

FREIGHT IN MERCER COUNTY



for:
*Mercer County Planning Division
Mercer County Office of Economic Development and Sustainability
City of Trenton Planning Division
Greater Mercer Transportation Management Association*

by:
 **dvrpc**
DELAWARE VALLEY
REGIONAL
PLANNING COMMISSION

the BIG picture

At the center of it all, Mercer County, New Jersey, is a pivotal, forceful springboard for freight shipments. Its logistical prowess is forever memorialized by the *marque* TRENTON MAKES THE WORLD TAKES bridge minutes from the New Jersey State House. Today, Mercer County's freight activity resonates in new and varied forms that capitalize on distinct locational advantages and direct access to some of the world's most modern transportation facilities and networks.

When considering freight movement within and through Mercer County, it is useful to think about freight in the same terms as trips made by people. Like person trips, freight shipments are influenced by factors such as the total trip distance, the pricing of different travel alternatives, the "size" of the shipment, and the degree to which precise arrival times are needed. These factors, in turn, help shippers, carriers, and logisticians make decisions about how (i.e., which mode or combination of modes) to ship the freight.

Among a broad range of land uses, Mercer County features a significant number of sites wholly devoted to industrial activity and manufacturing. The majority of these individual tracts and larger clusters closely parallel existing rail freight lines and/or major highways. The largest contiguous industrial concentrations are the Northeast and Matrix Business Parks located near the New Jersey Turnpike/I-195 interchange, and a linear grouping between Trenton and Hamilton.

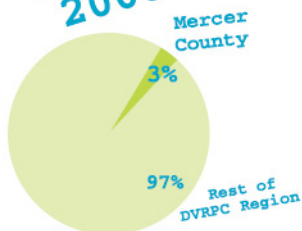
A high-level assessment reveals that Mercer County boasts a full arsenal of freight transportation facilities. Interstate highways I-95, I-195, I-295, and the New Jersey Turnpike, and 20 local interchanges offer superb routes, connections, and conditions for trucking operations. The highway system is further augmented by major arterials, such as US 1 and NJ 29.

For shipments by rail freight, four active lines traverse the county. The most prolific line, CSX's Trenton Subdivision, is a major north-south interstate route with doublestack capabilities. Rail service more local in nature is available via the New Jersey Transit RiverLINE route (during overnight hours), the Robbinsville Secondary, and the Amtrak Northeast Corridor. One additional rail facility, the Norfolk Southern intermodal facility in Bucks County, Pennsylvania, is noteworthy because of its ability to serve Mercer County businesses and customers.

With regard to water and air transportation, Mercer County shippers and receivers enjoy the luxury of proximity to two world-class systems. The port facilities of Camden and Philadelphia sit to the immediate south, while other port facilities and services can be found in North Jersey. Similarly, air cargo connections are available nearby at either Philadelphia International Airport or Newark Liberty International Airport.

This brochure provides an introductory overview about freight activity in Mercer County, including a map, two case study references, data, and helpful contacts. Freight shipments will continue to grow in the coming years, and it is therefore vital for the general public, elected officials, and planners to grasp the factors and dynamics that govern freight shipments and to more fully integrate freight into the planning process. ♦

Manufacturing output (\$)
In Mercer County:
2008



Source: Global Insight's U.S. Business Demographics Service

Mercer County: Demographic Data

	1970	2000	% Change
Employment			
Manufacturing	39,895	18,126	-55%
Transportation	6,780	8,289	22%

Source: Bureau of Economic Analysis, 2002 REIS data

MERCER COUNTY

FREIGHT RELATED TRANSPORTATION

	OUTPUT (\$\$\$)
WATER	493,534
ROADWAY	138,945,829
RAIL	98,707
COURIER (PARTIALLY INCLUDES AIR)	304,744,176
PIPELINE	25,800,625
WAREHOUSING	54,975,262

TOTAL 524,558,132

Source: Global Insight's U.S. Business Demographics Service

just in time

FACTS

Just-In-Time—a logistics term connoting cargo shipment reliability, speed, and transparency.

Of the four primary freight modes (trucking, rail, water based, and aviation), trucking is the most prominent in Mercer County. The DVRPC simulation model estimates that trucks log roughly 740,000 miles on Mercer County roadways on an average day. Light trucks account for more vehicle miles than heavy trucks (i.e., single-unit trucks with three axles and larger), and 45 percent of all truck trips occur on arterial highways, 44 percent occur on freeways, and the remainder occur on local roads.

In Mercer County, rail freight route miles are evenly split between public and private ownership. These lines afford existing or potential rail freight service to 11 of the 14 municipalities in the county. Barge calls on Duck Island, Hamilton Township maintain maritime transportation activity in the County. ♦

Interstate Highway Route Miles*	39.19
Other National Highway System Route Miles	84.25
NHS Freight Connector Route Miles	0.0
Interstate Highway Interchanges*	20
Total Truck Rest Stop Parking Spaces	84
Light-Truck Miles Traveled Daily	388,800
Heavy-Truck Miles Traveled Daily	352,100
Freight Rail Route Miles (total):	43.91
Private lines	23.23
Freight trackage rights on public lines	20.68
Rail Yards and Intermodal Terminals	0
Ports	1
2010 Barge Calls	86
Linear Berthing (feet)	500
Ship Cranes	0
Trenton, NJ to Cargo City at Philadelphia International Airport (miles)	35.74

**Includes New Jersey Turnpike*

It's All About Jobs

The movement of freight is integrally related to the retention and creation of employment in the transportation and manufacturing sectors. **From 1970 to 2000, transportation jobs (many of which entail managing, hauling, or storing freight) increased in Mercer County by 22 percent.** From 1970 to 2000, Mercer County experienced a loss of 55 percent of its manufacturing jobs, but it is still an important sector that provides higher than average annual salaries. All together, the transportation and manufacturing sectors accounted for 11 percent of total nonfarm employment in Mercer County in 2000.

In 2008, Mercer County businesses produced over \$3 billion in economic output, and accounted for a total of 3 percent of the region's manufacturing output. Chemical manufacturing created just over \$1 billion in manufacturing output, led by over \$600 million from pharmaceutical preparation manufacturing. Over \$500 million in economic output was generated by machine manufacturing in 2008. Most of this output was generated by air-conditioning and warm air heating equipment and commercial and industrial refrigeration equipment manufacturing. Food manufacturing, printing and related support activities, plastics and rubber products manufacturing, and computer and electric output manufacturing all created over \$200 million in economic output in 2008.

In terms of economic output from freight-related transportation, Mercer County is highly oriented toward courier and roadway movements. **Roadway and courier movements accounted for 84 percent of the economic output from freight-related transportation in the county in 2008.** ♦

how it

GOES

from here
to there

The 21st century supply chain is an amazing spectacle of interwoven modes, schedules, and partnerships. Each manufactured product results from its own unique logistics and decision-making process as it goes from raw material to production and then to consumers for final consumption.

If you could peer inside factories, warehouses, trucks, rail cars, and ships, you would find a diverse and fascinating number of supply chain case studies criss-crossing Mercer County at any moment in time. What is particularly interesting about different products is how varied their trip lengths are: they may range from wholly local to regional, national, and even international

The diagram below details the intricate supply chain journey of resilient tile flooring that is manufactured by Congoleum Corporation in Hamilton, New Jersey. The step-by-step diagram illustrates Mercer County's technological prowess, industrial muscle, and critical role in the global and green economies. ♦

- # 1** Daily orders for Congoleum resilient tile flooring products (commonly called Dura Products) are placed by national distributors and big box customers.



- # 2** Raw materials such as resins and pigments are carefully delivered to the Hamilton, Mercer County, Congoleum plant by tank truck from domestic and foreign suppliers.

- # 3** On site, more than 100 shift workers oversee production lines that heat and consolidate a base mixture in an industrial-sized continuous mixing operation.

- # 4** The resulting blend of raw materials is calendered into one continuous sheet of base stock.

- # 5** Choosing from 150 tile designs and colors, decorative patterns are embossed on the sheets, which are then cut into a variety of tile and resilient wood plank sizes.

- # 6** The product is cooled, boxed, and transferred to a nearby Congoleum warehouse, which employs an additional 80 hourly and salary employees.

- # 7** An average of 10 tractor trailers a day ship out a total of 21 million pounds of tile by truck throughout the United States each year.

- # 8** Following easy installation, homeowners, office workers, and others glide across beautiful, durable Congoleum tile flooring where they live, work, and play.

MERCER COUNTY

Freight Facilities & Industrial Centers



Good Neighbors Right in Our Backyard

Local communities are where the rubber hits the road when it comes to freight shipments. Freight facilities and operations sometimes generate unwanted impacts, so it is important to cultivate partnerships and promote programs that allow for freight movement, but that also protect the quality of life in our neighborhoods.

In Robbinsville Township, Mercer County, a new three-mile nature trail that will connect with other existing trails is under development thanks to a vast distribution and light manufacturing center, the Northeast and Matrix Business Parks. Accounting for close to 900 contiguous acres, the business parks have deeded over wooded areas and wetlands at the perimeter of its property to the township. Candidate Eagle Scouts from a local Boy Scout troop are constructing trail beds and pedestrian bridges so that township residents can enjoy flora and fauna in a natural environment.

For more information, see DVRPC's special treatment of freight in local communities in a Municipal Implementation Tool brochure released in 2010 (publication # MIT019). ♦

Mercer County Freight Planning Contacts:

Mercer County Planning Division

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640 South Broad Street
Trenton, NJ 08650-0068
(609) 989.6545
www.state.nj.us/counties/mercer

Mercer County Office of Economic Development and Sustainability

Mercer County Administration Building
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City of Trenton Planning Division

319 East State Street
Trenton, NJ 08608
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Greater Mercer Transportation Management Association

15 Roszel Rd. South, Suite 101
Princeton, NJ 08540
(609) 452.1491
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Delaware Valley Regional Planning Commission

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Philadelphia, PA 19106
Contact: Ted Dahlburg
(215) 238.2844
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Delaware Valley Goods Movement Task Force

DVRPC's freight advisory committee, the Delaware Valley Goods Movement Task Force, allows the local freight community to participate in formulating regional policies, plans, and programs. This diverse committee has been meeting since 1992. Members include shippers, Class I and short line railroads, trucking companies, ports, air freight, 3PL firms, federal, state, and local agencies, toll authorities, and consultants.

County Freight Scans

This brochure has been prepared in conjunction with DVRPC's County Freight Scans Program. During Fiscal Year 2011, brochures were completed for each of the nine counties in the Delaware Valley region: Bucks, Chester, Delaware, Montgomery, and Philadelphia counties in Pennsylvania, and Burlington, Camden, Gloucester, and Mercer counties in New Jersey. DVRPC gratefully acknowledges the stalwart support of many members of its freight advisory committee in the conduct of the County Freight Scans and the preparation of the series of county freight brochures.

