

Transforming
Transportation

The Delaware Story



Commitments to the Citizens of Delaware

1 **Commitment 1** To preserve and protect existing investments and assets

2 **Commitment 2** To integrate and manage the transportation system

3 **Commitment 3** To plan comprehensively for transportation improvements which foster mobility and provide for economic growth and urban revitalization

4 **Commitment 4** To use technology as a means of enhancing mobility and improving Departmental management

5 **Commitment 5** To listen to customers and involve them in planning and implementing policies and projects

6 **Commitment 6** To operate in a more business-like way

Promises for the Future

1 **Promise 1** To foster accountability by measuring performance of internal operations and of transportation services

2 **Promise 2** To integrate land use and transportation decision-making as a way of optimizing investments and preserving Delaware's quality of life

3 **Promise 3** To expand investments in people, technology and operations in order to provide better services and be more responsive to customers

4 **Promise 4** To work with citizens and county and local governments to insure transportation investments help make communities attractive and livable while supporting the growth and development of the state

Transform:

To change the form or outward appearance;
to change the condition, nature or function;
to convert; to change the character or
personality.



The Delaware Department of Transportation is transforming the very way it thinks about, plans for and implements transportation services. The old transportation paradigm focused solely on building more roads to alleviate congestion. The new paradigm recognizes the complexity of transportation problems. The shift means the Department is doing business very differently than it did a decade ago.

In the mid-1990s, Delaware's population was nearly 720,000. By 2020, the population is expected to grow to nearly 860,000.

The Department has moved from being predominately a highway department to being a complete transportation agency. While it still constructs and maintains roads as one of its core operations, it is now truly a multimodal agency. The Department provides transportation options to address transit, bicycle, pedestrian and freight needs in addition to the automobile.

Delaware is at the leading edge of a national trend in which transportation programs are broadened to be a tool for:

- supporting the growth and development goals of the state
- encouraging good land use practices ensuring that communities are livable;
- nurturing new economic development through strategic investments;
- providing mobility options aimed at reducing congestion, preserving natural resources and improving air quality.

Within the past ten years, changes in Federal transportation policies have required states to plan transportation improvements in a very different way. The more complex planning guidelines and regulations have changed every aspect of how the Department of Transportation identifies a problem, proposes solutions to it and implements projects to fix it. Federal laws such as the Clean Water Act and the Clean Air Act now dictate transportation investments as much as traffic patterns and growth projections.

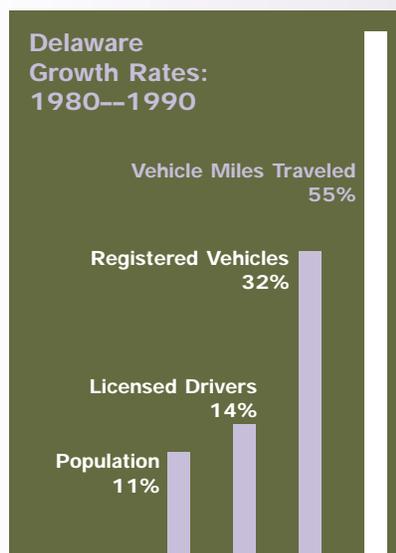


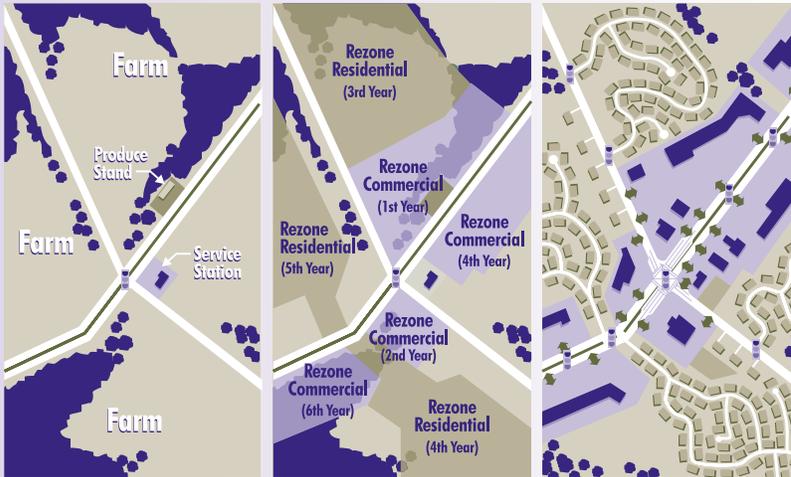
Delaware is a small wonder, but keeping people and commerce moving is no small job. The Department manages an extensive transportation network—a larger state-maintained system than either New Jersey or Massachusetts.

Population and traffic continue to grow and the Department of Transportation's responsibilities continue to expand. Delaware is becoming a more car-dependent

state and its residents are driving more vehicles and more miles. Moreover, the number of commercial vehicles on the road has also increased with more freight being moved by trucks both intrastate and interstate.

Housing developments have sprawled over what used to be farmland, and commercial and industrial centers have dispersed from urban areas. In the five year period between 1992 and 1997, developed land increased by more than 26,000 acres or nearly 14%. These new suburban communities require nearly everyone to ride in a car—alone. As the suburban ring has extended further and further





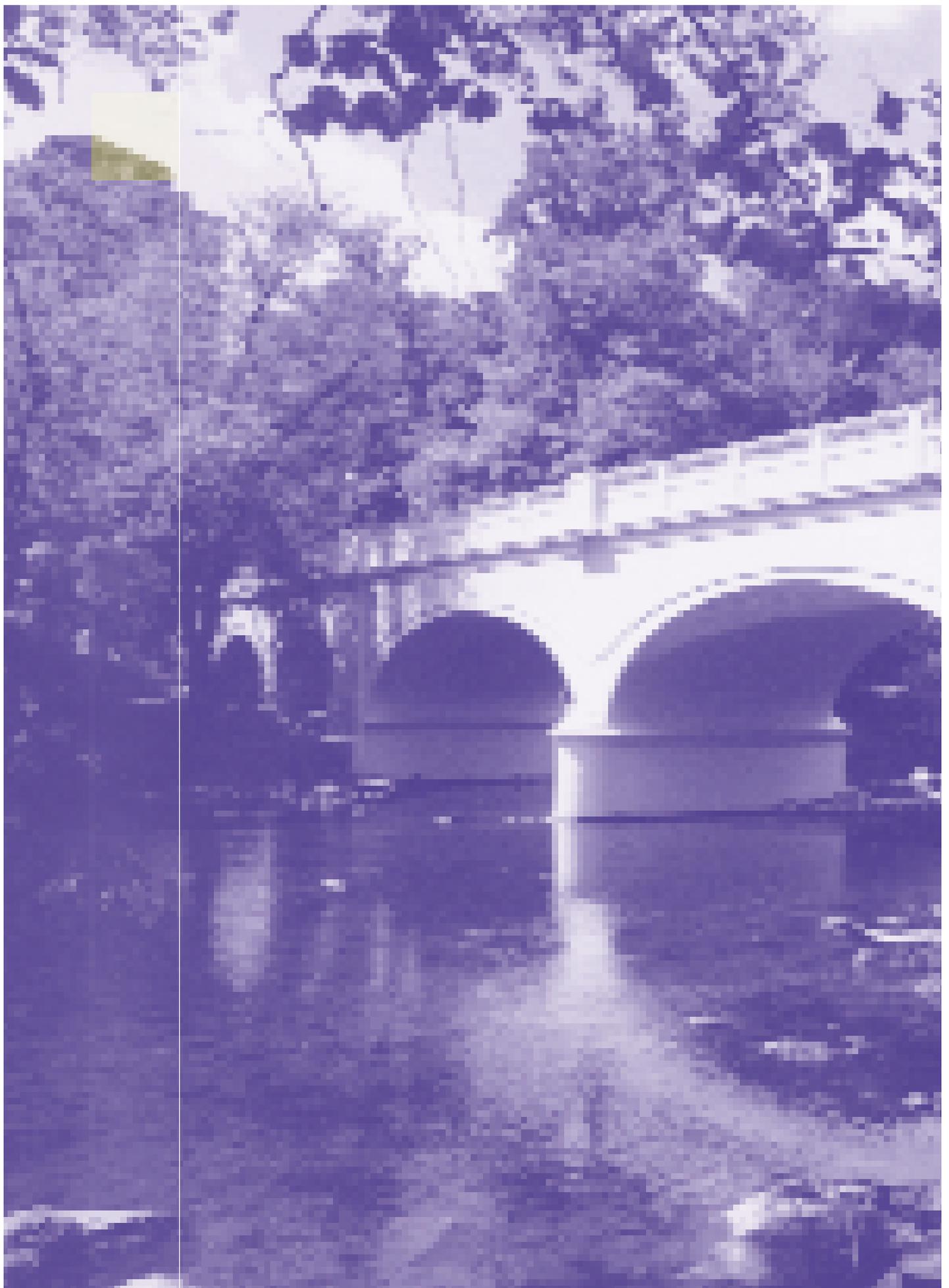
from central job locations and as major employers have moved from urban areas to suburban campuses, vehicle miles traveled have continued to escalate as people make more and longer trips to work or shop.

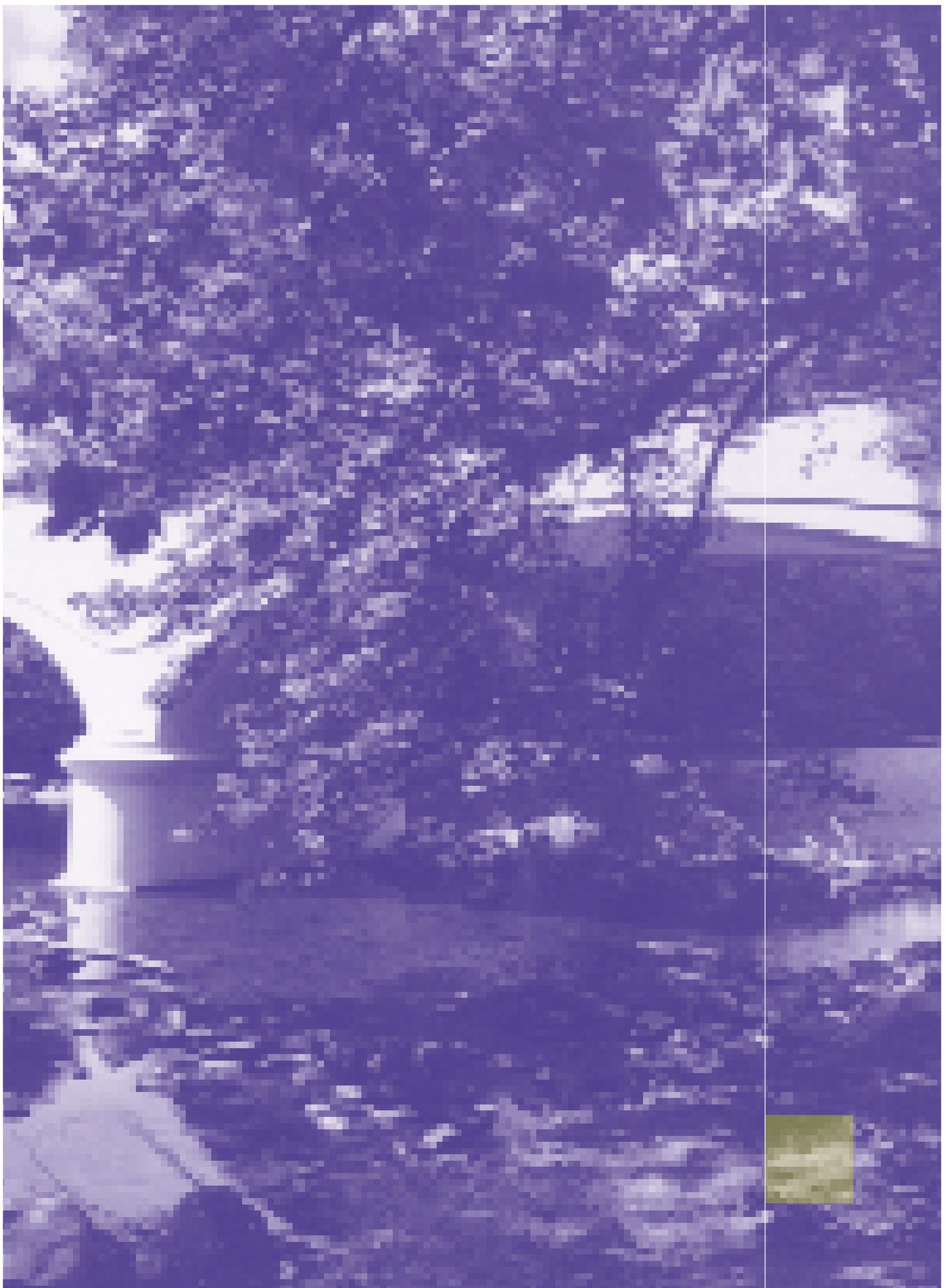
These growth trends are not yet abating. In New Castle County most new growth is projected to be south of the canal where major infrastructure investments will have to be made to accommodate that planned growth. In Kent County, development is occurring even outside the areas designated as their planned primary growth zones. Sussex County is growing rapidly both in the number of visitors and in year round residents. It is projected that nearly 50,000 more people will live in Sussex County in 2020 than did in 1995.

These trends are a challenge to the existing transportation system. Building large capacity new roads is becoming increasingly difficult. The traditional approach of the last 40 years—building out of congestion—is no longer a viable option. Given environmental constraints, less available land, increased public resistance and high costs of building new roadways, the Department of Transportation is becoming a mobility manager, an operator of the transportation system. The Department is developing innovative approaches to enhance the capacity of the existing transportation system, while developing networks of small collector roads and providing transit, pedestrian and bicycle options in developing areas of the state.

The Department has made many changes and taken many actions to achieve a new vision of transportation in Delaware. This report provides a framework for understanding the changes and actions and describes how the Department has positioned itself as a proactive leader in preparing Delaware to meet future transportation challenges.

The Department of Transportation maintains more than 5,700 miles of highways and streets, about the same as traveling from Wilmington to San Francisco and back.

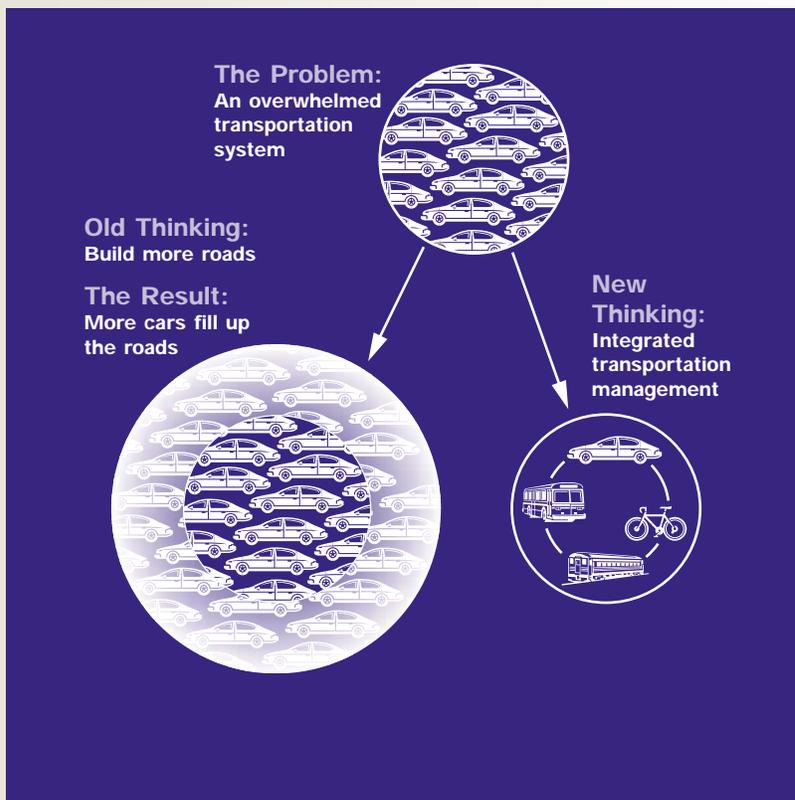




Thinking New Ways; Doing Different Things

The first step in any transformation involves asking fundamental questions: Are there other ways of doing some things other than the ways they have always been done? Are there solutions to problems that haven't been thought of as possible before? Are there ways to reduce demand rather than by increasing supply? Responding to those questions led to a major refocusing of the transportation strategies in Delaware. Transforming the Department of Transportation includes working toward the following commitments:

- to preserve and protect existing investments and assets
- to integrate and manage the transportation system as a complementary network of systems and services
- to approach transportation problems comprehensively, resulting in plans for transportation improvements that foster mobility, economic growth and urban revitalization through strategic investments
- to use technology to improve mobility and to improve the management functions within the Department
- to listen to customers and involve them in planning and implementing transportation policies and projects
- to operate in a more business-like way



Commitment

1
ONE

Preserve Existing Assets

Integrate and manage the system plan comprehensively to foster economic prosperity. Use technology. Focus on customers. Operate more like a business.

Preserve existing assets



Preserve Existing Assets

The Department of Transportation maintains 1,209 of Delaware's 1,303 bridges.

The transformation of the Department of Transportation began with a fundamental decision—to protect and preserve Delaware's transportation assets. Thus, the initial task was to ensure financial stability for the Transportation Trust Fund. The Department of Transportation first balanced pay-as-you go capital spending with spending paid for by long-term debt in the form of bonds. Second, it developed more accurate project cost estimates in order to manage better within its existing resources. Third, it increased revenues to the Trust Fund through additional federal funding and modest gas tax and toll increases.

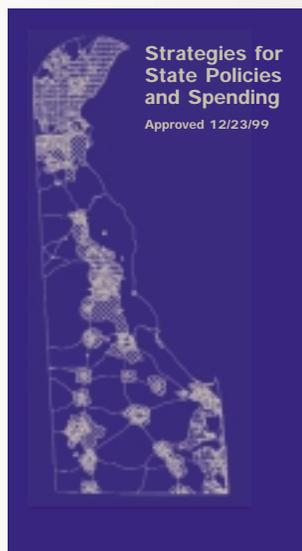
The Department of Transportation is revising its guidelines for making capital investments which conform to the State Strategies Investment Map. These guidelines help the Department focus investments in existing centers and other county specified growth areas. Simply put, in areas with high growth and density, the Department invests in all modes of transportation, providing the broadest range of transportation options to residents. In management and preservation areas, the Department focuses more on protecting the existing transportation infrastructure and the natural environment.

Finally, the Department shifted its capital investment strategy from a focus on highway expansion to rehabilitation of roadways and bridges, selected operational improvements and other capacity preservation strategies. Now, fully 40 percent of the Department's capital program is earmarked for system preservation.

Dedicating such a significant segment of capital investment to preserving the investment made by past generations of Delawareans is a fiscally conservative approach. In the long run it will save scarce capital resources by extending the useful life of roadways, bridges and buses.

Using preventive maintenance and rehabilitation to extend the life cycle of Delaware's roadways frees capital dollars for use on more immediate needs and reduces the number of times that motorists are inconvenienced by more extensive rehabilitation projects.¹ The Department now uses management systems which focus on pavement, bridges, safety and equipment.

For greater detail and information on this map, please see <http://www.state.de.us/planning/shape/strategy/stratmap.htm#state>



Preventive Maintenance Standards

In support of its preservation strategy, the Department is developing a comprehensive pro-

¹ The value of preventive maintenance investments has recently been studied by two states—Michigan and California. Michigan estimates that a five-year investment of \$78 million in preventive maintenance resulted in savings of approximately \$700 million, even after accounting for the longer life of a rehabilitation or reconstruction project. They found that pavement life can be extended by 5-10 years. California, using a slightly

gram of preventive maintenance standards for its assets. It is increasing its maintenance staff to meet these new demands. It has implemented pavement and bridge management systems and it is now completing maintenance standards for sign and light structures. These programs include key objectives and performance measures. For example, the objective of the pavement management program is to have 85% of pavement in good or excellent condition. Thus the Department of Transportation maintenance activities—paving, crack sealing, drainage, pothole filling—aim to achieve this objective.

Transportation studies have shown that preventive pavement maintenance can extend pavement life for anywhere from 2 to 10 years.

Preventive maintenance also extends to transit facilities. The Delaware Transit Corporation (DTC) maintains a fleet of nearly 325 vehicles, 41 park and ride lots, 2,391 bus stops and 82 bus shelters. Presently, DTC is undertaking an evaluation of all its bus stops and shelters, focusing on accessibility, location and infrastructure. As the evaluations are completed, improvements are being made.

Preserving transportation assets also involves broadening the definition of assets, changing from thinking only of the tangible investments—roadways, bridges, buses—to considering the capacity of an existing roadway as an asset. In support of that shift in definition, the Department of Transportation has launched a major initiative to respond to anticipated growth in future traffic by preserving existing highway capacity through integrating and managing access to the transportation system.

Integrate and Manage the System

System integration and system management have become core building blocks on which the Department of Transportation built its transformation. The three major building blocks include: technological innovations which enable the Department of Transportation to manage traffic effectively through an Integrated Transportation Management System; regional partnerships which focus on electronic tolls and the I-95 corridor; and specialized programs, such as Access Management and Corridor Preservation, which will help protect road capacity and encourage “smart” growth.

Integrated Transportation Management

different methodology, calculated the cost per lane mile per year for preventive maintenance compared to rehabilitation or reconstruction. They too found that preventive maintenance was more cost effective, by ratios ranging from 5:1 to 8:1 and that pavement life could be extended by 5 to 7 years. Meanwhile, Ontario, Canada found that crack sealing alone extended pavement life by 2 years.

The Department of Transportation developed an Integrated Transportation Management System (ITMS) to support its operation of the system. At the heart of ITMS and managing

National studies show a 15-25% reduction in congestion and a 30-50% reduction in the impact of incidents using Integrated Transportation Management Systems.

customers generate more like a business

Preserve existing assets. Plan comprehensively to foster econo

Commitment
2
TWO
Integrate and Manage the System





the system is a set of tools designed to: maintain traffic flow; provide information to customers to help improve their ability to make choices; and help the Department more effectively deploy snow and ice removal forces or respond to incidents.

ITMS has important implications for Delaware's drivers. While nationally, more than 60 percent of travel delay on urban roadways is caused by a non-recurring event such as an accident or construction, only about 30 percent of delays in Delaware were caused by such incidents. Most delays on Delaware roadways were caused by traffic signals, many of which were uncoordinated because timing had not kept up with the changes in traffic flow due to new development.

As a key component of its ITMS program, the Department of Transportation identified 250 critical miles of roadway where it is adjusting signals, as well as providing real-time information about transit delays, roadway conditions and accidents. By the end of 2004, nearly 1,000 traffic signals will be included in the program.

Another key component of the ITMS program is a Transportation Management Center in Smyrna. Linked to the new statewide emergency management center, it will provide for the centralized control, monitoring and central information point for transit and roadway operations. It is among the first in the nation to be an intermodal transportation management center.

Smart Highways in New Castle and Kent Counties

ITMS is proving to be a critical tool in helping the Department of Transportation address congestion in New Castle County. Through a traffic-adaptive signal system, which uses detectors to provide real-time system information to DOT's Traffic Management Center, the Department can then adjust area traffic signals to improve traffic flow. This signal system will soon be in place on most of the major roads and cities in New Castle County, including US 40, US 13, Newark, Wilmington, Churchman's, Brandywine Hundred and Middletown.

ITMS technology allows DOT to provide information to travelers before starting their trip by logging on the DOT's web page, www.deldot.net. This site shows

existing conditions through cameras at congestion hot spots. Beginning first in New Castle County, motorists and transit riders will be able to obtain information about current conditions and delays via interactive kiosks that will be placed in major employment centers and transit locations. Once on the road, drivers can obtain information from variable message signs and, beginning in 2000, broadcasting throughout New Castle County on radio channel 1380 AM.

In Kent County, ITMS measures will be implemented in the Smyrna-Milford and Dover-Harrington corridors. The improvements, designed to benefit both local and through travelers, will include improvements

For current traffic information on the internet: www.deldot.net



on Routes 1, 8, 10, 13 and 113. Construction between Smyrna and Milford began in 1999 and will ultimately include more than 50 signals, cameras in key locations, detectors and fiber optic telecommunications capacity.

Reach the Beach

In another specific ITMS application, the Resort Access Project, smart highway components are being installed as part of a three-year effort to improve access to the beaches. Nine miles of fiber optic cable, cameras, and upgraded signal equipment have been installed between Five Points and Dewey, and loop detectors that will enable the signals to adjust themselves are being installed. State Route 1 between Bethany and Fenwick began receiving similar upgrades in the fall of 1999. Ultimately SR 1 between SR 16 and SR 54 will contain a comprehensive ITMS system designed to help motorists reach beach resorts.

Roadway-related improvements are not the only piece of the puzzle, however. The Travelers' Advisory Radio currently in place will be upgraded, as will the information kiosk at the Park-and-Ride at SR 1 and SR1A in Rehoboth. In addition, portions of Routes 13, 20, 26, 54, 113 and 404 will all receive ITMS improvements over the next three years to help travelers reach Delaware's resorts.

Regional Partnerships

Thinking beyond organizational and geographical boundaries has become a way of doing business at the Department of Transportation.

Regionally, the Department of Transportation is playing a leadership role in the E-ZPass coalition to implement a regional electronic toll collection, enabling drivers to travel

What is an Integrated Transportation Management System?

- electronic toll collection (E-ZPass) which provides for collecting tolls without stopping
- a Transportation Management Center which can manage and coordinate transit and traffic operations with police, fire, rescue and emergency management providers in the event of roadway incidents or natural disasters
- Traveler Information Systems including traffic advisory radio and variable message signs to keep drivers and riders informed
- "Smart Lights" traffic systems that adjust signals to improve traffic flow based on volume
- real-time monitoring systems where traffic flow can be monitored on a minute-by-minute basis similar to air traffic control systems
- an aerial monitoring program which allows for quicker identification and improved management of accidents and incidents
- real-time commuter information through kiosks or the internet where travelers can get up-to-date information on bus and train schedules or traffic conditions
- on-road commercial vehicle tracking, weighing and permitting which cuts delays for trucks and deliveries
- Satellite Vehicle Tracking Systems which allow centralized tracking of transit and commercial vehicles to improve schedule adherence and information

Development patterns in the beach area require creative and sensitive transportation solutions.

Integrate and manage the system. Preserve existing assets. Plan comprehensively to foster economic prosperity. Use technology. Focus on customers. Operate more like a business.





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throughout the region using one E-ZPass for all toll roads and bridges. Beginning in 1998, tolls in Delaware on Interstate-95 and SR1 were able to be collected electronically as well as manually. When the installation of E-ZPass is completed on New Jersey's toll roads, a driver will be able to use the same electronic device for tolls from Delaware through Massachusetts.

Supported by various technologies, the Department of Transportation actively exchanges information with Maryland, New Jersey and Pennsylvania transportation agencies and law enforcement about incidents that have caused congestion along the regional corridor. The Department of Transportation uses this information to notify the public about delays and option routes for their travel. Transportation Management Teams are being formed throughout Delaware to include transportation agency representatives, police, fire and other emergency responders to deal with high profile accidents and serious delays.

Managing Transportation in the Future

As part of its ongoing transformation, the Department of Transportation recognized that traffic management will continue to be a major part of its future responsibility. To plan for that future, the Department of Transportation established Access Management and Corridor Preservation programs.

Managing Access to the Highway

Historically, the Department had a program to regulate the placement of entrances to the highway system to assure the safe and efficient operation of the roads. That program was adequate in slow growth areas with little development. In other areas, however, the program resulted in expensive major highways becoming more like local streets because of the impact of development. Route 13 through Dover, for example, was originally built as the Dover bypass but as a result of development, began functioning like a city street.

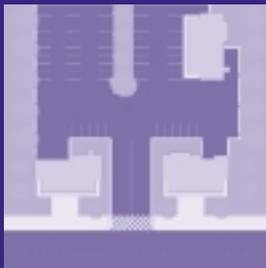
Access management focuses on accommodating development while preserving the function of the road. This proactive approach to managing access includes actively working with developers to determine access consistent with both the planned development and with the Department's goal of protecting highway capacity.

The Access Management Program preserves existing capacity and enhances safety by:

- minimizing the number of conflict points by designing intersections and entrances that minimize the number of possible turning movements;
- regulating the proximity of entrances to street intersections and by establishing spacing standards for interchanges, intersections, median openings, entrances



Unlimited access results in numerous roadway entrances, increasing congestion and accidents.



This shows how the same commercial area might look with limited access. This design creates safer traffic patterns and an aesthetically pleasing appearance.

- and driveways in order to minimize situations where incoming and outgoing vehicles could conflict with each other;
- removing slower, turning vehicles from through traffic lanes through design improvements;
- maintaining proper traffic signal spacing to minimize the number of times motor vehicles must stop for traffic signals.

In addition, the Department of Transportation continues to look for ways to preserve existing capacity through a greater use of mass transit in key corridors such as by providing express bus service from Dover to Wilmington.

Preserving Roadway Capacity for the Future

The Corridor Capacity Preservation Program considers the relationship between land use and transportation. It implements a variety of strategies to accomplish four basic goals:

- maintain a road’s capacity to handle traffic efficiently and safely;
- minimize the transportation impacts of increased economic development;
- preserve the ability to make future transportation improvements as needed; and
- forestall the need to build an entirely new road.

This program complements the Access Management Program by looking into the future and identifying best future design in designated transportation corridors. For corridors within the program, including a segment of SR 48 in New Castle County and US 13, US 113 and SR1 in Kent and Sussex Counties, the Department of Transportation reviews plans for rezonings, new subdivisions and entrance permits and coordinates development activities with counties and local governments. The Department also works with property owners to find alternative access to their property and to refine site development plans. The Department may purchase access rights or actual property from an owner, if a special committee approves. It can also purchase development rights or easements to restrict development.

On SR1, transportation improvements at Nassau and SR 16 are designed to preserve road capacity without sparking unplanned new growth. Using the Department of Transportation recommendations, for example, developers of two subdivisions south of Milford revised their plans to support the goals of the program.

Plan Comprehensively to Foster Economic Prosperity

Planning, by definition, is about the future. Innovative planning looks at “what could be” without necessarily following a logical process from “what was.” An innovative plan looks to a future on the horizon, beyond the next two or three years.

In 1994, the Cabinet Committee on State Planning Issues produced a report, “Shaping Delaware’s Future,” which provided a vision for the state’s growth and development. The Department of Transportation expanded that vision in a Long Range Transportation Plan called, “Transportation and Delaware’s Future.” The plan, developed with much public input and state and local agency involvement, provides a framework which will guide transportation decision-making and investments over the next twenty years.



Prosperity. Use technology. Focus on customers. Generate more like a business. Integrate and manage the system.

Commitment

3

THREE

Plan Comprehensively to Foster Economic Prosperity

Preserve existing assets. Plan



New Thinking = New Results

Within the context of the Long Range Transportation Plan, the Department of Transportation began a transformation in thinking. Simply put, the Department of Transportation's thinking has moved beyond the curb line or the shoulder of the road. The old way of planning—build or widen a road whenever there is a problem—only created more problems in the long run. Across the country, especially in densely populated areas, additional highway capacity has historically attracted new development and more vehicles which quickly consume the additional highway capacity. The Department of Transportation has shifted its focus to multimodal planning—focusing on how transit, bicycle and pedestrian options can help stretch capacity and reduce the need for widening roadways.

While economic development brings jobs and tax dollars to Delaware, it can also bring traffic. In areas already burdened with too much traffic, the addition of a new development can shift congestion to gridlock in a matter of weeks. Comprehensive multimodal planning results in a variety of transportation options for residents while maintaining a quality of life and environment which makes Delaware such an attractive place to live and work.

Transit: A Key Element of Providing Mobility

Public transit is a key component of any effort to sustain economic development and to expand transportation options for people. In 1994, the Delaware Transit Corporation was established and consolidated all transit services into a single unit. The consolidation of train, bus and ridesharing programs into a single operating agency, still part of the Department of Transportation, allowed for a wholesale change in the way planning for mobility is undertaken.

The modal integration of DTC and the Department of Transportation resulted in several significant accomplishments that are responding to customer demand. Commuter rail between Philadelphia and Wilmington was extended to Newark serving the I-95 corridor. Since 1994 when it was inaugurated, ridership increased by over 54% on this rail line known as the R2. In 2000, commuter rail service will be available at Churchman's Crossing Station and ridership is projected to continue to grow.

With rail ridership increasing, bus access to and commuter parking at train stations becomes a key component of the Department of Transportation's multimodal strategy for reducing congestion. Expanded parking has been provided at Claymont along with coordinated bus service in the corridor leading to Claymont. Transit Routes in Brandywine Hundred are being reviewed for the first time in 40 years to explore the feasibility of improving service, tailoring services to meet travel needs and providing express services.

Transit has also been a key element of the traffic mitigation plan for the reconstruction of I-95. For example, DTC improved 45 bus stops in the Brandywine Hundred area and added a park and

What are the basic strategies of Delaware's Long Range Transportation Plan?

1. Make transportation investments in support of growth management goals
2. Better coordinate transportation and land use
3. Reduce driving alone by expanding travel choices
4. Take advantage of new technologies
5. Preserve existing transportation facilities
6. Ensure safe, efficient services and facilities
7. Develop multimodal options to address congestion including facilities for walking, biking, transit operations, access to transit and ride sharing



ride lot at Tri-State Mall, in addition to the one at Brandywine Town Center.

Express services were added to each of these park and rides as well as on the Route 11 for portions of Harvey Road which will not be served by Route 13 during the construction.

In other areas of the state, DTC is also making service improvements to increase ridership, particularly on routes where more public transit use could help lessen congestion. For example, DTC is improving express bus service in the Route 40 and other key corridors which will result in a reduction of travel time during rush hour. In addition, new park and ride lots have been built as part of the SR 1 construction and new commuter-style coaches have been purchased to make the trip more pleasant for riders.

DART First State bus ridership increased by 25% between 1994 and 1999.

Churchman's Crossing: A New Model

In New Castle County, the Churchman's Crossing planning study stands out as a noteworthy example of how the Department of Transportation's new thinking has resulted in an innovative approach to solving congestion problems while supporting economic investment.

Prior to 1993, seven different studies were conducted seeking solutions to the congestion that was predicted for the development. Each study reached the same conclusion: it couldn't be done. Recognizing the importance of the proposed economic development project, the Department of Transportation worked with New Castle County to create a 20-year growth plan that was modally balanced. The plan includes mixed-use development—commercial, residential and industrial—aimed at reducing the number and length of vehicle trips. It also includes a commuter rail station and DTC bus routes. The plan calls for shuttle buses, 18 miles of sidewalks, 90 bus shelters, ITMS improvements around signals and major intersection improvement projects.

As part of a designated growth corridor, the Department of Transportation worked with J.P. Morgan, Prudential, Christiana Mall, the Medical Center of Delaware and MBNA and made significant improvements at Churchman's Crossing, including building a new interchange at Churchman's Road and SR7. The Department of Transportation also designed roadway improvements at business entrances along SR7 and SR4 to improve traffic flow.

At the same time, the Department of Transportation worked with these employers to offer more transportation options for commuters. For example, when J.P. Morgan submitted its development plan to the Department of Transportation for review, the Department proposed changes which made it more conducive to transit trips. The Department and J.P. Morgan signed an agreement under which J.P. Morgan agreed to provide financial support for shuttle bus service.

Equally important were the non-transportation aspects of the plan. Staggered work hours and other travel demand management measures reduce the number of cars on the roads at peak hours.

Even the sequencing of the improvements was done to encourage acceptance of using travel options other than the single car with the single driver. By implementing the non-roadway improvements first, residents and workers within the Churchman's Crossing area are becoming accustomed to van pools, transit and other travel options. Developing the roadway capacity first would have made implementing these options nearly impossible and the area would have become gridlocked.



Plan comprehensively to foster economic prosperity. Operate more like a business. Use technology. Focus on customers. Preserve existing assets. Integrate and manage the system.



A New Approach to Highways-- Scarborough Road

Scarborough Road represents the Department's new approach to planning and designing roads. The project was first envisioned as simply a connection to get vehicles, especially trucks, from north of Dover to the city's more industrial west side without having to use downtown streets. It eventually evolved into a multimodal effort that incorporated a separate bike and pedestrian path. A parking lot at the Delaware Technical and Community College was retrofitted into a park and ride facility, with more parking, improved traffic flow patterns and a bus shelter. The final design of the roadway disturbed fewer wetlands, created wetlands mitigation and included a pedestrian greenway through the natural area. What was first envisioned as a truck route is now treated as the gateway to the City of Dover, landscaped to provide a positive first impression of Delaware's capital.

Planning Differently for the Future: SR 141 - US 202 Corridor

The Department had an old transportation plan for the SR 141-US 202 corridor which was outdated and incomplete. The decision by AstraZeneca to locate in Delaware along this corridor presented an opportunity for the Department to rescope the regional plan: to address the needs of AstraZeneca and other planned expansions; to cooperate with other agencies and the adjacent communities; and to provide open space improvements.

In the revised plan, the Department identified approximately \$70 million worth of improvements that would help address traffic issues, including a greenway crossing of US 202 and the incorporation of an "historic enclave" into the overall project to accommodate historic structures that might be affected by the transportation project.

In late 1999, the Department of Transportation began working with the company and the community to identify steps for managing travel demand that will enable the second phase of the project to move forward.

"The fact that the Department of Transportation attended most of the critical meetings was a plus. They were a partner right along the way. It was very visible to the AstraZeneca people that they were up front and part of the proposal."

Tony Felicia, Vice-President,
Corporate and Community
Affairs

Wilmington: A Livable City on the Move

As part of its comprehensive approach to planning, the Department of Transportation made a special point of targeting transportation investments where people already live and work. This enhances the desirability of communities that are

MBNA has been a partner in efforts to improve regional mobility by encouraging car-pooling and transit use through a mix of incentives and disincentives. MBNA charges employees to park at their downtown Wilmington facility, with higher charges for those who earn more; car pools receive a discount and preferential parking spaces. Employees earn points when they arrive at work other than by driving alone in their own automobile which can be redeemed for items offered through a catalog. In addition, all employees who have made at least one trip to work other than through a single-occupant vehicle become eligible for a monthly prize which is randomly drawn. The company also subsidizes the use of transit by providing TransitCheks to its employees. MBNA also benefits from its participation in TravelLink, the state program in which companies receive tax credits for encouraging travel to work through other than individually driven vehicles.

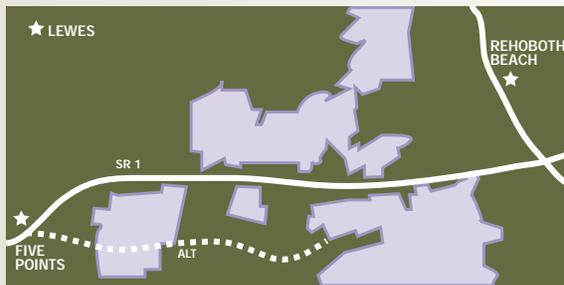
already developed and stems the tide of suburban sprawl.

A series of projects at the Wilmington waterfront are designed to promote economic development, provide recreational access and create connectivity between the Christina River and the Wilmington Central Business District. The Department worked closely with Wilmington to improve the gateways to and atmosphere within the city.

New Planning Approach: The Grid Concept + Transit

Realizing it needed an innovative approach to assessing growth before new development occurs in rapidly-growing Sussex County, DOT developed the SR1 Grid Concept. Its goal is to work with the community to plan additional collector roads which can accommodate resident's mobility needs by taking traffic away from arterial roads such as SR1.

In addition to a rapid growth in resident population, more than 56% of visitors to Delaware travel to Sussex County. Traffic volume in August is nearly double the off-season volume. As a result, roads such as the southern portion of SR1, which



originally carried significant local traffic, are now clogged with regional trips, making local trips more difficult and time consuming. The SR1 Grid Concept, combined with transit, will ease the burden on local residents by providing transportation alternatives such as local connector roadways between developments, bicycle and pedestrian facilities, and bus service which will enable local trips to be made on roads other than SR1 and without using a car.

Wilmington Improvements and Plans

- A comprehensive multi-modal plan to accommodate the growing number of activities along the waterfront: a riverfront walkway; improved automobile access to Frawley Stadium and the Shipyards Shops retail area; infrastructure to support water taxi service.
- An examination of trolley options that would link the riverfront with downtown Wilmington.
- Numerous improvements to the city street system including streetscaping, transit amenities, period lighting, tree plantings and brick-paved sidewalks.
- Improved gateways to the city via Martin Luther King Boulevard, Delaware Avenue, and Union and Lincoln Streets.
- Redesign of 11th and 4th Streets to provide multi-modal capacity and improved aesthetics.
- Improvements in the area surrounding the train station.

More people pass through the Wilmington train station per year than live in the state of Delaware.

Plan comprehensively to foster economic prosperity. Create more like a business. Preserve existing assets. Integrate and manage the system. Use technology. Focus on customer. On a scale from 1 to 10, how well does this system meet your needs?





Enhancing the Transportation Experience

Passage of the federal Intermodal Surface Transportation Efficiency Act in the early 1990s established a new program, Transportation Enhancements. The program expands the definition of transportation by focusing on adding landscape elements to roadsides, restoring historic transportation facilities and providing facilities that encourage bicycle and pedestrian use. These grants have been made to counties, municipalities, historic preservation groups, parks and recreation commissions and other government agencies as well as not-for-profit civic betterment groups.

The Department of Transportation embraced this program. In state parks, on state and local roads and in transit facilities, the Department of Transportation's commitment to transportation enhancements improved mobility and the travel experience for Delawareans and their visitors.

The program enables sponsors throughout the state to take the lead on transportation projects that enhance a community while providing a transportation benefit. For example, the New Castle County Department of Parks and Recreation sponsored an award-winning bicycle and pedestrian greenway in Bringhurst Woods that benefits park users while protecting wetlands and historic sites. In Dover, brick sidewalks, planters and period lighting on Loockerman Street will not only enhance the pedestrian experience, but help economic development in the downtown area. The Town of Laurel worked with the Department of Transportation and the Laurel Historical Society to begin restoration of the historic Laurel Train station. And in Milford, the restored Greenway Pedestrian Bridge over the Mispillion River benefits both boaters and pedestrians.

In one very innovative project, along Route 9 in New Castle and Kent Counties, the Department of Agriculture augmented its Farmland Preservation Program funds which preserve farmland forever with Transportation Enhancement funds. The combined dollars created scenic vistas on Route 9 between Odessa and Dover Air Force base while protecting critical farm land. The partnership ensured that more than 500 acres of land will remain as farmland forever while providing motorists with beautiful views that enhance their traveling experience.

The Department's transformation is rooted in planning transportation improvements differently. This new approach encourages economic growth in appropriate ways and, through programs like Transportation Enhancements, broadens the definition of transportation. The approach has involved non-transportation agencies, organizations and companies in planning transportation. Planning to meet mobility needs will continue to evolve in the future.

What can Transportation Enhancements be Used for?

- Bicycle and pedestrian facilities
- Historic transportation facilities
- Scenic easements
- Preservation of abandoned railway corridors (rails to trails)
- Removal of outdoor advertising
- Archaeological planning and research
- Projects to reduce highway-caused wildlife deaths
- Transportation museums
- Tourist or welcome centers
- Landscaping roads and highways

The Department of Transportation has approved more than \$20 million in transportation enhancement grants for over 100 projects.



Transportation Enhancement Program Grants

Seaford, High Street Pedestrian Improvements
Odessa, Scenic Easement
Wilmington, Eighth Street Enhancements
Delaware City, Promenade
Wilmington, Brandywine Village Gateways
New Castle County, Mill Creek Greenway
Bellefonte, Brandywine Blvd. Streetscape Improvements
Wilmington and Western Railroad, Bridge Restoration
Delaware Greenways, Powder Mill Greenway
Dover, New Burton Road - Bike/Pedestrian/Rail Crossing Study
Georgetown, Rail Depot Restoration
Milford, Mispillion River Greenway Pedestrian Improvements
Harrington, Sidewalk Additions
Greenwood, Sidewalk Additions
Milford, Sidewalk Additions
Milton, Streetscape Enhancements
Centerville, Traffic Calming
Lewes, Rehabilitation of Greenhill Light
Wedgewood Pedestrian Bridge
Newark Bikeway
Dover, Wheels and Heels
New Castle County, Marsh Road Crossing
New Castle County, Bringham Woods
Laurel, Laurel Train Station
Smyrna, Hoffecker Street Bike Path
New Castle Tree Commission, New Castle Walkway Beautification No.
Delaware Greenway Brandywine Connection
Bethany Beach, Bethany Beach Bike Trail
Dover, North Dover Gateway
Wilmington, Christina Riverwalk
Delaware Theatre Company, Christina Gateway
Seaford, Virginia Avenue Sidewalks
Milton, Governor's Walk
South Bethany, South Bethany Beach Pedestrian Walkway
Bellevue Bike Connector
White Clay Crook Valley Pike/Pedestrian Facilities
DelTech, Terry Campus Transit Shelter
Smyrna, Greens Branch Trail Bike/Pedestrian Facilities
Milford, Mispillion Greenway Bike/Pedestrian Facilities
New Castle County Parks & Recreation, Mill Creek Greenway
(Limestone Hills to Delcastle Golf Course)
Wilmington, Brandywine North Rail to Trail Conversion
Smyrna, South Street Sidealks (Carter Road to Ransom Lane)
Rockland Road Feasibility Study
Selbyville, Bike/Pedestrian Facilities
Trinity Vicinity Neighborhood Association, Adams Street Improvements
Dover, Pedestrian/Landscape Improvements, Loockerman Street
Georgetown, East Market Street & Layton Avenue Enhancements
Newark, Sidewalks
Milford, NW Front Street (Church to Walnut) Streetscape Improvements
Dover, West Walker Road Bike/Pedestrian Path



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Preserve existing assets. Integrate and manage the system. Use technology. Focus on customers. Operate more like a business.



Commitment
4
FOUR
Use Technology

Use Technology

In a rapidly changing technological world, the Department of Transportation recognizes that investing in technology will continue to be a core strategy for enhancing mobility and improving internal processes and communication. The Department of Transportation embraced new technologies as another set of tools to support its transformation. Technology is a vital part of planning and operating the transportation system more efficiently and maximizing the efficiency of the Department. It also allows the Department to be more responsive to customer demands.

Designing Differently

Completing the transition to Computer Aided Drafting and Design (CADD) enabled transportation designers to produce several alternative designs with less effort and cost than was previously possible. This technology allows designers to easily “tweak” proposed designs to deal with environmental problems or respond to community concerns. In the past, altering designs was a laborious, time-consuming process often delaying projects and making it costly for the Department of Transportation. The investment in CADD yields benefits in the Department’s efficiency, in higher quality designs, and in responsiveness to the public.

Constructing with New Materials

Using innovative construction materials is one way the Department implements technological advancements to produce better products that will ultimately yield both cost and efficiency savings for Delaware. One technology, composite bridges, produces a more durable, longer-lasting, bridge deck than a traditional steel and concrete deck. The Department built four of these bridges including the Business Route 896 bridge over Muddy Run in Glasgow. It is anticipated that with more use of composite technology, the cost of using these materials will be competitive with using conventional materials. Competitive cost combined with longer life and lower maintenance needs will, ultimately, result in lower expenses.

Similarly, high performance concrete is extending the life of transportation investments at a competitive cost. Because it is less permeable than traditional concrete, moisture and salt are not able to penetrate the roadway. As a result, the concrete lasts longer.

Technology Investment

While all of the Integrated Transportation Management Systems, such as E-ZPass and coordinated traffic signals, rely on new technologies, there are other technologies which are changing the way the Department of Transportation does business. For example, computerized pavement temperature detection determines exactly when and where maintenance crews should be dispatched when roadways are freezing. This gives the Department a way to proactively respond to changing roadway conditions that will, ultimately, provide safer roadway conditions for motorists.

Technology also has implications for mass transit. For example, Automatic Vehicle Locating (AVL) technology, used in concert with the Global Positioning System, will allow buses to be tracked as they travel on their route. This information will then be used to provide riders with updated information about when the next bus

Integrate and manage the system. Plan comprehensively to foster economic prosperity. Focus on customers. Operate more like a business.

Use technology



is expected at major stops. It also will enable DTC to track a vehicle's adherence to its schedule, improve on-time performance and better manage the fleet.

The current and planned investments being made in computer equipment and networks will yield significant productivity benefits in years to come by eliminating unnecessary work processes, helping to speed decision-making, and giving managers new tools for keeping projects on budget and on time. Electronic signatures, for example, will shorten time frames for approvals from days or weeks to hours.

Electronic Bidding

Those who do business regularly with the Department also benefit from the Department of Transportation's investment in internal technology. Before 1998, the bidding process for a contractor wanting to do business with the Department of Transportation was completely manual. Now, a bidder has the option of receiving a formatted disk, completing the bid information and submitting the disk back as the official submission. Errors in the formatting of the submission and bid analysis process are significantly reduced, and contractors are enthused about future improvements that will result in a "paperless" process.

The Department of Transportation itself also benefits from having electronic bidding. It has reduced the time required for entering bid data into the system from days, on a large project, to minutes. Bid tabulations are now available to the engineering team for review the day after the bid.

Scheduling Paratransit to Meet Customer Needs

Technology is also helping Delaware Transit Corporation respond to the explosive demand in requests for paratransit services. Implementation of an automatic scheduling system streamlined the reservation process for customers using DART First State's Paratransit Service. The new program optimizes vehicle use while providing better customer service. The program reduced the average call time for customers asking to be served from 2½ minutes to just under 2 minutes. With the number of paratransit request calls growing at an estimated 10 percent a year, these improvements in customer service and vehicle routing are critical to meeting demand for the services.

Focus on Customers

The Delaware Department of Transportation is nationally recognized for viewing the public as a partner, for being responsive to public concerns and for devising new processes for involving customers in the Department of Transportation's decision-making process.

Involving customers of the transportation system proactively, earlier and more often in the process has allowed the Department to learn from people who use its facilities every day. The Department works with businesses, emergency personnel and residents to ensure that projects meet various constituent needs along a particular corridor or roadway in planning, designing and constructing the project. The Delaware Transit Corporation gathers public input when it establishes, changes or discontinues service.

Commitment

5
FIVE

Focus on Customers



Listening to Customers in New Ways

The Department reaches out to the public using several approaches. It expanded and emphasized public meetings, advisory committees and working groups as mechanisms for involving the public in meaningful ways. The Delaware Transit Corporation made changes in its public hearing process to make sure that customers have ample opportunity to be heard.

On Route 54 in Sussex County an advisory committee, including residents, businesses, elected officials and emergency personnel working with the Department of Transportation, found a way to prevent roadway flooding and to provide a safe emergency evacuation route.

On Route 40 between the Maryland state line and Route 13, the Department of Transportation is working with the Wilmington Area Planning Council, New Castle County and a steering committee to examine the alternatives available to improve the corridor so it can accommodate the expected residential and employment growth over the next 20 years. As part of this plan, DTC is exploring alternative transit service such as route deviation, limited trips and express service on I-95. Improvements have been made at current bus stops to improve attractiveness and accessibility; park and ride lots are being considered. Finally, ITMS passenger information will be provided at various stops along the corridor.

The Council on Transportation serves in an advisory capacity to the Secretary and Directors of the Department of Transportation and to the Governor on the annual Capital Improvement Program—a six-year program of transportation investments.

John Malloy, Chairman
June D. MacArtor
Thomas W. Bennett, Sr.
Don C. Brown
P. Raquel Bushweller
Mary W. Davis
Joseph DeMul
Robert P. Hopkins
Elizabeth S. Townsend

Internal and External Working Groups and Committees

- Naamans Road
- Harmony Road
- Rt. 7/Valley Road
- I-95 Planting
- Rt. 26/Assawoman to Rt. 113
- Rt. 54
- Basin Road
- Rt. 40
- St. Georges Bridge
- I-95 Rehabilitation
- SR-1 Grid Study
- SR-1 Corridor Capacity
- Rail to the Fair
- Newark Traffic Relief Committee
- DuPont Riverfest Steering Committee
- Cherry Lane Steering Committee
- Hockessin Boulevard Steering Committee
- Transportation Festival Steering Committee
- Elderly and Disabled Transportation Advisory Committee
- Rt. 52
- Kent County Tourism Committee

Route 26 in Sussex County is severely congested during the summer months. The Department of Transportation convened a local advisory committee of elected officials, emergency personnel, residents, businesses and bicycle-pedestrian advocates. The committee oversaw the development of a project plan which includes sidewalks to permit safe pedestrian use, shoulders to enable bicycles to use the road, improvements to nearby secondary roads to offer alternative options for local travel, turn lanes to allow through traffic to pass turning vehicles and more controlled access to businesses on the road to eliminate conflict points between vehicles.

Listening to customers also means monitoring their satisfaction and learning about their usage patterns through surveys and other means. Citizens' opin-

ions are gathered through Customer Satisfaction Surveys. For example, during the past year, a telephone survey of New Castle County residents found that on average, 77 percent of bus riders find service to be good or excellent.

By responding to customer needs, DTC's ridership is growing between 4-5 percent a year, with the biggest increases being seen in rail commuting and paratransit. DTC's bus operation--DART First State--looks

at how to best serve customers and is becoming a viable alternative to the automobile in key corridors. The designation of Delaware's New Castle and Kent counties as severe non-attainment areas under the Clean Air Act means that DART will play an increasingly important role in helping the state meet its Clean Air mandates.

The Department of Transportation gives citizens direct access through hotlines in each of the regions. These hotlines enabled nearly 1,500 people to contact the Department during the first year of operation. For routine inquiries or complaints, the Department of Transportation's maintenance hotlines logged 1,066 calls during 1998, with virtually every complaint resolved in a timely manner. From January-September 1999, the Central District Hotline received nearly 200 calls. Every complaint received was resolved within a week--the vast majority were resolved within one or two days.

For its employees, the Department of Transportation launched an innovative system to report problems or issues employees experience as users of highway or transit systems. Through "The Department of Transportation Eyes on the Road," employees are urged to call district hotlines or the Traffic Management Center when they see problems on the roadways. Similarly, DTC drivers regularly report traffic incidents such as accidents or lights out to the Traffic Management Center or other officials.

Supporting Welfare to Work

The Delaware Transit Corporation is a key part of the multi-agency partnership to provide transportation services for welfare recipients and low income workers. Under a special grant from the Federal Transit Administration, DTC will be providing contracted van service, van pools, local feeder services to already existing bus lines, late night and Sunday and reverse commute services.

One of the reverse commute services will run from Wilmington to the industrial areas of Boulden Boulevard, Southgate Industrial Park, CenterPoint Industrial Park, Airport Park and Amazon.com. The Route 21 bus line will provide Saturday service to coincide with shift requirements at locations such as Fleet Bank, Advanta, Corporate Commons and the News Journal. Finally, a contractor-run service will be available to entry-level employees who work too late to ride fixed route bus service. The shuttle will initially serve five downtown Wilmington hotels and will eventually expand to Concord Pike and Christiana.

DeIDOT Hotline Numbers

North District (New Castle County north of the C&D Canal)
(302) 323-1111

Central District (New Castle County south of the C&D Canal and Kent County)
1-800-324-8379
and
(302) 739-1111

South District (Sussex County)
(302) 855-1111



Focus on customers

Preserve existing assets. Integrate and manage the system. Plan comprehensively to foster economic prosperity. Use technology. Operate more like a business.



Commitment

6
SIX

Operate More
Like a Business

Operate more like a business. Preserve existing assets. Integrate and manage the system. Plan comprehensively to foster economic prosperity. Use technology. Focus on customers.

Operate More Like a Business

Many of these changes would not have been possible if the Department of Transportation did not adopt the best aspects of business thinking. Like a business, the Department of Transportation has a Long Range Plan, developed with significant input from the public, that looks ahead 20 years. The Department also has a strategic plan, annual objectives and performance measures.

To provide a better measure of the Department's productivity, in the mid-1990s the Department of Transportation began to track the progress of all projects on which the Department was working. With a concerted emphasis on project delivery, over 90 percent of projects in the Capital Improvement Program were achieved in FY 1999.

In fact, the Department's annual transportation investment is a key component of the State's economy. The Department has invested nearly \$215 million through its capital expenditures during the past two fiscal years alone. The size of this investment has kept Delaware's contractors and construction workers busy. The indirect benefits of this capital investment—including the buying power of those who receive the payments and wages—are significant.

This level of capital investment, particularly when it's targeted carefully, sends a strong message that Delaware is a good state in which to do business and encourages existing businesses to expand and also attracts new businesses.

Financial Accountability and Performance

On the financial side, the Department of Transportation is integrating capital and operating budgets. It is less reliant on debt to finance its capital program, it has better cash management practices and project managers are becoming, for the first time, an integral part of managing the financial cost of their projects.

The Department recognizes the need to systematically review its operations for any internal risk or vulnerability from its practices and procedures. After doing research on the internal audit function in other states and using it as guidance, a five-year audit plan was established. Functions were prioritized for an internal audit review. The first year targeted many of the functions with greatest exposure.

In order to maximize revenues, the Department of Transportation conducted 375 audits in 1998 and 1999 in its Motor Fuels Division resulting in over \$150,000 in additional revenue. Increasing the number of audits increases initial compliance by fuel dealers and increases the amount of Federal funding Delaware receives.

Investing in People

The Department of Transportation, like all well-managed businesses, recognizes that its employees are a critical resource. The need to have a productive, skilled professional workforce is of critical importance in both the private and public sectors.

There is no more critical issue facing the Department than that of assuring it will have a skilled and trained workforce in the future as the strategies for meeting its mission continue to evolve. To ensure that the Department will continue to have the best staff available, it completed a comprehensive human resources management strategic plan. All aspects of human resources management were reviewed for ongoing initiatives and improvements as part of the plan, including training, employee recognition, succession planning, retirement potential and diversity. The plan's diversity component identifies what recruitment actions—from on-campus recruiting to advertising—should be taken to assure that the workforce reflects the community at large.



In addition, the Department has provided employee training that has resulted in a more professional workforce. Training programs have included diversity training, consultant management, project management and capacity analysis. In addition, a new employee orientation program has won rave reviews from within and outside the Department. The program's introductory video, "The Department of Transportation—We're on the Move," gives an overview appropriate for new employees, managers or others who want to understand the organizational structure and operations of the Department.

Strategic Thinking

Like successful businesses, the Department of Transportation has focused efforts not only on the Long Range Transportation Plan for the state, but has also recognized the value of strategic planning for specific functional areas and their investments.

One critical strategic plan the Department has developed is the Information Technology Plan. This plan defines the process by which the Department identifies, prioritizes, implements and manages information technology as a resource to achieve its mission. The Information Technology Plan outlines a blueprint for linking business operations, strategic planning and information technology. Through this plan, the Department focuses on executing business strategy by improving productivity through technology and using information technology as a tool for fostering collaboration around work processes.

The Integrated Transportation Management Systems initiatives being implemented are part of the Department-wide Information Technology Strategic Plan. This approach is unique among state transportation agencies, which typically keep technological support for office systems separate from traffic management systems. The Department of Transportation has planned for an integrated, consolidated technology network capable of changing a traffic signal's timing, processing a payment, sending an e-mail and monitoring transit schedules.

The information technology plan also aligns with the Delaware Office of Information Systems plan, as part of a statewide information capability. An early benefit of this coordination helped the Department of Transportation determine the sequence of its implementation of client-server technology.

The Department of Transportation is one of the first agencies that will become part of the statewide financial management system, Automated System for Accounting and Purchasing (ASAP), which will further strengthen its financial planning, budgeting and funds management capabilities, improve procurement and reduce the costs of goods and services.

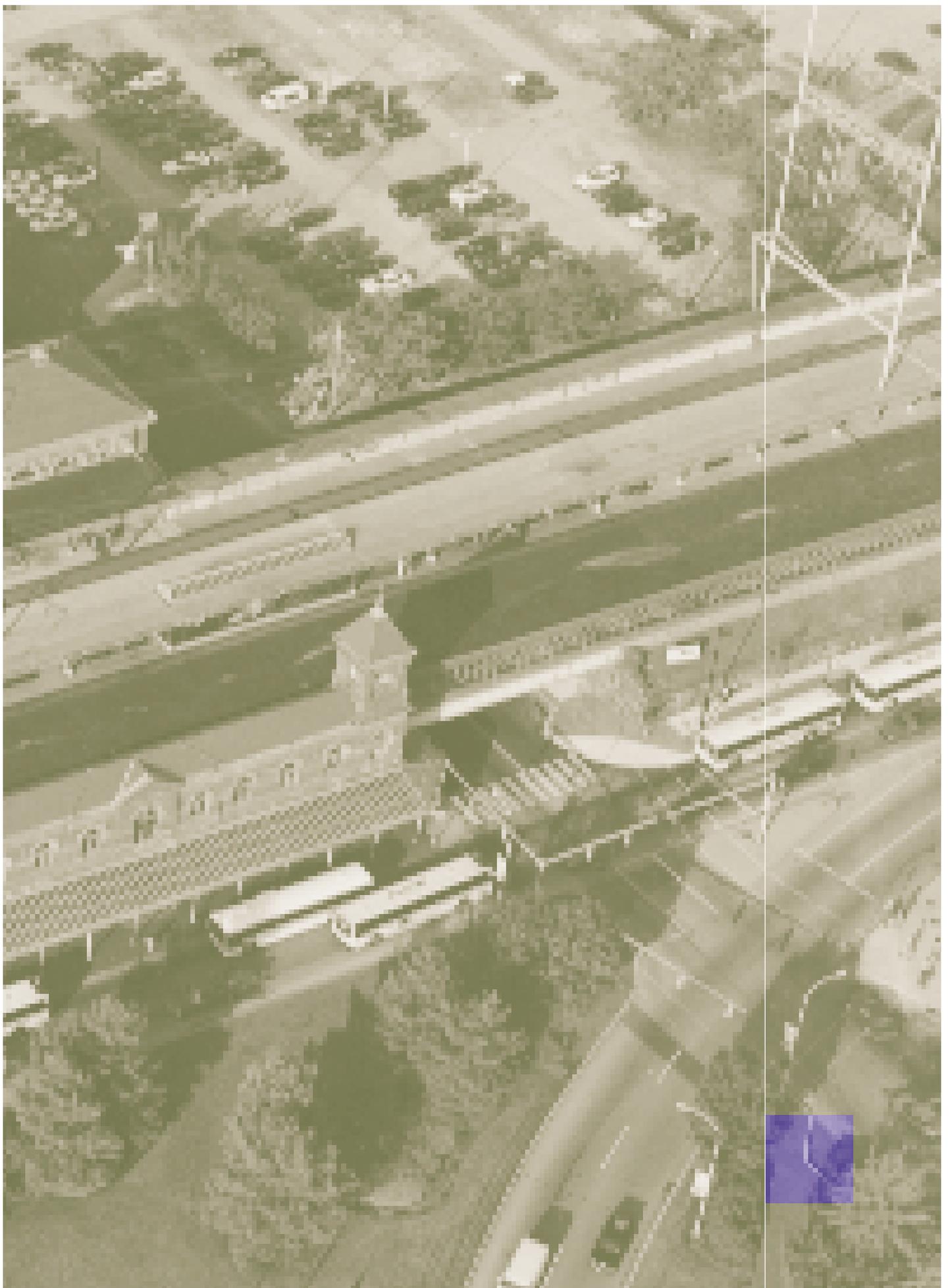
The Delaware Transit Corporation is completing a five year business plan—the first in its history. Like private sector companies, it is thinking very differently about the quality of its services and how to best serve customers. For example, a new bus maintenance facility in Kent County will result in an improved working environment which will allow for more efficient equipment management, more reliable bus service and cleaner buses. The location of administrative offices in the facility will allow for direct contact between customers and operations personnel. The consolidation of Kent County employees will improve both internal and external communications.

"The Department of Transportation's new employee orientation video is a great tool for educating newly-hired staff. And it has a lot to offer those who are not familiar with all of the services and functions of the Department. It serves as a model for other agencies in state government."

Lisa Blunt-Bradley, Secretary of Labor, Delaware









Promises For the Future

While the transformation of the Department of Transportation is underway, it is far from complete. The issues the Department of Transportation will face in the future are likely to be more complex and harder to solve than those it faced during the 1990s. While the Department of Transportation laid a solid foundation for addressing those challenges, meeting them will require:

- expanding the Department's focus on performance measurement
- integrating land use decisions and transportation planning as a way of optimizing investments and preserving Delaware's quality of life
- expanding investments in people, technology and operations
- working with citizens and local and county governments to ensure transportation investments support economic growth and livable communities

Be More Accountable by Measuring Performance

1

The Delaware Department of Transportation has made a significant commitment to measuring the performance of both its internal operations and the transportation services it provides.

As a first step toward evaluating the performance of its internal procedures and processes, the Department contracted with a team of management consultants to conduct an operational review. That operations review made 52 major recommendations, of which 94 percent are implemented or in the process of being implemented.

One key recommendation of the operations review was to hire an appropriately qualified professional services firm to conduct a comprehensive staffing study of the Department to determine whether the Department of Transportation has the people and the skills it needs to meet its mission. That study was completed in 1999 and the Department of Transportation is already implementing many of those recommendations including: hiring additional staff in planning, information technology, maintenance and operations; improving utilization of existing staff; and evaluating the increased use of contract services.

Adopting best business practices, the Department of Transportation defined a comprehensive set of goals, objectives, measures and activities for evaluating its internal and external performance.

One goal focused on internal operations, for example, is to maintain the financial stability of the Transportation Trust Fund. Objectives within that goal include:

- maintaining a 50% pay-as-you-go cash ratio
- capturing the maximum amount of Federal discretionary funding
- developing public/private partnerships to increase revenue streams
- maintaining 99.9% accuracy in fee and toll collection

Another transportation system goal is to preserve transportation assets. Objectives within that goal include:

- having 85% of pavement being in good or excellent condition
- having 90% of bridges being “structurally sufficient”
- delivering maintenance programs based on clearly-delineated standards
- providing paratransit and fixed route bus service that achieve at least 90% on-time performance

Each objective includes specific measures and activities designed to construct the measure. So, for example, an objective of having 90% of bridges meet sufficiency ratings would result in a measure of what percentage actually are sufficient compared with the 90% figure. The annual bridge inspection and bridge rehabilitation and replacement programs are activities that support that objective.

This commitment to performance will ultimately give the Department a more focused work program, result in more efficiency and provide better service to the citizens. Internally, the work processes and internal budget and staffing policies will need to undergo continuous evaluation in order for the Department to continue to respond to increasing and different demands. A commitment to measuring performance is no longer optional; it is required.

2

Link Land Use and Transportation Decisions

The greatest single challenge facing transportation planners is the disconnect between how transportation and land use decisions are made. The Department of Transportation cannot, however, face this challenge alone. The counties and municipalities must continue to transform their thinking about the relationship between land use patterns and transportation. Land use decisions must be made in conjunction with transportation investment decisions. Citizens must be an integral part of the process.

Delaware is different from many states in that nearly all the state’s roadways are managed by the state while planning and growth decisions are made on the local level. One key challenge will be to integrate and coordinate land use and transportation decisions in the future. Currently, land use decisions can be made in months, weeks and sometimes even days, while planning transportation projects, especially large ones, can take several years to fulfill federal requirements, solicit public input and identify funding.

As the 21st century begins, the Department needs to continue to work aggressively with county and local governments and the development community to plan developments that have higher densities, mixed uses, pedestrian and mass transit accessibility, meaningful open space and safe traffic flow.

3

Expand Investments in People, Technology and Operations

If there has been one single lesson learned during the past decade, it is that the Department of Transportation must continue to solve transportation problems in

a variety of ways other than building more roads. Although it appears on the surface that building more roads will solve congestion problems, it has become evident that using a road building strategy alone will exacerbate congestion, not solve it. One challenge the Department will face will be to continue to shift its emphasis from roadbuilding to managing and operating the system. In fact, as the population increases and as new development is proposed, this shift in policy will need to be accelerated and expanded.

As the Department continues its transformation toward becoming a mobility manager—operator and manager of the transportation system—it will need to continue to invest in having a well-skilled, highly-trained, productive and professional workforce.

All of the Integrated Transportation Management Systems being developed and utilized to smooth and speed the flow of traffic are based on new technologies. As these systems are expanded, more Department operations will run on a 24 hours a day/seven days a week schedule. These systems will require additional investments in technology and changes in employees, skills and job roles.

Similarly, a continued capital investment in technology will enable the Department to provide better services and be more responsive to customers more cost effectively.

Make Transportation Investments which Support Economic Growth and Livable Communities

4

Perhaps there is no more critical task before Delaware than defining what Delaware will look like in 2025. Making communities livable so that people feel good about where they live and how they travel will continue to be a challenge for all levels of government.

Over the next year, the Department of Transportation will be updating its Long Range Transportation Plan. Done in partnership with county and local governments and citizens from across the state, this plan will provide a blueprint for this future vision.

Delaware is at a crossroads. It could easily follow a path which continues development and transportation patterns of the past dominated by sprawling development which make people's work and leisure activities dependent on the automobile. Or it could follow a path where quality of life and protection of natural resources provide people with more living and transportation choices. It could follow a path where congestion chokes economic growth. Or it could follow a path of "smart growth" which balances quality of life issues with economic development. It could continue to expand its partnerships with citizens, county and local governments and other regions. Or it could determine its investments and plan its projects with little input from others.

Delaware's future lies in making transportation networks—highway, transit, bicycle and pedestrian—work for individuals and businesses. The Department of Transportation has made a commitment to transformation. It will continuously examine and re-examine itself to meet new transportation challenges and improve the quality of life in Delaware.

That's a promise.

Progress as Promised

Over the past several years, the Department of Transportation has transformed its capital program from a wish list to a work program. It completed projects that had been on the books for 25 years, eliminated key bottlenecks and congestion points, and inaugurated expanded commuter rail and bus services. It also created bikeways and pedestrian facilities, reconstructed bridges and improved key intersections.

Naaman's Road--This 25 year old project was opened in 1999.

SR 1--Significant progress has been made toward completion of this toll road which significantly improves north-south access in the state. A new bridge over the Cheapeake and Delaware Canal was completed.

Newark--Opened a commuter rail station, launched commuter rail service. Completed Route 273 from Route 4 to Amtrak; Route 896 between Route 40 and I-95.

Bus Services--Launched express bus service between Kent and New Castle counties and inaugurated paratransit services.

Wilmington--Completed a bikeway along the Christina River and the first phase of a pedestrian walkway along Riverfront/River Walk Park; improved Martin Luther King Boulevard; completed Transit Center improvements and local street enhancements.

Major Bridge Rehabilitations

- SR 1 over Chesapeake and Delaware Canal
- Rehoboth--Silver Lake Bridge
- Odessa--Drawyer's Creek Bridge
- Wilmington--VanBuren Street Bridge
- Seaford-Stein Highway overpass

Lancaster Pike--Improvements to this roadway service growing employment and residential areas.

Route 7--Reconstruction helps ease congestion.

Major Pavement Rehabilitations, Road Reconstructions and Intersection Improvements

- Churchman's Road/SR 7
- Interstate 495
- Dover--Route 13; Governor's Avenue including adding sidewalks; SR 1
- Entrance to Delaware Air Force Base
- Hockessin--41/48 intersection improvements
- Route 141
- Valley Road, Route 7 to Route 41
- Terminal Avenue
- Ogletown Interchange
- Rockland Road and Mt. Lebanon Road
- Bridgeville Bypass /Route 404
- Milford/Georgetown--Route 113

Pedestrian and/or Bike Paths

- Bringham
- Cape Henlopen
- Scarborough Road
- Smyrna

Scarborough Road--Links West Dover employment centers directly with SR1 and includes pedestrian and bicycle features.

Route 26--Improves traffic conditions in Delaware's beach region.

Providing Mobility for the 21st Century

Delaware Department of Transportation

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Thomas R. Carper

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Anne P. Canby

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January 2000