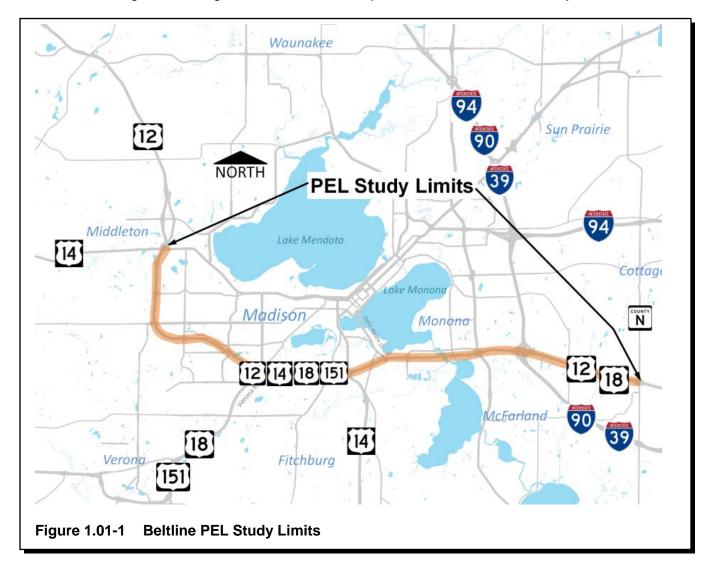


# 1.01 INTRODUCTION

The Beltline Planning and Environmental Linkages (PEL) corridor is a 20-mile study corridor of US 12/14/18/151. It begins at the US 12 and US 14 (University Avenue) interchange in the city of Middleton and extends to the US 12/18 County N interchange in the town of Cottage Grove. Four United States highway routes (US 12, US 14, US 18, and US 151) are partially routed on the Beltline connecting the cities of Middleton, Madison, Fitchburg, and Monona and the towns of Blooming Grove and Cottage Grove. Figure 1.01-1 shows a map of the Beltline and the vicinity.



In addition to serving as a major regional transportation link, the Beltline serves as a local transportation corridor for the communities it passes through. Because of the nature of the geography, lakes, and development surrounding the Beltline, it is the only continuous east-west route on the south side of Madison. As a result, the Beltline is also a critical link for local traffic.

# 1.02 BELTLINE CLASSIFICATION AND FUNCTION

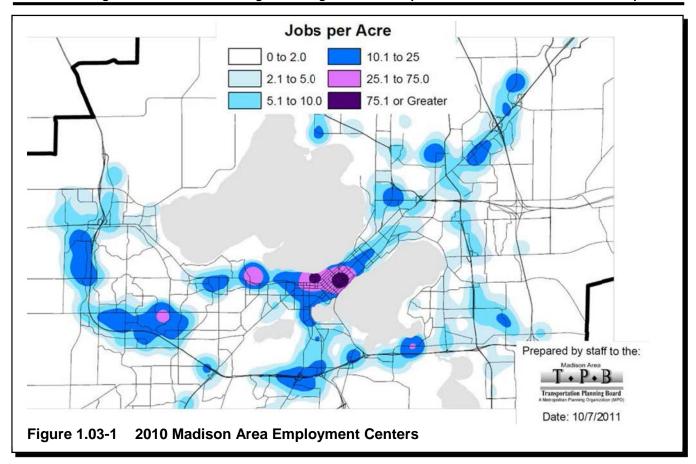
According to Wisconsin Department of Transportation's (WisDOT's) Connections 2030 Long-Range Multimodal Transportation Plan (adopted October 2009), the Beltline is part of a system of high priority statewide multimodal intercity corridors. The Beltline is at the hub of a system of intercity corridors that connect Madison to Beloit-Illinois; Iowa; Oshkosh-Green Bay; Lake Geneva-Chicago; Eau Claire-Twin Cities; La Crosse; Milwaukee; and northern Wisconsin. The Beltline corridor serves critical sectors of the economy and a major population center; carries significant travel activity for passenger and freight traffic; shows significant growth in travel and economic development; and serves an important role for other transportation modes. Corridors 2030 State Highway Plan classifies the Beltline between Verona road (US 151) and I-39 as part of the Backbone system and the rest of the Beltline as part of the Connector system. Backbone highways are multilane divided highways interconnecting major population and economic centers of the state and linking them to the national transportation network. Connector highways are 2- and 4-lane highways directly linking other significant economic and tourism centers to the Backbone system.

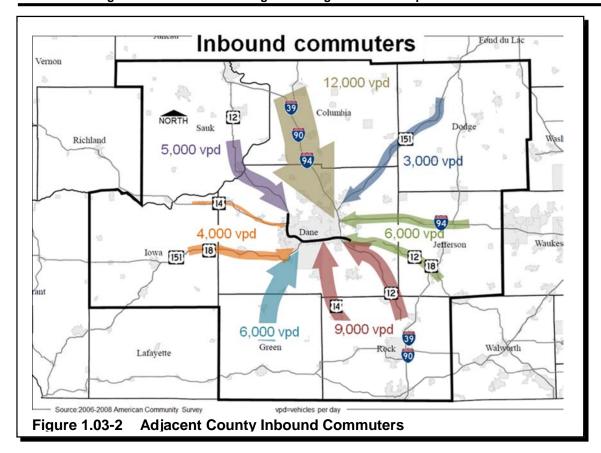
As described by these two WisDOT reports, *Connections 2030* and *Multimodal Freight Network–2012 Interim Activities Report* and supporting data, the Beltline serves an important economic development function by providing access to existing local and regional economies as well as the state as a whole. Adequate transportation is considered to be one of several key factors considered in site location for business and industry. Businesses require some level of transportation access to labor, materials, and customers in order to operate and survive. Transportation is a factor that influences the ability of a region to attract businesses, expansions, retentions and start-ups.

The following sections describe the relationship of the Beltline to the local, regional, and statewide economy. It discusses commodities shipped along the Beltline, number of industrial parks, businesses, lodgings, and education institutions close to the Beltline.

# 1.03 INSTITUTIONAL, INDUSTRY, AND BUSINESS ACCESS

The Beltline is used to ship goods and provides access to employment, school, and shopping. Because the growth in labor force in Dane County has not kept pace with the growth in employment, workers in Dane County have been commuting in from other counties. This is especially true in the cities of Madison and Middleton. The Madison area Metropolitan Planning Organization (MPO) plan, 2035 Regional Transportation Plan (RTP) Update, shows the likely 2035 major employment and activity centers in the Madison Metropolitan Area and Dane County (see Figure 1.03-1). Many of the users of those centers rely on the Beltline for transportation. Figure 1.03-2 shows the number of workers commuting to Dane County from other counties.





The Beltline provides a link to Madison area employment centers and business centers. There are 41 industrial parks with over 4,783 industrial/business/commercial acres located in communities within 5 miles of the Beltline corridor. Over 950 acres were available for sale in 2012. Additionally, 7 business incubators, available for start-up and early-stage companies, are located in the city of Madison. There are approximately 5,500 business establishments within 1 mile of the study segment, and there are about 14,950 businesses within 5 miles, employing approximately 297,000 employees.

The Beltline serves Dane County tourism. In addition to providing access to Dane County communities and corresponding events, the Beltline is often an entrance for out-of-town visitors. There are 31 lodging establishments identified within 1 mile of the Beltline, with 3,510 rooms. Fifty-six lodging establishments are located within 5 miles of the Beltline, offering 5,811 rooms.<sup>3</sup>

Numerous higher education institutions are located in Dane County. While few are located directly adjacent to the Beltline, the Beltline serves each institution by directing employees, students, and visitors to roads that lead to each campus. Colleges and universities in the study area include the following:

 The University of Wisconsin-Madison Campus (42,800 students) is located within 2.5 miles of the Beltline.

<sup>&</sup>lt;sup>1</sup> http://www.mge.com/Images/PDF/BusParks/BusParks 2012.pdf accessed in June 2013.

<sup>&</sup>lt;sup>2</sup> 2010 ESRI Business Locations (using Reference USAGov, a division of Infogroup, an internet-based database).

<sup>&</sup>lt;sup>3</sup> The Department of Public Health for Madison & Dane County

- One of the Madison College campuses is located within 1 mile and several other campuses are within 5 miles of the Beltline. A total of 43,300 full- and part-time students are enrolled at Madison College.
- Edgewood College (2,500 students) is located about 2.5 miles from the Beltline.
- ITT Technical Institute is located within 1 mile of the Beltline.
- Omega School is located within 1 mile of the Beltline.
- Herzing University (6,900 students over 11 campuses) is located over 5 miles away.
- Upper Iowa University learning center (6,200 students over 1 campus and 15 learning centers) is directly adjacent to the Beltline.

# 1.04 COMMODITY FLOW

The WisDOT report, *Multimodal Freight Network–2012 Interim Activities Report*, identified the Beltline as a high priority freight corridor based on commodity flow characteristics, high volumes of trucks, and validation through stakeholder input. Figure 1.04-1 shows the state's *Draft Priority Highway Priority Freight Network*. This report further describes Dane County as a major origin of wholesale and distribution commodities such as motor vehicle parts and farm products. These commodity movements are expected to grow substantially by 2035.

Figure 1.04-1 Draft Priority Highway Freight Network



The following is a summary of traffic volume, freight origin and destination analysis, and commodity breakdown along the study segment.

- In 2012, average annual daily traffic (AADT) was as high as 123,000 vehicles per day on the Beltline. The segment of the Beltline with the most traffic is east of Verona Road (US 18/151).
- Trucks represented about 8.1 percent of that traffic at approximately 9,100 trucks/day.
- In 2011, 12.2 million tons of freight valued at \$14.2 billion was shipped on the corridor.
- Of the 12.2 million tons, 12 million tons (98.1 percent) originated or terminated in the United States. About 94,000 tons (0.8 percent) were imported from outside North America and 78,000 tons (0.6 percent) were exported outside North America; 64,000 tons (0.5 percent) were shipped to or from Canada or Mexico.

Table 1.04-1 shows the most valuable commodities, along with their tonnage, transported by truck along the Beltline segment. The warehouse and distribution commodity category represents a little over 8 percent of the truck value and tonnage. Livestock, paper, dairy farm products, miscellaneous field crops and processed milk are some of the next most important commodities in truck value and tonnage. This reflects the importance of agriculture to Wisconsin's economy.

Commodity	Truck Value (\$)	Truck Tons
Warehouse and Distribution Center	\$ 1,224,922,328	1,094,165
Livestock	848,985,363	477,903
Paper	641,548,282	337,396
Dairy Farm Products	596,628,702	693,081
Miscellaneous Field Crops	542,955,349	995,373
Miscellaneous Plastic Products	317,125,536	92,811
Processed Milk	282,644,177	319,212
Motor Vehicle Parts or Accessories	263,641,253	29,889
Drugs	254,989,755	13,979
Misc Electrical Industrial Equipment	247,817,584	33,526
Womens or Childrens Clothing	202,118,030	14,405
Misc Industrial Organic Chemicals	189,892,183	194,698
Solid State Semiconducts	179,505,474	5,892
Cheese or Special Dairy Products	178,149,939	69,482
Farm Machinery or Equipment	161,466,514	22,651
Constr Machinery or Equipment	157,537,540	22,635
Distilled or Blended Liquors	155,110,579	141,208
Other	\$ 6,445,038,589	4,558,306
TOTAL	\$ 14,200,534,925	12,254,074

Table 1.04-1 2011 IHS TRANSEARCH Data-Most Valuable Commodities

Tables 1.04-2 and 1.04-3 list top origins and destinations of freight moved on the Beltline. Over one-half of the total freight value and tonnage traveling on the Beltline originates and terminates in Wisconsin.

lowa and California are the next most important origins and destinations of truck freight moving on the Beltline.

	Truck Value	
Origin State	(\$)	Percent
Wisconsin	\$7,507,435,108	52.9%
Iowa	\$3,489,705,164	24.6%
California	\$1,603,263,986	11.3%
Illinois	\$ 374,949,279	2.6%
Nebraska	\$ 229,747,412	1.6%
Michigan	\$ 193,558,932	1.4%
Kansas	\$ 143,872,204	1.0%
Indiana	\$ 124,766,788	0.9%
Missouri	\$ 91,863,211	0.6%
Colorado	\$ 72,034,488	0.5%

Table 1.04-2 Top 10 Origins of Freight Moving on the Beltline

Destination	Truck Value	
State	(\$)	Percent
Wisconsin	\$7,306,330,251	51.5%
Iowa	\$3,269,566,384	23.0%
California	\$ 922,360,686	6.5%
Illinois	\$ 562,156,067	4.0%
Nebraska	\$ 310,950,645	2.2%
Michigan	\$ 240,023,879	1.7%
Colorado	\$ 209,475,618	1.5%
Missouri	\$ 193,207,410	1.4%
Kansas	\$ 192,682,817	1.4%
Indiana	\$ 158,852,602	1.1%

Table 1.04-3 Top 10 Destinations of Freight Moving on the Beltline

# 1.05 FUTURE ECONOMIC GROWTH

The Madison area population and economy are expected to continue to grow. The MPO plan, 2035 Regional Transportation Plan (RTP) Update, predicts that the Dane county population will grow by 34 percent between 2000-2035 and employment is expected to grow by over 48 percent between 2000-2035. The Madison area MPO land use plan shows a significant amount of growth including infill and redevelopment. Statewide freight traffic by truck is expected to grow by 64 percent by 2030 according to Connections 2030. Congestion is expected to grow with these increases. Based on Connections 2030, the entire Beltline west of I-39 is projected to be extremely congested by 2030, which will increase travel time and decrease system reliability. This is expected to increase the operating costs of commuters, businesses, and freight haulers using the Beltline.