

Chapter 5: Fundamental Strategies

Five fundamental strategies form the framework of the Long Range Transportation Plan and subsequent transportation actions. These five strategies are presented in this chapter. Chapter Six contains more specific actions to implement each strategy. These actions are designed to contribute directly to supporting the Vision and achieving the transportation goals.

Fundamental Strategies ➤

1. **Preserve and maintain the existing transportation system**
2. **Improve the management of the existing transportation system**
3. **Develop and expand other modes of transportation**
4. **Provide additional roadway system capacity**
5. **Focus transportation investments**

The first four strategies are ranked in order of their relative importance and impact on the region and its residents. Actions intended to preserve and maintain the existing system will be more cost-effective and less intrusive on residents than building additional roadway capacity. Consequently, preference will be given to more cost-effective strategies.

The fifth strategy provides an overall framework for all transportation investments. The intent is to ensure that these investments are made in such a way that they support the Vision. Given the strong desire expressed by county residents to better manage growth, and that growth often results from transportation system expansion, the most important aspect of this strategy is to concentrate transportation investments in areas where growth is felt to be desirable. This approach, which proactively coordinates transportation investments with land use decisions, can create a more sustainable transportation system.

1. Preserve and Maintain the Existing Transportation System

The first step which should logically be taken in the effort to provide adequate access and mobility and to maximize the value of the transportation system is to ensure that the existing transportation system continues to provide at least as much capacity in 2030 as it does today. This means that the system must be maintained properly, and that steps must be taken to prevent the reduction of its operating capacity. Improved maintenance also includes taking steps to ensure the safe movement of people and goods.

Encroaching development and unlimited access onto the region's major roadways reduces system capacity. By guiding development, controlling access, and taking active steps to preserve the existing transportation system, investments that have already been made can be maintained to a large degree. Clearly, such actions are consistent with the Vision, Livable Delaware Initiative and the transportation goals and objectives.

2. Improve the Management of the Existing Transportation System

Increasing the capacity of the region's transportation system does not necessarily start with building new roadways or adding more buses. Improving efficiency through the use of technology (*intelligent transportation systems*) to better management of the existing system can increase capacity. DelDOT continues to improve the current system's capacity through implementation of various technology and management strategies referred to as Intelligent Traffic Management Systems (ITMS).

Congestion management strategies may consist of implementing traveler information systems that provide up-to-date, real-time information to help travelers make informed decisions, and choose more efficient routes to arrive at their destinations; incident management; and road weather management. Other strategies include automated fare collection systems reduce delays at transit stops, thus improving the efficiency. Better traffic signal systems can also improve the flow of traffic by eliminating unnecessary waiting at intersections. DelDOT has mainstreamed into every phase of operations and planning, various DelTrac technology. DelTrac utilizes technology to offer strategies and solutions to expedite the movement of buses and trains; to consult with other agencies, such as police and fire companies, during emergencies and special events; and to provide real time information through its website, through traffic advisory radio and electronic message signs. DelTrac consists of multiple integrated subsystems that provide real-time traffic control, monitoring and information. Transportation management strategies that utilize technology helps extend the life of the existing transportation system through efficiency and safety.

In 2003, DelDOT took over the management of E-ZPass in the state and created a state-of-art E-ZPass Service Center. E-ZPass has the potential to significantly reduce congestion on major roadways. According to DelDOT, E-ZPass lanes and highway-speed E-ZPass lanes reduce congestion allowing toll collection 3 to 6 times faster than at a cash booth. In addition, DelDOT is utilizing cameras to reduce red light running by up to 70% as a strategy to improve roadway safety for motorists as well as pedestrians.

Actions which help improve management of the existing transportation system will avert the need for new roadway facilities. They clearly support the Vision and help achieve the transportation goals while conserving resources such as land and money.

3. Develop and Expand Other Modes of Transportation

The next step in meeting the access and mobility needs of Kent Countians is to provide more transportation options so that residents don't have to own an automobile in order to get where they need to go.

Expanding facilities and services for other modes of transportation such as walking, bicycling, taxi, and transit, supports the Vision and Livable Delaware Initiative by increasing travel options for residents, providing basic mobility for those who cannot drive, and reducing the need to own an automobile. These improvements are not necessarily expensive. For example, providing a sheltered bench on which riders may wait for the bus or adding a half-mile of paved shoulder for bicyclists will allow and encourage people to use these other modes. Efforts should be exerted to make these modes more convenient, secure, and affordable. These alternatives provide environmentally sensitive as well as health conscience modes of travel.

Expanding facilities and improved efficiencies for other modes including freight supports the Vision and Livable Delaware Initiative by increasing economic development while reducing impacts to the environment. DeIDOT's Long Range Transportation Plan reflects the growing government interest in freight transportation. The approach is to work proactively and collaboratively with shippers and carriers to meet the needs of the state's businesses while balancing conflicts between the needs of citizens and community development objectives.

4. Provide Additional Roadway System Capacity

For the past century, transportation development efforts have been focused primarily on roads. The region now has an extensive network of excellent roads. Although the emphasis of the Long Range Transportation Plan is not on the construction of new roadway capacity, it will be necessary to provide additional capacity in cases where other strategies are not sufficient. Future roadway improvements will focus on mobility and connectivity in lieu of strictly additional lane miles.

Roadway improvements developed for the Long Range Transportation Plan are, for the most part, small scale. All future roadway improvements, with the exception of interstate-type facilities, should include facilities that support walking, bicycling, and transit.

5. Focus Transportation Investments

Supporting the four strategies previously identified is a transportation investment strategy that recognizes the important link between land-use and transportation. It is virtually impossible to plan for one without considering the other. Transportation demand is derived from land-use; people live in one place and work, shop, and play in another, creating the need for transportation and transportation of goods. In general and as otherwise described, the strategies are initially based on the Livable Delaware Initiative which describes guidelines regarding the general types of investments to be made in each Transportation Investment Area.

The Livable Delaware transportation investment strategy fully supports the Vision and the transportation goals, objectives and fundamental strategies of this plan. Investing in communities and developing areas will allow more efficient utilization of existing transportation resources and may lead to infill development and redevelopment. Maintaining the density of development (or even increasing density), in turn, will better support alternative modes of travel such as transit, and will make walking and bicycling more feasible. At the other end of the investment spectrum, preservation areas will reflect the region's vision of a region that retains its rural character, preserves recreational opportunities, and protects environmentally sensitive assets.

The four levels of investment areas identified in the 2004 Strategies for State Policies and Spending have been simplified to include the seven investment areas originally identified. These areas are depicted geographically on Figure 5.1. The following is a brief description of each of the investment levels with corresponding transportation strategy. This section includes definitions that provide an explanation of the various investment levels with a description of each associated investment area. In addition to investment areas associated with investment levels there are areas that require resource protection and sustainable growth in environmentally sensitive areas.

Summary of Investment Level 1 Transportation Strategy ➤

- ◆ Provide the greatest number of transportation options, emphasizing public transportation, walking and bicycling.
- ◆ Make existing infrastructure and planned improvements as safe and efficient as possible.
- ◆ Projects typically should include new or expanded facilities and services for all modes of transportation, including public transportation facilities and services when compatible with development patterns.
- ◆ Projects include those that manage traffic flow and congestion, support economic development and redevelopment efforts and encourage connections between communities.

Description of Investment Level 1 Area

People have historically congregated for access to convenient housing, commerce and social interaction. Whether they are called villages, towns or cities, these areas are characterized by a lively pace, a core commercial area, several modes of transportation and a variety of housing options, often ranging from detached single-family homes to multi-family apartments.

These population centers are often built around a traditional central business district or “downtown,” which offers a wide range of opportunities for employment, shopping and recreation. They usually have a concentration of cultural and entertainment facilities, and a wide array of public institutions, services and amenities (such as post offices, police, and fire stations, libraries, hospitals and other health care facilities). Although the scale of these population centers varies throughout the region, from the City of Dover to smaller towns such as Felton, the Strategies for State Policies and Spending document calls them all by one name: Investment Level 1 Areas.

These relatively compact patterns of development tend to have a human scale and are notably walkable. Investment Level 1 Areas provide a range of transportation choices, making it possible to pursue daily requirements by foot, bike, private vehicle depending, and in limited quantities and locations, transit.

Investment Level 1 Areas may also have overlooked opportunities in the form of underused or previously used sites (some of which are called “brownfields”), as well as a century or more of public and private investment in services, facilities and buildings. These are places where significant investment already exists in roads, bridges and airports, water and sewer systems, schools, commercial and industrial buildings and houses.

Investment Level 1 Areas provide regional and local identity and a sense of place to

personal and business activities. The Dover/Kent County MPO region contains 20 incorporated communities varying in size from its largest city, Dover, to smaller towns such as Hartley and Farmington. Intensely developed areas in and around Dover, Milford and Smyrna function in a similar manner. These Investment Level 1 Areas drive Delaware's economic engine.

The state's goals clearly recognize the value of these Investment Level 1 Areas and provide for their continued health and vitality through reinvestment and redevelopment, and through the efficient use and maintenance of existing public and private investments.

Summary of Investment Level 2 Transportation Strategy ➤

- ◆ **Encourage sensible development through a planned set of phased transportation investments, land use coordination, and policy actions consistent with zoning densities and designations.**
- ◆ **Transportation projects should expand or provide roadways, public transportation, pedestrian walkways, bicycle paths, and other transportation modes.**
- ◆ **Manage traffic flow, support economic development efforts, and encourage connections between communities.**

Description of Investment Level 2 Area

These diverse areas surround many municipalities and also seem to be the most popular portion of Delaware's developed landscape. They serve as transition areas between the Investment Level 1 Areas and the state's more open, less populated areas.

These areas are often characterized by a limited variety of housing types (predominantly detached single-family dwellings), commercial and office uses serving primarily local residents (example include food, drug, and video rental stores), and a limited range of entertainment, parks and recreation, cultural and institutional facilities.

Innovative developers, architects and land use experts recognize that the historic design of suburban developments could be improved by incorporating a mix of housing types and commercial uses as well as interconnecting roads, walkways and bikeways between developments. They also recognize that compact development strategies may fit within areas adjacent to existing towns and population centers. These elements, designed with a greater concern for aesthetics and the environment, would revive the feel of the traditional "village," providing a stronger sense of community.

Summary of Investment Level 3 Transportation Strategy ➤

- ◆ **Continue to invest in the regional roadway network, and in maintenance of the existing roadway system and roadway safety.**
- ◆ **Continue to protect the capacity of major transportation corridors such as Routes 1, 113 and 13 through the Corridor Capacity Preservation Program.**
- ◆ **Roadway improvements that are necessary to support new development activities will not be preferred. Investments will be prioritized in Investment Level 1 and 2 areas.**

Description of Investment Level 3 Area

Investment Level 3 areas are portions of county designated growth zones, development districts, or long term annexation areas in municipal comprehensive plans that aren't in the Investment Level 1 or 2 designations in the state's Strategy Map. In Kent County they mostly include areas outside Investment Level 1 or 2 Areas built within the county-designated "Growth (Overlay) Zone." This zone is determined by measuring a two-mile radius from existing wastewater system pumping stations. There are also areas designated as Investment Level 3 in the region where there are environmentally sensitive features, agricultural preservation issues, or other infrastructure issues which should be considered by State Agencies and local governments when considering spending decisions and/or development proposals.

Although these areas may be primarily used for agriculture today, they are experiencing development pressure, and may not remain pre-dominantly rural in the long term.

Summary of Investment Level 4 Transportation Strategy ➤

- ◆ **Preserve existing transportation facilities and services and manage the transportation system to support the preservation of the natural environment.**
- ◆ **Transportation projects should only include necessary drainage, maintenance and safety improvements and programs to manage regional highway facilities.**

Description of Investment Level 4 Area

Delaware's leading industry today is agriculture, as it was a century ago. The state's open spaces and rural vistas are critical components of the quality of life Delawareans enjoy, as are the small settlements and historic villages reflecting earlier times. Marshlands, wooded areas and a network of waterways support an abundance of wildlife, provide recreation and help define the Delaware scene.

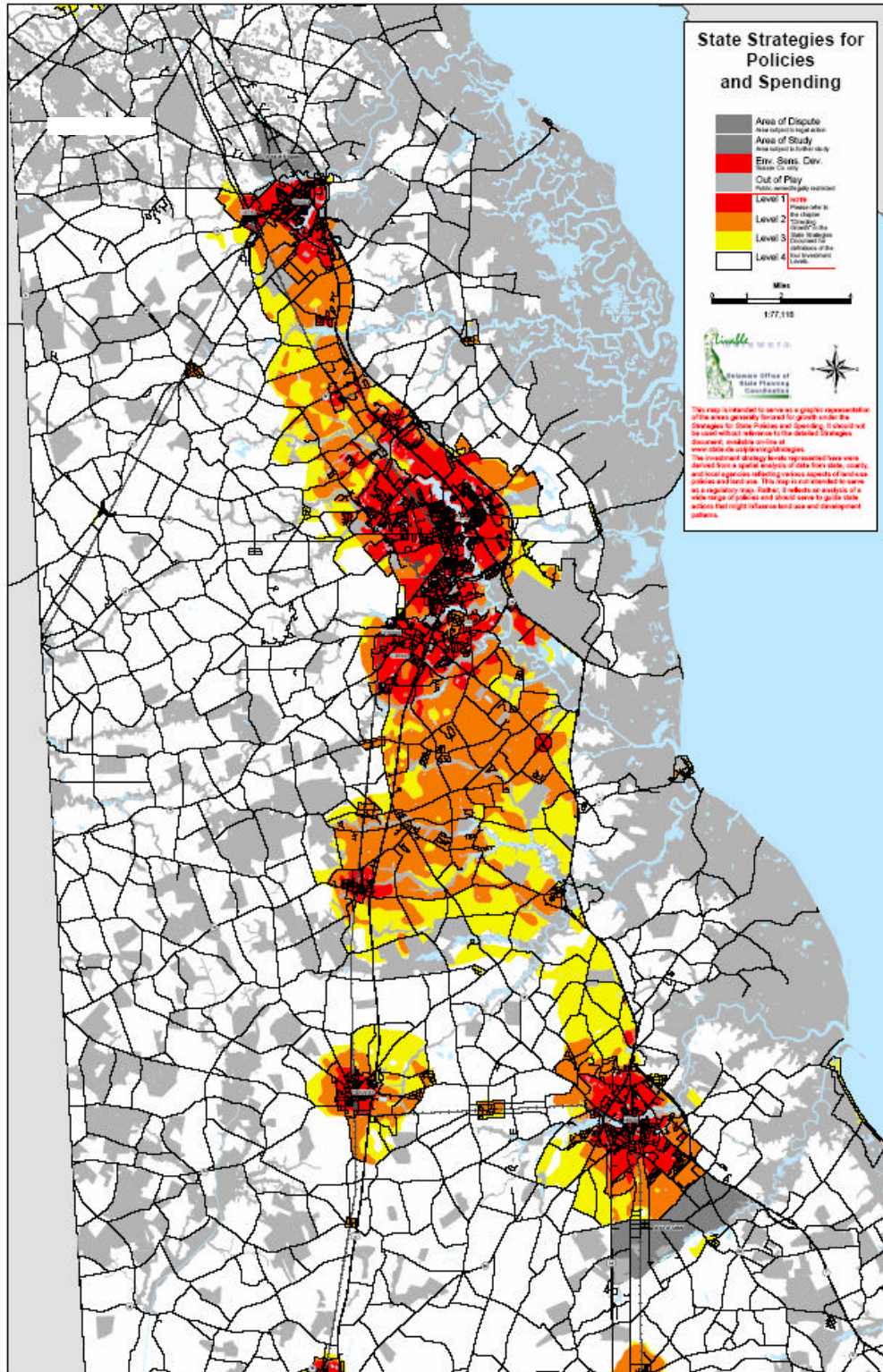
Delaware's Investment Level 4 areas are predominantly agricultural. These areas contain agribusiness activities, farm complexes and small settlements. They are typically found at historic crossroads or points of trade, often with rich cultural ties, such as Little Creek, east of Dover.

Investment Level 4 Areas also boast undeveloped natural areas, such as forestlands, and large recreational uses, state and county parks and fish and wildlife preserves. Sometimes, private recreational facilities, such as campgrounds or golf courses (often with associated residential developments), area also situated in Investment Level 4 Areas.

Some limited institutional uses may exist in such areas. Delaware's Investment Level 4 Areas are also the location of scattered residential uses, featuring almost entirely single-family detached residential structures. These are homes for those who value the quiet and isolation provided by locations away from more developed settings, albeit with an almost total reliance on private vehicles for every transportation need.

Delaware' Investment Level 4 Areas also include many unincorporated communities, typically with their own distinctive character and identity. These places reflect the rich rural heritage of the state. Investment Level 4 Areas depend on a transportation system of primarily secondary roads linked to roadways used as regional thoroughfares for commuting and trucking.

Figure 5.1 State Strategies for Policies and Spending



Source: Office of State Planning Coordination

