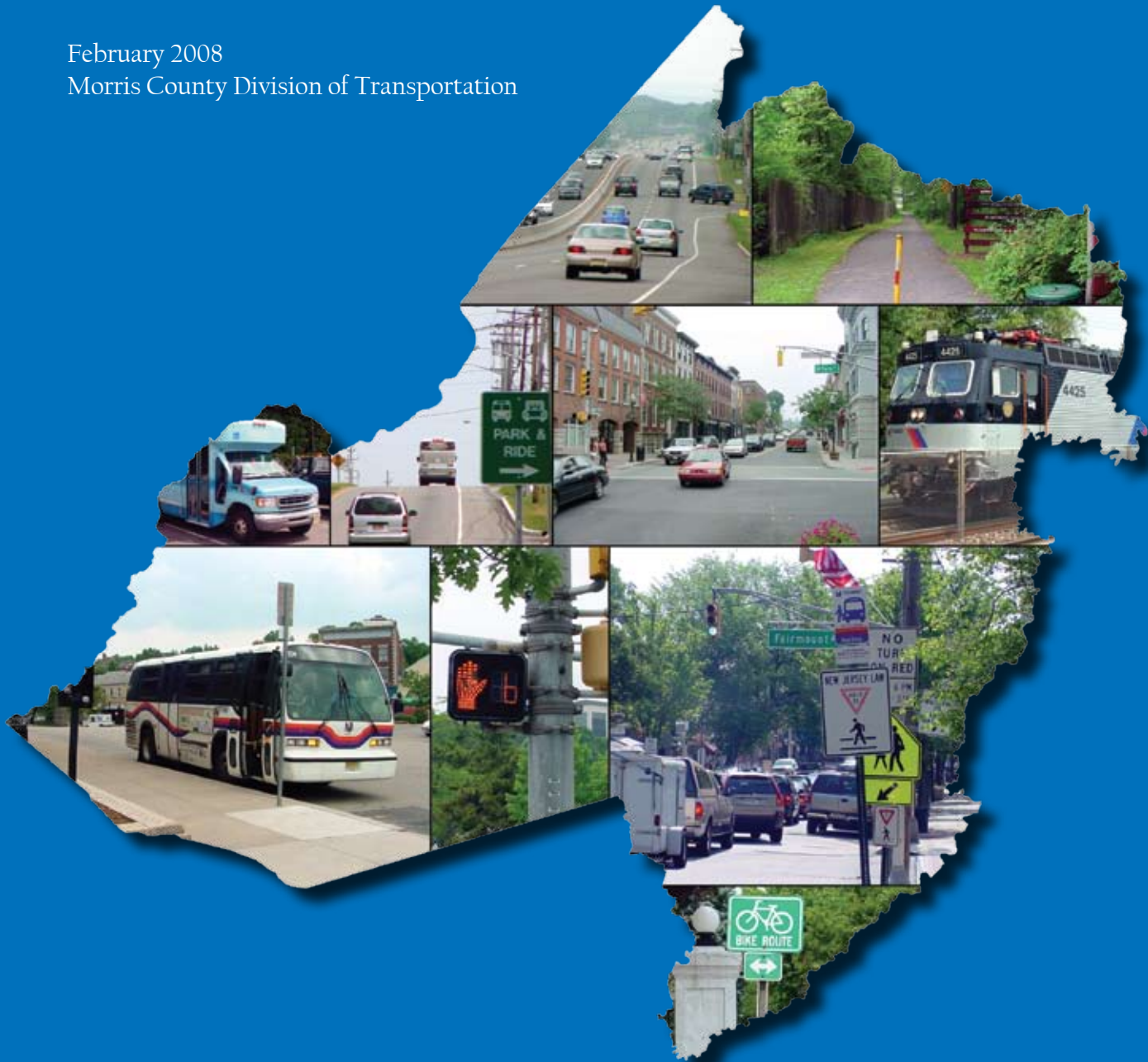# Bulletin #7

"Life, liberty, and the pursuit of a parking space"
How can we meet current and future transit parking demand?

February 2008
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, is currently under 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: Putting the Brakes on Congestion! – Will it only get worse? (February 2007)

Bulletin #3: Not Another Accident! – Improving roadway safety and enhancing emergency response. (March 2007)

Bulletin #4: Exercise Your Right to Bike or Walk!! – How can we enhance the bicycle and pedestrian facilities in Morris County? (July 2007)

Bulletin #5: Get a move on freight, before it's too late! – Managing and supporting efficient freight movement. (September 2007)

Bulletin #6: It's a Bird, It's a Plane... It's Another Plane! – The importance of the aviation industry and its impact on our quality of life (December 2007)

Bulletin #7 discusses the shortage of parking spaces at bus and rail transit stations. During the county's municipal outreach to elected officials, planners, engineers, and residents, the lack of parking spaces near transit was identified as an on-going problem. The Trans-Hudson Express Tunnel will expand passenger rail service to Manhattan, attracting more riders. However, parking lots at many train stations in Morris County are already near or at capacity and will not be able to handle the increased demand. Providing more parking spaces is one approach but is not always practical or the best use of land in proximity to train stations. The discussion in this bulletin focuses on providing sufficient transit parking through efficient use, planning, and development practices and management to meet commuters' needs.

This bulletin, as well as the previous bulletins mentioned above, can also be found on the Morris County Division of Transportation's (MCDOT) website at www.MorrisDOT.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.

LIFE, LIBERTY, AND THE PURSUIT OF A PARKING SPACE

How can we meet current and future transit parking demand?

Finding a parking space before the train or bus departs in the morning is a challenge for commuters every day. Parking at train stations and park and ride lots is in high demand. The lack of space leads to transit riders parking in illegal areas or on residential streets, or forces commuters to drive. The obvious solution would be to add more parking spaces, but land is limited and expensive. A long term solution to this problem will require a comprehensive approach consisting of the addition or expansion of parking infrastructure, improved parking management, and transit-oriented development patterns that reduce automobile trips.

According to a 2005 park and ride inventory conducted by TransOptions, Morris County's Transportation Management Association, existing parking was at or near capacity. Chatham, Dover, Madison, Morris Plains, and Mt. Olive train stations were at 100% capacity, and the parking lots at Morristown, Convent Station, Denville, and Gillette train stations were approaching maximum capacity. Also, park and ride lots serving bus transit to NYC, located in Dover, Parsippany, and Rockaway, were operating at 100% capacity.

NJ Transit has seen an increase in rail ridership in Morris County over the past several years. This is largely due to the introduction of Midtown Direct Service to Penn Station, New York and the opening of the Secaucus Transfer Station. The demand for transit service continues to increase. According to a recent NJ Transit Quarterly Ridership Trends Report, northern New Jersey rail ridership increased by 3.8% between the 4th quarter of 2006 and the 1st quarter of 2007. Individu-

There are over 47 park and ride facilities serving train stations and bus stops throughout Morris County.
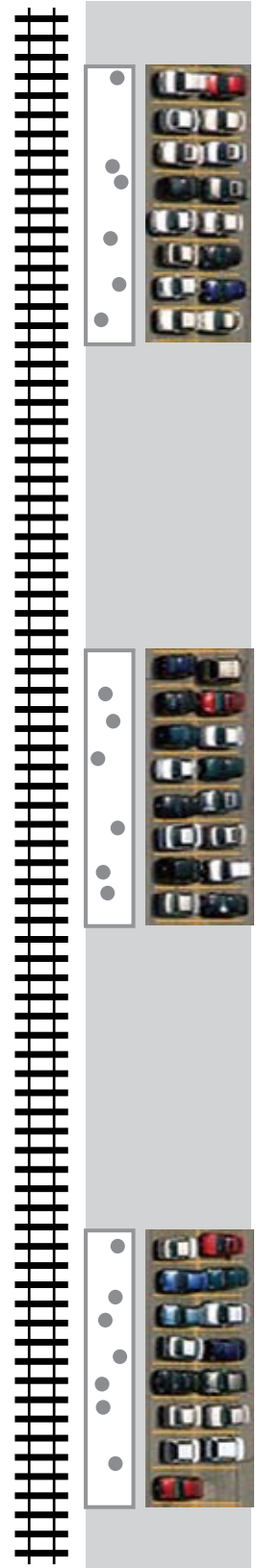
ally, over this time period, the Montclair-Boonton Line increased by 10.8% and the Morris and Essex Line increased by 4.5%. The most heavily used rail stations in Morris County are Dover, Morristown, Convent Station, Madison, and Chatham, each with over 1,000 daily boardings.

Additional riders are expected with the completion of future projects such as the Trans-Hudson Express Tunnel, which will create expanded passenger rail access to Manhattan, and the restoration of ferry service at the Hoboken Terminal. Sufficient parking capacity needs to be provided for the new riders who will be attracted by this improved service.

Parking shortages at bus and rail facilities also have a negative impact on the transportation network. Not only does the lack of parking inconvenience drivers, it also minimizes the opportunity for existing drivers to choose public transit. When a real or perceived shortage of parking exists, people will simply drive, resulting in a customer lost. This trend fails to remove cars from the roads.

Building more parking is one way to address growing parking demand. There are two types of parking facilities: structured and surface. Surface parking lots are less expensive to develop at around $3,000 to $4,000 per parking space. However, they require far more land to hold a comparable number of vehicles than structured garage parking. Surface parking, particularly in downtowns, also occupies land that could be more efficiently developed for commercial, residential, or other uses that would better serve community needs, the local economy, and

the general quality of life. Additionally, large surface lots disrupt the continuity of neighborhood streetscapes and are aesthetically unappealing. Structured parking is more expensive with an estimated cost of $20,000 per space, but requires less land to develop. Automated parking garages, which use machinery to move automobiles between levels, are becoming more popular in dense urban areas because they take up even less land and produce fewer emissions associated with automobile congestion. These are slightly more expensive, costing approximately $22,000 per spot. Finally, below-grade (underground) parking provides the benefit of not utilizing any additional land, but can cost upwards of $35,000 per spot due to excavation costs. Regarding aesthetics, the architecture of parking garages can disrupt the continuity of neighborhood and downtown streetscapes. However, incorporating façade design treatments and ground level commercial store fronts into the parking structure can help to integrate the facility into its surroundings. While building more parking lots and structures seems like a viable solution, it is only one component to addressing the parking problem in Morris County.

Managing the demand for parking can be as important a strategy as adding parking spaces. In Morris County, the ownership and operation of parking lots serving transit facilities is diverse. Depending on location, NJ Transit, local governments, private companies, and municipal parking authorities may be involved. Prices and policies also vary from location to location. A single, consolidated parking management system at transit locations controlled at a regional level could eliminate these inconsistencies.

Consolidating parking management under one body would create efficiencies in terms of pricing, timing, and availability. Pricing would be consistent, waiting lists could be generated, and available spots at other convenient locations could be identified and recommended. Regional parking management could also be integrated with transit-

oriented rideshare programs. The management entity could identify individuals living within close proximity of one another that could carpool to train stations, making at least one more parking spot per carpool available for another transit rider. Spaces could be reserved for those who participate. Commuters would also benefit from sharing the costs of parking, gas, and tolls. Parking management can also incorporate new technologies to increase parking efficiencies. Real-time parking information can be transmitted to commuters through the internet, cell phones, and variable message signs. This information can direct commuters to available parking and eliminate trips to parking lots that are already full, allowing drivers to make better and timely decisions.

Land development strategies can be used to reduce demand for parking by allowing for mixed-use and higher density in proximity to transit facilities. Transit-Oriented Development (TOD) locates residential, commercial, office, and civic uses around transit stations, thereby reducing the need for parking. NJ Transit has designated Morristown and Netcong as Transit Villages, which incorporates TOD principles around these train stations. Dover developed a plan to incorporate TOD around its train station as well. The 2006 Town of Dover Transit-Oriented Development Plan received an award from the New Jersey chapter of the American Planning Association. Montville is also exploring transit supportive land uses around the Towaco train station. Individuals choosing to live in TOD's would not require transit parking and would also have the additional benefit of having daily goods and services within walking distance.

Meeting the current and future demands of transit parking will continue to be a challenge in Morris County. Through strategic evaluation, planning, and management, sufficient parking can be provided to meet this demand. The following are actions that can be taken to improve transit parking:

Motorists spend an average of eight minutes looking for a parking space.

Transport Policy 13 (2006) 479–486, Cruising for parking, Donald C. Shoup.

LOT FULL

Proposals

1. Evaluation of Parking

Evaluate transit accessibility and develop plans to meet long-term parking demand.

COUNTY ACTIONS

▶ *Update the Morris County Rail Access Improvement Study. This should include an inventory of parking spaces, bike racks, ADA (Americans with Disabilities Act) compatibility, and other amenities at railroad stations.*

▶ *Explore the creation of an overflow parking plan to identify shared parking opportunities at locations adjacent to or close to transit. Consider properties with reduced weekday activity such as houses of worship, movie theatres, and shopping malls.*

▶ *Create a long range parking demand plan for Morris County that forecasts expected future demand for parking at public transportation facilities. The plan would take into account current shortages, expected population growth, transit improvements, and potential development.*

▶ *Work with TransOptions to enhance ride match to support carpooling to and from park and rides.*

GENERAL ACTIONS

▶ *Complete parking utilization studies to determine existing usage patterns and determine the need for expansion.*

2. Parking Management

Develop reliable, efficient, and cost effective service for motorists.

COUNTY ACTIONS

▶ *Review the results of NJ Transit's Station Car Program. This 2-year test program will evaluate the viability of leasing parking spaces at train stations to businesses that provide membership-based car sharing services to the public.*

▶ *Seek expansion in the number of peak-hour Morris County Metro (MCM) bus trips to NJ Transit Rail Stations. This will allow more people to take the bus to the train stations for their commute.*

GENERAL ACTIONS

▶ *Consolidate and centralize parking management to allow for consistent pricing and polices.*

▶ *Consider valet parking at larger railroad stations for quick and efficient drop-offs and pick-ups. Off-site parking could be utilized to locate vehicles during the workday.*

- *Develop a centralized Advanced Traveler Information System (ATIS) that permits commuters to check parking availability through their phone, email, or personal digital assistant (PDA).*

- *Provide real-time information to direct drivers to available parking lots with parking space availability using variable message signs.*

- *Limit parking permit availability only to those who use transit. Businesses in proximity to transit stations that do not utilize those facilities would not be able to purchase reserved parking.*

3. Parking Facilities

Plan and identify opportunities for the expansion and creation of parking lots.

GENERAL ACTIONS

- *Reconfigure existing parking facilities to maximize efficient use of space.*

- *Expand structured parking near train and bus park and rides.*

- *Require parking lots to include compact vehicle parking to maximize the number of spaces.*

- *Offer state grants to municipalities to construct new parking at or near transit.*

- *Dedicate an impact fee on new residential units towards the construction and improvement of transit parking. This impact fee must be based on the projected number of residents that will use transit parking.*

- *Develop off-site parking lots and provide shuttle service from these sites to the train station.*

4. Land Use near Transit Stations

Encourage future development to be less dependant on automobiles.

COUNTY ACTIONS

- *Partner with the County Planning Board to develop a how-to guide for municipalities to encourage Transit-Oriented Development (TOD) around transit stations.*

GENERAL ACTIONS

- *Establish TOD zones around transit stations. Development in this zone should be consistent with design standards associated with TOD.*

- *Encourage Smart Growth policies that could reduce the need to drive from home to transit parking.*

- *Provide adequate sidewalks and bikeways to and bike racks at transit to encourage people to bike or walk rather than drive.*

- *Encourage increased development densities near train stations necessary to support the use of structured parking.*

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