Reinvesting in Cities:

Transportation Improvements in Urban Areas

An Implementation Strategy of the DVRPC Year 2020 PLAN

DIRECTION 2020

A Region on the Rise

Report 27

Delaware Valley Regional Planning Commission

REINVESTING IN CITIES:

TRANSPORTATION IMPROVEMENTS IN URBAN AREAS

An Implementation Strategy of the DVRPC Year 2020 Plan

DIRECTION 2020 REPORT NO. 27

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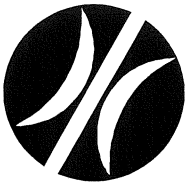
Created in 1965, the Delaware Valley Regional Planning Commission (DVRPC) is an interstate, intercounty and intercity agency which provides continuing, comprehensive and coordinated planning for the orderly growth and development of the Delaware Valley region. The region includes Bucks, Chester, Delaware, and Montgomery counties as well as the City of Philadelphia in Pennsylvania and Burlington, Camden, Gloucester, and Mercer counties in New Jersey. The Commission is an advisory agency which divides its planning and service functions between the Office of the Executive Director, the Office of Public Affairs, and four line Divisions: Transportation Planning, Regional Planning, Regional Information Services Center, and Finance and Administration. DVRPC's mission for the 1990s is to emphasize technical assistance and services and to conduct high priority studies for member state and local governments, while determining and meeting the needs of the private sector.



The DVRPC logo is adapted from the official seal of the Commission and is designed as a stylized image of the Delaware Valley. The outer ring symbolizes the region as a whole while the diagonal bar signifies the Delaware River flowing through it. The two adjoining crescents represent the Commonwealth of Pennsylvania and the State of New Jersey. The logo combines these elements to depict the areas served by DVRPC.

DELAWARE VALLEY REGIONAL PLANNING COMMISSION

Publication Abstract

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Geographic Area Covered: Nine-county Delaware Valley region including the counties of Bucks, Chester, Delaware, Montgomery and Philadelphia in Pennsylvania; and Burlington, Camden, Gloucester and Mercer in New Jersey

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ABSTRACT

This report considers urban infrastructure investment and its impact on urban redevelopment. Existing federal, state and regional infrastructure investment policies are reviewed, as well as the primary economic development objectives and related infrastructure needs of each of the region's four major cities (Philadelphia, Camden, Trenton and Chester). Recommendations for implementing the region's 2020 goal of encouraging redevelopment in urban centers are presented, including revising the regional TIP selection process; coordinating redevelopment efforts; coordinating state, county and local infrastructure investment decisions; and implementing concurrency, adequate public facilities ordinances or an urban growth boundary.

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EXECUTIVE SUMMARY

Both population and employment of the Delaware Valley have decentralized dramatically since World War II, with the region's urban centers losing residents and employees or remaining stable while suburban and rural fringe communities experienced tremendous growth. This decentralization has been characterized by low-density, sprawling development, and has been supported by expansion of the region's capital infrastructure (including roadways, sewer and water systems and utilities) into previously undeveloped areas. While many of the region's urban infrastructure systems are currently under-utilized and in need of repair, suburban systems continue to expand to accommodate suburban growth.

This report considers existing infrastructure investment policies within the Delaware Valley region and the relationship between infrastructure investment in the region's urban areas and urban revitalization. Existing federal, state and regional investment policies and priorities are reviewed, including the New Jersey *State Development and Redevelopment Plan*, Pennsylvania's Interim Transportation Plan, the final report of the 1991 Pennsylvania House Select Committee on Land Use and DIRECTION 2020, the Delaware Valley Regional Planning Commission's long range plan. Economic development policies in the region's four major urban areas (Philadelphia, Trenton, Camden and Chester) are assessed, particularly as related to transportation infrastructure. Finally, the potential impact of infrastructure investment in urban areas is considered and recommendations for implementing DVRPC's policy of reinvesting in urban centers and concentrating development in identified centers and growth areas are presented.

Various studies confirm that maintenance of the existing public capital is essential to preserving the economic health of central cities, and that sustained economic recovery and growth in urban areas requires financial incentives and improved social services and facilities as well as infrastructure investment. Infrastructure investments are often essential components of an economic redevelopment strategy; for example, financial incentives and improved services alone cannot facilitate economic redevelopment if transportation access limitations are not addressed.

Studies have also demonstrated that the health of the suburbs is dependent upon the health of the central urban area, justifying a regional policy of urban reinvestment. The reconcentration of resources in urban areas facilitates the efficient application of available resources for both physical infrastructure improvements and social facilities and services. Directing growth into already developed or developing areas and discouraging growth in rural or suburban fringe areas can also assist in preserving open space and farmland, and can encourage the necessary densities to facilitate efficient public transit. The regional benefits of reinvesting in urban centers include the creation of tax-producing areas within these centers; the retention and creation of employment opportunities; improved air quality; the preservation of "greenfield" areas; and the rehabilitation, maintenance and full utilization of the region's existing infrastructure.

Over the past several decades, federal policies regarding infrastructure funding (particularly transportation infrastructure) have generally favored suburban areas over existing urban centers,

and system expansion over repair and maintenance. Current policies, however, require that infrastructure investment decisions be based on a long-range plan which is consistent with the region's long-range goals and objectives and links transportation with land use planning.

The Delaware Valley Regional Planning Commission's long-range plan (DIRECTION 2020) encourages the recentralization of development in identified centers and corridors and discourages development outside identified growth areas, in order to preserve open space and farmlands while creating a more compact development pattern. New Jersey's *State Development and Redevelopment Plan* likewise advocates concentrating development within designated centers while preserving environmentally sensitive areas, and recommends using infrastructure investment as a development and redevelopment tool to direct growth into these centers. Although the Commonwealth of Pennsylvania has no adopted growth management or infrastructure investment policy that specifically favors urban reinvestment, several state agencies' policies and programs give priority to the needs of the Commonwealth's older urbanized areas.

The region's four major urban areas (Philadelphia, Camden, Trenton and Chester) have each developed economic redevelopment plans which in large part depend upon the provision, expansion or improvement of public infrastructure, particularly transportation facilities. While infrastructure investment alone cannot resolve all urban problems or lead to immediate revitalization of distressed areas, transportation improvements are often essential components of an overall economic development strategy, and in many cases may be critical if other economic development incentives and initiatives are to be successful. This report specifically considers the economic development strategies of the region's four major cities, but the recommendations cited will also apply in many of the other development centers identified in DIRECTION 2020.

Recommendations for implementing the region's goal of focussing development and redevelopment in centers and corridors while simultaneously meeting the needs of existing suburban development include the following:

- DVRPC should revise the regional transportation improvement program's prioritization methodology, giving higher priority to proposed projects which encourage growth in identified centers and growth areas. For example, projects which positively impact "revitalized" or "regional" centers and/or corridors accessing these centers should be assigned higher ratings than projects impacting areas outside of identified growth areas. Negative ratings should be assigned to proposed projects that violate the goals and intent and fail to advance the objectives of adopted state and regional land use plans, including DVRPC's DIRECTION 2020 and New Jersey's *State Development and Redevelopment Plan*. Higher priority should be assigned to projects which are planned as a component of an overall urban revitalization plan which has received support and resources from other State and local agencies. The TIP ranking and selection process should be revised to clearly reflect the goals and objectives of DVRPC's DIRECTION 2020, and should give priority to projects which encourage redevelopment of the region's identified centers and/or discourage expansion into suburban and rural fringe areas not appropriate for growth.

- Transportation improvement projects should be targeted to assure planning consistency and facilitate implementation of the goals and objectives of DIRECTION 2020. *Guiding Regional Growth*, the Land Use Element of DVRPC's long range plan, has defined a hierarchy of land use categories and centers and provides objectives for managing growth. The Delaware Valley Regional Planning Commission should consider the appropriateness of each proposed project given the objectives for managing future growth within each type of center or land use category when prioritizing proposed TIP projects.

- Both New Jersey and Pennsylvania should work towards coordinating transportation, water and sewer infrastructure investment decisions made at all levels (including State, county, regional and local agencies and authorities) and integrating them with adopted land use and environmental goals and objectives.

- New Jersey state agencies should promote and support the objectives of the New Jersey *State Development and Redevelopment Plan* when developing and enforcing regulations or program guidelines and distributing available discretionary funding or incentives.

- Unlike New Jersey, the Commonwealth of Pennsylvania has not yet adopted a statewide long-range growth management and/or land use plan which sets clear policies regarding development and redevelopment objectives, relying on individual State agencies to make policy and funding decisions independently. The Commonwealth should develop a statewide growth management plan and set clear policy directives regarding the prioritization of incentives and investments that all state agencies could refer to when developing policies, guidelines and regulations.

- A key to the successful revitalization of the region's urban centers will be the extent to which federal, state and local agencies coordinate their redevelopment efforts. New Jersey should continue to utilize their Urban Coordinating Council to facilitate interaction and coordination between all State agencies which direct any programs benefitting urban areas, including the Departments of Community Affairs, Commerce, Transportation and Environmental Protection. Pennsylvania should create a similar coordinating committee as a complement to its existing Governor's Response Team, consisting of representatives of all state agencies which set policy and implement programs benefitting urban affairs.

- Funding agencies should consider both user benefits/costs and regional benefits/costs when weighing proposed infrastructure improvement projects. User benefits include decreases in travel time, vehicle operating costs and accidents that are attributable to a transportation investment. Potential regional benefits (indirect benefits that may result from reduced costs to businesses and access to new markets as a result of the investment) include business expansion, business attraction and potential growth in tourism.

- Pennsylvania and New Jersey should adopt infrastructure "concurrency" legislation, similar to that enacted in Florida, in order to encourage development in areas with existing available infrastructure and limit low-density development in suburban and rural areas.

The concept of "concurrency" would prohibit municipalities from granting approvals to new developments if the proposed development resulted in a decrease in the level of service of various infrastructure systems, and infrastructure systems would be expanded based on an adopted schedule consistent with the long-range goals of the region.

- As an alternative to concurrency, the states could enact legislation allowing counties and municipalities to adopt and implement adequate public facilities ordinances such as in Maryland, which would limit development in areas where public infrastructure systems were inadequate to meet the needs of prospective residents and employees.

- To encourage growth in areas with existing infrastructure and discourage suburban and rural sprawl, New Jersey and Pennsylvania should authorize county or regional agencies to define "growth boundaries" that delineate those areas with adequate existing or planned infrastructure to accommodate the needs of future development, and work to ensure that future growth be directed to these areas. The DIRECTION 2020 Land Use Element identifies growth centers and future growth areas and clearly differentiates between areas appropriate for growth and those inappropriate for growth, including rural and agricultural areas.

- Quality urban in-fill development should be encouraged and supported as a complement to concurrency, adequate public facilities ordinances or defined urban growth boundaries. Urban area housing and development agencies should actively support developers interested in undertaking urban in-fill projects, and local jurisdictions should examine their existing statutes and ordinances and remove impediments to in-fill development.

- The current property tax structures in both Pennsylvania and New Jersey require that municipalities rely on tax revenues generated from developments within their boundaries to pay for necessary services, which are in most cases provided locally. The concepts of concurrency, adequate public facilities legislation and urban growth boundaries, which limit development in certain areas of the region and encourage in-fill development and growth in other areas, should be accompanied by changes in the way that basic services are provided, including revisions to the property tax structure and the regionalization of services, to ensure an equitable distribution of both revenues and costs.

Opponents to urban infrastructure investment and the coordinated application of other economic development incentives argue that few private-sector jobs have been created and maintained in urban areas as a result of past revitalization efforts, and that the hidden costs of urban capital investment outweigh the potential benefits. Proponents counter, however, that revitalization of under-utilized urban areas could ultimately lead to economic vitality within those communities and throughout the region. An adopted regional policy advocating reinvestment in the region's urban areas facilitates coordinated redevelopment efforts, maximizing the total available resources within specific areas and ensuring the most effective use of limited available resources.

I. INTRODUCTION

Population and employment in the Delaware Valley have decentralized over the past several decades, with the City of Philadelphia and the region's other urban centers losing residents and employees or remaining stable while suburban communities experienced tremendous growth. This decentralization into ex-urban areas, characterized by low-density, sprawling development, has been supported by a vast expansion of the region's capital infrastructure into previously undeveloped areas. While many of the region's urban infrastructure systems are now under-utilized and in need of repair, suburban systems continue to expand to accommodate growth.

This report considers existing policies within the Delaware Valley region relevant to infrastructure investment, and explores the relationship between urban infrastructure investment (particularly transportation infrastructure) and urban revitalization. "Infrastructure" refers to capital facilities operated and maintained for public benefit. As such, a region's infrastructure may include its transportation network as well as its water supply; wastewater treatment and disposal; solid waste disposal; drainage systems; open space and recreation; education; public health and safety facilities; and utilities and telecommunications.

The Delaware Valley Regional Planning Commission (DVRPC) develops plans which guide construction of physical infrastructure systems in a nine-county metropolitan region, primarily related to highways and public transit. In its role as the metropolitan planning organization (MPO), the commission prioritizes transportation improvement program (TIP) proposals based on the goals and objectives identified in their long-range plan. Proposed projects are prioritized based on a number of different criteria, including whether they enhance key elements of the existing system and the degree to which they support regional land use goals and objectives and promote economic activity.

Guiding the current study are the goals of the Delaware Valley Regional Planning Commission's long range plan (DIRECTION 2020), which stresses the concentration of development within "existing communities and appropriate growth areas" and "around centers, along corridors and within existing communities". Both DVRPC's DIRECTION 2020 and the *New Jersey State Development and Redevelopment Plan* are based on the goal of promoting efficient and compact development patterns, focussed on the region's existing urban and suburban centers. Both also stress that sufficient public investment in both human resources and physical infrastructure can attract additional private investment and help lead to the revitalization of urban centers.

The benefits of such "recentralization" of development include population stability, increased economic opportunities, preservation of natural resources, and more efficient utilization of capital resources. Studies have shown that every $1 million invested in rehabilitation creates five more temporary construction jobs and three more permanent jobs than the same amount of money

invested in new construction[1]. The Impact Assessment of the New Jersey Interim State Development and Redevelopment Plan conducted by a consortium led by the Center for Urban Policy Research at Rutgers University also demonstrated that preserving cities and containing sprawl could save the State of New Jersey almost $1.3 billion in capital infrastructure costs and about 30,000 acres of prime farmland by the year 2010[2].

The *New Jersey State Development and Redevelopment Plan* and DVRPC's *Direction 2020* are based on the premise that public infrastructure investments can significantly impact upon the location, scale and pace of growth, and that policies and priorities regarding such investments will therefore alter future growth patterns. The most powerful tool available to regional and state agencies to direct growth is their ability to selectively fund infrastructure improvements and expansions, since land use decisions in both Pennsylvania and New Jersey are made at the local level, primarily by municipal zoning and planning boards.

Although improving a road or transit stop in a neglected neighborhood may not by itself revitalize the area, it may provide a focal point for other redevelopment efforts. Major capital investments can enhance access to employment opportunities and/or provide conditions favorable for redevelopment. Transportation infrastructure improvements are often essential components of an economic development strategy. Although other factors (such as the lack of a qualified labor force, high crime rates or the lack of public services) may limit the redevelopment potential of an area, non-transportation improvements and other redevelopment incentives cannot succeed in revitalizing an area if transportation access was (and continues to be) a problem.

Thus, successful redevelopment is often dependent upon the initial or simultaneous completion of the transportation improvement. Transportation improvements may not always be the "engine" for growth and redevelopment, but are often critical for the success of other redevelopment initiatives. Infrastructure investments must be targeted as a part of an overall redevelopment strategy, to allow programmed improvements to act as conduits to funnel additional resources into the region's centers.

This report explores the relationship between public infrastructure investment and economic redevelopment in urban areas. Urban decay may be combatted through the stimulation of economic development within urban areas, and investment in capital facilities is one means of stimulating economic development. Numerous studies and surveys have also demonstrated, however, that social service facilities and delivery enhance human capital and thus plays a significant developmental role. Any public infrastructure policy must therefore complement other community programs and initiatives that deliver or improve social services.

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[1]Bass, Robert M., *Mend Urban Fabric by Preservation*, Philadelphia Inquirer, January 4, 1993.

[2]Ibid.

BACKGROUND RESEARCH

The aging infrastructure of the United States has been of concern to planners for a number of years and has come to the forefront in recent years, as major infrastructure components near the end of their life span. A study conducted in the 1970's by the Port Authority of New York and New Jersey concluded that adequate infrastructure systems (including water and sewer systems, streets, bridges and mass transit) were vital to the economic health of urban centers, and were one of the major competitive advantages held by large, older cities.[3] Policies of the last several decades, however, have contributed to the construction of expanded infrastructure networks and the deferment of maintenance of existing urban systems. Federal guidelines have historically favored new construction over rehabilitation and repair.

The United States Department of Transportation (USDOT) reports that one-third of the bridges on the Federal-Aid Highway System are currently "structurally deficient" or "functionally obsolete", and that 40% of the pavement on the Interstate Highway System is in imminent need of repair.[4] Additional USDOT reports indicate that meeting the existing capital needs on the federal-aid system would require a sustained annual investment of almost $40 billion (compared to about $15 billion allocated to the system in 1991, and the $20 billion allocated annually since the passage of the federal ISTEA legislation). Given the limited funding available for both construction and maintenance of the transportation system, it is clear that the country's regional metropolitan planning organizations, states, counties, local governments and transportation providers must prioritize proposed improvements carefully and fully weigh the costs and expected benefits of all proposed projects.

As stated previously, population and employment in the Delaware Valley have decentralized since 1930, as the region's suburban and rural areas developed rapidly while its urban centers (including Philadelphia, Camden, Chester and Trenton) lost both people and jobs. Regional decentralization and a historical channeling of public infrastructure dollars into suburban expansion rather than the repair of existing systems has left under-utilized urban infrastructure systems to decay.

Various studies have demonstrated that growth rates in the suburbs are linked to the growth rates of the central urban core[5]. Sound urban and suburban infrastructure systems are essential to the overall vitality of the region. Highway and transit access to urban employment opportunities is critical to employees residing in both urban and suburban areas, and access to markets and

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[3]Advisory Committee on Intergovernmental Relations, *Financing Public Infrastructure*, June, 1984.

[4]*The Jobs Impact of an Expanded Federal Highway Program*, Apogee Research, Inc., February, 1991. Page 1.

[5]Ledeber, Larry, and Barnes, William, editors. *City Distress, Metropolitan Disparities and Economic Growth.* National League of Cities, September, 1992.

materials is equally critical to the success of urban and suburban businesses. Residents and employees must have sufficient access to the amenities and necessary services often concentrated in urban centers. The strength of suburban businesses often depends on the success of businesses located in the urban core. While the suburbs may experience growth, this growth must be complemented and enhanced by productivity at the urban center. Suburban plans should therefore be developed in concert with plans for their core urban areas.

The vast expansion of residential and non-residential developments into suburban areas requires the extension or construction of new capital facilities. Funds for scheduled maintenance on existing infrastructure may be diverted to the construction of new facilities, which over the course of time will also require maintenance. Suburban expansion has also been characterized by low-density land use, which has proven to be an impediment to cost-effective transit service provision.

Additionally, older industrial areas in the region's urban centers have been abandoned for suburban locations, in part because neglecting the physical infrastructure in developed urban areas has led to deteriorating roads and failing water systems. The benefits of reversing this trend include increased cost effectiveness of public investments and the stabilization or revitalization of urban neighborhoods. Consequently, the use of infrastructure investment to encourage and support the redevelopment of the region's urban areas provides an efficient and financially sound strategy for reviving healthy communities.

Various studies have linked regional growth to regional capital expenditures. Many studies suggest that public capital has a positive effect on private productivity, and that a decline in public capital can be linked to a failure to be as productive as possible.[6] Additional research indicates that when transportation investment is considered separately from other public infrastructure systems, it often yields the strongest individual effect on productivity, having as much as twice the positive effect of water and sewer systems[7].

Since infrastructure expenditures influence regional economic performance, downturns in the region's economy may be due at least in part to diminished capital investment. A failure to build and maintain infrastructure leaves that responsibility to private firms, sapping the resources available to businesses to fully compete in the marketplace. The cycle of disinvestment then continues; the incentive to invest in public capital in areas where the economy is weakened is diminished, less is invested, and reduced infrastructure investment results in a further weakening of the area's economic base.

The ultimate success or failure of a business depends heavily on the disadvantages or advantages offered by its physical location. Literature relating to the attraction and retention of firms

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[6]United States Department of Transportation, *Assessing the Relationship Between Transportation Infrastructure and Productivity*, pg. vii.

[7]Ibid.

identifies transportation infrastructure as a significant determinant in business decisions regarding location. Several surveys describe a "pull" factor created by infrastructure; public investment in transit and highways in an area is one thing that firms look for when making decisions regarding location. Other studies, however, suggest that while transportation may be a necessary component, it is rarely the singular condition on which companies base their location decisions. Economic development rarely follows a transportation improvement unless other conditions equally necessary for recovery (such as a qualified labor force, an improved quality of life, available sites, utilities and a good business climate) are already in place.

The following general conclusions can be drawn from the numerous studies identified in this report's bibliography that document the linkage between investment in transportation infrastructure and economic growth:

- Maintenance of the existing public capital is essential to preserving the economic health of central cities.

- Sustained economic recovery and growth in urban areas requires reinvestment in physical infrastructure as well as economic incentives to create jobs and improved social services and facilities.

- A review of various case studies failed to uncover common criteria which might "guarantee" that a transportation improvement in a specific area will spark successful redevelopment, or that might signal probable failure. Most economists agree, however, that infrastructure projects, including roads, transit, water and sewer, are essential and necessary for economic development, and that public investment in infrastructure is often accompanied by private investment. Disagreement arises when debating whether public infrastructure investment **causes** growth or is rather **associated** with growth.

- The regional/urban link is a justified connection. Several studies have concluded that the health of the suburbs is dependent upon the health of the central urban area[8].

- Primary emphasis should be given to the reconcentration of resources within existing development centers. The justification for this is as follows:

    - A regional policy advocating the concentration of resources within centers is cost-efficient. This efficiency is derived both from the lower cost of rehabilitating and re-using standing capital and from cost savings associated with the spacial consolidation and concentration of services.

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[8]Ledeber, Larry and Barnes, William, editors. *City Distress, Metropolitan Disparities and Economic Growth.* National League of Cities, September, 1992.

- A regional policy advocating the concentration of resources within centers facilitates the coordinated application of available resources for both physical infrastructure systems and social facilities and services, increasing the likelihood of successful urban revitalization.

- Since there is a correlation between improved infrastructure systems and economic development, reinvestment in the city should be accompanied by increased economic activity and job opportunities for local residents. There is an economic benefit derived from re-establishing ratables within the urban city limits.

- Utilizing infrastructure investment to direct future growth into designated centers and corridors and discourage expansion into undeveloped areas yields ecological benefits such as groundwater protection and the preservation of open space and farmland throughout the region.

- Directing growth into already developed or developing areas and discouraging continued expansion into suburban and rural areas facilitates regional compliance with Clean Air Act regulations. The concentration of employment and population in existing centers and along corridors reduces average trip times, facilitates alternatives to the single occupancy vehicle, and encourages higher densities necessary to support public transit.

COSTS OF URBAN INVESTMENT

Although reinvestment in urban centers has been shown to be a cost-effective and efficient way of investing public funds over the long-term and is often associated with increased private sector investment in these same areas, the short-term cost of urban redevelopment may be higher than the initial cost of suburban development. Characteristics associated with urban areas that can result in increased costs of urban projects include the following:

- Urban areas are more densely occupied than suburban or rural areas, making acquisition of right-of-way more difficult (and more expensive) and community opposition to changes more likely;

- Cities are by nature older than their surrounding suburbs, often contain historic sites or facilities, and are therefore more often subject to related historic preservation regulations; and,

- Urban project development often involves sites previously occupied by industrial, commercial or transportation uses, which are more likely to be environmentally contaminated and are often subject to related environmental regulations.

Impediments to urban reinvestment and redevelopment include land use constraints inherent in densely developed areas (including having to avoid conflicting adjacent land uses); community

opposition; potential litigation and the relocation of existing residents or businesses; increased right-of-way acquisition costs; environmental constraints; potential environmental contamination and its related regulations and responsibilities; and restrictions related to historic sites and districts, including encountering historic or archaeologic constraints after a project has begun. These impediments can increase the time required to complete a transportation project, which translates to increased cost. The direct, short-term costs of urban projects often seem high when compared to suburban expansion or improvement projects.

Many benefits of urban projects, however, may be indirect (such as job creation or expansion tied to improved access, for example, or the regional benefit of an improved urban core) as opposed to direct (such as congestion mitigation). The direct and indirect costs of urban investment must be carefully weighed against both the direct and indirect benefits of such investment when comparing urban versus suburban projects.

STUDY METHOD

This study includes a review and analysis of existing federal, regional and state policies and priorities regarding infrastructure investment, including the Delaware Valley Regional Planning Commission's long range plan, the region's transportation improvement program (TIP), Pennsylvania's interim transportation plan, the final report of the 1991 Pennsylvania House Select Committee on Land Use, and New Jersey's statewide development and redevelopment plan. Policies and regulations of selected state and federal economic development and/or infrastructure investment programs were also considered. The primary economic development goals and policies of the region's four major urban areas (Philadelphia, Trenton, Camden and Chester) are assessed, and transportation infrastructure needs related to these goals are discussed. Conclusions regarding the potential impact of infrastructure investment in urban areas are drawn, and recommendations for implementing DVRPC's policy of reinvesting in urban centers and concentrating development in identified centers and growth areas are presented.

II. FEDERAL, STATE AND REGIONAL INVESTMENT POLICIES AND PROGRAMS

This chapter considers federal, state and regional policies and programs regarding economic development and infrastructure investment in urban areas. Federal policies on infrastructure investment and economic development in urban areas are considered, including federal transportation funding and the federal empowerment zone program. New Jersey's *State Development and Redevelopment Plan* and *Transportation Choices 2020* are discussed, particularly as related to public investments and infrastructure expenditures. Investment policies identified within the Commonwealth of Pennsylvania's *Interim Transportation Plan* and the recommendations of the 1992 House Select Committee on Land Use and Growth Management are presented. Infrastructure investment opportunities within various state agencies are identified, including the New Jersey and Pennsylvania Departments of Transportation, Community Affairs and Commerce. Finally, policies and priorities of the Delaware Valley Regional Planning Commission's (DVRPC's) long range plan *Direction 2020* are reviewed, and the ranking and selection process of the Commission's Transportation Improvement Program (TIP) is discussed.

I. FEDERAL INFRASTRUCTURE INVESTMENT POLICY

Federal transportation dollars represent the largest single source of available funds for infrastructure financing, with approximately $20 billion allocated annually for transportation improvements. The 1991 Intermodal Surface Transportation Efficiency ACT (ISTEA) requires metropolitan planning organizations such as DVRPC to develop a long-range transportation plan linking planning and land use with transportation investment. This mandate for coordinated planning requires that agencies consider the impacts of transportation investments on their region's long-range goals and objectives as the regional transportation improvement program is developed and adopted.

The ISTEA process requires that metropolitan planning organizations weigh the benefits and costs of every proposed improvement and prioritize them, given the limitations on the total funds available for transportation improvements. In fact, a 1994 Executive Order establishing "Principles for Federal Infrastructure Investments" stated that *"infrastructure investments should be based on systematic analyses of expected benefits and costs, including both quantitative and qualitative measures...reflecting values that are not readily quantified".*

Other federal programs through which funds are made available to states and localities for infrastructure, including transportation facilities as well as other facilities such as water and sewer improvements, include the community development block grant (CDBG) program and the federal empowerment zone program, a relatively recent initiative.

Community Development Block Grant (CDBG) funds are available to states and municipalities, either as entitlements (to cities which, because of their demographic profile, are eligible for funds without competing for them) or as discretionary funding awarded on a competitive basis. The CDBG program provides funding for a wide range of community development activities directed

at neighborhood revitalization. Entitlement jurisdictions have the freedom to choose how to spend their CDBG funds (including infrastructure improvements), provided that local programs benefit low-or-moderate income residents or aid in the prevention or elimination of slums.

The federal empowerment zone is a demonstration program established in 1994 to provide funding to a limited number of cities to accomplish community and economic development objectives within specific zones" within their boundaries. The goal of the program is to encourage cities to direct available resources to specific urban redevelopment areas. The program will provide $100 million over three years to each of ten designated empowerment zones and to numerous other "enterprise communities", smaller in size. The cities of Philadelphia and Camden have been designated as a joint federal empowerment zone, with parts of three state-designated enterprise zones in Philadelphia as well as the waterfront and downtown areas of Camden targeted for redevelopment.

In addition to empowerment zones, the federal program allows for the designation of smaller Enterprise Communities, each of which will be eligible for approximately $3 million annually in addition to other incentives. The City of Trenton (in Mercer County) and Chester City (in Delaware County) identified specific areas within their limits as enterprise communities and applied for designation under the enterprise community program, but were not selected. A primary goal of the process, however, was to encourage each applicant to develop a redevelopment plan that could be implemented by the public and private sectors regardless of whether or not the City is designated as an Enterprise Community. Both Trenton and Chester are actively pursuing implementation of the plans developed during the Enterprise Community application process.

The federal empowerment zone and enterprise community programs stress the importance of providing social facilities and services (such as housing, education, job training, day care and health care) in conjunction with economic incentives and physical improvements in order to effectively revitalize distressed urban areas. Critics (perhaps pessimists) maintain that this program (like urban enterprise zones and preceding economic development programs) will not significantly improve distressed urban areas. Like other designated communities, however, Philadelphia and Camden are hopeful that public commitment to social and physical investments in their communities will encourage increased private investment and commitment as well.

II. STATE INFRASTRUCTURE INVESTMENT POLICIES AND PROGRAMS

This section considers growth management and urban infrastructure investment policies of New Jersey and the Commonwealth of Pennsylvania. New Jersey is one of only a few states nationwide that has adopted and begun to implement a statewide growth management plan. The *New Jersey State Development and Redevelopment Plan* was adopted in 1992, and advocates revitalizing existing urban areas and concentrating growth in centers. Various state programs with available discretionary funding have developed regulations which give priority to investment in New Jersey's urban areas. The governor of New Jersey has also established an Urban Coordinating Council, through which various redevelopment efforts can be coordinated in urban

areas. Although Pennsylvania has not formally adopted a statewide growth management plan, certain policy recommendations and program regulations give priority to urban revitalization and concentration of available resources in the Commonwealth's urban areas.

New Jersey Plans and Policies

The *New Jersey State Development and Redevelopment Plan* (NJSDRP) was adopted in June of 1992, having evolved over the course of six years through discussions and negotiations between the State Planning Commission, municipalities, counties, state agencies, organized interest groups and citizens. A primary goal of the NJSDRP is to revitalize the state's urban centers and urbanized areas. After much debate, the State Planning Commission concluded that revitalization of existing urban areas must be achieved through incentives in those areas, rather than by restricting growth in rural areas.

Specifically, the plan states that the state's urban centers and areas should be revitalized by investing sufficiently in their human resources and infrastructure systems in order to attract private investment. Other fundamental goals of New Jersey's State Plan are conservation of natural resources; the promotion of beneficial economic growth; environmental protection; the provision of public services at reasonable cost; the provision of sound, affordable housing; the preservation of historic, cultural, open space and recreational resources; and the facilitation of sound, integrated statewide planning.

As was the case in many other states, infrastructure investment in New Jersey shifted after 1950 from urban areas and their immediate suburbs to newer suburban areas and outlying subdivisions. Urban infrastructure maintenance and repair was deferred while new facilities were constructed to accommodate suburban growth. The NJSDRP establishes urban and community infrastructure priorities meant to guide discretionary decisions of agencies as they allocate public resources. Recognizing that public investment of resources can significantly impact upon the location, pattern and pace of growth, the State Plan identifies four categories of priorities, which generally give higher priority to projects in urban centers and other distressed urban areas. At the same time, the plan provides guidelines that allow non-distressed and non-urban areas to also receive priority under certain circumstances.

In order of priority, the NJSDRP suggests allocating resources to projects related to public safety; to infrastructure maintenance and repair; and to projects in distressed urban centers which have an endorsed Strategic Revitalization Plan and Program. The State Plan assigns priority to urban centers; existing regional centers, towns and villages; and planned regional centers. Priorities for public transit investment are given to services linking urban centers, regional centers and major transportation terminals, and highway access priorities are assigned to urban centers, regional centers and towns. Additionally, priorities may be given to municipalities and counties that engage in activities that promote the goals of the State Plan and increase the ratio of benefits to costs in the expenditure of public funds, such as municipalities or counties that regionalize service delivery; that have adopted planning tools such as certified housing elements and up-to-date master plans; or to projects that effectively leverage private investment.

The New Jersey State Planning Act was amended to require that the State Plan include an infrastructure needs assessment that "provides information on present and prospective conditions, needs and costs with regard to State, county and municipal capital facilities, including water, sewerage, transportation, solid waste, drainage, flood protection, shore protection and related capital facilities"[9]. The infrastructure needs assessment referenced by the State Plan was conducted by the New Jersey Office of State Planning.

This needs assessment projected that $116 billion will be needed for infrastructure through the year 2010 if existing land use trends were to continue. Over 54% of this total need will be needed for local infrastructure, while over 40% of the total will be needed for roads, bridges and tunnels. The assessment concluded that two-thirds of the total projected infrastructure costs will be needed for repairing and maintaining existing infrastructure systems if existing trends continue, while only one-third will be required to support projected population and employment growth.

The impact assessment demonstrates that development focussed around centers as an alternative to continued sprawl would clearly reduce this projected shortfall, with anticipated savings in transportation infrastructure, water and sewer supply systems and school capital facilities. Implementation of the State Plan could also protect 30,000 additional acres of environmentally fragile land, preserve 40,000 additional acres of farmland, and reduce water pollutants by 40%.

The State Plan establishes policies for investing in infrastructure reconstruction, development and acquisition, to be used as a guide to State, county and local agencies to incorporate the goals and objectives of the State Plan into their planning and decision-making processes. The Plan stresses that infrastructure and related services can be provided most efficiently "by restoring systems in distressed areas, maintaining existing infrastructure investments, creating more compact settlement patterns in appropriate locations in suburban and rural areas, and timing and sequencing the maintenance of capital facilities service levels with development throughout the State".[10] Specifically, the NJSDRP states that infrastructure investment should be viewed as a development and redevelopment tool, and investment decisions should be made that promote development and redevelopment in accordance with the Plan's goals and objectives.

The Plan recommends a strategic, systemic approach to planning, as opposed to the short-term, piecemeal approach common in the past. The State Planning Act mandates that the State Plan and its infrastructure needs assessment be directly linked to New Jersey's capital budget, by requiring the Commission on Capital Budget and Planning to prepare an annual statewide Capital Improvement Plan which identifies proposed capital projects and must be consistent with the goals and provisions of the adopted State Plan.[11]

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[9]N.J.S.A. 52:18A-199(b).

[10]*Communities of Place: The New Jersey State Development and Redevelopment Plan*, pg. 35.

[11]N.J.S.A. 52:9S-3.a.

In 1994 the New Jersey Department of Transportation developed and adopted its long-range plan, *Transportation Choices 2020.* A goal of this long-range, multi-modal plan is to use transportation to help shape desired development patterns consistent with the *State Development and Redevelopment Plan.* The Plan endorses the establishment and strengthening of "Communities of Place" and the protection of environmentally sensitive areas, and recommends that transportation investment be coordinated with other public investment. *Transportation Choices 2020* stresses the importance of maintaining, repairing and upgrading the existing transportation infrastructure; of maximizing the service provided by the existing infrastructure; and of linking infrastructure improvement projects to land use policies.

Programs and Policies of New Jersey State Agencies

The State of New Jersey has recently launched a new Urban Strategy, of which four cities (Asbury Park, Camden, Elizabeth and Trenton) will initially be a part as demonstration cities. The goal of this new Urban Strategy is to devise "community-driven strategies that will permit the development of locally defined solutions to local problems", emphasizing the importance of comprehensive neighborhood-based planning to redevelopment efforts. Under this Strategy, the primary focus of the State's housing policy will be urban housing (with approximately $350 million earmarked for urban housing projects), and $2 million will be appropriated to fund an urban community development bank.

Urban neighborhoods that want to participate in this new initiative must be co-sponsored by their respective City, which in turn must target available municipal funding, services and/or technical assistance to the effort. The community must develop a neighborhood revitalization plan, with the assistance of the city and the Office of State Planning, which assesses how state and city resources could best be coordinated and how public funds can be used to leverage private and non-profit sector funding and participation. The State has also agreed to streamline the regulatory process for community development projects to the greatest extent possible, and is currently re-evaluating existing funding program rules in most state departments to reward urban communities that undertake comprehensive neighborhood planning.

As a part of this new initiative, the Governor of New Jersey has established an Urban Coordinating Council (UCC), the primary mission of which is to ensure the coordination of various State programs and resources directed to urban areas. High-level representatives of all State agencies serve on the Council, facilitating an ongoing dialogue between state, local and county officials and the coordination of redevelopment efforts, including environmental remediation, housing and neighborhood development, economic development, and infrastructure investment.

The primary benefit of developing and adopting a statewide development and redevelopment plan is the opportunity to use it as a guide for developing coordinated and consistent rules, regulations and policies at all levels of government. Several of New Jersey's individual state agencies have entered into memorandums of understanding with the New Jersey Office of State Planning, signaling a commitment to implement their programs and policies in adherence to the goals of

the State Development and Redevelopment Plan. Additionally, several programs which provide discretionary funding to municipalities give priority to urban areas.

The New Jersey Department of Transportation (NJDOT) has applied the principles of the State Plan to several of its program and planning strategies. In support of the NJSDRP's primary policy of reinvestment in Centers, the agency has developed a new funding program specifically designed to assist municipalities that are undertaking local planning efforts consistent with the goals and policies of the State Plan. Municipalities eligible for program funds (which include the cities of Camden and Trenton and Hopewell Borough in the DVRPC region) must have formally participated in the implementation of the state plan, by seeking and obtaining Center designation, preparing a Strategic Plan and Program endorsed by the State Planning Commission, or being officially recognized as an Urban Complex by the Commission.

This program, known as "Local Aid for Centers of Place and State Plan Implementation", awarded a total of $1 million to eligible municipalities in August of 1995, and may provide additional funding in future years. Program funds are being used for "non-traditional" transportation improvements, including bicycle and pedestrian facilities; scenic or historic highway programs; parking management; traffic management; preservation of abandoned railway corridors; landscaping or scenic beautification; or the rehabilitation of transportation structures. The only projects which are specifically excluded from eligibility for funding under the program are system preservation projects, such as roadway resurfacing, rehabilitation or reconstruction.

Additionally, the NJDOT now assigns a high priority to designated centers when evaluating proposed highway systems management and new capacity. The Office of State Planning is also assisting with the development of NJDOT's long-range plan by developing municipal-level population and employment forecasts and providing technical assistance.

The New Jersey Department of Environmental Protection (NJDEP) has likewise signed a Memorandum of Understanding with the Office of State Planning, indicating their commitment to advancing the goals and policies of the state plan. Several regulations and programs implemented by the NJDEP favor urban redevelopment over suburban expansion. For example, the Department administers the state's Industrial Sites Recovery Act (ISRA), which provides grants to municipalities to pay for preliminary assessments on urban sites and limits their liability if contamination is discovered during this assessment. This program has enabled municipalities to assess the condition of municipally-owned sites as a first step towards marketing or redeveloping them. Some funding to provide for remediation on these sites is currently available through Federal "brownfields" programs, and additional State funding for remediation is being considered.

New Jersey's Enterprise Zone Program, administered by the New Jersey Enterprise Zone Authority and the New Jersey Department of Commerce and Economic Development, is a state program which provides significant tax and business incentives in urban areas, in order to enhance economically distressed urban centers. Designated urban zones located within the DVRPC region include the City of Camden (Camden County), Trenton (Mercer County) and Mt.

Holly (Burlington County). Other municipalities eligible to compete for enterprise zone designation if and when additional funds become available include Pemberton Township and Willingboro in Burlington County; Gloucester City and Winslow in Camden County; and Deptford, Glassboro, Monroe, Paulsboro and Woodbury in Gloucester County.

Urban enterprise zones are designated within eligible cities by the state's Urban Enterprise Zone Commission, based on factors such as the need for economic development, the unemployment rate, the percentage of families on welfare and the potential benefits of designation. The zones are usually located within the industrial or commercial area of a city and contained within a continuous boundary. Benefits to businesses operating within these zones include tax credits; state sales tax exemptions when purchasing building materials and most services; unemployment tax rebates; skills training programs; priority for business funds available under certain state programs; possible exemptions from certain state and municipal regulations; reduced utility rates; and energy assistance. Additionally, retailers located within the zones are allowed to charge only 50% of the state's normal 6% sales tax. Revenues generated from the 3% sales tax are added to a state fund and returned to the zones, to be used to improve services or infrastructure.

New Jersey's Department of Community Affairs develops and implements programs that can provide discretionary funding to the state's urban areas to aid in their revitalization. Several of its housing policies and programs (such as the Balanced Housing Fund) have been restructured to reflect an emphasis on supporting neighborhood revitalization in the state's urbanized areas. The Urban Homeownership Recovery Program, a part of the State's new Urban Housing Initiative, provides $150 million for construction of single-family units, and an additional $150 million has been appropriated for permanent mortgages for families who purchase units in urban areas. An additional $30 million is available through the Homeownership Incentive Fund, which provides low-interest temporary gap financing to developers who build units affordable to potential low and moderate income homeowners.

Recent New Jersey Urban Initiatives

The New Jersey legislature is currently considering legislation would could significantly impact the state's urban areas. The New Jersey Urban Redevelopment Act (Senate Bill 1655, Assembly Bill 2515) would establish a State Redevelopment Authority (NJRA), with the power to coordinate state urban policy and raise money through bond sales to pay for urban construction and environmental remediation. It also would create the Urban Policy Coordinating Council (UPCC) to coordinate existing state programs, including as its members "the highest level" of state officials from all state departments and divisions serving urban centers. The Act also creates a real estate investment trust that would use seized properties as collateral for stock offerings (through a program to be known as "Take Stock in New Jersey").

The Urban Redevelopment Act attempts to discourage speculation in urban areas by allowing local authorities to initiate accelerated foreclosure of abandoned properties. It empowers local officials to seize abandoned housing even if the owner continues to pay taxes. Properties which sit unused for one year could be listed as abandoned; once listed, the owner would have 45 days

to respond as to his intentions to re-use the site, and the property could be seized after 6 months. It also would allow tax increment financing, where some of the new tax revenue generated by rehabilitated properties could be used to repay bonds that financed the rehabilitation. The environmental remediation process would be expedited, and some environmental clean-up rules would be eased in urban areas.

The proposed Redevelopment Act requires participating cities to outline a plan to rebuild entire neighborhoods with a mix of affordable and market-rate housing and commercial development, and allows them to create neighborhood development districts. Participating cities would be required to document that local civic groups, businesses and residents support the development plan. Participation would initially be limited to 27 municipalities that are currently receiving distressed cities aid and have special-needs school districts (including Trenton and Camden).

The New Jersey Urban Redevelopment Act would require an initial state investment of $250,000 for staff. As of September 18, 1995, the Senate version of the Act (S-1655) had been passed; the Assembly's version (Assembly Bill 2515) had been transferred by the Assembly's Local Government Committee to the Assembly Appropriations Committee for further action.

Pennsylvania Plans and Policies

The Commonwealth of Pennsylvania's comprehensive Municipalities Planning Code (MPC) currently allows (but does not require) local land use planning. There is no statewide commitment to comprehensive planning, however, since there is currently no requirement or incentive for local planning and only limited resources available for local planning assistance. Although county planning commissions are given the authority to develop, county-wide land-use plans, these plans are advisory only, and must coincide with local plans if such plans exist. The Commonwealth has not yet developed, adopted or implemented any kind of statewide planning or growth management strategy that could be used as a guide for developing consistent and coordinated economic development and investment policy.

In March of 1991, the Pennsylvania House of Representatives established a Select Committee on Land Use and Growth Management. This Committee held six meetings at which they heard testimony from over thirty separate organized interest groups and individuals, and incorporated testimony from witnesses who had testified before a similar 1990 committee into their final recommendations to the legislature.

The final report of this House Select Committee was issued in June of 1992 and advocates the implementation of an infrastructure "concurrency" system throughout the Commonwealth. The report states that "the infrastructure and public services needed to support a particular level of development should be available before such a development is approved by a municipality".[12]

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[12]*Final Report of the 1991-1992 House Select Committee on Land Use and Growth Management*, page 23.

The Committee also recommended that the State Planning Board and the county planning commissions be given the responsibility of establishing the necessary criteria and plans to assist municipalities in achieving concurrency.

Future implementation of the recommendations outlined in the House Select Committee's report is uncertain, given the recent change in administration. A second report completed in late 1994 by the Pennsylvania Futures Council, a committee working under the direction of the Commonwealth's lieutenant governor, considered the future economic competitiveness of the Commonwealth. That report faces a similar uncertain future, and has not yet been distributed in final form for review.

The Commonwealth of Pennsylvania's 1994 *Interim Transportation Policy Plan* is a statement of goals, objectives and strategies regarding the current and future statewide transportation system. The Interim Plan is a long-range intermodal plan, representing all transportation modes and considering both public and private transportation facilities and services. While the Interim Plan does not specifically state that urban redevelopment is preferable to suburban sprawl, several goals and policies of the Interim Plan could be interpreted as supporting urban reinvestment.

For example, the plan establishes as a goal the provision of "efficient, accessible and connected transportation systems, facilities and services as an incentive to support economic change statewide"[13], an objective of which is to promote and coordinate access and intermodal improvements which support employment-generating opportunities, consistent with regional and local economic, environmental and land use policy. This goal implies that the Pennsylvania Department of Transportation's intent is therefore to invest in projects consistent with DVRPC's regional goal of revitalizing the region's urban centers.

Another goal of the Commonwealth's Interim Plan is to maintain and improve the State's transportation systems to meet the needs of people and goods movement in both urban and rural regions. Objectives include maintaining existing systems and facilities in the most cost-effective manner and on a life-cycle basis. The plan recommends preserving the existing system while keeping future transportation alternatives open, and endorses the coordination of infrastructure investments among state and local public entities to achieve the maximum public benefit.

Programs within Pennsylvania State Agencies

Despite the lack of statewide policy regarding growth management or development priorities, several state programs generally support urban redevelopment and revitalization. The Pennsylvania Department of Community Affairs administers the Commonwealth's Enterprise Zone Program. Enterprise zones are designated within distressed municipalities, and are provide with a basic grant of $110,000 for administrative expenses and seed money. Enterprise zones are

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[13]Pennsylvania Department of Transportation, *Interim Transportation Policy Plan*, December, 1994, page 4-9.

also eligible to compete for additional grants for larger scale projects involving manufacturing or business service firms within these zones. Low-interest bridge loans may also be available, using basic grants or from a revolving loan fund capitalized over time from basic grant funds.

Pennsylvania's Enterprise Zone Program focusses on building the capacity of the community to respond effectively to local business opportunities and constraints. Employers within the zones receive a state corporate net income tax credit of up to 20% of the value of improvements they make for business purposes, and some local jurisdictions offer property tax credits or deductions within the zone. Municipalities designated as zones are given priority consideration from other state agencies for resources available under existing community and economic development programs, including Business Infrastructure Development (BID) funds; Employment and Community Conservation (ECC) Program funds; Customized Job Training (CJT) funds; and Pennsylvania Industrial Development Authority (PIDA) loans. Improvements funded with enterprise zone program grants can include infrastructure and site access improvements, and sometimes can combine program grants from the departments of Commerce and Transportation to make urban industrial and business sites more efficient and thus more attractive to prospective businesses.

Four enterprise zones are located within the City of Philadelphia: American Street and Hunting Park West in North Philadelphia; West Parkside, in West Philadelphia; and the Ports of Philadelphia, along the Delaware River waterfront. The city and the state provide low-interest financing to companies locating within these zones, and Philadelphia uses city-tax-supported capital funds to provide the basic infrastructure in city-owned industrial parks located within enterprise zones. Additionally, both the City's Water Department and the Gas Commission make repairs to existing lines in these zones using their own funds.

A state-designated enterprise zone is also located in the City of Chester, including the City's Delaware River waterfront and some adjacent areas. This enterprise zone is currently inactive, due to limited administrative staffing. The Commonwealth's Department of Community Affairs expects the Chester Enterprise Zone to secure basic planning funds and take advantage of available resources in the near future, using the City's recently completed comprehensive plan (*Chester City Vision 2000*) as its guide for the future.

Some funding for infrastructure improvements is available to businesses throughout the Commonwealth through the Capital Loan Fund, funded through the Pennsylvania Department of Commerce and administered in Philadelphia by the Philadelphia Industrial Development Corporation (PIDC). Industrial manufacturing or export service companies with less than 50 employees may obtain loans through this program for both property acquisition and infrastructure improvements. Additionally, the Industrial Communities Site Program (ICSP), also administered through the Department of Commerce, has grants available to be used to construct infrastructure, remove hazardous waste or make other changes to blighted industrial sites. The ultimate purpose of the program is to create jobs by bringing older, blighted industrial sites back into use. Grants may be used to construct or reconstruct public infrastructure; construct on-site private utilities; clean up hazardous waste; or excavate, grade and prepare the site.

The Commonwealth of Pennsylvania has generally encouraged (through various programs regulations) the reuse of existing sites in developed areas as an alternative to new development on "greenfield" sites. As an example, legislation designed to encourage the cleanup and reuse of older industrial and commercial sites was recently introduced in the Pennsylvania Senate. Senate Bill 1, known as the Land Recycling and Environmental Remediation Standards Act, establishes a process for cleaning up and reusing industrial and commercial properties, defines remediation standards and limits future liability for owners who meet cleanup standards. Additionally, Senate Bill 11 limits the future liability of economic development agencies and financial institutions willing to take on development of these sites, and Senate Bill 12 establishes a program within the Department of Commerce to provide funding to municipalities, economic development agencies, authorities or similar agencies to conduct preliminary assessments of abandoned sites in distressed urban areas, with an annual appropriation of $1 million.

Pennsylvania's Recent Urban Initiatives

Pennsylvania House Resolution 91, passed by the Commonwealth's House of Representatives in March of 1995, directs the Urban Affairs Committee to review issues concerning blighted and abandoned property and the economic revitalization of the Commonwealth's boroughs, cities and urban areas. This Committee was ordered to hear testimony on issues and laws pertaining to urban economic development and the elimination of urban blight, including the effectiveness of existing programs and legal remedies and any impediments to their effectiveness. A report of its findings must be prepared for the House of Representatives by December 30, 1995, including remedial legislation. As background, the Urban Affairs Committee's research staff has prepared a list of the primary economic development and housing statutes and programs currently in operation (including 35 separate Acts, 17 Department of Community Affairs programs, 28 programs under the Department of Commerce, 4 housing programs under the Treasurer's office, and 9 programs within the Pennsylvania Housing Finance Agency), and testimony will be heard in various locations throughout the Commonwealth during the coming months.

III. REGIONAL INFRASTRUCTURE INVESTMENT POLICY AND PROGRAMMING

The Region's Long-Range Plan: Direction 2020

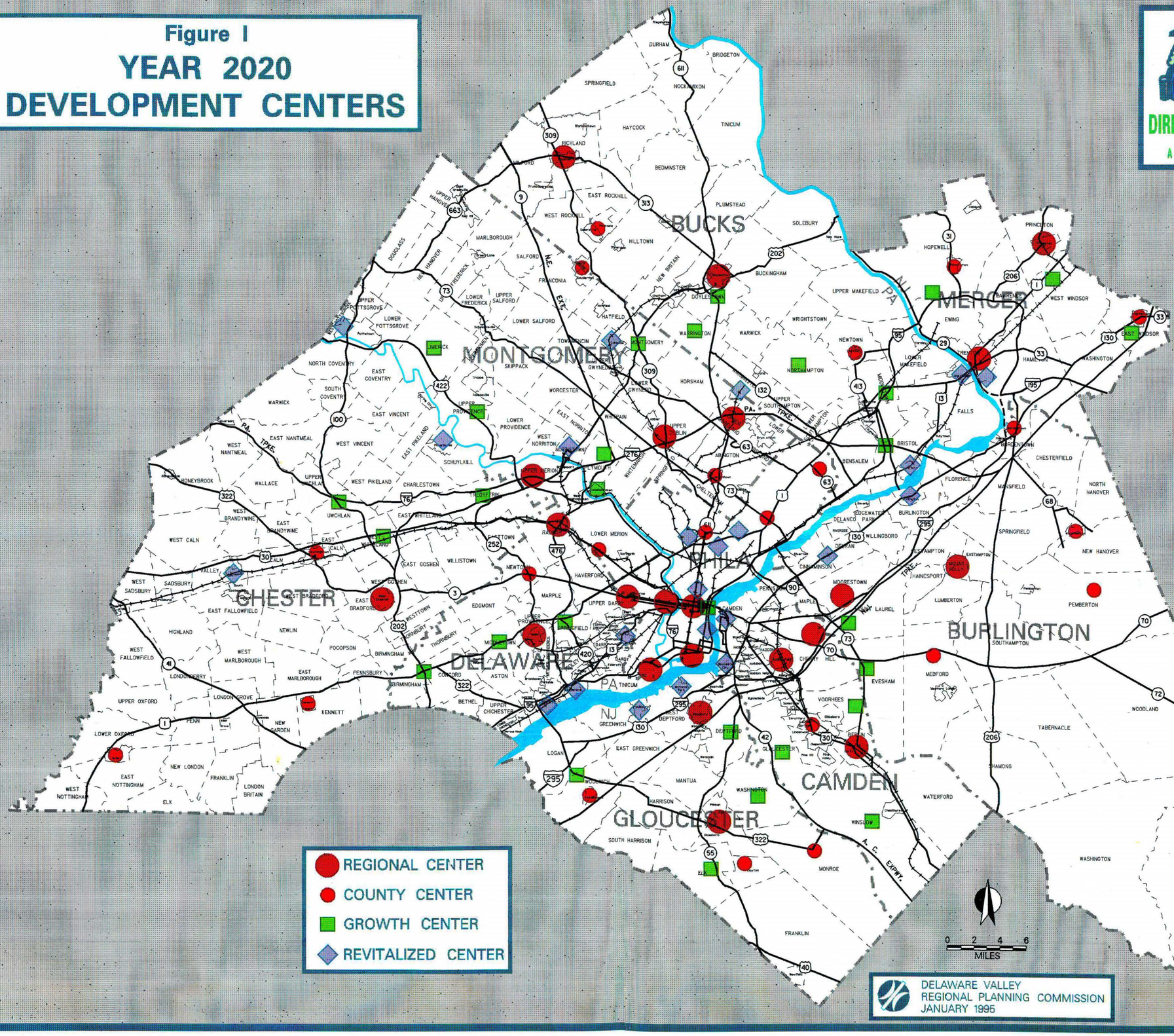
The Delaware Valley Regional Planning Commission's long-range plan for the future of the region, DIRECTION 2020, emphasizes revitalization and redevelopment of the region's urban centers and encourages a compact land development pattern as an alternative to continued suburban and rural sprawl. The plan promotes sustainable development by advocating the preservation and strengthening of the region's existing resources and the concentration of future growth in identified centers, and recommends that the region's decision-makers use infrastructure investments to encourage development within existing communities and appropriate growth areas. DIRECTION 2020's policies advocate focussing development within a set of centers of varying scale and character (including regional, county, growth and revitalized centers). The region's 96 identified development centers, which serve as the basis for the 2020 land use plan, are listed in Table I and illustrated in Figure I.

TABLE I
DIRECTION 2020 DEVELOPMENT CENTERS

COUNTY	Regional Centers	County Centers	Growth Centers	Revitalized Centers
BUCKS	Doylestown Boro, Quakertown Boro	Newtown Boro, Sellersville/Perkasie	Oxford Valley (Middletown), Doylestown Township, Northampton, I-95/276 Interchange, Warrington	Warminster/ Hatboro (Montgomery County), Bristol Boro, Morrisville
CHESTER	West Chester	Downingtown, Kennett Square, Oxford	Exton (West Whiteland), Great Valley (Tredyffrin), Uwchlan/Eagle	Coatesville, Phoenixville
DELAWARE	Media, Radnor, Upper Darby	Newtown Square	Painters Crossroads (Birmingham/Concord), Middletown, Springfield	Chester City, Darby Boro, Industrial Waterfront
MONTGOMERY	King of Prussia (Upper Merion), Willow Grove (Upper Moreland), Fort Washington/Ambler	Jenkintown, Bryn Mawr/Ardmore, Souderton/Telford (Bucks County)	Upper Providence, Plymouth, Montgomery, Limerick, Conshohocken	Pottstown/West Pottsgrove, Norristown, Lansdale
PHILADELPHIA	Center City, University City/30th Street Station, Airport, Sports Complex/Naval Yard	Bustleton/Roosevelt Byberry/Franklin Mills, Broad/Olney	Central Waterfront	North Philadelphia, Central Germantown, American Street, South Waterfront, Naval Depot/Sears
BURLINGTON	Mt. Holly, Moorestown	Bordentown, Browns Mills (Pemberton), Medford, Wrightstown	Mt. Laurel, Evesham	Burlington City, Route 130 Industrial Corridor
CAMDEN	Cherry Hill, Haddonfield Boro, Berlin Boro/Town	Lindenwold	Voorhees, Winslow, Gloucester	Camden, Gloucester City
GLOUCESTER	Glassboro/Pitman, Woodbury City	Swedesboro, Clayton, Williamstown (Monroe)	Logan/Woolwich, Deptford, Washington, Elk	Paulsboro, National Park
MERCER	Trenton, Princeton Boro	Pennington, Hightstown	East Windsor, Hopewell, West Winsdor (Route 1)	South Trenton

Figure I
YEAR 2020
DEVELOPMENT CENTERS

DIRECTION 2020
A Region on the Rise



DIRECTION 2020 encourages "population and employment stability or growth in urbanized areas" and "suburban growth in designated areas with adequate infrastructure"[14]. The plan recommends limiting new infrastructure in rural areas outside of the centers and corridors in order to maintain the rural character of portions of the region, and states that infrastructure investment should be targeted in order to encourage development within existing communities and appropriate growth areas. Portions of Philadelphia, Trenton, Camden and Chester cities are identified as "revitalized" centers, where concerted action is necessary to stem the flow of residents and jobs and rebuild neighborhoods and the employment base. Areas identified as being appropriate for growth are generally located within existing and proposed sewer service boundaries and infill areas of the region, and in most cases are already partially developed with a mix of low density residential and commercial uses.

The underlying assumption to DIRECTION 2020's long-range planning policies is that the availability of infrastructure drives growth, and that public infrastructure investment can be used to direct growth to appropriate growth areas. The DIRECTION 2020 Land Use Plan, including development centers, developed areas, future growth areas, proposed open space and areas appropriate for rural or agricultural use, is illustrated in Figure II.

Under DIRECTION 2020's policies, adequate capacities for water and sewer systems and other services would be provided in designated growth areas, and key elements of the existing transportation system would be preserved and enhanced. The plan recommends that municipalities amend their local zoning ordinances to increase densities and concentrate infrastructure improvements in designated centers, and coordinate their local planning process with an adopted Act 537 Plan (in Pennsylvania) or with their area's 208 Water Quality Management Plan (in New Jersey). State and federal transportation agencies and transit service providers are encouraged to maintain and improve services and facilities in urbanized areas, improve and expand services and facilities in designated growth areas, and limit new infrastructure in rural or agricultural areas.[15]

Regional Transportation Investment: the Transportation Improvement Program (TIP)

The primary mechanism through which DVRPC influences infrastructure investment and decision-making in the region is its Transportation Improvement Program (TIP). DVRPC's TIP identifies all federally-funded highway and transit improvements scheduled during a multi-year period, in addition to selected 100% state-funded projects. The TIP includes all priority projects for which federal funds will be sought within the nine-county DVRPC region, and represents a consensus among state and local officials as to which transportation improvements should be undertaken.

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[14]Delaware Valley Regional Planning Commission, *DVRPC 2020 Land Use and Transportation Plan: The Policy Agenda*, 2020 Document number 21, pp. PF2 - PF3.

[15]Ibid, pages PF2 - PF8.

The current TIP (for years 1995 through 1998) schedules almost $3.5 billion in transportation improvements, including transportation infrastructure improvements, bus and rail car acquisition, new highway construction, reconstruction, bridge improvements and safety projects. While local capital improvement budgets or plans are developed at the local level and reflect local concerns and priorities, the TIP should reflect regional goals and policies.

In developing the TIP, the DVRPC uses a project ranking and selection process. Every proposed project is first screened to ensure that the project meets ISTEA eligibility requirements; is consistent with county, state and regional plans; is well-defined and includes a reasonable cost estimate; and can actually be accomplished within the estimated time frame. Each eligible project is then reviewed and given a score for its applicability to each of seven goals, by assigning a rank of high, medium or low to reflect the degree to which each specific goal is satisfied. Each goal has been weighted according to its overall importance to the region. The seven goals used to rank proposed improvement projects and their respective weights are as follow:

- Preservation and modernization of key elements of the existing transportation system (given a weight of 20);
- Improving safety and security (assigned a weight of 15);
- Mitigating congestion (also assigned a weight of 15);
- Protecting and improving the environment (assigned a weight of 10);
- Supporting economic activity (given a weight of 15);
- Improving mobility of people and goods (also assigned a weight of 15); and,
- Supporting land use goals and plans (given a weight of 10).

The TIP ranking and selection process is the primary mechanism through which the regional planning commission can implement the goals and objectives of its long-range plan. Of the seven selection criteria, "supporting land use goals and plans" is the only one that is specifically based on the physical location of the proposed improvement within an urban center or identified growth area, but is given the lowest weight (tied with protecting the environment). Most of the other criteria, however, may also support reinvestment on urban areas, including the extent to which the project preserves and modernizes key elements of the existing system, improves mobility, improves safety and security, mitigates congestion, and supports economic activity.

The extent to which a project preserves and enhances the existing system is given the highest weight of any selection criteria. The project's support of economic activity is currently weighted more heavily than either its support of land use plans and goals or the level to which it protects the environment. This leaves the actual rating of a project open to subjective review; while some may argue that economic activity is highly supported by a rehabilitation project in the region's urban centers, others may maintain that a system expansion project in a suburban or rural area produces the most immediate results in terms of attracting prospective employers to the region.

Whether the TIP selection process specifically favors urban redevelopment projects is unclear. Under "supporting economic development activity", highway projects may be given a "high impact" rating if they improve access to either freight distribution facilities, ports or major

Figure II
DIRECTION 2020 LAND USE PLAN

DIRECTION 2020
A Region on the Rise

BUCKS
MONTGOMERY
PHILA
MERCER
CHESTER
DELAWARE
BURLINGTON
CAMDEN
GLOUCESTER

1990 DEVELOPED
FUTURE GROWTH AREA
EXISTING PARK
PROPOSED OPEN SPACE
RURAL OR AGRICULTURAL

REGIONAL CENTER
COUNTY CENTER
GROWTH CENTER
REVITALIZED CENTER

0 2 4 6
MILES

DELAWARE VALLEY
REGIONAL PLANNING COMMISSION
May 1995

industrial districts (which are often located in the region's developed centers) or to any major employment center (which could very well be newer employment centers located in suburban areas). Transit projects that improve or provide access between residential concentrations and employment centers are ranked as high impact projects, although the rehabilitation of existing transit stations (often located in older developed areas) are ranked as low impact projects. Transit projects which provide new or expanded service with significant ridership potential are given a high rating (since this is only likely to occur on lines providing service to the urban core), while projects that upgrade existing transit infrastructure are assigned a medium rating.

An analysis of the historical pattern of transportation improvement programming in the region was undertaken as a part of this project, in an attempt to illustrate trends in expenditures and document historic differences in spending in urbanized areas as opposed to suburban or rural areas. Analysis of past TIP's, however, is complicated by changes to the TIP process brought about by the federal 1991 Intermodal Surface Transportation Efficiency Act (ISTEA). Prior to 1991, the regional TIP acted primarily as a "wish list", with little attention paid to funding limitations or any prioritization of projects given such limitations. The current programming process, however, permits only those projects which can reasonably be expected to receive funding to be included on the transportation improvement program, and requires that projects be prioritized in the order in which the region would like to see them completed.

This revised programming strategy attempts to represent a realistic, long-range commitment to transportation investment, and is meant to result in coordinated projects which are consistent with national, state, regional, county and municipal plans. Comparisons between the current TIP and previous programs, however, can be misleading, given that many of the projects listed in previous TIP's had little chance of actually being constructed (since the combined cost of all TIP projects far exceeded available funding). Additionally, the current TIP, though assembled under the new guidelines requiring prioritization of projects based on regional goals and policies, also includes certain projects to which the region has made significant commitments in the past which may have been consistent with the region's past goals. These projects are likely to continue to be funded regardless of whether they specifically further the region's current goals.

Attempts to compare urban versus suburban expenditures and draw conclusions regarding relative benefits realized by the two is also difficult, since the location of an improvement (within or outside of an urban area) may or may not coincide with the location realizing the greatest benefit from the improvement. For example, a newly constructed highway built through the suburbs but terminating in the city may actually benefit the city, although the project's cost will be attributed to the suburbs. Conversely, it can be argued that a bypass similar to the Vine Street Expressway may actually benefit the suburbs (since it moves suburban residents through the city rather than within it) even though the project is located within the urban limits.

In the case of transit projects, it becomes even more difficult to assign relative benefit of improvements to different areas, since transit improvements often serve both an urban area and its surrounding suburbs and benefit both, though possibly in different ways. In the case of the PATCO High Speed Line, for example, it can be argued that this suburban rail line benefits the

suburbs through which it passes, in terms of the access provided to residents and the development generated around stations along its route. The rail line also benefits the Cities of Philadelphia and Camden, however, since it provides improved access to numerous employees who work in the cities (and thus, in the case of Philadelphia, pay City wage tax) but live in the New Jersey suburbs. Conversely, it has been argued that the rail line may have actually hurt the cities, since it facilitated the movement of working people out of the cities by enabling them to work in Philadelphia (or, to a lesser extent, Camden) but live elsewhere. Increasingly, rail lines will serve City residents that "reverse-commute" to a job in the suburbs.

Despite these limitations, some general conclusions regarding patterns of regional transportation investment over time can be drawn based on a review of TIP proposals since 1976. Six separate transportation improvement programs were compared, considering both the location of proposed projects (urban or non-urban) and the type of project (transit or highway). "Urban" projects were defined as those projects located within Philadelphia, Camden, Trenton or Chester. Projects were further classified as either rehabilitation/repair or new construction.

Regional public transit projects, which represent approximately 50% of approved TIP projects, are fairly evenly divided between urban centers and suburban areas. As discussed above, suburban transit improvements often benefit urban areas as well as the region's suburbs (and vice versa) by facilitating movement between suburban and urban sites.

Highway expenditures have averaged approximately 40% of programmed TIP spending. Urban highway expenditures amount to approximately a quarter of these total highway expenditures, with these programmed urban highway improvements dedicated almost exclusively to highway repair. This is not unexpected, given the relatively small percentage of the region's highways that are located in urban areas; the extensive network of transportation facilities existing within urban areas relative to the surrounding suburbs; and the fact that much of the region's urban infrastructure is in need of repair.

Two exceptions to this general pattern were noted: the construction of Vine Street through Philadelphia in the late 1980's and the construction of Route 29/129 through the City of Trenton in the early 1990's. During both of these time periods, urban projects classified as "new construction" rose significantly. While it may be argued that each of these highways primarily serve non-urban areas by increasing mobility, both projects were located within defined urban areas and were therefore characterized as "urban". These two anomalies demonstrate that investments cannot be easily characterized as strictly urban or suburban.

Based on this limited analysis of historical TIP data, it appears that federal, state and regional highway funding policies have in the past favored investment in suburban areas over re-investment in the region's major urban centers, and have favored new construction over repair. Some officials maintain that the cities have historically favored transit improvement and expansion over highway construction (which therefore explains why highway funding is concentrated in the suburbs). Many believe that the primary beneficiaries of most (if not all) transit projects are the cities.

Many officials argue that limited transportation dollars are of necessity dedicated to rectifying existing problems (as opposed to planning to prevent future problems). Projects that rectify existing suburban congestion and safety problems stemming from the decentralization of both population and employment have historically received precedence over repair and expansion of existing, often under-utilized urban infrastructure.

This historical analysis of the region's transportation improvement programs did not consider the relative cost of completing transportation projects in urban settings as opposed to less developed areas, including costs related to difficulty in assembling right-of-way, environmental contamination and community opposition. A shift in transportation policy away from new construction and expansion towards improvement, maintenance and repair of the region's existing urban infrastructure, however, may improve cost-effectiveness (since repair and maintenance is generally less expensive than suburban expansion). More importantly, higher prioritization of projects located within or specifically supporting centers and corridors would further the objectives of DVRPC's *Direction 2020.*

CONCLUSION

Over the past several decades, federal policies regarding infrastructure funding (particularly transportation infrastructure) have generally favored suburban areas over existing urban centers, and system expansion over repair and maintenance. Current policies, however, require that infrastructure investment decisions be based on a long-range plan which is consistent with the region's long-range goals and objectives and links transportation with land use planning.

New Jersey's *State Development and Redevelopment Plan* likewise advocates concentrating development within centers while preserving environmentally sensitive areas, and recommends using infrastructure investment as a development and redevelopment tool, using it to direct growth into these centers. Although the Commonwealth of Pennsylvania has no adopted growth management or infrastructure investment policy that specifically favors urban redevelopment, several state agencies' policies and programs give priority to the needs of the Commonwealth's older urbanized areas.

The Delaware Valley Regional Planning Commission has developed a long-range plan which encourages the recentralization of development in identified centers and corridors and discourages development outside identified growth areas, in order to preserve open space and farmlands while creating a more compact development pattern. To that end, DVRPC's long range plan advocates the maintenance, repair and full utilization of the existing infrastructure systems within these centers, and recommends that public infrastructure investment be used to direct growth into identified growth areas.

III. TRANSPORTATION INVESTMENT IN THE REGION'S MAJOR URBAN CENTERS

The goals of DIRECTION 2020 give priority to preserving and strengthening the existing resources of the region in order to create a more efficient and compact development pattern. The plan recommends that infrastructure investment be used to encourage development within existing communities and appropriate growth areas, rather than to support a further dispersion of land uses. Economic development strategies to stabilize and encourage growth in the region's four primary urban centers of Philadelphia, Camden, Chester and Trenton, as well as in other established communities, are essential in ensuring the future economic heath of the region.

This chapter describes the primary economic development goals and policies and related infrastructure needs of Philadelphia, Camden, Trenton and Chester City. while this report considers the specific needs of the region's four largest cities, many of the smaller "revitalized" centers of the 2020 Plan face similar challenges. Aging and neglected infrastructure systems present significant impediments to urban redevelopment efforts in each of the region's urban centers. City officials were asked to identify infrastructure improvements that they considered essential to furthering the economic development objectives of their area. This discussion demonstrates the importance of an improved and expanded infrastructure system as an essential component of each of their overall economic development strategies.

Problems identified by city representatives are diverse, ranging in scale from new roads and transit lines (linking existing major facilities) to streetscape and sidewalk improvements in urban neighborhoods (to improve the "liveability" of urban spaces). City officials also recognize, however, that in many areas transportation problems are not the only impediments to economic development and redevelopment. In the Cities of Trenton and Camden, for example, transportation problems were ranked as "moderate" by county and city planning, economic development, transportation and social service professionals when given a list of problems facing the city's employers and employees, while higher rankings were given to other factors such as the prior work history and inadequate skills of the available labor force and suburban competition.[16]

PHILADELPHIA

In order to stem the flow of businesses out of the City and instead facilitate the retention and attraction of businesses, the City of Philadelphia has developed the Philadelphia Economic Stimulus Program, a comprehensive 3-year plan that will ultimately see the investment of $2.7 billion of public and private funds to retain existing businesses, attract new business, revitalize neighborhoods, and maximize the economic opportunities in the City. The Economic Stimulus Program identifies four strategic areas into which resources will be channeled: neighborhood

[16]New Jersey Department of Transportation, *State Transportation Plan, Urban Transportation Supplement: Summary*, June, 1993.

economic development; business retention and attraction; hospitality and tourism; and defense conversion. The Program will be funded through a variety of sources, including $823 million in City-controlled funds; $925 million in federal, state and Delaware River Port Authority funds; and $968 million in private investment which will be leveraged with this public funding.

Neighborhood Economic Development and Business Expansion and Retention

Taken together, the neighborhood economic development and business expansion and retention components of the Economic Stimulus Program represent a continuing commitment to build the City's economy through a sustained program of capital investment, and financial and technical support for growing Philadelphia businesses.

Neighborhoods receive the largest share of funding under the three year Economic Stimulus Program. Over $834 million in Economic Stimulus funds will be combined with an estimated $238 million in private investment, to infuse Philadelphia's neighborhoods with $1 billion of investment in infrastructure, assistance to small neighborhood businesses, and the fostering of economic development skills.

The Economic Stimulus Program will also provide significant investment in Citywide programs aimed at retaining existing business and attracting new enterprises to the City. Over $206 million of Economic Stimulus funds, leveraged by $115 million in private funds, will support business loans, the Mayor's Business Action Team and the City's marketing efforts. Major components of these efforts include the following:

- *Philadelphia/Camden Empowerment Zone*

  Philadelphia and Camden jointly received designation as a federal Empowerment Zone in December of 1994, one of six chosen throughout the country. As its share of the $100 million award, Philadelphia will receive $79 million over a two-year period for a broad array of neighborhood programs and projects in the American Street, North Central and West Parkside neighborhoods. It is anticipated that over 2,600 full-time and nearly 160 part-time permanent jobs will be generated for zone residents.

- *Enterprise Zones*

  The City's four enterprise zones (American Street, Hunting Park West, Port of Philadelphia and West Parkside) are industrial areas of extreme poverty and unemployment. Within these zones City capital funds and state grants support infrastructure development, and City and state loan programs provide individual businesses with priority consideration and increased loan limits.

- *Neighborhood Infrastructure*

  Enhancing infrastructure and promoting neighborhood stabilization is a major component

of the Economic Stimulus Program. City capital funds are used to improve the physical infrastructure of neighborhood commercial districts and to develop industrial parks located in or adjacent to the City's neighborhoods. Over $231 million in public funds is allocated for housing and community development activities.

- *Center City*

  Center City Philadelphia is an intense, dynamic marketplace, situated at the hub of the regional transportation system. It is the region's largest employment center, providing the greatest variety and number of employment opportunities. Center City businesses are a major exporter of tax revenue to the City neighborhoods. As much as 31% of the City's tax base is generated by Center City businesses, while only 12% of City operating funds are spent on Center City. Center City also benefits from numerous historic and cultural institutions, making it an attraction for conventions, meetings and tourists. A thrust of the economic stimulus program is to help expand and retain Center City businesses .

Many specific infrastructure renewal projects will contribute to neighborhood economic development and business expansion and retention. These include:

- The reconstruction of the Market Street Elevated. This will not only allow the City's basic transportation function to continue well into the next century, but will also improve the face that it presents to the neighborhoods through which it passes, increasing their chances for economic revitalization.

- A new multi-modal terminal for the Frankford Elevated which will improve the connection by bus and by auto for thousands of daily commuters.

- A new 21st Street station on the Market Street Subway, to serve existing employment and enhance the development prospects of the western edge of the Center City business district.

- Reconstruction of Delaware Avenue/Christopher Columbus Boulevard from Race St. to Richmond Street, facilitating access to industries and burgeoning commercial development on the North Delaware Riverfront.

- An advanced electronic traffic control system for Center City, which will allow traffic to flow more smoothly and be responsive to changes in demand during the day.

- A Center City streetscape and signing program, which will support the enhanced level of cleanliness brought about through the Center City District.

- A total renewal of the Center City concourses, starting with the complex around Suburban Station, supplemented by coordinated and designed retailed space developed and managed through public-private partnerships.

- Rehabilitation of bridge crossings over the Schuylkill River, including the South Street and University Avenue bridges.

- Transportation investment in Northeast Philadelphia, including the extension of the Woodhaven Road Expressway and a new rapid transit line located along the spine of the Northeast.

Hospitality and Tourism

The Economic Stimulus Program invests significantly in Philadelphia's growing tourism and hospitality industry. More than $638 million in public funds is expected to leverage an anticipated $515 million in private investment, for a total investment of close to $1.2 billion. The Convention Center area is the cornerstone of the City's hospitality and tourism initiatives. Funds are included to finance additional parking facilities, infrastructure improvements and new hotel development. The Avenue of the Arts, stretching both north and south on Broad Street, encompasses the performing arts, visual arts, educational institutions and community-based cultural organizations. Once completed, this project is expected to draw 1.6 million visitors and create 2,000 new jobs. Philadelphia's riverfront has become one of the premier entertainment destinations in the region.

Funds are included to support hotel development, infrastructure improvements and parking. Historic Philadelphia, Inc. was formed by the City to create a historic district, encompassing the Independence National Historic Park, Society Hill, Old City and Historic East Market Street. Significant projects include a redesign for Independence Mall (incorporating a new Visitor's Center and a National Constitution Center) and streetscape improvements on Historic East Market Street. Philadelphia International Airport plays an integral role in the City's destination strategy. The Airport is currently undergoing a $1 billion, ten year revitalization that will continue through the end of the century.

- *Reconstruction of the Chestnut Street Transitway.* Recognizing the importance of the area centered on Chestnut Street east of Broad Street to the success of the convention and visitor industry, the City Planning Commission has prepared a plan for the area. A major element of the plan is a new Chestnut Street, featuring better quality sidewalks and street furnishings, small-scale shuttle buses, alfresco dining, street entertainment, and new shops, restaurants and entertainment venues.

- *City Hall Station.* City Hall itself is in the early stages of a $200 million renewal. The rehabilitation program will not only make City Hall a more efficient workplace, but will also restore City Hall as a masterpiece of art and architecture – a landmark not to be missed on any tour of the city. A major renovation is needed for the Broad Street City Hall Station and its associated concourses, stairs, escalators, and headhouses. Rehabilitation is required not only to serve existing SEPTA riders, but also visitors who will come to experience the grandeur of this unique and internationally renowned building which is the symbolic center of Philadelphia.

- *Christopher Columbus Boulevard (Reed Street to Race Street).* This major improvement will improve and beautify access to the Delaware riverfront, complementing public and private initiatives to develop the riverfront with uses appealing to visitors to the City.

- *Turnpike Interchange.* This is a key element in the City's efforts to make it easier for visitors to experience Philadelphia. All too-often visitors get lost wending their way to Philadelphia from Exit 4 of the New Jersey Turnpike in Mt. Laurel Township. The provision of ramps between the Pennsylvania Turnpike and I-95 will remedy the situation, as well as speeding the trip to Philadelphia from New York and other points north.

Defense Conversion

The imminent closure of the Philadelphia Naval Shipyard, the Philadelphia Naval Base and the Philadelphia Naval Hospital presents the City with a challenge to provide replacement employment for the civilian workers of the shipyard and to find productive uses for the Naval Complex land and facilities. The City has completed a Reuse Plan for the Naval Hospital and a Community Reuse Plan for the Ship Yard and Base and has created the Office of Defense Conversion to direct and coordinate all of its efforts regarding defense closures. The Economic Stimulus Program provides $69 million in public funds and $100 million in anticipated private funds for defense conversion over the three year period.

In its *"Community Reuse Plan for the Philadelphia Naval Base and Shipyard"*, the City has identified $23.7 million of on-site circulation improvements which will be necessary simply to support proposed new activities on site. Most of these will have to be implemented in the near future in order to accommodate new uses:

- League Island Boulevard, a spine roadway serving the new development ($4.5 million);
- Realignments and improvements to existing streets ($8.5 million);
- A replacement of the Reserve Basin Bridge ($8 million); and,
- 26th Street Connection ($2.7 million).

In addition to internal circulation improvements, the *Community Reuse Plan* identifies $37.8 million in longer-range infrastructure investments in site access, including:

- A 26th Street flyover, allowing Center City-bound traffic from the Platt Bridge to bypass the intersection ($6 million);
- I-95 ramp widenings to and from the north ($3.8 million);
- Supplemental I-95 Ramps to and from the south ($18 million);
- A Darien Street Tunnel under I-95 and the entrance tracks to the Greenwich Yards ($4 million); and,
- A new roadway at the eastern end of the Greenwich Yards, connecting through to Delaware Avenue ($6 million).

The Delaware Valley Regional Planning Commission's *Centers and Corridors Plan*, drafted as a component of its long-range planning process, identifies 3 regional centers, 1 county center, 1 growth center and 5 revitalized centers within Philadelphia County, and generally suggests that infrastructure systems be maintained, repaired and upgraded as appropriate. The *Centers and Corridors* plan also cites numerous transportation improvements, many of which echo the concerns and recommendations of city officials listed above.

CAMDEN

The City of Camden is served by regional high-speed rail, linking suburban New Jersey with Philadelphia. The Walter Rand Transportation Center is served by both PATCO and NJ Transit, with access to Philadelphia's 30th Street Station and to the Philadelphia, Washington and New York airports via SEPTA service connections. The City contains extensive train yards, with its Pavonia Trainyards matched only by those in Philadelphia, Baltimore and New York. The City is located at the confluence of several major interstates and state and local highways and contains active port terminals, which City officials view as vital to the economic recovery of the City.

The City of Camden has struggled economically, with an insufficient tax base to generate the necessary revenue to maintain and improve basic services. Significant redevelopment efforts have focussed on development of the City's waterfront south of the Benjamin Franklin Bridge, where the State of New Jersey has developed the Thomas Kean State Aquarium, a public/private partnership has developed a major performing arts center and outdoor amphitheater, and the Delaware River Port Authority is constructing an office/retail center. The City will complete a Wayfinder Signage Program and lighting upgrade program by the Fall of 1995 to facilitate and promote an easy and safe tourist trade. Community redevelopment efforts are also ongoing in North Camden, and the Coopers Ferry Association continues to plan for redevelopment of Camden's waterfront and downtown area. Significant redevelopment activity is also anticipated as a result of the City's designation as a part of the Philadelphia/Camden Urban Empowerment Zone, which will include parts of North Camden, Coopers Grant and the downtown area.

One infrastructure problem which impedes redevelopment efforts and negatively impacts on the environment relates to the City of Camden's aging brick combined-sewer system. The City has a combined sewer system that dates back to 1850. While there have been some problems with combined sewer overflows, the City is implementing a plan to rehabilitate the system. The New Jersey Department of Environmental Protection has awarded nearly $1 million to the City to conduct a Combined Sewer Overflow Study, and the study's recommendations will eventually be implemented. In addition, the City has initiated a plan to televise and condition code several miles of sewers each year. The City will be spending several million dollars over the next five (5) years to rehabilitate or reconstruct several miles of sewer system.

One of Camden's greatest assets is the availability of a transportation highway network which provides regional access to the City. Related to transportation infrastructure, Camden experiences severe bottlenecks during peak hour travel times and poor access into its industrial center. Substandard structural conditions on Delaware Avenue and Front Street impede access to the

waterfront from the south. Improvements to Delaware Avenue have been employed to relieve the residential neighborhoods of truck traffic while serving the North Camden industrial areas. The first phase extended the truck route from Federal to State Street; the planned second phase extension will continue the truck route to Erie Street. The recently completed Delaware Avenue reconstruction provides egress and ingress only to and from the commercial waterfront area.

The Port of Camden moves significant amounts of both import and export freight, and must be served by an efficient transportation network in order to remain competitive. Given the importance of the City's ports to Camden's economic recovery as well as ongoing redevelopment efforts, access to the waterfront is vital from a goods movement standpoint. A transit problem facing the City is the limited mobility of its residents between its neighborhoods and available employment sites (as opposed to between the City and its surrounding municipalities).

Specific transportation problems within the City of Camden include the following:

- Poor local access to the Camden waterfront for automobiles and trucks, particularly along Delaware Avenue and Front Street;
- Inadequate signage throughout the City to direct visitors to major destinations;
- Heavy congestion on Interstate 676 northbound during the morning peak hours, from the Benjamin Franklin Bridge Toll Plaza to Mickle Boulevard and south to Atlantic Avenue;
- Heavy congestion at Mickle Boulevard; and,
- Truck traffic on local streets, from Delaware Avenue to Seventh Street.

Over the past several years the City of Camden, NJDOT, NJTransit and Camden County have worked to develop a coordinated transportation strategy that would upgrade substandard facilities and relieve congestion. The following objectives have been identified as a result of these ongoing planning efforts[17]:

- Improve and preserve the existing transportation system and enhance safety;
- Improve access to the regional transportation network;
- Improve highway operations and alleviate congestion;
- Encourage greater use of public and non-traditional transportation alternatives;
- Implement traditional transit service strategies;
- Advance non-traditional transit service strategies; and,
- Implement major new transit initiatives

Specific improvements which could improve local circulation within the City of Camden and/or improve access between the City and the regional transportation network include the following:

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[17]City of Camden, New Jersey Department of Transportation and New Jersey Transit, *State Transportation Plan Urban Supplement*, June, 1993, pages 71-82.

- Bridge investments, including replacement of the Route 30 bridge over the Cooper River and the rehabilitation of the Morgan Boulevard Bridge over the Newton Creek and the Baird Boulevard Bridge over the Cooper River.

- Highway improvements that will improve connections and facilitate goods movement to the waterfront, including the extension of Delaware Avenue to Clinton Street, improvements on Pearl Street to Interstate 676, and improvements on US Route 30 from Baird Boulevard to Federal Street.

- The continuation of various studies to identify how to correct the "gaps" in the existing interstate highway system which impede regional access, including the Route 42 Freeway, Interstate 295 and Interstate 76 corridor and the design and construction of a complete US Route 130/NJ Turnpike Interchange.

Projects located in Camden and listed on the regional TIP include a bridge replacement on Admiral Wilson Boulevard over the Cooper River, the elimination of the Collingswood Circle on U.S. Route 130, and funding to establish a Camden Downtown Waterfront Circulator. This last project would involve the use of electric vehicles to link the Camden Waterfront to the downtown business area. Funding to purchase the necessary vehicles has been appropriated, and sponsors are currently considering how future operating expenses will be funded.

DVRPC's *Centers and Corridors Plan* recommends considering the feasibility of a new waterfront access road similar to Delaware Avenue in Philadelphia, starting at the I-676/Morgan Boulevard interchange and using existing streets and vacant properties to parallel the waterfront. This proposed road would serve manufacturing, port-related and recreational uses, and would increase the economic viability of the Camden waterfront while simultaneously reducing the volume of waterfront-related traffic passing through its residential neighborhoods.

The *Centers and Corridors Plan* also recommends improved signage between US Route 30 and I-676 and the Camden waterfront (to better facilitate freight movement) and the improvement of the Federal Street intersection. The Plan suggests that NJ Transit continue to study the feasibility of the extension of light rail service to Gloucester County, which would include service along the Camden Waterfront and improve access to redevelopment sites. Streetscape improvements in residential neighborhoods and commercial areas, including lighting and sidewalk improvements, should be pursued as necessary.

TRENTON

The City of Trenton is the center of government for the State of New Jersey, with a large percentage of the City's workers employed in state and county government jobs. The City's population peaked in 1950 (at 128,009) and has declined since, decreasing by 10% or more each decade between 1950 and 1980. Between 1980 and 1990, the population declined by only 3.7%, with 88,675 residents in 1990.

Trenton possesses an excellent transportation network, with connections via air, rail and highway to most major metropolitan areas in the Northeast. The New Jersey Turnpike is located within 15 miles of the city, and major highways serving Trenton include US Route 1 (connecting Trenton to Philadelphia), US Route 206, Route 31, Route 33 and Route 29. The City is also linked to Route 130, Interstate 295 and Interstate 195. Various NJ Transit routes operate within and from Trenton, and the Trenton rail station is served by AMTRAK, NJ Transit and SEPTA.

A large percentage of the City's resident labor force (almost 50%) work within the City's limits, many in state and county government jobs. Transportation issues related to public transit and local circulation therefore take on an increased importance. Trenton's overall economic development objectives are embodied in the *Capital City Renaissance Plan*, a twenty-year blueprint for Trenton's future.

The primary highway problems facing Trenton are limited in-city parking, poor intercity highway connections and congestion. Of particular concern is the poor access into the City from the south and the long, circuitous route into the City from the New Jersey Turnpike, which impedes access to the central business district and to the industrial area in the vicinity of New York Avenue. Based on conversations with the city's planning officials, specific transportation needs within the City that effect the City's economic development and redevelopment efforts include the following:

- Existing problems at the Barlow Circle, US Route 1 and the Trenton Train Station: Barlow Circle should be redesigned, with access to Route 1 and Route 29 improved. No current exit to the industrial area adjoining Route 1 and South Olden Avenue exists when travelling south via Route 1. A new south-bound ramp is needed to establish access to the city's industrial corridor along both sides of Route 1.

- Inadequacies of the Calhoun Street Bridge: This bridge is operating beyond capacity during peak hours. A new four-lane bridge has been proposed by the Delaware River Joint Toll Bridge Commission.

- Limited access to Route 1: Because of the historical pattern of movement into the downtown, access to Route 1 is limited in certain locations throughout the City. For example, ramps are often only from one direction, necessitating a longer trip to the next ramp when accessing local streets.

- Public transit problems: Bus service on the radial arterials converges into the downtown area, but there is no service on Olden Avenue, a cross-town arterial that links the northern and southern parts of Trenton. City residents often must therefore travel unnecessarily to the downtown, transfer and backtrack in order to reach other areas. There are also limited transit options available for residents to "reverse-commute" to suburban job areas.

Projects currently included on the regional transportation improvement program (TIP) in the City of Trenton include the following:

- Resurfacing, rehabilitation and replacement of bridges, as well as various shoulder widenings and drainage improvements.

- Elimination of the Greenwood and Barlow Circles and replacement with at-grade intersections.

- Completion of the final segment of I-295 to join I-195, the extension of the Route 29 Freeway and the new Route 129 in a major interchange known as "Trenton Complex".

The Delaware Valley Regional Planning Commission's *Centers and Corridors Plan*, an element of DIRECTION 2020, recommends that redevelopment, in-fill development, adaptive re-use, downtown revitalization and neighborhood preservation be encouraged within the City of Trenton. Sewer and water authorities serving Trenton and its surrounding communities currently have excess capacity, and could accommodate additional development and expansion. Recommended transportation infrastructure improvements include widening West Trenton Avenue from 2 to 4 lanes; improving the surface of Routes 206 and 29; preserving the rights-of-way for eventual removal of all remaining traffic circles in the city; improving directional signage to and from Route 1 in key locations throughout the City; constructing pedestrian crosswalks at all major intersections; completing streetscape improvements as necessary in the City's residential neighborhoods and commercial centers; and improving the condition of the City's on/off ramps.

CHESTER

The City of Chester, located south of Philadelphia along the Delaware River, has direct access to numerous transportation modes and facilities, including two interstate highways, passenger and freight rail service, deep water ports, a Delaware River bridge crossing and Philadelphia International Airport, located 6 miles to the north. Interstate 95 is the spine of the City's highway network, providing direct access to Philadelphia, Wilmington, Baltimore and Washington and to other highways which in turn connect the city to New Jersey, King of Prussia, the Pennsylvania Turnpike and US Route 202. The Industrial Highway (PA 291) is located along the City's waterfront, paralleling Interstate 95.

Three active rail lines traverse the city: CSX (freight traffic), CONRAIL (freight traffic) and Amtrak/SEPTA (passenger service). CSX runs on a single line in and around the City, generally parallel and adjacent to the southbound lanes of I-95, but has expressed an interest in double tracking the line. A new intermodal rail yard lies on the south side of the line, adjacent to the northwestern-most border of the city (and to the I-95/US 322/Highland Avenue interchange).

Conrail owns the Chester Secondary Track (which runs parallel to PA 291 and serves industrial customers along the waterfront), while a segment of Amtrak's Northeast Corridor runs between the waterfront and I-95, carrying intercity rail passengers and rail freight. Amtrak owns the right-of-way, and leases trackage tights to both Conrail and SEPTA. SEPTA maintains three rail stops in the city on its R-5 Wilmington line: Highland Avenue, Lamokin Street and the Chester Transportation Center (the most utilized of the three). The Chester Transportation Center also

provides connections between eight SEPTA bus routes and SEPTA's R-2 Regional Rail Line between Philadelphia and Wilmington. Transit stops in Chester include Highland/Lamokin and the Chester Transportation Center (located on the Avenue of the States).

The major impediments to redevelopment in the City of Chester related to transportation infrastructure are inadequate access between the industrial corridor along the waterfront and Interstate 95 and the movement of traffic along the waterfront corridor. According to a recent survey of businesses with 20 or more employees, the primary concern for businesses located within the City of Chester is highway access. The following general recommendations for improving the city's transportation infrastructure have been identified by city officials:

- Improve the waterfront service corridor by reconstructing Industrial Highway (Route 291);

- Provide access improvements between I-95 and the waterfront, specifically by providing and improving the Flower Street ramps beneath the Commodore Barry Bridge and by completing the on-off ramps between 9th Street and the Commodore Barry Bridge;

- Support effective mass transit within and to the City, including improving the Chester Transportation Center and the Lamokin Station;

- Widen the Chestnut Street/Morton Avenue corridor to the waterfront between I-95 and Route 291; and,

- Raise AMTRAK under-clearances to facilitate truck movement.

Specific transportation recommendations within the City of Chester that were identified in their recent redevelopment plan (entitled *Chester City: Vision 2000)* include the following:

- Widen Route 291 (Industrial Highway) from Ridley Creek to Harwick Street: The reconstruction of the Industrial Highway is currently programmed on the region's TIP, from the Ridley Creek to Franklin Street and then continuing from Franklin Street southward to Trainer Borough. The highway will be widened from 3 lanes to 5 lanes and join the current 4-lane section in Eddystone, with a center turning lane. Construction on the section from Ridley Creek to Franklin Street was originally programmed to be completed in December of 1994. This project was delayed because of acquisition problems which surfaced when hazardous materials were found on sites adjacent to the road (a problem typical in urbanized areas). It is now programmed for FY 1996, with the remaining section programmed for construction during 1998.

- Complete the I-95 southbound ramp at Edgemont Avenue: This project is also now scheduled on the region's transportation improvement program (TIP), with right-of-way acquisition continuing in 1995 and construction scheduled in 1996.

- Construct I-95 on-off ramps between 9th Street and the Commodore Barry Bridge connector to serve as the western leg of a new "Waterfront Access Loop": Construction of the 9th Street ramps (Commodore Barry Bridge Connector) is likewise scheduled on the current transportation improvement program. Two missing ramps at the interchange between the Commodore Barry Bridge connector and 9th Street will be constructed, serving traffic from 9th Street to I-95/US 322 west and from I-95/US 322 east to 9th Street. These missing ramps will provide needed access between Interstate 95 and the waterfront. Although the estimated completion date is November of 1996, this project may be dropped by PennDOT and instead addressed by the design consultant team of the I-95 intermodal mobility project.

- Improve the Morton Avenue/Chestnut Street Corridor between I-95 and Route 291 to serve as the eastern leg of the new "Waterfront Access Loop".

- Post new signs verifying all under-clearances for bridges.

- Improve the physical condition of the Chester Transportation Center: In August of 1994, the Federal Transit Administration (FTA) pledged $6 million towards the renovation of the Chester Transportation Center as a part of its "Liveable Communities" Initiative. The Liveable Communities concept is a planning process that allows neighborhood residents, businesses and organizations to have direct input into the shaping of their community. A full-scale community participation process initiated by SEPTA and involving several design, engineering and management consultants was undertaken, and the selected design for a revitalized Chester Transportation Center (based on the community's input and user surveys) was presented in October of 1995.

- Erect new street and directional signs and traffic control systems where necessary.

The Delaware Valley Regional Planning Commission's *Centers and Corridors Plan* recommends the following transportation improvements in the City of Chester:

- Develop and implement a master circulation plan which addresses the provision of adequate travel lanes, one-way street pairing, loading zones and parking;

- Provide a signed truck route through the City along PA 291 (the Industrial Highway) and Highland Avenue, directing traffic between this corridor and I-95, I-476 and US 322;

- Provide a distinct local circulation route to serve the commercial district, the Widener University Campus, waterfront employers and appropriate intermediate destinations, in order to further economic development objectives;

- Reconstruct the City's transit stations, including the previously described revitalization of the Chester Transportation Center and the renovation and expansion of the Lamokin Street Station to implement a pilot day care center program; and,

- Improve safety and provide pedestrian amenities by supplementing existing lighting throughout the City with standardized lighting fixtures, erecting graffiti-resistant soundwalls and plantings along Interstate 95 as appropriate, and providing bicycle lockers within the central business district, at SEPTA stations and at other strategic locations.

Completion of the programmed projects will significantly improve access between Interstate 95 and the waterfront in Chester City and will facilitate improved movement on the Industrial Highway along the waterfront. City officials and planners are hopeful that these planned and recommended improvements will facilitate redevelopment along the City's industrial waterfront, strengthen the tax base, increase employment opportunities and contribute to the overall revitalization of the City of Chester.

CONCLUSION

The region's four major urban areas have developed economic development and redevelopment plans which in large part depend upon the provision, expansion or improvement of public infrastructure, particularly transportation facilities. Identified transportation needs range from improved connections between existing regional highway and transit facilities to sidewalk and lighting improvements in urban neighborhoods. Many of these identified infrastructure needs have been programmed on the region's transportation improvement program and should eventually be completed; others have not yet been programmed, and funding remains uncertain.

Officials in the region's urban centers recognize that infrastructure improvements alone cannot resolve their city's problems or lead to immediate revitalization of distressed areas. Infrastructure improvements (and particularly transportation investments), however, are essential components of an overall economic development strategy, and in many cases may be critical if other economic development incentives and initiatives are to succeed.

The region's long-range land use plan advocates preserving and strengthening the existing resources of the region, and targeting infrastructure investment to encourage the redevelopment of region's existing centers and development within identified growth areas. Coordinated economic development strategies in each of the region's major development centers, including necessary and appropriate infrastructure investments, are essential to ensuring the future economic health of the region.

IV. SUMMARY AND CONCLUSIONS

The adopted policies of both the Delaware Valley Regional Planning Commission and the State of New Jersey stress that maintenance, improvement and expansion of infrastructure in urban and developed areas and in designated growth areas should be given priority over continued expansion into suburban fringe and rural areas. The benefits of such a policy are clear:

- This policy facilitates the region's compliance with Clean Air Act regulations, by concentrating employment and population growth in identified growth areas along existing transit and highway routes and thus facilitating alternatives to the single-occupancy vehicle (SOV) and shorter average trip times. Additionally, higher densities necessary to support public transit as an alternative to SOV commute are encouraged and supported.

- Concentration of development in centers and along corridors connecting these centers provides better linkages with transportation facilities, and helps to preserve open space, natural resource areas and farmland.

- The most efficient use of the region's infrastructure systems is facilitated, by requiring the full utilization and maintenance of existing infrastructure as opposed to continued expansion of suburban systems and development of new infrastructure in outlying areas.

- This policy, if used as a guide by all federal, state, county and local agencies which make discretionary decisions regarding funding, would result in a concentration of infrastructure investments and facilitate a complementary concentration of social services and facilities (such as police, fire and sanitation services) in developed, urban areas. The concentration of scarce resources and incentives in specific areas has been shown to provide the best potential for successful revitalization and redevelopment of the region's urban areas.

The benefits of urban redevelopment include strengthening of the region's urban centers, cost-efficiencies related to the full utilization of existing capital, and preservation of "greenfield" areas in suburban and rural fringe areas. Transportation investments can lead to improved productivity for private sector firms, since public investments can reduce private transportation investment; reduce overall production and distribution costs; and increase the profitability and overall competitiveness of local firms. Transportation improvements can facilitate improved personal travel time as well as improved goods movement, opening new markets for the city's businesses.

As long as land use decisions continue to be made at the local level, the primary mechanism available to state and regional agencies for directing growth is their power to influence where and when the region's infrastructure will be improved and/or expanded. Since the region's adopted growth management policy is to encourage a compact development pattern focussed in centers and corridors, investment decisions should be made recognizing that the ultimate goal is to redirect development into already developed areas and identified growth centers.

Despite the benefits of urban redevelopment and the region's overall policy of encouraging growth in developed areas and identified centers, many proposed transportation improvements in areas outside identified centers and corridors also have merit. Certain projects (such as those that rectify safety problems and congestion mitigation in already developed suburban areas, for example) must also be given some priority. Given that the cost of projects (many of them equally meritorious) proposed by state, county and local officials will always exceed available funding, public policy makers and decision makers need a rational set of criteria that can be referenced when making decisions regarding which projects will receive funding, and in what order. Some prioritization of transportation improvement projects is currently accomplished through the TIP's project ranking and selection process.

RECOMMENDATIONS

While this report examines the specific economic development strategies of the region's four major cities, the recommendations cited will apply in many existing boroughs or older development centers as well, particularly those identified within *Direction 2020* as "revitalized" centers. Recommendations for implementing the region's goal of focussing development and redevelopment in centers and corridors while simultaneously meeting the needs of existing suburban development include the following:

- The Delaware Valley Regional Planning Commission should revise the regional transportation improvement program's prioritization methodology, giving higher priority to projects which support the redevelopment of centers or growth within identified growth areas. Under current guidelines, proposed TIP projects are weighted based on a number of factors, including preserving and modernizing key elements of the existing system; improving safety and security; mitigating congestion; protecting the environment; improving mobility; supporting economic activity; and supporting land use plans and goals. The TIP ranking and selection process should be revised to clearly reflect the goals and objectives of DVRPC's DIRECTION 2020, and should give priority to projects which encourage redevelopment of the region's identified centers and/or discourage expansion into suburban and rural fringe areas not appropriate for growth.

  For example, projects which positively impact "revitalized" or "regional" centers and/or corridors accessing these centers should be assigned a higher rating than other projects located outside of identified centers and corridors. "Negative impacts" (such as those currently assigned to certain projects under "protecting the environment" that increase SOV capacity) should be assigned to proposed projects that violate the goals and intent and fail to advance the objectives of adopted state and regional land use plans, including DVRPC's DIRECTION 2020 and New Jersey's *State Development and Redevelopment Plan.* Higher priority should also be assigned to transportation projects which are planned as a component of an overall urban redevelopment or revitalization plan which has received support and resources from other State and local agencies (such as the Departments of Community Affairs and Environmental Protection).

- Transportation improvement projects should be targeted to assure planning consistency and facilitate implementation of the goals and objectives of DIRECTION 2020. *Guiding Regional Growth* has defined a hierarchy of land use categories and centers with objectives for managing growth.[18] Identified 2020 centers include regional centers, such as Center City Philadelphia, King of Prussia and Cherry Hill; county centers, such as Downingtown and Jenkintown; growth centers, such as Exton and Winslow Township; and revitalized centers, such as Camden, Coatesville and Pottstown (see Table I in Chapter II for a complete listing of the DIRECTION 2020 development centers).

  Table II identifies the type of transportation improvements which are appropriate in each of these identified centers and land use categories. The Delaware Valley Regional Planning Commission should consider the appropriateness of each proposed project given the objectives for managing future growth within each type of center or land use category when prioritizing proposed TIP projects.

- New Jersey state agencies should promote and support the objectives of the New Jersey *State Development and Redevelopment Plan* when developing and enforcing regulations or program guidelines and distributing available discretionary funding or incentives. Some state agencies (including the NJDEP and NJDOT) as well as DVRPC have signed "Memorandums of Understanding" with the NJOSP, and many state programs give preference to projects located in and benefitting urban areas. Executive Order 114, executed by former Governor Jim Florio, directs all state agencies to utilize the State Plan when implementing programs, enforcing regulations or distributing discretionary funding.

- Unlike New Jersey, the Commonwealth of Pennsylvania has not yet adopted a statewide, long-range growth management and/or land use plan which sets clear policies regarding development and redevelopment objectives. State program guidelines and funding decisions, while generally supporting investment in developed areas as opposed to low-density sprawl into "greenfield" areas, are made independently. The Commonwealth should develop a statewide growth management plan and set clear policy directives that all state agencies could refer to when developing policies, guidelines and regulations.

- A key to the successful revitalization of the region's urban centers will be the extent to which federal, state and local agencies coordinate their redevelopment efforts. New Jersey should continue to utilize their Urban Coordinating Council to facilitate interaction and coordination between all State agencies which direct any programs benefitting urban areas, including the Departments of Community Affairs, Commerce, Transportation and Environmental Protection. Pennsylvania should create a similar coordinating committee as a complement to its existing Governor's Response Team, consisting of representatives of all state agencies which set policy and implement programs benefitting urban affairs.

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[18]Delaware Valley Regional Planning Commission, *Guiding Regional Growth: Land Use Element of the DVRPC Year 2020 Plan*, July, 1995. Pages 26-28.

TABLE II
TRANSPORTATION IMPROVEMENT MATRIX[1]

	Roadway	Public Transit	Freight	Passenger Intermodal	Traffic Operations	Other Improvements[2] or Facilities
EXISTING DEVELOPED AREAS[3]						
Major Facilities[4]	○	●	●	●	●	●
Minor Facilities		●	○	●	○	●
REGIONAL AND COUNTY CENTERS						
Major Facilities	○	●	●	●	●	●
Minor Facilities		●	○	●	○	●
REVITALIZED CENTERS						
Major Facilities	○	●	●	●	●	●
Minor Facilities		●	○	●	○	●
GROWTH CENTERS						
Major Facilities	○	●	●	●	●	●
Minor Facilities		●	○	●	○	●
FUTURE GROWTH AREAS						
Major Facilities	○	○	○	○	○	●
Minor Facilities		○	○	○	○	●
EXISTING OR PROPOSED OPEN SPACE						
Major Facilities						●
Minor Facilities	○	○			○	●
RURAL AND AGRICULTURAL AREAS						
Major Facilities						●
Minor Facilities		○	○	○	○	●

● Improvement type is appropriate in virtually all cases.

○ Improvement type is appropriate under certain conditions.

Blank indicates improvement type is usually not appropriate.

1 Travel Demand Management improvements are implemented regionwide and are not included here.

2 Includes Safety and Environmental Improvements, Network Reconstruction and Maintenance, Enhancements and Amenities, and Bicycle and Pedestrian Improvements, which are appropriate in all areas.

3 Land use categories as specified in DIRECTION 2020 ***Guiding Regional Growth***, DVRPC 1995.

4 Roadways and transit lines to be assigned to Major or Minor category designations.

Delaware Valley Regional Planning Commission, 1995

- Both New Jersey and Pennsylvania should work towards coordinating transportation, water and sewer infrastructure investment decisions made at all levels (including State, county, regional and local agencies and authorities) and integrating them with adopted land use and environmental goals and objectives. In New Jersey, NJOSP, NJDOT and NJDEP have proposed to undertake a study that is intended to create an integrated system for state and local investment decision-making and to streamline the permit process. The Land Use, Infrastructure and the Environment (LUIE) project will include a review of the existing regulatory and procedural framework within which infrastructure investment decisions are made (including state, county, regional and local authorities and agencies) and propose revisions to this system to better coordinate these decisions and integrate them with land use planning.

  The coordinating agency (MSM Regional Council) has not yet received permission to release a Request for Proposals for this project. The proposed LUIE project should be advanced, and a review of the existing procedures and a proposed revision to the decision-making framework should also be undertaken in the Commonwealth of Pennsylvania.

- Funding agencies should consider both user benefits and regional benefits when weighing the positive and negative considerations of proposed infrastructure improvement projects. The Southwest Pennsylvania Regional Planning Commission (SPRPC) recently commissioned a study that considers the prioritization of proposed transportation projects. Faced with a number of proposals and limited funding, and recognizing that consideration must be given to how projects relate to one another and to an overall regional long-range plan, the SPRPC was interested in developing a methodology for ranking proposed highway and transit projects. The recommended method presented in their final report, entitled *Regional Economic Impacts of Transportation Investments Study*, is based on a cost/benefit analysis method which attempts to quantify the costs as well as the benefits (both direct and indirect) of each project.

  Under this proposed method, the potential benefits of proposed transportation projects are broken into user benefits and regional benefits. User benefits include decreases in travel time, vehicle operating costs and accidents that are attributable to a transportation investment. Regional benefits (indirect benefits that result from reduced costs to businesses and access to new markets as a result of the investment) may include business expansion, business attraction and potential growth in tourism.

  Existing transportation and land use models (the SPRPC uses MINUTP, a transportation model; and MERLAM, a land use model) can estimate current and future user benefits, which can then be weighed against the cost of the project. Such estimates are generally effective, provided that the data used to develop the estimates (such as passengers per vehicle, differences between person trips by employment category and differences between car and truck travel) is reasonably accurate and timely. Regional expansion benefits are more difficult to accurately forecast, but can be estimated as a function of reductions in truck travel times, operating costs and accidents through the use of an economic model.

Newer methods also incorporate data on commercial automobile miles traveled.Regional attraction benefits are generated from new investment and employment from businesses that move into the region because of the transportation investment. In the SPRPC report, their consultant advises the Commission to develop a qualitative analysis of each project's "business attraction potential". This analysis might consider factors such as travel time to the nearest freeway interchange; travel time to the airport; proximity to other manufacturers; the availability of rail service; property tax rates; relative utility rates; available economic development incentives; the availability of water and sewer service; available office space; available vacant sites; potential environmental contamination; and crime statistics. These factors would then be assigned weights, and an overall "score" could be estimated for each proposal.

The report notes that a comprehensive cost/benefit analysis should consider to the greatest extent feasible all costs and benefits, both direct and indirect. The SPRPC's consultant acknowledges that accurately assessing far-reaching, indirect impacts of investments may be conceptually manageable but realistically difficult. In many situations involving urban investment and growth, indirect impacts are greater in magnitude than direct impacts; additionally, many impacts cannot be quantified. Direct impacts may also in turn generate additional indirect impacts, which should also be considered. The report concludes that the indirect benefits of transportation investment could be reasonably incorporated when estimating the regional economic impacts of transportation investments, but recommends that the SPRPC staff continue to consider other impacts as appropriate and incorporate them where feasible into the overall analysis.

- Pennsylvania and New Jersey should adopt infrastructure "concurrency" legislation similar to that enacted in Florida. The concept of "concurrency" would prohibit municipalities from granting approvals to new developments if the proposed development resulted in a decrease in the level of service of various infrastructure systems (for example, the highway network, public transportation, or water or sewer service). Infrastructure systems (including transportation, sewer and water) would be expanded based on an adopted schedule consistent with the long-range goals of the region. This method would encourage development in areas with existing infrastructure that is currently under-capacity, and limit low-density development into suburban and rural areas.

  The concept of concurrency was advocated by Pennsylvania's 1991-1992 House Select Committee on Land Use and Growth Management, formed to hear testimony and develop recommendations for improved growth management throughout the Commonwealth. Such requirements, however, would require legislative action.

- As an alternative to concurrency, the states could enact legislation allowing counties and municipalities to adopt and implement adequate public facilities ordinances, which would limit development in areas where public infrastructure systems were inadequate to meet the needs of prospective residents and employees.

- To encourage growth in developed areas with existing infrastructure and discourage suburban and rural sprawl, New Jersey and Pennsylvania should authorize county or regional agencies to define "growth boundaries" that delineate those areas with adequate existing or planned infrastructure to accommodate the needs of future development, and work to ensure that future growth be directed to these areas. The *Direction 2020* Land Use Element identifies a hierarchy of development centers (including growth centers) and clearly differentiates between areas appropriate for future growth and those inappropriate for growth, including rural and agricultural areas and proposed open space.

- Quality urban in-fill development should be encouraged and supported as a complement to concurrency, adequate public facilities ordinances or defined urban growth boundaries. Urban area housing and development agencies should actively support developers interested in undertaking urban in-fill projects, and local jurisdictions should examine their existing statutes and ordinances and remove impediments to in-fill development.

- The current property tax structures in both Pennsylvania and New Jersey require that municipalities rely on tax revenues generated from developments within their boundaries to pay for necessary services, which are in most cases provided locally. The concepts of concurrency, adequate public facilities legislation and urban growth boundaries, however, would limit development in certain areas of the region and encourage in-fill development and growth in other areas, and effectively result in increased revenues in certain areas and stable revenues in others. These recommendations should therefore be accompanied by changes in the way that basic services are provided, including revisions to the property tax structure and the regionalization of services, to ensure an equitable distribution of both revenues and costs.

CONCLUSION

Comprehensive growth management policies outlined in DIRECTION 2020 (DVRPC's long-range plan) and New Jersey's *State Development and Redevelopment Plan* call for reinvestment in already developed areas and investment in identified growth centers to avoid expensive capital investments supporting suburban sprawl. If applied by all funding agencies in the region, this policy would permit all levels of government to direct their available resources effectively and maximize the potential return on public investment.

Urban redevelopment and investment policies should create sustainable revitalized areas which can attract and retain both residents and employment opportunities. Direct and indirect impacts of infrastructure investment in urban redevelopment areas may include stabilization or expansion of employment; improved transportation access; business expansion or creation; improved access to social services and facilities; improved housing quality in residential neighborhoods; reduced area crime rates; and physical improvements in the vicinity of the infrastructure investment.

Opponents to urban infrastructure investment and the coordinated application of other economic development incentives and social programs in urban areas argue that efforts to revitalize urban

centers and bring employment back into distressed urban areas have historically failed, and that few private-sector jobs have been created and maintained in these areas. Since many of the benefits of urban reinvestment are indirect, long-range (as opposed to immediately obvious) and regional (as opposed to user-oriented), the costs of capital investment in urban centers as opposed to suburban or rural expansion are often seen as outweighing potential benefits.

Proponents counter, however, that revitalization of under-utilized urban areas could ultimately lead to economic vitality within those communities and throughout the region. Regional benefits of reinvesting in urban centers include creation of tax-producing areas within these centers; the retention and creation of employment opportunities; the preservation of "greenfield" areas in suburban and rural areas; and the rehabilitation, maintenance and full utilization of existing infrastructure.

Sufficient investments in both human resources and physical infrastructure can ultimately attract additional private sector investment and lead to the revitalization of the region's urban centers. Transportation improvements are often essential components of an overall economic redevelopment strategy; other economic incentives and investments cannot successfully lead to revitalization until transportation access problems within and to the area are resolved. An adopted regional policy advocating reinvestment in the region's urban areas provides an opportunity to coordinate redevelopment efforts, maximizing the total available resources within specific areas and ensuring the most effective use of limited available resources.

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