



CHAPTER 6

Implementation



Overview

Public investment decisions made today will affect Chicago's prosperity for decades to come

The Central Area's growth over the past 20 years did not occur spontaneously. Rather, it was the result of sound planning, aggressive economic development efforts, and infrastructure investment on the part of both the public and private sectors. Some of these efforts date back generations - the Loop elevated was built in 1897, the Burnham plan appeared in 1909, and most of the present commuter rail system was in place by the 1920's. Decisions made now will have equally far-reaching impact. Though the time horizon contemplated by this Plan is 2020, it is no exaggeration to say that the groundwork laid today will be the basis of the city's well-being a century hence.

The base and opportunity demand forecasts presented in this Plan reflect the level of investment Chicago is willing to make in its future. If the city makes minimal improvements, no doubt it will continue to grow, but not at the rate that it might have. If the city implements all of the recommendations of this Plan, it will capture a larger share of regional and national growth. The economic impacts to the City of Chicago, the Region and the State of Illinois for both the base and opportunity growth forecasts are significant. The potential impacts over the next 20 years include (stated in 2002 dollars):

Chicago Metropolitan Statistical Area (MSA) Economic Benefits	\$534 to 755 billion
Includes: Operations, Indirect, and Construction Output and Earnings, Increased Property Values	
Chicago MSA Fiscal Benefits	\$10 to 13 billion
Includes: Property Tax, Retail Sales, Hotel Room Tax, Construction Public Revenue, Employee Head Tax	
City of Chicago Fiscal Benefits	\$1.7 to 2.3 billion
Includes: Property Tax, Hotel Room Tax, Employee Head Tax, Retail Sales Tax	
State of Illinois Fiscal Benefits	\$9 to 12 billion
Includes: Construction Public Revenues, Personal Income Tax, Retail Sales Revenue, Hotel Room Tax	

It is important to understand the degree to which the components of this Plan are interrelated and depend on one another for their success. There is little point in upzoning the West Loop if workers do not have an efficient way to get to their jobs. Downtown residential neighborhoods will not continue to thrive if viable commercial corridors are not established providing convenient access to goods and services. If the city does not provide its workers, residents, and visitors with the beauty and amenity that greenery and open space afford, they will go someplace that does.

This document lays out an ambitious twenty-year program for Chicago's Central Area. An equally ambitious implementation strategy will be required to bring it to fruition. The scale of needed investment is formidable. Implementation must be carefully phased, with public projects coming online in coordination with the private investment they support. The timing must take into account the long lead times required by government capital funding cycles. As the rebuilding of Wacker Drive demonstrated, these often require a five-year span from initial commitment of funds through project completion.

Implementation Tools

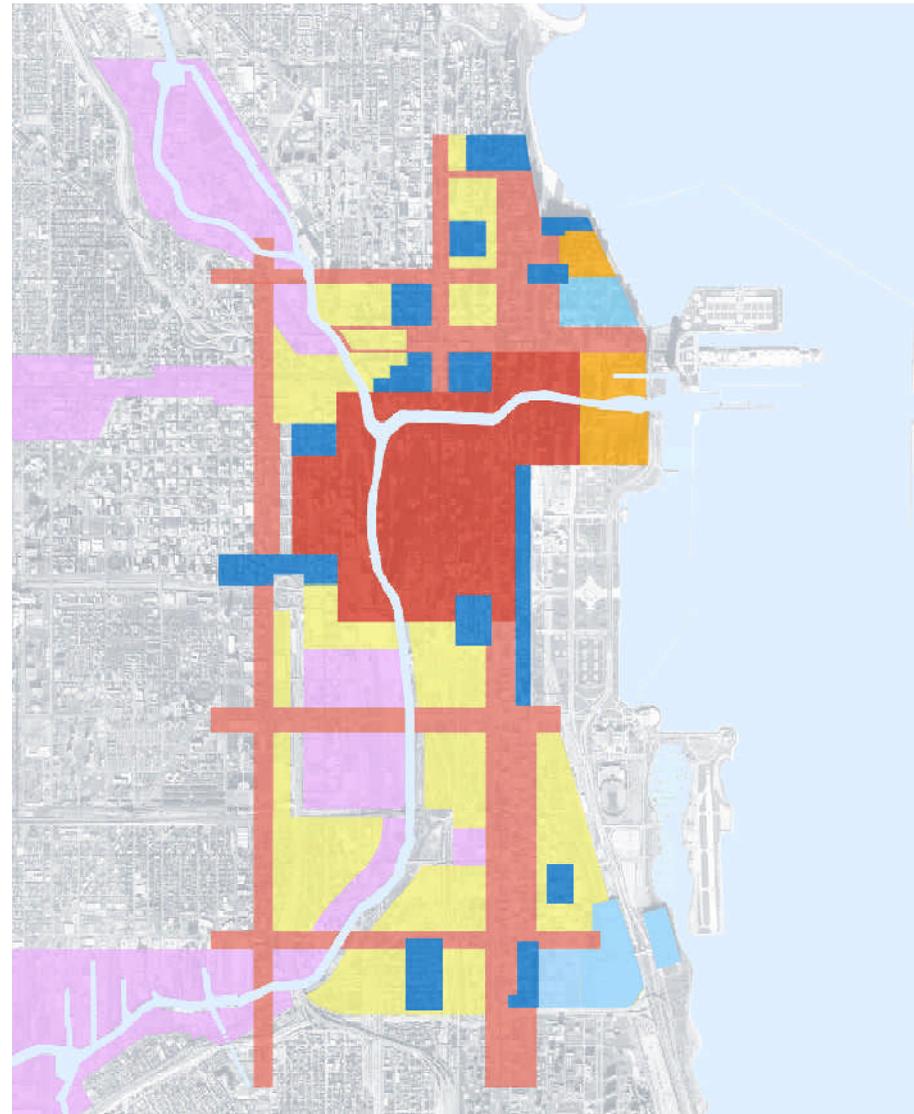


Figure 6.2
Conceptual Framework for Zoning
in the Central Area

- The Expanded Loop
- High Density Corridors
- High Density Residential
- Residential
- Industrial Districts and Corridors
- Landmark Districts and Character Areas
- Special Areas - Northwestern Hospital and McCormick Place

The City's zoning ordinance is its key regulatory tool, and is used to direct the size, character, use, and location of development throughout the city. Chicago is currently rewriting its zoning ordinance. A new set of zoning classifications is being designed specifically to address needs within the Central Area planning district.

The public infrastructure improvements proposed in the plan will require substantial and sustained capital investment by the public sector. Traditional sources of revenue will continue to be employed, including federal and state grants, property and sales taxes, and use of the City's bonding authority. But given the massive scale of the proposed capital investment, new sources of revenue must be identified.

Each of these tools will come into play in varying degree for each of the proposed initiatives. Zoning will play a greater role in implementing some aspects of the Plan, while the availability of capital will be more crucial for others. The mix of tools for implementing each of the plan's guiding themes is detailed in the following pages.

Development Controls

Zoning will direct and shape development

Key Recommendations

- Ensure sustained employment growth by providing an adequate land supply for high-density office within walking distance of the existing office core and around enhanced transit facilities.
- The major location for the highest density development should be the Central and West Loop. Secondary locations for high and mid-density development are specific mixed-use corridors.
- Protect and enhance the character of historic areas, special character districts and residential neighborhoods.
- Preserve sufficient industrial land for essential warehousing, distribution and other services to support downtown businesses.
- Enhance the Central Area as an attractive place for people to walk, bicycle, work, live and play by requiring standards for appropriate scale and character, orientation of buildings to streets, appropriate vehicular access, pedestrian-oriented ground floors, well-articulated and transparent facades, landscaping, and by implementing Chicago's Streetscape Guidelines.

Zoning regulation will be the most important factor in directing the type and location of development downtown. The existing ordinance doesn't recognize downtown as a distinctive place, nor does it facilitate development at appropriate locations, consistent with the ideas in this Central Area Plan. The comprehensive rewrite of the zoning ordinance currently underway will create activity districts, development controls and design standards specific to the downtown.

The current zoning district framework divides downtown into four Central Business Districts and three Commercial Districts that represent little more than high-density versions of the neighborhood districts. The revised zoning framework for the Central Area should promote high-intensity, vertically mixed-use districts. In addition to accommodating a full range of uses that contribute to the area's vibrancy, the ordinance should establish standards to implement Central Area plans and policies and achieve economic and development goals. The following four classifications are proposed for the Central Area:

Downtown Core (DC)

A Downtown Core classification would reflect the expanded loop identified in the plan. Uses should be oriented to commercial and office development and provide for the highest density permitted in the city of Chicago. The West Loop and selected other areas intended for incorporation into the office core should be designated DC.

Downtown Mixed-Use (DX)

A Downtown Mixed Use district would reflect the corridors of vertically-stacked mixed uses radiating from the office core. Within them, a rich mix of complementary uses would be encouraged, including hotels, meeting and convention facilities, retailing, residential, and cultural and entertainment uses. In general, permissible density would be high (although less so than in DC districts), graduating down where the DX district adjoined a lower-density residential district.

Downtown Residential (DR)

A Downtown Residential District would reflect the higher density residential neighborhoods within the Central Area. Permissible density would vary depending on the predominant housing type envisioned for a particular district.

Downtown Service (DS)

The industrial and commercial services areas in the Central Area should be designated "downtown service" zones. The DS classification would ensure the survival of support and back-office functions that are crucial to the health of downtown businesses.

Historic Preservation will be a major priority

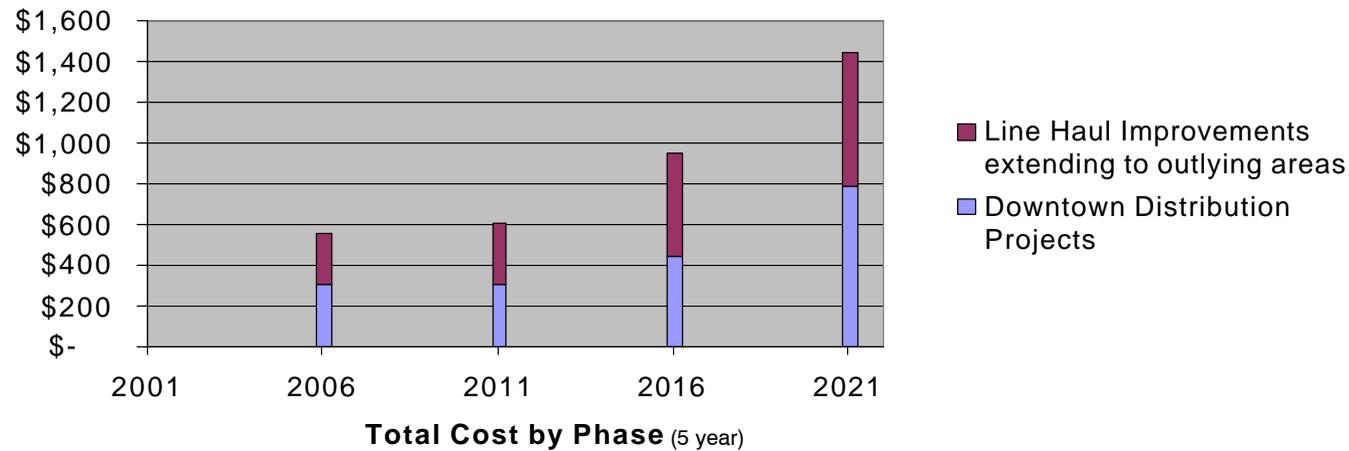
Chicago's world-renowned architectural heritage contributes immeasurably to the Central Area's character and quality of life. The City will continue to be proactive in protecting and designating landmarks, creating incentives for preservation, and educating owners about the benefits of preserving historic buildings.

Key Recommendations

- Protect the currently designated landmark buildings and districts in the Central Area.
- Continue to designate the Central Area's most important landmark buildings and districts.
- Protect significant buildings and districts that have been identified on the City's historic resources survey, are under study as potential landmarks, or are on or eligible for listing on the National Register of Historic Places.
- Expand incentives to motivate owners to preserve and maintain historic buildings.
- Educate building owners about the benefits of preservation.

Table 6.1
Central Area Transportation Projects
Estimated Capital Cost by End Date (in \$Ms)

The total cost of transportation improvements over 20 years will be between \$2.25 and \$3.5 billion in capital investment. This is in addition to the \$7 billion needed for regional improvements to meet current demand for service.



Transportation

New transportation facilities will require new sources of revenue

The transportation plan for the Central Area requires major new systems and facilities to support growth. While zoning can help to promote an accessible Central Area, these new systems will require major new sources of capital funds.

Need vs. Available Funding

Table 4.1 provides order-of-magnitude costs for the transportation projects proposed in this Plan, broken out by phase. Note that costs are "back-loaded" - the largest expenses occur in later years, reflecting a desire to link capital expenditures to increases in the tax base. The phasing also takes into consideration the long lead times needed to fund and build major facilities such as the West Loop Transportation Center.

Transportation is not the only infrastructure need requiring public funding. Additional investment in police and fire facilities, water distribution, street and sidewalk reconstruction, etc., will also be required. However, increased tax receipts from existing sources due to tax base growth are expected to be sufficient to cover such costs. That is not the case for transportation.

The Chicago Department of Transportation (CDOT) and the Regional Transportation Authority (RTA) estimate that \$7 billion will be needed region-wide between 2003 and 2020 to meet the current level of demand. In addition to this \$7 billion, the base scenario for Central Area growth would require about \$2.25 billion in additional transportation capital investment. The opportunity scenario would require and additional \$3.25 billion.

Current sources of funds fall far short of these needs. Transportation planners estimate that only \$5 billion in funds from various sources will be available to contribute to the \$7 billion needed to meet current demand in the region, creating a funding gap of \$2 billion even before factoring in the additional demand generated by growth. With Central Area growth factored in, the projected gap is 4.6 billion. To reduce this \$4-6 billion funding gap, three steps are important:

- Reauthorize existing federal and state funding programs
- Explore new Central Area funding sources
- Refine priorities

Federal and State Funding Programs

Like all U.S. cities, Chicago relies on state and federal sources for the majority of its transportation funds. In 2001, the Regional Transportation Authority received 56% of its capital funds from the federal government, while 36% came from the State of Illinois. At the federal level, the Transportation Equity Act for the 21st Century (TEA-21) has been a significant source of funds, providing 80% of capital costs against a 20% local match. This program will expire in 2003. Within the state, Illinois FIRST and the Illinois Series "B" bond program have been the major funding sources. Both programs are designed, in part, to satisfy the local matching requirement. Illinois FIRST is due to expire in 2004. The Series "B" program is subject to annual appropriation by the Illinois General Assembly.

Reauthorization of these programs is an important first step. The capital need forecast for transportation in the Central Area is many times what has been funded in the past. The City and its representatives in Congress and the General Assembly must persuade the federal and state governments that increasing funding for existing programs and creating new programs for the 21st century is key for the survival of Chicago and all of America's cities and for the American economy to remain competitive globally.

Local Central Area Funding Sources

Sources in this category include Tax-Increment Financing (TIF), Special Service Areas (SSAs). An additional funding source could be realized by capturing a percentage of the property taxes generated by new office growth.

The Central Loop TIF District is the largest and most successful of Chicago's 120 TIF districts. It has generated over \$300 million for investment since 1990. It has been used for major transportation projects downtown, ranging from the Randolph/Washington subway station renovation to bridge improvements on Lower Wacker Drive. However, this TIF is unlikely to be a major source for funding new projects. The program is due to expire in 2007, and most of the remaining increment has been committed. The district has also largely succeeded in eliminating blight within its boundaries, leaving little possibility of establishing a new district.

Fourteen other TIF districts exist within the boundaries of the Central Area. Of these, four - Chicago/Kingsbury, River West, Near South, and Canal/Congress - are structured to permit funding of transportation. But the amount of increment generated within these districts is limited, so they would not be major sources of revenue.

Special Service Areas (SSAs) are a second possible local mechanism. These special taxing authorities are approved by local property holders who agree to a maximum additional tax levy of 0.175% of their equalized assessed valuation (EAV) to support special projects. The potential revenue from this source was estimated for the existing commercial and industrial properties in the Central Area. At a base property tax rate of 9.252%, this source could generate as much as \$155 million in bond proceeds over 20 years. If the permissible tax levy were raised to, for example, 0.8%, the resultant revenues could reach \$675 million under the growth scenario.

Several policy issues arise with regard to the use of SSAs. Would funds generated by an SSA be usable strictly for transportation or could they be used for other programs? Should an SSA include residential property? How do we ensure that special levy will not affect competitiveness of the Central Area office market? All of these factors will need to be carefully weighed before an SSA can be introduced.

Office property taxes are other potential sources of funds for Central Area transportation enhancements. The City could direct a portion of the taxes generated by new office development to a downtown transportation enterprise fund. Similar in concept to a TIF, this would require no net increase in taxes, merely the redirection of property tax increment to a specific geographic area and a specific use. If 5% of new office property taxes were segregated in this way, the fund could generate up to \$19 million in bond proceeds over 20 years. Segregating 30% of office property taxes would provide up to \$115 million.

Open Space

Creating new open space will also require new revenue sources

The high cost and relative scarcity of land will continue to present a barrier to large-scale development of open space in the Central Area. The City must explore new ways of acquiring and developing open space. A combination of approaches will be employed:

- Use publicly owned land creatively
- Increase the open space impact fee in the Central Area
- Negotiate new park land in planned developments
- Capitalize on the 30-foot river setback

Publicly Owned Land

Through its campus parks program, the City seeks to develop open space adjacent to public facilities such as schools and libraries. This puts open space where younger users congregate. It also makes the most of publicly owned land, reducing capital and operating costs. Within the Central Area, campus parks are planned for a new school: the Lake Shore East development along the river east of Michigan Avenue.

The City must also look for park sites in unorthodox locations, and create land where it currently doesn't exist. Such out-of-the-way spots include land beneath the elevated Green Line tracks and air rights over the expressways. New open space could be created in the West Loop by decking over a portion of the expressway without ramps just north and south of Monroe Street. This new open space would help to break down existing barriers while helping to meet demand for park land.

Open Space Impact Fee

Under the zoning ordinance, new residential development must contribute to the creation of open space and recreational facilities required to serve new residents, either through direct land donations or cash contributions to a dedicated fund. The requirement applies to all new residential development and rehabilitation that creates additional dwelling units. Replacement housing which does not increase the existing number of dwelling units is exempt from the fee.

The formula currently used to calculate the open space impact fee is based on city-wide land values. In the Central Area, land acquisition costs are much higher. A reasonable approach would be to modify the formula for downtown projects to reflect the higher cost of obtaining downtown land.

Open Space in Planned Developments

The City negotiates improvements for larger developments downtown through the planned development process. An important element of this process is the provision of open space, particularly for projects involving residential use. The planned development process has resulted in a number of significant additions to the Central Area's open space inventory, and will continue to be an important tool.

Environmental Commitment

Green initiatives will enhance Central Area energy efficiency and improve environmental quality during the coming era of growth

Promoting public transit and advancing open space and landscaping are important tools for environmental health. In addition, Chicago's approach to ensuring environmental quality is three-pronged: it seeks to reduce the level of noxious emissions, restore areas that have suffered past degradation, and ensure reliable production and distribution of electric power through management of the Commonwealth Edison franchise. Within the Central Area, the Chicago Department of Environment (DOE) is advancing several initiatives to achieve those ends.

Controlling Emissions - Air Quality

In an urban area, changes in land cover alter local climate and air quality, in part by elevating the emission of volatile organic compounds (VOCs) and nitrogen oxides (NOx), two of the key ozone precursors. Especially during the summer, dark colored pavements, rooftops and other surfaces absorb, trap and radiate heat. These dark surfaces make up approximately 48% of Chicago's landscape. More than 60% of Chicago's rooftops are dark.

The result is an "urban heat island" with temperatures averaging 6 to 10 degrees Fahrenheit higher than rural temperatures. This increase not only results in higher energy use for cooling buildings, but also causes pollution-creating ground level ozone.

Chicago's Urban Heat Island Initiative is designed to ameliorate the effects of dark surfaces and reduce pollution by: (1) using alternative paving, (2) constructing light-colored roofs, (3) using alternative energy sources, (4) increasing green space, and (5) installing rooftop gardens. DOE is not only encouraging business and homeowners to use these techniques but also is implementing them itself. One example is the rooftop garden on City Hall. In addition, Chicago will pursue Cities for Clean Air Partnership goals to cut emission of greenhouse gases, and safeguard human health as well as local fauna and habitats.

Managing the Energy Supply

Distributed Generation: Distributed generation, the use of small-scale power generation technologies located on-site or close to the demand being served, is an important tool for energy efficiency. Energy users and suppliers can thereby reduce their reliance on the electric grid, increasing energy security, reliability, efficiency and cost and reducing overall emissions.

The Chicago Industrial Energy Plan Project has established a government and industry cooperative to identify strategic industrial locations that will maximize the benefit of integrated industrial distributed generation.

The project is guided by a Steering Committee consisting of industry leaders, local electric and gas utilities, city and state officials, engineering companies, equipment manufacturers and energy project developers.

Cogeneration: Cogeneration is a highly efficient means of generating heat and electric power at the same time from the same energy source. Displacing fossil fuel combustion with heat that would normally be wasted in the process of power generation, it reaches efficiencies that triple or even quadruple conventional power generation. Cogeneration is cost-effective and has been in use since the 19th century. It accounts for well over half of new power plant capacity in North America in the last decade. In northern Europe and increasingly in North America, cogeneration is at the heart of district heating and cooling systems.

Chicago's Trigen/Peoples District Energy Center at McCormick Place is an example of a cogeneration user. Instead of using separate energy-consuming processes for producing steam and electricity, the company produces both at once. A machine that burns natural gas can run a turbine to produce electricity, while the waste heat can be used to make steam.

DOE promotes cogeneration facilities that distribute steam and electricity to other facilities through district heating and cooling programs. A central distribution center would cogenerate steam and electricity, then distribute steam for heat and use the electricity to chill water, which would be piped out to cool buildings.

District Heating and Cooling: District heating and cooling is an environmentally sound technology for providing heating and possibly other forms of energy from a central plant to multiple users.

Chicago's district cooling system is run by Exelon Thermal. It uses five centrally located plants to produce chilled water and then distributes the water through pipes to cool nearby buildings:

- South State Street and East Adams Street
- South Franklin Street and West Congress Parkway (main plant)
- East Randolph Street and North Columbus Drive
- Merchandise Mart Building
- 100-150 South Wacker Drive

Additional facilities are planned.

District energy can save money for users, conserve resources, reduce pollution, and open up options for flexible and sustainable energy solutions in the future. District energy has a number of advantages over energy systems that serve only one user:

- Central plants are more efficient than multiple small plants, so energy consumption is reduced and operation and maintenance costs are lowered.
- Central plants have almost zero emissions whereas traditional electric generation is one of the most significant sources of pollution in Chicago.
- District energy removes combustion equipment from buildings, saving space in the buildings, and removing a source of indoor air quality contamination.
- District energy systems can be flexible-fueled, which means they can burn whatever fuel is most economical and/or environmentally sound at the time.
- District energy systems present an opportunity for cogeneration.

DOE is working to establish cogeneration district heating and cooling sites city wide.

In addition to these tools, Chicago's Energy Management Plan calls for the City to:

- Promote renewable energy
- Install solar panels on public buildings and encourage private owners to do the same.
- Promote rehabilitation of public and private buildings to make them more energy efficient.
- Encourage energy efficiency in residential development through the "green homes" initiative.
- Use energy efficient light bulbs in street lights and traffic signals.

Green Design

Chicago is adopting the nationally recognized "Leadership in Energy and Environmental Design" (LEED) Green Building Rating System and will examine opportunities to create incentives to promote construction and rehabilitation that meets LEED standards. These standards promote construction that will:

- Reduce the impacts of natural resource consumption.
- Create healthy indoor environments.
- Safeguard water and water efficiency.
- Be energy efficient and use renewable energy.