

Chapter 1 Purpose and Need

1.2 Purpose and Need Statement

1.2.1 Project Purpose

The purpose statement below specifically defines the reason why the Project is being proposed.

The purpose of the Project is to increase transportation options for central and southern Lake County residents traveling to downtown Chicago and surrounding areas, to reduce travel time and travel costs, and to promote economic development opportunities in Lake County.

1.2.2 Project Need

This section outlines the needs foundation for the Project purpose defined in **Section 1.2.1**. More specifically, this section identifies the needs that the Project is intended to address and the underlying cause of the defined needs. The following subsections include an overview of transportation-related conditions in the Project Area and discuss the Project's ability to meet identified needs.

The Project is needed to increase transportation options for accessing downtown Chicago, reduce travel time to downtown Chicago, reduce the parking burden at existing transit stations, reduce travel costs, and promote economic development.

1.2.2.1 Increase Transportation Options for Accessing Downtown Chicago

Existing transportation options available to residents in the Project Area seeking access to jobs in Chicago are limited to travel by automobile or travel by automobile to the MED line, owned and operated by MED, and SSL commuter rail services. The population growth anticipated in the Project Area will exert increasing demands on regional roads, MED's services including the MED line, and the SSL, which are already operating at or near capacity (Policy Analytics, LLC 2014). Thus, the Project purpose to increase transportation options is supported by the lack of direct transit service to downtown Chicago from parts of the Project Area that are experiencing high growth rates.

Population Growth

Table 1.2-1 identifies population within the counties crossed or affected by the Project. According to the United States Census Bureau, northwest Indiana has seen major changes in land use patterns and distribution of population between 2000 and 2015. These changes have had, and will continue to have, major implications for transportation in the region. Northwest Indiana, including Lake, Porter, and LaPorte Counties, experienced population growth greater than that of the surrounding areas between 2000 and 2015 (United States Census Bureau 2000, 2010a, 2015). During this time frame, the population in northwest Indiana increased 3 percent compared to population declines in Chicago and Cook County. In particular, Munster and Dyer, both in Lake County, experienced high population growth rates during this period. Conversely, the established urban area along Lake Michigan, including Hammond, saw declines in population. Commuter rail service in northwest Indiana is provided in the established communities along Lake Michigan where populations have declined, but it is not readily available to communities experiencing population growth.

According to NIRPC's 2040 Comprehensive Regional Plan (CRP), the population in northwest Indiana (Lake, Porter, and LaPorte Counties) is expected to increase by 170,000 (+22 percent) from 2010 to 2040, increasing to a total population of approximately 942,000 in 2040



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(NIRPC 2011). As shown in **Table 1.2-1**, Lake County is anticipated to have approximately 26 percent of this growth, and populations in Dyer, Munster, and Hammond are expected to increase.

Table 1.2-1: Northwest Indiana Population

	Population	Population	Population Estimate	Forecast Population	Percent Change (%)	Percent Change (%)
County/City/Town	2000 ^a	2010 ^b	2015 ^c	2040 ^d	2000–2015	2010–2040
Lake County	484,564	496,005	487,865	622,950	+1	+26
Dyer	13,895	16,390	16,051	20,587	+16	+25
Munster	21,511	23,603	22,984	26,499	+7	+12
Hammond	83,048	80,830	77,614	92,169	-7	+14
Porter County	146,798	164,343	167,688	190,205	+14	+16
LaPorte County	110,106	111,467	110,884	128,660	+1	+15
Northwest Indiana	741,468	771,815	766,437	941,815	+3	+22
Cook County	5,376,741	5,194,675	5,238,216	5,960,239	-3	+15
Chicago	2,896,016	2,695,598	2,720,546	2,904,444	-6	+8

^a United States Census Bureau. 2000. Profile of General Demographics: 2000 Census Summary File (SF 1) 100-Percent Data. http://www.census.gov/.

Employment Focus Is Chicago

Since the decline in rust-belt industries, northwest Indiana has become an exporter of workers. A lower cost of living in the Indiana portion of the region attracts many families who have jobs in Chicago but want more-affordable housing. At the same time, Indiana residents want access to the higher-paying jobs in Chicago (Policy Analytics, LLC 2014).

According to Census Transportation Planning Products (CTPP) information and American Community Survey (ACS) data, the number of Lake County residents who are also employed in the county remained roughly the same between 2000 and 2010, while the number of Lake County residents working in northeastern Illinois grew from 45,095 to 52,004 (+15 percent) (American Association of State Highway and Transportation Officials [AASHTO] 2000; United States Census Bureau 2010b) (see **Table 1.2-2**).

b United States Census Bureau. 2010a. Summary File (SF 1) 100-Percent Data. Table GCT-PH1 – Population, Housing Units, Areas, and Density: 2010. http://www.census.gov/.

^c United States Census Bureau. 2015. Annual Estimates of the Resident Population. http://www.census.gov/.

d NIRPC. 2015. Forecast Data .www.nirpc.org.

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Table 1.2-2: Northwest Indiana Residence-Work Location

	Work in Same County	Work in Same County	Work in Northeast Illinois	Work in Northeast Illinois	
Residence	2000	2006–2010	2000	2006–2010	
Lake County	146,406	146,421	45,095	52,004	
Porter County	38,893	41,267	5,906	6,191	
LaPorte County	35,776	34,713	1,137	1,419	

Sources: AASHTO 2000; United States Census Bureau 2010b.

More than 9,900 residents of Lake County, or 4 to 5 percent of all employed residents of the county, worked in downtown Chicago between 2006 and 2010 (AASHTO 2000; United States Census Bureau 2010b). The Chicago Metropolitan Agency for Planning (CMAP) forecasts that downtown Chicago employment will grow from 479,700 jobs in 2010 to 675,900 jobs in 2040, an increase of 196,200 jobs (+41 percent) (CMAP 2014c).

Based on the analysis of the CTPP and United States Census Bureau ACS 2006–2010 data, Lake County is expected, at a minimum, to sustain its share of residents working in downtown Chicago because of population gains but also because of worker-to-job deficits in northwest Indiana. Not only do Lake and Porter Counties have more workers than jobs, but the worker-to-job deficit increased from 2000 to 2006–2010, as shown in **Table 1.2-3**. Both Chicago and Cook Counties showed a growing surplus of jobs. Key population centers within the Project Area are within a 25- to 30-mile commute to downtown Chicago, making these jobs within commuting reach to residents of those communities. For the 2006–2010 period, Lake County exported more than one-fifth (22 percent) of its employed residents to jobs in Cook County (AASHTO 2000; United States Census Bureau 2010b).

Table 1.2-3: Workers versus Jobs in Northwest Indiana

	2000	2000	2000	2006–10	2006–10	2006–10	
Area	Workers	Jobs	Workers versus Jobs	Workers	Jobs	Workers versus Jobs	Change in Job Deficit/ Surplus
Lake County, IN	208,955	192,865	-16,090	211,795	194,539	-17,256	-1,166
LaPorte County, IN	51,097	48,786	-2,311	47,645	43,890	-3,755	+1,444
Porter County, IN	72,440	56,140	-16,300	75,895	57,670	-18,225	-1,925
Cook County, IL	2,371,160	2,554,120	+182,960	2,377,334	2,581,745	+204,411	+21,451
Chicago, IL	1,192,140	1,336,555	+144,415	1,219,311	1,396,768	+177,457	+33,042

Sources: AASHTO 2000; United States Census Bureau 2010b.

One of the incentives for Lake County residents to seek employment in Cook County is the substantial premium in average wages. For most industries, Cook County jobs pay an average of 40 percent more than what Lake County jobs pay (Policy Analytics, LLC 2014). The higher incomes that these jobs generate produce substantial economic benefits, as incomes returned to northwest Indiana are used to purchase homes, enroll in school, and buy goods and services.



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Higher wage premiums in Chicago, coupled with Lake County's lower cost of living, present desirable economic opportunities for northwest Indiana residents.

Transit Services

Existing transit options for accessing downtown Chicago from the Project Area are limited to NICTD's SSL, which extends along the northern edges of Lake, Porter, and LaPorte Counties. Users of the SSL service who live in the Project Area must travel by automobile to the closest stations in East Chicago or Hammond (http://www.nictd.com/).

Another transit option that serves downtown Chicago is Metra's MED line, a commuter rail line that principally serves suburban Chicago commuters. The MED line extends south from downtown Chicago and terminates at University Park in Illinois. Residents living in the Project Area can travel west by automobile to access the MED line stations at University Park and Kensington. Weekday boardings are 35 and 75, respectively (Metra, OD Survey 2016).

Within northwest Indiana, other public transportation is focused primarily on serving the urban areas of northwest Lake County. These include two bus service operators, East Chicago Transit (ECT) and Gary Public Transportation Corporation (GPTC), both serving in-city transportation needs in East Chicago and Gary, Indiana. Neither of these urban bus services extends to downtown Chicago. Additionally, Pace Suburban Bus provides connections with the SSL at Hegewisch Station.

- **ECT** is a local bus transit operator in East Chicago. It operates three fixed-route bus services and a complementary paratransit service Monday through Saturday within East Chicago. Connections are possible to the SSL and GPTC (ECT 2017).
- GPTC operates a system of 10 fixed-route bus routes in northwest Indiana and complementary paratransit within Gary. Connections are provided to the SSL, ECT, and intercity buses. GPTC provides service to the Gary Airport (GPTC 2017).
- Pace operates fixed-route bus service primarily to the surrounding communities of Chicago, with some express bus service into downtown Chicago. Three routes connect with the SSL at Hegewisch Station. Two routes have a terminal stop at Morton Court/Willow Court west of downtown Hammond.

The Project would provide an additional transportation option that would be more convenient and closer for residents in the Project Area traveling to downtown Chicago.

1.2.2.2 Reduce Travel Time to Downtown Chicago

The purpose of reducing travel time for residents in the Project Area is supported by the need to provide service that has competitive travel times with the congested roadway system connecting northwest Indiana to downtown Chicago. In addition, the purpose would be met by reducing travel time to commuter rail stations and parking facilities with available capacity.

The Policy Analytics research of 2014 observed, "[t]he highway connections between northwest Indiana and Chicago are congested, especially during peak times" and determined that trips are 40 percent faster in off-peak periods. The research also noted that the addition of more traffic from population growth to an already congested network will cause even more congestion by further slowing throughput. Offloading some commuters from highways to commuter rail would improve the efficiency of the highway system (Policy Analytics, LLC 2014).

Under current conditions, travelers from the Project Area destined for downtown Chicago travel by automobile either directly to downtown Chicago or to an existing commuter rail station.



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Travelers by automobile use the existing regional roadway network, which includes key highways such as the Dan Ryan Expressway; Lake Shore Drive; Bishop Ford Expressway; Interstate 90 (I-90) Skyway; Frank Borman Expressway (I-80/94); Interstate 65 (I-65); U.S. Routes 30, 41, and 231; and portions of State Routes 2 and 53 (see **Figure 1.1-1**). Many of these roads experience congestion during peak travel periods, yielding slow travel speeds and extra travel time compared with non-peak travel periods. For example, the Dan Ryan Expressway in Chicago is typically congested on a daily basis, as indicated by average vehicle speeds of 25 miles per hour (mph) to Interstate 55 (I-55) and 16 mph for the final 2 miles to the Jane Byrne Interchange (CMAP 2013). The Bishop Ford Expressway and I-90 Skyway, which are principal feeders to the Dan Ryan Expressway, also experience slow peak-period travel speeds (41 mph and 33 mph, respectively) and variability in travel times (CMAP 2013). Travel forecasts for roadway corridors heading north and west from Lake County show increases in traffic volumes, including the Frank Borman Expressway (I-80/94); I-65; U.S. Routes 30, 41, and 231; and portions of State Routes 2 and 53 (NIRPC 2011).

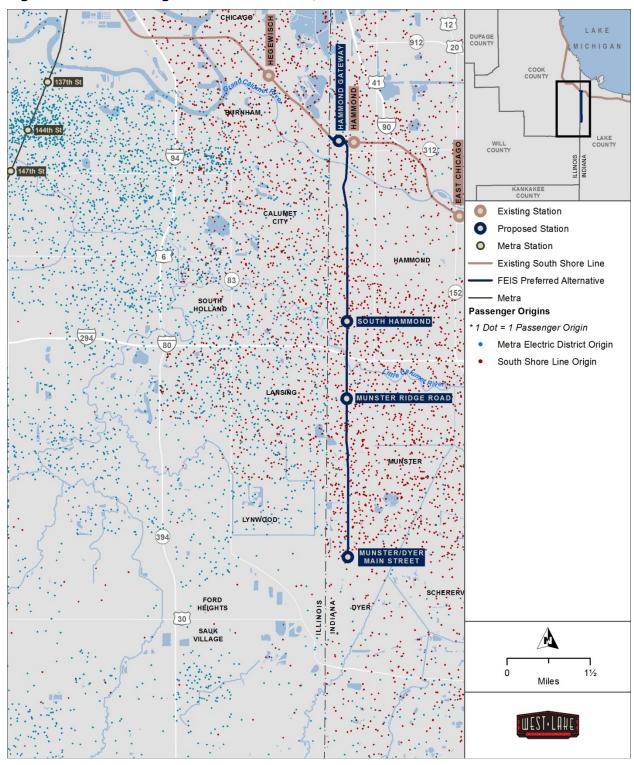
As population continues to grow, vehicle miles traveled (VMT) is projected to increase as well. Growth in VMT reflects the continuing regional dependence on automobile travel often associated with decentralized highway-oriented development. It is noteworthy that VMT is projected to grow faster than population. NIRPC modelers have projected VMT to increase by 37 percent between 2012 and 2040, while population is expected to grow by 22 percent (NIRPC 2014). This statistic suggests an increased reliance on automobile travel, which will place further demands on the existing regional transportation system.

Travel time for transit users is a combination of time spent in an automobile (if any) and on a transit vehicle. According to the *South Shore Line Onboard Passenger Survey* (NICTD 2013), approximately 90 percent of riders access the SSL service by driving to a station and parking; therefore, the amount of time spent in an automobile can have a great effect on the total amount of travel time. The same survey found that nearly 25 percent of passengers using the Hammond and East Chicago stations had residential origins that were more than 10 miles from each of the two stations (NICTD 2013). Considering that the distance to Millennium Station from these two stations is just over 20 miles (21 miles for Hammond and 23 miles from East Chicago), these distances from stations add a considerable amount of time to the total travel time for affected riders.

Metra's *Systemwide Origin-Destination Passenger Survey* found that many Lake County residents are driving long distances to board the existing MED line to head north into Chicago (Metra 2006). Commuters residing in Lake County average 12.2 miles to reach a MED station. This is illustrated in **Figure 1.2-1**, which shows that many riders of both lines reside in the western part of Lake County.

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Figure 1.2-1: Rider Origins on SSL and MED, 2013 and 2006



Sources: Metra 2006; NICTD 2013. Note: Origins are in approximate locations.



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Table 1.2-4 compares the CTPP and ACS travel time data between automobile travelers and public transit users. Lake County commuters who used private automobiles (drove alone or carpooled) reached their destinations faster than workers who reported taking public transit. Nearly half of private-vehicle commuters in Lake County completed their trips in less than 1 hour compared to less than 20 percent of public-transit commuters. This can be attributed to the fact that rail transit travel times in the Project Area currently include the access time to get to and from stations, park, and walk to the platform.

Table 1.2-4: Percentage of Workers by Travel Time and Mode (Lake County to Downtown Chicago)

Travel Time (minutes)	Private Vehicle (%)	Public Transit (%)
59 or less	48	18
60 to 89	40	48
90 or more	12	34
Total	100	100

Sources: AASHTO 2000: United States Census Bureau 2010b.

The Project would help alleviate some of the travel time experienced by some riders by allowing them to access stations closer to their homes, thereby minimizing drive times. Overall, this would have a considerable impact on total ridership, as 90 percent of riders currently access SSL stations via automobile.

However, driving times can be highly variable from day to day depending on traffic conditions. Variability in highway travel time is largely a product of congestion. Congestion in the Chicago metropolitan area was reported to be the eighth worst in the country (Texas A&M Transportation Institute 2015). Commuter rail service, in contrast, is far more predictable and reliable. In 2014, NICTD's rush-hour trains were on time for 91 percent of trips (NICTD 2015), while Metra trains were on time for 98 percent of trips (Metra 2015).

As several studies have shown, there is a need to overcome both the increasing unpredictability of automobile commuting time and reduce or eliminate the automobile component of transit travel time in the Project Area. Further, an alternative solution to driving is needed to increase the region's commuter capacity and reduce congestion on roads and highways leading to and from downtown Chicago.

1.2.2.3 Reduce the Parking Burden at Existing Transit Stations

Limited transit options for residents in the Project Area are causing transit stations to experience parking demand at or near capacity. An example of this condition is seen at the existing SSL East Chicago Station (see **Figure 1.2-2**). This facility is largely land-locked, and the local road network used to access the site is congested. Considering that 90 percent of SSL riders use a "Park-and-Ride" to access stations, SSL riders in the Project Area are affected by constrained parking at existing SSL stations and would benefit from facilities in their home communities.

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Figure 1.2-2: East Chicago Station Parking, 2016



Source: NICTD 2016.



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1.2.2.4 Reduce Travel Costs

The Project purpose of reducing the cost of travel to downtown Chicago is supported by the need to offer alternatives to the high cost of driving to downtown Chicago. This need is primarily driven by the cost to park in downtown Chicago.

The price of commuting can be an important factor in choice of travel mode (Litman 2013; Victoria Transport Policy Institute 2015). SSL monthly fares from Lake County are \$187.75 for Zone 4 (that is, Hammond and East Chicago Stations) and \$201.50 for Zone 5 (that is, Gary stations) (NICTD 2017a). The majority of SSL riders' out-of-pocket cost is the train fare, because 80 percent of riders do not pay for parking at boarding stations and 78 percent walk to their ultimate destination in downtown Chicago (NICTD 2013).

By comparison, for commuters who drive to downtown Chicago for work, costs include vehicle operation (for example, fuel and tolls), maintenance, and parking in downtown Chicago. The *North America Central Business District Parking Rate Survey* found that median monthly parking rates in downtown Chicago averaged \$289, well above the national average of \$165 for central business districts (Collier's International 2012).

In a study of working families' spending patterns for 27 metropolitan areas, costs associated with transportation represented 29 percent of household income, about the same as housing costs overall. The research found that families tend to trade off lower housing costs for higher transportation costs (Center for Housing Policy 2006). Providing transit alternatives in the Project Area at a lower cost would minimize the burden of being more distant to jobs, while still allowing residents in the Project Area to take advantage of comparatively lower housing costs.

1.2.2.5 Promote Economic Development

The local planning context of the Project recognizes that improved transit service to downtown Chicago would result in economic benefits such as increased access to jobs for residents in the Project Area. Additionally, current planning documents incorporate a long-term vision for the growth of businesses and jobs within the Project Area. Previously completed studies emphasized the addition of new transit service as a critical means for achieving this vision, citing transit-oriented, mixed-use redevelopment, town center plans, walkable communities, and attracting young families and workers as specific goals. The advancement of a commuter rail project consistent with these visions is a common thread uniting entities responsible for making land use decisions and promoting economic development within the Project Area.



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In its long-term vision for the future, RDA anticipates wages and local spending to enhance and expand economic development in northwest Indiana (RDA 2007). At the local level, the communities in northwest Indiana are encouraging growth and working toward managing change in a way that emphasizes livability and economic benefit. The local communities within the Project Area have adopted comprehensive plans, as described below. These plans emphasize economic development and redevelopment as well as attracting and retaining population, particularly young families and workers.

- The *Town of Dyer Comprehensive Plan* (Town of Dyer 2012) states that "transportation planning now needs to anticipate commuter rail" and indicates that the land use effects of commuter rail service would be advantageous to Dyer.
- A Vision for the 21st Century: 2010 Comprehensive Plan (Town of Munster 2010, revised 2012) foresees the catalytic effects of future transit service in its downtown area. The Town envisions transit-oriented, mixed-use redevelopment that focuses on a walkable community of residents and businesses and creates an activity destination for surrounding neighborhoods and the region.
- The City of Hammond Comprehensive/Land Use Plan (City of Hammond 1992, reprinted in 2013) recommends the Project as one of the projects to support their goal of improving transportation in Hammond.
- The 2040 Comprehensive Regional Plan: A Vision for Northwest Indiana (NIRPC 2011) focuses on a key strategy—the Livable Communities Initiative. This initiative aims to focus growth and revitalization around existing communities. The initiative provides funding for community-based transportation and land use development and redevelopment projects that bring vitality to downtown areas, neighborhoods, station areas, commercial cores, and transit corridors. NIRPC has identified four neighborhood livable centers near the proposed Project stations: Munster/Dyer Main Street, Munster Ridge Road, South Hammond, and Downtown Hammond Stations. Livable centers promote ease of movement and regional connectivity including public transportation.

In addition to recognizing the economic benefits of improved transit service to Chicago, the long-term vision of RDA, NIRPC, and the communities in the Project Area includes developing and sustaining a reverse-commute travel pattern. This is a vision in which transit users from other locations would come to central, southern, and western Lake County when the demand for access to local employment and other destinations in the region matures.