedestrian projects such as multi use trails and trail head facilities. Funding for state, county and local governments (and non-profits - acquisition only with a 50% match) is available for land acquisition and facilities development. The source of these
funds is state bond issues. The program is administered by the Green Acres Office in the Department of Environmental Protection.

**Developer Provided Facilities**

The current Residential Site Improvement Standards currently in effect in New Jersey require new residential developments to include sidewalks. Other municipal and state zoning or access code regulations have been used to require developers to provide both on site and off site improvements to benefit bicycle and pedestrian traffic.