Traffic Management

Efficiently manage traffic circulation and parking to prevent gridlock

Kev Recommendations

- Improve traffic signaling to control gridlock
- Maximize off-street truck loading and delivery
- · Expand the grid system where possible, and maintain alleys and limit cul-de-sacs to ensure efficient circulation
- · Limit parking in the Central Loop to minimize traffic congestion

While transit will be emphasized, growth will generate an estimated 56,000 new auto trips per day by 2020. The roadway system serving the Central Area is already built out with limited opportunity to build new roads. The geography that gives downtown Chicago its special character - its location between the river and lake - also limits automobile access as the capacity of the Central Area's famous bridges cannot be expanded. While there are opportunities to expand the street grid in the Near South Side, north of Congress Street there are few opportunities for additional streets.

The challenge for development in this context of limited roadway capacity is that the mix of uses that gives Chicago its vibrant character, also tends to require easy access to parking at multiple locations. The goal of the plan is to strike a balance between efficient circulation on roadways with limited capacity, and convenient parking access.

Street and Traffic Improvement Projects

Traffic Management Center

A new Traffic Management Center (TMC) on the Near West Side will monitor and control traffic signals throughout the Central Area and, in the future, citywide. TMC operators will use video cameras, street sensors and computers to coordinate signal timing and keep traffic moving efficiently and safely.

West Loop and Streeterville Signal Interconnects

The interconnected Central Area traffic signal system will extend beyond the Loop to the West Loop and Streeterville. This system will be tied to the TMC and will reduce delays at intersections.

- South Branch Bridges Bridges across the South Branch will be constructed at Polk, Taylor, and/or 16th streets.
- TruckLoading

The growth in office, retail and other development will increase truck loading and deliveries. To maintain efficient traffic circulation in view of this challenge, the City will require a comprehensive policy regarding truck loading and deliveries. A major study will evaluate this issue.

Expand the Grid System

As the South Loop and Near South grow, existing streets will be extended and new alleyways added. In particular, the Wells - Wentworth connector will be a Near South neighborhood collector street, linking these new east-west streets to the Loop and Chinatown. Throughout the Central

Area, existing alleys and streets will not be vacated or cul-de-saced to maintain continuity and efficient circulation.

Parking Policy

Establish appropriate limits on non-accessory parking. Existing policy restricts non-accessory, free standing garages and reduces the number of parking spaces required in new development within the inner core of the Central Area Parking District. This area begins half a block inside the Loop elevated structure. The outer core of the Central Area Parking District discourages surface parking lots.

The policy offers several advantages:

• It encourages commuters to use transit rather than private autos, increasing traffic efficiency in the core, reducing auto congestion and air pollution.

• It makes maximum use of developable land and ensures that the business core remains compact, one of downtown Chicago's major competitive advantages.

It minimizes conflicts between pedestrians and buses with automobiles using parking facilities.

Managing New Parking

If additional parking is developed to accommodate growth, traffic models project that rush hour gridlock will occur at key points in the Central Area, including most bridges. To avoid this, it will be necessary to control the total number of Loop parking spaces by further restricting non-accessory parking structures and directing most of the additional parking to areas outside the Loop. There will also be opportunities for parking within the Expanded West Loop near the expressways.

Parking Structure Design

Any new parking structure in the downtown must adhere to the design guidelines outlined in the Chicago Parking Garage Ordinance. A parking garage should be designed to respect its surrounding context with regard to materials, scale, proportion and orientation of openings. The ground floor of the structure should have active uses such as retail and lobby functions, and should incorporate canopies, clear glazing and special lighting to add interest at the sidewalk level. Curb cuts and driveways ought to be minimized to allow for pedestrian movement; and alley access is recommended, if possible.

A study addressing traffic and parking issues in the Central Area is currently underway. The study has four components:

· Determining the unique parking and transit needs of specific user groups and different Central Area districts.

· Developing a comprehensive picture of parking and transit trends and issues.

· Developing summary estimates of parking and transit needs, and outlining strategy and policy alternatives for transportation in the Central Area.

· Researching the range and type of available funding strategies for proposed transit improvements.



Figure 4.2.26

Growth will bring an estimated 56,000 new cars to downtown per day. Road capacity is limited, and in order to prevent gridlock it will be necessary to establish limits on non-accessory parking in the Expanded Loop.







- Bicycle Lanes Proposed

- O Lakefront Access
- O Lakefront Bike Station

DRAFT

Figure 4.2.27 The existing and proposed Bicycle Path System



Figure 4.2.28 The future Water Taxi System



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Alternative Transportation

Encourage alternative modes such as bicycles and water taxis

Key Recommendations:

- · Expand and improve the network of bicycle paths
- Expand the water taxi system to provide a commuting alternative

Bike paths and water taxis will primarily be used in warm weather months. These commuting alternatives provide a great outdoor experience amid the bustle of the Central Area. They reduce demand on other transit systems that may be carrying increased numbers of summer tourists and visitors to special events. Cycling rather than driving offers the added benefit of cleaner air on what may be summer Ozone Action Days. There is enormous potential for cycling in the Central Area. There are hundreds of thousands of people living within 3 miles, a 20 minute bicycle ride, of the Central Area.

BIKE PATHS AND WATER TAXIS OFFER A PLEASANT COMMUTING ALTERNATIVE

BICYCLE PATHS

The proposed Central Area bikeway system includes special pavement markings and signage on selected streets and the well known bicycle paths through the Lakefront parks. A bicycle station with bicycle parking, showers and lockers, will be provided in the West Loop and at Millennium Park.

To create a continuous connection for pedestrians and cyclists a new bicycle/pedestrian bridge over the Chicago River's Main Branch east of Lake Shore Drive known as the DuSable Flyover will be constructed. This will enable pedestrians and bicyclists to travel from the north Lakefront bicycle path, through the Navy Pier/DuSable park area, to the Lakefront path south of the river without having to cross any streets, creating a connection between Navy Pier, Monroe Harbor and Museum Campus.

South of the Museum Campus, a greenway constructed on the St. Charles Airline parallel to 16th Street will provide access from the Lakefront to the Chicago River and neighborhoods in the Near South and further west.

WATER TAXIS

Water taxis, like the riverwalk, can provide excellent alternative transit between commuter rail and downtown office and cultural destinations. Water taxi system improvements will consist primarily of docks at key embarkation points. The docks shown in the diagram are for illustrative purposes only; actual locations will depend on river traffic management considerations and the willingness of riverside property owners to participate in the program. Water taxis are subject to city regulations but are operated by private owners. Fares and schedules may be coordinated with the other transit systems in the Central Area







Figure 4.2.30 Water Taxis on the Chicago River provide convenient access to the West Loop transit stations.







Figure 4.2.31 Potential Metra Extension Projects

Figure 4.2.32 Potential CTA Rail Projects

Metropolitan Area Expansion Projects

Increase CTA and Metra capacity to bring workers to the Central Area.

Key Recommendations:

- Extend CTA rail lines to improve access to the Central Area from outlying neighborhoods
- · Improve signaling to increase capacity
- Reroute Metra service to reduce conflicts with freight traffic
- Upgrade passenger facilities including stations and platforms

Proposed CTA Rail Extensions and New Lines

CTA rail line extensions will make the Central Area more accessible from outlying areas.

ORANGE LINE EXTENSION

The extension of the Orange Line from Midway Airport to Ford City shopping center will make transit more attractive for trips to the Central Area from the far Southwest Side.

- RED LINE EXTENSION TO CHICAGO'S FAR SOUTH SIDE Several routes are being investigated, including a route along the Bishop Ford Expressway to 130th Street.
- BLUE LINE EXTENSION

An extension of the Blue Line northwest from O'Hare to Schaumburg will reduce travel time between destinations outside the City and downtown. An extension of the Blue Line west from Forest Park to Maywood could incorporate a large intermodal transit center and increase transit capacity to the Central Area.

YELLOW LINE EXTENSION

Extending the Yellow Line from Dempster to Old Orchard Mall will make transit more attractive for trips to the Central Area from the Northern suburbs and for commuters on the Edens Expressway.

NEW CIRCLE LINE

The Circle Line is a new "super loop" around and through the Central Area of Chicago, connecting from Chinatown to North Avenue along Paulina Street. The 6.6-mile line would use a combination of existing rail segments and new subway and elevated links. The line would provide convenient shortcuts for CTA customers making cross-town trips while also improving access to the periphery of the Central Area. In addition, the Circle Line is designed to connect with many Metra commuter lines to the suburbs.

NEW MID-CITY TRANSITWAY

A 22-mile circumferential line will provide fast connections from outlying neighborhoods and provide easy connections to Metra and CTA radial lines to downtown.

NEW OGDEN A VENUE TRANSIT CORRIDOR

Establishing a modern streetcar line to connect the Central Area and Southwest Side via Ogden Avenue could enhance transit service between Navy Pier, Streeterville, River North, the West Loop, United Center, and the West Side Medical Center.

CTA Rail Signaling Upgrades

Improved signaling is proposed for the Red Line and the O'Hare branch of the Blue Line. The CTA's existing rail signaling system permits operation of trains at three-minute intervals. Upgraded signaling will permit two-minute headways to provide a 50% increase in train service. The increase in train service will require expanded yard capacity and the purchase of additional rolling stock.

Metra Commuter Rail Improvements

Many Metra commuter rail routes share trackage with freight traffic. Business Leaders for Transportation, a regional business coalition, anticipate "an 80% increase in Chicago area freight traffic over the next 20 years." Freight traffic is already a major constraint on some of the most heavily traveled routes, such as the BNSF line to Aurora. Substantially increasing the route capacity is difficult. Central Area rail terminals are also approaching the limits of their train-handling capacity. The following projects are proposed to provide alternative service and eliminate bottlenecks:

REROUTE SOUTHWEST SERVICE FROM UNION STATION TO LASALLE STREET STATION

LaSalle Street Station has excess capacity, while Union Station is approaching its limit. Rerouting Southwest Service will free up platforms on the south side of Union Station and provide faster service. Some trackwork at 74th Street is required to permit this change. Additional work is needed on the Southwest Service to bypass busy freight junctions.

- PROVIDE ADDITIONAL PLATFORMS ON THE SOUTH SIDE OF UNION STATION
 The Amtrak-Union Station Capacity Study currently underway will investigate all options and permit
 an appropriate expansion plan to be developed. Possibilities include:
- West Loop Transportation Center tunnel under Clinton Street, as previously described - Platforms under the old main post office between Harrison and Van Buren
- ELIMINATE RAIL/RAIL CROSSINGS AT KEY LOCATIONS.

Metra lines cross other commuter or freight routes at the same elevation at several points. The scheduling of trains to avoid conflicts limits the capacity of these lines. To eliminate such bottlenecks, "flyovers" are proposed at the following locations: Kensington on Metra Electric South Shore, Grand Crossing, Englewood, Brighton Park.

UPGRADE NORTH CENTRAL SERVICE

Improvements to tracks and interlockings will provide for expansion of the North Central Line between Union Station and Antioch.

• EJ & E CIRCUMFERENTIAL ROUTE

This line will intersect and link with lines radiating from the Central Area, allowing more people to reach the Central Area by rail rather than car.





Figure 4.2.33 The Midwest Regional High-Speed Rail Initiative

Figure 4.2.34 Potential Express Rail to O'Hare and Midway Airports



Midwest and National Enhancement Projects

Inter-city enhancement projects will improve national and international connections.

Key Recommendations:

- Facilitate development of the regional high speed rail system.
- Create express rail service to O'Hare and Midway airports from a central downtown terminal located between State and Dearborn in the Loop.

High Speed Rail

THE PROPOSED REGIONAL HIGH SPEED RAIL SYSTEM WILL USE CHICAGO AS A HUB

The proposed Midwest regional rail system will connect Chicago with the ten largest metropolitan areas of the Midwest and numerous smaller cities en route. Trains will operate at speeds in excess of 110 MPH and would reduce travel times substantially. In downtown Chicago the high speed rail network will be a catalyst for the anticipated office and retail growth in the West Loop area.

Airport Express

EXPRESS RAIL SERVICE TO AIRPORTS FROM A DOWNTOWN AIRPORT TERMINAL OFFERING BAGGAGE CHECK-IN WILL GIVE THE CENTRAL AREA A POWERFUL COMPETITIVE ADVANTAGE AS A PLACE TO DO BUSINESS

Chicago is unique among U.S. cities in providing local rail service to both its major airports. On a typical weekday in 2000, nearly 9,000 riders boarded the Blue Line at O'Hare, making it one of the CTA's busiest stops. The existing service, in which trains make all stops, requires more than 45 minutes for the trip from O'Hare to the Loop.

As part of a comprehensive effort to improve access to all of Chicago's aviation facilities, an express rail operation is planned to connect a new downtown terminal with O'Hare and Midway Airports. Express trains would operate over the O'Hare branch of the CTA Blue Line for the 18-mile journey to the airport. Dedicated tracks will be used in key locations for faster service.

This presents an outstanding business opportunity for Chicago. The availability of fast, convenient and comfortable rail service will give the Loop a powerful global advantage as a place to hold business meetings and locate corporate headquarters and other facilities.

Midway Express trains would operate over a portion of the existing Red Line in the State Street Subway and the Orange Line to Midway Airport. The service would utilize an existing unused connection near 16th Street to transition between the Red Line and the Orange Line. Express trains will be able to operate with little congestion due to existing Orange Line station spacing.

Both O'Hare and Midway express service would use dedicated high-speed trains with special passenger amenities and high security cars to carry checked baggage. The trains would operate from a new terminal to be located between State and Dearborn in the Loop. Special platform doors would lead directly to the new downtown terminal, where passengers would be able to obtain a seat assignment and boarding pass from most carriers and check baggage through to their final destination. Airline flight and city information would be available at the station and aboard the train. The airports' checked luggage would be transferred directly to secured conveyors in existing tunnels leading to airline terminals.

The O'Hare Express would make the trip in less than 30 minutes, faster than any other form of ground travel. Trains would operate every 15 minutes from approximately 5:00 a.m. to 10:00 p.m.

Midway Airport Express service is expected to run every 20 minutes between 5:00 a.m. and 10:00 p.m. At the Midway rail station a new pedestrianway and secure baggage conveyer will allow for convenient passenger connections.

The O'Hare Express offers numerous advantages:

- Funding. As a premium-fare service built as part of the planned airport expansion, the O'Hare Express would have access to two revenue sources not available to most transit projects Federal Aviation Administration airport funding and revenue bonds secured by fare income.
- Support for other transit improvements. The upgraded signaling needed to permit express trains to
 pass locals would also permit operation of local trains at two-minute intervals rather than the existing
 three, thereby increasing capacity on the Blue Line.



Figure 4.2.35 Trains used in the Midwest High-Speed Rail Initiative may be similar to the Acela Trains used in the Northeast Corridor System.



Figure 4.2.36 Express Rail Service from a central downtown Airport Terminal to Midway and O'Hare Airports will use dedicated train cars with special passenger amenities.





Figure 4.2.37 Phase 1 Transportation Improvements Years 2002-2006



Figure 4.2.38 Phase 2 Transportation Improvements Years 2007-2011



Figure 4.2.39 Phase 3 Transportation Improvements Years 2012-2016



Figure 4.2.40 Phase 4 Transportation Improvements Years 2017-2021

KEY FOR PHASING DIAGRAMS

CTA Station - Existing	Bus Rapid Transit
Metra Station - Existing	O'Hare Express
Metra Terminal - Existing	
🖈 New CTA Station	Riverwalk
CTA Station Renewal	Roadway Improvement
💥 Intermodal Center	Signal System Roadway
Metra Station Renewal	Reserved Right-of-Way
Bike Station	Water Taxi Route

Conclusion

Phasing of Transportation Improvements

Transportation improvements will be built in phases to provide increased levels of service as new development occurs. The following phasing schedule assigns illustrative dates to some of the proposed projects. Others will be added to the phasing schedule as funding permits and demand requires.

PHASE 1 (2002-2006)

- Resumed Lower Wacker express bus service
- Traffic Management Center
- Carroll Avenue transitway
- Pedestrian improvements
- Modernize Randolph and Roosevelt Road stations on Metra Electric
- Renovate CTA rapid transit stations (ongoing program through all four phases)
- · Signal interconnects throughout Central Area
- Upgraded on-street transitways
- Protect rights-of-way
- Downtown Airport Terminal / Airport Express station
- Begin Circle Line

PHASE 2 (2007-2011)

- Wells-Wentworth connector
- Pedestrian bridge across South Branch at Union Station
- Expanded water taxi service
- Bicycle station in West Loop
- Complete the Circle Line

PHASE 3 (2012-2016)

- Monroe Street busway
- Bridge over South Branch at Taylor or Polk

PHASE 4 (2017-2021)

West Loop Transportation Center

Next Steps

The following next steps should be taken to ensure the transportation plan moves forward:

- Continue feasibility studies
- Protect rights-of-way for future transportation corridors
- · Estimate capital and operation costs
- Continue to develop implementation and funding plans
- Build consensus around transportation plan funding
- Complete Central Area parking study

