Since the mid-1800s, rail transportation has helped shape the pattern of residential and commercial development throughout the six-county metropolitan Chicago region. The network’s current hub-and-spoke system of rail passenger service, with Metra commuter rail lines radiating out in all directions from its downtown terminals, has contributed much to the diversity and growth of the regional economy and has served as an essential link in connecting city and suburb, people and jobs.

Importantly, though, is the understanding that the strength of the Chicago regional economy is not found simply in the jobs and business opportunities located in the city center. The northeastern Illinois area is far more complex and dynamic, requiring transportation solutions to match. Indeed, continuing increases in suburban population and employment have created a critical demand for new and expanded levels of service and for system improvements that enhance overall service effectiveness and cost-efficient transportation solely within the suburbs.

Metra has, therefore, been actively evaluating the feasibility of expanded commuter rail service to meet the demand for inter-suburban travel and to foster vital operational synergies in integrating existing alignments so as to afford improved linkages and connections within the suburbs. Metra’s proposed STAR Line (Suburban Transit Access Route) goes beyond providing service to a single corridor or portion of the suburban areas. Rather, the STAR Line establishes key rail connections throughout the northwest, west, and southwest suburbs and also offers the basis for expanded suburban rail service in the future.

Specifically, the STAR Line provides for a commuter rail line along a route starting in Joliet, north though Naperville and continuing to Hoffman Estates, east via Schaumburg, Rolling Meadows, Arlington Heights, and DesPlaines, and on to O’Hare International Airport. Under such a routing, the STAR Line would link such major economic and business centers as Navistar, Lucent Technologies, BP Amoco, Tellabs, Nicor, the Louis Joliet mall, the Prairie Stone business campus, Woodfield Mall, SBC, Motorola and O’Hare Airport.

The route provides a direct connection within the suburbs to existing Metra lines: including the Metra/Burlington NorthernSanta Fe at Aurora/Naperville; the Metra/Union Pacific West line at West Chicago; and the Metra/Milwaukee District West line at Elgin.

In addition, the STAR Line offers the potential to extend rail service in later phases east from Joliet, north and west from Prairie Stone, north and south along the Illinois Route 53/Interstate 290 corridor, and to link O’Hare and Midway airports.

The STAR Line creates a long-needed alternative to the automobile for the nearly 1.2 million employees who commute to work at businesses located along the alignment. It also provides an effective and proven transportation option to the nearly 1.6 million residents who today live in an area chronically plagued by highway congestion. By linking nearly 100 communities in the southwest, west, and northern suburbs, the STAR Line fills a critical void in inter-suburban travel.

The STAR Line complements Metra’s high performing radial system and allows for seamless access to existing Metra services. The route will create service that supports existing and future demands for inter-suburban service, as well as for increased levels of reverse commuting. The STAR Line emphasized the clear need for more service in order to meet the challenges imposed by the continuing movement of jobs and commercial development to the suburbs and the high congestion experienced throughout the region’s road and highway network.

Expanded suburban rail service of the type provided for under the STAR Line proposal is essential to maintaining economic growth and development. A robust growth in jobs, housing, and population is forecast for the region. To service this anticipated growth, the service expansion and system integration afforded by the STAR Line must be realized.
The STAR line project consists of three segments:

**Outer Circumferential Segment (OCS)**
Joliet to I-90 at Prairie Stone via the Elgin Joliet & Eastern Railway (EJ & E) corridor.

**Prairie Stone Connection**
New alignment connecting the OCS to the I-90 corridor via one of two alternatives.

**Northwest Corridor (NWC)**
Prairie Stone Connection east to the intersection of I-90 and Mannheim Road.

- **Current (A)**
  Under this alignment a connection of the northwest tollroad east of Rosemont Horizon will be built to connect into Metra’s current North Central Service at O’Hare.

- **Future (B)**
  An alignment has been identified which allows for the STAR Line to access the proposed O’Hare Western Terminal.
Within each of the three segments, the following specific projects are proposed in order to fully implement the overall STAR line:

**Outer Circumferential Segment**

**Upgrade track and signal systems**

Track and signal improvements are needed to accommodate the proposed passenger service while maintaining existing freight traffic. Upgrade of the existing EJ & E main track to FRA Class 4 trackage is necessary to provide competitive travel times. These improvements will also include partial rail replacement, installation of new ties in selected locations, and resurfacing as necessary. Existing sidings will be rebuilt to FRA Class 3 standards, with similar improvements. Existing turnouts will be rebuilt/rehabilitated as part of this investment program, and new turnouts will be installed with hot air blower switch heating equipment to enhance inclement weather reliability. The signal system will also be upgraded to Centralized Traffic Control (CTC). This will provide increased capacity to accommodate the initial service; provide for day-to-day operating flexibility; permit future enhancements; and improve safety. Improvements to the grade-crossing warning equipment are required to accommodate the increase in maximum speeds and the mix of passenger and freight service.

**Add second main track between West Chicago and Joliet**

A second main track would be configured by joining upgraded passing sidings with new trackage. The location of this second main track would be partially located on a site that previously had such a track on it. Though now removed, the availability of the previously-used track site will ease the construction of a second main track.
Add additional siding between West Chicago and Prairie Stone

A single passing siding of 8,000 feet in length will be constructed to allow both Metra and freight trains to pass each other. The ability of the EJ & E to use the new double track and siding for freight service at other times of the day will provide additional flexibility, capacity, and value for the public investment. As the project moves forward, additional studies will be done on this segment of the project.

Double track from Joliet to Eola

The double tracking of this segment would include the upgrade of three existing sidings to permit their incorporation, along with new trackage, into the second main track. Two pairs of crossovers are also proposed in this segment for operational flexibility.

Track additions and improvements

The project will add a new one-half mile of single track to avoid a major earthwork and bridge over the BNSF main line, double tracking from Eola to the south side of West Chicago and single track from West Chicago to Prairie Stone, with existing sidings remaining in place. In addition, a new passing siding from Mile Post 37.6 to 39.1 and other non-main line trackage at the terminal stations will be added.

Prairie Stone Connection

Construct station at Prairie Stone Development

This segment would call for the construction of a new station at the Prairie Stone development.

Construct one of two alignments

Alignment D1 would be located north of I-90, where north/eastbound trains would rise adjacent to the existing EJ & E alignment north of the I-90 bridge, then curve eastward through the Prairie Stone Development, and enter the I-90 corridor from the north via flyover structures.

Alignment D2 would be located south of I-90 and would rise south of Shoe Factory Road to an elevated track structure adjacent to the existing EJ & E alignment. The proposed line will pass over the eastbound I-90 lanes and...
curve eastward on a flyover structure. A station would be constructed at Shoe Factory Road or Illinois Route 59. A shuttle bus from these stations would provide access to the Prairie Stone Development.

**Northwest Corridor**

**Construct double-track rail corridor in the I-90 median**

Placement of the rail corridor in the I-90 median would minimize operational interferences with the I-90 entrance and exit ramps as compared to an alignment along the shoulders of the highway.
### Project Benefits

#### Improved Reliability, Capacity and Speed

**New transfer points providing more and improved connections with other Metra lines**

This project will provide convenient connection points to three existing Metra service lines that today provide nearly 30 million annual passenger trips. The new line will also provide access to O'Hare International Airport.

**New stations in communities that have identified sites or have expressed an interest in potential transit-oriented development**

Nearly 100 communities will be served by the new STAR line, and this new line will support forecasts for significant growth in households, overall population, and employment along the defined route. New commuter rail service will be provided for several communities in western suburban Cook County that currently do not have Metra service.

#### Improved Operational Efficiency and Maintenance Productivity

**Use of Diesel Multiple Units (DMU's) for rolling stock**

DMU's have lower operating costs and have quicker acceleration than conventional locomotives, making the elevated flyovers more economical since the approaches can be designed for a more aggressive 3% slope.

**Construct new maintenance facility**

Because the route is some distance from existing maintenance facilities, a new shop facility is proposed that will provide increased maintenance productivity for Metra.