INTRODUCTION

Delaware
Valley
Regional
Planning
Commission

INTRODUCTION

OVERVIEW

OVERVIEW

What is the Delaware Valley Regional Planning Commission (DVRPC) and How Does It Help You?

DVRPC, created in 1965 through an interstate compact between Pennsylvania and New Jersey, is a bi-state agency federally designated and certified as the Metropolitan Planning Organization (MPO) for the nine-county, Philadelphia-Camden-Trenton region. DVRPC is responsible for land use and transportation planning in accordance with US Department of Transportation guidance. We are governed by an 18-member Board composed of state, county and city representatives from its member governments, as well as various participating, non-voting members and federal agency observers.

- DVRPC's long-range planning is a collaborative process that involves close working relationships with the two State Departments of Transportation, the region's three public transit agencies and representatives from the eight suburban counties and four cities that are members of the DVRPC Board.
- DVRPC's land use and transportation plans and policies affect every citizen, business and institution in the Delaware Valley (and beyond), with recommendations for all modes of travel (pedestrian, bicycle, automobiles, public transit, shipping and air), regional goods movement, air quality, infrastructure investment (roads, bridges, sewer and water facilities) and the location of future land development and protected green space.

What is the DVRPC Long-Range Land Use and Transportation Plan?

Destination 2030 is intended to help DVRPC carry out its defined mission *"to plan for the orderly growth and development of the region."* It is also a requirement of the US Department of Transportation, which is charged with certifying MPO plans and programs. MPOs are key actors, in regions across the country, helping to implement the federal Surface Transportation Act (most recently, TEA-21, the Transportation Equity Act for the 21st Century).

DVRPC's Long-Range Plan serves as the basis for the Transportation Improvement Program (TIP), a capital program of highway, bridge and public transit projects, as well as separate plans for regional airports, goods movement and bicycle/pedestrian activities. Proposed projects must be included on the TIP if they are to receive federal funding. The Plan is also used to evaluate the consistency of sewer and water projects in the New Jersey and Pennsylvania portions of the region, as well as relating regional plans to the on-going, concurrent planning at the county and State levels. Finally, DVRPC's Long-Range Plan serves as an educational guide and informational resource for the citizens, businesses and institutions in the Delaware Valley.

DVRPC is seeking public comment on the Draft Destination 2030 Long-Range Plan. The Draft Destination 2030 Long-Range Plan includes the following primary elements:

Regional Population and Employment Forecasts

A key component of the long-range planning process is the preparation and adoption of revised population and employment forecasts for the nine counties and the 352 municipalities that make up the region. DVRPC staff prepared Year 2030 regional and county forecasts and coordinated with each county on the final municipal forecasts. The forecasts have been adopted by the DVRPC Board.

Destination 2030 – A Vision for The Future – Is a separate document that contains the policies and the goals of the Long-Range Plan. This report lays the framework for the Long-Range Plan and explores eight critical issue areas, including: Urban Revitalization, Growth Management, Economic Development, the Environment, Equity and Opportunity, Transportation Facilities, Transportation Operations, and Transportation Finance.

The Land Use Component

The Land Use component summarizes and integrates the Plan's vision, goals and policies related to land use, and serves as the basis for the transportation plan's facilities and service recommendations.

The Planning Areas

The Planning Areas represent DVRPC's effort to categorize and simplify the region's 353 townships, boroughs and cities and the corresponding long-range planning policies appropriate for each community type.

The Land Use Map

The Year 2030 Land Use Map shows the generalized extent of existing developed areas, the region's proposed growth areas, and rural lands. The region's various Centers are also mapped, reflecting their significance in terms of scale and stage of development.

2030 Greenspace Network

The core areas included in the network encompass large contiguous natural resource features and existing regional parks.

2030 Conservation Focus Areas

The 2030 Conservation Focus Areas depict largely unfragmented areas of agricultural and natural lands that possess a combination of unique geographic, physiographic, and land use characteristics.

Transportation Component

The Transportation component provides the vision and foundation for the region's transportation system. The transportation goals are 1) Improving Safety, 2) Reducing Congestion, 3) Increasing Mobility, 4) Rebuilding the Infrastructure, 5) Enhancing the Environment, and 6) Linking Transportation Investments to Land Use and Economic Development Goals

Financial Plan – The Long Range Plan is required to be fiscally-constrained. Fiscal-constraint limits the number of projects that can be included in the Plan to what we can reasonably assume to afford over the life of the Plan. The Financial Plan documents total funds anticipated to be available by state and by mode (i.e., highway or transit). The 2030 Plan also allocates money to various funding categories (i.e., reconstruction, new capacity, operational improvements) based on historic trends and anticipated needs. The number of projects included in each funding category is capped by the amount of money available within that category.

Evaluation Criteria for Selecting Projects – Over 250 candidate transportation projects were evaluated for inclusion in the fiscally-constrained Long Range Plan. In order to help guide the selection process, projects were evaluated by 14 criteria to determine how well they met the transportation goals of the Plan.

Major Regional Transportation Projects – the fiscally-constrained Long Range Plan includes over 100 major regional projects that were selected from a pool of over 250 candidate projects. Major regional projects are those projects that have a significant impact on travel patterns and the movement of people and goods in the Delaware Valley. Smaller scale, non-regionally significant projects, such as a bridge rehabilitations or intersection improvements, are still considered consistent with the Plan, even though they are not specifically listed in the Plan.

Transportation Modules – The Transportation component contains four modules which contain a more detailed vision, goals, policies and projects for four transportation sub-modes: Aviation, Goods Movement, Bicycle/Pedestrian, and Intelligent Transportation Systems.

INTRODUCTION

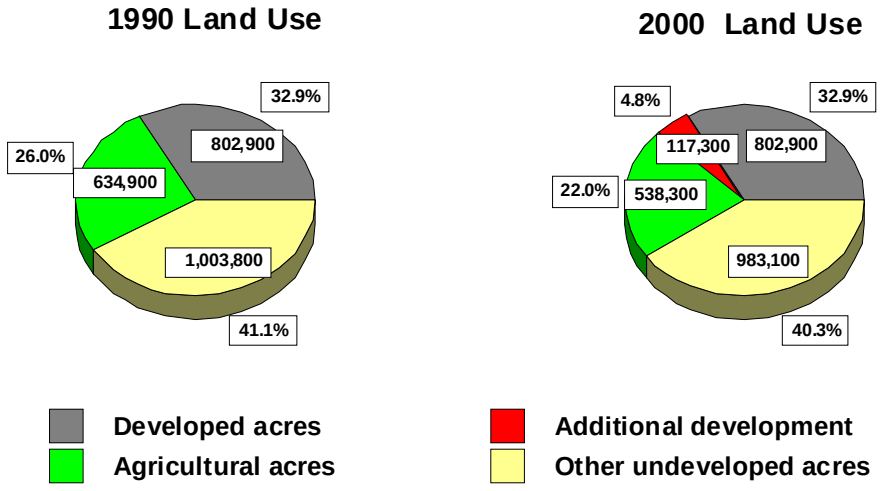
REGIONAL TRENDS AND CHANGES

Regional Trends and Changes:

What are the Region's Land Use, Development and Travel Trends, and How Do These Changes Affect You?

Current trends have serious consequences for the social, physical, economic and environmental character and quality of life in the nine-county region. One of the major issues facing the Delaware Valley is the redistribution of population and jobs from core cities and developed suburban communities into new suburban areas. Growth in population and employment is a positive indicator of a region's appeal to retain and attract new businesses and residents. However, when regional growth is coupled with decline in existing developed areas and communities, the outcome is continued sprawl with the resulting loss of open space and farmland, deteriorating urban areas, increased traffic congestion, and duplicative and excessive infrastructure costs.

Land Use in the Delaware Valley, 1990 vs. 2000



Since 1970, the population of the region has grown by over 265,000 people, but we have developed an additional 280,000 acres of land. These trends are not sustainable, and the need for implementing a consistent and coordinated growth management approach across the Delaware Valley region is urgent. Continuation of these development patterns will result in:

- Further outward expansion into rural areas and across the boundaries of adjacent regions; blurring the unique character and identity of each.
- Loss of farmland and natural features. Since 1970, almost a quarter of a million acres of farmland have been converted to other uses, representing a decline of nearly one-third of the region's agricultural lands.
- Over-reliance on the single occupant automobile for most trips, at the expense of public transit, bicycling and walking, resulting in over-consumption of gasoline, increased traffic congestion and negative impacts to community health. As of 2000, over 70% of the region's workforce drives alone to work each day, while only 10% use transit.
- Continuation of the region's designation as an Ozone Non-Attainment Area by the US Environmental Protection Agency, given the heavy contribution of mobile source pollution from the region's dramatic increases in vehicles, trips and vehicle miles traveled.

INTRODUCTION

POPULATION AND EMPLOYMENT FORECASTS

Population and Employment Forecasts

Forecasting Regional Population and Employment

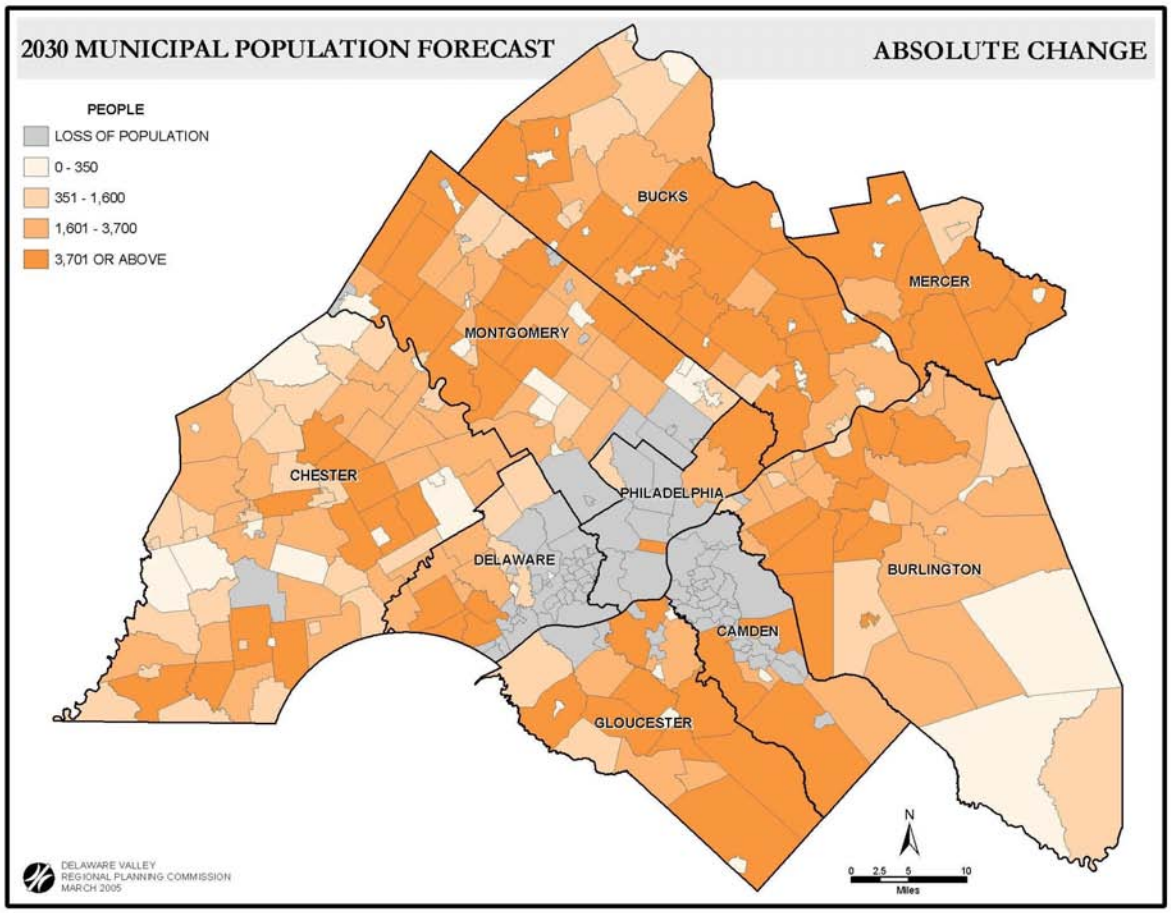
In order to plan for the future, it is essential to understand development trends in the region. From 1990 to 2000, regional population grew by 4%, with Chester, Gloucester, and Montgomery Counties seeing the largest gains. By 2030, the population of the nine-county region is forecasted to grow by nearly 13%, with no net population growth in Philadelphia, Delaware or Camden counties and increases exceeding 25% in Bucks, Burlington, Chester and Gloucester counties. By 2030, the employment of the nine-county region is forecasted to grow by 18%, with the greatest increases in Bucks, Chester and Gloucester counties.

If current land use development trends continue, this future growth would consume an additional 250,000 acres of land, now in agricultural use or forested, for new development. However, by directing a small amount of new growth as infill to existing communities and modestly increasing the net density of new development, all of the forecasted growth could be accommodated in just 110,000 acres, saving over 140,000 acres – an area the size of Camden County.

Population Change and Forecasts by County for DVRPC Region

County	1990	2000	% Change 1990 to 2000	2030 Forecast	% Change 2000 to 2030
Bucks	541,174	597,635	10%	762,455	27.6%
Chester	376,396	433,501	15%	571,800	31.9%
Delaware	547,651	550,864	1%	547,890	-0.7%
Montgomery	678,193	750,097	11%	878,440	17.1%
Philadelphia	1,585,577	1,517,550	-4%	1,505,000	-0.8%
5 PA Counties	3,728,991	3,849,647	3%	4,265,585	10.8%
Burlington	395,066	423,394	7%	532,850	25.9%
Camden	502,824	508,932	1%	515,425	1.3%
Gloucester	230,082	254,673	11%	337,090	32.4%
Mercer	325,824	350,761	8%	415,650	18.5%
4 NJ Counties	1,453,796	1,537,760	6%	1,801,015	17.1%
9 Counties	5,182,787	5,387,407	4%	6,066,600	12.6%

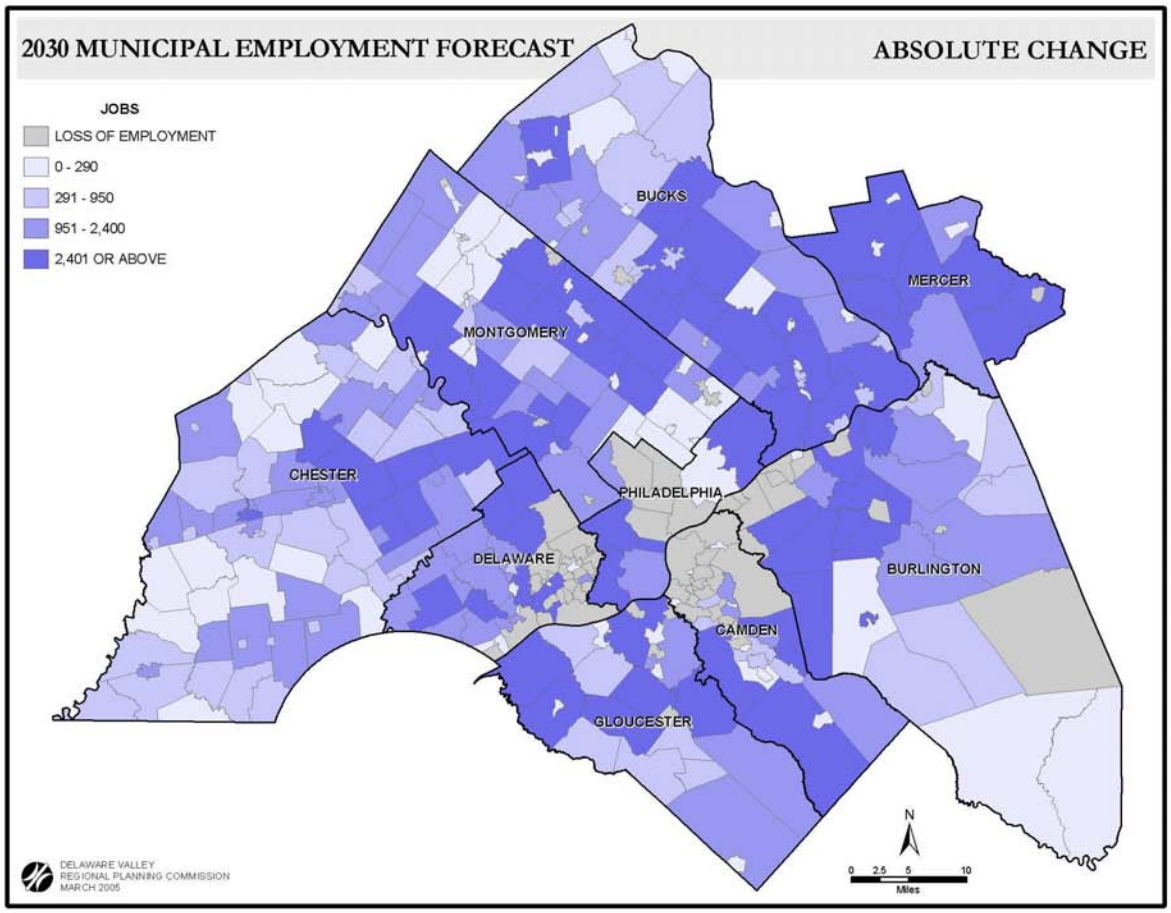
Source: DVRPC/US Census Bureau, 2005.



Employment Change and Forecasts by County for DVRPC Region

County	1990	2000	% Change 1990 to 2000	2030 Forecast	% Change 2000 to 2030
Bucks	245,360	267,124	8.9%	352,772	32.1%
Chester	197,752	238,641	20.6%	345,062	44.6%
Delaware	230,459	238,164	3.3%	273,411	14.8%
Montgomery	457,501	492,677	7.7%	597,300	21.2%
Philadelphia	836,874	741,397	-11.6%	763,176	2.9%
5 PA Counties	1,967,946	1,978,003	0.5%	2,331,721	17.9%
Burlington	191,345	202,535	5.8%	249,653	23.2%
Camden	227,933	216,931	-4.8%	235,453	8.5%
Gloucester	86,079	99,467	15.6%	135,627	36.4%
Mercer	220,592	220,915	0.1%	257,162	16.4%
4 NJ Counties	725,949	739,848	1.9%	877,895	18.7%
9 Counties	2,693,895	2,717,851	0.9%	3,209,616	18.1%

Source: DVRPC/US Census Bureau, 2005.



INTRODUCTION

DESTINATION 2030:
A VISION FOR THE FUTURE

DESTINATION 2030: A Vision for the Future

As part of the 2030 Long Range Plan development process, DVRPC has identified eight critical issue areas that will impact the future form and development of the region. The eight areas are GROWTH MANAGEMENT, URBAN REVITALIZATION, The ENVIRONMENT, ECONOMIC DEVELOPMENT, TRANSPORTATION FACILITIES, TRANSPORTATION FINANCE, TRANSPORTATION OPERATIONS, and EQUITY AND OPPORTUNITY. A vision, describing what life will be like in the future, was developed for each of the eight issues. This vision is supported by background data, including trends and current policy perspective. Each section also identifies the opportunities in and challenges to achieving the vision as well as developing a set of goals. The intent of this collection of Issue Papers is to spur discussion among stakeholders and the public of what the region should and could be in the future.

A summary of this report follows. The full *DESTINATION 2030: A Vision for the Future* report accompanies this document under separate cover.

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DESTINATION 2030...
A VISION FOR THE FUTURE

To accomplish great things,

we must not only act,

but also dream;

not only plan,

but also believe.

Anatole France

Planning for the future begins with a vision.

In order to craft a direction for the future, we must first define what we wish that future to be. Our plans, policies and projects must follow from a clear conception of future conditions and all of our efforts must be focused on making that future vision a reality. Vision is essential, because if we don't know where we are going, then any road will do, making it easy to lose our way.

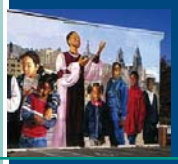
For almost 40 years, the Delaware Valley Regional Planning Commission (DVRPC) has been charged with the challenging task of planning "for the orderly growth and development" of the Philadelphia metropolitan area. Our region centers on the City of Philadelphia, and includes Bucks, Chester, Delaware and Montgomery counties in Pennsylvania and Burlington, Camden, Gloucester and Mercer counties in New Jersey. The two states are essential partners on the DVRPC Board, as are the cities of Philadelphia, Chester, Camden and Trenton.

While DVRPC is required to prepare a regional plan to guide the distribution of federal transportation funds, we believe the plan can, and should, do more. A vision of the region's future growth and development patterns should provide the framework for transportation investments. Transportation planning and implementation is most meaningful and successful when infrastructure improvements serve to support and build our communities. Transportation services increase opportunities for new workers, expand our economy, and - if done right - can protect and even enhance our environment.

This is our vision of the Delaware Valley in the year 2030. Join us as we move forward to make that vision a reality.

Delaware Valley Regional Planning Commission

GROWTH MANAGEMENT



URBAN REVITALIZATION

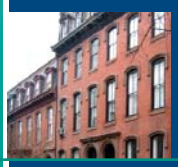
ECONOMIC DEVELOPMENT

THE ENVIRONMENT

TRANSPORTATION FACILITIES

TRANSPORTATION OPERATIONS

TRANSPORTATION FINANCE



EQUITY & OPPORTUNITY

DVRPC'S VISION FOR THE YEAR 2030

GROWTH MANAGEMENT

Regional sprawl is minimized, as a significant share of new growth and development locates within and around defined centers and along major transportation corridors. High quality site and building design is the norm, with higher density, mixed-use and transit-oriented development in existing and emerging communities with a strong identity and character.

URBAN REVITALIZATION

Urban centers, boroughs and older suburbs thrive, as a combination of public and private actions strengthen local schools; improve the quality of local services; rejuvenate our cities and older suburbs with art and culture; reduce crime; clean up brownfield sites; reinvigorate greyfields and abandoned shopping areas; build relationships with the business community to foster local entrepreneurship and business investment and create new jobs; capture and enhance existing amenities; preserve existing historical elements of significance; strive for a mix of younger and older persons; and restore distressed neighborhoods.

ECONOMIC DEVELOPMENT

A diversified and growing regional economy, attractive for new entrepreneurial and established business investment where the combination of an educated labor force, favorable business climate, and high quality of life create a competitive regional advantage with new economic opportunities created in proximity to the needed labor force.

THE ENVIRONMENT

A clean and sustainable environment for existing and future residents and visitors to the region; where key natural resource areas and scenic landscapes are protected; recreation and open space facilities are provided in an integrated regional network; environmental protection objectives are incorporated into planning activities and growth strategies at all government levels; and investment and redevelopment of urban areas results in reduced development of rural and agricultural lands.

TRANSPORTATION FACILITIES

A safe, convenient and seamless multi-modal passenger and freight system that is sufficient in its capacity, attractive and affordable to its users, accessible and equitable for all citizens and visitors to locations throughout the region and incorporating sound growth management, urban revitalization, economic development and environmental planning principles.

TRANSPORTATION OPERATIONS

A well-planned, reliable and safe multi-modal regional transportation system that promotes inter-connectivity among systems, keeps operators and users informed about travel conditions, responds rapidly to incident related congestion and assures efficient delivery of goods and passengers utilizing available and new technologies.

TRANSPORTATION FINANCE

Each mode of transportation has adequate funding to maintain, modernize and operate its infrastructure. Money is available to provide needed expansions within corridors designated for growth and reinvestment in existing centers. Funding can be used to facilitate the movement of people, vehicles and goods and to enhance important inter-modal connections. A combination of user fees, tolls, regional and state taxes, and other creative financing mechanisms, including public-private partnerships, are in place.

EQUITY & OPPORTUNITY

Barriers to opportunity for all residents of the region are removed through increased distribution of affordable housing throughout the region, enhanced resources and equalized quality of education in all school districts. Transportation choices and reverse commute opportunities are provided to regional employment centers for all workers.

MAKING THE VISION A REALITY

Vision without action is merely a dream.
Action without vision just passes the time.
Vision with action can change the world.
Joel A. Barker

Change is possible. By looking into the future and focusing on the vision of conditions in the year 2030, we can begin to develop the policies, projects and priorities that will lead us there. Making the vision a reality - what planners call implementation - will involve coordinated and cooperative action across municipal, county and state lines; across local, county, state and federal agencies; and across the public, private and non-profit sectors. In a region of two states, nine counties and 352 municipalities, such cooperation will be essential to achieve the vision.

DVRPC's mission and mandate is to help facilitate such cooperation. The DVRPC Board reflects the diversity of the region and our plans and programs include the wide range of stakeholders needed to advance the vision. Key DVRPC initiatives include:

TRANSPORTATION IMPROVEMENT PROGRAM (TIP) Working with our state and local partners and in conformance with the regional plan, the TIP reflects the priority list of highway, transit, freight, bicycle and pedestrian improvements that will be funded in coming years.

PROJECT & CORRIDOR PLANS Transportation problems are transformed into community solutions through DVRPC studies and plans that encourage local leaders to work together to identify projects and policies that manage their land use and transportation needs.

COMMUNITY PLANNING & REVITALIZATION DVRPC's transit-oriented development, economic, and local land use plans provide new directions for communities, while our TCDI program provides additional funds for local revitalization planning.

REGIONAL & LOCAL OPEN SPACE PROTECTION From a regional open space network to municipal open space and natural resource plans, DVRPC "thinks regionally and acts locally" to protect our environment.

IMPROVING LOCAL LAND USE PLANNING Education, training and technical assistance is provided to our municipal partners to enhance their capacity to manage change.

EXPANDING ACCESS TO JOBS DVRPC has developed a strategic plan and manages a funding program to increase transportation services linking low-income residents with job opportunities.

PROVIDING INFORMATION & ANALYSIS Objective analysis and regional data developed by DVRPC is used widely by the public and private sectors. Check www.dvrpc.org for your needs.

BUILDING COALITIONS & PARTNERSHIPS From land use to housing, aviation to air quality, goods movement to water quality, environmental justice to information exchange, DVRPC organizes and manages a wide variety of committees to facilitate communication and cooperation. Contact us to see how you can get involved.

Delaware Valley Regional Planning Commission

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LAND USE

Delaware Valley Regional Planning Commission

LAND USE

OVERVIEW

Planning Areas

Analyzing the Region's Geography: A Community Typology and Planning Policies for the 21st Century

The Delaware Valley region is a mosaic of 353 townships, boroughs and cities. The communities are quite diverse and complex, and the present level of land use and planning can only be described as fragmented. In an effort to categorize and simplify the types of communities and corresponding long-range planning policies, DVRPC organized the region into four community types, each with different overall planning and development policies. (See Planning Areas map)

- **Core Cities**

  The region's four Core Cities are Philadelphia, Trenton, Camden and Chester. Each has success stories and key assets: Philadelphia's Central Business District is thriving, Trenton's downtown is supported by the offices of New Jersey State government and Chester and Camden have seen revitalized waterfront development. However, each has also experienced population and job losses related to the national and local shift from a manufacturing to a service-based economy, and each has experienced declining housing stock and infrastructure systems, including the quality of education to support the human capital for the knowledge-based economy of the 21st Century.

  Key policies that should guide the future growth and development of Core Cities are **Redevelopment and Renewal.** Such actions as targeted infrastructure investments, asset maintenance and rehabilitation, comprehensive renewal of local neighborhoods and concerted efforts to reinforce a network of educational and social programs can help to rebuild and restore currently declining portions of these cities. The goal of the Year 2030 Plan is to maximize the assets of these communities, while stressing community renewal, neighborhood preservation and economic development strategies that encourage population and job growth rather than further decline.

- **Developed Communities**

  These communities represent the region's older suburbs, including: inner ring communities adjacent to the Core Cities; railroad boroughs and trolley car communities whether close-in or in outlying locations around the region; and developed townships that experienced the first wave of post-war

suburban boom in the 1950s. Many of these suburban communities are stable and thriving, with housing opportunities for young families, a walking and bicycling environment, easy access to transit and strong community identity. However, many are also experiencing loss of population and jobs, deteriorating infrastructure, a declining tax base, an aging population that requires more services and a property tax base that cannot keep pace with existing realities and new demands. The key policy approach for these communities is **Stabilization and Revitalization.** Preventive maintenance, economic development activities (like Main Street programs) and aesthetic projects, like streetscape and signage programs, can help to reinforce their locational and physical advantages, while stemming further or initial decline. Similar to the Core Cities, these communities offer the potential for increased population growth, particularly if current, aging residents are supplanted by young families in the future.

- **Growing Suburbs**

  These communities are experiencing or are forecast to experience significant additional growth, including employment and retail centers. However, unlike the stereotypical "bedroom" communities of the 1950s and 1960s, they also provide a location for jobs and shopping and are evolving into self-contained communities. With rapid growth in population, jobs and land consumption, these communities face problems of traffic congestion, low density, leap-frogging sprawl, increased infrastructure construction demands, dwindling open space resources and a lack of community identity.

  Key policies for these communities are **Growth Management and Community Design** reflecting the need to improve the form of development, reduce congestion and mitigate the negative impacts of rapid growth. A "re-imaging" of the growing suburbs would establish a more concentrated development pattern, with higher densities (including clustering, mixed-use and transit-oriented development) to provide the critical mass that can support new transit services and other mobility alternatives to the single-occupant automobile. A key approach is to focus on the quality of design and architectural character, in terms of the location and arrangement of buildings and parking areas, landscaping, signage and other design features. Preservation and creation of a coordinated system of open space and recreational areas is also a priority goal and strategy for these communities.

- **Rural Areas**

  Farmland in the Delaware Valley is some of the most productive agricultural land in the nation, but it is also land most easily converted to other developed uses. From 1990 to 2000 the region lost almost 10,000 acres of farmland a year. The strong agricultural heritage of the region needs to be retained because farming and its support industries are an important economic sector for the region. Active farming can also preserve the pastoral landscapes that contribute to the region's attractiveness for residents, visitors

and businesses. The key policy approach for these communities is **Preservation and Limited Development**, including limited expansion of infrastructure systems, preservation of a rural lifestyle and village character, support for continued farming and enhancing further natural resource protection. The additional benefit that this policy approach can accomplish is to inhibit exurban sprawl that threatens to meld the Delaware Valley region with adjacent regions in southeastern and central Pennsylvania and southern and Central New Jersey.

Core Planning Principles

Regional Core Planning Principles

The Land Use component of the *DESTINATION 2030* Plan is based on five core principles, which are summarized here and illustrated on the Year 2030 Land Use Plan map:

1. Linking Land Use and Transportation

At the root of planning for transportation facility and service improvements is the notion of travel demand. Travel demand is derived from population and employment growth and land use changes. Thus, more people (whether workers or residents) desiring to access different land uses (for example, shopping, employment or housing) generally results in greater demand for travel in an area or along a transportation facility. The spatial arrangement of land uses is also important, since that will determine whether alternatives to the automobile (public transit, bicycling and walking) can succeed.

Likewise, transportation facilities and services result in impacts (both positive and negative) on the landscape, the environment and the demand for different land uses. Planning for such facilities without considering the consequences for land use change would be as short sighted as planning for land uses without considering the resulting demand for transportation. A more coordinated approach to land use and transportation convenes municipal, county, regional and state land use and transportation planners with local elected officials and the public to craft an integrated solution for an area that meets multiple community goals for transportation mobility, community character, economic development, and environmental protection.

2. Creating and Maintaining Centers

A key principle to guide the *DESTINATION 2030* Plan is the concept of *Centers*. Centers provide a focal point in the regional landscape that can serve to reinforce or establish a sense of community for local residents, while recognizing their regional and local significance from a governmental, service, economic or mixed-use perspective. The Year 2030 Plan includes a hierarchy of Center-types, based on their current or prospective role and activities within the region:

- **Metro Center**

  The three square miles of Center City Philadelphia, bounded by the Delaware and Schuylkill rivers from Spring Garden to South streets, is the region's *Metro Center*. This dense, compact, mixed-use area includes the City's central business district and office core with more than 265,000 jobs and about 60,000 residents, as well as major tourism and entertainment destinations. Future growth to 2030 may well expand the definition of the Metro Center north and south, as well as west across the Schuylkill River into University City.

- **Metro Sub-Centers**

  Six *Metro Sub-Centers* reflect their region-wide significance and stages of development. Two *Mature Urban Centers*, the cities of Trenton and Camden, reflect existing job concentrations and regional importance as Core Cities. Four *Suburban Growth Centers* - King of Prussia/Valley Forge, International Airport/I-95, Cherry Hill/Voorhees/Marlton and the Route 1/Princeton Corridor - reflect the dramatic job growth concentrations that have emerged as employment centers.

- **Regional Centers**

  Three types of Regional Centers have been identified on the plan, reflecting their different stages of development and the need for different planning policy approaches in the future. *County Centers* are existing centers of importance on a countywide or sub-county scale, and provide a stable concentration of housing, jobs and services. *Revitalizing Centers* are compactly developed, mixed-use communities that have served as focal points for employment, services or cultural activities, but now require concerted action to renew and stabilize neighborhoods and reverse the trend of declining population and/or jobs. *Growth Centers* are either existing or emerging centers forecasted to have increasing concentrations of people, jobs and services. They have land available for new development, existing or planned sewage capacity and are supported by current county and municipal planning policies favoring continued growth and expansion.

3. Promoting Growth Areas

A third principle of the plan is to identify areas appropriate for new growth. This growth management strategy is developed in cooperation with city and county member governments. The strategy is derived from a framework of sewer, water and transportation facility plans that define proposed "growth areas", where infrastructure would be provided or encouraged to support new growth within the time frame of the plan. Growth areas are located contiguous to existing developed areas and provide appropriate and sufficient land (in combination with the defined Centers) to accommodate the region's forecasted increases in population and jobs. DVRPC will direct its

infrastructure investments in accordance with this approach, and it is recommended that local municipalities use this approach to manage their growth based on infrastructure availability and planned expansions of these systems.

Table 3. DVRPC Year 2030 Land Use Centers

County	Metro Sub-Center	Regional Centers		
		County	Growth	Revitalizing
Bucks	---	Doylestown, Newtown, Oxford Valley, Quakertown,	Warrington	Bensalem, Bristol/Route 413/13 Corridor, Penndel/Langhorne, Falls, Tullytown, Warminster
Chester	King of Prussia/Valley Forge	Downingtown, Kennett Square, Oxford, Paoli, West Chester	Exton, Lionville, Great Valley	Coatesville, Phoenixville
Delaware	International Airport/I-95	Ardmore, Media, Radnor, 69th Street	Middletown, Routes 1/202/& 322 Corridor	Darby, Routes 291/13 Waterfront Corridor
Montgomery	King of Prussia/Valley Forge	Ardmore, Cheltenham Avenue, City Avenue, Jenkintown, Ft. Washington/ Ambler	Conshohocken, Kulpsville, Montgomeryville, Plymouth Meeting, Route 422, Willow Grove/Horsham	Lansdale, Norristown, Pottstown
Philadelphia	International Airport/I-95	Boulevard/Grant, Broad and Olney, Cheltenham Avenue, Chestnut Hill, City Avenue, Cottman/Bustleton, Lawncrest/Fox Chase, Mayfair/Holmesburg, Roxborough/Manayunk, 69th St	Boulevard/Wood-haven, Navy Yard/Sports Complex, University City	Broad and Cecil B. Moore, Broad and Erie, Broad and Passyunk, Central Germantown, Frankford, Kensington/Richmond, 52nd and Market
Burlington	Cherry Hill/ Voorhees/ Marlton	Bordentown, Browns Mills, Medford, Moorestown, Mt. Holly, Wrightstown	Mt. Laurel	Burlington City, Roebling, Rt. 130 Corridor, Willingboro Town Center
Camden	Camden, Cherry Hill/ Voorhees/ Marlton	Haddon Avenue Corridor, Lindenwold/Gibbsboro	Berlin, Berlin-Cross Keys Corridor, Sicklerville	Gloucester City
Gloucester		Clayton, Glassboro/Pitman, Swedesboro, Williamstown, Woodbury	Deptford, Logan/Woolwich, Washington	National Park, Paulsboro, Westville
Mercer	Route 1/ Princeton Corridor, Trenton	Hopewell, Hightstown, Pennington, Princeton	Washington Town Center	

4. **Implementing Smart Growth and Smart Transportation Approaches to Achieve Change**

The policies and implementation approaches for the land use and transportation plan are linked through five components of Smart Growth and Smart Transportation:

- **Regional Policy Framework** links the transportation plan's six different levels of investment and modal types to the four different community types and areas defined on the land use plan.

- **Corridor Planning** provides a comprehensive approach that links land use, transportation, the environment and the economy, working collaboratively with county and municipal representatives.

- **Multi-Modal / Intermodal Approaches** integrate different transportation modes to serve community and area needs, while facilitating accessibility and transfers between modes.

- **Context Sensitive Planning and Design** crafts transportation solutions through collaboration with local stakeholders, in context with the setting and character of the local community, and sensitive to community concerns about potential negative impacts.

- **Community Development Approaches** use transportation investments as a foundation and catalyst to effect positive community changes. Transit-oriented development (as recommended in studies funded through DVRPC's TCDI program) is an example of this approach. Such development can help to generate new real estate development, revitalize older communities and support increased public transit ridership.

5. **Maintaining and Preserving Sensitive Environmental Areas and Creating a Greenspace Network**

Areas located outside already developed areas and the newly defined growth areas include protected lands (parks, preserved farms or land trust lands), proposed greenspace network lands (proposed for protection for ecological and recreational purposes), and undeveloped rural and agricultural lands that are designated to remain rural or agricultural in character.

As of 2004, 18% of the region (almost 427,000 acres) was permanently protected as parks, preserved farms or land trust lands. *Destination 2030* proposes linking and expanding this existing open space into a green space *network*, where parks, forests, meadows, protected farms and stream corridors are joined together in an inter-connected system. The 2030 Greenspace Network is based on the twin principles of protecting core natural resource areas and linking them with greenways. The core areas included in

the network encompass large contiguous natural resource features and existing regional parks. The 2030 Greenspace Network portrays a seamless vision of connected natural open space that enhances ecological and recreational capacity, protects critical natural resources, ameliorates the impacts of sprawl, and improves the quality of life in the region's communities.

Table 4. Year 2004 Delaware Valley Protected Open Space by Ownership

	Publicly Owned Lands (acres)							Privately Owned Lands (acres)			
County	*Federal*	*State*	*County*	*Municipal*	*Total Protected Public Open Space*	*Protected Public Open Space as Percent of Total Area*	*Public Protected Acreage per 1000 population*	*Preserved Farmland*	*Land Trust or Privately Protected*	*Total Protected Private Open Space*	*Protected Private Open Space as Percent of Total Area*
Bucks	0	12,880	8,322	10,363	31,565	8.12%	52.8	8,014	7,617	15,631	4.02%
Chester	1,290	7,105	5,792	7,714	21,901	4.53%	50.5	20,688	30,660	51,348	10.61%
Delaware	726	2,683	844	5,197	9,450	8.02%	17.2	208	2,289	2,497	2.12%
Montgomery	1,964	4,475	5,770	11,031	23,240	7.52%	31.0	6,183	3,606	9,789	3.17%
Philadelphia	365	282	8,126	1,360	10,133	11.72%	6.7	0	531	531	0.61%
PA TOTAL	**4,345**	**27,425**	**28,854**	**35,665**	**96,289**	**6.95%**	**25.0**	**35,093**	**44,703**	**79,796**	**5.76%**
Burlington	4,001	140,036	2,658	9,512	156,207	30.34%	368.9	18,321	2,841	21,162	4.11%
Camden	0	18,845	2,640	4,050	25,535	17.95%	50.2	118	9	127	0.09%
Gloucester	0	5,400	1,706	4,058	11,164	5.37%	43.8	8,865	423	9,288	4.46%
Mercer	0	4,283	8,311	8,040	20,634	14.28%	58.8	4,676	2,079	6,755	4.67%
NJ TOTAL	**4,001**	**168,564**	**15,315**	**25,660**	**213,540**	**21.15%**	**138.9**	**31,980**	**5,352**	**37,332**	**3.70%**
REGION TOTAL	**8,346**	**195,989**	**44,169**	**61,325**	**309,829**	**12.93%**	**57.5**	**67,073**	**50,055**	**117,128**	**4.89%**

The 2030 Conservation Focus Areas depict agricultural and natural lands that possess a combination of unique geographic, physiographic, and land use characteristics. These characteristics differentiate the focus areas from one another and form the basis for widespread conservation efforts by government organizations and nonprofit land trusts. These areas contain villages and scattered suburban development, but they remain comparatively intact and their integrity can be maintained through strategic acquisitions and easements, land management, and appropriate forms of growth. Both the 2030 Greenspace Network and the 2030 Conservation Focus Areas are designed to brand individual greenspace and focus areas. By creating a

shared regional geography and “name recognition” with regard to these areas, their status and prominence can be elevated, thereby enhancing preservation efforts.

Implementation Plan

How Can the Plan be Achieved?

Planning is a process that involves communicating information, ideas and goals to the public, including specific local interests. Through a constructive dialogue, planners and the public can share their opinions and mutually shape a vision for a neighborhood, community, county or region. Key stakeholders in the planning and implementation process include: (1) elected or appointed officials; (2) the development community; (3) local interests, such as the chamber of commerce or other business groups, civic and neighborhood associations, community development corporations and environmental and historic preservation and affordable housing advocacy organizations; and (4) the general public.

Public agencies and organizations involved in the planning and implementation process include local, county and regional planning commissions and agencies, the State Departments of Environmental Protection, the State Departments of Transportation, the Office of Smart Growth and the Department of Community Affairs (in New Jersey) and the Departments of Community and Economic Development, the Office of Housing and Community Revitalization and the Department of Conservation and Natural Resources (in Pennsylvania), SEPTA, PATCO and NJ Transit, sewer and water authorities (or companies), local Zoning Hearing Boards, Redevelopment Authorities (for urban renewal projects), school districts and other special purpose boards and commissions.

DVRPC will continue to work with all of these partners to make the vision of the plan a reality. By “thinking regionally but acting locally”, DVRPC is able to achieve coordinated and cooperative action across municipal, county and state lines; across local, county, state and federal agencies; and across the public and private sectors.

Specific planning and implementation programs at DVRPC related to the three action areas included in this paper (Centers, Growth Areas and Farmland/Open Space Preservation) include DVRPC’s Transportation and Community Development Initiative (TCDI), which provides grants to local governments for revitalization planning; local area and corridor planning studies that develop integrated solutions for the transportation and land use needs of an area; municipal open space and natural resource plans that form the building blocks for the regional open space network; and extensive outreach and education efforts that facilitate better communication and information sharing across the region.

LAND USE

MAPS

TRANSPORTATION

Delaware Valley Regional Planning Commission

TRANSPORTATION

OVERVIEW

Transportation

The DVRPC region has a mature highway network. This has two important implications. First, a large percentage of our transportation funds must be spent on rebuilding and maintaining our present infrastructure at the expense of improved or new facilities or services. Second, since there are few new facilities planned, most increase in capacity will have to come from making our current system more efficient and reducing the demand for travel.

Our road system is not as congested compared to many other major metropolitan areas across the country, even though the number of miles traveled is growing disproportionate to the region's growth in population, as we continue to experience sprawling development patterns. The growth in traffic particularly exacerbates congestion on the region's arterial street network. Many of the region's arterials suffer from poor access management, numerous driveways, older signal systems, and little or no linkage between highway and land use planning. In addition, they are required to carry high volumes of traffic due to the limited coverage of the freeway system.

As development continues to push into rural areas at the periphery of the region, new transportation investments are sought by people who want to live there. However, investments serving low-density development are inefficient and divert funds that are needed to expand and rebuild our existing system in established communities.

The region's transit system is also mature. Most of the rail system was built in the early part of the 20th century. Not only does the infrastructure need to be rebuilt, but the system is radial and does not readily serve the growing intra-suburban circumferential travel patterns that have emerged over the past several decades. Additionally, travel time for the suburban to Philadelphia CBD transit commute has increased as suburban residential and employment locations have spread outwards into the suburbs. Operating the existing system, let alone expanding it, is difficult given the unreliable funding streams currently allocated to transit. Transit ridership has declined across the region over the past forty years. However, the rate of decline has slowed over the past decade. The value of the transit system remains in removing vehicle trips from the highway network and providing mobility options.

Consistent with the passage of ISTEA and the subsequent TEA-21 legislation, DVRPC realizes the importance of a multi-modal transportation network and stress the integration and role of all travel modes. The vision for our future transportation system needs to address the needs of bicycle, pedestrian, aviation and freight movement along with the highway and transit modes. Philadelphia International Airport suffers from one of the highest rates of delay in the nation. Increasing capacity at Philadelphia

International Airport is a priority for the region for both transportation and economic reasons. Equally important is maintaining the feeder and relief system at smaller airports in face of increasing development pressures on suburban land. Bicycle and pedestrian modes are important to foster because they provide an alternative to driving for short trips, help support sound land use development, and encourage a healthy life-style. The Federal Highway Administration estimates that freight will double by 2020. Currently, over 70% of all freight is shipped by truck. As freight service continues to increase we must plan to better accommodate both passenger and freight movements on the highway network. Sharing track rights between freight and passenger service while still providing "just in time" delivery of goods is another significant freight movement issue.

At present, each mode of transportation is faced with a staggering backlog of unmet needs. Much of the region's infrastructure is more than half a century old and in need of complete reconstruction. Expansion of the labor force in recent decades and higher standards of living have placed tremendous demands on the system, often more than the facilities were ever designed to handle. Though the population of the region has not grown significantly, it has spread out across the landscape. In particular, the leapfrogging of businesses into once rural areas has doubly impacted the system: by generating traffic in areas without sufficient infrastructure; and, by replacing once efficient radial travel patterns with scattershot chaos. And while highways are in better surface condition in most parts of the region than in years past, a significant number of bridges are below federal standards. Also, while a number of our transit lines have undergone major reconstruction, the commuter rail system is still one of the slowest and does not serve all areas of the region.

Financial resources to address these needs have not been able to keep up, despite increases of state and federal gas taxes and expanded federal and state appropriations. Gas tax receipts at the national and state level plateaued in the late 1990's and have actually declined, after accounting for inflation.

VISIONS, GOALS, AND POLICIES

The Destination 2030 Long Range Plan focuses on three primary components of the transportation system: Facilities, Operations and Finance. Transportation Facilities incorporates the physical infrastructure of roads, transit lines, trails, and other transport facilities. Operations addresses the performance of the transportation system. The sector is receiving increased attention as we try to make our existing facilities more efficient. Finance, is becoming increasingly important as we look for innovative ways to fund our ever-increasing transportation and other societal needs. Visions of what the future holds for each of the three focus areas were developed at the beginning of the development process for the Destination 2030 Plan.

The Vision for Transportation Facilities

A safe, convenient and seamless multi-modal passenger and freight system that is sufficient in its capacity, attractive and affordable to its users, accessible and equitable for all citizens and visitors to locations throughout the region and incorporating sound growth management, urban revitalization, environmental and economic development planning principles.

The Vision for Transportation Operations

A well-planned, reliable and safe multi-modal, regional transportation system that promotes interconnectivity among systems, keeps operators and users informed about travel conditions, responds rapidly to incident related congestion and assures efficient delivery of goods and passengers utilizing technologies.

The Vision for Transportation Finance

Each mode of transportation has adequate funding to maintain, modernize and operate its infrastructure. Money is available to provide important expansions within corridors designated for growth and reinvestment in existing centers. Funding can be used to facilitate the movement of people, vehicles and goods and to enhance important inter-modal connections. A combination of user fees, tolls, regional and state taxes, and other creative financing mechanisms, including public-private partnerships, are in place.

Policies

The following transportation policies are organized around the transportation goals of the Plan and seek to implement the Facilities, Operations and Finance visions.

Improving Safety

- Ensure the safety and security of all users of all modes.
  - Reduce the number of accidents and fatalities across all modes
  - Address safety needs as they relate to specific population segments such as the elderly and handicapped

- Address the importance of safety issues when considering regional transportation plans

- Collect, analyze and share regional crash data to serve as a basis for safety planning

- Promote programs that address behavioral and marketing aspects of safety

- Facilitate quick emergency response through incident management planning

- Increase public awareness of transportation security program

Reducing Congestion

- Optimize the efficiency of the existing transportation system
  - Reduce traffic congestion along travel corridors and at critical intersections through incident management, access control, signal system improvements and needed highway improvements

- Utilize transportation demand management (TDM) techniques
  - Establish programs to reduce the number of vehicle trips
  - Encourage practices which spread travel throughout the day, and throughout the week, making the transportation system more efficient

- Provide more options for commuters
  - Improve area coverage and operation of transit service
  - Increase the number of multi-modal transportation centers and park and ride facilities
  - Improve bicycle and pedestrian facilities

- Focus construction of new capacity on providing missing links

Improving Mobility

- Promote coordination and integration of all transportation systems
  - Establish opportunities for connections among transportation modes
  - Improve scheduling and operations to accommodate intermodal movements

- Provide system accessibility for all segments of the population
  And increase affordable transportation alternatives

- Comply with regulations and guidance for the Americans with Disabilities Act and Environmental Justice (Title VI)

Enhancing the Environment

- Encourage the reduction in use of travel modes that contribute significantly to air pollution
  - Promote the use of public transit, bicycle and pedestrian facilities, telecommuting and ridesharing
  - Forecast poor air quality days and request temporary, voluntary changes in behavior to reduce pollutants

- Encourage the use of transportation control measures
  - Expand the use of employer-based ride-sharing programs and shuttles
  - Promote the use of low-emission vehicles, low-polluting fuels, and cleaner fleets

- Protect the environmental assets of the region
  - Seek alternatives to transportation projects that negatively impact wetlands, riparian corridors and unique habitats
  - Include best management practices for the treatment of stormwater runoff from transportation facilities to improve water quality and groundwater recharge
  - Build and retrofit noise reduction barriers where necessary to enhance he livability of existing residential areas

Rebuilding the Infrastructure

- Devote sufficient resources to address reconstruction and maintenance needs

- Develop and employ assess management systems to determine capital plans to increase the long-term cost effectiveness of system improvements

- Identify innovative financing mechanisms and advocate for a greater share of federal and state funds
  - Support a dedicated funding stream for transit
  - Identify and pursue opportunities for public/private partnerships

Linking Transportation Investments to Land Use and Economic Development Goals

- Promote transit-oriented development and mixed use development

- Encourage investment in older, developed areas and brownfields

- Increase the level of investment in transportation facilities that promote freight movement and economic development

- Limit new capacity to appropriate areas as identified in the Congestion Management System

- Consider the land use impacts of transportation investments in the development of plans and programs

- Apply context-sensitive design standards to transportation facilities

Associated Programs

The Long Range Plan impacts a number of other transportation planning programs, such as the Transportation Improvement Program (TIP) and the Congestion Management System (CMS). The TIP is the regionally agreed upon list of priority projects to be advanced during a short (3-4 year) timeframe. As required by federal law (ISTEA and TEA-21), the TIP document must list all projects that intend to use federal

funds, along with non-federally funded projects that are regionally significant. The TIP also includes all other State funded capital projects. The projects are multi-modal; that is, they include bicycle, pedestrian, freight related projects, and innovative air quality projects, as well as the more traditional highway and public transit projects.

Regionally significant projects must be drawn from the region's long range plan and all projects in the TIP must help implement the goals of the plan. The Long Range Plan, required by federal law, is the document which helps direct transportation and land use decisions over a minimum 20 year horizon. The TIP represents the implementation of recommendations from DVRPC's Long-Range Plan into a short-term program of improvements.

The CMS has an objective to minimize travel delays on the transportation system. The CMS is a management system that is designed to aid decision-makers in gauging system performance, assessing needs, and in selecting cost-efficient strategies and actions to improve and protect investment in the region's infrastructure. The CMS is used in prioritizing and selecting projects for the Transportation Improvement Program, guiding the planning activities of the long-range plan and serving as input for alternative analysis studies.

The CMS also includes strategies to reduce single-occupant vehicle travel and improve the efficiency of the existing transportation infrastructure. A major role of the CMS is to identify all capacity-adding single-occupant vehicle (SOV) projects. Any project that receives federal funds and results in adding general-purpose lanes to an existing highway or in constructing a new highway must be included in the region's Congestion Management System. An analysis may be necessary to determine if the additional capacity needs can be first met through other means.

Financial Plan

The Destination 2030 Financial Plan and the Major Regional Projects that follow seek to implement the Plan goals and policies. The Long Range Plan must be fiscally-constrained to the amount of funds that are expected to be available over the life of the Plan. The Destination 2030 Plan anticipates over $57 Billion being available for transportation projects over the 25-year time span of the Plan.

Due to the extensive and expensive needs of rebuilding our current system, Destination 2030 has adopted a "fix-it first" policy. Both Pennsylvania and New Jersey Departments of Transportation have also adopted maintenance-first policies. This means that the majority of funds available over the life of the Plan will be reserved for reconstructing and maintaining our existing infrastructure.

Destination 2030 differs from previous long-range plans, by allocating funding to the various funding categories, such as new capacity, operational improvements and reconstruction, before selecting projects. Therefore, the number of projects able to be selected in each funding category is limited by how much money is available in each

category. More details on the Financial Plan is included under the *Financial Plan* section of this document

Transportation Modules

Destination 2030 has devoted extra consideration to the Aviation, Bicycle/Pedestrian, Goods Movement and Intelligent Transportation Systems (ITS) components of the transportation system. Specific visions, goals, and policies have been developed for each of these important areas. Additionally, projects have been developed for the Aviation and Goods Movement modules. However, these projects are not part of the fiscally-constrained Plan but have been included as part of an Aspirations Plan that highlights the total needs of the region, irrespective of anticipated revenue. Funding for aviation, rail freight and port-related projects typically come from sources other than the federal transportation authorization bills and state revenue sources that fund the region's highway and transit projects. Projects that have been developed for the ITS and Bicycle/Pedestrian modules, as well as highway-related goods movement projects are funded as part of the fiscally-constrained Plan.

Implementing the Plan

A Plan is not worth much unless people take ownership of it. DVRPC has worked with our regional planning partners to develop the transportation elements of the Destination 2030 Plan and the projects identified therein. DVRPC will continue to foster a close working relationships with our federal, state and regional planning partners as we implement the Long Range Plan. We will work with our partners to:

- Improve the transportation planning process
- Find innovative solutions to transportation problems through technical studies.
- Build coalitions to plan for major new projects
- Protect the region's air quality
- Find new funding opportunities
- Meet the goals of the Plan and attain the vision for the future
- Continue to expand opportunities for public involvement in the planning process

TRANSPORTATION

FINANCIAL PLAN

Financial Plan

Overview

Federal regulations require that a regional long-range transportation plan be fiscally constrained. The total transportation expenditure level identified in a long-range plan must not exceed the total revenue level expected to be available for the region over the life of the long-range plan. This requirement is intended to ensure that the long-range plan is a financially responsible one.

Adhering to these requirements, DVRPC has identified both federal and state revenue resources that the region can reasonably expect to receive in the next 25 years. All revenue estimates are developed in consultation with DVRPC's federal, state and transit partners including Federal Highway Administration (FHWA), Federal Transit Administration (FTA), state departments of transportation (state DOTs; or PennDOT and NJ DOT, individually), Southeastern Pennsylvania Transportation Authority (SEPTA), New Jersey Transit (NJ Transit), Port Authority Transit Company (PATCO) of the Delaware River Port Authority (DRPA), and Pottstown Urban Transit (PUT).

Preparation for this financial plan include a review of historical data, recent trends and other relevant materials including the statewide FY 2005 financial guidance documents and information from previous statewide transportation improvement programs (STIPs). Previous STIPs and federal authorization levels also serve as a baseline for the future. General assumptions regarding the future of the federal and state funds that are expected to be available to the region are collectively developed among DVRPC and its federal, state and transit partners.

These general assumptions include the expected levels of all future federal reauthorization acts, each state's share of the total authorized amount, and the DVRPC's share of the states' shares by sub-region under the current highway distribution formulae. State funds are assumed to maintain the respective FY 05 STIP levels and extended to the future tracking the respective state's federal share trends.

Because TEA-3/SAFETEA has not yet been enacted at press time, DVRPC has based the financial plan partly on a six-year apportionment analysis of S.1072 by the FHWA OFFICE OF LEGISLATION AND STRATEGIC PLANNING, which includes the new Equity Bonus program that replaces the current Minimum Guarantee approach. Under the newly proposed Equity Bonus provision, states can expect to receive, at minimum, 95% return of its motor fuel tax contributions by 2010. The existing approach guarantees that states will receive, at least, a

90.5% return of their tax receipts. Currently, Pennsylvania's rate of return is at about 120%, while New Jersey's rate of return is near its minimum at 91%. All amounts are held in constant dollar.

All pertinent planning principles and assumptions in identifying financial resources are collectively developed and reviewed by DVRPC and its federal, state and transit partners. Various funding levels for each DVRPC sub-region by mode follow the overall federal authorization levels and other governing assumptions consistent with the recent trends and projected growths in the use of transportation facilities. These pertinent planning principles and financial assumptions are detailed in Table 1. No new funding sources are recognized for the fiscally constrained plan.

TABLE 1. FINANCIAL PLAN PRINCIPLES AND ASSUMPTIONS – FEDERAL & STATE SOURCES †

	Financial Plan Parameter	Planning Principle and Justification	Assumptions (2006-2010) ‡	Assumptions (2011-2030) §
Federal Funds	Totals [a]	Transportation Authorization Act	Roughly $ 255B [a]	12% increases every 6 years
	Hwy/Transit Splits	Proportionate to Titles I & III in S.1072	80/20 after take-downs (3%) «	80/20 after take-downs (3%) «
	State Shares »	% by mode after the take-downs; 95% equity by 2010	PA – 4.7% (hwy); 3.8% (trnst) NJ – 2.9% (hwy); 5.5% (trnst)	PA – 4.6% (hwy); 3.7% (trnst) NJ – 3.3% (hwy); 6.2% (trnst)
	DVRPC Shares	% by mode of the respective state's shares	PA – 26% (hwy); 65% (trnst) NJ – 18% (hwy); 12% (trnst)	PA – 26% (hwy); 66% (trnst) NJ – 20% (hwy); 12% (trnst)
State Funds	Totals	Proportionate to FY 2005 STIP levels	PA – $1.8B (hwy); $1.9B (trnst) NJ – $3.4B (hwy); $2.6B (trnst)	Tracks the respective state's federal share trends [1]
	Hwy/Transit Splits	Proportionate to FY 2005 STIP levels	PA – roughly 48 / 52 NJ – roughly 56 / 44	Preserve the split ratios
	DVRPC Shares	% by mode of the respective state fund totals	PA – 26% (hwy); 63% (trnst) NJ – 10% (hwy); 25% (trnst)	PA – 26% (hwy); 66% (trnst) NJ – 12% (hwy); 25% (trnst)

NOTE:

† Local funds do exist in the region, but are deemed marginal. Other financial resources including the Turnpike and toll revenues are identified by respective authorities and agencies, and as such, are not considered in the DVRPC's LRP.

‡ Short-term assumptions are derived from recent trends and available knowledge.

[a] Based on the TEA-3/SAFETEA estimate of $300 B beginning in FFY 2004 and a 12% increase in the subsequent TEA. Assumes a six-year cycle for all present and future federal reauthorization bills.

§ Long-term assumptions reflect the DVRPC's LRP vision and policies for the future where appropriate.

« The take-downs, typically 2% - 3% of the authorized total, include provisions for research, safety, and other miscellaneous items.

» Includes Earmark and Demo funds at the same proportion as in ISTEA and TEA-21. 95% doner/donee equity adjustments are proportionate to the yearly apportionment changes in S.1072, which achieves the 95% equity by 2010.

[1] State funds are independent of the federal 95% equity changes.

Revenue

In all, DVRPC anticipates that over $57.3 billion will be available from traditional financial sources for the region for regionwide transportation improvements over the life of *DESTINATION 2030*. This amount is based on the $300 billion TEA-3/SAFETEA total as a starting point. Table 2 details the estimated *DESTINATION 2030* resource amounts by mode, funding source and sub-region.

TABLE 2. ESTIMATED FINANCIAL RESOURCES BY MODE, FUNDING SOURCE AND SUB-REGION †

Mode	Funding Source	PA Sub-region	NJ Sub-region	DVRPC Total
Hwy	Federal	$ 14.5 B	$ 6.1 B	**$ 20.6 B**
	State	$ 4.6 B	$ 4.1 B	**$ 8.7 B**
	Subtotal	**$ 19.1 B**	**$ 10.1 B**	**$ 29.3 B**
Transit	Federal	$ 7.1 B	$ 2.4 B	**$ 9.5 B**
	Federal (New Start) ‡	$ 0.6 B	$ 0.6 B	**$ 1.2 B**
	State	$ 11.5 B	$ 5.9 B	**$ 17.4 B**
	Subtotal	**$ 19.2 B**	**$ 8.9 B**	**$ 28.1 B**
Grand Total		**$ 38.3 B**	**$ 19.0 B**	**$ 57.3 B**

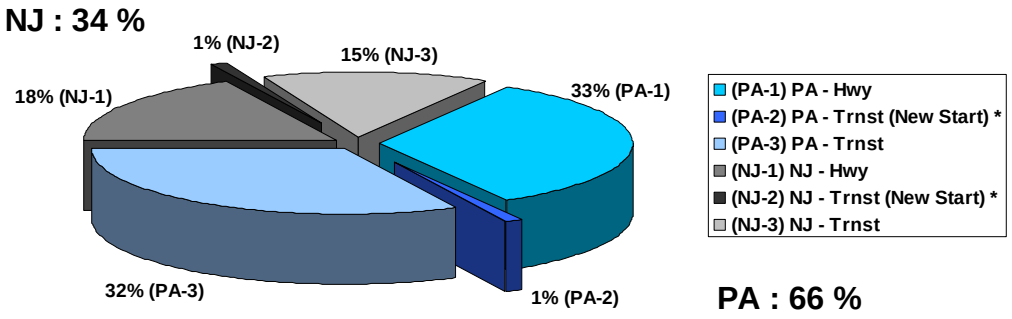
NOTE:

† All amounts are tentative DVRPC estimates over the life of the LRP, and are based on the $300 B estimate for TEA-3/SAFETEA. All figures are in 2005 dollars, and are rounded off to the nearest tenth of a billion.

‡ Represents the discretionary federal matching amount for transit new start projects in respective sub-region. Currently, FTA meets roughly 4%-5% of all New Starts demands with the Full Funding Grant Agreements. Upon consultation with FTA, DVRPC assumes that the region receives two New Start matches over the life of the LRP, which are evenly divided between the two sub-regions. It is extremely rare that any new transit projects to receive more than $ 0.6 B in 5309 New Starts money.

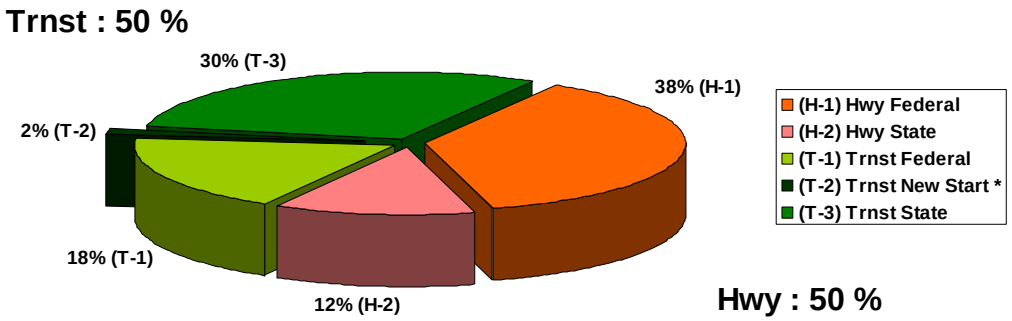
The assumed total translates into roughly $38.3 billion for the Pennsylvania sub-region and $19.0 billion for the New Jersey sub-region over the life of the long-range plan. As structured, the Pennsylvania sub-region claims almost 2/3 of the total funds identified for the region. Illustration 1 shows how $57.3 billion is allocated by mode and by sub-region. Of the assumed total, roughly 54% is from federal sources; the rest is from the respective state funds. Illustrations 2 and 3 detail the fund composition by mode in the sub-regions.

ILLUSTRATION 1. REGIONWIDE ($57.3 B) ALLOCATION BY SUB-REGION



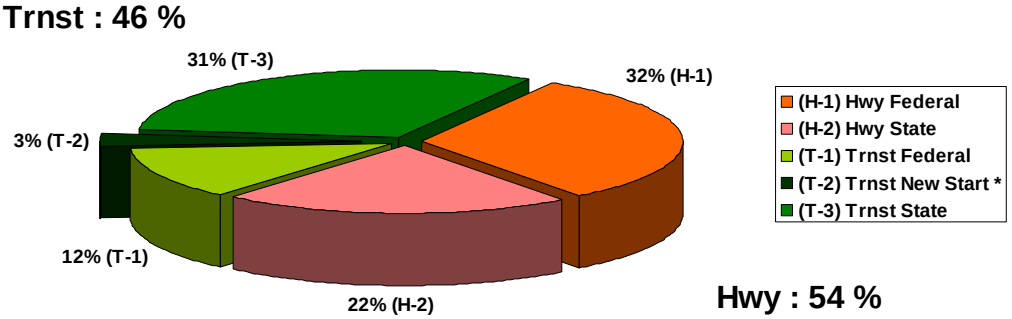
Note: From the assumed total of $57.3 billion. Federal Transit New Start funds (PA-2; NJ-2) are pulled out slightly to indicate their discretionary nature. Percentages correspond to the expected amounts, which are not guaranteed.

ILLUSTRATION 2. SUB-REGIONAL ($38.3 B) ALLOCATION BY MODE – PENNSYLVANIA



Note: From the assumed sub-regional total of $38.3 billion. Federal Transit New Start fund (T-2) is pulled out slightly to indicate its discretionary nature. Percentage corresponds to the expected amounts, which is not guaranteed.

ILLUSTRATION 3. SUB-REGIONAL ($19.0 B) ALLOCATION BY MODE – NEW JERSEY



Note: From the assumed sub-regional total of $19.0 billion. Federal Transit New Start fund (T-2) is pulled out slightly to indicate its discretionary nature. Percentage corresponds to the expected amounts, which is not guaranteed.

GARVEE Bonds in New Jersey

Beginning in FY 2006, NJ DOT will begin using a federal innovative financing program (Grant Anticipation Revenue Vehicles, or "GARVEEs") to finance portions of its high-cost bridge program. NJ DOT is facing a critical need to fund a series of these bridges – each costing more than $100 million to build – over the next several years. The projects are all eligible for federal aid, but due to their size would consume a major portion of the capital program in the year they are ready for contract award. GARVEE bonds are a mechanism offered by FHWA to address this type of problem. GARVEEs are in use in 22 states. Under this mechanism, FHWA authorizes a project agreement that reimburses the state for project debt service over a number of years rather than construction outlays. The state agency in turn issues GARVEE bonds which provide the funds to cover construction outlays. Future federal appropriations are pledged to pay debt service on the GARVEE bonds. GARVEE bond maturities are flexible, but a typical payback period is 12 years, which corresponds to two standard six-year federal authorization programs. The STIP assumes that GARVEE financing will be used on three projects within the three-year funding window: Route 52 Contract A (FY 2006), Route 139 Contract 3 (FY 2007), and Route 52 Contract B (FY 2008). None of these projects are within the DVRPC region, but the use of GARVEE bonds will impact revenue sources at the statewide level. Route 52 Contract A has been selected as the first project for GARVEE funding because of the poor condition of the four bridges on the causeway, the delay in construction that would be caused by waiting for conventional financing, the cost and annoyance of continual emergency repairs (including large pieces of concrete falling from the structures), and the importance of the causeway as an emergency evacuation route. Use of the GARVEE mechanism will enable these important projects to go forward without a major impact on the use of federal funding in any one year and without a massive dislocation in the normal share of federal funding available in each of three MPO areas in the state. Although GARVEE funding requires the assumption of some debt over time, well under 10 percent of New Jersey's expected annual federal funding will be encumbered under the proposed plan, assuming all three projects go forward as programmed. The financing plan will also require debt service payments. However, the cost of debt service should be more than offset by avoidance of the costs of delay: recurring expenditures for maintenance and the possible increase in construction contract costs. GARVEE bonds are a proven financing mechanism and NJDOT expects no difficulty in the marketing of these instruments. However, in order to provide additional reassurance, NJ DOT has identified resources from statewide Trust Fund programs (Unanticipated Design, Right of Way, and Construction Expenses, State and the Resurfacing Program) as emergency backing in the range of $50 to $70 million a year for three years for the first GARVEE project.

Expenditure

The financial plan also describes anticipated usage of the identified resources over the life of Plan. Identified highway and transit funds are allocated to various plan funding categories, and the percent proportions dedicated represent the DVRPC's long-term transportation vision for the future.

There are five categories in both highway and transit. They are:

Highway

- ROADWAY RECONSTRUCTION/REHABILITATION/RESURFACE/RESTORATION
- BRIDGE REPLACEMENT/RESTORATION
- SAFETY & OPERATIONAL IMPROVEMENTS
- NEW CAPACITY
- OTHER (including ITS and bike/ped trail projects)

Transit

- TRACK & SYSTEM REHABILITATION/RESTORATION
- VEHICLE REHABILITATION/RESTORATION/REPLACEMENT
- SYSTEM & OPERATIONAL IMPROVEMENTS
- NEW CAPACITY
- OTHER (including park & ride and ITS projects)

The *ROADWAY RECONSTRUCTION/REHABILITATION/RESURFACE/RESTORATION* and *BRIDGE REPLACEMENT/RESTORATION* categories are two highway maintenance categories. Long-term needs in these two categories are generally not individually listed in the Plan, but funds are set aside for all appropriate projects rising from the regional transportation system needs. Those projects will be able to draw from the allocated amount as they advance into the TIP process throughout the life of the Plan, so long as the allocated category funds are not depleted. Likewise, on the transit side, the *TRACK & SYSTEM REHABILITATION/ RESTORATION* and *VEHICLE REHABILITATION/RESTORATION/REPLACEMENT* categories are the maintenance categories for the long-term needs. These funds will be shared between SEPTA and PUT in the Pennsylvania sub-region and between NJ Transit and PATCO in the New Jersey sub-region. Individual transit projects in the maintenance categories are not generally listed on the Major Regional Project list, either.

The highway *NEW CAPACITY* category is for projects that construct new roads and interchanges or that provide additional capacity (e.g. through lanes) on existing facilities. Identified needs are great in this category, and an evaluation exercise has been performed to help prioritize projects for inclusion in the Major Regional Project list. 10% allocation of funds in this category also generally

adheres to the region's "fix-it-first" approach. In Pennsylvania, PennDOT has been implementing an "80/20" approach in favor of maintenance categories. In New Jersey, emphases on Smart Growth have placed a 4% cap on highway new capacity as a general statewide policy direction of NJ DOT. The allocated 10% amount in New Jersey, developed in consultation with NJ DOT, represents the DVRPC's long-range vision. All identified highway *NEW CAPACITY* projects included in the Major Regional Project list will only utilize 9% of the total highway funds allocated by state. The remaining 1% (or 10% of the 10% allocated to the highway *NEW CAPACITY*) will be held in reserve for emerging future projects yet to be identified.

On the transit side, the *NEW CAPACITY* category funds projects that are new transit initiatives. In identifying available financial resources in this category, the federal discretionary funds are treated separately from other traditional sources. Currently, FTA meets roughly 4%-5% of all New Starts demands with the Full Funding Grant Agreements. Upon consultation with FTA, DVRPC assumes that the region receives two New Start matches over the life of the LRP, which are evenly divided between the two sub-regions. It is extremely rare that any new transit projects to receive more than $ 0.6 B in 5309 New Starts money. Upon consultation with FTA, DVRPC expects that the region will secure about $1.2 billion of the federal New Start match money over the life of the plan, and that each state will commit approximately the same amount for the respective sub-region. Percentages for "As-Identified" in Table 3 are derived from this assumption from a total excluding the discretionary money.

The long-range plan also allocates funds to the *SAFETY/OPERATIONAL IMPROVEMENTS* and *OTHER* categories in highway. There are *SYSTEM/OPERATIONAL IMPROVEMENTS* and *OTHER* categories for comparable projects on the transit side. However, projects in these categories are typically identified as needs arise or are not considered major regional projects. Therefore, individual projects in these categories are not noted on the Major Regional Project list in the long-range plan.

Resulting funding scheme shown in Table 3 is based on recent trends, existing constraints and anticipated future needs, and is a collective recommendation from technical staff at DVRPC and its federal, state, and local highway and transit partners.

Table 3. Estimated Financial Resources by Funding Category †

Mode	Funding Category		PA Sub-region Allocation %	PA Sub-region 25-Year Estimate	NJ Sub-region Allocation %	NJ Sub-region 25-Year Estimate	DVRPC Total
Hwy	Rdwy Rcns/Rhb/Rsf/Rstrtn		45.0 %	$ 8.6 B	35.0 %	$ 3.5 B	$ 12.2 B
	Bridge Rplcmt/Rstrtn		25.0 %	$ 4.8 B	20.0 %	$ 2.0 B	$ 6.8 B
	Safety & Op Imp		15.0 %	$ 2.9 B	25.0 %	$ 2.5 B	$ 5.4 B
	New Capacity ‡		10.0 %	$ 1.9 B	10.0 %	$ 1.0 B	$ 2.9 B
	Other (ITS, bike/ped, etc.)		5.0 %	$ 1.0 B	10.0 %	$ 1.0 B	$ 2.0 B
	Subtotal		**100.0 %**	**$ 19.1 B**	**100 %**	**$ 10.1 B**	**$ 29.3 B**
Transit [1]	Trk & Sys Rhb/Rstrtn		37.5 %	$ 7.0 B	35.0 %	$ 2.9 B	$ 9.9 B
	Vhcl Rhb/Rstrtn/Rplcmt		37.0 %	$ 6.9 B	30.0 %	$ 2.5 B	$ 9.4 B
	Sys & Op Imp		15.0 %	$ 2.8 B	15.0 %	$ 1.2 B	$ 4.0 B
	New Capacity	As Identified §	5.5 %	$ 1.0 B	15.0 %	$ 1.2 B	$ 2.3 B
		New Start «		$ 0.6 B		$ 0.6 B	$ 1.2 B
	Other (P&R, security, etc.)		5.0 %	$ 0.9 B	5.0 %	$ 0.4 B	$ 1.3 B
	Subtotal			**$ 19.2 B**		**$ 8.9 B**	**$ 28.1 B**
Grand Total				**$ 38.3 B**		**$ 19.0 B**	**$ 57.3 B**

NOTE:

† All figures are in 2005 dollars, and are rounded off to the nearest tenth of a billion.

‡ 10% highway new capacity in Pennsylvania adheres to PennDOT's 80/20 "fix-it-first" approach, and includes 9% for identified projects and 1% for contingency. In New Jersey, a 4% cap on new capacity is a general direction of the statewide policy at NJ DOT. 10%, which also entails 9% identified plus 1% contingency, represents DVRPC's long-range vision.

§ Represents non-federal only, and does not include discretionary federal matches for transit new start projects. See notes « and [1] below.

« Represents the discretionary federal matching amount for transit new start projects in respective sub-region.

[1] The funding allocation scheme for transit is a collective recommendation from technical staff at DVRPC, SEPTA, PUT, DRPA, and NJ Transit based on recent trends and existing constraints.

TRANSPORTATION

EVALUATION CRITERIA FOR SELECTING PROJECTS

Evaluation Criteria for Linking Transportation Investments to the Goals of the Long Range Plan

The *Destination 2030* Long Range Plan includes a set of transportation projects to be carried out over the life of the Plan. The transportation projects serve as a tangible implementation of the Plan's goals and policies. The projects included in the plan are major regionally significant projects that will have an impact on regional travel. Smaller scale projects, such as individual intersection improvements and bridge replacements, are not specifically listed in the plan, but are considered consistent with the plan.

Destination 2030 seeks to create improved linkages between the transportation projects identified in the Plan and the goals and policies of the Plan. Evaluation criteria were established for each of the six primary transportation goals and are shown below. The evaluation criteria cover an array of project types. Some criteria are suitable for all project types while others may only pertain to highway or transit projects. Projects are grouped together by funding category (i.e., reconstruction, new capacity, etc.) to facilitate easier comparisons. A positive response to a given criteria generally indicates a desirable attribute. Consequently, the more criteria that are checked, the more a project may be considered to be meeting the goals of the plan. The matrix that follows this section shows the results of the evaluation of major regional projects.

Goal:

Improve safety by reducing travel hazards through the application of technological improvements and by bringing our transportation system up to modern standards.

Evaluation Criteria:

- Is project located in a high accident location with more than twice the statewide average number of accidents for similar type facilities?

- Does the project improve safety by reducing the number or severity of accidents which occur on highways or transit systems by reconstructing a facility to modern standards or improving the geometry or alignment of a facility?

Goal:

Reduce congestion by making the transportation infrastructure more efficient, instituting transportation demand management strategies and providing alternatives to the single-occupant vehicle.

Evaluation Criteria:

- Is the project located in a congested corridor as identified in the regional Congestion Management System?

- Is the project a transportation demand management strategy or does it provide an alternative to or improve the area coverage and/or operation of an alternative to the single-occupant vehicle?

Goal:

Rebuild the transportation infrastructure with a focus on maintaining our current system before expanding capacity to new areas.

Evaluation Criteria:

- Does the project maintain or improve an existing facility?

- Does this project serve or support an existing Plan Center as identified in the Land Use Plan Map?

Goal:

Enhance the environment by ensuring transportation investments improve or preserve our natural environment

Evaluation Criteria:

- Is the project located beyond an area targeted for preservation in the Greenspace Network or Conservation Focus Areas?

- Will the project contribute to a reduction in vehicle miles traveled by reducing single-occupant vehicle trips or promoting the use of public transit and ridesharing and/or improving or expanding bicycle and pedestrian facilities?

Goal:

Increase mobility by providing additional choices for travel and guaranteeing the transportation system accommodates everyone.

Evaluation Criteria:

- Does the project serve an area with a large proportion of households without access to an automobile?
  AND
  Will the project provide more non-auto options for commuters by:
  - Improving the operation of transit service and/or increasing the coverage area.
  - Increasing the number of multi-modal transportation centers and park and ride facilities, or
  - Encouraging pedestrian and/or bicycle use or supporting transit-oriented land use and mixed-use development?

- Will the project establish opportunities for linkages between transportation modes or otherwise improve the intermodal connectivity of the transportation system?

Goal:

Link transportation improvements to land use and economic development policies outlined in the Long Range Plan in order to create a holistic built environment.

Evaluation Criteria:

- Is the project located in a developed or future growth area as shown on the Land Use Map?

- Is the project located in a Core City or Developed Communities as shown on the Planning Areas Map?

- Will the project improve access to major rail freight or port facilities?

- Will the project improve access to areas of major employment concentration based on the map of Major Employment Centers?

TRANSPORTATION

MAJOR REGIONAL PROJECTS

Major Regional Transportation Projects

The Destination 2030 Plan offers a framework for future transportation investments and puts forth a set transportation projects. The projects help to carry out the Plan's vision and goals. The projects listed in the Plan are major, regional projects that have significant impact on regional travel. All major regional projects included in the Long Range Plan were evaluated to determine how well they meet the goals of the Plan. The evaluation was based on 14 criteria that measure attainment of the transportation goals of the Plan. More details on the evaluation process is contained in the *Evaluation Criteria for Selecting Projects* section of this document

The project selection process was rooted in consensus-building, technical rigor and flexibility. As previously noted, the vast majority of funds anticipated over the life of the Plan will be allocated for rebuilding and maintaining our existing roads, bridges and transit facilities. These projects are generally, not considered major, regionally-significant projects. Therefore, they are not specifically listed in the Long Range Plan. However, money must be available to fund these projects and Destination 2030 has set aside sufficient funds to meet anticipated needs for these projects. The Financial Plan contains more details on the allocation of anticipated funds over the life of the Plan.

The Long Range Plan contains over 100 major regional projects. They are grouped by funding category to more readily show the financial constraint of the Plan. The projects are listed and mapped in the *Major Regional Transportation Projects* section of this document.

TRANSPORTATION

TRANSPORTATION MODULES

TRANSPORTATION

TRANSPORTATION MODULES

I. AVIATION

The Year 2030 Regional Aviation System Plan Update/Adjustment

To maintain a functioning and competitive regional airports system, certain facility goals need to be achieved through specific improvements. Those improvements are at not only the commercial airports in our region, but also the General Aviation and Business Aviation facilities. DVRPC developed policy goals and a list of projects that are most important to maintain competitiveness and achieve the regional goals set forth in this and previous vision plans for the next 25 years.

Policy Goals:

The DVRPC Office of Aviation Staff works relentlessly to integrate and improve Aviation policies at all governmental levels. In view of a looming federal and state funding crisis in the aviation trust fund, which provides the main funding source to non-commercial business and GA airports for safety/security, and capacity projects, DVRPC recommends study of an increase in the Jet Fuel Tax and other revenue sources to remedy revenue losses due to airline service cutbacks.

Current federal policy prevents the sale of obligated airports even to parties willing to continue to utilize the land for aviation purposes. DVRPC will work with the states and the FAA to resolve the interpretation of issues restricting such transactions. In addition, more federal and state funds should be used for the purchase of land and easements to improve safety and satisfy GPS minimums. DVRPC continues to integrate regional airport capital needs with state and federal funding Programs (ACIP) to insure adequate regional aviation infrastructure investment.

Regional GA and commercial airports are experiencing continued land use pressure, which in turn hinders necessary airport development from being implemented. The need to introduce legislation to force airport municipal zoning and coordination of compatible land-use around airports on every planning level is a priority. Airport sponsors must also develop business plans for their facilities to satisfy airport and municipal needs. DVRPC will work to find alternative funding sources for our airports to ensure a safe, profitable and competitive regional aviation system.

Specific Facility Goals and Recommendations:

1) Runway/Taxiway extensions:

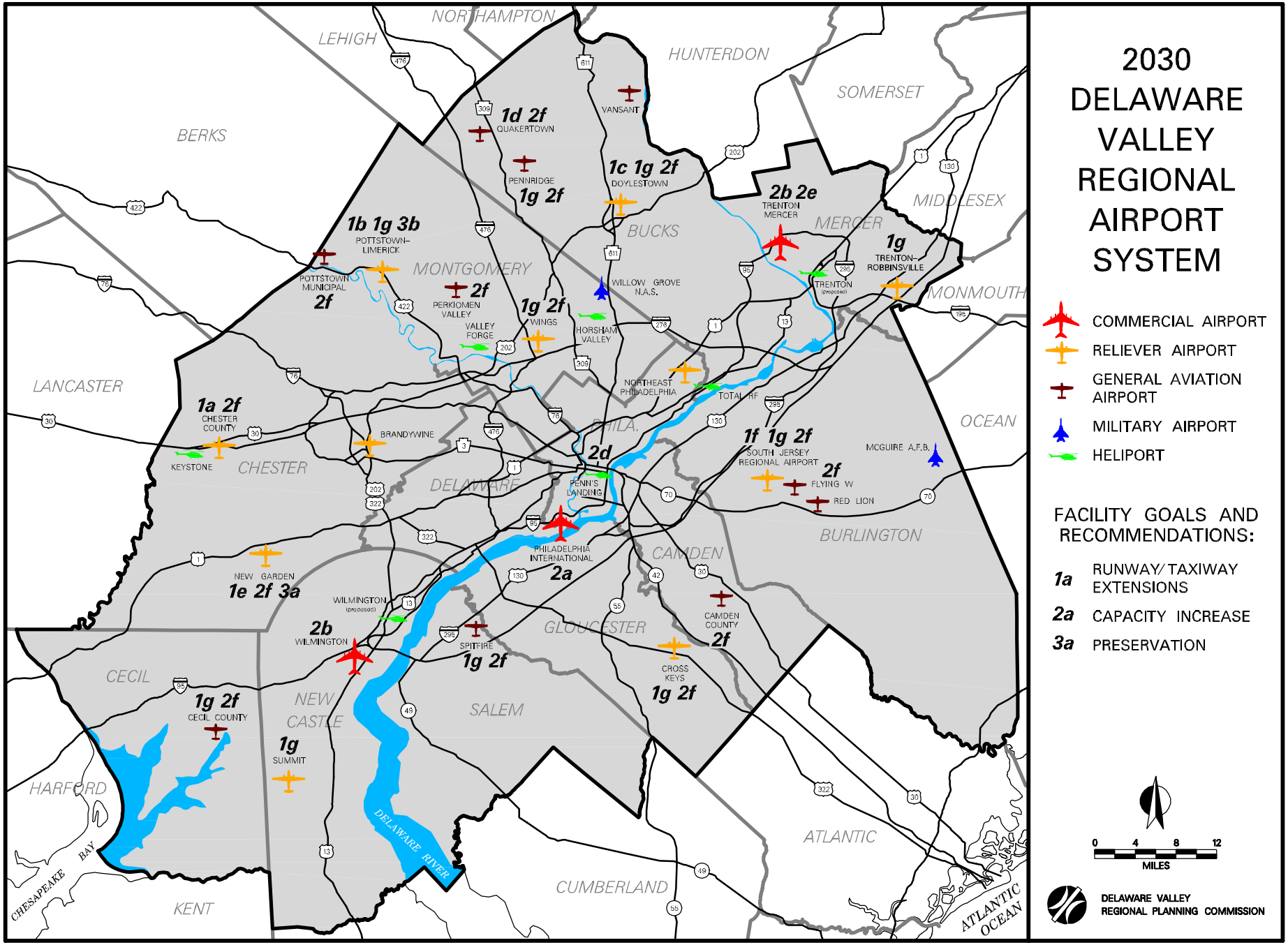
    a) Chester County, relocate and extend runway 700 feet to 6100 feet total length.
    b) Pottstown Limerick, extend runway 1201 feet to 4570 feet total length.
    c) Doylestown, extend runway 800 feet to 3800 feet total length.
    d) Quakertown, extend runway 600 feet to 3800 feet total length.
    e) New Garden, extend taxiway 1000 feet to 2300 feet total length.
    f) South Jersey Regional, extend runway 1600 feet to 5500 feet total length.
    g) System wide, where appropriate implement safety area and approach improvements to allow small corporate jet operations.

2) Capacity increase:

    a) Increase Philadelphia International Airport capacity by 30% including airtraffic control, runway/taxiway and passenger terminal improvements.
    b) Study potential capacity increases and service improvements at existing smaller regional commercial airports.
    c) Propose a new commercial airport location in central New Jersey.
    d) Penn's Landing Heliport, conduct FAA-AIP funded feasibility study, and extend pier to increase operating and storage capacity.
    e) Trenton Mercer, construct 2 new gates and increase parking lot capacity.
    f) System wide, construct hangars to house 500 additional aircraft at regional General Aviation (GA) and Reliever (business) airports and heliports.

3) Preservation:

    a) New Garden, public acquisition by New Garden Township.
    b) Pottstown Limerick, public acquisition by County (Montgomery County Airport Authority) or Municipality.
    c) System wide, conduct and update outdated Master Plans and Airport Layout Plans, develop airport business plans.



2030 DELAWARE VALLEY REGIONAL AIRPORT SYSTEM

- COMMERCIAL AIRPORT
- RELIEVER AIRPORT
- GENERAL AVIATION AIRPORT
- MILITARY AIRPORT
- HELIPORT

FACILITY GOALS AND RECOMMENDATIONS:

- ***1a*** RUNWAY/TAXIWAY EXTENSIONS
- ***2a*** CAPACITY INCREASE
- ***3a*** PRESERVATION

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MILES

DELAWARE VALLEY REGIONAL PLANNING COMMISSION

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TRANSPORTATION

TRANSPORTATION MODULES

II. GOODS MOVEMENT

Freight Vision Statement, Policies, and Strategies
DVRPC 2030 Transportation Plan

I. Year 2030 Transportation Vision Statement

Economic development will be advanced through freight transportation infrastructure, investment, and policies.

The planning process will place emphasis on economic development. Transportation policies, regulations, and projects will support the needs of manufacturers, carriers, and consumers. The freight network is recognized as a cornerstone of efforts to foster a flourishing regional economy.

II. Transportation Policies and Strategies: Freight Movement

A. Identify strategies and improvements that maximize air, rail, ship, and truck modal contributions to the flow of goods, including connections between the modes and support facilities.

- Collect, analyze, and disseminate strategic goods movement data using information from public sources and facility owners and operators.
- Utilize and cultivate all available strategies and technologies to address capacity and bottleneck issues in corridors and for key freight generators and attractors.
- Employ the Delaware Valley Goods Movement Task Force to identify and advocate policies, regulations, and projects that promote the movement of freight.
- Promote orderly growth and development and a hierarchical transportation network that most efficiently uses primary corridors and feeder routes, and that minimizes total travel.
- Promote compatible interface and balance competing demands posed by the mixing of freight and passenger operations.

B. Elevate considerations of projects that promote efficient freight movement and economic development.

- Maintain the freight community=s close involvement in federal and state funding programs.
- Document and communicate the positive economic and quality of life effects resulting from freight improvements, as well as the alternative consequences if no

improvements are made, to decision makers when funding allocation priorities are being established..

- Support partnerships between the freight community, economic development agencies, adjacent regions and states, multi-national corporations, and foreign diplomatic offices.

C. Integrate freight facilities and operations with community goals.

- Promote safety and environmental programs that minimize the negative impacts of freight operations, while supporting the positive contributions derived from freight movement.
- Prepare education materials and *big picture views* that explain freight and distribution practices, trends, implications, and benefits to the private sector, the general public, and affected public agencies.
- Inform local elected officials about zoning, planning ordinances, and site design strategies which help better manage freight activity.
- Advance the reuse of brownfields as transportation and distribution facilities.
- Support efforts to assure national security and national defense.

TRANSPORTATION

TRANSPORTATION MODULES

III. BICYCLE/PEDESTRIAN

Bicycling and walking in the 2030 Long Range Plan

Vision

The Delaware Valley is a place where people of all ages choose to bicycle and walk for routine transportation, as part of an active, healthy lifestyle, and to experience the remarkable natural and cultural resources of the region. Residents and visitors alike are able to conveniently walk and bicycle with confidence and a sense of security in every community.

Goals

DVRPC embraces the twin goals of the USDOT: doubling the percentage of trips by foot and bicycle while reducing the number of injuries and fatalities suffered by bicyclists and pedestrians by 10 percent from current levels.

To accomplish this requires a program addressing the 4 E's: Engineering, Education, Enforcement and Encouragement. To this end, DVRPC:

- Works with the state DOTs, counties and municipalities to accommodate bicyclists and pedestrians in all highway projects.
- Works to accelerate the development of a regional trails network.
- Serves as a catalyst for education, encouragement and enforcement programs to increase safe bicycle and pedestrian travel.

Policies

Design streets and highways for all users

- Highway projects are designed to accommodate bicyclists and pedestrians in accordance with USDOT policy and guidance and each state's Bicycle and Pedestrian Master Plan.
- TIP project sponsors routinely address bicyclist and pedestrian accommodation in project scope descriptions.

- DVRPC evaluates highway construction, reconstruction and resurfacing projects and recommends the appropriate level of bicyclist and pedestrian accommodation, addressing physical and right-of-way constraints, measures of probable demand, various area and roadway designations of state and regional plans, designated hazardous school walking routes, connectivity with the regional trail network, and roadway operational characteristics.
- Highway projects meeting a critical combination of factors as listed above are designed to accommodate "Group B" basic adult bicyclists in accordance with FHWA guidance and incorporate sidewalks. All other projects are designed to accommodate "Group A" (advanced) bicyclists except where bicycles are prohibited; in this instance, accommodation elsewhere within the right of way or corridor is investigated. Funding is allocated for necessary retrofit design work otherwise not provided for in highway maintenance program budgets.
- DVRPC provides technical and administrative assistance to municipalities for the development of municipal bicycle and pedestrian plans.
- Major bridge construction and reconstruction projects provide new opportunities to cross the Delaware River, the region's longest single barrier to non-motorized travel, by bicycle or on foot. DVRPC works with bridge and turnpike authorities and commissions to incorporate non-motorized access in project scopes, plans and designs, in compliance with USDOT policy; and to remove financial, legal, statutory, regulatory, and technical impediments to implementation.
- DVRPC works with its planning partners to foster the creation of safe walking and bicycling routes to primary and secondary schools.
- DVRPC and the state DOTs systematically record and measure progress toward the plan's goals and objectives. DVRPC performs a regional bicycle travel survey once every ten years, and keeps an updated inventory of regionally significant trails and trail development projects; and the DOTs record the presence of bike lanes and sidewalks in their Roadway Management System inventories.

Promote development of a regional trail network

- DVRPC works with its planning partners to accelerate the movement of trail projects through the project development pipeline.
- DVRPC supports the completion of the East Coast Greenway through the region.

  DVRPC has developed a future trails network that identifies existing and proposed trails. Funding for future trail projects is accounted for in the financial plan.

Promote safe non-motorized travel through education, enforcement and encouragement

- DVRPC promotes the inclusion of bicycle education curricula in middle schools through the dissemination of information and the benefits of such programs.
- DVRPC encourages adherence to and enforcement of vehicle laws for the safety of bicyclists and pedestrians through execution and funding of education and awareness campaigns and regional conferences.
- DVRPC works with transportation management associations to encourage more and safer bicycling and walking.

Accommodate bicycles on public transportation

- Transit operators strive for constant improvement in the offering and marketing of bicycle transport and parking amenities for their customers.

DVRPC works with transit operators to ensure secure bicycle parking facilities at all rail stations and transportation centers sufficient to meet current and potential demand. Operators keep an inventory of such facilities as part of an asset management system.

TRANSPORTATION

TRANSPORTATION MODULES

IV. INTELLIGENT TRANSPORTATION SYSTEMS

ITS Vision Statement
DVRPC 2030 Transportation Plan

VISION

According to national statistics, 55 percent of the congestion in major metropolitan areas is attributable to non-recurring congestion caused by accidents, special events, construction and maintenance activity, and other types of incidents. The goal of ITS is to implement an infrastructure to monitor traffic and transit networks, identify incidents as soon as possible, trigger an appropriate response, and notify the traveling public so they can take alternative routes or modes to avoid getting stuck in delays. Because traffic congestion does not recognize jurisdictional boundaries, a secondary goal of ITS is to establish institutional relationships that will allow different types of transportation agencies to coordinate their operations with each other, and with non-transportation organizations like police and fire departments.

ITS STRATEGIES

IMPLEMENT HIGHWAY ITS INFRASTRUCTURE

- Deploy basic field devices including closed circuit television (CCTV) cameras, variable message signs (VMS), and traffic flow detectors.
- Implement fiber optic communications networks to link field devices to operation centers.
- Establish operation centers at all major transportation organizations, operate centers 24X7.
- Install high speed E-ZPass lanes, security cameras at bridges and other sensitive transportation structures, and equipment for commercial vehicle operations.

IMPLEMENT INCIDENT MANAGEMENT PROGRAMS

- Deploy emergency service patrol vehicles to assist motorists.
- Utilize incident management task forces to improve incident management coordination. Task forces are composed of departments of transportation, state police, 911 dispatchers, tow truck operators, and local police, fire, and EMS personnel.
- Establish incident management response teams to coordinate a department of transportation's response to incidents.

- Use integrated corridor management control to dynamically implement expressway detours. Traffic signal timings on diversion routes would automatically change to reflect the surge in traffic. Blankout signs will delineate the detour route for motorists.

Implement Transit Management Programs

- Deploy advance control systems for rail and buses. This encompasses automatic vehicle location (ALV) for buses, and signal and electrical systems for rail.

- Modernize transit control centers to incorporate the latest technology.
- Implement advanced traveler information systems for transit riders, including smart bus stops, and VMS signs and public address systems for rail stations.
- Implement advanced passenger security systems.

Implement Traveler Information Programs

- Maintain public-private partnerships with traffic reporting services.
- Provide basic pre-trip and enroute travel information to the public.
- Deploy 511 telephone number for traveler information.

ITS Regional Initiatives and Policies

Below are items that need to be addressed on a regional basis by the ITS Technical Task Force and/or by individual agencies:

- Implement the Regional Integrated Multi-modal Information Sharing (RIMIS) information exchange network.
- Establish policies and priorities for implementing closed loop traffic signal systems and coordinating the signal systems across neighboring jurisdictions.
- Conduct a regional Smart Card study to evaluate the need and feasibility of implementing a regional advanced Smart Card based fare collection program.
- Conduct a regional study to evaluate various probe vehicle technologies for obtaining traffic flow information, and develop a regional consensus on the best approach. Traffic flow information will generate realtime travel time information for motorists.
- Develop policies to fund ITS maintenance and operations through the TIP. These costs are associated with maintaining field devices, leasing telecommunication lines, software maintenance, and staffing operation centers and emergency service patrols.