



for:

Montgomery County Planning Commission
Montgomery County Economic Development Corporation
GVF: A Transportation Management Association
The Partnership TMA - Montgomery County

by.





An economic juggernaut, Montgomery County, Pennsylvania's, prosperity and prestige are enabled by a masterful freight network. Fabled logistics successes fueled a young nation's army at Valley Forge, a massive steel mill in Conshohocken, and more recently a glamorous megamall at King of Prussia. Now punctuated by some of the nation's most affluent communities and most recognized businesses, Montgomery County provides a textbook example of the inexorable link between readily available freight transportation facilities and services and economic vibrancy.

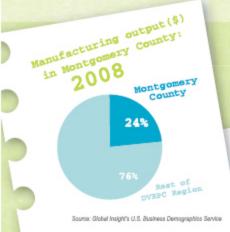
When considering freight movement within and through Montgomery County, it is useful to think about freight in the same terms as trips made by people. Like person trips, freight shipments are influenced by factors such as the total trip distance, the pricing of different travel alternatives, the "size" 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.

Montgomery County hosts numerous manufacturing sites, warehouses, and commercial centers that generate intense freight activity and, in many cases, involve high-value shipments. On the basis of size, combined freight generators in the Lansdale/Montgomeryville area make up one of the Delaware Valley's most formidable industrial centers. Other notable industrial clusters within the county are located in Conshohocken, Pottstown, Souderton, and Valley Forge/Oaks.

Montgomery County's expansive highway network capably accommodates significant commercial vehicle operations, and carriers such as Con-way, Haines and Kibblehouse, Pitt-Ohio Express, UPS, and Venezia Transport are routinely visible. Interstate highways I-76, I-276, and I-476 form the north-south, east-west spines of the system and handle the highest volumes of large trucks. Complementary U.S. and state highways, such as US 202, US 422, PA 100, and PA 309 augment the interstate system, provide circumferential routing, and serve county growth centers.

Other forms of freight transportation are equally present or available. A prominent Norfolk Southern main line (which may also be used by CSX and Canadian Pacific) is the region's only continuous double-track, double-track, cleared rail freight line. It serves rail terminals and yards in Montgomery County (i.e., Abrams Yard), Bucks County, Philadelphia, and New Jersey, and offers a gateway to Harrisburg and beyond. Rail services more local in nature are provided by CSX, East Penn, the Pennsylvania Northeastern, and the Upper Merion and Plymouth railroads. Shippers and receivers with businesses in Montgomery County also enjoy full entrée to maritime and air cargo services at the collective ports of the Delaware River and Philadelphia International Airport, respectively.

This brochure provides an introductory overview about freight activity in Montgomery 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.



rographi	c Data
Montgomers 2000	% Change
Employment 1970 Manufacturing 103,094 85,790 Manufacturing 11,082 22,213	100%
Manufactation 11,082	

MONTGOMERY COUNTY
FREIGHT RELATED TRANSPORTATION

WATER

ROADWAY

STR. 983.516

COURIER (PARTIALLY INCLUDES AIR)

SSQ. 564.019

PIPELINE

8.442.268

WAREHOUSING AND MICE COUPERT ACTIVITIES

150,174.622

TOTAL 1,440,416,878

Source: Global Insights U.S. Business Demographics Service

Source: Bureau of Economic Analysis, 2002 REIS data



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 Montgomery County. The DVRPC simulation model estimates that trucks log roughly 1.6 million miles on Montgomery County roadways on an average day. Heavy trucks (i.e., single-unit trucks with three axles and larger) account for more vehicle miles than light trucks and 54 percent of all truck trips occur on arterial highways.

Montgomery County possesses the most freight railroad miles of any county in the region, with 136. Forty six of the 62 minor civil divisions in the county contain a rail line used by a freight railroad. The county is also situated in close proximity to modern maritime terminals along the Delaware River and to an array of air cargo services available at Philadelphia International Airport.

Interstate Highway Route Miles Other National Highway System Route Miles NHS Freight Connector Route Miles	61.19 145.95 0.0
Interstate Highway Interchanges Total Truck Rest Stop Parking Spaces	12 24
Light-Truck Miles Traveled Daily Heavy-Truck Miles Traveled Daily	751,900 887,000
Freight Rail Route Miles (total): Private lines Freight trackage rights on public lines	135.87 76.71 59.16
Rail Yards and Intermodal Terminals	4
Norristown, PA to Packer Ave. Marine Terminal, Philadelphia, PA (miles)	8.57
Norristown, PA to Cargo City at Philadelphia International Airport (miles)	18.01

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) doubled in Montgomery County. Also, while the loss of manufacturing jobs in the United States is well documented, Montgomery County experienced just a 17 percent loss during from 1970 to 2000. All together, the transportation and manufacturing sectors accounted for 18 percent of total nonfarm employment in Montgomery County in 2000.

In 2008, Montgomery County businesses produced a total of 24 percent of the region's manufacturing output. Four manufacturing sectors created over \$1 billion in economic output. Chemical manufacturing resulted in \$11.5 billion in manufacturing output, led by over \$10 billion from pharmaceutical preparation manufacturing. Food manufacturing produced \$2.2 billion in economic output, roughly half of which was from animal slaughtering. Primary and fabricated metal manufacturing created just under \$2 billion in output, \$250 million of which was from iron and steel mills. Lastly, paper product manufacturing provided just over \$1 billion in output, roughly half of which was from the manufacturing of sanitary paper products.

In terms of economic output from freight-related transportation, Montgomery County is highly oriented toward roadway and courier movements. Roadway and courier activities accounted for 79 percent of the economic output from freight-related transportation in the county in 2008.



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 Montgomery 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 a daily Philadelphia Inquirer and Philadelphia Daily News, printed by Philadelphia Newspapers in Upper Merion Township. The step-by-step diagram vividly illustrates Montgomery County's technological prowess, industrial dexterity, and critical role in the global and green economies.

- Each month, 1,500 tons of recycled clean newsprint are delivered by rail car or tractor trailer to the Philadelphia Newspapers plant in Upper Merion Township, Montgomery County.
- Wewsprint rolls are stored in the Upper Merion plant for printing of the Philadelphia Inquirer, Philadelphia Daily News, and several other daily and weekly newspapers.



- Preserving the time-honored professionalism of the Fourth Estate, journalists electronically submit investigative reports and human interest stories to their editors.
- Using sophisticated software and fiber optic technology, the newspaper content and advertisements are laid out into three daily editions: B, C, and C ★.
 - # Streaming upon three miles of an internal conveyor system, the newspaper is printed at a rate of 50,000 copies per hour.
- Departing from the plant's strategic location near I-76 and I-476 between 1AM to 3AM, 300 large and midsize trucks transport the newspapers to distribution centers, convenience stores, and honor boxes.
 - # The Philadelphia Inquirer and Philadelphia Daily News begin the daily routine for 400,000 well-informed readers.
- # Scrap newsprint is baled up at the plant and sent by ship to China for recycling.

IONTGOMERY Freight Facilities Industrial Centers Freight Facilities Interstate Highway Interstate Highway Interchange Other National Highway System Route Overnight Truck Parking Facility Freight Rail (Private) Freight Trackage Rights (Public) Rail Intermodal Facility Port Facility Air Freight Facility Industrial Centers County Industrial Sub-Center 200 - 499 Acres County Industrial Center 500 - 999 Acres Regional Industrial Center 1000+ Acres Featured Brochure Items Supply Chain Case Study Freight as a Good Neighbor Example 73 422 202 70 F

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.

Amidst a second golden age of railroading, the Norfolk Southern Corporation has ramped up safety blitzes in communities near its highway-railroad grade crossings in Montgomery County. Employees of this multistate freight railroad periodically disseminate safe-driving tips to passing motorists and also host hi-rail trips on active rail lines for local officials and law enforcement personnel.

These efforts educate the public about the special operation characteristics of trains and combat crossing and trespassing violations.

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

Montgomery County Freight Planning Contacts:

Montgomery County Planning Commission

Montgomery County Courthouse P.O. Box 311 Norristown, PA 19404-0311 (610) 278.3722 www.planning.montcopa.org

Montgomery County Economic Development Corporation

420 West Germantown Pike East Norriton, PA 19403 (610) 272-5000 www.montcoedc.com

GVF: A Transportation Management Association

1012 West Eighth Ave., Suite A King of Prussia, PA 19406 (610) 354.8899 www.gvftma.com

The Partnership TMA - Montgomery County

134 N. Main Street North Wales, PA 19454 (215) 699.2733 www.ptma-mc.org

Delaware Valley Regional Planning Commission

190 N Independence Mall West Philadelphia, PA 19106 Contact: Ted Dahlburg (215) 238.2844 www.dvrpc.org

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.

