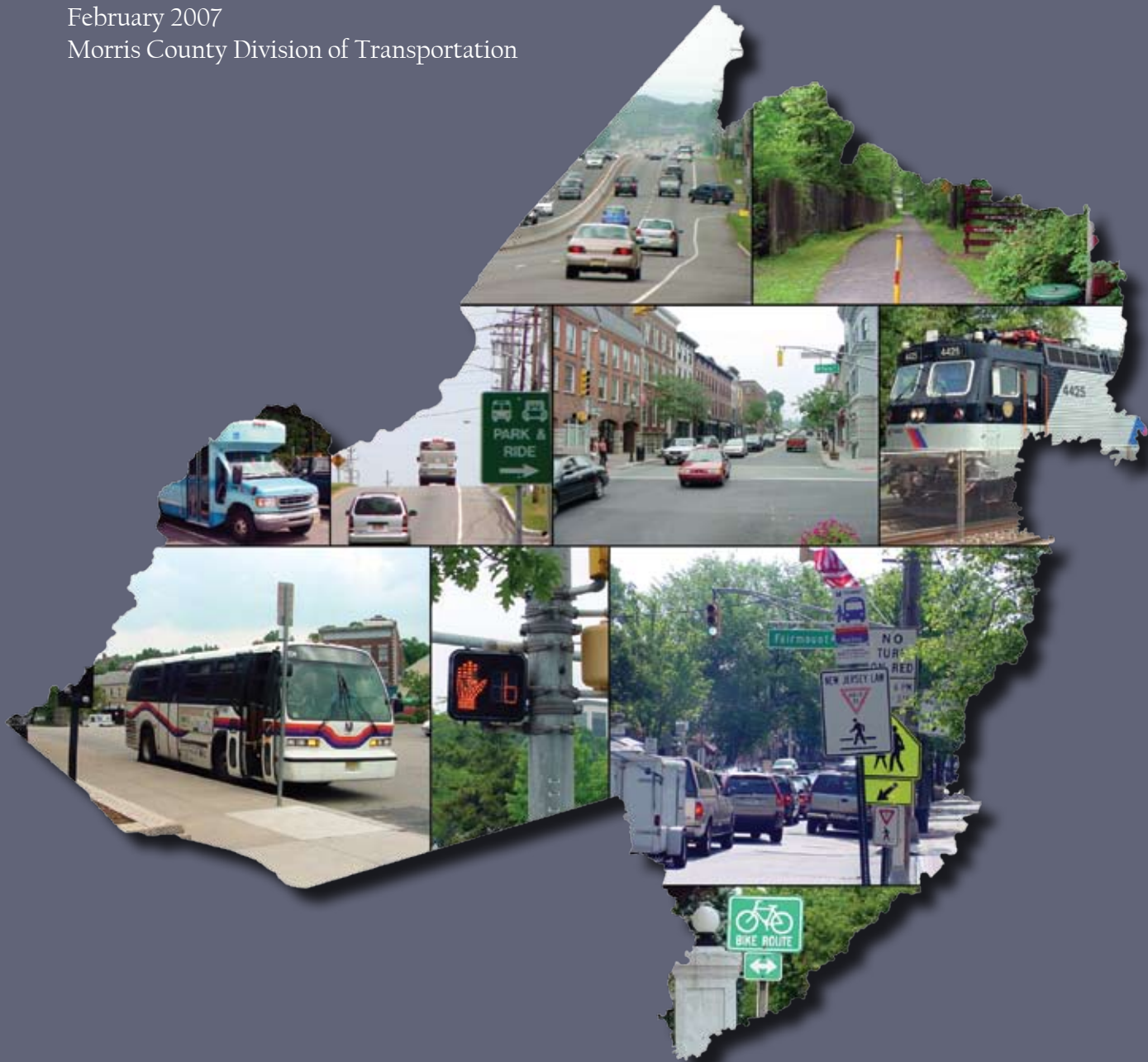


Bulletin #2

“Putting the Brakes on Congestion!”
Will it only get worse?

February 2007
Morris County Division of Transportation



The Morris County Division of Transportation, in coordination with the Morris County Planning Board, is developing the Circulation Element of the Morris County Master Plan. A series of ten transportation bulletins, which will be released individually, are currently in development to reflect major countywide and regional transportation issues that affect our daily lives. In addition to the bulletins, a technical document is being developed. This document will reflect detailed county projects, demographics, issues, and projections. It is anticipated that these broad based bulletins, which will have a large distribution, will create an exchange of ideas, therefore, becoming an important part of the plan's development.

PREVIOUSLY PUBLISHED

Bulletin #1: It's Not Cool to Drive to School-An Examination of School Related Congestion (June 2006)

Bulletin #2 addresses the issue of roadway congestion. During the county's outreach program to municipal elected officials, planners, engineers, and residents, delays caused by traffic congestion were a key concern. As the ability to increase roadway capacity becomes limited, additional options must be explored. The discussion in Bulletin #2 addresses this situation and proposes actions.

This bulletin, as well as the previous bulletin mentioned above, can also be found on the Morris County Division of Transportation's (MCDOT) website at www.mcdot.org. Questions may be directed to Deena Cybulski of the MCDOT at mcdot@co.morris.nj.us or by using the contact information provided below.

Morris County Department of Planning, Development & Technology
Division of Transportation
P.O. Box 900
Morristown, NJ 07963-0900
973-829-8101
Fax 973-326-9025



Putting the Brakes on Congestion!

What can be done to help reduce congestion in Morris County?



The capacity of roads in Morris County is severely strained during morning and evening commutes. According to NJDOT statistics, vehicle miles traveled on interstate highways throughout Morris County have increased 14% over just the past five years. And, as the population and workforce continue to grow in New York, Pennsylvania, and New Jersey, roadway congestion will only get worse. Factors that increase this traffic include: regional population growth, dispersed suburban development, an expanding economy, and the ever-increasing distance between employment and home. According to the US Census, the number of employees commuting from Monroe, Northampton, and Pike Counties in Pennsylvania to Morris County has increased by approximately 40% from 1990 to 2000.

Morning and evening peak traffic congestion can largely be attributed to work trips. Of the 276,965 people that work in Morris County, 138,737 workers live in Morris County and 138,228 live outside the county. Additionally, 101,102 Morris County residents work outside of the county. These figures do not include workers who contribute to congestion traveling through Morris County. The increase in the number of out-of-county commuters is substantiated by the increase in the daytime population of Morris County. As a major employment destination, the county's workforce population increases by 37,126 people during business hours (US Census 2000). This figure is larger than the combined resident popula-

tion of Randolph and Hanover Townships. The congestion problem is compounded by the continued preference of commuters to drive alone. According to the 2000 US Census, 81.2% of Morris County commuters drive alone to work, 8.2% either take a vanpool or carpool, and 4.2% ride public transit.

Traffic jams and delays are not just an annoyance to residents and commuters. Slow travel increases the cost of transporting goods and services and lengthens commuting time for employees, thus discouraging businesses from moving into the region. According to the National Center for Transportation and Industrial Productivity, congestion cost Morris County's economy \$486 million in lost productivity and fuel consumption in 1998. Unless commuter behavior changes these costs are projected to steadily rise, reaching \$607 million annually by 2010 (Mobility and the Costs of Congestion in New Jersey, 2001 Update).

In the past, the solution to this problem was simple: add new roads or expand existing roads. While this approach was successful in the short term, it ultimately led to more car dependant development and more congestion, resulting in the need to expand roadway capacity once again. The highly developed nature of the region, environmental constraints, state budget realities, and air quality mandates make the creation of new roadways unlikely. According to the New Jersey Congestion Management System data, there is now very little right-of way near the current roadway network to allow for the construction of expanded roadways (Mobility and the Costs of Congestion in New Jersey, 2000).

While the ability to construct additional through lanes is restricted, other physical improvements can enhance the efficiency of the road network. Improving intersections, adding left and right turn lanes, reconfiguring jughandles, and coordinating traffic light signalization will improve traffic flow. However, even these capacity improvements are limited in their effectiveness as more vehicles crowd the roads.

Contact
TransOptions
at www.transoptions.org
to sign up for real
time traffic
alerts

There is
an average of
1.86 vehicles per
household in Morris
County (US Cen-
sus 2000).

The
average
commute time for
Morris County Resi-
dents increased from
25.7 to 29.4 minutes
between 1990 and
2000 (US Cen-
sus)

All
road im-
provement
projects, plans, and
programs must help to
reduce pollution emitted
by motor vehicles and
conform to air quality
standards set by
the EPA

As the ability to increase capacity becomes even more limited, the pursuit of transportation management strategies that seek to reduce the number of vehicles on the road becomes increasingly important. TransOptions, the transportation management association that serves Morris, along with other surrounding counties, promotes alternative modes of transportation. Vanpooling, carpooling, and staggered work hours are a few of the strategies that TransOptions has initiated over the years. Currently, 49 vanpools, 9 shuttle buses, and 249 carpools are operating because of TransOptions. TransOptions also works with employers to produce incentives for employees who commute using alternative modes of transportation.

Getting people to use traditional public transit is challenging. Bus and train service must be as or more convenient, efficient, comfortable, time saving and affordable as driving in a personal automobile, which often contains almost all the comforts of home or the office.

In 1994, NJDOT began the construction of the I-80 and I-287 High Occupancy Vehicle (HOV) lanes, which required at least two persons per vehicle. These lanes actually *increased* congestion and air pollution and were highly unpopular. The lanes were ultimately converted to regular travel lanes eleven months after being completed in 1998.

In order for any transportation management strategies to work, commuters must change their behavior, which can be extremely difficult to accomplish. In response to the 1990 Clean Air Act as amended, the state passed the New Jersey Traffic Congestion and Air Pollution Control Act of 1992. This law required all employers with 100 or more employees at a worksite within an extreme ozone nonattainment area to participate in an Employee Commute Options program (ECO). The ECO program required employers to promote and enforce alternative modes of commuting other than the single occupancy vehicle. Although environmentalists were enthused about the plan, the companies did not take well to it. Many problems arose. Employers did not promote the idea effectively and employees complained about its cost and lack of convenience. In addition, the DEP did not effectively enforce the program. The underlying problem was that this program had a top-down approach to behavior modification,

which meant state government was trying to change the minds of individuals rather than allowing individuals to desire the change themselves.

Today, New Jersey employers who develop and support their own employee commuter transportation programs may apply for a state corporate tax credit for a portion of the expenses incurred to make alternative modes of transportation available to their employees. Tax credits are available from the state of New Jersey through its Smart Moves for Business tax credit. Washington, California, and Massachusetts are just a few of the states that have programs in place to address employer incentive programs. These programs result in better attendance, productivity and morale, and are therefore often paid for by the employer. In addition, the Federal Commuter Tax Benefit, under IRS Section 132(f), provides mass transit and van pool commuters a pre-tax deduction of up to \$105 per month towards their fares.

Commuters in Morris County using interstate and state highways or major county roads during peak hours can confirm that traffic congestion is at crisis level. Solutions must be developed to prevent congestion from worsening. Concerns over increasing sprawl, fuel consumption and air pollution, combined with rising congestion costs, also make driving to work alone less attractive. Transportation management strategies must be put into action to improve public transit facilities, increase transit ridership, reduce the number of drive-alone commuters, increase transportation alternatives, and reduce the overall pressure on existing roadways.

The demographics of America are ever-changing and some of these transformations may affect the commuting picture, including the price of gas. According to Alan Pisarski, author of the study *Commuting in America III*, American commuting trends are about to change, with baby boomers reaching retirement age and more people starting to work from home. The percentage of people working from home is currently 3.6%, up from 3.3% in 2000, according to Pisarski. He also forecasted that future trends in commuting would be influenced by the growing number of newly arrived immigrants in the workforce, considering many new immigrants either carpool, bike, walk, or use public transportation for their daily commute.

Van Pooling

Sprawl

Buses

Global Warming

Telecommuting

Air Pollution

Trains

Driving Alone

Flexible Work Week

Stress

Traffic Signal Timing

Fuel Consumption

Improved Jughandles

Traffic

Park-and-Rides

Oil Issues

Metered Ramps

Delays

Car Pooling

Ozone

Bike Paths

Gas Prices



Proposals



1 ♦ Expand and improve the capacity of the road network.

Expanding existing roads, improving intersections and adding new roads where feasible, will help alleviate traffic congestion during peak commuting hours.

County Actions

- ▶ The Morris County Division of Transportation (MCDOT), in coordination with the Division of Engineering, should:
 - ▶ Conduct an inventory of county roads in order to determine where: bottlenecks occur; intersection improvements can be made; and the existing right-of-way allows for expansion.
 - ▶ Create a County Roadway Access Management Code. The goal of the code will be to limit and consolidate access to major county roads in order to increase the safety and efficiency of the roadway network.



General Actions

- ▶ Improve the following six congestion Hot Zones:
 1. NJ 24/Columbia Turnpike (CR 510) /Park Avenue (CR 623), Hanover Township
 2. NJ 23/Newark-Pompton Turnpike (CR 660), Pequannock Township
 3. US 46/Mount Hope Avenue (CR 661), Dover
 4. Schooleys' Mountain Road (CR 517)/East Mill Road (CR 513), Washington Township
 5. Sussex Turnpike (CR 617) near Millbrook Avenue (CR 670), Randolph
 6. East Main Street (CR 510) near West Morris Mendham High School, Mendham Borough
- ▶ Encourage planned developments to use an interconnected street network as a basis for their circulation plan, thereby promoting better traffic flow. Encourage greater roadway connections in all new development and redevelopment.
- ▶ Where roadways can not be further expanded, explore methods of increasing the efficiency and utility of the existing roadway. For example, the use of technologies that change the number of lanes available for each direction on multi-lane highways to accommodate peak hour traffic patterns could increase the functional capacity of some existing roadways.



2. Increase the use of technology for transportation management.

The use of technology to improve traffic signal timing, inform commuters of delays, road construction, or accidents, and monitor traffic patterns will help to improve traffic flow.

County Actions

- ▶ MCDOT, in coordination with the Division of Engineering, should compile a comprehensive database containing technology data for the over 270 traffic signals on county roads. This inventory would be the first phase in a county-wide effort towards traffic signal synchronization on county roads.

General Actions

- ▶ Invest in intelligent transportation systems (ITS) that relieve congestion and improve the safety and efficiency of the road network. ITS includes a wide range of technologies, such as traffic cameras, phone, radio, and internet travel updates, dynamic message signs and anti-icing/deicing systems.



3. Support alternative transportation programs.

Increasing the use of trains, buses, carpools or vanpools to commute to work will help to reduce peak hour traffic congestion by decreasing the number of vehicles on the roads. Additional travel demand strategies should continue to be implemented by both the public and private sectors.

County Actions

- ▶ MCDOT should conduct a study of park-and-ride facilities in Morris County. This study will include an inventory of all existing facilities, potential park-and-ride expansions, and an analysis of possible locations for future park-and-rides.
- ▶ MCDOT should conduct a study to determine whether additional county-sponsored bus service should be considered.

General Actions

- ▶ Challenge all parties to take ownership of traffic congestion and convince all commuters that they can make difference in reducing congestion. It is a quality of life issue.
- ▶ Encourage legislators to adopt policies that provide financial incentives to employers and employees who participate in traffic reduction programs.
 - ▶ Provide guidance to employers who implement transportation management strategies such as vanpools, staggered work hours, telecommuting, and reduced transit fares.
 - ▶ Encourage the inclusion of work place amenities, such as bike racks, fitness centers, showers, day-care, drycleaners, banks, and restaurants to support employer traffic reduction strategies.
 - ▶ Promote commuting alternatives through marketing materials, informational campaigns, and other outreach programs that inform employees of the personal and societal benefits of participating in traffic reduction programs.
- ▶ Launch a publicity campaign to promote commuting changes, such as “Staggered Wednesdays.” On Wednesday employers could allow staggered work hours in order to gauge its effect on productivity and effect on employees’ commutes. The policy could become permanent if advantages are evidenced.



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