

# World Transport Policy & Practice

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# World Transport Policy & Practice

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WTPP has a philosophy based on the equal importance of academic rigour and a strong commitment to ideas, policies and practical initiatives that will bring about a reduction in global dependency on cars, lorries and aircraft.

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# Emerging European-style planning in the USA: Transit-oriented development

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## Abstract

The New Jersey Transit Village Initiative demonstrates a new role for state planning in the USA, one that is more European-like in nature. In an attempt to promote mixed-use, pedestrian-oriented, dense developments around transit stations in New Jersey – transit-oriented developments – the planning process has proven to be innovative and not typically American. This paper presents an overview of the Initiative and a summary of its evaluation. We conclude that the Transit Village Initiative in New Jersey is a good model of smart growth, which stems from active planning and intergovernmental co-operation on land use and transportation issues.

## Keywords

Land use, New Jersey, planning, smart growth, Transit-oriented development, Transit Village Initiative

## Introduction

'My answer to sprawl is active planning of the type practiced everywhere except the United States (and beginning to appear here out of necessity)' (Ewing, 1997, 118).

The concept of satellite villages, centred upon a rail station, is not a new idea but promoted in England by Ebenezer Howard in the late 1800s. This became known as the Garden City Movement. New Towns, a successor to Garden Cities, were prevalent in the middle of the twentieth century, mostly in Europe. This movement also promoted high-density development at rail stations with special attention for high quality pedestrian environments.

'From about the 1860s in Europe and the New World, the old Walking Cities began to collapse under the pressure of population and industry. A new city form developed that enabled the city to accommodate many more people at somewhat reduced densities... This was achieved through new transit technology... [in which] [t]he trains generally created subcenters at railway stations that were small 'cities' with walking-scale characteristics' (Newman & Kenworthy, 1999, 28-29).

From the perspective of many Americans, European cities can be characterised by their high quality public spaces and excellent transit network and services. This becomes evident when comparing travel habits between the two continents. According to Newman and Kenworthy (1999), who look at large cities, an average of 38.8% of work trips are made on transit in Europe compared to only 9.0% in the USA. Furthermore, in selected cities on each continent in 1990, 18.4% of workers walked or bicycled in Europe compared to only 4.6% in the USA. Pucher and Lefèvre state 'walking and bicycling account for roughly three to five times as high a proportion of urban travel in Europe as in either the USA or Canada. Public transport serves four to six times as high a percentage of urban trips in Canada and Europe as in the USA' (1996, 7). Indeed,

'[t]he most salient trend in American travel behavior over the past four decades has been increased reliance on the private car for urban travel, with corresponding declines in public transit and walking... The private car continues to dominate urban travel among every segment of the American population, including the poor, minorities, and the elderly' (Pucher and Renne, 2003, 49).

The strength of this love affair with the car notwithstanding, Americans woke up to a disturbing reality in the 1980s: they were spending more and more time sitting in traffic and driving longer and longer distances from their home to the job. Downs aptly describes the growing congestion problem in *Stuck in Traffic* (1992). He recounts a variety of factors that converged in the late 1980s to create a quandary in commuting for major American metropolitan areas that has only worsened with time. Specifically, population and job growth have out paced road construction, low-density suburbs are not served by public transit, and political bodies have failed to charge users for the true cost of automobile operation. As large numbers of women joined the workforce in the new service economy, more vehicles per household were needed and more cars were on the road at peak travel times. Lower land costs in the outer metropolitan fringes have attracted home buyers and companies alike. Jobs

formerly in city cores, which were accessible by transit, are now ensconced in sprawling office parks reachable, for the most part, only by car. As congestion has increased and citizens have complained, there has been a major movement in the 1990s by planners and policy makers to combat American automobile dependency by promoting transit use, walking, bicycling, and land use changes.

To this end, major federal legislation, the Intermodal Surface Transportation Efficiency Act (ISTEA) (US–DOT, 1991), and the Transportation Equity Act for the 21<sup>st</sup> Century (TEA–21) (US–DOT, 1998) attempted to create a more balanced transportation system. These ground-breaking federal programs coupled with planning's new urbanism and smart growth (defined as development that fosters compact, multiuse development; open-space conservation; expanded mobility; enhanced livability; efficient management and expansion of infrastructure; and infill, redevelopment, and adaptive use in built-up areas as defined by Douglas Porter in *Making Smart Growth Work*, 2002, 1.) initiatives have fostered a fresh look at public transportation, particularly rail, and its connection to the built environment. The result is what planners are calling transit-oriented development strategies.

Transit-oriented development (TOD) is most commonly defined as a mixed use, relatively high density, pedestrian-oriented district that is located within a half-mile of a rail, bus, or ferry station. Furthermore, the urban environment must encourage and/or facilitate transit use and walking through its urban form. This new TOD philosophy illustrates the convergence of key movements currently taking place in many major metropolitan regions across the USA: renewed popularity in public transit use (see Pucher, 2002), increased legal restrictions on growth in ex-urban green spaces, the push for reinvestment in urban areas, and reclamation of brownfields (defined as abandoned, idled or underutilised industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived contamination (HUD, 1999)). The result has been a rise in more 'European-like' characteristics in many towns and cities – transit use, walking, bicycling, mixed uses, and high density – but, it has been observed that the planning process is also beginning to change in some states with respect to land use and transportation.

### Recent Studies

Transit-oriented development was first popularised by Peter Calthorpe's book, *The Next American Metropolis* (1993). Calthorpe calls for a better

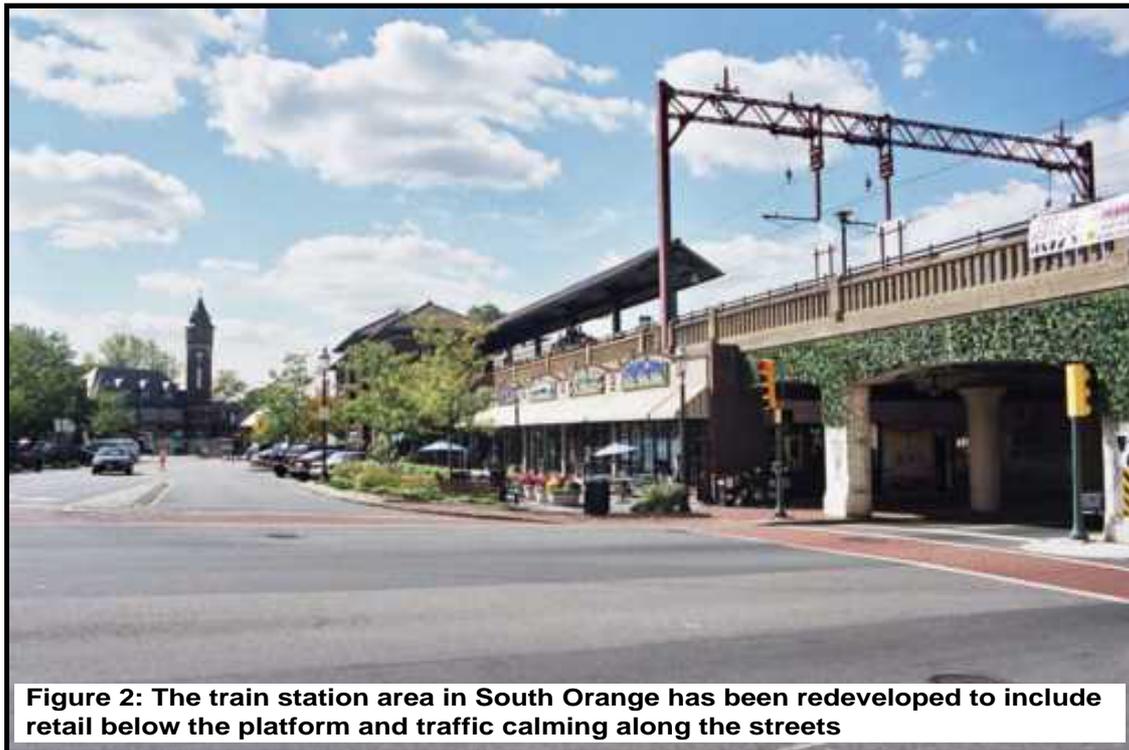


integration between transportation and land use. This form of development aims to create sub-centres around a transit line. The sub-centre is a mixed-use, dense development, centred on a transit station – a TOD or Transit Village. People can walk or bicycle around this community or travel to other places using transit.

'A [TOD] is a mixed-use community within an average 2,000-foot walking distance of a transit stop and a core commercial area. TODs mix residential, retail, office, open space, and public uses in a walkable environment, making it convenient for residents and employees to travel by transit, bicycle, foot or car' (Calthorpe, 1993, 56).

The TOD concept represents a shift in planning practice. It calls for the shaping of land uses to affect travel patterns, which had not been widely practised before the mid-1980s (Boarnet and Compin, 1996).

Because of a growing interest in this topic, federal and state government, and non-profits have funded major research projects to better understand the state of practice. These include the Transit Cooperative Research Program (2002), Caltrans (2002) and Belzer and Autler (2002). These reports describe many aspects



**Figure 2: The train station area in South Orange has been redeveloped to include retail below the platform and traffic calming along the streets**

of TOD. They grapple with defining the concept, and discuss many topics, some of which include the role of public and private entities, land use and design, financing, parking, and mixed use. The overall conclusions from the current state of the literature are:

- Collaboration is key;
- Public policies are lacking;
- It is necessary to develop a typology and guidelines for success;
- Housing, parking, and financing need special attention; and
- Measuring and evaluating success is necessary.

#### **TOD in New Jersey**

This paper will describe how a TOD program in New Jersey exemplifies a change in the traditional planning process to one that might be described as 'European' in style. In the following pages we describe our research agenda and New Jersey's attempt to plan for the better integration of land use and transportation through the Transit Villages Initiative. Although outcomes of the Transit Villages program are still to be determined (since the Initiative is only a few years old), the planning process has already proven to be innovative and not typically American.

#### **Overview of Research Agenda**

The Alan M. Voorhees Transportation Center has been engaged in a variety of activities in order to assess the status of the New Jersey Transit Villages Initiative (an overview of the Initiative appears below). These efforts include:

- Literature review on TOD;
- GIS mapping of each Transit Village with a pedshed overlay (a 'pedshed' being defined as a true half-mile walking distance from the centre of the transit station, as opposed to the typical half-mile 'air' distance; based on the street network, some stations have a larger walkable catchment areas or pedsheds than others);
- Interviews with state agencies, municipal officials, and private entities – stakeholders – to evaluate the success of the program;
- Site visits to the Transit Villages;
- Data gathering from the Census, NJ Transit, and other state agencies to understand the socioeconomic and transportation profile of each Village;
- Research on the history of the towns and review of the New Jersey Department of Transportation (NJDOT) files on the Transit Village program;
- Residential and commercial surveys to report on travel behaviour and community perception; and
- Development of a system to monitor outcomes (new housing, commercial space, street improvement, etc.) in the Villages.

This paper will focus on the socioeconomic profile of each village and the stakeholder interviews. It will show how the planning process in New Jersey, initiated by the State government, has attempted to co-ordinate land use and transportation planning at both the municipal and state level. Our evaluation describes the successes and obstacles of the overall Initiative.



**Figure 3: Pleasantville's bus terminal**

Due to the complexities of planning for TOD, the planning process must include co-operation and collaboration between various groups, both public and private. This co-operative style of planning is not typical in America and represents an 'European-like' transition in planning. Our findings indicate that in attempt to create mixed-use, pedestrian-friendly TODs, a development style that mimics most European cities, the co-operation between local and state government in New Jersey has also adjusted to resemble European planning.

#### **Overview of the New Jersey Transit Villages Initiative**

The Transit Villages Initiative, co-ordinated by the NJDOT, is a program that seeks to revitalise and strengthen selected communities with transit as an anchor. The program began in 1999 under Governor Whitman and has been widely supported by the McGreevey administration. Initially, five communities, including Morristown, Pleasantville, Rutherford, South Amboy, and South Orange were named as Transit Villages. These municipalities were selected because they had demonstrated a commitment to redeveloping their downtown using the principles of smart growth and TOD. Riverside, Rahway, and Metuchen were later added as Transit Villages for the same reason. Due to the growing popularity of the Transit Villages program, on January 27, 2003, Governor McGreevey, a major supporter of smart growth initiatives, called for the state to double the number of Transit Villages by the end of this year (State of New Jersey, 2003).

The Transit Villages policy fits into the larger smart growth agenda because it helps to promote the growth of businesses and residential population around existing (or planned, in the case of Riverside) transportation infrastructure investments. It can be viewed as a tool within the smart growth policy framework as its aim is to promote increased transit ridership, economic revitalisation, and the growth of housing stock as part of an overall plan to create vibrant, fun, and exciting areas around major transit nodes.

#### **Transit Village Descriptions**

A demographic overview of seven Transit Villages – Morristown, Pleasantville, Rahway, Riverside, Rutherford, South Amboy, and South Orange – has revealed much diversity in characteristics (Metuchen was excluded because we had already begun our research). Figure 1 shows the locations of these Transit Villages within New Jersey). Each community brings unique assets to the challenge of fostering TOD and transit ridership. Some towns are farther along than others in terms of their redevelopment; some have more financial capacity; some have better transit service and/or parking facilities; some have better geography and history. The towns fell into three general categories: traditional bedroom communities; urban, industrial-based communities; and South Jersey, non-commuter-rail based communities.

##### *Traditional bedroom communities*

This group includes Morristown, Rutherford, and South Orange. Tied to commuter rail for over a hundred

years, these towns are compact and concentrated around historic train stations. Their downtowns are readily walkable and their residential neighbourhoods harbour classic housing stock on quarter- to half-acre lots complete with sidewalks and shade trees. The towns are similar in population, 16,000-18,000 persons, and these are also the wealthiest of the seven Villages. Despite a comfortable financial position, in recent decades each has had to struggle with fraying downtown areas as a result of competition from expanding development at the urban edge with newer housing stock and shopping choices. Still, beyond such common traits, these three traditional suburbs have very different demographic personalities (based on 2000 Census – see Tables A-1 and A-2).

Racially and ethnically, they are diverse populations. The last decade of high immigration levels has affected all three towns: Morristown is 27% Hispanic and almost a third of the residents are foreign born. Rutherford has a large Asian contingent, 11.3%, with 20% of the borough foreign born. South Orange is 31% black with almost 17% foreign born.

Household configurations vary as well: Morristown has nearly 40% single person units. South Orange has the most married couple units of all the Villages, 55%. Financially, South Orange has the number one median family income, at \$107,641. Rutherford is second with \$78,120 and Morristown is \$66,419. Yet, Morristown showed a high 11.5% poverty rate.

Housing, too, differs. Morristown has only 36.5% single-family dwellings while South Orange, on the other hand, is of almost 70% single-family stock. Rutherford falls in between with 55% single family. Morristown shows an above average level of crowding, nearly 8%, while Rutherford is 3% and South Orange is only 1.7%.

Transit usage is also dissimilar. In Morristown only 6.3% of workers use mass transit. In Rutherford the level is 17% and in South Orange it reaches 21%. Yet, in Morristown and South Orange most workers take the train while in Rutherford the bus is the principal mode. In South Orange nearly 11% of workers walk to work while 8% do so in Morristown and only 4% in Rutherford.

#### *Urban, industrial-based communities*

The second group is the urban, industrial-based communities of Rahway and South Amboy. These are blue-collar towns seeking to reinvent themselves economically. Both have water assets: The Rahway River passes through the middle of Rahway and South Amboy is located on the Raritan Bay. Rahway, with a population of 26,500, is about three times the

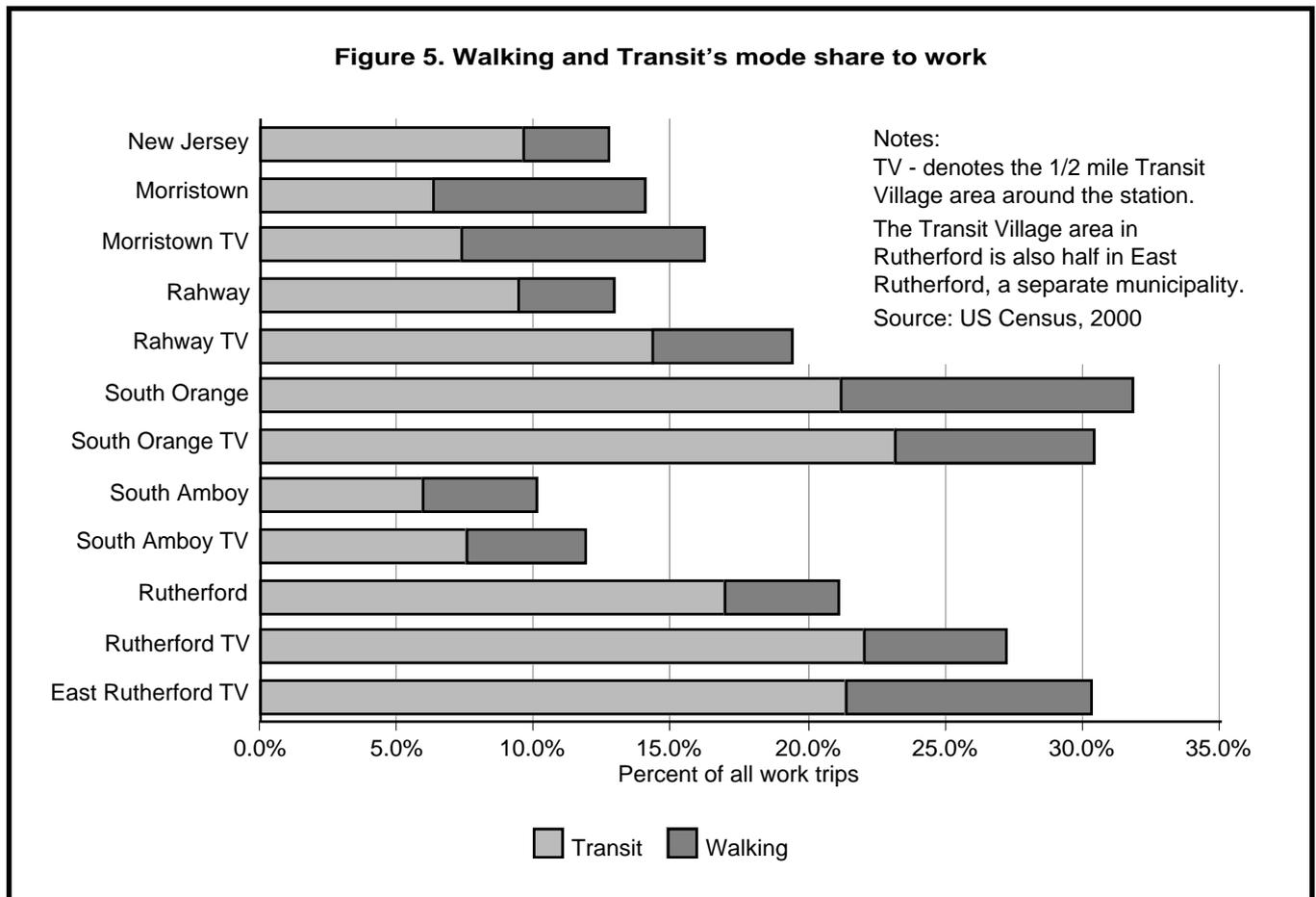


**Figure 4: Riverside's historic Watchcase factory building adjacent to the new light rail stop. Developers are currently planning the redevelopment of this old factory site**

size of South Amboy. South Amboy is 90% white non-Hispanic. Rahway, in contrast, is 27% black and 22% Hispanic. Still, they are close in financial terms: median family income for Rahway is \$61,931 and for South Amboy it is \$62,029. Household configuration is also similar: Married couple households are 47% in Rahway and 49% in South Amboy with single person households at 28% and 26%, respectively.

South Amboy is characterised by single-family housing, 60% of the units, and a home ownership rate of 59%. Rahway is only 46.5% single-family stock and home ownership is at 48%. Still, house value (Rahway at \$142,600 and South Amboy at \$ 138,500) and rent levels (Rahway at \$732 and South Amboy at \$767) are very similar. Vacancy rates are about the same as well. With their more modest housing stock South Amboy and Rahway are still relatively affordable.

In both towns approximately 12% of households are car-free. A little over 9% of workers use mass transit in



Rahway compared to about 6% in South Amboy. This is probably due to the rail service. Rahway is a stop on both the Northeast Corridor and the North Jersey Coast line. Access to employment centres in Newark and New York to the north and New Brunswick and Trenton to the south is frequent and efficient. South Amboy, however, has the distinction of hosting a ferry service to Manhattan. Interestingly, most of the rail passengers boarding at South Amboy are non-residents. They live in nearby towns, drive to South Amboy and take the train to New York City, mostly for jobs during the weekdays and for recreation on weekends, evenings and holidays.

Rahway and South Amboy are making major land use changes in order to compete with their suburban counterparts. Old, industrial sites have to be cleaned up for residential and retail opportunities. They do not have the financial capacity of the 'Bedroom Communities' previously discussed. However, they have the larger properties that developers are looking for and they have excellent transportation access.

*Non-commuter-rail based communities*

The last grouping is the South Jersey contingent: Pleasantville and Riverside. And, it is not only geography that puts them together: Neither is served by traditional commuter rail. Pleasantville is a major bus hub to and from Atlantic City and Riverside is awaiting the start of the South Jersey Light Rail

service. In addition, both towns have waterfront areas that they want to utilise for development. There, however, the similarity ends as the municipal demographics could not be more different.

Riverside has a population close to 8,000, Pleasantville just over 19,000. Riverside is 88% white non-Hispanic. Pleasantville is 58% black, 22% Hispanic. Foreign born make up 32% in Pleasantville but only 10% in Riverside. Married couple households are 48% in Riverside, 35% in Pleasantville. Female single parent households are 12% in Riverside. They are twice that in Pleasantville. Median family income in Riverside is \$52,479. In Pleasantville the median family income is \$40,016 with a poverty rate of almost 16% and an unemployment rate of 10.2%.

Both towns contain mostly single-family housing. However, in Pleasantville almost 8% of the units are considered crowded compared to 2.4% in Riverside. The home ownership rate is only 56% in Pleasantville versus 68% in Riverside. Pleasantville has a high vacancy rate and Riverside's is low. Few workers use the bus service in Riverside whereas in Pleasantville 14% use transit, as 21% of the households have no car.

Still, both towns are in need of economic improvement. Riverside suffers from a manufacturing legacy that has left it with brownfield contamination and a striking but obsolete industrial building that dominates the landscape (see Figure 4). The new light

rail stop offers the possibility of land redevelopment based on upscale residential units or perhaps commercial activity. Pleasantville does not have an industrial albatross but it lacks a distinguishing personality. The town hopes to take advantage of its location on Lakes Bay for waterfront development. Ironically, this fishing spot is what initially brought people to Pleasantville. Perhaps it will do so again.

### **Demographic Characteristics of the Transit Village**

The area called the Transit Village in each designated municipality is defined as the half-mile radius circle around the train or bus station. In order to isolate demographics for the Transit Village area, block groups were selected that corresponded to this circle as much as possible. Since Riverside and South Amboy are small geographically, the Transit Village area represents most of the town. Hence, fewer differences are seen between the Village and the municipality in these two cases. In general the characteristics of the Transit Village shift from the municipal profile with remarkable consistency (based on 2000 Census – see Tables B-1 and B-2):

Transit Villages in New Jersey feature a younger population, more racial and ethnic diversity, higher percentage of immigrants, lower household incomes, more singles, more rental housing, higher vacancy rates, and exhibit better transit habits – less cars, higher use of train and bus, and more residents walking to work (see Figure 5).

### **Demographic Conclusion**

Residents in the Villages demonstrate a strong tendency to use transit, walk or bike – either because they have to financially or because it is more convenient than driving. With the ongoing ‘transit-friendly’ improvement of these station areas (safe, walkable street patterns for access, mixed-use and higher density development, reduced auto activity, traffic calming, and pedestrian scale streetscapes) New Jersey Transit Villages are becoming excellent examples of smart growth strategies.

### **Parking and Service**

As part of the demographic review NJ Transit provided parking information and ridership data (Table A-1). South Amboy has the largest parking capacity (657 spaces) and the most reported bicycle lockers (4), which compared to many European railway stations is minuscule. As mentioned previously, most of their transit ridership is non-resident. However, of the Transit Villages, its monthly charge is the highest (\$90 per month) and the utilisation rate is the lowest (70%). South Orange, with average daily ridership of 2,169, and Morristown, with 1,825, enjoys the highest rail usage. This is a function of the type of ridership –

professionals working in New York City taking advantage of the convenient mid-town direct service. Pleasantville (326 daily departures) and Rutherford (332 daily departures including shuttle services) lead in bus service. Pleasantville and Riverside currently have no commuter parking facilities.

### **Results of Stakeholder Interviews**

In addition to studying the demographic profiles of the Transit Villages, as part of our assessment of the Initiative, we conducted extensive interviews with state and municipal government, and the private sector. This section will summarise our findings.

#### *State Government*

The Transit Villages Task Force consists of representatives from ten state agencies, co-ordinated by the New Jersey Department of Transportation. We conducted interviews with most of the representatives: NJ Department of Transportation, NJ Department of Environmental Protection, NJ Redevelopment Authority, NJ Transit, Office of Smart Growth, NJ Department of Community Affairs, Main Street New Jersey, NJ Economic Development Authority, NJ Housing and Mortgage Finance Agency, and the NJ Commerce & Economic Growth Commission. Based on these discussions we believe the following points are the most important components in the viability of the Transit Village Initiative:

- *A Task Force that meets regularly with designated agency representatives to monitor progress in the designated municipalities, to discuss problems, and propose solutions.* Many representatives cited this ‘teamwork’ aspect as refreshing. It allows the agencies, both large and small, to sit at the same table and act co-operatively to help municipalities leverage resources. The state-municipal relationship is viewed as a partnership.
- *Engaged Task Force members that help cut through ‘red tape’ at their various agencies and assist in targeting funding to the designated Transit Villages.* The Task Force members give the municipalities a specific contact within an agency to call when a problem arises.
- *An active and effective Transit Village program administrator.* The Task Force can only be successful if there is guidance, co-ordination and follow through on Transit Village issues.
- *State leadership publicly supporting transit oriented development and the Transit Village Program.* The Transit Village Program owes much of its strength to the statehouse: Created under the auspices Governor Whitman and continued with enthusiasm under Governor McGreevey.



**Figure 6: Jitneys are small buses, operated by the municipalities to serve the town. They run a limited service to residential neighborhoods within the towns and connect to the train station as well as other destinations within the town (ie. recreation center, downtown shopping).**

- *NJ Transit actively supporting transit oriented development.* NJ Transit's excellent station improvement program, its efforts at better utilisation of parking facilities through partnerships with towns and the private sector, and its investment in a variety of support programs such as jitneys were applauded by everyone. These jitneys are basically limited service bus routes.

#### *Municipal Government*

Based on our interviews and observations certain positive municipal characteristics emerged that mark Transit Villages:

- *Strong leadership.* All designated towns in the Transit Village Initiative have mayors, administrators and city councils that have demonstrated a concerted willingness to take action for change.
- *History of planning.* New Jersey Transit Villages had been preparing for change and redevelopment well in advance of being designated (some for as long as eight to ten years).
- *Sustained vision of redevelopment.* Not only have these towns planned for renewal they have shown perseverance in the face of delays and financial hurdles in pressing for implementation of their strategies.
- *Entrepreneurial attitude.* Specifically, willing to:
  - 'think outside of the box' and entertain new ideas
  - work with developers to achieve the desired product
  - implement creative zoning with increased density, multifamily housing, mixed-use, and flexible parking requirements
  - actively seek grant funding and/or low-interest loans
  - participate in public/private partnerships
- *Willing to foster pedestrian and bike access to the downtown and station areas.* All of the communities have acknowledged the importance of 'walkability' and reduced auto use by implementing such strategies as streetscape improvements, traffic calming configurations, and jitney service.
- *Support of the commercial area through downtown partnerships, Main Street programs, or enterprise zones.* Transit Villages show a great deal of concern for the climate of local businesses, particularly retail and restaurants that draw people.
- *Sensitive to 'quality of life' issues by including parks, recreation areas, and cultural assets in redevelopment goals.* Enhanced pocket parks, bike paths, new public recreation facilities, a wetlands educational preserve, and performing arts theatres are among the many lifestyle amenities that are featured on the agendas of New Jersey's Transit Villages.

### Private Sector

The success of the Transit Village Initiative has not been one-sided. Private developers have played a key role in implementing redevelopment plans. We interviewed several who have completed large projects in Transit Villages and their common characteristics are worth noting:

- They are major regional or national companies that have the capacity and experience to deal with difficult site issues;
- They are willing to work with towns to achieve a shared vision;
- They place a high market value on good transportation connections; and
- They are creative with respect to design of product and utilisation of land.

### Obstacles

Despite these noted success factors there are many roadblocks that face Transit Villages. Some are site specific; others are systemic to the development process. We have identified some major deterrents that need to be considered:

- *Contaminated land or brownfields.* Most of the Transit Villages have some level of land contamination that is discouraging redevelopment. Even if it is just an abandoned gas station, environmental assessment and then implementation of appropriate remediation is necessary. For old manufacturing locations like Rahway, South Amboy, and Riverside the situation is particularly critical. Often the best use for these properties is housing or recreation, i.e., high human use. This increases the level of clean-up and as a result, the cost. Even with the state's progressive brownfield statute that provides for the remittance of a certain portion of remediation costs and limited liability for 'innocent purchasers', many developers refuse to consider such risk. And, towns, if they own the property, are not in a fiscal position to carry out the clean-up themselves. It is even worse if the egregious property is privately held and 'mothballed'. These owners, fearing liability for clean up if they sell, keep taxes paid but do little else with the site. Often these are the prime parcels for redevelopment because of their size or location.
- *Acquisition of properties for redevelopment.* In order to attract developers, towns need large enough parcels that can hold what builders call a 'critical mass'. Effectively, this is a high enough number of units to justify the effort and make the project marketable and profitable. Either the town or the developer has to acquire these properties. This can be a time consuming, expensive process that entails

valuation arguments and recalcitrant property owners.

- *Bureaucracy of state agencies.* Despite the efforts of the Task Force, municipal representatives complained of frustrating encounters with state agencies. Often this is related to staff changes that leave an approval request in limbo. At other times it reflects the agency's rigidity with regard to regulations, irrespective of the particular situation. For municipalities that are attempting to be innovative this attitude is extremely exasperating.
- *Parking.* Parking requirements still stand as a major obstacle to new urban infill development. Despite the relaxation of parking requirements in a few cases, developers and many planners feel that current ratios, designed primarily for suburban developments, are not representative of Transit Village households. The demographics of this study clearly show that more workers in the Transit Village use transit, walk to work, and have fewer cars than those in the municipality at large. New parameters for residential parking capacity in downtown areas need to be developed.
- *Cost.* Redesigning the built environment is expensive. Even with grants and low cost loans, Transit Villages have major financial challenges in implementing redevelopment plans.
- *Conflict in funding sources.* To compound financing problems, towns have found that often federal and state resources cannot be used on the same project due to restrictions placed on the monies that are not compatible.
- *Fear of school children.* In New Jersey, the cost of educating children is a major factor in land use decisions. In order to avoid the possibility of a major influx of school-aged children the tactic towns use is to limit the number of bedrooms in new developments to one or two. This leaves little housing choice for families or those childless couples wanting extra space. It also limits possibilities for those single or childless couples that move into Transit Villages' new developments to stay in town once they have children. Only South Amboy has embraced family housing with any enthusiasm.

### A New Role for the State Government in New Jersey

In most European countries, the co-ordination of land use and transportation planning, to some extent, takes place at the state and/or regional level with more co-operation from municipalities compared to American cities (Cervero, 1998; Newman and Kenworthy, 1999).

'American cities are thus much more decentralized than European cities, and they continue to

decentralize further at a rapid pace... [t]he failure to plan for mixed-use development or any sort of co-ordination has led to massive cross-commuting within and among the suburbs' (Pucher and Lefèvre, 1996, 177).

Although there is variety in the planning systems amongst European countries, the conventional understanding is that 'European central governments... oversee... local decisions through nationwide land-use statutes' (Nivola, 1999). (Nivola argues that this is not necessarily true when compared to the US as a reason for sprawl because there is much variety between European countries). Still, most agree that planning is taken more seriously in Europe compared to America. Planning in the USA is incremental and often reactionary, based on the requests of developers (Ewing, 1997).

An EU-funded study, which looked at TODs in both Europe and the USA, focused upon the various levels of public-private partnerships across the case studies and made specific recommendations to better inform the joint development process (Gaffron *et al.*, 2002). The investigators noted the benefits of 'institutional co-operativism: when land use and transport planning authorities work together during the planning and implementation phase of municipal development or redevelopment plans, or region wide planning – the success rate of reaching goals increases in most cases' (Gaffron *et al.*, 2002, 71). The authors also noted that this 'institutional co-operativism' is not easily transferable because it requires certain political instruments or policies (Gaffron *et al.*, 2002, 71).

In New Jersey, the Transit Village Initiative is innovative because it represents an impressive attempt to co-ordinate state and local planning, especially with respect to land use planning and transportation investments (institutional co-operativism, if you will). The stakeholder interviews were most telling on this point. Representatives from state agencies remarked with almost disbelief about the team aspect of this program: 'We actually sit down every quarter and look at each other and talk about how together we can assist the various municipalities.' The essence of this remark was repeated in many conversations with Task Force members. As a result, although the program is co-ordinated by NJDOT, it functions as a 'State' effort.

At the local level, this rarely seen team approach by the state is building bridges and trust. It is no secret that in New Jersey, a home rule state<sup>1</sup>, municipalities often see the State as an adversary. With this new

approach, Transit Villages have a designated representative at each of the various state agencies who is committed to helping the town solve problems. Consequently, a partnership attitude between local and state government is emerging.

### **A new paradigm for land use and transportation planning in the USA**

The decade of the 1990s was a period of significant change with respect to land use and transportation planning in the USA. As mentioned earlier, the ISTEA and TEA-21 federal initiatives attempted to create a more balanced transportation system, including much attention to the connection between land use and transportation planning. Due to the legal nature of land use planning in the USA (being locally governed) in comparison to transportation planning (typically controlled by state DOTs), the only way to integrate land use and transportation planning is through intergovernmental co-operation. In urbanised areas, the planning mechanism to achieve these goals is through metropolitan planning organisations (MPOs). MPOs have the responsibility of administering federal transportation dollars to projects within a region. These organisations consist of representatives from the municipalities within a region and decisions ought to be made in a manner that co-ordinates transportation investments with local land use strategies. In theory, this system should represent a good model for regional planning, but in reality few MPOs have been viewed as 'successful.' Part of the problem is that (with the exception of Portland, Oregon) MPOs have no legal authority to dictate land uses. Even still, some regions have successfully used MPOs to promote more compact, transit-friendly development, although this has not been the case in New Jersey.

While some states and regions have promoted TOD through MPOs, others have attempted to achieve the same goal through direct co-operation between state and local government, as demonstrated in New Jersey. In our view, intergovernmental co-operation in the USA, for the purpose of promoting pedestrian-friendly, mixed use, and compact transit villages demonstrates an European-like quality. It would be nearly impossible to directly compare the two continents with respect to planning, as it is probable that just as much planning policy variation exists within each continent as between the two. Furthermore, one could easily write a paper about how European cities are beginning to resemble US cities through increased levels of automobile ownership and the sprawling of development. Even so, the fact remains that what we call a 'transit village' in the USA is just typical of common development practices in Europe. Our research and experience suggests that in

<sup>1</sup> 'Home rule' is an expression used for the self-determination attitude of local governments in New Jersey. This independent spirit is due in large part to the fact that the entire state is divided up into 566 municipal units. There is no such thing as county-owned land and counties have relatively little say in local planning.

both practice and product, the Transit Village Initiative in New Jersey, and the transit-oriented development movement at large in the USA, is an emerging paradigm shift for land use and transportation planning. While this may not be new for Europe, for the USA, it's something to get excited about.

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### References

Belzer, D. and Autler, G. (2002) *Transit oriented development: moving from rhetoric to reality* The Brookings Institution Center on Urban and Metropolitan Policy, Washington, DC.

Boarnet, M.G. and Compin, N.S. (1996) 'Transit-Oriented Development in San Diego County: Incrementally Implementing a Comprehensive Idea' Working Paper, Department of Urban and Regional Planning, School of Social Ecology, University of California, Irvine, CA.

Caltrans (2002) *Statewide Transit-Oriented Development Study: Factors for Success in California* Business, Transportation, and Housing Agency. Parsons Brinckerhoff Consultants. California Department of Transportation, Sacramento, CA.

Calthorpe, P. (1993) *The Next American Metropolis: Ecology, Community, and the American Dream* Princeton Architectural Press, New York, NY.

Cervero, R. (1996) *The Transit Metropolis: A Global Inquiry* Island Press, Washington DC.

Downs, A. (1992) *Stuck in Traffic* The Brookings Institution Center on Urban and Metropolitan Policy, Washington, DC.

Ewing, R. (1997) 'Is Los Angeles-style Sprawl Desirable?' *Journal of the American Planning Association* 63, 1, 107–126.

Gaffron, P., Streich, S., Djekrif, R., Racine, C. and Schneider, J. (2002) *Public Private Partnerships around Urban Rail Transit* European Centre for Transportation and Logistics, Hamburg-Harburg, Germany.

HUD (1999) *Assessment of State Initiatives to Promote Redevelopment of Brownfields* Department of Housing and Urban Development (HUD), Office of Policy Development and Research, Washington, DC.

<http://www.huduser.org>

Nivola, P. (1999) 'Are Europe's Cities Better?' *The Public Interest*

<http://www.brook.edu/views/articles/nivola/1999.htm> (accessed 16 June 2003).

Newman, P. and Kenworthy, J. (1999) *Sustainability and Cities: Overcoming Automobile Dependence* Island Press, Washington DC.

Porter, D. (2002) *Making Smart Growth Work* Urban Land Institute, Washington DC.

Pucher, J. (2002) 'Renaissance of Public Transport in the USA?' *Transportation Quarterly* 56, 1, 33–50.

Pucher, J. and Lefèvre, C. (1996) *The Urban Transport Crisis in Europe and North America* Macmillan, London.

Pucher, J. and Renne, J. (2003) 'Socioeconomics of Urban Travel: Evidence from the 2001 NHTS' *Transportation Quarterly* 57, 3, 49–77.

Renne, J. and Wells, J. (2002) *State of the Literature: Transit-Oriented Development*. Prepared for the New Jersey Department of Transportation: Voorhees Transportation Policy Institute, Edward J. Bloustein School of Planning and Public Policy.

NJDOT (2003) 'McGreevey to Double Number of Transit Villages' News Release: Office of the Governor, 27<sup>th</sup> January.

<http://www.state.nj.us/transportation/press/2003releases/012703.htm>

Transit Cooperative Research Program (2002) 'Transit-Oriented Development and Joint Development in the United States: A Literature Review' *Research Results Digest* Sponsored by the Federal Transit Administration, Number 52.

US–DOT (1991) *Inter-modal Surface Transportation Efficiency Act (ISTEA)* Public Law 102-240, Department of Transportation, Washington, DC.

\_\_\_\_ (1998) *Transportation Equity Act for the 21st Century (TEA-21)* Public Law 105-178, Department of Transportation, Washington, DC.

<http://www.fhwa.dot.gov/tea21/index.htm>

**Table A-1. New Jersey Transit Villages Comparative Demographics - Municipalities**

	Morristown	Pleasantville	Rahway	Riverside	Rutherford	S. Amboy	S. Orange
<i>Population (Source: Census 2000)</i>	18,544	19,012	26,500	7911	18,110	7913	16,964
Total area (square miles)	3.0	7.3	4.0	1.6	2.9	2.7	2.9
Population density (per square mile)	6304	3291	6642	5197	6452	5102	5945
% school age	18.4%	28.3%	25.2%	25.4%	25.4%	24.4%	37.6%
% 62 years and older	14.3%	13.1%	16.6%	15.5%	17.0%	15.4%	13.9%
% White non-Hispanic	50.7%	17.9%	53.2%	88.1%	75.6%	90.0%	58.2%
% Black	17.0%	57.7%	27.1%	4.4%	2.7%	0.9%	31.3%
% Asian	3.8%	2.0%	3.6%	0.4%	11.3%	1.4%	3.9%
% Hispanic	27.1%	21.9%	13.9%	4.1%	8.6%	6.7%	4.9%
% foreign born	32.4%	12.9%	17.2%	10.2%	20.1%	9.0%	16.9%
<i>Households (Source: Census 2000)</i>							
% married couple households	34.4%	35.0%	46.7%	48.4%	53.5%	48.8%	55.2%
% female single parent households	12.0%	24.7%	15.6%	12.0%	9.2%	14.5%	10.0%
% single person households	38.7%	24.5%	28.0%	27.3%	28.3%	25.9%	25.2%
<i>Income (Source: Census 2000)</i>							
Median family income 1999	\$66,419	\$40,016	\$61,931	\$52,479	\$78,120	\$62,029	\$107,641
Poverty rate	11.5%	15.8%	7.1%	8.2%	3.7%	7.4%	5.3%
Unemployment rate	3.4%	10.2%	6.6%	3.9%	4.6%	4.2%	4.2%
<i>Housing (Source: Census 2000)</i>							
Housing density (units per acre)	4	1.9	4.1	3.2	4	3.1	3.1
% single-family	36.5%	64.0%	60.9%	70.9%	55.4%	64.2%	69.5%
% of units built before 1940	33.2%	18.4%	26.1%	46.2%	46.6%	47.2%	54.9%
% crowded units	7.9%	10.6%	5.4%	2.4%	3.0%	1.1%	1.7%
Homeownership rate	39.5%	56.3%	62.7%	67.7%	65.5%	64.2%	72.1%
Median house value	\$224,400	\$85,900	\$142,600	\$100,400	\$218,300	\$138,500	\$274,600
For sale unit vacancy rate	1.2%	3.1%	1.2%	1.9%	0.6%	1.5%	1.2%
Median gross rent	\$914	\$715	\$732	\$670	\$832	\$767	\$879
Rental vacancy rate	3.7%	7.6%	3.3%	3.7%	2.2%	4.2%	2.7%
Median gross rent as a %age of income	24.7%	28.5%	24.5%	26.5%	22.2%	27.8%	28.1%
<i>Transportation (Source: Census 2000)</i>							
% of households with no vehicle	15.5%	20.9%	11.7%	10.4%	10.0%	11.9%	11.5%
% of HHs with 3 or more vehicles	10.2%	7.1%	12.5%	12.2%	14.4%	15.8%	15.3%
% of workers using transit	6.3%	14.2%	9.4%	1.5%	16.9%	5.9%	21.2%
Bus or trolley bus	1.5%	13.4%	1.7%	1.5%	11.9%	1.6%	2.9%
Railroad	4.4%	0.0%	6.9%	0.0%	4.1%	3.6%	16.8%
% of workers walking to work	7.7%	2.4%	3.5%	3.4%	4.2%	4.2%	10.6%
Mean travel time to work (minutes)	24.3	22.4	27.8	24.3	30.2	29.2	30.3
<i>Transit service (Source: NJ Transit)</i>							
Weekday train departures to New York	49	no service	54	no service	18	32	63
2002 average rail weekday ridership	1825		not available		669	1190	2169
Transit village Intercity bus routes	10	7	1	1	5	2	2
Bus departures per weekday	70	326	37	61	332	62	69
Shuttle services	0	0	0	0	3	0	2
Ferry departures	no service	no service	no service	no service	no service	9	no service
<i>Parking (Source: NJ Transit)</i>							
Total parking spaces	447	0	587	0	133	657	613
Owned by municipality	99		587		133	88	249
Owned by NJ Transit	348		0		0	569	364
Utilization	86.0%		73.0%		82.0%	70.0%	91.0%
Monthly fees: Resident	\$40		\$30 - \$50		\$25	\$90	\$25
Monthly fees: Non-resident			\$40 - \$60				\$55
Bicycle spaces	3	0	3	0	3	4	3
<i>Schools (Source: NJ Department of Education)</i>							
State Aid 2002-2003 (\$)	7,070,986	43,276,630	14,835,527	7,809,379	2,615,338	5,876,048	5,362,479
Expenditure per student	\$12,361	\$8951	\$8891	\$8457	\$10,356	\$7113	\$9194

**Table A-2. New Jersey Transit Villages Comparative Demographics - Transit Villages (1)**

<i>Transit Villages - TV</i>	Morristown TV	Pleasantville TV	Rahway TV	Riverside TV	Rutherford TV	South Amboy TV	South Orange TV
<i>Population</i>	8022	7134	8862	6470	5535	5785	8861
%age of population	43.3%	37.5%	33.4%	81.8%	30.6%	73.1%	52.2%
Population density per square land mile	7992	2442	8650	5136	3917	4753	5899
% school age	21.8%	29.4%	27.5%	26.6%	23.6%	26.5%	29.8%
% 62 years and older	13.5%	11.4%	16.3%	13.9%	18.7%	13.1%	15.2%
% White non-Hispanic	40.6%	15.9%	38.7%	87.0%	64.6%	88.8%	62.6%
% Black	17.7%	57.1%	38.7%	4.4%	5.0%	0.9%	24.9%
% Asian	1.6%	2.3%	4.2%	0.6%	17.4%	0.7%	4.6%
% Hispanic	38.0%	23.3%	16.8%	4.5%	9.8%	8.4%	4.3%
% foreign born	42.1%	15.8%	19.6%	10.9%	27.7%	8.7%	20.0%
<i>Households</i>							
% married couple households	30.8%	34.8%	39.4%	49.9%	47.2%	51.0%	46.9%
% single female householder family	12.3%	27.0%	16.3%	10.5%	8.2%	14.9%	10.6%
% single-person households	40.3%	25.5%	32.9%	28.8%	34.0%	26.2%	32.3%
<i>Income</i>							
Median family income (1999): Range (Only available for individual block groups)	\$104,890 - \$31,458	\$44,632 - \$30,909	\$70,114 - \$43,250	\$60,000 - \$38,519	\$77,393 - \$57,321	\$76,947 - \$48,000	>\$200,000 - \$69,821
Poverty rate	17.2%	19.4%	9.2%	8.4%	4.4%	7.3%	7.3%
Unemployment rate	2.9%	10.3%	7.5%	3.7%	7.4%	4.6%	4.3%
<i>Housing</i>							
Housing density (units per acre of land)	5.3	1.4	5.5	3.2	2.6	3	3.7
% single-family	21.6%	68.5%	46.5%	70.8%	32.1%	59.6%	57.9%
% units built before 1940	36.4%	28.5%	33.7%	49.5%	47.1%	49.0%	55.0%
% crowded units	13.2%	12.0%	6.8%	2.3%	4.4%	1.3%	2.1%
Homeownership rate	24.6%	63.3%	47.7%	66.0%	43.7%	59.4%	59.7%
Median house value: Range (Only available for individual block groups)	\$397,900 - \$182,600	\$85,800 - \$78,200	\$147,100 - \$110,200	\$109,100 - \$86,100	\$259,300 - \$160,200	\$148,900 - \$113,700	\$467,000 - \$164,900
For sale unit vacancy rate	5.9%	4.3%	2.6%	1.0%	1.4%	2.6%	0.7%
Median gross rent: Range (Only available for individual block groups)	\$1128 - \$775	\$574 - \$495	\$928 - \$469	\$807 - \$584	\$928 - \$709	\$888 - \$435	\$1900 - \$275
Rental vacancy rate	3.4%	10.7%	3.9%	6.5%	1.8%	4.1%	3.9%
Median gross rent as a % of income (Only available for individual block groups)	31.4% - 19.5%	45.0% - 23.4%	31.8% - 19.4%	42.5% - 23.0%	28.0% - 16.5%	36.3% - 24.9%	38.0% - 19.4%
<i>Transportation</i>							
% households with no vehicles	23.2%	27.0%	15.4%	10.2%	16.3%	12.8%	15.8%
% households with 3 or more vehicles	9.8%	4.3%	8.4%	10.4%	12.6%	15.2%	13.5%
% workers using public transportation	7.3%	19.9%	14.3%	1.8%	22.0%	7.5%	23.1%
Bus or trolley bus	2.6%	19.0%	2.2%	1.8%	15.3%	2.1%	4.0%
Railroad	4.1%	-	11.2%	-	5.6%	4.4%	18.5%
% workers walking to work	8.9%	2.7%	5.1%	3.7%	5.2%	4.4%	7.3%
Mean travel time to work (minutes)	22.5	21	31.4	24.2	30.6	28.9	31.7

Note 1: As defined by census block groups around the train/bus station; does not include East Rutherford.

Source: Census 2000