

FREIGHT IN CHESTER COUNTY



for:
*Chester County Planning Commission
Chester County Economic Development Council
Transportation Management Association of Chester County
GVF: A Transportation Management Association*

by:

the BIG picture

In Chester County, Pennsylvania, freight delivers, freight flourishes, and freight votes. In addition to popular illustrations and paintings by the Wyeth family and Horace Pippin, an alternative perspective and depiction of the county exists: one where products of substance and fortitude originate, freight facilities and services thrive, and economic development and sustainable transportation planning principles are carefully combined through the county's award winning Landscapes and newly adopted Landscapes2 initiatives.

When considering freight movement within and through Chester 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.

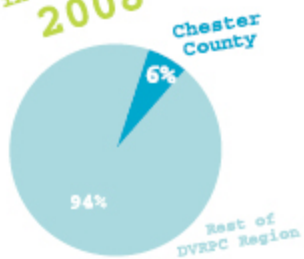
Industrial centers and individual locations—such as warehouses, industrial parks, and farms—that generate freight transportation activity are sprinkled throughout Chester County. Modern UPS and FedEx facilities and the QVC headquarters anchor a major center near West Chester and epitomize the movement of high-value, time-sensitive cargo within the county. Other notable clusters surrounding Coatesville and Downingtown reflect legacy industries, such as steel manufacturing. Another sizable center near Kennett Square highlights the county's extensive agricultural production activities, which also create a high demand for the safe and efficient movement of goods through and within the county.

Chester County's extensive transportation system is well suited for handling freight shipments. One Interstate highway (i.e., I-76, the Pennsylvania Turnpike) traverses the entire county in an east-to-west fashion and affords local access via the Downingtown Interchange. US 1, US 30, and US 202 are complementary limited-access highways. Pennsylvania state Routes 41, 100, and 252 also serve as major arteries with significant truck volumes.

The county has an abundant supply of active rail freight lines. Norfolk Southern's Philadelphia-Harrisburg main line hugs the Schuylkill River and passes through Phoenixville. Running parallel to US 202, Norfolk Southern's Dale Secondary connects the Amtrak Keystone Corridor (which handles some freight traffic) with the Norfolk Southern's Philadelphia-Harrisburg and Morrisville lines near Norristown. Local shippers receive rail cars directly along the Octoraro line and the Wilmington and Northern branch, both of which are operated by the East Penn Railroad via Chadds Ford.

This brochure provides an introductory overview about freight activity in Chester 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 Chester County: 2008



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

Chester County: Demographic Data

	1970	2000	% Change
Employment			-6%
Manufacturing	35,272	33,074	
Transportation	5,056	12,528	148%

Source: Bureau of Economic Analysis, 2002 REIS data

CHESTER COUNTY

FREIGHT RELATED TRANSPORTATION OUTPUT (\$B)

Mode	Output (\$B)
WATER	1,404,512
ROADWAY	512,982,472
RAIL	11,058,108
COURIER (PARTIALLY INCLUDES AIR)	346,912,532
PIPELINE	74,291,956
WAREHOUSING	48,177,239

TOTAL 994,826,819

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 Chester County. The DVRPC simulation model estimates that trucks log roughly one million miles on Chester County roadways on an average day. Heavy trucks (i.e., single-unit trucks with three axles and larger) account for slightly more vehicle miles than light trucks. Close to half of all truck trips occur on the Chester County network of freeways.

Chester County boasts an extensive rail freight network: **38 of the 73 municipalities in the county contain a rail line presently used by a freight railroad or which could potentially be used by one.** 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. ♦

<i>Interstate Highway Route Miles</i>	25.99
<i>Other National Highway System Route Miles</i>	159.59
<i>NHS Freight Connector Route Miles</i>	0.0
<i>Interstate Highway Interchanges</i>	1
<i>Total Truck Rest Stop Parking Spaces</i>	36
<i>Light-Truck Miles Traveled Daily</i>	477,800
<i>Heavy-Truck Miles Traveled Daily</i>	563,500
<i>Freight Rail Route Miles (total):</i>	108.47
Private lines	70.32
Freight trackage rights on public lines	38.15
<i>Rail Yards and Intermodal Terminals</i>	3
<i>West Chester, PA to Penn (marine) Terminals, Eddystone, PA (miles)</i>	15.86
<i>West Chester, PA to Cargo City at Philadelphia International Airport (miles)</i>	20.51

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) grew by nearly 150 percent in Chester County. Also, while the loss of manufacturing jobs in the United States is well documented, Chester County experienced just a six percent loss from 1970 to 2000.

All together, the transportation and manufacturing sectors accounted for 16 percent of total nonfarm employment in Chester County in 2000.

In 2008, Chester County businesses accounted for a total of six percent of the region's manufacturing output. Chemical manufacturing was responsible for \$1.3 billion in output from the county. Chester County has a very diverse manufacturing base as 10 commodity sectors had over \$300 million economic output in 2008. Those commodity sectors with more than \$500 million of economic output in 2008 included: primary metal manufacturing, with \$585 million, computer and electronic product manufacturing, with \$543 million, and food manufacturing with \$538 million.

In terms of economic output from freight related transportation, Chester County is highly oriented toward roadway and courier movements. Roadway and courier movements accounted for 86 percent of the economic output from freight-related transportation in the county. The output from roadway activity was the third highest in the region. ♦

how it

GOES

from here to there

Twenty-first century supply chains are 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 Chester 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 potato chips produced by Herr's, Inc., in West Nottingham, Chester County. The step-by-step graphic vividly illustrates Chester County's multimodal dexterity, consumer orientation, and integral role in the global economy. ♦

- #1** Using computers and modern inventory procedures, distributors, route salesmen, and on-line consumers set demand levels and trigger potato chip production.
- #2** Less than 36 hours after being dug up, potatoes are delivered by truck from East Coast farms to the Herr's manufacturing facility in West Nottingham, Chester County.
- #3** Fifty thousand pounds of potatoes are off-loaded from each truck by raising the trailers up at one end and using gravity to empty them.
- #4** Rail tank cars utilizing the East Penn's Octoraro line safely deliver 22,500 gallons of cooking oil per rail car.
- #5** Potatoes are inspected, cleaned, sliced, and fried in oil for three to eight minutes (depending on the type of potato chip).
- #6** After cooling and drying, chips are carefully packaged in "stay-fresh" foil bags.
- #7** Chips are trucked or flown to warehouses or distribution sites in 26 states and 32 countries.
- #8** Kids, families, and devoted snackers enjoy fresh potato chips (and other Herr's products) at parties, sporting events, and just for pleasure within days of production.

CHESTER COUNTY

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 Yard
- 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



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.

A hometown success story guided by Main Street values, the A. Duie Pyle trucking and logistics company of West Chester has shone as a good corporate citizen for 85 years. In recent years, the company has fully embraced rapid gains in commercial vehicle technologies and outfitted the company's fleet of more than 800 trucks with sophisticated on-board equipment. A. Duie Pyle's high-tech smart trucks are good for both the public and for business: they help reduce unnecessary idling, schedule repairs, monitor driver performance, increase safety, and promote fuel savings.

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

Chester County Freight Planning Contacts:

Chester County Planning Commission

601 Westtown Road, Suite 270
West Chester, PA 19380
(610) 344.6285
www.chesco.org/planning

Chester County Economic Development Council

Eagleview Corporate Center
737 Constitution Drive
Exton, PA 19341
(610) 458.5700
www.cceconomicdevelopment.com

Transportation Management Association of Chester County

Great Valley Corporate Center
7 Great Valley Parkway, Suite 144
Malvern, PA 19355
(610) 993.0911
www.tmacc.org

GVF: A Transportation Management Association

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

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.

