Getting on Track

Key Public Transportation Projects and Their Benefits for Illinois

Illinois PIRG Education Fund

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May 2009

Acknowledgments

The authors wish to thank Scott Bernstein, President, Center for Neighborhood Technology, and Rob Hoffman, Director of Business Development, Chicago Workforce Board, for their review of this report. Thanks to Tony Dutzik of Frontier Group and Carolyn Kramer for their editorial assistance. The authors would also like to thank Linda Young, Center for Neighborhood Technology; Patrick Wilmot, Pace; and Ethan Johnson, Wisconsin Department of Transportation, for the information and maps they provided, and David Ohmer, Jim Frazier, Che Lin, Jeremy Atherton, William Accord, the CREATE Program, and the Midwest High Speed Rail Association for the photographs they provided. The generous financial support of the Rockefeller Foundation and Surdna Foundation made this report possible.

The authors bear responsibility for any factual errors. The recommendations are those of Illinois PIRG Education Fund. The views expressed in this report are those of the authors and do not necessarily reflect the views of our funders or those who provided review.

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Layout: Harriet Eckstein Graphic Design

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Executive Summary

Illinois' transportation system is in trouble. High and wildly fluctuating gas prices add to Illinois residents' economic woes, traffic congestion wastes valuable time and energy, and our cars and trucks produce pollution that harms Illinois residents' health and contributes to global warming.

Public transportation makes a vital contribution to Illinois' transportation system, relieving congestion, reducing our dependence on oil, curbing pollution, stimulating the economy, and helping to sustain healthy, vibrant communities. In recent years, Illinois transit systems have made these vital contributions despite funding levels that have often threatened service and left important expansion projects on the drawing board.

Illinois needs a transportation system that meets the needs of the 21st century—one in which public transportation plays an even bigger role than it does today. To get there, we need to start investing now in critical public transportation projects.

The investment Illinois has made in public transportation helps address Illinois' energy, transportation and environmental challenges.

- Public transportation pays dividends for Illinois residents and our economy.
  - In 2006, public transportation in Illinois saved approximately 276 million gallons of oil, saving consumers $723 million at the pump.
  - Public transportation prevented more than 40 million hours of traffic delay—equivalent to about 2,600 person-years—in the Chicago metropolitan area in 2005, saving the economy more than $800 million in wasted time and lost productivity.
  - Public transportation is helping to reduce global warming pollution in Illinois, averting about 2 million metric tons of carbon dioxide pollution in 2006.
- More and more Illinoisans are choosing to take public transit rather than drive. Travel via public transportation in Illinois has increased at a faster rate than automobile travel since the early 1990s—with the number of passenger

miles traveled on transit jumping 20 percent between 1993 and 2006.

- Transit ridership continues to increase. In 2008, ridership on the state's transit lines jumped 5.1 percent versus the year before, compared with a 3.5 percent drop in vehicle travel.

- However, 74 percent of Illinois residents drive to work alone while only 8.5 percent take public transportation, meaning that there are plenty of opportunities to entice new riders to transit.

Our public transit system has not kept up with growing need. Illinois residents drive more miles, spend more on gasoline, experience more congestion, and produce more global warming pollution from transportation than they did two decades ago.

- Vehicle travel on Illinois highways increased by approximately 62 percent between 1980 and 2007. This is largely due to more driving per person—the number of vehicle miles traveled per person has increased by 44 percent over that same period of time.

- Illinois residents spent about $6.9 billion more on gasoline in 2006 than they did in 1998, a product of more miles being driven in less efficient vehicles, coupled with higher gasoline prices.

- Congestion on Illinois roads has continued to get worse. In 2005, Chicago area residents spent about 202 million hours in traffic delays, while congestion cost the area's economy about $4 billion.

- Transportation is a leading source of global warming pollution in Illinois. Illinois' transportation system produced 40 percent more carbon dioxide in 2005 than it did in 1990.

There are dozens of worthy public transit improvements that would give Illinois residents alternatives to the rising cost of driving, reduce congestion by removing cars from the road, save oil and reduce pollution. Many of these projects have been stuck on the drawing board for decades but their importance is greater than ever.

A comprehensive transit system for Illinois would include the following (not in order of priority):

Chicago: Expanding the "L"

- Extending the Red Line to 130th Street, improving public transportation in the Far South Side to help relieve chronic congestion and spur job creation.

- Extending the Blue Line to Yorktown to meet growing transportation needs in quickly growing Cook and DuPage counties.

- Extending the Yellow Line to Old Orchard Road to encourage transit-oriented development in areas ripe for growth.

- Creating a new Gray Line to serve Hyde Park, the University of Chicago, and the South Side on existing Metra commuter rail tracks to improve public transit in a chronically underserved area.

Linking Northeastern Illinois Communities

- Connecting Chicago's suburbs to each other through the Suburban Transit Access Route (STAR) Metra Line.

- Building a new SouthEast Service Metra line to serve the southern suburbs from the South Side of Chicago all the way to quickly developing Crete.

- Upgrading Pace bus service, including through the use of bus rapid transit in areas such as the Cermak Road corridor.

Connecting the State: Passenger Rail

- Restoring Amtrak service in northwestern Illinois through Rockford to Dubuque, Iowa, to reduce congestion on I-90 and bring better transportation options to a growing area of the state.

- Making necessary repairs and upgrades to the rail infrastructure in Illinois to improve the speed and on-time performance of Amtrak trains, as well as Metra and freight rail, and to reduce conflicts between passenger rail and freight trains.

- Building on the current passenger rail system to create a fast and efficient Midwest high speed rail system that would take passengers between the major cities in the Midwest in 50 to 70 percent of the current travel time.

Illinois faces a transportation funding crisis, which could prevent the state from making the investments required to build a 21st century transit system. Illinois should do the following to address both and future current transportation needs:

- Urge the U.S. Congress to revamp federal transportation policy when the federal transportation funding law comes up for reauthorization in 2009. Revisions should include shifting resources from highway expansion to transit projects and focusing federal money on strategic goals such as transportation system efficiency and safety, energy conservation, environmental improvement, and the creation of compact, sustainable communities.

- Include $10 billion in funding over a five-year period to repair and expand transit service in the capital funding bill under consideration this year.

- Establish a long-term commitment to expand public transit, with an investment of $2 billion a year for the next 30 years in building a 21st century public transportation system—about 25 percent of the state's current transportation budget.

- Require that all proposed transportation investments be evaluated for their impact on oil dependence and global warming pollution. State government buildings should be located, to the extent possible, in areas with accessible transit service. And Illinois should encourage local governments to adopt land-use plans and zoning reforms that allow for and encourage compact development in and around transit stations.

- Prioritize investments in public transit over new roads in plans for state transportation investment.

- Coordinate with the other Midwestern states and take a leadership role in ensuring the implementation of a modern regional rail system. Illinois should work to ensure federal investment in the region's rail infrastructure.

Introduction

Chicago rose to greatness on wave after wave of transportation innovation. From the Erie Canal that brought settlers and goods to the Midwest, to the trains that made land travel convenient for the first time, to the air travel that made O'Hare the second busiest airport in the world, Chicago has been the hub of America's transportation network.[1] Indeed, our transportation network is a major reason for Illinois' historic prosperity and Chicago's status as a world-class city.

Today, transportation in Chicago is known more for its problems than progress. Long-range travelers and commuters alike waste hours in highway traffic and lines at airports. Passenger trains battle freight cars for space to crawl along deteriorating tracks. Chicago's famed "L" suffers from delays and inconsistent service due to outstanding maintenance needs.

Fixing our broken transportation system is an opportunity for Illinois to once again lead the way as the transportation hub of America. More and more people are already turning to public transit across the state. Illinois can ride this momentum by investing in the vision of a fast, reliable and extensive public transportation radiating out from Chicago to the rest of the state and the country.

In addition to the added convenience for travelers and commuters, expanding public transit in Illinois will take cars off the road, relieving highways of congestion and reducing the smog that threatens our health. More efficient travel will also reduce global warming emissions from the state, a critical imperative. By addressing our transportation problems with efficient, modern transit, Chicago can cement its status as a world-class city, and Illinois can lay the groundwork for future growth in the 21st Century.

The Case for More and Better Public Transportation in Illinois

Over the last few decades, Illinois residents have driven more miles in our cars and trucks, become more dependent on oil, and spent more time in traffic. Automobile dependence is increasingly a drain on our economy, particularly during spikes in gasoline prices.

In some ways, however, Illinois is lucky. Thanks to more than 100 years of investment, Chicago has the second largest public transportation system in the country. In an era of fluctuating gasoline prices, our public transportation system gives Illinois an advantage over other states, insulating many Illinoisans from the impact of higher oil prices and providing an attractive amenity for businesses and individuals considering moving here.

Still, as anyone who has ridden public transportation in Illinois—or anyone who has lacked access to it—can tell you, Illinois' transit systems fall far short of their potential. Our investment has not kept up with the need for public transit in Illinois. The suburbs are expanding much more quickly than transit systems are being extended to meet the added demand. Buses, trains, and tracks are aging faster than they are being fixed and replaced, which leads to delays and unreliable service. Passenger trains are slow and often late. Addressing these challenges, and improving public transportation in Illinois, must be a top priority for public officials in the years ahead.

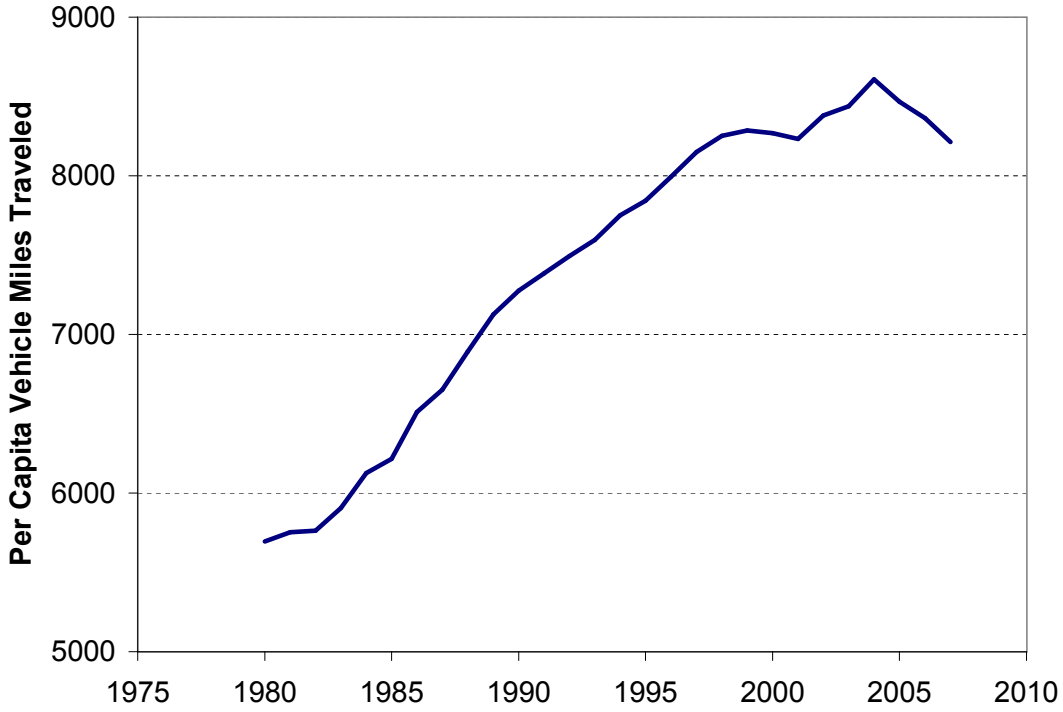
Travel Trends: More Driving, Rising Transit Ridership

Automobile Travel

Illinois residents drive far more than they did several decades ago—both in terms of total miles and miles per person—leading to more congestion, greater dependence on oil, and increased emissions of global warming pollution.

More than 105 billion miles were traveled on Illinois roads in 2007—up from just 65 billion miles in 1980. While some of the increase is due to population growth, the average Illinois resident is also driving many more miles each year than three decades ago. Vehicle travel per capita on Illinois highways has increased by 44 percent

Figure 1. Per Capita Vehicle Miles Traveled, Illinois[2]



since 1980, although there has been a small drop off in recent years. (See Figure 1).

The increased travel on Illinois highways has led to worsening traffic congestion. Residents of the Chicago metropolitan area (which extends into parts of Indiana) spent approximately 202 million hours in traffic congestion in 2005—a five-fold increase since 1982.[3] In the St. Louis metropolitan area (which straddles Illinois and Missouri), travelers spent about 37 million hours in congestion in 2005, a four-fold increase from 1982.[4]

Congestion imposes real costs on Illinois' economy. Between the cost of wasted time and wasted fuel, congestion cost the Chicago metropolitan area approximately $4 billion in 2005 and the St. Louis area approximately $711 million.[5] This does not count lost economic opportunities as businesses and skilled workers decide to locate elsewhere rather than contend with the traffic in Illinois' cities.

Increasing vehicle travel has also helped lead to a recent increase in the amount of money that Illinois residents must spend on fuel. After a spike in fuel expenditures in the 1970s during the fuel crisis, new fuel economy standards led to a rapid increase in vehicle fuel economy nationally. [6] The improved fleet combined with low gasoline prices actually led to a substantial drop in the amount of money that Illinois residents spent on gasoline between the early 1980s and the late 1990s. By 1998, Illinois residents were spending 50 percent less each year on gasoline in inflation-adjusted terms than they had in 1980, despite a dramatic rise in vehicle travel over that time.[7] (See Figure 2).

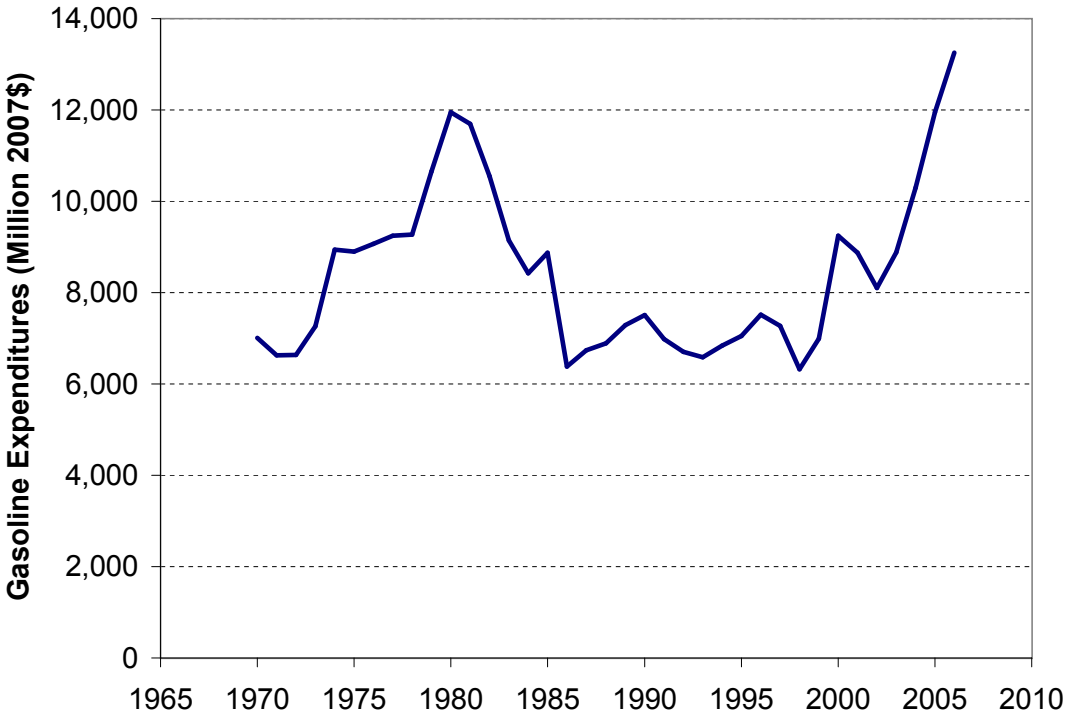
The expectation that the era of cheap gasoline would continue, however, led Illinois residents (as well as public officials responsible for energy and development policy) to make choices that increased Illinois' dependence on oil, including the proliferation of SUVs on Illinois highways. In 1998, passenger cars (as opposed to SUVs and other trucks) made up 69 percent of all motor vehicles registered in Illinois. By 2006, the percentage of passenger cars had declined to 60 percent. By the end of that eight-year span, there were 478,000 fewer cars registered in Illinois, but 647,000 more SUVs.[9] Nationally, the sudden increase in SUVs actually led to a slight drop in average fuel economy by 2006.[10]

As a result, when gasoline prices started to spike in 2004, Illinois families were hit hard and many were left with few good alternatives. In 2006, Illinois residents spent more than twice as much on gasoline as they did a decade ago, costing Illinois families an estimated $6.9 billion in additional annual costs in 2006 compared with 1998.[11]

Not every Illinois community, however, was equally hard hit by the rising gasoline prices of the past few years. Residents of communities with access to transit tend to drive fewer miles each year than those living in auto-dependent areas, meaning that they spend less on transportation generally, and are less vulnerable to fluctuating fuel prices. (See Figure 3).

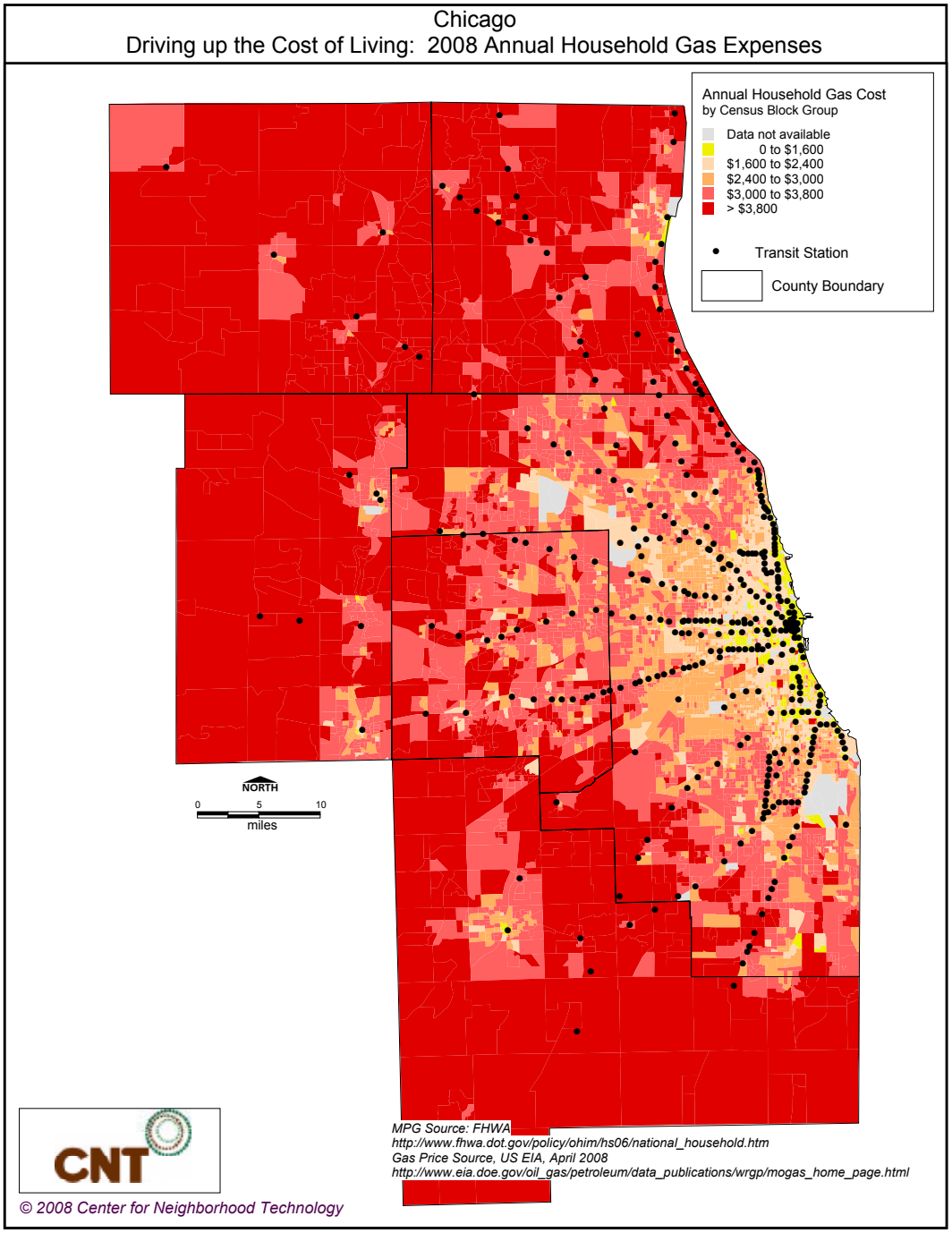
Though gasoline prices fell dramatically in the end of 2008, the sudden spikes and drops over the past few decades have shown us that our reliance on cars for transportation makes Illinois families vulnerable to wild fluctuations in gas prices.

Figure 2. Inflation-Adjusted Spending on Gasoline, Illinois[8]



Rising vehicle travel—not just in personal vehicles but also in the form of increased freight traffic—has also increased Illinois' emissions of global warming pollution. In 2005, Illinois' transportation network emitted 40 percent more carbon dioxide than in 1990. Moreover, the transportation sector was one of only two sectors for which global warming emissions increased during that period, second only to electricity generation.[13]

Figure 3. Annual Household Gasoline Expenditures in 2008[12]



Public Transportation

While Illinoisans are driving more miles than in the past, they are also taking more and longer trips on public transportation. Between 1993 and 2007, the number of passenger-miles traveled annually on public transportation in Illinois increased by 20 percent—a rate of growth higher than that of automobile travel (see Figure 4).[14] This increase has been across the board, but was especially pronounced in public transit that serves the suburban Chicago area.[15]

Transit ridership has been rising over the past 15 years with increases in service and increasing gas prices. Between 2003 and 2007, transit ridership in Illinois increased by 9 percent.[17] And in 2008, transit ridership in Illinois was up by 5.1 percent over the year before.[18] Over the same period, vehicle travel declined by 3.5 percent.[19] At a time of rising gasoline prices, Illinois' transit systems provided an important alternative for thousands of travelers. (See Figure 5).

But while transit ridership is on the rise, too many Illinois residents still find themselves without good alternatives to driving. Among Illinois commuters, for example, 74 percent drive to work by themselves, compared to just 8.5 percent who take transit.[20] (See Figure 6).

Providing more and better public transportation options would allow more Illinois residents to choose transit—reducing congestion, curbing pollution, and minimizing Illinois' dependence on oil.

The Benefits of Transit in Illinois

Public transportation already provides a wide range of benefits to Illinois—saving oil, reducing congestion, and reducing emissions of global warming pollution, while serving as an important economic asset for the state.

Figure 4. Passenger-Miles Traveled via Transit, Illinois[16]

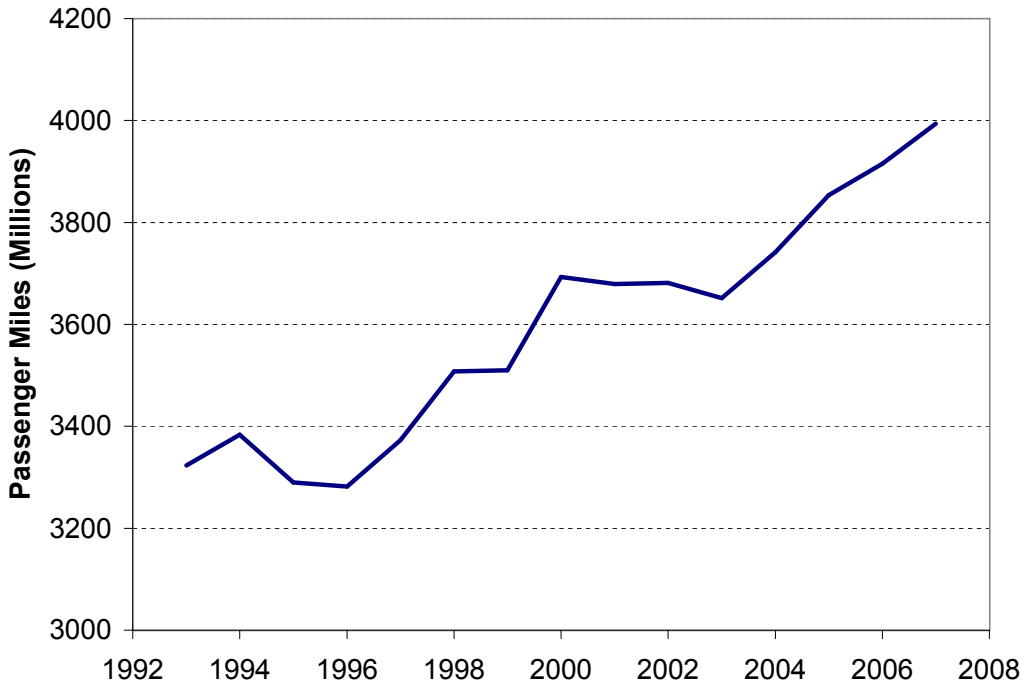


Figure 5. Year-Over-Year Change in Transit Ridership vs. Vehicle Miles Traveled, Change from 2007 to 2008

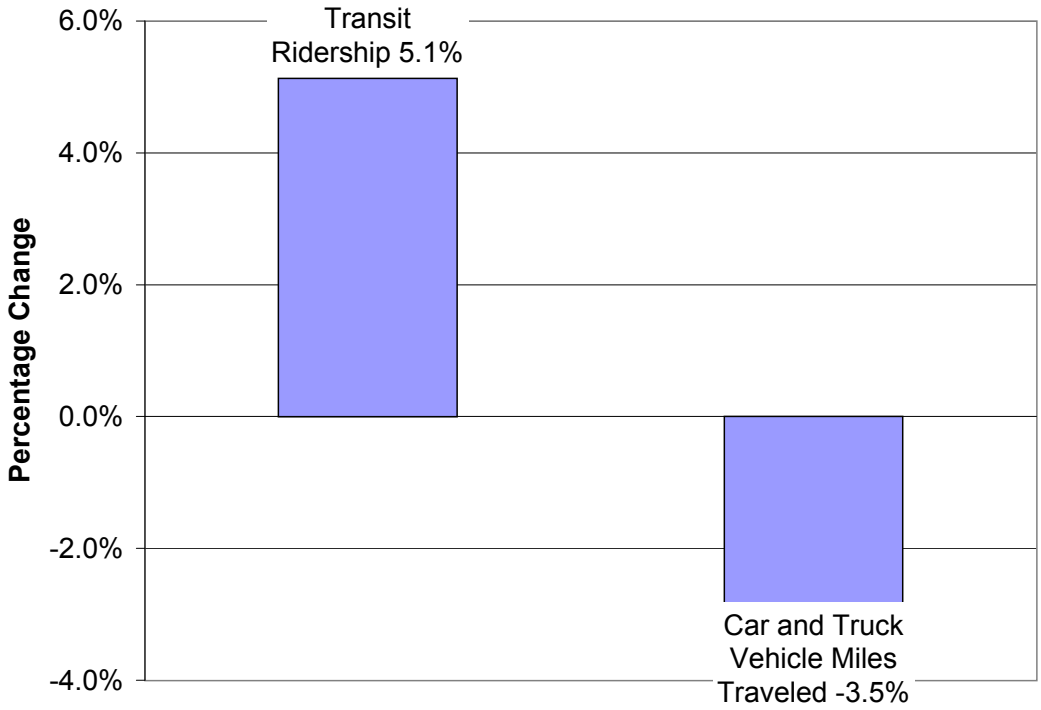
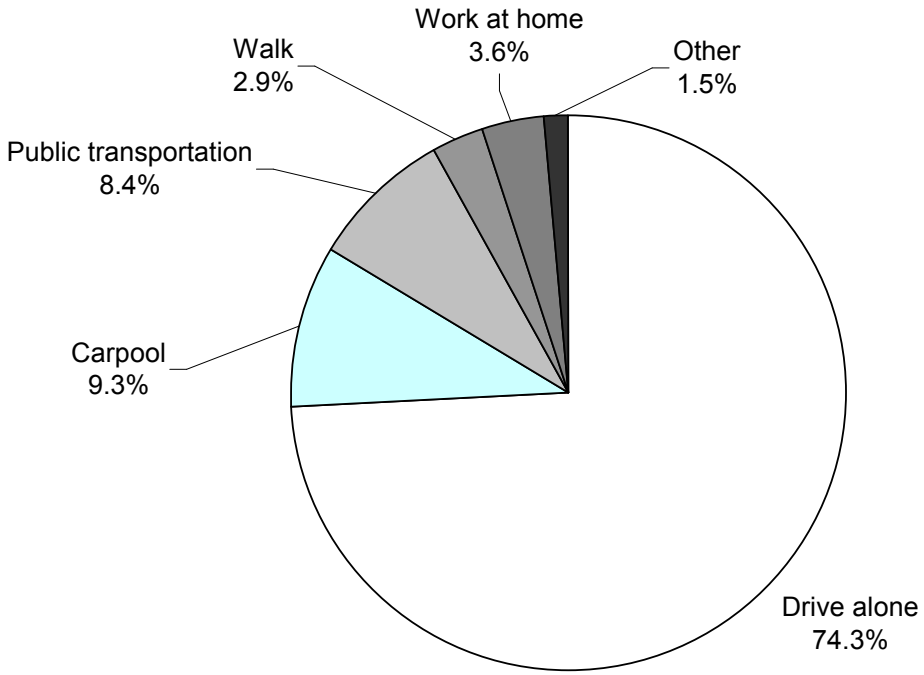


Figure 6. Means of Travel to Work in Illinois, 2007[21]



In 2006, public transportation in Illinois saved approximately 276 million gallons of oil that would have otherwise been burned in vehicles, saving consumers more than $723 million at the pump, based on an average gasoline price in 2006 of $2.68 per gallon.[22]

Public transportation also plays an important role in reducing traffic congestion. A 2007 study by the Texas Transportation Institute estimated that public transportation prevented almost 40 million hours of traffic delay—equivalent to about 4,600 person-years—in the Chicago metropolitan area in 2005 saving the economy almost $800 million in wasted fuel, time and productivity.[23]

In addition, public transportation is helping to reduce global warming pollution in Illinois, averting about 2 million metric tons of carbon dioxide pollution in 2006.[24]

Public transportation provides a host of other important, if difficult to quantify, benefits. Transit provides a source of mobility to the poor, elderly, children and disabled, many of whom cannot afford a car or cannot drive. Investments in transit have helped spark the economic revitalization of areas around transit stations, helping to create vibrant communities that are less dependent on the automobile—a big advantage for economic development in an era of higher fuel prices. Transit riders are free from the responsibilities of driving, meaning that they can use their time to read, chat, catch up on the day's news or, in an increasing number of transit vehicles, use wireless Internet to check e-mail or do important work.

Every day, residents across Illinois count on transit to get where they need to go. And even those of us who don't take transit every day can rely on it in a pinch—when a sudden snowstorm hits that makes driving unsafe, during periods of major road construction, or when gasoline prices are high.

In short, public transportation is a vital resource for Illinois—one that will become even more important in a world of unstable oil prices and increased concern about congestion and global warming. Investing in transit can build on this important public asset and position Illinois for even greater benefits in the years to come.

A Vision for the Future of Public Transportation in Illinois

Illinois has made significant investments in transit over the last two decades, but there remain many transit projects—some of which have been on the drawing board for decades—that can bring significant benefits to the state. The projects listed in this section are in various stages of development. Some of them are already far along in the planning stages and are simply waiting for funding to move forward with construction. Others will require longer-term planning. Still others are mere concepts requiring more evaluation. This is not a comprehensive list, but rather serves as an example of transit investments that can address key needs in Illinois, from reducing traffic congestion and pollution to promoting smart growth and community revitalization.

The projects listed in this section are *not* in order of priority. Transit investments must be evaluated on a range of criteria, from their impact on air quality and global warming emissions to their potential to spark economic development and improve quality of life. Investments in high-speed rail, for example, deliver different benefits to different constituencies than investments in improved bus service for inner-city neighborhoods.

A critical element in planning transportation investment is coordination among agencies. When more than one agency is considering expansion projects that affect the same corridor, it's important that they communicate to make sure that the pieces fit together.

All of the projects described here are part of an integrated vision for the future of public transportation in the state—a vision that Illinois should strive to make happen through strategic investments in the years to come.

Goals of Transit Investments in Illinois

Any transit investment strategy for Illinois should have a blueprint to guide it—a set of principles based on the state's goals for public transit. Five principles will be key over the next 15 years in improving our public transportation system to ease traffic congestion, reduce our dependence on oil, cut global warming emissions, and

ensure better transportation choices for all communities. The state should set a target of, by 2025 at the latest, completing investments that would achieve the following goals:

1) Fill in obvious gaps in public transportation systems, ensuring that all those who live in areas with the population and ridership to support public transit have access to high-quality transit service.

2) Improving the connectivity of existing transit systems, making it easier for travelers to reach a wide variety of destinations quickly and affordably.

3) Creating an integrated, Midwest-wide rail transportation network, with Chicago at its hub, that serves both commuters and inter-city passengers within the Midwest and connects the region to important destinations elsewhere.

4) Expanding access to transit in lightly served areas of Illinois, including smaller cities, suburbs and rural areas, providing an appealing alternative to driving.

5) Improving the quality of existing transit service to make Illinois' transit systems second to none in efficiency, low carbon emissions, convenience, safety and comfort.

Achieving these goals will create an Illinois that is more economically vibrant, less dependent on oil, less impacted by traffic on the roadways, and capable of meeting the transportation challenges of the 21st century.

Chicago: Expanding the "L"

Chicago's "L" system is 222 miles long, with eight routes. Approximately 1,200 train cars carry half a million passengers daily.[25] Despite this extensive system, many areas of Chicagoland do not have access to adequate train service. The projects highlighted below would help fill some of the biggest gaps in Chicago's system.

Red Line Extension to 130th St. on the South Side

The Red Line enters the south side of Chicago by using the median strip of the Dan Ryan Expressway (I-90 and I-94), but ends at 95th Street, even though room is available in the median of the freeway past that point. This has meant that, for decades, communities south of 95th Street have had to deal with inferior transit options. For instance:

- Subway passengers from the Far South Side have commutes that take 20 percent longer than riders elsewhere in the city.[26]

- Many passengers depend on lengthy bus trips to reach the 95th Street station, adding to the length and cost of their commute and creating significant congestion around the 95th Street station.

Extending the Red Line to 130th Street would enhance travel options for commuters and other travelers in the Far South Side and the suburbs beyond. Improved transit could both spur job creation in the economically disadvantaged area and relieve congestion on the expressways that serve the region.[27]

In addition to lengthening the rail line by four stops and roughly six miles, the project could improve bus-to-rail transfers through construction of a transit center.[28] Ideally, such a facility would also accom-

The CTA Red Line carries passengers between downtown Chicago and the South Side, but stops at 95th Street. A proposed extension would continue the line to 130th Street, spurring job creation and relieving congestion in the Far South Side. Photo Credit: Jeremy Atherton.

modate connections to Metra, South Shore Line trains, and long-distance bus service.[29] A park-and-ride facility would further encourage ridership.

After 40 years of community discussion about extending the Red Line, the CTA is in the early planning phases of this project. Both bus rapid-transit and heavy rail options are being considered for the corridor. Though bus rapid-transit is less expensive to construct, in general heavy rail provides greater transit and development benefits to a community. According to an analysis conducted by CTA as part of its effort to obtain federal funding for an extension of the Red Line, the two best heavy rail options are elevated lines routed along Halsted Street or along the Union Pacific right-of-way.[30]

As of 2006, the project was estimated to cost $741 million, with the federal government providing the bulk of the money and city and state governments paying approximately $150 million.[31]

Blue Line Extension to Western Suburbs

The Cook DuPage corridor, extending 30 miles from Cicero Avenue in Chicago to the end of DuPage County, is notorious for traffic congestion. The suburbs of Chicago have been rapidly developing over the past 30 years, and in this area population increased by 20 percent between 1970 and 2000 while employment doubled. Despite this development boom, the transit network has remained essentially unchanged over the last 35 years.[32] Congestion on the Eisenhower Expressway (I-290) is continuous, and spills over into surrounding areas during peak traffic times.[33] A number of large employment centers are completely unserved by public transit, including Loyola University Medical Center/Hines VA Hospital.

At its terminus at Des Plaines Avenue in Forest Park, the Blue Line points straight into the middle of the Cook DuPage

corridor, but stops short. If extended, the Blue Line would help ease the congestion and form a central part of an expanded transit system designed to serve the growing number of "reverse commuters" working in the corridor.

As employment has grown in this area, more and more commuters are traveling from the city to the suburb for work during peak travel periods. By contrast, the current system is designed with traditional suburb-to-city commutes in mind. While the largest flow of traffic (425,000 commuters) does continue to follow the traditional commute, a huge flow of commuters (245,000) are reverse commuters. Even more people travel from suburb to suburb every day for work on a number of different corridors. Workers in the suburbs are often forced by limited transit options and inconvenient schedules to add to the congestion on Cook DuPage roads.[34]

The Chicago Transit Authority's proposal to extend Blue Line rail service from Forest Park in the west Cook County suburbs to Yorktown in DuPage County would bring efficient public transit, with consistent service in both directions, to major employment centers now underserved by transit.[35] This $2.3 billion project would include an 11-mile heavy rail line, potentially in the median of I-290.[36] Eventually, the new segments of the Blue Line could connect with three proposed bus rapid-transit lines and an additional rail line linking O'Hare and Midway airports.[37]

The lengthened Blue Line would provide the greatest benefit to commuters if tracks were laid to accommodate express service, enabling faster trips. For the community, though the extended rail line would pass through areas that are already heavily developed, it could influence redevelopment patterns to ensure they support transit and walkable communities where residents can complete many trips without relying on a car.

Yellow Line Extension to Old Orchard Rd.

When the Chicago Rapid Transit Company opened the Niles Center Line in 1925, it offered service from Howard Street at the northern end of today's Red Line west to Dempster Street in Skokie.[38] The line served seven other stations along its five mile route.

Known today as the Yellow Line, trains follow the same route opened in 1925 but no longer stop at any of the intermediate stations. As a result, the communities along the rail line have missed out on an opportunity to spur compact, walkable development centered around transit. That could change with an extension of the Yellow Line north to Old Orchard Road and the re-opening of at least one station along the way.

The CTA is considering extending the Yellow Line from its current end at Dempster Station in Skokie north to the commercial and employment district at Old Orchard Road. The extension, potentially using a heavy rail line along an existing Union Pacific railroad right-of-way or up Gross Point Road and Skokie Boulevard, would decrease travel time, allow better connections to CTA and Pace buses, and increase ridership. [39]

Lengthening the Yellow Line also could encourage transit-oriented development (TOD) around stations (See text box). Along the Yellow Line, potential TOD redevelopment locations include sites next to the existing Dempster Station, at the proposed Old Orchard Road station, and at the Oakton station that is being considered for reopening. The Oakton station, in downtown Skokie, could help support more compact residential and commercial development. Planners for the Village of Skokie have drafted a preliminary redevelopment plan for downtown that would establish high-density residential and commercial zoning in a half-mile radius from transit

Transit-Oriented Development

For decades, transit-oriented development (TOD) has been used to create thriving urban and suburban corridors in cities. Its basic idea is both simple and sensible: mixed-use zoning around a major transit station encourages compact, walkable development that is good for people, businesses and the environment alike. In the TOD corridors of cities like Portland, Oregon, and Arlington, Virginia, a combination of mixed business and residential buildings, easy transit and pedestrian access, and attractive public spaces foster compact growth and strengthen community identity. Chicago can use TOD concepts to springboard smarter, more appealing growth, especially in its suburban and exurban centers.

The Center for Neighborhood Technology is working with the City of Blue Island to encourage development that will help revitalize the community while improving the quality of life for residents through a number of TOD projects. One proposal would move the industrial development that currently surrounds the two Metra stations in the city, and replace it with housing and commercial space to connect the stations with the main street district, as well as creating a nature trail along a waterway in the area. Other proposals include improving pedestrian access to commercially important areas, building attractive public spaces like parks and greenery, and encouraging the development of mixed-use buildings so that dense residential development is mixed with retail stores and workplaces.[40]

stations.[41] In addition to enabling more people to live close to transit, this change could boost commercial activity. Planners estimate that downtown Skokie could support 250,000 to 300,000 square feet of new or renovated retail space.[42]

The new Old Orchard Road station would be close to a major retail center, the Westfield Old Orchard shopping center, and institutions such as the Niles North High School and the Cook County Courthouse.[43] Currently, these facilities are accessible by bus and by car, but a fast and reliable rail link would facilitate redevelopment more amenable to pedestrians.

Gray Line to Hyde Park

Hyde Park, the University of Chicago, and much of the South Side are poorly served by transit. Commuter trains operating during limited hours provide the only train service, and bus lines are crowded and slow. Establishing CTA service using existing Metra commuter rail tracks and stations would bring a reliable, affordable transit option to the area.

Known as the Gray Line, new CTA service on Metra's infrastructure would require coordination between the agencies. One approach to opening this line is to have the CTA pay Metra for the cost of operating frequent service on the South Chicago, Kensington, and Blue Island lines.[44] CTA would collect fares from passengers along the 22-mile, 37-station route, and passengers on the Gray Line would have the same ability to transfer to other trains and buses as riders on any CTA route.[45] (See Figure 7).

Unlike most commuter rail lines, the three lines in question are well suited to urban service with closely spaced stations.

Figure 7: Route of proposed Gray Line[46]

Trains on the line are powered by electricity, allowing them to stop and start quickly, a necessary element for rapid service between stations placed less than a mile apart.[47]

Thanks to the high number of new passengers that would be served, and how well the line would support good land use practices and boost economic development, among other benefits, the Chicagoland

Transit and the 2016 Summer Olympics

Chicago is in the running to be the host city for the Summer Olympics in 2016, and one important part of preparing for the Olympics will be providing transportation for the millions of people who would descend on the city during the games. Chicago's strong network of "L" trains and Metra lines, as well as its role as a transit hub, could give it a leg up as a contender provided investment is made to upgrade, enhance and expand on the current network.

Preparing for the Olympics is historically a significant investment for host cities, with new infrastructure that can continue to be an asset far beyond the games. The Olympic committee president recently emphasized the importance of heritage and sustainability in Olympic infrastructure.[51] In preparation for hosting the 1964 Summer Olympics in Tokyo, Japan worked to modernize its transportation system to accommodate the expected crowds by building subway lines as well as a bullet train between Tokyo and Osaka . The transportation infrastructure built helped reintroduce Japan as a technological leader and continues to benefit Japanese citizens to this day.

In contrast, when Atlanta hosted the Olympics in 1996, the city implemented a comprehensive, but temporary, transit plan to reduce congestion and travel delays, but it dismantled the system as soon as the games were over. The opportunity the city lost by investing in a temporary transportation plan rather than a permanent one was measurable and profound. Atlanta's Olympic transit plan included an expanded 24-hour-a-day public transportation network and 1,000 additional buses for park-and-ride service, as well as closing the downtown area to private vehicles. Besides the drastically reduced commuting times, the resulting cleaner air immediately improved the health of local residents. Asthma-related emergency room visits for children decreased by 41.6 percent in a Medicaid database during the Games, by 44.1 percent in an HMO database, and by 11.1 percent in two major pediatric emergency departments. Additionally, hospitalizations for asthma decreased by 19.1 percent.[52] When transportation returned to normal after the conclusion of the Olympics, so did pollution levels and emergency room visits.

In its bid for the Olympics, and in preparing for the games, Chicago should keep other cities' experiences in mind and use the opportunity to expand its public transportation in ways that will serve to meet the transportation needs of residents after the Olympics are over. All projects in this report would fill gaps that will be important in preparing the city for the Olympics, but the Gray Line and the Midwest High Speed Rail network will be especially critical in meeting the transportation demand the Olympics will present.

Transportation and Air Quality Commission, affiliated with the Center for Neighborhood Technology, ranked the Gray Line as the most sensible and worthy transit idea out of all transportation projects being proposed for Chicagoland.[48]

In addition to providing improved transit service to Chicago residents, the Gray Line would provide transit service to the likely location of the Olympic Village at McCormick Place, should Chicago be awarded the 2016 games.[49] The infrastructure upgrades needed to establish service would cost an estimated $100 million, a relatively low cost for such a long line.[50]

Linking Chicago Suburbs

Over the past 20 years, the suburbs of Chicago have burgeoned with development. Cornfields have been plowed under to make way for residential developments, and commercial centers have grown up around them. Jobs have followed populations to the suburbs, as large employers have built business parks and office developments closer to their employees' homes.[53]

Since 1984, Metra, the commuter rail system, has provided suburbanites with a transportation alternative, providing service into the city from spokes extending into the surrounding areas. This service prevents the need for 35 extra lanes of expressway, which would be necessary to handle the congestion if all Metra riders drove instead of taking the commuter rail.[54]

Complementing train service in the Chicago suburbs is an extensive bus network. Pace has bus lines that take commuters from the suburbs to the city and help suburban residents get around their communities without cars.

However, with population in many counties continuing to explode, Metra and Pace must expand to keep up with demand for the more convenient and efficient transportation options. Already, traffic congestion is a constant frustration in the suburbs. Commuters waste 5.5 hours a week in rush hour traffic, and many complain that frequent delays and unpredictable congestion make getting to work by car difficult to the point that it sometimes threatens their job security.[55]

Some growing commuter populations are also underserved by the current suburban transit system. With employers following workers to the suburbs, more people now work in the suburbs than the city, and most projected job growth is in the suburbs, not in downtown Chicago.[56] But current service routes and schedules make it difficult for people who work in the suburbs to rely on public transit to get to work -- especially those who both live and work in the suburbs. Inter-suburb transit is notoriously bad around Chicago, with commuter rail and bus systems—and even road systems—historically focused on bringing workers into the city. Current scheduling and service also makes it difficult for reverse commuters, who live in Chicago and work in the suburbs, to use the commuter rail or buses to get to work.

An expansion of Metra's service in the suburbs, including new commuter rail lines as well as extensions of existing lines and revised schedules, would address these problems and get ahead of the curve, as population and job growth in the area are projected to continue over the next few decades. Improving bus service to improve speed and reliability would also help to meet the needs of the Chicago area's growing suburban population.

Metra Suburban Transit Access Route (STAR) Line

The Suburban Transit Access Route (STAR) Line would be one of the first suburb to suburb commuter rail lines in the United States—a line well-suited to meeting the transportation needs of Chicago's

Metra gives suburban commuters a way to get to work without having to contend with traffic, and helps lower congestion and pollution by reducing the number of drivers on the road every day. Photo Credit: jimfrazier.com.

rapidly growing western suburbs.

The planned STAR line has two sections: the Outer Circumferential Segment (OCS), running 36 miles from Joliet in the south to Hoffman Estates at Prairie Stone in the North, and the Northwest Corridor Segment (NWCS), which would continue east from Prairie Stone to end at O'Hare International Airport.[57] The OCS would build on tracks already used for freight traffic by the Elgin, Joliet and Eastern (EJ&E) Railway. The NWCS is planned to be built on the median strip of I-90.

The STAR Line would serve four of the five most populous and fastest growing counties in Illinois.[58] In these counties, residents increasingly travel within the suburbs more frequently than they travel into the city. A Metra study projected that by 2020, there would be 5.1 million daily trips either starting or ending in the area that would be served by the STAR Line; of these, 70 percent would both start and end within this area. Building the STAR Line would provide an alternative to taking a car for the millions of people taking those trips.[59]

The commuters who would be served by the STAR Line include 1.6 million residents who currently live in an area that is chronically congested with traffic, and 1.2 million employees.[60] The line would run within five miles of 110 cities and villages, in the fastest growing areas of the state, and would connect to four existing Metra lines, linking the spokes in the current commuter rail system (see Figure 8).[61]

The STAR Line's route takes it through areas where public transit is sorely needed. Populations around the OCS grew by 85 percent during the 1990s, and are projected to grow by over 40 percent by 2020. In the NWCS area, employment is projected to grow at similar rates, outpacing population growth.[63] Moreover, traffic conditions along the route are severe. The notorious congestion on I-90 is so extreme that there is no rush hour, only constant delay.[64]

The STAR Line would also provide better transit access to some key locales in suburban Chicago, including a number of businesses that each employ thousands of workers, and large shopping centers such as IKEA. Most significantly, it would link suburban residents and workers with two of the three largest airports in the state, O'Hare and DuPage. O'Hare is not only one of the busiest airports in the country, it also frequently cited as the main economic engine of the region. With an expansion project in the works that would create approximately 455,000 new jobs in the region, expanding public transit as well will be critical.[65] By connecting existing Metra lines to each other, the STAR Line will expand transit options not only for residents along the line, but also for people living along other lines who currently must go into the city and out again to travel between northern and southern suburbs.

In addition, the proposed STAR line has been designed to allow for further expansion in the future, as the region continues to develop. The OCS could be continued north past Prairie Stone to Waukegan, and east to Lynwood from Joliet, and the NWCS could be extended to be connected directly to a proposed west terminal at O'Hare. The Inner Circumferential Segment

Figure 8. Route of the proposed STAR Line[62]

(ICS) could continue south from O'Hare to end at Midway Airport, the second busiest airport in Illinois.

SouthEast Service

The SouthEast Service (SES) would be an entirely new line of Metra service which would link almost 20 communities in Cook and Will counties, where population growth is currently outpacing employment opportunities. It would run 33 miles from LaSalle St. Station in downtown Chicago, starting on the Rock Island District Metra route then breaking off and continuing straight south to Balmoral Park on existing freight lines.[66] (See Figure 9).

These communities currently experience some of the longest commuting times in suburban Chicago. With no commuter train service directly serving this area, residents must either drive long distances to existing stations, which are difficult to access from the area, or drive into downtown Chicago and contend with increasing highway congestion.[67]

This corridor was not always so underserved by rail. Until the 1960s, part of this line had commuter service into Chicago, but with the nation-wide decline in passenger rail, all service was eliminated when Amtrak took over in 1971.[68] Due to this history, much of the development in these cities is along the rail lines that would be reutilized by the SES.

At the southern end of the line, the SES would reach predominantly rural communities that have recently been experiencing quick population growth, especially between Crete and Chicago Heights. This dramatic population growth is projected to continue through 2020. Employment is projected to outpace population growth, suggesting that reverse-commuting options will soon be necessary.[69] A commuter rail line would help ease congestion as more and more people commute between this area and downtown Chicago. It would also make it possible for growing cities and towns to plan smarter growth and minimize sprawl as these rural communities develop by encouraging more dense development near commuter rail stations. A four-story mixed-use development is already under construction in Glenwood near the site of the proposed SES station.[70]

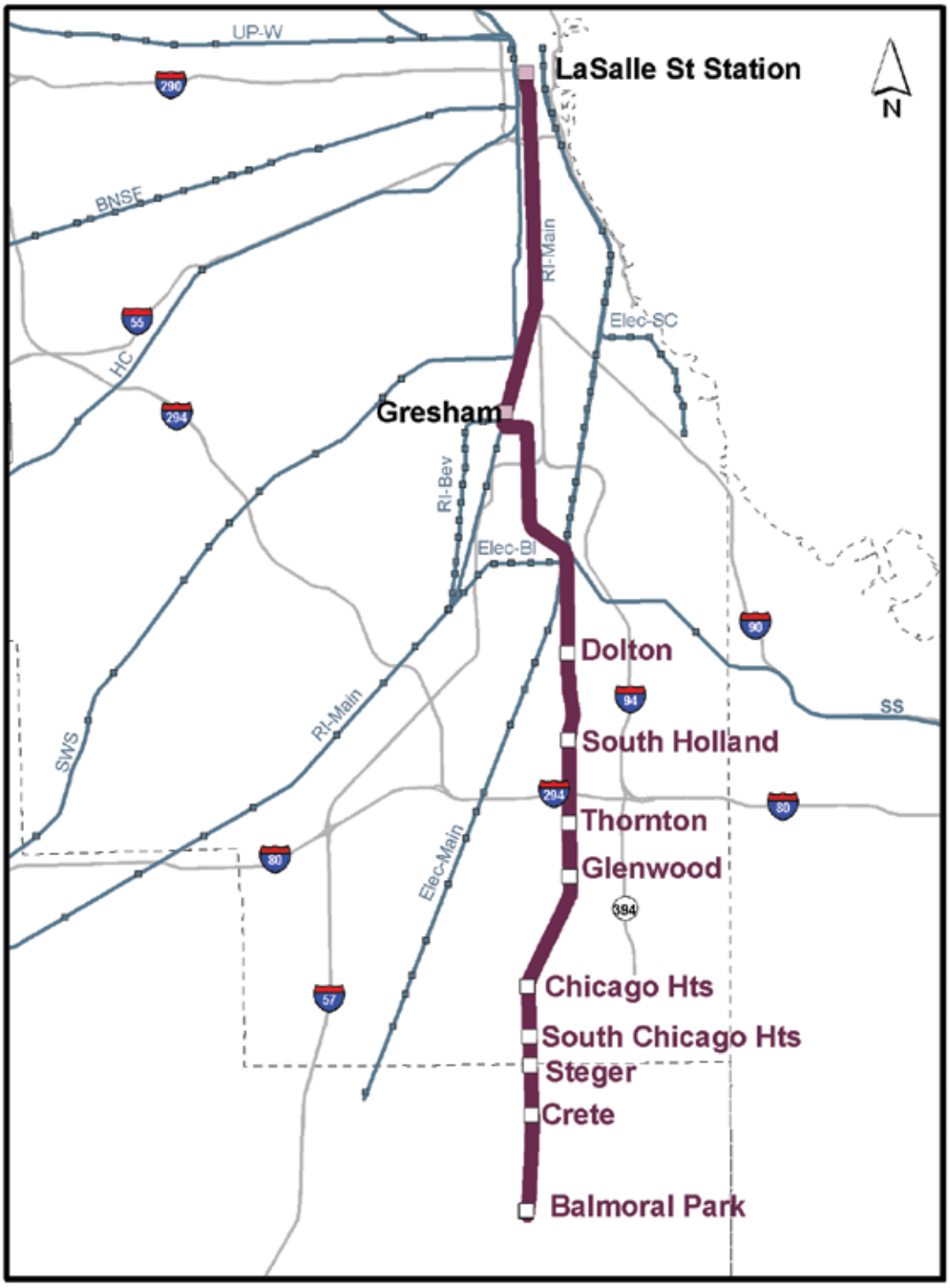
The northern end of the line would serve the south side of Chicago, an area that is traditionally Chicago's center of heavy industry and unionized jobs. With the decline in this job market over the past few decades, these southern suburbs have seen slower growth than the rest of suburban Chicago and unemployment rates are high. Many old industrial buildings sit ready for renovation and although housing is much more affordable than in the rest of the Chicago area there is little movement towards the area. Better transit service to the southern suburbs would help connect residents to potential jobs in downtown Chicago or farther south as employment opportunities grow along the commuter line. It could also bring more residents and redevelopment to this area.[71]

The SES also has a number of benefits for the state. By reducing congestion, the commuter line would save the state more than $4 million in highway construction and maintenance. And construction of the line would create about 550 jobs during the 10 year period from engineering to completion.[72]

Cermak Road Bus Rapid Transit

Buses play an important role in the transit system: carrying people to and from rail stations, providing express service from suburbs without rail service, and helping residents of Chicago and its suburbs get to and from the places they need to go in their communities. But bus service in Chicagoland is often unreliable and slow. Because they travel on roads within the stream of traffic, buses are subject to congestion and must wait at lights. Because of increasing

Figure 9. Route of the proposed SouthEast Service line[73]



congestion, Pace bus speeds have declined to an average of 14 mph, and CTA buses have average speeds of 10 mph.[74] Buses also stop frequently—on some Pace lines buses stop whenever a pedestrian flags them down. This leads to significantly longer travel times.

Pace has been working to improve bus service by giving buses an edge over traffic through some creative new techniques and technology. These range from bus rapid transit (BRT) systems that use separate lanes or even tunnels in which only buses can travel, mimicking the advantages that trains gain from their dedicated tracks, to simply adding more express bus routes that stop much less frequently. BRT systems can also include other improvements to make bus travel more attractive, including more comfortable buses, improved waiting areas, and bike racks on buses.

Pace has already begun implementing bus rapid transit techniques on Cermak Road, and has outlined a plan to make much more extensive improvements to this route. Cermak Road is a good pick to serve as the starting point for improvements to all of Pace's bus routes. The Cermak Road route goes between the 54th Ave. Station of the CTA Pink Line, and Yorktown Mall in Lombard. The route serves a number of major commercial centers and office areas and a few high schools, and passes through a few different types of land use similar to a number of areas Pace serves.[75] On its eastern end, the Cermak Road route goes through inner-ring suburbs, which include a walkable mix of commercial and residential development. On its western end, the route serves an area that is more car-oriented and less dense.

Bus rapid transit (BRT) systems use techniques to make buses easier and more convenient to use. The BRT system in this rendering for a system planned in Toronto has dedicated lanes to prevent traffic from interfering with bus speed and reliability, and distinctive stations to make the bus stops easy to find. Photo Credit: York Region Rapid Transit Corporation.

Pace's original plan outlined a strategy to reduce travel time in this high traffic corridor by combining a number of BRT techniques. First, it would reduce the number of stops in the eastern, highly dense section so that the bus would not stop more than once every half mile. The route would also make use of transit signal priority (TSP) technology, which makes it possible for buses to avoid waiting at lights through a transmitter that signals to traffic lights when the bus is coming. When possible, the lights will stay green longer or change from red more quickly so that the bus will not have to stop. This technology has been shown to reduce travel time by up to 15 percent in other cities.[76] Pace also considered building lanes at frequently congested intersections that would allow buses to bypass long lines of backed-up traffic. In addition, passengers would pay their fares before boarding the bus and buses would have low floors to reduce boarding time. These improvements were projected to decrease round-trip travel time by 23 percent during peak hours.[77]

Dedicated lanes were identified by a study as the single most effective way to reduce travel time for buses and increase reliability in the Pace system, but were not proposed as part of the Cermak Road plan because finding a place for an extra lane along the corridor would be difficult within current rights-of-way.[78]

The Cermak Road project also includes

improvements that would increase bus ridership and reduce car congestion by making the bus system more accessible and attractive. The most obvious is to have heated and enclosed waiting areas that protect passengers from the weather, and canopied boarding areas. Signs that tell riders how long it will be before the next bus arrives also encourage people to use the bus.[79]

By considering passengers' experiences before boarding or after leaving the bus, the Cermak Road project designs routes and stations to make bus riding easier for more people. Pedestrian overpasses are considered for stations across a busy road from large office or commercial complexes, for example at Oakbrook Center. Sidewalk availability is taken into account when placing stations and in some cases sidewalks are redesigned to make access easier for pedestrians. Bike racks are incorporated into stations and on buses. Building areas where drivers can park or drop people off to catch the bus reduces congestion in busier areas.[80]

Reducing the number of stops on the Cermak Road route, while a key way to improve service, does have a downside in that it reduces service for the people who currently rely on these stations. However, this can be mitigated by adding alternate routes to fill in the gaps. A local bus could run along the same route and feed into the express service. "Flex" routes, buses that can vary their route by request and respond to pedestrians who flag them down, could be used to expand service even further into areas currently not considered dense enough for service. These routes could feed into the express route to provide efficient bus service to people who do not currently have any public transit options within walking distance of their homes. Adding local and flex routes that feed into a more efficient Cermak Road route would make service available to more people along the corridor while increasing the speed of travel and reliability on the most trafficked route.[81]

So far, the only part of the plan that has been rolled out on Cermak Road is a very simple TSP system on a small section of the route, but performance evaluation has shown that it saves three to seven minutes in each run.[82] Based on this success Pace is planning to expand TSP to other routes, especially three routes in the south suburbs that have some of the highest ridership in the system. Some measures have already been put in place on these routes to improve service, including limiting stops to every half mile or more and no longer stopping for pedestrians who flag down the buses, and this has already helped to speed up the routes and help the buses be on time more often.[83] Pace should build on this success and implement the rest of the BRT plan developed for Cermak Road, and continue to expand BRT to improve the efficiency of bus service in the rest of the suburban bus system.

Connecting the State: Passenger Rail

Back in the 1800s when railroads were the wave of the future, Chicago grew into a booming metropolis because it was the central hub through which all rail traffic in the United States flowed. Though freight rail is still important, air travel and the interstate highway system have largely replaced passenger rail. Chicago remains at the forefront of these transportation systems, with O'Hare the second busiest airport in the country and many roads converging on the city.

With airports and highways congested, travelers are turning once again turning to our rail system. As gas prices skyrocketed in 2008, train ridership shot up—Amtrak ridership in Illinois was up by 16 percent

overall compared to the same period in 2007, with a 15 percent increase on the busiest line between St. Louis and Chicago.[84]

Although with its historical infrastructure Chicago is well positioned to take advantage of this renewed interest in passenger rail, there is much room for improvement. Amtrak was on time only 44 percent of the time in the summer of 2008, and one month that summer was on time as little as 14 percent of the time between Chicago and St. Louis.[85] Trains in Illinois can go up to 79 miles per hour, but average speeds are much slower because of poor track maintenance and conflicts with freight trains.[86] These slow speeds contribute to delays and make trains less convenient for some people who would otherwise prefer to travel by rail. Service is limited to a few times a day on many routes, and many cities in the Midwest aren't served by passenger rail at all.

Technology is not the reason for these limitations. Japan and Europe have operated high speed rail since the 1960s—around the same time that passenger rail hit bottom in the United States—with top train speeds around 200 miles per hour, travel times under half of driving times, and reliable service.[87] This technology is finally beginning to make its way to America, with Acela's high speed service between Boston and New York, and a high speed line between Los Angeles and San Francisco that Californians voted to create this past fall.

Illinois can take advantage of the increased interest in passenger rail and the available technology to improve our rail system and position the state for growth in the 21st Century. To provide Midwesterners with the transportation options they're looking for, Illinois can make some serious investments in its passenger rail system. Investment can have a big effect: In 2006 Illinois voted to double state funding of passenger rail from $12.1 million to $24.7 million, and as a result Amtrak was able to double the number of daily trains on the three main routes in Illinois, which helped lead to dramatically increased ridership over the past few years.[88] The demand for rail travel is there, but the system is still lacking. Service can be extended to reach more people, and current infrastructure can be maintained and modernized to help trains run quickly and on time, and to make it possible to create a high speed rail system that reaches across the Midwest.

Passenger Rail to Rockford

Rockford is the largest city in Illinois that does not have passenger rail service.[89] For seven years in the 1970s, the Black Hawk train stopped there daily on its way from Chicago to Dubuque and back, but the line was cut in 1981 when passenger rail service was being reduced across the country.[90] Now, with renewed interest in rail travel resulting from the spike in gas prices and increasing traffic congestion, momentum is building to bring back the Black Hawk line.

Currently, bus service is the main source of public transportation between Rockford and Chicago, with 17 daily round trips to O'Hare and five to downtown Chicago.[91] I-90 is the main road to Chicago, and as new residential development has cropped up along it in recent years congestion has grown so that it reaches all the way to Rockford.[92]

A few different paths between Chicago and Rockford are being considered. One veers north through McHenry County, including the quickly growing towns of Huntley and Marengo.[93] The most direct route would follow the same path the railroad took 30 years ago, taking a straighter path through Genoa, which would give the 25,000 students at nearby Northern Illinois University rail access to Chicago.

The route would continue past Rockford through Freeport and Galena to its ultimate destination of Dubuque, Iowa, for a total of approximately 180 miles (see Figure 10). Galena is big tourist destination

during the summer and fall, and Dubuque has a number of new attractions, including a large convention center, a hotel complex with an indoor water park, and the Mississippi River National Riverways Aquarium. The train station in Dubuque has been built into plans to redevelop the downtown area along the Mississippi.[94]

There is a range of estimated costs and riders for the line depending on the route chosen. The route favored by the Illinois Department of Transportation would cost $34 million, for track upgrades and new trains—building the new stations would be the responsibility of the local communities served. It is projected that every year 74,500 people would ride this line, and it would take five hours and ten minutes to travel the entire length from Rockford to Chicago, with one train a day going into the city in time for an 11 a.m. meeting and leaving in the evening.[95] The Rockford line was included on a list of ready-to-go infrastructure projects Illinois presented to President-elect Barak Obama's transition team along with a similar line proposed to reach the Quad Cities; together, these lines would provide 4,700 jobs in Illinois.[96]

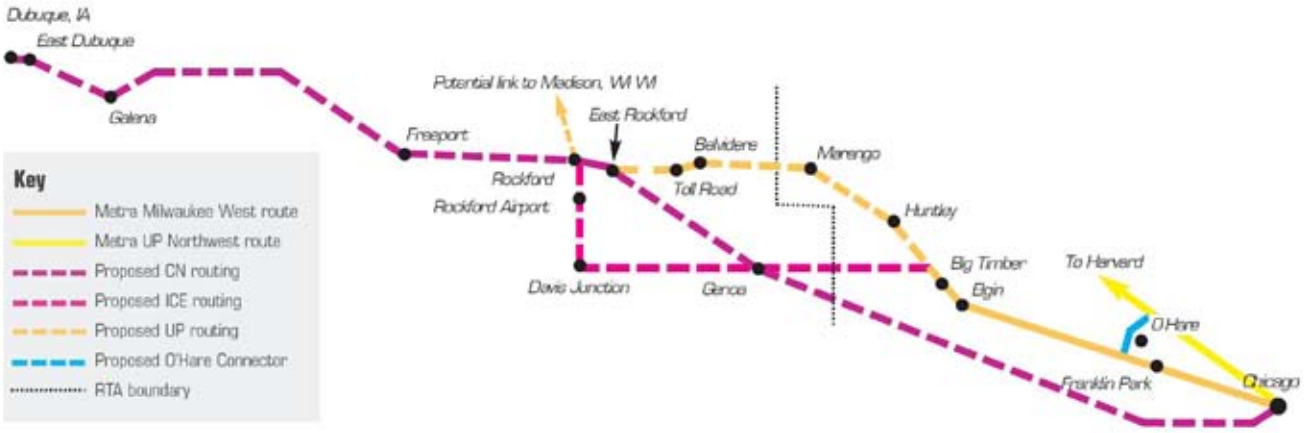
The once-a-day Amtrak line to Dubuque would be a good start towards improving service to Rockford, and should be combined with a commuter rail line which has also been proposed for Rockford, bringing far more trips per day but not continuing any farther west. There has been talk of connecting the new line to Rockford Airport and directly to a new terminal in O'Hare.[97] All of these proposals, including the line to the Quad Cities and other expansions of regional rail, would be good ways to reduce congestion on roads and make travel easier for residents of Northwestern Illinois.

Rail Infrastructure Improvements

A modern passenger rail system for Illinois can only be built on a solid foundation of facilities, equipment and infrastructure. Currently, however, the rail system in the Midwest is in a state of disrepair, and this is the main reason for the slow, limited and unreliable service that keeps many from considering rail travel as a competitive alternative to cars and airplanes.

Trains must travel at reduced speeds on aging tracks in need of repair on many portions of the rail system, outdated safety systems at road crossings require trains to stay at lower speeds, and old signal systems mean that conflicts with freight trains can delay passenger service. Old trains break down, and the yards where they're fixed

Figure 10. Proposed routes of the Rockford Amtrak line[98]



are under funded and backlogged. And as demand for freight shipping and passenger rail service swells, competition for track limits growth. Passenger trains must wait as freight trains cross their paths, and train crossings on roads add to traffic congestion.[99]

The Amtrak service between St. Louis and Chicago is a good example of the real impact that infrastructure improvement can have on the quality of public transit. In response to a significant increase in demand on this route, the Midwest High Speed Rail Association urged the State of Illinois to add two more trains to the schedule, including an express, and make some basic track repairs that would have made the express route 20 minutes faster. The schedule was increased, with corresponding jumps in ridership. However, the track repairs have not been made, so service could still easily be further improved.[100]

Infrastructure improvements should also improve the energy efficiency of the rail system. Some of Metra's lines are currently powered by electricity; where possible, this should be expanded. The energy efficiency of different train models should be considered when purchasing new rolling stock, and diesel should be avoided.

Metra and CTA Infrastructure Improvements Needed

On Metra and the CTA's system—nearly 1,500 miles of tracks, which are also used by freight trains and Amtrak—there are continual maintenance and upgrades that need to be performed to keep a steady level of service. The Regional Transportation Authority (RTA) estimated in 2006 that $10 billion over five years would be required to bring infrastructure up to standards. The list of needs includes:

- Track and structure upgrades: the North Mainline CTA track and structures need structural rehabilitation; there are ongoing replacement needs

Better passenger train service between St. Louis and Chicago helped meet rising demand when gas prices rose. Infrastructure improvements would reduce travel time and encourage more people to take the train, reducing pollution and congestion on Illinois roads. Photo Credit: William Accord.

for rails, ties, and other track components for both Metra and CTA; there are bridges, retaining walls, foundations, and other structures that need rehabilitation and new structures that are in line to be built. These upgrades would cost $2.1 billion.

- Signals and other electronic infrastructure CTA and Metra use for communication need maintenance and upgrades. This would cost $1.4 billion.

- The shops, yards, and other facilities necessary to keep the trains and buses in Northeastern Illinois running. Maintenance of these facilities would cost $1.8 billion.[101]

There are also a number of enhancements that Metra and CTA must make beyond the minimum maintenance to improve service further to keep up with increasing demand, especially as fluctuating gas prices and congestion cause commuters to turn away from cars and look for other options. There are currently many places where tracks cross roads and other railroad tracks, forcing traffic to wait while trains pass — with additional investment, some of these grade crossings could be removed, increasing travel speed and improving safety. Other improvements include track upgrades and new signal and communication systems. Service could be expanded to serve the growing demand for rail service on weekends and during off-peak hours, to reduce crowding, and to better serve reverse commuters. The RTA estimates that $1.1 billion is needed to make these improvements.[102]

Managing Rail Congestion: The CREATE Program

In response to a growing urgency about rail congestion around Chicago, the private railway companies that own the tracks have teamed with Metra, Amtrak, the Illinois Department of Transportation, and the Chicago Department of Transportation to design a plan to update the region's railroad infrastructure, called the Chicago Region Environmental and Transportation Efficiency Program (CREATE).

The CREATE program has already begun to improve rail travel through better infrastructure. New bridges, such as this one at Grand Avenue in Franklin Park, allow trains to cross roads without stopping, reducing travel time for rail and car commuters alike and improving safety. Photo Credit: CREATE Program.

With freight demand projected to double over the next 20 years and almost a quarter of the country's rail shipments moving to or through the Chicago area, at the same time as demand for passenger rail service is increasing, CREATE developed a plan to reduce conflicts between freight rail, passenger rail, and road traffic while minimizing environmental impacts of the railway system. The plan organizes the region into five corridors of rail traffic: four for freight traffic and one for passenger rail. The plan identified 70 projects that will allow both freight and passenger rail to move more quickly, enable increases in service, and minimize the effects of rail traffic on people on the roads and in the neighborhoods around tracks. Projects

include building overpasses so that tracks can cross roads and other tracks, rerouting service that currently passes through environmentally sensitive areas, and modernizing and increasing the capacity of track, signals, bridges, and yards.[103]

CREATE will make it possible for freight and passenger rail to expand service to keep up with increasing demand, and for current service to be more reliable. Railroads around Chicago will be more attractive to travelers and shippers, so highways will be less congested with trucks and cars. The program will allow the Chicago region to sustain 17,000 jobs and $2 billion in annual economic production over the next 20 years that would otherwise be lost. Commuters will save a collective 3,000 hours a day that otherwise would be spent waiting for trains to pass, which will also reduce fuel used and air pollution produced when idling. Fuel usage, air pollution, and noise will also be reduced with trains moving more quickly through a number of areas and spending less time crawling along through neighborhoods. There will also be safety benefits with fewer road crossings, and with fewer people using the roads, less congestion.[104]

The CREATE Project will cost an estimated $1.5 billion. A portion has been funded by the railroads, the City of Chicago, and the federal Safe Accountable Flexible Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU), but most of the cost has still not been funded.[105] Although the problem of the competing interests of freight and passenger rail will not be solved by CREATE, it is an important first step towards managing rail congestion and building the infrastructure we need for a 21st century transportation system.

Midwest High-Speed Rail

High speed rail technology has been around for decades, and has been proven to significantly improve travel time. The Tokaido Shinkansen in Japan connected Tokyo with Osaka in time for the 1964 Olympics in Tokyo, reducing travel time between the cities to four hours, compared with today's almost seven hour driving time for the 320 mile trip—a bit farther than the distance between Detroit and Chicago. Upgrades in 1992 shortened the travel time to two and a half hours.[106]

In contrast, if a businesswoman in Detroit wants to attend a noon meeting in Chicago, her options are inferior. She can drive six hours the day before and rent a hotel overnight. Or, she can take a flight in the morning, with a total travel time of about four hours assuming there are no delays. If she wanted to take the train, she would have to take it the day before, and unless she moved her meeting to an earlier time or didn't mind arriving in Detroit in the middle of the night, her trip would have to extend over three days.[107]

A proposed high speed rail system, extending in spokes from Chicago across the Midwest, would give her a better option, bringing her from city to city in three hours and 45 minutes—faster and more reliably than any other option, with the possibility of going there and back in the same day.

Chicago was once the booming center of passenger rail, and to this day has more lines of track radiating from its center than any other city in North America.[108] In the 20th century long distance rail travel was mostly replaced with travel by car and plane.

However, there are benefits to rail travel that hold true to this day. Most railway stations are located in city centers at large transit hubs, unlike airports which must usually be located on the fringes of cities, increasing travel time and uncertainty. Rail travelers can work, nap, or read continuously, unlike driving which requires a traveler's full attention, and with less interruption than in air travel. And trains are often more comfortable than either cars

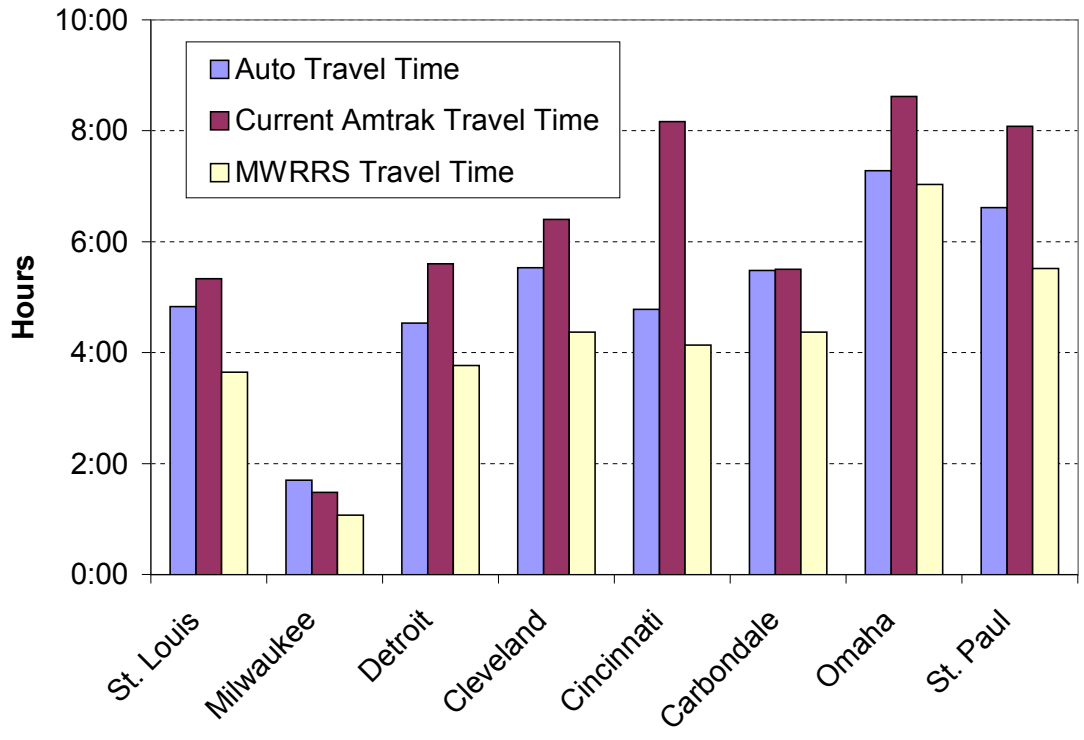
or airplanes, with more leg room and space to walk around. With air travel growing increasingly frustrating and fluctuating gas prices adding difficulty to car travel, improving the rail system's efficiency and reliability so that Midwesterners can travel quickly and easily between any two large cities in the Midwest would increase rail travel's appeal even further, with numerous environmental and societal benefits.

An extensive and efficient high speed rail system has been talked about since the 1960s.[109] Now the transportation departments of the Midwest states have developed a plan with Amtrak that would connect the major cities in the Midwest with trains that would reach their destinations faster than a car.

The Midwest Regional Rail Initiative (MWRRI) would build on the current rail system by upgrading tracks and building new tracks on existing railroad rights-of-way so that trains could travel up to 110 miles per hour on seven spokes starting in Chicago. Three of the spokes would stretch across Illinois, ending in Quincy, St. Louis, and Carbondale, and the others would reach Detroit, St. Paul, Cleveland, and Cincinnati, with stops in between in major cities such as Madison, Springfield, and Toledo. (See Figure 11).

The travel time for trips between these cities would be cut by 30 to 50 percent, and the frequency of trains would be increased by three- or four-fold, removing the impediments to rail travel being the most convenient way to get between the major cities in the Midwest.[111] The time between Chicago and St. Louis would be cut from five and a half hours to less than four, with nine daily trips instead of the current three (see Figure 12). The rail system would

Figure 11. Travel time from Chicago to Midwestern cities by car, current Amtrak service, and the proposed MWRRI[110]



also reach more people—90 percent of the population of the Midwest would be within a one hour ride from train station.[112]

Because of this increased convenience, ridership for the MWRRI is projected to be 13.6 million passengers a year by 2025—four times what it would be if Amtrak continued its current level of service.[113]

Besides convenience there are many additional benefits to creating a high speed rail system in the Midwest. According to a study conducted for the Illinois Department of Transportation, the project would deliver 1.8 times greater economic benefit than it would cost, generating $23 billion in benefits including money saved from lowered highway and rail congestion, shorter travel time for riders, lower costs for airlines, and reduced emissions. Of the nine states included in the proposal, Illinois would benefit the most.[114] By 2020, the MWRRI would divert about 1.3 million trips from air travel, and 5.1 million trips that would have been taken by car.

In addition to these benefits, fuel would also be saved, relieving some of the stress on supply, global warming emissions would be reduced, and jobs would be created—152,000 person years of work during the construction period, and over

Figure 12. Proposed Midwest Regional Rail System[120]

57,000 permanent jobs, including 24,200 in Illinois.[115] Improvements to the passenger rail lines would also benefit freight and commuter rail service using the same tracks.

The initial capital investment required would be $7.7 billion for the trains and the tracks, but by 2025 the system would pay for itself with no ongoing federal subsidies.[116] In June 2008, the U.S. House of Representatives passed a bill that would provide stable, multi-year funding to Amtrak and create $350 million per year in matching funds for investment in high-speed rail corridors.[117] And in February 2009, the American Recovery and Reinvestment Act included $8 billion for building intercity and high speed rail development, and $1.3 billion for Amtrak infrastructure improvements.[118] In order to continue the momentum and ensure that this high speed rail system is developed, Illinois officials should push the federal government to ensure that the MWRRI has all of the funding it needs to be built. Congress should also establish the same sort of steady funding for passenger rail that highway and mass transit programs have by adding a rail title to the multiyear federal transportation legislation.[119]

From Vision to Reality: A 21st Century Transit System for Illinois

Illinois must make sound investments in public transportation if it hopes to remain competitive in the 21st century—a time that looks increasingly likely to be one of higher oil prices, increased concern about global warming, and growing congestion problems. State officials must recognize public transit's central importance in addressing these issues. The state must develop forward-thinking plans to ensure that Illinois has rail and bus systems that not only serve current demand, but anticipate and guide future growth so that transit can serve the needs of a larger portion of Illinois' population.

To make this happen, Illinois' transit systems must have funding that they can rely on. More than that, however, the state needs a coordinated vision for the future of public transit in Illinois. The state should develop a long-range, strategic plan for transit investments in Illinois, identify the price tag of completing that plan, and then work to obtain the necessary resources to get the job done.

Many levels of government and other institutions have a role to play in achieving the goal of a 21st century transit system for Illinois.

Federal Government

The main federal transportation funding law—the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)—is due for reauthorization by Congress in 2009. It is possible that the coming reauthorization will be the most sweeping reform of federal transportation policy in nearly two decades. The Congressional Budget Office projects that the portion of the federal highway trust fund that pays for highway projects will run out of money sometime during fiscal year 2009, with the public transit portion of the account scheduled to run out of money soon thereafter.[121] America's aging transportation network is increasingly in need of costly repairs. Meanwhile, amid fluctuating gasoline prices, Americans are now experiencing the downside of the highway-centered investment policies of the last few decades, which leave too many Americans with few transportation choices. In short, the status quo cannot continue.

Illinois officials should campaign for a new federal transportation funding law that makes a large investment in needed

improvements to transit systems and intercity rail, while focusing federal highway investment on the need to maintain and repair existing infrastructure. Federal money should be used in a targeted and strategic way to encourage transportation investments that minimize oil dependence, congestion, environmental pollution and sprawl, and encourage the development of compact, livable communities where driving is an option, not a requirement.

Such a dramatic shift would benefit Illinois by providing additional resources for needed transit projects—including some that have sat on the drawing board for decades. In addition to pushing for new federal transportation priorities, Illinois should also work aggressively through existing avenues to obtain federal funding for transit infrastructure projects, including high-speed passenger rail.

Regional Coordination

Illinois residents aren't the only ones who benefit from investments in public transportation in the state—particularly investments in the region's rail network. Amtrak's intercity rail network and the Metra commuter rail network already cross state borders, linking residents across the Midwest.

The development of plans for the Midwest Regional Rail Initiative shows that the Midwestern states recognize the benefit of coordinating across the region. As the hub of this planned system and any other regional transit, Illinois should take a leadership role in ensuring that these plans become a reality across the region. Illinois should continue to coordinate with the other states on the implementation of this rail system and in developing future regional transit plans, and work to obtain its share of the new federal funding for high speed rail.

State Policy

Illinois must ensure that public transit agencies and projects have the resources they need to not only continue existing services, but also expand service to meet growing demand and to encourage Illinois residents to choose public transportation over cars by making public transit a better choice. The RTA and other agencies have developed solid, comprehensive proposals to meet these goals. The state should follow by ensuring that these plans are not abandoned due to a lack of funding.

The coming year provides a unique opportunity to start building a modern, 21st century transportation system for Illinois. Lawmakers are likely to consider a capital bill to allocate to capital projects statewide. The last capital program was passed in 1999.

In addition to the necessary resources to fix crumbling roads and bridges that have fallen into disrepair since the last program was in place was implemented, state policy makers should include $10 billion in funding over a five-year period for transit service. Unlike highways, transit infrastructure has gone without capital funding for several years and led to a significant hole in funding just to bring the state's current transit networks into good working order.

In addition to modernizing Illinois' current public transportation network, there must be a long term commitment to expand transit service. To build a 21st century transportation system, state lawmakers should invest $60 billion over the next 30 years, or $2 billion a year, about 25 percent of the state's current transportation budget.[122] Doing so will again demonstrate that Illinois is a national leader in transportation innovation.

Finally, money generated by a capital plan must be spent wisely. Lawmakers should ensure the most effective use of future spending on expansion projects by requiring objective criteria to prioritize

the projects that most effectively address problems generated by our transportation network, such as congestion, global warming emissions and oil dependence. As much as possible, public transit vehicles should rely on electricity rather than diesel or gasoline to minimize pollution and global warming emissions. Lawmakers should also continue to encourage system unification, strengthening the RTA and ensuring that CTA, Metra, and Pace are improving the efficiency of their coordination.

When planning future investments in the state's transportation network, Illinois should prioritize investments in public transportation, with state and federal dollars used to finance transit improvements.

The state should align other public policies with a 21st century vision for transportation that is less dependent on automobiles and can take full advantage of improved public transit. Illinois should require that all proposed transportation investments be evaluated for their impact on oil dependence and global warming pollution. State government buildings should be located, to the extent possible, in areas with accessible transit service. And Illinois should encourage local governments to adopt land-use plans and zoning reforms that allow for and encourage compact development in and around transit stations.

Conclusion

Illinois' extensive transit network is a tremendous asset for the state—particularly at a time of fluctuating gasoline prices, traffic congestion, and increasing concern over the environment. Much of that network is a gift left to us by policy-makers and entrepreneurs who lived a century or more ago, laying down the tracks on which our transit system operates.

Illinois must make its transportation investments with a similar long-term vision in mind—especially in an era when high gasoline prices, increased concern about the environment and continuing congestion all argue for investment in clean, efficient transportation alternatives. There are myriad potential solutions to Illinois' transportation funding challenges, but obtaining money for transportation improvements is only half the battle—the state also needs a visionary, forward-looking plan for investing that money in ways that create and sustain a safe, affordable and extensive transportation system for the 21st century.

The projects listed in this report should make up the core of Illinois' transit "to-do" list over the coming years. The state simply cannot afford to allow these projects—many of which have already sat on the drawing board for decades—to remain undone, particularly at a time when metropolitan areas across the country are developing and implementing visionary plans for public transportation. It is time, once again, for Illinois to lead.

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