

Updated 2030 Regional Transportation Plan for Northeastern Illinois

Reflects All Approved Updates through June, 2008

Prepared by the MPO Policy Committee



This page is intentionally blank.

2030 REGIONAL TRANSPORTATION PLAN FOR NORTHEASTERN ILLINOIS

THIS COMPILED DOCUMENT REFLECTS:

2030 REGIONAL TRANSPORTATION PLAN 2006 UPDATE 2007 UPDATE 2008 UPDATE NO. 1 (APPROVED MARCH, 2008) 2008 UPDATE NO. 2 (APPROVED JUNE 12, 2008)

Approved by

The Board of the Chicago Metropolitan Agency for Planning

June 11, 2008

Approved by

The MPO Policy Committee

June 12, 2008

Chicago Metropolitan Agency for Planning 233 South Wacker Drive Suite 800 Chicago, Illinois 60606 312-454-0400 <u>http://www.cmap.illinois.gov</u> This page is intentionally blank.

Table of Contents

EXECUTIVE SUMMARY	1
Planning process	
Participation and involvement	
Regional transportation concerns	

Transportation system supply measures	. 44
Tripmaking behavior	. 45
Transportation system demand	. 45
Transportation system costs	. 45
Natural environm	

5.2	Regional Transit	
5.2.1	Transit Supportive Land Use	
5.2.2	Private Providers	106
5.2.3	Bus Rapid Transit	108
5.2.3.1	Central Area Bus Rapid Transit System	110
5.2.3.2	2	

6.2.2.9	I-80	189
6.2.2.10	I-55	191
6.2.2.11	Elgin-O'Hare Expressway Expansion	194
6.2.2.12	I-290 High-Occupancy-Vehicle Lanes	196
6.2.2.13	I-355 (Veterans Memorial Tollway)	199
6.3 E	xpanding the transportation system to manage growth and change	201
6.3.1	New transportation to serve the region's major employment centers	201
6.3.1.1	SouthEast Service	201
6.3.1.2	Elgin-O'Hare Expressway Extension and West O'Hare Bypass	204
6.3.1.3	Suburban Transit Access Route (STAR Line)	208
6.3.2	New Transportation Corridors	211
6.3.2.1	Mid-City Transitway	212
6.3.2.2	McHenry-Lake Corridor	214
6.3.2.3	Central Lake County Corridor	216
6.3.2.4	I-355 Extension	218
6.3.2.5	South Suburban Corridor	220
6.3.2.6	I-57/IL394 Connector	222
6.3.2.7	Illiana	223
6.3.2.8	Prairie Parkway	225

CHAPTER 7. IMPLEMENTATION OF THE 2030 REGIONAL

TRAN	SPORTATION PLAN	
7.1	Project Planning Status	
7.1.1	Short term563.34 Tm[(I-)5(3nni)Toh[(Short term563.34 Tm[(I-)5(3n3.814)]TJ0 T

Table of Figures

Figure 1 : Service-Intensive Scenario	39
Figure 2: System-Intensive Scenario	40
Figure 3: System-Additions Scenario	41
Figure 4: System Expansion Scenario	

Figure 56: McHenry-Lake Corridor	214
Figure 57: Central Lake County Corridor	216

List of Acronyms

ADA	Americans with Disabilities Act
BNSF	Burlington Northern Santa Fe
BRC	Belt Railway of Chicago
BRT	Bus Rapid Transit
CATS	Chicago Area Transportation Study
CBD	Central Business District
CMAP	Chicago Metropolitan Agency for Planning
CMP	Congestion Management Process
CMS	Congestion Management System
CNT	Center for Neighborhood Technology
CSS	Context Sensitive Solutions
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
EJ&E	Elgin Joliet & Eastern
FTA	Federal Transit Administration
HOV	High Occupancy Vehicle
IDOT	Illinois Department of Transportation
IEPA	Illinois Environmental Protection Agency
IHB	Indiana Harbor Belt
ISTHA	Illinois State Toll Highway Authority
ITS	Intelligent Transportation Systems
MPO	Metropolitan Planning Organization
NIPC	Northeastern Illinois Planning Commission
NOx	Nitrogen Oxides
NS	Norfolk Southern
PEF	Pedestrian Environment Factor
RID	Rock Island District
RTA	Regional Transportation Authority
RTP	Regional Transportation Plan
SEDP	Strategic Early Deployment Plan (ITS)
STAR	Suburban Transit Access Route
SWS	SouthWest Service
TDM	Transportation Demand Management
TIP	Transportation Improvement Program
TIS	Traveler Information System
TMC	Traffic Management Center
TOD	Transit-Oriented Development
TSM	Transportation System Management

outreach provided effective communication of transportation concerns at a community level.

Shared Path 2030 also benefited from several subregional and strategic transportation

Plan recommendations

The 2030 RTP includes a set of strategic and capital recommendations intended to both accommodate and manage growth. *Shared Path 2030* estimates that \$65.0 Billion will be available for maintaining and improving the region's transportation system for the planning period, from 2004 to 2030. Of that, an estimated \$47 Billion will be needed to maintain the existing transportation system in a state of good repair. The 2030 RTP recommends that \$5 Billion be allocated for strategic improvement to the region's "shared-use" system comprised primarily of arterial, bus, truck, bicycle and pedestrian facilities; and that \$12.9 Billion be allocated to expanding the region's major highway and rail network. Nearly \$20 Billion, however, in major capital needs were identified during *Shared Path 2030*. The 2030 RTP provides guidance for identifying, refining and advancing the proposals with the greatest merit.

avoid service duplication and to ensure uniform capacity. Nonetheless, nearly all of the decisions regarding the transportation system's use are privately made. Thus, while decisions regarding transportation supply occur in the public domain, their success is dependent to a significant extent on the personal travel choices of individuals and the travel needs of

• Economic development

The following transportation planning "problem statements" emerged following about 12 months

In addition, an ongoing theme throughout these discussions was that greater planning coordination between and among private freight operators and public agencies is necessary to sustain the region's preeminence as a global freight center.

1.2.3 Land Use and Transportation Relationships

The transportation system can be used to promote efficient land use and transportation and land use need to be mutually supportive.

The 2040 Regional Framework Plan¹⁹ was developed by NIPC (CMAP's predecessor) in concert with the transportation planning process. The Framework Plan envisions a region with development focused on centers, ranging from the global center in the Chicago Central Area, to metropolitan, community, and town centers, and hamlets in rural areas, all developed with housing and jobs to minimize travel distances. The *2040 Regional Framework Plan* envisions metropolitan centers linked to each other with "transportation corridors." In addition, a large part of the region would be maintained as "green areas."

The Regional Framework Plan was developed to guide the region's future land use and development by coordinating local land-use planning and the regional, state, and federal decisions that shape land development. The plan defines seventeen implementation strategies that include approaches to compact, mixed-use development and redevelopment; jobs and housing balance; transit-oriented development; preservation of biodiversity, water resources, and farmland; and economic vitality.

CMAP will also create a comprehensive plan, as required by the Regional Planning Act, to articulate a vision for the region's future and the strategies necessary to realize that vision. This plan will fully integrate land use and transportation, as well as consider other important regional issues. The plan will use scenario modeling and evaluation to strengthen the functional links between land use and transportation planning, wi24.4 Tw 92rate , j0.0004 T58b33.72 022 ulloationgewiirodexett

1.2.4 Community Planning

Regional transportation policy affects the success of community planning efforts. Coordinated community planning can support regional goals.

Defining and improving the links between community planning and regional planning continued throughout *Shared Path 2030*. Transportation planning occurs on many different levels and for many different reasons. The resulting transportation projects range in size and impact from large to small, regional to local. It is not sufficient to merely recognize that all transportation projects have a continuum of regional to local implications.

Some parity of concern for smaller-scale transportation solutions that, in aggregate, provide regional benefits has a place in regional planning. It has always been easier to visualize the potential local impacts of a major regional facility than to identify the regional implications of collective smaller-scale investments.

Shared Path 2030 recognized that some local issues are so widespread that, once discerned, they can logically be elevated to regional consideration. At the regional level, we have the ability to consider solutions to widespread local problems

Transportation greatly affects the quality of our natural resources and environment. In both urban and rural areas of northeastern Illinois, transportation projects can improve access to natural areas, but can also degrade them with congestion and pollution. Mitigation of environmental impacts that arise from transportation projects must be well thought out and be an outcome of an interactive communication process that gives all stakeholders a voice in the decision-making process. National, state, and local environmental protection regulations are met, in part, through environmental mitigation activities. The SAFETEA-LU planning regulations define environmental mitigation activities to "mean strategies, policies, programs, actions, and activities that, over time, will serve to avoid, minimize, or compensate for (by replacing or providing substitute resources) the impacts to or disruption of elements of the human and natural environment associated with the implementation of a long-range statewide transportation plan or metropolitan transportation plan. The human and natural environment includes, for example, neighborhoods and communities, homes and businesses, cultural resources, parks and recreation areas, wetlands and water sources, forested and other natural areas, agricultural areas, endangered and threatened species, and the ambient air. The environmental mitigation strategies and activities are intended to be regional in scope, and may not necessarily address potential project-level impacts."²³

A robust context-sensitive solutions process can give early, though not necessarily complete, consideration to biodiversity and other environmental impacts of proposed transportation projects. As planning, design and construction of major transportation projects is subject to rigorous environmental regulation public and private organizations can also participate in of an interactive communication process to assist with promoting not only the preservation of high-quality natural areas in the region that remain unprotected by legislation or regulation, but in enhancing and protecting natural resources that include ground and surface water and terrestrial resources.²⁴

Shared Path 2030 recognizes the need to protect environmental resources while improving safety, mobility and accessibility for the region. The generalized alignments of *2030 RTP* capital recommendations have been overlaid on a map of the region's sensitive natural resources. This overlay identified potential concerns about the impact of transportation system proposals on sensitive areas. These concerns, which are included with each project in the capital element of this plan, serve as a preliminary guide in identifying the scope and scale of further study, and will be thoroughly addressed during project development and design phases.

Shared Path 2030, in coordination with the 2040 Regional Framework Plan developed a set of regional strategies consistent with adopted regional policies on environmental preservation and enhancement. (See Section 1.4.3.1)

NIPC, as a partner in *Shared Path 2030*, led in preparing a set of natural environment measures that were used in evaluating future regional scenarios. This also resulted in a graphical base of importanTc 0.0001 20001 20001 20001 20001 dincd

performance measures to monitor the deployment of management and operations strategies and to ensure their effectiveness.

An important reason for elevating management and operations in regional planning is the recognition that systemic improvements may arise as much from the consistent application of many small-scale strategies as from the results of some major capital projects.

Emphasizing management and operations during long-range transportation planning serves as a link between the broad regional objectives supporting strong and equitable regional economic development and those addressing local context-sensitive solutions.

Shared Path 2030 developed a set of regional management and operations strategies to support both maintaining and improving the performance of the existing transportation system as well as guiding the performance expectations of its capital recommendations.

1.2.8 Public Health and Safety

Regional transportation policy should address public health and safety in ways beyond the traditional acknowledgement of vehicular safety and air quality concerns.

Promotion of transportation safety has been a paramount consideration of federal and state transportation regulation and enforcement for many years. Transportation crashes are a leading cause of early death. More broadly, transportation crashes result in large personal losses because of injuries and property damage. Tertiary losses to the region include economic effects and significant disruptions to the transportation system. Crashes and their severity are a function of human factors, (such as behavior, reaction time, and vision), environmental factors (roadway geometry, weather), vehicle characteristics (handling, crash-worthiness), and exposure rates. Many of these factors are out of the control of the RTP. However, transportation providers can respond with information systems to identify risks, exposure, and crash rates to prioritize and implement countermeasures. These countermeasures, as identified for roadways in the Illinois Comprehensive Highway Safety Plan, may include engineering improvements to operate roadways more safely for motorized and non-motorized users, traffic regulations and their enforcement, and education/outreach to encourage safe behavior by users of the transportation system. In addition, transportation and land use can be planned together to reduce risk exposure by encouraging modes of travel which are less likely to cause crashes (e.g., transit) and safely facilitating non-motorized travel. Community planning can encourage less motor-vehicle miles of travel (VMT), safe travel choices and behavior, and can reduce exposure to risk.

transportation regulat8(s

Similarly, Shared Path 2030 proceeded during a resurgence of interest in the ways that

1.2.9 Transportation Security

Regional transportation policy needs to respond to security threats. Threat assessments of transportation facilities should evaluate their vulnerabilities and risks, to prioritize physical security improvements. As noted by the Mineta Transportation Institute in a report for the FHWA, "Physical security by itself does not prevent terrorism, but good security can displace the risk, pushing terrorists toward still vulnerable but less lucrative targets where their actions are likely to cause fewer casualties."²⁷ Remote monitoring technology should be deployed to deter, detect, and respond to specific security threats if possible. Should an incident occur, related to the transportation system or not, the transportation system response should be coordinated among agencies to minimize casualties and disruption. Evacuation procedures should assure the evacuation of vulnerable users, which may include children, the disabled, those without access to cars, and the elderly, depending on the incident. Communications plans should be in place to assure that coordinated actions are taken by the public and response personnel, to prevent panic, and to keep in place those not at risk. In addition, advance system planning should assure a variety of transportation facilities may accommodate security needs by, for example, blast-resistant construction and increased vehicle stand-off distances for vulnerable structures.²⁸

flow of freight in northeastern Illinois must be assessed, measured and evaluated in order to identify its value and impact on the region. In the area of goods movements, CMAP can track industry trends, develop and promote best practices, benchmark costs and conditions, provide training and technical assistance, and facilitate regional discussions to support the efforts of our economic-development partners.

The process of collaboration and partnership has been a long term challenge for the region. To demonstrate the new approach to involvement, over 120 business and community leaders attended a CMAP economic and community development summit on August 17, 2006, to provide input in helping to define CMAP's role in this focus area. The primary feedback from participants was that CMAP should focus on its data analysis tools and resources to link transportation, land use, and economic development for improved planning and decision making. Finally, the committee structure at CMAP will guide and lead the agency's innovative approach to ensure that economic development is fully integrated into the transportation planning process.

1.3 THE 2040 REGIONAL FRAMEWORK PLAN

In September 2006, the *2040 Regional Framework Plan* was adopted by the CMAP Board to guide the region's integrated approach to regional planning. The Regional Framework Plan was prepared by the Northeastern Illinois Planning Commission in concert with the Chicago Area Transportation Study and CATS' development of the first 2030 Regional Transportation Plan. The Regional Framework Plan basic recommendations provide the vision for transportation improvements and activities in the RTP. The RTP supports the approach and recommendations of the 2040 Regional Framework Plan. The 2040 Plan identifies a regional planning framework that includes the elements of Centers, Corridors and Green Areas.

Centers are defined as compact, mixed-use, economically vibrant places interconnected by multiple modes of transportation, and nearly three hundred centers are identified throughout the region. The 2040 Plan recommends that regional population and employment growth be directed to centers, with more compact development and a greater mix of land uses. Centers are recommended to provide a variety of housing types and affordability, encourage diversity among their residents, and feature high standards of livability. The 2040 Plan recognizes the critical role of transportation in facilitating the development of centers through concepts such as Transit Oriented Development (TOD).

are to be realized, they must be considered and integrated throughout all goals and objectives in this section.

The RTP objectives are organized in terms of the opportunities they provide to introduce the challenges and concerns revealed in *Shared Path 2030* into future transportation policy and implementation work. To clarify these opportunities, the plan's objectives are stated such that they identify the development stage at which they become important.

- **Develop a transportation system that**... (carried out at the broadest policy levels, such as legislation, taxation, budgeting and regulation).
- **Promote transportation proposals that**... (carried out when establishing priorities for capital programs)
- **Encourage project implementation that**... (carried out during project design, environmental review, and community plan development).

1.4.1 Goal: Maintain the Integrity of the Existing Transportation System

Northeastern Illinois' surface transportation infrastructure is the product of more than a century of public investment decisions and actions. A long history of societal ideals and visions has produced a stable and functional regional transportation system. Both because of its history and functionality, our transportation system is a strong part of our regional identity and should be respected as such. Diverse elements from multi-lane highways to sidewalks, from airports to rail passenger depots, are assets that we must protect and use effectively. In this spirit, the RTP places the highest priority on maintaining existing transportation system integrity by giving careful consideration to reconstruction and replacement decisions. This includes maximizing the performance of existing and new transportation infrastructure and service efficiency through effective transportation management and operations practice.

Specific objectives include the opportunity to reconstruct and replace facilities in a way that accounts for new travel needs and preferences. In some cases this may include capacity additions that accommodate forecast demand increases. Other strategies will include capital, management and operations techniques that improve the availability of highway as well as transit choices.

1.4.1.1 Maintenance, reconstruction and replacement objectives

Develop a transportation system that:

• maximizes the performance of existing transportation facilities.

Promote transportation proposals that:

- improve the performance of existing transportation facilities.
- preserve the level of service offered by the existing transportation system.

Encourage project implementation that:

- improves connections between existing transportation facilities.
- improves accessibility to surrounding land uses.
- manages access to nearby land uses.
- mitigates conflicts between rail and highway systems.

1.4.1.2 Congestion management objectives

Develop a transportation system that:

- improves transportation system information available to travelers and system operators.
- facilitates management and operations communications abilities and real-time decision making.
- reduces non-recurring delay by reducing the number and duration of highway incidents and improves transit system on-time performance.
- reduces recurring delay through access and speed management, value pricing, improved design, and incentives encouraging alternate modes of travel

Promote transportation proposals that:

- reduce highway congestion.
- improve system reliability.
- provide improved transportation management capabilities.
- maximize performance benefits through intensive management.
- increase person throughput in congested corridors by increasing vehicle occupancy, providing transit options, and encouraging transit use.
- increase the share of trips made by walking, bicycling, and transit.
- improve coordination and connectivity between and among different modes.
- support regional or local efforts to balance the location of jobs, services, and housing to reduce travel distances.

Encourage project implementation that:

- provides for intensive facility management and operations capabilities.
- provides for coordinated management with other existing and planned transportation facilities.
- facilitates safe travel and reduces the number and severity of crashes.

- preserves the integrity of the transportation system by considering access of nearby land uses to the facility.
- implements the regional transportation and land use plans and programs efficiently.
- improves ability to manage freight.
- improves compliance with speed, right-of-way and safety regulations.

1.4.2 Goal: Improve Transportation System Performance

While stable and functional, it is clear that our current transportation system presents immediate challenges for its users and operators. Along with our concern for maintaining the integrity of the existing transportation system, we seek ways to improve the system's future performance.

1.4.2.1 Transportation system efficiency objectives

Develop a transportation system that:

- balances allocation of financial resources among transportation modes and improvement strategies.
- addresses transportation solutions across a variety of travel needs.
- maximizes the efficient use of existing infrastructure.

Promote transportation proposals that:

•

- facilitates efficient and sustainable management of land resources.
- supports the goals and objectives of regional land use policies.
- supports the implementation of the recommendations for centers, corridors, and green areas in the 2040 Regional Framework Plan.

Promote transportation proposals that:

- promote consistency with regional and local planned growth patterns.
- are coordinated with regional and local development plans.
- provide access to centers identified in the 2040 Regional Framework Plan.
- encourage compact and efficient mixed-use developments.
- improve access from residential areas to local employment centers or public transit facilities.

Encourage project implementation that:

- supports industrial/commercial development with appropriate multimodal freight access.
- facilitates preservation of historical, cultural and agricultural resources.
- provides efficient access to existing and anticipated land uses.
- supports land use mixes that foster efficient and healthy travel behavior.
- supports Transit Oriented De
to natural beauty. We should design local community transportation systems to enhance the quality of life of residents.

One important way to highlight these concerns is to carefully consider the relationship between transportation and regional growth. This can include large-scale regional strategies that promote growth potential at existing centers of development with an emphasis on those areas that are in need of reinvestment. While local communities engage in land use planning and zoning control to promote economic and community development, the historical footprints of the real estate market may better characterize long-term regional development patterns.

The vision of CMAP is to provide the framework that will help the region connect its land use to its transportation systems, preserve its environment, and sustain its economic prosperity. Taking a new integrated and collaborative approach to regional planning and decision-making will create a more comprehensive framework, with more focused implementation on the local level. During 2007 and future years, CMAP will improve its capacity to understand and communicate the significant impacts that land use and transportation decisions have on each other and on housing, economic and community development, and natural resources. This process will result in the adoption of an integrated comprehensive plan in 2010.

1.4.3.1 Transportation and natural environment objectives

Develop a transportation system that:

- helps improve air quality.
- helps improve water quality, quantity and sustainability.
- promotes and protects biodiversity.
- reduces air pollution from mobile sources.
- promotes planning for a sustainable water supply.
- encourages the sustainability and connectivity of natural, environmental and ecological systems
- f

courages thr quality.

• enhance green areas identified in the 2040 Regional Framework Plan.

Encourage project implementation that:

- employs Context Sensitive Solutions (CSS) with regard to cultural, historical and natural environmental features.
- avoids wetland impacts and promotes wetland protection
- protects and enhances natural groundwater recharge and water quality.
- promotes effective stormwater management.
- utilizes the "state of the practice" methods for including environmental values and sustainability into decision-making.
- promotes farmland preservation.
- enhances greenways, trails and open space.
- includes natural landscaping and buffers to further sustainability of environmental and natural resources.
- recognizes that environmental mitigation is necessary to restore and maintain the environmental functions affected by the plan's implementation.
- helps protect threatened and endangered species and promotes biodiversity.
- is consistent with federal, state, regional and locally adopted environmental protection and preservation plans.

1.4.3.2 Transportation and economic development objectives

Develop a transportation system that:

- enhances the region's business environment.
- promotes the region's position as a national and global transportation hub.
- enhances commercial and industrial strength for the long-term benefit of the region.
- supports a balance of jobs, services, and housing within communities.
- supports economic reinvestment in communities with disadvantaged populations.

Promote transportation proposals that:

• provide multimodal ground access to the region's major airports, rail terminals and ports at navigable waterways.

- improve multimodal service to the Chicago Central Business District (CBD) and other employment concentrations.
- provide multimodal access to industrial and commercial areas.
- provide multimodal access to centers identified in the 2040 Regional Framework Plan.
- provide multimodal connections between affordable housing locations and appropriate jobs and services.
- support the strategic needs of commercial goods shippers and carriers.
- support planned economic development patterns and activities.
- facilitate the staging of development and integrate with existing infrastructure or road networks

Encourage project implementation that:

- accommodates forecast demand.
- provides for improved level of transportation service for workers and businesses.
- considers access to job centers and links between residential and employment areas.
- brings together the public and private sectors to diversify and strengthen regional economies.

1.4.3.3 Transportation and social equity objectives

Develop a transportation system that:

- provides travel benefits to persons of all ages, abilities, incomes, races and/or ethnicity.
- avoids placing disproportionate burdens on minority or low-income populations.
- reduces dependence on personal transportation assets.³⁵

Promote transportation projects that:

- provide improved transportation choices to economically disadvantaged persons.
- stimulate balanced and sustainable development in communities with concentrations of disadvantaged residents.
- support programs providing financial incentives to low-income persons residing in

- support efforts to develop affordable housing opportunities.
- support links from disadvantagee3Eommunities to jobs and services.
- encourages3Eoordination of transportation services for disadvantagee3populations.

Encourage project implementation that:

- balances project burdens among all who benefit.
- minimizes or mitigates project burdens on disadvantagee3populations.
- employs3Eontext-sensitive solutions with rgard to promoting local3Eommunity quality.
- provides early,3Eontinuous **a**d extendee3outreach efforts*that reach a variety of Eonstituents* with attention given to engaging nontraditional3stakeholders suchas disadvantagee3 populations.

1.4.3.4 Transportation and Eommunity development objectives

Develop a transportation system that:

- promotes balanced land use within and among local3Eommunities.
- Promotes sustainable Eommunity quality of life.

Promote transportation projects that:

- provide access to centers identified in the 2040 Regional3Framework Plan.
- facilitate locally planned land use patterns.

Encourage project implementation that:

- is3Eonsistent with Eommunity development goals.
- maximizes the local3value of regional3.46 . bao[(mtatiou-ransportati)-7(Td(eelopm)9(i)ffortsd[(suppcal3Eor

CHAPTER 2. REGIONAL ASSESSMENT

Shared Path 2030 included a technical evaluation of the transportation system and its performance under a set of "future regional scenarios."

2.1 DEFINING THE TRANSPORTATION SYSTEM

Shared Path 2030 defined the transportation system in terms of the intent, scope and constraints of the RTP outlined above. This established the bounds for assessing the interaction and balance of transportation functions offered by a variety of physical transportation facilities and management/operation strategies.³⁷

Shared Path 2030 considered a wide variety of regi

requires constant and thorough management of track and signal systems, rolling stock and support facilities. In addition, rail infrastructure capacity often must be managed and operated to serve both passenger and freight movements. Proposals were evaluated in which existing major passenger rail (including a new mode called "Bus Rapid Transit") facilities were upgraded, expanded or newly constructed. Proposals to improve the passenger level of service by reconfiguring rail yards and stations as well as improving rail access and operational performance were also evaluated.⁴⁰

Also proposed were sets of smaller-scale improvements to the region's arterial, bus, bicycle, pedestrian and freight systems that would demonstrate a regional benefit if consistently applied over a large area. Most of the smaller-scale proposals occur on "shared-use facilities" (i.e., arterial streets that serve autos, buses, bicycles, pedestrians and trucks) that inevitably sacrifice some travel time performance for increased accessibility and flexibility in use.

Arterial streets compose most of the region's surface transportation infrastructure and pose special design challenges because they serve both motorized and non-motorized traffic as well as provide direct access to adjacent land uses. Typically, design attention is paid to intersections, structures (bridges and grade-separations) and vehicle traffic control. Specific design options also are available for carpool, bus (including in-way Bus Rapid Transit), trucks, bicycles and pedestrians. Proposals were evaluated for introducing new express and local bus service, maintaining, redesigning and/or expanding arterial facilities, introducing dedicated and shared bicycle/pedestrian facilities and introducing grade separations and bypasses to reduce conflicts and improve the context between and among highway, rail, bicycle and pedestrian facilities.

Also evaluated were proposals for improving connections and coordination among these major projects, and arterial and local community strategies. Proposals included improved or new highway interchanges, transit stations, carpool and transit parking and intermodal facilities for transferring freight between and among modes.

2.2.1 Socioeconomic Inputs

Each of *Shared Path 2030's* thematic alternatives is based on an initial 2030 forecast of the geographic distribution of households and employment under a "transportation no-build" scenario.⁴¹

This no-build scenario was used to evaluate future regional scenarios in advance of NIPC's *Common Ground* recommendations for a preferred land use scenario to guide future regional transportation planning work. Table 1 on the following page summarizes this initial no-build scenario by geographic area.

In addition, *Shared Path 2030* assessed social equity in transportation in terms of the mobility and accessibility benefits accruing to concentrations of low-income and minority residents. This was accomplished through an evaluation of transportation system use as well as by stratifying the benefits that accrue to travelers. *Shared Path 2030* reports benefits to travelers based on where they reside, even though in many cases they may have received the benefit from a transportation improvement at another location. It is important to recognize that there may be some distance between where a transportation improvement is made and the "home-base" of the traveler that receives its benefit.

 Table 1: Socioeconomic Inputs (NIPC no-build, 1/03)

District

income for the zone is less than one-half the regional mean. These two statistics are presented to illustrate the distinction between the regional distribution of lower income households "at-large" and the geographic concentration of lower-income households in a particular area. Because regional transportation improvements can potentially provide benefits to all households in a particular geographic area, social equity objectives are concerned with identifying geographic concentrations of a target income population.

Table 3: Concentrations of Low-Income Households

District	2000 Total Households	2000 Households in zones averaging <\$35,000	

Table 4: Minority Population

	2000 Population ⁴²	2000 Minority	
District		Population	Percentage
Chicago CBD	42,684	14,186	33.23%
Chicago Balance	2,866,582	1,979,215	69.04%
Cook Balance	2,459,337	824,329	33.52%
Cook Total	5,368,603	2,817,730	52.49%
DuPage	904,170	192,217	21.26%
Kane (w/ Kendall part)	441,504	134,406	30.44%
Lake	644,330	171,410	26.60%
McHenry	260,080	27,194	10.46%
Will	502,278	113,855	22.67%
Region	8,120,965	3,456,812	42.57%

Shared Path 2030 stratified concentrations of minority

• Multimodal system improvements to the region's system of shared-use facilities (i.e., primarily arterial streets that serve autos, buses, bicycles and have a direct interface with the

System Expansion Scenario

The system expansion scenario introduced significant new segments to the region's major highway and passenger rail system, with the intent of accommodating or managing projected growth. These proposals are the most expensive, they fundamentally change the way travelers use the transportation system, and they have the potential to induce significant land use changes. Because of their large scale, they are subject to elaborate financing, design, engineering and environmental reviews. This alternative was intended to illustrate the benefits of capitalintensive approaches to improving the transportation system by adding new major capital facilities.

2.2.4 Measuring Transportation Benefits

A technical evaluation of the transportation system is intended to help examine the effects of proposed transportation improvements on each other, as well as their combined contribution toward the plan's goals and objectives.

To begin, a general "sketch" analysis of each major capital project was performed in support of assembling the network alternatives. This consisted of developing and preparing the necessary

The evaluation measures themselves played a variety of roles in the plan development process, but primarily they were intended to improve understanding of how the transportation system works and illustrate the relative contributions of the various transportation proposals to achieving the plan's goals and objectives.

2.2.4.1 Transportation system performance

An important element of a transportation system's success is the efficiency with which it functions as a unified whole. It is therefore important that some evaluation measures reflect the effects of transportation decisions on the performance of the entire system.⁴⁸ These system measures result from an assessment of an equilibrium between travel supply and demand.

Transportation system supply measures

Walkable miles

Tripmaking that can be satisfied by non-motorized means is, in part, a function of the overall pedestrian environment in an area. Alternatives including regional and project-level strategies that called for improved pedestrian and bicycling environments resulted in a higher "pedestrian environment factor" (PEF⁴⁹) applied to the affected areas. To facilitate comparing this measure to other transportation system supply measures, the PEF for each zone is divided by the standard Chicago "8 blocks per mile.".

Highway lane miles

Demand for auto and truck travel is, in part, a function of the overall capacity offered by the highway system. While the actual capacity of a highway facility varies by its design, tabulating highway lane miles provides a quick comparison of highway supply in each scenario.

Daily transit service hours

Demand for travel by public transit is a function not only of physical facilities, but also the frequency and speed of service offered by transit providers. The level of transit service varies

Tripmaking behavior

The number, mode and purpose of trips affect system performance. The travel demand analysis calculates trips generated based on household composition (e.g., adults, workers, children and auto ownership) and employment. In addition, the location and "pedestrian environment" of households will affect the number and purpose of trips made.

Shared Path 2030 anticipated that a denser arrangement of socioeconomic activity⁵⁰ generating fewer motorized trips, shorter trip lengths and providing good transit options makes less costly demands on the transportation system.

Transportation system demand

Trip lengths, mode and route choice affect system performance. Person-miles traveled and person-hours traveled are tabulated from transportation network demand statistics that respond to variations in these components of travel demand.

Miles and hours traveled are affected primarily by congestion on the demand side and the introduction of new or expanded system capacity on the supply side. To a lesser extent, these network statistics are affected by marginal changes in the pattern or density of development.

Shared Path 2030 anticipated that reduced miles and hours of travel are associated with lower energy costs, less pollution and more efficient use of the transportation system. Congestion affects both travel time and route choice. High VHT (vehicle hours traveled) due to recurring congestion also affects overall system performance. Future estimates of tripmaking, trip lengths, mode choice and network performance are also significantly affected by link-level congestion.

Shared Path 2030 anticipated that reduced traffic congestion is associated with reduced fuel⁵¹ consumption, less pollution and more efficient use of the transportation system.

Transportation system costs

Energy costs

Energy consumption is associated with both the type of transportation supply and level of demand. Energy costs are calculated by applying energy consumption statistics to travel demand model results. Included are fuel costs estimated by current prices and consumption rates. Current nominal assumptions regarding energy costs are held constant and applied to changed transportation variables.

Shared Path 2030 anticipated that lower energy costs are associated with more efficient use of the transportation system.

Capital construction and maintenance costs

⁵⁰ A regional measure of socioeconomic concentration is summarized here as "% trips in Chicago" in order to give an overall indication of the level of regional decentralization being fostered by the transportation system. This is different and does not undermine RTP strategies in support of compact development patterns region-wide.

⁵¹ Including electricity.

Capital costs represent a constraint on the plan's recommendations. The estimates are made on a unit cost basis for the capital proposal as initially proposed. This provides only the most general indicator of the financial costs associated with each alternative. Further refinement of recommended proposals, including unforeseen right-of-way, community and environmental mitigation costs, can significantly affect the final capital cost of an individual proposal.

In this case, *Shared Path 2030* anticipated that capital investment in the transportation system should be commensurate with other system benefits.

Natural environment sensitivity

The methodology for analyzing 2030 project proposals employed a composite natural resource score based on the degree and type of natural resources present within the project zone of analysis. The composite score made the comparison of projects and alternatives possible.⁵²

The natural resource categories used in this evaluation were included based on their importance to protecting the region's water resources, natural areas, and farmlands and were only tabulated for proposed major capital projects. Therefore, there is no composite score reported for the non-capital-intensive alternatives nor for the existing transportation system. These categories are broad-ranging and their selection was based, in part, on the availability of reliable information at the regional scale.

Shared Path 2030 anticipated that higher composite natural resources scores indicate a greater likely need for avoidance or mitigation of natural resource impacts.

2.2.4.2 Evaluation of transportation system performance

Table 6 on the next page provides a regional overview of the transportation system supply, demand and effects under each thematic alternative.

⁵² NIPC, Natural Resource Impact Analysis: Summary of Natural Resource Features of Projects Proposed for the 2030 *RTP*, Draft, 2003.

2.2.4.3 Traveler mobility and accessibility

An important element of a transportation system's success is the "level of service" it offers its users. "Level of service" is defined as the mobility the system engenders and the accessibility it provides to travelers in the region. In order to evaluate the regional equity and comparative effectiveness of mobility and accessibility improvements, these measures are stratified (i.e., classified, aggregated) into the following discrete groups:

- Subregional geography⁵³
- Minority population (by residence)
- Household income (by residence)

The mobility and accessibility measures expected to respond to the RTP recommendations include:

- Use of transportation modes
- Access to transit
- Access to jobs
- Work commute times

Use of transportation modes

A person's decision regarding travel mode typically includes an assessment of the different costs associated with the modes available.

Mode use measures are most often expressed as the number of trips made by auto, transit or nonmotorized means. It is frequently reported as a percentage of total trips made by a particular mode.

Auto and transit trips are estimated by comparing the relative generalized costs of making a trip by each mode. The costs are estimated under the different thematic future alternatives, each with a different set of policy and network assumptions.

Shared Path 2030 anticipated that a wider range of choices among modes confers a benefit (i.e., having more choices available reflects better mobility and accessibility).

Access to transit

A traveler's proximity to major rail transit facilities is associated with having greater mode choice to more destination opportunities in the region.

The part of the trip each traveler needs to make in order to reach a rail passenger station is called the "access leg." The principal ways to access rail transit are by walking, biking, bus or auto.

⁵³ The subregional geography stratification consists of the traditional Chicago/County breakdowns. Separate stratification for assessing mobility and accessibility are also reported for high-demand multimodal corridors.

The decision to use rail transit is very heavily weighted in terms of the time, costs and mode of access, including parking costs/capacity and the time spent waiting for the train.

Accessibility to rail transit will change as new facilities are introduced. Introducing transitoriented development will improve the opportunity to choose transit as an alternate mode for more travelers. In the case of auto access to transit, accessibility will also change with prevailing highway congestion.

Shared Path 2030 anticipated that easier accessibility to transit stations confers a benefit to residential or employment locations.

Evaluation of "Use of transportation modes and Access to transit"

Tables 7-12 on the following pages show the mode choice and access to transit effects by trip purpose for each future regional alternative by geography, race/ethnicity and income level.

Note that measures are reported based on the traveler's "home-base" even though they may have received the benefit of a transportation improvement elsewhere.

By subregional geography

Table 7: 2030 Mode Use

By race/ethnicity

Tables 9 and 10 stratify the evaluation results by minority race or ethnicity concentrations within an analysis zone.

Shared Path 2030 defined "minority population" as the total number of persons in a zone who reported themselves in the 2000 Census as non-white or Hispanic.

Work trips

Work trips are based at the traveler's home location and include short diversions (e.g., errands, drop-off/pick-up and park and ride) along the way.

<u>All</u> trips

The tabulation of all trips is based at the traveler's home location, if referenced, but also includes non-home-based trips.

Table 9: 2030 Mode Use and Access to Transit: Work Trips by Minority Concentration

Percent
MinorityPopula-
tion in
holdsWork-4(o)4(n)-9-Access to Transit: Work Trips
(000)Popula-
tion in
ZoneHouse-
(000)

Table 10: 2030 Mode Use and Access to Transit: All Trips by Minority Concentration

Percent Minority Population in Zone	Popula- tion in House- holds (000)	Workers in House- holds (000)	Total Trips (000)	Trips Taken by
--	--	--	----------------------	-------------------

By income

Tables 11 and 12 stratify the evaluation results by income level within an analysis zone.

Shared Path 2030 defined "income level" as the average of median household incomes in a zone (usually about 1 mile square).

Work trips

Work trips are based at the traveler's home location and include short diversions (e.g., errands, drop-off/pick-up and park and ride) along the way.

<u>All</u> trips

The tabulation of all trips is based at the traveler's home location, if referenced, but also includes non-home-based trips.

Table 11: 2030 Mode Use and Access to Transit: Work Trips by Income Level

Ratio of Popu-Zone lation Average in Income to House-Regional holds Average

Table 12: 2030 Mode Use and Access to Transit: All Trips by Income Level

Zone Average Population Workers Income to (000) (000) (0 Regional Average	otal Trips rips Taken by 000)
---	-------------------------------------

Access to jobs

A traveler's ability to reach a variety of destinations within a reasonable travel time is another aspect of mobility and accessibility, this relating to the overall volume of economic opportunity available in the region.

Access to jobs is defined as the total number of jobs available within a threshold travel time, distance or generalized cost of one's residence.

Forecasted travel times, distances or generalized costs will vary according to different transportation strategies and physical improvements. Employment density and location will vary with socioeconomic scenario.

Shared Path 2030 anticipated that greater availability to all jobs within proximity to residential location is a benefit.

Work commute times

A traveler's ability to reach work within a reasonable travel time is also a measure of accessibility, this relating both to choice of mode available and employment location.

Work commute time is determined by an equilibrium assessment of household and job locations available, and the desire by workers to minimize the time, distance and cost of the work trip. accessibility, this relating both to choice of mode available and employment location.

Work commute time is determiermier eqaila2.015(iAm)8(r008(.0sTf0.rd[(TJ0la)5(tin)65.3 Tm())BT/TT0)

Table 13: 2030 Work Commute Times and Access to Jobs

	SYSTEM COMMITMENTS			
	Percentage of commutes under Percentage of jobs reacha		obs reachable	
	60 minutes within 60 minutes		minutes	
District	Highway	Transit	Highway	Transit
Table 14: 2030 Socioeconomic and Land Use Implications of Alternative Future Scenarios (continued)

System Additions 2030				
District	Households	Population	Employment	
CBD	30,150	47,600	649,712	
Chicago Balance	1,125,604	2,967,610	911,824	
Cook (w/o Chicago)	1,026,481	2,716,053	1,794,776	
Cook Total	2,182,235	5,731,263	3,356,312	
DuPage	363,078	1,001,252	798,608	
Kane (w/ Kendall portion)	253,977	713,448	353,940	
Lake	299,793	827,902	457,707	
McHenry	141,903	391,672	199,575	
Will	405,628	1,156,267	409,954	
Region	3,646,614	9,821,804	5,576,096	

System Expansion 2030				
District	Households	Population	Employment	
CBD	30,214	47,694	782,978	
Chicago Balance	1,125,353	2,969,374	912,897	
Cook (w/o Chicago)	1,026,969	2,718,182	1,732,422	
Cook Total	2,182,536	5,735,250	3,428,297	
DuPage	369,250	1,016,959	763,770	
Kane (w/ Kendall portion)	233,652	656,057	303,838	
Lake	310,234	855,790	473,449	
McHenry	127,723	352,592	173,566	
Will	429,370	1,223,777	447,835	
Region	3,652,765	9,840,425	5,590,755	

Note: Population numbers include group quarters populations

CHAPTER 3. REGIONAL TRANSPORTATION STRATEGY RECOMMENDATIONS

The set of future alternative regional scenarios illustrate the land use and transportation effects of four different themes reflecting a broad array of land use, management and operations, system improvement and capital-intensive strategies. It was anticipated that the plan's

The future regional scenarios identified two types of regional strategies:

•

The RTP encourages community development efforts that:

- Employ land use planning, zoning and economic development resources to balance the location of jobs, services and housing within a community to reduce travel distances.
- Arrange land uses in ways that foster efficient⁵⁷ and healthy travel behavior.
- Permit development concurrent with anticipated transportation supply.
- Arrange land use to support use of existing transit infrastructure and introduction of new and expanded transit service.
- Encourage development or redevelopment that minimizes the impacts of traffic noise.
- Plan and design major land uses⁵⁸ to allow for convenient and safe access by all travel modes.⁵⁹
- Allocate land use for commercial and industrial development adjacent to major highways.
- Allocate land use for residential development we 1 o p m p 1 o p m

- Carefully and objectively analyze the structure of the region in order to identify comparative advantages, critical industries, workforce needs and emerging prospects for development and growth.
- Make sensible investment in the public transportation infrastructure as a way to spur regional economic development and growth.
- Strive for a strong and sustainable return on investment from any transportation economic development initiative.

For its part, the RTP's strategy is that:

- A variety of transportation choices will be offered to all communities at an appropriate level of service.⁶¹
- Transportation improvements and community development activities will be coordinated⁶² to offer efficient⁶³ transportation service.
- Transportation improvements should support the functions of existing and planned adjacent land uses.
- Transportation improvements should be designed, managed and operated to encourage compact, sustainable land development.⁶⁴
- Plans and designs for transportation improvements should be sensitive to community context.⁶⁵
- Transportation improvements should be consistent with official historic, cultural and/or agricultural plans.

Context-sensitive solutions

The RTP recommends sensitivity to the effects transportation facilities have on the environment and communities. An interdisciplinary approach to planning and design incorporates the viewpoints of various agencies, stakeholders, and others who have roles or areas of concern in the transportation project allowing for better coordination and resolution of competing interests. New and better ways of planning and designing transportation facilities are evolving based on growing interest in better integrating these facilities into the communities they serve over the long term.

Most communities host transportation facilities that serve a regional function. The process of planning, designing, constructing and improving these facilities should involve early and

intensive involvement with the full range of stakeholders to preserve and enhance the human and natural environment in the project area.

Important principles of context-sensitive solutions include⁶⁶:

• Strike a balance between cost, safety, mobility, community needs, and the environment.

Travel Demand Management:

TDM strategies reduce the demand for peak-period single-occupant vehicle travel.⁷¹ These strategies are intended to better manage the demand placed on a fixed transportation supply. The strategies are aimed primarily at encouraging alternatives to traveling alone by auto, with emphasis on more efficient travel planning and private vehicle use. The intended benefit is to contribute to reduced congestion and auto emissions. These strategies are typically voluntary in nature, and often rely on market-based or employer incentives to increase participation.

- Ridesharing Programs. Ridesharing can reduce congestion by reducing the number of vehicle trips, in turn leading to reductions in VMT.
- Car Sharing Programs. Car sharing reduces VMT by reducing vehicle ownership; cars are available when needed, but discretionary trips may be more likely made by transit or non-motorized modes.
- •

- Traffic Signal Improvements. Traffic signal improvements improve traffic flow and/or provide priority or preemption capabilities. Traffic signals need to be optimized for traffic flow at individual sites while maintaining local access. Traffic signals are coordinated to provide smoother flow for vehicle platoons and reduce crashes. Priority is sometimes given to transit or other vehicles, allowing longer green times to accommodate transit schedules. Preemption is given to emergency vehicle needs or to clear railroad grade crossings.
- Geometric improvements. Geometric improvements are "physical improvements that may involve adjustment to the number or arrangement of travel lanes at intersections or on limited segments of a roadway." Intersection improvements include restriping, channelization, adding turn lanes, installing traffic islands, modifying the intersection angle, and changing corner radii (increasing or decreasing). Segment improvements may include expressway auxiliary lanes, passing lanes, truck climbing lanes, bus turnout lanes, widened shoulders, one-way couplets, medians, and reversible lanes. Geometric improvements generally smooth traffic flow and/or reduce crashes.
- Time of day restrictions. Time of day restrictions move travel demand to off peak periods or, in the case of parking restrictions, increase peak-period travel capacity.
- Ramp metering. Ramp meters are used to assure that merging traffic does not exceed the merge area or weave area's capacity to absorb that traffic at a point. Ramp meters spread out the entering vehicles. Ramp meters are also used to control overall flow to assure that downstream traffic flow is maintained.
- Commercial Vehicle Improvements. Geometric, sign and signal improvements focused on commercial vehicle traffic can smooth traffic flow and reduce crashes (see freight strategic system).
- Construction Management. Enhanced construction management reduces the duration and scope of delay resulting from project construction.

Encourage High-Occupancy Vehicle Use

- HOV Priority Systems. High-Occupancy Vehicle priorities reduce delay for vehicles with multiple occupants, so they encourage carpooling and vanpooling, thereby increasing person throughput for a given capacity and reducing VMT.
- HOV Support Services. HOV support services include preferential parking, park-andride facilities, and other services to make carpooling easier, thus reducing VMT and increasing person throughput.

Public Transit Capital Improvements (see also Strategic Regional Transit System)

• Exclusive Right-of-way Facilities. Exclusive right-of-way facilities reduce conflicts between public transit and other transportation system users. Examples include rail facilities, busways, bus bypasses of signal queues, or bus lanes on roadways.

•

• Parking Fees. Parking fees can be increased for parkers, perhaps only in peak periods, to discourage driving to or th

such capital-oriented and non-capital-oriented management and operations strategies is supported by the following RTP objectives:

- Maintenance, reconstruction and replacement
- Congestion Management Process
- Transportation and land use interaction

The RTP recommends enhancing implementation of all capital projects by identifying the multimodal corridor to be influenced by a set of associated management and operations strategies. These strategies are intended to ensure efficient coordination of capital construction, service provision and effects on local development patterns. The following subsections provide more information and analysis of strategies in the following areas:

- Maintenance and reconstruction
- Transportation system safety
- Transportation system security
- Rail, highway and intermodal freight
- Intelligent transportation systems
- Transit service coordination

3.3.2.1 Maintenance⁷³ and Reconstruction

The RTP's goal of maintaining the integrity of the existing transportation system network asserts an ongoing commitment to keep existing transportation infrastructure in a state of good repair. Most major transportation facilities are completely reconstructed over the course of 20-50 years. Large-scale maintenance and reconstruction of

the community t and

plans, as well as other strategies to improve safety. Strategies of note recommended by the RTP include:

- Developing safety information systems to facilitate better decisions about safety. Such systems should improve the quality and timeliness of crash data; identify and integrate all crash databases for easy user access; involve stakeholders appropriately; and facilitate the selection of appropriate crash countermeasures. Mobile capture and reporting of crash reports is an important initiative in this information system, and is recommended by the RTP.
- Improving highway-rail crossing safety. Such improvements may include grade separations to eliminate conflicts,⁸⁵ improved sight distances, improved crossing control devices and operations (including coordination with highway traffic control devices upstream and downstream), and continued efforts to educate the public about rail safety and enforce safety rules.⁸⁶ Closing of railroad crossings may be an option when they facilitate only minimal auto and truck traffic and when the closure would not cause longer travel distances or degradations in level of service; if a highway crossing is closed, maintaining safe pedestrian crossings at or near the closed highway crossing is recommended in urban and suburban areas.⁸⁷
- Increase intersection safety by such strategies as improved signal conspicuity and enforcement, including expanded red-light runn

in highway design; and pursue motorcycle helmet laws.⁹⁰ Strategies to improve bicycle and pedestrian safety include provision of sidewalks, bike lanes, and wide, paved shoulders; maintaining low vehicle speeds on urban and suburban streets and arterials; develop off-system trails. In addition, education and enforcement to promote right-of-way laws may help.^{91.} Additional pedestrian safety strategies have already been adopted with the *2030 RTP* Capital Element's Strategic Bicycle and Pedestrian System.⁹²

- Special attention to correcting and avoiding hazards created by vehicular traffic in community settings and on shared-use facilities.
- Special attention to ensuring the safety of children, seniors and persons with disabilities while using or adjacent to transportation facilities.

Many of the RTP's goals can be achieved by a commitment to pursuing the system maintenance strategies recommended in this plan. In terms of placing the proper emphasis on maintenance and reconstruction activities, the RTP recommends that highest priority be given to promoting the physical safety of all persons using and adjacent to the facility being improved.

The design-oriented details of transportation safety are refined through the project programming phases. Many projects intended to increase capacity, reduce congestion or provide alternative travel choices have safety benefits that cannot easily be isolated from the total project cost and benefit.⁹³ Safety issues are also considered at a local level. In most cases, these local solutions focus on specific problems and are typically not indicative of any systemwide or long-term safety deficiency.

Because safety improvements are heavily regulated and are achieved primarily through rapidly changing technology and design solutions, preparing long-range forecasts of the safety implications foreca;ca318y.

The RTP also recommends safety through community design practices to encourage less motorvehicle miles of travel, safe travel choices and behavior, as well as reduce exposure to risk. This implies interesting, vibrant streets close to residences. In addition, commercial activity should front the sidewalk, with zero-lot-line or minimal setbacks, all so that walking, bicycling, and transit convenience and activity is maximized.¹⁰⁰

3.3.2.3 Transportation System Security

The region's transportation system is vital to the welfare of our residents. In addition, the system provides several unique corridors for commercial goods and passenger transportation that are important for the country. Therefore, the security of the system must be addressed.

The RTP supports coordinated responses now under way to address identified security threats. These responses include the following:

- Overarching goals in the "Illinois State Transportation Plan."¹⁰¹
- Detailed Illinois Terrorism Task Force work to develop and implement the state's terrorism preparedness strategy. The Illinois Terrorism Task Force meets monthly, following secure procedures. The MPO/CMAP staff, as well as member agencies, participates in these efforts. Staff provides data and analysis as requested. The Task Force has a number of standing committees, including ones for Transportation and for Communications.¹⁰² Work included developing and implementing an evacuation plan and alternate routes plan for the City of Chicago Central Business District, developing a contra-flow evacuation plan on primary interstates in the Chicagoland area, with a travel demand management annex; a bridge recove

• Transit agency development of a System Security Program Plan. Integrated transit security program plans have been developed by the region's transit operating agencies and are being implemented. Each agency is responsible for implementing the plan with current or newly identified funds thr

Region Environmental and Transportation Efficiency Program (CREATE) identifies many public benefits, including reduced conflict with arterial and passenger rail traffic, improved community interfaces with railroad facilities and the potential for greater economic development regionwide.¹⁰⁶

The RTP supports freight strategies that demonstrate a benefit *to* the region's economic health overall. The strategies embraced, like the RTP's community and environmental strategies, involve consistent and ongoing efforts to improve coordination among freight system owners and operators and those concerned with the economic benefits an efficient freight system can provide. In northeastern Illinois, reconciling and coordinating the strategic plans developed under private business models and by various civic and advocacy groups will require both policy coordination by public agencies as well as an investment in technical planning resources to support improved freight decision-making.

3.3.2.5 Intelligent Transportation Systems (ITS)

The RTP's goal of improving transportation system performance recognizes the need to enhance the efficiency of traveler decisions and transportation management and operations. Technological advances provide an opportunity to dramatically improve the collection, organization and dissemination of information in support of improved real-time decisionmaking.

ITS is a collective name for technology enhancements that improve transportation management and information exchange. ITS allows transportation providers to offer an improved range of services and aids travelers in making more informed travel decisions. Improved transportation safety and security is made possible due to real-time monitoring capabilities and faster response to incidents.

The RTP supports the ongoing development and implementation of the region's principal ITS blueprint, the *Strategic Early Deployment Plan for Northeastern Illinois* (SEDP).¹⁰⁷ The SEDP includes a "Regional Intelligent Transportation Systems (ITS) Architecture," a 15-year guide for transportation technology integration in northeastern Illinois. This "Architecture" is primarily an implementation plan for integrating communications between transportation system managers and operators and is further integrated into implementation of the multi-state Gary-Chicago-Milwaukee ITS corridor.

The regional ITS architecture also contains guidance on enhancing safety and security efforts. This is the product of outreach with emergency response staff from the counties and City of Chicago, including city and county emergency operations centers. Discussions have included how ITS can help emergency responders communicate with transportation implementers to jointly improve system operations, particularly during emergencies.

The RTP's goal of improving the transportation system with ITS supports:

¹⁰⁶ CREATE Plan, 2003.

¹⁰⁷ CATS, Strategic Early Deployment Plan for Northeastern Illinois, June 1999.

- A system of regional traffic management centers that will coordinate communication and operations for the entire freeway, tollway, arterial and rail transit system. These traffic management centers serve as "information hubs" for each transportation operator.¹⁰⁸
- A regional and multi-state communications system that provides real-time travel condition and emergency management information to transportation agencies, emergency response providers and the general public.¹⁰⁹ This includes a communications infrastructure that will provide electronic links to travelers, emergency responders, transportation/emergency response operations centers, roadside equipment and vehicles.¹¹⁰

3.3.2.6 Transit Service Coordination

The RTP's goal of improving transportation system performance recognizes the need to enhance transit service coordination between and among transit providers.

"User-friendliness" is a critical element to making transit a meaningful choice for travelers. Often, adjustments to service or additional traveler information at • Facilitating fare payment and collection, especially for patrons of multiple operators.

The RTP acknowledges the comprehensive regional planning process currently underway by the Regional Transportation Authority to develop the region's first Human Services Transportation Plan. The RTP anticipates that this plan will provide policy guidance and strategies for the region that support the goals of the RTP. In particular the RTP supports initiatives that will enable elderly individuals, individuals with disabilities, and low-income individuals to increase their mobility, gain increased access to jobs, medical facilities, and other services through increased coordination of services, reducing gaps in services, and planning for future increases in demand.

• Making financial arrangements to pay for construction, management and operation of the facility.

4.2 Regional Invest.0018 (ew)**J**J0.0**J**J/TTT-5(i)168999re.009he

The transportation financial plan is expected to also identify the legal and institutional framework required to implement new transportation financial arrangements in the region.

Figure 5: 2030 F	RTP Update	Financial Allocation
-------------------------	------------	-----------------------------

Category ¹²¹	Allocation (in Billions of dollars)
Management Recommendations (includes capital maintenance and reconstruction of existing facilities)	\$47.0B (72.4%)
Committed Recommendations (major projects already funded)	\$3.6B (5.4%)

Strategic Recommendations (a

strategic guidance intended to support these ongoing efforts. There are also numerous neighborhood, community and county level land use pl

CHAPTER 5. STRATEGIC REGIONAL SYSTEMS

Strategic Regional Systems (SRS) are organized around particular transportation functions. The RTP recommends allocating \$5B of forecast revenue for use among the strategic regional systems, the fundamental guidance being that facilities and services are designed and implemented to improve the performance of a unified multimodal transportation system.

The 2030 RTP organizes its Strategic Regional Systems by mode in order to develop specific guidance regarding implementation of particular types of improvements. These include improvements oriented toward arterials, bus transit, trucks and intermodal freight, and bicycle and pedestrian facilities.¹²⁷

These systems are the product of scenario evaluations included with the original RTP. Increased attention to transportation system management and operations, intensive expansion of the arterial and bus transit system and limited strategic capital additions to the expressway and passenger rail system were found to increase transit mode choice and contribute to managing traffic congestion.

The 2040 Regional Framework Plan emphasizes the need for multimodal corridors around the region¹²⁸ and multimodal transportation is one of the most enduring topics in the RTP. In addition, the emergence of "context-sensitive" transportation solutions indicates a priority for sharpening and expanding the considerations given to improving existing "shared-use" transportation facilities. The RTP recommends that transportation implementers and providers give priority to ensuring that individual highway and transit programs improve the multimodal integrity of the transportation system, especially with regard to promoting safety for all travelers. Important features of a strong multimodal transportation system include:

- Coordination of service between and among travel modes.
- Project design that promotes "choice" between and among travel modes.

Making a distinction among specific transportation functions helps recast the RTP's strategydriven goals and objectives so that they address the improvement programs developed by odes.12 0 001sign that promotes "choice87 helps recas
- Roundabouts should be employed as an alternative to conventional intersections where appropriate.¹³⁹
- Limit introduction of new traffic signals.
- Provide transit accommodation and priority.
- Provide safe and comfortable accommodation for pedestrian and bicycle travel.

5.1.2 Arterial extensions, bypasses and major collectors

For facilities that are intended to contribute to regional accessibility, but that will also provide new opportunities for land development, the 2030 *RTP* recommends that the following strategies be considered to maximize the effect of capacity additions:

- Adopt a comprehensive design that coordinates access to individual land uses with the need to optimize the flow of traffic on the new facility.
- Limit introduction of new traffic signals.
- Roundabouts should be employed as an alternative to conventional intersections where forecast traffic volumes are appropriate.
- To the extent feasible, a grid system of streets should be maintained to provide land access and provide alternative arterial routes.
- Provide transit accommodation and priority.
- Provide safe and comfortable accommodation for pedestrian and bicycle travel.

5.1.3 New arterial bridges, grade separations, interchanges and advanced intersection design

The RTP recognizes that new or reconstructed arterial structures such as bridges, grade separations and interchanges can be

some major capital projects. Because of this, new arterial structures often give rise to the type of community and environmental concerns that are associated with major capital investments.

Manyspartentiabistsystemes, should as no serve local land use go0.s and address environmental concerns. Introducing new atiters may stand as a viable structing larger and more costly capital facilities.

dipplities that oghof new arteri

rais diction man and a conflict the statistic of the state of the stat

140

- Arterial arterial grade separations in order to improve traffic flow and reduce congestion.
- **BiteFylpræsdypæylæstdianlyvædeisægrædatinges**sim order to improve accessibility and support efficient economic development. This should be accomplished in coordination with local land use plans that recognize the intended role of expressways and tollwa

travel.

141

¹⁴²The SRA Design

¹⁴³maiginallybprapgenetated with the infiltinge an SRA dattidies as endorsed by the C

¹⁴⁰ The conflict between freight and commuter rail traffic and vehicular traffic at heavily used at-grade crossings creates delays for both highway and rail traffic. In some communities, these delays have a significant impact on local traffic and create major safety concerns as crossings are blocked for long periods of time.

¹⁴¹ At present, a significant number of tollway intercTJ0peferc coa(a)1(jonne(r)-8(a)-3(hf)5(nep)preowsfic r)6nd c0.0002 Tc 0.0013 Tc

the Councils of Mayors. The specific recommendations appear in the final edition of each study report.¹⁴⁴

Each of these studies was conducted with the participation of state, regional and local agencies, overseen by a steering committee comprised of government and citizen members, with most of the recommendations being approved by local government resolution. This process has helped establish a consistent and logical connection for programming arterial improvements based on sound and participatory planning principles.

These studies provided valuable guidance for improving the individual facilities themselves, but also created a large local literature of arterial concepts that can now be transferred to other appropriate arterial settings.¹⁴⁵

5.1.4.1 New segments for study

A legacy of these original SRA designations is this "pre-phase one" planning and design study of the route that includes local community involvement.

As the region grows, counties and communities continue to request SRA designation. Discussion of the merits of such studies originates with the City of Chicago, the counties and/or appropriate Council(s) of Mayors.

In the original 2030 RTP, a number of new sections were proposed as additions to the designated SRA system. Some of these were already under study, others should be further evaluated in their subregional context before proceeding with detailed evaluations.¹⁴⁶

The 2030 RTP recommends that preliminary evaluations be conducted to determine the potential for these routes to be developed in close accordance to the RTP's regional strategies and shared-use principles. The evaluations may be prepared in the context of sub-regional (e.g., county) transportation plan or as a corridor study of one or more individual routes. This provides an 144

These evaluations can serve as the basis for proceeding with the "pre-phase one" engineering analyses, right-of-way studies, community planning and environmental evaluations associated the original set of SRA studies.

Potential SRA Additions

Figure 6: Potential SRA Additions



Potential SRA additions identified in the 2030 RTP include:

- Longmeadow Parkway from IL62 to Randall Road, including a new bridge over the Fox River.
- Stearns Road from Dunham Road to IL47 in Kane County, including a new bridge over the Fox River.
- Gougar Road from Wilmington/Peotone Road to the proposed I-355 extension in Will County.
- Arsenal/Manhattan Road from I-55 to US45 in Will County.¹⁴⁷
- Schoolhouse Road from Manhattan/Monee Road to Peotone Road in Will County.

¹⁴⁷ This is an extension of the currently designated SRA: Manhattan-Monee Road from US45 to IL1 in Will County.

- Bus routes with limited stops that run longer distances.¹⁴⁹
- Community circulators that allow an alternative to short auto trips.
- Short rail extensions and additional sidings intended to improve the efficiency of existing rail operations.
- Other intersection operations improvements such as queue bypass and far-side bus stops as appropriate.
- Improved water transport routes to serve passengers and goods.¹⁵⁰

The RTP recognizes that additional high-quality bus service has the potential to be a costeffective way to increase the transit options available regionwide.

Extensive bus route systems are proposed in a number of local, subregiow -112552i9tion orce has alsididort(e)2(

The

public and private entities. Private Providers operate in an open and competitive market¹⁵⁷. The prevailing business model is based on the premise that fees and services must be acceptable to customers or the provider will be replaced by a more efficient and service-friendly competitor.

The 2030 *RTP* recommends that, when appropriate, private services may be contracted to provide or to supplement traditional public transit, perhaps with a performance-based public subsidy. By partnering with competitive contractors, public transit providers can ensure the mobility of low income riders, so they may obtain and maintain jobs.

The 2030 RTP recommends that private provider resources be utilized for:

- School Bus Service
- Community Transit
- Paratransit
- Shuttle Service
- Subscription Bus Service
- Charter Service
- Limousine/Taxi
- Corporate Internal Shuttle
- Interstate Coach
- Van Service

Public transit authorities often resort to increased fares and reduced service levels in response to rising costs. Converting elements of the public transit systems to competitive contracting may save costs.¹⁵⁸ Public-private partnerships can offer public transportation entities the flexibility they require to offer full service and improved timetable packages that its ridership demands and needs.

¹⁵⁷

Private Providers can be used to promote better service levels, flexible scheduling and to stabilize fares. Further, private providers are ideal for augmenting public transit service to students, seniors and persons with disabilities, providing transit choices to underserved areas and non peak service.

5.2.3 Bus Rapid Transit

Bus Rapid Transit (BRT) is a flexible rubber-tired rapid-transit mode that combines stations, vehicles, services, running ways and intelligent transportation system elements into an integrated system with strong positive identity that evokes a unique image. BRT applications are designed to be appropriate to the market they serve and their physical surroundings, and can be incrementally implemented in a variety of environments.¹⁵⁹

Although the infrastructure, vehicle and operation characteristics of individual BRT systems vary, the objectives of BRT reflect that it is a high-quality transit service:

- Reduce transit travel time
- Increase transit reliability
- Increase frequency to reduce waiting time
- Improve transit connections
- Enhance system identity to easy system use by increasing system recognition
- Increase accessibility through low floor vehicles, enhanced infrastructure and quality upto-date information
- Enhance transit safety and security

These objectives are achieved through the combination of the following specialized elements of BRT:

- Specialized or exclusive running way
- Specialized Vehicles
- Flexible Service
- Flexible Route structure
- Efficient Fare collection
- Intelligent Transportation Systems Integration:
 - o Automatic Vehicle Location (AVL) combined with traffic management systems,
 - Transit Signal Priority (TSP), signal coordination

¹⁵⁹ Transportation Cooperative Research Program (TCRP), Report 90, Bus Rapid Transit, Vol. I, 2003.

- Transit supportive services (information systems: web site, maps, real-time information system, on-board announcements)
- Identity branding of infrastructure and vehicle

One of the advantages of BRT is that it can be tailored to serve the local demand and to fit in the local transportation context. A low-cost, mixed traffic BRT system running on arterial streets would have some of the elements of the above list, while a full BRT on its own exclusive running way serving high demand will have all these features. The challenge is to develop a BRT project without sacrificing the quality and the system efficiencies gained in combining these features.

Because BRT is a rubber-tired operation it can be developed incrementally in terms of time and space:

• An initial investment phase would put some of the key features in place, start operation to reap benefits early while additional feat

Two key initiatives are taking place now to support the Central Area Bus Rapid Transit Project. First, the Carroll Avenue busway element of the project, along a now unused railroad right-ofway along the north side of the Chicago River Main Branch, is being studied. In addition, the Clinton Street element of the project is also under study. For this element, property rights necessary for the construction are being sought as the adjacent properties are developed.

5.2.3.2 DuPage "J" Line Bus Rapid Transit Line

Figure 8: DuPage "J" Bus Rapid Transit Line



The "J" Line is part of the DuPage Area Transit Plan. The DuPage Area Transit Plan is intended to provide a fully integrated multimodal and regionally coordinated transit system for DuPage County. The plan includes a system of intra-county connectors and local circulators designed to feed into connector routes, as well as enhance mobility within the community. These are intended to function in concert with proposed BRT, Metra and Pace services. The "J" Bus Rapid Transit (BRT) Route would provide a high-sp

The line would operate initially

regional transportation centers. Numerous enhancements are planned for these stations to improve passenger information and comfort.

A test of transit system priority (TSP) has taken place in the corridor. TSP gives transit vehicles priority at intersections by granting an early green phase or an extended green phase to approaching buses. TSP should be incorporated with emergency signal priority programs. Other ITS features expected to be incorporated with the Cermak BRT service include automatic vehicle location, electronic fare collection (to reduce dwell times at stops), transfer connection protection (to reduce transfer wait times), real time passenger information (to help patrons plan their itinerary) and facility monitoring and security systems.

The Cermak Road BRT service would enhance service to the 54th/Cermak (Pink Line) rapid transit service now being implemented. The service would also feed and complement a proposed "J-Line" BRT service to Schaumburg, O'Hare and Naperville, as well as an extension to the Forest Park rapid transit service at Oak Brook.

This proposal is also being evaluated in the Cook DuPage multimodal corridor study.

The project crosses Salt Creek in DuPage County adjacent to York Woods and Fullersburg Woods on Salt Creek, properties of the Forest Preserve District of DuPage County. The project also crosses the Des Plaines River and adjacent forest preserves in Cook County.

5.2.3.5 Ogden Avenue Transitway

Figure 11: Ogden Avenue Transitway

This transit corridor extends from North Riverside Park Shopping Center to Chicago's Central Area. The line would operate in priority lanes on surface streets or dedicated right-of-way and would employ a variety of new techniques and technologies to speed service.

The initial proposal includes the possibility of new or historically styled streetcar rail service, light rail, state-of-the art bus rapid transit, or other fixed guideway design alternatives.

This project is expected to increase accessibility and reduce travel time for residents of the West Side and nearby suburbs to the Central Area and other major activity centers, relieve traffic Loop. Service coordination would be necessary with the recently improved 54/Cermak rapid transit service.

Studies are underway to implement an initial segment of the Ogden Avenue service with the Carroll Avenue busway.

This proposal is also being evaluated in the Cook DuPage multimodal corridor study. The

- Improve reliability
- Improve frequency
- Simplify transit usage in the suburbs

The advantages of an Arterial Rapid Transit Network are that it:

- 1. Reaches the maximum number of people in the region,
- 2. Takes the shortest time to implement out of all rapid transit options, and
- 3. Takes the least amount of capital expenses to implement out of all rapid transit options.

The PARTNER Program is currently under development. It is planned to:

- Operate on arterial street in mixed traffic with short sections of bus-only lanes and queue bypass lanes where necessary to help buses get through congested road sections,
- Branded modular station that will include specially designed bus pole, information kiosk (including system map, schedules and real-time information display), shelter, bench subject to space availability.
- Low floor buses
- Corridor-based, simple route structure that provide regional connectivity
- ITS systems:
 - Automatic Vehicle Location system combined with dynamic traffic management,
 - Transit signal coordination and Transit Signal Priority
 - Transit supportive services, such as information systems: web site, maps, realtime information system, on-board station announcer
- Identity branding of infrastructure and vehicle

The PARTNER program will provide improved transit service to major centers and connecting transit services throughout the region. The services will serve major regional centers and transit connections.

The system is expected to provide decreased travel times over conventional bus service, with transit vehicles receiving priority during traffic congestion delays. Rapid boarding and alighting would reduce dwell times.

Evaluation of this program is underway.

5.2.4.3 Pace Express Bus Transit System

Figure 14: Pace Express Bus System



Pace's Express Bus System serve two kinds of travel demand:

- regional connectivity through low density areas
- direct point to point connection between well defined origin-destination pairs

Express Buses will provide regional connectivity as extensions of Arterial Rapid Transit (ART) through areas where low density does not warrant high frequency service or uniform stop spacing. Such corridor-based express service will be integrated with the ART service. That is, ART extension express buses will run on the ART corridor under ART brand, however, they will stop only at major activity centers and will run less frequently, predominantly in the peak hours and peak direction.

Point to Point Express Service will provide direct point to point connection between major centers of activities in the regions. Point to Point Express Buses will take the fastest route between origin-destination points independently of corridors or arterials. Such express routes will have a cluster of stops at origin and a cluster of stops at destination without stops in between. This will allow them fast travel between origin and destination nodes. Express buses will provide a one seat ride between the route defining origin and destination centers.

Because Point to Point Express buses will take the shortest-time route between origin and destination it is proposed that they utilize expressways, tollways, and highways, including shoulder-riding priority where safe and appropriate.

5.2.4.4 Transit Signal Priority System

Figure 15: Pace Transit Signal Priority System

ngnur e storu Pees Le syste fingula i it (TAR) (1 euro a sansu -
NY. THE REPORT OF A DECK O
1 Martin Martin Martin La Contra Martin Ma

The Transit Signal Priority System (TSP) will provide more reliable and faster transit service to major centers and connecting transit services throde m.p.sm (T, wheelidelayJ0.0006 Tc2-0.0013 T3 20.79.36d(u

5.3 Regional Freight

5.3.1 Freight Supportive Land Use and Economic Development

The 2040 Regional Framework Plan recognizes the pressing needs of commercial goods movements in the region and advocates a commitment to improving the performance of the region's freight system.¹⁶²

Regional transportation strategies improve the performance of existing freight operations with emphasis on streamlining intermodal transfers and commercial goods delivery.

By providing multimodal transportation options to more industrial and commercial businesses, the economic benefits to the region from its position as the nation's freight transportation hub can be maintained and enhanced.

Strategic freight improvements are supported by the following RTP objectives:

- Maintenance, reconstruction and replacement
- Management and operations
- System efficiency
- Transportation and land use interaction
- Commercial goods movement
- •

- Coordinate freight rail operations with commuter rail service and infrastructure projects.¹⁶⁵ This includes providing additional capacity on new or restored rail sections to permit additional train movement with modernized train control systems that permit bi-directional operation.
- Where heavy conflicts occur between commuter services and crossing freight services, provide rail-to-rail grade separations.
- Reduce rail/highway grade crossings conflicts by providing grade separations and at-grade safety improvements.¹⁶⁶
- Mitigate negative community effects caused by train noise and blocked crossings.
- Establish highway system truck priorities during capital construction and reconstruction projects.
- Promote truck-specific treatments aimed at improving safety and efficiency of commercial goods movement during project development.¹⁶⁷ Study the feasibility of truck-only corridors to facilitate commercial goods movement where appropriate.
- Correct severe bottlenecks in locations that impede freight mobility and cause inefficient routing. This includes mitigating inefficiencies caused by vehicle weight restrictions and viaduct clearance limitations in locations requiring truck access.
- Promote continued improvement of "intermodal connector" facilities.¹⁶⁸
- Promote context-sensitive geometric improvements to improve truck turning movements such as recessed stop bars and right-aligning left turn lanes.
- Provide "freight-friendly" installations such as truck-only electronic toll collection, preclearance and credentialing, information and advisory systems, and truck storage lanes that improve operations safety.
- •

- Study the ways in which information technology may be used to facilitate freight movement, particularly in regard to container and railcar movement planning and the formation of unit trains to cities within approximately 700 miles (i.e. Midwestern cities).
- Study mechanisms for coordinating land use and transportation planning so as to improve the efficiency of commercial goods movement.

In implementing the above strategies, several programs are specifically included in the Strategic Regional Freight System. These include two major elements of the Chicago Region Environmental And Transportation Efficiency Program (CREATE) and National Highway System Intermodal Connectors. To implement CREATE, the *2030 RTP* supports strategies to expedite CREATE project development.¹⁶⁹

5.3.2 Freight Corridors (CREATE)

Figure 16: CREATE Corridors



The 2030 RTP Strategic Regional Freight System includes implementation of the CREATE rail corridor development plan developed by the Association of American Railroads and supported by the state of Illinois and the city of Chicago. This comprehensive plan will improve the efficiency and safety of rail operations in the region by providing additional rail capacity, upgrading technologies and removing key rail/rail and rail/highway conflicts. The CREATE corridors will improve regional freight mobility by, among other improvements, improving

corridor rail connections, signaling, additional mainline track, crossovers, and interlockings. In addition, new rail flyovers are an integral element of the corridors program, designed to reduce conflicts between rail corridors.

The CREATE corridors program includes four freight corridors. In addition, a passenger corridor is included in the CREATE program that, through strategies like rail-to-rail grade separations, will reduce conflicts between freight and passenger operations, reduce delay, and improve the reliability of each service. One intent of the RTP strategic regional freight system is to improve freight infrastructure to facilitate additional and more reliable passenger service on the Passenger Corridor.

Preliminary engineering has commenced for the CREATE Corridors. The corridors will be implemented with a set of improvements with independent utility. These improvements can be developed and implemented as discrete projects as laid out in the SPEED strategy. Together, these projects will provide corridor improvements for commercial goods movements to and through the metropolitan area.

The RTP's Strategic Regional Freight System also includes the CREATE Program's system of highway-rail grade separations. These railroad grade separations will improve highway travel time reliability, reduce conflicts between road users and rail freight operations, improve the flexibility of rail freight operations, and improve safety. In implementing railroad grade separations, community concerns regarding roadway access, non-motorized travel needs, and transit access should be considered.

It is anticipated that these and other grade separations may be implemented as independent projects and in support of other transportation system development and community es i8iTheic development initiatives.

Among the CREATE highway-rail grade separations identified, the Grand Avenue grade separation in Franklin Park is now under construction. In addition, projects at Belmont (Downers Grove), 130th/Torrence (Chicago), and Roosevelt/Kautz (West Chicago), among others, are in advanced stages of engineering.

5.3.3 National Highway System Intermodal Connectors

The RTP supports implementation of improved freight connectivity, consistent with demonstrated freight needs, on the approved list of the National Highway System's Intermodal Connectors. The RTP calls for consideration of freight needs and the implementation of strategies to accommodate freight movements along these connectors, as the included streets are maintained, rehabilitated, and res istructed in the course of the region's ongoing highway maintenance activities. Community concerns about these accommodations should be addressed where appropriate.

Figure 17: NHS Connectors

Intermodal Connectors

5.4 Pedestrian and Bicycle

The 2040 Regional Framework Plan recommends that bicycle and pedestrian connections be ubiquitous in fully urbanized parts of the region¹⁷⁰ and that bicycle and pedestrian connections linking centers be developed in less urbanized areas.¹⁷¹

Bicycle and pedestrian transportation strategies that encourage non-motorized travel and improve the quality of walking and biking trips are integral to successful shared-use design.

These are supported by the following RTP objectives:

- Mobility and accessibility
- Community development
- System efficiency
- Economic development
- Public health and safety

¹⁷⁰ NIPC, p. 53.

¹⁷¹ NIPC, p. 54.

The 2030 RTP acknowledges federal guidance to give due consideration to bicycle and pedestrian facilities improvements when improving or constructing transportation facilities.¹⁷²

Non-motorized travel makes up a significant portion of overall travel demand, both in terms of a singular mode choice and as a means for reaching transit. In addition, non-motorized travel is often the preferred means of travel for children, seniors and persons with disabilities.

The RTP recommends strategic improvements to shared-use facilities that foster "routine accommodation" of pedestrian and bicycle design in all transportation projects and services.¹⁷³ This includes pursuing improvements that support bicycle and pedestrian access to transit and providing bicycle and pedestrian travel information and promotion as part of larger management and operation strategies applied to the entire transportation system.

The RTP also acknowledges NIPC's *Regional Greenways Plan*¹⁷⁴ and the comprehensive regional bicycle and pedestrian planning process currently underway, called *Soles and Spokes*, which includes a regional inventory of county and local pedestrian and bicycle plans and strategies. The RTP anticipates *Soles and Spokes*' contribution to regional mobility and accessibility through additional strategic guidance in support of routine accommodation, shared use and dedicated bicycle and pedestrian facilities.

The RTP recommends that project implementers consider a facility's potential use by bicycle and pedestrian travelers and make appropriate design accommodations using flexibility included in most highway design manuals.

The 2030 RTP acknowledges the FHWA's designation of

Business District (CBD). The Circle Line will also facilitate significant service and operational improvements to the entire rapid transit system.

The proposal is divided into three phases. Phase I restores a section of elevated structure connecting Lake Street and Congress Parkway. Phase II constructs a new south link between the Douglas Branch and the Orange Line. Phase III constructs a new north link between Lake Street and the Red Line. Implementing each of these phases is accompanied by service changes on existing rapid transit lines serving downtown Chicago.

Project Planning Status

Phase I of the Circle Line has been partially completed and new service on CTA's "Pink Line" has begun. In addition, enhanced Forest Park Blue Line service envisioned as part of the Circle Line has been implemented. Part of Phase I of the Circle Line project was accomplished through rehabilitation of the Douglas Branch of the Blue Line.

Combining Circle Line Phase I with the Douglas Branch rehabilitation made possible track and structure improvements for the "Paulina Connector" segment to the Green Line. Other elements of Phase I (stations and connecti 17WseTeha -0.e9st3sn0 11.t Line. ,nk 0.00J1TJ0.0Aly -0.-0.000s a new south e

subway alignments are under consideration to minimize negative community impacts. Station location should ensure context sensitivity¹⁸⁰.

Continued implementation of the Circle Line will improve transit access to employment centers in Chicago's expanded Central Area allowing for new transit-oriented commercial, retail and residential development to be concentrated along existing, but underutilized urban infrastructure. This investment is expected to encourage redevelopment in a mature part of the region. Station and facility design include safe, convenient and comfortable pedestrian access to the proposed transit service.

The 2030 RTP includes strategies for effective management and operation of the transportation system.

When complete, the Circle Line will promote service coordination of the region's extensive commuter rail and rapid transit system. New linkages will improve security and incident response capabilities by increasing the operating flexibility of the existing rail network. The project will also provide for passenger safety and accessibility, as well as provide enhanced management communications and control of passenger rail operations.

This proposal is included in regional analyses that demonstrate 2030 RTP fiscal constraint and conformity with state air quality plans.

Public Priority

The complete Circle Line proposal has been authorized for evaluation in the current federal transportation authorization.

¹⁸⁰ The proposed re-built station at Ashland/Archer and additional station at Chinatown-Wentworth provides an opportunity to enhance access to the proposed
6.1.2 West Loop Transportation Center

Figure 19: West Loop Transportation Center



The West Loop Transportation Center is a proposed transportation terminal located under Clinton Street between the Eisenhower Expressway and Lake Street in Chicago. The terminal structure is envisioned to incorporate three levels that accommodate and facilitate easy transfers between inter-city rail, commuter rail, rapid transit and bus services. The upper level will serve the routes of the proposed Central Area Bus Rapid Transit System with destinations in the North Michigan Avenue Area, River North, McCormick Place, and the eastern part of the Loop. The middle level will serve a new rapid transit. The lower level will provide two through tracks for either commuter rail or intercity services.

Rapid transit service is being cools red either as a link for Blueine trains, creating a central area loop for Forest Park and Hozire services with a new subway under Clinton from Lake Street to Congress Parkway, or alternatively lagrement of some or all Red Line service in a new subway from near North/Clybourn to Cermak/Chinatown.

The proposal also includes increased capacit@foicago Union Station which serves several commuter and intercity passengeil services. This projectould include through-routing some AmtrakBe8Heomut

Project Planning Status

Negotiations for easements that will accommodate a guideway leading to the lower level of the proposed terminal are underway. The 2030 *RTP* anticipates project planning for this proposal to be completed over the long term.

Regional Investment

A funding source for construction of this project has not been identified. The 2030 RTP includes this proposal as a "corridor" recommendation.

Regional Plan Consistency

The project shows a high level of land use support from the 2040 Regional Framework Plan. The proposal is also included in Chicago's Central Area Plan¹⁸¹.

The West Loop Transportation Center responds to growth in the West Loop Area and will provide services needed to maintain the vitality and growth of Chicago's downtown. The project also addresses the need for improved circulation of passengers from major commuter and intercity rail services in the West Loop to other parts of Chicago's Central Area.

A main focus of the project is to facilitate access to additional development west of the historic core of Chicago. The project will encourage redevelopment of areas with established infrastructure networks. Development in the corridor, however, is advancing upon right-of-way needed to effectively implement this project.

The 2030 RTP includes strategies that address effective management and operation of the transportation system.

¹⁸¹ City of Chicago, Central Area Plan, 2003.

The remainder of the project is still in the early planning stages. Current activities include preliminary evaluations along the entire route. The alignment is expected to follow existing transit routes. The 2030 RTP anticipates project planning for this proposal to be completed over the medium term.

Regional Investment

It is anticipated that the project's completion will be accomplished through innovative private sector participation in the design, construction, operation and financing of the project. Funding for construction of this project is expected to derive from a specially prepared financial plan that identifies new revenue sources. The 2030 RTP includes this proposal as a "corridor" recommendation.

Regional Plan Consistency

The project shows a high level of land use support from the 2040 Regional Framework Plan. The service crosses the Des Plaines River, the Chicago River, and some Cook County forest preserves, such as Schiller Woods, but construction activities are not projec This proposal is included in regional analyses that demonstrate 2030 RTP fiscal constraint and conformity with state air quality plans.

6.2 Improvements to Existing Facilities

6.2.1.1.1 Brown Line Rehabilitation





The Chicago Transit Authority (CTA) Brown Line elevated structure is being rehabilitated to provide faster service and allow for longer trains.

Project Planning Status

Construction on the project is underway. Short-term implementation planning remains.

This project is included in regional analyses that demonstrate 2030 RTP fiscal constraint and conformity with State air quality plans.

6.2.1.1.2 Blue Line Douglas Branch Rehabilitation

Figure 22: Blue Line Douglas Branch Rehabilitation

1	3lue Line Douglas Branch Reha	bilitation
	J.C.A.	A N

The CTA Blue Line Douglas Branch elevated structure has been rehabilitated and the "Paulina Connector" restored to provide faster service and more flexible train routing options.¹⁸³

Project Planning Status

Project construction is complete.

Regional Investment

The 2030 RTP includes this project as a "management recommendation".

Regional Plan Consistency

This project rehabilitated a rail line dating from the early part of the last century. Eight stations were reconstructed and five miles of track replaced. This line serves the fast-growing Pilsen and Little Village neighborhoods and links these neighborhoods with downtown Chicago and the rest of the region.

183

The 2030 RTP recommends that safe non-motorized access to transit continue to be addressed.

This project is included in regional analyses that demonstrate 2030 RTP fiscal constraint and conformity with State air quality plans.

6.2.1.1.3 Green Line Enhancements

Figure 23: Green Line Enhancements

Green Line Enhancements	
	Δ
	N

The Green Line is a rapid transit line serving Oak Park and Chicago's CBD, West and South sides.

To provide more direct neighborhood access to the Green Line and to establish new opportunities for transit-oriented development, this proposal includes increasing the number of stations on the Green Line while maintaining or improving transit service levels.

Project Planning Status

The Green Line was largely reconstructed during the 1990s. To permit higher train speeds and reduce in-vehicle travel times, the number of stations on the Green Line was limited in the new design. The 2030 RTP anticipates project planning for this proposal to be completed over the long term.

Regional Investment

The 2030 RTP includes this proposal as a "management recommendation".¹⁸⁴

Regional Plan Consistency

The proposal shows a high level of land use support in the 2040 Regional Framework Plan. The project is adjacent to locations on the North and South branches of the Chicago River in the Loop area. The Green Line also crosses several of Chicago's historic boulevards.

The proposal provides additional transportation choices for community residents and business. Improved accessibility to existing transit services will support economic and community development objectives.

Because the area is redeveloping, rights-of-way for new stations should be identified to preserve needed land and plan for appropriate community interfaces.

Consideration of new station locations should include thorough assessment of both transit service coordination and local land use conditions. The service should support existing and planned adjacent land uses. The service should be coordinated with economic and community development activities to offer efficient transportation service.

The 2030 RTP includes strategies for effectively managing and operating the transportation system.

Community involvement that establishes support for a new station location should include an exdstabatil25rchfdesrsteryt intentiac pattern needs. Ne

Analyses of alternatives are underway. As the project is expected to use the Belt Railway Corridor, several competing right-of-way needs are being addressed as part of the ongoing rightof-way acquisition process.

Complementary transportation improvements (the CREATE Belt Corridor, the Express Airport Transit Service Project) are currently under evaluation.

The 2030 RTP anticipates project planning for this proposal to be completed over the medium term.

Regional Investment

Funds have been programmed for right-of-way acquisition.

Funding for construction is anticipated through discretionary federal grants made based on the proposal's merits.

The 2030 RTP includes the proposal as a "project recommendation".

Regional Plan Consistency

The project shows a high level of land use support from the 2040 Regional Framework Plan. The Orange Line Extension will support existing land uses and encourage compact land development. Growth and development in the corridor, however, is advancing upon right-ofway needed for the Orange Line Extension.

The project is being coordinated with ongoing community and transportation development activities, including the airport.

The 2030 RTP includes strategies for effective management and operation of the transportation system.

This proposal is included in regional analyses that demonstrate 2030 RTP fiscal constraint and conformity with state air quality plans.

Public Priority

Evaluation of the proposal has been authorized by the current federal authorization

Adjacent communities are evaluating bicycle access improvements along the former Skokie Valley route north and south of the project; coordination with this improvement is anticipated.

The 2030 RTP

Public Priority

The proposal to extend the line has been authorized for evaluation in the current federal transportation authorization.

6.2.1.1.6 Blue Line West Extension

Figure 26: Blue Line West Extension



The Blue Line is a rapid transit line providing service between Chicago's CBD, central Cook County and O'Hare Airport.

To provide additional transit choices for travelers, relieve congestion, and establish new opportunities for transit-oriented development, this proposal includes extending the Congress branch of the Blue Line further west along or near I-290 and I-88 into central DuPage County.

The intent is to provide transit service from population centers in the existing Blue Line corridor to growing employment centers along the I-88 corridor.

Project Planning Status

This proposal is also being evaluated in the Cook/DuPage multimodal corridor study.

The 2030 RTP anticipates project planning for this proposal to be completed over the long term.

Regional Investment

Funds for construction of the project have not been identified.

The 2030 RTP includes the Blue Line West Extension as a "corridor recommendation".

Regional Plan Consistency

The project shows a high level of land use s

6.2.1.2 Existing Commuter Rail Upgrades and Extensions

The existing commuter rail system operates primarily on radial lines serving Chicago's Central Area.

While several proposals appearing in this section extend beyond the region's planning boundaries, it should be noted that the 2030 RTP estimates of financial resources for these proposals are based on the revenue structure for the existing commuter rail service area¹⁸⁹. Proposals to extend commuter rail service beyond the region's boundaries cannot be considered strategic priorities for the region and cannot be officially endorsed by the 2030 RTP. To do so requires institutional redefinition of the region's transit service area as well as the revenue structure to support it.

6.2.1.2.1 Union Pacific North

Figure 28: Union Pacific North Improvements

th Line Unerades	Union Pacific Nor

The Union Pacific North Line serves Chicago, northern Cook and Lake Counties. The proposal is to upgrade the existing signal system and install additional crossovers between downtown Chicago and the outer terminal in order to increase the operating capacity of the UP-N Line.

¹⁸⁹ This area was established by the RTA as Cook, DuPage, Kane, Lake, McHenry and Will Counties in Illinois.

Project Planning Status

The 2030 RTP anticipates project planning to be completed over the long term.

Regional Investment

Structure and track improvements along portions of the line were recently completed in order to maintain existing service reliability.

The 2030 RTP includes this proposal as a "system" recommendation.

Regional Plan Consistency

The project shows a high level of land use support from the 2040 Regional Framework Plan.

The 2030 RTP includes strategies for effectively managing and operating the transportation system.

This would encourage utilization of the commuter rail system by creating the ability to operate more trains, and at faster speeds, shortening travel times and increasing the efficiency of the physical plant.

6.2.1.2.2 Heritage Corridor

Figure 29: Heritage Corridor Improvements



The Heritage Corridor is a 38-mile commuter rail line serving communities in southwest Cook and northwest Will County. The Heritage Corridor project will provide full-service commuter rail operations on the Heritage corridor to serve Chicago, Summit, Justice, Willow Springs, Lemont, Lockport, Romeoville, and Joliet. The line, which also serves interregional passenger rail and a busy freight service, currently has limited service.

The proposal is to upgrade infrastructure and service levels and to add stations. Expanded service will include improved peak and off-peak service frequencies as well as weekend service. The improvements are also expected to reduce passenger delays by resolving freight conflicts and expanding service to additional stations.

Project Planning Status

The 2030 RTP anticipates project planning for this proposal to be completed over the long term.

Regional Investment

No funds have been identified for this or associated interregional high-s

6.2.1.2.3 Rock Island

Figure 30: Rock Island Improvements and Extension



The Rock Island District (RID) Line currently operates between LaSalle Street Station in downtown Chicago and Joliet Union Station. The initial proposal is to upgrade infrastructure and service levels. An extension to Minooka is also proposed to provide transit access to jobs.

The upgrade proposal includes adding a third track to the nine-mile double-track portion (between Gresham Junction and a point north of 16th Street Junction) of the Rock Island District (RID) Line, north from Gresham, where the Beverly Branch trains connect with the RID Main Line. The additional track will accommodate future expansion of RID service, the proposed SouthEast Service and the eventual connection of the SouthWest Service with LaSalle Street Station.

The project will also include related bi-directional signals and centralized traffic control to integrate with existing RID operations, plus several new or rehabbed bridges over city streets. Ancillary benefits include freeing up capacity at Chicago Union Station.

Another significant Rock Island District upgrade proposal includes the 47th Street Yard improvements that will expand and modernize the operations facilities between 47th and 51st Streets that serve as storage and maintenance facilities for all trains using the line. This yard expansion also offers the potential to implement express or limited-stop service.

The proposed extensions include several options to provide passenger rail service west of Joliet. Due to the significant residential growth in Will, Kendall, and Grundy Counties, the 2030 *RTP* initially recommends an extension of the Rock Is

crosses the Des Plaines and DuPage Rivers, which are designated "C" quality streams with opportunities for restoration to a higher quality stream,¹⁹⁴ and is near concentrations of wooded and agricultural lands in southwest Will County.

6.2.1.2.4 SouthWest Service

Figure 31: SouthWest Service Improvements and Extension



The proposal is to upgrade infrastructure and service levels and to provide an extension of service within rapidly-growing Will County.

The proposal includes constructing a 2-mile segment beginning west of Belt Junction (Belt Railway of Chicago, BRC) near 75th/Loomis, with a combination of bridges and embankment, crossing above Norfolk Southern (NS) tracks south of 74th St, ending near 75th/Normal where the SouthWest Service (SWS) will access the RID tracks. This installation of two rail-to-rail grade separations to carry the SWS above the BRC and NS tracks will provide improved reliability and fewer operating conflicts. Rerouting the SouthWest service into Chicago's LaSalle Street Station will relieve congested operations at Union Station.

An extension to Midewin (near the former Joliet Arsenal site) is also proposed. Extension of the SouthWest Service to Midewin will provide commuter rail service to the Midewin National Tallgrass Prairie, Lincoln National Cemetery, and the Centerpoint Intermodal Center, as well as provide a terminal closer to rapidly growing Elwood and Wilmington. The extension will use primarily former Joliet Arsenal right-of-way by connecting at Manhattan.

Project Planning Status

The SouthWest Service extension to Manhattan opened for service in January, 2006. New stations in Palos Heights, New Lenox and Manhattan are also in service. Other station reconstruction and parking projects associated with the improved service are proceeding to completion.

The 2030 RTP anticipates project planning for upgrades related to the CREATE Program's Passenger Corridor to be completed in the short term. Further planning, particularly for extension proposals, will be completed over the long term.

Investment category

Further progress toward completing the proposed upgrades to existing service is contingent on funding through the CREATE program. Funds for construction of the extension have not been identified.

The 2030 RTP includes the recently completed Manhattan extension service as a "management" recommendation; the remainder of the proposed upgrade as a "system recommendation"; and extension of the line to Midewin as a "corridor" recommendation.

Regional Plan consistency

The project shows a high level of land use support from the 2040 Regional Framework Plan. The proposed extension to Midewin is within the north border of Midewin National Tall Grass Prairie in southwest Will County and crosses the Prairie Creek System in central Will County. The proposed extension is within the Lower Des Plaines River Watershed, classified as high priority for protection and/or restoration. The project would also affect agricultural land in central Will County. Evaluating of the proposal to extend the service to Midewin will need to be especially sensitive to concerns regarding the environmental and safety implications of its proximity to a nature preserve.

The upgrade proposal encourages redevelopment in established urban areas and supports the functions of adjacent land uses.¹⁹⁵ The new service also provides for additional transportation choices in areas with little or no rail service.

Particularly for the corridor surrounding the newly opened service, community development practices should continue to foster transit oriented development.

The 2030 RTP includes strategies for effective management and operation of the transportation system.

New rail-to-rail grade separations will improve operations and eliminate delays caused by freight interference. The new routing will also allow SWS trains to terminate at the less congested LaSalle Street Station in downtown Chicago. Full service includes rerouting increasing train frequency and providing additional parking.

¹⁹⁵ An example of these can be seen in Orland Park's plans to provide a transit-oriented development near the Orland Park 143rd Street Station.

Pedestrian accessibility and safety should be pursued collaboratively as a project management strategy, particularly to ensure that rail stations are safe and inviting places to walk. Connecting bus services should be evaluated to ensure maximum use of the new commuter rail offering.

Additional track will allow bi-directional service and more reliable passenger operations. Signal improvements will also facilitate efficient operations and improve safety.

This proposal is an integral element of the CREATE program.

Service improvements on the existing line are included in regional analyses that demonstrate 2030 *RTP* fiscal constraint and conformity with state air quality plans.

6.2.1.2.5 Metra Electric

Figure 32: Metra Electric Improvements and Extension



The Metra Electric District (MED) serves southern Chicago and the south suburbs.

The initial proposal is to upgrade infrastructure and service levels. The proposal includes relocation of the present facilities at 18th Street and Weldon Yard that currently service Metra Electric trains during the daytime layover. The present facility has long been overcrowded and outmoded, so an entirely new facility suitable for both present needs and potential expansion will be required.

The proposal also includes consideration of alternative service levels. Improved local community access, increased frequencies and off-peak service, as well as service and fare

coordination with other transit services are expected to increase demand and better serve local needs.¹⁹⁶

An 8-mile extension of the Metra Electric District line between University Park and the proposed South Suburban Airport is also recommended. This improvement is expected to provide transit access to jobs at and near the airport, plus express passenger transport to and from downtown Chicago and intermediate locations. An extension to Kankakee is also proposed.¹⁹⁷

Project Planning Status

The 2030 RTP Update_anticipates infrastructure upgrade proj

6.2.1.2.6 North Central Service

Figure 33: North Central Service Improvements



The North Central Service was introduced in August, 1996. The proposal calls for ongoing continuing upgrades to infrastructure and service levels. Phase I improvements to the initial North Central Service Improvements include double-tracking much of the line, new stations, additional parking, and improved operations via the Milwaukee District West Line to Union Station.

Project Planning Status

The first phase of double-tracking and service upgrade of the North Central Service Line was completed in January 2006. The project now provides additional capacity for improved service and additional stations between Chicago Union Station and Antioch.

Additional improvements may be implemented through the regular capital programming process.

The 2030 RTP anticipates project planning for this proposal to be completed over the long term.

Investment category

Because capital construction is substantially complete, the 2030 RTP includes this project as a "management recommendation."

6.2.1.2.8 Milwaukee District North

Figure 35: Milwaukee District North Improvements and Extension



The Milwaukee District North line currently provides service between Fox Lake and downtown Chicago.

The present route is from Chicago Union Station to the Rondout junction in central Lake County, where service continues northwest²⁰⁷ terminating at Fox Lake.

The proposal includes upgrading infrastructure and service levels with two possible extensions, one to Richmond and another to Wadsworth.

The Richmond proposal extends the Fox Lake segment and includes additional track between Rondout and Fox Lake.²⁰⁸

The extension to Wadsworth includes 13 miles of new service between Rondout and Wadsworth in northeastern Lake County. The proposal is to follow main line tracks²⁰⁹ northward to serve the communities of Wadsworth, Gurnee, western sections of Waukegan, and Green Oaks.

207

already includes bi-directional signaling and Centralized Traffic Control, but track capacity will require close scrutiny.

6.2.1.2.9 Union Pacific Northwest

Figure 36: Union Pacific Northwest Improvements and Extension



The Union Pacific Northwest (UP-NW) Line is the region's longest commuter rail line, extending from Chicago to Harvard with a seven-mile branch to McHenry.

Two improvements are proposed on the UP-Northwest: infrastructure upgrades and an extension to Johnsburg²¹³. The upgrades include improvements to the existing signal system and additional crossovers and other track improvements to increase the operating capacity and reliability. The extension to Johnsburg will allow improved operations on the entire line. New yards are planned for the Woodstock and Johnsburg areas.

Project Planning Status

Alternatives analyses are underway for the entire proposal.²¹⁴

The 2030 RTP anticipates project planning for this proposal to be completed over the medium term.

²¹³ The original 2030 RTP proposal extended the service to Richmond[.]

²¹⁴ "Metra UP-Northwest Line Core Capacity Upgrades" including an extension to the McHenry Branch as far as Johnsburg.

accommodating bicycle and pedestrian travel along Northwest Highway and along McHenry County's Prairie Trail should be evaluated as the proposal is developed. Pedestrian safe routes should be addressed along the entire corridor.

The need for additional rail-highway grade separations should also be evaluated.

Additional transit service coordination, particularly for reverse commute and non-work trips should be evaluated as the project is developed.

This proposal is included in regional analyses that demonstrate 2030 RTP fiscal constraint and conformity with state air quality plans.

Public Priority

The project has been authorized for evaluation in the current federal authorization.

6.2.1.2.10BNSF Railway

Figure 37: BNSF Railway Extension



The BNSF Railway serves western Cook, DuPage and southern Kane Counties.

The initial proposal is to extend the existing commuter rail service from its current terminus in Aurora to Oswego (in Kendall County). A longer extension terminating in Plano is also proposed.
6.2.1.2.11 Union Pacific West





The Union Pacific West (UP-W) Line is a commuter rail line serving Chicago's CBD and western suburbs. The Union Pacific West Line (UP-W) extends nearly 44 miles west from Chicago to Elburn. The UP-W Line serves 62 communities in parts of Kane, DuPage and western Cook counties. The original *2030 RTP* included an extension from Geneva to Elburn. This extension opened for service in January 2006.

To provide faster and more fre

An additional proposal includes consolidation of the M-19A/California Avenue Yard.

Project Planning Status

The extension from Geneva to Elburn opened for service in January, 2006.

Alternatives analyses for the proposed core capacity upgrade to the entire line are underway.

The 2030 RTP anticipates project planning for this proposal to be completed over the medium term.

Investment Category

Funding for construction is anticipated through discretionary federal grants made based on the proposal's merits.²²²

Several CREATE program grade separations are integral to the project²²³.

The 2030 RTP includes the completed extension to Elburn as a "management recommendation" and the remaining upgrade proposal as a "system recommendation."

Regional Plan Consistency

The project shows a high level of land use support from the 2040 Regional Framework Plan. This project is located within the Middle Des Plaines River and Middle Fox River Watersheds, classified as very high priority for protection and/or restoration.

The UP-W has served adjacent communities for most of their history. The passenger service shares the right-of-way with significant freight traffic. Improvements are primarily along existing right of way. Project development should include addressing community and environmental strategies in the corridor²²⁴.

There is an increasing demand for service in this region due to substantial residential growth²²⁵.

The UP-West track and signal improvements will support the functions of existing and planned adjacent land uses. Improved transit service in western Cook, DuPage, and Kane Counties will

222

away from entrances to the two coach yards. Improved operating efficiencies will enable both revenue and deadhead trains to move through the new crossing point at increased speeds and reduced operating costs, resulting from using simple diamond crossings rather than double-slip switches.

encourage compact land development. Several communities along the corridor are pursuing infill development that will complement the improved service.

These improvements will also enhance the potential for reverse-commuting along the UP-W Line.

The proposal is included for evaluation in the Cook/DuPage Corridor Study. Initial evaluation of this proposal indicates that it serves a discrete travel market and is not a likely alternative to other improvements proposed in the corridor.

The 2030 RTP includes strategies for effective management and operation of the transportation system.

The UP-West Core Capacity upgrade improves transportation choices for the corridor's travelers. More trains with faster, more reliable service are envisioned.

The M-19A/California Avenue Yard is expected to significantly improve operations by locating a new locomotive facility adjacent to the coach yard used by all Union Pacific train equipment. Also, a new and modern maintenance facility (including an environment-friendly paint shop) will replace the existing one, and the yard will be expanded with wider track spacing for efficiency and safety. Improved operating efficiencies will en

6.2.2.1 I-90/94

Figure 39: I90/94 Improvements



This project consists primarily of reconstructing the existing roadway and reconfiguring access to improve safety. Modified access and auxiliary lanes will be included in the project to reduce weaving maneuvers. Through-access on I-90 to the Chicago Skyway Toll Bridge will be enhanced with a flyover to the express lanes north of 63rd Street.

Project Planning Status

The project is largely complete and open to traffic.

Investment Category

This project was largely complete in 2007 and is a "management recommendation."

Regional Plan Consistency

The project is consistent with the 2030 RTP goal to maintain the existing transportation investment.

The 2030 RTP includes strategies to effectively manage and operate the transportation system. The reconstruction project takes advantage of many design and engineering opportunities to meet this objective.

6.2.2.2 I-80/94

Γ

Figure 40: I-80/94 Improvements

1.20/94 Minsort Fernance Jumpor contes

I-80/I-94 provides a link between northern Illinois and the northern tier of the United States. It is

6.2.2.3 I-190

Figure 41: I-190 Improvements



This project consists primarily of redesigning and reconfiguring arterial access to I-190 and O'Hare International Airport to improve mobility and reduce congestion and collisions.

Project Planning Status

Project planning is advanced, with adequate funding being the major impediment to further construction. However, further development of O'Hare International Airport may require some project elements to be periodically revisited. Planning is expected to be complete in the medium term.

Investment Category

Due to funding uncertainties, the 2030 RTP includes this project as a "system recommendation". Funding is expected to be made available through regular capital programming activities.

Regional Plan Consistency

The 2030 RTP includes strategies to effectively manage and operate the transportation system.

The improvements will include collector and distributor roads that will facilitate access to the many job and activity centers on the airport site.

Reconstruction with additional capacity from the Elgin Toll Plaza to Randall Road has been completed. All remaining segments west to Sandwald Road are being studied.

In addition, sections of I-90 away from the region's most developed areas, from I-39's junction with I-90 in Rockford to Madison, Wisconsin are scheduled for additional lanes between now and 2011.

The 2030 RTP anticipates project planning for this proposal to be completed over the medium term.

The participation of the parti

McGraw, WelthitibeFroerityheasr ofe

6.2.2.5 I-88 (Ronald Reagan Memorial Tollway)

Figure 43: I-88 (East-West Tollway) Improvements



I-88 (Ronald Reagan Memorial Tollway) serves DuPage and Kane County, linking the region with western Illinois.

The initial RTP proposal is to provide an additional lane in each direction on the Ronald Reagan Memorial from I-290 to Orchard Road in Kane County. Since most of the Ronald Reagan Memorial Tollway will require reconstruction in the coming decades, capacity additions can be efficiently implemented during reconstruction projects.

The road also serves external travel to DeKalb and northern Illinois. This external travel may also soon include additional frei

Value pricing for trucks was implemented in early 2005 to encourage trucks to use this facility during the mid-day off-peak and overnight hours.

Additional toll plazas are currently undergoing conversion to open-road tolling.

Reconstruction with additional capacity from Naperville Rd to IL 59 is complete. All remaining segments west to Orchard Road have been staged for construction to begin between now and 2011.

The 2030 RTP anticipates project planning for this proposal to be completed over the short term.

Regional Investment

Because funds for this project are identified in the State's capital program, the project is included in the 2030 RTP as a "committed recommendation."

Regional Plan Consistency

The project shows a high level of land use support the 2040 Regional Framework Plan. The project is partially located in the Lower Fox River Watershed, which is classified as very high priority for protection and restoration. The project crosses the Fox River, the Main and East Branches of the DuPage River, and Salt Creek. The project is adjacent to DuPage County preserves, such as Big Woods, Danada, York Woods, Fullersburg Woods and the privately owned Morton Arboretum, which encompasses a large concentration of threatened and endangered species communities.

I-88 links the near west suburbs of Chicago with Oak Brook and the Naperville/Aurora areas. The corridor has grown rapidly and is the home of several commercial centers. The highway was originally built through less-developed areas between transit-oriented communities that had developed along existing parallel commuter rail services; the areas surrounding the road have since developed with lower density uses interspersed with land preserved from development. Intense development pressure is expected to continue, with more opportunities to provide accessibility through recommended capacity improvements and complementary new transit service.

The 2030 RTP includes regional strategies for improved management and operations of the region's major highway facilities.

This proposal is also being evaluated in the Cook/DuPage multimodal corridor study.

Close coordination of this highway project with all proposed transit improvements in the corridor is necessary. The project is part of a multimodal transit corridor extending from downtown Chicago to the western suburbs. Portions of this project coincide with the proposed DuPage "J-Line" and Blue Line extension. Evaluation of priority treatments for transit and carpools should be evaluated.

The project will improve safety and accessibility for a highway serving major residential and employment centers. Safe walking and bicycling accommodation across the facility from adjoining neighborhoods and feeder bus services to proposed transit services is suggested.

Bicycle and pedestrian accommodation across the corridor should be pursued.²³⁰ In addition, several reconfigured and expanded auxiliary lanes and interchanges may be appropriate to

6.2.2.6 I-294/94 (Tri-State Tollway)

Figure 44: I-294/94 (Tri-State Tollway) Improvements



The Tri-State Tollway was originally intended to provide a bypass of congested city highways for external trips traveling through the region. Today, the Tri-State also links suburban communities in an arc from the south suburbs to Lake County, providing access to O'Hare International Airport and several commercial and industrial centers, as well as intermodal freight terminals.

The initial proposal is to provide additional lanes on the Tri-State Tollway south from US12/20 (95th Street) to IL394, and north from Balmoral Avenue to the Wisconsin state line.²³³

Project Planning Status

Toll plaza conversion to open-road, express electronic toll collection is underway or complete²³⁴. Value pricing for trucks was implemented in early 2005 to encourage trucks to use this facility during the mid-day and overnight hours.

²³³ The additional lanes project should be extended to the Wisconsin state line (north of Russell Road) to match a project planned for medium-range construction in Wisconsin.

²³⁴ Open-road tolling improvements are completed or underway at Irving Park, Touhy, Cermak, 82nd/83rd, Waukegan and 163rd.

The project will improve safety and accessibility for a highway serving major residential and employment centers, including Chicago O'Hare International Airport, Waukegan, and the south suburbs.

This proposal is included in re

A phase-I engineering study for the project has been completed.

The 2030 RTP anticipates project planning for this proposal to be completed over the long term.

Regional Investment

Funding for the project has not been identified.

Because the proposed improvements are expected to be implemented through the normal programming process, the 2030 RTP includes this proposal as a "system recommendation".

Regional Plan consistency

The project shows a high level of land use support from the 2040 Regional Framework Plan. The project passes through the Thorn Creek Forest Preserve and Thorn Creek in south Cook

6.2.2.8 I-57

Figure 46: I-57 Improvements



I-57 links the Chicago area with east central and southern Illinois as well as cities of the lower Mississippi River valley. I-57 also provides a regional link to the proposed South Suburban Airport.

The initial proposal is to add lanes to I-57 from I-80 south first to the proposed I-57/IL 394 connector then to Naperville Road.

Project Planning Status

Complementary improvements, including the South Suburban Airport, the I-57/IL 394 Connector, and IL 394 are in various stages of study.

Transportation management strategies associated with the project may be completed in the short or medium term.²³⁶

The 2030 RTP anticipates project planning for this proposal to be completed over the long term.

Regional Investment

²³⁶ Strategies may include interim strategic transportation management strategies to control congestion and facilitate

6.2.2.9 I-80

Figure 47: I-80 Improvements



I-80 serves southern Cook and Will Counties, linking the region to the northern tier of the United States. The proposal is to add lanes to I-80 first from US 45 to I-55 then to the Grundy County line.

Project Planning Status

A Phase-1 engineering study of the project is currently underway.

The 2030 RTP anticipates project planning for this proposal to be completed over the mediumterm.

Investment Category

Funding for construction has not been identified.

Because the improvement can be accomplished through the regular programming process, the 2030 RTP includes this project as a "system recommendation".

Regional Plan Consistency

The project shows a high level of land use support from the 2040 Regional Framework Plan.

The section of I-80 from I-55 to US45 crosses the Des Plaines River in Joliet, the Marley Creek System in eastern Will County near Frankfort, and the Hickory Creek System in central Will County. The project is located in the Lower Des Plaines Watershed in central and eastern Will County, which is identified as very high priority for protection and/or rest

6.2.2.10 I-55

Figure 48: I-55 Improvements

I-55 links the Chicago area to central Illinois, St. Louis, and the southwest United States. Rapid population and employment growth has taken place in this corridor over the past several years, and is expected to continue.

This initial proposal is to add lanes to I-55 (Stevenson Expressway) from Naperville Road to Coal City Road. When completed, improvements from Naperville Road to I-80 will include complete roadway reconstruction, bridge reconstruction or replacement, and additional safety and operations improvements.

Project Planning Status

Additional lanes have been completed from Naperville Road to Weber Road. The I-80 interchange is now being reconstructed and th

Improvements at Arsenal Road²⁴² remain in the multi-year state highway program.

A study has commenced on I-55 from River Road to Coal City Road in the Wilmington area of southern Will County.²⁴³ Additional warehousing and industrial development expected in this area are focusing attention on I-55 operations and capacity. The study's primary focus is the rehabilitation and reconfiguration of the interchanges; one of the existing interchanges has obsolete designs, including a U-turn in the freeway median. The need for additional lanes will also be evaluated.

The 2030 *RTP* anticipates that Arsenal Road and I-55 interim improvements, including additional lanes from Weber Road to I-80 will be completed in the short term. Project planning for the Wilmington area project will be completed in the medium term. The remainder of the proposal is anticipated to be completed in the long term.

Investment Category

The 2030 RTP includes the completed section from Na Weber Roa haabe

degraded.²⁴⁶ From north of River Road to the Grundy County line, I-55 passes through the Kankakee River and Upper Illinois River Watersheds, both identified as being very high priorities for protection and restoration.²⁴⁷

The project will also pass through or near the Des Plaines Fish and Wildlife Area and the Midewin National Tallgrass Prairie, an important area under development for the region.

Continued planning to complete this proposal should address access concerns raised by adjacent communities.²⁴⁸

The 2030 RTP includes strategies for effective management and operations of the region's transportation system.

Reconfigured and expanded auxiliary lanes, interchanges and viaducts may be appropriate to improve traffic flow and community access, as well as highway safety. In addition, freight accommodations need particular attention in this corridor because of unusually high truck

Td16000041nets. The facility serves one of the region's

6.2.2.11 Elgin-O'Hare Expressway Expansion

Figure 49: Elgin-O'Hare Expressway Expansion



The Elgin-O'Hare Expressway serves northwest Cook and northern DuPage Counties. An initial segment of the highway was opened in the 1990's and presently carries high traffic volumes. In addition to extending the Elgin-O'Hare east and west, the *2030 RTP* recommends adding lanes to the existing freeway, which provides two lanes in each direction from US20 to near I-290.

Project Planning Status

Implementation of this project is predicated on completion of the Elgin-O'Hare extensions as proposed.

The 2030 RTP anticipates project planning for this proposal to be completed over the long term.

Investment Category

Funds for construction of the Elgin-O'Hare Expressway additional lanes project have not been identified.

The 2030 RTP includes the Elgin O'Hare Expressway additional lanes project as a "system recommendation," indicating that the project may be completed through the regular programming process.

Regional Plan Consistency

The project shows a high level of land use support from the 2040 Regional Framework Plan.

The project should be coordinated with regional and local jurisdictions along this facility that are developing bicycle trails and local bicycle networks. As this road passes through residential developments and near transit services, improved non-motorized access along and across the expressway should be considered. In addition, the RTP recommends consideration of priority treatments for carpools and transit vehicles where appropriate.

The 2030 RTP

6.2.2.12 I-290 High-Occupancy-Vehicle Lanes

Figure 50: I-290 High Occupancy Vehicle Lanes

I-290 (Eisenhower Expressway) serves Chicago's CBD and western suburbs. The initial HOVswae on 2.12 I-froms, 2.188 to Austins B

Regional Investment

The 2030 RTP includes the completed portion of the project at the I-290 /I-88 interchange as a "management recommendation" indicating an ongoing commitment to effective management and operation of the facility.²⁵⁴

Funds to evaluate and plan for the "Oak Park Cap" are included in the current federal authorization.

No funds have been identified for construction of this project.²⁵⁵

Safety improvements to the recently completed I-290/I-88 project should be addressed as a "management recommendation." The 2030 RTP includes completion of the entire I-290 HOV Facility as a corridor recommendation.

Regional Plan Consistency

The project shows a high level of land use support from the 2040 Regional Framework Plan. The project crosses the Des Plaines River and terminates near historic Columbus Park, where adjacent auxiliary lanes and interchange improvements are planned. The project is also near the Gunderson Historic District.

The proposal is included for evaluation in the Cook/DuPage Multimodal Corridor Study. Continued evaluation of this proposal should include mass transit needs, non-motorized transportation, and the "Oak Park Cap" proposal.²⁵⁶ Economic development, including transitoriented developments being planned in Maywood and Hillside, should be evaluated. Historic concerns, including Columbus Park, the Gunderson Historic District, and other sites should also be considered.

Because this is an intensively developed transportation corridor, securing rights-of-way for future multi-modal improvements should be a priority.

The 2030 RTP includes strategies for effectively managing and operating the region's transportation system.

The corridor has long been congested, partly because of a lane imbalance at both project termini. In addition, increasing numbers of trips along the corridor are not CBD-oriented, making them less amenable to diversion to existing transit.

tracked. Construction is expected to begin in 2008. Thus, the project planning status is "short term."

Construction is enabled by the Illinois Tollway's additional financial capacity.

Regional Investment

Because funds for this project are identified in the Illinois Tollway's Congestion-Relief Program,

The proposal is to introduce a new commuter rail line serving Chicago, southern Cook and northeastern Will County.

The initial proposal is for a new 33-mile commuter rail line between the Chicago CBD and southern Cook/northeastern Will County suburbs. The proposed route runs north from Crete using primarily UP/CSX right-of-way, joining the Metra Rock Island District at Gresham to LaSalle Street Station.

Project Planning Status

Initial feasibility studies for the SouthEast Service Line are complete. ²⁶⁰ Several communities along the proposed line have evaluated station sites for the proposed service²⁶¹.

Alternatives analyses are currently underway.

Complementary transportation improvements are being evaluated for the Red Line Extension and freight improvements associated with the CREATE Program.

The 2030 RTP anticipates project planning for this proposal to be completed over the medium term.

Regional Investment

Funding for construction is anticipated through discretionary federal grants made based on the proposal's merits.²⁶²

The 2030 RTP includes the proposal as a "project recommendation."

Regional Plan Consistency

The project shows a high level of land use support from the 2040 Regional Framework Plan. The project crosses streams and wetlands associated with Thorn Creek, Butterfield Creek and Plum Creek in the southern Cook/northern Will County segment of the project. The project is adjacent to Thorn Creek Forest Preserve properties in southern Cook County.

The project is expected to provide additional transit access to jobs from underserved areas and promote local economic development.²⁶³

²⁶⁰ A 1999 study by ICF Kaiser. The SouthEast Service Operations Study for the proposed rail line was completed in February 2005 by CANAC for Metra.

²⁶¹ The South Suburban Commuter Rail Corridor Land Use & Local Financing Study was completed for each proposed station site in December 2004 by Wilbur Smith Associates, consultant team for the South Suburban Mayors and Managers Association and the Village of South Holland.

²⁶² An application for FTA New Starts funding is being prepared.

²⁶³ The project will encourage economic development in a part of the region that has lagged behind other areas of the region. The SouthEast Service is to provide a commuter rail alternative along the Metra Rock Island and Union Pacific/CSX right-of-way from Chicago south through such towns as Dolton, Thornton, Chicago Heights, Crete, and Beecher.

The project supports adopted community and environmental strategies by providing additional transportation choices for communities. The proposal is supportive of local land use strategies. This new line would provide commuting opportunities for a fast growing, underserved corridor of the south suburbs.

The

6.3.1.2 Elgin-O'Hare Expressway Extension and West O'Hare Bypass

Figure 53: Elgin-O'Hare Expressway and West O'Hare Bypass

Elcin_O'Usra.Excepterantestentinondellest_O'Usra.Poppores

The Elgin-O'Hare Expressway is proposed to link the western suburbs in Cook and DuPage Counties with Chicago O'Hare International Airport at the proposed western terminal. The initial proposal is to provide new multimodal highway segments to complete west and east segments of the existing Elgin-O'Hare Expressway and provide new access to and a western bypass of O'Hare Airport.

The proposal is comprised of several distinct phases of implementation. On the eastern end of the existing Elgin-O'Hare facility, an expressway segment is proposed to complete the facility's connection to O'Hare. On the western end of the existing Elgin-O'Hare facility, a short "near west" expressway segment is proposed to bypass an existing neighborhood and complete the facility's connection to US20. The remaining western sections²⁶⁴ are proposed as improvements to US20 to an access-controlled arterial facility.²⁶⁵

The O'Hare Bypass proposal consists of two sections. On the south, a new spur freeway is proposed to connect from the Tri-State to the extended Elgin-O'Hare expressway and the
planned O'Hare western terminal.²⁶⁶ On the north, a new connection will link the proposed western terminal with the Northwest Tollway.

Project Planning Status

Rights-of-way needed for the new facility have been evaluated, but are subject to ongoing development pressure.²⁶⁷ Large tracts of right-of-way have been acquired for the project.

The 2030 RTP anticipates project planning for the Elgin-O'Hare east extension project to be completed in the medium term, the west extension

This section of the Elgin O'Hare passes through a major industrial and commercial goods distribution center for the region. Freight access management and operations will be important considerations in facility design. In addition, there are existing residential communities adjacent to the corridor that should be considered in mitigating the impacts of the project. Arterial designs should include signal improvements and access control.²⁷⁴

Pedestrian and bicycle accommodations and priority facilities for transit service would improve travel options for residents, employees and other corridor users. The safe accommodation of pedestrians and bicycles adjacent to the facility and at arterial connections should be included in the project design as appropriate. Particular attention should be paid to non-motorized access to rail stations and bus services.

The 2030 RTP recommends that improvements to the existing Elgin O'Hare sections provide a freeway-to-freeway connection between the Elgin-O'Hare and I-290. However, to the east, while the initial proposal remains a freeway, study of the project should continue, including the possibility for an arterial solution that addresses transit and community development.²⁷⁵ The 2030 RTP also recommends that further development of the Elgin-O'Hare proposal include consideration of the "J" Line Bus Rapid Transit and potential STAR Line alternatives and extensions.²⁷⁶

This proposal is included in regional analyses that demonstrate 2030 RTP fiscal constraint and conformity with state air quality plans.²⁷⁷

several hundred feet wide exists to accommodate this interim step. It will also provide a substantial part of the e a nite23.tw4(veravel .054Td(it.054 7e andm)06 improvem)iay-ght-of-he Eop

Project Planning Status

A feasibility study covering the I-90 (Northwest Tollway) portion of the project indicated significant potential for transit ridership in the corridor.²⁷⁸ A feasibility study for the Inner Circumferential Rail Line is also complete.²⁷⁹

Following an evaluation of alternatives, the initial O'Hare to Joliet portion of the STAR Line was endorsed by local and regional agencies as the preferred initial segment employing commuter rail-style service using the Northwest Tollway (I-90) from O'Hare to Hoffman Estates and the Elgin Joliet & Eastern (EJ&E) freight rail line from Hoffman Estates to Joliet. Planning for these future phases of the STAR Line will continue, and should be evaluated for coordination opportunities with other proposed commuter rail improvements.

Corridor-level planning studies have been completed. Early environmental studies, alternatives analyses, and feasibility studies are underway. Complementary projects, including reconstructing and expanding the Northwest Tollway are also being evaluated.

Further alternatives analyses of this initial segment are also being conducted.²⁸⁰

The 2030 RTP anticipates project planning for the initial proposal to be completed in the medium term. The 2030 RTP anticipates project planning for completion of the remainder of the STAR Line proposal over the long term.²⁸¹

Investment Category

Funding for construction of the initial proposal is anticipated through discretionary federal grants made based on the proposal's merits.²⁸²

The 2030 RTP includes the initial phase of the STAR Line as a "project recommendation" and the remaining phases of the STAR Line as "corridor recommendations".

Regional Plan Consistency

The project shows a high level of land use support from the 2040 Regional Framework Plan.²⁸³

In Lake County, the STAR Line project is within the Lake Michigan Watershed, identified as very high priority for protection and/or restor[(NgmT18s)]TJ03302 Tc 94c 0 2.18n8-51g6-51 aefomilabj/TT1 1 6

Coordination with other passenger and freight services should be evaluated.²⁸⁷ To maximize the value to riders and the communities served, the latest technological innovations will be considered for rail vehicles and buses.²⁸⁸

Coordination with other regional transit services are being developed for key transfer stations, and the potential for regional service integration will be evaluated.

6.3.2.2 McHenry-Lake Corridor²⁸⁹

Figure 56: McHenry-Lake Corridor



²⁸⁷ The location of certain alternatives on right-of-way shared by rail freight will require consideration of the latest Federal Railroad Administration regulations and guidelines. A combination bus-truckway is one of the alternatives under review.

²⁸⁸ Stations and rail cars will be accessible for persons with disabilities. Consistent with new stations on other lines, escalators and elevators will be provided. The rail lines will be grade-separated. Stations will be designed to maximize safety of transit patrons. City plans call for coordination of signals, computer monitoring, and other measures to improve traffic flows especially on major arterials, of which the SRAs are a subset. Portions of the LRT and BRT alternatives would operate on SRAs and rely on special measures to provide reliable and fast transit service. These may include signal preemption and dedicated lanes. Rapid transit alternatives under consideration are grade-separated from city streets⁻

²⁸⁹ This project has historically been referred to as "Richmond-Waukegan".

The initial proposal is to provide a fully access-controlled highway from the terminus of the US12 freeway at the Wisconsin border to the IL120 north extension near Wilson/Fairfield Road.

Project Planning Status

This proposal is substantiated by resolution of the Illinois General assembly in 1993 authorizing its study and evaluation by the Illinois State Toll Highway Authority.

Several arterial bypasses

Alternative alignments and controlled access arterial solutions may be suited to meeting community and environmental objectives.

6.3.2.3 Central Lake County Corridor

Figure 57: Central Lake County Corridor



The initial proposal is to extend IL53 from its current terminus at Lake-Cook Road to central Lake County. The proposal includes a dual terminus with I-94 to the east and IL120 at Wilson Road to the west²⁹³.

Project Planning Status

The proposal is substantiated by resolution of the Illinois General assembly in 1993 authorizing its study and evaluation by the Illinois State Toll Highway Authority.

During the late 1990s, a comprehensive study of Lake County's transportation needs was undertaken. During the study, the effectiveness of various alternatives to address Lake County's most severe transportation problems was evaluated. This effort resulted in a set of two draft alternative transportation scenarios, one including the IL53 extension with a limited set of arterial and transit expansion and another offering an alternative set of more extensive arterial and transit expansion.

²⁹³ The proposal includes additional lanes at connections to I-94 and IL120.

Evaluation of a proposal to implement the dual terminus (a.k.a. "IL120 bypass) segment of the initial proposal is underway. The 2030 *RTP* recognizes that implementation of this portion of the project may function both as an interim improvement to the complete proposal and as an alternative to the complete proposal with independent utility to local communities.

The 2030 RTP anticipates project planning for the IL120 portion of the proposal to be completed in the medium term. Planning for the remaining improvements in the corridor is anticipated to be complete in the long term.

Regional Investment

Funding for construction of the project has not been identified.

The 2030 RTP includes the Central Lake County proposal as a "corridor recommendation."

Regional Plan Consistency

The project showed a high level of land use support from the 2040 Regional Framework Plan. The project crosses areas dense with wetlands, rivers and streams, including the Mill Creek System, the Des Plaines River, Indian Creek and Buffalo Creek in the north-south segment. The project also passes through concentrations of threatened and endangered species especially dense

6.3.2.4 I-355 Extension

Figure 58: I-355 Extension



The proposal is to extend I-355 from its current terminus at I-55 south to I-80 and is intended to provide improved highway accessibility in a rapidly growing part of the region. This project connects to the proposed South Suburban corridor.

Project Planning Status

This proposal is substantiated by resolution of the Illinois General assembly in 1993 authorizing its study and evaluation by the Illinois State Toll Highway Authority.

During the late 1990s, the Illinois Department of Transportation and the Illinois State Toll Highway Authority supplemented the Final Environmental Impact Statement (EIS) for I-355 to address requests by the U.S. District Court. This Supplemental EIS went to public hearing in the fall of 2001, and the Federal Highway Administration approved the record of decision on February 25, 2002, recommending the extension as the selected alternative in this corridor. The I-355 Extension, between the current I-355 terminus at I-55 and I-80, is largely complete and is open to traffic. 294

Regional Investment

The project remains in the RTP as a management recommendation.

Regional Plan Consistency

The project showed a high level of land use support from the Centers included in the 2040 Regional Framework Plan. The project passes through wooded and agricultural areas in northeast Will County. The project also passes through Keepataw Woods and Black Partridge, near concentrations of threatened and endangered species along Will County's northern border with Cook County. The project crosses stream systems associated with the Des Plaines River including Spring Creek and is located in the Lower Des Plaines River Watershed, in an area considered very high priority for protection and/or restoration.

The 2030 RTP recommends that local communities remain active in managing project construction through the local advisory council process.

The 2030 RTP includes strategies for effective management and operation of the transportation system.

The project is designed with Open-Road Tolling, and will employ value pricing.

The project will address needs of non-motorized travel along and across the corridor. ²⁹⁵ Special

6.3.2.5 South Suburban Corridor

Figure 59: South Suburban Corridor



Regional Plan Consistency

The project showed a high level of land use support from the 2040 Regional Framework Plan. The project crosses and abuts Hickory Creek and the Forked Creek System, which are "B" quality streams in central Will County; Jackson Creek, a "B" quality stream; and Manhattan Creek, an "A" quality stream.

The South Suburban Corridor is to address accessibility in an arc from I-80 to I-57 in a rapidly developing part of Will County.

The proposal is intended to provide improved highway accessibility for rapidly growing northern Will County. Right-of-way preservation should be considered for the project, owing to the rapid development occurring in the area. Alternative systems of arterial improvements should be

The initial proposal is to extend the proposed I-57/IL394 Connector from its proposed terminus at IL394 east to I-65 in Indiana.

Project Planning Status

The Indiana portion of the facility is under consideration for inclusion in the long-range transportation plan by the Northwest Indiana Regional Planning Commission.

Initial feasibility studies of the Indiana proposal are underway.

The 2030 RTP anticipates project planning for this proposal to be completed over the long term.

Regional Investment

Funding for construction of this project in Illinois has not been identified.

The State of Indiana is considering financing construction of the facility using proceeds from its lease of the Indiana Toll Road.

The 2030 RTP includes the Illiana project a "corridor recommendation".

Regional Plan Consistency

The project crosses Plum Creek System in four places, and is identified as a "C" quality stream. The project also passes Goodenow Grove, a Will County forest preserve that includes a high concentration of threatened and endangered species communities.

The proposal is intended to provide improved highway accessibility for northern Will County and provide a suitable freight route in the area. The project is to provide better access between

6.3.2.8 Prairie Parkway

Figure 62: Prairie Parkway



The initial proposal is to introduce a new highway facility connecting I-80 to I-88 in Kane and Kendall Counties.

Project Planning Status

The metropolitan planning area covered by the 2030 RTP for northeastern Illinois was officially expanded in 2005 to include the entire Prairie Parkway proposal.

Corridor evaluation and alternatives analyses are underway. Two alternative alignments are now being studied, in addition to a "no build" scenario.

In order to preserve threatened right-of-way, corridor preservation is underway.

The 2030 RTP anticipates project planning for this pr

CHAPTER 7. IMPLEMENTATION OF THE 2030 REGIONAL TRANSPORTATION PLAN

As outlined in Chapter 4, the capital element is organized around an assessment of each project's priority for implementation. These are:

- Project Planning Status
- Regional Investment Category
- Consistency with Regional Plans, and
- Public Priority

The following lists summarize project priorities as they appear in the preceding proposal descriptions.

7.1 Project Planning Status

7.1.1 Short term

- Brown Line Improvements
- I-294 South Improvements
- I-55 Interim Improvements
- I-355 Improvements
- SouthWest Service Improvements (CREATE Passenger Corridor)
- I-88 Improvements
- I-294/94 North Improvements

Figure 63: Short Term Project Planning Status

Project Planning Status - Short-Term

7.1.2 Medium term

Figure 64: Medium Term Project Planning Status

- I-190 (O'Hare) Improvements
- Express Airport Train Service
- Orange Line Extension
- Yellow Line Enhancements and Extension

- Red Line Extension
- Union Pacific Northwest Upgrade and Extension
- Union Pacific West Improvements
- I-90 Improvements
- STAR Line Phase I
- Central Lake County Corridor (IL 120 element)
- Circle Line Completion
- BNSF Railway Extension
- I-290 High Occupancy Vehicle Lanes
- SouthEast Commuter Rail Service
- I-57/IL394 Connector
- Illiana
- I-55 Improvements (North River Road to Coal City Road)
- I-80 Improvements
- Elgin-O'Hare East Extension
- O'Hare Bypass South
- Prairie Parkway

7.1.3 Long term

Figure 65: Long Term Project Planning Status

- IL394 Improvements
- Mid-City Transitway
- West Loop Transportation Center

- Green Line Enhancements
- Blue Line West Extension
- Union Pacific North Upgrades
- Heritage Corridor Upgrades
- Rock Island Improvements and Extension
- SouthWest Service Extension
- North Central Service Upgrade (Phase 2)
- Milwaukee District West Upgrade and Extension
- Milwaukee District North Upgrade and Extension
- I-57 Improvements
- I-55 Improvements (I-80 North River Road)
- Elgin-O'Hare Improvements
- Elgin-O'Hare West Extension
- O'Hare Bypass North
- STAR Line Completion
- McHenry-Lake Corridor
- Central Lake County Corridor (IL 53 element)
- South Suburban Corridor
- Metra Electric Improvements and Extension

7.2 Regional Investment

7.2.1 Management Recommendations

Figure 66: Regional Investment Management Recommendations

- Marsher Ma

- SouthWest Service to Manhattan
- North Central Service Upgrades
- Union Pacific West to Elburn
- I-355 Extension
- I-90/94 (Dan Ryan) Improvements
- I-80/94 (Kingery) Improvements

7.2.2 Strategic Recommendations

- Central Area Bus Rapid Transit
- DuPage "J" Bus Rapid Transit
- Cermak Road Bus Rapid Transit
- Golf Road Bus Rapid Transit
- Ogden Avenue Transitway
- Pace Arterial Rapid Transit Systems
- CTA Neighborhood Express
- Pace Express Bus Transit Systems
- CREATE Corridors
- NHS Intermodal Connectors

7.2.3 Committed Recommendations

Figure 67: Regional Investment Committed Recommendations

I ommitted Recommendations

- Brown Line Improvements
- I-88 Ronald Reagan Memorial Tollway Improvements
- I-294/I-94 Tri-State Tollway Improvements
- I-55 Interim Improvements
- I-355 Improvements

7.2.4 System Recommendations

Figure 68: Regional Investment System Recommendations



- Union Pacific North Upgrades
- Rock Island Upgrades
- SouthWest Service Upgrades
- Metra Electric Upgrades

- Union Pacific West Upgrades
- I-190 (O'Hare) Improvements
- IL394 Improvements
- I-57 Improvements
- I-80 Improvements
- I-90 Jane Addams Memorial Tollway Improvements
- I-55 Improvements (South)
- Elgin-O'Hare Expansion

7.2.5 Project Recommendations

Figure 69: Regional Investment Project Recommendations



- Circle Line Completion
- Orange Line Extension
- Yellow Line Upgrade and Extension
- Red Line Extension
- Union Pacific Northwest Upgrades and Extension

- BNSF Railway to Oswego
- SouthEast Service Commuter Rail
- O'Hare Bypass South
- STAR Line Phase I

7.2.6 Corridor Recommendations

Figure 70: Regional Investment Corridor Recommendations



• West Loop Transportation Center

- Express Airport Train Service
- Blue Line West Extension
- Heritage Corridor Upgrades
- Rock Island Extension
- SouthWest Service Extension
- Metra Electric Extension
- Milwaukee District West Extensions
- Milwaukee District North Extensions
- BNSF Railway to Plano
- I-290 High Occupancy Vehicle Lanes
- Elgin-O'Hare Extensions
- O'Hare Bypass North
- STAR Line Completion
- Mid-City Transitway
- McHenry-Lake Corridor
- Central Lake County Corridor
- South Suburban Corridor
- I-57/IL394 Corridor
- Illiana
- Prairie Parkway
7.3 Public Priority

7.3.1 New Start Authorizations

Figure 71: New Start authorizations

Priority: Ne	w Start Aut	horizations			Pub
<u> </u>			A		
ÎN		\sum		$\leq \langle -$	- 1

- Circle Line
- Ogden Avenue Transitway
- Orange Line Extension
- Yellow Line Extension
- Red Line Extension
- UP West Upgrades
- UP Northwest Upgrades and Extension
- SouthEast Commuter Rail Service
- STAR Line (Phase I)

7.3.2 Illinois Tollway

Figure 72: Illinois Tollway Projects



- I-294/I-94 Improvements
- I-90 Improvements
- I-88 Improvements
- I-355 Extension
- O'Hare Bypass
- I-355 Improvements

7.4 Air Quality Conformity

The capital element of the 2030 RTP Update is subject to an evaluation that demonstrates conformity with the State Implementation Plan (SIP) for air quality. The air quality evaluation is based on an analysis that estimates mobile source pollution resulting from future travel. For purposes of these analyses, the following 2030 RTP capital projects are included in the analysis. The estimated capital cost of construction of the additional capacity provided by these projects is within the constraint established by anticipated transportation revenues. The projects were selected for evaluation based on project planning activities that anticipate a federal review in the next few years.

Figure 73: Air Quality Conformity Projects



- Circle Line
- Express Airport Transit Service
- Brown Line Improvements
- Orange Line extension
- Red Line extension
- Yellow Line upgrade and extension
- UP West upgrade
- UP Northwest upgrade and extension
- Rock Island Upgrade
- BNSF Railway extension
- SouthWest Service (CREATE Passenger Corridor)
- I-190 upgrade
- I-80/94 Kingery Expressway upgrade
- I-90/94 Dan Ryan Expressway upgrade
- I-55 upgrade
- I-294 upgrade
- I-80 upgrade
- I-88 upgrade
- I-90 upgrade
- I-290 priority lanes
- SouthEast Service
- STAR Line (Phase I)
- I-355 extension
- I-355 Improvements
- Elgin-O'Hare extension (east)
- O'Hare Bypass, south
- Central Lake County (IL120 Bypass)

- I-57/IL394 Connector
- Prairie Parkway
- Illiana Extension

7.5 Public Engagement³⁰⁰

Regional transportation projects result from long, complex decision making processes. Public participation is an important part of these processes. This report discusses the results of the public engagement effort focused on the 2030 Regional Transportation Plan (RTP) Update. This process involved seven workshops conducted throughout the planning region that utilized a novel public outreach tool that illustrates transportation investment decisions in the form of an engaging board game³⁰¹. The tool allows workshop participants to simulate the process decision-makers use to decide on how transportation funds should be invested. The public outreach effort also involved a web-based survey that was used to reach a large regional audience.³⁰²

The results of this public engagement effort showed strong support for the themes presented in the 2030 RTP. Three of the seven themes were identified as the most important issues for the region based upon findings from gaming tool and the survey:

- More and better integrated public transit
- Better land use and transportation integration
- Improved transportation congestion management

The desire to improve the public transit system was expressed in terms of project choices from the game and the results of survey. The tool allowed for the participants to choose among numerous regional transportation projects. The project choices made by the workshop participants showed overwhelming support for the expansion of transit lines throughout the region. Of interest, strong support was present for circumferential lines (north-south) that would connect transit lines that radiate outward from downtown Chicago. Likewise, the survey showed that on a scale of 1 (not important) to 5 (very important) the participants ranked the improvement and expansion of the public transportation systems as 4.7.

 ³⁰⁰ The following section is excerpted from the draft "Regional Report for the Public Involvement Process for the 2030 Regional Transportation Plan. This independently prepared report will be made available in its entirety as part of the official record of public comment that will accompany the final adopted 2030 RTP Update.
³⁰¹ The official record of public comment that will accompany the final adopted 2030 RTP Update.

³⁰¹ TransopolySM developed by the Center for Neighborhood Technology (CNT).

³⁰² Emails and websites were the primary means used to notify people about the workshop and internet survey. Six hundred ninety (690) people completed the survey and one hundred fifty-two (152) people attended the workshops. Twenty workshop attendees

This tool demonstrated another interesting result; the workshop participants invested on a

Each of the themes is assessed below.

7.5.1 More and better integrated public transit

The most significant finding from the seven meetings is the strong support for transit investment throughout the region. This support was evident in the prioritization of themes and in the game investments made in all areas of the region. Every group in the region made some transit investment. Sixteen groups invested exclusively in transit. While participants ensured new transit in their own section of the region, they also invested in transit throughout the region in a pattern that coordinated and improved existing transit offerings.

7.5.2 Better land use and transportation integration

The positive response to this RTP theme was nearly

"purchasing" several grade separations for CREATE, but not applying them to specific geographies.

7.5.6 Services and Safety

Neither of these themes received emphasis as stand-alone choices when participants were limited to three thematic choices (although the survey results indicate moderate to high priority for all of the themes [see Table 3-1]). Table facilitators report that in conversation about choosing themes, frequent reference was made to these themes as outcomes to improvements in transit, land use, and bicycle/pedestrian options. In at least three instances, paratransit improvements were specified as a Regional Innovation. Eighty percent of the tables choosing to retrofit existing highways into multi-modal corridors also indicates a desire to create travel choices that could be perceived as safe, accessible, and desirable for the all ages and ability levels.

Appendix

Part 1: Stakeholders Engaged in Safety Discussions

Shared Path 2030 Process, 2001 – 2007: CATS/CMAP Sponsored Events (Planning Information Forums, Soles and Spokes Workshops, etc.).

American Lung Association of Metropolitan Chicago Baxter and Woodman James J Benes and Associates Cemcon Engineering Center for Neighborhood Technology Chicago Area Transportation Study Chicago Metropolis 2020 Chicago Park District Chicago Transit Authority **Chicagoland Bicycle Federation** Children's Memorial Hospital Christopher Burke Engineering City of Chicago, Department of Transportation City of Chicago, Office of Emergency Management and Communications City of Chicago Heights City of Elgin City of Highland Park City of McHenry City of Naperville City of Park Ridge City of Saint Charles City of Woodstock **Civiltech Engineering** Cook County Forest Preserve District Cook County Highway Department **DuPage** County DuPage Railroad Safety Council Edwards and Kelcey Federal Highway Administration, IL Div.

Federal Highway Administration, Midwest Resource Center

Part 2: Safety Processes with Shared Path 2030 Participation, 2001 – 2007

- "Local Agency Highway Safety Improvement Program Workshop" in Orland Park on January 23^{rd,} 2007
- Mayor's Pedestrian Advisory Committee, 2006-2007.
- "Safety Summit," Illinois Comprehensive Highway Safety Plan, July 19, 2006
- "Safety Records," Division of Traffic Safety, May 2, 2006
- "Safety Conscious Planning" IDOT Division of Traffic Safety, May 3, 2005.
- "Transport Chicago" Metropolitan Conference on Public Transportation Research, June 2004.

"Safety Summit," Illinois Comprehensive Highway Safety Plan, March 2005

Part 3

Designated Strategic Regional Arterials

SRA Route 101 Michigan Avenue from Lake Shore Drive to Roosevelt Road

SRA Route 102 Ontario / Ohio Corridor from Columbus Drive to I - 90/94

SRA Route 102 Illinois / Grand Corridor from Lake Shore Drive to LaSalle Street

SRA Route 103 US 30 (Lincoln Highway) from Indiana State Line to I - 80

SRA Route 104 IL 31 / Randall Road / Orchard Road from Wisconsin State Line to US 30

SRA Route 105 IL 59 from IL 72 to I - 55

SRA Route 106 IL 21 (Milwaukee Avenue) from IL 120 (Belvidere Road) to IL 43 (Harlem Road)

SRA Route 107 Palatine Road / Willow Road from I - 94 to US 14 (Northwest Highway)

SRA Route2132 S452 fom 6(Drii)6-4un(52osi-4un(s)6(St)4(at)4(e Li)4(nA R))52

SRA Route 501 IL 38 (Roosevelt Road) / Fabyan Parkway from Randall Road to I - 294

- SRA Route 502 IL 1 (Halsted / Dixie Hwy.) from US 6 (159th St.) to Kankakee / Will County Line
- SRA Route 502 IL 394 (Calumet Expressway) from US 30 (Lincoln Hwy.) to IL 1 (Halsted / Dixie Hwy.)
- SRA Route 503 IL 72 (Higgins Rd. / Touhy Ave.) from IL 25 (Dundee Ave.) to I 94
- SRA Route 504 US 20 from McHenry / Boone County Line to Randall Rd. (US 20 Bypass W)
- SRA Route 505 IL 59 from US 12 (Higgins Road) to IL 72
- SRA Route 506 US 20 from Elgin-O'Hare Expressway to I-355
- SRA Route 507 Stearns Road/Greenbrook/US 20 from Dunham Road at Stearns to IL 25 at US 20
- SRA Route 508 IL 53 from I 80 to Wilmington-Peotone Road
- SRA Route 509 Pulaski Road from I 55 to US 12 / 20 (95th St.)
- SRA Route 509 IL 50 (Cicero Ave.) from I 94 to 167th St. / I 57
- SRA Route 510 IL 120 / Charles Road from IL 47 to FAP 342 (Wilson Rd.)
- SRA Route 510 IL 120 from FAP 342 (I 94) to IL 131 (Green Bay Rd.)
- SRA Route 511 IL 19 (Irving Park Rd.) from IL 83 (Busse Rd.) to IL 171 (Cumberland Ave.)
- SRA Route 512 IL 176 / IL 60/83 / IL 60 (Townline Road) from US 12 (Rand Rd) to US 41 (Skokie Hwy.)

SRA Route 513 Kendall County Routes from IL 47 south from US 30 (Baseline Rd.) to US 34 from IL 47, north to US 30 (Oswego Rd.)