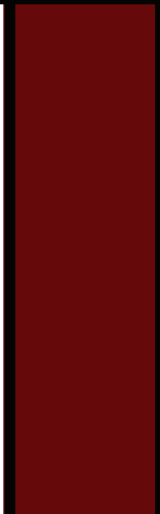


Dover/Kent County Metropolitan Planning Organization



Transportation Information Booklet 2010



November 2011

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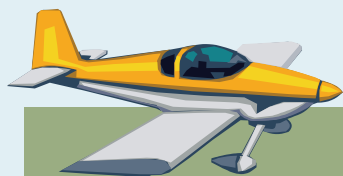
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The preparation of this document was financed in part with funds provided by the federal government, including the Federal Transit Administration, through the Joint Funding Simplification Program, and the Federal Highway Administration of the United States Department of Transportation, and by the Kent County Levy Court.

Most of the information in this booklet is from 2010. However, some is older, and some is from 2011, as the information became available. We hope you find this publication informative and enjoyable.

— The Dover/Kent County MPO



It's a busy world out there with places to go, people to see and goods to ship. Wherever we go, and however we get there, there is a network of passages to follow.

Planning transportation networks doesn't happen overnight. That's why the Dover/Kent County Metropolitan Planning Organization (MPO) invites the talents of Kent County's transportation and planning communities to create a blueprint for the safest and most efficient way to get people, goods and services where they need to go.

The Dover/Kent County MPO:

Planning transportation for you, for me, for everyone.

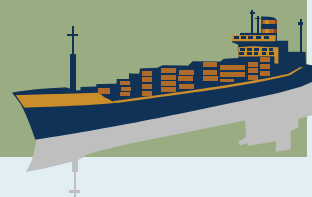


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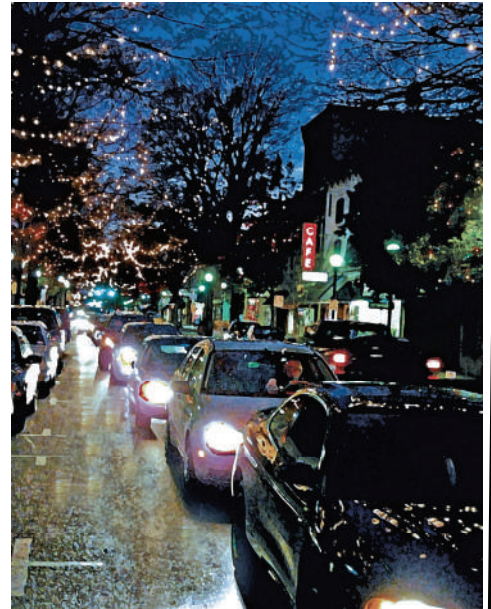
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Traffic

Traffic can be one car on a country road or hundreds of vehicles on an urban highway. Three measures are used to define traffic conditions in Kent County: Average Annual Daily Traffic (AADT), Level of Service (LOS), and Vehicle Miles Traveled (VMT).

Why is AADT Important?

Annual Average Daily Traffic (AADT) calculates the average number of cars that are on the road throughout the year. AADT is determined by taking Average Daily Traffic (ADT) counts and adjusted for Seasonal Adjustment Factors (SAF). The Delaware Department of Transportation (DelDOT) uses 78 Automatic Traffic Recorder Stations throughout the state, 18 of which are in Kent County, to record traffic counts each day. (See maps, pgs. 6&7)



Level of Service

Level of Service is a measurement of road usage. Levels are listed from "A" to "F" like grades on a school report card to indicate the quality of travel that motorists perceive.

A&B: Traffic flows freely with few stops and brief delays

C: Traffic flows well; delays seem reasonable

D: Traffic moves, but motorists sense congestion

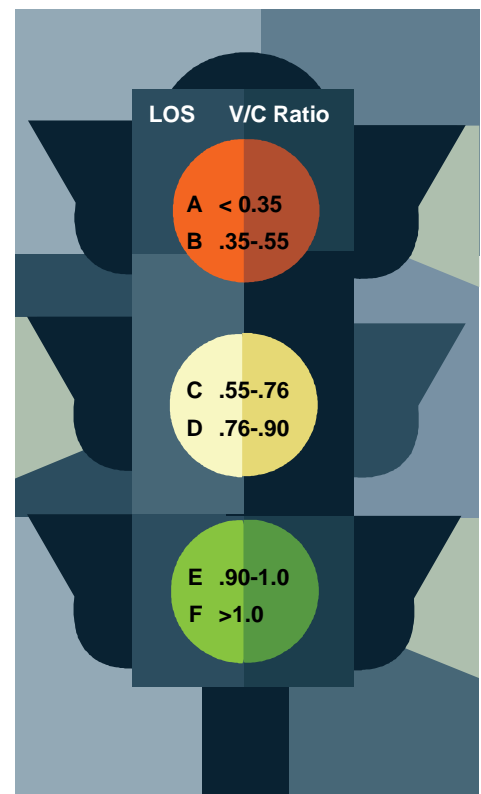
E: Traffic slows; delays seem long. The road is crowded

F: Traffic is stop-and-go with long delays. Traffic is more than road can handle

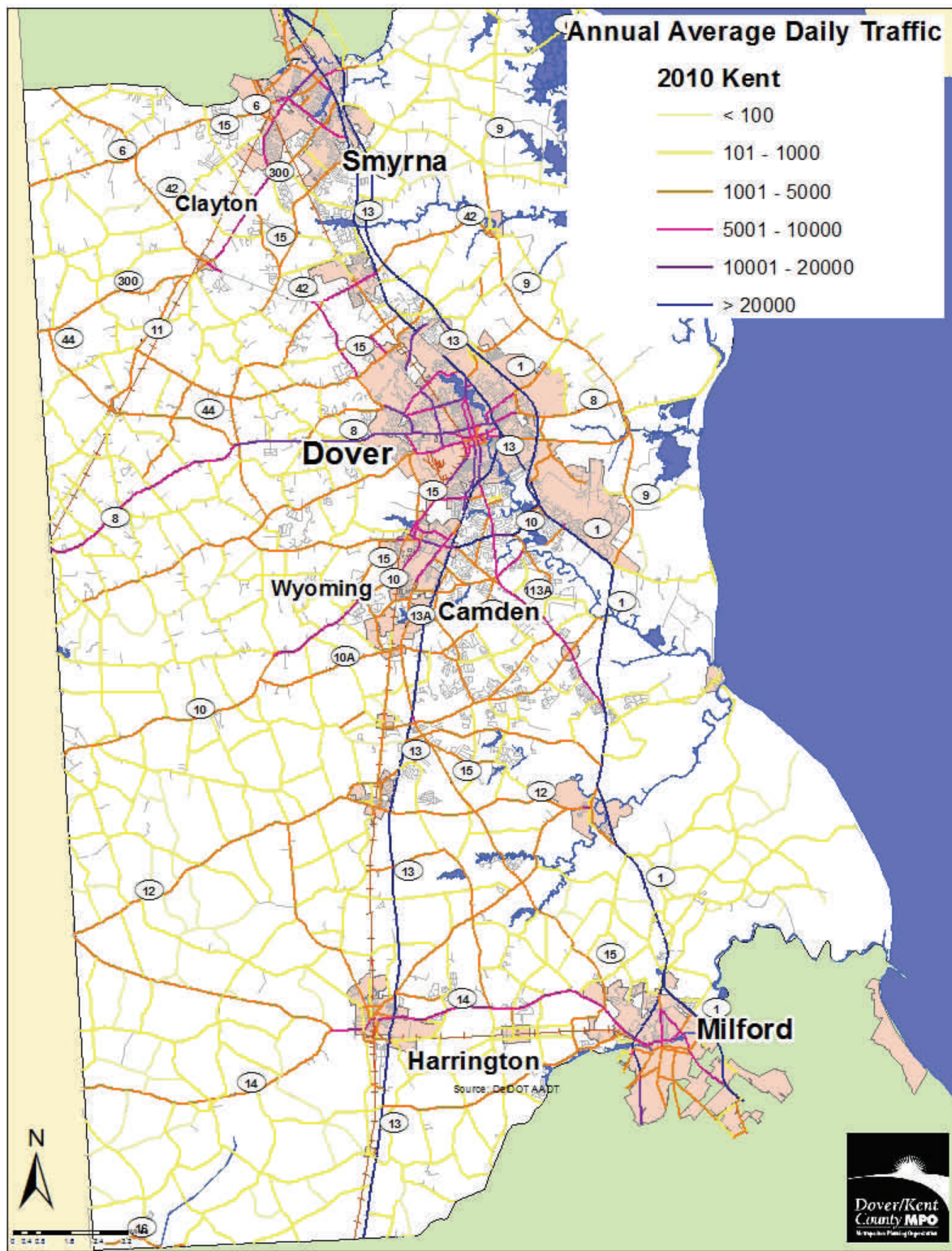
Table Explanation:

Volume to Capacity (V/C) Ratio is determined by dividing the volume of traffic by the amount of traffic the road can carry.

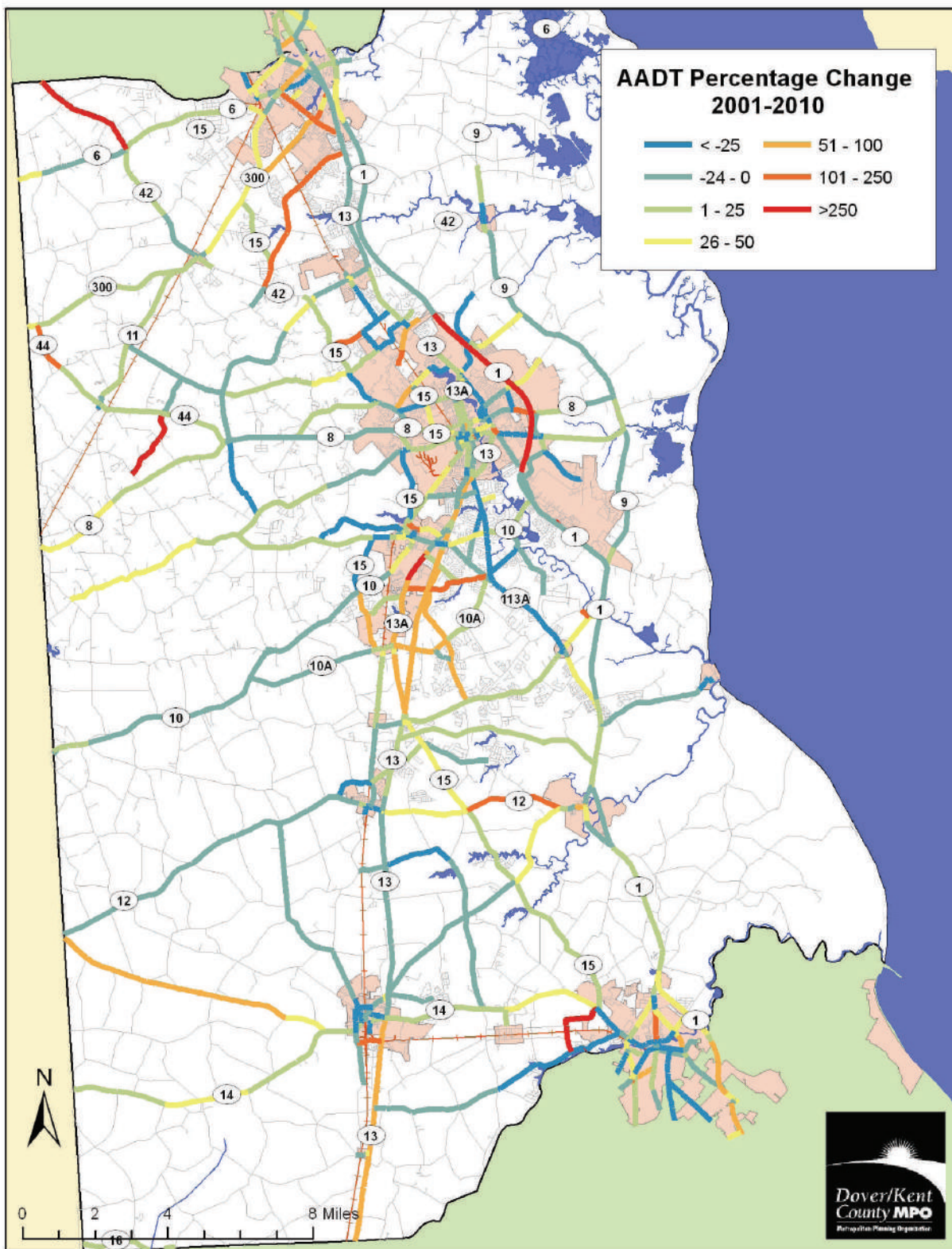
$$\text{Traffic Volume} \div \text{Roadway Capacity} = \text{V/C}$$



AADT MAP



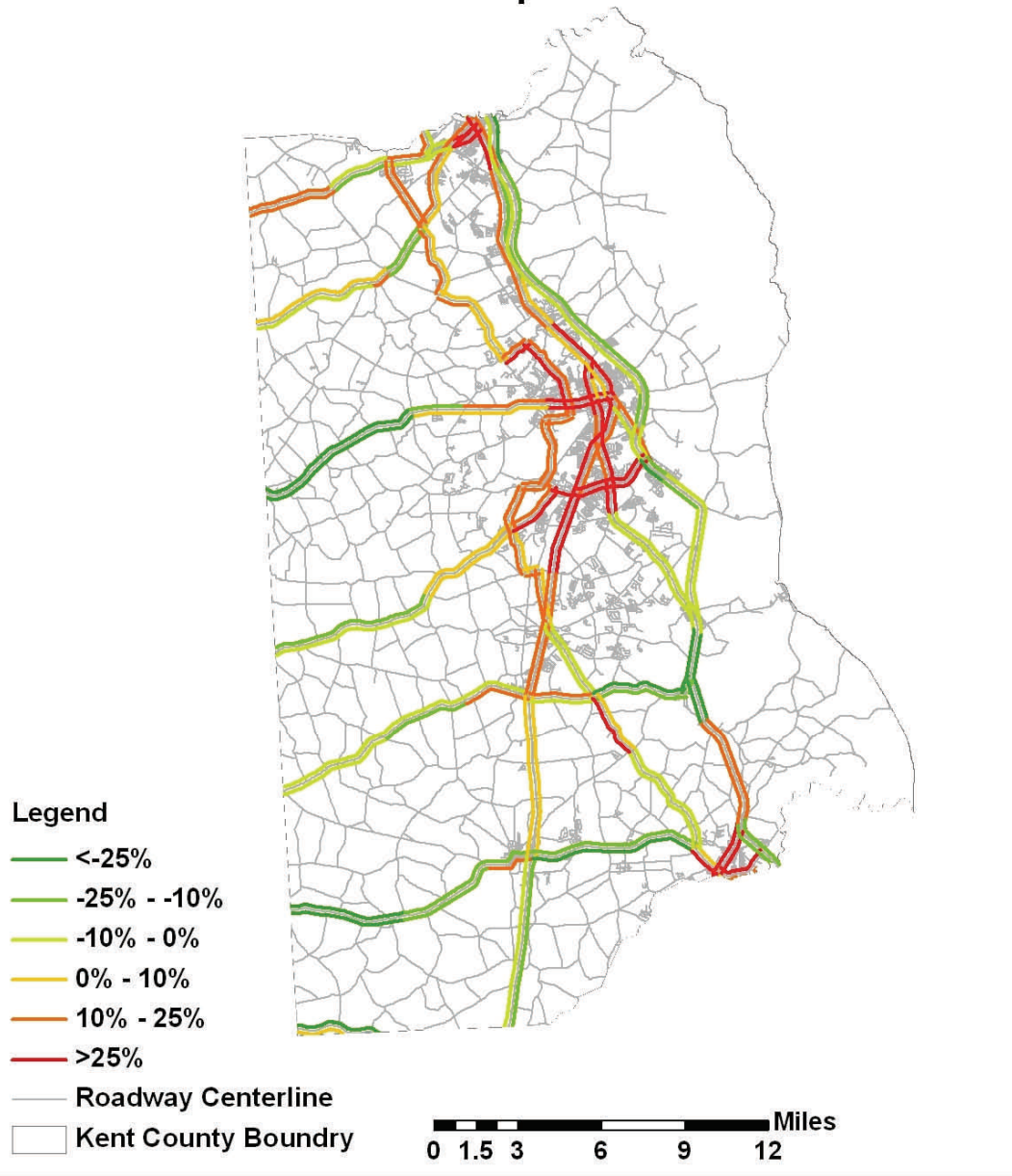
AADT MAP (Percent Change)



Travel Speed

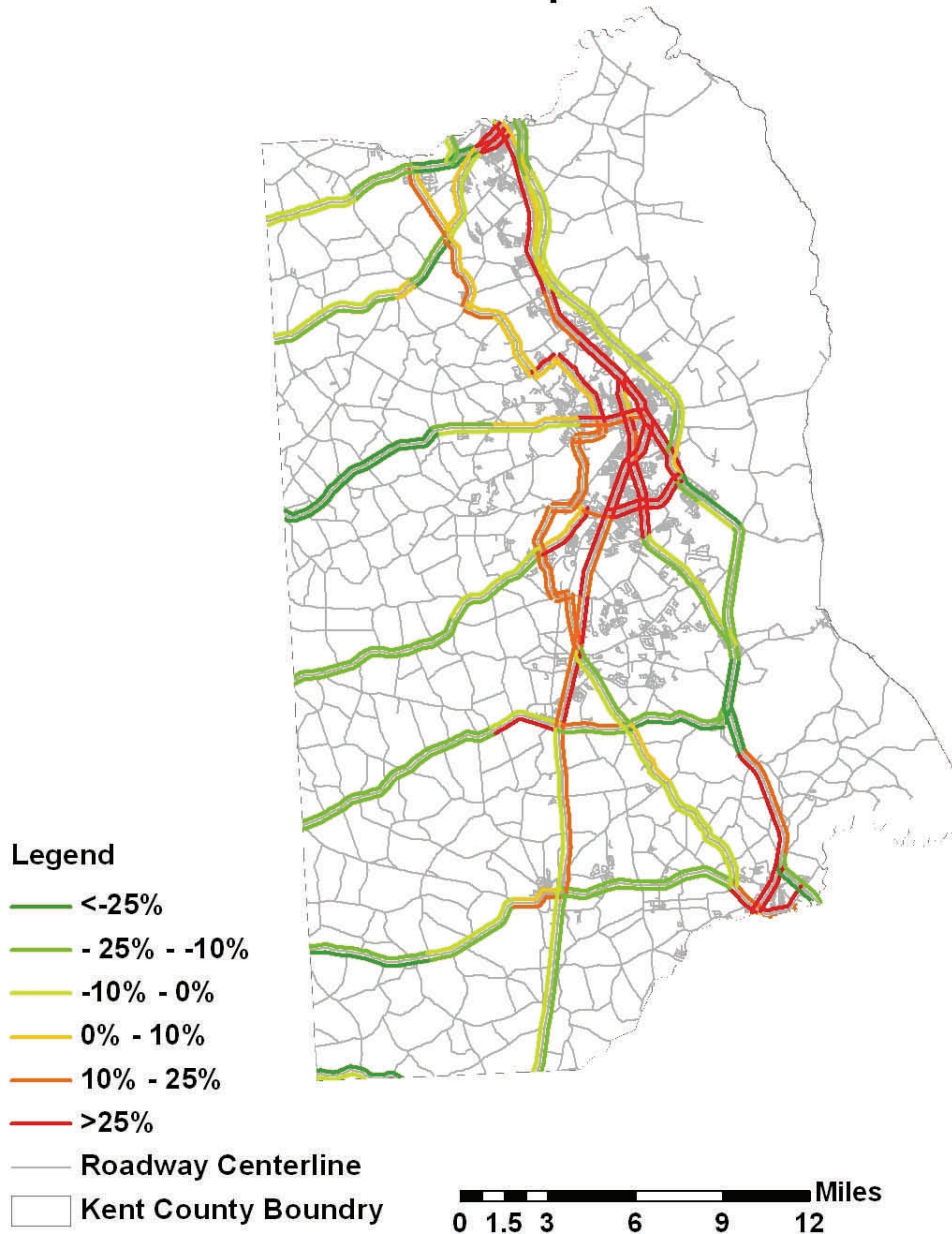
The map below shows the percent difference between the posted speed and the average speed on selected roads in Kent County. The difference is calculated by subtracting the average speed from the posted speed and dividing the difference by the posted speed. On green roads, travel was 25 percent faster than the posted speed. On red roads, travel was 25 percent slower than the posted speed.

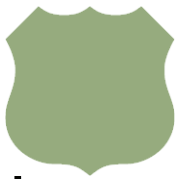
Travel Time and Delay Study- Fall 2010- Kent County Percent Difference Between Posted Speed and Mean Speed - AM



The map below shows the percent difference between the posted speed and the average speed on selected roads in Kent County. The difference is calculated by subtracting the average speed from the posted speed and dividing the difference by the posted speed. On green roads, travel was 25 percent faster than the posted speed. On red roads, travel was 25 percent slower than the posted speed.

Travel Time and Delay Study- Fall 2010- Kent County Percent Difference Between Posted Speed and Mean Speed - PM





VMT (Vehicle Miles Traveled)

Thousands of cars travel Kent County roads each day. Calculating VMT helps to determine the distance each of these cars travels. Daily Vehicle Miles Travelled (DVMT) is calculated by taking a driver's average trip length and multiplying it by the total number of daily trips.

Year Daily Vehicles Miles Traveled

2004	4.45 million
2005	4.54 million
2006	4.60 million
2007	4.65 million
2008	4.44 million
2009	4.47 million
2010	4.17 million



Who's Driving?

According to the 2010 U.S. Census, Kent County's population is 162,310. Forty-eight percent of that population is male and 52% is female.



Year	Number of Valid Drivers	Male Drivers Percentage	Female Drivers Percentage	Registered Vehicles
2001	85,753	45.7%	54.2%	85,456
2002	88,395	45.6%	54.3%	88,691
2003	91,205	45.7%	54.2%	91,490
2004	94,460	45.7%	54.2%	94,560
2005	97,168	45.6%	54.3%	98,886
2006	98,823	45.6%	54.3%	101,573
2007	100,361	45.5%	54.4%	103,161
2008	114,799	48%	51.9%	139,496
2009	115,365	48.6%	51.4%	135,889
2010	116,296	48%	52%	133,982

The 2008-2010 registered vehicle numbers are based on tag types and not necessarily vehicle types. The 2009 and 2010 figures for registered vehicles does not include trailers or farm tractors. — Source: Delaware Division of Motor Vehicles



The Highway Performance Monitoring System (HPMS) is a national database of information that serves the needs of state and local governments, MPO's, and other customers in assessing high-

way condition, performance, air quality trends, and future investments for the functional classification of the nation's roadways.

The data obtained from HPMS serves as a basis for determining the level of federal-aid funding states

receive by Congress using bi-annual condition and performance reports. This ultimately affects every state that contributes data to the HPMS. Below are some of the data Delaware reports to the HPMS.

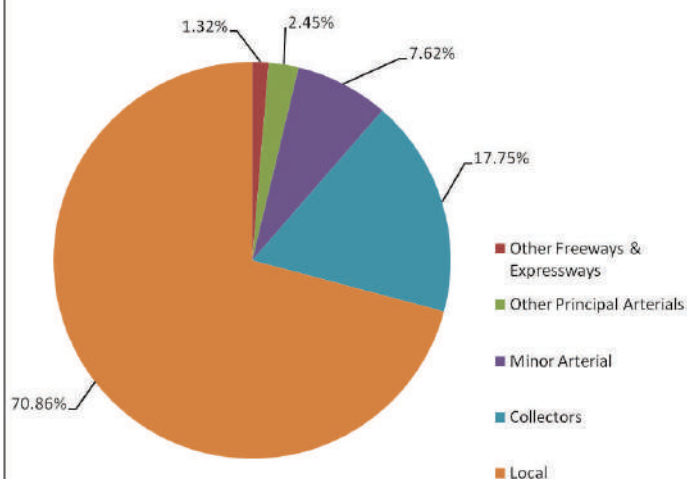
—Source: DelDOT

HPMS

Roadway Mileage by Functional Class for Kent County (2010)

Functional Class	Route Miles	Lane Miles	% of Total Lane Miles
Interstate	0	0	0.00%
Freeway & Expressway	20	85	2.67%
Other Principal Arterials	37	149	4.68%
Minor Arterials	115	289	9.09%
Collectors	268	537	16.88%
Local	1,070	2,121	67%
TOTAL	1510	3,181	100%

Route Miles by Category in Kent County (2010),
Percent of Total Roadways



This pie chart shows the distribution of route miles among the various roadway classifications. Local roadways (70.86% of the Route Miles in Kent County) represent any road that provides direct access to land or routes with a higher classification.



Route Miles: are:

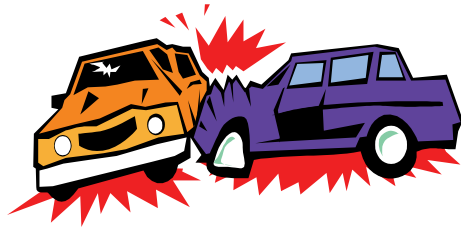
Miles of road in Kent County



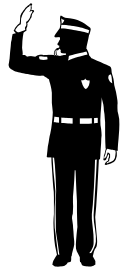
Lane Miles: are:

Miles of road multiplied by the number of lanes

Crashes

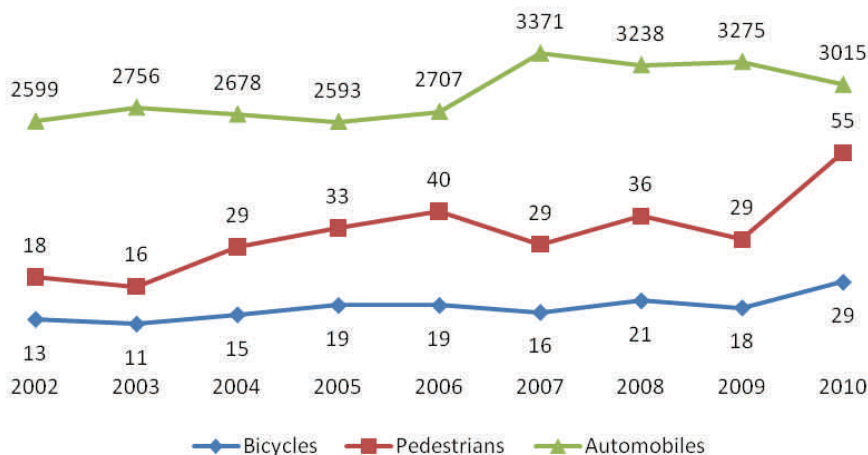


Safety is always a concern.
Here is crash-related data for
Kent County.



For Kent County between 2002 and 2010

Crash Comparison Bicycles, Pedestrians and Automobiles



Kent County
vehicle crashes
decreased 8%
between the years
2009 and 2010.

There were 256
alcohol related
crashes in Kent
County in 2010.
This represented
8% of the 3,015 total
crashes.

2010 Crash Rates

Crash rates (per 100,000 population) provide a fair and relevant way to compare crash data between the three counties in Delaware and statewide crash data. A crash rate per 100,000 population signifies the amount of crashes that occurred for every 100,000 people.

Crash Rate (per 100,000 population)	New Castle County	Kent County	Sussex County	Statewide
Fatal Crashes	8.36	12.32	14.71	10.47
Alcohol Related Crashes	2.79	6.78	5.58	4.12
Bicycle Crashes	16.53	17.87	20.29	17.60
Pedestrian Crashes	54.78	33.89	29.42	45.44

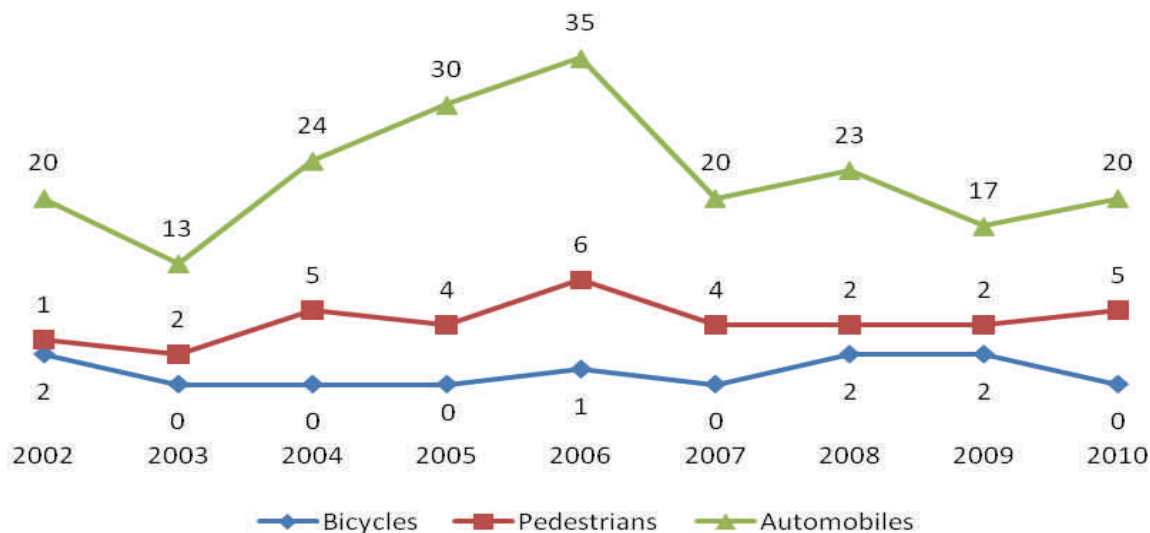
Source : Delaware State Police

Fatalities

There were 94 fatal auto crashes in Delaware in 2010, down by 8% from 102 fatalities in 2009. In 2010, Kent County had the fewest auto-related fatalities of Delaware's three counties.



Fatal Crash Comparison Bicycles, Pedestrians and Automobiles



Reported fatal crashes in Kent County (2002-2010) — Source Delaware State Police

2010 Fatality Rates

Fatality Rate (per 100,000 population)	New Castle County	Kent County	Sussex County	Statewide
Fatal Crashes	8.91	14.79	15.72	11.47
Alcohol Related Crashes	2.97	6.78	6.09	4.34
Bicycle Crashes	0.19	0.00	1.01	0.33
Pedestrian Crashes	2.60	3.08	1.52	2.45

Fatality rates (per 100,000 population) provide a fair and relevant way to compare crash data between the three counties in Delaware. A fatality rate per 100,000 population signifies the number of crash related fatalities that occurred for every 100,000 people.

Safety Programs

Delaware's Department of Transportation has many programs to help keep travelers safe. The **Highway Safety Improvement Program (HSIP)** is a comprehensive safety program whose goal is to reduce fatal and injury crashes on highways. As a part of HSIP, four other programs exist to evaluate unsafe roads and

high crash locations. The **High Risk Rural Roads Program** evaluates safety conditions and recommends improvement for high crash rural collector and rural local roads. The **Strategic Highway Safety Plan** is the state's collaborative plan to reduce fatal crashes, and the **Highway/Rail Grade Crossing Safety Program** annually reviews each highway rail grade crossing for safety.



Fuel Prices in Kent County

Fuel costs can have a large effect on people's travel decisions. Increases in fuel costs can dissuade people from traveling long distances or to make fewer local trips.



Annual Average Fuel Price Dover, Delaware

Year	Unleaded Price (Per Gallon)	Diesel Price (Per Gallon)
2004	\$1.79	\$1.84
2005	\$2.21	\$2.40
2006	\$2.53	\$2.70
2007	\$2.67	\$2.88
2008	\$3.13	\$3.88
2009	\$2.24	\$2.45
2010	\$2.71	\$2.97

—Source: AAA Mid-Atlantic

There are many ways to save money on fuel by reducing the amount you use. The Web site www.fueleconomy.gov provides many fuel-saving tips including planning and combining trips, tips to drive more efficiently, and information on proper car maintenance that can save fuel.

—Source: www.fueleconomy.gov

DTMS

The Delaware Trip Monitoring System survey was put together by the University of Delaware for DelDOT to answer the questions of where people go, how they get there, and how often they travel. Below are some interesting facts about Kent County residents that came out of the survey.



Trip Purpose by Three-Year Average

Destination	2006 - 2008	2007 - 2009	2008 - 2010
Work	35.2%	32.0%	31.2%
Store	16.0%	17.5%	17.6%
Drop Off/Pickup	8.2%	8.3%	9.2%
Social	5.9%	7.6%	7.6%
Recreation	6.7%	7.2%	7.2%
School	5.0%	6.2%	6.5%
Other	8.3%	6.8%	6.1%
Doctors (Medical)	4.5%	4.4%	4.7%
Dining Out	4.6%	4.4%	4.6%
House of Worship	1.9%	2.1%	2.3%
Bank or Post Office	2.2%	2.2%	1.6%
Child Care	0.9%	0.9%	0.7%
Barber/Hairdresser	0.4%	0.4%	0.4%
Public Transportation Stop	0.3%	0.0%	0.1%

Responses to the Delaware Trip Monitoring Survey have remained relatively stable over the past few years, with only minute changes in the destination percentages. Excluding trips to one's home, the 2008-2010 trip purpose averages indicated that the majority of vehicle trips were to work or to a store.

Older Drivers



Delaware the fastest growing aging population in the United States and has more than 250,000 drivers over the age of 60.

Population projections show that by the year 2030, nearly 25 percent of the state's population will be older than 65.

Delaware is doing more for senior drivers by striving to keep them safely on the road as long as possible. In 2010, the Delaware Division of Motor Vehicles formed the Senior Driver Task Force to determine what additional steps the state can take to respond to

the needs of senior drivers. One measure was to launch a Web site for senior drivers, complete with information on driver's licenses, general car information, an online version of the DMV's Senior Driving manual, health information, self-assessment tests and reaction time games for drivers to test their skills.

For more information, visit: www.seniordriver.dmv.de.gov.

As of July 2010, the U.S. Census Bureau reported that 14.3% of Delawareans are 65 or older. Of those drivers, 21.4% of the population in Sussex County, 13.4% in Kent County and 12 % in New Castle County.

Delaware's Division of Motor Vehicles reports that Delaware has 296,681 drivers age 50 and older. Of those, 54% are in New Castle County, 28% are in Sussex County and 18% are in Kent County.

Safety Measures

Last year, 1,851 drivers age 55 and older were involved in automobile crashes in Delaware, according to DMV and Delaware State Police statistics. There were 15 vehicle oc-

cupants age 55 and older who were killed in Delaware crashes.

Delaware has already taken steps to improve the driving environment for not just seniors, but all Delaware drivers. Some of these steps include:

- Allowing all senior drivers 85 years and older to obtain a handicapped parking placard

- Enlarging street signs where possible, particularly at critical signalized intersections

- Countdown pedestrian signal heads have been installed at over 100 intersections statewide, and are being included in all new and retrofit signal designs.



RideShare Delaware

RideShare Delaware is a program administered by DART that helps commuters find and use alternative modes of transportation including carpools, vanpools, transit and supportive bicycle or pedestrian facilities. The goal of RideShare Delaware is to reduce single occupancy vehicle

trips as a way to improve air quality and manage traffic congestion. To learn more about the program, visit RideShare Delaware's website at www.ridesharedelaware.org or call toll free at 1-888-RIDE-MATCH.



Kent County had 786 people registered in RideShare Delaware as of June 2011.

Kent County Mode Split (As of June 2011)	
Mode	Kent County's Participants % of Mode Total
Drive Alone	41.6%
Transit	26.2%
Carpool	25.8%
Vanpool	3.2%
Walk	1.7%
Bicycle	1.3%
Source: RideShare Delaware	

Kent County Mode Split represents the proportion of people registered with RideShare Delaware and the mode of transportation that they have indicated using. RideShare Delaware users can access an account online to specify their current transportation mode for commuting. Users that drive alone might have not found a ride partner yet or have discontinued use of the RideShare program. RideShare users that have indicated that they are carpooling, vanpooling, walking, bicycling or using transit are eligible for RideShare Delaware's "Guaranteed Ride Home."

RideShare Delaware offers free ride matching services for commuters working in Delaware as well as for parents of Delaware school students. It offers an emergency ride home benefit for registered commuters actively using the service. Delaware employers also are eligible for vanpool service and transportation benefit assistance.

Commute Patterns of Kent County Employees/Residents Registered with RideShare			
Kent County Residents Commuting to: (770 commuters)			
New Castle County	Kent County	Sussex County	Other
651	90	26	3
84.5%	11.7%	3.4%	0.4%

Commute Patterns of Kent County Employees/Residents Registered with RideShare						
Kent County Employees Commuting from: (587 commuters)						
New Castle County	Kent County	Sussex County	Maryland	Pennsylvania	New Jersey	Virginia
341	90	53	8	76	18	1
58.1%	15.3%	9.0%	1.4%	12.9%	3.1%	0.2%

Transit



DART First State (DART) is Delaware's transit service for fixed-bus routes and paratransit service. Delaware Transit Corporation (DTC), a division of DelDOT, operates DART. DART offers weekday service between Smyrna, Dover, and Milford, and throughout the greater Dover region. Saturday service exists in the Dover area. For detailed times, schedules, and route maps, visit DART's Web site at www.DartFirstState.com.

Bus Fares (One Way Trip)

	1 Zone	2 Zones
Cash	\$1.00	\$2.00
Cash (Reduced Fare)	\$0.40	\$0.80
Daily Pass	\$2.10	\$4.20
Children (46" Tall or less)	Free	Free
Blind	Free	Free

Reduced Fares are for people who are ages 65 & over, or who have a certified disability. All fixed-route bus trips are one zone except for some trips on Route 303 (Dover to Georgetown).

—Source DTC

Cost Per Trip

Route Type	Cost per Trip
Fixed Route	\$9.53
Inter-County Fixed Route	\$15.63
Paratransit	\$34.45

The amounts in the table are DART's total costs per trip for each listed type of bus service in Kent County. Trip in this case means one person, taking a one-way bus trip. This is not the rider's individual cost. The difference to make up DART's share of the cost comes from the Delaware Transportation Trust Fund.



DART Routes



Local Weekday Routes

Route #	Description
100	Forrest Ave. (Dover Transit Center to Greentree Village Shopping Center)
101	Walker Rd. (Dover Transit Center to Greentree Village Shopping Center)
102	Gateway West (Dover Transit Center to Gateway West Shopping Center)
103	Rodney Village (Dover Transit Center to Rodney Village Shopping Center)
104	Walmart (Dover Transit Center to Walmart)
105	Moore's Lake Ctr. (Dover Transit Center to Gateway South)
106	Dover AFB (Dover Transit Center to Camden Walmart)
107	Blue Hen Corporate Center (Dover Transit Center to Blue Hen Corporate Center)
108	Towne Point (Dover Transit Center to Townsend Blvd.)
109	Dover Mall (Dover Transit Center to Walmart)
112	Del Tech (Dover Transit Center to Scarborough Rd.)
113	West Dover (Dover Transit Center to Dover Mall)
117	Harrington-Dover (Harrington to Dover)
120	Dover-Cheswold-Smyrna (Dover to Smyrna)

Local Saturday Routes

101	Walker Rd. (Dover Transit Center to Greentree Village Shopping Center)
104	Walmart (Dover Transit Center to Walmart)
107	Blue Hen Corporate Center (Dover Transit Center to Blue Hen Corporate Center)
109	Dover Mall (Dover Transit Center to Walmart)
112	DelTech (Dover Transit Center to Scarborough Rd.)

Intercounty Routes

301	Inter-county New Castle/Kent (Dover to Wilmington)
303	Dover to Georgetown
305	Beach Connection (Seasonal)

GoLink Service

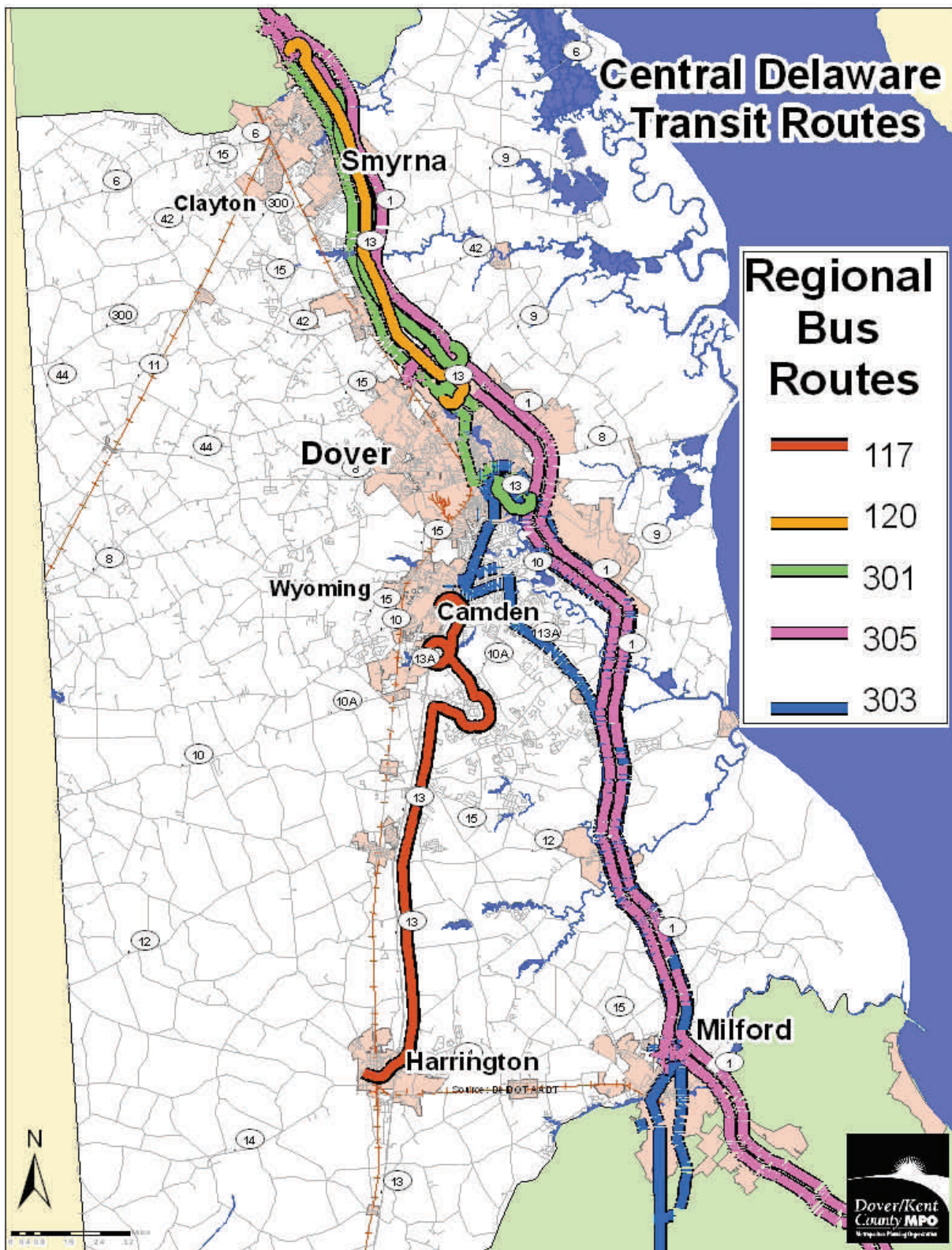
The GoLink Flex service is available from 6 a.m. to 6 p.m. Monday through Friday for fixed route bus stops. GoLink Flex service provides additional accessibility to riders who live beyond walking distance of a DART fixed route bus stop. Riders who live within designated Flex Zones are able to make reservations for connections between their community and a fixed route bus stop. GoLink Night service provides the convenience of service between 6 p.m. to 9 p.m. to commuters within the Dover area through the existing paratransit service. Reservations for these services must be made between one and seven days in advance of the day of service. For more information, visit www.DartFirstState.com.



Central Dover Map



Intercounty and Regional Fixed-Route service





Kent County's Fixed-Route Bus Ridership has grown significantly over the past three years, having jumped nearly 40% between 2007 and 2010.

Kent County Ridership

DART buses are everywhere. But how many people actually ride the bus each year? How many miles do the buses travel when taking their passengers to their destinations? Here a few quick facts:

Kent County Ridership Paratransit		
Year	Number of Passengers	Percent Change
2005	157,346	
2006	169,171	7.5%
2007	176,716	4.5%
2008	183,383	3.8%
2009	193,916	5.7%
2010	208,098	7.3%

Kent County Ridership Fixed Routes		
Year	Number of Passengers	Percent Change
2005	340,856	
2006	364,781	7.0%
2007	376,223	3.1%
2008	409,942	8.9%
2009	468,942	14.4%
2010	525,829	12.1%



Kent County Saturday Service Ridership

<u>2009</u>		<u>2010</u>		<u>2011</u>	
January	1866	January	2,001	January	1,568
February	1589	February	1,381	February	1,972
March	1882	March	1,750	March	1,951
April	1927	April	1,765	April	2,376
May	2205	May	2,087	May	1,642
June	1911	June	1,823	June	1,783
July	1,321	July	1,973	Total	11,292
August	2,342	August	1,896		
September	1,884	September	1,856		
October	2,274	October	2,292		
November	2,008	November	1,850		
December	1,345	December	2,932		
Total	22,554	Total	23,606		



Passengers Per Mile

How do you measure the productivity of a transit system like DART's fixed-route bus service? Passengers Per Mile is one method. Passengers Per Mile calculates the total number of passengers who ride a given route over the total miles that route travels. The more passengers that ride that route, the higher the ratio. A higher ratio means the route is more productive.

Local Fixed Bus Routes

By this measure, Route 107 is the most productive with a Passenger Per Mile Ratio of 1.49. Route 107, the Capital Complex-Blue Hen Corporate Center Loop, provides weekday and Saturday service to the Dover Transit Center, the Blue Hen Corporate Center, the DelDOT Administration Building, the DART Administration Building and the Tudor Industrial Park. The numbers in red indicate the highest ratios.

Route	Passenger Per Mile Ratio		Percent Change Since 2009
	2009	2010	
100	0.33	0.33	0.00%
101	1.03	1.25	21.3%
102	1.25	1.39	11.2%
103	0.85	1.04	22.4%
104	1.32	1.32	0.00%
105	0.63	0.65	3.12%
106	0.41	0.38	-7.3%
107	1.39	1.49	7.2%
108	0.85	0.90	5.9%
109	1.50	1.47	-2.0%
112	1.16	1.06	-8.6%
113	0.79	0.81	2.5%
117		0.16	N/A
120		0.30	N/A

Intercounty Fixed-Routes			
Route	Passenger Per Mile Ratio		Percent Change Since 2009
	2009	2010	
301	0.41	0.36	-12.20%
303	0.18	0.20	11.11%
305		0.23	N/A

Paratransit		
Passenger Per Mile Ratio		Percent Change Since 2009
2009	2010	
0.10	0.10	0.00%

Dover Transit Center

The new Dover Transit Center opened in December 2010 at the intersection of Water and Queen Streets near downtown Dover. This new transit hub is two blocks from one the Delaware Department of Transportation (DelDOT) operated at Water Street and South Governor's Avenue. The \$5.3 million hub has a larger passenger shelter, parking lot and bus

driveways, newspaper kiosks and bike racks. Funding for the new transit center came from the 2009 Federal American Recovery and Reinvestment Act (ARRA). Routes 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 112, 113, 120, 301, and 303 stop at the Dover Transit Center.

According to the Delaware Transit Corporation, between



January 1, 2011 and June 10, 2011, the Dover Transit Center had an average of 1044 passenger departures and 866 passenger arrivals each day.



Google Maps



Dover Transit Center Neighborhood Plan



In Fall 2010, the Dover/Kent County MPO and the City of Dover held a multi-day workshop, or charrette, to explore how the neighborhood surrounding the new Dover

Transit Center could evolve over the next several years. The result was the Dover Transit Center Neighborhood Plan.

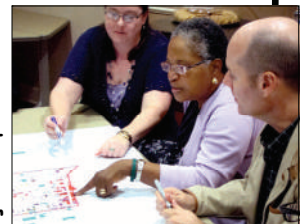
The purpose of the plan and its guidelines is to provide the City of Dover with a development planning strategy for the area surrounding the transit center, using the hub as an im-

petus for re-

development.

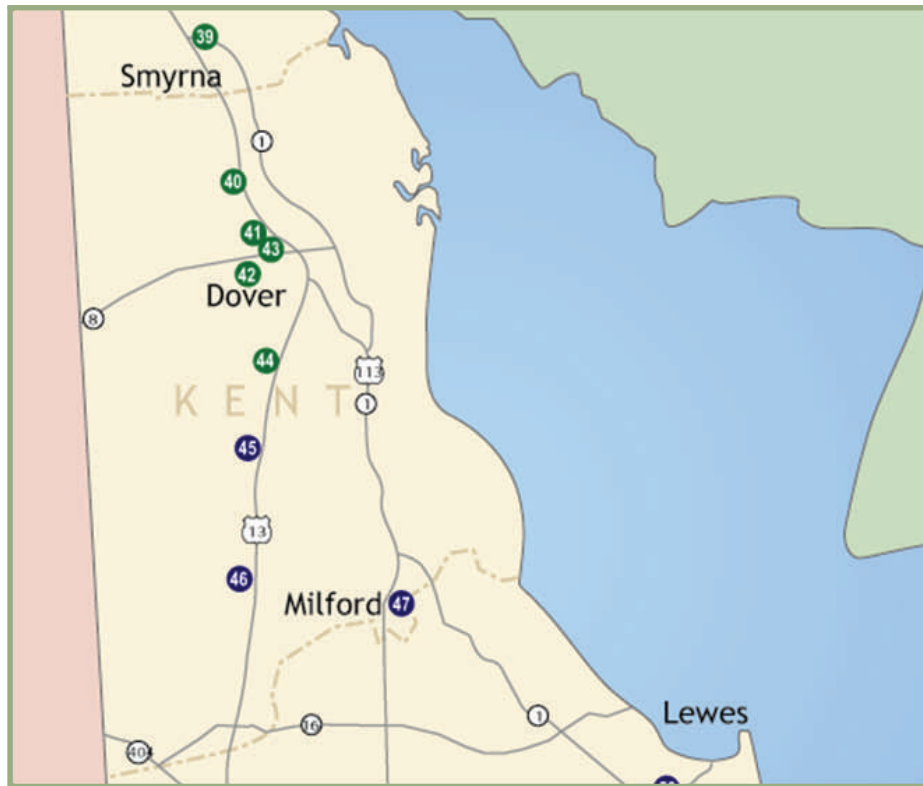
The center

also offers strategies to improve all modes of transport throughout downtown, and re-energize downtown Dover as a place worthy of the capital of the First State. The MPO Council approved and adopted the plan in 2011 and Dover City Council endorsed the plan as a strategy to revitalize Downtown Dover.



Park-n-Ride and Park-n-Pool

The numbers listed with each Park-n-Ride and Park-n-Pool location correspond with the numbers on the map.



Kent County Park-and-Ride Locations

Scarborough Road, Dover #40
Routes: 112, 120, 301, 305

Delaware Agricultural Museum #41
866 North DuPont Hwy., Dover;
Routes: 109, 112, 120

Dover Transit Center #42
Routes: 100-109, 112, 113, 120, 301, 303

St. Andrew's Lutheran Church #43
425 North DuPont Hwy., Dover;
Routes: 108. Board on Townsend Blvd. at K-Mart;
109; Board on US 13 in front of K-Mart

Faith Community Church #44, 2240 South DuPont Hwy., Dover;
Routes: 104, 303

Kent County Park-and-Ride Locations

Shore Stop
#45
US 13 & Road 31, Canterbury

Harrington Moose Lodge
#46
US 13, Harrington

Milford Bowling Lanes
#47
809 North DuPont Hwy., Milford

Where do we walk?



Kent County has sidewalks and footpaths to suit everyone's needs. Here is a summary of amenities in all three Delaware counties. The sidewalk inventory included neighborhood, municipality, county, and DelDOT facilities. DelDOT defines "footpath" as any pedestrian facility that was not immediately adjacent to a roadway segment.

Source: DelDOT Planning

	Type	Sidewalk (miles)	Footpath (miles)
NCC	Asphalt	17.55	32
	Concrete	1888.26	8.57
	Dirt	0	1.06
Total:		1905.8	41.6
KC	Asphalt	7.4	7.9
	Concrete	399.5	5.5
	Dirt	1.3	9.7
Total:		408.2	23.1
SC	Asphalt	7.8	5.46
	Concrete	333.83	5.99
	Dirt	0.76	35.46
Total:		341.7	46.91

Transportation Enhancement Projects

The Transportation Enhancements (T.E.) Program, established through federal legislation, is intended to encourage a more balanced, multi-modal approach to transportation. The T.E. Program provides funding for transportation related projects that further the cultural, aesthetic, and environmental

goals of the communities in which they are built. Sidewalks, crosswalks, bicycle and multi-use paths, historic rehabilitation of buildings, and streetscape renovation are examples of T.E. projects.

Since 2006, some enhancement projects have been completed in Kent County:

- **Clayton:** sidewalk improvements

- **Camden:** streetscape improvements
- **Wyoming:** sidewalk improvements
- **Wyoming:** sidewalk improvements on New Burton Road
- **Kent County:** St. Jones River Greenway.

Safe Routes to School



Delaware's Safe Routes to School (SRTS) Program was established in

September 2002 with the signing of Senate Bill 353 of the 141st General Assembly of

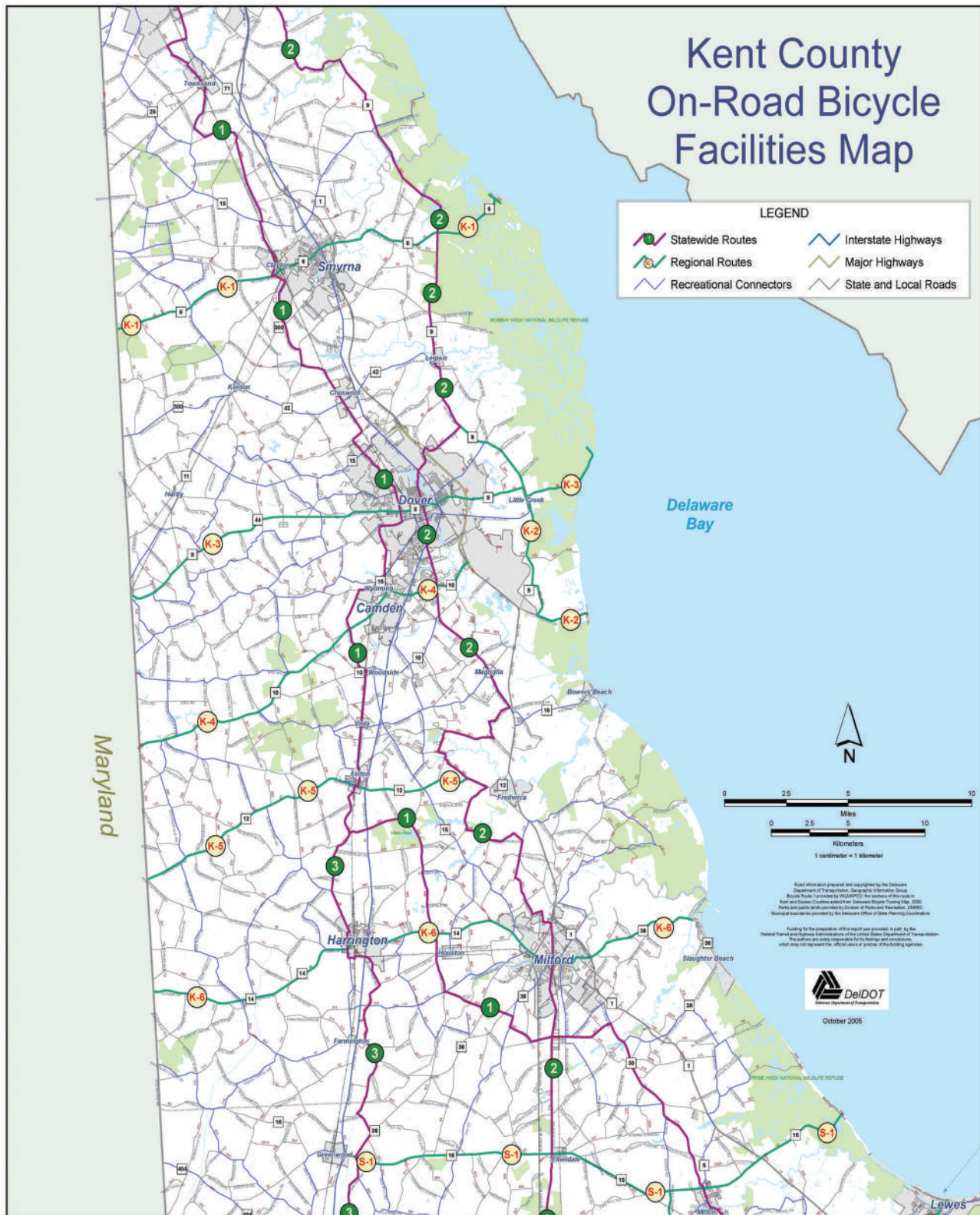
Delaware. The bill directed the Delaware Department of Transportation (DelDOT) to create a program to encourage children walking and bicycling to school safely. Delaware's Safe Routes to School program provides grants to elementary

schools and middle schools to plan, build and implement projects that encourage safely walking and bicycling to school.

In Kent County, Safe Routes to School is providing funding to projects at Fred Fifer Middle School, Central Middle School and Towne Point Elementary School.



Kent County Bike Facilities



Regional Bike Plan

In September 2011, Dover Kent County Metropolitan Planning Organization adopted its Regional Bicycle Plan.

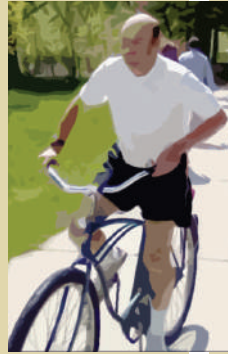
The bike plan aims to create an effective, safe bicycle system in central Delaware. It shows where there are bicycle trails, lanes and similar facilities in central Delaware and where there are gaps in service. In addition, the plan addresses the need for bicyclists and motorists to share the road, increase recreational biking as well as encourage people to bike to work or school.

The plan was the result of the MPO's 2008 Regional Transportation Plan, in which public comments expressed a need

for more bicycle facilities. For two years, a working group comprised of MPO staff, representatives from state agencies, Kent County, municipalities and the public worked with consultant Andrea Kreiner of A. Kreiner Company in Dover to create the plan.

MPO staff put the plan through a 30-day public comment period in 2011, and the MPO's Technical Advisory and Public Advisory committees endorsed the plan's adoption.

The plan contains four recom-



mendations:

- Selecting appropriate bicycle facilities
- Putting bicycle facilities at intersections
- More bicycle parking
- Education and enforcement of bicycle laws.

The plan is compatible with the Delaware Department of Transportation's statewide bicycle plan and includes criteria from which to prioritize projects for bicycle facilities. Projects identified in the Regional Bike Plan will be submitted to DelDOT for development and funding.

Proposed Bicycle Projects

The MPO's Regional Bicycle Plan lists a number of projects to improve bicycling in central Delaware. The recommendations include on-road and off-road improvements.

Seven criteria, ranging from safety and significance to cost would influence how projects would be prioritized.

On Road Improvements:

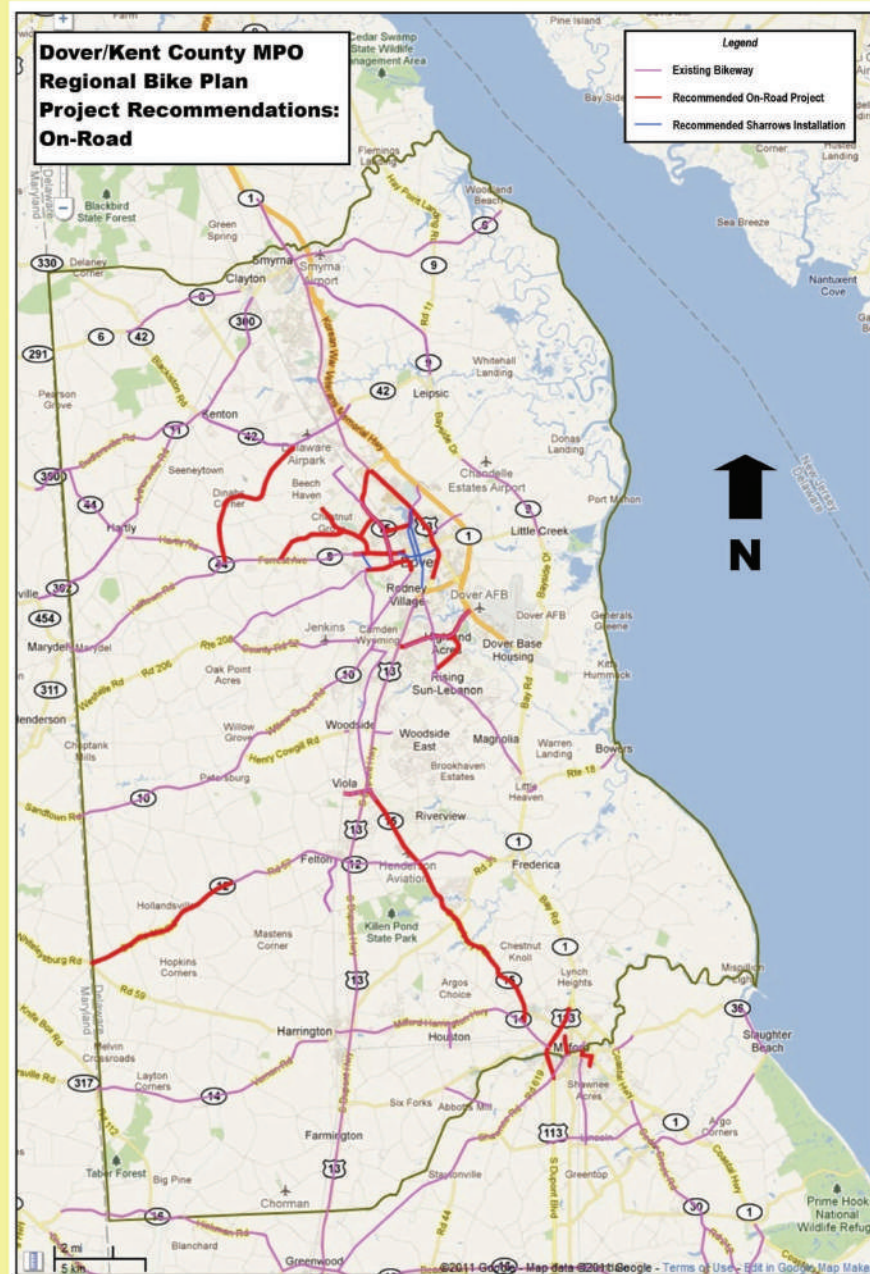
1. S. West Street
2. U.S. 13 (through Dover)
3. West Denney's Road
4. State Street
5. DE 8/Forest Avenue
6. Walker Road
7. College Road
8. North Street
9. DE 10 (DAFB to Camden)
10. Milford Riverwalk
11. Saulsbury Road/DE 15
12. U.S. 113 (through Milford)
13. Dover-Kenton Road
14. Sorghum Mill Road
15. Pearsons Corner Road
16. Chestnut Grove Road
17. DE 12
18. DE 15

Off-Road Improvements:

1. Silver Lake to St. Jones Connector Trail
2. Camden to Dover Trail
3. Route 10 Trail
4. Smyrna-Clayton Trail
5. Smyrna-Big Oak Park Connector Trail
6. Clayton, DE to Easton, MD Rail Trail
7. Dover Air Force Base Bike Trail



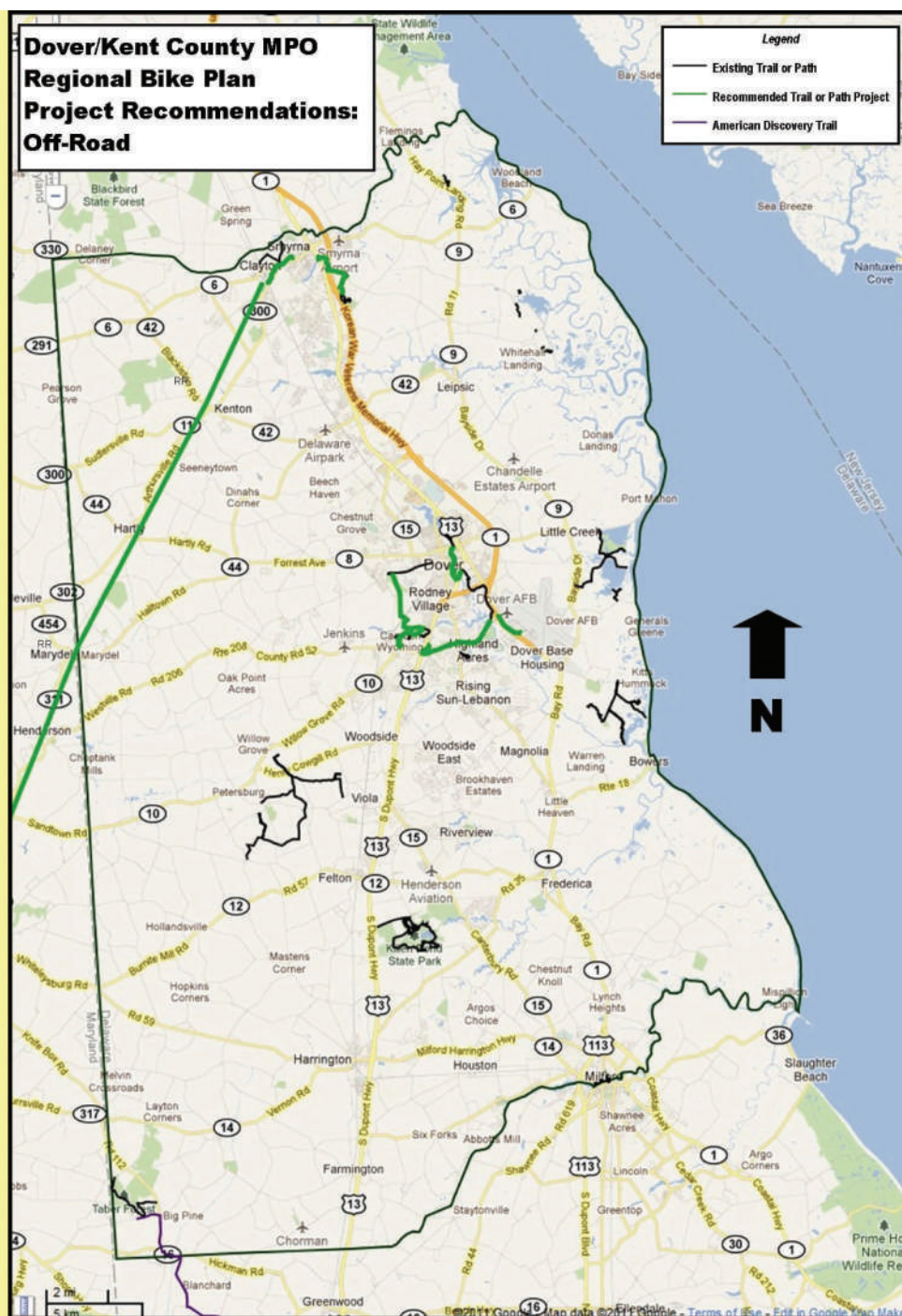
On-Road Bicycle Facilities



Summary of Projected Recommendations

1. West Street (North Street to Queen Street)
2. U.S. 13 (Scarborough Road to Puncheon Run Connector)
3. W. Denney's Road
4. State Street (U.S. 13 to Walker Road)
5. DE 8/Forest Avenue (Railroad Tracks to Heatherfield Way)
6. Walker Road (State Street to Salsbury Road)
7. North Street (Wyoming Mill Road to Railroad Tracks)
8. College Road (McKee Road to Dover-Kenton Road)
9. DE 10 (U.S. 13 to U.S. 113)
10. Milford Riverwalk
11. Salsbury Road/DE 15 (North Street to U.S. 13)
12. U.S. 113 (SR 1 through Milford)
13. Dover-Kenton Road (DE 8 to Denney's Road)
14. Sorghum Mill Road (DE 10 to the Hunn Property)
15. Pearsons Corner Road (DE 8 to DE 42)
16. Chestnut Grove Road (Dover-Kenton Road to DE 8)
17. DE 12 (Black Swamp Road to Maryland Line)
18. DE 15 (Viola to Airport Road)

Off-Road Bicycle Facilities



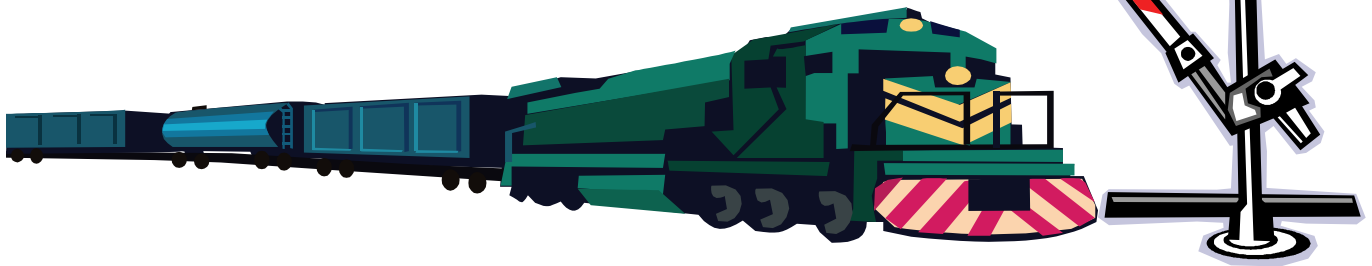
Summary of Project Recommendations

1. Silver Lake to St. Jones Connector Trail
2. Camden to Dover Trail
3. Route 10 Trail
4. Smyrna-Clayton Trail
5. Smyrna-Big Oak Park Connector Trail
6. Clayton, DE to Easton, MD Rail Trail
7. Dover Air Force Base Bike Trail

Rail

Norfolk Southern provides rail service through Kent County and lower Delaware. Food processors and chemical industries are the rail company's main customers. But trains also run through the county as they go

up and down the state. A major rail yard in Harrington sends rail cars to Milford, western Sussex County, and the Eastern Shore of Delmarva via the Indian River Secondary track.



Commodities

Many commodities come to Kent County by rail. Stone, coal and grain are the three major commodities. Most of the grain is for chicken feed. Products like processed chicken and

other finished products are transported by truck.



Rail Safety

A concern in rail safety is the increase in both rail and ve-

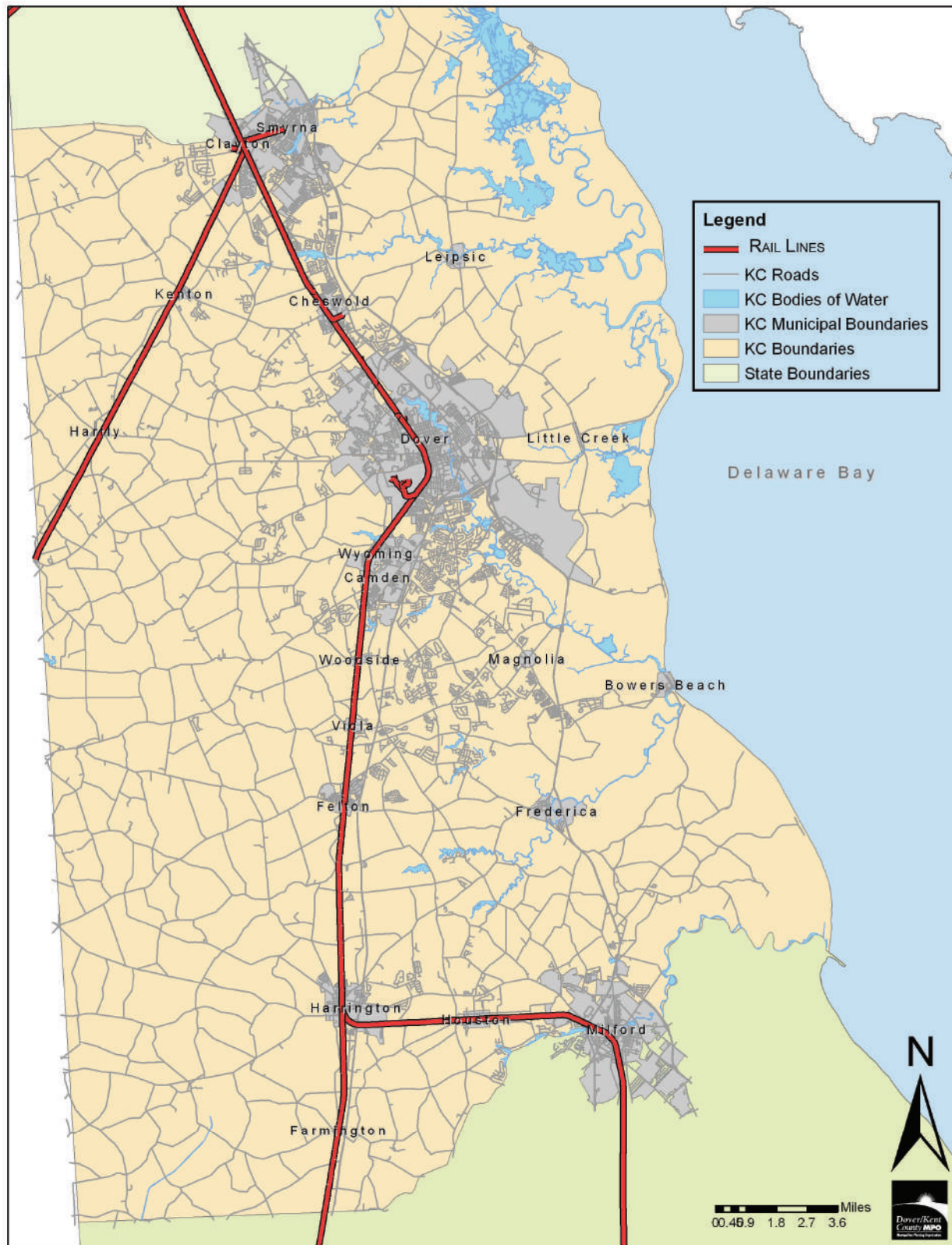
hicular traffic. DART's Operation Lifesaver Program provides information to local communities and schools about safely crossing railroads.



Rail Source: DelDOT



Rail Lines



Freight

Hundreds of thousands of tons of freight move throughout Delaware every year. How much freight moves along Delaware's roadways, railways, airways and waterways? What is transported? The U.S. Bureau of Transportation Statistics

provides some interesting insights into freight movement in and out of Delaware.

In 2007, 25,679 tons of freight were shipped from Delaware to other states or other locations within Delaware.



Commodity Shipments Originating in Delaware by Weight

Type	Percent of Weight
Fuel Oils	16.1%
Gasoline and Aviation Turbine Fuel	12.4%
Coal and Petroleum Products	8.9%
Nonmetallic Mineral Products	6.4%
Natural Sands	4.6%
Other Commodities	51.6%

Source: Bureau of Transportation Statistics, 2007 Commodity Flow Survey

Outbound Shipments for Delaware by Weight

State of Destination	Percent of Weight
Delaware	43.5%
New Jersey	8.2%
Maryland	8.2%
Virginia	3.3%
New York	3.1%
Connecticut	0.8%
Other States	32.9%

Source: Bureau of Transportation Statistics, 2007 Commodity Flow Survey

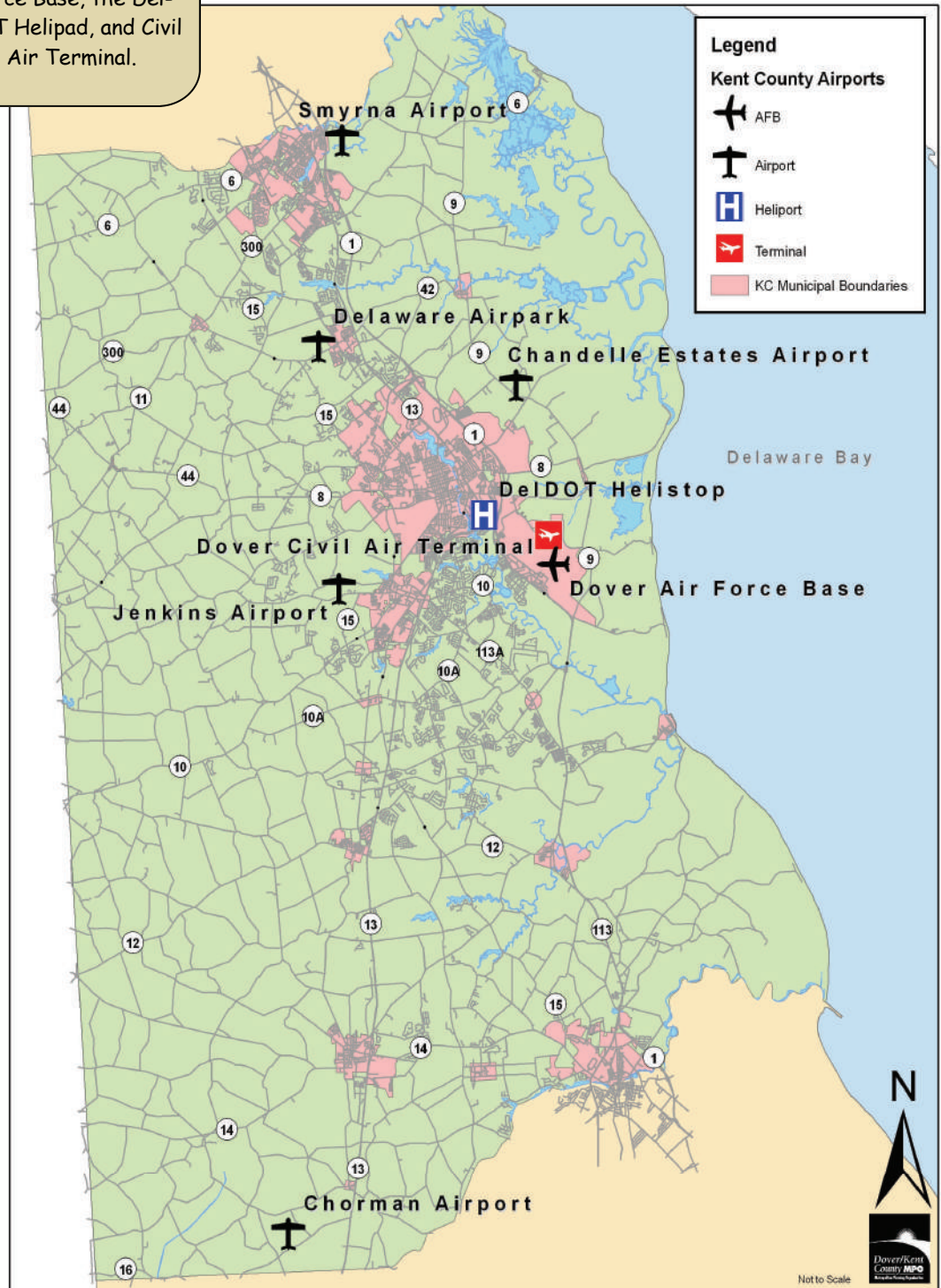
Kent County Airports



These are Kent County's Airports including Dover Air Force Base, the DelDOT Helipad, and Civil Air Terminal.

The Delaware Airpark in Cheswold is home to 45 based aircraft and Delaware State University's flight training program, it serves both corporate and recreational flyers year-round. The airport is especially busy during the summer months when Delaware State conducts NASA and Air Force ROTC pilot training. The Civil Air Terminal, adjacent to Dover Air Force Base, is operated by the Delaware River and Bay Authority under the terms of a special-use agreement with the U.S. Air Force. Use of the CAT is limited to aircraft having Prior Permission Requests (PPRs) approved by the DRBA.

(Source: DRBA Web site)



Money Obligated to Projects

DeIDOT #	Project	Allocated Funding
29-010-01	2008 High Risk Rural Roads Program Locations	-\$49,387.94
29-010-02	2008 HSIP Traffic Control Device Improvements	\$2,150,659.13
30-004-01	2009 Hazard Elimination Program- Traffic Control Device Improvements	\$1,372,356.43
30-010-03	2009 High Risk Rural Roads Program-Traffic Control Device Improvements	\$10,750.01
29-093-01	2009 Traffic Signal Improvements, Statewide	-\$18,979.11
31-010-02	2011 High Risk Rural Roads Program- Studies	\$77,511.92
31-010-01	2011 Highway Safety Improvement Program- Studies	\$762,725.91
31-005-01	2011 Highway-Rail Grade Crossing Safety Program-Studies	\$70,400.20
29-503-05	35' Hybrid (7) Expansion FY10 Spend	\$520,000.00
23-047-05	511 Traveler Information Program Assistance	-\$248.71
30-075-01	BR 2-012B on SR9 over Leipsic Road	\$52,000.00
30-072-02	BR 2-040A on K040 School Lane Over Duck Creek, Clayton	\$40,800.00
30-072-04	BR 20429A on K429 Jackson Ditch Road over Brown's Branch	\$38,400.00
30-072-05	BR 2-143A on Lion Hope Road over Gravelly Run	\$517,520.00
30-072-01	BR 2-186A on K186 Strauss Avenue, Marydel	\$20,800.00
29-072-01	BR 2-203A on Todds Mill Road over Isaac Branch	\$77,600.00
27-075-04	BR 2-254A on Mt. Olive Cemetery over Wildcat Branch	\$135,000.00
27-075-03	BR 2-277A on Fox Hunters Road, West of Harrington	-\$17,571.34
27-072-04	BR 2-296A on K296 Laytons Corner RD over Green Branch, W. of Harrington	-\$18,618.23
30-072-06	BR 2-381A on Fox Chase Road over Hudson Branch	\$54,400.00
98-072-01	BR208B on Mahan Corner Rd over Shades Branch, Marydel	-\$1,000.00
21-072-01	BR210A on Shady Bridge RD (K210) over Shades Branch	-\$1,000.00
27-075-02	BR2-221 on Sandy Bend Road over Tappahanna Ditch	-\$105,476.02
27-070-01	Bridge Inspection Program FY07	-\$1,145,120.98
31-078-02	Bridge Inspection Program FY11	\$1,335,600.00
28-070-01	Bridge Management Inspection FY08	-\$729,184.36
23-016-01	Carter Road (K137), Sunnyside Road to Wheatley's Pond Road, Smyrna	\$1,469,969.00 (\$9,600,000 - 2009) (\$215,250 - 2008) (\$234,869.04 - 2007)

BR=Bridge

Money Obligated to Projects

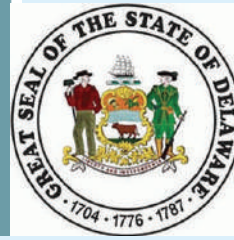
DeIDOT #	Project	Allocated Funding
27-200-19	City of Harrington Streetscape Improvement	\$208,000.00
24-047-03	Civil Air Patrol, Statewide, 2004	-\$134.43
31-002-02	Crash Analysis Reporting System	\$360,000.00
30-730-01	Critical Cantilever Sign Structures 2	\$675,767.23
31-600-02	DBE Supportive Services Activities- Fed Fiscal Yr 2010	\$262,500.00
26-600-01	DBE Supportive Services Work Program, FY06 & FY07	-\$218,134.90
31-600-01	DBE/ SS Workshops & Training	\$218,134.90
21-200-15	Del Tech Terry Campus Bike/Pedestrian Improvements	-\$199.16
24-660-06	Delaware Bicycle Facility Master Plan (04 SPR)	-\$241.88
29-024-01	Delaware Byways Program Rebranding	\$1,280.00
29-024-02	Delaware Byways Signing Project	-\$1,280.00
23-047-03	DeIDOT AVL- Statewide	-\$1,069.17
25-020-01	Dover Transit Center	-\$578,803.61
31-670-02	Dover/Kent MPO, 2011 UPWP	\$374,172.00
24-500-04	Education & Training FY04 7/01/03-10/15/04	-\$52.80
26-500-02	Education & Training FY06 7/1/05-6/30/07	-\$8,480.67
30-630-01	Education & Training FY10	\$29,652.00
29-083-05	Epoxy Pavement Marking Program, Statewide	\$60,325.69
29-083-02	Epoxy Pavement Markings District II 2009, 2010, 2011	\$844,630.75
31-047-01	FY11 DelTrac Projects State-wide Support	\$865,448.47
31-047-02	FY11 DelTrac Statewide Projects	\$1,966,919.01
99-200-17	Harrington Sidewalk Additions (West, Liberty and Milby Sts.)	-\$1,000.00
25-010-01	Highway Safety Improvement Program, 2005	\$43,569.56
30-705-01	Historic Compliance Follow Up	\$240,800.00
29-008-03	HSIP KC, SR10 at Sorghum Mill Road	-\$56,458.36
29-008-01	HSIP KC, US 13 at Carpenter Bridge Road	\$180,000.00
27-660-65	NCHRP Contribution for FY2007 SPR	-\$92,646.29
27-200-06	New Burton Road Sidewalk Improvements	-\$83,183.45

Money Obligated to Projects

DeIDOT #	Project	Allocated Funding
25-600-02	OJT Supportive Services (Welfare to Work Program) FY05	-\$29,147.46
31-637-01	On the Job Training/ Supportive Services Training Evaluation	\$107,378.46
25-660-04	On-Call Bicycle and Pedestrian Planning Services (05 SPR)	-\$70,349.32
30-503-03	Paratransit Vehicle Replacement Buses FY11 (80)	\$1,553,184.00
24-062-02	Pave & Rehab- South I-II (Bay Rd NB & SB, N. Little Creek)	-\$233,605.59
30-072-03	Pipe Replacements, Kent County	\$120,152.96
22-660-64	Pooled Fund Studies and NCHRP Participation (02 SPR)	-\$100.00
20-660-63	Pooled Fund Studies and NCHRP Participation (00 SPR)	-\$2,544.98
21-660-62	Pooled Fund Studies and NCHRP Participation (01 SPR)	-\$13,345.46
99-660-64	Pooled Fund Studies and NCHRP Participation (99 SPR)	-\$400.00
23-660-62	Pooled Fund Studies NCHRP Participation (03 SPR)	-\$4,080.45
30-300-01	Recreation Trails FY10-11 Work Plan	\$1,311,644.80
97-007-04	Red Light Running Program	-\$44,232.75
30-048-01	Rideshare FY10	\$360,000.00
30-005-05	Rose Bowl Rd (K154) Railroad Crossing Improvement	\$242,999.10
30-690-03	Safe Routes to School, Planning and Program Management 2010, Statewide	\$153,628.40
93-012-01	Scarborough Access/Service Rd (Crawford Carroll Avenue)	\$453,296.16
26-901-06	Sign Structure, High Mast Lighting & Inspections Statewide	\$700,536.02
21-901-05	Sign Structure, High Mast Lighting & Inspections, 2001	-\$316,811.87
30-630-02	Site Visits for Audit	\$25,000.00
20-045-02	South Governors Avenue, Webbs Lane to Water Street	\$631,824.04
30-660-01	SPR Planning and Traffic Program 2010	-\$340,156.20
31-660-01	SPR Planning Program 2011	\$2,314,983.00
30-660-02	SPR Research Program 2010	\$100,156.20

Money Obligated to Projects

DeIDOT #	Projects	Allocated Funding
24-122-01	SR 1, Bay Road/K19, Thompsonville Road Intersection Improvements	\$5,345,211.26
24-122-02	SR 1, Little Heaven Grade Separated Intersection	\$2,577,600.00
24-122-03	SR 1, North Frederica Grade Separated Intersection	-\$2,146,350.03 (\$9,200,000 - 2009) (\$12,063,484 - 2008) (\$25,600 - 2007)
28-122-02	SR 1, South Frederica Grade Separated Intersection	\$360,875.11
29-065-02	SR1 Joint Sealing, Phase II, 2009	-\$272,600.18
24-122-04	SR1, SR9, Grade Separated Intersection at DAFB	\$341,510.40
30-005-03	SR15 Main Street Woodside (K054) Railroad Crossing Improvement	\$395,999.10
21-200-16	St Jones Greenway, Isaac Segment Phase I	-\$33,173.41
99-660-31	Statewide Planning & Research Program (Traffic), FY99	-\$99.58
22-660-31	Statewide Planning & Research Program ,Traffic (02SPR)	-\$1,000.00
23-660-31	Statewide Planning & Research Program, Traffic (03 SPR)	-\$121,338.31
24-660-31	Statewide Planning & Research Program, Traffic (04 SPR)	-\$173,237.22
90-660-04	Study of Application of GPS	-\$3,631.56
28-500-52	Summer Transportation Institute	-\$6,610.75
27-500-25	Summer Transportation Institute 2007	-\$10,318.79
30-636-01	Summer Transportation Institute 2010	\$38,929.54
27-200-02	Town of Camden Streetscape Improvements	\$499,890.35
27-200-07	Town of Clayton Sidewalk Improvements Phase II	\$33,791.30
24-200-01	Town of Clayton Sidewalks	-\$96,311.61
30-200-08	Town of Smyrna (US 13) Streetscape Improvements	\$24,000.00
25-200-06	Town of Wyoming Streetscape Improvements	-\$7,529.19
30-660-03	Traffic Impact Studies (Option A), FY10	\$240,000.00
22-660-03	Transit Demand Modeling (02 SPR)	-\$1,650.09
24-660-65	UD Traffic Monitoring & Data Program (04 SPR)	-\$305.00
29-008-02	US 13, SR8 Intersection Improvements	\$521,575.81
98-008-04	US13, River Rd. to Court St. (Dover)	-\$38,639.97
22-083-05	Variable Speed Limit & Message Signs, Statewide	-\$1,000.00
28-042-01	Wyoming Mill Road Realignment	\$46,995.08 (\$1,500,000 - 2009) (\$316,789 - 2008)
30-042-02	Wyoming Mill Road Realignment, Construction	\$3,392,106.89



Transportation Information Booklet

November 2011

Dover/Kent County MPO

P.O. Box 383
Dover, DE 19903

Phone: 302-387-6030
Fax: 302-387-6032

Visit us on the Web!
www.doverkentmpo.org

What's the Dover/Kent County MPO?

The Dover/Kent County Metropolitan Planning Organization is the transportation planning agency for central Delaware, including all of Smyrna and Milford, which straddle the state's north and south counties.

The MPO provides a forum where state agencies, county and municipal governments work together in full view of the public to guide how federal transportation dollars will be spent.

MPOs are federally-mandated agencies. Urbanized areas with populations greater than 50,000 must have an MPO. The Dover/Kent County MPO was founded in 1992.

