A MENU OF IMPLEMENTATION OPTIONS



A Document for Public Discussion Direction 2020 Report No.18

April 1994

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
PHILADELPHIA, PENNSYLVANIA

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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 three line Divisions: Transportation Planning, Regional Information Services Center, which includes Regional Planning Office, 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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ABSTRACT

This report provides a range of implementation strategies as options to implement the policy goals of DIRECTION 2020, DVRPC's long-range land use and transportation plan for the Delaware Valley region. Implementation options are presented for each of 56 specific action steps previously identified by the DVRPC Board. Significant new implementation tools are boxed on each page.

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INTRODUCTION

A plan is a blueprint for the future, a document that outlines the vision of a product to be built and describes the individual elements that comprise it. As the Delaware Valley's Metropolitan Planning Organization (MPO), DVRPC has, in the past 20 years, prepared three long-range plans for the region's future.

In 1993, DVRPC initiated work on the region's fourth long-range plan, **DIRECTION 2020**. Using the principles and tools of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Clean Air Act Amendments of 1990 (CAAA), **DIRECTION 2020** will define the Land Use and Transportation needs of the region through the year 2020.

Upon its completion in late 1994, **DIRECTION 2020** will present a vision for the future of the Delaware Valley. DVRPC will use a collective and collaborative planning process to examine existing conditions, analyze future trends and impacts, and identify the preferred patterns of land use and development, transportation access and mobility, and environmental protection in the year 2020. This preferred scenario will be built upon eight primary issue areas:

- PHYSICAL FORM
- TRAFFIC CONGESTION
- ENVIRONMENT
- AIR QUALITY
- ECONOMIC DEVELOPMENT
- FREIGHT MOVEMENT
- MOBILITY
- HOUSING

Each of these eight issue areas contain a goal that was crafted by DVRPC, its member governments and operating agencies, public interest groups, and the citizens of the region. In addition, each issue area has an associated series of policies designed to achieve that goal, and a number of action steps that provide more specific direction to the policy. These goals, policies and action steps are presented in detail in *Policies For The 21st Century*, which was completed by DVRPC in May 1993. Taken together, the goals, policies and action steps of that report provide the superstructure upon which the physical elements of the 2020 plan will be constructed.

Any plan, however, no matter how comprehensive or well-conceived, will remain a blueprint only unless the means to implement the recommendations and vision of the plan are defined. This report is the first step in that process.

This report provides the possible incentives, deterrents and means needed to implement **DIRECTION 2020**. For each action step included with the eight primary issue areas — 56 in all — a series of potential implementation strategies to achieve that action step have been identified. These implementation strategies include the specific legislative, administrative, fiscal or policy changes needed to make each action a reality. Included are options for changes at the federal, state, regional, county and municipal levels, as well as potential strategies for transit operating agencies, bi-state agencies, regional authorities, non-profit organizations, farmers and real estate developers.

These implementation strategies range from continuing use of certain planning tools and programs through simple changes in existing programs to dramatic changes in policy or state enabling legislation. As such, while some of these options will be easy to achieve through simple changes in procedure, others present much more complex political challenges and additional financial commitments. Significant new initiatives have been boxed on each page and are summarized in the final chapter.

Identifying the appropriate implementation strategies for inclusion in the plan is essential for the ultimate use and success of DIRECTION 2020. DVRPC is currently working to develop the physical portion of the plan — the land use, open space and transportation facilities recommended for the future. The physical plan is based on a "Centers and Corridors" approach, which focuses on channeling new development into existing and emerging centers and along existing and emerging corridors, to create the mix of uses and density patterns that can be efficiently served through intermodal transportation choices. Local area plans will be developed that utilize many of the strategies contained within this report, applied based on local needs and conditions.

This report, *A Menu Of Implementation Options*, is being distributed for public review and comment. The menu contains a range of regional level strategies that could be used to implement the plan. While DVRPC anticipates that some of the options contained herein will be controversial, this report is intended not to generate controversy, but to generate debate. For it is only by considering the full range of implementation options available to the region that we can collectively decide upon the necessary actions that we are willing to embrace to achieve our preferred vision for the future. Both the physical and policy elements of the plan are being developed for adoption by the DVRPC Board by the end of 1994.

Change will be necessary. If we wish to change our patterns of development, our transportation choices, and our environmental and economic future, then changes in our current policies and practices cannot be avoided. Please review the implementation options carefully. Note those that are the priorities to work toward, as well as those which cannot now be supported. Add additional strategies that are not now included. Use the menu to choose the package of recommendations that will go into the final plan, the implementation strategies that, together, will build a better region by 2020.

GLOSSARY

KEY ACTORS AND IMPLEMENTORS

DCA -	Department	of	Community	Affairs
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DOT - Department of Transportation

DRBC - Delaware River Basin Commission

DRPA - Delaware River Port Authority

DVRPC - Delaware Valley Regional Planning Commission

EPA - Environmental Protection Agency

FHWA - Federal Highway Administration

FRA - Federal Railway Administration

FTA - Federal Transit Administration

GMTF - Goods Movement Task Force

HUD - Housing and Urban Development (Department of)

NJDEPE - New Jersey Department of Environmental Protection and Energy

NJDOT - New Jersey Department of Transportation

NJT - New Jersey Transit

NOAA - National Oceanic and Atmospheric Administration

NTSB - National Transportation Safety Board

PADER - Pennsylvania Department of Environmental Resources

PATCO - Port Authority Transit Corporation

PennDOT - Pennsylvania Department of Transportation

RAQC - Regional Air Quality Committee

RCC - Regional Citizens Committee

RTC - Regional Transportation Committee

SEPTA - Southeastern Pennsylvania Transportation Authority

TMA - Transportation Management Association

GLOSSARY

TECHNICAL TERMS

A A A			A . 1 ° 1	
$\Delta \Delta \Delta$	-	American	Automobile	Association
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- APO Average Passenger Occupancy
- CAAA Clean Air Act Amendments of 1990
- **CAFE** Corporate Average Fuel Economy
- CDBG Community Development Block Grant
- CWA Clean Water Act
- **CZM** Coastal Zone Management
- ETRP Employer Trip Reduction Program
- HOV High Occupancy Vehicle
- ISTEA Intermodal Surface Transportation Efficiency Act of 1991
- IVHS Intelligent Vehicle Highway Systems
- JTPA Jobs Training Partnership Act
- MSW Municipal Solid Waste
- NPDES Non-Point Discharge Elimination System
- NPS Non-Point Source
- PDR Purchase of Development Rights
- RIRA Recreation Improvement and Rehabilitation Act
- SIP Statewide Implementation Plan
- TIP Transportation Improvement Program
- **TCM** Transportation Control Measures
- TDR Transfer of Development Rights
- UGB Urban Growth Boundaries



GOAL 1:

ENCOURAGE LAND USE PATTERNS THAT ENHANCE COMMUNITY CHARACTER, PROVIDE FOR A MIX OF RESIDENTIAL, COMMERCIAL, EMPLOYMENT AND RECREATIONAL OPPORTUNITIES; AND LINK THESE ACTIVITIES WITH TRANSPORTATION FACILITIES

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CONCENTRATE DEVELOPMENT WITHIN EXISTING AND EMERGING CENTERS AND CORRIDORS

ACTION 1.1.a.

Encourage population and employment stability or growth in urbanized areas

ACTION 1.1.b.

Encourage suburban growth in designated areas with adequate infrastructure

POLICY 1.2

MAINTAIN RURAL CHARACTER OF PORTIONS OF REGION

ACTION 1.2.a.

Limit new infrastructure in rural areas

ACTION 1.2.b.

Limit rural or farmland acreage developed

POLICY 1.3

PROVIDE SUFFICIENT
PUBLIC OPEN AND
RECREATIONAL SPACE

ACTION 1.3.a.

Provide new land for open space and recreational facilities to meet forecasted population's needs

POLICY 1.4

UPGRADE OR EXPAND
PUBLIC SERVICES AND
INFRASTRUCTURE IN
APPROPRIATE GROWTH
AREAS

ACTION 1.4.a.

Provide adequate capacity for water and sewer systems and other services as measured against residential and commercial needs in designated growth areas

ACTION 1.4.b.

Preserve and enhance key elements of the existing transportation system

POLICY 1.1: Concentrate Development within Existing and Emerging Centers and Corridors

ACTION 1.1.a.

ENCOURAGE POPULATION AND EMPLOYMENT STABILITY OR GROWTH IN URBANIZED AREAS

IMPLEMENTATION

While the regional population and employment base has grown over the past two decades, the urban centers of the region, such as the core cities of Philadelphia, Trenton, Camden and Chester, have lost both residents and jobs. Creating a healthy, viable, efficient and growing region into the future will be impossible unless these urban centers are stabilized and encouraged to grow. To encourage growth in the urban areas:

- 1. Counties and municipalities should utilize all available state and federal funding programs to revitalize residential neighborhoods in urbanized areas. Social services programs should be linked with neighborhood preservation and housing assistance programs to encourage homeownership opportunities. Municipal zoning regulations should encourage infill development and mixed-uses where appropriate, stressing good urban design.
- 2. Urbanized areas should expand their work with business groups (such as Chambers of Commerce and merchants associations) to promote business districts. These organizations can be a source of funding for business district improvements, and can prioritize and carry out the goals of the business community. Public-private development opportunities should be pursued.
- 3. City and State agencies should continue to provide incentives to employers and developers to locate or develop in industrial or commercial districts of urbanized areas and combine those incentives with the job training and marketing efforts needed to make these projects work. Federal "empowerment" zone designation should be pursued for Philadelphia and Camden. Other urban centers should pursue state or federal enterprise" zone designation.
- 4. Municipal and county governments should seek funding and give priority to maintaining/revitalizing urbanized areas and investigate available programs designed to promote historic preservation and promote Main Streets. Congress should restore the Historic Preservation Tax Credit to encourage investment in urban areas.
- 5. State and federal regulatory agencies should provide priority funding for infrastructure maintenance and improvements, including sewer, water and roads in urbanized areas and seek to locate public offices, employees and facilities in the urban areas. Local governments must provide adequate services, including police, fire, sanitation and school systems.
- 6. States should adopt legislation and federal and state regulatory agencies should adopt or revise regulations aimed at preventing the abandonment of old industrial sites in favor of new "greenfield" sites. Clear guidelines for cleanup measures based on the risks and the use of the property should be set; the liability of innocent parties not responsible for the pollution but involved in its cleanup should be limited; and a loan fund and industrial land recycling fund to aid industrial site cleanups should be established.
- 7. Counties in the region should organize to consider the adoption of a dedicated regional wage tax in lieu of a reduced property tax to fund education, public services and infrastructure improvements and to *level the playing field* between Philadelphia and the suburban counties. Such a regional tax may require State authorization.

POLICY 1.1: Concentrate Development Within Existing and Emerging Centers and Corridors

ACTION 1.1.b.

ENCOURAGE SUBURBAN GROWTH IN DESIGNATED AREAS WITH ADEQUATE INFRASTRUCTURE

IMPLEMENTATION

Within the Delaware Valley, growth pressure is primarily felt in the suburban counties of the region. This growth pressure must be managed and directed so that the goal of concentrating new development in existing and emerging centers and corridors can be achieved through coordinated planning efforts among the state, county and municipal levels of government. To encourage orderly suburban growth in designated areas with adequate infrastructure:

- 1. State agencies, counties and municipalities in New Jersey should adhere to the stated goals and strategies of the State Development and Redevelopment Plan. The Office of State Planning, DVRPC and county planning offices should provide technical planning assistance to municipalities.
- 2. SEPTA, NJ TRANSIT and other transit providers should improve their existing services, and expand into areas designated for future suburban growth. State DOTs should work to reduce local congestion conditions in center and corridor areas in order to make those areas more attractive for residents and employers.

 Municipal zoning ordinances should require pedestrian and transit-friendly urban design.
- 3. Municipal zoning regulations must be revised to encourage residential growth and development of employment centers within existing and emerging centers and corridors, by incorporating techniques such as desntiy bonus provisions, village zoning, station area overlay zones, and more efficient and expedited permitting.
- 4. The Commonwealth of Pennsylvania should implement growth management legislation, as now exists in New Jersey, that would provide a legal underpinning for counties and municipalities to adopt growth management land use policies that are coordinated with county, regional and state planning goals. DVRPC and county planning offices should provide technical assistance to local governments.
- 5. Local plans should be consistent with state, regional and county plans. Counties and municipalities should review and revise their comprehensive plans and zoning regulations to direct future development to areas with adequate infrastructure. State legislation should assign counties should have a stronger role in reviewing, approving or denying projects with regional impacts.
- 6. Counties should designate urban growth boundaries (UGB) or Community Development Boundaries within their comprehensive plans that contain only those land areas served or projected to be served by adequate infrastructure.
- 7. The States of New Jersey and Pennsylvania should enact, and counties and municipalities should implement, county-level Transfer of Development Rights (TDR) legislation that designates rural areas and areas without infrastructure as *sending* areas and emerging and existing center and corridor areas with adequate infrastructure as *receiving* areas. Such a program now exists locally only in Burlington County.
- 8. State legislatures should consider tax reform to reduce the municipal dependence on real estate taxes and to provide additional revenue options for local governments, as proposed for Pennsylvania. Reducing the reliance on real estate taxes will reduce the desire to zone for commercial development in inappropriate areas in order to increase local revenues.

POLICY 1.2: Maintain Rural Character of Portions of Region

ACTION 1.2.a. LIMIT NEW INFRASTRUCTURE IN RURAL AREAS

IMPLEMENTATION

The rural character of portions of the Delaware Valley is an essential element in the image, quality of life, and economic stability of the region as a whole. Rural areas maintain a tradition, provide a lifestyle choice, and permit farming activities to continue. Key to maintaining these rural areas are limits on the new infrastructure extending outward from the developed areas of the region. To limit new infrastructure in rural areas:

- 1. Municipalities can encourage higher density development in designated growth areas while preserving the remainder of the rural area, by amending zoning ordinances and concentraing infrastructure improvements in designated centers. These centers should serve the retail and service needs of the surrounding rural area. Clustering and planned unit development design approaches should be encouraged to utilize existing infrastructure efficiently.
- 2. Municipal governments should amend zoning ordinances to preserve prime agricultural land in rural areas. These lands should be zoned agriculture rather than large-lot residential or commercial to prevent random subdivision of large lots and the ultimate loss of land for farming purposes. Use sliding scale or net-lot averaging techniques to permit limited development. Existing agricultural preservation programs, such as Agricultural Security Districts and purchase of development rights, should be expanded in priority areas.
- 3. Municipalities should investigate the use of Transfer of Development Rights (TDR) programs as a means to maintain rural character and limit new infrastructure development. Receiving areas should be established in areas with adequate existing water, sewer and transportation infrastructure, while sending areas should be those rural areas without the necessary infrastructure to support development.
- 4. Counties and municipalities should require that developers conduct a full impact analysis of significant development proposals, including the fiscal impacts of providing new services and infrastructure to the proposed development. Reasonable and equitable impact fee programs should be established where appropriate to pay the necessary cost of these improvements such as the transportation improvements permitted under Pennsylvania's planning code and the roads, water, sewer and drainage improvements authorized under New Jersey's land use law.
- 5. State enabling legislation should assign counties the authority to review, approve or deny projects of regional significance and to establish Urban Growth Boundaries (UGB) or Community Development Boundaries to preserve rural areas. New or expanded infrastructure facilities would not be built outside the UGB until development opportunities within the UGB are depleted.
- 6. PADER and NJDEPE could halt the spread of *leap-frog* development by strengthening the rules for on-lot treatment or preventing new residential development if existing sewer and water facilities have insufficient capacity to treat the new development. Local sewage facilities plans need to be coordinated with comprehensive and master plans to limit growth in areas without adequate infrastructure.
- 7. PADER, NJDEPE and municipal governments should prohibit the use of package sewage treatment plants in rural areas unless maintenance and oversight responsibilities are clearly defined. These facilities cannot be expanded and often are poorly managed resulting in below standard performance. Local governments often have to assume control of the facility and all associated costs. Groundwater protection programs are essential, particularly in areas without public water systems.

POLICY 1.2: Maintain Rural Character of Portions of Region

ACTION 1.2.b. LIMIT RURAL OR FARMLAND ACREAGE DEVELOPED

IMPLEMENTATION

Current development patterns have consumed a vast amount of farmland and other rural landscapes. Continuing trends threaten agricultural heritage and rural vistas of the region as prime farmland and farmsteads, hamlets and villages are replaced by new subdivisions and commercial centers. However, if supported by the implementation of appropriate tools, farmland, villages and the rural landscape can be preserved for future generations. To limit rural or farmland acreage developed:

- 1. Local governments with existing viable farmland should adopt a resource based comprehensive plan that considers farming to be an integral part of a community's economic portfolio. The plan should concentrate development in appropriate town centers while preserving critical farmland. Techniques within the plan may include Purchase of Development Rights (PDRs), Transfer of Development Rights (TDRs), sliding scale and other effective agricultural zoning (zoning that enables the landowner to realize some development potential of the site while still promoting effective agriculture production), adequate public facilities ordinances, capital improvement programs, growth staging plans, joint municipal zoning ordinances, and urban growth boundaries that limit extension of municipal services. Municipalities should also use these tools to preserve viewsheds around village boundaries to protect village character.
- 2. Counties should continue to promote cluster development ordinances where appropriate which reduce development pressures on farms and help to preserve the critical mass needed to support continued farming or more significant natural resources on the tract.
- 3. DVRPC and/or county planning commissions should undertake a local fiscal impact analysis comparing the costs of farmland and residential growth. The American Farmland Trust in their report "Does Farmland Protection Pay," showed that residential development can cost communities as much as a third more in public services than they raise in revenue, whereas with farmland, a community only pays a range of 2 to 33 cents in services for every dollar raised from agricultural property taxes.
- 4. Counties should encourage joint municipal planning and zoning ordinances and promote Transfer of Development Rights programs within and between those municipalities, as authorized in both Pennsylvania and New Jersey but not now used. Counties and states should form TDR banks through creative mechanisms such as dedicated funding from real estate transfer taxes or sin taxes. Alternatives to local property taxes should be explored to reduce the pressure to zone for commercial development in order to pay for local services.
- 5. Congress should: 1) enforce the Farmland Protection Policy Act of 1981, which requires federal agencies to review federally-supported development proposals and avoid certain farmland conversions; 2) adequately fund the 1990 Farms for the Future Act, which authorizes federal cost-sharing for state and local programs that buy agricultural conservation easements; and 3) modify the inheritance tax laws to increase the value of farmland that can be passed between generations without excessive inheritance tax payments.

POLICY 1.3: Provide Sufficient Public Open Space and Recreational Space

ACTION 1.3.a.

PROVIDE NEW LAND FOR OPEN SPACE AND RECREATIONAL FACILITIES TO MEET FORECASTED POPULATION'S NEEDS

IMPLEMENTATION

Adequate recreational and public open space is extremely important to the image of a community and to the attitudes and perceptions that residents have of their community. Counties and municipalities within the region have excellent opportunities to provide greater amounts of open and recreational spaces within their communities to serve both current residents as well as forecasted needs. However, reserving undeveloped land for these purposes requires careful and creative planning. To provide new land for open space and recreational facilities to meet forecasted population's needs:

- 1. Counties and municipalities in the region should continue to take advantage of all available state and federal programs to assist in open space efforts, including ISTEA; the Pennsylvania Department of Community Affairs' Recreation Improvement and Rehabilitation Act (RIRA) program and the funds available under the Key 93 bond program; the New Jersey Green Acres, Bureau of Green Trust Management program; and individual county bond programs.
- 2. The States of Pennsylvania and New Jersey should encourage counties and municipalities to prepare *Recreation Master Plans* that evaluate the current and forecasted demographic characteristics of the community as well as the physical conditions. Local plans should support and serve to implement DVRPC's regional open space planning recommendations.
- 3. Pennsylvania counties and municipalities in the region should provide and/or expand bicycle paths, picnic areas, hiking trails, jogging/fitness trails, natural/wild areas and outdoor theaters, as identified within Pennsylvania's Recreation Plan 1991-97. The Pennsylvania Bureau of State Parks should move to implement the Pennsylvania Trail Plan and to work with the National Park Service to define trails for the National Trail System, including rails-to-trails opportunities.
- 4. Counties and municipalities in New Jersey should adhere to the "Balanced Land Use Guidelines" of the State Outdoor Recreation Resources Plan which states that 7% of developed and developable county land, and 3% of developed and developable municipal land should be set aside for recreational purposes.
- 5. Private landowners should be encouraged to donate conservation easements over the land to qualified conservation organizations for preservation and/or recreational use. These organizations should promote the tax advantages of such easements to property owners.
- 6. Counties and municipalities should require developers to prepare an impact analysis identifying the recreational needs created by that development and a plan for mitigating impacts of their development, if any, upon the public open and recreational spaces of the community. Impact fee programs should be authorized by the states as a means to either acquire new parkland (based on a project's impacts) or to pay for other recreational improvements necessitated by the project.
- 7. Counties and municipalities should use the official map technique to identify the public open and recreational spaces needed for forecasted needs. They should also prepare and adopt a capital facilities plan that budgets for and acquires sufficient lands over time to meet those needs.
- 8. Counties in the region should initiate bond issue programs for the acquisition and development of open space and recreational lands and facilities to meet their forecasted needs.

POLICY 1.4: Upgrade or Expand Public Services and Infrastructure in Appropriate Growth Areas

ACTION 1.4.a.

PROVIDE ADEQUATE CAPACITY FOR WATER AND SEWER SYSTEMS AND OTHER SERVICES AS MEASURED AGAINST RESIDENTIAL AND COMMERCIAL NEEDS IN DESIGNATED GROWTH AREAS

IMPLEMENTATION

The provision of adequate infrastructure and community services is extremely important to the proper functioning and daily life of a community. As communities grow and respond to pressures for growth it is important that they direct that growth to appropriate areas as determined by comprehensive planning analyses. These analyses should determine the infrastructure and public service needs of both the residential and commercial community. The communities will need to match the anticipated needs of the growth areas with appropriate levels of water and sewer capacity and other public services. To provide adequate infrastructure capacity and services in designated growth areas:

- 1. The State of Pennsylvania and county planning commissions should continue to encourage all municipalities to develop and implement an Act 537 Plan for their existing and future sewage disposal needs. The Act 537 Plan should be consistent with and linked to the comprehensive plan of the municipality and the county.
- 2. New Jersey municipalities should continue to ensure that their Master Plans are in conformance with the 208 Water Quality Management Plan governing their land area. Specifically, areas designated for growth by municipal master plans must be within the 208 Plan's designated public sewage disposal service areas.
- 3. Counties and municipalities should review and revise existing zoning regulations, using density bonuses as necessary to attract development to growth areas, and establish impact fee regulations to provide for infrastructure and public services concurrent with estimated future residential and commercial needs.
- 4. States, counties and municipalities should work with SEPTA, PATCO, NJTRANSIT and other transit providers to expand and improve their services in appropriate growth areas thereby attracting growth and the required supporting sewer and water infrastructure and public services.
- 5. Counties should encourage municipalities to utilize existing infrastructure capacity before constructing new capacity. They should also initiate comprehensive planning analyses to determine the location of growth areas and the anticipated residential and commercial needs for infrastructure and public services within. These plans should be consistent with county and regional plans. State regulatory agencies should not permit expansion of services into inappropriate areas as defined on State, county or regional plans.
- 6. The Pennsylvania and New Jersey state governments should give priority to public investments in those areas designated for growth in regional, county and municipal comprehensive land use plans because of their existing adequate capacity for transportation, sewer and water systems and other public services.
- 7. Pennsylvania and New Jersey should enact enabling legislation permitting counties and municipalities to adopt and implement an *Adequate Public Facilities Ordinance*. Such ordinances could act as an enforceable legal instrument requiring that necessary water and sewer infrastructure, schools, and other public services are provided for and in place at the time of development.

POLICY 1.4: Upgrade or Expand Public Services and Infrastructure in Appropriate Growth Areas

ACTION 1.4.b.

PRESERVE AND ENHANCE KEY ELEMENTS OF THE EXISTING TRANSPORTATION SYSTEM

IMPLEMENTATION

Identifying appropriate growth areas of the region starts with those areas that are already developed. These areas may either have excess capacity in their infrastructure that can support additional development, or infrastructure which can be expanded cost effectively. The transportation system is a major component of an area's infrastructure. The region should establish a program of replacing or rehabilitating transportation assets at the optimal replacement cycle. Improvements include resurfacing, restoration, and rehabilitation, and transit facility and fleet replacement or modernization. ISTEA required each state, in cooperation with its MPOs, to develop six management systems to preserve the nation's transportation infrastructure. Key elements of the existing infrastructure are recognized in those systems as those elements necessary from a regional perspective, to insure the safe and efficient movement of people and goods. Strategies to achieve preservation of the system include:

1. State DOTs in cooperation with DVRPC and transit agencies should establish the six management systems required by ISTEA. These include:

Bridge Management
Traffic Congestion Management
Intermodal Facilities and Management
Pavement Management
Public Transportation Facilities and Equipment Management
Highway Safety Management

- 2. State DOTs and transit operators should preserve unused rights of way (e.g., abandoned railroad corridors) for future transportation improvements.
- 3. State DOTs, DVRPC and transit operators should establish performance standards for use with data from the management systems to identify those elements of the system which fail to meet standards.
- 4. State DOTs, DVRPC and transit operators should establish a prioritization methodology for selecting improvements among those that are below accepted standards.
- 5. **DVRPC, in consultation with FHWA and FTA, should establish a program** that rewards transit and highway system operators for effective preventive maintenance and which discourages neglect of facilities.



GOAL 2:

EASE TRAFFIC CONGESTION THROUGH THE REDUCTION OF SINGLE OCCUPANT VEHICLES BY BETTER INTEGRATING AUTOMOBILE AND PUBLIC TRANSIT LINKS, ENCOURAGING CHANGES IN COMMUTERS' TRAVEL HABITS AND IMPROVING THE EFFICIENCY OF EXISTING TRANSPORTATION FACILITIES AND SERVICES

POLICY 2.1

PROVIDE MORE NON-AUTO OPTIONS FOR COMMUTERS

ACTION 2.1.a.

Improve area coverage and operation of transit service

ACTION 2.1.b.

Increase the number of multimodal transportation centers and park and ride facilities

ACTION 2.1.c.

Encourage transit-oriented land use and mixed-use development

POLICY 2.2

USE TRANSPORTATION
DEMAND MANAGEMENT
TECHNIQUES FOR CORRIDOR
AND SYSTEM PLANNING

ACTION 2.2.a.

Establish programs aimed at reducing the total number of trips

POLICY 2.3

OPTIMIZE **EFFICIENCY** OF EXISTING TRANSPORTATION SYSTEMS

ACTION 2.3.a.

Reduce traffic congestion along travel corridors and at critical intersections through incident management and advanced technology systems

POLICY 2.1: Provide More Non-Auto Options for Commuters

ACTION 2.1.a.

IMPROVE AREA COVERAGE AND OPERATION OF TRANSIT SERVICE

IMPLEMENTATION

Most transit systems today are collections of routes which have evolved over time through a series of small adjustments, each in response to a perceived need. Additional thought needs to be given as to how well the routes work collectively as a system, or whether the service is as competitive with the automobile as it might be. To increase market share, potential customers must be offered services that go where they want to go, when they want to go and at a *price* they are willing to pay in terms of fare, travel time, comfort and other perceived qualities. In many cases routes can be restructured to better match current trip patterns, reduce travel times and cut operating costs. Park-and-ride lots can extend the reach of express routes to lower density areas. Separate rights-of-way may be needed in high density corridors to allow transit vehicles to bypass highway congestion that slows autos. New technology can be used to improve communications, information systems, fare collection and generally improve the user friendliness of the system. Strategies to improve coverage and service include:

- 1. Transit operators should continue to restructure routes to increase efficiency of existing service and add new service where markets are available.
- 2. Transit operators should strive to reduce travel times in order to improve competitiveness with other modes. Strategies include: consolidation of stops, better use of express and local services, use of signal preemption by street vehicles where advanced traffic control is present and signaling and track improvements for rail vehicles.
- 3. Transit operators, TMAs and employers should use Geographic Information Systems to match commuters with existing service, to target their marketing efforts in a certain area, and to design new services where needed.
- 4. Transit operators should develop new information systems that make it easier for new or occasional riders to use public transportation.
- 5. Transit operators should use advanced fare collection systems to reduce time needed at stops and stations, to ease payment barriers, to permit fare structures that better match the service and to collect ridership data.
- 6. Transit operators should facilitate transfers through coordinated scheduling, improved pedestrian flow at transportation centers, better directional signage, simplified payment procedures and use of vehicle-to-vehicle communications. The last could reduce missed connections by alerting drivers when and where to expect transfers.
- 7. Transit operators should improve services in lower density areas through simplified, timed transfers at key transfer points, demand-responsive vehicles as circulators to feed routes and expansion of park-and-ride lots.
- 8. Transit operators should develop Intelligent Vehicle/Highway Systems (IVHS) programs to provide guidance in the implementation of these emerging technologies in their operations. Such programs should include both near term and long term recommendations to recognize current initiatives and the wide variety of systems.

POLICY 2.1: Provide More Non-Auto Options for Commuters

ACTION 2.1.b.

INCREASE THE NUMBER OF MULTI-MODAL TRANSPORTATION CENTERS AND PARK AND RIDE FACILITIES

IMPLEMENTATION

Transportation centers are facilities where a number of different transit lines, including rail and/or buses, come together in an area of land use activity so that the transit service is linked directly and conveniently to the adjoining land uses. Park and ride lots are facilities whereby drivers can park one vehicle in order to transfer to another for carpools, vanpools or transit vehicles. Both facilities serve to reduce single occupant vehicles and congestion. In order to increase the number of multi-modal transportation centers and park and ride facilities:

- 1. DVRPC and County planning agencies should assist PennDOT and NJDOT in identifying potential park and ride sites at focal intersections or highway interchanges that can intercept single occupant vehicles and provide for a convenient transfer to a train, bus, carpool, vanpool or other transit service. Potential sites should be situated in proximity to the regional transportation network, have the potential to generate a significant number of trips and be in areas to reduce congestion. Sites that can link residential neighborhoods with expressways, rail lines and/or express bus routes have the greatest likelihood of success. Where linked to a bicycle network, the sites should provide secure bicycle lockers and storage.
- 2. PennDOT and NJDOT should conduct market area evaluations of potential sites to determine expected demand. Evaluations must consider overall travel distance, travel time, travel cost, proximity to transportation services, transit frequency and locational factors, such as land availability, cost, adjacent land uses, environmental constraints and neighborhood acceptance. Select sites with greatest market viability and design for projected demand. State departments of transportation should enroll regional transit agencies and private interests in the design, funding, construction, marketing and maintenance of these facilities.
- 3. SEPTA, NJ TRANSIT and PATCO should continue to explore joint development projects with municipalities and private developers on land surrounding transit stations. A higher-density mixed use development, which could include parking structures, will serve to increase ridership while providing an economic benefit to these communities.
- 4. DVRPC, county planning agencies and transit operators should work to implement identified potential transportation centers that facilitate movement of people into and out of activity areas and link transit service with surrounding land uses. A hierarchy of transportation centers should be established, representing both urban and suburban densities. Transportation centers work best when served by several transit lines and surrounded by a mix and density of residential, retail and employment activity within convenient walking distance.
- 5. Municipalities should enact appropriate zoning and land use controls to encourage an appropriate land use mix and density in the area of transit centers. Guidelines for transportation centers should specify appropriate land uses and densities, as well as circulation, parking, bicycle and pedestrian improvements needed to link transit with nearby activities.

POLICY 2.1: Provide More Non-Auto Options for Commuters

ACTION 2.1.c.

ENCOURAGE TRANSIT-ORIENTED LAND USE AND MIXED-USE DEVELOPMENT

IMPLEMENTATION

The Delaware Valley region has a well-established network of existing transit service, including commuter rail, light rail and bus systems. However, for the transit system to maintain its ridership or expand service to other areas, it is essential to improve the links between land uses and surrounding development. To encourage transit-oriented land use and mixed-use development:

Municipalities responsible for local area planning decisions should:

- 1. Utilize existing planning tools to encourage higher densities and a mix of different uses at existing transit stations and create new developments that are sensitive to and can accommodate expanded transit service.
- 2. Require cluster development where possible, to reduce the walking distance between each of the buildings and the nearest bus stops or transit facility. Zoning and subdivision regulations should also require developers to provide a mix of uses within a development at appropriate locations, such as restaurants, banks, daycare and convenience stores to reduce the number of off-peak automobile trips.
- 3. Establish site design standards within a subdivision and land development ordinance that require new commercial or residential developments to be oriented towards streets with bus service or require preferential parking for carpools and vanpools adjacent to building entrances. If a development is in proximity to a rail station, the amount of required parking could be reduced, and developers given incentives or bonuses to operate connecting shuttle services. Municipal design standards should also address the layout and arrangement of streets and sidewalks, by including provisions for walkways, lighting, benches and bus turn-off facilities.
- 4. Grant density bonuses for developer improvements, such as a transit center or locating adjacent to a regional rail station. An overlay zone or special district may be created at an intersection or around a rail station, to allow more intense and efficient use of land, a unique mix of uses, or to require the provision of amenities such as bus stops or shelters. Planned unit developments should be encouraged to coordinate development of larger tracts of land with new or expanded transit service and a mix of compatible uses.

Regional transit agencies should work with municipalities to:

- Recognize and respond to emerging land use patterns and plan for system changes to accommodate new needs.
- 6. **Be accessible and responsive to municipalities,** to help municipal officials and planners encourage the types of density and center designs which are most compatible with transit service.
- 7. Consider joint development proposals with municipalities on land surrounding a rail station. Higher density development can both increase ridership on the transit line and provide an economic stimulus to the older communities along the rail lines.

POLICY 2.2: Use Transportation Demand Management Techniques for Corridor and System Planning

ACTION 2.2.a.

ESTABLISH PROGRAMS AIMED AT REDUCING THE TOTAL NUMBER OF TRIPS

IMPLEMENTATION

Three ways to reduce total trips include combining trips, ridesharing, and eliminating the need for trips. Eliminating trips can be done through telecommuting (working from home with the aid of computers, modems and fax machines or from a neighborhood telework center), compressed work weeks (working the same hours per week or biweekly period in fewer, longer days), and land use strategies (siting of residential development and services within walking distance of employment centers).

The following actions will reduce the total number of trips:

- 1. PADER, NJDEPE, DVRPC and local advocacy groups should conduct a public education campaign to promote carpooling as well as other commuting options and combining auto driver trips (e.g., combining various errands rather than taking discrete trips). NJDOT currently airs radio spots to encourage alternate modes of transportation.
- 2. State and county governments, transit operators and interest groups should conduct and support public education efforts designed to promote the idea that pollution can be reduced by driving less.
- 3. Pennsylvania and local governments should provide tax incentives to employers who offer telecommuting and compressed work week programs. Benefits and incentives for employees who carpool or rideshare should also be identified. New Jersey currently provides a state tax deduction.
- 4. State, county and municipal governments should provide tax incentives to employers who offer appropriate incentives to employees to locate near their workplace or near convenient transit service.
- 5. Municipalities should revise zoning ordinances to allow a mix of land uses and pedestrian scale activity centers. For example, commercial uses should be permitted in office parks so employees can walk to lunch, banks and stores instead of having to drive to them. Residential, commercial and office uses should be permitted in the same areas so employees can live nearby, thus allowing them to walk to work and to their errands instead of having to drive. Site design standards should be revised to make it easier to walk to work: buildings should be located and oriented toward the street, sidewalks and bus passenger shelters should be provided and parking lots should be located behind buildings.
- 6. The region should adopt a tax on new parking facilities to be borne by automobile commuters which would provide funding for ETR and travel demand reduction programs.

POLICY 2.3: Optimize Efficiency of Existing Transportation Systems

ACTION 2.3.a.

REDUCE TRAFFIC CONGESTION ALONG TRAVEL CORRIDORS AND AT CRITICAL INTERSECTIONS THROUGH INCIDENT MANAGEMENT AND ADVANCED TECHNOLOGY SYSTEMS

IMPLEMENTATION

Nationally, over 50 percent of the delay on the highway system can be attributed to incidents or accidents. Incident management, which includes incident detection, initiating an appropriate emergency response and managing traffic flow, will significantly minimize vehicle delays. Advanced technology systems are also increasingly being employed to manage recurring congestion through technologies ranging from advanced traffic control systems and ramp metering to traveler advisory systems. In order to implement incident management and advanced technological systems:

- 1. State DOTs should continue implementing ramp metering systems to maintain satisfactory traffic operating conditions on expressways.
- 2. Toll authorities should implement automatic vehicle identification (AVI) to expedite vehicle movement.
- 3. State DOTs should continue implementing traffic operations centers.
- 4. State DOTs should broaden the scope of plans to facilitate traffic movement through/around work zones to address incident management requirements where applicable.
- 5. State DOTs should continue installing loop detectors, surveillance cameras, weather monitoring equipment, highway advisory radio (HAR) transmitters and changeable message signs on all limited access highways.
- 6. State DOTs, transit agencies, toll authorities, county and municipal emergency response agencies and local media should establish a Transportation Operations Coordinating Committee (TRANSCOM) for the region to coordinate traffic information.
- 7. DVRPC should identify corridors where advanced traffic control systems are feasible. State DOTs should conduct studies to determine system requirements, costs and benefits and insure that projects are prioritized.
- 8. State DOTs and counties in conjunction with affected localities should develop traffic management plans for major highways with pre-arranged detour routes, signing, radio announcements and traffic control points.
- 9. State DOTs should station roadside assistance vehicles at strategic locations adjacent to all heavily traveled routes during peak travel periods.
- 10. State DOTs, state and local police departments, transit operators and traffic reporting firms should collectively institute a televised information service on regional highway and transit travel conditions.
- 11. State DOTs, toll authorities and transit agencies should design and implement special bus and HOV access gates and lanes at toll plazas to reduce delays and thereby travel times for these vehicles.
- 12. State DOTs should develop a prioritized list of candidate maintenance projects on a biennial basis for problem locations stemming from poor geometric and pavement conditions.



GOAL 3:

ASSURE A CLEAN AND SUSTAINABLE ENVIRONMENT FOR EXISTING AND FUTURE RESIDENTS OF THE REGION, AND INTEGRATE ENVIRONMENTAL PROTECTION OBJECTIVES IN ALL PLANNING ACTIVITIES

POLICY 3.1	POLICY 3.2	POLICY 3.3	POLICY 3.4
ENCOURAGE THE USE	PROTECT, MAINTAIN	PROTECT AND	USE ENERGY
OF SAFE AND EFFICIENT	AND IMPROVE QUALITY	PRESERVE CRITICAL	EFFICIENTLY
WASTE MANAGEMENT AND REDUCTION PROGRAMS	AND SUPPLY OF WATER	NATURAL RESOURCES	
ACTION 3.1.a.	ACTION 3.2.a.	ACTION 3.3.a.	ACTION 3.4.a.
Encourage recycling programs in all communities and the growth of recycling industries	Improve surface water quality for fishing and swimming	Promote permanent protection of identified critical natural resource areas, including no net loss of wetlands	Reduce per capita energy usage
		ACTION 3.3.b.	
ACTION 3.1.b.	ACTION 3.2.b.	Increase river miles	ACTION 3.4.b.
Reduce amount and	Meet goals of "Water	protected under state	Encourage the use of
percentage of waste	Quality 2000" to	and federal scenic river	alternative fuels,
going to landfills	protect and enhance the	designation, where	efficient equipment and
	quality of drinking	appropriate	facility design concepts
ACTION 3.1.c.	water supplied by surface and ground		

Provide additional

waste disposal

facilities if needed, for

sources

POLICY 3.1: Encourage the use of safe and efficient waste management and reduction programs

ACTION 3.1.a.

ENCOURAGE RECYCLING PROGRAMS IN ALL COMMUNITIES AND THE GROWTH OF THE RECYCLING INDUSTRY

IMPLEMENTATION

Recycling — the removal and reuse of materials from the waste stream — has long been viewed as a practical solution to the problems of solid waste management. In 1987, New Jersey passed the Statewide Mandatory Source Separation and Recycling Act, requiring New Jersey's 21 counties to provide a system for the collection of designated recyclables and develop markets for recyclables. New Jersey has established a 60% recycling goal to be attained by 1995. In Pennsylvania, The Municipal Waste Planning Recycling and Waste Reduction Act (Act 101) was signed in 1988, giving counties the primary responsibility for planning how municipal solid waste (MSW) will be disposed in each county. Curbside recycling programs are required in all of Pennsylvania's larger communities, with a goal of 25% recycling by 1997. The degree to which a community can attain this goal is determined by the strength of recycling markets. Therefore, the stronger the recycling industry, the more materials a community can recycle.

- 1. State and local laws should require that all levels of government apply reduce and recycle to the use of all products and services.
- 2. States should fund positions for county recycling coordinators to assist individual municipalities to establish recycling programs. Recycling coordinators should also ensure that waste reduction programs are fully integrated with recycling programs.
- 3. The states, in conjunction with the counties and DVRPC, should establish a comprehensive inventory and library of recycling industries and organizations throughout the region.
- 4. States should offer job training and development assistance (such as low-interest business loans) to the recycling industry as part of state sponsored job training and business assistance programs.
- 5. PennDot and NJDOT should continue to use Rubber Modified Asphalt and Glassphalt in certain highway projects in Pennsylvania and New Jersey, and experiment with other materials such as roofing shingles or incinerator fly ash. County and local road projects should also use these recycled materials.
- 6. **Pennsylvania counties should encourage communities to establish voluntary drop-off centers**, if not affected by mandatory recycling requirements.
- 7. PennDOT and NJDOT should allow the use of the recycling symbol on directional signs that are located on state routes to help residents locate recycling sites in Pennsylvania and New Jersey.
- 8. Local governments should establish recycling market enterprise zones where appropriate within the region.
- 9. Federal incentives should be developed to encourage manufacturers to develop capacity and technology for using more recyclables instead of virgin raw materials.
- 10. Federal legislation should establish minimum recycled content standards for newspaper.

POLICY 3.1: Encourage the use of safe and efficient waste management and reduction programs

ACTION 3.1.b.

REDUCE AMOUNT AND PERCENTAGE OF WASTE GOING TO LANDFILLS

IMPLEMENTATION

The EPA estimates that the amount of waste generated in the United States has more than doubled since 1960 and is projected to continue to grow throughout the rest of the century. As of 1990, EPA estimates that 64 percent of garbage was disposed in landfills, 18 percent was recycled and 18 percent incinerated. Currently, the region is not doing all that it can to decrease the amount of materials being discarded through both source reduction and recycling. Efforts should be undertaken to promote source reduction, recycling and reuse of products.

- 1. At the state and county level, programs should continue to educate consumers about environmentally correct packaging.
- 2. Low density communities should encourage home composting of yard waste and non-animal foodstuffs. High density communities should provide a central location for composting of yard waste and all foodstuffs and provide that compost for use by residents for gardening.
- 3. Large appliances should be diverted from the waste stream through locally sponsored large appliance recycling and reuse programs.
- 4. Both Pennsylvania and New Jersey should continue to explore markets for recyclables and consider banning certain types of packaging.
- 5. Both states should require all offices and business to recycle high quality office paper and expand recycling to include asphalt and demolition waste.
- 6. Permanent county household hazardous waste collection programs or facilities should be established, as now exists in several counties in the region. These programs should be accessible and well promoted.
- 7. Pennsylvania should follow New Jersey's lead and ban white goods, nickel cadmium batteries, tires and scrap metal from landfills. Both states should explore additional landfill bans on plastics, telephone directories and tin cans.
- 8. More communities should consider introducing variable rate pricing for garbage collection, including bag based recycling, volume based recycling and weight based recycling.
- 9. Local municipalities should establish battery collection programs in their communities where the private market has not served this function. Act 101 in Pennsylvania requires sellers of automotive batteries to provide for the collection, reuse and recycling of this product. New Jersey requires manufacturers of dry cell batteries to make provisions for the collection of discarded batteries.
- 10. Local communities should encourage or support individual service station participation in waste oil collection programs. To assist in this effort, states should pass legislation requiring manufacturers of hazardous products make provisions for collecting and recycling them after they have been used.

POLICY 3.1: Encourage the use of safe and efficient waste management and reduction programs

ACTION 3.1.c.

PROVIDE ADDITIONAL FACILITIES, IF NEEDED, FOR WASTE DISPOSAL

IMPLEMENTATION

During the 1970's, approximately 300 to 400 municipal landfills were built each year. By the 1980's, this number dropped to between 50 and 200, while almost 70% of all landfills closed. Nationally, however, the amount of waste produced per person continues to increase. If per capita waste generation does not decrease or the degree of recycling does not expand, it may be necessary to site new waste disposal facilities or expand existing facilities.

- 1. Each state should require more uniform waste planning and permitting within its borders in order to achieve regional balances between supply capacity and expected trash generation.
- 2. Counties should ensure adequate disposal capacity through the timely update of county solid waste plans. New Jersey currently requires plan updates every two years.
- 3. The EPA, PADER and NJDEPE should ensure that landfill or resource recovery facility siting complies with all local, state and federal regulations and ensure that the public is provided a realistic and responsible role in the process.
- 4. DVRPC, in conjunction with the counties and the states, should examine the cumulative impact of individual permits and solid waste plans in order to aid policy makers in understanding the use of and need for disposal capacity within the region. Data collected by the States should be used to develop regional waste generation disposal models to determine disposal capacity.
- Landfill operators and managers should maximize existing landfill space through the use of safe and
 efficient technology. In addition, the use of enhanced landfill compaction and alternative daily covers can
 create significant capacity savings.
- 6. Landfill operators and managers should explore the option of retrofitting existing facilities (such as power plants) that are located in appropriate areas, into solid waste facilities.
- 7. When choosing municipal solid waste (MSW) facilities, local governments should consider technologies that can give something back to the community, such as landfill gas reclamation and waste to energy facilities that reclaim energy from MSW.

POLICY 3.2: Protect, maintain and improve quality and supply of water

ACTION 3.2.a.

IMPROVE SURFACE WATER QUALITY FOR FISHING AND SWIMMING

IMPLEMENTATION

Surface water of good quality is one of the region's most valuable natural resources. It is not only the source of sustenance for countless forms of plant and animal life, it also serves as a water source for man's continually increasing domestic, agricultural, industrial and recreational needs. Addressing non-point pollution is essential to improve surface water quality for fishing and swimming:

- 1. EPA should continue to closely monitor NPDES Quarterly Noncompliance Reports to determine the number of facilities in the region not in compliance.
- 2. Pennsylvania and New Jersey NPDES (Non-Point Discharge Elimination System) permits should be analyzed by EPA to determine the adequacy of enforcement actions against those facilities that have violated their NPDES permits.
- 3. County conservation districts, local governments and private conservation groups should consider adopting streams under the Pennsylvania Fish Commission's "Adopt a Stream Program." Such programs are aimed at alleviating stream bank erosion and nutrient pollution problems.
- 4. PADER and NJDEPE should develop and submit to EPA and NOAA, Coastal Nonpoint Pollution Control Programs in compliance with Section 6217 of the U.S. Coastal Zone Management Act, which are at least as effective as EPA's measures.
- 5. The Delaware Estuary Program, together with the States, DRBC and DVRPC should identify land use management practices which result in non point source pollution and develop nonpoint source education programs to educate the public about the effects of NPS pollution.
- 6. Municipalities should recognize that under municipal code, they possess strong legal capabilities to regulate and govern pollution causing activities within their boundaries. Land use planning, zoning and subdivision review are also means to protect surface water quality.
- 7. Municipalities should determine whether existing state and federal water pollution control laws are adequate to meet the needs of their communities. Municipalities, under law may adopt ordinances that supplement or increase required state and federal water pollution controls.
- 8. Pennsylvania DER should develop NPS model ordinances as an educational tool for local governments, as New Jersey has already done.
- 9. EPA, together with PADER and NJDEPE, should develop a region-wide inventory and assessment of Best Management Practices for nonpoint source pollution control in the region.
- 10. The DRBC should examine the feasibility of delineating regional watershed management districts throughout the region that would require local governments to implement specific land use planning measures and best management practices to control nonpoint source pollution.
- 11. DRBC, DVRPC or the counties should utilize stream watch funds available through the EPA to implement a region-wide stream watch program to assist regulatory monitoring efforts and identify possible means of non-point source pollution management.

POLICY 3.2: Protect, maintain and improve quality and water supply

ACTION 3.2.b.

MEET GOAL OF "WATER QUALITY 2000" TO PROTECT AND ENHANCE THE QUALITY OF DRINKING WATER SUPPLIED BY SURFACE AND GROUND SOURCES

IMPLEMENTATION

The United States currently has no unified national policy that observes the principles of integrated land and water resource planning and management. Current water policies are often narrow and conflicting. "Water Quality 2000" represents an effort by more than 70 private, public and nonprofit organizations to identify water quality problems and craft comprehensive solutions. The report calls for the creation of a unified national water resource policy that integrates both land and water planning.

- 1. All levels of government should increase resources devoted to public education. Elementary and secondary schools and colleges and universities should incorporate environmental education into their curriculums in order to ensure the public is informed of and sensitive to water quality issues.
- 2. PADER and NJDEPE, working with the DRBC, should continue to be the principal focal points for the implementation of water quality improvement programs. EPA should assume a lead role in helping state and local governments overcome barriers to successful implementation of water quality programs. The EPA should also take the lead in coordinating cooperating federal agencies including the Department of Agriculture, Transportation, Housing and Urban Development, and NOAA.
- 3. PADER, NJDEPE, other state agencies, and local conservation district programs that focus on agriculture pollution prevention should, at the minimum, contain the following elements: education, program assessment, research, monitoring, technical assistance, financial incentives, regulation and penalties for non-compliance.
- 4. U.S. Army Corps of Engineers should expand its beneficial uses of dredged material initiative in order to provide the best and most efficient use of resources to provide water resources benefits.
- 5. County and municipal governments should adopt, implement and enforce land use policies that are compatible with the maintenance and restoration of high-quality water resources and suited to the watershed.
- 6. State and federal economic development assistance programs should assure that all loan or grant recipients are in conformance with environmental regulations or have established individual pollution prevention plans.
- 7. Congress should establish a federal policy that recognizes the vulnerable nature of ground and surface water resources and commits to reducing pollution at the source, whether point or nonpoint. Amend the Clean Water Act as needed to integrate land and water resource planning. Congress and state legislators should also seek to improve the incentives for industry to implement effective pollution prevention programs.
- 8. DVRPC, DRBC, DER and the counties should explore the establishment of regional watershed authorities in Pennsylvania to set policies and review new development proposals affecting ground and surface water resources. Such a regional watershed authority, similar to the Tri-County Water Quality Management Board in New Jersey, should also establish and maintain a regional water quality management plan.

POLICY 3.3: Protect and Preserve Critical Natural Resources

ACTION 3.3.a.

PROMOTE PERMANENT PROTECTION OF IDENTIFIED CRITICAL NATURAL RESOURCE AREAS INCLUDING NO NET LOSS OF WETLANDS

IMPLEMENTATION

Because growth and change will continue to occur in the region, it is important that measures be undertaken to ensure that the region's resources are protected from the impacts associated with growth. In order to permanently protect critical natural resources:

- 1. Local Comprehensive and Master plans should define and map wetlands and include provisions for protecting significant wetlands in local zoning and subdivision ordinances.
- 2. Municipalities should continue to adopt special zoning and subdivision ordinances to control development in 100 year floodplains, areas with steep slopes, and critical habitat areas.
- 3. Counties and municipalities should promote and support park and greenway proposals which aim to preserve sensitive areas as open space. Local governments should act to implement county and DVRPC regional open space plans.
- 4. Municipalities, counties and conservancies should acquire and manage wetlands and important woodlands and other natural areas to ensure that they are protected.
- 5. PADER and NJDEPE should develop state-wide data bases with the goal of determining both qualitatively and quantitatively the effect of the cumulative destruction of wetlands and other environmentally important habitats.
- 6. PADER and NJDEPE should conduct an evaluation of the compatibility/incompatibility of the states' economic development and environmental protection policies with respect to wetlands and habitat protection issues.
- 7. Municipalities should develop zoning and subdivision ordinances to control the indiscriminate cutting of trees or require the replacement of cut trees at a minimum of one to one size replacement.
- 8. States should sponsor a wetlands delineation training program for local government staff and the interested public. Federal and state agencies should agree to use the same wetlands delineation manual and methods.
- 9. PADER and NJDEPE should design state or region-wide surveillance monitoring programs to document incidence of habitat/wetland loss.
- 10. Pennsylvania and New Jersey should modify the state planning codes to require county and local governments to identify and inventory local natural resources and critical habitat areas in their comprehensive plans.
- 11. DRBC, PADER, NJDEPE and the regional EPA offices should investigate the feasibility of developing a regional wetland mitigation banking system.

POLICY 3.3: Protect and preserve critical natural resources

ACTION 3.3.b.

INCREASE RIVER MILES PROTECTED UNDER STATE AND FEDERAL SCENIC RIVER DESIGNATION, WHERE APPROPRIATE

IMPLEMENTATION

Scenic River Programs exist at both the federal and state level. These programs are designed to protect rivers and related lands that offer outstanding aesthetic and recreational value in order to ensure that the benefits provided by these resources are available to present and future generations. Currently federal and state programs exist independently. Federal funding is available for initial feasibility studies. On the state level, Scenic River designation is dependent upon completion of a detailed river study. The purpose of the study is to: 1) recommend resource management and protection strategies; 2) document resources; 3) evaluate impacts; 4) recommend legislation necessary for designation. Pennsylvania's Scenic Rivers Program has designated the following rivers within the region: Schuylkill River, French Creek, Octararo Creek and Lower Brandywine. New Jersey has not developed a Scenic Rivers Program.

- 1. Municipalities should identify, within their master plans, rivers and adjacent lands within their jurisdictions that possess outstanding aesthetic and recreational values of present and potential benefit to the people of the region.
- 2. More local governments should involve the public and private sector in identifying river segments for environmental protection, general recreational enjoyment and recreational benefits.
- 3. Municipalities, with the help of other interested parties, should identify rivers that are currently not eligible, but could be eligible if corrective measures were initiated. The goals of such programs should include: restoring the river, improving habitat, and providing recreational opportunities.
- 4. Conservation districts, local governments and private conservation groups should participate in programs such as the Pennsylvania Fish Commission's "Adopt A Stream Program" a program designed to help alleviate stream bank erosion and nutrient pollution problems.
- 5. Municipal zoning ordinances should be modified where necessary to protect lands abutting rivers that currently are, or could be listed as scenic river candidates. Setback buffers or conservation easements along the river's edge will prevent development.
- 6. The State of New Jersey should enact a State Scenic Rivers Act in order to manage and protect rivers exhibiting significant aesthetic, ecological and cultural values.

ENVIRONMENT

POLICY 3.4: Use Energy Efficiently

ACTION 3.4.a. REDUCE PER CAPITA ENERGY USAGE

IMPLEMENTATION

The rate at which all forms of energy are consumed has major implications to the economic health, quality of life and quality of the environment of the Delaware Valley region. Energy usage is inextricably linked to the numerous policies and actions required for the efficient growth of the region. Central to the efficient use of energy is reducing consumption at the lowest common denominator — the individual consumer. According to the U.S. Department of Energy, Energy Information Administration, per capita energy usage in 1989 was 276 million Btu's in New Jersey and 298 million Btu's in Pennsylvania. In order to reduce per capita energy use, the region must adopt energy conservation strategies at all levels of government as well as in the home, at the workplace, in transportation and in land development patterns. To reduce per capita energy use:

- 1. States, counties, municipalities and transportation providers should continue to encourage the use of public transit, car pools, van pools, bicycling, walking and HOV while simultaneously discouraging the use of single occupancy automobile travel.
- 2. States, counties and municipalities should encourage urban development and redevelopment and the attraction of public and private investment to areas where mass transit systems exist and where higher density mixed-use centers reduce the need to travel. Municipal site design standards should encourage the use of solar heating and natural lighting through proper site orientation.
- 3. States, counties, municipalities and energy service providers should encourage the education of consumers on life-cycle costing of equipment and appliances, as well as basic energy conservation and efficiency.
- 4. University architecture programs should mandate curriculum that teaches ecologically supportive and energy-efficient siting and construction techniques.
- 5. The Pennsylvania Energy Office, the New Jersey Department of Environmental Protection and Energy, counties, municipalities and energy service providers should provide technical assistance and low-interest loans to encourage weatherization and insulation of residences and buildings to reduce energy usage.
- 6. States, counties and municipalities should review and revise the building codes so that greater energy efficiency can be built into new residences and buildings, thereby reducing energy consumption in the long-term. Also, the building codes should require greater energy efficiency for residences and buildings undergoing rehabilitation or expansion. Building codes should also encourage the use of solar energy for space and hot water heating.
- 7. Energy service providers should offer utility rebate incentives, modifications of rate schedules and terms and conditions of service to both residential and commercial/industrial consumers for the replacement of inefficient space and water heating equipment, refrigerators, air conditioners and other energy-intensive appliances and equipment.
- 8. The federal government should initiate the establishment of a standard Home Energy Rating System to evaluate the energy efficiency of homes and identify those needing improvements.

ENVIRONMENT

POLICY 3.4: Use Energy Efficiently

ACTION 3.4.b.

ENCOURAGE THE USE OF ALTERNATIVE FUELS, EFFICIENT EQUIPMENT AND FACILITY DESIGN CONCEPTS

IMPLEMENTATION

The commercial, industrial, institutional and transportation entities of the Delaware Valley are extremely dependent on all forms of energy for their daily operations. These entities consume massive amounts of energy each day and together represent the greatest potential for improving the efficient use of energy in the region. According to the NJ Department of Environmental Protection and Energy, the transportation, industrial and commercial sectors consumed 75% of all energy used in the state in 1989. Some examples of these entities include large commercial and government office buildings, industrial manufacturing plants, public transit systems, freight transport systems, hospitals, schools, universities and corporations and businesses that operate large fleets of cars and trucks. The Delaware Valley region would greatly benefit from the encouragement of these entities to use alternative fuels, install more energy efficient equipment and implement more efficient facility design concepts. Tools to encourage implementation of these ideas include:

- 1. States, counties and municipalities should continue to encourage increased energy efficiency on public transit vehicles, encourage HOV arrangements and make better use of the existing roadway systems to improve mobility, reduce congestion and improve air quality.
- 2. The federal and state governments should continue to encourage the use of electric vehicles or compressed natural gas for their vehicle and truck fleets, as well as for commercial, industrial and institutional fleets so that emissions are reduced.
- 3. The states should continue to encourage participation in their respective "Institutional Conservation Programs" which assist schools and other institutions in implementing cost-effective energy conservation improvements.
- 4. States, counties, municipalities and energy service providers should encourage the use of shared-savings arrangements whereby several facilities share a common power and/or heating source which reduces energy costs and increases energy efficiency.
- 5. The Pennsylvania Energy Office, the New Jersey Department of Environmental Protection and Energy, counties, municipalities and energy service providers should expand monetary incentives such as tax breaks, rebates on equipment purchases and service cost reductions to invest in high efficiency commercial lighting technology, encourage the use of daylighting and weatherization in new or retrofitted buildings, and the use of thermal storage and natural gas air conditioning to reduce energy consumption and cut costs; and to improve the efficiency of high-use electrical equipment, motor drives, and gas and oil fired space and water heating equipment.
- 6. The federal government and the states should encourage the use of cogeneration technology (the simultaneous generation of power and heat) in large facilities so that emissions are reduced.
- 7. The federal government should increase the Corporate Average Fuel Economy (CAFE) standards and consider encouraging state incentives to raise the fuel efficiency of cars and trucks.
- 8. The federal government should consider a significantly higher gasoline tax to encourage the automobile industry to meet higher CAFE standards, encourage the development of less-polluting fuels, and to facilitate use of HOV, public transit and more efficient land use patterns.



GOAL 4:

IMPROVE THE REGION'S AIR QUALITY BY REDUCING THE NUMBER OF SINGLE OCCUPANT VEHICLES, PROMOTING ALTERNATIVE TRAVEL MODES AND ENCOURAGING OTHER MEASURES WHICH WILL LIMIT EMISSIONS FROM MOBILE SOURCES

POLICY 4.1

FACILITATE REGIONAL COMPLIANCE WITH THE CLEAN AIR ACT AMENDMENTS OF 1990

ACTION 4.1.a.

Coordinate regional air quality improvement programs

ACTION 4.1.b.

Integrate air quality standards into the Transportation Improvement Program

POLICY 4.2

ENCOURAGE THE USE OF ALTERNATIVE TRANSPORTATION MODES

ACTION 4.2.a.

Promote the use of public transit and ridesharing

ACTION 4.2.b.

Improve and expand bicycle and pedestrian facilities

POLICY 4.3

ENCOURAGE THE USE OF TRANSPORTATION CONTROL MEASURES THROUGHOUT THE REGION

ACTION 4.3.a.

Expand the use of Employer Trip Reduction Programs

ACTION 4.3.b.

Maximize the use of lowemission vehicles and lowpolluting fuels

ACTION 4.3.c.

Increase the effectiveness of measures such as enhanced inspection and maintenance

POLICY 4.1: Facilitate Regional Compliance with the Clean Air Act Amendments of 1990

ACTION 4.1.a. COORDINATE REGIONAL AIR QUALITY IMPROVEMENT PROGRAMS

IMPLEMENTATION

The Philadelphia Non-attainment Area for Ozone includes the nine counties in the DVRPC region. Salem and Cumberland counties in New Jersey, New Castle and Kent counties in Delaware and Cecil County in Maryland. The CAAA require the four states to write and administer air quality implementation plans within their portion of the non-attainment area. Coordinated air quality improvement programs throughout the non-attainment area will maintain an equitable distribution of requirements among the residents of the region.

Specific measures to promote coordination include the following:

- 1. DVRPC should continue to support the Regional Air Quality Committee (RAQC) which includes representatives from a variety of agencies throughout the non-attainment area. The RAQC should be continued to facilitate information exchange and, to the extent possible, coordination of State Implementation Plan (SIP) requirements.
- 2. States should continue to participate in the deliberations of the Ozone Transport Commission, an organization established by the CAAA of 1990 to foster cooperation among the Northeastern states.
- 3. RAQC should maintain a close association with the Departments of Environment and Transportation in each state in order to assure that similar reduction targets are adopted for each of the sources of ozone precursors.
- 4. DVRPC and other appropriate planning agencies should strive to maintain a high level of public participation, including random surveys and educational outreach efforts to assure that proposed measures taken to limit emissions will be effective and acceptable.
- 5. States should require that emission reductions from stationary and mobile sources are the most efficient in terms of costs to the region.

POLICY 4.1: Facilitate Regional Compliance with the Clean Air Act Amendments of 1990

ACTION 4.1.b. INTEGRATE AIR QUALITY STANDARDS INTO THE TRANSPORTATION IMPROVEMENT PROGRAM

IMPLEMENTATION

Air quality concerns are an integral component in the region's TIP process. The TIP document undergoes a conformity analysis, required by the EPA, to demonstrate that constructing the projects in the TIP will result in acceptable levels of emission reductions. Many TIP projects will reduce automobile trip making, delay, mitigate and reduce congestion and decrease vehicle miles of travel (VMT) thus reducing emissions and improving air quality.

In order to further integrate air quality standards into the TIP, the following are recommended:

- 1. DVRPC should insure that all TCMs receive highest priority for implementation in the TIP.
- 2. **DVRPC should revise the TIP programming process** to include a ranking process that provides some degree of scoring preference for highway and transit projects which provide the most benefit to regional air quality.
- 3. DVRPC should require that all TIP projects are drawn from an adopted long range plan that conforms to all applicable federal air quality guidelines. DVRPC should further insure that all TIPs provide for timely reductions in emissions in accordance with adopted emissions budget for the region.
- 4. DVRPC should pursue a Memorandum of Understanding outlining its working relationships with all other agencies involved in assessing regional conformity with federal air quality guidelines.
- 5. DVRPC should provide for innovative programs and technologies in the TIP that lead to reduced emissions. A placeholder should be considered to facilitate the inclusion of new activities.

POLICY 4.2: Encourage the Use of Alternative Transportation Modes

ACTION 4.2.a.

PROMOTE THE USE OF PUBLIC TRANSIT AND RIDESHARING

IMPLEMENTATION

Congestion on the region's highways has increased considerably in the past decade, partially negating the advances in air quality attributable to today's cleaner fleet of automobiles. Reducing auto travel cannot only limit the direct emissions from vehicles, but can also reduce emissions by increasing average speeds (at which emission rates are lower). Promoting the use of ridesharing and high occupancy vehicles can be an effective means to reduce congestion and improve air quality.

Several steps can be taken for the region to increase the use of high-occupancy vehicles:

- 1. DVRPC and transit operators should continue to promote TRANSITCHEK, as a means to reduce the cost of commuting and encourage more workers to use transit.
- 2. Transit operators and municipalities should coordinate transit station improvement proposals with municipal development plans and zoning requirements.
- 3. Transit agencies should pursue partnerships with civic and community groups to develop and oversee transit facility improvements in their communities, particularly those which are intended to bolster ridership.
- 4. **DVRPC should conduct studies** to determine the incremental benefits of increased funding for ridesharing programs, particularly for promotion and ride-matching services, to meet the anticipated increase in ridesharing.
- 5. **DVRPC and transit operators should conduct studies** to determine the incremental benefits of increased operating assistance to transit agencies to minimize fares and increase transit ridership.
- 6. State DOTs, municipalities and counties should introduce transit-friendly design to public works projects, particularly highway improvements.
- 7. Municipalities and counties should design and adopt regulations which encourage the use of transit through development controls.
- 8. State and county governments and transit operators should address travel needs in areas where transit services have been discontinued due to insufficient funds and other reasons beyond local opposition.
- 9. Transit operators, DVRPC and interest groups should advocate changes in impact fee laws to give priority to transit improvements where transportation related improvements are needed from developers to mitigate the impact of the project. In Pennsylvania, this would require amendment of the existing Impact Fee law.

POLICY 4.2: Encourage the Use of Alternative Transportation Modes

ACTION 4.2.b. IMPROVE AND EXPAND BICYCLE AND PEDESTRIAN FACILITIES

IMPLEMENTATION

Bicycle and pedestrian access and facilities should be an integral component of the region's transportation network. Providing convenient pedestrian access and safe facilities for bicycles can provide options for non-automobile travel and help to improve air quality. Both the Pennsylvania and New Jersey Departments of Transportation have recognized the importance of these alternate modes of travel by establishing State Bicycle and Pedestrian Coordinators in their offices.

For the region to improve and expand bicycle and pedestrian facilities:

- 1. SEPTA, NJ Transit and PATCO should provide facilities for bicycle locking and storage at regional rail stations and transit stops and establish a policy to permit bicycle transport, where feasible, on transit vehicles. SEPTA has a policy for transporting permitted bicycles on their Broad Street, Market-Frankford and Regional Rail lines during off peak hours as well as collapsible bicycles during all periods.
- 2. Projects in regional bicycle and pedestrian plans should be implemented, with both short and long-range policies and projects identified. DVRPC has begun such a plan for the five Pennsylvania counties and is working with New Jersey on their statewide planning process.
- 3. DVRPC and the counties should identify specific pedestrian or bicycle projects eligible for federal transportation funding and include those projects in the region's Transportation Improvement Program (TIP).
- 4. PennDot and NJDOT must establish policy for bicycle access on the roads, highways, streets and bridges of the region where such access is appropriate, compatible and safe for both cyclists and motorists. Identify existing roadways where access is feasible and the types of roadways or facilities where access should be accommodated as a component of future improvements.
- 5. DVRPC should identify and map existing trails and facilities with the information made available widely throughout the region to encourage the active usage and upkeep of such facilities.
- 6. The DVRPC long range plan should identify potential future facilities that create an integrated and coordinated network of bicycle and pedestrian mobility. Linkages should be focused on the major origins and destinations of trips, such as population centers, employment centers, shopping centers, schools, parks and transportation centers. Trips of less than two miles are more likely to be made by bicycle rather than automobile if a safe and convenient access is available.
- 7. Regional employers should encourage the use of bicycles for commuting through employer incentives such as storage facilities, showers, lockers, emergency roadside assistance, guaranteed rides home in case of emergencies or inclement weather, or employee benefits.
- 8. Municipalities should utilize zoning and site design standards in subdivision ordinances to require pedestrian and bicycle access and facilities in new or expanded developments.

POLICY 4.3: Encourage the Use of Transportation Control Measures throughout the Region

ACTION 4.3.a.

EXPAND THE USE OF EMPLOYER TRIP REDUCTION PROGRAMS

IMPLEMENTATION

ETRPs are one of the key strategies to reduce the number of single occupant vehicles in the region. The mode of travel for work-based trips can be greatly influenced by employer policies and actions. An employer's decision about work place location, for example, determines if employees can take mass transit to work or if they can walk to nearby locations at lunch to eat or run errands. If an employer fully subsidizes employees' parking costs but does not subsidize any costs for employees who take mass transit or bicycle to work, employees will be more inclined to drive their cars to work.

The following actions will improve the effectiveness of ETRPs:

- 1. States, counties and DVRPC should continue to support and encourage the development of TMAs where they are viable as a means to assist employers.
- 2. DVRPC should become a regional clearinghouse for ETRP mechanisms and develop an awards program for employers in order to recognize successful efforts and encourage employers to develop commuter trip reduction programs.
- 3. State and local governments should implement commuter trip reduction programs for their personnel.
- 4. Pennsylvania, DVRPC, transit operators and Pennsylvania TMAs should provide technical assistance to employers for the development of their commuter trip reduction programs. New Jersey and New Jersey TMAs currently provide this assistance.
- 5. States and DVRPC, in cooperation with TMAs, should establish van pool incentive programs, which will assist employers to organize van pools.
- 6. **Pennsylvania and local governments should provide tax incentives** for employers who implement commuter trip reduction programs. New Jersey currently provides a state tax deduction.
- 7. Transit operators and DVRPC, in cooperation with TMAs, should develop a regional guaranteed ride home program.
- 8. Employers, developers, homeowners' associations, states, local governments, civic groups and TMAs should establish local community transit services in residential areas surrounding employment centers.
- 9. Change Pennsylvania legislation to establish a means to coordinate the brokering of APO credits in order to maximize the cost effectiveness of employer trip reduction programs. New Jersey legislation is conducive to this type of arrangement. PADER, NJDOT and DVRPC should work together to implement such a program.

POLICY 4.3: Encourage the Use of Transportation Control Measures throughout the Region

ACTION 4.3.b. MAXIMIZE THE USE OF LOW-EMISSION VEHICLES AND LOW-POLLUTING FUELS

IMPLEMENTATION

Attaining the standard for ozone in large metropolitan areas requires a substantial decrease in the emissions of precursor pollutants. Typically these reductions cannot come through a decrease in demand alone and will require the use of cleaner vehicles and fuels. Currently, Northeastern U.S. state governments are deliberating over the adoption of the California car emissions standard as recommended by the Ozone Transport Commission. Although several requirements of the CAAA will bring cleaner vehicles and fuels to the region, more can be done through local initiatives such as those described below:

- 1. EPA, NJDEPE and PADER should support the continued sale of gasoline with reduced volatility during the summer months when ozone exceedances are more common.
- 2. NJDOT and PADER should promote the use of credits in the Employer Trip Reduction Programs for the use of low-emission vehicles, particularly electric vehicles.
- 3. EPA, NJDEPE and PADER should support the sale of reformulated gasoline required in the Philadelphia non-attainment area.
- 4. Transit operators and DVRPC, in cooperation with TMAs and energy companies should pursue a regional station car program. This program will provide alternative fueled vehicles and designated parking to transit patrons for travel between their homes and transit stations. SEPTA and PECO Energy are currently pursuing a pilot program through the National Station Car Association.
- 5. Federal, state, county and municipal government agencies and departments, as well as transit and paratransit agencies should promote the acquisition of cleaner vehicles for fleets. These acquisitions would take place ahead of the schedule mandated in the CAAA where applicable.
- 6. State DOTs, alternative fueled fleet operators and gasoline retailers should increase the availability and visibility of alternative fuel refilling locations throughout the region. These groups should support the initiative to establish I-95 and the New Jersey Turnpike as alternative fuels highways along the Northeast Corridor.
- 7. NJDEPE and PADER should examine ways of retiring, or minimizing the use of, automobiles built before 1980, which emit hydrocarbons at much higher rates than newer vehicles.
- 8. State and county governments should consider implementation of a graduated regional gasoline tax to finance transportation improvements and provide an economic disincentive to conventionally powered automobile use. A graduated system would reduce the impact on gasoline retailers at the periphery of the region and where transit is not a convenient option.
- 9. Congress should increase the cost of new vehicles which emit the most pollutants and decrease the cost of cleaner vehicles through a *feebate* program.

POLICY 4.3: Encourage the use of Transportation Control Measures throughout the Region

ACTION 4.3.c.

INCREASE THE EFFECTIVENESS OF MEASURES SUCH AS ENHANCED INSPECTION AND MAINTENANCE

IMPLEMENTATION

In addition to the benefits derived from transportation control measures which alter the transportation infrastructure and/or the costs of travel, other measures such as vehicle inspection and maintenance programs should be strengthened. It is important that they be carried out, particularly where they represent a more efficient means of improving regional air quality.

Some of the steps include:

- 1. Pennsylvania should expedite implementation of its enhanced inspection and maintenance program and other improvements which would make the programs more effective.
- 2. States and county governments in consultation with gasoline retailers should evaluate the costs and benefits associated with implementation of Stage II vapor recovery requirements for gas stations in the region.
- 3. States and DVRPC should support federal requirements for further improvements to the design and manufacture of motor vehicles in order to minimize emission rates.
- 4. State inspection programs should consider additional tests such as inspection of the fuel tank and intake line and air conditioning systems for vapor and coolant leaks, respectively, in older cars.



GOAL 5:

ENSURE A DIVERSE AND COMPETITIVE REGIONAL ECONOMY BY SUPPORTING THE RETENTION AND EXPANSION OF EXISTING BUSINESS AND BY ENCOURAGING NEW ENTERPRISES THAT CREATE EMPLOYMENT OPPORTUNITIES IN CLOSE PROXIMITY TO THE LABOR FORCE

POLICY 5.1

EXPAND THE **REGIONAL MARKET** FOR BOTH LABOR
AND GOODS

ACTION 5.1.a.

Promote retention and expansion of existing businesses

ACTION 5.1.b.

Encourage the start-up of businesses in emerging growth sectors and the relocation of growing businesses to the region

ACTION 5.1.c.

Expand job training and labor force participation

ACTION 5.1.d.

Improve access to areas of major employment concentration

POLICY 5.2

PRESERVE AND PROMOTE
HISTORICAL AND CULTURAL
RESOURCES

ACTION 5.2.a.

Increase number of designated historic districts and landmarks

ACTION 5.2.b.

Increase number and value of business and tourist visits

POLICY 5.3

PRESERVE AND PROMOTE
AGRICULTURAL LAND AND
ACTIVITIES

ACTION 5.3.a.

Increase the acreage of productive farmland preserved for agriculture

ACTION 5.3.b.

Improve the conditions that accommodate and support local farming

POLICY 5.1: Expand the Regional Market for Both Labor and Goods

ACTION 5.1.a. PROMOTE RETENTION AND EXPANSION OF EXISTING BUSINESSES

IMPLEMENTATION

There are a variety of economic development agencies in the region that focus a great deal of attention and resources on attracting new businesses to an area, but may tend to overlook the existing businesses as an engine of economic growth. Existing businesses provide the employment base for area residents, contribute to the tax base of the locality, and can act as a catalyst for spin-off industries. They may also add to the identity and stability of certain areas. To promote the retention and expansion of existing businesses:

- 1. County and local governments should have a proactive approach to retaining businesses by setting up an office that builds ongoing relationships with existing businesses, concentrates on identifying problems before they become crises, conveys the message that the business is an asset to the community, and trouble-shoots for the business when problems arise.
- 2. Public agencies should continue and expand, where possible and warranted, business loan programs, bond financing, real estate tax abatements, neighborhood development funds, venture capital funds, incubator programs, export aid, technical assistance, and acquisition, improvement and disposal of land for business development.
- 3. DVRPC and economic development agencies in the region should coordinate their activities to avoid redundencies or unnecessary competition, and identify opportunities for collaborative ventures among existing businesses and serve as a clearinghouse to connect existing business services within the region.
- 4. State and local resources should be applied to support industries with particular regional advantages, such as tourism, health care, and agriculture in certain areas of the Delaware Valley.
- 5. State, county and municipal governments should invest in infrastructure maintenance to improve productivity, and companies should invest in upgrading equipment and training to improve productivity.
- 6. Local school districts and community colleges should work with local businesses to improve the region's workforce through better school curriculums, training programs, apprenticeships and business/school partnerships.
- 7. Public agencies, along with vocational schools, colleges and universities, should sponsor job fairs and placement assistance programs that match local graduates with local companies.
- 8. Local governments should form special assessment districts or Main Street programs as needed to boost the level of services and promote activities in commercial areas.
- 9. State, county and municipal governments and utilities should contain the cost of doing business in the region with respect to regulations, mandated programs, tax policies and utility rates.
- 10. The U.S. Department of Defense should facilitate the transition from defense related jobs to civilian high tech jobs by providing revolving loan pools and other assistance for defense conversions.

POLICY 5.1: Expand the Regional Market for Both Labor and Goods

ACTION 5.1.b.

ENCOURAGE THE START-UP OF BUSINESSES IN EMERGING GROWTH SECTORS AND THE RELOCATION OF GROWING BUSINESSES TO THE REGION

IMPLEMENTATION

One of the signs of a healthy economy is the start-up of new businesses and the relocation of existing businesses to a region. A high level of new firm activity promotes hiring, investment and overall confidence in an area, all necessary ingredients for sustaining a dynamic economy. To attract start-ups and relocations of growth industry businesses, the region must aggressively market its strong points, seriously address its weak points, provide a climate conducive to doing business, and offer assistance to new small businesses in their incipient, most vulnerable years. To encourage new businesses in the area:

- 1. Chambers of commerce, economic development agencies and all levels of government in the region should promote the region's strongest advantages, such as its diverse economic base, buying power, strong financial resources, low poverty rate, low crime rate, large number of institutes of higher learning, doctors and hospitals, and overall quality of life.
- 2. Business and schools should work together to address the region's weak points, such as its low percentage of high school and college graduates and its low labor force participation rate, through improved school curriculums, training programs (including entrepreneurship education), apprenticeships and business/school partnerships to provide a more competitive workforce.
- 3. Economic development agencies should offer a regulatory trouble-shooting service to new businesses.
- 4. DVRPC and regional economic development entities such as the Greater Philadelphia Economic Development Coalition should identify emerging economic opportunities in order to better target which sectors or types of businesses to attract to the region.
- 5. State, county and municipal governments should focus infrastructure investments where they will lead to reduced cost of goods and services and opportunities for better access to employment for the region's workforce.
- 6. County industrial development corporations should create and appropriately locate industrial parks specially geared toward high technology and other growth industries which are known to outperform other industries in terms of employment generation, economic growth, productivity, product and process innovation and invention, and international trade. Urban enterprise zones should continue to be specifically marketed.
- 7. State, county and local levels of government and utility companies should ensure the competitiveness of the region by setting fair and efficient laws, regulations, mandated programs, taxes and utility rates.
- 8. Pennsylvania tax policy, in order to become more competitive, should provide a net loss carry forward provision to permit start-up businesses which lose money in their early years to use those losses to offset profits in future years. Pennsylvania is one of only two states in the nation without this provision.

POLICY 5.1: Expand the Regional Market for Both Labor and Goods

ACTION 5.1.c. EXPAND JOB TRAINING AND LABOR FORCE PARTICIPATION

IMPLEMENTATION

The change in the regional economy from a predominantly manufacturing base to a primarily service base has created a greater demand for employees who have mastered basic english, math, communication and problem-solving skills. Many technical skills from an earlier age are no longer applicable. Schools and job training programs are now challenged to identify emerging job requirements and develop the curriculum and training needed to educate the future work force. In order to expand job training and labor force participation:

- 1. Local schools should focus curriculums on teaching the basic skills and problem-solving abilities that can be transferred to the workplace. Nurture personal qualities such as responsibility, self-esteem and integrity and link education to necessary social services. National standards for competency coupled with standardized testing and certification would provide employers with more confidence in the work force.
- 2. Local school districts should support vocational training as an attractive and interesting option for students, and keep abreast of new employment opportunities and new job skill needs to provide relevant training.
- 3. Regional employers should provide opportunities for the practical application of skills in apprenticeship and internship programs. Encourage business/school partnerships and adopt-a-school programs for classroom training, apprenticeships, curriculum development and skill development.
- 4. Local chambers of commerce should provide information to their members and encourage area businesses to participate in school reform.
- 5. Encourage experimentation and school reform to explore alternative approaches to education, such as outcome based measures proposed for Pennsylvania. Integrate the public and private efforts to create the work force of the future.
- 6. State and federal job training programs need to improve their coordination and collaboration efforts. Maintain outreach to all sectors of the business community to identify current and emerging training needs.
- 7. State Welfare Department and Job Training Partnership Act (JTPA) funded programs should link job training programs to welfare reform and economic development efforts to train and educate people away from welfare and create new employment opportunities. National welfare reform should guarantee community service jobs to welfare recipients who are involved in a job training program.
- 8. Federal monies available under the Jobs Training Partnership Act (JTPA) should be increased; current programs reach less than 1% of the labor force. Provide customized training to meet specific facility or area needs for displaced workers and to upgrade skills of existing workers. Local job training programs should strive to make job training a viable solution by also providing the support services, such as daycare and transit service, that make it possible for training candidates to participate in such programs. Changes to the JTPA program should be pursued to permit the sharing of job credits across county lines, to encourage regional cooperation for job training programs.

POLICY 5.1: Expand the Regional Market for Both Labor and Goods

ACTION 5.1.d. IMPROVE ACCESS TO AREAS OF MAJOR EMPLOYMENT CONCENTRATION

IMPLEMENTATION

Traditionally, major employment centers encounter access problems during the peak congestion periods when employees arrive and leave the work place. The decentralization of employment has resulted in longer periods of vehicular congestion, with frequent mid-day bottlenecks as employees and visitors travel to multiple destinations. Improved site design, localized traffic improvements, pedestrian access and better transit connections could greatly enhance access to employment centers.

Specific strategies to improve access to employment areas include:

- 1. SEPTA, NJ TRANSIT and PATCO should continue to implement shuttle buses between rail stations and major employment centers and construct bus pull-outs and bus shelters at these centers. TMAs can help initiate such services by working with local employers and the transit agency.
- Counties and municipalities should aggresively promote redevelopment of abandoned commercial and industrial facilities near available transportation network capacity. Limitations on the assumption of liability for prior site conditions should be offered as an inducement.
- 3. Employers and TMAs should establish express buses, vanpools and carpools which more directly link employees' homes with work sites.
- 4. Counties should work with municipalities to require a pedestrian circulation element within land development standards and comprehensive plans. To minimize traffic within an employment center, pedestrian facilities must be incorporated into the design. Pedestrian amenities include sidewalks, separation from traffic, grade separation from high speed multi-lane roads and building design oriented toward the pedestrian.
- 5. Counties should work with the municipalities and state DOTs to incorporate efficient access control and siting into the design of employment centers. Poor access control frequent driveways, parking spaces close to entrances, substandard design effectively reduces roadway capacity. Techniques such as joint driveways, internal circulation roads, appropriate siting in relation to highway and transit access, turn lanes and proper driveway spacing can alleviate many problems.
- 6. Pennsylvania counties should lobby the state legislature for a more effective access code to regulate driveways onto state and county highways as currently provided for in New Jersey.
- 7. Counties and municipalities should lobby the state legislature for the authority to require off-site improvements from developers to mitigate the impacts of the projects. Typical improvements could include intersection improvements, traffic signal improvements and construction of turn lanes. Although New Jersey and Pennsylvania now permit this, ambiguities and limitations in the enabling legislation require an ad hoc negotiation process to obtain the improvements.
- 8. Counties should lobby the state legislature for the authority to have more control over site plan approval of major land developments. The counties would be able to work with municipalities to encourage more mixed use developments where the diversity of businesses, services and physical layout reduces the need for employees to leave the site during the day.

POLICY 5.2: Preserve and Promote Historical and Cultural Resources

ACTION 5.2.a.

INCREASE NUMBER OF DESIGNATED HISTORIC DISTRICTS AND LANDMARKS

IMPLEMENTATION

Historic preservation efforts can offer economic dividends by attracting tourists and vistors, boosting community pride, and stimulating greater interest and investment in these areas. The Delaware Valley has tens of thousands of historical and cultural resources, but only about 1,250 sites and districts are listed on the National Register of Historic Places and afforded some protection against federally and state funded, assisted, or licensed projects. Local preservation controls can offer more protection by regulating the private use, maintenance, alteration and demolition of historic places. To enhance historic preservation in the region:

Residents and their municipalities or counties should:

- 1. Identify historic districts and adopt preservation or conservation ordinances complying with state enabling legislation.
- 2. Support the nominations of places to the National Register which already have Determinations of Eligibility as well as other sites on historic resource surveys which meet National Register criteria.
- 3. Apply to become a Certified Local Government in the National Historic Preservation Program, thereby becoming eligible for special grants and other benefits.
- 4. Create and appropriately fund local Historical Commissions. Historical commissions should initiate, refine or expand historic resource surveys, continuously monitor their data base, and incorporate this information into the municipality's comprehensive planning process.
- 5. Use local land use controls such as the subdivision and land development ordinance, building code, incentive zoning and a transfer of development rights program to protect locally significant sites and districts.
- 6. Seek other means of historic preservation such as conservation covenants and easements and donation of facade easements, which can offer federal income tax incentives to owners.
- 7. Identify priority projects and pursue grants through the state historic preservation offices, the National Trust for Historic Preservation, Preservation Pennsylvania, Preservation New Jersey, and/or other foundations.
- 8. Apply for Community Development Block Grants (CDBG) oriented toward neighborhood preservation, housing rehabilitation, and individual historic properties which are blighted or threatened by deterioration.
- 9. Seek historic preservation funding through the Transportation Enhancements provisions of the Intermodal Surface Transportation Efficiency Act.
- 10. States should utilize preferential tax assessment programs, now used primarily as a tool for preserving open space and farmland, to also apply to preservation of National Register properties and districts.
- 11. The federal government should broaden the availability and use of Investment Tax Credits for rehabilitation work of certified structures meeting National Register criteria, particularly in urban centers.

POLICY 5.2: Preserve and Promote Historical and Cultural Resources

ACTION 5.2.b. INCREASE NUMBER AND VALUE OF BUSINESS AND TOURIST VISITS

IMPLEMENTATION

Visitors to the Delaware Valley, for either business or pleasure, contribute significantly to the local economy through direct and indirect spending on lodging, dining, shopping, transportation, admission fees and special events. Increasing the number and value of business and tourist visits is important not only for the additional revenue it brings, but for improving the overall image and competitive position of the region. To increase the number and value of business and tourist visits to the region:

- 1. The Philadelphia City Planning Commission and Streets Department should continue to improve the overall street life and image of Philadelphia, particularly in the area of the Convention Center, Avenue of the Arts, and the historic districts. Encourage activity such as cafes or retail at street level and use special district or tax increment financing for street furniture, facade improvements, cleaning and patrolling. The Center City District has been very successful to date in addressing many of these issues.
- 2. PennDOT, NJDOT and the Philadelphia International Airport should provide funding for the transportation improvements needed to support business and tourist visits. Directional signage throughout the region should identify tourist attractions through a consistent and unique treatment. Pedestrian circulation in Philadelphia must continue to be addressed through signal or walkway modifications, bicycle lanes and pedestrian maps posted on the street.
- 3. The region's mass transit agencies, including SEPTA, New Jersey Transit, PATCO and private carriers should continue to promote the attractions they service and provide special routes, such as SEPTA's "Ben Frankline" in Center City or the Camden Aquarium ferry and establish special fare packages for visitors. A special visitors pass good for fares on all systems would increase usage and reduce confusion.
- 4. **Develop regional tourism councils** to promote the larger region surrounding the Delaware Valley, linking Philadelphia and its suburban counties with such attractions as Lancaster County, Wilmington and the Jersey Shore. Significant special events, such as the 4th of July, the Mummer's Parade, Super Sunday or the Flower Show should be marketed broadly outside of the region to attract additional visitors.
- 5. City and County tourist councils and the National Park Service should cooperate to create unified tourist districts and link regional tourist and cultural attractions, such as regional historic attractions and cultural institutions, through thematic maps, roadway signs and shuttle buses.
- 6. Congress should dedicate sufficient funding for the National Park Service to maintain, rehabilitate and improve the buildings and grounds of Independence National Historical Park in Philadelphia. Enliven Independence Park through interactive, multi-media and evening events such as historical recreations of speeches or meetings, light shows or parades. Such activities would draw more visitors, provide additional revenue, create more activity throughout the day and evening, and provide opportunities for associated spending.
- 7. The region's counties should organize to consider the formation of a bi-state cultural district, such as the one currently under consideration in the Kansas City bi-state region. Such a district would raise revenues from all counties through a small sales tax increase to support the operations and capital improvements of cultural and tourist attractions throughout the region.

POLICY 5.3: Preserve and Promote Agricultural Land and Activities

ACTION 5.3.a.

INCREASE THE ACREAGE OF PRODUCTIVE FARMLAND PRESERVED FOR AGRICULTURE

IMPLEMENTATION

The farmland of the Delaware Valley is some of the most productive land in the country for agriculture. Local agriculture contributes to the local food processing industry, wholesale and retail marketing and transportation sector and provides a substantial impact on the region's economy. The proximity of local farms to major population areas reduces shipping time and costs and offers fresher products for the public. However, the soil conditions and location of some of this land also make it attractive for development. In order to increase the acreage of productive farmland preserved for agriculture:

- 1. DVRPC, county planning agencies and municipalities should identify existing viable farms with prime agricultural soils and designate those areas for continued agricultural use. Municipalities should place effective limitations on subdivisions in prime agricultural areas that also provide an equity return for farmers.
- 2. States and counties should continue funding the purchase of development rights and easement programs in both Pennsylvania and New Jersey through installment purchase agreements; combining government funding with conservancy acquisitions or donations; use of zero coupon bonds which pay farmers only interest until maturity; expediting the process time for PDRs; and implementing PDRs and easement programs in concert with appropriate agricultural zoning and other techniques.
- 3. Local governments should use Agricultural Security districts, Purchase of Development Rights (PDRs), Transfer of Development Rights (TDRs), sliding scale and other effective agricultural zoning, adequate public facilities ordinances, capital improvement programs, growth staging plans, joint municipal zoning ordinances, and urban growth boundaries to preserve viable farm sites.
- 4. States, DVRPC, counties and local governments should plan and program public infrastructure improvements such as highways, sewer and water services, and other growth generating public facilities to avoid development pressure on prime farmland.
- 5. A state or multi-state agency should establish and administer a land link program matching new farmers looking for land with retiring farmers who want to keep their land in agricultural use.
- 6. States should adopt tax reform measures that reduce property tax burdens on farmers by giving localities more flexibility in levying an appropriate and equitable mix of personal income, real estate, real estate transfer, amusement or other taxes. Tax reform should also include measures giving cumulative preferential rates based not only on the land's current use, but on the period of time for which it will be preserved. For example, open space/farmland preserved in perpetuity under conservation and easement programs would receive an even greater reduction in its assessment than land preserved temporarily.
- 7. Congress should modify the inheritance tax laws, to provide a greater exemption from taxes for farmland that is passed onto a younger generation and that remains in productive agricultural use. High land values in this region coupled with high inheritance taxes present a further impediment to young farmers maintaining and continuing a family farm.

POLICY 5.3: Preserve and Promote Agricultural Land and Activities

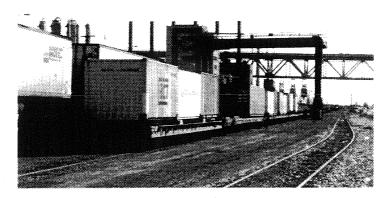
ACTION 5.3.b.

IMPROVE THE CONDITIONS THAT ACCOMMODATE AND SUPPORT LOCAL FARMING

IMPLEMENTATION

If agriculture is to remain an economically viable industry in this region, it is not enough to merely preserve agricultural land. Farms must be economically profitable enterprises, and sufficient areas of land must be devoted to farming. Without the necessary critical mass, the specialized services, supplies, processing, distribution and other industries that agriculture support cannot be sustained. In addition, farms and surrounding residents are not always compatible neighbors; without controls in place, new residents may view farm operations as a nuisance. To improve the conditions that accommodate and support local farming:

- 1. County economic development agencies should continue to encourage and offer technical assistance to food processing, distribution and retail businesses that use locally grown and raised farm products.
- 2. Counties in Pennsylvania should continue to encourage farmers and municipalities to establish agricultural security areas. Such a designation is a prerequisite for eligibility in the state funded purchase of development rights program and can protect farms from nuisance ordinances and condemnation proceedings.
- 3. County conservation districts should promote the "single plan farm management" approach. Such an approach integrates natural resource management with government regulations in order to avoid conflicts and duplication of efforts, save time, achieve stewardship goals, make the land more productive, and increase profits.
- 4. Municipalities should allow farmers to sell their own products directly to the consumer by permitting roadside stands at locations that can accommodate the traffic and parking.
- 5. Some farmers should form cooperative units in order to gain collective buying power, to share equipment and costs, and to jointly market their products in nearby urban areas.
- 6. Some farmers should pursue value-added and/or niche farming in order to improve profitability. For example, pick-your-own fruit and vegetables, farm stores, nurseries, festivals and demonstrations of agricultural practices through tours and demonstrations are all ways to not only raise farm profits but to foster a greater understanding of farming practices with area residents.
- 7. Municipalities should require developers of tracts in or adjacent to farming areas to provide setback buffers between new uses and adjacent agricultural tracts.
- 8. Farmers who plan to pass their farms down to family members should develop an estate plan in order to successfully transfer their farm upon retirement and avoid burdensome inheritance taxes. Changes in federal tax law should be pursued to reduce the inheritance tax burden for young farmers.
- 9. **State right-to-farm laws** limit the circumstances under which agricultural operations may be subject to nuisance suits and ordinances. In order to further reduce conflicts between farms and their neighbors, these laws should also require that persons buying land be notified if agriculture is the primary industry in the area and that the ability to file nuisance suits will be limited.



GOAL 6:

PROMOTE COOPERATION AMONG FREIGHT MOVEMENT INTERESTS AND DEVELOPMENT OF AN INTERMODAL REGIONAL FREIGHT MOVEMENT PLAN WITH IMPROVEMENTS TO AIR, HIGHWAY, PORT AND RAIL SYSTEMS

POLICY 6.1

INCREASE LEVEL OF **PUBLIC AND PRIVATE INVESTMENT**IN REGIONAL FREIGHT
MOVEMENT ACTIVITIES

ACTION 6.1.a.

Encourage the participation of freight interests in the joint public/private programming of transportation improvements

ACTION 6.1.b.

Program and integrate needed freight movement projects into the Transportation Improvement Program process

POLICY 6.2

CREATE OPPORTUNITIES FOR NEW AND EXPANDED
BUSINESSES WHICH UTILIZE
FREIGHT SERVICES

ACTION 6.2.a.

Establish a unified marketing program for existing freight systems

ACTION 6.2.b.

Coordinate operations of oversight authorities responsible for freight movement

POLICY 6.3

CREATE EFFICIENT INTERMODAL FREIGHT FACILITIES
THROUGHOUT THE REGION

ACTION 6.3.a.

Reduce transfer time to move freight between different transportation modes

ACTION 6.3.b.

Improve data and technology sharing among public and private freight interests

POLICY 6.1: Increase Level of Public and Private Investment in Regional Freight Movement Activities

ACTION 6.1.a.

ENCOURAGE THE PARTICIPATION OF FREIGHT INTERESTS IN THE JOINT PUBLIC/PRIVATE PROGRAMMING OF TRANSPORTATION IMPROVEMENTS

IMPLEMENTATION

The importance of freight movements to the regional economy requires the coordination of both investment decisions and operation issues between the public and private sectors of the goods movement community. DVRPC has begun this necessary coordination by involving freight interests in the planning process through the Goods Movement Task Force (GMTF) which consists of freight haulers, public planning agencies (particularly DVRPC) and regional port and toll authorities. As specific freight movement projects are identified opportunities to leverage public funds with private or authority sources will be explored.

- 1. DVRPC should continue to support the regional GMTF and its Long Range Planning subcommittee in identifying the needs of and advocating improvements for the freight movement elements of the region's transportation system.
- 2. DVRPC and GMTF should periodically perform a joint analysis of public-private partnership opportunities in the region.
- 3. DVRPC should involve all toll authorities in the regional planning process and in planning for relevant corridors. In this regard, DVRPC should maintain current information on the capital planning efforts of these authorities.
- 4. DVRPC's RTC should provide a mechanism for direct participation of the GMTF.
- 5. State DOTs, in conjunction with DVRPC and the GMTF, should expand the Intermodal Management System to include all freight movement related needs.

POLICY 6.1: Increase Level of Public and Private Investment in Regional Freight Movement Activities

ACTION 6.1.b.

PROGRAM AND INTEGRATE NEEDED FREIGHT MOVEMENT PROJECTS INTO THE TRANSPORTATION IMPROVEMENT PROGRAM PROCESS

IMPLEMENTATION

Many freight movement projects are already included in the TIP process but are not identified as such. Some of these projects include: rail crossing hazard elimination projects; replacement/rehabilitation of weight restricted bridges; intersection improvements which increase turning radii; and bypasses of congested villages and business districts. In order to insure adequate representation of freight issues in the TIP process:

- 1. DVRPC, in consultation with the GMTF, should highlight those TIP projects which benefit freight movements.
- 2. DVRPC should promote early involvement of the GMTF in the TIP preparation process through an ongoing, direct notification and project solicitation process.
- 3. DVRPC should revise the TIP scoring procedure to provide greater recognition of freight movement benefits.
- 4. DVRPC should provide for the advancement of TIP eligible projects which improve freight terminal access.
- 5. DVRPC should program publicly funded rail improvement projects in the TIP.

POLICY 6.2: Create Opportunities for New and Expanded Businesses which Utilize Freight Services

ACTION 6.2.a.

ESTABLISH A UNIFIED MARKETING PROGRAM FOR EXISTING FREIGHT SYSTEMS

IMPLEMENTATION

The Delaware Valley possesses a diverse and extensive freight movement network. This network, and a strategic geographic location, give the region great potential to serve as a major goods distribution center. The regional network includes three Class 1 rail lines, 3 commercial and 12 reliever airports, diversified maritime port facilities and a comprehensive network of highway routes suitable for trucks. The recently undertaken "high-and-wide" container rail initiative to extend track clearances in Pennsylvania typifies the quality of freight services available in the region. Since there is intense national competition for goods movement operations, it is necessary to market existing services and capabilities to potential markets.

To promote the region's potential as a major center of freight operations, the following strategies should be pursued:

- 1. GMTF should coordinate industry investments (within and across modes) to maximize business opportunities and reinforce the marketing program.
- 2. DVRPC, in consultation with GMTF, should periodically reassess the region's freight movement system and usage, comparing it to competing regions and facilities.
- 3. State and local economic development offices and DRPA should develop a high-quality, multi-faceted marketing program detailing the diversity of the region's freight system and economic resources.
- 4. DRPA, in consultation with the GMTF, should launch targeted marketing initiatives aimed at special niche markets.
- 5. DRPA, in consultation with the GMTF, should survey both current and potential customers to determine any deficiencies of the region's freight system.

POLICY 6.2: Create Opportunities for New and Expanded Businesses which Utilize Freight Services

ACTION 6.2.b.

COORDINATE OPERATIONS OF OVERSIGHT AUTHORITIES RESPONSIBLE FOR FREIGHT MOVEMENT

IMPLEMENTATION

The many factors which impact goods movement indicate the need for close coordination among the numerous organizations in the industry. The need is made more acute by increases in intermodal freight operations, whereby freight is conveyed by more than one mode to its final destination. Intermodal movements and their importance to the local economy require the coordination of investment decisions and operations issues among public and private sectors of the goods movement community.

To assure adequate coordination and dialogue among the many organizations within the freight movement industry, the following steps are recommended:

- 1. GMTF should establish short-term committees to address specific issues as warranted.
- 2. State governments should continue to support efforts to coordinate the activities and operations of port oversight authorities, thereby unifying the region's ability to compete for cargo.
- 3. DVRPC and GMTF should promote further industry involvement in the activities of the metropolitan planning organization (MPO) including the formulation of a long range plan and the six mandated management systems.
- 4. State DOTs, DVRPC and GMTF should provide opportunities for concurrence on design standards, alternative routes and other goods movement considerations for major transportation improvements.
- 5. State DOTs and GMTF should solicit industry input and perspective on the statewide Long Range Transportation Plans mandated by the ISTEA.
- 6. State DOTs should set up joint training programs on regulatory issues such as the transport of hazardous materials.
- 7. **DVRPC should examine the goods movement network** in its entirety, emphasizing the relationships between the various modes.
- 8. State DOTs should centralize traffic monitoring and communications for freight movements within the region. They should also encourage the industry trend toward use of Global Positioning System (GPS) tracking of freight movements.

POLICY 6.3: Create Efficient Intermodal Freight Facilities throughout the Region

ACTION 6.3.a.

REDUCE TRANSFER TIME TO MOVE FREIGHT BETWEEN DIFFERENT TRANSPORTATION MODES

IMPLEMENTATION

Time is a critical aspect of freight operations. Shelf-life of products can be extremely limited; and customers demand on-time delivery of commodities. Moreover, the technique of "just-in-time" delivery of production resources is becoming more commonplace. Maritime, truck, and rail operators need to assure efficient and rapid transfers of goods between them. To minimize transfer time to move freight between different transportation modes, the following measures should be pursued:

- 1. GMTF and other industry forums should jointly establish industry-wide standards for technology and facilities.
- 2. Intermodal facility proprietors and the U.S. Customs Office where applicable should develop and implement internal circulation plans and procedures for all intermodal facilities.
- DRPA, in consultation with DVRPC and GMTF, should develop a region-wide system to govern drayage movements.
- 4. FRA, freight rail operators, State DOTs, counties, toll authorities and transit agencies should effect agreements to permit joint passenger and freight uses where desirable.
- 5. State and local economic development offices and GMTF should assure the availability of all necessary storage and transfer facilities and equipment through the public and private capital programming processes.
- 6. **Intermodal facility operators should negotiate agreements** between labor organizations and freight facility operators to assure the smallest possible turnaround times.
- 7. DRPA and GMTF should work to establish easy access to real time information regarding freight status, for freight service customers and providers.
- 8. State DOTs, county and municipal governments should provide adequate transportation capacity, directional signage, and truck rest areas for truck traffic adjacent to intermodal facilities.

POLICY 6.3: Create Efficient Intermodal Freight Facilities throughout the Region

ACTION 6.3.b.

IMPROVE DATA AND TECHNOLOGY SHARING AMONG PUBLIC AND PRIVATE FREIGHT INTERESTS

IMPLEMENTATION

Decision-makers in the goods movement industry must confront numerous issues, including global events and trends, trade agreements and an ever growing number of key players and agencies. Maintaining the region's competitiveness under these circumstances is challenging. Cooperation through pooling resources, information and technology, is essential to maintain the region's extensive goods movement capacity.

To promote continued partnerships and information sharing in the goods movement arena:

- 1. DVRPC and GMTF should maintain access to current national research on freight movement topics.
- 2. **DVRPC and GMTF should track developments** in the marketplace, the industry and competing regions which may impact freight movement activities in the region.
- 3. DVRPC and GMTF should develop a directory of available freight transportation data in the Delaware Valley.
- 4. DVRPC and GMTF should create a central clearing house to distribute available data through periodic newsletters, computer files and other appropriate vehicles.
- 5. DVRPC and GMTF should conduct qualitative and quantitative surveys to document trends and existing conditions.
- 6. DVRPC and GMTF should develop future scenarios of freight movement systems and quantify the associated costs and benefits.
- 7. States, counties, GMTF and others in the goods movement industry should establish a public/private consortium to pool resources to identify, develop and implement useful technological innovations.

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GOAL 7:

IMPROVE ACCESS TO AND EFFICIENCY OF THE REGION'S TRANSPORTATION NETWORK, AND ENSURE THE SAFETY AND SECURITY OF THE SYSTEMS' USERS

POLICY 7.1

PROMOTE COORDINATION AND INTEGRATION OF ALL TRANSPORTATION SYSTEMS

ACTION 7.1.a.

Establish opportunities for connections among transportation modes

ACTION 7.1.b.

Improve scheduling and operations to accommodate intermodal movements

POLICY 7.2

PROVIDE SYSTEM

ACCESSIBILITY FOR ALL

POPULATION SEGMENTS

ACTION 7.2.a.

Increase the affordable mobility options for the young, the elderly, the handicapped and the poor

ACTION 7.2.b.

Comply with the regulations of the Americans With Disabilities Act

POLICY 7.3

ENSURE **SAFETY AND SECURITY**OF HIGHWAY AND TRANSIT
USERS

ACTION 7.3.a.

Reduce the number of accidents and fatalities which occur on highways and transit systems

ACTION 7.3.b.

Reduce transit-related crime rate

ACTION 7.3.c.

Increase public awareness of security programs

POLICY 7.1: Promote Coordination and Integration of All Transportation Systems

ACTION 7.1.a.

ESTABLISH OPPORTUNITIES FOR CONNECTIONS AMONG TRANSPORTATION MODES

IMPLEMENTATION

Facilitating travel within the region while reducing dependence on single-occupant vehicles requires alternatives to both strictly automobile and transit travel. Within the Delaware Valley there are numerous transit routes, both rail and bus, that offer such an alternative. Making routes efficient to use, however requires these routes to be in as direct a line between origin and destination as possible. To accomplish this, transit systems should be viewed as a network of inter-connecting major routes, fed by multiple smaller routes instead of a series of individual routes. The individual automobile, local taxi and small private bus can be part of such a system. In this context, the highway system functions as an integral part of the transit system.

To be effective, this new view of the transit system needs to focus more attention on the nodes that serve as connecting points between the feeder system and the intersecting major routes.

- 1. Transit operators, TMAs, counties and municipalities should encourage the operation of shared-ride services to transit stations/stops and other local destinations not served by transit.
- 2. Transit operators should evaluate the existing system of bus and rail routes and establish a network of transit arterials, using existing rail lines and limited stop high frequency bus routes. To complement this arterial transit system, they should establish a network of feeder or collector/distributor local bus routes.
- 3. Transit operators, in consultation with counties and relevant municipalities, should identify and continue to construct a system of park and ride lots for rail stations and express bus services. Facilities should serve as either large regional lots (500+spaces) or smaller local lots (100-500 spaces), and should include facilities for bicycle access and storage.
- 4. Transit operators should evaluate opportunities for intermodal connections where multiple passenger rail lines cross and where rail lines cross principal arterial routes.
- 5. Transit operators and private carriers should provide better connections/coordination between intercity bus terminals and local transit services in suburban areas.
- 6. Transit operators should evaluate local bus service in relation to the network of regional rail lines and longer distance and express bus routes to revise them to provide feeder service to designated transfer stations/stops, where practical.
- 7. Transit operators, municipalities, civic and advocacy groups should develop pedestrian/bicycle circulation plans around major rail stations that are integrated into adjacent bicycle network plans where applicable.
- 8. State DOTs and counties, in consultation with relevant municipalities, should identify and construct a system of park and ride lots for carpool, vanpool or local bus services. Regional lots should offer at least 100 spaces and local lots 30-100 spaces. Both should include facilities for bicycle access and storage.

POLICY 7.1: Promote Coordination and Integration of All Transportation Systems

ACTION 7.1.b. IMPROVE SCHEDULING AND OPERATIONS TO ACCOMMODATE INTERMODAL MOVEMENTS

IMPLEMENTATION

Travel from one point in the region to another by transit often requires transferring from one route to another. To promote the use of transit and reduce our dependence on single-occupant vehicles, it is important to coordinate transit routes so that connections can be made with the least amount of inconvenience to the traveler. Coordination must address three factors: 1) Locating transfer points that result in the fewest number of transfers needed to reach one's destination, 2) Scheduling that insures the least amount of delay between vehicles when completing a multi-vehicle trip and 3) Providing real-time information to the traveler regarding schedules and on-time performance.

Strategies to improve scheduling and operations to accommodate intermodal movements, include:

- 1. Transit operators, both public and private, should work cooperatively to develop contingency plans for using shuttle buses in case of emergency for all scheduled rail service. These plans should include passenger communications elements for platform information systems and local media.
- 2. Transit operators should coordinate scheduling between all operators with routes serving the region's designated transportation centers and major transfer points.
- 3. Transit operators should establish a common, centralized clock to govern schedules regionwide. This clock would be used by dispatchers and individual vehicle operators to control vehicle movements. They should also discourage vehicle operators from leaving timed transfer points ahead of schedule.
- 4. Transit operators should establish a regionwide policy that trains or buses designated as meeting/connecting service will wait a prescribed period for delayed connections at these locations. This policy can be marketed as a service guarantee in published schedules and system advertising.
- 5. DVRPC and transit operators should conduct assessments of on-time performance for all transit services. These assessments would locate points where delays recur and would provide strategies to address these conditions.
- 6. Transit operators should construct and operate a system of "Intelligent Rider" information displays at train stations, key bus stops, transportation centers, major transfer points and major multi-route bus stops. These visual display units would identify the schedule of trips serving that location (one half hour before and after the current time) and the status of each (arrived, on-time, delayed, canceled). The displays could be updated electronically, by either the passage of the scheduled bus or from a system control center using cellular technology.
- 7. Transit operators should devise policies and procedures to make transferring between systems "seamless." By creating a universal transfer instrument, all transfer charges could be equalized. All operators would honor each other's transfer instruments, thus saving passengers time and expense.

POLICY 7.2: Provide System Accessibility for All Population Segments

ACTION 7.2.a.

INCREASE THE AFFORDABLE MOBILITY OPTIONS FOR THE YOUNG, THE ELDERLY, THE HANDICAPPED AND THE POOR

IMPLEMENTATION

Too often, access to the transportation system is either not available or severely limited for individuals who cannot afford to travel. The young, the elderly, the disabled and the poor who may be on fixed incomes or are unemployed or underemployed, or physically unable to obtain jobs generally cannot pay typical transit fares or purchase and maintain a car. An individual's access to transportation services should not be deprived because they may be young, old, disabled, or poor.

The following actions will increase the affordable mobility options for the young, the elderly, the disabled and the poor:

- 1. The states, DVRPC and transit operators should continue to encourage employers to provide transportation subsidies to their employees. Tax-free transit and van pool subsidies can be provided to each employee in amounts up to \$60 per month through DVRPC's TRANSITCHEK_⊕ program. Taxable subsidies can be provided to employees who carpool, bicycle or walk to work, or telecommute at their homes or from other remote sites.
- 2. Transit operators and local governments should provide affordable transit service between areas of high unemployment and areas with labor shortages. They should also consider temporary underwriting of transportation costs to the unemployed as they enter employment situations.
- 3. States, counties, municipalities and transit and paratransit operators should encourage the formation of jitney services, particularly in suburban areas.
- 4. States, counties, municipalities, employers, developers and transit operators should improve the environment for bicycling by providing paved shoulders and wider curb lanes on roads, secure bicycle parking, shower facilities and bicycle transport capabilities on transit vehicles.
- 5. States, counties, municipalities and developers should improve the environment for pedestrians by providing sidewalks between residential communities and commercial destinations and revising zoning and land development ordinances to make walking distances shorter by locating buildings next to roads and parking lots behind buildings.
- 6. States, transit operators and the private sector should explore fare free zones in conjunction with the creation of improvement districts. This approach, as employed in Portland, Oregon, would reduce operating costs substantially (no fare instruments, cashiers, ticket sellers, fare machines, or turnstiles would be needed). State, local and county governments and private sector employers, businesses and developers would provide subsidies to replace the lost fare revenue.

POLICY 7.2: Provide System Accessibility for All Population Segments

ACTION 7.2.b. COMPLY WITH THE REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT

IMPLEMENTATION

The Americans With Disabilities Act of 1990 (ADA) is a comprehensive civil rights law which prohibits discrimination on the basis of disability in employment, State and local government services, public accommodations, transportation and telecommunications. Titles II and III of the ADA require a broad variety of buildings, facilities and vehicles to be accessible to individuals with disabilities. Title II requires, among other things, that newly constructed and altered buildings and facilities used by state and local government agencies and publicly operated bus and rail systems be accessible to individuals with disabilities. Title III requires, among other things, that newly constructed and altered restaurants, hotels, theaters, shopping centers and malls, retail stores, parks, private schools, day care centers, other similar places of public accommodation, commercial facilities (nonresidential facilities affecting commerce) and privately operated public transportation services be accessible to individuals with disabilities.

The following actions should be taken to comply with the regulations of ADA to provide transportation system accessibility for all population segments:

- 1. Transit operators should continue to pursue accessible vehicles, paratransit services, buildings, key stations, parking facilities, ticket offices and other facilities in accomplishing their ADA implementation plans. Communications systems should also be accessible for disabled persons, including the hearing impaired.
- 2. Counties or municipalities should require parking lot operators to provide accessible parking facilities in sufficient quantities to meet anticipated demands.
- 3. State DOTs, counties and municipalities should improve deficient roads, streets, bridges and sidewalks in conjunction with facility repair operations and as otherwise allowable. Sidewalks and curb cuts should be provided in developed areas, and roadside emergency telephones, rest areas and park and ride lots should be accessible, to disabled persons. Pedestrian traffic signals should be usable by persons with vision handicaps.

POLICY 7.3: Ensure Safety and Security of Highway and Transit Users

ACTION 7.3.a.

REDUCE THE NUMBER OF ACCIDENTS AND FATALITIES WHICH OCCUR ON HIGHWAYS AND TRANSIT SYSTEMS

IMPLEMENTATION

Measures to improve highway safety, including buses and other transit vehicles which operate on public streets, need to address three principal components: the driver, the highway and the vehicle. Each contributes to accidents and can be improved. Trains and other fixed guideway vehicles, which generally run on segregated rights-of-way, face a different operating environment. Reliable signaling and communications are essential for safe operation of these types of vehicles at high speeds or with short time periods between scheduled vehicles.

Strategies to reduce accidents include:

- 1. Transit operators should review training and supervision procedures to ensure that they reflect current conditions and cover all aspects of the job.
- 2. State and local law enforcement agencies should increase enforcement of traffic regulations.
- 3. State licensing bureaus should require driver training and testing programs to include understanding of bicycle and pedestrian rights. This information should also be distributed with license renewals.
- 4. State licensing bureaus and school districts should expand high school driver education courses.
- 5. Transit and freight rail operators should upgrade signaling and communication systems for rail lines. Modern train control systems can provide flexibility to deal with changing conditions and emergencies, as well as increase capacity and shorten time between trains.
- 6. State DOTs and counties should correct deficiencies in older highways. These include narrow or inadequate lanes, shoulders and bridges, blind intersections, sharp curves, poor drainage and other identifiable hazards.
- 7. State and local law enforcement agencies should provide toll-free cellular and CB monitoring for highway users who wish to anonymously report reckless driving and unsafe highway conditions.
- 8. State offices for highway safety, local media and private organizations such as auto clubs should educate the driving population through ongoing public service announcements about poor driving behaviors and improper vehicle maintenance.
- 9. State licensing bureaus and police departments should prevent continued licensing of unsafe commercial drivers. Careful licensing procedures should be combined with procedures to detect drug and alcohol abuse.
- 10. States should strengthen vehicle safety inspection programs.
- 11. State licensing bureaus should periodically test all drivers providing more frequent testing as driver age.
- 12. State governments should pursue legislation to require insurance companies to provide reduced rates for drivers who voluntarily take safe driving courses and retest their skills when renewing driver's license.

POLICY 7.3: Ensure Safety and Security of Highway and Transit Users

ACTION 7.3.b. REDUCE TRANSIT-RELATED CRIME RATE

IMPLEMENTATION

Although the incidence of serious crime within transit systems is fairly low, non-violent acts, minor annoyances and assaults on the senses are not. The perception of personal risk pervades parts of the system, especially during evening and night hours of services. In order to preserve or expand the market for public transportation, operators must have effective programs to ensure the personal security of passengers, who will choose other modes unless they feel safe while using the system.

Strategies to reduce crime and improve security include:

- 1. Transit operators should design new stations with security in mind. Good sight distances, well-lighted public areas with no hidden corners and a layout that focuses activities avoids giving passengers a feeling of risk.
- 2. Transit operators and local law enforcement agencies should develop more effective procedures for removing disruptive persons from the system.
- 3. SEPTA and municipalities should enact or enforce prohibitions against loitering and vagrancy at rail stations. Transit agencies cannot be responsible for sheltering the homeless, whose presence in stations and walkways intimidates passengers and seriously erodes transit patronage during off-peak hours.
- 4. Transit operators, counties, municipalities and civic groups should establish a graffiti control program that both seeks to discourage it and promptly removes that which does appear. Although local operators generally keep the trains, buses and trolleys free of graffiti, some stations and tunnels are problem areas.
- 5. Transit operators should insure that all stations are clean, well-lighted and equipped with passenger facilities such as benches and trash cans. Many of SEPTA's rail stations are currently in poor condition. Where SEPTA lacks sufficient funds to make repairs, community involvement can help restore these stations.
- 6. AMTRAK should repair/install centerline fencing at all stations to prevent passengers crossing tracks to change platforms.
- 7. **SEPTA and NJ TRANSIT should secure rail rights-of-way** on commuter rail lines through use of fences, electronic gates and security systems.
- 8. NJ TRANSIT and SEPTA should install closed-circuit television monitors with available voice communications in unattended rail and transit stations. Such devices can act as a strong deterrent to crime.
- 9. Transit operators should increase the presence of uniformed police in stations and aboard vehicles during late evening hours. While police cannot be everywhere, their presence has been proven to lower crime and other incidents, and reassures passengers using the system.
- 10. Municipalities, transit operators and developers should work toward compatible mixes of activities around transit stations through the sale or lease of development rights and other means. Compatible activities would add to the security of the transit systems by maximizing pedestrian traffic near the stations during their regular hours of operation.

POLICY 7.3: Ensure Safety and Security of Highway and Transit Users

ACTION 7.3.c.

INCREASE PUBLIC AWARENESS OF SECURITY PROGRAMS

IMPLEMENTATION

Security programs work best when the public has an understanding of how they work, who administers them, how to gain access when emergencies arise, and the response that can be expected.

Steps that can be taken to improve the effectiveness of security programs include:

- 1. State and local police and local emergency services offices should expand use of the '911' emergency telephone number to cover the entire Delaware Valley region. Cellular technology has greatly expanded the number of cars equipped with mobile phones and roadside phones are also widely available, but it can sometime be difficult to determine who to call. State and local police can also monitor Citizens Band (CB) channel 9 to assist radio-equipped vehicles.
- 2. SEPTA, PATCO and the NJ TRANSIT divisions serving the region should develop a Transit Officer of the Month program in conjunction with local media and sponsors which recognizes exemplary performances by security personnel.
- 3. Transit operators should prepare a pamphlet for passengers outlining security procedures and providing useful tips. The pamphlets should be readily available at stations and aboard buses and trolleys.
- 4. State licensing agencies should distribute updated summaries of traffic regulations, enforcement measures, security procedures and other useful information to motorists with license renewals.
- 5. Transit operators should ensure that emergency telephones are available at all rail and transit stations and that trains, buses and trolleys are equipped with telecommunication equipment that uses silent alarms and can transmit the vehicle's location. They should also provide the means to allow passengers to communicate directly with the driver on multi-car trains.
- 6. State DOTs, transit operators and toll authorities where applicable should ensure that all park and ride facilities have adequate lighting and telephones for emergency use. Video monitors can also be used at high crime locations or where sight distances are restricted.
- 7. State DOTs and toll authorities should install and monitor roadside emergency telephones at regular intervals along limited access highways. Such telephones are common along toll roads, but less often seen along other highways where the distance to the next interchange may be large and access to local land use restricted.



GOAL 8:

DEVELOP AN ADEQUATE SUPPLY OF QUALITY HOUSING AFFORDABLE TO ALL INCOME GROUPS IN THE REGION, LOCATED IN ACCORDANCE WITH REGIONAL LAND USE AND TRANSPORTATION GOALS

POLICY 8.1

DEVELOP AN AMPLE SUPPLY OF ALL HOUSING TYPES

ACTION 8.1.a.

Provide the number of owner and rental units needed to meet population growth

ACTION 8.1.b.

Improve the ratio of jobs to housing by county

POLICY 8.2

IMPROVE AND MAINTAIN **QUALITY** OF HOUSING STOCK

ACTION 8.2.a.

Reduce the percentage of substandard housing units

ACTION 8.2.b.

Provide new housing units in designated growth areas and infill and rehabilitation in urban areas

POLICY 8.3

PROVIDE A VARIETY OF HOUSING AFFORDABLE TO ALL INCOME GROUPS

ACTION 8.3.a.

Increase the number of municipalities where housing options are available to those earning the regional median income

ACTION 8.3.b.

Provide for the special housing needs of low-income and homeless citizens

POLICY 8.1: Develop an ample supply of all housing types

ACTION 8.1.a

PROVIDE THE NUMBER OF OWNER AND RENTAL UNITS NEEDED TO MEET POPULATION GROWTH

IMPLEMENTATION

Regional forecasts prepared by the DVRPC predict that the region's population will increase by over 500,000 people by the year 2020. A declining average household size coupled with this forecasted increase in population will necessitate a significant increase in the region's housing stock. Techniques must be employed to encourage the development of a mix of housing densities and types in areas with the infrastructure and services necessary to support growth. To encourage housing development of all types in appropriate locations:

- 1. County planning agencies and the DVRPC should continue to provide technical assistance to municipalities in forecasting growth and identifying future growth centers.
- 2. State and county agencies such as the Departments of Community Affairs (DCA) should continue to provide funding and technical assistance for local planning efforts.
- 3. Municipalities should revise local zoning ordinances to allow medium and high density residential development in areas with appropriate infrastructure. Housing alternatives such as modular housing, elder cottages, residential conversions and accessory apartments are effective means to provide affordable housing in both low and higher density zoning districts.
- 4. Municipalities should rezone excessive industrial or commercially zoned land for residential uses; encourage mixed use and planned residential developments; and encourage the adaptive reuse of appropriate non-residential structures for residential uses. Developer incentives such as mortgage assistance funds or land clearance will help to attract private sector investment.
- 5. State funding agencies such as the Departments of Community Affairs or Transportation should increase the availability of funding for infrastructure improvements in appropriate growth areas forecast to increase in population, giving priority for funding to projects within designated centers.
- 6. The state legislatures should consider authorizing county and regional agencies to develop county-wide or region-wide zoning schemes and to use measures such as jobs-to-housing ratios to allocate forecasted growth and define the need for additional housing units to serve the forecasted population.
- 7. Regional tax-base sharing should be explored to discourage municipalities from zoning for excessive commercial or industrial uses in areas appropriate for residential growth and to provide for a mix of housing densities and types on a regional basis, such as is now used in the Hackensack Meadowlands area in northern New Jersey.

POLICY 8.1: Develop an Ample Supply of All Housing Types

ACTION 8.1.b. IMPROVE THE RATIO OF JOBS TO HOUSING BY COUNTY

IMPLEMENTATION

In the past 20 years, the decentralization of population and employment in the Delaware Valley has contributed to a growing imbalance between the location of many jobs and prospective employees. Urban population centers contain an affordable housing stock but lack the entry-level jobs needed for much of the resident labor force. Suburban employment centers may lack a complete resident labor pool due to a lack of local affordable housing opportunities, yet do not have the transit service needed to connect urban workers with these suburban jobs.

Establishing a more appropriate balance between jobs and housing by county can: reduce congestion by rationalizing commuting patterns; promote social equity by expanding housing and employment opportunities; and create economic growth in the region by filling available positions. To improve the ratio of jobs to housing by county:

- 1. The City of Philadelphia and other urban centers should create or expand urban enterprise zones as tax incentives, coupled with targeted efforts to improve police and sanitation services, safety and the image of the area. Philadelphia and Camden should pursue federal "empowerment" zone designation and other urban centers should pursue "enterprise" zone designation.
- 2. Urban areas should utilize all available local, state and federal programs, such as CDBG, Small Business Administration loans and other programs, to expand business, develope land resources, attract new businesses and manage special projects.
- 3. Municipalities should encourage mixed-use development to provide opportunities to live closer to work, and allow alternative housing arrangements such as shared housing, accessory apartments, or conversions from commercial to residential. Clustering and zero-lot line development in certain areas can reduce development costs, accommodate mixed-use projects, and help protect open spaces.
- 4. Municipalities should revise local zoning policy to permit higher density residential development in areas with adequate infrastructure; streamline review procedures or reduce fees for affordable housing projects; and provide density bonuses to developers for the construction of dedicated affordable housing.
- 5. Major employers in the region should establish and/or expand employer-assisted housing programs, such as group mortgages or mortgage insurance, closing cost assistance, down-payment loans, site subsidies, construction financing, or purchase guarantees for housing developers, as part of their overall employee trip reduction efforts.
- 6. The State of Pennsylvania should consider the mandatory municipal provision of affordable housing and authorize the use of housing impact fees on non-residential projects, now utilized in New Jersey.

POLICY 8.2: Improve and maintain the quality of the housing stock

ACTION 8.2.a. REDUCE THE PERCENTAGE OF SUBSTANDARD UNITS

IMPLEMENTATION

Maintaining and enhancing housing quality is an important objective which must be achieved in order to ensure the continued social and economic vitality of the Delaware Valley region. While the majority of the region's housing stock is of relatively good quality, many housing units are over fifty years old and are now at risk of becoming deteriorated. Many units located in certain older, urbanized areas are over-crowded and/or physically substandard. Low and moderate-income residents, in particular, may find it difficult to save the funds necessary to maintain their homes. In order to maintain the health of the region's housing stock, policies and strategies must be developed to encourage and support the rehabilitation and maintenance of renter and owner-occupied units throughout the region. To reduce the number of substandard units:

- 1. State, county and local agencies and non-profit groups should provide education on basic homemanagement and repair for low and moderate income homeowners and renters in addition to rehabilitation funds.
- 2. Local community development and housing agencies should develop or improve programs addressing vacant residential units, including the boarding of recently vacated properties to inhibit deterioration, the acquisition of vacant properties for rehabilitation and re-use, or the demolition of deteriorated properties.
- 3. City and municipal agencies should provide adequate police protection, lighting and sidewalk and street maintenance in their neighborhoods, in order to instill a sense of community pride and encourage residents to clean and maintain their individual units as well as their neighborhood.
- 4. Support for community development corporations, non-profit groups and private sector developers by both public agencies and the private sector (including the financial community) in fulfilling their missions to rehabilitate and maintain quality urban neighborhoods should be expanded.
- 5. Municipalities that have not yet done so should adopt local property maintenance codes and actively enforce code requirements.
- 6. Federal, state, county and local agencies and non-profit groups should increase funding available to low and moderate income homeowners and landlords for housing rehabilitation and initiate or expand rent-to-own and sweat equity programs.
- 7. The U.S. Department of Housing and Urban Development and the region's housing authorities, including the Philadelphia Housing Authority should continue to explore the feasibility of tenant-management of public housing projects. The PHA should also continue to look toward small-scale scattered public housing to eventually replace certain high-rise housing projects.

POLICY 8.2: Improve and maintain the quality of the housing stock

ACTION 8.2.b.

PROVIDE NEW HOUSING UNITS IN DESIGNATED GROWTH AREAS AND IN-FILL AND REHABILITATION IN URBAN AREAS

IMPLEMENTATION

Between 1970 and 1990, population and employment in suburban areas and rural locations near the region's fringe grew significantly, while urbanized areas lost both residents and jobs. Concentrating future residential development in designated growth areas and encouraging rehabilitation and in-fill development in existing urban areas will facilitate the efficient usage of infrastructure and provide an opportunity for improved transportation linkages while preserving open spaces, farmland and natural resource areas. To encourage and support a compact pattern of development:

- 1. **DVRPC should continue to provide technical assistance** to counties and municipalities by providing a region-wide perspective on residential and non-residential development and identifying areas appropriate for growth.
- 2. Community development corporations and non-profit groups established to meet identified social needs should be supported by both public agencies and the private sector (including the financial community) as they work to rehabilitate and maintain quality urban neighborhoods.
- 3. Urban area housing and development agencies should acquire vacant properties; market them at reduced costs to interested developers; and provide bonuses (such as increased densities or streamlining of the permit and review process) to developers who undertake in-fill projects on vacant urban tracts.
- 4. The conversion and re-use of large facilities in urban areas to accommodate residential growth should be encouraged where appropriate, but link new residential development with job opportunities wherever possible.
- 5. State and federal agencies should increase the availability of funding for urban housing rehabilitation.
- 6. The state legislatures should authorize the development and implementation of county or regional land use plans which designate growth areas and areas suitable for preservation.
- 7. Municipalities should revise local zoning and land use plans to coincide with county or regional plans, allowing development in designated growth areas and prohibiting or minimizing development in areas designated for preservation.
- 8. **Priority for state and federal funding for infrastructure improvements**, such as water and sewer systems and transportation improvements, should be given to projects in existing urban areas or designated growth areas.
- 9. Regional tax-base sharing and joint municipal planning and zoning should be implemented where appropriate to encourage rational growth patterns and discourage municipalities from permitting development regardless of regional benefit or cost because of competition for revenue.

POLICY 8.3: Provide a Variety of Housing Affordable to All Income Groups

ACTION 8.3.a.

INCREASE THE NUMBER OF MUNICIPALITIES WHERE HOUSING OPTIONS ARE AVAILABLE TO THOSE EARNING THE REGIONAL MEDIAN INCOME

IMPLEMENTATION

A 1990 DVRPC analysis of housing prices in the region found that a family earning the regional median income could not afford to purchase the median priced home in 81% of the region's 353 municipalities. An analysis of rental housing prices found that one-half of all rental households in the region now pay more than 30% of their income toward rent and utilities. To increase the number of municipalities where housing options are available to those earning the regional median income:

- 1. **DVRPC should continue to assist in defining regional housing needs**; provide data and technical assistance; provide a regional perspective on residential and non-residential development; and define the linkages between land uses and the existing infrastructure and identify areas most appropriate for growth.
- 2. County planning agencies should update their existing county-wide comprehensive housing affordability strategies as appropriate and utilize their available resources to assist municipalities in developing local affordable housing plans.
- 3. Housing developers should participate in public/private partnerships and take advantage of all available programs to reduce housing costs, and market housing units at prices which reflect costs savings resulting from reduced land or construction costs. Housing sold at affordable prices should be monitored to ensure continued affordability.
- 4. Municipalities should revise local comprehensive plans and zoning ordinances to allow and encourage higher density development; density bonuses; public/private partnership efforts; alternative housing types (such as accessory apartments and residential conversions); mixed use developments; and planned residential developments. Subdivision requirements and construction standards should be revised where appropriate to reduce construction costs while protecting the public good, and the development approval process should be expedited.
- 5. Congress should commit additional funding for affordable homeownership programs and rental assistance programs.
- 6. State legislatures should provide incentives for municipal action by linking eligibility for available state funding to local affordable housing actions. State agencies should streamline their permitting procedures to reduce housing production costs. Existing State programs should be expanded and marketed to a broader constituency.

POLICY 8.3: Provide a variety of housing affordable to all income groups

ACTION 8.3.b.

PROVIDE FOR THE SPECIAL HOUSING NEEDS OF LOW-INCOME AND HOMELESS CITIZENS

IMPLEMENTATION

The lack of affordable housing opportunities for low-income people is a critical problem facing the Delaware Valley region. In 1990, over 500,000 people in the Delaware Valley region were living at or below the federally-defined poverty level, including over 242,000 households with household incomes of less than \$10,000. With inadequate income identified as the primary cause of homelessness, many of these households can be considered to be at risk of becoming homeless. The Coalition on Homelessness estimated that in 1987 approximately 30,000 people experienced homelessness in Philadelphia alone. The continued vitality of the Delaware Valley region will be directly influenced by its ability to meet the needs of its most vulnerable residents. To ensure that the needs of low-income and homeless residents will be met in the future:

- 1. The federal government should increase funding for low-income rental assistance programs and expand funding for support services such as drug rehabilitation programs and job training, in order to assist tenants at high risk of becoming homeless.
- 2. Non-profit groups should continue to be supported by both public funding and private sector charitable grants as they provide shelter, support, and other services to special-needs individuals.
- 3. The development of comprehensive centers designed to re-integrate the homeless into mainstream society through the provision of training and services should be encouraged and supported, as an alternative to facilities which provide only temporary shelter.
- 4. Education programs should be expanded for local officials and residents, as a means of alleviating fears often associated with the development of special-needs group homes and support facilities.
- 5. State funding agencies should begin to provide incentives to municipalities by linking eligibility for available state funding to local actions in addressing the needs of low-income and homeless individuals and families. State and county housing and community development offices and agencies should improve coordination among activities to ensure efficient use of available resources.
- 6. Municipalities should revise local zoning ordinances and codes to allow the development of low-cost housing alternatives, including allowing residential densities necessary to develop affordable housing units and permitting non-traditional housing alternatives such as shared housing and accessory apartments. Smaller units and expedited permit review will help to keep costs down. Municipalities should also permit group homes for persons with special needs in areas with the appropriate infrastructure and support services, in accordance with the regulations of the federal Fair Housing Act.

SUMMARY OF SIGNIFICANT NEW INITIATIVES

This *Menu of Implementation Options* provides a wide range of tools, techniques and programs to make the goals, policies and actions of DIRECTION 2020 a reality. If it is to move beyond the blueprint stage, DIRECTION 2020 will require a comprehensive implementation approach. Fortunately, many of the options identified herein are already in place in the region in some form. They may be used in one state but not another, or they may be applied in only certain counties or municipalities. These are the options that will be relatively easy to implement, since the required enabling legislation or funding authority probably already exists.

There are other options identified here that will be harder to achieve. These are the options that may require changes in federal or state legislation, changes in state agency operating or regulatory programs, changes in policy or administrative procedures, or significant new alliances among actors. These options have been identified on each page within a box and are summarized herein. Implementing actors for these significant new initiatives include:

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Where a strategy applies to more than one state or operating agency, this has been shown on each table. As described in the Introduction, these strategies are not presented as recommendations, but rather as **OPTIONS**, tools from which the DVRPC Board and regional decision-makers will ultimately select for inclusion in the adopted regional plan. At this point, all comments, thoughts and suggestions are welcome, both from those potentially directly affected by these options and from those with an interest in the future of the region.

CONGRESS AND FEDERAL AGENCIES

ACTION	
1.1.a.5	Provide priority funding for infrastructure improvements and locate public offices in urbanized areas
1.2.b.5	Enforce the Farmland Protection Act and fund the Farms for the Future Act
3.1.a.8	Establish incentives for manufacturers to utilize recycled and recyclable materials
3.1.a.10	Establish minimum recycled content standards for newspapers
3.2.b.6	Assure that economic development loan or grant recipients are in conformance with environmental regulations
3.2.b.7	Amend Clean Water Act to integrate land and water resource planning. Improve incentives for industry to implement pollution prevention programs.
3.4.a.8	Establish a standard Home Energy Rating System to evaluate energy efficiency
3.4.b.7	Increase the Corporate Average Fuel Economy (CAFE) standards
3.4.b.8	Consider a higher gasoline tax to increase efficiency, reduce driving and encourage HOV and transit use
4.3.b.9	Increase the cost of vehicles that are most polluting; a decrease cost of cleaner vehicles through "feebates."
4.3.c.3	Further improve the design standards of motor vehicles to minimize emissions
5.1.a.10	Facilitate conversion from defense to civilian jobs through job training and loan pools
5.1.c.8	Increase Jobs Training Partnership Act funding; permit and encourage sharing of job credits across counties
5.2.a.11	Broaden the availability and use of Investment Tax Credits for historic properties
5.2.b.6	Dedicate sufficient funding for Independence National Historic Park; enliven park activities to increase visitors and revenues
5.3.a.7 .	Modify inheritance tax laws to reduce estate taxes for continuing farms
8.2.a.6	Increase available funding for housing rehabilitation and affordable homeownership programs
8.2.a.7	U.S. Department of HUD should further explore tenant-management of public housing projects
8.2.b.8	Assign priority for infrastructure funding to urban centers and designated growth areas
8.3.a.5	Commit additional funding for rental assistance programs

STATE LEGISLATURES

<u>ACTION</u>	PA	NJ	
1.1.a.6	х	х	Adopt legislation as needed to facilitate cleanup and reuse of old industrial sites
1.1.b.4	х		Implement growth management legislation that integrates state, regional, county and municipal planning
1.1.b.5	х	х	Assign a stronger review role to counties in regard to projects with regional impacts
1.1.b.7	X	х	Authorize county-level Transfer of Development Rights
1.1.b.8	x	х	Consider tax reform to reduce municipal dependence on real estate taxes
1.4.a.7	х	х	Adopt enabling legislation permitting county and municipal use of Adequate Public Facilities ordinances
2.2.a.3	x		Provide tax incentives to employers who offer telecommuting, compressed work weeks and other trip reduction programs
3.1.b.10	х	x	Require manufacturers of hazardous products to collect and recycle them after use
3.3.a.10	х	х	Require county and local plans to identify and inventory local natural resources and critical habitat areas
3.3.b.6		х	Enact a State Scenic Rivers Act to manage and protect rivers
4.2.a.9	x		Amend Impact Fee law to give priority to transit improvements
4.3.a.9	x		Change ETRP legislation to permit the brokerage of APO credits
5.1.b.8	х		Change business tax policy to provide a net loss carry forward provision
5.1.d.6	x		Establish a more effective state access code to regulate driveways onto state and county highways
5.1.d.7	x	х	Clarify enabling legislation to require off-site mitigation improvements from developers
5.2.a.10	х	х	Utilize preferential tax assessment programs to preserve historic properties and districts
5.3.a.6	х	х	Consider tax reform to reduce property tax assessments on operating farms
5.3.b.9	х	, X	Right-to-farm laws should require notice to buyers of property adjacent to farms
7.3.a.12	х	х	Require insurance companies to reduce rates for drivers completing safe drivers courses and who retest their skills
8.1.a.7	x	х	Consider authorizing the development and implementation of county or region-wide zoning schemes by county and regional agencies
8.1.b.6	x		Consider mandating municipal provision of affordable housing
8.1.b.6	x		Authorize municipal imposition of housing impact fees on non-residential projects
8.3.a.8	x	x	Link eligibility for available state funding to local affordable housing efforts

STATE TRANSPORTATION AGENCIES

ACTION	PA	NJ	
1.1.a.5	x	x	Provide priority funding for maintenance and improvements in urbanized areas
1.4.a.6	х	х	Give priority to public investments in growth areas as identified in State, regional and county plans
2.3.a.9	х	х	Station roadside assistance vehicles at strategic locations during peak periods
2.3.a.10	x	x	Institute a televised information service on regional highway and transit travel conditions
2.3.a.11	х	х	Design and implement special bus and HOV access gates and lanes at toll plazas
2.3.a.12	x	х	Develop a prioritized list of maintenance projects due to poor geometric and pavement conditions
4.2.b.4	х	X	Establish policies for bicycle access on state roads and bridges
4.3.a.9		х	Broker APO credits to maximize the effectiveness of ETR programs
4.3.b.6	х	х	Increase the availability and visibility of alternative fuel refilling locations
5.3.a.4	X	х	Program public infrastructure improvements to avoid development pressures on prime farmland
6.1.a.5	x	х	Expand the Intermodal Management System to include freight movement needs
6.2.b.6	х	х	Establish training programs for truckers on regulatory issues such as hazardous materials transport
6.2.b.8	х	Х	Centralize traffic monitoring and communications for freight movements and encourage the industry use of Global Positioning System (GPS) tracking of freight movements
6.3.a.8	X	х	Provide capacity, signage and rest areas for trucks near intermodal freight facilities
6.3.b.7	x	x	Establish a public/private consortium to develop new freight movement technology
7.1.a.8	X	х	Identify and construct a system of park and ride lots for carpools, vanpools and local bus services
7.2.a.4	х	×	Provide paved shoulders and wider curb lanes for bicycles
7.2.b.3	х	х	Improve facilities as needed to provide access for persons with disabilities
7.3.a.7	x	х	Provide toll-free cellular and CB monitoring for highway users to report reckless drivers
7.3.a.8	х	х	Educate the driving public about poor driving behaviors and improper vehicle maintenance
7.3.a.9	х		Prevent licensing of unsafe commercial drivers; screen for drug and alcohol abuse
7.3.a.10	х		Strengthen vehicle safety inspection programs
7.3.a.11	x		Periodically test all drivers, providing more frequent testing as drivers age
7.3.c.6	x	X	Ensure that all park and rife facilities have adequate lighting and emergency telephones
7.3.c.7	х	X	Install and monitor roadside emergency telephones at regular intervals along limited access highways
8.2.b.8	X	Х	Assign priority for infrastructure funding to urban centers and designated growth areas.

PUBLIC TRANSPORTATION OPERATORS

ACTION	SEPTA	NJT	OTHERS	
2.1.a.5	х	x	x	Use advanced fare collection systems to reduce time and ease payment barriers
2.1.a.6	х	x	x	Facilitate transfers within and among systems
2.1.a.7	X	x	x	Improve services in lower density areas
2.1.a.8	х	x	x	Develop Intelligent Vehicle/Highway Systems (IVHS) programs
2.1.c.7	х			Consider joint development proposals with municipalities at rail stations
2.3.a.10	Х	x	х	Institute a televised information service on regional highway and transit travel conditions
4.2.a.8	х	x	х	Address travel needs in areas where transit services have been discontinued
4.3.a.7	х	х	x	Develop a regional guaranteed ride home program for employer trip reduction participants
4.3.a.8	X	х	x	Establish local community transit services in areas surrounding employment centers
7.1.a.6	х	х	x	Revise local bus service to better integrate with regional rail and express bus service
7.1.a.7	х	x	x	Develop pedestrian/bicycle circulation plans around major rail stations
7.1.b.5	X	x	х	Assess on-time performance for all transit services
7.1.b.6	х	х	х	Construct and operate a system of "Intelligent Rider" information displays that provide schedule and status information, to be installed at train and bus stops and transfer points
7.1.b.7	х	x	x	Create a "seamless" transfer between systems and modes
7.2.a.3	х	x	x	Form jitney services particularly in suburban areas
7.2.a.4	Х	x	x	Provide bicycle parking facilities at stations and transport capabilities on vehicles
7.2.a.6	Х	x	х	Explore the creation of fare free transit zones in conjunction with improvement districts
7.2.b.3	х	x	x	Improve facilities as needed to provide access for persons with disabilities
7.3.b.6			x	AMTRAK should repair or install centerline fencing at all stations to prevent pedestrian crossings
7.3.b.7	х	x		Secure rail rights of way through fences, gates and security systems
7.3.b.8	х	x		Install monitors and voice communications in unattended stations to increase security
7.3.b.9	х	x	x	Increase the presence of uniformed police in rail stations and aboard vehicles
7.3.b.10	x	x	х	Work with municipalities to develop a compatible mix of land uses around transit stations
7.3.c.5	х	x	х	Provide emergency telephones and telecommunications equipment at all rail and transit stations and on transit vehicles
7.3.c.6	х	x	х	Ensure that all park and ride facilities have adequate lighting and emergency telephones

OTHER STATE AGENCIES

<u>ACTION</u>	PADER	NJDEPE	OTHERS	
1.1.a.5	x	x	x	Provide priority funding for infrastructure improvements and locate public offices in urbanized areas
1.1.a.6	x	x		Revise regulations to facilitate cleanup and reuse of old industrial sites
1.2.a.6	х	х		Strengthen rules for on-lot treatment of sewage
1.2.a.7	X	х		Prohibit package sewage treatment plants unless maintenance and oversight responsibilities are defined
1.4.a.5	х	x		Prohibit expansion of water and sewer services into inappropriate areas as defined on State, county or regional plans
3.1.b.7	x			Ban white goods, nickel cadmium batteries, tires and scrap metal from landfills
3.2.b.6			х	Assure that economic development loan or grant recipients are in conformance with environmental regulations
3.2.b.7	x	x		Improve incentives for industry to implement pollution prevention programs
3.3.a.9	x	X		Design state or region-wide surveillance and monitoring programs to document wetland or habitat loss
3.3.a.11	х	х	x	Develop a regional wetland mitigation banking system
3.4.a.6			х	Establish building codes that require greater energy efficiency and encourage solar energy
4.3.a.9	x			Broker APO credits to maximize the effectiveness of ETR programs
4.3.b.7	х	x		Examine ways to retire or minimize the use of pre-1980 automobiles
4.3.c.4		٥	х	Add vehicle inspection tests such as inspection of fuel tanks, intake lines and air conditioning systems for vapor and coolant leaks
5.1.a.9	x	x	x	Contain costs of regulations and taxes for existing and new businesses
5.1.c.7			х	Link job training, welfare reform and economic development efforts
5.3.a.5		-	х	Establish a "land link" program to match retiring farmers with prospective new farmers
6.2.a.3			х	Develop a marketing program that details the region's freight system and economic resources
6.3.a.5			х	Assure the availability of necessary freight storage and transfer facilities and equipment
7.3.a.7			X	Provide toll-free cellular and CB monitoring for highway users to report reckless drivers
7.3.a.8			х	Educate the driving public about poor driving behaviors and improper vehicle maintenance
7.3.a.9			х	Prevent licensing of unsafe commercial drivers; screen for drug or alcohol abuse
7.3.a.10			х	Strengthen vehicle safety inspection programs
7.3.a.11			х	Periodically test all drivers, providing more frequent testing as drivers age
8.2.a.7			x	Increase funding for housing rehabilitation and affordable homeownership programs, including rent-to-own and sweat equity programs
8.2.b.8	х	х	х	Assign priority for available infrastructure funding to urban centers and designated growth areas
8.3.a.6	х	х	х	Streamline permitting procedures to reduce housing costs
8.3.b.5	x	X	х	Link eligibility for available state funding to local affordable housing efforts, including assisting the homeless.
8.3.b.5			Х	Improve coordination between the various state agencies providing housing and community development assistance

COUNTIES AND REGIONAL AGENCIES

ACTION	PA	NJ	REG.	
1.1.a.7	x	x	x	Organize to consider adoption of dedicated regional wage tax
1.1.b.6	x	X	^	Designate urban growth boundaries or community development boundaries
1.2.b.4	x	x		Encourage joint municipal planning, zoning and Transfer of Development Rights
1.3.a.7	x	x		Utilize the official map and capital budget to identify and budget for public open
1.5.4.7		"		space needs
1.3.a.8	x	x		Initiate bond issue programs to acquire and develop public open space
1.4.a.5	x	x	х	Prohibit expansion of services into inappropriate areas as defined on State, county or
				regional plans
2.2.a.6			x	Adopt a tax on new parking facilities to fund ETR and demand reduction programs
3.1.b.6	х	х		Establish permanent county household hazardous waste collection programs or facilities
3.2.a.10			х	Delineate regional watershed management districts based on local non-point control measures
3.2.a.11			x	Utilize EPA stream watch funds to establish a region-wide stream watch program
3.2.b.8	х		x	Establish a regional watershed authority to plan for and review development proposals that affect ground and surface water resources.
3.3.a.11			x	Develop a regional wetland mitigation banking system
4.1.b.5			x	Provide for programs and technologies in the regional TIP that reduced air emissions
4.2.b.6	x	x	x	Identify potential future bicycle facilities to create an integrated network
4.3.a.7	x	x	x	Develop a guaranteed ride home program for employer trip reduction participants
4.3.b.8	x	x	x	Implement a graduated regional gasoline tax based on transit accessibility
5.1.b.6	x	x		Create industrial parks geared toward high technology growth industries
5.1.c.8	x	х	x	Provide support services together with job training; share job credits across county
				lines
5.1.d.8	х	х	x	Seek State enabling authority for stronger county role with projects of regional impact
5.2.a.10	х	х		Utilize preferential tax assessment programs to preserve historic properties and districts
5.2.b.7	х	х	x	Consider the formation of a bi-state cultural tax district to support regional attractions
5.3.a.4	X	х	x	Program public infrastructure improvements to avoid development pressures on prime farmland
6.1.a.4	-		x	Provide a mechanism for the GMTF to participate in DVRPC's RTC
6.1.a.5	-		x	Expand the Intermodal Management System to include freight movement needs
6.1.b.5			x	Program publicly-funded rail improvement projects in the regional TIP
6.2.a.3			x	Develop a marketing program that details the region's freight system and economic resources
6.2.a.4			x	DRPA should target marketing initiatives at special niche markets
6.2.a.5			x	DRPA and the GMTF should survey customers to determine freight system deficiencies
6.3.b.6			x	Quantify the associated costs and benefits of future scenarios of freight movement systems
6.3.b.7	x	x	x	Establish a public/private consortium to develop new freight movement technology
7.1.a.8	x	x		Identify and construct a system of park and ride lots for carpools, vanpools and local
				bus services
7.1.b.5			x	Assess on-time performance of all transit services
7.2.a.6	х	х	x	Explore the creation of fare free transit zones in conjunction with improvement districts
8.2.a.6	x	x		Increase funding for housing rehabilitation and affordable homeownership programs
8.3.b.5	x	x	x	Improve coordination between housing and community development agencies

MUNICIPALITIES

<u>ACTION</u>	PA	NJ	
1.1.b.5	x		Local plans should be consistent with state, regional and county plans
1.2.a.6	x	x	Coordinate sewage facilities plans with comprehensive and master plans
1.3.a.6	х	x	Require an impact analysis of developers that identifies recreational needs, impacts and mitigation measures
1.3.a.7	х	x	Utilize the official map and capital budget to identify and budget for public open space needs
2.1.b.5	x	x	Use appropriate zoning and land use controls to encourage density and mix of uses in area of transit centers
2.1.c.3	x	x	Establish site design standards for transit-oriented land use and mixed use development
2.1.c.4	x	x	Grant density bonuses for developer improvements at transit centers
3.1.a.8	x	x	Establish recycling market enterprise zones
3.1.b.8	x	x	Introduce variable rate pricing for garbage collection
3.1.b.9	x	x	Establish battery collection programs where the private market has not emerged
3.1.c.7	x	x	Consider MSW treatment technologies that also provide energy or gas reclamation
3.3.b.5	x	x	Revise local ordinances to protect lands abutting rivers
3.4.a.6	x	x	Establish building codes that require greater energy efficiency and encourage solar energy
4.2.b.8	x	x	Utilize zoning and site design standards to provide pedestrian and bicycle access and facilities
4.3.a.8	x	x	Establish local community transit services in areas surrounding employment centers
5.1.a.9	x	x	Contain regulatory and other costs for existing and new businesses
7.1.a.7	x	x	Develop pedestrian/bicycle circulation plans around major rail stations
7.1.a.8	x	x	Construct park and ride lots for carpools, vanpools and local bus service
7.2.a.4	x	X	Provide paved shoulders and curb lanes for bicycles
7.2.a.5	x	х	Revise local ordinances to require sidewalks among and between residential and commercial activities
7.3.b.10	x	x	Work with transit agencies to establish a compatible mix of land uses around transit stations
8.3.a.4	х	x	Revise local ordinances to allow and encourage affordable housing alternatives and reduce housing construction costs
8.3.b.6	X	x	Permit group homes for persons with special needs in appropriate locations

UTILITIES AND OTHER AUTHORITIES

ACTION	
3.1.c.6	Landfill operators and managers should consider retrofitting existing facilities, where needed, into solid waste facilities
3.4.a.7	Offer utility rebate incentives and other means to replace energy-inefficient appliances and equipment
5.1.a.9	Contain utility and other costs for existing and new businesses
8.2.a.7	The Philadelphia Housing Authority should look toward eventual replacement of certain high-rise projects with small-scale scattered site public housing
8.2.a.7	The region's housing authorities should continue to explore the potential of tenant-management of public housing projects
8.2.b.8	Assign priority for funding for infrastructure improvements to urban centers and designated growth areas
0.2.0.0	Assign priority for funding for infrastructure improvements to urban centers and designated growth area

PRIVATE AND NON-PROFIT SECTOR

ACTION	
4.2.b.7	Encourage bicycle use for commuting through employer-provided incentives and facilities
4.3.a.8	Establish local community transit services in areas surrounding employment centers
4.3.b.6	Increase the availability and visibility of alternative fuel refilling locations
5.3.b.8	Farmers must develop an estate plan to reduce inheritance taxes for continuing farms
6.3.a.5	Assure the availability of necessary freight storage and transfer facilities and equipment
6.3.a.6	Negotiate labor agreements at intermodal facilities to minimize turnaround times
6.3.b.7	Establish a public/private consortium to develop new freight movement technology
7.2.a.3	Form jitney services particularly in suburban areas
7.2.a.4	Provide secure bicycle parking and shower facilities
7.2.a.5	Provide sidewalks within and between residential communities and commercial destinations
7.2.a.6	Explore the creation of fare free transit zones in conjunction with improvement districts
7.3.a.8	Educate the driving population about poor driving behaviors and improper vehicle maintenance
7.3.b.10	Work with municipalities and transit agencies to develop a compatible mix of uses around rail stations
8.1.b.5	Establish or expand employer-assisted housing programs as a part of overall employee trip reduction efforts
8.2.a.6	Non-profit agencies should increase funding for housing rehabilitation and affordable homeownership programs, including rent-to-own and sweat equity programs