



Washington/Wabash Loop Elevated Station ENVIRONMENTAL ASSESSMENT (EA)

February 2014



Prepared by the Chicago Department of Transportation in cooperation with the Federal Transit Administration





Washington/Wabash Loop Elevated Station ENVIRONMENTAL ASSESSMENT (EA)

February 2014

Prepared by the Chicago Department of Transportation in cooperation with the Federal Transit Administration

Washington/Wabash Loop Elevated Station Project

City of Chicago, Cook County, Illinois

ENVIRONMENTAL ASSESSMENT

Submitted pursuant to 42 U.S.C. 4332 (2)(c)

by the:

U.S. Department of Transportation

Federal Transit Administration

and the

Chicago Department of Transportation

Date of Approval

Date of Approval

Marisol Simón, Regional Administrator Federal Transit Administration

2 - 24 - 2014

Date of Approval

Rebekah Scheinfeld, Commissioner Chicago Department of Transportation

HIS PAGE INTENTIONALLY LEFT BLANK)	
askington/Makash Lagn Flavatod Station	

RESPONSIBLE AGENCIES

Lead Agency: Federal Transit Administration

Project Sponsor: City of Chicago - Department of Transportation

WHERE TO FIND COPIES OF THIS DOCUMENT

A hard copy of the document is available for public inspection at the following locations:

Harold Washington Public Library Center Municipal Reference Collection 400 South State Street, Fifth Floor Chicago, Illinois 60605

Chicago Department of Transportation (CDOT) 30 North LaSalle Street, Suite 1100 Chicago, Illinois 60602

To view an electronic copy of this document please visit the project website at: http://www.chicagodot.org

CONTACT INFORMATION

For additional information please contact our public involvement coordinator who can direct your questions and comments to the appropriate person:

Reginald Arkell Community Planner Federal Transit Administration, Region 5 200 West Adams Street, Suite 320 Chicago, Illinois 60606 Pete Scales
Public Information Officer
Chicago Department of Transportation
30 North LaSalle Street, Suite 1100
Chicago, Illinois 60602

ABSTRACT

The Chicago Department of Transportation (CDOT) proposes to construct a rapid transit station at Washington/Wabash on the Loop Elevated structure for use by Chicago Transit Authority (CTA) rapid transit services. This station would replace two existing 115-year old stations along North Wabash Avenue in Chicago's downtown with a new station that would be accessible to riders with disabilities, would offer improved boarding and alighting efficiencies, and would include safety and security enhancements.

This Environmental Assessment (EA) is prepared under National Environmental Policy Act (NEPA) guidelines to consider the effects and impacts of the construction of the Preferred Alternative for the Washington/Wabash Station on the resources in the vicinity. The potential impacts studied encompass social, economic, and environmental factors, as well as indirect and cumulative effects.

The construction scenarios analyzed include the demolition activities at the Randolph/Wabash and Madison/Wabash Stations, staging, and mitigation of impacts in accordance with construction Best Management Practices (BMPs) and local, state, and federal regulations.

The Federal Transit Administration (FTA) will make an independent evaluation of this EA, supporting documents, and public comments and responses thereto. If the FTA determines that the proposed *Project* would not have a significant adverse impact on the environment and on the social and economic fabric of the surrounding community, a Finding of No Significant Impact (FONSI) would be issued.

SUBMITTING COMMENTS

Comments on this Environmental Assessment must be received by the Chicago Department of Transportation by 5 PM CST, Friday, April 4, 2014

Comments may be submitted to the Chicago Department of Transportation via email at:

WashingtonWabashEA@cityofchicago.org

or in writing to the following address:

Pete Scales
Public Information Officer
Chicago Department of Transportation
30 North LaSalle Street, Suite 1100
Chicago, IL 60602

Table of Contents

1	EXECUTIVE SUMMARY	1
	1.1 NEPA Process and this EA	1
	1.2 Structure of this Environmental Assessment	1
	1.3 Project Purpose and Need	2
	1.4 Objectives Addressed by this <i>Project</i>	2
	1.5 Alternatives Considered for this <i>Project</i>	3
	1.6 Summary of Potential Impacts and Mitigation Measures	3
2	PURPOSE AND NEED FOR ACTION	4
	2.1 Project Background	4
	2.1.1 Location and Construction Limits	5
	2.1.2 Public Transit Service Overview	5
	2.1.3 Transportation and Urban Planning Context	11
	2.2 Project Purpose	11
	2.3 Project Need and Objectives	11
	2.3.1 ADA Compliance	12
	2.3.2 Operational Efficiencies	12
	2.3.3 Pedestrian Traffic Flow and Vertical Clearance	12
	2.3.4 Capacity for Growth, Increasing Ridership	14
	2.3.5 Safety and Security	14
	2.3.6 Maintaining Viability of the Historical Loop Elevated	14
3	ALTERNATIVES	15
	3.1 Preferred Alternative	15
	3.1.1 Conceptual Design Elements	15
	3.1.2 Benefits	16
	3.1.3 Drawbacks	19
	3.2 Non-Preferred Alternative	19
	3.2.1 Conceptual Design Elements	19
	3.2.2 Historic Preservation Consultation	19
	3.2.3 Benefits	21
	3.2.4 Drawbacks	21
3.	8.3 No Build Alternative	21
	3.3.1 Benefits	22

	3.3.2 Drawbacks	22
	3.4 Evaluation of Alternatives	22
4	AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES AND PROPOSED MITIGATION	23
	4.1 Resources of No Concern Eliminated from Detailed Analysis	23
	4.2 Land Use, Zoning, Land Acquisition, and Relocation	23
	4.2.1 Consistency with Regional Land Use Plans	23
	4.2.2 Zoning	25
	4.2.3 Relocation	25
	4.2.4 Summary	25
	4.3 Social and Economic Considerations	25
	4.3.1 Neighborhood Continuity and Community Cohesion	25
	4.3.2 Neighborhood Economic Fabric	27
	4.3.3 Summary	27
	4.4 Environmental Justice	27
	4.4.1 Definitions of "Minority" and "Low-Income" for this analysis	27
	4.4.2 Applicable Census Data for <i>Project Area</i> and City of Chicago	27
	4.4.3 Determination of Environmental Justice Impacts	28
	4.4.4 Environmental Justice Considerations in Outreach Planning	28
	4.4.5 Summary	28
	4.5 Historical and Archeological Resources	30
	4.5.1 Existing Local Architectural Historical Resources and Impacts	30
	4.5.2 Section 106 Consultation	30
	4.5.3 Archaeological Resources	37
	4.5.4 Summary of Impacts and Mitigation Measures	37
	4.6 Parklands and Recreational Resources	37
	4.6.1 Existing Parklands and Recreational Resources and Impacts	37
	4.6.2 Section 4(f) Resources	38
	4.6.3 Section 6(f) Resources	38
	4.6.4 Summary	40
	4.7 Visual Resources and Aesthetics	40
	4.7.1 Visual Resources	40
	4.7.2 Summary	40
	4.8 Air Quality	40
	4.8.1 Non-Attainment Areas	40

4.8.2 Hot Spot Analysis Requirements	41
4.8.3 Summary	41
4.9 Noise and Vibration	41
4.9.1 Noise	42
4.9.2 Vibration	42
4.9.3 Summary	42
4.10 Floodplains	43
4.11 Water Resources	43
4.11.1 Navigable Waterway	43
4.11.2 Section 401/404 of the Clean Water Act (CWA)	43
4.11.3 National Pollutant Discharge Elimination System	43
4.11.4 Summary	45
4.12 Wetlands	45
4.13 Biological Resources	45
4.14 Ecologically Sensitive Areas	45
4.14.1 IDNR EcoCAT Correspondence	45
4.14.2 USFWS Correspondence	45
4.14.3 Summary	45
4.15 Hazardous Materials	47
4.15.1 Visual Survey for Lead Based Paint and Asbestos Containing Building Materials	47
4.15.2 Local, State, and Federal Hazardous Materials Database Findings	47
4.15.3 Use of information during Construction	48
4.15.4 Summary of Impacts and Mitigation Measures	48
4.16 Energy	49
4.16.1 Conservation through Design Elements	49
4.16.2 Conservation through Construction Best Management Practices	49
4.16.3 Summary of Impacts and Mitigation Measures	
4.17 Traffic and Parking	50
4.17.1 Construction-Related Temporary Closures	50
4.17.2 Summary of Impacts and Mitigation Measures	50
4.18 Safety and Security	51
4.18.1 Design Elements	51
4.18.2 Summary of Impacts and Mitigation Measures	51
4.10 Construction Palated Impacts	51

vii

4.19.1 Staging	51
4.19.2 Work Crew Activities	52
4.19.3 Summary of Impacts and Mitigation Measures	52
4.20 Indirect (Secondary) Impacts	55
4.20.1 Construction-Related	55
4.20.2 Post-Completion	55
4.20.3 Summary of Impacts and Mitigation Measures	
4.21 Cumulative Impacts	
4.21.1 Cumulative Impacts – Findings	
4.22.2 Summary of Impacts and Mitigation Measures	
5 PUBLIC INVOLVEMENT AND PROJECT COORDINATION	
5.1 Agency Coordination	
5.2 Public Coordination	
5.3 Traveler Notification	
5.4 Public Hearing	
References	59
Figures and Tables	
Tigures and Tables	
Figure 1 – Downtown Loop Elevated Stations and CTA Lines - Past and Present	
Figure 2 – Washington/Wabash Elevated Station <i>Project Area</i>	
Figure 3 – Washington/Wabash Elevated Station Study Area	
Figure 4 – Topographic Maps including Roads and Highways	
Figure 5 – CTA Rail Boarding Trends at Randolph/Wabash and Madison/Wabash Stations	
Figure 6 – Platform View of Washington/Wabash Elevated Station (Preferred Alternative)	
Figure 7 – Overhead View of Washington/Wabash Elevated Station (Preferred Alternative)	
Figure 8 – Conceptual Cross Section Perspective of the Haskell Building in the Non-Preferred Alternative Des	-
Figure 9 – Zoning Map of <i>Project Area</i> and Vicinity	
Figure 10 – Census Tracts incorporating the <i>Study Area</i>	
Figure 11 – Map of National Register of Historic Places sites in <i>Study Area</i> and downtown Chicago	
Figure 12 – Parks near the <i>Study Area</i>	
Figure 13 – Flood Insurance Rate Map (FIRM) for <i>Study Area</i>	
Figure 14 – Wetlands Inventory Map for the <i>Study Area</i>	46
Table 1 – Vertical Clearance Comparisons of proposed station and existing stations	13
Table 2 – Population Characteristics related to Environmental Justice	
Table 3 – Formally Designated Historic Districts and Buildings in <i>Project Area</i> and <i>Study Area</i>	
Table 4 – Construction Impacts and Related Mitigation Measures - by Resource	

APPFNDICES

Title **Appendix**

A Exhibits

Fxhibit 1 Preliminary Design Concept for Preferred Alternative Concept Design for Non-Preferred Alternative Exhibit 2

B. Section 106 Correspondence and Attachments

Urban Mass Transit Administration October 7, 1981 Correspondence and Finding of No

Adverse Effect

Illinois Historic Preservation Agency 2006 Correspondence (May 3 by City, June 22 by SHPO)

> 2007 Correspondence (May 16 by City, Aug. 23 by SHPO) 2013 Correspondence (May 7 by FTA, Nov. 5 by SHPO

Files IL-1, IL-1D and IL-1I (ILL-16-CHIG-108,-108D,-108I)

Excerpt from 1981 City of Chicago Master Plan for the

CMAP and 2010 U.S. Bureau of the Census Data Cook County Non-Attainment Status by Year since 1978

(CO), Particulate Matter (PM) PM_{2.5} and PM₁₀

CFR-2011-title40-vol20-sec93-123 – For Carbon Monoxide

Dec. 20 by FTA)

Historic American Engineering Record

(National Park Service)

City of Chicago

Loop Elevated Rehabilitation and Historic Preservation

National Register of Historic Places (NPS) National Historic Buildings and National and Chicago

and Chicago Landmarks Commission Landmarks

C. Research and Data Findings

Chicago Metropolitan Agency for Planning Transportation Improvement Program (TIP) Listing -Project ID 01-12-0008

(CMAP)

Environmental Justice

Air Quality Conformity Reference for Illinois

Hot Spots Analysis Reference

Noise Study Calculations and Graphs Illinois Department of Natural Resources IDNR EcoCAT Response

IDNR EcoCAT Cook County Endangered Species List

United States Fish and Wildlife Service USFWS No Effects Determination Letter

USFWS Endangered Species List

D. Hazardous Materials Findings

Environmental Research Synopsis Matrix and Map Sampling Results and Report Lead Based Paint

E. Public Outreach and Coordination

Public Involvement **Public Involvement Matrix**

ACRONYMS AND ABBREVIATIONS

ACBM Asbestos Containing Building Material
ACHP Advisory Council on Historic Preservation
ADA Americans with Disabilities Act of 1990

BMP Best Management Practice(s)

BRT Bus Rapid Transit

CDOT Chicago Department of Transportation

CFR Code of Federal Regulations

CMAP Chicago Metropolitan Agency for Planning

CMAQ Congestion Mitigation and Air Quality Improvement

CO Carbon Monoxide

CTA Chicago Transit Authority
EA Environmental Assessment
EJ Environmental Justice

EPA United States Environmental Protection Agency FEMA Federal Emergency Management Agency

FHWA Federal Highway Administration FONSI Finding of No Significant Impact FTA Federal Transit Administration

HAER Historic American Engineering Record
IDNR Illinois Department of Natural Resources
IHPA Illinois Historic Preservation Agency

LBP Lead Based Paint

LUST Leaking Underground Storage Tank

MAP-21 Moving Ahead for Progress in the 21st Century Act of 2012

NAAQS National Ambient Air Quality Standards
NEPA National Environmental Policy Act

NFA No Further Action
NFR No Further Remediation

NHPA National Historic Preservation Act of 1966

NICTD Northern Indiana Commuter Transportation District

NPS National Park Service

NRHP National Register of Historic Places
SHPO State Historic Preservation Officer or Office

SAFETEA-LU Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users of 2005

SQG Small Quantity Generator

TIP Transportation Improvement Program
TOD Transit Oriented Development

USC United States Code

UMTA Urban Mass Transportation Administration
USFWS United States Fish and Wildlife Service
USGS United States Geological Survey
UST Underground Storage Tank

GLOSSARY OF TECHNICAL TERMS

American with Disabilities Act of 1990 (ADA) – This legislation defines the responsibilities and requirements for transportation providers to make transportation accessible to individuals with disabilities.

Best Management Practices (BMPs) – For transportation projects, this term refers to measures taken during construction and demolition to control noise, minimize impact to air quality from idling equipment, prevent release of soils into storm sewers, and provide ongoing updates to surrounding businesses, institutions, and service providers.

Bus Rapid Transit (BRT) – This is a mode of public transportation where bus operations are supplemented with facilities and service qualities resembling those of rapid transit. Facilities to be constructed on Madison and Washington Streets in the *Study Area* as part of CDOT's Central Loop BRT project include tinted bus lanes, BRT stations with level boarding and "Queue Jump" bus priority signal timing.

Environmental Justice (EJ) – This is an overall term for the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Federal EJ policy was codified in 1994 by Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations.

Historic American Engineering Record (HAER) - This was established in 1969 by the National Park Service, the American Society of Civil Engineers and the Library of Congress to document historic sites and structures related to engineering and industry and it was later joined by four other engineering societies.

Finding of No Significant Impact (FONSI) – This is the decision document to be issued by a project's lead federal agency (for this project, the Federal Transit Administration) if, after the environmental assessment is prepared and public comments are received and addressed, the proposed project is not expected to have significant negative impacts.

Moving Ahead for Progress in the 21st Century Act (MAP-21) – This federal act, signed into law in 2012, funds surface transportation programs at over \$105 billion for FY 2013 and 2014 and consolidates federal programs. It is the successor to SAFETEA-LU. (See below.)

National Environmental Policy Act (NEPA) – This federal law (40 CFR §§ 1500-1508) requires consideration of the potential impacts on the environment of proposed federal actions (including projects that use federal grant funds).

National Register of Historic Places (NRHP) – Managed by the National Park Service, this is the official list of historic places in the United States determined to be worthy of preservation. Authorized by the National Historic Preservation Act of 1966, it is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources.

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) – This federal act, signed in 2005, guaranteed funding of \$224.1 billion for highways, highway safety, and public transportation and specified transportation policies. It was succeeded in 2012 by MAP-21. (See above.)

Section 106 – This section of the National Historic Preservation Act (16 U.S.C. 470f) requires federal agencies to take into account the effects of federally funded projects on historic resources in the vicinity of construction activities.

Section 4(f) – This section of the Department of Transportation Act of 1966 restricts the use of publicly owned parks, recreation areas, wildlife and waterfowl refuges, and public or private historic sites for federally funded projects. Portions were revised by SAFETEA-LU legislation.

Title VI – This section of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, and national origin in programs and activities funded by the federal government. Transit Oriented Development (TOD) – This term describes urban mixed land use development focused on access to surrounding transit facilities.

1 EXECUTIVE SUMMARY

The Chicago Department of Transportation (CDOT) proposes the construction of a new Washington/Wabash Elevated Station on the Loop Elevated structure to be used by rapid transit service on Chicago Transit Authority's (CTA's) Brown, Green, Orange, Pink, and Purple Lines. This fully-accessible station would replace and consolidate operations of two 115-year old elevated stations in Chicago's Central Business District: Randolph/Wabash Station to the north and the Madison/Wabash Station to the south.

The lead federal agency on this project is the Federal Transit Administration (FTA), because construction would use federal Congestion Mitigation and Air Quality improvement funds through an FTA grant. In order to receive approval to proceed with construction of the Washington/Wabash Station, CDOT has been following National Environmental Policy Act (NEPA) guidance in preparing this Environmental Assessment (EA).

This executive summary describes the National Environmental Policy Act (NEPA) process, the structure of this EA, the *Project* purpose and need, the objectives that it fulfills, and the basics of the proposed construction and its impacts. Mitigation measures related to anticipated construction impacts are summarized.

NOTE: In this document, certain shortened names are used for clarity, consistency, and/or simplicity. The entire scope of work that includes station removal and construction is simply the "Project." The stations are often identified as "Randolph/Wabash Station," "Madison/Wabash Station," and "Washington/Wabash Station" without the words "Loop" or "Elevated." The structure carrying CTA rapid transit trains above streets in Chicago's downtown is known variously to the public as the "L", the "Loop," the "Elevated" and the "Loop Elevated," but "Loop Elevated" is used throughout this document unless a historical document is directly quoted.

1.1 NEPA Process and this EA

This document has been prepared by the FTA as the lead federal agency and by the Chicago Department of Transportation (CDOT) as its grantee to comply with the National Environmental Policy Act (NEPA). Enacted in 1969, NEPA's overarching mission is for federal agencies that implement or fund projects to fulfill their responsibilities as trustees of the environment for succeeding generations. Therefore, this NEPA EA study documents the potential for impact on natural, cultural, and historical resources within the *Project Area* (Figure 2), immediately adjacent to the proposed perimeter of the Washington/Wabash Station, and the *Study Area*, (Figure 3). The *Study Area* is ½ of a mile around the periphery of the *Project Area*.

The purpose of this EA is to provide CDOT, FTA, and the public with information to make an informed decision about this proposed *Project*. The findings of this study will be published and distributed to the public via several media. A public hearing will follow and the public will be given the opportunity to comment. Responses to public comments will be made available by CDOT. If FTA determines - after an independent evaluation of findings, public comments, and responses to comments - that the negative impacts from the *Project* would be less than significant, a Finding of No Significant Impact (FONSI) would be issued and this *Project* would proceed to completion.

1.2 Structure of this Environmental Assessment

This EA is composed of five sections. The Executive Summary gives an overview of the NEPA process and the *Project*. The second section, "Purpose and Need For Action", describes how the construction of the Washington/Wabash Station would resolve identified deficiencies of the east leg of the Loop Elevated and would fulfill essential objectives. The third section presents the three alternatives considered for this *Project*, including a No Build Alternative. The fourth section, "Affected Environment, Environmental Consequences and Proposed Mitigation,"

details the potential impacts of the *Project* on particular social, economic, and physical resources as well as planned mitigation measures. The fifth and final section outlines Public Involvement and Project Coordination.

1.3 Project Purpose and Need

The purpose of the Washington/Wabash Station *Project* is to address deficiencies on the east leg of the Loop Elevated, along North Wabash Avenue, generally between and including East Randolph Street on the north and East Madison Street on the south. The *Project* need is to provide an accessible, safe, and efficient public transit infrastructure for all riders.

The two current stations are unable to properly serve people with disabilities, have constrained capacity with narrow platforms, have an awkward retrofitted layout of fare collection equipment, and lack the quality of lighting, security, and real-time travel information that contemporary transit customers expect.

The Loop Elevated structure has historic significance for Chicago's downtown. Built in 1897, the Loop Elevated has retained its viability because the stations along its route have been consolidated and renovated over time. The two stations on North Wabash originated with the Loop itself but are an accumulation of piecemeal improvements over the decades, all of which are beyond their useful life.

Preserving the structural and operational viability of the Loop Elevated is a *Project* objective expressed in the *1981 City of Chicago Master Plan for the Loop Elevated Rehabilitation (1981 Loop Master Plan)*. Among the recommendations in the plan were the consolidation of pairs of stations on Wells Street and Wabash Avenue, both at Washington Street. These would better serve customers and result in two stations per side of the Loop Elevated structure. The Wells Street stations were consolidated in the 1990's and this *Project* would consolidate the Wabash stations.

Having a quality, accessible station is especially important at this high profile location that is crucial to the CTA rapid transit system. It serves a total of almost 700 train runs each day on five different lines and is also the primary transfer point to Metra Electric commuter rail service and the upcoming Central Loop Bus Rapid Transit (BRT) project. It serves a mix of destinations; it is not only adjacent to the Jewelers Row shops and a block from the historic retail center of State Street, but it is also the gateway to the Chicago Cultural Center, Michigan Avenue, the Pritzker Pavilion and the Harris Theater in Millennium Park, and the high-rise office, hotel, and residential buildings of River East including Aon Center, Two Prudential Plaza, Aqua, and Blue Cross-Blue Shield Tower (the 6th, 15th, 44th, and 86th tallest buildings in the US, respectively).

1.4 Objectives Addressed by this *Project*

The *Project* addresses the identified deficiencies and serves the goals of improving customer satisfaction and maintaining a viable Loop Elevated structure. It would provide the first Americans with Disabilities Act (ADA)-compliant station on the east leg of the Loop Elevated. Wider platforms and more turnstiles would improve the flow of passenger traffic, making access and egress safer and more efficient. Modern amenities that would come with the new Washington/Wabash Station include escalators and elevators, brighter, energy efficient lighting, better protection against wind and inclement weather, and electronic signage and announcements. These amenities would create a pleasant, safe environment, encouraging more riders to use the rapid transit lines on the Loop Elevated to travel to and from the many residential, work, retail, cultural, and recreational destinations nearby.

1.5 Alternatives Considered for this *Project*

There are three alternatives discussed in this EA. Two of them, the Preferred and Non-Preferred Alternative, each include a consolidated station as the preliminary design. The station house in the Preferred Alternative is primarily in a mezzanine above the street and below the track level. In the Non-Preferred Alternative, the station house would be located inside the historical Haskell building. This option was removed from further consideration after discussions with the Illinois Historic Preservation Agency (IHPA). The third alternative, the No Build scenario, is included for comparison.

1.6 Summary of Potential Impacts and Mitigation Measures

Potential direct impacts from the construction of the new Washington/Wabash Station were reviewed and itemized in Section 4 of this document, "Affected Environment, Environmental Consequences and Proposed Mitigation."

The section is subdivided into resource categories pertinent to the urban environment of the *Study Area*. These include potential effects on land use and zoning, on the local economy and neighborhood, on minority and low-income populations, on cultural, historical, and natural resources such as architecturally significant buildings and parks, on the visual or aesthetic resources, on security and safety, on traffic and parking, and on air quality.

Physical environmental impacts related to soil and water quality, sustainability, floodplains were also researched. Due to the *Project's* location, it was deemed unnecessary to review the following resources: sole source aquifers, coastal zones, wild and scenic rivers, and prime and unique farmland.

Based on the review of the resources outlined above, no long-term negative impacts of significance were identified.

The short-term impacts from construction and associated demolition activities are summarized in Table 4 following Section 4.19 (Construction-Related Impacts). To reduce short-term transit access impacts, construction would be staged in two phases. In the first stage, the Randolph/Wabash Station would remain open during the demolition of the Madison/Wabash Station and construction of the Washington/Wabash Station. After the completion of the Washington/Wabash Station, the second stage would begin with the demolition of the Randolph/Wabash Station.

2 PURPOSE AND NEED FOR ACTION

The Randolph/Wabash and Madison/Wabash Stations on Chicago's Loop Elevated serve five rapid transit lines and constitute a gateway to office and retail complexes, cultural and recreational resources, public and educational institutions, and residential developments. These two aging stations have become increasingly difficult and costly to maintain, and lack proper access for people with disabilities. While there have been piecemeal improvements over the last 115 years, such as the cosmetic improvements to the exterior of the Randolph/Wabash Station in 1957, these two stations are well beyond a standard 50-year service life for such facilities.

The cost of rebuilding both stations would be high and would be an inefficient use of public resources given their close spacing – less than 800 feet apart. Therefore, the Chicago Department of Transportation (CDOT) and the Chicago Transit Authority (CTA) propose to address several objectives by consolidating the Randolph/Wabash and Madison/Wabash Stations into a new, attractive, fully-accessible station at Washington/Wabash that would have greater boarding capacity than the two stations it would replace, combined. Such a consolidation would not only be consistent with plans that date back to 1981 (1981 Loop Master Plan), but would match a similar consolidation (also in the 1981 plan) on the Wells Street side of the Loop Elevated in 1994-1995.

The primary goals of CDOT and CTA for this *Project* are to satisfy existing and potential transit customers with accessible, safe, and efficient facilities, to address physical and operational deficiencies in a cost efficient manner, to support neighboring businesses and institutions, and to improve the viability and visibility of transit as a travel option for Chicagoans and visitors.

Because CDOT and CTA each owns parts of the public transit infrastructure operated by CTA in Chicago, they work together to improve that infrastructure. CDOT often serves as the lead design, engineering and construction agency on such projects in the Central Area, and would serve as the lead on this *Project* as well.

This section begins with the *Project's* background including its location, the urban transportation planning context, and an overview of CTA's transit service. This is followed by a discussion of the overarching purpose of the Washington/Wabash Station to address the deficiencies of the east leg of the Loop Elevated. The next subsection describes the needs that this *Project* is intended to address, and details the objectives to meet those needs.

2.1 Project Background

The *Project* location is in a thriving downtown business district. The predominant activities are retail and commercial, as they have been for over 100 years, although more recently there has been an increased presence of educational and cultural institutions in this area, as well as high-rise residential development and redevelopment. The surrounding land uses epitomize the objectives of Transit Oriented Development (TOD).

Rapid transit trains have defined this urban landscape since 1897, when the Union Elevated Railroad began operations along what later came to be called the Loop Elevated. These elevated tracks are a historic and economic resource whose viability can only be maintained if it serves its role well as a public transportation facility. One aspect of this is that the stations along its route are fully accessible and attractive to customers. As a result, there have been many changes to the stations along the Loop Elevated over the decades, with some undergoing renovations, others being demolished, and new ones being constructed.

To continue these efforts, the *1981 Loop Master Plan* recommended a number of station-related projects to support the viability and vitality of the Loop Elevated. One of these future projects was the replacement of the Randolph/Wabash and Madison/Wabash Stations with a consolidated Washington/Wabash Station.

2.1.1 Location and Construction Limits

The maps in figures 1 through 4 identify the *Project* location in different contexts. Figure 1 shows the Loop Elevated, past and present, including the fact that none of the stations on the east (Wabash Avenue) leg are Americans with Disabilities Act (ADA)-compliant, whereas there is already one accessible station (marked with the International Symbol of Access) on each of the other three legs.

The planned limits of the *Project Area* are depicted in Figure 2. The new station limits extend along Wabash Avenue from Washington Street to 150 feet south of East Madison Street. However, the *Project Area* also includes the demolition area for the Randolph/Wabash and Madison/Wabash Stations which extends along Wabash Avenue from 300 feet north of East Randolph Street to 300 feet south of East Madison Street.

The *Study Area* used in several evaluations in the EA, is shown in Figure 3. It extends ½ of a mile beyond the perimeter of the *Project Area*. Figure 4 uses federal USGS topographic maps to depict the *Study Area* in the larger urban context of downtown Chicago including major thoroughfares and natural features.

2.1.2 Public Transit Service Overview

The CTA serves the City of Chicago and 35 of its suburbs. On an average weekday, there are about 1.7 million rides taken on CTA's bus and rail lines. These connect to commuter long distance rail stations, a suburban bus system, as well as two international airports. CDOT and CTA regularly upgrade facilities to be accessible to people with disabilities; 97 of the CTA's 145 rail stations now meet ADA accessibility standards.

The east (Wabash) leg of the Loop Elevated currently serves 673 train operations each weekday on five CTA rail lines: Orange, Brown, Green, Pink, and Purple (it also serves as a detour route for the Red Line). The two existing stations in the *Project Area* served a total of over 4,300,000 entering passengers in 2012 – a number that has more than doubled in the past twenty years (See Figure 5). Randolph/Wabash served 2,311,684 entering passengers, averaging 7,676 on weekdays, 3,862 on Saturdays and 2,604 on Sundays. Meanwhile, Madison/Wabash served 2,036,939 passengers, averaging 6,797 on weekdays, 3,375 on Saturdays and 2,172 on Sundays.

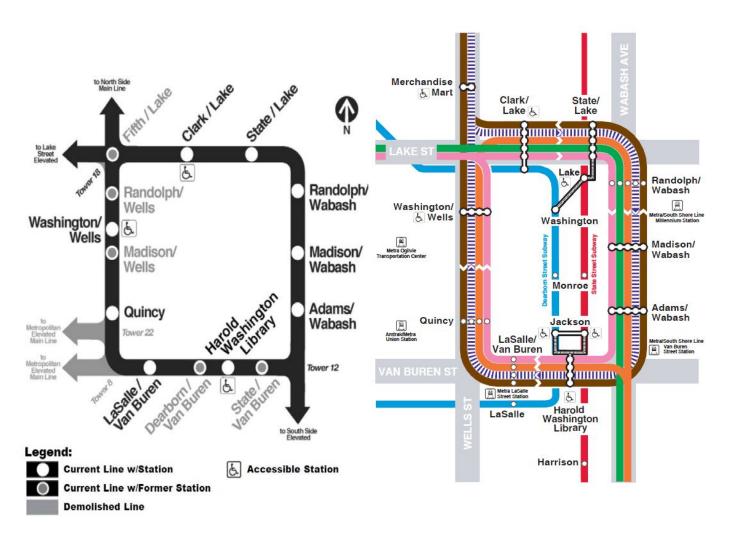
There are two subway lines immediately to the west of the *Project Area*. One block away, underneath State Street, is the Red Line - the most heavily used rail route in the CTA system. Two blocks west, below Dearborn Street, is the Blue Line - which serves O'Hare International Airport at its northern terminal. (Transfers to the Red and Blue Lines can also be made at the State/Lake and Clark/Lake Stations on the Loop Elevated, respectively.)

Nine CTA bus routes (J14, 19, 20, 56, 60, 124, 147, 151, 157) pass below the east leg of the Loop Elevated on either Madison Street, Washington Street or both. Thirteen more (2, 3, 4, 6, 7, 10, 26, 29, 36, 62, 143, 146, 148) operate in the Study Area on State Street and/or Michigan Avenue.

The new Washington/Wabash Station would become the closest rapid transit station to Millennium Park and to Millennium Station (located below the park), which is a terminal for the Metra Electric and NICTD South Shore commuter trains.

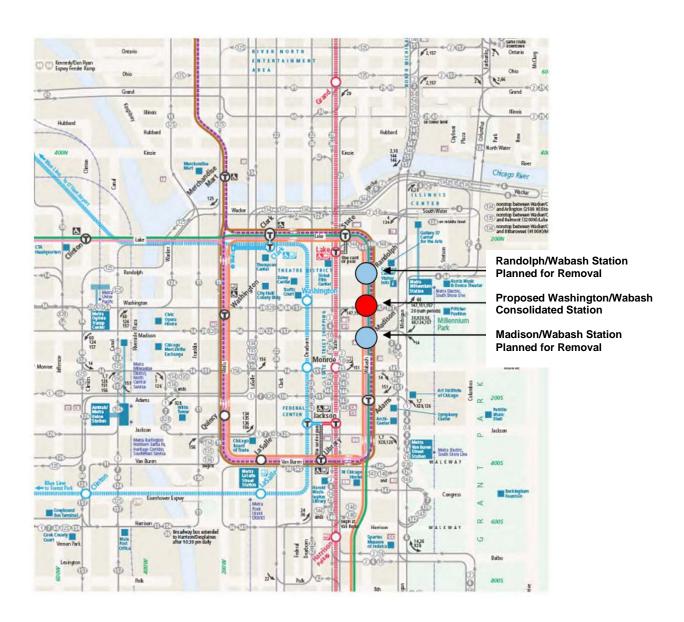
The new station would also serve notable destinations such as the Chicago Cultural Center, Grant Park, academic facilities of the School of the Art Institute, DePaul University, Roosevelt University, and Columbia College, as well as a wide variety of commercial establishments.

Figure 1 – Downtown Loop Elevated Stations and CTA Lines
- Past and Present



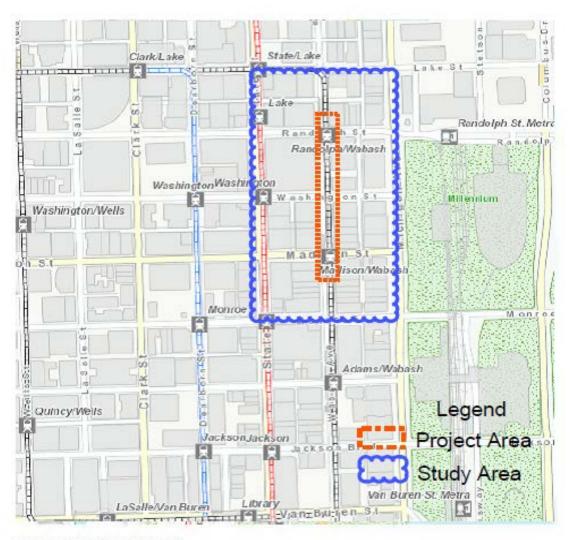
Sources: http://www.chicago-l.org/operations/lines/loop.html http://www.transitchicago.com/maps/

Figure 2 – Washington/Wabash Elevated Station *Project Area*



Source: Chicago Transit Authority (CTA)

Figure 3 – Washington/Wabash Elevated Station Study Area

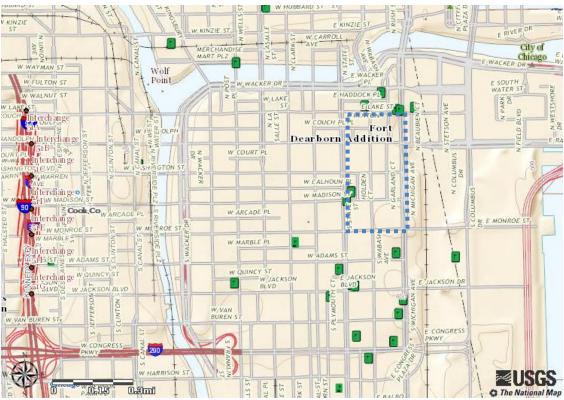


Printed 04/29/2013 04:47:58 PM Copyright © 2013 City of Chicago

Source: Chicago Department of Transportation (CDOT)

Figure 4 – Topographic Maps including Roads and Highways

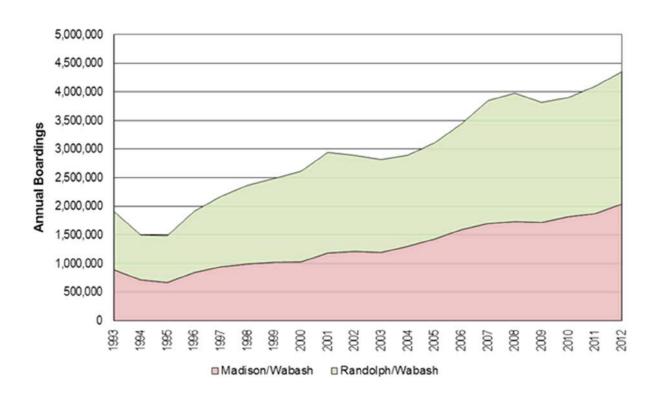
(Study Area is indicated by blue dashed lines)



Above: present day web-based map; Below: scan of past paper map from USGS website







2.1.3 Transportation and Urban Planning Context

This *Project* fits into several of the City's and region's transportation and urban planning initiatives. Consistency with Regional Land Use Plans is discussed in greater detail in Section 4.2.1.

The 1981 Loop Master Plan called for the consolidation of closely spaced stations. This Project would be the sixth station project to be implemented of the eight proposed in the plan, and it would fulfill the objective of having two stations placed uniformly on each of the four legs of the Loop Elevated. The Washington/Wabash Station would mirror the work completed at the Washington/Wells Station in 1994-95, when the Randolph/Wells and Madison/Wells Stations were demolished and replaced with a consolidated Washington/Wells Station. (See Figure 1.)

The Chicago Metropolitan Agency for Planning (CMAP) *GO TO 2040 Comprehensive Regional Plan (CMAP, October 2010)* incorporates by reference all rehabilitation and reconstruction projects identified in the CMAP Transportation Improvement Program (TIP). The "Washington/Wabash Consolidated Station" listing in the TIP has been assigned ID number 01-12-0008 and is included in Appendix C.

The Chicago Central Area Action Plan (Chicago Plan Commission, 2009) is intended to encourage the implementation of policies and projects essential for downtown Chicago's effective functioning, growth and quality of life. The *Chicago Forward Department of Transportation Action Agenda* (CDOT, May 2012) sets forth principles and current priorities for transportation infrastructure and policy. Both include the *Project* in itemized lists of recommended projects.

2.2 Project Purpose

The purpose of this *Project* is to address deficiencies in the current rapid transit stations on the east leg of the Loop Elevated, along North Wabash Avenue generally between East Randolph Street and East Madison Street. Customer satisfaction and the structural integrity of transit facilities are paramount goals for CDOT and CTA. After reviewing current conditions and consulting with local, state, and federal agencies, CDOT proposes to consolidate two obsolete stations into the single new Washington/Wabash Station. This new station would provide accessible, safe, and efficient transit to more riders in the Chicago area.

From the long range planning perspective, the *Project* is intended to contribute toward encouraging the use of public transit. Increased ridership would support the urban economy and compact land use development, while reducing traffic congestion, vehicle miles traveled, and air pollution from automobile tailpipe emissions.

2.3 Project Need and Objectives

The improved access, safety, and operational features of a new consolidated Washington/Wabash Station would rectify several problems with the existing system. CTA riders with disabilities currently lack ADA access to the Loop Elevated on Wabash Avenue. Having three stations in close proximity to each other on one side of the Loop Elevated is inefficient and results in operational costs and travel times that are greater than necessary. Both existing stations are outmoded, lack capacity for ridership growth, and are not conducive to attracting to new riders; for example, the Madison/Wabash Station mezzanine has too few turnstiles and low overhead clearances.

In 2011, an interagency Infrastructure Accessibility Task Force convened by CTA identified 11 criteria to prioritize ADA station improvements. Based on its final scoring of these criteria in 2012, the Randolph/Wabash Station ranked 8th on the list of 48 stations (the highest not on the Red Line) and Madison/Wabash was 12th.

11

To address these needs, specific objectives have been identified for the *Project*: to provide a rapid transit station whose design is ADA-compliant for the first time on the east leg of the Loop Elevated; to improve operational efficiency; to improve vertical clearance and pedestrian traffic flow for transit customers; to add capacity for ridership growth that can lead to improved air quality; to provide features in the design to increase safety and security; and to support the continued viability of the Loop Elevated as a whole. Detailed descriptions of the proposed design and construction elements for the Washington/Wabash Station are found in Section 3.1 (Preferred Alternative) and Exhibit 1 of Appendix A.

2.3.1 ADA Compliance

The new station would be fully ADA-accessible. On each side of the street would be pairs of elevators, one elevator between street level and one of the "unpaid" sections of the mezzanine level, and one between the "paid" area of the mezzanine and the platform level. (See Section 3.1.1.1 for further details). On each end of the mezzanine, one of the turnstile positions would be a wheelchair-accessible gate.

2.3.2 Operational Efficiencies

The consolidated Washington/Wabash Station would save travel time for riders since there would be one stop rather than two for each train running between the State/Lake and Adams/Wabash Stations. Time saved in travel and other benefits as quantified in the Congestion Mitigation and Air Quality Improvement (CMAQ) application for this *Project* are enumerated in Section 3.1.2 (Preferred Alternative - Benefits).

The single new station would be less costly for CTA to maintain and staff than two aging stations with worn and outmoded equipment. CTA would also have more energy efficient operations due to modernized lighting, electrical and mechanical systems and the elimination of one acceleration cycle on each train run on the Loop Elevated.

2.3.3 Pedestrian Traffic Flow and Vertical Clearance

The current stations have pedestrian routes that are constrained in width and height. The proposed design of the new station would have better vertical access, larger mezzanines with higher vertical clearance, and wider platforms.

2.3.3.1 Traffic Flow

At street level, sidewalks would be widened to protect each entrance. As stated above in the discussion of ADA compliance, access from the street level would include an escalator and elevators (not present in either of the two existing stations) as well as four regular stairwells which have a clearance width of at least 5' wide, about a foot (25%) wider than most stairs at the current Madison/Wabash and Randolph/Wabash Stations.

The escalator and one of the elevators would be located in the northeast quadrant of the station, which is expected to be the heaviest traveled quadrant. This corner of the station would be the closest entrance for the high-rise buildings of River East, the performance venues in Millennium Park, and transfers to Metra Electric service at Millennium Station.

The mezzanine level would be approximately 7,200 square feet, compared to approximately 3,200 square feet at the existing Madison/Wabash Station and a narrow walkway at Randolph/Wabash Station (where fare collection is at platform level).

There would be separate unpaid areas at both ends of the mezzanine, each with seven to eight turnstiles in a row (including one wheelchair accessible gate on each side) which would be immediately visible at the top

of the stairs/escalators. Fare vending equipment and customer information signs would be on the opposite wall nearest the stairs thereby reducing conflict between their use and the primary traffic flow of entering/exiting customers.

In the central "paid" area of the mezzanine, there would be train tracker monitors and contemporary signage to guide customers to both the inner and outer Loop platforms with two more 5-foot-wide stairs and an elevator to each platform.

The new station would have wider platforms than those in the existing stations (10-to-16 feet instead of 7.5-to-12 feet). The platforms would each have four exit points: two stairs to the mezzanine, an elevator to the mezzanine, and an exit-only stair at the south end that would connect directly to the south side of Madison Street.

2.3.3.2 Vertical Clearance

On the mezzanine level of Loop Elevated stations, vertical clearance for customers is constrained by the track support structure above and the vertical clearance for vehicles on the street below. Objects attached to the ceiling of the mezzanine can further reduce clearance at specific points.

At the current Madison/Wabash mezzanine, the lowest ceiling area height is 6 feet 5 inches and a conduit reduces clearance to 6 feet 3 inches. At the Randolph/Wabash mezzanine walkway (fare collection is at track level), the lowest ceiling height is 6 feet 4.5 inches, and a covered overhead pipe further reduces clearance to as little as 6 feet 1.5 inches.

The proposed minimum mezzanine ceiling height for the new Washington/Wabash station is 7 feet, increasing to at least 8 feet where there is no track overhead. This condition is similar to the most recently constructed mezzanines on the Loop Elevated at the Washington/Wells and Harold Washington Library Stations. Security cameras would reduce clearance to 6 feet 10.5 inches.

Table 1 below shows the net improvement of clearances between the existing stations and the new design.

Table 1 – Vertical Clearance Comparisons of proposed station and existing stations

From	То	Proposed Washington/ Wabash Station	Existing Madison/ Wabash Station	Proposed Clearance Increase	Existing Randolph/ Wabash Station	Proposed Clearance Increase
Lowest Continuous Ceiling Area	Floor	84"	77"	7" = 9%	76.5″	7.5" = 10%
Lowest Point of Obstruction	Floor	82.5″	75″	7.5" = 10%	73.5	9" = 12%

2.3.4 Capacity for Growth, Increasing Ridership

A greater number of turnstiles, an improved fare collection system, wider platforms, and auxiliary entrances (with high barrier gates) would better serve passengers, especially during peak travel periods.

The modernization of the station would eliminate capacity constraints and accommodate ridership growth. The total entrance capacity would increase to 15 turnstiles from the total of 14 at the two stations it would replace. There would be eight turnstiles on the Washington end of the mezzanine, and seven at the Madison end, including a wheelchair-accessible gate at each end. During special events CTA can install up to three temporary turnstiles at the service equipment gate to add additional capacity.

The open design of the new station is expected to attract residents as well as visitors and tourists. As the Loop Elevated station closest to many North Michigan Avenue attractions, the office and residential high rises of the Illinois Center and River East areas and Millennium Park, there is a clear market to be served. The availability of elevators and wheelchair-accessible turnstiles would also benefit people with luggage traveling between downtown and Midway Airport on the Orange Line, or to other destinations.

As mentioned in *Project* Purpose above, more riders on the CTA system would translate into fewer auto trips on the road. This would lead to a decrease in traffic congestion and air pollution resulting in improved air quality. Calculations related to estimating the number of motor vehicle trips diverted and eliminated is included in Section 3.1.2 (Preferred Alternative-Benefits).

2.3.5 Safety and Security

Safety and security features such as well-lit platforms, emergency response equipment, modern communication systems, electronically controlled real time signage (including train and bus tracker monitors) and improved weather protection and lighting all would create a brighter and safer transit environment. The escalators, elevators, and wider platforms would be convenient and safer in all weather.

2.3.6 Maintaining Viability of the Historical Loop Elevated

The construction of the Washington/Wabash Station is specified by the 1981 Loop Master Plan. That plan determined that the key to preserving the historic Loop Elevated was to keep it viable as a well-used transportation facility. The stations along its route must be in good repair, meet current accessibility, safety, and security standards, and satisfy current and potential public transit users. Such changes must also help maintain the historical integrity of the Loop Elevated as a structure and of the architectural and cultural resources within the *Project* and *Study Areas*.

3 ALTERNATIVES

After confirming the lack of accessibility and other inadequacies at the Randolph/Wabash and Madison/Wabash Stations, CDOT proceeded to evaluate alternatives to modernize the east leg of the Loop Elevated and provide accessibility.

Due to the high cost of renovation and maintenance for these two stations built in 1897, CDOT and CTA have concluded that demolition and replacement by a single station would be a more cost-effective solution. This is consistent with past and current plans for the Loop Elevated and the rest of downtown Chicago. A similarly-conceived station at Washington/Wells, built in 1995, demonstrated the feasibility and benefits of consolidating two outmoded and closely spaced stations into a single, modern facility. In 2006, CDOT - in consultation with CTA - began planning and design of a consolidated Washington/Wabash Station.

In accordance with the NEPA process, more than one alternative was evaluated. The Preferred Alternative and Non Preferred Alternative, both proposed to build a new consolidated Washington/Wabash Station, but differ in the placement of the station house. The No Build Alternative was also investigated to serve as a baseline comparison.

3.1 Preferred Alternative

The 2007 design for a consolidated Washington/Wabash Station with a mezzanine-level exterior station house design was chosen as the Preferred Alternative. It would satisfy the *Project* objectives of ADA access, improved safety, and operational efficiency. It would also fit within the larger transportation and urban planning context by contributing to the preservation of the viability of the historic Loop Elevated structure, and inviting increasing ridership. Its open design would offer a less obstructed view of the architecturally and culturally significant structures along Wabash and Michigan Avenues. Given the historical resources near the *Project Area*, CDOT consulted with the Illinois Historic Preservation Agency (IHPA). Following an opinion from the IHPA's State Historical Preservation Officer (SHPO) that the design presented would be able to meet standards related to the rehabilitation of historic structures, this design was chosen by CDOT as the Preferred Alternative.

The platform and overhead views of the Preferred Alternative are illustrated by Figures 6 and 7 respectively; cross-sections and additional illustrations are provided in Exhibit 1 of Appendix A.

3.1.1 Conceptual Design Elements

The conceptual design elements of the new proposed Washington/Wabash Station address the *Project*'s objectives of access, safety, and operational efficiencies. They include wider platforms, ADA-compliant elevators, and a more effective turnstile layout. For improved security and comfort, bright lighting, windbreaks, and overhead heaters are also incorporated.

3.1.1.1 Access

For improved access and increased capacity there would be stairs and pairs of elevators on each side of the street. One elevator would take passengers from street level to the mezzanine level, and another would go from the "paid" area of the mezzanine to the platform level. There would be an escalator and two stairwells for exiting passengers, midway between East Washington Street and East Madison Street. Two auxiliary entrance/exit stairs would be located on each side of South Wabash Avenue just south of East Madison Street, to serve riders accustomed to accessing the former station at that location. Overall, the distance to the stairs would change and be slightly closer for some transit customers and slightly farther for others.

3.1.1.2 Capacity, Safety and Security

To accommodate more passengers and maintain safety this new station would have platforms nearly twice as wide as the current stations, enlarged from the existing width of 7.5 feet to 10-to-16 feet. The total entrance capacity would increase to 15 turnstiles from the current 14.

There would also be a public address system for travel and emergency announcements and train tracker monitors would be installed.

The new station would have an Essential Transit System (ETS)/Uninterruptible Power Supply (UPS). In addition there would be a backup lighting system to provide security for CTA riders in event of a power failure or emergency. With lighting of all station locations, a backup electrical supply system, and twenty (20) surveillance cameras with offsite monitors, passengers would feel secure in all station areas, thereby expanding effective capacity.

3.1.1.3 Energy Efficiency

Energy efficiency would be incorporated into the lighting and electronically controlled signage for the station. The electrical system would include the extension of higher capacity electrical lines to the station area and the replacement of outdated electrical housing units as needed.

3.1.1.4 Integrity of Historical Resources and Vistas

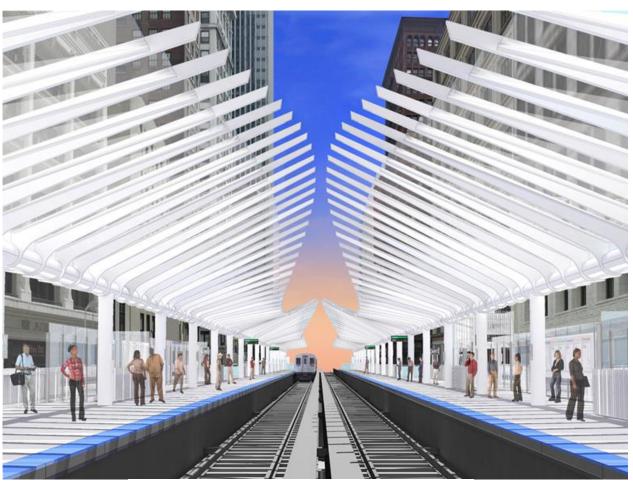
This plan would minimize alterations to the trestle of the Loop Elevated and have no impact on other historic buildings facing Wabash Avenue. It would offer clearer views of Millennium Park and improve street clearances by removing mezzanines over the East Randolph Street and East Madison Street intersections of Wabash and would provide less obstructed views of historic buildings facing Wabash.

3.1.2 Benefits

Anticipated benefits of the Preferred Alternative are:

- Complies with ADA requirements for access to all riders.
- Provides a modern design that would be less crowded for users, would attract riders and would be compatible with existing buildings.
- Increases station entrance capacity by 7.2% with 15 turnstiles versus the current combined total of 14 at the two stations it would replace.
- Improves security with a backup electrical system and a surveillance system for stairways, mezzanine, and platforms.
- Shortens travel times due to one stop rather than two between East Randolph Street and East Madison Street. According to the calculations in the CMAQ application for funding for the consolidated Washington/Wabash Station, it is anticipated that travel times would be improved by 30 to 50 seconds per day for about 66,300 daily passengers due to the elimination of one stopping sequence for each train.
- Improves air quality by eliminating and diverting car trips. Using a diversion rate of 4.71% of 12,107 daily boardings at the consolidated Washington/Wabash Station, the CMAQ application calculations show 356 round trips by car eliminated per day and 119 round trips by car diverted per day.
- Implements changes specified in local and regional plans.

Figure 6 – Platform View of Washington/Wabash Elevated Station (Preferred Alternative)



Source: Chicago Department of Transportation (CDOT)

Figure 7 – Overhead View of Washington/Wabash Elevated Station (Preferred Alternative)



Source: Chicago Department of Transportation (CDOT)

3.1.3 Drawbacks

Drawbacks of the Preferred Alternative are shown below. Please note that mitigation measures are discussed in Section 4 (Affected Environment, Environmental Consequences and Proposed Mitigation).

- Disrupts traffic during construction activities, including temporary street closures.
- Changes street-level entrance locations such that some users of the current Randolph/Wabash Station would have to walk up to 500 feet (1.2 blocks) further south to enter the new consolidated station.

3.2 Non-Preferred Alternative

Another design for a consolidated Washington/Wabash Station was prepared in 2006. It also addressed the inefficiencies identified at the existing Randolph/Wabash and Madison/Wabash Stations by incorporating wider platforms, elevators for improved accessibility, electrical and monitoring systems for security, and other modernization features. The primary difference was the re-use of the interior of the Haskell Building as the station house with a walkway leading to each platform.

Figure 8 depicts a cross section view of the Haskell Building interior under the Non-Preferred Alternative; additional illustrations of this alternative are included in Exhibit 2 of Appendix A.

3.2.1 Conceptual Design Elements

The conceptual design element that differentiated this approach from the Preferred Alternative was the connection of the retail spaces and interior station houses on the west and east sides of North Wabash Avenue with a pedestrian bridge.

The model for this was a Louis Sullivan-designed pedestrian bridge for transit station access that once stood at this location. One of the most influential architects representing the Chicago School of Architecture, Louis Sullivan is regarded as the "father of skyscrapers." An elevated two-story walkway would have replicated the original Louis Sullivan bridge. Decorative details would have been restored and missing decorative panels refabricated.

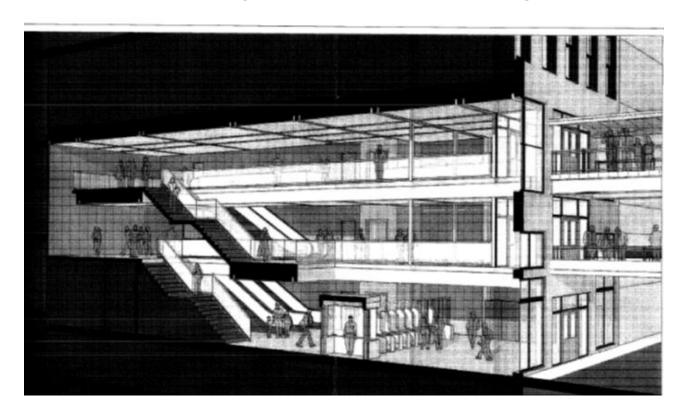
This alternative would have placed a station house inside the historic Haskell-Barker-Atwater Building at 22 South Wabash Avenue, framed by a restored Sullivan façade with all the windows in vision glass. (The Haskell Building had also been remodeled by Sullivan, in 1896.) The stairs, escalators, and an elevator would have been located indoors in the station house (comparable to the access to the Loop Elevated platforms at the Clark/Lake Station).

As with the Preferred Alternative, this plan would provide clearer views of Millennium Park, and improved street clearances by removing mezzanines over the East Randolph Street and East Madison Street intersections of Wabash.

3.2.2 Historic Preservation Consultation

Although the Sullivan-designed details and decorative panels would have been restored, the interior station house would have meant a notable change to the historic Haskell Building. Furthermore, the Haskell Building façades would have been obstructed from street level by the walkway. Due to the sensitive nature of such changes, CDOT arranged for IHPA staff to visit the site and review schematic drawings and hear their input prior to seeking any approvals for the *Project*.

Figure 8 – Conceptual Cross Section Perspective of the Haskell Building in the Non-Preferred Alternative Design



In a June 22, 2006 letter to CDOT, the SHPO observed that this alternative for the *Project* would partially demolish and wholly obscure a façade designed by Louis Sullivan and obscure several historic buildings across the street, "most notably the Jewelers' Building, also a Louis Sullivan design." SHPO closed the letter to CDOT recommending against the concept: "It is our decision that these are very grave adverse effects and we encourage the CTA to explore alternative locations for the Wabash Elevated Station." Copies of the June 22, 2006 letter and other CDOT-IHPA correspondence are provided in Appendix B.

While the design was intended to restore and replicate historic design elements, CDOT learned that historic preservation experts would have other concerns that would outweigh the intended benefits and would find the overall design concept unsatisfactory. Rather than further pursue a design concept unlikely to secure future approvals, CDOT abandoned the concept and made changes to the design so as to no longer include any use of the Haskell building. These changes ultimately lead to the Preferred Alternative.

3.2.3 Benefits

The anticipated benefits of the Non-Preferred Alternative would have been:

- Complies with ADA for access to all riders
- Improves security with modern electrical, monitoring, and public announcement systems.
- Shortens travel times due to one stop rather than two between Randolph Street and Madison Street.
- Improves air quality by eliminating and diverting car trips
- Provides unobstructed view of architectural, historical, and cultural resources from certain vantage points
- Reuses a historical building, replicates a historic pedestrian bridge and restores a Louis Sullivan façade.

3.2.4 Drawbacks

The anticipated drawbacks of the Non-Preferred Alternative would have been:

- Alters the interior of the Haskell Building substantially, raising concerns by historic preservation experts about the future historical integrity of the building.
- Partially demolishes an existing Louis Sullivan facade
- Obscures views of historical buildings across the street such as Jewelers Row, another Louis Sullivan design
- Lacks support from historic preservation experts
- Changes street-level entrance locations such that users of the current Randolph/Wabash station would have to walk up to 650 feet (1.3 blocks) further south to enter the consolidated station.

3.3 No Build Alternative

In the No Build Alternative, construction of the consolidated Washington/Wabash Station would not occur. CTA would conduct routine maintenance of the Randolph/Washington and Madison/Washington Stations as funds permit with occasional, piecemeal improvements when necessary for public safety.

The No Build Alternative would not address the needs identified in Section 2.3 (*Project* Needs and Objectives), or in local and regional plans for the Loop Elevated as described in Section 2.1.3 above and Section 4.2.1 below. Stations would continue to operate with the deficiencies identified by CDOT and CTA. No action would be taken to address the lack of ADA accessibility on the east leg of the Loop. This much used location adjacent to established retailers, a gateway to Michigan Avenue and its cultural and recreational resources, and proximity to office and hospitality complexes would still not be served adequately in terms of access, security, or operational efficiency.

In the long-term, costs would increase for the upkeep of these aging, obsolete structures, and the continued deterioration of the existing stations could eventually lead to demolition of one or both stations without adequate replacement.

3.3.1 Benefits

Benefits for the No Build Alternative are:

- Does not cause construction-related disruption
- Does not change station entrance locations

3.3.2 Drawbacks

The drawbacks for the No Build Alternative are:

- Fails to improve transit access for people with disabilities
- Fails to increase total turnstile capacity to accommodate ridership increases
- Makes little or no improvements to security on the platform and in the stairwells
- Does not improve travel times
- Does not adhere to local and regional plans calling for consolidating Randolph/Wabash and Madison/Wabash Stations
- Does not address deterioration of stations and risks their eventual closure

3.4 Evaluation of Alternatives

The conceptual designs for a consolidated station from 2006 and 2007 each provided improved accessibility, capacity, security, and efficiency. The difference was the placement of the station house. The Non-Preferred Alternative from 2006 located the station house inside the historic Haskell building; this design raised sufficient historic preservation concerns during early consultations with the SHPO at the IHPA that it was no longer considered feasible by CDOT.

Revisions lead to the development of the Preferred Alternative a year later. The 2007 concept maintained benefits of a modern consolidated station, but its use of an exterior station house in a mid-block mezzanine was designed specifically to avoid the historic preservation issues raised by the 2006 concept, while still improving vistas on Randolph and Madison Streets.

The No Build Alternative would not meet the *Project* Purpose and Need to resolve the current inefficiencies on the east leg of the Loop Elevated. Maintaining the status quo would not respond to the need to build a modern fully accessible, safe, and efficient consolidated facility.

4 AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES AND PROPOSED MITIGATION

As part of the planning and design process for the Preferred Alternative, potential *Project* impacts and proposed mitigation have been considered. In this section, the findings for each of the resources of concern are concluded by a listing of potential negative and positive impacts and either proposed mitigation measures or a statement that such measures are not applicable.

4.1 Resources of No Concern Eliminated from Detailed Analysis

Since the *Project Area* is located within an urbanized setting that has been densely developed for over a century, the analysis of some resources was not applicable. These Resources of No Concern are: sole source aquifers, coastal zones, wild and scenic rivers, and prime and unique farmland. No detailed analysis was conducted for these resources.

4.2 Land Use, Zoning, Land Acquisition, and Relocation

The land use in the *Project* and *Study Areas* has historically been oriented for access to public transit, a prototype of Transit Oriented Development (TOD). Regional plans support the *Project* and zoning changes are not anticipated to occur as a result of the *Project*. There would also be no land acquisition, and therefore relocation as a result of this *Project* would not occur.

4.2.1 Consistency with Regional Land Use Plans

There are several regional and local land use/transportation plans that discuss the benefits of the *Project*. They are summarized below in chronological order. These plans confirm that this *Project* would be consistent with existing land use centered on public transit.

4.2.1.1 City of Chicago 1981 Master Plan for the Loop Elevated Rehabilitation and Historic Preservation

In 1978, the Loop Elevated was determined to be eligible to be included on the National Register of Historic Places, and the City of Chicago made a commitment to preserve this historic land use. The 1981 *Master Plan for the Loop Elevated Rehabilitation and Historic Preservation* (1981 Loop Master Plan), stated that the City and CTA must address "three vital issues":

"1) the physical integrity of the Loop Elevated trestle structure; 2) the siting of stations on the rehabilitated Loop El; and 3) the value of the Loop Elevated Structure as a site of historic importance."

In regards to issue #2, it declared that "Stations sited and designed to best meet the demands of transit patrons are essential to the continued viability of the Loop Elevated."

Therefore, all Loop Elevated stations were evaluated based on five criteria: Pedestrian Accessibility, Ease of Transfer, Operational Efficiency, Joint Development, and Historical Integrity. The master plan then made station-specific recommendations, based on these evaluations. For the Randolph/Wabash and Madison/Wabash Stations, it recommended station consolidation, summarizing that:

...Since the original stations have both been altered substantially, their historical significance has been diminished. The track-level fare collection facilities at the Randolph/Wabash Station are

inefficient... The two stations are located such that they could be combined into one, which could provide efficient and effective service at lower operation costs [Page III-39]

The combination of two stops into one can lead to substantial financial savings due to decreased car stops (acceleration cost), the need for fewer ticket agents, and less frequent maintenance. ... These factors make the proposed [Washington/Wabash] station location preferable to the retention of the two existing stations. [Page III-41]

4.2.1.2 The Chicago Central Area Action Plan

Released in 2009, The Central Area Action Plan (CAAP) contains information intended to encourage the implementation of policies and projects essential for effective functioning, growth and quality of life in Chicago's downtown core.

The CAAP builds upon the vision for the central area articulated in the 2003 Central Area Plan. In addition to including cost estimates for public improvement projects and an implementation timeline, it represents input from community stakeholders and technical expertise from a steering committee, task forces, city staff and planners. It was adopted by the Chicago Plan Commission on August 20, 2009.

The transportation chapter states six goals, the first of which is "Improve Transit in the Central Area." Among its recommendations are completion of nine modernized CTA stations and four in-fill stations. The *Project* is among the nine modernizations and is currently on schedule to become the third of those completed following Grand/State and Clark/Division.

4.2.1.3 The CMAP GO TO 2040 Comprehensive Regional Plan

The Chicago Metropolitan Agency for Planning (CMAP) is the designated Metropolitan Planning Organization (MPO) for Northeastern Illinois. Its CMAP's GO TO 2040 Comprehensive Regional Plan (CMAP, October 2010) integrates land use and transportation policy objectives.

One top level recommendation is to "Invest strategically in transportation." On page 272, GO TO 2040 calls for spending \$41.8 billion over 30 years on projects that "Bring the system to a state of good repair and those that enhance and modernize." It states that "Projects of this type are not identified individually in the plan, but are identified and implemented through the region's Transportation Improvement Program." Therefore, because the "Washington/Wabash Consolidated Station" is included in the CMAP Transportation Improvement Program (TIP) with ID number 01-12-0008, it is also incorporated by reference into GO TO 2040. A printout of the TIP listing is included in Appendix C.

4.2.1.4 The Chicago Forward CDOT Action Agenda

The Chicago Forward Department of Transportation Action Agenda (CDOT, May 2012) lists among its action items the construction of four new CTA stations. One sub-item specifies the design and construction of the Washington/Wabash Station on the CTA Loop Elevated.

The 2013 Update to Chicago Forward (CDOT, October 2013) has a two-page feature on "New CTA Stations" that includes the recently completed Morgan Station, the Cermak-McCormick Place Station under construction, and progress toward the Washington/Wabash Station *Project*.

4.2.2 Zoning

The *Project Area* is generally zoned "DX-16," which is "Downtown Mixed-Use" with a maximum 16 Floor/Area Ratio (see Figure 9, Zoning Map of *Project Area* and Vicinity). Although Figure 9 shows that Planned Developments 476 and 787 include portions of the current Randolph/Wabash Station, it is only because zoning changes for a building are drawn to the centerline of adjacent streets; the enacting ordinances for these planned developments make no reference to the station.

According to the city's zoning code, DX zoning "is primarily intended to accommodate office, commercial, public, institutional and residential development." The land uses in the *Project Area* are predominantly commercial for retail and service businesses, and institutional for universities and public services. There are also a few adjacent high-rise residential uses.

Transit stations qualify for the "Utilities and Services, Major" usage category, which is designated a "special use" in the DX zone (and almost all other zoning categories in Chicago). Given the nature of the *Project*, no difficulty is expected in securing special use approval. There are no changes needed for the underlying zoning as a result of this *Project*.

4.2.3 Relocation

The City of Chicago would not acquire land for this *Project*; therefore relocation of businesses or residences would not occur.

4.2.4 Summary

Impacts are not expected in this resource category:

- Construction of a consolidated Washington/Wabash Station is consistent with local and regional land use and transportation plans.
- The *Project* is not expected to trigger changes in land use.
- Zoning would not change and zoning adjustments would not be requested.
- The City of Chicago would not be acquiring land for this Project.

Therefore, mitigation measures are not applicable to Land Use, Zoning, Land Acquisition, and Relocation.

4.3 Social and Economic Considerations

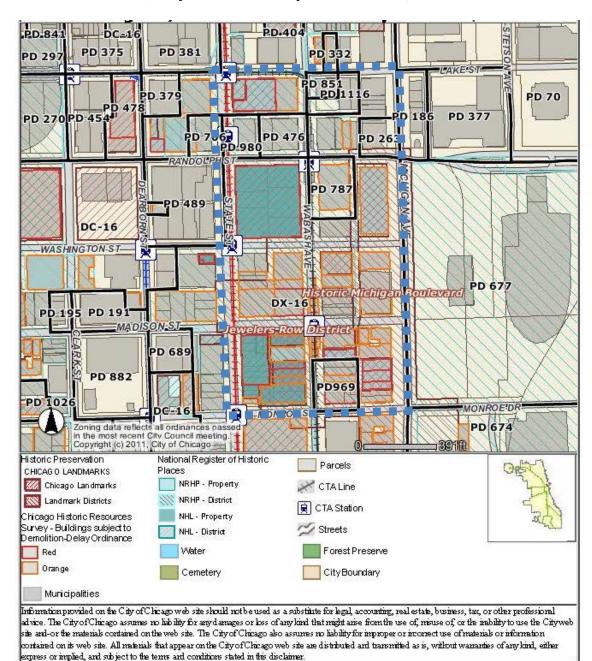
Social and economic considerations were studied in terms of impacts from the *Project*. As noted above in Section 4.2.2 (Zoning), there are no anticipated long term changes in commercial, institutional, or residential land uses for the area. Therefore, negative impacts to neighborhood continuity are not expected. Findings, impacts, and mitigation for neighborhood continuity and community cohesion, and neighborhood economic structure are noted in the sub sections below.

4.3.1 Neighborhood Continuity and Community Cohesion

Section 4.2.2 notes that residential land use surrounding the proposed Washington/Wabash Station is minimal. The *Study Area* and vicinity are comprised primarily of retail and service-oriented businesses as well as educational and cultural institutions. Although there are some high-rise residential buildings with commercial and office units at street level, there is no residential neighborhood in the traditional sense. There would be no long term change in land use initiated by the *Project*; therefore impacts to neighborhood continuity and community cohesion are not anticipated.

Figure 9 – Zoning Map of *Project Area* and Vicinity

(Study Area is indicated by blue dashed lines)



Retrieved from cityofchicago.org/Zoning, 11/25/2013

4.3.2 Neighborhood Economic Fabric

The *Project* would not result in any land acquisition. Therefore, a negative change in the neighborhood's economic structure would not be anticipated. Other than the temporary and minor traffic and parking impacts detailed in Section 4.17, current businesses would not be affected because workers, customers, and visitors would continue to use the CTA lines along North and South Wabash Avenue and street level access to patronize local stores and restaurants. Upon completion of the *Project*, improved access, to and from the new station may increase visitors to the area. It is anticipated that the overall impacts to the economy of the surrounding area would be positive.

4.3.3 Summary

Areas of potential impact or concern are:

- No negative impacts are expected regarding neighborhood continuity and community cohesion.
- No negative impacts are expected on the economic fabric of the *Project* or *Study Areas* because there are no land acquisitions or changes in land uses.
- Retail, service, and institutional activities may experience temporary, construction-related access impacts from the traffic and parking impacts detailed in Section 4.17.
- A modern station would be anticipated to have an overall positive effect on the economy of the area.

Permanent mitigation measures are not applicable for this resource category. The measures discussed in the traffic and parking section (Section 4.17) of this EA would also serve to mitigate any short term construction-related impacts.

4.4 Environmental Justice

The purpose of an Environmental Justice evaluation is to identify whether a project would have disproportionately high and adverse impacts on minority and/or low-income populations. This Environmental Justice Section has been prepared in accordance with federal Executive Order No. 12,898.

4.4.1 Definitions of "Minority" and "Low-Income" for this analysis

U.S. Bureau of the Census data are used to determine the numbers of low-income and minority populations within proximity of the *Project* as defined in FTA Circular 4703.1 (2012) on Environmental Justice.

"Minority" is defined as anyone who is 1) American Indian or Alaska Native, 2) Asian, 3) Black or African American, or 4) Hispanic or Latino, or 5) Native Hawaiian or Other Pacific Islander. "Minority population" means any readily identifiable group of minority persons who live in geographic proximity.

The circular also indicates that the FTA uses poverty thresholds from the US Department of Health and Human Services to define a "low-income population" as any readily-identifiable group of low-income persons who live in geographic proximity.

4.4.2 Applicable Census Data for *Project Area* and City of Chicago

As noted above in Section 4.2.2 (Zoning), the *Study Area* is located in a "Downtown Mixed-Use" zoning area (see Figure 9, Zoning Map). The land uses in the *Study Area* include retail, several universities, student housing, and high rise, high-end residential condominium and rental units. The Project Area and Study Area lie within Census tracts 3201 and 3204 (see Figure 10). Since the CTA lines that operate on the Loop Elevated serve a

ridership that encompasses a large metropolitan area, the low-income and minority populations statistics considered for this analysis were for the *Study Area* as well for the City of Chicago.

Due to the unique characteristics of the *Study Area*, the percentages of minority and low-income populations residing in these tracts are less than in the City as a whole. In tracts 3201 and 3204, respectively, 8.3% and 4.6% of the population have incomes below the poverty line and 31.4% and 29.3% are minorities. In the entire City of Chicago, the population below poverty level is 21.4%. and minority population is 68% (See Table 2). Full Census data regarding minority populations is included in Appendix C.

Based on these statistics, the low-income and minority populations potentially affected are not the residents of the *Study Area*, but those across the city who travel through the *Project Area* and/or to the *Study Area*. The new station would provide an improved transit experience to riders traveling to local jobs, public service centers, public institutions, schools, residences, shopping and tourist destinations. This would benefit all populations within Chicago traveling to the *Study Area*, including minority and low-income populations.

4.4.3 Determination of Environmental Justice Impacts

Based on the analyses conducted for this EA, and the demographic characteristics of the *Study Area* and of the City of Chicago, it was determined that this *Project* would not disconnect any residential areas, would not serve as a physical barrier, and would not interrupt community services. Further, no adverse long-term environmental impacts are anticipated as a result of the *Project*.

Therefore, the *Project* would not result in a disproportionately high and adverse impact on minority or low-income populations.

4.4.4 Environmental Justice Considerations in Outreach Planning

CDOT and CTA will consider minority and low-income populations in planning its outreach efforts to make all CTA customers aware of the *Project* and its construction schedule. In addition to coordinating with the local Alderman's office and publishing online notifications, CDOT and CTA will post updates throughout the CTA rapid transit system. They will also place notifications in ethnic and local newspapers and directly contact community organizations serving minority populations, such as the Rainbow PUSH Coalition, National Council of La Raza, and the Chicago Minority Business Development Council. See Section 5 (Public Involvement and Public Coordination) for additional outreach details.

4.4.5 Summary

No negative impacts on minority and low-income populations residing in the *Study Area* are anticipated. It is expected that the addition of a fully accessible facility, with improved security and safety features would be a benefit to all customers, including minority and low-income populations, and attract a greater diversity of riders. An improved station may encourage a greater number of visitors of diverse economic, racial, and ethnic backgrounds to take advantage of the cultural and recreational resources nearby.

Mitigation measures for Environmental Justice issues are not required. Minority and low-income populations will be given specific consideration by incorporating specific outreach efforts to community groups and service organizations that assist these populations during the overall effort to keep all riders informed on the progress of the *Project*, construction activities, and staging schedules.

.

Figure 10 – Census Tracts incorporating the Study Area

(Study Area is indicated by green dashed lines, main station entrance by blue dot)

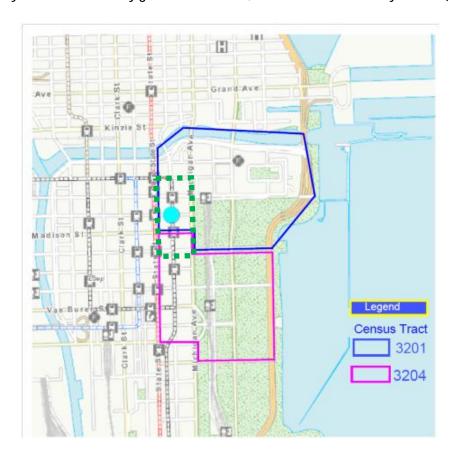


Table 2 – Population Characteristics related to Environmental Justice

	City of Chicago	Census Tract 3201	Census Tract 3204
Total Population	2,695,598	10,848	2,518
% Below Poverty Threshold	21.40%	8.30%	4.60%
% Minority Population	68%	31.40%	29.30%

SOURCE: 2007-2011 American Community Survey 5-Year Estimates

4.5 Historical and Archeological Resources

Research was conducted to determine the presence of historical and archeological resources in the *Project* and *Study Areas*. This section describes resources that are present and discusses Section 106 consultations with the State Historic Preservation Officer (SHPO) at the Illinois Historic Preservation Agency (IHPA).

4.5.1 Existing Local Architectural Historical Resources and Impacts

Table 3 lists buildings and districts in the *Study Area* that have one or more major historic designations: National Historic Landmark (NHL), National Register of Historic Places (NHRP), Chicago Landmark Building (CLB), and Chicago Landmark District (CLD). There are three districts and eleven buildings in the *Study Area* that qualify for at least one of these historic registries with buildings dating back as far as 1878. (The Zoning Map in Figure 9 includes layers outlining historic buildings and districts while Figure 11 below shows locations and names of noteworthy historic buildings in the overall Central Area, with the *Study Area* outlined for reference.)

Seven of the buildings in Table 3 border the *Project Area*, and four of the seven are on the National Register of Historic Places (NRHP). At the southwest corner of State and Madison is the Carson, Pirie, Scott and Company Building at 1 South State Street (now known as the "Sullivan Center" and occupied by a Target store and other tenants.) The Marshall Field Company Store (now Macy's) is at 111 North State Street. Across the Street from each other are the Silversmith and Jeweler's Buildings. Jewelers Row is along North Wabash Avenue between Madison Street and Washington Street. The NRHP Loop Historic Retail District includes these buildings and effectively all of those facing the *Study Area*.

Appendix B includes a more detailed table that itemizes each building in or bordering the *Study Area*, and lists date of construction, date and type of historic designation, inclusion in designated historic districts, and whether the building is subject to a demolition delay due to the Chicago Historic Resources Survey. Note that most buildings are at least 50 years old, even if not under a historic designation.

In addition to architectural landmarks in the vicinity of the *Project*, the *Project* itself is located on the Loop Elevated (once known as the Union Loop). Built in the 1890's, it is a historic structure eligible for NRHP designation. Its preservation continues to be a priority for public agency planners, engineers, and architects.

Under the Preferred Alternative, there is no direct physical impact to any of the historic structures described above, and as illustrated in Appendix A, the design would improve the visibility of these buildings. Therefore, there are no anticipated permanent impacts on any of the historic structures listed in Table 3. While no construction-related impacts are anticipated either, CDOT would take precautions during demolition and construction to assure that there are no unintended negative impacts on nearby historic buildings.

4.5.2 Section 106 Consultation

Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f) requires federal agencies to consider the effects on historic properties of projects they carry out, approve, or fund. (The details of how agencies address this requirement are found in federal regulations 36 CFR Part 800).

The *Project* would be primarily funded with an FTA grant, and thus Section 106 must be considered. Additionally, the Advisory Council on Historic Preservation (ACHP), an independent federal agency, must be provided an opportunity to comment on such projects prior to the agency's decision on them.

Section 106 coordination on this *Project* began in 1981 with review of the conceptual plan documented in the 1981 Loop Master Plan, and included ACHP commentary. The subsections below describe the Section 106 coordination activities that have occurred to date.

Table 3 – Formally Designated Historic Districts and Buildings in *Project Area* and *Study Area*

Name	Location	Designations (See below)	Year Constructed	
Historic Districts partially in Project Area/Study Area				
Loop Retail Historic District	Area roughly bounded by Lake St, alley east of Wabash Ave, Congress Pkwy & State St)	NRHP (1998)	Various	
Jewelers Row District	Wabash Ave, generally between E. Washington St and E Monroe St	CLD (2003)	1872-1941	
Historic Michigan Boulevard District	Michigan Ave between E. Randolph St and E. 11th St	CLD (2002)	Various	
Historic Buildings in/bordering Project Area				
Marshall Field and Company Building (a.k.a. "Marshall Field Company Store" now occupied by Macy's)	101-137 N State St, (Block bounded by Wabash Ave, Washington St, State St, and Randolph St, incl. 29 E Randolph St, 122 N Wabash Ave & 28 E Washington St)	NRHP (1978) NHL (1978) CLB (2005)	1914	
Carson Pirie Scott & Co. Building (now part of Sullivan Center, and occupied by Target)	1 S State St (Block bounded by Wabash Ave, Madison St, State St, and Monroe St, excl. 39 S State St. and Silversmith Building)**	NRHP (1970) NHL (1975) CLB (1970)	1905	
Haskell, Barker and Atwater Buildings (now part of Sullivan Center)	18, 22 and 28 S Wabash Ave	CLB (1996)**	1875-1877, 1896	
Heyworth Building	29 E Madison St	CLB (2000)**	1904	
Silversmith Building (Now Crowne Plaza Hotel)	10-14 S Wabash Ave	NRHP (1997)	1896	
Jewelers Building	15-19 S Wabash Ave	NRHP (1974) CLB (1981)	1878	
Pittsfield Building	55 E Washington St	CLB (1977)	1927	
	Historic Buildings in Study Area			
Page Brothers Building Cast Iron Front	177-191 N State St	NRHP (1975) CLB (1983)	1921	
Balaban & Katz Chicago Theater	175 N State St	NRHP (1979) CLB (1983)	1921	
Chicago Public Library (now Chicago Cultural Center)	78 E Washington St (also 122 N Michigan Ave)	NRHP (1972) CLB (1976)	1897	
Gage Group (Gage, Keith and Ascher Buildings)	18, 24, and 30 S Michigan Ave	NRHP (1985) CLB (1976)	1898	

NRHP National Register of Historic Properties NHL National Historic Landmark

CLB City of Chicago Historic Landmark Building CLD City of Chicago Historic Landmark District

Sources:

https://gisapps.cityofchicago.org/zoning/viewframe.htm (retrieved 11/14/13)

http://www.illinois.gov/ihpa/Preserve/Pages/NHL.aspx (retrieved 11/14/13)

http://www.cityofchicago.org/content/dam/city/depts/zlup/Historic_Preservation/Publications/Chicago_Landmark_Address_List_Oct2013.pdf http://webapps.cityofchicago.org/landmarksweb/web/listings.htm#P (retrieved 11/14/13)

http://www.cityofchicago.org/content/dam/city/depts/zlup/Historic_Preservation/Publications/National_Register_List_Jul2012.pdf http://www.cityofchicago.org/city/en/dataset/landmark_districts.html (retrieved 11/14/13)

^{**} Haskell, Barker, Atwater and Heyworth were considered part of the Carson Pirie Scott Building for NRHP/NHL/CLB designation in the 1970's, but later given an independent designation as CLB.

Figure 11 – Map of National Register of Historic Places sites in *Study Area* and downtown Chicago

(Study Area is indicated by solid blue lines)



HISTORIC PLACES IN CHICAGO

This map introduces you to more than two dozen of Chicago's historic buildings. Each numbered dot connects you to a photograph and a brief description of the place it identifies. The 16 that are in or near the Loop appear on the street map; the other nine are farther south. You can also view a list of all 25 sites.

Scroll down to the bottom of this page to visit the Bing map and get directions to all the sites in this itinerary.



- 1. Albert F. Madlener House
- 2. James Chamley House
- 3. Montgomery Ward and Company Building
- 4. Chicago Avenue Water Tower and Pumping Station
- 5. Tree Studio Buildings and Annexes
- 6. Reid Murdoch Building
- 7. Marshall Field Building
- 8. Chicago Public Library (now the Chicago Cultural Center)
- 9. Carson, Pirie, Scott and Company Building
- 10. The Rookery
- 11. Marquette Building
- 12. Monadnock Block
- 13. Old Colony Buildings
- 14. Manhattan Building
- 15. Auditorium Building

4.5.2.1 Historic Designation Eligibility of the Loop Elevated

During the 1970's, the Loop Elevated was in a poor state of repair, and planning had been underway for a Franklin Street Subway and Monroe Distributor Subway that would have replaced – and lead to the demolition of - the Loop Elevated.

FTA's predecessor, the Urban Mass Transportation Administration (UMTA), conducted an environmental impact statement for the Franklin Street Subway. During the Section 106 process for that project UMTA requested an opinion on the historic status of the Loop Elevated from Dr. William Murtaugh, keeper of the National Register of Historic Places. In a July 28, 1978 letter, Dr. Murtaugh found the "Chicago Union Loop Elevated Structure" to be eligible for the NRHP.

In providing this opinion, Dr. Murtaugh cited NRHP criteria "A" (association with events that have made a significant contribution to broad patterns in our history) and "C" (embodiment of distinctive characteristics of a type, period, or method of construction; representation of work of a master; possession of high artistic values; or representation of a significant and distinguishable entity whose components may lack individual distinction).

The Loop Elevated has never been added to the NRHP itself, but the "Loop Retail Historic District" was added to the register in 1998. The District generally includes buildings between State Street and the Wabash Leg of the Loop Elevated. A column in the historic buildings table in Appendix B identifies which pre-1965 buildings in the *Study Area* are in this NRHP district.

4.5.2.2 Master Plan for the Loop Elevated

The City and CTA ultimately chose not to pursue the Franklin Avenue Subway Project, and instead began evaluations to rehabilitate the Loop Elevated. By 1981, the City and CTA were seeking to use federal funds (among those reprogrammed from the cancelled Crosstown Expressway) to rehabilitate the Loop Elevated structure and some of its stations. To document the proposed project for federal approvals, the City of Chicago prepared the *Master Plan for the Loop Elevated Rehabilitation and Historic Preservation* (1981 Loop Master Plan). Excerpts from this document are in Appendix B.

As part of the 1981 Loop Master Plan planning process, the City of Chicago and UMTA consulted with the SHPO concerning effects on resources either on or eligible for the NRHP from the projects described in the master plan (which included the Washington/Wabash Loop Elevated Station *Project*).

The 1981 Master Plan observed that the history of Chicago's Loop Elevated has had repeated alterations of its administrative and physical structure to meet the city's changing transportation needs. Without such changes, the Loop Elevated would probably have ceased to be a functioning part of Chicago's transportation system. Changes made to it over time have altered many of its original features.

In reviewing each station individually, the *1981 Loop Master Plan* found that most stations had been greatly altered and bear little resemblance to their original condition. Randolph/Wabash Station and Madison/Wabash Station had each been modified on a piecemeal basis over the decades and lacked historic integrity. Quincy Station and portions of the Adams/Wabash Station were considered to better exemplify the history of Loop Elevated stations and were prioritized for preservation. However, all stations affected by the *Project* were deserving of documentation for historic records.

The 1981 Master Plan argued that the construction of new, more efficient stations in better suited locations would mitigate the overall effects of work on the Loop Elevated because of the altered and deteriorated condition and appearance of the individual stations. Construction of a new station would not alter the overall

integrity of the Loop Elevated. It further reasoned that the present location of existing stations inhibits the viewing of other National Register properties located throughout Chicago's Business District.

4.5.2.3 Historic Effects Determination for Projects in the 1981 Loop Master Plan

On October 7, 1981 UMTA issued a Section 106 "Determination of No Adverse Effect" to permit the use of federal funds for rehabilitation of the Loop Elevated projects defined in the 1981 Loop Master Plan, specifically "upgrading the trestle and restoring, rehabilitating, and reconstructing certain stations to maintain the structural integrity of the structure and to respond to changing transportation needs in the Central Area of Chicago." The ACHP concurred with this finding on the same date. These documents were included in the final version of the 1981 Loop Master Plan document.

The supporting document by UMTA itemized the projects, and included an explicit description of the *Project* under consideration in this EA: "The Washington-Madison/Wabash Station will replace the existing Randolph/Wabash and Madison/Wabash stations. Consolidation of these stations at one mid-block location will improve operating efficiency while maintaining easy transfer to bus, subway, and commuter rail."

In its reasoning for the "Inapplicability for the Criteria of Adverse Effect", the supporting document stated that:

"Station removal and reconstruction on the Loop EI is not considered to be an adverse effect. Historically, it was not the stations, but the encircling layout of the structure itself around the downtown core that embodied historical significance. As noted in the Department of the Interior's determination of eligibility for the National Register (July, 1978), the Loop EI Structure is important as a historic transportation facility as well as for its influence on the growth and development of downtown Chicago. As detailed in the City's Master Plan for the Loop EI rehabilitation, original station locations have changed in some cases to adapt to changing needs. Stations have periodically been removed due to lack of ridership. Moreover the fabric of the original stations has been altered through periodic maintenance over the years. In comparison, the trestle has remained relatively unchanged with its intricate web of supporting members still intact. The best hope, then, of preserving the Loop EI as a viable transportation facility is to continue the trend of allowing stations to change in response to changing downtown developments."

The letter also stated that the finding was based on the "Conditions for a Determination of No Adverse Effect for the Chicago Loop Elevated Rehabilitation Project" as signed in October 1981 by the City of Chicago, CTA, and SHPO.

This conditions document stated that: "With the exception of Quincy/Wells and Wabash/Adams, all existing stations on the Loop Elevated structure may be removed in accordance with the 1981 Master Plan. Prior to demolition of any structure, the City of Chicago and/or CTA shall contact National Architectural and Engineering Record (NAER) (National Park Service, US Department of Interior) to determine the level of documentation required. After documentation is accepted by NAER, the Advisory Council on Historic Preservation must be notified of the NAER acceptance prior to demolition." [The current name of this National Park Service documentation program is the Historic American Engineering Record (HAER), see discussion below.] The conditions document further specified that the NAER documentation be archived with the Chicago Historical Society, CTA, and Chicago Public Library. Finally, the conditions document stated that the SHPO will be given the opportunity to review final design plans for station construction prior to implementation.

4.5.2.4 Historic American Engineering Record Documentation

The Historic American Engineering Record (HAER) was established in 1969 by the National Park Service, the American Society of Civil Engineers and the Library of Congress to document historic sites and structures related to engineering and industry. HAER documents were previously filed in response to the documentation requirements described in Section 4.5.2.3 above for the Loop Elevated (IL-1 / ILL-16-CHIG-108), Randolph/Wabash Station Elevated (IL-1D / ILL-16-CHIG-108D), and Madison/Wabash Station Elevated (IL-1I / ILL-16-CHIG-108I). These documents provide well researched histories of these structures and their evolution. This history is summarized below, but the full HAER documentation is available in Appendix B.

Built in 1896-1897 as the Union Elevated Railroad, the Loop Elevated is the oldest elevated transit structure in the United States and one of the few Elevated Railways still operating in America. It is important to the history of Chicago and its downtown, as the downtown area derived its name from this property. [Although there was a "Loop" of trolley lines downtown prior to 1897, it is the Loop Elevated that was prominent when community areas were formally named in the 1920s]. Subsequent HAER information states the importance of this elevated transit system in industrial archeology. The Loop Elevated was designed by John Alexander Low Waddell, an engineer known for his bridge design. Financier Charles Yerkes acquired the rights of way to build this composite of steel and wood. "Historically the Loop Elevated defined the most prestigious locations for office buildings..." This record also lists the many changes to platforms, stations, and transfer bridges, demolitions and renovations of stations between 1903 and 1975.

The HAER documentation for Randolph/Wabash Station lists the alterations and additions for the station. In 1919, "platform extensions doubled the carrying capacity of the station and allowed larger trains." In 1916-1930, "Marshall Field & Company planned a direct access staircase." In 1956, "the entire west station house was replaced with a structure completely different in both design and construction from that which had been designed by Waddell." In 1967 the east platform station house was demolished.

The HAER documentation for Madison/Wabash Station also lists its alterations and additions. In 1903, platform extensions were added. In 1908, there were "modifications of the interior of the east platform station house with the removal of the north ticket booth and new handrails." In 1967, "system wide modernization replaced multi-paned glass windows with corrugated fiberglass windbreaks. The east station house was demolished."

4.5.2.5 Activities on the Loop Elevated since the 1981 Master Plan

In the 16 years that followed the publication of 1981 Loop Master Plan, many of the station projects specified in the Plan were achieved:

- November 1985-February 1988: Historic restoration of Quincy Station
- 1987-1989: Adams/Wabash Station renovated, combining restoration of historic elements (e.g., railings and transfer bridge, and modernization of other elements (e.g., platform areas over Adams)
- 1988-1992: Clark/Lake Station reconstructed and relocated westward On March 23, 1992, the original station houses closed and access to the platform moved to entrances built into the State of Illinois Center and the 203 N. LaSalle building. These entrances had opened in 1989 and 1991 to provide access to the "Lake Transfer" subway station on the route now known as the Blue Line. Upon completion of this work, the subway stop became part of the Clark/Lake Station and direct "paid area" transfers between the elevated and this subway became possible.
- January 1994: Madison/Wells Station closed for demolition in preparation for Washington/Wells Station construction

- July 1995: A consolidated Washington/Wells Station opens, Randolph/Wells Station permanently closes.
- June 1997: Harold Washington Library-State/Van Buren Station opens, replacing a station that had been closed in 1973 and demolished in 1975

The only station-related projects in the 1981 Loop Master Plan that have not yet been completed are this *Project*, the State/Lake Station, and the LaSalle/Van Buren Station. The State/Lake Station Project is currently in the preliminary design process; in November 2013 CMAP programmed CMAQ funds to allow CDOT to start Phase II (Final) Engineering as early as 2014.

4.5.2.6 Evaluations of Washington/Wabash Loop Elevated Station in the 21st Century

As detailed in Section 3.2 above ("Non-Preferred Alternative"), CDOT developed an initial design for the *Project* in 2006 that would have incorporated a station house in the Haskell Building. Based in part on historic preservation concerns raised by the SHPO, CDOT then revised this initial design to the one that became the Preferred Alternative.

In May of 2007, CDOT provided SHPO design drawings of this new conceptual design for review. In its cover letter, CDOT emphasized features of the new design:

- ...The new station will be entirely self-contained within the Wabash Avenue corridor with no connection to adjacent buildings
- ...A glass canopy will cover the north end of the platform. The concept for the canopy design is to allow for minimum structure and maximum transparency to allow for clear views of the adjacent historic facades and minimize impact of the new station on the street corridor.
- ...View corridors down Randolph and Madison Streets will provide a clearer view to Millennium Park with the removal of station houses over the intersections.
- ...The replacement of two stations with one that is more transparent will improve the overall environment of the Wabash streetscape

In August 2007, following review of the plans, SHPO concurred in a Section 106 finding of no adverse effect pursuant to 36 CFR 800 with the following condition: "the project design is finalized in consultation with our office to ensure adherence to the Standards (Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.)"

In 2013, FTA reviewed the Section 106 coordination activities that have occurred to date on the *Project*. FTA has determined that the HAER documentation described above in Section 4.5.2.4 satisfies the condition for NAER documentation outlined in the October 7, 1981 UMTA Section 106 "Determination of No Adverse Effect" letter (described in Section 4.5.2.3 above).

The only remaining Section 106 coordination activity yet to occur for the *Project* is the requirement to provide the SHPO the opportunity to review final design plans for station construction prior to implementation, as described above (see Section 4.5.2.3). FTA and CDOT will continue to coordinate activities as the *Project* moves into final design. The SHPO will be given an opportunity to review the final design plans once they are prepared.

No additional Section 106 coordination activities will be required for this *Project*. Copies of the Section 106-related SHPO correspondence are included in Appendix B.

4.5.3 Archaeological Resources

No archaeological artifacts or remains have been identified within the *Project Area* during the periodic consultations since 1981 with SHPO and ACHP. Due to prior excavation in the vicinity for other structures, roads, and urban infrastructure, intact archaeological remains or artifacts are not expected to be present. Therefore, the proposed *Project* is not anticipated to impact any archaeological resources.

4.5.4 Summary of Impacts and Mitigation Measures

Anticipated impacts are listed below:

- Preservation of the Loop Elevated as a historic structure depends on the long-term viability of its transit operations, and thus on well maintained, modernized, efficient stations. The consolidation of the Randolph/Wabash and Madison/Wabash Stations promotes this long-term viability, while at the same time respects and supports the adopted historic preservation plans for the Loop Elevated. Consequently, the *Project* would have no adverse historic preservation effects on the Loop Elevated.
- There are over a dozen formally designated historic buildings and districts in the *Study Area*. The new station would not alter any adjacent historic buildings. The replacement of two visually imposing structures with a single station of a more open design would improve the visibility, and potentially the appreciation, of these buildings.

Mitigation measures would be implemented as follows:

- CDOT and FTA will consult with the SHPO to allow the opportunity to review the final design for adherence
 with the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic
 Buildings.
- Although no direct impacts to architecturally or historically significant structures are anticipated, CDOT would use best management practices to prevent unintended impacts to these resources throughout demolition and construction.

4.6 Parklands and Recreational Resources

This section considers the location of existing parks and recreation areas for potential impacts. It also evaluates the compliance with Section 4(f) of the U.S. Department of Transportation Act, and Section 6(f) of the Land and Water Conservation Fund Act.

4.6.1 Existing Parklands and Recreational Resources and Impacts

There are no parks or recreational resources in the Project Area, but the Study Area includes the Chicago Cultural Center (also a historic building), and borders Millennium Park. The Chicago Cultural Center is at Washington Street and Michigan Avenue, and is shown on Figure 11. The 24-acre Millennium Park (owned by the City of Chicago and managed by the Chicago Park District) is the nearest public park/green space, and is located on the east side of Michigan Avenue between Randolph Street and Monroe Drive, approximately 600 feet east of the *Project Area*. Millennium Park is shown on the *Study Area Map* (Figure 3), and on the Map of Park Resources near the *Study Area* (Figure 12).

Further away, the Chicago Riverwalk (including Heald Square) is approximately 1,000 feet north of the *Project Area*. Chicago Park District parks in the general vicinity (i.e., 1,500-2,500 feet from the *Project Area*) include Maggie Daley Park (Part of Grant Park) at 337 East Randolph Street, Lake Shore East Park at 450 East Benton Place, and Pritzker Park at 310 South State Street.

The *Project* would not include any demolition or construction activity in these parks and green spaces. It also would not place restrictions on public access to parks or recreational resources. Furthermore, the surrounding land uses are expected to remain unchanged. Therefore, public parks and green spaces would not be affected negatively by the proposed Washington/Wabash Station. Instead, the new station would improve and continue to provide easy, safe access for residents and guests to these public spaces, and to the cultural activities they host.

4.6.2 Section 4(f) Resources

Section 4(f) refers to the original section of the U.S. Department of Transportation Act of 1966, which established requirements for consideration of park and recreational lands, wildlife and waterfowl refuges, and historic sites in transportation project development. Collectively, these types of properties are referred to as "Section 4(f) resources." The requirements for treatment of these resources are codified in federal law in 49 U.S.C. §303 and 23 U.S.C. §138, and implemented through 23 CFR Part 774.

Projects that receive funding from, or require approval of, an agency of the U.S. Department of Transportation are generally restricted in terms of being able to "use" Section 4(f) property. Properties can only be used if there is no feasible and prudent alternative to the use of land, and the action includes all possible planning to minimize harm to the property. The term "use" is generally defined for Section 4(f) purposes as the permanent incorporation of land into a transportation facility, or the temporary occupancy of land that is adverse in terms of the preservation purpose of the statute.

As discussed above in Sections 4.5 and 4.6.1, there are both historic properties and parks/public recreation areas near the *Project* and *Study Areas*, but these properties would not be negatively affected by the *Project*. As a result, there would also be no Section 4(f) impacts to these resources.

As discussed in Section 4.5.1, the Loop Elevated itself is eligible for listing on the NRHP, and is therefore a Section 4(f) resource in its own right. However, FTA has determined that use of the Loop Elevated for the *Project* is excepted from the requirements of Section 4(f) approval pursuant to the provision at 23 CFR Part 774.13(a) which states the following:

The Administration has identified various exceptions to the requirement for Section 4(f) approval. These exceptions include, but are not limited to:

- (a) Restoration, rehabilitation, or maintenance of transportation facilities that are on or eligible for the National Register when:
 - (1) The Administration concludes, as a result of the consultation under 36 CFR 800.5, that such work will not adversely affect the historic qualities of the facility that caused it to be on or eligible for the National Register, and
 - (2) The official(s) with jurisdiction over the Section 4(f) resource have not objected to the Administration conclusion in paragraph (a)(1) of this section.

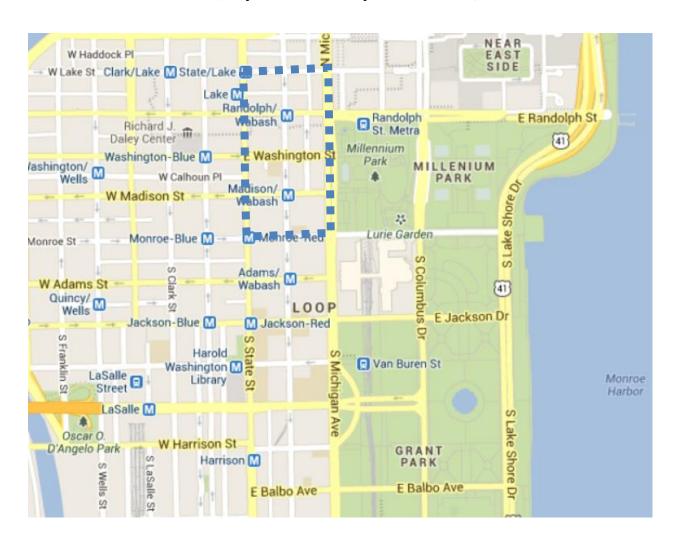
The *Project* meets the conditions of this provision. Based on this determination, and the lack of any other impacts to Section 4(f) resources, the *Project* would therefore have no Section 4(f) resource impacts. No further Section 4(f) analysis is required.

4.6.3 Section 6(f) Resources

Section 6(f) refers to a section of the Land and Water Conservation Fund Act of 1965 that was enacted to assist state and federal agencies with funding of present and future outdoor recreation sites. Once Section 6(f) funds are used, the recreation resources cannot be eliminated or acquired without coordination with the National Park Service. Research for this EA did not identify any Section 6(f) resources in the *Project* or *Study Areas*.

Figure 12 – Parks near the Study Area

(Study Area is indicated by dashed blue lines)



Source: Chicago Park District

Therefore, the proposed *Project* is not expected to impact any Section 6(f)-funded public properties or resources during any phase of the demolition or construction work.

4.6.4 Summary

Parks and recreational spaces would not be negatively affected by this *Project*, and mitigation measures are not necessary. No impacts to Section 4(f) or Section 6(f) resources are expected.

4.7 Visual Resources and Aesthetics

The visual resources in the *Project and Study Areas* include the views of significant architectural and historical landmarks, Michigan Avenue, Millennium Park, and a variety of urban vistas. The Louis Sullivan façades on buildings adjacent to the proposed consolidated Washington/Wabash Station are of high importance, symbolizing the architectural legacy that Chicago is acclaimed for. The conceptual open canopy design would lend itself to maintaining visual access to the aesthetically pleasing surroundings.

4.7.1 Visual Resources

Exhibit 1 of Appendix A contains preliminary design concepts and visual simulations of the *Project*. Based on a review of this preliminary design, no net negative impact on the views and visibility of historic buildings and facades along the length of the proposed platforms and station house is expected from the *Project*. There would be improved visibility of Millennium Park from several approaches, as the existing station houses that obstruct views of the park from the west would be removed and the new station would offer less obstructed views.

The illustrations and renderings in Figures 6 and 7 (Section 3.1) and in Appendix A demonstrate the aesthetic components of the transparent canopy design versus the obstructed views from the existing, solid structures.

4.7.2 Summary

Long-term negative impacts on visual and aesthetic resources are not anticipated. CDOT would take measures during construction activities to keep visual and aesthetic resources as unobstructed as is feasible.

4.8 Air Quality

The *Project* is located within a high density urban area with high traffic volumes and within an air quality "non-attainment zone" as detailed below.

While there may be temporary changes in traffic patterns during construction, once built, the *Project* would not permanently affect vehicular traffic patterns and therefore long-term air quality impacts are limited to the benefits from replacement of auto travel with increased transit use. Also, there would be temporary air quality impacts that are typical of any construction process. Heavy equipment using fossil fuels would have tailpipe emissions. Dust and dirt may be disturbed and could become airborne.

4.8.1 Non-Attainment Areas

The *Project Area*, and Cook County, are located within a US Environmental Protection Agency (EPA)-designated Non-attainment Area due to measured violations of the National Ambient Air Quality Standards (NAAQS) for ground level ozone (O₃) (Chicago-Gary-Lake County, IL-IN eight-hour Ozone Nonattainment Area) and

particulate matter (PM_{2.5}) (Chicago-Gary-Lake County, IL-IN PM_{2.5} Nonattainment Area). As a result of the Nonattainment status, an air quality evaluation is required under the Clean Air Act to assess compliance with the Transportation Conformity Rule (40 CFR Parts 51 and 93) on a regional and project-level basis.

On a regional level, projects are assumed to conform to the provisions of the air quality State Implementation Plan (SIP) if they are included in the *Fiscal Year 2010-2015 Transportation Improvement Program* (TIP) and a conforming regional transportation plan. This *Project's* TIP ID is 01-12-0008. The TIP also confirms that this *Project* was adopted by CMAP's *GO TO 2040 Comprehensive Regional Plan for Northeastern Illinois* and by the FTA and the FHWA on October 25, 2010. (The TIP listing is included in Appendix C.) Therefore, the *Project* conforms to the existing SIP.

4.8.2 Hot Spot Analysis Requirements

The EPA's *Procedures for determining localized CO*, PM_{10} , and $PM_{2.5}$ concentrations (hot - spot analysis) [40 CFR Part 93.123] provides guidance on the types of projects for which a detailed hot spot analysis is required. In addition, Appendix A of EPA's *Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in PM*_{2.5} and PM_{10} Nonattainment and Maintenance Areas (March 2006) provides guidance on identifying "projects of air quality concern" for which qualitative hot spot analysis is required.

Based on this guidance, the Washington/Wabash Elevated Station *Project* does not meet any of the relevant criteria for "projects of air quality concern" or for which a detailed hot spot analysis is required. Thus, there is no need for detailed hot spot analysis. See Appendix C for Non-Attainment and Hot Spot Analysis references.

4.8.3 Summary

Long-term negative impacts to air quality are not anticipated. (The consolidated Washington/Wabash Station is actually expected to have positive effects on air quality by virtue of encouraging potential riders to use public transit rather than cars.)

To mitigate temporary air quality issues common to construction projects, CDOT would use Best Management Practices to keep equipment idling at a minimum, and otherwise minimize temporary negative impacts on air quality from dust and equipment.

4.9 Noise and Vibration

Noise and vibration evaluations were conducted using the FTA Transit Noise and Vibration Impact Assessment quidance (May 2006).

The *Project* is within an area that the Loop Elevated has traversed since 1897. As described in earlier sections, this eastern leg of the Loop Elevated serves five train lines. The existing noise environment is characterized by the dense, urban development of this core area of Chicago's Central Business District including high auto traffic volumes and frequent transit service.

A generalized noise impact assessment was conducted for the proposed Washington/Wabash Station, in accordance with procedures described in the document 'Transit Noise and Vibration Impact Assessment' (FTA-VA-90-1003-06). The analysis utilized the Noise Impact Assessment Spreadsheet of the FTA (version: 7/3/2007) to estimate generalized impacts to the noise-sensitive receptors at the Madison/Wabash intersection, based on the frequency and schedule of elevated train service and published auto volumes. The analysis accounts for construction of the new elevated station not being accompanied by any proposed changes in the frequency of elevated train service in the Loop or by any alteration of the existing alignment of the elevated tracks.

4.9.1 Noise

A noise study utilizing the FTA Transit Noise and Vibration Impact guidance (May 2006) has been conducted with calculations and spreadsheets in Appendix C and results reported below.

Inputs to the noise model included existing elevated train service (day and night volumes), published daily auto traffic volumes and average speeds on Madison Street and Wabash Avenue, and the use of high-rise residential buildings as the noise sensitive receptors near the intersection of the two streets. No field measurements are available; therefore, background noise levels were drawn from reference tables provided in the FTA manual to represent the urban character of the Loop and the relatively short distance from the elevated trains to the receptors.

The existing noise environment is the result of dense urban street traffic, the vehicle type and frequency of CTA train service, and the close proximity of noise-sensitive receptors (high-rise residential buildings) to the elevated tracks. The analytical results point to moderately high existing noise levels; however, these results are greatly influenced by the auto traffic volumes and the short distances from the buildings to the street and elevated rail tracks. Even if there were a proposal to increase rail service by 50%, there would be no change in the level of noise impact that local residents would experience. Instead, the consolidation of two stops into one has the potential to reduce somewhat the net amount of noise due to braking by trains operating in the *Study Area*.

Temporary noise impacts during construction would inevitably occur. However the noisier types of construction work would occur during regular work hours, where the existing high noise levels would mask the impact. Work during night time hours would be infrequent and generally limited to the types of work that cannot be done while trains operate, such as replacement of bents in the structure. This work should be no louder than transit operations that would be detoured to conduct this work.

4.9.2 Vibration

Among the factors that influence vibration impacts are the type and condition of the structures supporting the rail service; the types of transit vehicles and their speeds; the distance to the nearest receptors and the nature of the receptor buildings. In general, the replacement of the century-old Randolph/Wabash and Madison/Wabash Stations with a single new structure would result in lesser ground-borne vibration.

The proposed station would be constructed to modern design standards and would replace the worn structural components that have served for many years at the two stations to be demolished.

The Loop elevated trains serve the densest area of the traditional Chicago Central Business District. Wabash Avenue is lined with high-rise buildings which, because of their mass and depth of foundations, are the most resistant to ground-borne vibration of any structures.

There would be no changes in the frequency or number of elevated trains traversing the Loop as a result of the *Project*, nor would the distance from the rails to the receptors be shortened. As a result, no ground-borne vibration impacts are expected.

The construction of supports for the new station would utilize micropiles and auguring. Vibration impacts that can occur during some construction projects due to pile driving or hammering would not be present in this *Project*.

4.9.3 Summary

There would be no permanent changes to the noise and vibration environment in the *Project Area*.

- Noise volumes would be unchanged because there are no proposed long-term changes in service frequency, or speeds of the CTA rapid transit as a result of the *Project*, and no anticipated impact on the street traffic below the elevated tracks.
- There are no anticipated impacts from the vibration because there would be no substantial change to the immediate environment from the proposed station.
- New design standards employed by CDOT and the resilience of the buildings in the Chicago's Central Area would also prevent any substantial vibration impacts.

Construction-related noise and vibration mitigation measures would include:

- Although construction-related noise and vibration levels should typically be no worse than current
 conditions, work that has any potential to be louder than regular train operations would be scheduled during
 daytime hours where it can blend into overall background noise levels.
- Construction methods that have greatest potential for vibration impacts would not be present.
- CDOT and its contractors would comply with Chicago's Environmental Noise Ordinance (Article XXI). Even though "public improvements authorized by a governmental body or agency" are exempted from some provisions of the ordinance, CDOT would still attempt to follow those provisions to the extent feasible.
- Ensuring that pile driving would not occur.
- CDOT would use other Best Management Practices during construction to minimize noise and vibration.

4.10 Floodplains

The *Study Area* was evaluated for the presence of floodplains. According to Federal Emergency Management Agency (FEMA) maps, the *Study Area* is within "Zone X" as shown in a FEMA Flood Insurance Rate Map (FIRM) (see Figure 13). "Zone X" designates an area with a low flooding probability.

Because the *Study Area* is not in a Flood Zone, there are no flooding impacts anticipated and mitigation measures are not applicable.

4.11 Water Resources

The *Project* was researched for impacts to water resources in the *Study Area*.

4.11.1 Navigable Waterway

The *Project* is not within close proximity of a river or lake, or a navigable waterway under the jurisdiction of the U.S. Army Corps of Engineers (USACE); therefore permits from USACE would not be sought as there are no anticipated impacts on navigable waterways.

4.11.2 Section 401/404 of the Clean Water Act (CWA)

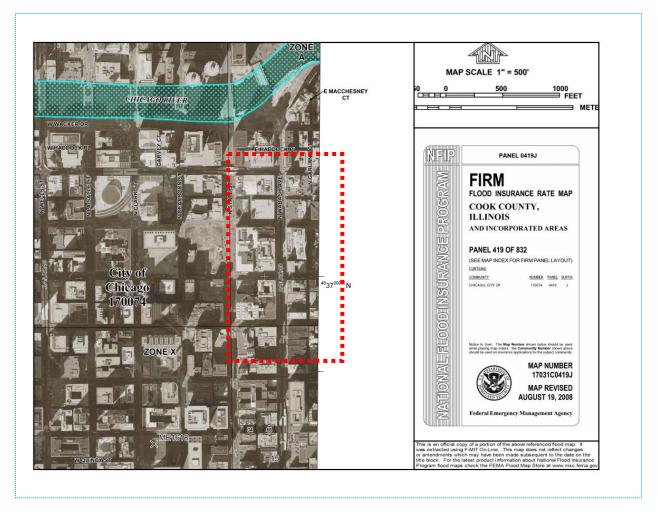
The *Project* is not within close proximity of a river or lake and therefore would not fall under the U.S. EPA's CWA regulations.

4.11.3 National Pollutant Discharge Elimination System

The *Project* would not impact water resources and therefore would not fall under NPDES regulations.

Figure 13 - Flood Insurance Rate Map (FIRM) for Study Area

(Study Area is indicated by dashed red lines)



Note: The easternmost portion of the Study Area is located on Panel 438 of 832 (Map #17031C0438J) and is also designated as "Zone X"

Source: Federal Emergency Management Agency Map Service Center (msc.fema.gov)

4.11.4 **Summary**

There are no impacts to navigable waterways, river or lakes, or water resources falling under the NPDES regulations. Nonetheless, as a matter of agency policy, CDOT would use Best Management Practices related to discharge of water borne pollutants from construction activities.

4.12 Wetlands

US Fish and Wildlife Service (USFWS) and Cook County maps have been consulted for the existence of wetlands in the *Study Area* up to ¼ mile from the *Project Area*. There are no wetlands in the *Study Area* as shown in a National Wetlands Inventory map, Figure 14 below.

There would be no wetland impacts as a result of this *Project* and thus mitigation measures are not applicable.

4.13 Biological Resources

The *Study Area* was evaluated for the presence of biological resources. The *Study Area* is located in a heavily developed urban area with no biological resources. As a result no impact to biological resources would be anticipated and mitigation measures are not applicable.

4.14 Ecologically Sensitive Areas

The *Study Area* was researched for ecologically sensitive resources such as endangered and threatened species. The Illinois Department of Natural Resources (IDNR) and U.S. Fish and Wildlife Service (USFWS) were consulted.

4.14.1 IDNR EcoCAT Correspondence

An IDNR EcoCAT consultation response letter was received with the conclusion that "adverse effects are unlikely." This is found in Appendix C.

4.14.2 USFWS Correspondence

A USFWS "No Effects Determination Letter" and an accompanying "Threatened and Endangered Species List" for Cook County are provided in Appendix C. Since the *Project* is in an urban central business district where no habitat for Threatened and Endangered Species exists, no impacts are anticipated.

4.14.3 **Summary**

Ecologically sensitive habitats are not present. Therefore impacts on threatened and endangered species are not anticipated and mitigation measures are not applicable.

Figure 14 – Wetlands Inventory Map for the Study Area

(Study Area is indicated by dashed red lines)



4.15 Hazardous Materials

In order to plan for the handling and disposal of potentially hazardous materials, database research was conducted for the *Study Area* and an on-site inspection was conducted at the current Randolph/Wabash and Madison/Wabash Stations. The inspection was performed by an individual with an Asbestos Professional License and a Lead Risk Assessor License both issued by the Environmental Health division of the Illinois Department of Public Health following standards based on USEPA guidelines. During the inspection, potential Lead Based Paint (LBP)-containing surfaces were identified and samples were collected. These were sent to a laboratory for analysis which confirmed the presence of LBP. Results of the LBP analyses are found in Appendix D. The inspector identified no suspected Asbestos Containing Building Materials (ACBMs) during the visual survey, so no ACBM sampling was conducted.

The potential for Recognized Environmental Conditions (RECs) within the *Study Area* has been researched in government records for the *Project Area* and within 1/8 of a mile from the proposed station. This research included State of Illinois and Federal Environmental Protection Agency databases, Freedom of Information Act (FOIA) requests, and other records containing historical land use and compliance history. The results are summarized below, and full results are included in Appendix D.

The potential areas of RECs concern have been documented to guide the geotechnical sampling, soil characterization during construction, and the appropriate disposal methods for contaminated materials.

The handling of any hazardous materials, such as LBP and ACBM, encountered during demolition and construction activities would follow applicable local, state, and federal rules and regulations.

4.15.1 Visual Survey for Lead Based Paint and Asbestos Containing Building Materials

The structural elements slated for demolition were sampled for the presence of LBP and analyzed by a certified laboratory. Data results were interpreted for remediation, containment, and handling during demolition and construction activities, to protect worker health and prevent contamination of the ambient environment. The survey focused on the exterior of the station houses, platforms and superstructure of the elevated rapid transit tracks. The results indicated the presence of lead above the Housing and Urban Development (HUD) definition of LBP in 10 of the 11 samples collected on elements of the two stations. See results in Appendix D.

During the onsite visual survey of the Randolph/Wabash and Madison/Wabash Stations and their transit facilities, the inspector identified that the stations were composed of metal structures and roofing that, in his professional judgment, were not suspected to contain ACBM. Therefore, sampling for ACBMs was not conducted.

4.15.2 Local, State, and Federal Hazardous Materials Database Findings

Research for RECs included State of Illinois and Federal Environmental Protection Agency databases, Freedom of Information Act (FOIA) requests, and other records containing historical land use and compliance history in and around the *Study Area*. (Full results are included in Appendix D).

These databases identified a few REC locations within the *Study Area*.

- 25 East Washington, 111 North Wabash, and 111 North State have small quantity generators (SQG), which
 do not pose an environmental risk to construction activities. An example of the type of SQG present is the
 one at 111 N. Wabash associated with a medical imaging office.
- 36 South Wabash had a Leaking Underground Storage Tanks (LUST) incident which was categorized as "other petroleum product", and 23 South State had one that was "non-petroleum." Cleanup on both concluded with No Further Remediation (NFR) letters issued on 11/21/2006.

- Several locations have Underground Storage Tanks (USTs), typically for heating oil, that are regulated and registered with the Office of the State Fire Marshal (OSFM) because of size.
 - 5 South Wabash (the Mallers Building) two 8,000-gallon heating oil tanks were installed in 1960 and the OSFM notified in 1999.
 - o 111 North Wabash removed
 - o 137 North Wabash abandoned in place
 - o 55 East Washington three heating oil tanks, exempt
 - o 180 North Michigan one tank
 - o 1-29 South State five heating oil tanks abandoned in place
- 17 East Monroe had 4 USTs abandoned in place and is on the Dry Cleaner Tracking Database

This number of tanks is not surprising for an area of commercial land uses. Since there is no anticipated excavation or soil movement by the *Project* in these buildings, the identified RECs do not appear to pose a threat to human health.

4.15.3 Use of information during Construction

The areas of potential REC concern have been documented to guide geotechnical sampling. After final design, when construction details become known and exact excavation locations can be determined, final sampling would be conducted to assess soil conditions to confirm whether there are REC impacts and, if so, identify the specific mitigation measures to be conducted.

Following industry best practices and regulations, soils disturbed during construction would be sampled for any potential environmental contaminants for reuse and disposal purposes. If contaminated soils are found, they would be characterized for types and extent of contaminants and transported to appropriate landfills, following State of Illinois and Federal protocols.

4.15.4 Summary of Impacts and Mitigation Measures

All anticipated impacts relate to demolition and construction. These include:

- Lead Based Paint would be disturbed during demolition and construction, requiring proper precautions for worker and public safety.
- Engineering and construction teams would need to maintain awareness of Underground Storage Tanks locations on properties in the *Study Area*. However, no direct UST-related impacts are expected because all excavation on the *Project* would be in the public right-of-way.

Mitigation measures include:

- Contract documents will obligate the contractor to comply with all Environmental Laws. Among those
 obligations, Section XVIII.F.1 of CDOT's standard contract documents specifies that the selected contractor
 must comply with all applicable requirements of the National Emission Standards for Hazardous Air
 Pollutants (NESHAP).
- Workers would be protected from inhalation and contact with potentially hazardous materials.
- Lead Based Paint, contaminated soils or other hazardous materials would be contained and removed per industry standards and disposed of in regulated landfills as needed, all in accordance with State of Illinois and Federal protocols.
- During demolition, structural and building materials would be regularly sampled and analyzed for LBP, ACBM and other hazardous materials. If found, their removal and disposal would be monitored according to appropriate protocols.

48

 Disturbed soils would be tested, as would soils related to any unanticipated impact on UST's and SQG's. If contaminants are discovered, they would be characterized and the extent of contaminants and disposal method determined.

4.16 Energy

Energy use occurs in every construction project, from delivery of materials to operation of heavy equipment. A completed facility also uses energy in many ways, with lighting the most visible. CDOT is committed to sustainability, and although the new CDOT Sustainable Urban Infrastructure Guidelines were released after design of the *Project* was underway, the underlying principles would still influence the *Project*. Energy conservation priorities would be observed during final design and construction of the *Project*. This section describes some of the sustainability components of the conceptual design and their pending implementation.

4.16.1 Conservation through Design Elements

CDOT would apply sustainable standards to the design of the Washington/Wabash Station. The design team would incorporate into its specifications sustainable options for materials and energy-consuming fixtures. For lighting, Light Emitting Diode (LED) bulbs would be installed. In addition to implementing energy efficiency, the standards for lighting levels would consider impacts on riders with low vision via glare control and warmer rather than cooler color quality. As practical and fitting with the design, stairs would be lit with high lumen, fluorescent lamps or LEDs.

As appropriate for the design and visibility, signage would also use LEDs or high lumen, fluorescent lamps. Surveillance cameras would be integrated into the signage. The lighting and signage would make the station entrances highly visible. This type of signage uses 60% less energy than neon-lit signs, with a life expectancy of seven years without maintenance. (CDOT has experience working with LEDs, as it has already retrofitted 1,150 traffic signals to LEDs.)

In addition to lighting, other design elements would also be selected that demonstrate energy efficiency, low maintenance, and recyclability. For example CDOT would specify that construction materials such as glass and steel be composed of a high percentage of recycled content and be recyclable.

4.16.2 Conservation through Construction Best Management Practices

Sustainable best management practices would be followed during construction. For example, idling of construction vehicles would be kept to a minimum. Clean Construction and Demolition Debris (CCDD) requirements would be followed. Also, recycling of materials would be implemented throughout the demolition and construction activities.

4.16.3 Summary of Impacts and Mitigation Measures

Impacts would be limited to energy and fuel use typical of construction projects and transit station operations.

Mitigation strategies would include:

- Reduction of energy and fuel use throughout construction activities by use of Best Management Practices such as turning off rather than idling of construction vehicles.
- Standards would emphasize the use of energy efficient electrical systems, bulbs, and construction materials.

 The use of recycled materials and onsite recycling would be implemented during demolition and construction phases.

4.17 Traffic and Parking

There would be a reduction of an estimated four to six on-street parking spaces within the *Project Area*. The exact number and locations would be determined after final design. Except during demolition and construction, there would be no anticipated change in traffic patterns.

4.17.1 Construction-Related Temporary Closures

During demolition and construction, temporary street closures are anticipated and would be staged to minimize disruption of traffic. However, closures are anticipated to be limited to one block or two blocks of Wabash at a time. It is also anticipated that areas would be provided for pickup and drop off of customers for nearby businesses. Closures at cross streets (Madison, Washington, and Randolph) would be scheduled on separate nights and weekends to minimize disruption to businesses and educational institutions in the area.

CDOT would coordinate with the City of Chicago Office of Emergency Management and Communications (OEMC) to formulate a plan that minimizes street closures and traffic delays. The City of Chicago website has an alert notification system at www.alertchicago.org where residents can also register for Notify Chicago and create an account for receiving traffic delay alerts on cell phones. Rail and bus disruptions are updated on the CTA's website, www.transitchicago.com. Information on *Project* construction related traffic delays would be posted on these websites as appropriate. CDOT would also work with the Alderman of the 42nd Ward, to post on the 42nd Ward website, http://www.ward42chicago.com, updates on the *Project's* progress and any street closures or construction-related schedule changes on the five CTA Lines serving the Wabash Elevated stations. See Sections 5.2 (Public Coordination) and 5.3 (Traveler Notification) for further details.

4.17.2 Summary of Impacts and Mitigation Measures

Pedestrian access would be maintained to all businesses. Temporary traffic closures are expected on the Washington-Madison block of Wabash Avenue during most of construction, with occasional scheduled night/weekend closures at other locations during station demolition. These would be mitigated through public information and standard Maintenance of Traffic plans. One to three blocks of parking would be closed at various stages of construction, and some loading zone operations may shift to Garland Court for buildings east of Wabash, and to an existing alley for buildings west of Wabash.

Four to six on-street parking spaces would be removed permanently due to curb extensions for elevators, and stair/escalator landings. These parking losses are minor in the scope of downtown Chicago and would be mitigated by the inventory of well-marked private parking garages in the *Study Area*. CDOT would work with the Alderman's office to determine the most appropriate allocation of the remaining curb space in terms of parking and loading areas.

There are no anticipated long term effects on traffic patterns.

4.18 Safety and Security

CDOT would implement safety and security measures throughout the duration of this *Project*, from demolition through construction, and after completion. Planned measures for the completed station include visible signage and well-lit stairs and platforms. During demolition and construction, CDOT safety and security best practices would be followed. More details are found below in Section 4.19 (Construction-Related Impacts).

4.18.1 Design Elements

The station would have customer assistance buttons and phones at the station mezzanine and on each platform. Activating this call button phone would generate an audio message to a digital system as well as a text message alerting CTA staff that a rider needs assistance. The audio system would serve visually impaired customers. An elevator status visual and audio sign would be installed near or above the turnstiles. There would also be single and multi-line, dynamic scrolling marquee LED signs accompanied by public address audio announcements.

4.18.2 Summary of Impacts and Mitigation Measures

The safety and security features incorporated into the design of the Washington/Wabash Station would have a positive impact for riders using the east leg of the Loop Elevated. There are no expected long term negative safety and security impacts.

Work zones would be secured as is standard to protect the general public from construction-related safety issues. CDOT would be in close communication with the 42nd Ward Alderman's office and organizations such as the Building Owners and Managers Association (BOMA) regarding traffic impacts during demolition and construction. This process would also be used to receive feedback on safety and security issues, both real and perceived, and communicate solutions.

4.19 Construction-Related Impacts

Demolition and construction associated with the *Project* may briefly inconvenience residents, businesses and business customers adjacent to the *Project Area*. However, the *Project* would not require the closing of any local businesses, or cultural or public resources. Construction impact controls would be integrated into the *Project's* contract specifications to avoid or minimize these potential areas of impact. Construction-related activities and impacts are described below, and summarized by resource in Table 4.

4.19.1 Staging

Though traffic and transit service interruptions may occur during construction, all reasonable efforts would be taken to minimize these and communicate access changes.

At least one Loop Elevated Station in the *Project Area* would be available throughout the duration of the construction activities. The Randolph/Wabash Station would remain open until construction of the new Washington/Wabash Station is substantially complete and open for service.

On rare occasions, work may require trains to not to operate on the Wabash Avenue segment of the Loop Elevated. Such work would be scheduled for hours when no or few trains are operating. The rapid transit detour plan would match weekends 9, 10, and 12 of the Loop Track Renewal project in 2012, i.e., all Loop Elevated lines would operate on the Wells and Van Buren legs only, with Brown and Orange Lines through-routed and the Pink Line extended to Roosevelt Station.

51

During demolition and construction, temporary street closures are anticipated and would be staged to minimize disruption of traffic. As stated in Section 4.17.1, closures at cross streets (Madison, Washington, and Randolph) would be scheduled on separate nights and weekends to minimize disruption to businesses and educational institutions in the area. More frequent, but still temporary, traffic interruptions are anticipated along Wabash Avenue.

During demolition and construction, CDOT would communicate with the retail, institutional, and residential populations in the immediate *Project Area* and wider *Study Area* through the 42nd Ward Alderman's office. The planned demolition and construction schedule would be shared with retailers on the ground floors of buildings in the *Project Area* and in the buildings adjoining the *Project Area*.

Notifications and fliers would be posted throughout the Loop Elevated system in train stations and on the trains. There would also be direct communication with the businesses, educational institutions, and private and public service providers via electronic, popular print and online media. Sections 5.2 (Public Coordination) and 5.3 (Traveler Notification) contain details of public notification strategies.

4.19.2 Work Crew Activities

Construction work impacts would be short-term in nature and could include noise, vibration, visual quality, and air quality effects from dust. Such impacts would be mitigated according to City of Chicago construction requirements.

Construction activities would be managed by CDOT, in accordance with Federal and State of Illinois guidelines. Standards and codes contained within the City of Chicago building ordinances regarding construction coordination, compliance and permits would be followed.

Preventative actions would be based on Best Management Practices for general construction and have been described above and summarized in Table 4. To the extent possible, noisy construction activities would be scheduled to occur during normal daytime working hours when such work can more readily blend into background noise. Dust would be kept at a minimum with watering as needed. Extended idling of construction vehicles would be discouraged. Demolition debris would be recycled, if feasible, or taken to appropriate disposal facilities. Additional preventive actions would be added to the construction plan as the construction documents are finalized.

4.19.3 Summary of Impacts and Mitigation Measures

Construction impacts would be short-term in nature. These would include street closures, construction equipment traffic and parking, and dust and elevated noise levels during construction and demolition.

The following mitigation measures would be used:

- All reasonable efforts would be made to use staging to minimize the impact on traffic flow, parking, and transit operations during construction.
- Best Management Practices would be used throughout the construction period. These would include containment and appropriate disposal of hazardous materials as needed, as well as efforts to reduce environmental impacts.
- Posted signage, notifications, fliers, and website updates would be regular and targeted at all CTA riders to communicate construction information. CDOT would also be in regular and direct communication with the Alderman's office and business and building owners adjacent to the *Project Area*.

Table 4 – Construction Impacts and Related Mitigation Measures - by Resource

Resources	Impact Mitigation for Construction	
All	Demolition and construction would be staged, with clear signage and outreach to businesses. The planned demolition and construction schedule would be shared with the general public, with emphasis on transit customers and retailers and other tenants of buildings adjoining the <i>Project Area</i> .	
	To cause the least disruption, construction affecting transit service or local streets would take place during off-peak hours as much as possible. Construction and demolition activities would be coordinated with the CTA, Alderman's Office, and other City of Chicago Departments.	
	CDOT would employ best management practices at all times.	
Land Acquisition, Land Use, and Zoning	Not Applicable: No acquisition or zoning changes are needed and no land use changes are expected.	
Social and Economic	The mitigation actions listed below for Traffic and Parking would also apply here.	
Environmental Justice	Mitigation measures for Environmental Justice are not required. However, CDOT still plans to incorporate specific outreach efforts to community groups and service organizations that engage minority and low-income populations during the overall effort to keep all riders informed about the <i>Project</i> .	
Historical and Archeological Resources	While no construction-related impacts are anticipated, CDOT would take precautions during demolition and construction to assure that there are no unintended negative impacts on nearby historic buildings.	
Parklands and Recreational Resources	Cultural and natural resources would remain accessible throughout the duration of the <i>Project</i> as Randolph/Wabash Station would remain open until construction on the new Station is substantially complete and open for service.	
Visual - Aesthetics	CDOT would take measures throughout construction activities to keep visual and aesthetic resources as unobstructed as is feasible.	
Air Quality	To mitigate temporary air quality issues common to construction projects, CDOT would use Best Management Practices to keep equipment idling at a minimum, and otherwise minimize temporary negative impacts on air quality from dust and equipment.	
Noise and Vibration	CDOT and its contractors would comply with Chicago's Environmental Noise Ordinance (Article XXI). Even though "public improvements authorized by a governmental body or agency" are exempted from some provisions of the ordinance, CDOT would still attempt to follow those provisions to the extent feasible.	
	Also, work that would be louder than regular train operations would be scheduled during daytime hours where it can blend into background noise levels and pile driving would not occur, eliminating a common source of vibration impacts in construction. CDOT would also use other Best Management Practices to minimize noise and vibration.	

Resources	Impact Mitigation for Construction
Floodplains	Not applicable: The Study Area is not in a flood zone
Water Resources	Not applicable.
Wetlands	Not applicable: The Study Area is not in a wetland.
Biological Resources	Not applicable.
Ecologically Sensitive Areas	Not applicable.
Hazardous Materials	Potentially hazardous materials on the existing structures and disturbed soils would be sampled. If hazardous waste were to be discovered, it would be removed and disposed in accordance with all municipal, state, and federal regulations. Workers would be protected from inhalation and contact with potentially hazardous materials.
Energy	Energy and fuel use would be reduced through Best Management Practices such as turning off rather than idling of construction vehicles. Design standards would emphasize the use of energy efficient and/or recycled construction materials. Onsite recycling would be utilized.
Traffic & Parking	Temporary traffic closures and detours would be mitigated through public information and standard Maintenance of Traffic plans. Pedestrian access would be maintained to all businesses.
	Some loading zone operations may shift to Garland Court for buildings east of Wabash, and to an existing alley for buildings west of Wabash.
Safety and Security	Work zones would be secured as is standard practice to protect the general public from construction-related safety issues. Communications channels with adjacent buildings regarding traffic impacts during demolition and construction would also be used to receive feedback on safety and security issues, both real and perceived, and communicate solutions.
Indirect Impacts	Maintenance and customer assistance resources would be targeted to Adams/Wabash (in addition to Randolph/Wabash) and State/Lake (in addition to Washington/Wabash) when adjacent stations close for demolition.
	Passengers on the five affected lines would be notified in advance when detours or slow zones could affect their travel or waiting times. Monitoring of service consistency would be used to determine when measures are required to alleviate or prevent "bunching" of trains.

54

4.20 Indirect (Secondary) Impacts

Under NEPA, indirect or secondary impacts are defined as those that are reasonably foreseeable but may occur at a different time and/or place.

For this project, indirect impacts could be caused by changes in individuals' travel patterns and by changes in transit operations.

4.20.1 Construction-Related

At the beginning of construction, the Madison/Wabash Station would close for demolition. The Randolph/Wabash Station would stay open as the primary alternate to serve these riders, but transit customers – especially those approaching from south of Madison – can also use Adams/Wabash as an interim access point to transit services on the Loop Elevated. Therefore, one construction-related indirect impact would be increased use of the Adams/Wabash station.

Another construction-related indirect impact relates to the implementation of slow zones on the Loop Elevated to protect workers on the track and detours of train service on selected weekends. These have the capacity to impact service consistency and travel times elsewhere in the City on the lines that use the Loop Elevated.

4.20.2 Post-Completion

Upon completion of construction of the Washington/Wabash Station, the Randolph/Wabash station would close for demolition. CTA customers who had approached Randolph/Wabash from the north may use State/Lake as their access point to the Loop Elevated instead of the new station. A number of customers who switched to Adams/Wabash may continue to do so, even after the new station opens.

The presence of a state-of-the-art, ADA-compliant, safe, and well-lit new station in downtown Chicago would be expected to generate new transit trips. One of the stated benefits of the Preferred Alternative (See Section 3.1.2) is the ability to draw a projected 475 trips per day from automobiles to transit. However, it could also inspire new trips by making travel to nearby attractions more convenient and attractive. This could result in indirect effects in two ways. First, the transit users (and untaken auto trips) have origins at other locations in the region, so other stations may see increases in ridership. Attractions and businesses in and around the *Study Area* may see increases in numbers of visitors. While these effects would generally be diffuse, if they do rise substantially at any one location (e.g. trips between River East hotels to convention events at the Merchandise Mart or McCormick Place (where a new Green Line Station is under construction), the impact would likely be either positive or neutral.

4.20.3 Summary of Impacts and Mitigation Measures

Expected impacts and their mitigation strategies are as follows:

 Loop Elevated boardings would be redistributed when each existing station closes for demolition, with some shifting to the next stations on the line outside the *Study Area*: Adams/Wabash Station (for Madison/Wabash) and State/Lake Station (for Randolph/Wabash). This can be mitigated by targeting maintenance and customer assistance resources to the recipient stations in the days surrounding the closures.

- Construction-related slow zones and detours have the potential to affect service consistency elsewhere on
 the lines that use the Loop Elevated. This can be mitigated with advisory "expect delays" notices to
 passengers at outlying stations, and targeted monitoring of schedule adherence on these lines with
 individual train runs being directed to run express when necessary to avoid "bunching".
- Transit trips generated by the new station would start or end at locations outside the Study Area. Some may
 draw new users to business and attractions in and around the Study Area. These impacts would not require
 mitigation because they would likely either be positive, neutral, or too diffuse to be significant.

4.21 Cumulative Impacts

The *Project* was studied for cumulative impacts. These are defined as: "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." (40 CFR Part 1508.7)

4.21.1 Cumulative Impacts – Findings

The Washington/Wabash Station is one of several current and planned transportation modernization efforts in Chicago's Downtown area. These plans for modernization are designed to enhance the public transit experience. They aim to increase ridership and to provide efficient, secure, access to Downtown Chicago's resources.

Of these projects, the one with the greatest ability to have cumulative impacts with the *Project* is the Central Loop (a.k.a. "East-West") Bus Rapid Transit (BRT) project. The BRT project would add bus lanes adjacent to the Washington/Wabash Station on Madison and Washington streets, and enhanced, level-boarding stations on Madison just east of Wabash Avenue, and Washington just west of Wabash Avenue.

In the long term, this is expected to generate a positive impact. This transfer point would provide more attractive CTA bus connections on six routes that together connect the Washington/Wabash Station, Metra commuter rail terminals, the major tourist attraction of Navy Pier, and the Central and East Loop areas.

Since both projects are projected to be under construction in 2014, this could provide opportunities for coordination to minimize net construction disruption for motorists and transit users. A recent example of such coordination (in 2013) was when a 9-day closure of the Brown Line service over the Wells Street Bridge for construction was accompanied by a concurrent weekend closure of the nearby CTA control tower for repairs.

4.22.2 Summary of Impacts and Mitigation Measures

Long-term, cumulative impacts are anticipated to be positive, including increased transit access and ridership, and potential development in the vicinity. During construction, the Central Loop BRT project would also have construction impacts, but schedule coordination may be able to allow one project to "piggyback" on a traffic disruption required by the other project, mitigating the combined impact on traffic.

5 PUBLIC INVOLVEMENT AND PROJECT COORDINATION

This section of the EA details the ongoing and planned public involvement efforts by the Chicago Department of Transportation (CDOT) (the sponsoring agency), the Chicago Transit Authority (CTA) (the operating agency), and the Federal Transit Administration (FTA), (the lead federal agency). To date, CDOT has been in regular contact with the office of the Alderman for the 42nd Ward of the City of Chicago, in which the entire *Project Area* is located. CDOT has presented and would continue to present this *Project's* concept to public agency officials, community organizations, and professional groups.

5.1 Agency Coordination

Coordination with agencies such as the Illinois Historic Preservation Agency (IHPA), CTA, Chicago Metropolitan Planning Council (CMAP) and environmental compliance agencies has commenced and would continue throughout the life of the *Project*. See Appendix E for the Public Involvement Matrix, which itemizes these outreach efforts.

5.2 Public Coordination

Meetings with community leaders and organizations have taken place with the assistance of the 42nd Ward Alderman's office. The Alderman has coordinated meetings for CDOT to share *Project* information with his constituents and to bring awareness of the *Project* to the public.

During demolition and construction, CDOT would continue to communicate with the retail, institutional, and residential populations in the immediate *Project Area* and wider *Study Area* through the 42nd Ward Alderman's office. The planned demolition and construction schedule would be shared directly with retailers on the ground floors of buildings in the *Project Area* and in the buildings adjoining the *Project Area*.

There would also be direct communication with the businesses, educational institutions, and private and public service providers via electronic, popular print and online media.

See Appendix E, Public Involvement Matrix, for details on Public Coordination to date and ongoing efforts planned.

5.3 Traveler Notification

CDOT's recent reconstruction of the Wells Street Bridge gives a good example of the type of outreach efforts CDOT and CTA make to transit users when a capital project disrupts service. For the bridge reconstruction, both agencies have provided on their websites, updates, video clips of the project's progress, alternative routes, shuttle buses, schedules, and contact information for riders with questions. For both the bridge reconstruction project and this *Project*, the public would be directed to the following websites: http://www.chicagodot.org and http://www.transitchicago.com/

However, this *Project* is expected to have a lesser impact than the Wells Street Bridge Project, because at most times, riders would be able to board trains within two blocks of their previous location (Randolph/Wabash Station or Adams/Wabash Station). During rare and brief closure of the track segment, train operations would be rerouted using previously executed plans from the CTA's 2012 Loop Track Renewal project - for which public information materials have already been prepared.

Riders using the Randolph/Wabash and Madison/Wabash Stations would be made aware of the construction impacts, and the schedule of the *Project* and its progress, with fliers, with signage throughout the CTA system, and through the CDOT and CTA websites. At www.alertchicago.org, individuals can also sign up for cell phone notifications by registering for Notify Chicago traffic alerts.

Notifications regarding the progress of the *Project* would take place through other media as well. The *Project* team would also send notices to neighborhood organizations located along the five CTA train lines serving this station. These organizations would include community groups in the neighborhoods of Woodlawn, Englewood, and Pilsen/Little Village, Lakeview, etc. The Little Village Environmental Justice Organization (LVEJO) is an example of a transportation-oriented community group which could further disseminate the information to community residents.

As noted earlier, the demolition of the Madison/Wabash Station would occur first. The construction of the new station at Washington/Wabash would follow. Throughout the duration of the *Project*, riders would be advised that the Randolph/Wabash Station would remain open until the Washington/Wabash Station is substantially complete and open for service.

5.4 Public Hearing

A public hearing will take place in Downtown Chicago on March 20, 2014, at the Chicago Cultural Center which is located in the Study Area. CDOT and CTA will advise the public of the availability of the Draft EA and seek the public's comments. The public will be invited to the public hearing via print and electronic media, as well as through signage in centrally-located areas, such as the current CTA Madison/Wabash and Randolph/Wabash Stations, and heavily-frequented retailers, restaurants, and institutions.

Documentation of the public hearing will be made available for further comment and feedback. A public comment addendum, which will contain comments received on the *Project* and responses to these comments, will be published after the end of the 30-day comment period.

References

ADA 1990	One Hundred First Congress of the United States of America at the Second Session, 1990. <i>Americans with Disabilities Act of 1990</i> (ADA).
ASTM 2005	ASTM International 2005, E1527-05. Standard practice for environmental site assessments – Phase I environmental site assessment process.
CDOT 2012	Chicago Department of Transportation (CDOT) 2012. The Chicago Forward Department of Transportation Action Agenda.
CDOT 2013	Chicago Department of Transportation (CDOT) 2013. <i>The Chicago Forward Department of Transportation Action Agenda 2013 Update.</i>
CFR 1978	Code of Federal Regulations. 1978. 40 CFR 1500 et seq. <i>Council on Environmental Quality</i> .
CFR 1986	Code of Federal Regulations. 1986. 33 CFR 328. Definition of navigable waters of the United States.
CFR 1987	Code of Federal Regulations. 1987. 23 CFR 771. Environmental impact and related procedures.
CFR 2004a	Code of Federal Regulations. 2004. 36 CFR 800. Protection of historic properties.
CFR 2004b	Code of Federal Regulations. 2004. 36 CFR 1191. American with Disabilities Act (ADA) accessibility guidelines for buildings and facilities; Architectural Barriers Act (ABA) accessibility guidelines.
CFR 2005	Code of Federal Regulations. 2005. 49 CFR 633. Project management oversight
CFR 2007	Code of Federal Regulations. Revised 2007. 36 CFR 60.4. <i>National Register of Historic Places: Criteria for evaluation</i> .
CFR 2008	Code of Federal Regulations. 2008. 23 CFR 773 et seq. <i>Parks, recreation areas, wildlife and waterfowl refuges, and historic sites</i> [Section 4(f)].
CFR 2013	Code of Federal Regulations February 2013. FHWA 23 CFR 771 and FTA 49 CFR 622. <i>Environmental impact and related procedures. Final rule.</i>
City 1981	City of Chicago, 1981. <i>Master Plan for the Loop Elevated Rehabilitation and Historic Preservation.</i> [Excerpted in Appendix B]
CMAP 2010	Chicago Metropolitan Agency for Planning. 2010. <i>GO TO 2040 Comprehensive Regional Plan.</i>
CPC 2009	Chicago Plan Commission, August 2009, Chicago Central Area Action Plan
CTA 2012	Chicago Transit Authority. 2012. Infrastructure Accessibility Task Force Report
CTA 2013	Chicago Transit Authority. April 2013. Annual Ridership Report: Calendar Year 2012
EPA 1971	Environmental Protection Agency. 1971. NTID 300.1. <i>Noise from construction equipment and operations, building equipment and home appliances.</i>

EPA 2006	Environmental Protection Agency. 2006. EPA 420-B-06-902. <i>Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in PM</i> $_{2.5}$ <i>and PM</i> $_{10}$ <i>Nonattainment and Maintenance Areas</i> .
EPA 2007	Environmental Protection Agency. 2007. EPA 420-F-07-017. Control of hazardous air pollutants from mobile source air toxics.
FHWA 1987	U.S. Department of Transportation, Federal Highway Administration. 1987. FHWA T6640.8A. Technical advisory guidance for preparing and processing environmental and Section 4(f) documents.
FHWA 1998	U.S. Department of Transportation, Federal Highway Administration. 1998 (Updated 2012). Order 6640.23: FHWA actions to address environmental justice in minority populations and low-income populations.
FHWA 2003	U.S. Department of Transportation, Federal Highway Administration. 2003. <i>Questions and answers regarding the consideration of indirect and cumulative impacts in the NEPA process</i> .
FHWA 2005	U.S. Department of Transportation, Federal Highway Administration. 2005. <i>FHWA Section</i> 4 (f) policy paper.
FHWA 2006	U.S. Department of Transportation, Federal Highway Administration, Federal Transit Administration. 2006. <i>SAFETEA-LU environmental review process final guidance</i> .
FHWA 2013	U.S. Department of Transportation, Federal Highway Administration, 2013. Guidance for screening level analysis for Documented Categorical Exclusions (dCEs) pursuant to 23 CFR 771.118(d).
FTA 2005	U.S. Department of Transportation, Federal Transit Administration, and Federal Highway Administration. 2005. <i>Linking the transportation planning and national environmental policy act (NEPA) processes.</i>
FTA 2006	U.S. Department of Transportation, Federal Transit Administration. 2006. FTA-VA-90-1003-06. <i>Transit noise and vibration impact assessment</i> .
FTA 2008	U.S. Department of Transportation, Federal Transit Administration. 2008. <i>Procedures and technical methods for transit project planning.</i> http://www.fta.dot.gov/12304_2396.html (various drafts).
FTA 2012a	U.S. Department of Transportation, Federal Transit Administration. 2012. NEPA, NPRM, Docket Documentation, Federal Transit Administration proposed categorical exclusions.
FTA 2012b	U.S. Department of Transportation, Federal Transit Administration. 2012. <i>MAP-21 Legislation. http://www.fta.dot.gov/map21.html. FTA online resource for an overview of the legislation. Moving ahead for progress in the 21st Century. Transforming the way we build, manage, and maintain our nation's transit systems.</i>
GG 2013	Garfield, Graham. <i>Chicago "L".org: Stations</i> (Profile pages for various Loop Elevated Stations www.chicago-l.org (Retrieved 11-7-2013)
IDOT 2009	Illinois Department of Transportation. Map as of 12-31-2009. Five Year Functional Classification and Urban Limit Data for Cook County, Illinois, including Interstate, U.S., State highways., rivers, streams, water bodies, and municipal boundaries.

LOC 2013	Library of Congress Catalog. Historic American Buildings Survey / Historic American Engineering Record for Union Elevated Railroad in Chicago.
NCHS 2008	McDowell MA, Fryar CD, Ogden CL, Flegal KM. Anthropometric reference data for children and adults: United States, 2003–2006. National health statistics reports; no 10. Hyattsville, MD: National Center for Health Statistics. 2008
NPS 2013	National Park Service. 2013. Chicago: A national register of historic places travel itinerary.
USC 1964a	United States Code. 1964. 49 USC 5309. Transportation: Capital investment grants.
USC 1964b	United States Code. 1964. 42 USC 20002-16. The civil rights act of 1964.
USC 1964c	United States Code. 1964. 49 USC 1601. The urban mass transportation act of 1964.
USC 1966a	United States Code. 1966. 16 USC 470. National historic preservation act of 1966 (NHPA) (Section 106).
USC 1966b	United States Code. 1966. 49 USC 303. Policy on lands, wildlife and waterfowl refuges, and historic sites [Section 4(f)].
USC 1966c	United States Code. 1966. 23 USC 138. Preservation of parklands.
USC 1969	United States Code. 1969. 42 USC 4321-4347. The national environmental policy act of 1969 (NEPA).
USC 1973	United States Code. 1973. 16 USC 1531-1534. The endangered species act of 1973.
USC 1976	United States Code. 1976. 42 USC 6901 et seq. <i>The resource conservation and recovery act of 1976.</i>
USC 1980	United States Code. 1980. 42 USC 103. Comprehensive environmental response – The compensation and liability act of 1980 (CERCLA).
USC 1983	United States Code. 1976. 49 USC 303. <i>Policy on lands, wildlife, and waterfowl refuges, and historic sites.</i>
USC 1986	United States Code. 1986. 42 USC 300 et seq. <i>The emergency planning and community right to know act of 1986.</i>
USC 1994	United States Code. 1980. 49 USC 5332. Mass Transportation.
USC 1995	United States Code. 1976. 16 USC 1531 et seq. <i>Endangered species act, U.S. Fish and Wildlife Service.</i>
USDOI 1995	U.S. Department of the Interior, 1995. <i>The Secretary of the Interior's standards for the treatment of historic properties</i> , 1995. http://www.nps.gov/hps/tps/standquide/ .
USDOT 1997	U.S. Department of Transportation. 1997. Order 5610.2. <i>USDOT order to address environmental justice in minority populations and low-income populations</i> . Updated 2012.
USEO 1994	U.S. Presidential Executive Order 12898. 1994. Federal actions to address environmental justice in minority populations and low-income populations.
USEO 2000	U.S. Presidential Executive Order 13166. 2000. <i>Improving access to services for persons with limited English proficiency.</i>

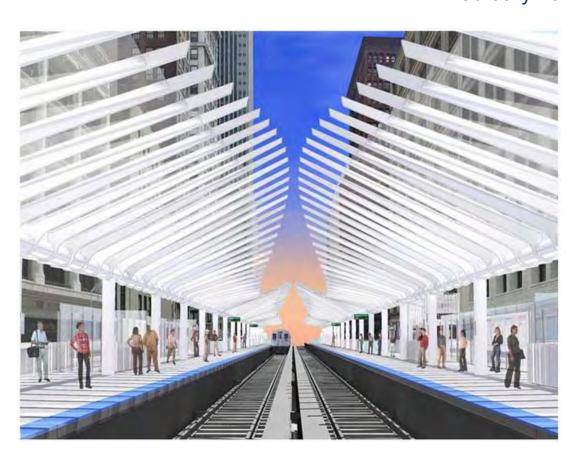




Federal Transit Administration

Washington/Wabash Loop Elevated Station

ENVIRONMENTAL ASSESSMENT (EA) – APPENDICES
February 2014



Prepared by the Chicago Department of Transportation in cooperation with the Federal Transit Administration





Washington/Wabash Loop Elevated Station ENVIRONMENTAL ASSESSMENT (EA) – APPENDICES

February 2014

Prepared by the Chicago Department of Transportation in cooperation with the Federal Transit Administration

Appendices Table of Contents

Exhibits, Agency Coordination, Research and Data, Hazardous Materials Findings, Public Outreach

Appendix	Title	Pages
A Exhibite		
A. Exhibits	Declination of Commont Decima for Declarated Alternative	2-9
Exhibit 1 Exhibit 2	Preliminary Concept Design for Preferred Alternative	2-9 10-19
EXHIDIT 2	Concept Design for Non-Preferred Alternative	10-19
B. Historical Resources Corre	espondence, Attachments, and Research	
Urban Mass Transit Administration	October 7, 1981 Correspondence & Finding of No Adverse Effect	21-30
Illinois Historic Preservation Agency (Section 10	06) 2006 Correspondence (May 3 by City, June 22 by SHPO)	31-35
	2007 Correspondence (May 16 by City, August 23 by SHPO)	36-38
	2013 Correspondence (May 7 by FTA, November 5 by SHPO,	
	December 20 by FTA)	
Historic American Engineering Records (National Park Service)	Files IL-1, IL1D and IL-1I (ILL-16-CHIG-108,-108D,-108I)	39-44
City of Chicago	Excerpt from 1981 City of Chicago Master Plan for the Loop	45-104
	Elevated Rehabilitation and Historic Preservation	105-156
City of Chicago, HARGIS, NPS - Matrix	Federal, State, and Local Historic Buildings and Landmarks	157-163
C. Research and Data Findin	ias	
Chicago Metropolitan Agency for Planning	Transportation Improvement Program (TIP) Listing- Project	
Chicago Well opolitan Agency for Flamming	ID 01-12-0008	165-168
Environmental Justice	CMAP and 2010 U.S. Bureau of the Census Data	169-171
Air Quality Conformity Reference for Illinois	Cook County Non-Attainment Status by Year since 1978	172-175
Hot Spots Analysis Reference	CFR-2011-title40-vol20-sec93-123 – For Carbon Monoxide	176-178
,	(CO), Particulate Matter (PM) PM2.5 and PM10 -	
Noise Study	Calculations and Graphs	179-188
Illinois Department of Natural Resources	IDNR EcoCAT Response	189-190
	IDNR EcoCAT Cook County Endangered Species List	191-194
United States Fish and Wildlife Service	USFWS No Effects Determination Letter	195-196
	USFWS Endangered Species List	197-198
D. Harardana Matariala Find	inaa	
D. Hazardous Materials Find		000 000
Environmental Research	Map and Synopsis Matrix	200-209
Lead Based Paint (LDP) Sampling	Sampling Results and Report	210-219
E. Public Outreach and Coor	rdination	
Public Involvement	Public Involvement Matrix	221-223
		•

Appendix A

Preliminary and Concept Designs for Two Alternatives:

- Preferred Alternative
- Non-Preferred Alternative

Contents

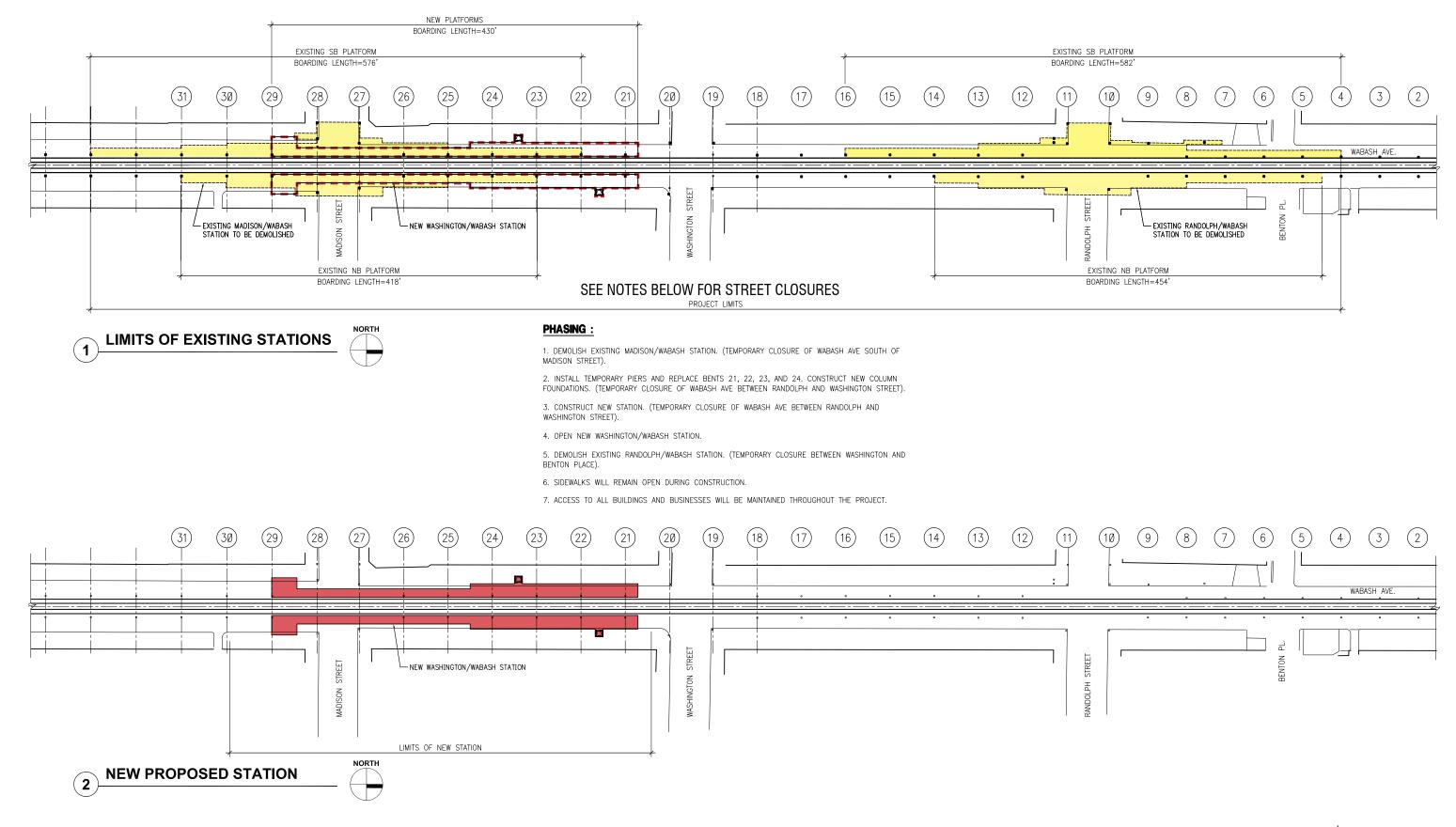
Title

Exhibit 1 – Preliminary Design Concept for Preferred Alternative

Exhibit 2 – Concept Design for Non-Preferred Alternative

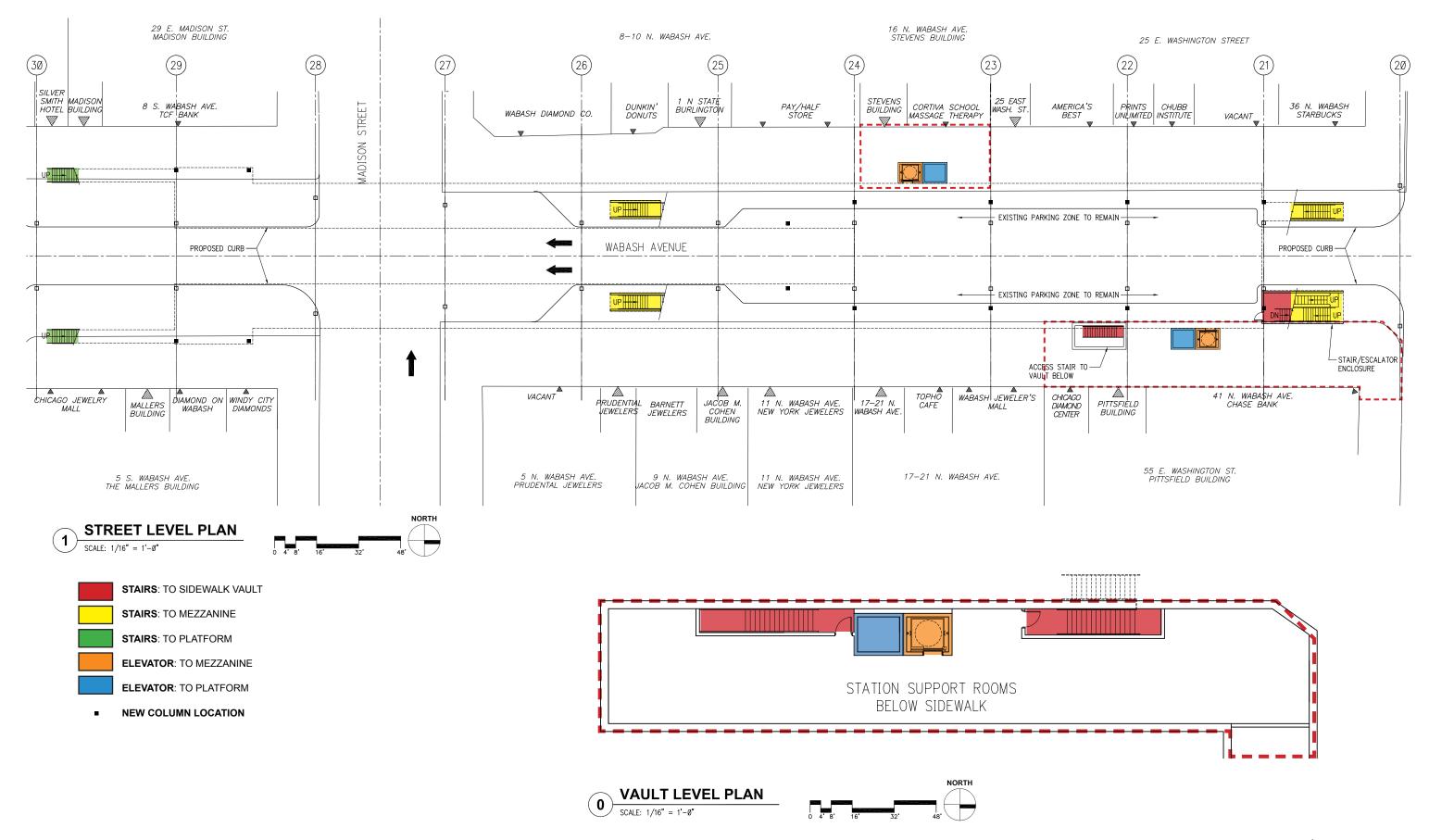
Preferred Alternative

Washington/Wabash Loop Elevated Station - Appendix A - Exhibit 1 - Preliminary Design Concept for Preferred Alternative







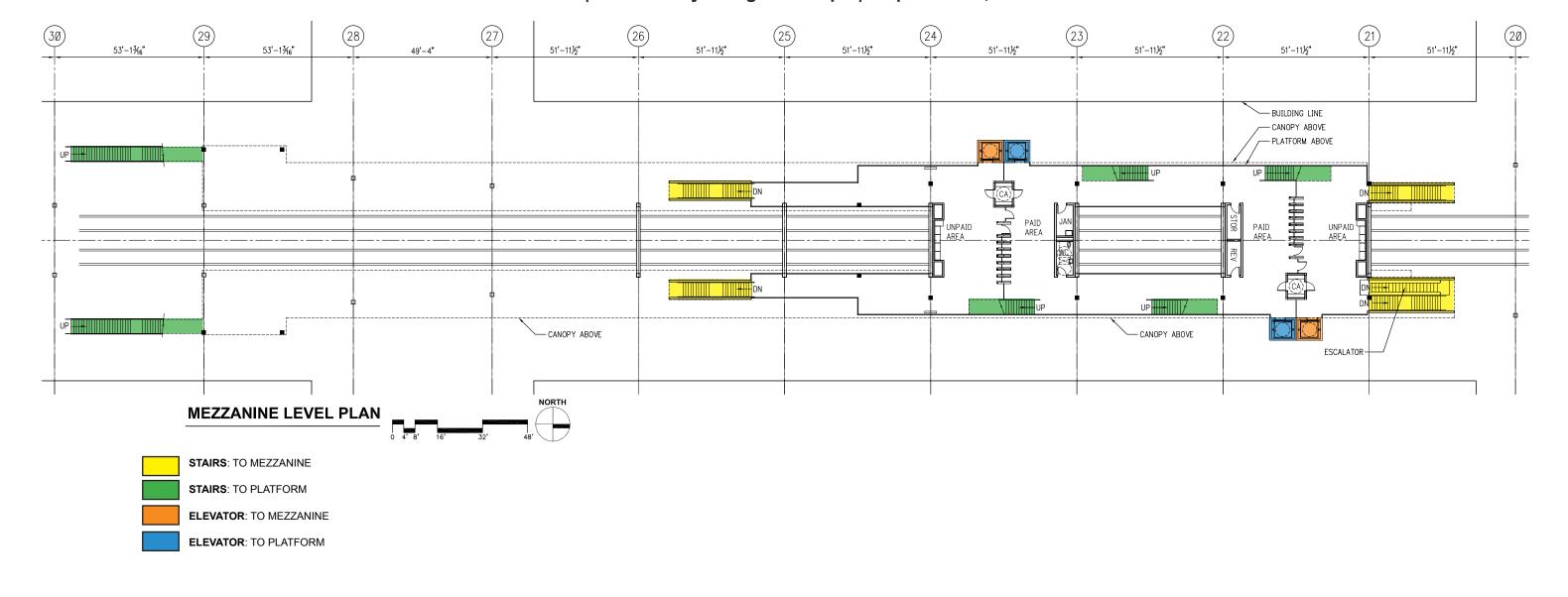




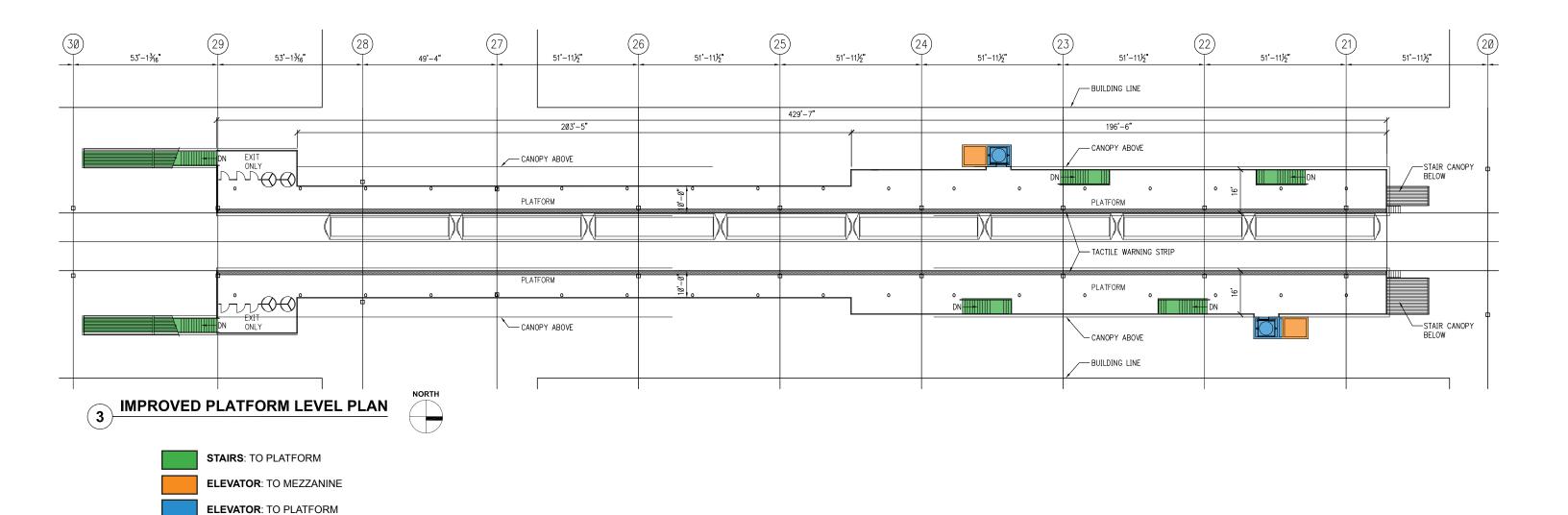


WASHINGTON/WABASH LOOP ELEVATED STATION | Preliminary Design Concept | September 3, 2013

WASHINGTON/WABASH LOOP ELEVATED STATION | Preliminary Design Concept | September 3, 2013





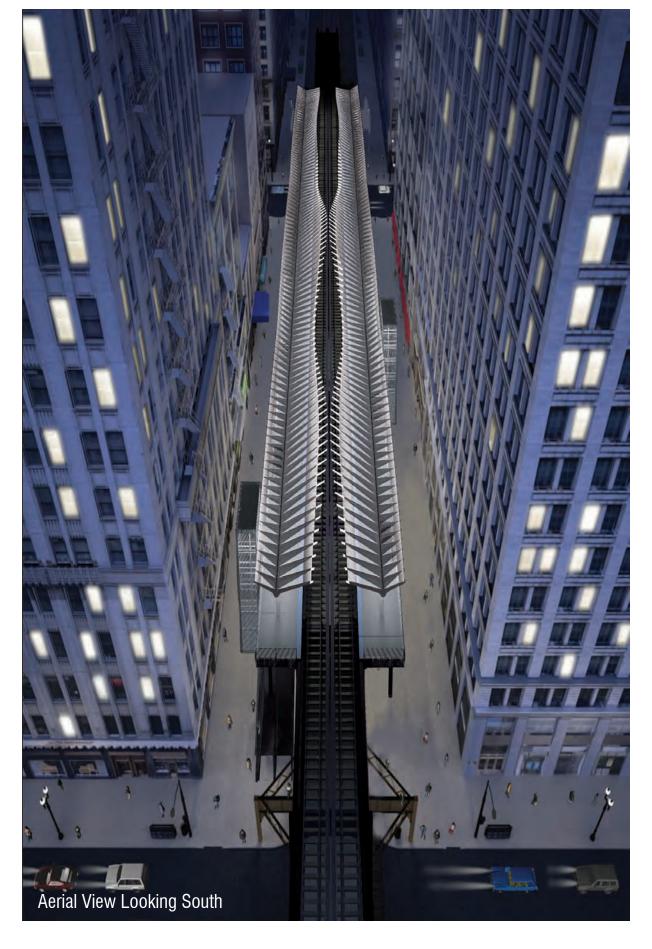


















55 E. Washington 17 N. Wabash 11-15 N. Wabash 7-9 N. Wabash 1-5 N. Wabash 5 S. Wabash 5 S. Wabash

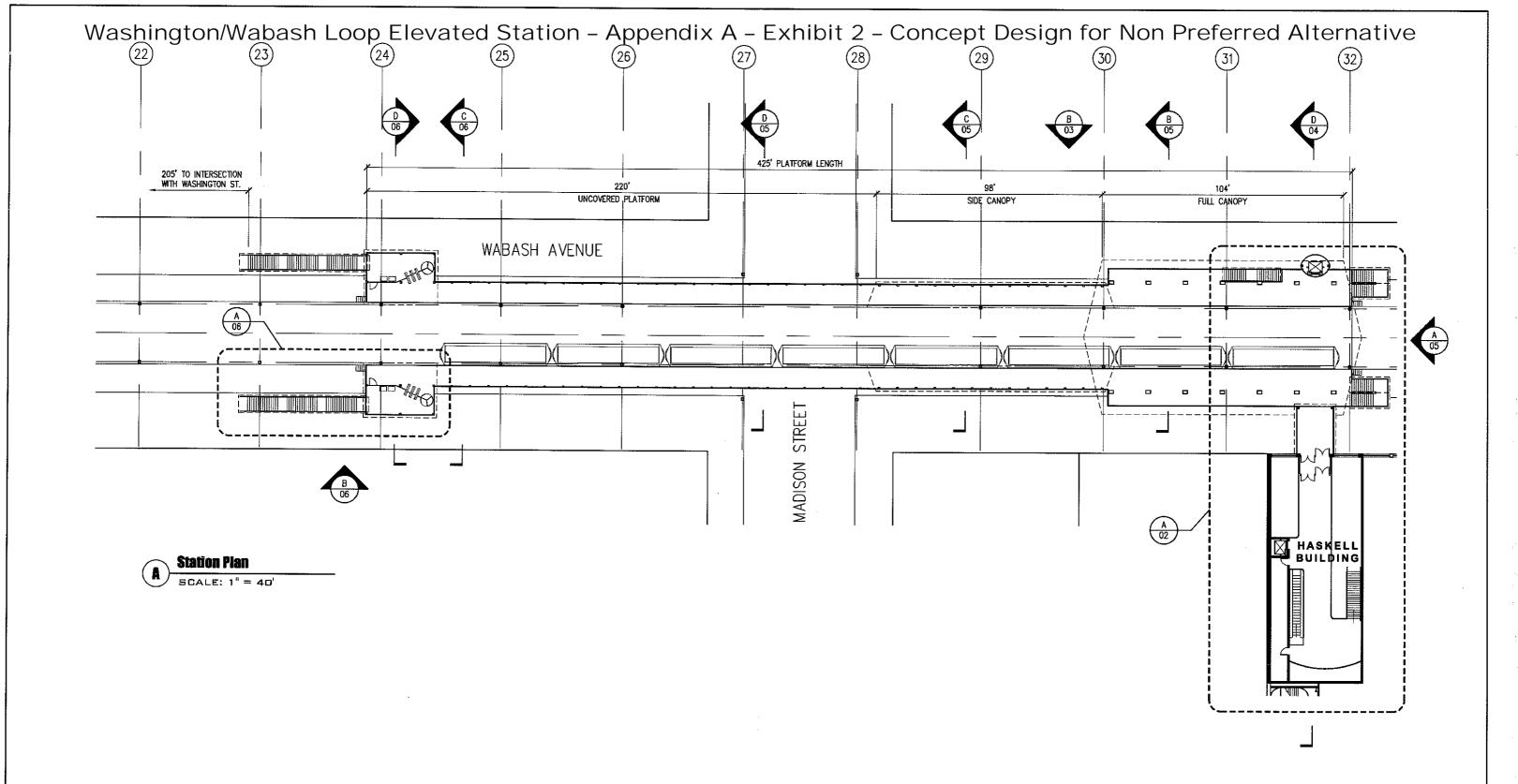


14 S. Wabash 29 E. Madison 2-14 N. Wabash 16 N. Wabash 25 E. Washington





Non-Preferred	Alternative
----------------------	--------------------



Washington/Wabash Loop Elevated Station **Environmental Assessment - Appendices**





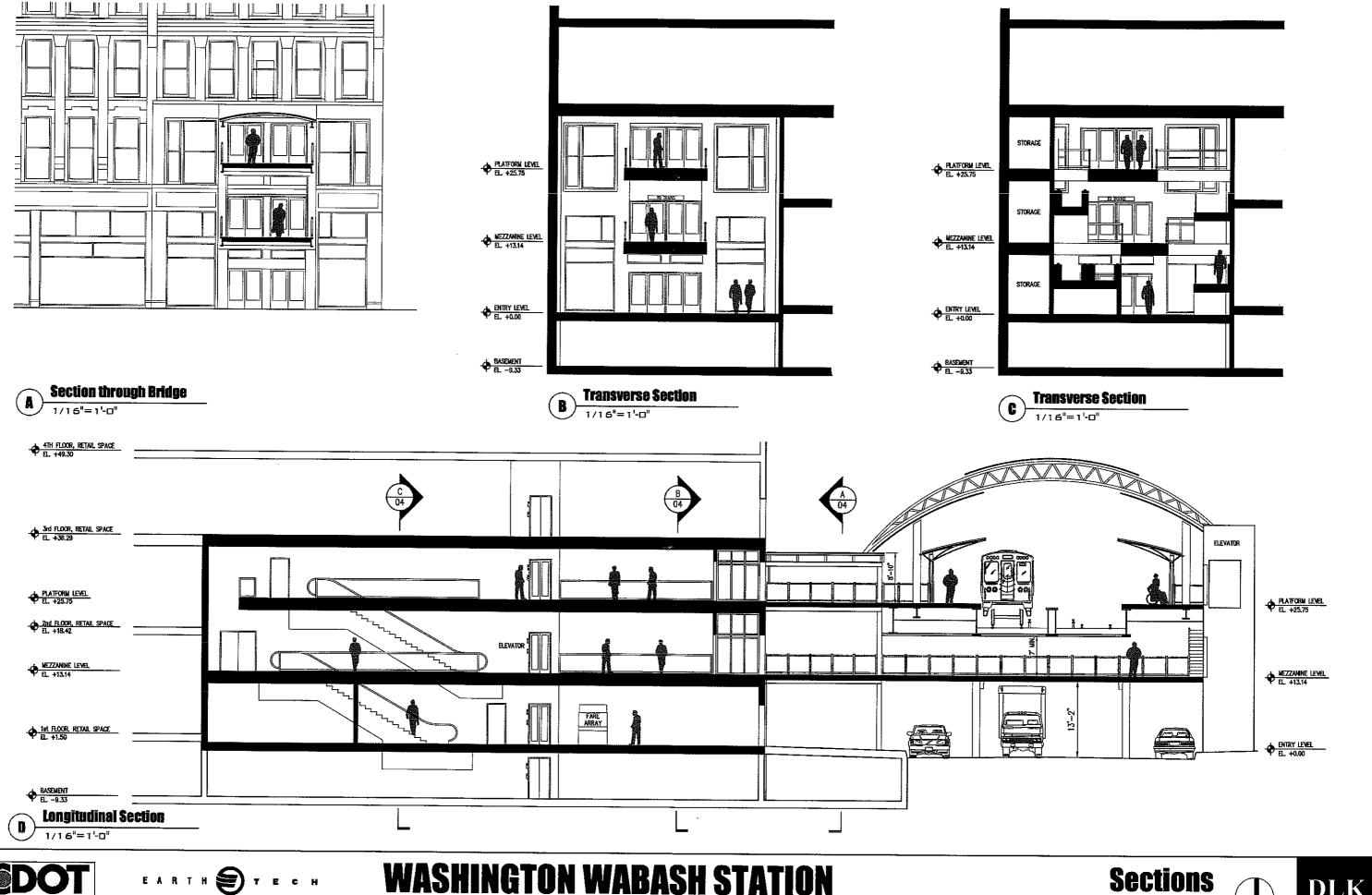
WASHINGTON WABASH STATION

Phase I - 30% Conceptual Design, In Progress













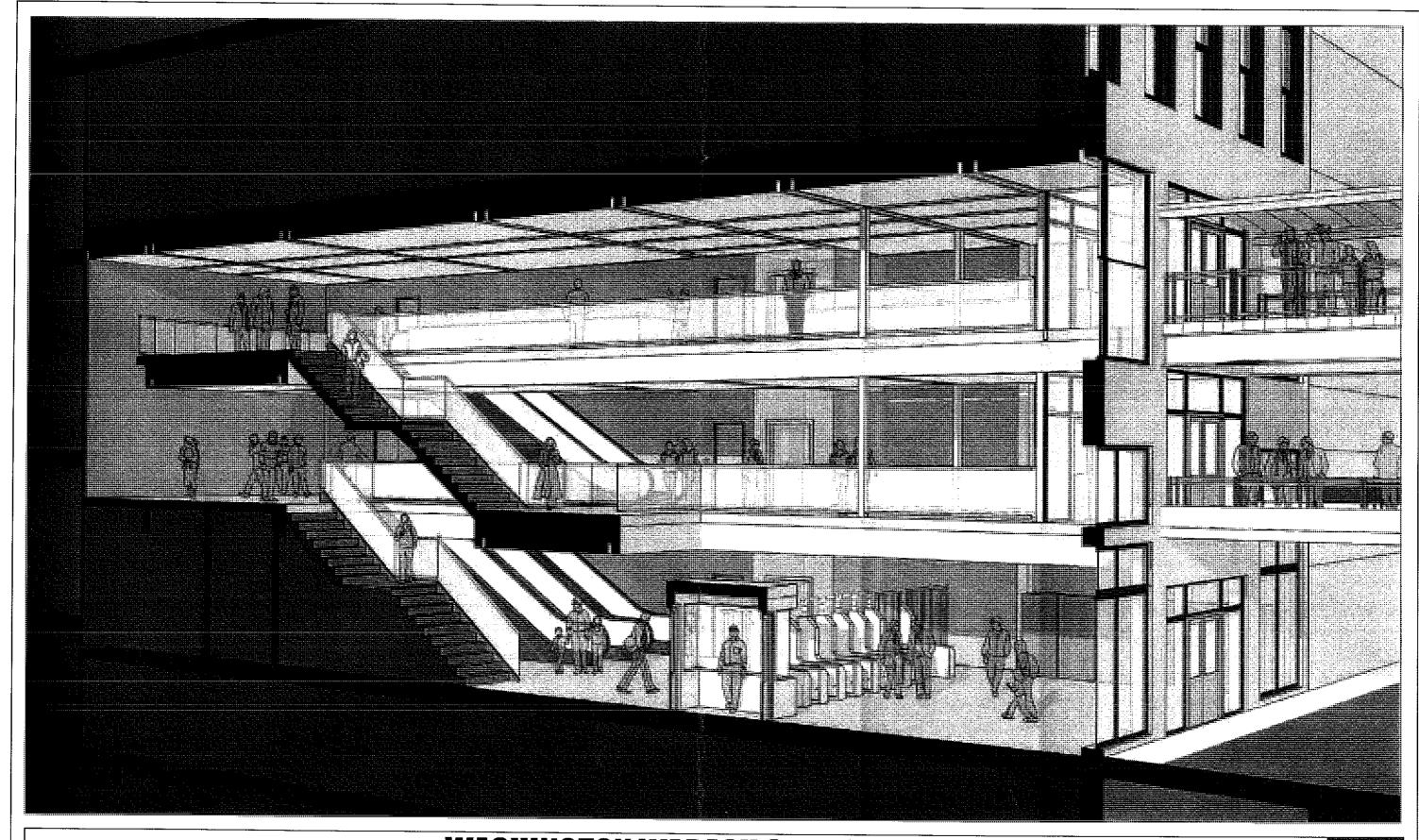
WASHINGTON WABASH STATION

CDOT Project No. D-3-102 Phase I - 30% Conceptual Design, in Progress









CDOT



A TUCO INTERNATIONAL LTD. COMPANY

WASHINGTON WABASH STATION
Phase 1 - 30% Conceptual Design - In Progress
CDOT Project No. D-3-102

Section Perspective Sheet 05

© DLK ARCHITECTURE 2006

Washington/Wabash Loop Elevated Station Environmental Assessment - Appendices

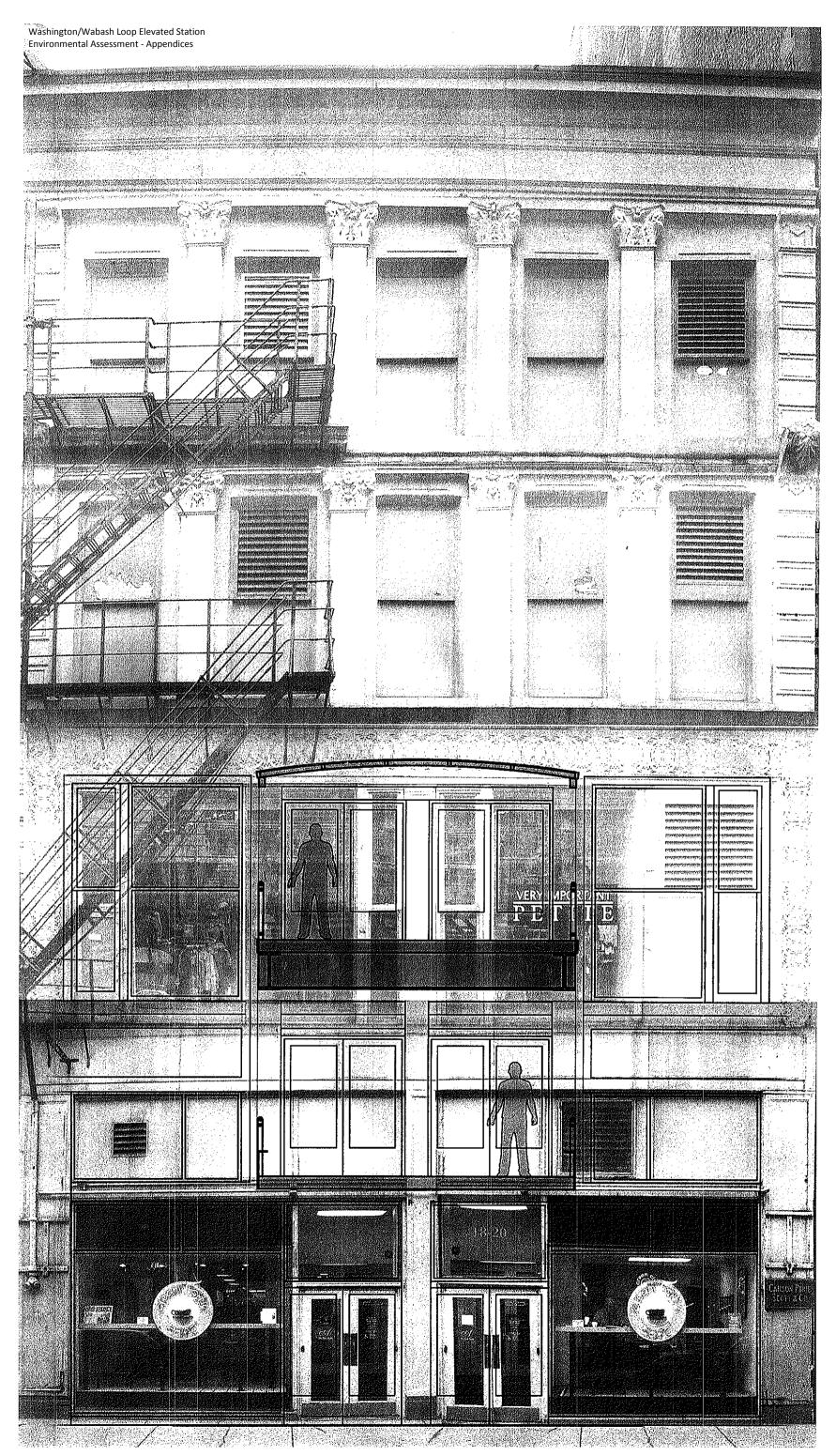


IMAGE DEPICTING POSITION OF PROPOSED BRIDGE CONNECTING THE STATION-HOUSE IN THE HASKELL - BARKER BUILDING TO THE LOOP ELEVATED STRUCTURE. 14







WASHINGTON WABASH STATION

Existing Building FaçadeSheet 1



A **TUGO** INTERNATIONAL LTD. COMPANY

MAY 4, 2006

SCALE: 1" = 10"







WASHINGTON WABASH STATION

Proposed Building Façade Sheet 2

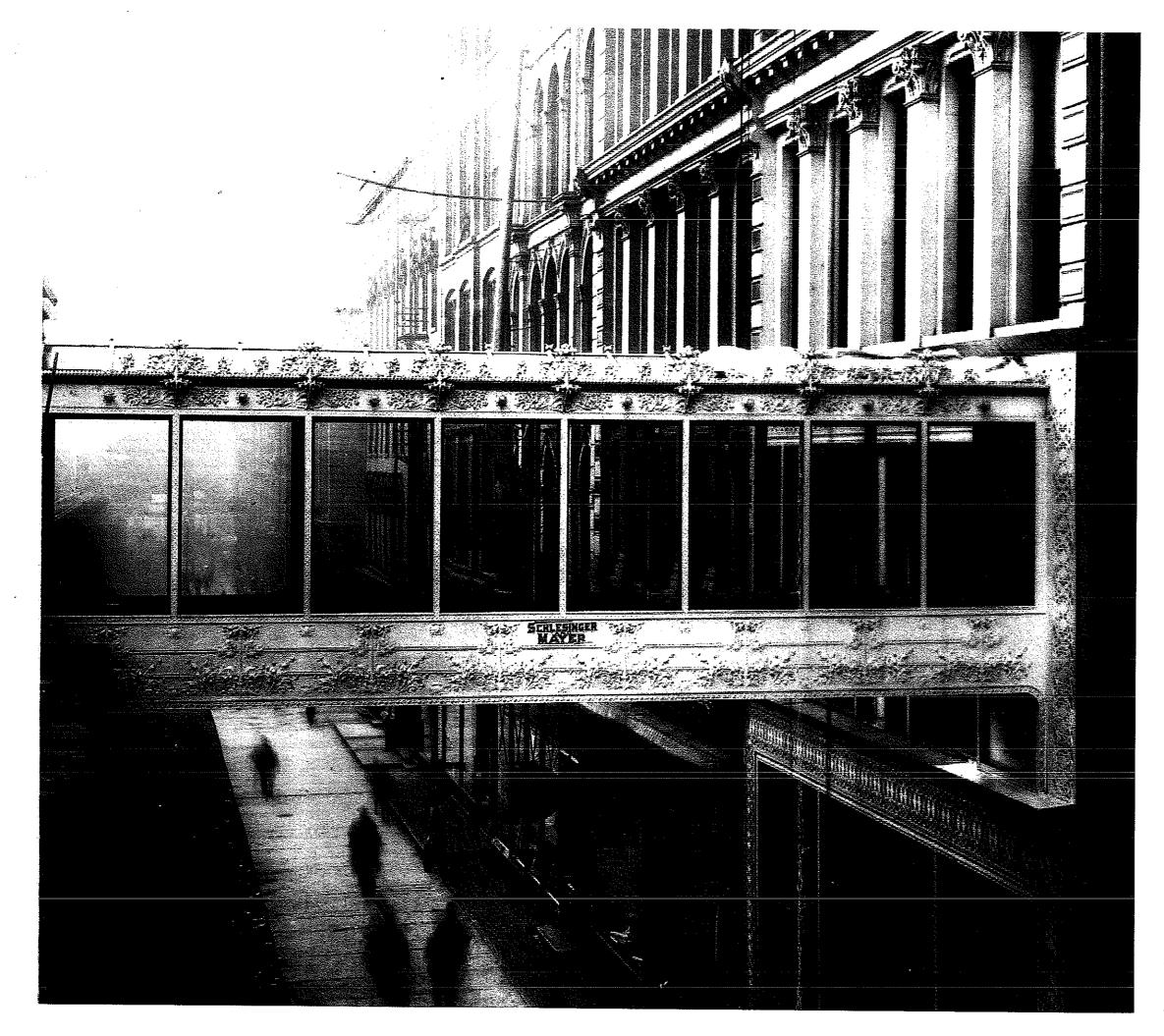




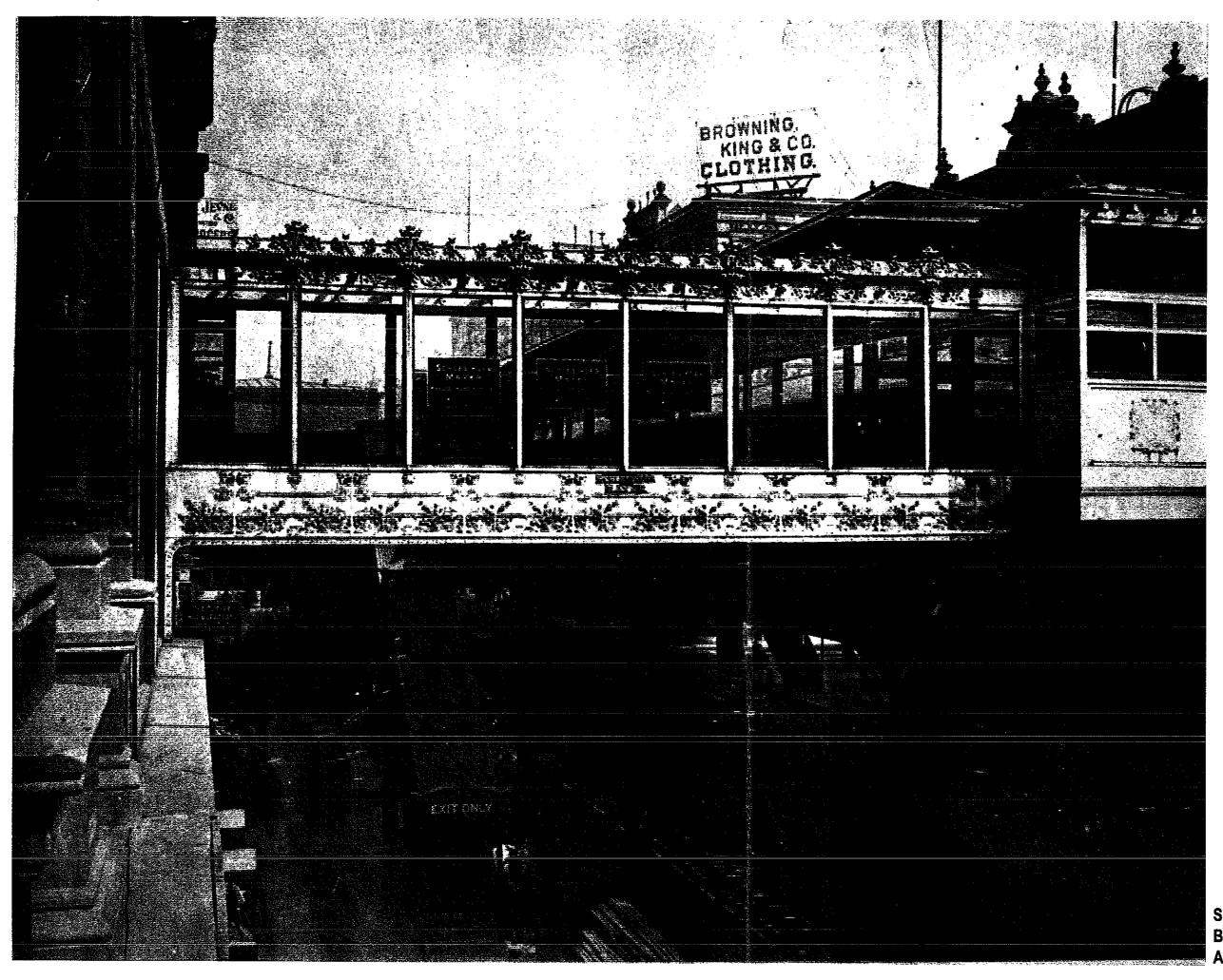
A TUED INTERNATIONAL LTD. COMPANY

Washington/Wabash Loop Elevated Station

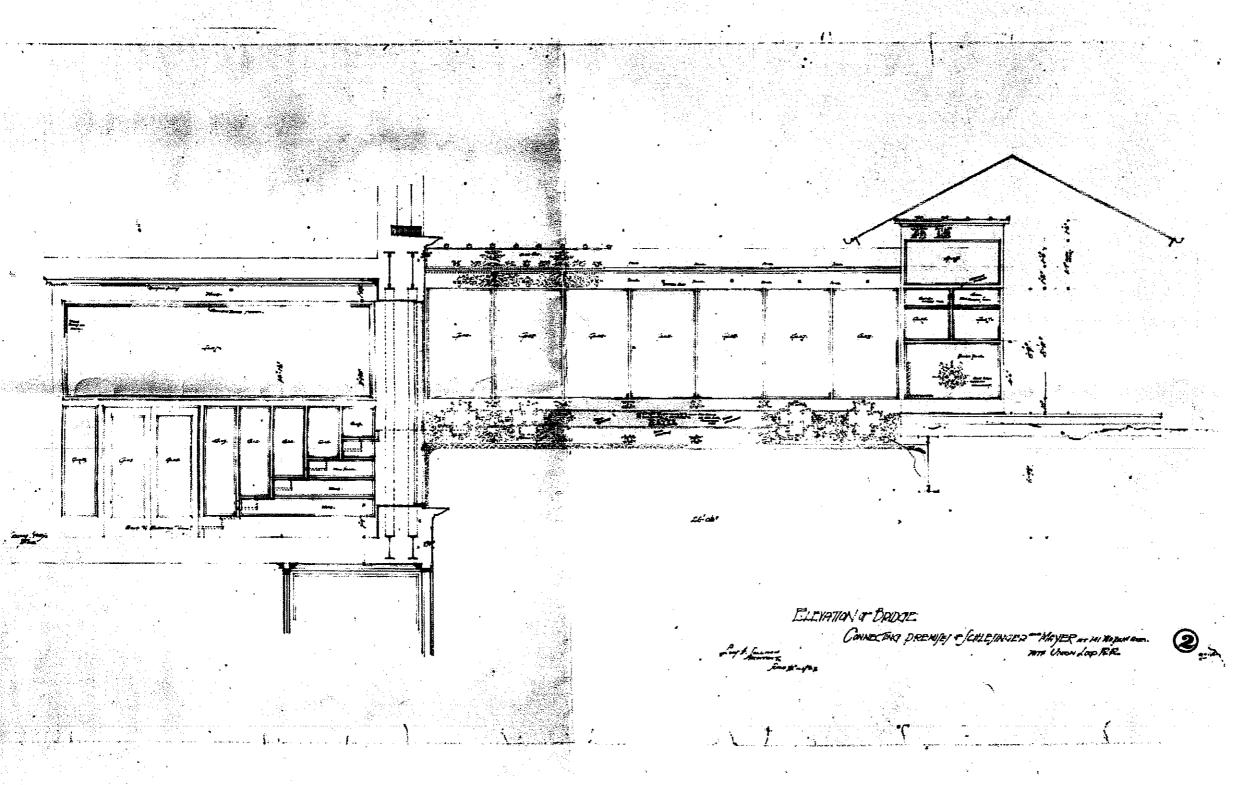
Environmental Assessment - Appendices



SCHLESINGER AND MAYER BRIDGE NORTH FACADE ARCHITECT: LOUIS SULLIVAN



SCHLESINGER AND MAYER BRIDGE:SOUTH FACADE 18 ARCHITECT:LOUIS SULLIVAN



Washington/Wabash Loop Elevated Station Environmental Assessment - Appendices

Appendix B

Pã (| 3&24ÁÜ^•[* | &^•ÁÔ[| | ^•] [} å^} &^ÉOTCCC&@ ^} o ÉA) åÁÜ^•^æ&@

- Section 106 Correspondence and Attachments
- HAER Correspondence Archives
- Excerpt from 1981 City of Chicago Master Plan for the Loop Elevated Rehabilitation and Historic Preservation

Contents

Title

Section 106 Correspondence and Attachments
Urban Mass Transit Administration (UMTA) October 7, 1981 Finding
of No Adverse Effect

Illinois Historic Preservation Agency
2006 Correspondence (May 3 by City, June 22 by SHPO)
2007 Correspondence (May 16 by City, Aug. 23 by SHPO)
2013 Correspondence (May 7 by FTA, Nov 5 by SHPO,
Dec. 20 by FTA)

Historic American Engineering Records (National Park Service) Files

IL-1, IL-1D and IL-1I (ILL-16-CHIG-108, -108D, -108I)

Excerpt from 1981 City of Chicago Master Plan for the Loop Elevated Rehabilitation and Historic Preservation

National Historic Buildings and National and Chicago Landmarks

Section 106	Correspondence	e and Attachments
-------------	----------------	-------------------

Urban Mass Transit Administration (UMTA) October 7, 1981 Finding of No Adverse Effect

Washington/Wabash Loop Elevated Station - Appendix B 1981 UMTA Correspondence and Finding of No Adverse Effect

of Transportation

Urban Mass Transportation Administration CONCUR

400 Seventh St., S.W. Washington, D.C. 20590

OCT-7 1981

ADVISORY COUNCIL ON HISTORIC PRESERVATION

OCT -7 1981

Mr. Robert R. Garvey, Jr. Executive Director Advisory Council on Historic Preservation 1522 K Street, N.W. Washington, D.C. 20005

Dear Mr. Garvey:

The City of Chicago and the Chicago Transit Authority propose to use financial assistance from the Urban Mass Transportation Administration (UMTA) to undertake the rehabilitation of the Loop Elevated Structure in Chicago, Illinois, a property eligible for the National Register of Historic Places. The project consists of upgrading the trestle and restoring, rehabilitating, and reconstructing certain stations to maintain the structural integrity of the facility and to respond to changing transportation needs in the Central Area of Chicago.

UMTA has determined that the proposed project as defined herein and in the City's Master Plan for the Loop Elevated Rehabilitation and Historic Preservation will have no adverse effect on the Loop Elevated Structure. Enclosed are the documentation for a determination of no adverse effect along with an attachment stating the conditions under which the Illinois State Historic Preservation Officer and the City concurred in this determination. These materials are submitted for your review and concurrence.

Sincerely,

Edward R. Fleischman

Acting Director

Office of Program Analysis

Enclosures

cc: Ira Bach, City
Jerome Butler, DPW
Eugene Barnes, CTA
David Kenney, SHPO
Joel Ettinger, UMTA
Franz Gimmler, UMTA

DETERMINATION OF NO ADVERSE EFFECT

LOOP ELEVATED STRUCTURE REHABILITATION CHICAGO, ILLINOIS

1. AGENCY INVOLVEMENT

The City of Chicago and the Chicago Transit Authority propose to use financial assistance from the Urban Mass Transportation Administration to rehabilitate the Loop Elevated Structure in the Central Area of Chicago.

2. DESCRIPTION OF THE PROPOSED UNDERTAKING

Rehabilitation will consist of a range of physical improvements designed to keep the Loop El structurally sound and respond to the changing transportation needs in the Central Area for the next 40 years. The rehabilitation will involve the trestle as well as the stations.

The trestle will remain on the same alignment on lake Street. Wabash Avenue, VanBuren Street, and Wells Street. Support columns will remain at present locations and the height of the trestle will be maintained at or near the current elevation. Depending on the results of current inspection and testing, columns, girders, and stringers will be replaced as needed to maintain the structural integrity of the facility. Existing lattice-type track stringers may be replaced with new solid-web sections. All other repairs to the trestle will replace existing members in kind.

The rehabilitation plan includes eight stations on the Loop Elevated Structure. (There are nine existing stations.) Of the eight, two stations will be restored or rehabilitated in place and six stations will be newly constructed. The following gives a breakdown of the proposed station improvements:

The Quincy/Wells Station will be restored to its former condition to the greatest extent possible while maintaining current ridership levels and security standards.

The Wabash/Adams Station will be rehabilitated in place. To better serve existing passenger volumes, the mezzanine level of the station will be widened and glass canopies and barriers will be used to replace the existing metal.

The Washington-Madison/Wells Station will replace the existing Randolph/Wells and Madison/Wells stations. The new station entrances are placed at mid-block locations and the station would be incorporated in the Madison Plaza Building now under construction at the corner of Madison and Wells streets.

The LaSalle/VanBuren Station will be reconstructed at a mid-block location straddling Sherman Street. This will allow better station spacing from the proposed new Library Place Station and improve vertical access to the station.

The Library Place Station is a new station on the Loop El proposed near the intersection of VanBuren and State streets. The Library Place Station would have direct, enclosed access to the adjacent library building and would provide an easier transfer to the State Street subway.

The Washington-Madison/Wabash Station will replace the existing Randolph/Wabash and Madison/Wabash stations. Consolidation of these stations at one mid-block location will improve operating efficiency while maintaining easy transfer to bus, subway and commuter rail.

The State/Lake Station would be developed in either a new office structure built on the southwest corner of the intersection, or in the existing State and Lake Building if this structure is retained in North Loop development. Station platforms would be moved to the west to improve access.

The Clark/Lake Station would take advantage of joint development with the State of Illinois Center on the south side of Lake Street and the Transportation Center on the north side of Lake Street. Accessibility between the subway and the El would be improved with this relocated site. Integration with new development at this site will increase rapid transit ridership.

3. NATIONAL REGISTER-ELIGIBLE PROPERTIES AFFECTED BY THE UNDERTAKING

The Chicago Loop Elevated Structure is the only property on or eligible for the National Register which will be affected by this project. This is an elevated street railway facility located in the air rights of public right-of-way along Wells Street, VanBuren Street, Wabash Avenue, and Lake Street. Approximately two miles in length (11,200 linear feet), with nine passenger stations, it is owned and operated by the Chicago Transit Authority (CTA).

Property Description

PPA

The Loop Elevated Structure is a composite of structural steel and wood. The entire basic framework is steel, built up by the riveting together of plates and angles. The support columns and bents are formed "I" sections and are spaced at 30- to 50-foot intervals along the running sections. In Lake Street, Wells Street, and Wabash Avenue, the typical cross-section is 24 feet. This permits a two-lane roadway under the structure with parking lanes

between the columns and the curb. In VanBuren Street, the structure is 52 feet wide, curb to curb.

The longitudinal members are triangulated trusses of the same built-up composition and support the trackbed of creosoted wooden ties. The track fixation is standard, tie plate and spike, with the tie plates being placed directly on the flange angles capping the longitudinal members of the structure.

At the passenger stations the structure widens to accommodate the platforms, stairs, station agent booths, and other appurtenances. The typical platform width is eight feet at the extremities and twelve feet at the stairwell entries. Overall station width varies from about 40 to 60 feet.

The primary design principle was function, with little evidence of typical Late Victorian Period ornamentation. The stations are not architecturally uniform and reflect the individual company design decisions. Selectively upgraded by the Chicago Transit Authority to improve passenger comfort and safety, fiberglass, plexiglass, aluminum, Monel metal, and other modern materials have been used in the remodelings. The original steel frame and wooden decking remain otherwise unchanged.

Significance

ר.

7

In constant service since 1897, the Loop Elevated has been the cornerstone of rapid transit service in the Central Area of the city for over 80 years. Its presence and configuration traditionally defined the most prestigious locations for office buildings inside the steel girdle. It contributed to the definition of the downtown, the Chicago Loop. As the city grew, development went beyond its physical confines, leaving low-density marginal use corridors along the streets supporting the structure. Prestige locations were those a block or more away from the dirt and noise generated by the elevated rail operation.

The Loop El Structure is also significant as an example of riveted steel elevated transit construction. Elevated railways were built in large American cities in the late 19th and early 20th centuries to facilitate transport in densely populated urban areas and the Loop El is one of the earliest examples of this type of construction.

4. INAPPLICABILITY OF THE CRITERIA OF ADVERSE EFFECT

While the Loop El Structure has been the focus of elevated rail transit in Chicago since its construction, the noise and intrusiveness of the structure have been a continuing concern of city government. Since the construction of the subway lines in the downtown in the 1930s, the city's mass transit plans have included various proposals to replace the Loop El. More recently, the 1968

Chicago Central Area Transit Study had as one of its objectives the removal of the Loop El. The Central Area Transit Project emerged from this study and the City of Chicago identified the Franklin Line Subway Project as the highest priority and first increment of the overall Central Area Project. The Franklin Line Subway Project was proposed as a new north-south distributor link through the downtown which would have allowed the removal of two legs of the Loop of the Monroe Line, an east-west subway which would have permitted the removal of the remaining two legs of the Loop

The Draft Environmental Impact Statement (July, 1978) for the Franklin Line Subway Project identified the Wells Street and VanBuren Street legs of the Loop El for removal as part of the subway project. A preliminary case report was submitted to the Advisory Council in November, 1978. This was followed by a public information meeting held in Chicago in January, 1979.

Because of the impact on the Loop El, local historic preservation groups opposed the Franklin Line Project. The project was also opposed locally because of the high cost and limited new transit service it provided. After a change in the city administration, local support for the project was withdrawn. The present plan to rehabilitate the Loop El was developed to accommodate historic preservation concerns while providing for the changing transportation needs in the Central Area over the next 40 years. A Determination of Effect for the rehabilitation project has to be made in the context of these historical developments.

A. Destruction or alteration of all or part of the property. The Loop El Structure will be rehabilitated without changing the basic structure or function of the facility. The alignment will remain the same and support columns will stay at their present locations. On the trestle, existing lattice-type track stringers may be replaced with new solid-web sections, an improved design.

Of the nine existing stations, two will be restored or rehabilitated in place and seven will be removed. Six new stations will be constructed. Five of these stations will be built proximal to existing station locations. That is, the new station locations will be shifted slightly to take advantage of new joint development or mid-block entries. The sixth new station will be built at the southeast corner of the Loop El where a station was once located.

Station removal and reconstruction on the Loop El is not considered to be an adverse effect. Historically, it was not the stations but the encircling layout of the structure itself around the downtown core that embodied historical significance. As noted in the Department of the Interior's determination of eligibility for the National Register (July, 1978), the Loop El Structure is important as an historic transportation facility as well as for its

7

了.

influence on the growth and development of downtown Chicago. As detailed in the City's Master Plan for the Loop El rehabilitation, original station locations have changed in some cases to adapt to changing needs. Stations have periodically been removed due to lack of ridership. Moreover, the fabric of the original stations has been altered through periodic maintenance over the years. In comparison, the trestle has remained relatively unchanged with its intricate web of supporting members still intact. The best hope, then, of preserving the Loop El as a viable transportation facility is to continue the trend of allowing stations to change in response to changing downtown developments.

B. Isolation from or alteration of the property's surrounding environment.

The project itself will not alter the surrounding environment. Certain stations would be integrated in buildings now under construction or planned to be constructed adjacent to the Loop El. In these joint development plans, the stations would generally be less obtrusive than they are now. Other new stations will utilize mid-block locations, thereby opening up the streetscape vistas which are presently blocked by the station houses.

C. Introduction of visual, audible, or atmospheric elements that are out of character with the property.

The new stations will be designed and constructed in accordance with the guidelines for new construction in the Secretary of the Interior's Standards for Rehabilitation. The designs for the new stations will be reviewed by the State Historic Preservation Officer to ensure that they are compatible with the Loop El Structure.

D. Neglect of a property resulting in its deterioration or destruction.

This project has been proposed specifically to upgrade the property so that it can continue to function efficiently at the heart of the city's rapid transit network.

E. Transfer or sale of a property without adequate conditions or restrictions regarding preservation, maintenance, or use.

The CTA owns the Loop El Structure. The property will not be transferred or sold as part of the proposed project.

5. VIEWS OF THE STATE HISTORIC PRESERVATION OFFICER

The Illinois State Historic Preservation Officer (SHPO) was consulted regarding his views on a determination of effect for the Loop El Rehabilitation Project. With certain conditions accepted by all parties, the SHPO concurs in the

determination of no adverse effect. These conditions, with the signatures of the concurring parties, are attached to this determination.

6. ESTIMATED COST OF THE UNDERTAKING

The estimated total cost of the proposed Loop El rehabilitation is approximately \$100 million, with the proposed Federal share being \$80 million.

7. DETERMINATION

The Urban Mass Transportation Administration has determined in consultation with the Illinois State Historic Preservation Officer that the proposed rehabilitation project will not adversely affect the Chicago Loop Elevated Structure.

October 7198]

Edward R. Fleischman

Acting Director Office of Program Analysis

CONDITIONS FOR A DETERMINATION OF NO ADVERSE EFFECT FOR THE CHICAGO LOOP ELEVATED REHABILITATION PROJECT

- 1. The location and structural characteristics of the Loop Elevated Structure (trestle) shall remain substantially unchanged as a result of the Loop Elevated Rehabilitation Project and shall continue to function as a transportation facility. All structural elements of the trestle will continue to be tested for structural integrity and replaced, if necessary. New structural elements may be added or existing ones replaced or removed for safety or operational reasons.
- The rails, signals, electrical systems, amenities (e.g., drippans) or components thereof may be improved or replaced, as necessary, at the discretion of the CTA or the City of Chicago for the purpose of improving operational efficiency, safety, reducing noise or enhancing the amenities of the structure to the passengers, pedestrians or motorists.
- 3. The City of Chicago and the CTA shall restore the Quincy/Wells station to a condition as close as possible to its condition of the early 1900's. This project shall be undertaken in accordance with the recommended approaches in the Secretary of the Interior's Standards for Rehabilitation.
- 4. The City of Chicago and the CTA agree to rehabilitate the Adams/ Wabash station to emphasize the historic structural characteristics of the trestle. In returning this station to a state of utility through use of contemporary materials and design elements, this project shall be undertaken in accordance with the recommended approaches in the Secretary of the Interior's Standards for Rehabilitation.
- With the exception of Quincy/Wells and Wabash/Adams, all other existing stations on the Loop Elevated Structure may be removed in accordance with the Master Plan. Prior to the demolition of any structure, the City of Chicago and/or the CTA shall first contact the National Architectural and Engineering Record (NAER) (National Park Service, U.S. Department of the Interior) to determine the level of documentation required. All documentation must be accepted by NAER, and the Advisory Council on Historic Preservation must be notified of the acceptance prior to demolition. Copies of the documentation required will be stored in the archives of the CTA, the Municipal Reference Library and the Chicago Historical Society, and submitted to the National Architectural and Engineering Record. The cost of these historical records will be part of the cost of the station construction funded by UMTA. Selected copies of these records may also be displayed in the new stations as appropriate.

CONDITIONS FOR A DETERMINATION OF NO ADVERSE EFFECT FOR THE CHICAGO LOOP ELEVATED REHABILITATION PROJECT

Page 2

- 6. As defined in the Master Plan, new stations may be constructed at mid-block locations in such a manner as to take advantage of adjacent buildings as a source of space for stations. The new structures shall be designed in accordance with the Secretary of the Interior's Standards for Rehabilitation.
- 7. The Illinois State Historic Preservation Officer will be given the opportunity to review final design plans for the restoration, rehabilitation and new construction of stations on the Loop Elevated Structure prior to the implementation of such improvements.
- 8. In the event that any of the involved parties determines that the aforementioned conditions cannot be met or must be modified, the Illinois State Historic Preservation Officer and the federal Advisory Council On Historic Preservation shall be consulted and the involved parties upon agreement may for good cause modify or amend these conditions.

Town State	(date) 10-2-87
Commissioner, Department of Public Works The City of Chicago	
Edgere M. Barres	(date) /0/5/8/
Chairman Chicago Transit Authority (CTA)	,3,0,
Κ .	·.
Daid Keremen	(date) 10/5/81
Illinois State Historic Preservation Offic	er (Illinois SHPO)

Section 106 Correspondence and Attachments

Correspondence with Illinois Historic Preservation Agency 2006 Correspondence (May 3 by City, June 22 by SHPO) 2007 Correspondence (May 16 by City, August 23 by SHPO) 2013 Correspondence (May 7 by FTA, November 5 by SHPO, December 20 by FTA)

Washington/Wabash Loop Elevated Station Appendix B - May 3, 2006 IHPA Correspondence

City of Chicago Richard M. Daley, Mayor

Department of Transportation

30 North LaSalle Street Suite 1100 Chicago, Illinois 60602-2570 (312) 744-3600 www.cityofchicago.org/transportation May 03, 2006

Ms. Ann Haaker
Deputy State Preservation Officer
Preservation Services
#1 Old State Capitol Plaza
Springfield, IL 62701-1507

Subject:

Haskell Building

CDOT Project D-3-102

Reuse as Stationhouse for a new CTA Elevated Station

Dear Ms. Haaker:

I am writing in regards to the reuse of the historic Haskell building (of the Haskell-Barker-Atwater buildings) as the stationhouse for a new elevated CTA station.

Background

Applicable Historic Designations:

- Haskell-Barker-Atwater buildings Chicago Landmark, designated 11/13/96
- Jewelers Row District Chicago Landmark, designated 7/9/03
- Loop Retail Historic District National Park Service National Register of Historic Places, listed 11/27/98

From the Jewelers Row District Landmark Designation Report:

The Haskell and Barker buildings, built in 1875, are fine examples of the small-scale commercial loft buildings, the oldest building type in the district, built just after the fire of 1871.

From the Haskell-Barker-Atwater buildings Chicago Landmark designation:

Clad in stone and detailed in classical ornament, the lower two floors of the northernmost building were remodeled in 1896 by architect Louis Sullivan. Those changes demonstrate his distinctive ornamental style and approach to modern architecture.

In the National Register of Historic Places Loop Retail Historic District listing, the Haskell-Barker-Atwater buildings are listed as a contributing structure. It also notes the Sullivan renovation of 1896, and shortly after, a bridge, which was demolished.





Current conditions

The overall configuration and many decorative pieces of the Sullivan renovation remain. The first floor Sullivan-designed ledge that topped the original but missing flat decorative frieze panel remains. The overall configuration of the first floor appears to have changed little from the Sullivan renovation although the decorative panels have been removed and the glazing has changed. The current first floor pilasters and fascia is covered with plain flat sheet metal panels with simple detailing.

The second floor is in better shape, with the decorative panels and decorative ledge intact but deteriorated. A blank-out panel with mechanical louver covers the location of the original Sullivan-designed footbridge. A fire escape obscures portions of the southern section of the second floor with attachment through the Sullivan decorative panels.

The Sullivan decorative metalwork that remains is rusting, deteriorated and covered with a heavy layer of paint.

The third and fourth floors of the Haskell building as well as the façades of the Barker and Atwater buildings appear to be in fair condition with most original detailing intact. All exterior glazing, except for the first floor storefront's lower windows, is opaque (either painted glass or metal panel) and has numerous mechanical louvers. The façades are covered in heavy paint.

Current proposal

The CTA wishes to replace two existing elevated stations, Randolph and Monroe, with a single new station. The existing stations are at the end of their useful lives and do not fully meet current CTA and ADA design standards. The Haskell building location would give the CTA an opportunity to have a key transfer point between the Red Line Subway on State Street and the Orange/Brown/Yellow/Purple Elevated Lines above Wabash Avenue. The new station will provide CTA customers with full ADA accessibility, meet the current design standards of CTA stations (access, customer amenities, weather protection), and provide the increased capacity needed for continued growth and support of the region's transportation needs. Operation and maintenance costs will be reduced which will benefit the overall CTA budget.

With the consolidation of the stations into one new station, the public will benefit from better station access and a faster trip through the loop. The Wabash streetscape will benefit from more light and less congestion. View corridors down Randolph and Madison Streets will provide a clearer view to Millennium Park with the removal of stationhouses located over the intersections. Street clearances will be improved at the Randolph and Madison intersections. The new station would also relocate large elements

such as escalators, stairs and an elevator that would otherwise restrict circulation at sidewalks and obstruct views of building façades.

The new stationhouse functions will be located within the first and second floor space of the Haskell building, which will contain an entry at street level, a mezzanine level and a platform level, all connected with an interior elevator, escalators and stairs. A two-level footbridge will connect the stationhouse mezzanine level to the outer loop platform and the stationhouse platform level directly to the inner-loop platform. The footbridge width will be sized to meet existing code-required exiting capacity.

The upper level of the footbridge will closely match the original elevation and height of the demolished Sullivan bridge. The mezzanine level of the footbridge will pass through the existing fascia separating the first and second levels of the façade. The existing Sullivan details will be restored and missing decorative panels will be recreated and installed on the first floor. The glazing for the two-story façade will be restored to all vision glass.

For proper station access and to meet capacity needs, the bridge is required to be two-stories. The desire is to have the bridge appear as a light structure to minimize its presence on the street. The new stationhouse will be framed by a restored Sullivan façade. The new design for the station will acknowledge the Sullivan design while remaining a light, modern facility.

We are requesting that the two story bridge be allowed. As this project is in the early stages of development, we look forward to discussing this project with you to arrive at a design that satisfies all parties.

Per my May 03, 2006, telephone conversation with Ms. Carol Dyson, we have attached our Loop Master Plan, pictures and plans related to the project. Should you have any questions or require additional information, please contact Thomas P. Ambry of my staff at 312 744-7742.

Sincerely,

Bob Loomis, P.E.

Deputy Commissioner

Cc:

AmbryX

Flores

B. Goeken (DPD/L)

K. Cook (DPD)

File

Attachments (IHPA)

Washington/Wabash Loop Elevated Station

Appendix B - June 22, 2006 IHPA Correspondence

Illinois Historic

Preservation Agency

Voice (217) 782-4836

1 Old State Capitol Plaza • Springfield, Illinois 62701-1512 • Teletypewriter Only (217) 524-7128

Cook County

www.illinois-history.gov

Chicago

Rehabilitation for Reuse as Stationhouse, Haskell Building 18-20 S. Wabash Ave.
IHPA Log #003050906

June 22, 2006

Robert Loomis
City of Chicago
Department of Transportation
30 N. LaSalle St., Suite 1100
Chicago, IL 60602-2570

Dear Mr. Loomis:

Thank you for arranging the staff site inspection at 18-20 South Wabash, the Haskell Building, which is proposed for adaptive use as a stationhouse for a new CTA Elevated Station. It was most helpful when we looked at the schematic drawings. The proposal would partially demolish and wholly obscure a façade designed by Louis Sullivan I n1896. It would also require wholesale interior demolition of the Haskell Building for elevators, escalators, turnstyles, etc.

Further, the project is located in the Loop Retail Historic District. Since the project would entail a large station and platform, it would further obscure several historic buildings across the street, most notably the Jewelers' Building, which is also a Louis Sullivan design.

It is our decision that these are very grave adverse effects and we encourage the CTA to explore alternative locations for the Wabash Elevated Station. Thank you for this opportunity to comment. We look forward to working with you as the project progresses.

Sincerely,

Anne E. Haaker

Deputy State Historic

Preservation Officer

Cc: Tom Ambry, Chicago Dept. of Transportation Eleanor Gorski, City of Chicago, Dept. of Planning and Development



Washington/Wabash Loop Elevated Station Appendix B - May 16, 2007 IHPA Correspondence

City of Chicago Richard M. Daley, Mayor

Department of Transportation

30 North LaSalle Street Suite 1100 Chicago, Illinois 60602-2570 (312) 744-3600 (312) 744-7215 (TTY) www.cityofchicago.org/transportation May 16, 2007

Ms. Ann Haaker Deputy State Preservation Officer Preservation Services #1 Old State Capitol Plaza Springfield, IL 62701-1507

Subject:

Washington/ Wabash Loop Elevated Station

CDOT Project D-3-102

Master Plan for the Loop Elevated Rehabilitation and Historic Preservation

Dear Ms. Haaker:

In accordance with the Master Plan for the Loop Elevated Rehabilitation and Historic Preservation, the Department of Transportation Division of Engineering (CDOT) is submitting the proposed design of the Washington/ Wabash Loop Elevated CTA station for your review and comments.

Current proposal

CDOT plans to replace two existing elevated stations, Randolph and Monroe, with a single new station. The existing stations are at the end of their useful lives and do not fully meet current CTA design standards. The new station will provide CTA customers with full ADA accessibility, meet the current station design standards (access, customer amenities, weather protection), and provide the increased capacity needed for continued growth and support of the region's transportation needs. Operation and maintenance costs will be reduced which will benefit the overall CTA budget.

With the consolidation of the stations into one new station, the public will benefit from better station access and a faster travel through the loop. The Wabash streetscape will benefit from more light and less congestion. View corridors down Randolph and Madison Streets will provide a clearer view to Millennium Park with the removal of stationhouses located over the intersections. Street clearances will also be improved at the Randolph and Monroe intersections.

The new station will be entirely self-contained within the Wabash Avenue corridor with no connection to adjacent buildings. The station will provide an entry at street level at both the north and south ends of the new platforms, mid-platform street exits, a mezzanine level and a platform level connected with interior elevators and stairs. A glass canopy will cover the north end of the platforms.



36 LOS WAR

The concept for the canopy design is to allow for minimum structure and maximum transparency in order to allow for clear views of the adjacent historic facades and to minimize the impact of the new station on the street corridor. The canopy will also protect the mezzanine level (fare array and machines, electrical and communication rooms, stairs, escalator and elevators) from the weather. Compared to the areas around the existing stations to be replaced, the new station will provide a more light-filled space. The replacement of two stations with one that is more transparent will improve the overall environment of the Wabash streetscape.

We have attached final design plans and drawings dated May 2007, for your reference. Should you have any questions or require any additional information, please contact Thomas P. Ambry, AIA of my staff at 312 744-7742.

Sincerely,

John Yonan, P.E

Deputy Commissioner

Cc:
Ambry
Flores

B. Goeken (DPD/ I

B. Goeken (DPD/L)

K. Cook (DPD/ L

File

Attachments

Washington/Wabash Loop Elevated Station Appendix B - August 23, 2007 IHPA Correspondence

Illinois Historic
Preservation Agency

FAX (217) 782-8161 Voice (217) 782-4836

1 Old State Capitol Plaza • Springfield, Illinois 62701-1512 • Teletypewriter Only (217) 524-7128

Cook County Chicago www.illinois-history.gov

New Construction of Washington/Wabash Loop Elevated Station Washington and Wabash St. CDOT-D-3-102
IHPA Log #037052907

August 23, 2007

John Yonan City of Chicago Department of Transportation Division of Engineering 30 N. LaSalle St., Suite 1100 Chicago, IL 60602-2570

Dear Mr. Yonan:

We have reviewed the documentation provided for the above referenced project. The Randolph and Monroe stations were previously determined eligible for listing on the National Register of Historic Places.

In our opinion the project meets the Secretary of the Interior's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" (Standards) and we concur in a finding of no adverse effect pursuant to 36 CFR Part 800 provided that the following conditions are met:

 The project design is finalized in consultation with our office to ensure adherence to the Standards.

Notifying our office of agreement with these conditions and their subsequent implementation constitutes compliance with Section 106 of the National Historic Preservation Act of 1966, as amended.

If you have any questions, please contact Patrick Gleason, Cultural Resource Manager, Illinois Historic Preservation Agency, 1 Old State Capitol Plaza, Springfield, IL 62701, 217/785-3977.

Sincerely,

Anne E. Haaker

Deputy State Historic

Preservation Officer

Jaaker



Washington/Wabash Loop Elevated Station Appendix B - May 7, 2013 IHPA Correspondence

U.S. Department of Transportation Federal Transit Administration REGION V Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin 200 West Adams Street Suite 320 Chicago, IL 60606-5253 312-353-2789 312-886-0351 (fax)

May 7, 2013

Anne E. Haaker Deputy State Historic Preservation Officer Illinois Historic Preservation Agency 1 Old State Capitol Plaza Springfield, Illinois 62701

Re: City of Chicago Department of Transportation Washington and Wabash Elevated Station Construction Project, Chicago, Cook County, Illinois – Section 106 IHPA Log #037052907 CDOT Project D-3-102

Dear Ms. Haaker:

The City of Chicago Department of Transportation (CDOT), in cooperation with the Chicago Transit Authority (CTA) and Federal Transit Administration (FTA), is proposing the Washington and Wabash Elevated Station Construction Project in Chicago, Illinois (Washington/Wabash Project). The proposed project consists of demolition activities at the Randolph/Wabash and Madison/Wabash stations on the Loop Elevated rail structure, both of which are more than 100 years old. A new consolidated Washington/Wabash station would be constructed within the elevated right-of-way above Wabash Avenue in the proximity of the area between Randolph Street and Washington Street. FTA and CDOT will be preparing an Environmental Assessment (EA) to evaluate the environmental impacts of the Washington/Wabash Project.

In September 1981, the City of Chicago created the *Master Plan for the Loop Elevated Rehabilitation and Historic Preservation* (Plan). The Plan provides detailed analysis of the elevated rail structure and stations in Chicago's central business district. This includes information on original construction, various modifications over the years, and the need to both restore and upgrade these facilities. These proposed rehabilitation projects are needed to both maintain a state of good repair and address the changing needs of transit patrons. Station rehabilitation projects have occurred in the past in accordance with the Plan as funding has become available to CDOT.

In relation to the Plan, the City of Chicago and the Urban Mass Transit Administration [(UMTA) predecessor to FTA] consulted with the Illinois State Historic Preservation Officer (SHPO) concerning the effects of the projects on resources on or eligible for the National Register of

Re: City of Chicago Department of Transportation Washington and Wabash Elevated Station Construction Project, Chicago, Cook County, Illinois – Section 106

Historic Places (NRHP). This consultation included the proposed Washington/Wabash Project. Pursuant to correspondence dated October 7, 1981, UMTA issued a *Determination of No Adverse Effect* for all of the proposed Loop Elevated Structure Rehabilitation projects. The Advisory Council on Historic Preservation (ACHP) concurred with this finding on the same date. Copies of these documents are enclosed with this letter.

Also enclosed is a copy of the Conditions for a Determination of No Adverse Effect for the Chicago Loop Elevated Rehabilitation Project (Conditions) signed in October 1981 by authorized representatives of the City of Chicago and CTA in addition to SHPO. According to these conditions, removal of the Randolph/Wabash and Madison/Wabash stations may take place in accordance with the Plan. Additionally:

"Prior to the demolition of any structure, the City of Chicago and/or the CTA shall first contact the National Architectural and Engineering Record (NAER) (National Park Service, U.S. Department of the Interior) to determine the level of documentation required. All documentation must be accepted by NAER, and the Advisory Council on Historic Preservation must be notified of the acceptance prior to demolition. Copies of the documentation required will be stored in the archives of the CTA, Municipal Reference Library and the Chicago Historical Society, and submitted to the National Architectural and Engineering Record."

The Conditions also specify that SHPO will be given the opportunity to review final design plans for station construction prior to implementation of the improvements. Please see the enclosed correspondence from the City of Chicago dated May 16, 2007 and the response from SHPO dated August 23, 2007 regarding the Washington/Wabash Project. Pursuant to these documents, FTA understands that the City of Chicago provided design drawings to your office for the Washington/Wabash Project and that SHPO concurred in a finding of no adverse effect pursuant to 36 CFR 800. One condition was specified by SHPO: "The project design is finalized in consultation with our office to ensure adherence to the Standards (Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings)." In March 2013, representatives of the City of Chicago advised FTA that the design for the Washington/Wabash Project has not changed from the version reviewed by SHPO in 2007. When the design is finalized, FTA will have the City of Chicago share that design with SHPO for review.

In accordance with the Conditions, as the Washington/Wabash Project moves forward FTA will confirm that all of the stipulations have been met, including coordination with the National Park Service, prior to demolition of the Randolph/Wabash and Madison/Wabash stations. A summary of these activities will be included in the final EA with either a conclusion that the Conditions have been met or will be met before demolition of these structures.

FTA will not be initiating or requiring further Section 106 consultation in accordance with 36 CFR Part 800. The intent of this letter is to provide you with an update on the status of the Washington/Wabash Project. If you have any concerns regarding the activities described above,

Re: City of Chicago Department of Transportation Washington and Wabash Elevated Station Construction Project, Chicago, Cook County, Illinois – Section 106

please respond in writing to the above listed address. If you have further questions regarding the Washington/Wabash Project or these procedures, please contact Mark Assam, Environmental Protection Specialist, at (312) 353-4070. Thank you for your assistance.

Sincerely,

Marisol R. Simón

Regional Administrator

Enclosures

cc: Reginald Arkell, FTA

Mark Assam, FTA
Julian Silva, CDOT
Don Gismondi, CTA

Page 3 of 3

Washington/Wabash Loop Elevated Station Appendix B - November 5, 2013 IHPA Correspondence

Illinois Historic
Preservation Agency

FAX (217) 782-8161

1 Old State Capitol Plaza . Springfield, Illinois 62701-1512 . www.illinois-history.gov

Cook County Chicago

Demolition and New Construction of Washington/Wabash Loop Elevated Station Randolph/Wabash Station, Madison/Wabash Station, Washington and Wabash St. CDOT-D-3-102
IHPA Log #037052907

November 5, 2013

Marisol R. Simon U.S. Department of Transportation Federal Transit Administration 200 W. Adams St., Suite 320 Chicago, IL 60606-5253

Dear Ms. Simon:

We have reviewed the documentation provided for the referenced project. This property is located within the Loop Retail Historic District, which was listed on the National Register of Historic Places on November 27, 1998.

In our opinion the project meets the Secretary of the Interior's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" and we concur in a finding of no adverse effect pursuant to 36 CFR Part 800 provided that the following condition is met:

1. Continue consultation with this office as plans are developed.

Notifying our office of agreement with these conditions and their subsequent implementation constitutes compliance with Section 106 of the National Historic Preservation Act of 1966, as amended.

If you have questions, please contact David J. Halpin, Cultural Resources Manager, at 217-785-4998.

Sincerely,

Anne E. Haaker

Deputy State Historic

Preservation Officer

Eleanor Gorski, City of Chicago
Eleanor Gorski, City of Chicago, Illinois
Terry Tatum, City of Chicago, Illinois
Don Gismondi, Chicago Transit Authority
Mark Assam, U.S. Department of Transportation
Marlise Fratinardo, Chicago Transit Authority

Washington/Wabash Loop Elevated Station Appendix B - December 20, 2013 IHPA Correspondence

U.S. Department of Transportation Federal Transit Administration REGION V Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin 200 West Adams Street Suite 320 Chicago, IL 60606-5253 312-353-2789 312-886-0351 (fax)

December 20, 2013

Anne E. Haaker
Deputy State Historic Preservation Officer
Illinois Historic Preservation Agency
1 Old State Capitol Plaza
Springfield, Illinois 62701

Re: City of Chicago Department of Transportation Washington and Wabash Elevated Station Construction Project, Chicago, Cook County, Illinois – Section 106/4f IHPA Log #037052907 CDOT Project D-3-102

Dear Ms. Haaker:

As you know, the City of Chicago Department of Transportation (CDOT), in cooperation with the Chicago Transit Authority (CTA) and Federal Transit Administration (FTA), is proposing the Washington and Wabash Elevated Station Construction Project in Chicago, Illinois (Washington/Wabash Project). Plans include demolition activities at the Randolph/Wabash and Madison/Wabash Stations in addition to construction of a new consolidated station. Preparation of an Environmental Assessment (EA) to evaluate the environmental impacts of the Washington/Wabash Project is ongoing. Since May 2013, FTA and the Illinois State Historic Preservation Officer (SHPO) have exchanged written correspondence regarding Section 106 responsibilities for the Project pursuant to 36 CFR Part 800. This included correspondence dated November 5, 2013, in which the SHPO provided its conditional concurrence with a finding of no adverse effect on historic and archaeological resources.

Reference is made to FTA's May 7, 2013 correspondence to you, which included copies of the following documents for rehabilitation of the Chicago Loop Elevated Rehabilitation Project: Determination of No Adverse Effect by the Urban Mass Transit Administration [(UMTA) predecessor to FTA], dated October 7, 1981; Conditions for a Determination of No Adverse Effect for the Chicago Loop Elevated Rehabilitation Project, signed in October 1981 by authorized representatives of the City of Chicago, CTA, and the SHPO. The ongoing Chicago Loop Elevated Rehabilitation Project includes the Washington/Wabash Project.

In accordance with the aforementioned conditions specified in 1981, FTA is providing the SHPO with the enclosed Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) information on file with the National Park Service which documents history of the Chicago Loop elevated stations and right-of-way.

Re: City of Chicago Department of Transportation Washington and Wabash Elevated Station Construction Project, Chicago, Cook County, Illinois – Section 106/4(f)

This includes descriptive information, photographs and drawings for the vicinity of the Washington/Wabash Project that were submitted at least in part by the CTA to the National Park Service. FTA will continue to collaborate with CDOT and CTA as the Washington/Wabash Project progresses. FTA contends that, subject to the SHPO reviewing final design plans for the Project, the no adverse effect conditions agreed upon in 1981 and specified by the SHPO in its November 5, 2013 letter will have been satisfied.

The applicability of the Department of Transportation Act of 1966, Section 4(f), codified in 49 USC §303 and 23 USC §138, and implemented through 23 CFR Part 774, will be discussed in the forthcoming EA for the Washington/Wabash Project. FTA has made a preliminary determination that the Project qualifies as an exception to Section 4(f) pursuant to 23 CFR 774.13(a). This finding is based on the Section 106 no adverse effect determination and conditional concurrence by the SHPO.

Please contact Mark Assam, Environmental Protection Specialist, at (312) 353-4070 if you have further questions regarding the Washington/Wabash Project Section 106 and Section 4(f) activities. Thank you very much.

Sincerely.

Marisol R. Simón Regional Administrator

Enclosures

cc: Reginald Arkell, FTA Mark Assam, FTA Julian Silva, CDOT Don Gismondi, CTA

Historic American Engineering Records (HAER) National Park Service

Files IL-1, IL-1D and IL-1I (ILL-16-CHIG-108, -108D, -108I)

Washington/Wabash Loop Elevated Station – Appendix B – Historic American Engineering Records (HAER) Sent to the National Park Service

Union Elevated Railroad: The Union Loop Chicago Cook County Illinois

HAER No. IL-1

HAER TLL, 16-CHIG,

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record National Park Service Department of the Interior Washington, D.C. 20240

TLL, 16-CHIG,

HISTORIC AMERICAN ENGINEERING RECORD

IL-1

UNION ELEVATED RR. UNION LOOP

Date:

1897

Location:

Lake, Wells, Van Buren Sts. and Wabash Ave.

Chicago, Cook Co. IL.

Owned by:

Originally; Union Elevated RR.

Present; Chicago Transit Authority

Significance:

One of the few Elevated Railways still operating in America.

Important to the history of Chicago and its downtown. (the

downtown area derived its name from this property.

Responsible for uniting the original lines of what is now

the Chicago Rapid Transit Authority.

Transmitted by:

Dan Clement, 1983 with historical data drawn from the

National Register of Historic Places Determination of

Eligibility file.

The Chicago Union Loop is an II,200 linear foot elevated street railway facility. Starting at the inter section of Lake St. and Wells St. it runs south turning east on Van Buren St. At the corner of Van Buren and Wabash it turns to run north on Wabash turning west on Lake St. to terminate back at Wells St. There are nine, passenger stations along the route which is owned and operated by the Chicago Transit Authority.

The conceptual beginning of the Union Loop was in 1894, the year that the Union Elevated Railroad Company was formed. Originally, as the radial elevated rail lines were built to replace the surface trolley lines, each line operated from its-own stub-end terminal in the central area of the city. As more elevated lines came into being to serve the growing city population, there came a need to facilitate interline transfers. As transit demand grew, there came a need to eliminate stub-end operations. An elevated loop structure, with two interconnected tracks would permit both.

The Chicago Union Loop Elevated structure is a composite of structural steel and wood. The entire basic framework is steel, built up by the riveting together of plates and angles. The support columns and bents are formed "I" sections and are spaced at 30 to 50 foot intervals along the running sections. In Lake Street, Wells Street and Wabash Avenue, the typical cross section is 24 feet. This permits a two lane vehicular cartway under the structure with parking lanes between the columns and the curb. In Van Vuren Street, the structure is 52 feet wide, curb to curb.

The longitudinal members are triangulated trusses, of the same built up composition, and support the track bed of creosoted wooden ties. The track fixation is standard, tie plate and spike, with the ties being placed directly on the flange angles capping the longitudinal members of the structure.

At the passenger stations, the structure widens to accommodate the platforms, station agent booths and other appurtenances. The typical platform width is eight feet at the extremities and twelve feet at the stairwell entries. Overall station width varies from about 40 to 60 feet.

The primary design principle was function, with little evidence of typical late Victorian Period ornamentation. The stations are not architecturally uniform and reflect the individual company design decisions. Selectively upgraded by the Chicago Transit Authority to improve passenger comfort and safety, fiberglass, plexiglass, aluminum, Monel metal and other modern materials have been used in the remodelings. The original steel frame and wooden decking remain otherwise unchanged.

Construction of the Loop Elevated was essentially completed, in 1897. It took over the structures and stations already in place, e.g. the Lake Street Elevated Lines' facilities to State Street and the South Side Rapid Transit Company's facilities on Wabash Avenue, and completed the circuit, adding sations at the major generators. In 1900, the Northwestern Elevated Railroad began operations from downtown, completing the radial connections. In order to avoid confusion between the lines, stations were subdivided for separate line use and the North and Lake services were operated clockwise around the Loop, while the South and

West Side services operated counterclockwise on the other track. The four transit companies merged in 1911. Under the aegis of the Chicago Railways Trust, transfer fares on the elevated were eliminated and riders could traverse the city from north to south on a single fare. In 1924 the four companies consolidated under the name of the Chicago Rapid Transit Company.

The Chicago system employed different techniques in its operation. In most cites no more than two services would be operated from the same platform. Because of the nature of the loop, as many as seven services would work a platform. Chicago also used the idea of staggered or multiple berthing. Since the trains were relatively short it was possible to see two trains at one platform.

In 1945 the Chicago Transit Authority was formed and on October 1, 1947 took over all property of the Chicago Rapid Transit Company. By that time the State Street Subway had been running for four years and took away much of the traffic of the north side south side service off the Loop. During the late sixties the Loop went through another change. The new Lake Dan Ryan service reversed the direction of the inner track and only used the Lake and Wabash sides of the Loop. As of 1979, only two trains went completely around the loop. Sides were drawn as to the Loops future, with some calling for preservation and restoration, while others called for demolition of the Loop in favor of a more efficient transportation system. Whether it remains or not, the Loop will always be seen as an important part of Chicago's transportation history.

ADDENDUM TO
UNION ELEVATED RAILROAD:
THE UNION LOOP
(Chicago Loop L)
Along Lake Street (200 W. to 50 E.),
Wasbash Street (2000 N. to 400 S.),
Van Buren Street (50 E. to 200 W.),
and Wells Street (400 S. to 200 N.)
City of Chicago
Cook County
Illinois

HAER ILL 16-CHIG, 108-

HAER No. IL-1

PHOTOGRAPHS WRITTEN HISTORICAL AND DESCRIPTIVE DATA REDUCED COPY OF MEASURED DRAWING

HISTORIC AMERICAN ENGINEERING RECORD
Rocky Mountain Regional Office
National Park Service
P.O. Box 25287
Denver, Colorado 80225-0287

ADDENDUM TO
UNION ELEVATED RAILROAD:
THE UNION LOOP
(Chicago Loop L)
Along Lake St. (200 W. to 50 E.), Wabash St.
(2000 N. to 400 S.), Van Buren St. (50 E.
to 200 W.), and Wells St. (400 S. to 200 N.)
City of Chicago
Cook County
Illinois
HAER No. IL-1
Page 5

HISTORIC AMERICAN ENGINEERING RECORD UNION ELEVATED RAILROAD: THE UNION LOOP (Chicago Loop L)

This report is an addendum to a 4 page report previously transmitted to the Library of Congress in 1983.

Location:

The Union Elevated Railroad tracking is located within the public right-of-way following a route along Lake Street (200 W. to 50 E.), Wabash St. (2000 N. to 400 S.), Van Buren St. (50 E. to 200 W.), and Wells St. (400 S. to 200 N.)

Present Owner:

Chicago Transit Authority

Present Use:

Rapid Transportation

Significance:

Significant in the history of American industrial archaeology, the Union Elevated Railroad is also important for its association with financier and traction magnate, Charles T. Yerkes and for its role in defining and shaping Chicago's downtown. According to Theodore Anton Sande, author of *Industrial Archeology: A New Look at the American Heritage*, to "the industrial archeologist, the Chicago Loop provides an ideal case study" (1976, 113). Having made its first run in 1897, the Union Elevated Railroad is one of only a few extant examples of transit systems that have remained in continuous operation for nearly a century. A "massive web of riveted steel girders and shining tracks," the Loop Elevated was designed by John Alexander Low Waddell, a Canadian-born engineer who played an important role in the history of American bridge design.

Chicago's earliest elevated line, the South Side Rapid Transit, began operating in 1892, in time to provide rapid transportation to huge crowds of visitors who came to the city for the World's Columbian Exposition.

Within the next few years, two additional elevated lines began running and several extensions were made. At the time, it was commonly believed that the elevated system could only be viable if there were a downtown loop that "would allow passengers to transfer to older transit lines at interchange points" (Cudahy 1979-80, 199).

A financier from Philadelphia, Charles T. Yerkes, who had purchased most of Chicago's existing surface car companies "seized the idea of an elevated loop and acted to realize it" (City of Chicago Sept. 1981, II-2). By circumventing laws, using bribery and other means of fraud, Yerkes succeeded in acquiring the rights-of-way and franchises to build the Loop Elevated between 1894 and 1896. The following year, a train carrying representatives of the Union Elevated Company made the first run around the entire loop. The company did not own any rolling stock, but allowed other companies to use the facility for a fee. Yerkes had achieved his ambition, however, his devious tactics soon caught up with him. In 1899, "when he attempted to secure a no-cost hundred year extension of his streetcar franchise, an angry mob surrounded City Hall during the Council debate and demanded that Yerkes be repudiated" (Cudahy 1979-80, 204). He sold his Chicago holdings, and went on to build the London subway system.

Historically, the Loop Elevated "defined the most prestigious locations for office buildings inside the steel girdle" (City of Chicago Sept. 1981, 3). An earlier system of surface streetcar lines encircled the city's central area, however the prominent visual presence of the elevated helped Chicago's downtown earn its well-known popular nickname, the Loop. Today, the elevated tracking structure is still associated with the definition of the Loop for many Chicagoans.

PART 1. HISTORICAL INFORMATION

A. Physical History

1. Date of Erection: 1896-97

2. Architect: The designer of the Loop Elevated structure and many of the associated stations was John Alexander Low Waddell (1854-1938), Consulting Engineer of Kansas City, Missouri. Born in Port Hope, Ontario, Canada, Waddell received training in engineering from the Rensselaer Polytechnic Institute in Troy, New York in 1875 (Brown 1989,

1). Apparently, Waddell went on to receive a PhD in Engineering. There is some discrepancy in the literature regarding the date and university from which he received the degree, however, he was often referred to as Dr. Waddell.

After having served as a government draftsman on the Canadian Pacific Railway, Waddell worked for a short time as chief engineer of Raymond & Campbell, a firm in Council Bluffs, Iowa that specialized in bridge design. In 1882, he published his first book, *The Designing of Ordinary Iron Highway Bridges*. In the same year, he accepted a teaching position in the Imperial University of Tokyo's Civil Engineering Department. In 1886, Waddell moved to Kansas City, Missouri and the following year, he began working as an engineering consultant and an official agent of the Phoenix Bridge Company of Phoenixville, Pennsylvania. Waddell was "in an excellent position to make the most of the frenzied competition among American railroad companies" and he began specializing in the design of bridges on the new rail routes (Brown 1989, 3-4).

In 1892, Waddell resigned the Phoenix Bridge Company to exclusively devote himself to his private engineering practice. The following year, Waddell built the first of what became his most notable engineering innovation, a vertical lift bridge. Constructed over the south branch of the Chicago River, the South Halsted Street Bridge was the prototype for many other "large-scale, high-clearance lift span" bridges constructed throughout the United States. (Brown 1989, 4). Waddell patented his vertical lift bridge, "preventing other engineers from entering the field during the period" (Missouri Highway and Transportation Dept., May, 1982).

Waddell's work on the Union Elevated Railroad spanned from initial planning in 1894 to construction drawings developed between 1895 and 1897. It is likely Waddell's reputation in engineering made him the obvious choice for the design of the Union Elevated Railroad. The Phoenix Bridge Company, which had previously employed Waddell, was the company responsible for building the Lake Street segment, which was the first part of the Loop Elevated system to be constructed.

Some of Waddell's plans for Union Elevated Railroad stations were apparently modified in 1897, prior to construction. Many of these changes were made by other designers. Waddell was, however, involved in at least one other elevated station in Chicago. This was the Armitage Avenue Station designed by Waddell and architect William R. Gibb in

1900 (Sinkevitch 1993, 183). Although this was not part of the Loop Elevated system, the client was the Northwestern Elevated Company, then owner of the Loop Elevated.

In 1899, Waddell formed a partnership with Ira G. Hedrick. That partnership lasted until 1906. The following year, Waddell formed a partnership with John Lyle Harrington, who had served as an engineer in the office of Waddell and Hedrick since 1901. Waddell & Harrington was dissolved in 1914, however, the successor firm of Howard Needles Tammen & Bergendoff continues to practice engineering in Kansas City to this day (Brown 1989).

Throughout his career, Waddell designed dozens of structures in the United States and abroad. In addition to Waddell's patented design for the vertical lift bridge, his recognized engineering innovations include the use of nickel-steel in bridge construction. For this latter work, "Waddell was awarded the Normal Medal from the American Society of Civil Engineers for his contributions to the engineering sciences" (Miszczuk 1976). In addition to Chicago's Union Elevated Railroad, Waddell is recognized for contributing to Boston's elevated system.

A number of Waddell's structures are listed in the National Register of Historic Places, including the Union Elevated Railroad. Among others are the Fratt Bridge in Kansas City, Missouri, and the Detroit Bridge in Cleveland, Ohio. Other notable bridges designed by Waddell are the reinforced concrete Arroyo-Seco Bridge in Passadena California; the cantilevered Quebec Bridge over the St. Lawrence River in Canada; and a vertical lift bridge over the Don River at Rostov, Russia (Miszczuk 1976).

Waddell published a number of text books in addition to Designing Ordinary Bridges (Brown 1989). Among them are De Pontbus: A Pocket-Book for Bridge Engineers (1898); Bridge Engineering (1916) and the Economics of Bridgework (1921) (Miszczuk 1976).

In 1920, Waddell moved his headquarters to New York and established branch offices in several foreign countries so he could best facilitate what had become an extensive international practice. John Alexander Low Waddell died in New York City on March 3, 1938. During the time of his death he had been serving as supervising designer for the 1939 New York World's Fair (Miszczuk 1976).

3. Original and Subsequent Owners: The original owner of Chicago's Union Elevated Railroad was Charles T. Yerkes. With the intent to develop an elevated tracking system that would encircle downtown, Yerkes purchased the Lake Street Elevated Railroad in 1894, and received permission from the City Council on October 1 of that year to extend the line east to Wabash Ave. (Cudahy 1979-80, 200). On November 22, 1894, the Union Elevated Railroad Company was formed with Charles T. Yerkes as "the controlling spirit of the corporation" (*The Economist* 1896, 31).

In 1895, Yerkes acquired a franchise for the Union Elevated Railroad Company from the City Council, allowing extension of the tracking south on the public right-of-way along Wabash Ave. Also in that year, another company owned by Yerkes, the Northwestern Elevated Company, acquired a franchise to build tracking on the public right-of-way along Fifth Ave. (now Wells St.) This gave Yerkes "three legs of the loop" (City of Chicago Sept. 1981, II-2). To obtain the fourth section and complete the circle, he formed the Union Consolidated Railroad, which obtained a franchise to build tracking over Van Buren Street on June 30, 1896.

Yerkes was known for using unethical and illegal methods in his business dealings. In 1899, after finding himself "not only politically blockaded but socially ostracized as well," Yerkes sold all of his Chicago traction interest for nearly \$20,000,000 and moved away (Malone 1936, 611). The purchasers were Peter A. B. Widener and William L. Elkins, the "Philadelphia traction kings," who had previously provided Yerkes with the loan for his first street car company in Chicago (ibid., 610).

In 1901, the Union Elevated Railroad came under the ownership of the Northwestern Elevated Railroad (Chicago Rapid Transit Company, 1925, 16). In 1911, the company was brought under one management with three other existing elevated companies to provide "better coordinate service around the Loop" (City of Chicago Sept. 1981, II-3). Composed of the Northwestern Elevated Railroad, the South Side Elevated Railroad Company, the Chicago and Oak Park Elevated Railroad Company and the Metropolitan West Side Railway Company, this voluntary association was known as the Chicago Elevated Railways Collateral Trust (Chicago Rapid Transit Company, 1926, 23). Millions of dollars in loans were secured by the Chicago Elevated Railways Collateral from the Commonwealth Edison Company for improvements to accommodate unified service. Unable to meet the interest payment on the new loans, the voluntary association defaulted, and Commonwealth Edison assumed ownership of the four

elevated companies (Cudahy 1982, 49).

Samuel Insull, who had begun as Thomas Edison's personal secretary, had risen in the company's ranks to become President of the Commonwealth Edison Company. When Commonwealth Edison assumed possession of the Chicago Elevated Railways Collateral Trust's elevated companies in 1911, Insull became the principal stockholder of all four companies (ibid.). In 1924, the four companies were formally unified into the Chicago Rapid Transit Company. Samuel Insull continued serving as Chairman of the Board to the Chicago Rapid Transit Company (Chicago Rapid Transit Company 1925, 3).

The Chicago Rapid Transit Company suffered financial difficulties during the Great Depression, and went into receivership in 1932. During the years that followed, it was increasingly evident that it was necessary for all of Chicago's mass transit companies to be publicly owned. After years of studies and reports, the Illinois State Legislature passed an act in April of 1945 authorizing the creation of a public mass transportation agency for metropolitan Chicago (Cudahy 1982, 64). After approval by public referendum and the financial and legal dealings necessary to transfer the Chicago Rapid Transit Company and the Chicago Surface Lines, a new public owner, the Chicago Transit Authority was established in 1947. The elevated as well as the city's bus and subway service has remained under continuous ownership and operation since then.

4. Builder, contractor, suppliers: The Loop Elevated structure was built by the following firms:

Wells Street Segment: Union Bridge Co., New York, NY., and Elmira Bridge Co., Elmira, NY. (CTA Archives, Engineering Dept., reviewed by J. Sniderman July 1, 1994).

Lake Street Segment: Phoenix Bridge Co, Phoenixville, PA. (City of Chicago Sept. 1981, II-3).

Wabash Street and Van Buren Street Segments: Pencord Iron Works, Pencord, PA (City of Chicago Sept. 1981, II-3).

5. Original plans and construction: A full set of original plans and construction drawings dated between August of 1894 and January of 1897 and signed by John Alexander Low Waddell are on microfilm in the archives of the Chicago Transit Authority (CTA Archives, Engineering

Dept. reviewed by J. Sniderman July 1, 1994). These include plans for the complete tracking structure and most, if not all of the original ten stations (There are more than one hundred original signed drawings). Waddell's drawings of 1894 have the client's name titled as Union Consolidated Elevated Railway, and some of them are titled Lake Street Elevated Railway Extension. All of his other drawings, which are dated between 1895 and January of 1897, are titled Northwestern and Union Elevated Railroad, Chicago, Illinois).

There is another smaller set of drawings dated between February and April of 1897 that do not include Waddell's name. Most of these drawings bear the name of A.M. Hedley, Consulting Architect of Chicago. Others have no name on the title block but have an approval signature of Charles Weston, Chief Engineer. All of them have the client's name titled as Union Elevated Railroad. Although it cannot clearly be documented, it appears that most of these 1897 drawings (which do not have Waddell's name) were used to modify and simplify Waddell's plans prior to the construction of stations in 1897 (CTA Archives, Engineering Dept. reviewed by J. Sniderman July 1, 1994).

In most cases, the Hedley plans show designs that are distinctly similar to those by Waddell of only a few years earlier. In fact, it is quite possible that Hedley began with a set of drawings traced from Waddell's originals. It seems apparent that the Union Elevated Railroad Company was re-thinking circulation and ticketing methods prior to the construction of stations, and Hedley served as consulting architect to make those changes. Hedley's drawings place the ticket booth in the upper level and provide an open-air lower level cross-over, while Waddell's drawings show an enclosed lower level area with ticket and cross-over functions. Many of Hedley's drawings show a simplified version of the ornamentation shown on Waddell's drawings, however, there are also some late 1896 drawing of Waddell's in which he had already simplified ornamentation (CTA Archives, Engineering Dept. reviewed by J. Sniderman July 1, 1994).

Little is known about Alfred M. Hedley, however, he may have been a relative of Frank Hedley, who was the Lake Street General Manager at the time (Cudahy 1982, 27). Alfred M. Hedley's name appears in the Lakeside City Directory of 1897, but does not reappear in subsequent years (Lakeside City Directory 1897).

6. Alterations and additions: The Loop Elevated has undergone numerous alterations over the years, however, changes to the overall appearance and

character of the tracking structure have been few. There have been numerous minor structural changes to girders, beams, columns, etc. Below is a chronological list of the more extensive alterations to the Loop Elevated. (This does not include a detailed account of all station changes and alterations.)

- 1903 Platform extension were added to the stations (City of Chicago Sept. 1981, II-4).
- Various changes to allow for through-routing and unified service with free transfer between lines. This included structural changes at intersections, platform extensions and exit stair modifications, erection of transfer bridges and canopies etc. (City of Chicago Sept. 1981, II-4; CTA Archives, Engineering Dept. reviewed by J. Sniderman July 1, 1994).
- 1916 Windows were added at some stations for windbreaks (CTA Archives, Engineering Dept. reviewed by J. Sniderman July 1, 1994)
- 1925-27 Columns along Wabash Ave. were moved to accommodate street widening and improved traffic flow. Platform extensions were also made, particularly at Wells St. where the extension created a continuous platform (City of Chicago Sept. 1981, II-4; Chicago Rapid Transit Company, 1924, 1926, 1928).
- 1930 Transfer bridge constructed at Quincy Street station (Chicago Rapid Transit Company, 1931).
- c. 1935 Platform extensions were made at Van Buren Street creating on continuous platform (City of Chicago Sept. 1981, II-4).
- 1958 Connection of the old west side line to the Loop at Van Buren St. and Wells St. were removed (City of Chicago Sept. 1981, II-4).
- c. 1960 Continuous platform running along Wells St. was removed (City of Chicago Sept. 1981, II-4).

1965 Platforms at Lake St. and Wabash St. were shortened (City of Chicago Sept. 1981, II-4).

Both station houses at Adams St./Wabash Ave. were demolished, and east side station houses at Randolph St./Wabash Ave. and Madison St./Wabash Ave. were demolished. The west side station house at Randolph St./Wabash Ave. was completely remodeled. South facade of Lake St./ State St. station was completely remodeled. Escalators with fiberglass enclosure replaced original stairs at Lake St./State St. station. Corrugated fiberglass windbreaks were added in place of multi-paned glass in all of the stations. (City of Chicago Sept. 1981, II-4).

The Van Buren St./Dearborn St. stations and the Van Buren St./ State St. stations were demolished and the continuous platform at Van Buren St. was removed (City of Chicago Sept. 1981, II-4).

B. Historical Context:

1967

In 1848, Chicago's first locomotive train, the Pioneer, made its inaugural run (Bach and Wolfson 1986). Within the following two decades, railroads were built linking Chicago to the Mississippi River on the west, and New York and Philadelphia on the east. Along with the construction of the Illinois and Michigan Canal, the railroad boom transformed the city into one of the largest centers for the transportation of agricultural products, lumber, and other goods in the world (Mayer and Wade 1969, 44). This contributed to the growth of Chicago's population and the need for a city-wide transit system; however, it was several years before cable car and electric railway systems came about.

Before the early 1880s, nearly all of Chicago's street railways "were operated by animal power," except for a few "suburban steam dummy lines (Weber 1936, 21). In 1882, the cable car system that had been introduced in San Francisco nine years earlier, arrived in Chicago. Within the next several years, eighty-two miles of these lines were constructed in Chicago, "making it the largest cable car system in the world" (Duis 1983, 2). The electric street car, an innovation developed in 1887, was introduced to the city in 1890. The initial line, which was known as the Calumet Electric Street Railway Company, included "the first overhead trolley system in the city" (Weber 1936, 21). There were several advantages to the new technology. The installation of electric railways was less expensive than cable cars and individual cars could be connected to provide a row of trains during rush hour. Within the next several years, many additional electric

railway companies began operating in Chicago and the surrounding suburbs.

During the mid 1880s, owners of several local streetcar companies began efforts to bring the new elevated railway system that had been developed in New York to Chicago, as they believed that it was inevitable that the elevated would eventually replace streetcars (Cudahy 1979-80, 194). The idea of creating an elevated system had been discussed as early as 1825 (ibid.) It was not until 1868 that Connecticut-born inventor Charles T. Harvey opened what is believed to be the "first elevated line in the world" (Hood 1993, 49). Initially this consisted of a one-half mile stretch of tracking in lower Manhatten. In 1870, the system was extended throughout Manhattan in 1870, and by 1885, it was extended into Brooklyn. The earliest New York elevated line had cable propulsion. Within the next several years, this was replaced by a steam locomotive system (Hood 1993, 49-50).

Although elevated lines were more costly to construct than horse or cable railways, "they could carry more passengers faster and more conveniently in crowded urban areas where traffic clogged the routes of surface travel" (Cudahy 1979-80, 194). Many of Chicago's streetcar owners began competing to build the city's first elevated and formed new companies to do so in the late 1880s. Legal restrictions, political issues, and the high cost of building such a system, however, delayed its introduction in Chicago for several more years.

Efforts in 1892 to prepare for Chicago's World's Columbian Exposition spurred the completion of the city's first elevated line. Built by the South Side Rapid Transit Company, this line extended from Congress Street to 39th Street, when it began running in 1892. The following year, it was extended to 63rd Street, in time to bring large crowds of visitors to Jackson Park for the World's Fair. Modeled after the New York Elevated, the South Side Elevated utilized steam "dummies" (Chicago Rapid Transit Company 1925, 15).

One major difference between the New York precedent and the new Chicago line was that "the elevated lines in Manhattan and Brooklyn ran on structures built largely over public streets," however, Chicago's South Side Elevated extended along "corridor-like alleys behind and between rows of buildings" (Cudahy 1979-80, 197). Because the South Side Elevated was constructed in this way, it became familiarly known as the "Alley L" (Chicago Transit Authority, reprint 1940,1). The reason that this line was constructed along alleys was that Chicago elevated companies were required to comply with the Adams Law, and an Illinois Statute requiring that approval signatures be obtained from the owners of property along every mile of a proposed route. Paying owners for signatures had become a common practice. Elevated companies, however, soon learned "that it cost less

to acquire alley rights-of-way than to pay for approval signatures for street construction, and that the costs of the former were more predictable" (Cudahy 1979-80, 197).

The second elevated line in Chicago, the Lake Street Elevated, began operating in 1893. Linking the west side to downtown at Madison Street, this elevated did not extend along alleys, but was built directly over a major east-west thoroughfare, Lake Street. It was commonly believed that this was because the original franchise for the Lake Street Elevated Company was held by a notorious racketeer, Mike McDonald. It was rumored that McDonald, who was often called King Mike controlled two-thirds of the City Council. Apparently the "council relaxed its normal requirements for approval signatures" for him (Cudahy 1979-80, 198). The Lake Street line was extended by an additional six miles to the west in 1894. The next elevated line in Chicago, the Metropolitan West Side Elevated began operating in 1895. It was the "first rapid transit system in the United States to use electricity on a scale beyond a simple streetcar installation" (Cudahy 1979-80, 201). It linked the near northwest and west sides to downtown at Franklin Street.

All three of these elevated lines terminated at a different parts of the edge of downtown, but none of them ran into or through the Loop. The idea of creating a quadrangle of tracking that would provide access to all of downtown and allow passengers to transfer at interchanges had been discussed for several years. In fact, a surface loop of street car lines already existed. Although some of the transit company owners were interested in creating an elevated loop, the possibility of creating such structure downtown seemed unlikely because of the Adams Law. "The cost of downtown real estate effectively precluded any thought of an Alley L in the business district, and the need to obtain approval signatures for building elevated lines over thriving downtown street put the elevated companies in a very difficult position" (Cudahy 1979-80, 197). Without some type of unification for the individual lines and stations at regular intervals throughout downtown, however, the future financial stability of the elevated companies was extremely questionable.

The man who managed to overcome the legal, political and financial obstacles associated with developing the Loop Elevated system was Charles T. Yerkes, Jr. Extremely enterprising and ambitious, Yerkes' methods were manipulative, devious, and quite often illegal. His career was a "phenomenon of Chicago life which interested a young man then serving as a newspaper reporter" (Hayes 1944, 240). That young man, Theodore Dreiser, who went on to become a highly successful novelist, immortalized Charles T. Yerkes, and his corrupt business practices, in three works of fiction, *The Financier*, *The Titan*, and *The*

Stoic. The "character of Frank Algernon Cowperwood, the principal figure" in all three famous novels was so closely "modeled on Yerkes that in the absence of a true biography," the Dreiser trilogy can serve "for those who would like to learn more about the real-life traction magnate" (Cudahy 1979-80, 204-05).

Born in Philadelphia in 1837, Yerkes was the son of the President of the Kensington National Bank (Malone 1936, 610). At the age of seventeen he began clerking at a brokerage firm, and four years later, he started his own brokerage office. By the time he was twenty-four, Yerkes had his own bank. He was ruined, however, in the "Panic of 1871 and then imprisoned for failure to give 'preference' to the City of Philadelphia over other creditors during the collapse" (Cudahy 1982, 17-18). Yerkes was pardoned after spending seven months in jail.

After prison, Yerkes faced "a hostile and gossipy world," but "managed somehow to reestablish himself financially" (Malone 1936, 610). Although he became a major investor in railway companies and was quite successful, he was shunned by Philadelphia society, particularly due to a scandalous divorce. Yerkes, and his second wife, Mary Adelaide Moore, moved to Chicago in 1882. With the financial backing of Philadelphia traction kings, Peter A.B. Widener and William L. Elkins, Yerkes began purchasing many of Chicago's existing streetcar companies.

In 1894, Yerkes acquired the Lake Street Elevated Company, which he perceived as a "potential threat to his West Chicago Street Railroad" (Cudahy 1982, 16-17). Yerkes had hoped to establish a "system of streetcar feeders to connect Lake Street elevated stations with the various West Side neighborhoods adjacent to the lines" (Cudahy 1979-80, 199). It was increasingly obvious, however, that none of Chicago's existing elevated lines would remain financially stable without better access to and through downtown. Yerkes thus set out to develop the Loop Elevated.

Aware that it would be too expensive to secure the rights-of-way for downtown alleys, Yerkes began the process of gaining approvals from property owners. He did not announce his intention to build the Loop Elevated structure. Rather, "he quietly proceeded to create one section at a time," by requesting approvals for making extensions to his existing lines (Cudahy 1979-80, 200).

He first requested approval to extend the Lake Street Elevated eastwardly to Wabash Ave. Yerkes then requested approval for the extension of the Northwestern Elevated Company, for which the city had given him a franchise in 1894. Even though that line had not yet been constructed, Yerkes was able to secure permission to build an extension to the line along Fifth Ave., a

thoroughfare now known as Wells Street. There was opposition from owners of property on Fifth Ave., however, Yerkes secured enough signatures by paying owners for them. By "dealing and politicking" Yerkes gained a franchise for the Wabash Ave. stretch (Cudahy 1982, 20). Yerkes formed the Union Elevated Company and "by now he made no pretense about his ultimate objective" (Cudahy 1979-80, 200).

The fourth and final stretch of the Loop Elevated, between Wabash Ave. and Fifth Ave. over Van Buren Street presented the most difficulty. Property owners along this half mile area "were dead set on squashing Yerkes as well as his proposed L" (Cudahy 1982, 21). Yerkes knew, however, that the Adams Law only required the signatures of a majority of owners along each mile. To realize this final stretch, he formed a new company, the Union Consolidated Elevated Company. Under the auspices of this company, Yerkes received a majority of approvals by seeking out only the signatures of property owners west of Fifth Ave., an area that was not directly affected by the construction. Final approval from the City Council was given to Yerkes on June 30, 1896. By that point "work was already underway on the previously approved Wabash, Fifth Avenue and Lake Street segments" (Cudahy 1982, 21).

On Labor Day of 1897, the first run around the entire circumference of the Loop Elevated took place. The following month, the three elevated companies that were already operating in Chicago negotiated leases to use the Union Elevated Railroad. By mid-October of 1897, the three lines ran along the Loop simultaneously. The Lake Street Elevated and the Metropolitan West Side Elevated ran clockwise on outside tracks, and the South Side Elevated ran counter-clockwise on an inside track. A fourth line, the Northwestern Elevated was also meant to run counter-clockwise on an inside track. This was the Northwestern Elevated Company. It was no where near completion, however, when the Loop Elevated opened for business in October of 1897.

The Northwestern Elevated Company was one of the two lines owned by Charles T. Yerkes which he had received extensions for, in order to establish the Loop Elevated. Yerkes and his Philadelphia syndicate had actually received a franchise for the Northwestern Elevated from the city as early as 1894. Construction of the line was "halted in 1896 for want of sufficient capital, while strikes and shortages of materials necessitated two extensions of the municipal franchise for building the elevated road" (Cudahy 1979-80, 203-04). The final franchise was due to expire on the first day of 1900.

On December 31, 1899, the Northwestern Elevated Company announced that the line was finished. It was then the common procedure for the elevated to go

through a final inspection by the city's Public Works Department. The Public Works Commissioner's assistants found the new elevated line to be substandard in many respects. "Portions of the structure lacked the proper number of rivets, and only three of the fourteen stations were ready for use" (Cudahy 1979-80, 204). On New Year's Day of 1900, all work on the Northwestern Elevated and use of its passenger trains were halted.

As efforts were being made to finish the Northwestern Elevated in 1899, Yerkes was also busy trying to obtain a one-hundred-year no-cost extension to his street car franchises. During the City Council's discussions on the matter "a shouting mob surrounded City Hall demanding that Yerkes be repudiated" (Cudahy 1982, 37). Although it was believed that Yerkes had spent more than a million dollars to bribe city officials to support him on this matter, he was voted down. Yerkes found that he was popularly despised and that he had lost his political stronghold. "Opposed by powerful financiers who considered his business methods dangerous and regarded him as a menace to stable finance, he sold his holdings to his friends Widener and Elkins in 1899" (Malone 1936, 611).

Yerkes returned to New York with fifteen million dollars in cash. The following year, he moved to England and built three of London's major subway lines. In spite of his many great successes, Charles T. Yerkes was near bankruptcy when he died in 1905 (Malone 1936, 611).

Throughout the years since the Loop Elevated was initially constructed in 1897, there were frequent criticisms about the structure's appearance, obstruction of light, and the sound. "Some complained that the elevated created a kind of Chinese Wall that damaged property outside; others thought the massive steel structures awkward and ugly, obstructing ground traffic and shutting out the sun and daylight" and most found the noisy squealing and rumbling unpleasant (Mayer and Wade 19, 214). Over the years, there were many studies to investigate ways of improving and upgrading the Loop elevated, and from time to time there were discussions about its potential demolition. In spite of such criticisms, the Loop Elevated spurred "extraordinary economic growth" (Mayer and Wade 19, 210).

The location of a business or store in relation to the Loop Elevated became an important factor in its success or failure. The Loop Elevated "defined the core of Chicago's central business district and identified the desirable and prestigious locations" (Mayer and Wade 19, 214). Pedways were occasionally built by Loop stores to provide attractive and convenient connections with the elevated for shoppers. One example was a pedestrian bridge structure designed by Louis Sullivan, linking the Schlesinger and Mayer Store to the Union Elevated Railroad (files of Tim Samuelson, Commission on Chicago Landmarks, reviewed by

Sniderman June 29,1994). This beautifully ornamented structure with glass roof was constructed in 1897, the year that the Loop Elevated first opened. The pedway was demolished in recent years.

The Loop Elevated, has been in continual operation for nearly a century. Although it has undergone various changes and alterations over the years, its form and overall appearance have remained constant. Today, as in previous years, the Loop Elevated structure continues to define the heart of downtown for most Chicagoans.

PART II. ARCHITECTURAL INFORMATION

A. General Information:

- 1. Engineering Character: The Union Elevated Railroad system is of engineering merit based on four criteria. First, the system is of merit in the history of American industrial archaeology. Second, it is of merit for its association with financier and traction magnate, Charles T. Yerkes. Third, it is of merit for its role in defining and shaping Chicago's downtown. Fourth, the system is of merit as one of the only few extant examples of transit systems that have remained in operation for nearly a century.
- 2. Condition of Fabric: Excellent
- 3. Summary Description: The Loop Elevated system is elevated over the street by steel buttressing girders. The system is divided into two portions, the substructure and superstructures. The substructure consists of a foundation, tress elevations, transverse sections and a structural system. The superstructures are the numerous stations that are supported by the substructure.

The Loop Elevated continues to operate after nearly a century. Although, the system has undergone various changes and alterations over the years, its form and overall appearance have remained constant (see alterations and additions section for discussion). Today, as in previous years, the Loop Elevated structure continues to define the heart of downtown. Most importantly, the Loop Elevated system continues to provide train service to the people of Chicago. In particular, the system allows passengers to transfer to other transit lines at individual station interchange points. In general, the integrity of the Loop Elevated system remains intact.

B. Description of Substructure:

- 1. Overall Dimensions: The Union Elevated Railroad tracking is located with in the public right-of-way following a route along Lake Street (200 W. to 50 E.), Wabash Street (2000 N. to 400 S.), Van Buren Street (50 E. to 200 W.), and Wells Street (400 S. to 200 N.).
- 2. Foundation: The structural system is rooted in the street below the Union Elevated Railroad system and is surrounded by asphalt.
- 3. Structural System: The Union Elevated Railroad system is supported by a buttressing girder system. This buttressing girder system in part consists of vertical I-sections that are rooted into the street below and are surrounded by asphalt. These vertical I-sections measure 1'3" x 1'4 1/2". The vertical I-sections directly support closely spaced flat I-beams. These closely spaced flat I-beams in turn form part of the inverted truss elevation. Specifically, the elevated tracks are superimposed on the tress elevations which in turn is supported by the vertical I-sections. Additionally, the numerous stations are suspended, or supported and extended out from the buttressing system.

C. Site and Surroundings:

1. General Setting and Orientation: The Union Elevated Railroad system is located in the heart of downtown Chicago and contributes to the definition of the loop area. The system is surrounded by office buildings, restaurants, parking facilities, residential and commercial establishments.

PART III. SOURCES OF INFORMATION

A. Architectural Drawings and Photographs:

Chicago Transit Authority Archives, Engineering Dept., drawings on microfilm made available by CTA staff member Clifford Hayes, reviewed by J. Sniderman July 1, 1994.

Chicago Transit Authority Library, photographs and reports made available by CTA staff member Violette Brown, reviewed by J. Sniderman July 1, 1994.

Commission on Chicago Landmarks, photographs and photo-reproduction of drawing entitled "Elevation of Bridge Connecting Premises of Schlesinger and Mayer at 141 Van Buren with Union Loop R.R." in the files of CCL staff

Union Elevated Railroad HAER No. IL-1 Page 21

member, Tim Samuelson reviewed by Sniderman June 29,1994.

B. Bibliography:

A History of the Yerkes System of Street Railways (from the Earliest Organization of the Horse Railway to the Present Development of Cable, Electric and Elevated Railway of the North and West Districts) Chicago, 1897.

Bach, Ira J. and Susan Wolfson. A Guide to Chicago's Train Stations Past and Present. Athens, Ohio: Ohio University Press, 1986.

Brown, Kathi Ann. Diversity by Design: Celebrating Seventy-Five Years of Howard Needles Tammen & Bergendoff 1914-1989, Kansas City: HNTB, 1989.

"Chicago Elevated Terminal Railway Ordinance," as passed by the City Council of the City of Chicago, November 5, 1891 and approved by His Honor the Mayor, November 9, 1891, and accepted by the Chicago Elevated Terminal Railway Company, November 9, 1891, by its President, Joseph T. Torrence and attested by its corporate seal.

Chicago Rapid Transit Company. Annual Reports for the years 1924, 1925, 1926, 1928, 1929, 1931, 1933, 1934.

Chicago Transit Authority. "The Story of the Chicago Rapid Transit Lines: The "L" System." 37th Anniversary Year Book of Division 308, Elevated Railway Employees, reprinted May 1, 1940.

City of Chicago. "The Chicago Union Loop Elevated Structure: Reasons for Not Listing on the National Register of Historic Places" Submitted to the Illinois Historic Sites Advisory Council, October 13, 1976.

City of Chicago and Chicago Transit Authority. Master Plan for the Loop Elevated: Rehabilitation and Historic Preservation. Sept. 1981.

Clement, Dan. HAER IL-1 "Written Historical and Descriptive Data for the Union Elevated Railroad." Historic American Engineering Record, U.S. Dept. of the Interior. 1983.

Commission on Chicago Landmarks. Historic Resources Survey. Individual Resource Forms for Randolph/Wells St. Station, La Salle/ Van Buren St. Station, Quincy/Wells St. Station and Madison/ Wells St. Station, August, 1990.

Union Elevated Railroad HAER No. IL-1 Page 22

Cudahy, Brian J. "Chicago's Early Elevated Lines and the Construction of the Union Loop," Chicago History, Vol. VIII, Winter 1979-80, pp. 194-205.

Cudahy, Brian J. Destination Loop: The Story of Rapid Transit Railroading In and Around Chicago. Brattleboro, VT.: The Stephen Green Press, 1982.

Duis, Perry. "Whose City? Part Two," Chicago History, Vol. XII, no. 2, 1983.

The Economist. Street Railway Supplement. 1896.

Hayes, Dorsha B. Chicago: Crossroads of American Enterprise. A Cities of American Biography. New York: Julian Messner Inc., Publishers, 1944.

Hirsch, Susan E. and Robert I. Goler. A City Comes of Age: Chicago in the 1890s. Chicago: Chicago Historical Society, 1990.

Hood, Clifton. 722 Miles: The Building of the Subways and how they Transformed New York, New York: Simon & Schuster, 1993.

The Inter-Ocean. "Lease of Loop is Signed: Elevated Trains will Soon be Running Down Town, Vol. XXVI. No. 193, Chicago, Sunday, October 8, 1897.

The Lakeside Annual Directory for the City of Chicago. Chicago, Illinois: The Chicago Directory Company, 1897, 1898.

Malone, Dumas, ed. Dictionary of American Biography, Vol. XX, New York: Charles Scribner's Sons, 1936.

Mayer, Harold M. and Wade, Richard C. Chicago: Growth of a Metropolis. Chicago: University of Chicago Press, 1969.

Missouri Highway and Transportation Department, "Written Historical and Descriptive Data for the Armour, Swift, Burlington Bridge (A.S.B.); Winner Bridge; Missouri River Bridge; Fratt Bridge; North Kansas City Bridge," Historic American Engineering Record, U.S. Dept. of the Interior, May, 1982

Miszczuk, Edward J. "Fratt Bridge; Armour-Swift-Burlington Bridge," National Register of Historic Places nomination form, National Park Service, U.S. Dept. of the Interior, 1976.

Platt, Harold L. "Samuel Insull and the Electric City," *Chicago History*, Vol. XV, No. 1, Spring 1986, pp. 20-35.

Union Elevated Railroad HAER No. IL-1 Page 23

Sande, Theodore Anton. Industrial Archeology: A New Look at the American Heritage. Battleboro, Vermont: The Stephen Greene Press, 1976.

Sinkevitch, Alice. AlA Guide to Chicago. San Diego: Harcourt Brace & Co., 1993.

Weber, Harry P. An Outline History of Chicago Traction, (compiled for Chicago Railways Co. and Walter J. Cummings and Guy A. Richardson, Its Receivers and Chicago City Railway Co., Calumet & South Chicago Railway Co., and Edward E. Brown and Harvey B. Fleming, Their Receivers). Chicago, 1936.

Weese, Harry. "Chicago Loop Elevated," National Register of Historic Places nomination form. National Park Service, U.S. Dept. of the Interior, 1978.

Prepared by:

Archaeological Research, Inc. 900 West Jackson, Suite 6E Chicago, Illinois 60607

PART IV. PROJECT INFORMATION:

This project was undertaken by the City of Chicago as it fulfilled Section 106 compliance requirements for a project that will affect the Union Elevated Railroad system. The City of Chicago contracted Archaeological Research, Inc. for the HAER documentation. Key project personnel included Julia Sniderman, historical researcher, Dr. John Vogel, historical consultant, Tom Yanul, photographer, Nancy Phillips and Karen Poulson, staff researchers and David Keene, principal investigator.

Union Elevated Railroad: Randolf Street Station Wabash Ave. @ Randolf St. Chicago Cook County Illinois

HAER No. IL-1D

HAER TLL, 16-CHIE, 108D-

PHOTOGRAPHS WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record National Park Service Department of the Interior Washington, D.C. 20240

HAER TLL, 16-CHIG, 108D-

HISTORIC AMERICAN ENGINEERING RECORD

IL-ID

UNION ELEVATED R.R. RANDOLF ST. STATION (ON WABASH)

Date:

1897

Location:

Randolf St. on Wabash Ave. Chicago, Cook Co. IL.

Owned by:

Originally: Union Elevated R.R.

Presently Chicago Transit Authority

Significance:

One of the stations along the Uion Elevated Railroad's Loop. The Loop is part of one of the oldest elevated rail systems still in operation in the United States. This station served an itegral part in its operation.

Transmitted by:

Dan Clement, 1983 with historical data drawn from the National Register of Historic Places Determination of Eligibility file.

For additional photographs and data on the Union Elevated R.R., see: IL-1
Union Elevated R.R.
The Union Loop

Union Elevated Railroad, Randolph /Wabash Avenue Station (Union Elevated Railroad, Randolph Street Station) Randolph and Wabash Avenue City of Chicago Cook County Illinois HAER No. IL-1-D

HAER ILL 16-CHIG, 108 D-

ADDENDUM TO: Union Elevated Railroad, Randolph Street Station Randolph and Wabash Avenue City of Chicago

Cook County Illinois

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
Rocky Mountain System Support Office
National Park Service
P.O. Box 25287
Denver, Colorado 80225-0287

UNION ELEVATED RAILROAD, RANDOLPH
/WABASH AVENUE STATION
(UNION ELEVATED RAILROAD,
RANDOLPH STREET STATION

HAER ILL 16-CHIG, 1080-

ADDENDUM TO: UNION ELEVATED RAILROAD, RANDOLPH STREET STATION HAER No. IL-1-D Page 2

HISTORIC AMERICAN ENGINEERING RECORD UNION ELEVATED RAILROAD, RANDOLPH/WABASH AVENUE STATION (UNION ELEVATED RAILROAD, RANDOLPH STREET STATION)

This report is an addendum to a one (1) page report previously submitted to the Library of Congress in 1983.

Location:

Randolph Street and Wabash Avenue, Chicago, Cook County, Illinois

Present Owner: Chicago Transit Authority

Present Use:

Rapid Transportation

Significance:

Significant in the history of American industrial archaeology, the Union Loop Elevated is also important for its association with financier and traction magnate, Charles T. Yerkes and for its role in defining and shaping Chicago's downtown. According to Theodore Anton Sande, author of *Industrial Archeology: A New Look at the American Heritage*, to "the industrial archeologist, the Chicago Loop provides an ideal case study" (1976, 113). Having made its first run in 1897, the Union Loop Elevated is one of only a few extant examples of transit systems that have remained in continuous operation for nearly a century. A "massive web of riveted steel girders and shining tracks," the Loop Elevated was designed by John Alexander Low Waddell, a Canadian-born engineer who played an important role in the history of American heiden design.

bridge design.

PART 1. HISTORICAL INFORMATION

A. Physical History

Date of Erection:

1897

- 2. Architect: The designer of the Loop Elevated and the Randolph/Wabash station was John Alexander Low Waddell (1854-1938), Consulting Engineer of Kansas City, Missouri. For additional information on Waddell, see HAER No. IL-1.
- 3. Builder, contractor, suppliers: Construction materials acquired from Pencoyd Iron Works, Pencoyd, Pennsylvania. (CTA 1981, 3). Some of the architectural/engineering drawings specify re-use of materials from older stations in the process of demolition. (CTA Engineering Archives, reviewed by E. Goldsmith September 3, 1996).
- 4. Original plans and construction: A set of original plans for the Randolph/Wabash Avenue Station were developed in 1896 by John Alexander Low Waddell. The client's name is listed as Northwestern and Union Elevated Railroad, Chicago, Illinois. The drawings are on microfilm in the archives of the Chicago Transit Authority (CTA Archives, Engineering Dept., reviewed by Julia Schneiderman July 1, 1994).

It is unclear whether or not all of the planned construction and modification was implemented. The accompanying photographic documentation intends, among other goals, to show some of the modifications, phases in construction and materials replacement that resulted from the architects/engineering drawings as they were executed.

- 5. Alterations and Additions: The Randolph/Wabash Street Station has had numerous alterations over the years, however, its overall appearance and character is quite intact. Below is a chronological list of the more extensive alterations to the station:
 - 1919: Platform extensions were drawn. As with other Wabash Avenue stations, these extensions nearly doubled the carrying capacity of the station and allowed longer trains access to the platforms at peak use periods. (CTA Engineering Archives, reviewed by E. Goldsmith 3 September 1996).

ca. 1920

Heating and plumbing mechanical drawings were produced for this station. (CTA Engineering Archives, reviewed by E. Goldsmith 3 September 1996)

1926-1930

Marshall Field & Company, department store, planned a direct access staircase leading from the northeast corner of the store to the west station house. During the same period, a wider staircase at the southwest entrance to the station was proposed. (CTA Engineering Archives, reviewed by E. Goldsmith 3 September 1996).

1956

The entire west station house was replaced with a structure completely different in both design and construction from that which had been designed by Waddell, the original being virtually identical in design and execution to the standing west station house at the Madison/Wabash station. Plan and elevation drawings show reconfigured seating areas, ticket booths and stairway locations. The specifications for the Randolph/Wabash stations call for material that would have been unavailable and/or unpopular three or four decades earlier, e.g., neoprene, and acoustic tile.

In addition, brushed aluminum and stainless steel, enameled metal paneling and prefabricated plastic for the waiting lounge seats were modern materials chosen to execute this contemporary building. The arcade of windows on the west, south and north sides of the station house is comprise of multi-pane panel sliding windows. (CTA Engineering Archives, reviewed by E. Goldsmith 3 September 1996).

1967

The east platform station house was demolished, and the width of the platform and mezzanine shortened by half. The columns which had been necessary as supports for the eastern edge of the east platform and had overhung the pedestrian crosswalk, were also removed. (City of Chicago September 1981, II-4)

PART II. ARCHITECTURAL INFORMATION

A. General Information:

- 1. Engineering Character: The Randolph/Wabash Station is of engineering merit based on four criteria. First, the station is of merit in the history of American industrial archaeology. Second, it is of merit for its association with financier and traction magnate, Charles T. Yerkes. Third, it is of merit for its role in defining and shaping Chicago's downtown. Fourth, from its inception, the Randolph/Wabash Station was a key portion in a system that serves as an extant example of the nation's second oldest elevated rail mass transit system.
- 2. Condition of Fabric: The condition of the fabric at the Randolph/Wabash station in fair to poor. In general, the material exhibiting the greatest extent of deterioration is that used for roofing, a function of exposure to the elements more than as a result of prolonged use by commuting passengers.
- 3. Summary Description: The Randolph/Wabash Station is a two level station that is elevated over the street by steel buttressing girders. The elevated is divided into two portions, the substructure and the superstructure. The substructure consists of a foundations, tress elevations, transverse sections, and a structural system. On older drawings, the substructure is referred to as the "subway." It is designated as substructure in this report to distinguish it from the underground subway mass transit system that was built in the 1930s and 1940s.

The superstructure consists of two levels. Although structurally unrelated to the surrounding buildings, it is clear from both profile and elevation perspectives that the station house -- at least the extant west station house -- bears an intentional visual relationship to the adjacent architecture. With an unbroken sight line between the buildings to its south and north, the station house gives the appearance of belonging to the architectural cityscape as much as it does to an elevated rail system. The first level serves as a transitional level for elevated passengers. The second level, or platform level, consists of two mirrored platforms separated by the elevated tracks. One platform serviced the Randolph/Wabash Station to the west, the mirror platform serviced the Randolph/Wabash Station to the east.

In general, the integrity of the Randolph/Wabash Station remains intact despite general maintenance deterioration and numerous minor alterations

(see Alterations and Additions section for discussion).

B. Description of Substructure:

- 1. Overall Dimensions: Not applicable. The Randolph/Wabash Station's substructure constitutes an integral and dependent segment of the overall Union Loop elevated substructure. As such, the Randolph/Wabash Station's overall dimensions are not applicable because they cannot be considered independent of the entire system.
- 2. Foundation: The structural system is anchored in the street below the Union Loop elevated system and is surrounded by asphalt and/or concrete.
- 3. Structural system: The station is supported by a steel buttressing girder system. This buttressing girder system in part consists of vertical I-beam sections that are rooted into the street below and surrounded by asphalt. These vertical I-sections measure 1'3" x 1'4 1/2". The vertical I-sections directly support closely spaced flat I-beams. These closely spaced flat I-beams in turn form part of the inverted tress elevation. Specifically, the elevated tracks are superimposed on the tress elevations which in turn is supported by the vertical I-sections. Additionally, the first level of the station is framed within the buttressing system, crossing the center line of the tracks at the street intersection. The second level is supported and extended out from the buttressing system.

C. Description of Superstructure:

1. First level: The building's first level interior is in fair condition. It is apparent that there has been some attempt to repair damages throughout the years.

The first level of the station is accessed via stairways which originate from the street level. There is one staircase on each corner of the Randolph Wabash intersection. Each of these four staircases features twenty-five stairs leading from the concrete sidewalk pavement to mezzanine, or first level, of the station. These steps measure 4' x 11" x 7". An additional, unusable staircase leading directly from ground level to the platform level is located along the pavement due north of the northwest corner staircase on Wabash Avenue. The locations of the interior staircases leading from mezzanine to platform levels is asymmetrical from east to west: on the east side of the the platform are two sets of stairs. On the west is an enclosed single stairwell that divides at a lower landing midway between mezzanine and platform levels.

There are no ticket booths or turnstiles at the first, mezzanine level. In general, the entire first level serves as s transition bridge that provides access to the east and west bound trains. The first-level provides this access above the street level and reduces passenger and vehicle traffic at the Randolph/Wabash intersection. The girders and columns themselves have also provided structural support for billboard advertising, traffic lights and window and masonry cleaning equipment.

2. Second level station: The second level station is in fair to good condition. The layout of the second level station varies from east to west platform. With the demolition of the east platform station house, the current east structure features a wooden ticket booth, an east wall constructed in plywood and fiberglass paneling, four-pane casement window panels.

The west platform is dominated by the station house. Within this building are two ticket booths, each with two adjacent ticket booth turnstiles, and a row of seats facing east. Behind the row of seats is a dividing railing, in a horizontal line with the configuration of ticket booths and turnstiles, separating the paying passengers on the eastern half of the west station from those who have just entered the station house on the western half.

3. Second level train loading platforms: The roof of the station is slanted at each side and meets at a point in the middle. It is made of corrugated sheet metal. The roofs that cover Thai stairways are flat, slant down towards the street and are also made of corrugated sheet metal. The roofs that cover the stairs are in poor condition, the paint is peeling and the corrugated sheet metal is heavily oxidized.

D. Site and Surroundings:

1. General Setting and Orientation: The Randolph/Wabash Station is located in the heart of downtown Chicago and contributes to the definition of the Loop area. Regional mass transit stations, buses and the underground subway system are within close proximity to the elevated trains at Randolph and Wabash Avenue. In particular, this station has enjoyed long-standing association with

the Marshall Fields department store that has served as a commercial anchor in the central downtown business district for a century. At present, the Randolph/Wabash station is girded by commercial buildings and parking garages.

PART III. SOURCES OF INFORMATION

A. Architectural Drawings and Photographs:

Chicago Transit Authority Archives, Engineering Department, drawings on microfilm and photo-reproducible drawings made available by mssrs. Clifford Hayes and Moses Sampson, reviewed by E. Goldsmith September 3, 1996.

Chicago Transit Authority Library, photographs and reports made available by CTA staff librarian Violet Brooks, reviewed by E. Goldsmith September 4, 1996.

B. Bibliography:

A History of the Yerkes System of Street Railways (from the Earliest Organization of the Horse Railway to the Present Development of Cable Electric and Elevated Railway of the North and West Districts) Chicago, 1897.

Bach, Ira J. and Susan Wolfson. A Guide to Chicago's Train Stations Past and Present. Athens, Ohio: Ohio University Press, 1986.

Brown, Kathi Ann. Diversity by Design: Celebrating Seventy-Five Years of Howard Needles Tammen & Bergendoff 1915-1989. Kansas City: HNTB, 1989.

"Chicago Elevated Terminal Railway Ordinance," as passed by the City Council of the City of Chicago, November 5, 1981 and approved by His Honor the Mayor, November 9, 1981, by its President, Joseph T. Torrence and attested by its corporate seal.

Chicago Rapid Transit Company. Annual Reports for the years 1924, 1925, 1926, 1928, 1929, 1931, 1933, 1934.

Chicago Transit Authority. "The Story of the Chicago Rapid Transit Lines: The "L" System." 37th Anniversary Year Book of Division 308, Elevated Railway Employees, reprinted May 1, 1940.

City of Chicago. "The Chicago Union Loop Elevated Structure: Reasons for Not Listing on the National Register of Historic Places" Submitted to the Illinois Historic Sites Advisory Council, October 13, 1976.

City of Chicago and Chicago Transit Authority. Master Plan for the Loop Elevated: Rehabilitation and Historic Preservation. September, 1981.

Clement, Dan. HAER IL-1 "Written Historical and Descriptive Data for the Union Elevated Railroad." Historic American Engineering Record, United States Department of the Interior, National Park Service, 1983.

Cudahy, Brian J. "Chicago's Early Elevated Lines and the Construction of the Union Loop," *Chicago History* Volume VIII, Winter 1979-80, pp. 194-205.

Cudahy, Brian J. Destination Loop: The Story of Rapid Transit Railroading in and Around Chicago. Brattleboro, VT: The Stephen Green Press, 1982.

Duis, Perry. "Whose City? Part Two," Chicago History Volume XII, No. 2, 1983.

The Economist. Street Railway Supplement, 1896.

Hayes, Dorsha B. Chicago: Crossroads of American Enterprise. A Cities of America Biography. New York: Julian Messner, Inc., Publishers, 1944.

Hirsch, Susan E. and Robert I. Goler. A City Comes of Age: Chicago in the 1890s. Chicago: The Chicago Historical Society, 1990.

Hood, Clifton. 722 Miles: The Building of the Subways and how they Transformed New York. New York: Simon & Schuster, 1993.

The Inter-Ocean. "Lease of Loop is Signed: Elevated Trains will Soon be Running Down Town," Volume XXVI. Number 193, Chicago, Sunday, October 8, 1897.

The Lakeside Annual Directory for the City of Chicago. Chicago: Illinois: The Chicago Directory Company, 1897, 1898.

Malone, Dumas, ed. Dictionary of American Biography, Volume XX, New York: Charles Scribner's Sons, 1936.

Mayer, Harold M. and Richard C. Wade. Chicago: Growth of a Metropolis. Chicago: University of Chicago Press, 1969.

Missouri Highway and Transportation Department, "Written Historical and Descriptive Data for the Armour, Swift, Burlington Bridge (A.S.B.); Winner Bridge; Missouri River Bridge; Fratt Bridge; North Kansas City Bridge," Historic American Engineering Record, United States Department of the Interior, May, 1982.

Miszczuk, Edward J. "Fratt Bridge; Armour-Swift-Burlington Bridge," National Register of Historic Places nomination form, National Park Service, United States Department of the Interior, 1976.

Platt, Harold L. "Samuel Insull and the Electric City," Chicago History, Volume XV, No. 1, Spring 1986, pp. 20-35.

Sande, Theodore Anton. Industrial Archeology: A New Look at the American Heritage. Brattleboro, VT: The Stephen Greene Press, 1976.

Sinkevitch, Alice. AIA Guide to Chicago. San Diego: Harcourt Brace & Co., 1993.

Weber, Harry P. "An Outline History of Chicago Traction," (compiled for Chicago Railways Co. and Walter J. Cummings and Guy A. Richardson, Its Receivers and Chicago City Railway Co., Calumet & South Chicago Railway Co., and Edward E. Brown and Harvey B. Fleming, Their Receivers). Chicago, 1936.

Weese, Harry. "Chicago Loop Elevated," National Register of Historic Places nomination form. National Park Service, United States Department of the Interior, 1978.

Prepared by:

Archaeological Research, Inc. 900 West Jackson Boulevard, Suite 6E Chicago, Illinois 60607

PART IV. PROJECT INFORMATION

This project was undertaken by the City of Chicago as it fulfilled Section 106 compliance requirements for a project that will affect the Randolph Wabash Station. The station is slated for demolition. The firm of Ross-Barney Jankowski contracted Archaeological Research, Inc. for the HAER documentation. Key project personnel included Elizabeth Goldsmith, historical researcher, Karen Poulson project manager, Ron Gordon, photographer, and David Keene, principal investigator.

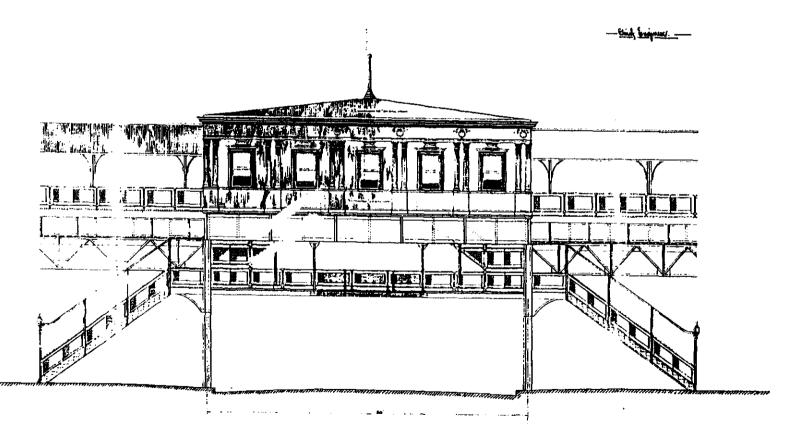
- <u>Union Elevated Railroad,</u>

- Randolph ~ Street ~ Station .-

- Chicago all October 264 1896

- Scale 4 = 1864. -

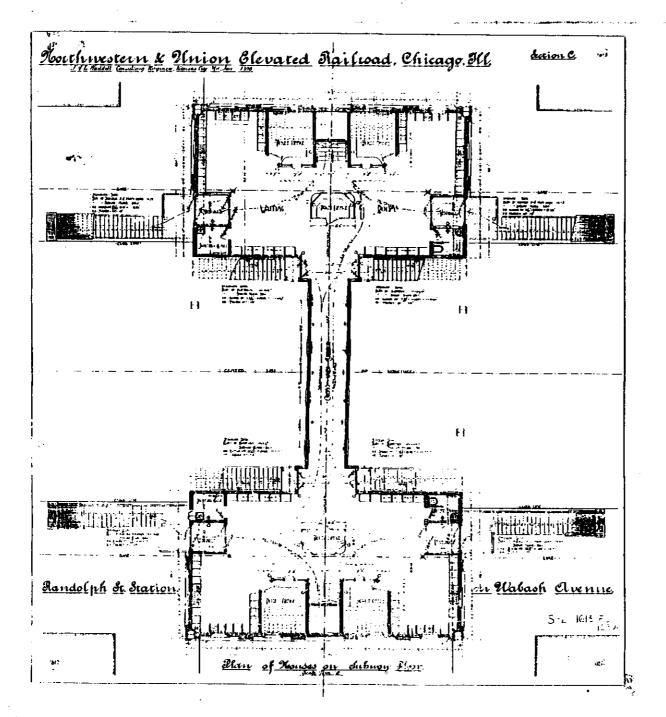
agrand Charles Killeston

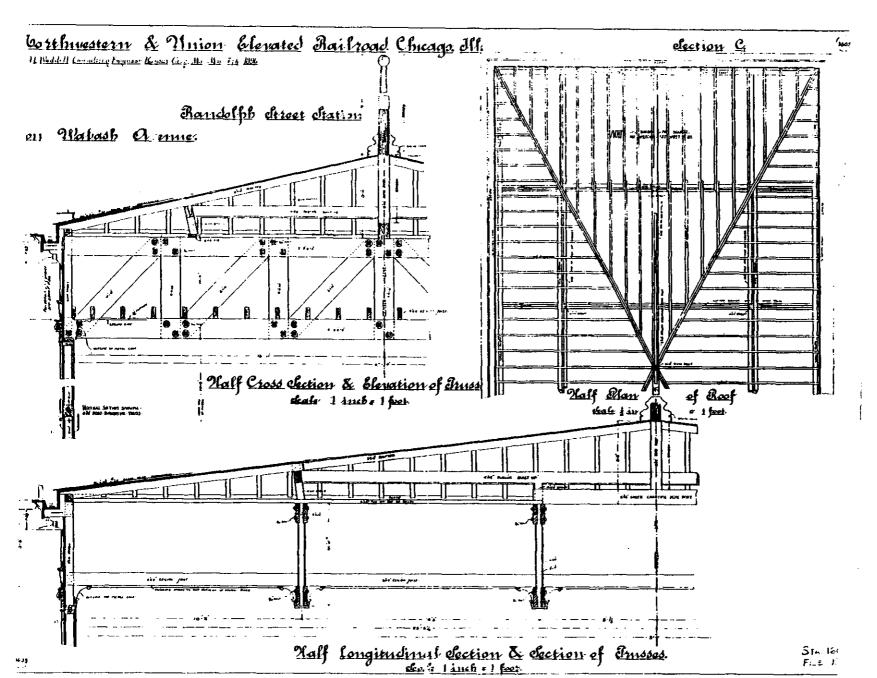


Union Elevated Railroad,
Randolph/Wabash Avenue Station
(Union Elevated Railroad,
Randolph Street Station)
HAER No. IL-1-D
Page 12

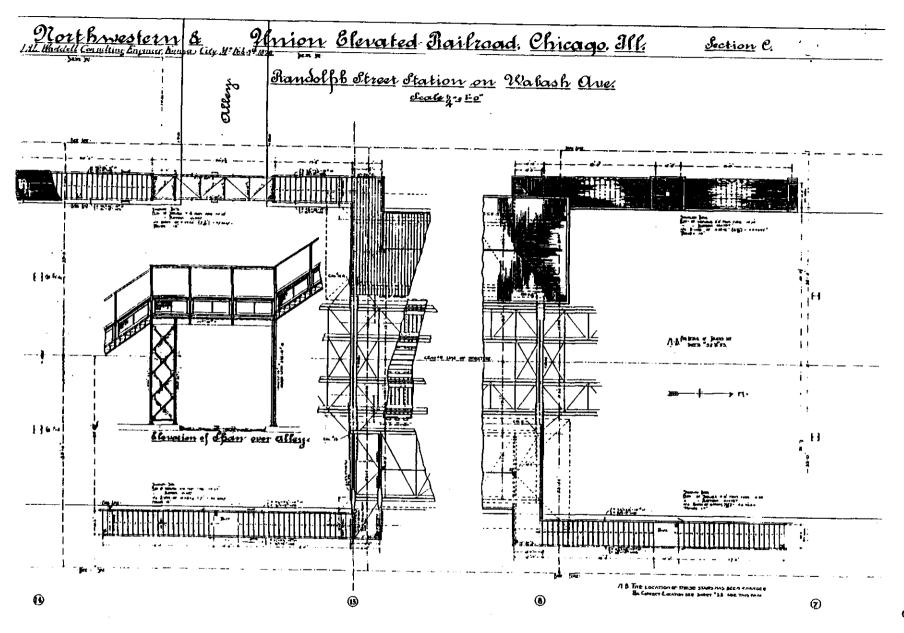
(stoming attention)

Washington/Wabash Loop Elevated Station Environmental Assessment - Appendices STA. 1610 FILE 153 A





Randolph/Wabash Avenue Station
(Union Elevated Railroad,
Randolph Street Station)
HAER No. IL-1-D
Page 14



Han showing final location of brit Stairmans.

Microsoft (MED

Ste 1662 Field

Union Elevated Railroad, Madison/Wabash Avenue Station Madison Street and Wabash Avenue City of Chicago Cook County Illinois HAER No.

IL-1-I

HAER ILL 16-CHIG, 108I-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
Rocky Mountain System Support Office
National Park Service
P.O. Box 25287
Denver, Colorado 80225-0287

HAER ILL 16-CHIG, 108I—

HISTORIC AMERICAN ENGINEERING RECORD UNION ELEVATED RAILROAD MADISON/WABASH STATION

Madison and Wabash City of Chicago Illinois

HAER No. IL-1-I

Location:

Madison Street and Wabash Avenue, Chicago, Cook County, Illinois

Present Owner: Chicago Transit Authority

Present Use:

Rapid Transportation

Significance:

Significant in the history of American industrial archaeology, the Union Loop Elevated is also important for its association with financier and traction magnate, Charles T. Yerkes and for its role in defining and shaping Chicago's downtown. According to Theodore Anton Sande, author of Industrial Archeology: A New Look at the American Heritage, to "the industrial archeologist, the Chicago Loop provides an ideal case study" (1976, 113). Having made its first run in 1897, the Union Loop Elevated is one of only a few extant examples of transit systems that have remained in continuous operation for nearly a century. A "massive web of riveted steel girders and shining tracks," the Loop Elevated was designed by John Alexander Low Waddell, a Canadian-born engineer who played an important role in the history of American bridge design.

PART 1. HISTORICAL INFORMATION

A. Physical History

Date of Erection:

1897

- 2. Architect: The designer of the Loop Elevated and the Madison/Wabash station was John Alexander Low Waddell (1854-1938), Consulting Engineer of Kansas City, Missouri. For additional information on Waddell, see HAER No. IL-1.
- 3. Builder, contractor, suppliers: Construction materials acquired from Pencoyd Iron Works, Pencoyd, Pennsylvania. (CTA 1981, 3). Some of the architectural/engineering drawings specify re-use of materials from older stations in the process of demolition. (CTA Engineering Archives, reviewed by E. Goldsmith September 3, 1996).

4. Original plans and construction: A single, unsigned "type" drawing appeared as early as 1895, for all of the Wabash stations, depicting fanciful and ornate Art Nouveau metal grillwork, glass canopies and a central, arched entrance with surrounding staircases facing inward toward the intersection. By 1896, a more complete set of drawings for the Madison Street Station was produced by J. A. Waddell which became the working specifications from which the actual stations were built. The client's name is listed as Northwestern and Union Elevated Railroad, Chicago, Illinois. The drawings are on microfilm in the archives of the Chicago Transit Authority (CTA Archives, Engineering Dept., reviewed by Julia Schneiderman July 1, 1994).

It is unclear whether or not all of the planned construction and modification was implemented. For example, one of Waddell's 1896 drawings shows the dimensions and locations of double height exit stairs leading directly from platform to curbside level. At present, however, only four sets of stairs leading from curbside to the first level, or mezzanine crossover corridor, are in evidence. The accompanying photographic documentation intends, among other goals, to show some of the modifications, phases in construction and materials replacement that resulted from the architects/engineering drawings as they were executed.

5. Alterations and Additions: The Madison/Wabash Street Station has had numerous alterations over the years, however, its overall appearance and character is quite intact. Additions to the structure are clearer to document than removal of structural elements because they require drawings. The existing stations appears more massive at the west platform than the east, i.e., more massive from "inside" the Loop than from "outside" it because a portion of the east platform has been removed. (Mike Wimmer, McDonough & Associates, Engineers, personal conversation: September 1996). The CTA Engineering Department Archives do not include visual documentation of the removal of the eastern section of the east station house. Below is a chronological list of the more extensive alterations to the station:

1903: Platform extensions were added to the station.
Platforms were lengthened to accommodate longer trains

Union Elevated Railroad, Madison/Wabash Station HAER No. IL -1-I Page 3

in response to growing ridership demands. The platform extensions were symmetrical on both east and west sides and on the north and south sides of the platform level waiting areas, but were only intended for passenger traffic. Without the overhead canopies and seating areas of the main platform sections, these overflow areas discouraged loitering and were intended to provide access to and from trains during peak periods when longer trains were pulled up the station. During this same year, Schlesinger & Mayer department store planned for a corridor between one of its southeast entrances and a northwest platform entrance. There is no indication that an original corridor even existed at that date, nor that this alteration was ever executed. The planned access to private retail emporia proved controversial, as the City and the Union Consolidated fought over franchise privileges (Moffat, 1995: 177-181: CTA Archives, Engineering Department, reviewed by E. Goldsmith, September 3 1996).

1908

Drawings by B. B. Schrager show modifications of the interior of the East platform station including the removal of the north ticket booth and new handrails.

1913-1933

A series of changes were made to the Union Loop Elevated to allow for through-routing and unified service with free transfer between lines. These changes reflected the immense popularity of the Loop elevated train lines, civic recognition of the importance of the Loop trains to the downtown economy, and the profitability of the elevated lines which allowed for greater uniformity of design and construction from one station to the next.

In addition, the advent of automobile traffic required the removal of structural columns along Wabash Avenue to allow for wider vehicle lanes beneath the tracks. As revealed in drawings from this period, these modifications included provision for turnstiles and partition gating to improve traffic flow at the mezzanine level, centralized ticketing, widening of of existing stairways and the erection of an overhead transfer bridge which is suspended from the station house roofs on the

Washington/Wabash Loop Elevated Station Environmental Assessment - Appendices

91

south side of the Madison Street Station. Drawings from this period specify replacing existing materials with those having greater durability (e.g., asphalt floor and stair tread covering over wood). By 1924, drawings indicate that the station was no longer held by the Northwestern Elevated, but instead as part of the larger Chicago Rapid Transit Company. (City of Chicago September 1981, II-4; CTA Archives, Engineering Department, reviewed by E. Goldsmith September 3, 1996).

ca. 1927

Holabird and Roche, Architects, proposed a bridge extending from the southeast mezzanine level of Mandel Brothers Department Store to the mezzanine level of the elevated station. Other drawings from this year depict the new locations of columns in relations to pavement modification along the the northeast corner of the intersection of Madison and Wabash. (CTA Engineering Archives, reviewed by E. Goldsmith, September 3, 1996).

1967

A program of system-wide modernization included at the Madison Street Station replacing multi-paned glass windows with corrugated fiberglass windbreaks. In this year, the east station house was demolished and the east portion of the east platform truncated. (City of Chicago September 1981, II-4)

PART II. ARCHITECTURAL INFORMATION

A. General Information:

1. Engineering Character: The Madison/Wabash Station is of engineering merit based on four criteria. First, the station is of merit in the history of American industrial archaeology. Second, it is of merit for its association with financier and traction magnate, Charles T. Yerkes. Third, it is of merit for its role in defining and shaping Chicago's downtown. Fourth, from its inception, the Madison/Wabash Station was a key portion in a system that serves as an extant example of the nation's second oldest elevated rail mass transit system.

- 2. Condition of Fabric: The condition of the fabric at the Madison/Wabash station in fair to poor. Peeling paint and oxidized and corroded metal are in evidence throughout the station, especially the thinner metal roofs, but the overall condition does not appear to detract from its viability as a functioning structure.
- 3. Summary Description: The Madison/Wabash Station is a two level station that is elevated over the street by steel buttressing girders. The elevated is divided into two portions, the substructure and the superstructure. The substructure consists of a foundations, tress elevations, transverse sections, and a structural system. On older drawings, the substructure is referred to as the "subway." It is designated as substructure in this report to distinguish it from the underground subway mass transit system that was built in the 1930s and 1940s.

The superstructure consists of two levels. The first, or mezzanine, level serves as a transitional level for elevated passengers. The second level, or platform level, consists of two mirrored platforms separated by the elevated tracks. One platform serviced the Madison/Wabash Station to the west, the mirror platform serviced the Madison/Wabash Station to the east. On the east and west platforms were two centrally located station houses with adjacent canopied shelters. Over the years, the station houses have provided some degree of comfort and shelter from the elements, and the earliest architectural drawings make provisions for public amenities. On each of the platforms are conveniences such as benches in wood and metal, telephones and wastebaskets. The east platform no longer features an enclosed station house and waiting area. The west platform's station house is still in use for office and possible storage facilities, but is inaccessible to passengers. In general, the integrity of the Madison/Wabash Station remains intact despite general maintenance deterioration and numerous minor alterations (see Alterations and Additions Section for discussion).

B. Description of Substructure:

1. Overall Dimensions: Not applicable. The Madison/Wabash Station's substructure constitutes an integral and functionally dependent segment of the overall Union Loop elevated substructure. As such, the Madison/Wabash Station's overall dimensions are not applicable because they cannot be considered independent of the entire system.

- 2. Foundation: The structural system is anchored in the street below the Union Loop elevated system and is surrounded by asphalt and/or concrete. As with the other Wabash Avenue stations that sit directly above street intersections, four I-beam columns are anchored into the sidewalk pavement, with two additional western columns supporting the west station house under its north and south corners, overhanging the pedestrian intersection and adjacent pavement along the west side of the Wabash at the Madison intersection. 1890s drawings indicate four additional columns positioned within the intersection itself. Today, only six of the eight columns remain.
- 3. Structural system: The station is supported by a steel buttressing girder system. This buttressing girder system in part consists of vertical I-beam sections that are rooted into the street below and surrounded by asphalt. These vertical I-sections measure 1'3" x 1'4 1/2". The vertical I-sections directly support closely spaced flat I-beams. These closely spaced flat I-beams in turn form part of the inverted tress elevation. Specifically, the elevated tracks are superimposed on the tress elevations which in turn is supported by the vertical I-sections. Additionally, the first level of the station is framed within the buttressing system, crossing the center line of the tracks at the street intersection. The second level is supported and extended out from the buttressing system.

C. Description of Superstructure:

1. First level: The building's first level is in very poor condition. The ceiling is incomplete, layers of peeling paint with areas of heavy oxidation. It is apparent that there has been some attempt to repair damages throughout the years. In general, repairs have been conducted piecemeal but usually with an attempt to increased durability of materials.

The first level of the station is accessed via stairways which originate from the street level. There is one staircase on each corner of the Madison & Wabash intersection. Each of these four staircases features twenty-five stairs leading from the concrete sidewalk pavement to mezzanine, or first level, of the station. These steps measure 4' x 11" x 7". Two turnstiles, that serve as exits from the second level, exist on the west and north sides of the mezzanine level. In general, the entire first level serves as a transition bridge that provides access to the east and west bound trains. The first level provides this access above the street level and reduces passenger and vehicle traffic at the Madison/Wabash intersection. The passageway that accesses east to west halves of the station

Union Elevated Railroad, Madison/Wabash Station HAER No. IL -1- I Page 7

is located at the south side of the mezzanine, while the ticketing area, with two booths and gates, half-height automatic ticket turnstiles, are located in the middle and northern section of the mezzanine. This ticketing area and four sets of stair to the platform are partitioned from the corridor with floor to ceiling height metal grillwork. The girders and columns themselves also provide structures from which traffic lights and signs are hung and as supports from which window and masonry cleaning equipment is suspended.

Some traces of original decoration are in evidence, especially near the top entrance to the southwest stairs. Wall tile is executed in 4" x 4" raised box floral design in an alternating pattern, while ceiling decoration is carried out on a larger scale (8" x 8").

The condition of these walls is fair; peeling paint has exposed the cast iron beneath, which has become badly oxidized. The are no exterior windows that are used by passengers on the first level of the station. There are, however, half walls, constructed in either plywood or fiberglass. The top half of these walls has been left open for ventilation.

2. Second level station: The second level is in poor condition. Roof oxidation and corrosion is severe. This level is laid out approximately the same on the north and south side. There are no longer any ticketing facilities on the second level. There are three benches on the west platform and two on the east. Plexiglas partitions around benches are all that remain of enclosed shelters for seated passengers. The roof of the station is slanted at each side and meets at a point in the middle. It is made of corrugated sheet metal. The roofs that cover the stairways are flat, slant down towards the street and are also made of corrugated sheet metal. The roofs that cover the stairs are in poor condition, the paint is peeling and the corrugated sheet metal is heavily oxidized.

At the south end of the train platform there is a pedestrian transfer bridge that connects the west bound train platform to the east bound train platform. This pedestrian transfer bridge crosses over the elevated tracks. The pedestrian transfer bridge allows passengers to switch train direction with paying an additional transfer fee.

The transfer bridge has twenty steps leading up the first landing, then four steps leading up to the actual bridge. The handrails on the outside of the staircase are wood and rail running up the middle of it is metal. The floor is wood slats. A metal swing gate is located in the middle of the bridge. There

are six fluorescent lights on the roof of the bridge and two on the roof of the staircase. The roof covering the stairs and bridge is made of corrugated sheet metal. On the outsides of the bridge at the center line are two vertical panels of corrugated sheet metal jutting out at right angles. These panels appear to provide some measure of stabilization from vibration when trains passed below.

D. Site and Surroundings:

1. General Setting and Orientation: The Madison/Wabash Station is located in the heart of downtown Chicago and contributes to the definition of the Loop area. Regional mass transit stations, buses and the underground subway system are within close proximity to the elevated trains at Madison and Wabash Avenue. In particular, this station has enjoyed long-standing association with department stores that have served as commercial anchors in the central downtown business district for a century. At present, the Madison/Wabash station is girded by commercial buildings and parking garages.

PART III. SOURCES OF INFORMATION

A. Architectural Drawings and Photographs:

Chicago Transit Authority Archives, Engineering Department, drawings on microfilm and photo-reproducible drawings made available by mssrs. Clifford Hayes and Moses Sampson, reviewed by E. Goldsmith September 3, 1996.

Chicago Transit Authority Library, photographs and reports made available by CTA staff librarian Violet Brooks, reviewed by E. Goldsmith September 4, 1996.

B. Bibliography:

A History of the Yerkes System of Street Railways (from the Earliest Organization of the Horse Railway to the Present Development of Cable Electric and Elevated Railway of the North and West Districts) Chicago, 1897.

Bach, Ira J. and Susan Wolfson. A Guide to Chicago's Train Stations Past and Present. Athens, Ohio: Ohio University Press, 1986.

Brown, Kathi Ann. Diversity by Design: Celebrating Seventy-Five Years of Howard Needles Tammen & Bergendoff 1915-1989. Kansas City: HNTB,

1989.

"Chicago Elevated Terminal Railway Ordinance," as passed by the City Council of the City of Chicago, November 5, 1981 and approved by His Honor the Mayor, November 9, 1981, by its President, Joseph T. Torrence and attested by its corporate seal.

Chicago Rapid Transit Company. Annual Reports for the years 1924, 1925, 1926, 1928, 1929, 1931, 1933, 1934.

Chicago Transit Authority. "The Story of the Chicago Rapid Transit Lines: The "L" System." 37th Anniversary Year Book of Division 308, Elevated Railway Employees, reprinted May 1, 1940.

City of Chicago. "The Chicago Union Loop Elevated Structure: Reasons for Not Listing on the National Register of Historic Places" Submitted to the Illinois Historic Sites Advisory Council, October 13, 1976.

City of Chicago and Chicago Transit Authority. Master Plan for the Loop Elevated: Rehabilitation and Historic Preservation. September, 1981.

Clement, Dan. HAER IL-1 "Written Historical and Descriptive Data for the Union Elevated Railroad." Historic American Engineering Record, United States Department of the Interior, National Park Service, 1983.

Cudahy, Brian J. "Chicago's Early Elevated Lines and the Construction of the Union Loop," *Chicago History* Volume VIII, Winter 1979-80, pp. 194-205.

Cudahy, Brian J. Destination Loop: The Story of Rapid Transit Railroading in and Around Chicago. Brattleboro, VT: The Stephen Green Press, 1982.

Duis, Perry. "Whose City? Part Two," Chicago History Volume XII, No. 2, 1983.

The Economist. Street Railway Supplement. 1896.

Hayes, Dorsha B. Chicago: Crossroads of American Enterprise. A Cities of America Biography. New York: Julian Messner, Inc., Publishers, 1944.

Hirsch, Susan E. and Robert I. Goler. A City Comes of Age: Chicago in the 1890s. Chicago: The Chicago Historical Society, 1990.

Hood, Clifton. 722 Miles: The Building of the Subways and how they Transformed New York. New York: Simon & Schuster, 1993.

Washington/Wabash Loop Elevated Station Environmental Assessment - Appendices

Union Elevated Railroad, Madison/Wabash Station HAER No. 1L-1-I Page 10

The Inter-Ocean. "Lease of Loop is Signed: Elevated Trains will Soon be Running Down Town," Volume XXVI. Number 193, Chicago, Sunday, October 8, 1897.

The Lakeside Annual Directory for the City of Chicago. Chicago: Illinois: The Chicago Directory Company, 1897, 1898.

Malone, Dumas, ed. *Dictionary of American Biography*, Volume XX, New York: Charles Scribner's Sons, 1936.

Mayer, Harold M. and Richard C. Wade. *Chicago: Growth of a Metropolis*. Chicago: University of Chicago Press, 1969.

Missouri Highway and Transportation Department, "Written Historical and Descriptive Data for the Armour, Swift, Burlington Bridge (A.S.B.); Winner Bridge; Missouri River Bridge; Fratt Bridge; North Kansas City Bridge," Historic American Engineering Record, United States Department of the Interior, May, 1982.

Miszczuk, Edward J. "Fratt Bridge; Armour-Swift-Burlington Bridge," National Register of Historic Places nomination form, National Park Service, United States Department of the Interior, 1976.

Platt, Harold L. "Samuel Insull and the Electric City," Chicago History, Volume XV, No. 1, Spring 1986, pp. 20-35.

Sande, Theodore Anton. Industrial Archeology: A New Look at the American Heritage. Brattleboro, VT: The Stephen Greene Press, 1976.

Sinkevitch, Alice. AIA Guide to Chicago. San Diego: Harcourt Brace & Co., 1993.

Weber, Harry P. "An Outline History of Chicago Traction," (compiled for Chicago Railways Co. and Walter J. Cummings and Guy A. Richardson, Its Receivers and Chicago City Railway Co., Calumet & South Chicago Railway Co., and Edward E. Brown and Harvey B. Fleming, Their Receivers). Chicago, 1936.

Weese, Harry. "Chicago Loop Elevated," National Register of Historic Places nomination form. National Park Service, United States Department of the Interior, 1978.

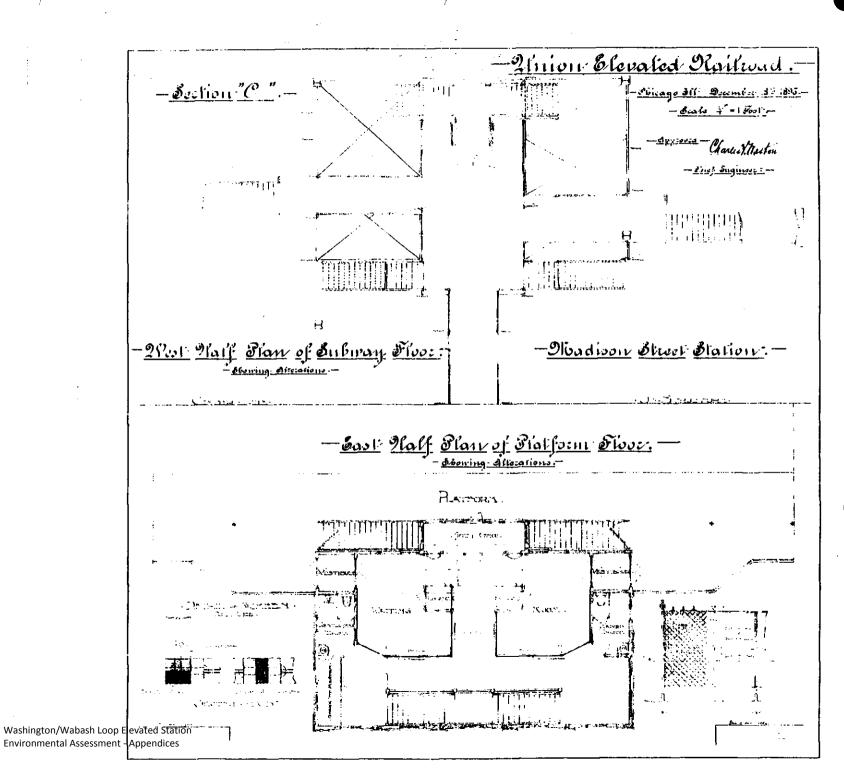
Union Elevated Railroad, Madison/Wabash Station HAER No. IL-1-I Page 11

Prepared by:

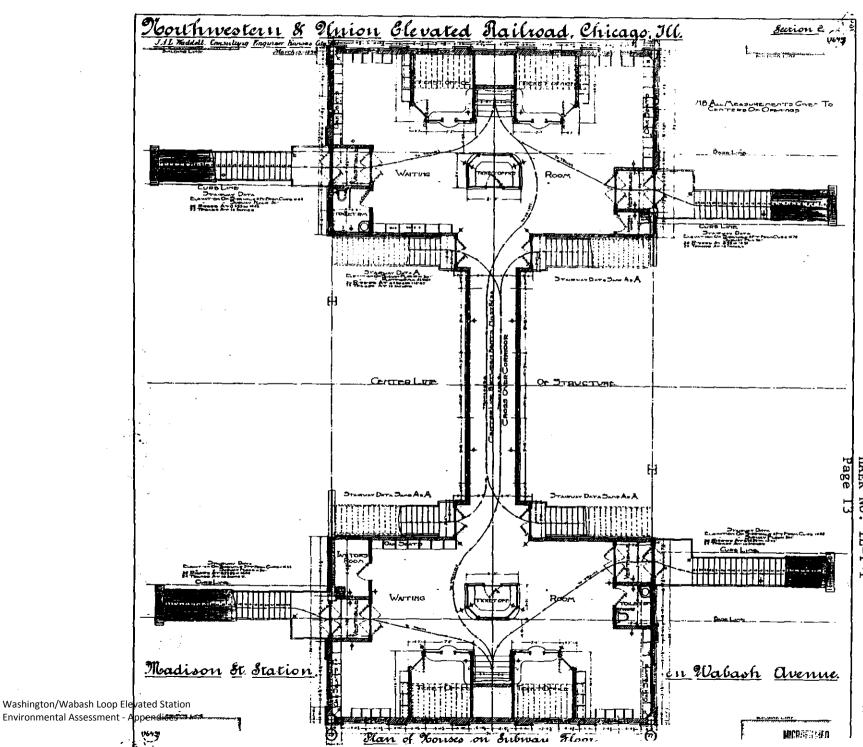
Archaeological Research, Inc. 900 West Jackson Boulevard, Suite 6E Chicago, Illinois 60607

PART IV. PROJECT INFORMATION

This project was undertaken by the City of Chicago as it fulfilled Section 106 compliance requirements for a project that will affect the Madison/Wabash Station. The station is slated for demolition. The firm of Ross-Barney Jankowski contracted Archaeological Research, Inc. for the HAER documentation. Key project personnel included Elizabeth Goldsmith, historical researcher, Karen Poulson project manager, Ron Gordon, photographer, and David Keene, principal investigator.



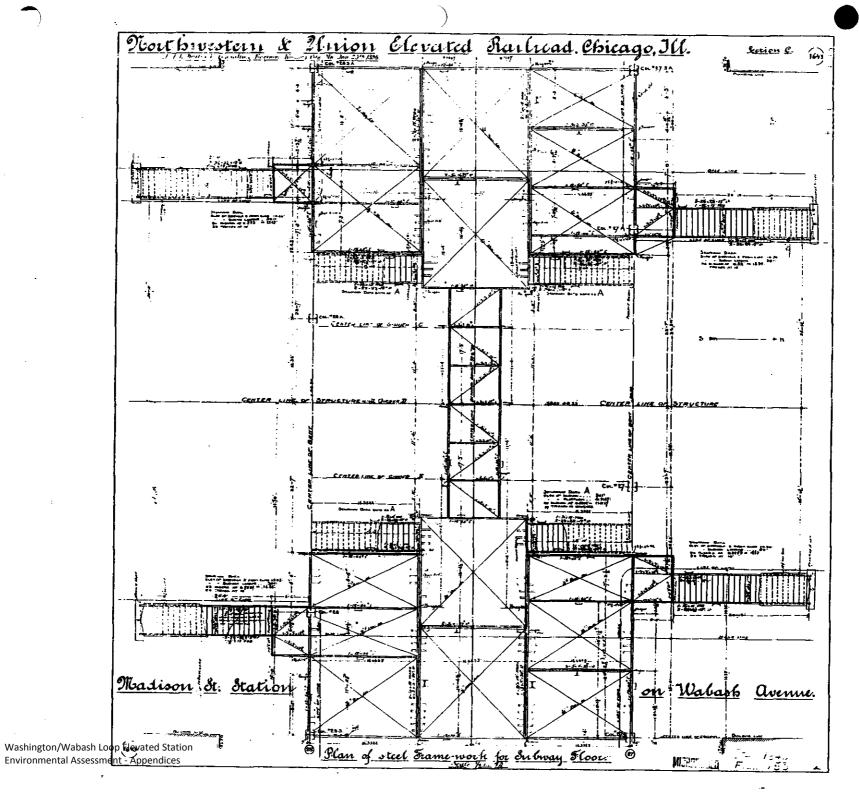
Madison/Wabash Station
MAER No. IL-1-I



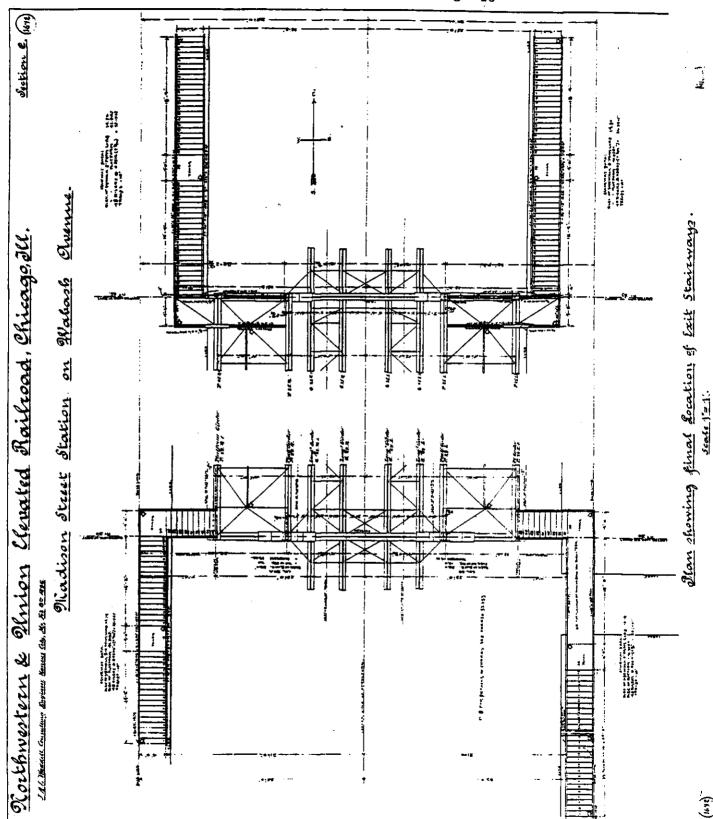
Union Elevated Railroad, Madison/Wabash Station HAER No. IL-1-I

101

Union Elevated Railroad, Madison/Wabash Station HAER No. IL-i-I Page 14



Union Elevated Railroad, Madison/Wabash Station HAER No. IL-1-I Page 15



City of Chicago 1981 Master Plan for the Loop Elevated

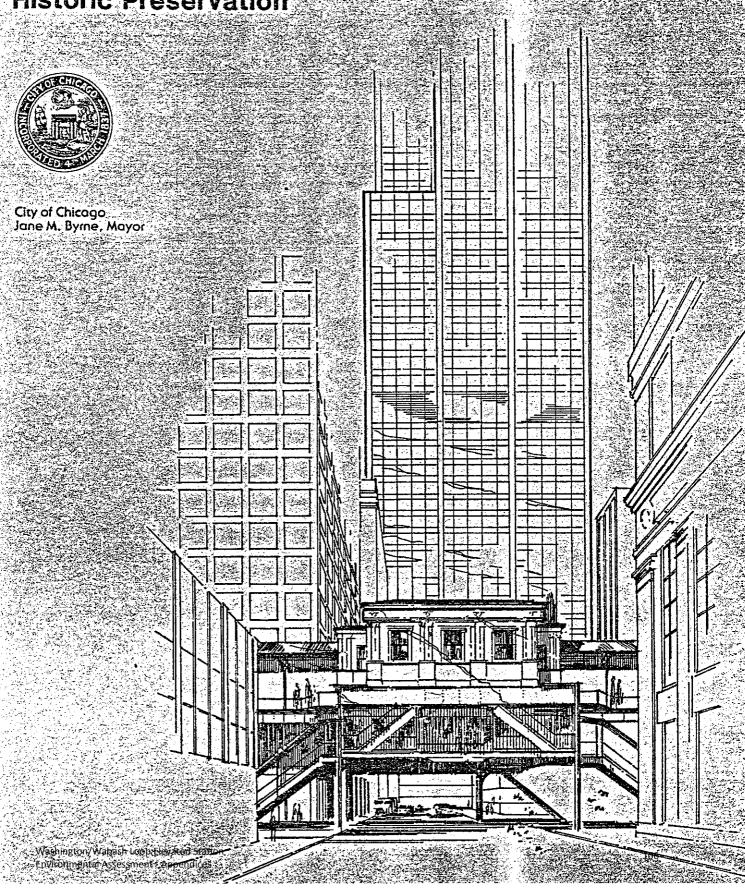
Excerpt from 1981 City of Chicago Master Plan for the Loop Elevated Rehabilitation and Historic Preservation Washington/Wabash Loop Elevated Station

Appendix B - 1981 City of Chicago Master Plan Excerptor

Master Plan for the Loop Elevated

Rehabilitation and





MASTER PLAN FOR THE LOOP ELEVATED REHABILITATION AND HISTORIC PRESERVATION

CITY OF CHICAGO

Jane M. Byrne, Mayor

Ira J. Bach Senior Advisor to the Mayor

Jerome R. Butler, Commissioner Department of Public Works

Martin R. Murphy, Commissioner Department of Planning

CHICAGO TRANSIT AUTHORITY

Eugene M. Barnes, Chairman
Theodore G. Schuster, Executive Director

September, 1981

MASTER PLAN FOR THE LOOP ELEVATED REHABILITATION AND HISTORIC PRESERVATION

	TABLE OF CONTENTS		PAGE	
	FORWARD	STIPULATIONS IN SUPPORT OF THE DETERMINATION OF NO ADVERSE EFFECT OF THE CHICAGO LOOP ELEVATED REHABILITATION PROJECT	i	included earlier in this appendix as part of 1981 UMTA Correspondence
	CHAPTER I	INTRODUCTION		
		Introduction	.I-2	
	CHAPTER II	HISTORY OF THE LOOP ELEVATED		
		Background	II-1 II-3	Sections marked
		D. Graphics Section - Lake-Randolph/Wells E. Graphics Section - Washington/Wells F. Graphics Section - Madison/Wells G. Graphics Section - Quincy/ Wells H. Graphics Section - LaSalle/VanBuren	II-16 II-25 II-29 II-34	by boxes appear in the following
		 I. Graphics Section - Dearborn/VanBuren J. Graphics Section - State/VanBuren K. Graphics Section - Adams/Wabash 	II-49 II-51 II-55	pages of this appendix
		L. Graphics Section - Madison/Wabash M. Graphics Section - Randolph/Wabash		аррения
		N. Graphics Section - State/Lake O. Graphics Section - Clark/Lake	II-75 II-81	•.
	CHAPTER III	DEVELOPMENT OF THE MASTER PLAN		7
	. •	A. Trestle Discussion	II-2	
			II-16 II-19 II-25 II-31	
		H. Randolph/Wabash and Madison/WabashI I. State/LakeI	II-36 II-42	
•		J. Clark/LakeI		
	CHAPTER IV	HISTORIC EFFECTS OF MASTER PLAN IMPLEMENTATION AND PRESENTATION OF THE MASTER PLAN	N:	
		A. Historic Effects B. Presentation of the Plan		
	APPENDIX	BIBLIOGRAPHY	.A-1	

CHAPTER I

INTRODUCTION

This report, <u>Master Plan For The Loop Elevated Rehabilitation and Historic Preservation</u>, describes the recommendations for the various physical improvements to the Chicago Central Business District's (CBD) elevated rapid transit network, The Loop Elevated. These recommendations are being made to assure the provision of safe, adequate, convenient and comfortable public transportation into the 21st Century. The recommendations are based on an evaluation of the structural integrity of existing facilities, ridership patterns, and both current and future development trends throughout the City's central area.

The development of this Master Plan has involved the coordinated efforts of the City's Departments of Planning and Public Works and the Chicago Transit Authority (CTA).

The topics covered in this report are organized into four chapters. The first chapter provides the background policy statements and rationale for retention of the Loop Elevated system. Chapter II presents a history of the Loop Elevated System and changes that have occurred during the course of its continual use since 1897. Chapter III sets out the goals of the renovation recommendations as applied to the two distinct components of the structure, namely the supporting trestle and the stations. Together, these three chapters introduce and apply the criteria for evaluation of the existing and proposed operation. The final chapter is devoted to a description of the renovated Loop Elevated facility and application of the National Register Criteria to each element of the Master Plan. This is necessary since the proposed renovation project is Federally assisted and the Loop Elevated System has been determined to be eligible for the National Register of Historic Places. Within this chapter will be found the framework for the proposed Memorandum of Agreement, which outlines specific actions that will be taken to assure no adverse effect results from the implementation of the rehabilitation activities set forth in the Master Plan.

The master Plan for rehabilitating the Loop Elevated must address three vital issues: 1) the physical integrity of the Loop Elevated trestle structure; 2) the siting of stations on the rehabilitated Loop El; and 3) the value of Loop Elevated Structure as a site of historic importance.

First, in anticipation of the Franklin Street Subway and the Monroe Distributor Subway, both CBD transit projects designed to replace the Loop Elevated, maintenance on the Loop El has been deferred. A necessary step in planning for the use of the Loop Elevated structure for the next 40 years is an evaluation of the structure's physical condition, as well as the condition of the Loop Elevated approaches. This effort is presently being carried out by the Chicago Transit Authority.

The second critical issue in planning the Loop Elevated Rehabilitation is the siting and design of stations located on the upgraded Loop El. Stations sited and designed to best meet the demands of transit patrons and the operational requirements of the Chicago Transit Authority are essential to the continued viability of the Loop Elevated.

The third issue, related to the other two, is the importance of the Loop El as an historic site. The Loop Elevated has been declared eligible for inclusion in the National Register of Historic Places, and as such, is protected under provisions of the Historic Preservation Act of 1966. Preservation of the historic value of the Loop Elevated is a prime criterion in determining the type of structural rehabilitation and in selecting the station locations and designs.

These major issues are discussed in greater detail later in this report.

A. LOOP ELEVATED RETENTION POLICY

In November of 1979, the City of Chicago, in coordination with the State of Illinois, completed recommendations for use of monies previously earmarked for construction of Interstate 494, the Crosstown Expressway. The result, A Transportation Strategy for the 1980's, is a statement of the policy Chicago will pursue in the early 1980's to enhance and improve the City's transportation infrastructure.

The selection of projects included in the strategy statement was made through a cooperative effort of local, State, and Federal transportation agencies, including: the Mayor's Office of the City of Chicago; the Chicago Department of Public Works; the Chicago Department of Streets and Sanitation; the Chicago Transit Authority; the Chicago Area Transportation Study; the Regional Transportation Authority; and the Illinois Department of Transportation, with advisory participation by the U.S. Department of Transportation, Federal Highway Administration and Urban Mass Transportation Administration. These agencies comprised the Interstate Transfer Program Implementation Committee.

The Committee, recognizing the importance of effective and efficient transportation to the vitality of the CBD, determined that a reasonable strategy must be developed to improve transportation into and through the downtown area. The Committee's strategy for implementing the policy of improving downtown transportation included, as a "vital initial step", a program to renovate and rehabilitate the Loop Elevated, a facility serving nearly 200,000 passengers every working day.

B. <u>HISTORICAL BACKGROUND</u>

Since its construction in 1897, the Loop Elevated Structure has been repeatedly altered to meet Chicago's changing transportation needs. Over the years four stations have been removed, and two new stations have been constructed. Platforms have been extended, shortened, and removed. Station houses have been dismantled, replaced, or greatly modified. Structural replacement and changes have been made to maintain the Loop as a functioning part of the City's transit system.

Chapter II presents in greater detail the history of the Loop Elevated and the changes made to it throughout its 84 year history. That history is primarily one of adaptive response to greatly changed conditions in Chicago's dynamic urban core, to the transit system which serves it, and to the needs and preferences of contemporary commuters. The proposed rehabilitation is consistent with the Loop's history of modifications and improvements required to preserve the structure as both an historic and integral part of Chicago's transportation network.

CHAPTER II

BACKGROUND

While elevated rapid transit has played an important role in Chicago's history, the concept of using an elevated railroad to move passengers quickly above the traffic in crowded areas was developed earlier in New York City. There the nation's first elevated railroad opened for business in 1870, and other elevated extensions were built in the 1870's and 1880's. Recognizing the advantages of the elevated, owners of street railways in Chicago became interested in the new technology as a means of both increasing their profits and forestalling competition with their surface lines. While several companies formed in the late 1880's to build an elevated railroad, it was the World's Columbian Exposition in 1893 that spurred completion of Chicago's first line.

That line, whose structure was closely modeled after lines in New York, opened for service between Congress and 39th Street on June 6, 1892. Nicknamed the Alley El because the structure ran over the alley, it was operated by the South Side Elevated Railroad Company. The line was extended south to 63rd Street by the time the Exposition opened in the Spring of 1893. Early commuters were enthusiastic about the speed of travel on the elevated, which was nearly twice as fast as surface lines, and about its ability to provide 24 hour service, while cable car lines had to shut down part of the night for repairs. While some residents expressed dissatisfaction with the elevated's noise and obstruction of light, it was clear that the line was a success, and others were being planned.

The Lake Street Elevated Railroad, which served Chicago's west side, was the next to open. Started by racketeer Mike (King Mike) McDonald and completed by New York interests, the line opened from Lake and California to Madison and Market Street (now Wacker) November 6, 1893. It was extended west to Laramie in April, 1894. A third line, the Metropolitan West Side Elevated, was also under construction during this period. Serving the west and west-southwest sides of the city, it opened May 6, 1895 between Franklin Street and Marshfield Avenue. The Metropolitan, which was electrified when it opened, was the world's first electrically powered elevated railroad. The Lake Street Elevated electrified the following year, and the South Side Elevated began electric powered service in 1898.

A. CONSTRUCTION OF THE LOOP ELEVATED

Despite their initial success, the early elevated railroads suffered financial difficulties, largely because their terminals were located at the periphery of the central business district, and many commuters found that surface lines more conveniently carried them closer to their destination. A surface loop consisting of street car lines around the downtown already existed - in fact, it was this cable car 'loop' that gave Chicago's downtown its famous nickname - and it is easy

to imagine how the idea of an elevated loop developed. By the early 1890's it was widely suggested that an elevated loop around the downtown would take commuters closer to their destination and even permit them to switch easily to other lines serving different parts of the city. The increase in convenience resulting from an elevated loop was expected to increase ridership and put the elevated railroad companies in better financial shape.

One astute transit developer, Charles Tyson Yerkes (1839-1905) seized the idea of an elevated loop and acted to realize it. An enterprising Philadelphia financier with a history of involvement - some fraudulent - in transit companies in the East, Yerkes had moved to Chicago and acquired street car lines on the north and west side of the City. When the Lake Street Elevated was suffering financial difficulties in 1894, he bought it for one million dollars. That same year, Yerkes also got a franchise from City Council to build an elevated line to the north and northwest side of Chicago.

On the basis of those two franchises, Yerkes acted to build the Lãop. His ability to raise capital, form companies, and overcome obstacles - political or other - was phenomenal. On October 1, 1894, he got City Council approval to extend the Lake Street line east to Wabash Avenue. On November 22, 1894, he formed the Union Elevated Railroad Company to develop an elevated right of way down Wabash Avenue from Lake Street. An opposition group, the Central Chicago Elevated Railroad, formed the same day, but by December 18, 1894, Yerkes had reached agreement with his opponents that allowed the Union Elevated to build on Wabash and for the other elevated companies to rent the use of his line. In 1895 he acquired a franchise from City Council to build over Wabash and was authorized to extend his franchise for the Northwestern Elevated Railroad south down Fifth Avenue (now Wells). He now had three legs of the loop. To close it up, he formed another company. the Union Consolidated, and obtained a franchise to build over Van Buren Street on June 30, 1896.

Work progressed rapidly and by September 6, 1897, a train carrying officers of the Union Elevated Railroad Company made the first complete trip around the Loop. The first revenue passenger train, from the Lake Street Elevated, began service around the Loop October 3, 1897. Other lines began to use the Loop shortly thereafter. Trains from the Metropolitan West Side Elevated first ran around the Loop on October 11, 1897, and those from the South Side Elevated, on October 18, 1897. Trains from the Northwest Elevated Railroad first went around the Loop on May 30, 1900.

The Chicago Loop Elevated structure was designed by John Alexander Low Waddell (1854-1938) an engineer of Canadian birth who opened an office as a bridge designer and consultant in Kansas City, Missouri, in 1886. His concern for strength and durability in construction led him to design a structure which exceeded the standards of the time and which has consequently been able to remain in use to the present. Early drawings of stations on the Loop bear the name of A.M. Hedley as consulting

architect. The following four firms, none from Chicago, built the Loop Elevated: the Union Bridge Company of Athens, Pennsylvania, and the Elmira Bridge Company, New York, constructed the Wells Street segment; the Phoenix Bridge Company of Phoenixville, Pennsylvania, built the Lake Street section; and the Pencoyd Iron Works of Pencoyd, Pennsylvania, built the Wabash and Van Buren sections.

B. CHANGES TO THE LOOP ELEVATED

The history of Chicago's elevated Loop is a story of repeated alteration of both the administrative and physical structure to meet the City's changing transportation needs. Without such changes, the current structure would probably have ceased to be a functioning part of Chicago's transportation system. While the major form of the Loop has remained unchanged, the following sections will show that the changes made to it over time have altered many of its original features.

Documentation for changes to the Loop consists primarily of architectural drawings from the CTA Engineering Department and historical photographs obtained from the CTA, the Chicago Historical Society, and the City of Chicago. Such sources frequently lack dates or may indicate only when the design was finished, not when construction was completed. Consequently, all dates given in the following sections should be treated as only approximate.

Administratively, service on the Loop Elevated gradually was consolidated into one operation. In September, 1901, the Northwestern Elevated Railroad Company acquired the Union Elevated Railroad Company, which had owned and operated the Loop from its completion in 1897. Other companies continued to operate the Lake Street, Metropolitan West Side, and South Side Elevated lines. In 1911, the Chicago Elevated Railways Collateral Trust was formed to better coordinate service around the Loop. Only after the Collateral Trust was established was the through-routing of trains from north to south and the free transfer to west side lines made possible. Previously, each line operated as a separate service and charged a separate fare. In 1913 unified service began, and stations were modified to accommodate the service changes. The four separate lines which constituted the Collateral Trust were further consolidated into a single Chicago Rapid Transit Company in January, 1924. That rapid transit company was absorbed by the Chicago Transit Authority (CTA) in October, 1947. The CTA currently operates Chicago's elevated railroad system, including the Loop.

In addition to such administrative changes, continual physical alterations to the Loop elevated structure have been made to adapt it to changing transit needs. The addition of Northwestern Elevated Railroad trains to the Loop in 1900 required the removal of an early elevated

station on the Loop on Lake Street over Wells. Shortly after the Loop was completed, station platform extensions were added in 1903. Further station modifications, including platform and exit stair additions, the erection of pedestrian transfer bridges over the tracks, and the construction of a station at Randolph and Wells were made in 1912 and 1913 to permit through-routing and unified service with free transfer between lines. After the creation of the Chicago Rapid Transit Company in 1924, a continuous platform connecting all stations on Wells Street was constructed, greatly altering the external appearance of the structure. A similar platform connecting all stations on Van Buren Street was built in the 1930's. Windbreaks of multi-light windows were also added in the 1920's. An early drawing and some early maps and photographs are included on the following pages of this Chapter as an example of the documentation for such changes.

Deterioration of station structures and the desire to upgrade the system led to further station modifications in the 1950's and 1960's. The continuous platforms running along Wells were removed in the 1960's, leaving individual station platforms. Service changes caused the shortening of platforms on Lake and Wabash Street stations from 10 car lengths to 6 in 1965. Later, the platforms were extended to 8 car lengths. Station houses on Adams and Wabash and on the east side of the Randolph and Madison stations on Wabash were removed, and the west side of the Randolph station on Wabash was completely remodeled, obscuring all original features. Corrugated fiberglass windbreaks were added or replaced the multi-paned glass ones on all stations. Escalators covered with plexiglass replaced the original stairs on the State and Lake station in 1967, when the south facade of the station was also completely remodeled. In 1975, the combined stations at Dearborn and State on Van Buren were completely removed and the continuous platform dismantled in response to a great decline in their use. In the late 1970's, flourescent lighting replaced original lighting on all Loop stations.

Structural alterations have also been made. Columns at Jackson and Wabash were relocated in the 1920's to facilitate the movement of street traffic. Platform additions and changes required the addition of beams which altered the structure's original appearance. On Lake Street at LāSalle, the original latticed steel work has been replaced with solid beams. New beams were also installed over State Street and Van Buren when the station was removed. Replacement materials used for needed repairs have often differed from the original material. In 1958 the connection of the old west side line to the Loop at Van Buren and Wells was removed.

In summary, while the Loop Elevated has been characterized by a continuity of use, such continuity has been made possible only by a continual alteration of the structure, especially as regard to the stations. The following section illustrates on a station by station basis the changes to the Loop Elevated.

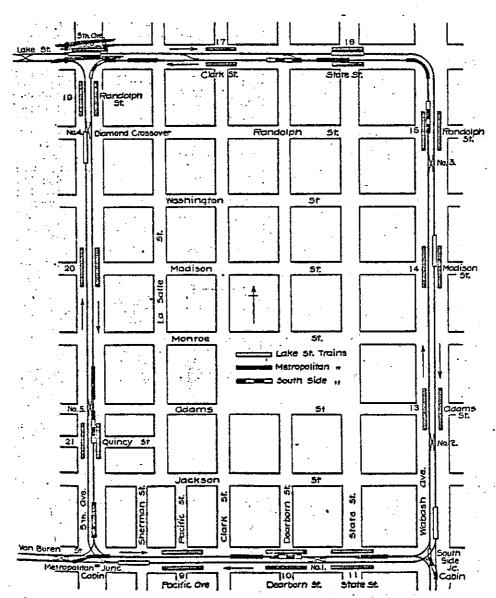
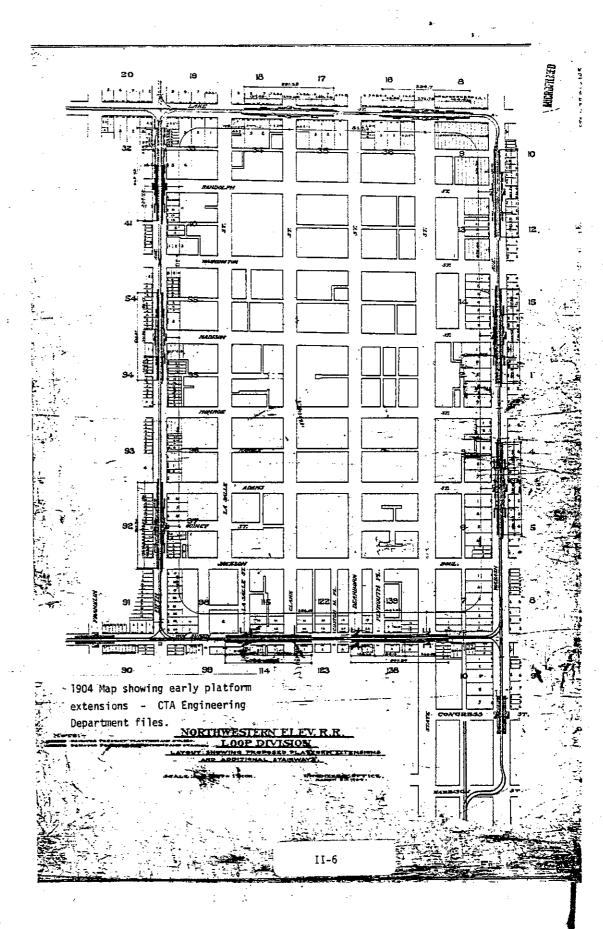
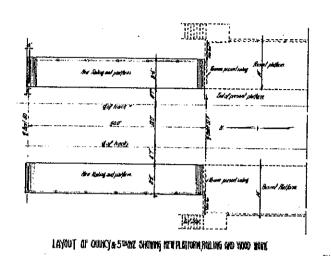


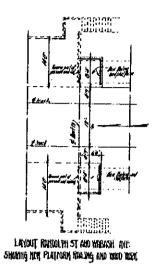
Fig. 3.—Union Elevated Railroad, Chicago, Showing the Position of Each Train on the Road at 7:45 a.m., August 10, 1898.

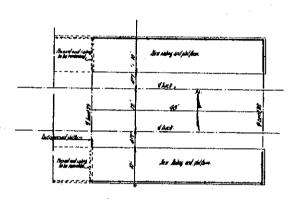
Early map of the Loop showing station on Lake Street at Fifth Ave. (Wells) which was removed when the Northwestern Elevated Railroad was connected to the Loop in 1900.

From: The Railroad Gazette, Vol. 31 #11, March 17, 1899

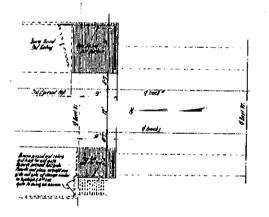




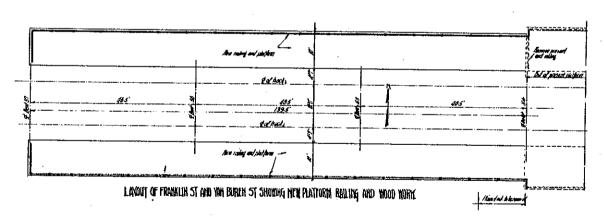




TAYOUT OF TO SULTE ST UND ARM BOWEH ST SHOUND WAS WARRING WAS AND MOODAOUN



LAYOUT OF MADICAL ST AND STUDY STOWNEY WERE PLATFORD RALLING AND MODE WORK.



Garrens! Motor: The circles of purplems word make and making a sec ching this (1840-186 145

Drawing showing platform changes made when service on the Loop was unified in 1913.

MORTHWISTERN ELEV. R. R.

LAYOUT OF PLATFORM YOOD YORK AND RAILINGS FOR Ouncies her, mensories her. Subscript of better hit, in the excess subscript fronchist chronisms. Script her.

Beard 4/3/10

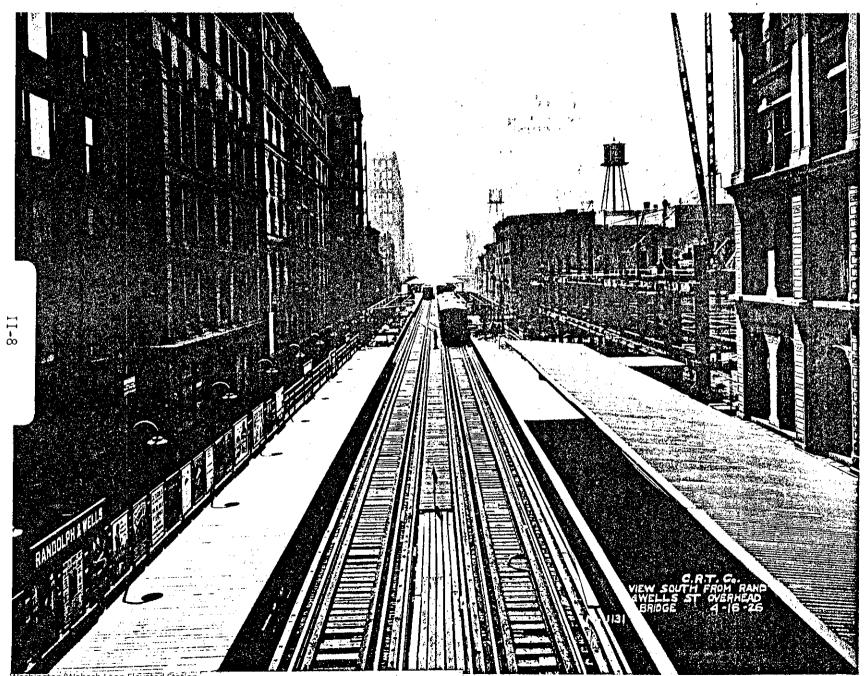
MICREFILMED

No.145-110.145

Washington/Wabash Loop Elevated Station

Environmental Assessment - Appendices

118

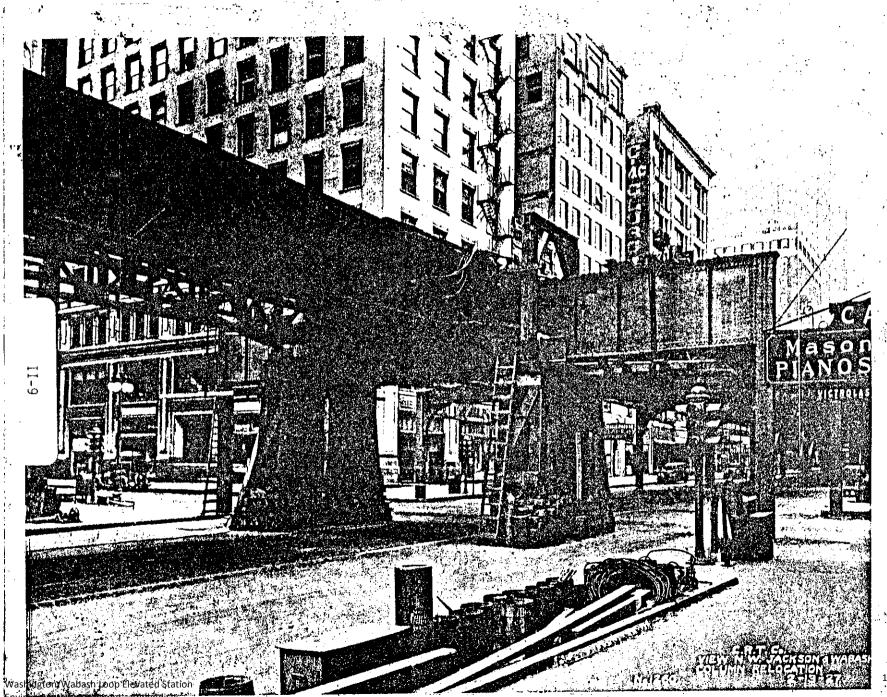


Washington/Wabash Loop Elevated Station Environmental Assessment - Appendices

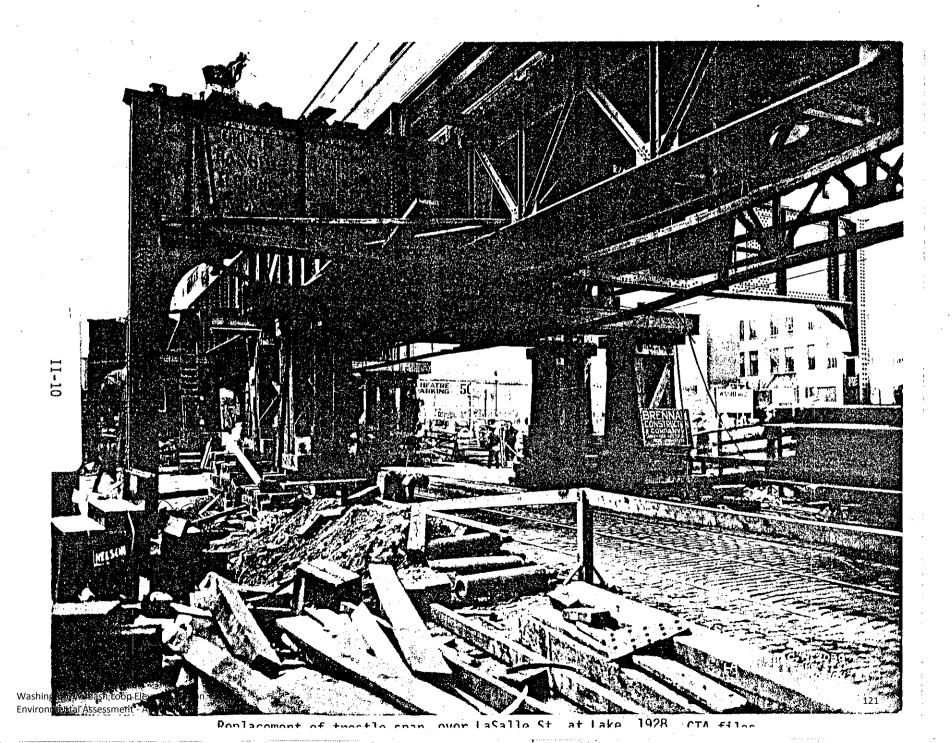
Construction of continuous platform along Wells, 1926.

CTA files

119



Column relocation, 1927. . . CTA files



C. STATION CONDITIONS

In general, most of the stations on the Loop Elevated have been greatly altered and now bear little resemblance to their original condition. Only Madison/Wells, Quincy/Wells, and LaSalle/Van Buren retain many original features, even though they too have been considerably modified. A description of each station is given below, based on field observation in September, 1981 and original drawings. With each description is a copy of early drawings showing the original features of each station and copies of available photographs showing the station at different points in time with the changes that had been made to it. A final photograph shows the station's current condition from the inner and outer sides of the Loop. Again, all dates given are approximate.

Lake/Randolph and Wells -- The original station, of neo-classical style, was located mid-block between Lake and Randolph, with the station houses located where the first alley south of Lake Street intersects Wells. The original portion of the station remains as part of the Randolph and Wells station, which was added to the extended Lake/Wells station in 1913. The new station has station houses over Randolph and stairways down to Wells that were not part of the original Loop structure.

Many of the railings and grills on the platform extensions and stairways were added at various times and differ from the original grillwork, sometimes greatly. Some of the original grillwork can still be found on the older platform section. Turnstyles and fences not like the original have been added to the station platform on the mezzanine level to make the older station portion into an exit-only facility. A ramp at at mezzanine level linking the two sides of the structure has been removed.

The original west station house has been modified by the construction of a fixed metal awning on the west side and the apparent removal of some windows. Fiberglass and wooden windbreaks have been added to the newer station houses over Randolph Street and to the platforms along the station houses. A pedestrian overpass probably constructed in the 1920's links both sides. All original lighting has been replaced by flourescent lighting fixtures in station houses, in stairways, and on platforms. Aluminum and fiberglass storage sheds have been added to the northeast platform near Lake Street. There are no direct connections to adjoining buildings. (See Section IIDD)

Washington/Wells -- When platform extensions were constructed in 1926 on Wells Street to create one continuous platform on the west leg of the Loop, a new station was erected over Washington Street at Wells. The new station houses consisted of arched steel trusses enclosed with multi-light windows and were virtually identical in style to those on the station added in 1913 at Randolph and Wells. The Washington/Wells station had access stairs leading down to Washington Street at right

angles to the station. The station was removed in 1969 when the continuous platform on Wells Street was dismantled. (See Graphics Section II E.)

Madison/Wells -- While the neo-classical station houses retain many original features, especially in their interiors and ticket areas, the original pressed metal ceiling has been extensively patched or replaced with smooth sheet metal. Other sections are in corroded condition. Newer turnstyles in station houses and on platforms alter original approaches to the platforms. Platforms have been extended to the north and south of the original one and have railings that do not match the original grillwork. Some original grills remain on platforms and on stairways, but others have been replaced by dissimilar material. A passenger transfer bridge has been added to the south end of the platform.

Fiberglass and wood windbreaks have been added to platforms near the station houses. Heated plexiglass windbreaks have also been added to the platforms. All original lighting has been replaced with flourescent fixtures. The flagpole on the station house and decorative gables on the ends of the stairways have been removed. A mezzanine still connects both sides of the structure over Madison Street. (See Section II F.)

Quincy/Wells -- The neo-classical station houses are essentially intact, and the interiors of the station houses and the ticket booth appear to be close to the original. Some parts of the pressed metal ceiling have been replaced with smooth sheet metal. Decorative features on the roof top have been removed, and a chimney stack for a heater seems to have been added. All original lighting in station houses, stairways, and on platforms have been replaced with flourescent fixtures. Newer turnstyles have been added to station houses and platforms.

The platform has been extended with a canopy different in design from the canopy over the original platform section and with railings different from grillwork on original sections. Some original grillwork has been replaced with dissimilar materials. Stairways on northeast and northwest appear to have been added, perhaps in 1925. Fiberglass and wood as well as heated plexiglass windbreaks have been added to the platforms. An original mezzanine over Quincy Street still connects both sides of the structure. (See Sections II G.)

LaSalle/Van Buren -- The station houses are of neo-Roman classical style and still retain original features. However, their side walls have been extended and a platform providing direct connection into the LaSalle Street railroad station has been added. The extension of the sidewalls has resulted in the enclosure of spaces under side roof gables that previously open. The enclosures give the station houses a different appearance. Radiators heat the station houses.

Platforms have been extended with railings unlike those on original sections. Some sections of grillwork on the stairways and original platforms have been replaced with dissimilar material. Ornamental details atop the roof have been removed. A mezzanine still connects both sides of track above LaSalle Street. New beams supporting the structure have replaced original beams between the tracks. Non-original turnstyles have been added to the station houses and platforms. All original lighting have been replaced with modern flourescent fixtures. Fiberglass and wood windbreaks have been added to the station house near the platform. (See Section II H.)

Dearborn/Van Buren -- This neo-Roman classical station was dismantled and removed in 1975 because of sharply decreased patronage at the combined Dearborn-State station and to realize operating economies. (See Section II I.)

State/Van Buren -- Like the Dearborn Station on Van Buren, with which it had been combined, the State Street station was removed in 1975 as an economy move in light of greatly reduced use of the station. It was originally neo-Roman classical in style. (See Section II J.)

Adams/Wabash -- This neo-classical station was greatly altered by the removal of the station houses in 1968 and their replacement with fiberglass and corrugated steel walls. Fiberglass and wood windbreaks as well as heated plexiglass windbreaks have been added to the platforms near the station house area. Platform extensions to the north and south of the original platform have roofs, trusses, steel work, and railings unlike that on the original platform section. Pedestrian transfer bridges have been added over the tracks at both ends of the platform.

Ticket booths on the mezzanine are non-original. Newer turnstyles have been added to the mezzanine and platform. Additional stairs seem to have been constructed at a later date on the southwest side. Most original grillwork has been replaced with dissimilar material, such as fiberglass and aluminum. Decorative gable ends on the stairways have been removed. All original lighting has been replaced with flourescent fixtures. (See Section II K.)

Madison/Wabash -- The west station house remains and retains many of its original neo-classical features, including a stamped metal ceiling on the underside at mezzanine level. However, the east station house has been removed and replaced by fiberglass and corrugated steel walls. A mezzanine over Madison Street still connects both sides of the tracks.

Some original railing remains on the platform, but much has been replaced with dissimilar material. Fiberglass and wood windbreaks have been added to platforms on both sides of station house areas, and heated plexiglass windbreak booths have been constructed on each platform. A pedestrian crossover bridge has been added at the south end of the plat-

form. All original lights have been replaced with flourescent fixtures. Non-original turnstyles have been added to the mezzanine level. (See Section II L.)

Randolph/Wabash -- Originally neo-classical in style, the west station house was completely remodeled in 1957 with glass and aluminum walls and doors, terrazzo floor, and enameled steel panels. The ticket booth has also been greatly altered. The east station house was completely removed and replaced with fiberglass and corrugated steel walls. Original railings on the west platform have been replaced with different materials.

Platform extension railings do not match grills on the original section. Fiberglass and wood as well as heated plexiglass windbreaks have been added to each platform. A stairway to the northwest appears to have been added to the original station. A ramp providing direct access to Marshall Field has been added to the southwest part of the station at mezzanine level. The mezzanine connecting both sides of over Randolph has non-original railings. Newer turnstyles have been added to the platforms. All original lighting has been replaced with flourescent fixtures. (See Section II M.)

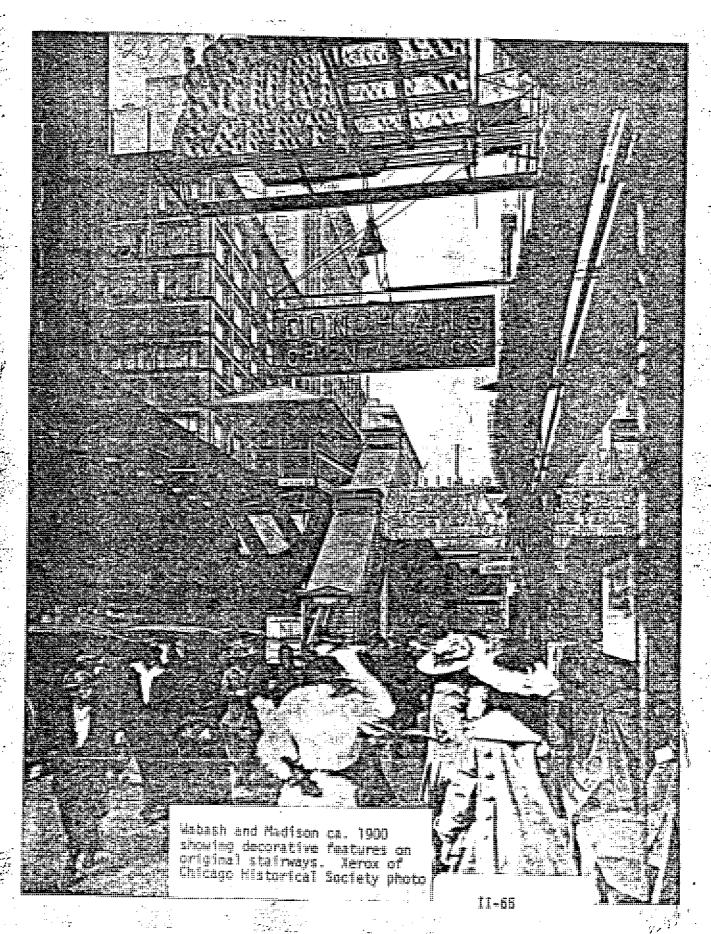
State/Lake -- The revivalist Roman classical station houses, with cupolas and other Mannerist elements, have been altered almost beyond recognition, and few original features remain. Present glass and aluminum facades on the south elevation completely obscure the original characteristics. The north elevation has wood sides and sash that do not appear original. Stairways on the southwest and southeast have been removed and replaced with plexiglass covered escalator tubes oriented 90 degrees from the direction of the original stairways. All but a small part of the trackside elevations of the station house has been removed.

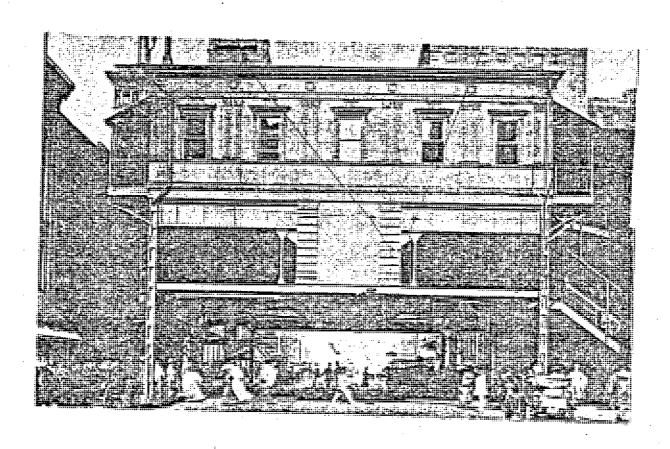
While much original grillwork remains on the north platform and stairway, most on the south side has been removed or replaced with plain aluminum panels. Fiberglass and wood windbreaks and heated plexiglass waiting areas have been added to the platforms. All original lighting has been replaced with flourescent fixtures. (See Section II N.)

Clark/Lake -- The original station houses were a revival of the Roman classical style with cupolas and other Mannerist elements. They have been greatly altered and now bear little resemblance to their original form. Walls on the trackside elevations have been almost entirely removed, and plexiglass and wood walls on the platforms seem to have replaced parts of the original outside station walls. The north elevation has sash windows with sheet metal sides, while the south elevation has sash windows with wooden sides. On both, very few original features remain.

Stairways on the north have some original grilled railings, but in most other areas the original grills have been replaced with dissimilar materials or railings. All original lighting fixtures have been re-

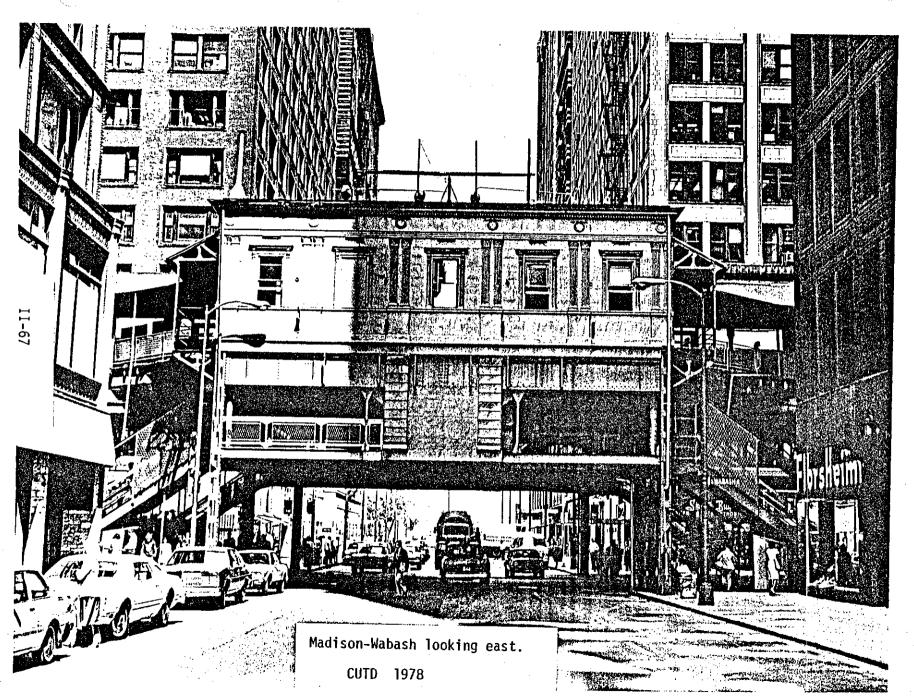
placed with modern flourescent ones. Pedestrian bridges over the tracks have been constructed at the east and west ends of the original platform. (See Section II 0.)

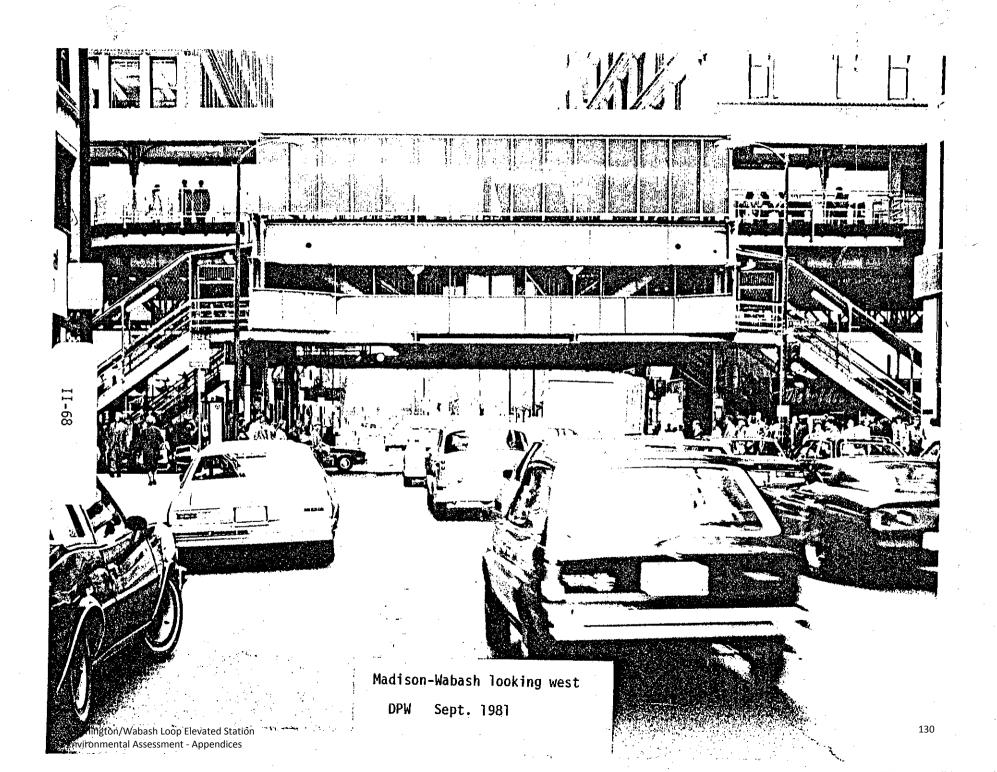




MADISON AND WABASH STATION LOOKING EAST HISTORICAL PHOTOGRAPH

CUTD files





2hion Elevated Railroad; Bandolph - Street - Station . — Свигадо д. И. Освави 289 1896. aggered Cheese & Hetter Washington/Wabash Loop Elevated Station

Washington/Wabash Loop Elevated Station Environmental Assessment - Appendices 131

Union Elevated Railroad;

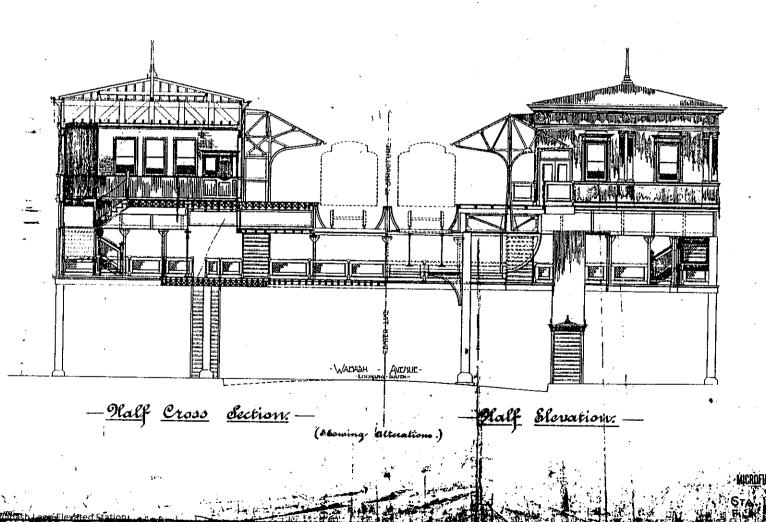
- Randolph - Street - Station :

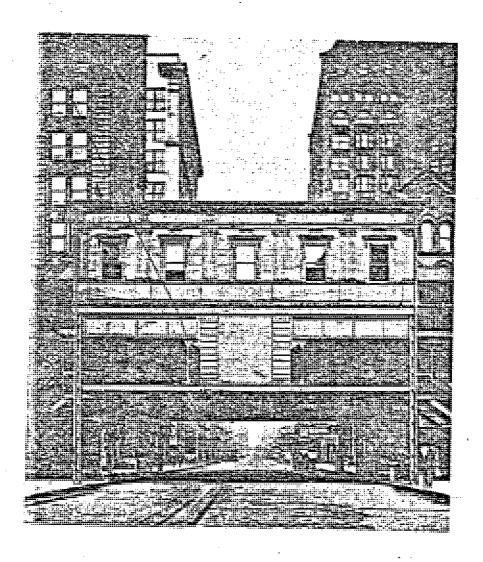
- Chicago SIV. Et tober 26 14 1896, -

- Scale 14 = 18001.

Companie Charies 9. 71 stew

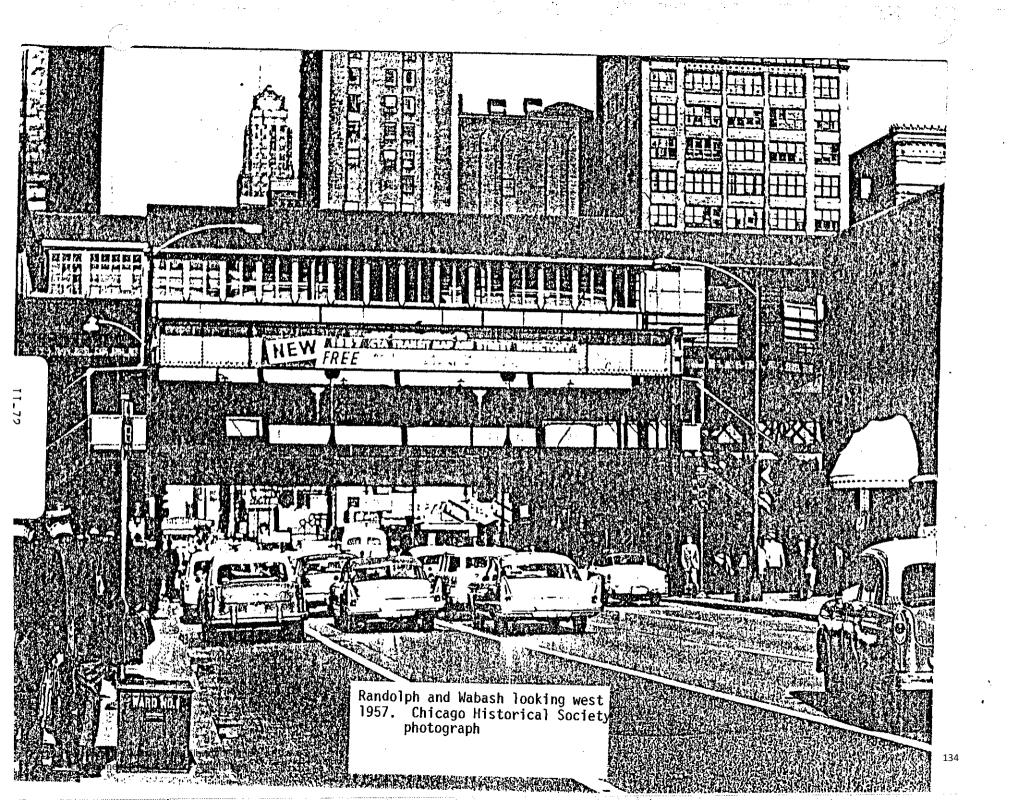
- Ciny Engineer -

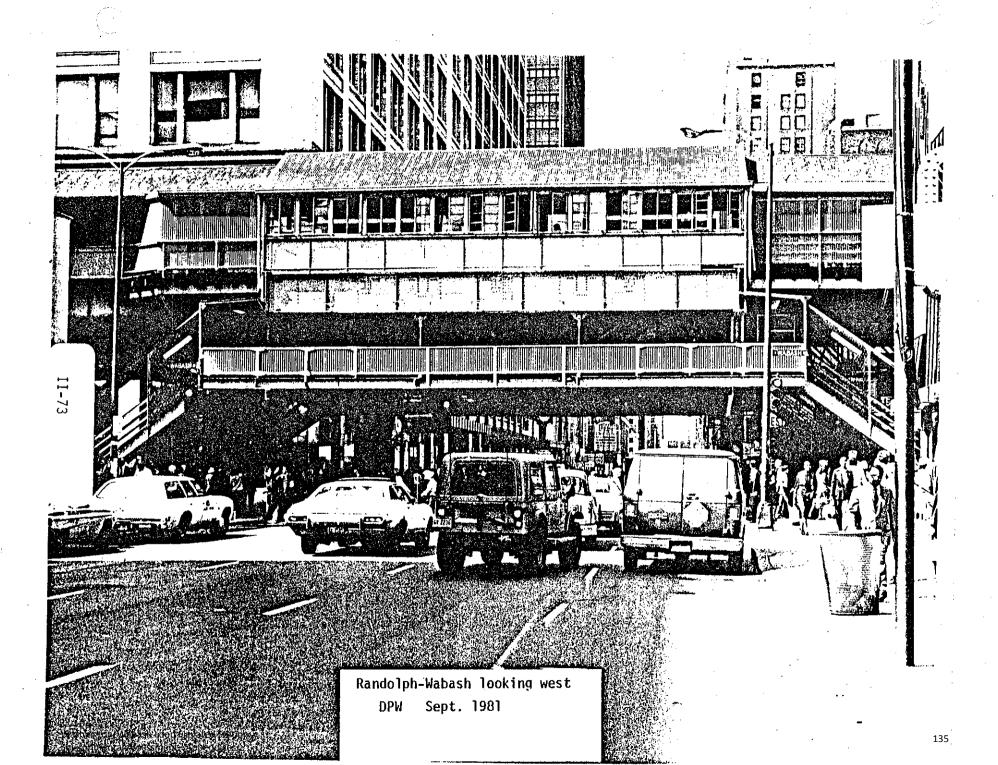


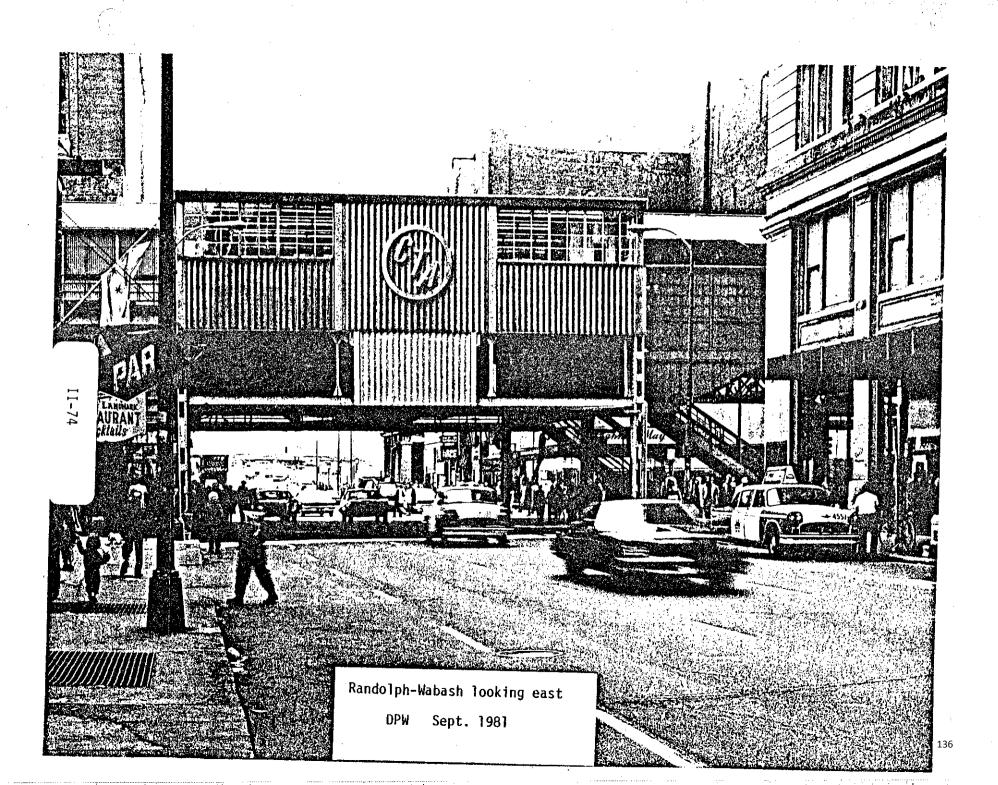


RANDOLPH AND WABASH STATION LOOKING WEST HISTORICAL PHOTOGRAPH

CUTD files







CHAPTER III

DEVELOPMENT OF THE MASTER PLAN

A. TRESTLE DISCUSSION

The existing 86 year old structure is currently being inspected and evaluated by an engineering consultant under contract to the CTA. The results of this inspection will determine which members must be replaced and which structural elements can be repaired.

The existing rapid transit structure will remain on the same alignment, the columns will stay at their present locations and the height of the structure will be maintained at or near its current elevation.

Existing lattice-type track stringers may be replaced with new solid-web sections. The solid-web sections, commonly referred to as wide flange beams represent the current state- of- the- art in short span steel construction. All other repairs will replace existing members in kind.

B. STATION CRITERIA DISCUSSION

It is the policy of the City of Chicago to use the opportunity provided by the proposed Loop Elevated Rehabilitation to create a rail transit distribution system that will provide efficient and effective transit service through the year 2020. In order to realize this policy, it has become evident that the location of the Loop Elevated stations must be examined and, if necessary, changed to reflect future transit needs. Additionally, new station locations must be examined to determine their feasibility. This effort must, of course, be undertaken within the context of the Loop Elevated's historic significance.

Toward this end, five criteria measuring the adequacy of station location and design and the historic continuity of station design have been developed. These criteria and the measures which are used to determine how well station locations meet the criteria are described below.

1) Pedestrian Accessibility to Station

In a location such as Chicago's CBD, with its intense concentration of workday population and the close proximity of buildings, walking is one of, if not the most often used means of transportation. The Loop El must provide a high level of service to the CBD pedestrians because most people walk to stations on the Loop Elevated.

a) Vertical Access

Transit service provided by the Loop Elevated requires transit patrons to ascend to the elevated grade to board CTA trains. This measure identifies both the number of station entrances and station locations providing elevator or escalator access. Elevators are a vital feature for access by mobility-limited persons who cannot use stairs, and escalators are a significant passenger amenity.

b) Pedestrianway Access

The City of Chicago has an existing system of pedestrian passageways which provide weather-protected pedestrian routes between a limited number of downtown buildings and subway stations. This pedestrianway system, however, will be significantly expanded as part of the improvements to downtown transportation funded through the Interstate Transfer Program. This measure identifies those Loop Elevated station sites that provide access to either existing or proposed pedestrianway facilities.

2) Ease of Transfer between Transit Modes

Improving the ease of transfer between the Loop El and other elements of the CTA bus and rail system, as well as the commuter rail network, upgrades access to all parts of the region of patrons of CTA rail lines routed on the Loop Elevated.

a) Bus Access

Easy accessibility to downtown bus routes, including those using the State Street Mall or the Contra-flow Bus Lanes, improves downtown distribution and provides public transit access to areas unserved by rail transit. This measure identifies the number of bus routes within ½ block of the station sites. Additionally, access to the State Street Mall or the Contra-flow Bus Lanes is identified. Anticipated rail route realignments could result in through-routing of service that currently circles the Loop, thereby placing greater reliance on the bus lanes for east-west cross CBD travel.

b) Subway Access

This measure identifies the station sites that provide access to the rail transit lines routed through the CBD via the subway system. Ease of transfer between rail lines is essential for quality service to all areas of the City served by the rail transit system.

c) Commuter Rail Access

High quality access to commuter rail stations is important both to distribution of commuter rail passengers to CBD destinations, as well as to CTA patrons travelling to parts of the Chicago region served by the commuter rail system. Those station locations from which passengers can walk to a commuter rail station are identified here.

3) Operational Efficiency

Station location and design can help realize reductions in CTA's operational expenses. Measures of efficiency improvements are discussed below.

a) Mezzanine Fare Controls

The labor resources of the CTA can be more effectively used if the fare controls of stations are effectively designed. Mezzanine fare controls and fare controls within new developments can be designed to feed both inner and outer Loop Elevated station platforms. This removes the requirement for a second ticket agent during slow periods,

as is now the case at stations where separate fare controls serve each station platform.

b) Train Stops

Reducing the number of train stops made on the Loop El reduces operating costs, namely the costs associated with decelerating, stopping, and accelerating a train at a station site. This measure identifies locations where station consolidation can reduce train stops or where new station sites could increase train stops.

4) Joint Development

For the purpose of this analysis, joint development is defined to be the incorporation of a Loop Elevated transit station into a building adjacent to the elevated structure.

Joint development has a number of advantages, in addition to those advantages measured under other criteria. Protection from inclement weather, reduction of pedestrian congestion at street level, high levels of convenience for building occupants, and potential for retail development to serve transit patrons are among the joint development advantages. This measure identifies those locations where joint development of transit stations and new CBD buildings is planned or possible.

5) Historical Integrity

This measure gauges the historic quality of existing stations or a planned station design by comparing station configuration to the original station plan. Those configurations or designs most closely resembling the original station design are considered to have best preserved the station's historic character.

H. RANDOLPH/WABASH AND MADISON/WABASH

Randolph/Wabash (existing)

The existing Randolph/Wabash station is located along Wabash Avenue at its intersection with Randolph Street. Access is available via stairways on Wabash Avenue and a connection at mezzanine level to the Marshall Field and Company building. Currently weekday entering traffic volume at this station is 11,500.

1) Pedestrian Accessibility

a) Vertical Access

Four stairways on Wabash Avenue provide access, both entrance and exit, to the station. One stairway is located in each quadrant of the Randolph Street-Wabash Avenue intersection. Mezzanine level access is also available via the Marshall Field and Company building during store hours.

b) Pedestrianway Access

A direct connection to the proposed Randolph Street Pedestrian (RSP) is possible since the RSP will cross Wabash Avenue between Randolph and Washington Streets. Since the location of the existing station is fixed this would limit the flexibility of the design of the connection between the station and the RSP.

2) Transit Transfer Accessibility

a) Bus Access

Two bus lines (routes 4 and 11) serve the Randolph Street/Wabash Avenue intersection.

b) Subway Access

The State Street subway's Randolph Street Station is located more than one block away. It is however, accessible via the Marshall Field building during business hours.

c) Commuter Rail Access

The Illinois Central Gulf (ICG) Railroad station is located approximately one block away. Access the rail-road station would be available during store hours via

the Marshall Field building and the proposed Randolph Street pedestrianway.

3) Operational Efficiency

a) Fare Control

Two fare collection facilities are located at track level; one on the outer track platform and one on the inner track platform.

b) Train Stop

The existing station requires the expenditure of the funds associated with the maintenance and operation of an individual station.

4) Joint Development

Direct access during store hours is provided via a walk-way at mezzanine level to the Marshall Field building at the southwest corner of Wabash Avenue and Randolph Street.

5) Historic Integrity

As noted in Chapter II this station has undergone substantial change since its original construction.

Madison/Wabash (existing)

The existing station is located along Wabash Avenue at its intersection with Madison Street. Access is available via stairways on Wabash Avenue.

Current weekday entering traffic volume at this station is 7400.

Pedestrian Accessibility

a) Vertical Access

Four stairways on Wabash Avenue provided access, both entrance and exit to the Elevated Station. One stairway is located in each quadrant of the Madison Street-Wabash Avenue intersection.

b) Pedestrianway Access

No potential exists for a connection to an existing or proposed pedestrianway.

2) Transit Transfer Accessibility

a) Bus Access

Washington Street is less than one block from this station. Six bus lines (routes 1, 16, 20, 56, 60 and 157) serve the Washington Street-Wabash Avenue intersection via the westbound contra-flow bus lane. Four bus lines (routes 145, 146, 147, and 151) serve this intersection on the regular eastbound lanes of Washington Street. Two bus lines (routes 4 and 11) serve Wabash Avenue.

At Madison Street and Wabash Avenue, six bus lanes (routes 1, 16, 20, 56, 60 and 157) serve the intersection via the eastbound contra-flow bus lane. The same two bus routes noted above serve Wabash Avenue at this point.

b) Subway Access

The existing elevated station is not directly connected to any subway station, but the Madison Street subway station of the North/South lines is one block to the east.

c) Commuter Rail Access

No commuter rail stations are located within easy walking distance of this elevated station.

3) Operational Efficiency

a) Fare Control

One centralized fare collection facility is located at the mezzanine level. A pedestrian walkway-overpass between platforms is provided.

b) Train Stops

The existing facility requires the expenditure of funds associated with the maintenance and operation of an individual station.

4) Joint Development

No joint development exists at the present station, and little potential exists for future application at the current station location.

5) Historical Integrity

As delineated in Chapter II of the <u>Plan</u>, this station has undergone substantial change since its original construction.

<u>SUMMARY</u>

The existing stations at Randolph/Wabash and Madison/Wabash do not allow flexibility in the design of a connection to the proposed Randolph Street Pedestrianway.

Since the original stations have both been altered substantially, their historic significance has been diminished. The track level fare collection facilities at the Randolph/Wabash Station are inefficient. Requiring passengers to use the walkway-overpass at the Madison/Wabash station after paying their fares would be very inconvenient.

The two stations are located such that they could be combined into one which could provide efficient and effective service at lower operating cost.

WASHINGTON-MADISON/WABASH (proposed)

The proposed Washington-Madison/Wabash would be located along Wabash Avenue over Washington Street. This station would replace two existing stations, Randolph/Wabash and Madison/Wabash. It would have mid-block access between Randolph Street and Washington Street and between Washington Street and Madison Street. Direct connection to Marshall Field's Department Store (replacing the existing connection at the Randolph/Wabash Station) and to the future Randolph Street Pedestrianway would be provided at the north end of the station.

1) Pedestrian Accessibility

a) Vertical Access

Stairways would be provided at either end of the station platform. Escalators and elevators for access to the station would be provided within the Marshall Field's building on the west side of Wabash Avenue.

b) Pedestrianway Access

Connection to the proposed Randolph Street
Pedestrianway (RSP) would be provided from the north fare
collection area. The RSP will cross under Wabash Avenue
between Randolph and Washington Streets. This -pedestrianway connection could be provided through
Marshall Field's or directly from the station platform

and would provide access to existing and proposed segments of the pedestrianway system.

2) Transit Transfer Accessibility

a) Bus Access

The full compliment of bus lines noted as serving both the Randolph/Wabash and Madison/Wabash Stations would be accessible from the Washington-Madison/Wabash Station. These include all routes on contra-flow bus lanes on Washington and Madison Streets.

b) Subway Access

The Washington Street subway station of the North-South Rapid Transit Line would lie one block to the west of this proposed station. Accessibility to the subway system would be enhanced by the new elevated stations accessibility to the RSP, which would provide direct, weather protected pedestrian access to the subway.

c) Commuter Rail Access

The Illinois Central Gulf (ICG) Commuter Railroad Station is located approximately one block to the east. This station will also be accessible via the Randolph Street Pedestrianway.

Operational Efficiency

a) Fare Control

The proposed station would have one centralized fare control facility replacing the three fare control facilities serving the two existing stations.

b) Train Stops

Consolidating two existing stations into one location would reduce train stops and result in operating cost savings.

4) Joint Development

Although fare control facilities are not proposed for inclusion in any adjoining buildings, the direct connection from the proposed station to the Marshall Field's building and to the Randolph Street Pedestrianway would enhance accessibility from the station to destinations in the area.

5) Historic Integrity

Upgrading the functional capabilities of the Loop Elevated by improving its distributional capabilities would assist in maintaining the Loop El as a viable transportation facility.

SUMMARY

The combination of two stops into one can lead to substantial financial savings due to decreased car stops (acceleration cost), the need for fewer ticker agents, and less frequent maintenance. Savings in this case are in the range of \$150,000 per year. With one station instead of two, accessibility to contra-flow bus lanes, nearby commuter rail station, and stations on the North-South Rapid Transit Line's downtown subway segment would not be diminished. These factors make the proposed station location preferrable to the retention of the two existing stations.

DESIGN INFORMATION

No design information other than the station location and methods of vertical access has been generated at this time.

A. EFFECTS OF THE MASTER PLAN ON HISTORIC STRUCTURES

The proposed rehabilitation of the Union Loop Elevated Structure has been determined to have no adverse effect on this property which is eligible for listing in the National Register of Historic Places. Hence this chapter, in conjunction with the other components of the Master Plan for the Loop Elevated Renovation and Historic Preservation will provide the information necessary to function as Justification for this Determination, in accordance with Part 800.13 (a) of Title 36 Code of Federal Regulations.

1) Federal Involvement

As authorized by 23 USC 103(3)(4), on October 2, 1971, the Secretary of the U.S. Department of Transportation approved the joint request of the Mayor of the City of Chicago and the Governor of the State of Illinois to withdraw the south leg of the Crosstown Expressway (Interstate 494). This approval allowed the Mayor to develop a program of highway and transit substitute projects to be administered by the Federal Highway Administration (FHWA) and the Urban Mass Transportation Administration (UMTA), pursuant to the requirements contained in 23 CFR Part 450 and 476. Accordingly, the City of Chicago and Chicago Transit Authority have proposed to use such funds as authorized for the rehabilitation of the Loop Elevated facility. This program involves 85% Federal and 15% matching funds. Maintenance of the structure will remain under the control of the City of Chicago and the Chicago Transit Authority.

2) Approval Status

For planning purposes, the Loop Elevated Renovation project appears on the 1982-1986 Transportation Improvement Program as authorized by the Chicago Area Metropolitan Planning Organization. Currently both engineering design and construction phases have been proposed for funding. However, final approval will not be given until all environmental and design reviews are completed.

3) National Register Properties

The Chicago Union Loop Elevated Structure was found to be eligible for inclusion of the National Register, on July 28, 1978, by Dr. William Murtaugh, then Keeper of the National Register. This determination was made in response to a letter dated July 5, 1978, by Mr. Edward Fleischman, Chief of the Planning and Analysis Division of the Urban Mass Transportation Administration (UMTA). The UMTA request for the opinion of the Keeper of the National Register was made in keeping with Section 106 of National Historic Preservation Act of 1966 (Public Law 89-665) and Executive Order No. 11593 and as a result of the Environmental Impact Statement conducted by UMTA in connection with the construction of the Franklin Street Subway in Chicago.

In providing the eligibility opinion, Dr. Murtaugh cited criteria "A" (association with events that have made a significant contribution to broad patterns of our history) and "C" (embodiment of distinctive characteristics of a type, period, or method of construction; representation of the work of a master; possession of high artistic values; or representation of a significant and distinguishable entity whose components may lack individual distinction) of the National Register evaluation criteria.

4) Evaluation of Project Effects on Historic Structures

The Master Plan recommends various alterations and modifications to the existing structure. Together these changes will return this property to a state of improved utility, assuring an efficient contemporary use. Incorporated in this Master Plan are specific activities to preserve or restore portions of the property which have been determined to be important in illustrating the historic and cultural values of the structure. In consideration of the primary objective of the Master Plan, all existing features may not be retained. In those instances where architectural or engineering features have been determined to impede realization of the primary objective of the Master Plan, and as a result are planned to be modified or eliminated, various mitigation measures have been proposed to minimize the overall impact and assure an accurate historic record of their existance.

This chapter is devoted to the application of the National Register Criteria of Effect and Adverse Effect to the proposed alternative actions of the <u>Master Plan</u>. The preceding chapters have described the existing conditions and the recommended actions for meeting the primary objective and goals of this rehabilitation project.

Preservation of the historic and cultural values associated with the Loop Elevated Structure and System are part of the design criteria and evaluation measures that were used in developing the selected alternative recommendations. A detailed description of the historic preservation guidelines that are to be used in selecting recommended actions is provided. These include:

- --Every reasonable effort will be made to provide a <u>compartible use</u> for the historic property which will require a minimum of alteration to the property and its environment.
- --Rehabilitation work will attempt to avoid destruction of the historic character of the property and its environment. The removal or alteration of any historic material or architectural features will be held to the level consistent with the proposed use.
- --Deteriorated material or architectural features will be repaired rather than replaced wherever feasible. In the event that replacement is necessary, the new material will match the material being replaced in composition, design, texture and other visual character wherever feasible, as found to be in conformance with the overall renovation objective.
- --Replacement of missing architectural features will be based on accurate duplications of original features. Duplications will be based on actual physical or pictorial evidence from the property components undergoing rehabilitation rather than on conjectural designs or the availability of architectural features from other properties.

- --Changes to the property and its environment which have taken place in the course of time are evidence of the history of the property and its setting. These changes to the property may have developed significance in their own right, and this potential significance will be recognized and respected.
- --The use of contemporary design elements associated with this project will attempt to provide for compatible features in all new additions or alterations. This will include elements of scale, size, functional similarity, and character of the historic property and its environment.
- --Wherever possible, new additions or alterations to this historic property will be done in such a manner that if they were to be removed in the future, the essential form and integrity of the original historic property would be unimpaired.

The relative degree of significance contributed to the National Register eligibility by the individual components of the Union Loop Elevated Structure and the synergistic interaction of each was considered in the development of the recommendations for rehabilitation. It is not the intention of this document to argue the value of each component. However, each of the three major elements of this structure, (a) the station facilities; (b) the supporting trestle; and (c) the system function as a whole have all undergone varying levels of change. As previously stated in the historic component of this Master Plan, the proposed rehabilitation is consistent with the structure's history of modifications and improvements required to preserve the physical integrity of the property as both an historic and integral part of Chicago's Gentral Area transportation network. One important component of the historic value of this structure must include the adaptive responses that have been incorporated to meet the dramatic changes that have occurred, and continue to occur in Chicago's Urban Core.

(a) The Loop Elevated System Stations

The greatest degree of change has been witnessed in the stations on this system. Three stations have been removed, and one new facility has been added since the original construction period. Platforms have been extended, shortened, and removed. Station houses have been dismantled, replaced, or greatly modified. Each of these changes have been necessary to accommodate emergency repairs, replacement of worn and deteriorated materials with contemporary features, and general remodeling to maintain safety features, or improve operational efficiency. Many of these previous changes have significantly altered or destroyed major elements of the original design and function of the stations.

(b) The Loope Elevated System Trestle

A relatively small degree of change has occurred with the supporting trestle. These changes were the result of replacement of deteriorated or damaged members over time. Another action is the result of station modifications, which may have required the addition or removal of support members to accommodate the desired change in station and platform location or size. Finally, various other modifications to the structure were the result of modernization of the operating and safety control systems. These fall into the categories of electrical, plumbing, and signal or signage modifications.

(c) The Loop Elevated System Layout

The least degree of change may be measured in the Loop Elevated System Layout in the City's Central Business District. Today it still provides the means of routing several rapid transit system legs through and around the Central Area. While some change in the number of these route legs have occurred, the basic function of the "Loop" is no different than it was when originally conceived.

5) Criteria of Effect which Apply

Implementation of the <u>Master Plan</u> will have an effect on the historic integrity of this National Register Eligible property. A direct effect on the quality of the historical and architectural characteristics that qualify the Loop Elevated Structure to meet the criteria of the National Register, will result from the following project action.

- a) Removal of seven existing stations
- b) Construction of six new station facilities of a contempory design
- c) Changes in station location

6) Criteria of Adverse Effect which Apply

An application of the National Register Criteria of Adverse Effect has shown that there will be no adverse effects associated with the proposed actions of the <u>Master Plan</u>. The following discussion will demonstrate how each of the Criteria of Adverse Effect do not apply to this undertaking, or are ratificatorily mitigated.

(a) <u>Destruction or Alteration of All or Part of a Property</u>

The proposed renovation project will require varying degrees of structural modification to the individual component elements of the Loop Elevated Structure. As previously stated in the text of this <u>Master Plan</u>, the fundamental area of rehabilitation will involve the stations on this structure.

i) <u>Station Removal</u>

It is the opinion of the City of Chicago and the Chicago Transit Authority that removal of the existing stations and construction of new stations at different locations will not significantly alter the historical integrity of the system as a whole. While it appears that many existing features will be

altered or removed by this undertaking, investigatin into the significance of these elements has shown that there is very little similarity between the present station and platform facilities and those of the original structure.

The construction of new efficient stations in ideally suited locations is a mitigation measure to offset the net effect of the actions, because of the altered and deteriorated condition and appearance of the individual stations. It is reasonable to assume that taking no corrective action for these conditions may contribute to the loss of the entire system of the Loop Elevated as it presently exists. As such, without the proposed improvements to this National Register property, an adverse effect may result through "neglect of a property resulting in its deterioration or destruction." Further, the present location of the existing stations inhibit the viewing of other National Register properties located throughout Chicago's Central Business District.

Other proposed measures to mitigate the effects of station removal include the documentation of the present condition and stage of station design alteration through the preparation of perspective corrected photographs and measured plans of affected stations prior to disassembly. Copies of these photographs and drawings will be stored in the archives of the CTA, the Municipal Reference Library and the Chicago Historical Society.

(ii) Station Restoration

The <u>Master Plan</u> recommends restoration of the Quincy & Wells station to its former condition, to the greatest extent possible, while maintaining operation at present volumes of ridership, with currently acceptable security standards. In undertaking this restoration, deteriorated material and architectural features will be repaired, rather than replaced, wherever feasible. In the event replacement is necessary, the new material will match the material being replaced in composition, design, texture and other visual charater, wherever feasible.

Restoration of this station will apply the Secretary of of Interior's Standards for Historic Preservation Projects. Accordingly, the activities at the Quincy/Wells station may be expected to have no adverse effect on the historical integrity of this component.

Incorporating the historic preservation activities at the Quincy/Wells station is expected to further mitigate the effects of removing other stations on the structure. An investigation into the historical integrity of each station, found within the text of the Master Plan, has shown that only the Quincy/Wells station has retained both significant elements of its original design, as well as being in a desired and recommended location.

Accordingly, this station was selected for retention and preservation as an example of the significant style of an original station complex.

(iii) Station Rehabilitation

The Master Plan recommends the rehabilitation of the Adams/Wabash station to emphasize the historic character of the structure of the trestle. The contemporary design elements associated with this project will provide for compatible features including scale, size, functional similarity and historic character of the structure and its environment.

As previously discussed in the historic integrity portion of the Master Plan, the Adams/Wabash station has undergone considerable alteration from its original form. On this basis, it may be expected that further modifications to this facility, within the context of the rehabilitation proposal, will not adversely affect either this one element of the structure, or the overall integrity of the Loop Elevated.

(b) Isolation From or Alteration of the Property's Surrounding Environment

The proposed renovation project will not require any alteration of the Loop Elevated's surrounding environment, nor might it be expected to isolate this property directly or indirectly from its environment. As such, there are not expected adverse affects associated with this criteria.

(c) Introduction of Visual, Audible, or Atmorpheric Elements that are Out of Character with the Property or Alter its Setting

The proposed renovation project will require the introduction of new physical design elements associated with the construction contemporary station facilities.

All new stations will be designed to be compatible with the scale of the trestle component of the structure. In addition, they will be designed to provide a transition between the various buildings being constructed adjacent to the structure and the structure itself. Where feasible, the new stations will be located within the buildings adjacent to the Loop Elevated Structure. As such, the introduction of new elements to the structure will be minimized.

(d) Neglect of a Property Resulting in its Deterioration or Destruction

The proposed recommended actions outlined in the <u>Master Plan</u> will avoid any further neglect of the Loop Elevated Structure, As such, this criteria is not applicable.

(e) Transfer or Sale of a Property Without Adequate Conditions or Restrictions Regarding Preservation, Maintenance or Use

The <u>Master Plan</u> does not recommend the transfer or sale of the Loop Elevated Structure. As such, this criteria is not applicable.

B. SUMMARY DESCRIPTION OF THE MASTER PLAN

The Master Plan For The Loop Elevated Renovation proposes to provide the guidance and control for the City of Chicago to revitalize and thereby retain one of its important transportation components. In addition, this Master Plan demonstrates the possibilities for using the historic Union Loop Elevated System to expand and enhance the highly utilized pedestrian passageway system, by developing connections between the Elevated System and nearby buildings, and where possible also to the subway systems that run through the City's Central Area. Specific accomplishments will include:

- * A rehabilitated and stablized supporting trestle for the Loop Elevated Structure. The actions of this <u>Master Plan</u> are expected to assure the continued safe use of this <u>system</u> for a minimum of 40 years.
- * Development of new stations in private and public structures that are adjacent to the Loop Elevated System. Any opportunity to make these pedestrian connections will allow for implementation passenger control improvements, as well as reductions in the cost of station operation. An additional benefit will be the elimination of unnecessary external structural elements, such as stairways and station house supporting structural members. This will have the obvious benefit of increasing natural lighting to the sidewalk level under the Elevated Structure.

Presently there are three sites that are being proposed for this type of connection. They are the State/Van Buren, Clark/Lake, and Madison/Wells station sites. Other possible sites are being studied.

- * With the development of Mid-Block Station Design proposals, there will be several significant improvements to both pedestrian and vehicular movement in and through the City's Central Area. These improvements include increased clearances under the Elevated Structure at all intersecting streets, reduced walking distances between transit facilities to facilitate convenience of transferring, and elimination of dangerous pedestrian conjection at roadway intersections due to the location of Elevated System Entrance.
- * The new design for the replacement stations and platforms will provide for improved all weather protection and reduced manpower requirements for operation.
- * Reduction of the total number of stations will allow for better management of train stops and headway delay problems between trains. This will be achieved by the consolidation of the two stations on each of the north ends of the north-south legs of the system.
- * Preservation of the relatively unchanged station at Quincy and Wells Street. This station will be restored and maintained as a functional element representing the early years of the system.

- * Development of a remodeled station at Adams and Wabash which will incorporate innovative contemporary design components.
- * Improvements to the accessibility for physically handicapped and elderly Elevated System users. This will be accomplished wherever stations will be able to be located in adjacent buildings.
- * Through the overall improvements to the Loop Elevated System and currently available noise reduction architectural materials and techniques, it is expected that the negative stigma of near structure building locations will be reversed.
- * Incorporated with the Mitigation Measures to reduce the impacts on the historic integrity of the Loop Elevated System is the proposal to investigate the development and operation of the System for the purpose of documenting the historic and cultural values associated with the System.

Specific details for each of the proposed changes to the existing Union Loop Elevated Structure are contained in the text of this Master Plan.

MAIN SOURCES OF HISTORICAL INFORMATION

Chicago Historical Society

Photographic collection

Chicago Transit Authority

"The Story of the Chicago Rapid Transit Lines - The 'L' System" reprinted May 1, 1940 from the 37th Anniversary Year Book of Division 308, Elevated Railway Employees

Chicago Transit Authority

Civil Engineering Department, drawings and microfilm on the elevated system

Chicago Transit Authority

Public Affairs Department, "Union Elevated Railroad Company" article dated April 1, 1957; various historical photographs.

City of Chicago

The Chicago Loop Elevated Structure: Reasons for Not Listing Upon the National Register Submitted to the Illinois Historic Sites Advisory Council Oct. 13, 1978.

Cudahy, Brian J.

"Chicago's Early Elevated Lines and the Construction of the Union Loop" in <u>Chicago History</u>, Winter, 1979-80, pp. 194-205.

Harrington, Kevin

"Above All Else: The Chicago Elevated Railroad" paper presented at the 1980 Annual Meeting of the Society of Architectural Historians in Madison, Wisconsin. On file in CTA library.

The Railroad Gazette

Various articles from 1896 through 1899, especially "The Northwestern and the Union Elevated Railroads of Chicago," Vol. 29, May 1, 1896; and "The Chicago Elevated Loop," Vol. 31, no. 11, March 17, 1899.

Young, David

"The City of Continual Change" in <u>Mass Transit</u>, May, 1978.

Federal, State, and Local
Historic Buildings and Landmarks

		Federal			
Address	Date Constructed	NRHP/ NHL Property Name		Date NRHP Designation	NRHP District
PROJECT AREA, west side	of street, north to south				
20-32 E Randolph	1990				Loop Retail Historic District
29 E Randolph	1914	Marshall Field Company Store	6/2/1978	6/2/1978	Loop Retail Historic District
122 N Wabash Ave	1914	Marshall Field Company Store	6/2/1978	6/2/1978	Loop Retail Historic District
28 E Washington St	1914	Marshall Field Company Store	6/2/1978	6/2/1978	Loop Retail Historic District
25 E Washington St	1913				Loop Retail Historic District
16 N Wabash Ave					Loop Retail Historic District
28-30 E Madison St					Loop Retail Historic District
29 E Madison St	1905	Carson Pirie Scott & Company Building	5/15/1975	4/17/1970	Loop Retail Historic District
10-14 S Wabash Ave	1896	Silversmith Building, 10 S Wabash		5/16/1997	Loop Retail Historic District
18-28 S Wabash Ave	1875-77, 1896	Carson Pirie Scott & Company Building	5/15/1975	4/17/1970	Loop Retail Historic District
PROJECT AREA, east side	of street, south to north	L			L
15-19 S Wabash Ave	1878	Jewelers Building		8/7/1974	Loop Retail Historic District
1-7 S Wabash Ave	1910				Loop Retail Historic District
54 E Madison	1910				Loop Retail Historic District
1-5 N Wabash Ave	1910				Loop Retail Historic District
7-9 N Wabash	1910				Loop Retail Historic District
11 N Wabash Ave	1930				Loop Retail Historic District
19-21 N Wabash Ave	1888				Loop Retail Historic District
31-41 N Wabash Ave	1927				Loop Retail Historic District
101-115 N Wabash Ave	1915				Loop Retail Historic District
130 N Garland Ct	2005				Loop Retail Historic District
50-60 E Randolph St					Loop Retail Historic District

		Local - City of Chicago				
Address	Date Constructed	Chicago Landmark Building Name(s)	Date Building Designation	Date District Designation	Chicago Landmark Districts	Chicago Historic Resources Survey Demoltion Delay
	e of street, north to south	Chicago Landmark Building Name(s)	Designation	Designation	Cilicago Landinark Districts	Demoition Delay
20-32 E Randolph	1990					
29 E Randolph		Marshall Field and Company Building	11/1/2005	5		red
122 N Wabash Ave		Marshall Field and Company Building	11/1/2005			red
28 E Washington St		Marshall Field and Company Building	11/1/2005		Jewelers Row District	red
25 E Washington St	1913		•	7/9/2003	Jewelers Row District	orange
16 N Wabash Ave				7/9/2003	Jewelers Row District	orange
28-30 E Madison St				7/9/2003	Jewelers Row District	red
29 E Madison St		Carson Pirie Scott & Company Building, Heyworth Building**	11/5/1970, 9/27/00 **		Jewelers Row District	orange
10-14 S Wabash Ave	1896				Jewelers Row District	orange
18-28 S Wabash Ave	1875-77, 1896	Carson Pirie Scott & Company Building, Haskell-Barker-Atwater Building**	11/5/1970, 11/13/1996**	7/9/2003	Jewelers Row District	red
PROJECT AREA, east side	of street, south to north					
15-19 S Wabash Ave	1878	Jewelers Building, 15-17 S Wabash	12/18/1981	7/9/2003	Jewelers Row District	orange
1-7 S Wabash Ave	1910			7/9/2003	Jewelers Row District	orange
54 E Madison	1910			7/9/2003	Jewelers Row District	
1-5 N Wabash Ave	1910			7/9/2003	Jewelers Row District	
7-9 N Wabash	1910			7/9/2003	Jewelers Row District	
11 N Wabash Ave	1930			7/9/2003	Jewelers Row District	
19-21 N Wabash Ave	1888				Jewelers Row District	orange
31-41 N Wabash Ave	1927	Pittsfield Building, 55 E. Washington St	11/6/2002		Jewelers Row District	orange
101-115 N Wabash Ave	1915			7/9/2003	Jewelers Row District	
130 N Garland Ct	2005					orange
50-60 E Randolph St						

		Federal			
			Data NUU	Data NIDUD	
A.1.1	But Court and	NIDUD (AUU Burnet Alema		Date NRHP	NEWS BOOK OF
Address		NRHP/ NHL Property Name	Designation	Designation	NRHP District
STUDY AREA, countercloc	kwise starting in north center				
174-184 N Wabash Ave					Loop Retail Historic District
175 N State St	1921	Balaban & Katz Chicago Theater		6/6/1979	Loop Retail Historic District
177-191 N State St		Page Brothers Building Cast Iron Front		6/5/1975	Loop Retail Historic District
167-151 N State St					Loop Retail Historic District
101-137 N State St	1914	Marshall Field Company Store	6/2/1978	6/2/1978	Loop Retail Historic District
103 N State St	1890-1895	Reliance Building	1/7/1976	10/15/1970	Loop Retail Historic District
97 E Washington St	1960				Loop Retail Historic District
17-29 N State St	1911				Loop Retail Historic District
1-15 N State St					Loop Retail Historic District
1-9 N State St		Carson Pirie Scott & Company Building	5/15/1975	4/17/1970	Loop Retail Historic District
31-35 S State St		Carson Pirie Scott & Company Building	5/15/1975	4/17/1970	Loop Retail Historic District
39 S State St					Loop Retail Historic District
12-16 E Monroe St		Carson Pirie Scott & Company Building	5/15/1975	4/17/1970	Loop Retail Historic District
37 S Wabash Ave	1902				Loop Retail Historic District
33 S Wabash Ave					Loop Retail Historic District
29 S Wabash Ave					Loop Retail Historic District
25 S Wabash Ave					Loop Retail Historic District
23 S Wabash Ave					Loop Retail Historic District
34-38 S Michigan Ave	1908				
		Gage Group (Ascher, Keith and Gage			
30 S Michigan Ave	1898	Buildings)]	11/14/1985	
		Gage Group (Ascher, Keith and Gage			
28 S Michigan Ave		Buildings)	_	11/14/1985	
		Gage Group (Ascher, Keith and Gage			
18 S Michigan Ave	1898	Buildings)		11/14/1985	

		Local - City of Chicago				
Address	Date Constructed	Chicago Landmark Building Name(s)	Date Building Designation	Date District Designation	Chicago Landmark Districts	Chicago Historic Resources Survey Demoltion Delay
STUDY AREA, counterclo	ckwise starting in north center				,	
174-184 N Wabash Ave						orange
175 N State St	1921	Chicago Theater, 175 N State	1/28/1983	3		red
177-191 N State St		Page Brothers Building	1/28/1983	3		red
167-151 N State St						
101-137 N State St	1914	Marshall Field and Company Building	11/1/2005	5		red
103 N State St	1890-1895		•			
97 E Washington St	1960					
17-29 N State St	1911					orange
1-15 N State St				7/9/2003	Jewelers Row District	- Control of the cont
1-9 N State St		Carson Pirie Scott & Company Building	11/5/1970	<u>)</u>		red
31-35 S State St		Carson Pirie Scott & Company Building	11/5/1970			
39 S State St					T	orange
12-16 E Monroe St		Carson Pirie Scott & Company Building	11/5/1970	7/9/2003	Jewelers Row District	orange
37 S Wabash Ave	1902		-	7/9/2003	Jewelers Row District	red
33 S Wabash Ave				7/9/2003	Jewelers Row District	orange
29 S Wabash Ave				7/9/2003	Jewelers Row District	orange
25 S Wabash Ave						
23 S Wabash Ave				7/9/2003	Jewelers Row District	
34-38 S Michigan Ave	1908		1	2/27/2002	Historic Michigan Boulevard	orange
30 S Michigan Ave	1898	Gage Group	9/11/1996	2/27/2002	Historic Michigan Boulevard	red
28 S Michigan Ave		Gage Group	9/11/1996	2/27/2002	Historic Michigan Boulevard	red
18 S Michigan Ave	1898	Gage Group	9/11/1996	2/27/2002	Historic Michigan Boulevard	red

		Federal		
Address	Date Constructed	NRHP/ NHL Property Name	Date NRHP Designation	NRHP District
STUDY AREA, continued			 	
12 S Michigan Ave	1912			
73-81 E Madison St	1929			
71 E Madison St	1912			
6 N Michigan Ave	1899			
o N Michigan Ave	1833			
12-24 N Michigan Ave	1893			
26 20 N Michigan Avo	1916			
26-30 N Michigan Ave	1910			
78 E Washington St		Chicago Public Library, Central Building	7/31/1972	
62 E Randolph St	1937		, ,	Loop Retail Historic District
66 E Randolph St	1881			Loop Retail Historic District
51-63 W Lake St	1927			Loop Retail Historic District

		Local - City of Chicago				
Address	Date Constructed	Chicago Landmark Building Name(s)	Date Building Designation	Date District Designation	Chicago Landmark Districts	Chicago Historic Resources Survey Demoltion Delay
STUDY AREA, continued						
12 S Michigan Ave	1912			2/27/2002	Historic Michigan Boulevard	orange
73-81 E Madison St	1929			2/27/2002	Historic Michigan Boulevard	
71 E Madison St	1912			2/27/2002	Historic Michigan Boulevard	
6 N Michigan Ave	1899			2/27/2002	Historic Michigan Boulevard	orange
12-24 N Michigan Ave	1893			2/27/2002	Historic Michigan Boulevard	
26-30 N Michigan Ave	1916			2/27/2002	Historic Michigan Boulevard	orange
78 E Washington St		Chicago Public Library/Cultural Center at 122 N Michigan Ave	11/15/1976	2/27/2002	Historic Michigan Boulevard	orange
62 E Randolph St	1937					
66 E Randolph St	1881					orange
51-63 W Lake St	1927					
		** The Heyworth Building and the Haskell-Barkel designations in the 1970's, but were later given t				mpany Building for historic
		Sources				
		https://gisapps.cityofchicago.org/zoning/viewframe.ht				
		http://www.illinois.gov/ihpa/Preserve/Pages/NHL.asp	x as of 11/14/13			
		http://www.cityofchicago.org/content/dam/city/dept	s/zlup/Historic_Preservati	ion/Publications/Chica	igo_Landmark_Address_List_Oo	t2013.pdf
		http://webapps.cityofchicago.org/landmarksweb/web	_			
		http://www.cityofchicago.org/content/dam/city/dept	s/zlup/Historic_Preservati	on/Publications/Natio	onal_Register_List_Jul2012.pdf	
		http://www.cityofchicago.org/city/en/dataset/landma	ark_districts.html as of 11/	/14/13		

Appendix C

Research and Data Findings

- Chicago Metropolitan Agency for Planning CMAP Transportation Improvement Program (TIP) Listing
- Environmental Justice Data and Maps
- Air Quality Conformity References
- Hot Spot Analysis References
- Noise Study Calculations and Graphs
- IDNR EcoCAT Confirmation of Consultation Letter
- U.S. Fish and Wildlife Service No Effects Determination Letter

Contents

Title

CMAP TIP Listing – Project ID 01-12-0008
CMAP and 2010 U.S. Bureau of the Census Data
Cook County Air Quality Non Attainment Status by Year since 1978
Hot Spot Reference CFR-2011-title40-vol20-sec93-123- for Carbon
Monoxide (CO), Particulate Matter (PM) PM_{2.5} and PM₁₀
Noise Study Calculations and Graphs
IDNR EcoCAT Response
IDNR EcoCat Cook County Endangered Species List
USFWS No Effects Determination Letter
USFWS Endangered Species List

CMAP Transportation Improvement Listing

Project ID 01-12-0008

Washington/Wabash Loop Elevated Station – Appendix C – Transportation Improvement Program (TIP) Listing From CMAP –

TIP Project PicQdo NeQOP8itan Agency for Planning

TIP - 01-12-0008

Suite 800 Chicago, Illinois 60606

312 454 0400 www.cmap.illinois.gov

Drainet TD	01-12-0008	141100000000000000000000000000000000000	······································
Project ID	01-12-0000		
Project Identification	The state of the s		
Project's Programming Agency	Chicago Department of Transportation		
Programming Agency's Project Name	TI01123775		
Other Participating Agencies	Chicago Metropolitan Agency for Planning		
Total Project Cost:			
RTP Project	No		
Contacts			
Contact Name Agency	P	hone	Contact Type
David Seglin Chicago Departme	ent of Transportation (3	12) 742-2762	Primary
Facility to be Improved			
Marked Route	Washington/Wabash Consolidated Station	pin	
	System - Route Number		
1st Ref. St. name	System - Route Number		
	County		
	Municipality 689		
2nd Ref. St. name		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	System		
	Route Numbers		
	County		
	Municipality		
Other Project Location Information			
Brief Description	Consolidate Randolph/Wabash and Madisor Station.	/Wabash into new	Washington/Wabash
Work Accomplished	Work Type Defined STATION - RELOCATE		The facility of the facility o
	Candidate TCM Type		

Project Financing

Financing Overall Totals			Cost Totals				
				Fed	eral Totals:		
CMAQ	ENGINEERING	12	4500	3600			
Project Segn	nent or Line Item Ident	ifier	2012-TI0112	3775			
Anticipated A	Authorization						
Section Num	ber						
State Job Nu	mber						
FTA Grant No	umber			14_13_111111111111111111111111111111111			
CMAQ	CONSTRUCTION	10	3415	3415			
Project Segn	nent or Line Item Ident	ifler	Transp. I Match	evelopment Credits	used for		
Anticipated A	Authorization			101101011011			
Section Num	ber						
State Job Nu	mber						
FTA Grant Nu	umber		IŁ-95-X0	12			
CMAQ	CONSTRUCTION op Elevated Station	12	40000	40000			
i/wabash Loop Elevated Station							

Project Segment or Line Item Identifier	Transp. Development Credits used for Match
Anticipated Authorization	
Section Number	
State Job Number	
FTA Grant Number	IL-95-X010-02

Modeled Project Data

ed Project Data			
Project ID			
Row Underway			
NEPA Completed			
Completion Year	2016		
Facility Type			***************************************
Project Length (miles)	0		THE STATE OF THE S
Transit Projects Only			
Modes Served	Rail		
Service Contract			
Commuter Rail/Rapid Transit Parking		Before	After
Parking Spaces *		0	0
		0	
Parking Price *		U	0
CMAP Use Only			
EMME Network ID			
FY 96-00 EMME ID			
Network			
Scenario Year			
Action/Baseline			
Land Use Scenario			
Non-regionally Significant Project Status			
Consultation Date		***************************************	

Modeled Highway Project Data **Project Dates**

Creation Date: 10/19/2011 12:14:35 PM

Completion Date:

Unspecified

Conformity Date:

Unspecified

CMAQ

ENGINEERING 12

2012-TI01123775

Letting Date: Unspecified

Authorization: 5/29/2012

Start Date:

Completion Date: Unspecified

Unspecified

Award Date:

Unspecified

CMAQ

CONSTRUCTION 10

Transp. Development Credits used for Match

Letting Date: Unspecified Authorization: Start Date:

8/9/2013

Unspecified

Completion Date: Unspecified

Award Date:

Unspecified

CMAQ

CONSTRUCTION 12

Transp. Development Credits used for Match

Letting Date: Unspecified Authorization: 12/11/2013 Washington/Wabash Loop Elevated Station.

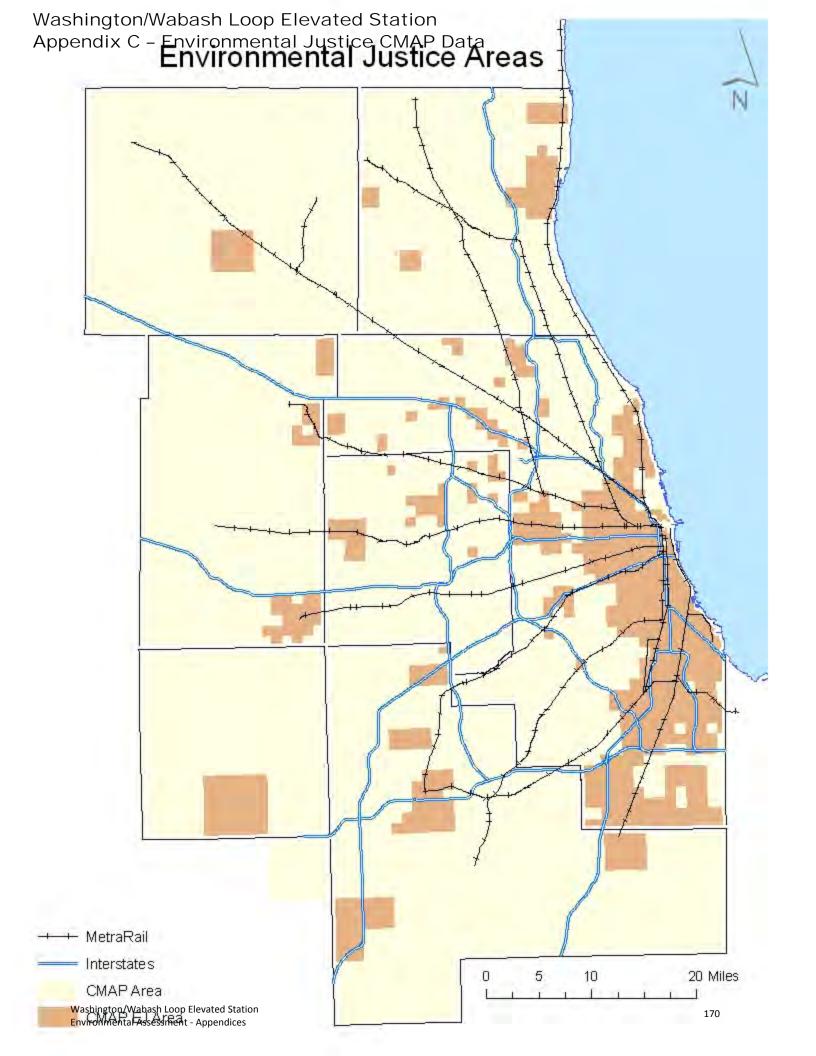
Environmental Assessment - Appendices

Start Date: Unspecified Completion Date: Unspecified Award Date: Unspecified

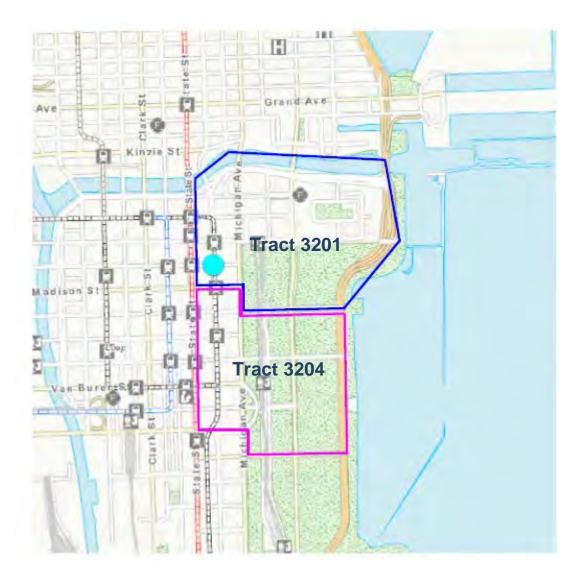
2013-07-01 16:21

	-			4 1	 4 =	
_	nvi	ron	ma	ntal	usti	\sim Δ
_	1 I V I	ıvı		ııtaı	 uali	

CMAP and 2010 U.S. Bureau of the Census Data



Washington/Wabash Loop Elevated Station Appendix C - Environmental Justice Census Results - Census Tracts



2010 Census Results	Tract 3201	Tract 3204
American Indian or Alaska Native	28	11
Asian	2,072	144
Black	780	444
Caucasian	7,495	1,777
Native Hawaiian or Pacific Islander	5	2
Some Other Race	163	61
Two or More Races	305	79

Cook County Air Quality Non Attainment Status by Year, since 1978



Green Book



Contact Us Search: All EPA This Area

You are here: FPA Home * Green Book * Historical Whole or Part County Nonattainment Status by Year Since 1978 for Illinois

Historical Whole or Part County Non Attainment Status by Year Since 1978 for Illinois

As of December 14, 2012

Listed by State, County, Pollutant (W=Whole County, P=Partial County designated nonattainment as of report date)

Select a State:

AK | AL | AR | AZ | CA | CO | CT | DC | DE | FL | GA | GU | HI | IA | ID | IL | IN | KS | KY | LA | MA | MD | ME | MI |

MS | MT | NC | ND | NE | NH | NJ | NM | NV | NY | OH | OK | OR | PA | PR | RL | SC | IN | IX | UT | VA | VT | WA |

WI | WV | WY |

Important Notes

	ILLINOIS y Pollutant 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 0																																			
County	Pollutant	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	1:
Adams County	1-Hr Ozone	W	W	W	w	W																														
Boone County	1-Hr Ozone	W	W	W	W	W																														
Champaign County	1-Hr Ozone	W	W																																	
Cook Co	8-Hr Ozone 1997																											W	W	w	w	w	W	w	w	
Cook Co	8-Hr Ozone 2008																																			W
Cook Co	Lead 2008																																		Р	Р
Cook Co	PM-2.5 1997																												W	W	W	w	W	w	W	W
Cook County	1-Hr Ozone	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	w	W	W	W	W	W	W	W	W	W	W	w								
Cook County	со	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р																					
Cook County	PM-10													Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р								
DeKalb County	1-Hr Ozone	W	W	W	w	W																														
Du Page Co	8-Hr Ozone 1997																											w	w	w	w	w	w	w	w	
Du Page Co	8-Hr Ozone 2008																																			W
Du Page Co	PM-2.5 1997																												W	W	W	W	W	W	W	W
DuPage County	1-Hr Ozone	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	w	W	W	W	W	W	W	W	W	W	W	W								
Grundy Co	8-Hr Ozone 1997																											Р	Р	Р	Р	Р	Р	Р	Р	
Grundy Co	8-Hr Ozone 2008																																			Р
Grundy Co	PM-2.5 1997																												Р	Р	Р	Р	Р	Р	Р	Р
Grundy County	1-Hr Ozone	W	W	W	w	W									Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р								

Jersey Co	Ozone 1997																											W	W	W	W	W	W	W	W	
Jersey County	1-Hr Ozone															W	w	w																		
Kane Co	8-Hr Ozone 1997																											W	W	W	W	W	W	W	W	
Kane Co	8-Hr Ozone 2008																																			w
Kane Co	PM-2.5 1997																												W	W	W	W	w	W	W	w
Kane County	1-Hr Ozone	w	w	w	w	W	w	w	W	w	w	W	w	W	w	W	w	w	w	W	W	w	W	W	w	w	W	w								
Kankakee County	1-Hr Ozone	W	W	W	W	W																														
Kendall Co	8-Hr Ozone 1997																											Р	Р	Р	Р	Р	Р	Р	Р	
Kendall Co	8-Hr Ozone 2008																																			Р
Kendall Co	PM-2.5 1997																												Р	Р	Р	Р	Р	Р	Р	Р
Kendall County	1-Hr Ozone	W	W	W	W	W									Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р								
La Salle County	1-Hr Ozone	w	w	w	w	w																														
La Salle County	PM-10													Р	Р	Р	Р	Р	Р	Р																
Lake Co	8-Hr Ozone 1997																											w	w	W	W	W	w	W	W	
Lake Co	8-Hr Ozone 2008																																			W
Lake Co	PM-2.5 1997																												W	w	w	w	w	W	w	w
Lake County	1-Hr Ozone	w	W	W	w	W	w	W	W	W	W	W	w	W	W	W	W	w	W	W	W	W	W	W	W	W	W	W								
Macon County	1-Hr Ozone	w	w																																	
Macoupin County	1-Hr Ozone						W	W	W	W	W	W	W	W																						
Madison Co	8-Hr Ozone 1997																											w	W	W	W	W	w	W	W	
Madison Co	8-Hr Ozone 2008																																			w
Madison Co	Lead 2008																																	Р	Р	Р
Madison Co	PM-2.5 1997																												W	w	w	W	w	W	w	w
Madison County	1-Hr Ozone	w	w	W	w	w	w	w	w	w	w	W	w	w	w	w	w	w	w	W	W	w	w	w	w	w										
Madison County	PM-10													Р	Р	Р	Р	Р	Р	Р	Р															
Massac County	SO2	Р	Р																																	
Mc Henry Co	8-Hr Ozone 1997																											W	W	W	W	W	W	W	W	
Mc Henry Co	8-Hr Ozone 2008																																			w
Mc Henry Co	PM-2.5 1997																												W	W	W	W 174	W	W	W	w

	1	+		+				+											1							+										\vdash
McHenry County	1-Hr Ozone	W	W	W	W	W								W	W	W	W	W	W	W	W	W	W	W	W	W	W	W								
McLean County	1-Hr Ozone	W	W																																	
Monroe Co	8-Hr Ozone 1997																											w	w	w	w	w	W	w	W	
Monroe Co	8-Hr Ozone 2008																																			w
Monroe Co	PM-2.5 1997																												W	w	w	w	W	w	W	w
Monroe County	1-Hr Ozone	w	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	w	W	W	W										
Peoria County	1-Hr Ozone	w	W	W	w	w																														
Peoria County	со	Р	Р	Р	Р	Р	Р																													
Peoria County	SO2	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р																		
Randolph Co	PM-2.5 1997																												Р	Р	Р	Р	Р	Р	Р	Р
Rock Island County	1-Hr Ozone	W	w																																	
Rock Island County	со				Р	Р	Р																													
Sangamon County	1-Hr Ozone	W	W	W	w	W																														
St Clair Co	8-Hr Ozone 1997																											w	w	w	w	w	W	w	W	
St Clair Co	8-Hr Ozone 2008																																			w
St Clair Co	PM-2.5 1997																												W	W	W	W	W	W	W	W
St. Clair County	1-Hr Ozone	w	w	W	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	W										
Tazewell County	1-Hr Ozone	W	W	W	W	W																														
Tazewell County	SO2	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р																		
Will Co	8-Hr Ozone 1997																											w	w	w	w	w	W	w	W	
Will Co	8-Hr Ozone 2008																																			w
Will Co	PM-2.5 1997																												W	w	w	W	W	w	w	W
Will County	1-Hr Ozone	W	W	w	w	w								w	w	w	w	w	w	w	w	w	w	w	w	w	w	w								
Williamson County	1-Hr Ozone	W	W	W	w	W	W	W	W	W																										
Winnebago County	1-Hr Ozone	W	w																																	

Go Top

Hot Spot Reference CFR-2011-title40-vol20-sec93-123for Carbon Monoxide (CO), and Particulate Matter (PM) PM_{2.5} and PM₁₀

Washington/Wabash Loop Elevated Station – Appendix C Hot Spots Reference CFR-2011-title40-vol20-sec93-123 For Carbon Monoxide (CO), Particulate Matter (PM) PM2.5 and PM10



§ 93.123

(2) In cases other than those described in paragraph (a)(1) of this section, the demonstrations required by

40 CFR Ch. I (7-1-11 Edition)

§93.116 may be based on either:
(1) Quantitative methods that rep-

sional practice; or

portation plan (even if it is not specifically included in the latest conforming TIP) with design concept and scope adequate to determine its contribution to the transportation plan's regional emissions at the time of the transportation plan's conformity determination, and the design concept and scope of the project is not significantly different from that described in the transportation plan.

(ii) Included in the conforming trans-

(3) A conformity determination that relies on paragraph (g) of this section does not satisfy the frequency require-

ments of §93.104(b) or (c).

[62 FR 43801, Aug. 15, 1997, as amended at 69 FR 40080, July I, 2004]

§93.123 Procedures for determining localized CO, PM₁₀, and PM_{2.5} concentrations (hot-spot analysis).

(a) CO hot-spot analysis. (1) The demonstrations required by §93.116 ("Localized CO, PM₁₀₁, and PM_{2.5} violations") must be based on quantitative analysis using the applicable air quality models, data bases, and other requirements specified in 40 CFR part 51, Appendix W (Guideline on Air Quality Models). These procedures shall be used in the following cases, unless different procedures developed through the interagency consultation process required in §93.105 and approved by the EPA Regional Administrator are used:

(i) For projects in or affecting locations, areas, or categories of sites which are identified in the applicable implementation plan as sites of viola-

tion or possible violation;

(ii) For projects affecting intersections that are at Level-of-Service D, E, or F, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes related to the project;

(iii) For any project affecting one or more of the top three intersections in the nonattainment or maintenance area with highest traffic volumes, as identified in the applicable implemen-

tation plan; and

(iv) For any project affecting one or more of the top three intersections in the nonattainment or maintenance area with the worst level of service, as identified in the applicable implementation plan. (ii) A qualitative consideration of local factors, if this can provide a clear demonstration that the requirements of §93.116 are met.
 (3) DOT, in consultation with EPA, may also choose to make a categorical.

resent reasonable and common profes-

- (3) DOT, in consultation with EPA, may also choose to make a categorical hot-spot finding that (93.116(a) is met without further hot-spot analysis for any project described in paragraphs (a)(1) and (a)(2) of this section based on appropriate modeling. DOT, in consultation with EPA, may also consider the current air quality circumstances of a given CO nonattainment or maintenance area in categorical hot-spot findings for applicable FHWA or FTA projects.
- (b) PM₁₀ and PM_{2.5} hot-spot analyses.
 (1) The hot-spot demonstration required by §93.116 must be based on quantitative analysis methods for the following types of projects:
- (i) New highway projects that have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of diesel vehicles;
- (ii) Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;
- (iii) New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;
- (iv) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and
- (v) Projects in or affecting locations, areas, or categories of sites which are identified in the PM₁₀ or PM_{2,5} applicable Implementation plan or Implementation plan submission, as appropriate, as sites of violation or possible violation.

- (2) Where quantitative analysis methods are not available, the demonstration required by §93.116 for projects described in paragraph (b)(1) of this section must be based on a qualitative consideration of local factors.
- (3) DOT, in consultation with EPA, may also choose to make a categorical hot-spot finding that §93.116 is met without further hot-spot analysis for any project described in paragraph (b)(1) of this section based on appropriate modeling. DOT, in consultation with EPA, may also consider the current air quality circumstances of a given PM_{2.5} or PM₁₀ nonattainment or maintenance area in categorical hot-spot findings for applicable FHWA or FTA projects.
- (4) The requirements for quantitative analysis contained in this paragraph (b) will not take effect until EPA releases modeling guidance on this subject and announces in the FEDERAL REGISTER that these requirements are in effect.
- (c) General requirements. (1) Estimated pollutant concentrations must be based on the total emissions burden which may result from the implementation of the project, summed together with future background concentrations. The total concentration must be estimated and analyzed at appropriate receptor locations in the area substantially affected by the project.
- (2) Hot-spot analyses must include the entire project, and may be performed only after the major design features which will significantly impact concentrations have been identified. The future background concentration should be estimated by multiplying current background by the ratio of future to current traffic and the ratio of future to current emission factors.
- (3) Hot-spot analysis assumptions must be consistent with those in the regional emissions analysis for those inputs which are required for both analyses.
- (4) CO, PM₁₀, or PM_{2.5} mitigation or control measures shall be assumed in the hot-spot analysis only where there are written commitments from the project sponsor and/or operator to implement such measures, as required by §93.125(a).

(5) CO, PM₁₀, and PM_{2.5} hot-spot analyses are not required to consider construction-related activities which cause temporary increases in emissions. Each site which is affected by construction-related activities shall be considered separately, using established "Guideline" methods. Temporary increases are defined as those which occur only during the construction phase and last five years or less at any individual site.

[58 FR 62235, Nov. 24, 1993, as amended at 71 FR 12510, Mar. 10, 2006; 73 FR 4441, Jan. 24, 2008]

§ 93.124 Using the motor vehicle emissions budget in the applicable implementation plan (or implementation plan submission).

(a) In interpreting an applicable implementation plan (or implementation plan submission) with respect to its motor vehicle emissions budget(s), the MPO and DOT may not infer additions to the budget(s) that are not explicitly intended by the implementation plan (or submission). Unless the implementation plan explicitly quantifies the amount by which motor vehicle emissions could be higher while still allowing a demonstration of compliance with the milestone, attainment, or maintenance requirement and explicitly states an intent that some or all of this additional amount should be available to the MPO and DOT in the emissions budget for conformity purposes. the MPO may not interpret the budget to be higher than the implementation plan's estimate of future emissions. This applies in particular to applicable implementation plans (or submissions) which demonstrate that after implementation of control measures in the implementation plan:

- (1) Emissions from all sources will be less than the total emissions that would be consistent with a required demonstration of an emissions reduction milestone;
- (2) Emissions from all sources will result in achieving attainment prior to the attainment deadline and/or ambient concentrations in the attainment deadline year will be lower than needed to demonstrate attainment; or

Noise Study Calculations and Graphs

Washington/Wabash Loop Elevated Station Appendix C - Noise Study Calculations and Graphs

version: 7/3/2007

Project: Washington/Wabash Loop Elevated Station

Receiver Parameters	
Receiver:	Residential Highrise
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	75 dBA

Noise Source Parameters		
	Number of Noise Sources:	2

Noise Source Paran	neters	Source 1
	Source Type:	Highway/Transit
	Specific Source:	Automated Guideway Transit /Steel Wheel
Daytime hrs		
	Speed (mph)	20
	Avg. Number of Events/hr	33
Nighttime hrs		
	Speed (mph)	20
	Avg. Number of Events/hr	24
Distance	Distance from Source to Receiver (ft)	40
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

Noise Source Paran	neters	Source 2
	Source Type:	Highway/Transit
	Specific Source:	Automobiles and Vans
Daytime hrs		
	Speed (mph)	25
	Avg. Number of Events/hr	581
Nighttime hrs		
	Speed (mph)	25
	Avg. Number of Events/hr	348
Distance	Distance from Source to Receiver (ft)	30
	Number of Intervening Rows of Buildings	
Adjustments	Noise Barrier?	No

Project Results Summary

Existing Ldn:	75 dBA
Total Project Ldn:	67 dBA
Total Noise Exposure:	76 dBA
Increase:	1 dB
Impact?:	Moderate

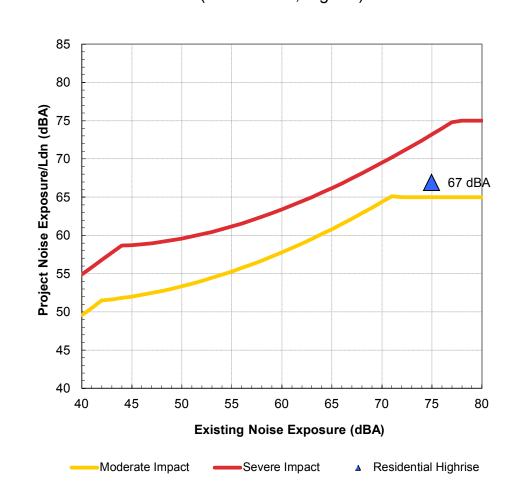
Distance to Impact Contours

Distance to impact contours							
Dist to Mod. Impact Contour							
(Sources 1+2):							
Dist to Sev. Impact Contour							
(Sources 1+2):							

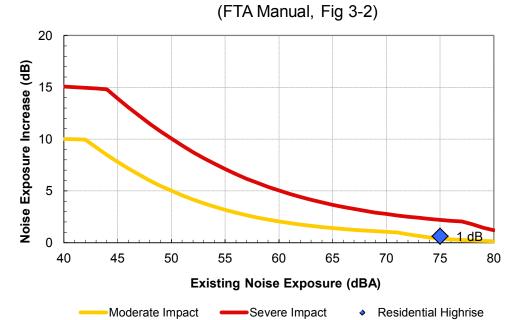
Source 1 Results

Leq(day): 58.1 dBA Leq(night): 55.7 dBA Ldn: 62.6 dBA

Noise Impact Criteria (FTA Manual, Fig 3-1)



Increase in Cumulative Noise Levels Allowed



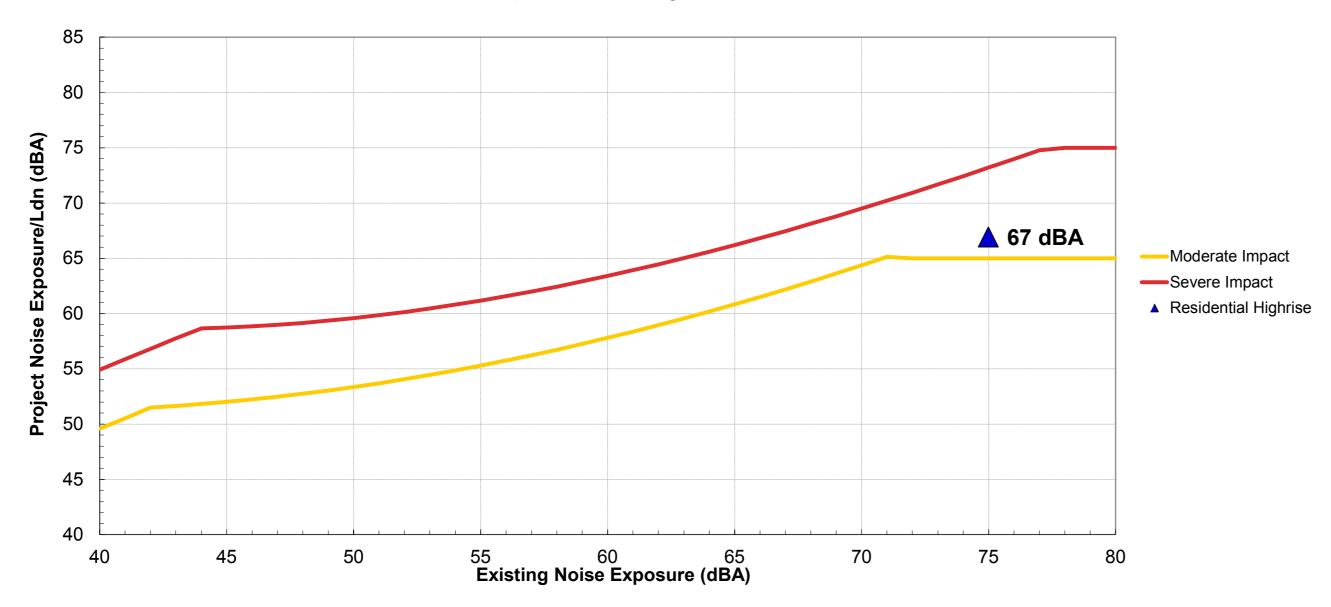
Source 2 Results

Leq(day): 60.3 dBA Leq(night): 58.1 dBA Ldn: 64.9 dBA Incremental Ldn (Src 1-2): 66.9 dBA **Project:** Washington/Wabash Loop Elevated Station

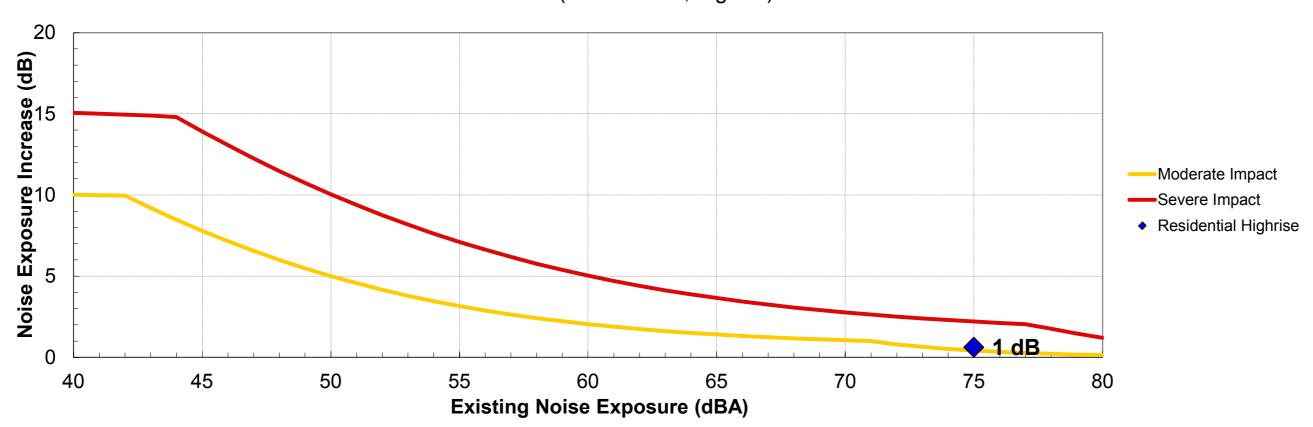
Receiver: Residential Highrise

				Noise C	Criteria	
Source	Distance	Project Ldn	Existing Ldn	Mod. Impact	Sev. Impact	Impact?
1 Automated Guideway Transi	40 ft	62.6 dBA	75 dBA	65 dBA	73 dBA	None
2 Automobiles and Vans	30 ft	64.9 dBA	75 dBA	65 dBA	73 dBA	None
3	ft		75 dBA	65 dBA	73 dBA	
4	ft		75 dBA	65 dBA	73 dBA	
5	ft		75 dBA	65 dBA	73 dBA	
6	ft		75 dBA	65 dBA	73 dBA	
Combined Sources		67 dBA	75 dBA	65 dBA	73 dBA	Moderate Impact

Noise Impact Criteria (FTA Manual, Fig 3-1)



Increase in Cumulative Noise Levels Allowed (FTA Manual, Fig 3-2)



Washington/Wabash Loop Elevated Station Environmental Assessment - Appendices

version: 7/3/2007

Project: Washington/Wabash Loop Elevated
Station

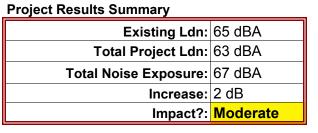
Receiver Parameters	
Receiver:	Residential Highrise
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	65 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source Paran	neters	Source 1
	Source Type:	Highway/Transit
	Specific Source:	Automated Guideway Transit /Steel Wheel
Daytime hrs		
	Speed (mph)	20
	Avg. Number of Events/hr	33
Nighttime hrs		
	Speed (mph)	20
	Avg. Number of Events/hr	24
Distance	Distance from Source to Receiver (ft)	40
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

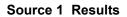
Noise Impact Criteria

(FTA Manual, Fig 3-1)

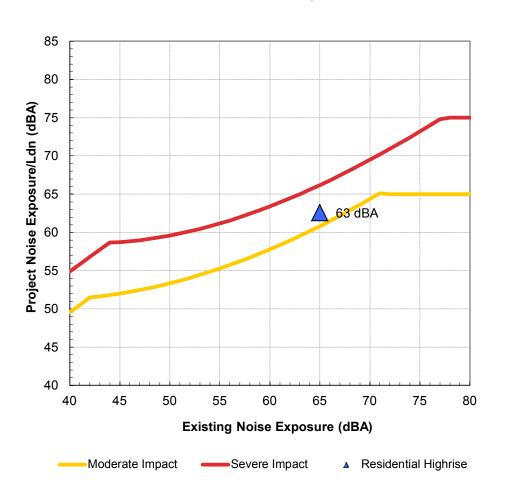


Distance to Impact Contours

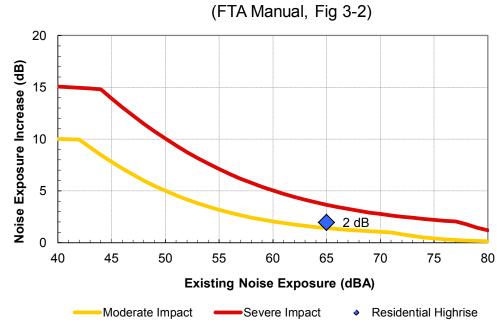
Dist to Mod. Impact Contour
(Source 1): 52 ft
Dist to Sev. Impact Contour
(Source 1): 23 ft



Leq(day): 58.1 dBA Leq(night): 55.7 dBA Ldn: 62.6 dBA



Increase in Cumulative Noise Levels Allowed

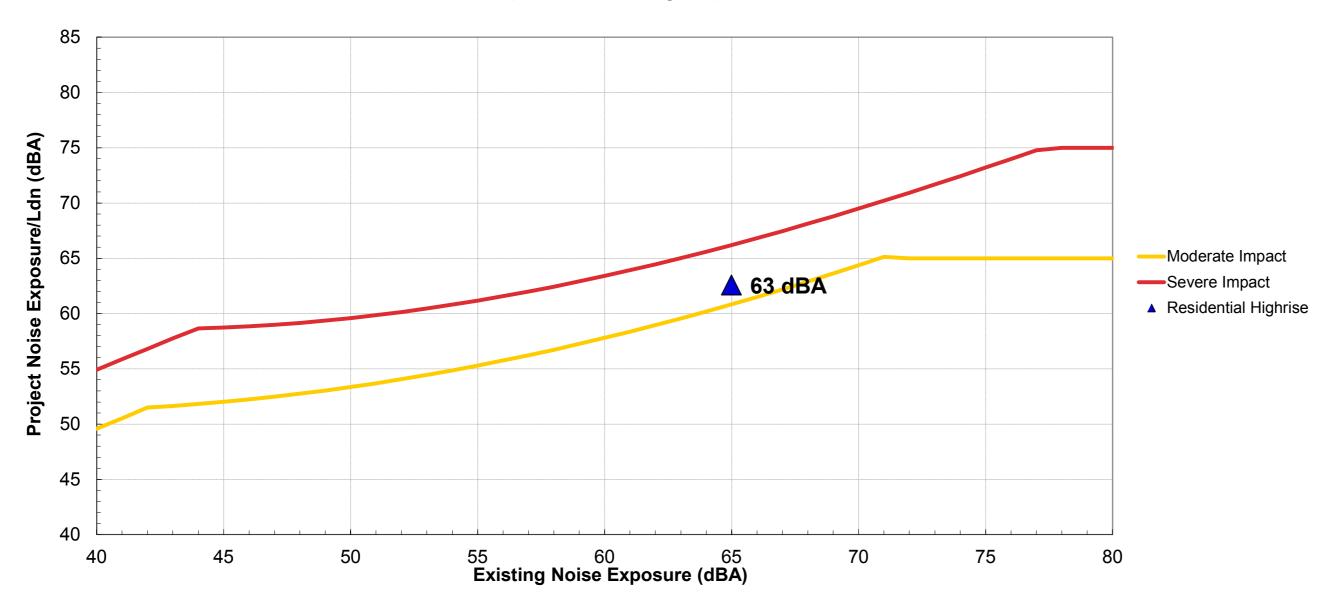


Project: Washington/Wabash Loop Elevated Station

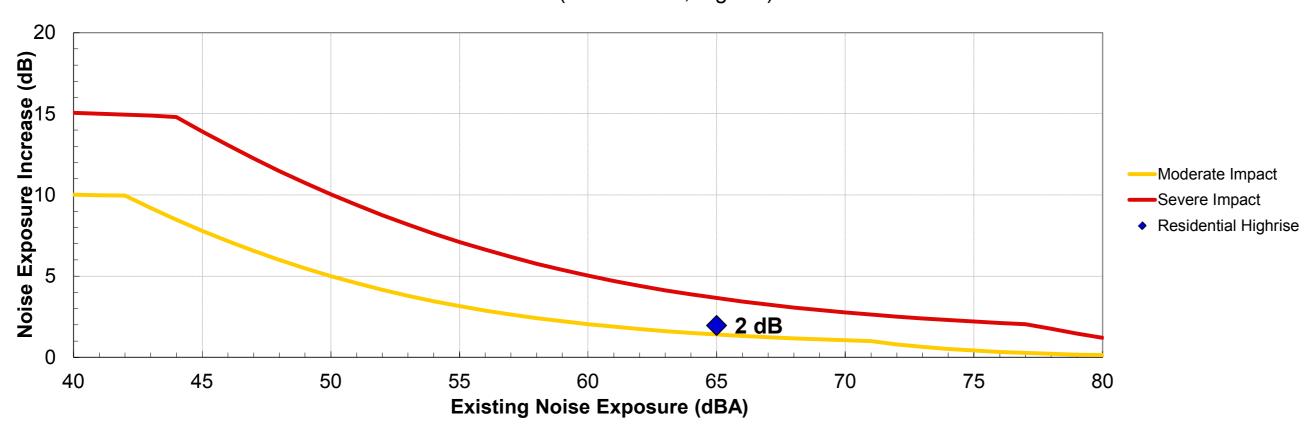
Receiver: Residential Highrise

				Noise C		
Source	Distance	Project Ldn	Existing Ldn	Mod. Impact	Sev. Impact	Impact?
1 Automated Guideway Transi	40 ft	62.6 dBA	65 dBA	61 dBA	66 dBA	Moderate Impact
2	30 ft		65 dBA	61 dBA	66 dBA	
3	ft		65 dBA	61 dBA	66 dBA	
4	ft		65 dBA	61 dBA	66 dBA	
5	ft		65 dBA	61 dBA	66 dBA	
6	ft		65 dBA	61 dBA	66 dBA	
Combined Sources		63 dBA	65 dBA	61 dBA	66 dBA	Moderate Impact

Noise Impact Criteria (FTA Manual, Fig 3-1)



Increase in Cumulative Noise Levels Allowed (FTA Manual, Fig 3-2)



185

Washington/Wabash Loop Elevated Station Environmental Assessment - Appendices

version: 7/3/2007

Project: Washington/Wabash Loop Elevated
Station

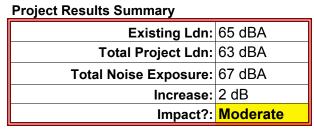
Receiver Parameters	
Receiver:	Residential Highrise
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	65 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source Paran	neters	Source 1
	Source Type:	Highway/Transit
	Specific Source:	Automated Guideway Transit /Steel Wheel
Daytime hrs		
	Speed (mph)	20
	Avg. Number of Events/hr	33
Nighttime hrs		
	Speed (mph)	20
	Avg. Number of Events/hr	24
Distance	Distance from Source to Receiver (ft)	40
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

Noise Impact Criteria

(FTA Manual, Fig 3-1)

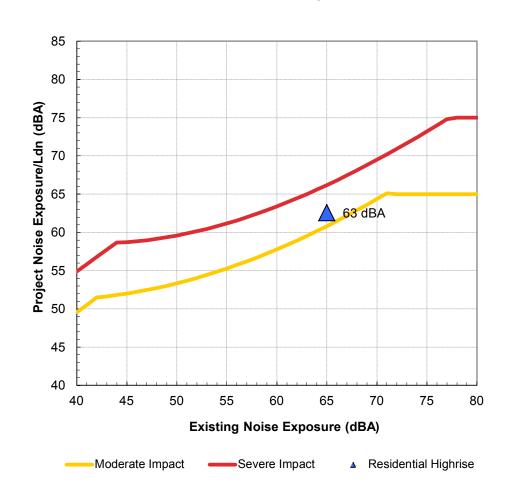


Distance to Impact Contours

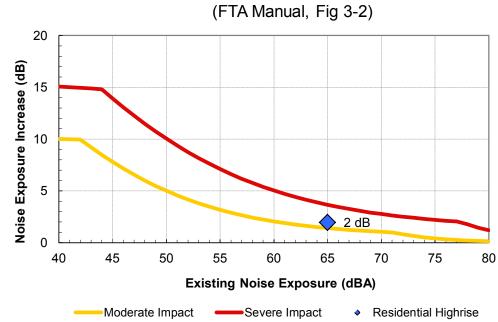
Dist to Mod. Impact Contour
(Source 1): 52 ft
Dist to Sev. Impact Contour
(Source 1): 23 ft

Source 1 Results

Leq(day): 58.1 dBA Leq(night): 55.7 dBA Ldn: 62.6 dBA



Increase in Cumulative Noise Levels Allowed

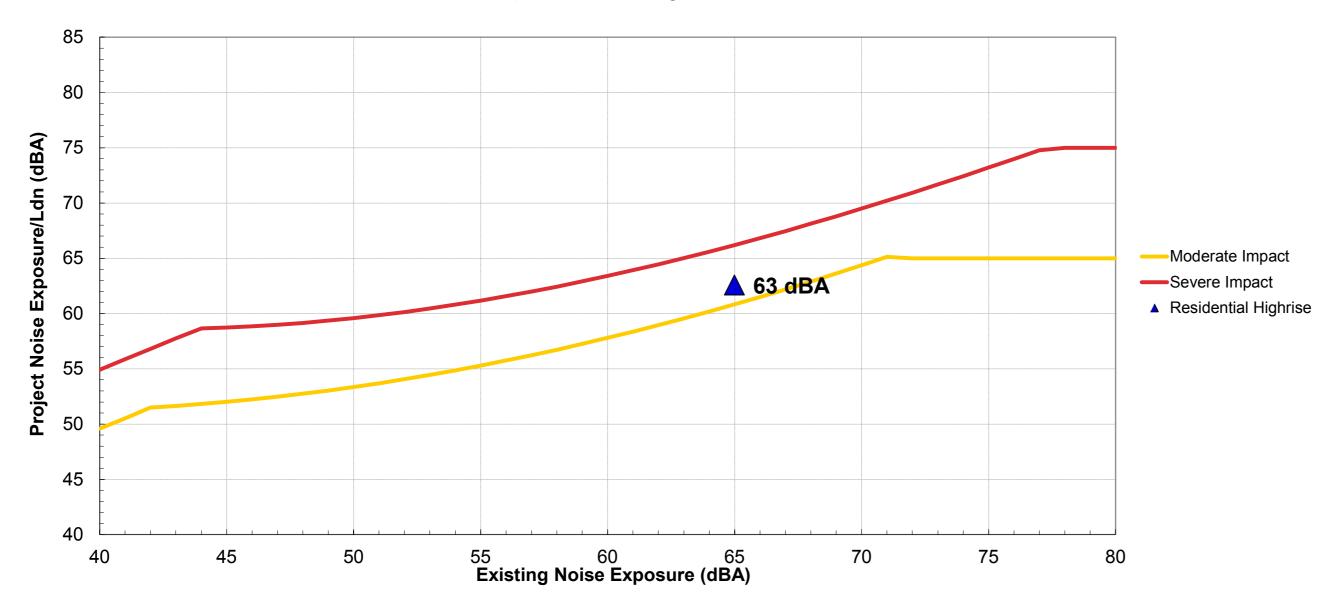


Project: Washington/Wabash Loop Elevated Station

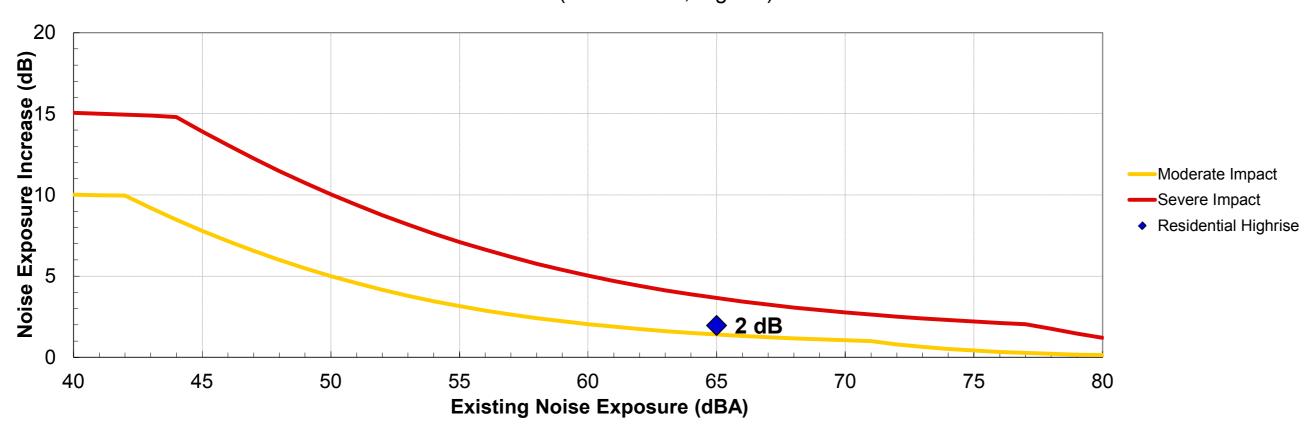
Receiver: Residential Highrise

				Noise C		
Source	Distance	Project Ldn	Existing Ldn	Mod. Impact	Sev. Impact	Impact?
1 Automated Guideway Transi	40 ft	62.6 dBA	65 dBA	61 dBA	66 dBA	Moderate Impact
2	30 ft		65 dBA	61 dBA	66 dBA	
3	ft		65 dBA	61 dBA	66 dBA	
4	ft		65 dBA	61 dBA	66 dBA	
5	ft		65 dBA	61 dBA	66 dBA	
6	ft		65 dBA	61 dBA	66 dBA	
Combined Sources		63 dBA	65 dBA	61 dBA	66 dBA	Moderate Impact

Noise Impact Criteria (FTA Manual, Fig 3-1)



Increase in Cumulative Noise Levels Allowed (FTA Manual, Fig 3-2)



Washington/Wabash Loop Elevated Station Environmental Assessment - Appendices

Illinois Department of Natural Resources
EcoCAT Response

Washington/Wabash Loop Elevated Station Appendix C - IDNR EcoCAT Response

Illinois Department of Natural Resources

Pat Quinn, Governor Marc Miller, Director

One Natural Resources Way Springfield, Illinois 62702-1271 http://dnr.state.il.us

June 20, 2013

Emma Kowalenko Emma Kowalenko Kowalenko Consulting Group 33 West Monroe Street, Suite 1825 Chicago, IL 60603

RE: Washington Wabash Elevated Station

Project Number(s): 1315046 [013-TRNSP-001]

County: Cook

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 is terminated.

This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Rick Pietruszka

Division of Ecosystems and Environment

217-785-5500

II	linois De	epartm	nent of N	latural	Resour	ces
EcoCAT	Cook C	ounty	Endang	jered S	Species	List

Washington/W IDNR EcoCA ⁻	T Cook County Endangered			
Alasmidonta viridis	Slippershell	LT	1	2000-09-07
Amelanchier interior	Shadbush	LT	2	2009-05-03
Amelanchier sanguinea	Shadbush	LE	2	2009-05-22
Ammophila breviligulata	Marram Grass	LE	6	2009-09-23
Asclepias lanuginosa	Wooly Milkweed	LE	2	2009-07-10
Asclepias ovalifolia	Oval Milkweed	LE	1	2009-06-15
Aster furcatus	Forked Aster	LT	3	2009-08-22
Bartramia longicauda	Upland Sandpiper	LE	3	1995-06-14
Beckmannia syzigachne	American Slough Grass	LE	4	2009-07-31
Besseya bullii	Kittentails	LT	1	2009-06-01
Botrychium multifidum	Northern Grape Fern	LE	1	1992-05-06
Botrychium simplex	Dwarf Grape Fern	LE	1	1976-07-09
Cakile edentula	Sea Rocket	LT	7	2009-08-16
Calopogon tuberosus	Grass Pink Orchid	LE	4	2009-07-10
Carex aurea	Golden Sedge	LT	4	2009-07-05
Carex bromoides	Sedge	LT	3	2009-05-31
Carex echinata	Sedge	LE	1	2002-06-17
Carex formosa	Sedge	LE	4	2009-07-03
Carex garberi	Sedge	LE	1	2000-05-24
Carex intumescens	Swollen Sedge	LT	2	1995-07-10
Carex tuckermanii	Tuckerman's Sedge	LE	1	2000-08-29
Carex viridula	Little Green Sedge	LT	2	2009-07-12
Carex woodii	Pretty Sedge	LT	2	2009-06-06
Catostomus catostomus	Longnose Sucker	LT	1	1991
Chamaedaphne calyculata	Leatherleaf	LT	1	1987-03-28
Chamaesyce polygonifolia	Seaside Spurge	LE	3	2009-09-23
Chimaphila maculata	Spotted Wintergreen	LE	1	1981-11-13
Chlidonias niger	Black Tern	LE	5	1996-07-22
Cirsium pitcheri	Pitcher's (Dune) Thistle	LT	1	2009-06-21
Clonophis kirtlandi	Kirtland's Snake	LT	6	2011-05-20
Comptonia peregrina	Sweetfern	LE	1	2009-08-18
Corallorhiza maculata	Spotted Coral-root Orchid	LT	1	1999-07-03
Cypripedium candidum	White Lady's Slipper	LT	15	2010-05-18
Dalea foliosa	Leafy Prairie Clover	LE	2	2010-07-17
Deschampsia flexuosa	Hairgrass	LE	1	2003
Dichanthelium boreale	Northern Panic Grass	LE	2	2008-06-14
Drosera intermedia	Narrow-leaved Sundew	LT	4	2001-07
Drosera rotundifolia	Round-leaved Sundew	LE	1	1976-07-06
Egretta caerulea	Little Blue Heron	LE	3	2002
Egretta thula	Snowy Egret	LE	1	1987
Eleocharis olivacea	Capitate Spikerush	LE	2	2001-09-12

Scientific Name Common Name		State Protection	# of occurrences	Last Observed
<u>ook</u>				
Eleocharis pauciflora	Few-flowered Spikerush	LE	1	2002-06
Eleocharis rostellata	Spike Rush	LT	1	2000-06-18
Elymus trachycaulus	Bearded Wheat Grass	LT	1	2000-06-29
Emydoidea blandingii	Blanding's Turtle	LE	16	2012-04-26
Etheostoma exile	Iowa Darter	LT	2	2002-SUM
Falco peregrinus	Peregrine Falcon	LT	21	2011-10-01
Filipendula rubra	Queen-of-the-prairie	LE	2	2009-08-25
Fundulus diaphanus	Banded Killifish	LT	6	2012-06-26
Gallinula chloropus	Common Moorhen	LE	7	2010
Geranium bicknellii	Northern Cranesbill	LE	2	2009-07-31
Helianthus giganteus	Tall Sunflower	LE	1	1999-09-12
Hypericum kalmianum	Kalm's St. John's Wort	LE	2	2009-09-05
Ixobrychus exilis	Least Bittern	LT	4	2008
Juncus alpinus	Richardson's Rush	LE	2	2009-08-08
Juniperus communis	Ground Juniper	LT	2	2009-05-22
Lathyrus ochroleucus	Pale Vetchling	LT	1	2009-05-23
Lespedeza leptostachya	Prairie Bush Clover	LE	1	1995-08-30
Liatris scariosa var. nieuwlandii	Blazing Star	LT	6	2009-09-05
Medeola virginiana	Indian Cucumber Root	LE	1	2009-05-31
Minuartia patula	Slender Sandwort	LT	2	2010
Nannothemis bella	Elfin Skimmer	LT	1	2004
Necturus maculosus	Mudpuppy	LT	6	1998-03-21
Notropis heterodon	Blackchin Shiner	LT	1	1967-07-10
Nyctanassa violacea	Yellow-crowned Night-Heron	LE	3	2000
Nycticorax nycticorax	Black-crowned Night-Heron	LE	13	2011-06-05
Oenothera perennis	Small Sundrops	LT	10	2009-06-29
Pandion haliaetus	Osprey	LE	2	2011-05-09
Papaipema eryngii	Eryngium Stem Borer	LE	1	2003
Phalaropus tricolor	Wilson's Phalarope	LE	1	1981
Plantago cordata	Heart-leaved Plantain	LE	1	2008-06-21
Platanthera ciliaris	Orange Fringed Orchid	LE	1	2001-07
Platanthera clavellata	Wood Orchid	LE	2	2000-07-20
Platanthera flava var. herbiola	Tubercled Orchid	LT	2	1999-06
Platanthera leucophaea	Eastern Prairie Fringed Orchid	LE	12	2011
Platanthera psycodes	Purple Fringed Orchid	LE	1	2008-07-30
Poa languida	Weak Bluegrass	LE	1	2005
Pogonia ophioglossoides	Snake-mouth	LE	2	2000-06-20
Polygonatum pubescens	Downy Solomon's Seal	LE	7	2009-06-06
Polygonum careyi	Carey's Heartsease	LE	1	1986
Populus balsamifera	Balsam Poplar	LE	1	2004-04-28
Potamogeton gramineus	Grass-leaved Pondweed	LT	1	2002-06-01

Scientific Name	Common Name	State Protection	# of occurrences	Last Observed
<u>ok</u>				
Potamogeton robbinsii	Fern Pondweed	LE	1	1987-08-27
Rallus elegans	King Rail	LE	2	1990-06-16
Rhynchospora alba	Beaked Rush	LT	1	1976
Rubus odoratus	Purple-flowering Raspberry	LE	1	2009-08-10
Rubus pubescens	Dwarf Raspberry	LT	5	2009-05-31
Rubus schneideri	Bristly Blackberry	LT	1	1996
Scirpus hattorianus	Bulrush	LE	1	2002-2007
Silene regia	Royal Catchfly	LE	1	2009-08-02
Sistrurus catenatus catenatus	Eastern Massasauga	LE	5	2006-05-24
Sisyrinchium montanum	Mountain Blue-eyed Grass	LE	8	2009-06-11
Somatochlora hineana	Hine's Emerald Dragonfly	LE	2	2010-07-23
Sparganium emersum	Green-fruited Burreed	LE	1	2011
Spermophilus franklinii	Franklin's Ground Squirrel	LT	2	2006-08-05
Spiranthes lucida	Yellow-lipped Ladies' Tresses	LE	2	2009-06-08
Stellaria pubera	Great Chickweed	LE	1	2009-05-29
Tetraneuris herbacea	Lakeside Daisy	LE	2	2010-05-02
Tofieldia glutinosa	False Asphodel	LT	1	2009-07-13
Tomanthera auriculata	Ear-leafed Foxglove	LT	10	2009-09-03
Trientalis borealis	Star-flower	LE	2	2008-05-29
Triglochin palustris	Slender Bog Arrow Grass	LT	1	2009-07-21
Trillium cernuum	Nodding Trillium	LE	1	2009-05-03
Utricularia intermedia	Flat-leaved Bladderwort	LT	2	2009-08-26
Utricularia minor	Small Bladderwort	LE	1	1990
Vaccinium macrocarpon	Large Cranberry	LE	1	1987-03-28
Vaccinium oxycoccos	Small Cranberry	LE	1	1999-11-02
Veronica scutellata	Marsh Speedwell	LT	7	2009-07-31
Viola blanda	Hairy White Violet	LE	2	1999-04
Viola canadensis	Canada Violet	LE	1	2008-05-10
Viola conspersa	Dog Violet	LT	7	2009-05-15
Xanthocephalus xanthocephalus	Yellow-headed Blackbird	LE	7	2008

<u>Cook</u> <u>Total # of Species</u> <u>112</u>

U.S. Fish and Wildlife Service No Effects Determination Letter

Washington/Wabash Loop Elevated Station - Appendix C USFWS No Effects Determination Letter

http://www.fws.gov/midwest/endangered/section7/no effect/developed4nonativeveg.html

S7 Consultation Technical Assistance Decision Process for "No Effect" Determinations

Projects within a Develped Area - Step 4

Step 4: "No Effect" Determination and Documentation Your project will have "no effect" on federally listed species. A "No Effect" determination is appropriate because your project is:

- within a Developed Area (an area that is already paved or supports structures and the only vegetation is limited to frequently mowed grass or conventional landscaping), and
- is not within or adjacent to any unlandscaped areas that support native vegetation (trees, shrubs, or grasses).

Since your project is not within suitable habitat for listed species, no listed species or designated critical habitat is anticipated to be directly or indirectly affected by this action.

To document your section 7 review and "no effect" determination, we recommend that you print this page (go to File<Print Preview), fill-in the project name and date, attach your <u>species list</u>, and file in your administrative record.

Project Name: Washington Wabash @ccd Elevated Station - Chicago

Date: April 23, 2013

U.S. Fish and Wildlife Service Endangered Species List

Washington/Wabash Loop Elevated Station Appendix C – USFWS Endangered Species List

County	Species	Status	Habitat
Cook Field Office to Contact:	Piping ploverCharadrius melodus	Endangered	Lakeshore beaches
USFWS Chicago Illinois FO 1250 South Grove, Suite 103	Eastern massasauga (Sistrurus catenatus)	Candidate	Graminoid dominated plant communities (fens, sedge meadows, peatlands, wet prairies, open woodlands, and shrublands)
Barrington, Illinois 60010 (847) 381-2253 e:mail	Hine's emerald dragonfly (Somatochlora hineana)	Endangered	Spring fed wetlands, wet meadows and marshes
Chicago@fws.go vCathy Pollack @fws.gov	Hine's emerald dragonfly (Somatochlora hineana)	Critical Habitat Designated	Go here for a map and written description of the areas designated as Critical Habitat (PDF)
	Eastern prairie fringed orchid (Platanthera leucophaea) Go here for specific guidance on how to determine whether this species is present on a site.	Threatened	Moderate to high quality wetlands, sedge meadow, marsh, and mesic to wet prairie
	<u>Leafy-prairie</u> <u>clover</u> (Dalea foliosa)	Endangered	Prairie remnants on thin soil over limestone
	Mead's milkweed (Asclepias meadii)	Threatened	Late successional tallgrass prairie, tallgrass prairie converted to hay meadow, and glades or barrens with thin soil
	Prairie bush clover (Lespedeza leptostachya)	Threatened	Dry to mesic prairies with gravelly soil

Appendix D

Hazardous Material Findings

- Environmental Research
- Lead Based Paint

Contents

Title

Environmental Research Synopsis Matrix and Map

Lead Based Paint Sampling Results and Report

Environmental	Research	Syı	nopsis
	Мара	ınd	Matrix

Washington/Wabash Loop Elevated Station – Appendix D Environmental Research Synopsis

Study Area plus one block buffer Enlarged from EDR DataMap Area Study

See following Table for Details of listed sites

Project Area: Study Area: — — — — —

(Study area defined as six block area bounded by Lake St., State St., Monroe St. and Michigan Ave.)

Chicago Downtown

Listed Sites

Earthquake Epicenters
(Richter 5 or greater)

Search Boundary

Noads

Major Roads

Waterways

Railroads

Contour Lines

/// Pipelines

Powerlines

Fault Lines

Water

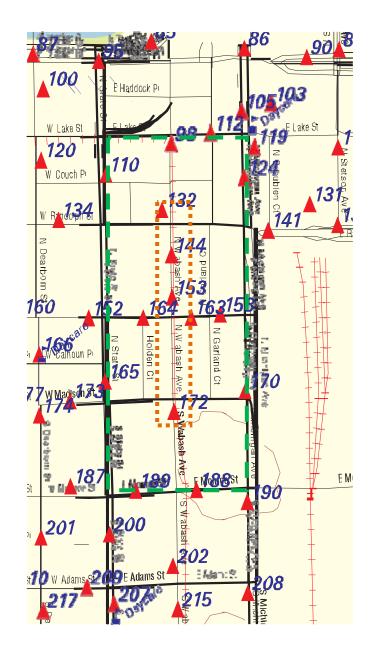
Superfund Sites

Federal DOD Sites

Indian Reservations BIA

100-Yr Flood Zones

National Wetland Inventory



Project Location	EDR#	Address	Owner / Tenant	Finding	Violations / Status	Comments
OSA		35 E WACKER	THE DORCHESTER CORP	RCRA-CESQG		part of number is cut off
•		•	•	IL NPDES	Permit	
				IL HWAR	Not Reported	
		35 E. WACKER, STE. 792	CITY NEWS BUREAU	FINDS	Registered	
		50 E WACKER DR LL	DEPT STREETS & SANITATION	UST	Diesel Fuel - Removed	
OSA	86	MICHIGAN & WACKER	BRIDGE HOUSE	FINDS	Registered	
		310 N MICHIGAN AVE	CHICAGO DOT	FINDS	Registered	
		310 N MICHIGAN AVE -MICHIGAN & WACKER	CHICAGO DOT MICHIGAN AVE BRIDGE	RCRA-LQG	No Violations Found	7
		300 N MICHIGAN AVE	WALGREENS #1332	RCRA-SQG	No Violations Found	7
		300 N MICHIGAN AVE	WALGREENS #1332	FINDS	Registered	7
OSA	87	55 W WACKER DR	55 W WACKER BLDG	RCRA-SQG	No Violations Found	-
05/1	0.	55 W WACKER DR	PM REALTY GROUP 55 W WACKER	RCRA-SQG	No Violations Found	
		300 N DEARBORN ST	CHICAGO DEPT OF TRANS BRIDGES	RCRA-SQG	No Violations Found	-
1		300 N DEARBORN OT	orner de per i er include bribele	NONA-0Q0	The Violatione Feature	part of number is cut off - just right of
OSA	88	300 N STETSON AVE (VIADUCT)	CHICAGO DEPT OF TRANS	RCRA-NonGen	No Violations Found	90
OSA	90	173 S WATER ST	SOUTH WATER MARKET	RCRA-CESQG	No Violations Found	
		233 N MICHIGAN AVE B	METROPOLITAN MGMT CO	RCRA-CESQG	No Violations Found	
OSA	95	309 N STATE ST	CHICAGO CITY OF STATE STREET D	RCRA-NonGen	No Violations Found	
		400 N STATE ST	CHICAGO DEPT OF TRANS BRIDGES	FINDS	Registered	
		1 EAST WACKER DRIVE	UNITED INSURANCE BLDG	FINDS	Registered	
		1 E WACKER DR STE 1200	EARTH TECH	FINDS	Registered	
		1 E WACKER	1 E WACKER DR BLDG	IL NPDES	Permit	
		ONE E WACKER DR	UNITED INSURANCE INSURANCE CO	FINDS - IL AIRS	Permit	
			HIGH RISE OFFICE BUILDING	IL UST	1 Heating - 2 Diesel	One tank abandoned in place
		1 W WACKER DR	RENAISSANCE CHICAGO HOTEL	RCRA-SQG	No Violations Found	
			•	FINDS - IL AIRS	Permit	
			ILLINOIS DRY CLEANERS	FINDS	Not shown	
SA	98	185 N WABASH	THE VILLAGE GREEN	FINDS	Registered	
		E LAKE ST & N WABASH	COMED MANHOLE	FINDS	Registered	
			COMED MANHOLE	RCRA-NonGen	No Violations Found	7
			CHICAGO CITY COLLEGES HAROLD			7
		30 E LAKE ST	WASHINGTON	RCRA-CESQG	No Violations Found	
				FINDS	Registered	
		203 N WASBASH	BUILDING	IL UST	1 Heating - Exempt	
			FIRST CAPITAL GROUP CARTAGE	RCRA-NonGen	No Violations Found	
		225 N WABASH AVENUE	OXFORD HOUSE HOTEL	IL UST	2 Heating Oil - Exempt	
				FINDS	Registered	
		65 WACKER PL RM 300	URBAN YOUTH HIGH SCHOOL	FINDS	Registered	
OSA	100	35 W WACKER DR	BUCK JOHN MGT GROUP	RCRA-SQG	No Violations Found	
		•	JOHN CHARLES CORP THE	FINDS	Registered	
OSA	103	205 NORTH MICHIGAN AVE.	MCI BSTRIL-45TH FL, MWHQIL-5,6,7TH FLRS	IL TIER 2	Reports to IEMA	
		225 N MICHIGAN AVE	GESTETNER CORP	RCRA-SQG	No Violations Found	
		OOF NAMOUNOAN AVE 44 FL	B R E CHICAGO	RCRA-SQG	No Violations Found	
		205 N MICHIGAN AVE 44-FL	AMSTED INDUSTRIES	FINDS	Registered	
OSA	105	230 N MICHIGAN AVE SUITE 618	THE ART BUNCH INC	RCRA-CESQG	No Violations Found	
		230 N. MICHIGAN - 14TH FLOOR	ASSOCIATED PRESS	FINDS	Registered	
		230 N MICHIGAN AVE	CARBIDE AND CARBON BUILDING	IL AIRS	Permit	
			SEMINARY CONSORTIUM FOR URBAN PASTORAL EDUCATION	FINDS	Registered	
1		200 N. MICHIGANI AVENI IE	1			\dashv
		200 N. MICHIGAN AVENUE	200 N. MICHIGAN, LLC	IL UST	1 heating oil tank abandoned	

Project Location	EDR#	Address	Owner / Tenant	Finding	Violations / Status	Comments
SA		10 E LAKE ST	COMED S5796	FINDS	Registered	
				RCRA-NonGen	No Violations Found	
SA	112	70 E LAKE ST	DART PRINTING	RCRA-CESQG	No Violations Found	
OSA	114	180 N STETSON ST	SIP NORTH STETSON VENTURE LLC	FINDS - IL AIRS	Permit	part of number is cut off Lake & Stetson
			PREMISYS REAL ESTATE SERVICES	FINDS	Registered	
			AT&T CORP	IL TIER 2	Reports to IEMA	
		LAKE ST & STETSON	CHICAGO DEPT OF TRANSPORTATION	FINDS	Registered	
		LAKE ST & STETSON (VIADUCT)	CHICAGO DEPT OF TRANSPORTATION	RCRA-NonGen	No Violations Found	
OSA	119	155 N. MICHIGAN AVE., #450	LEVEL 3 - CHCGIL02	IL TIER 2	Reports to IEMA	
		155 N. MICHIGAN AVE. SUITE 250, SUITE 219	MCI WLTLIL	IL TIER 2	Reports to IEMA	
		155 N MICHIGAN AVE., DORAL PLAZA, SUITE	QWEST - CHICAGO DORAL PLAZA	IL TIER 2	Reports to IEMA	
		155 NORTH MICHIGAN AVE #420	LEVEL 3 - CHCGIL80	IL TIER 2	Reports to IEMA	7
OSA	120	179-193 N DEARBORN ST	TREMONT PARKING GARAGE-NATIONAL	ICIS & FINDS	Civil Judicial Action - Registered	
		170 N DEARBORN	HARRIS SELWYN THEATERS	RCRA-NonGen	No Violations Found	
		191 N DEARBORN ST	TREMONT AUTO PARK INC	IL UST	3 gasoline tanks removed	
SA .	124	150 N MICHIGAN AVE STE 2930	HAZLETON GEN LLC/HAZLE TWP	PA AIRS	Permit	only if on W side of Michigan otherwise OSA
		150 N MICHIGAN AVE	STONE CONTAINER CORP	FINDS	Registered	
		•		ICIS	Bankruptcy	
			SEB IMMOBILIEN-INVESTMENTS-GMB	FINDS	Registered	
		151 N MICHIGAN STE 507	MILLENIUM PARK PLAZA	FINDS	Registered	
				RCRA-SQG	No Violations Found	
		151 NORTH MICHIGAN AVENUE	WINDSTREAM NORLIGHT MILENIUM PLAZA	IL TIER 2	Reports to IEMA	
		151 N. MICHIGAN AVE., #450 AND GARAGE LE	LEVEL 3 - CHCGIL02	IL TIER 2	Reports to IEMA	
		180 N MICHIGAN AVE # 700	CHILDRENS RESEARCH TRIANGLE	IL HWAR	Not Reported	
				RCRA-CESQG	No Violations Found	
		180 N MICHIGAN	180 N MICHIGAN AVE LLC	IL UST	1 heating oil tank	
		168 N MICHIGAN AVE	NATIONAL BANK OF GREECE	RCRA-SQG	No Violations Found	
OSA	131	130 E RANDOLPH STE 2303	WFYR RADIO	FINDS	Registered	
PA	122	22 EAST PEARSON	CONSTRUCTION SITE/LOYOLA UNIVERSITY	IL UST	1 heating oil, 6 substance not listed - exempt from registration	
OSA		32 W RANDOLPH	OLIVER BUILDING	IL UST	1 heating oil, exempt & closed	+
USA	134	32 W NANDOLFII	L J SHERIDAN & CO - CIVIC TOWER	FINDS	Registered	+
			E O OFFERDAN & OO - OIVIO TOWER	IL HWAR	Not Reported	+
		159 N DEARBORN	ORIENTAL THEATER	FINDS	Registered	-
		199 II DEWLOOKII	ONENTAL ITEATER	IL UST	1 heating oil tank, closed	+
				IL HWAR	Not Reported	+
				IL MWAK	Mor vehoused	

Project Locatio	n EDR#	Address	Owner / Tenant	Finding	Violations / Status	Comments
,					Violation - Sold or Distributed a	part of number is cut off Randolf
OSA	138	200 E. RANDOLPH	AMOCO CORPORATION	HIST FTTS	pesticide or misbranded device	Stetson
-		1			Producer Inspection - Violation	
				FTTS INSP	Occurred	
				RCRA-SQG	No Violations Found	1
			AMERITECH	RCRA-NonGen	No Violations Found	1
			AON CENTER/WELLS REIT CHICAGO CENTER,	T.G. E. T. T.G. I.G. G. I.		1
			ICHICAGO LLC	IL TIER 2	Reports to IEMA	
			0.1107.100 220	IL TILIX Z	respecto to 12.1111 t	1
			WELLS REIT CHICAGO CENTER LLC	FINDS - IL AIRS	Permit	
			WELES REIT CHICAGO CENTER EEC	FINDS - IL AIRS	Femili	-
					FIFRA 14 AO For Comp And	
			FMC CORPORATION	ICIS & FINDS	Penalties (Old)	
			AMOCO CHEMICALS MARINE	TSCA	Toxic substances listings	
			AMOCO	TSCA	Toxic substances listings	
			AMOCO CHEMICALS MARINE TRANSPORT	TSCA	Toxic substances listings	1
			FMC CORPORATION	FTTS INSP	Producer Inspection -No Violation	1
			- 2	FINDS	Registered	1
			AON CENTER	FINDS	Registered	1
			AON CENTER	1		-
	1	Least Danibourne orders	The control of	RCRA-CESQG	No Violations Found	4
OSA	141	111 EAST RANDOLPH STREET	No Owner Given	IN SPILL	Tank Truck Spill 7/7/2006	1
		111 EAST RANDOLPH STREET 130 EAST RANDOLPH	111 EAST RANDOLPH STREET MCI CHXMIL	ERNS IL TIER 2	Spill tracking Reports to IEMA	-
		130 EAST RANDOLPH	AMOCO CORP.	FINDS	Registered	-
			AWOCO CORF.	FTTS INSP	Health & Safety Inspection	1
			PEOPLES GAS LIGHT & COKE CO	FINDS	Registered	1
			TEST EED OF BEIGHT & SOME CO	RCRA-CESQG	No Violations Found	1
			VERIZON BUSINESS	FINDS	Registered	1
		130 EAST RANDOLPH STREET, SUITE 500	BCE NEXXIA CORPORATION CHICAGO POP2	IL TIER 2	Reports to IEMA	1
					Annual reporting HWAR & AIRS -	1
		130 E RANDOLPH ST	AT&T	IL TIER 2	Reported to IEMA	
		100 E RANDOLPH ST	METRA-NIRC	FINDS	Registered	
		130 EAST RANDOLPH	PEOPLES ENERGY MERCURY SPILLS	CERCLIS	Mercury spills throughout Service Area	
		130 LAGT KANDOLPH	PRUDENTIAL INSURANCE CO	RCRA-NonGen	No Violations Found	1
		130 E. RANDOLPH, SUITE 1250	CUSHMAN&WAKEFIELD OF ILLINOIS	FINDS	Registered	1
		TOO E. T. S. S. DOEL 11, COTTE 1200	ONE PRUDENTIAL PLAZA	IL UST	3 active heating oil tanks	†
						1
PA	144	137 N WABASH	ALFRED MOSSNER CO	IL UST	1 heating oil tank, abandoned in place	
OSA	152	22 W WASHINGTON	GD 22 W WASHINGTON STREET	FINDS	Registered]
		15 W WASHINGTON ST	WALGREENS 7054	RCRA-SQG	No Violations Found]
		STATE & WASHINGTON	COMED-MANHOLE	FINDS	Registered	
			COM ED	RCRA-SQG	No Violations Found	
		108 N STATE ST	108 N STATE TRANSIT LLC	FINDS	Registered	
			CONSTRUCTION SITE	II LICT 9 LUAVAD	2 exempt heating oil tanks &	
		444 N CTATE CT	CONSTRUCTION SITE MACYS NORTH STATE ST	IL UST & HWAR IL HWAR	hazardous waste annual report Not Reported	-
		111 N STATE ST	IVIACTO NORTH STATE ST		No Violations Found	-
		1	1	RCRA-CESQG	INO VIOIGIONS I OUNG	1

Project Location	EDR#	Address	Owner / Tenant	Finding	Violations / Status	Comments
PA		111 N WABASH STE 620	ADVANCED MEDICAL IMAGING CTR	RCRA-CESQG	No Violations Found	
			<u> </u>			1
				MLTS	Tracking radioactive usage - Licensed	
		111 N WABASH SUITE 2018	GARLAND OFFICE LLC	IL UST	1 removed tank	
		111 N WABASH	SHERIDAN, LJ & CO	RCRA-NonGen	No Violations Found	
SA		78 E WASHINGTON ST	CHICAGO, CITY OF CULTURAL CENTER	FINDS	Registered	
OSA	160	69 W WASHINGTON	69 W WASHINGTON MANAGEMENT CO	IL HWAR & IL AIRS	Not Reported - Permit	
			ARTHUR ANDERSEN & COMPANY	FINDS	Registered	
			RREEF FUNDS USA III INC	IL UST	2 fuel oil tanks removed	
			ARTHUR RUBLOFF & CO - BRUNSWICK BUILDING	IL NPDES & IL AIRS	Permits	
			COOK COUNTY HIGHWAY DEPARTMENT	FINDS	Registered	
			69 W WASHINGTON MANAGEMENT CO	RCRA-SQG	No Violations Found	
		77 W WASHINGTON ST	CHICAGO TEMPLE BUILDING	FINDS	Registered	
				IL AIRS	Permit	
			GROVE REALITY	FINDS	Registered	
		50 W WASHINGTON	CHICAGO CITY OF ABANDONMENT	RCRA-SQG	No Violations Found	
			RICHARD J DALEY CENTER	IL UST - 2 listings	3 active diesel fuel tanks	
				FINDS	Registered	
		66 W WASHINGTON ST	WESTINGHOUSE ELECTRIC CORP	RCRA-SQG	No Violations Found	
PA	163	55 E WASHINGTON STE 3003	KAPP, DR JEFFERY	FINDS	Registered	only if it is a corner, otherwise SA
	·	55 E WASHINGTON STE 3200	BLOCK, JORDAN-DDS	FINDS	Registered	
		55 E WASHINGTON ST	PITTSFIELD BLDG	FINDS	Registered	
				IL UST	3 exempt heating oil	
			MURDOCH COLL & LILLIBRIDGE INC	FINDS & IL AIRS	Registered & Permit	
		55 E WASHINGTON STE 2405	CHOYKE, DR CHRISTOPHER	FINDS	Registered	
PA	164	25 E WASHINGTON	25 E WASHINGTON	RCRA-NonGen	No Violations Found	only if it is a corner, otherwise SA
SA	165	36 S WABASH	SAKS FIFTH AVE	FINDS	Registered	only if on E side of State, otherwise OSA
		23 S STATE ST	CPS DEPT STORES INC	FINDS & HWAR	Registered & Not Reported	
					Fuel oil, non petroleum - NFR Letter	
		r		LUST	11/21/2006	
		1-29 SOUTH STATE STREET	ONE SOUTH STATE, LLC	IL UST	5 heating oil tanks - abandoned in place	
		1 S STATE ST	CARSON PIRIE SCOTT	FINDS	Registered	
				RCRA-NonGen	No Violations Found	
		ONE S STATE & 36 S WABASH	SULLIVAN CENTER	FINDS	Registered	
		26 S STATE ST	CHICAGO TRANSIT AUTHORITY	FINDS	Registered	
		10 S STATE	10 S STATE BLDG	IL UST	2 removed heating oil	
				HWAR	Not Reported	
			CHICAGO BOARD OF EDUCATION	FINDS	Registered	
				LUST	Fuel oil, NFR Letter 7/9/1993	
		6 S STATE ST	STATE MADISON LTD PARTNERSHIP	FINDS	Registered	
		MADISON & STATE	COM ED	RCRA-SQG	No Violations Found	
				FINDS	Registered	
I		7 WEST MADISON ST	THE CHICAGO BUILDING	IL UST	1 heating oil tank abandoned in place	
		1 N STATE ST	TUCKER MANAGEMENT	RCRA-SQG	No Violations Found	1
				FINDS	Registered	1
		ONE N STATE ST	ONE N STATE ST	FINDS	Registered	1
		2 N STATE ST	SEARS 1200	FINDS	Registered	1
		11 N STATE ST	MARSHALL FIELDS	RCRA-NonGen	No Violations Found	1
		20 N STATE ST	CITY OF CHICAGO (ABANDONMENT)	RCRA-CESQG	No Violations Found 2 heating oil tanks abandoned in	
			FOOT LOCKER	IL UST	place	
		30 N STATE ST	WOOLWORTH BLDG	RCRA-CESQG	No Violations Found	
		32-36 N STATE ST	RELIANCE BUILDING	FINDS	Registered	
		17 N STATE ST	No Owner or Tenant Listed	IN SPILLS	Paint Dust, Paint Fumes	

Project Location	EDR#	Address	Owner / Tenant	Finding	Violations / Status	Comments
OSA		33 N DEARBORN BLDG	L J SHERIDAN & CO	IL AIRS	Permit	
					2 heating oil tanks abandoned in	
		33 N DEARBORN STE 301	DRAPER & KRAMER INC	IL UST	place	
		33 N DEARBORN BLDG	L J SHERIDAN & CO	FINDS	Registered	
SA	170	30 N MICHIGAN	FORMER U S BANK	FINDS	Registered	only if on NW corner of Michigan, otherwise OSA
SA SA		44 S WABASH AVE	RESTORATION CO	FINDS	Registered	Galerwise Cort
3A	172	44 3 WADASH AVE	RESTORATION CO	FINDS	Registered	_
		37 SOUTH WABASH AVENUE	SCHOOL OF THE ART INSTITUTE OF CHICAGO	FINDS	Registered	
			WESLEY-JESSEN	FINDS	Registered	
		36 SOUTH WABASH	SAK'S FIFTH AVE.	LUST	Other petroleum, NFR Letter 11/21/2006	
		29 SOUTH WABASH AVENUE	THE ART INSTITUTE	RCRA-CESQG	No Violations Found	_
		23 S WABASH AAVENUE	THE ART INSTITUTE OF CHICAGO	RCRA-CESQG	No Violations Found	_
		19 S WABASH	HUEY REPROGRAPHICS		No Violations Found	_
				RCRA-SQG		_
		5 S WABASH # 1512	NORTH AMERICAN JEWELERS INC	FINDS	Registered No Violations Found	
		- 0.000	MALLERS BUILDING	RCRA-CESQG		<u> </u>
		5 S WABASH		IL UST	2 exempt tanks	<u> </u>
		29 E MADISON ST	RESTORATION CO COMED-MANHOLE	FINDS	Registered	
		MADISON & WABASH		FINDS	Registered	<u> </u>
		5 N WABASH AVE	INTERNATIONAL ART JEWELERS	FINDS	Registered	
		5 N WABASH ST ROOM 400	BAROQUE SILVERSMITH INC	RCRA-CESQG	No Violations Found	
		5 N WABASH AVE STE 1405	ALLERGAN OPTICAL CHICAGO INC	FINDS	Registered	
OSA		22 W MADISON ST	CHICAGO HOUSING AUTHORITY	FINDS	Registered	
OSA	174	30 S DEARBORN	CHICAGO TRANSIT AUTHORITY	FINDS	Registered	
		10 SOUTH DEARBORN	No Owner or Tenant Listed	IN SPILLS	Cable oil spill	
			COMMONWEALTH EDISON	FINDS	Registered	
				FTTS & HIST FTTS INSPECTIONS	PCB private citizen complaint	
		7 S DEARBORN ST	CITIBANK FSB	RCRA-SQG	No Violations Found	
		7 SOUTH DEARBORN	DEARBORN BUILDING LLC	IL UST	2 exempt heating oil tanks	
		1 S DEARBORN ST	CITICORP SAVINGS	IL AIRS	Permit	
				FINDS	Registered	
		1-7 S DEARBORN ST	HINES INTERESTS	FINDS	Registered	
		DEARBORN & MADISON STREETS	DEARBORN & MADISON STREETS	ERNS	Spill tracking	7
		1 N DEARBORN	FIRST CHICAGO NBD	FINDS	Registered	7
OSA	177	70 W MADISON STE 450	MADISON TWO ASSOCIATES	FINDS	Registered	\dashv
		70 W MADISON	HINES	RCRA-CESQG	No Violations Found	\dashv

Project Location	EDR#	Address	Owner / Tenant	Finding	Violations / Status
SA	187	33 W MONROE STE 1141	ANDERSON ARTHUR AND CO	RCRA-CESQG	No Violations Found
		33 WEST MONROE ST	DRAPER & KRAMER, INC, GREG MARTN	FINDS	Registered
		33 W MONROE STE 270	33 WEST MONROE ASSOCIATES, LLC	IL UST	1 diesel fuel tank
		33 WEST MONROE	LUCAS-HUNT ASSOCIATES - GREG MARTIN	FINDS	Registered
			LUCAS-HUNT ASSOCIATES, LAURA K. FISHER	FINDS	Registered
			SKIDMORE OWENINGS AND MERRILL	RCRA-SQG	No Violations Found
		55 W MONROE STE 2400	55 W MONROE LLC	FINDS	Registered
		33 W WORKOE STE 2400	OO W MONKOE EEO	RCRA-SQG	Registered
		55 W MONROE STE 2410	AMER NATL BANK TRUST 11266202	RCRA-NonGen	No Violations Found
		55 W. MONROE STREET HEITMAN PROPERTI		IL UST	1 diesel fuel tank
		WEST MONROE, SUITE 2700	HOMART COMMUNITY CENTERS, INC	FINDS	Registered
		22 WEST MONROE	22 WEST MONROE	ERNS	Spill tracking
		ZZ WEST WONKSE	MAJESTIC BLDG	FINDS	Registered
			RITEWAY REPRODUCTIONS INC	RCRA-SQG	No Violations Found
		30 W MONROE-A	INTERNATIONAL INVESTORS ASSOC	FINDS	Registered
		30 W MONROE-A 30 W MONROE	30 W MONROE PROPERTY A LLC	RCRA-NonGen	No Violations Found
		30 W WIGHROE	INLAND STEEL BLDG	FINDS	Registered
		32 36 N STATE ST	RELIANCE BLDG	RCRA-SQG	No Violations Found
	1	02 30 N SIMIE SI		NORA-SUG	140 VIOIAIIO119 I OUITU
	188	55 E. MONROE ST.	OTTER CREEK WATER RECLAIMATION DISTRICT	FINDS	Registered
			MILLER AND CO.	FINDS	Registered
			SARGENT & LUNDY ENG	RCRA-NonGen	No Violations Found
		60 E MONROE	COMED MANHOLE	RCRA-NonGen	No Violations Found
				FINDS	Registered
		17 EAST MONROE STREET	PALMER HOUSE HILTON	IL Dry Cleaners	Dry cleaners database
			No Owner or Tenant Listed	HWAR & IL Spills	Tracking spill at Palmer House
			PALMER HOUSE HILTON	IL AIRS	Permit
				IL UST	4 tanks abandoned in place
	189	17 E MONROE	PALMER HOUSE AND TOWERS	RCRA-SQG	No Violations Found
	190	122 S MICHIGAN BLDG	122 S MICHIGAN BLDG	RCRA-SQG	No Violations Found
4					Natural Gas Distribution - Damage b
		122 S MICHIGAN AVE	No Owner or Tenant Listed	DOT OPS - 2 listings	outside forces
			AMERICAN ACADEMY OF ART	RCRA-NonGen	No Violations Found
			NATURAL GAS PIPELINE CO	FINDS	Registered
				HWAR & IL AIRS	Annual report and permit
			PEOPLES GAS LIGHT AND COKE	FINDS	Registered
		122 S MICHIGAN STE 1920	URS CORP	FINDS	Registered
				RCRA-SQG	No Violations Found
		122 S MICHIGAN AVE B	122 SOUTH MICHIGAN LLC	FINDS	Registered
		118 S MICHIGAN AVE	GAGE FEE LLC	FINDS	Registered
		112 S MICHIGAN AVE	SCHOOL OF THE ART INSTITUTE	RCRA-NonGen	No Violations Found
		MICHIGAN AT ADAMS	ART INSTITUTE OF CHICAGO	RCRA-SQG	No Violations Found
		111 S. MICHIGAN AVE.	ART INSTITUTE OF CHICAGO	FINDS	Registered
				IL HWAR & IL AIRS	Annual report and permit
		104 S MICHIGAN	104 S MICHIGAN	FINDS	Registered
		104 S. MICHIGAN	MONROE BUILDING	IL UST & HWAR	I exempt heating oil tank & annual report
		-		RCRA-CESQG	No Violations Found

Project Location	EDR #	Address	Owner / Tenant	Finding	Violations / Status	Comments
OSA	200	144 S. STATE ST.	TSS126 STATE STREET	IL TIER 2 & ERNS	Reports to IEMA & permit	Address appears to be wrong
		1200 S STATE	CHICAGO DOT TRANSIT	RCRA-CESQG	No Violations Found	
		137 SOUTH STATE STREET	CVS STORE NO 8699	PA MANIFEST	Listing	
		135 S STATE ST	CVS STORE NO 8699	RCRA-SQG	No Violations Found	
				FINDS	Registered	
		137 S STATE ST	THERMAL CHICAGO CORP PLT 1	RCRA-SQG	No Violations Found	
				FINDS	Registered	
		137 S STATE ST	MDE THERMAL TECHNOLOGIES PLANT 1	IL HWAR & IL TIER 2	Annual report & report to IEMA	
		133 S STATE ST	THOR 133 STATE ST LLC	RCRA-CESQG	No Violations Found	
		114-118 S STATE ST	ULTA INC	RCRA-CESQG	No Violations Found	
			STATE ST BLDG	FINDS	Registered	
OSA	201	131 S DEARBORN	PRIME BETTLER DEVELOPMENT CO	FINDS	Registered	
			CITADEL INVESTMENT GROUP LLC	FINDS	Registered	
		140 S. DEARBORN SUITE 220	XO COMMUNICATIONS (IL-201)	IL TIER 2	Reports to IEMA	
OSA	202	201 THRU 23 S WABASH	CHICAGO CITY OF ADAMS WABASH EL STA	RCRA-NonGen	No Violations Found	
OSA		230 S STATE ST	CHICAGO TRANSIT AUTHORITY	FINDS	Registered	
		220 S. STATE ST.	TENG & ASSOC.	MLTS	Materials license	
		211 S STATE ST	FW WOOLWORTH CO	FINDS	Registered	
		211 S STATE ST	WOOLWORTH CO STORE #4	FINDS	Registered	
		202 S STATE ST 15TH FL	ILL MIGRANT COUNCIL HEADQUARTER OFFICE	FTTS & HIST FTTS INSPECTIONS	Inspections	
		11 EAST ADAMS STREET	CHICAGO COLLEGE OF COMMERCE	FINDS	Registered	
		11 E ADAMS ST	OFFICE BLDG	FINDS	Registered	
OSA	208	224 S MICHIGAN AVE # 1000	SKIDMORE OWINGS & MERRILL	FINDS	Registered	_
03/1	200	224 C MICHIGARY XV E # 1000		RCRA-SQG	No Violations Found	
		224 SOUTH MICHIGAN AVENUE	MCDONOUGH ASSOC., INC.	MLTS	Materials license	
		220 S MICHIGAN AVE	ORCHESTRAL ASSOCIATION	RCRA-CESQG	No Violations Found	
		220 0 11101 1107 1177 172		110101 02000	2 heating oil tanks abandoned in	
		200 S MICHIGAN AVE	BORG WARNER BUILDING	IL UST & HWAR	place & annual report	
			EQUITABLE REAL ESTATE	FINDS	Registered	
					Other petroleum, NFR Letter	
				LUST	10/12/1995	
OSA	209	17 W ADAMS ST	BERGHOFF RESTAURANT	FINDS	Registered	
	1	16 W ADAMS	WALGREENS 7559	FINDS	Registered	
OSA	210	72 W ADAMS ST	COM ED GENERAL OFFICE	FINDS	Registered	part of number is cut off Dearborn & Adams
			CHICAGO BOARD OF EDUCATION	IL AIRS	Permit	
				RCRA-SQG	No Violations Found	
			COMMONWEALTH EDISON GENERAL WHSE	ICIS	Action for penalry	
OSA	215	243 S WABASH AVE	DEPAUL UNIVERSITY	RCRA-SQG	No Violations Found	
	•	226 S WABASH	226 S WABASH	FINDS	Registered	
		218 S WABASH AVE	ACME COPY CORP	RCRA-SQG	No Violations Found	\neg
		218 S. WABASH AVE. #600	BLOOM SCHOOL OF JAZZ	FINDS	Registered	\neg
		218 S WABASH AVE	REPRODUCTION CONSULTANTS LTD	FINDS	Registered	\neg
		219 S WABASH AVE	MID CITY PARKING	IL UST & HWAR	3 exempt tanks & annual report	
		219 SOUTH WABASH	ORCHESTRAL ASSOC.	LUST	Gasoline, NFR Letter 10/24/1995	┪

Project Location	EDR#	Address	Owner / Tenant	Finding	Violations / Status	Comments
OSA	217	230 S. DEARBORN	ENVIRONMENTAL PROTECTION AGENCY	MLTS	Materials license	
		230 S. DEARBORN STREET	KLUCZYNSKI FEDERAL BUILDING	CERCLIS	Discovery	
		230 S DEARBORN ST -A	USEPA	RCRA-NonGen	No Violations Found	
				FINDS	Registered	
		230 S DEARBORN	FEDERAL PLAZA SCULPTURE	RCRA-NonGen	No Violations Found	
			GSA BUSINESS SVC CENTER	FINDS	Registered	
		219 S. DEARBORN STREET	DIRKSEN FEDERAL BUILDING	CERCLIS	Discovery	
				RCRA-NonGen	No Violations Found	
			US ARMY CORPS OF ENGINEERS	RCRA-NonGen	No Violations Found	
		219 S DEARBORN SUITE 500	U S DRUG ENFORCEMENT ADMINISTRATION	NY Manifest	Manifest	
		219 SO DEARBORN-BASEMENT LEVEL	FPS SMALL ARMS RANGE	RCRA-NonGen	No Violations Found	
		219 S. DEARBORN STREET	GENERAL SERVICES ADMINISTRATION	FINDS & HWAR	Registered & annual report	
		219 S DEARBORN ST ROOM 200	USGSA LOOP FIELD OFFICE	MLTS	Materials license	
				RCRA-SQG	No Violations Found	
		219 S DEARBORN STE 905-F	FEDERAL BUREAU OF INVESTIGATIO	FINDS	Registered	

Notes:

TSCA

Study area only includes the six block area and not the buildings across the street PA means Project Area, See Fig. 3 in the main document SA means Study Area, See Fig. 3 in the main document OSA means Outside of Study Area, an approximately 1/8 mile buffer

Acronym Definitions

Comprehensive Environmental Response, Compensation

CERCLIS and Liability Information System

U.S. Department of Transportation - Office of Pipeline Safety Handles pipeline related situations DOT OPS

ERNS Emergency Release Notification System

Facility Index System FINDS

HIST FTTS Tracking of historical data pertaining to compliance

ICIS Integrated Compliance Information Systen

IEMA Illinois Emergency Management Association

Illinois Dry Cleaners database IL Dry Cleaners

IL HWAR Illinois Hazardous Waste Annual Report IL NPDES Illinois National Pollutant Discharge Elimination System

IL TIER 2 Facilities with chemicals greater than household level

MLTS Material Licensing Tracking System

RCRA Resource Conservation and Recovery Act of 1976 RCRA-CESQG Conditionally Exempt Small Quantity Generator

Toxic Substances Control Act

RCRA-LQG Large Quantity Generator

RCRA-SQG Small Quantity Generator

RCRA-NonGen Non Generator

Underground Storage Tank UST UST/LUST Leaking Underground Storage Tank

Database tracking pollutant and chemical spills and actions taken

Database tracking accidental spills and chemical releases

FIFRA/TSCA Tracking System (FTTS) is a regional system that tracks compliance activities; inspections, enforcement actions taken

Tracks regional compliance and legal actions in an EPA database

Tracks chemical usage and preparedness for appropriate disposal

Database kept by the State of Illinois for Dry Cleaners

For hazardous waste generators

Hold permits for discharges

Regulated facility for hazardous chemicals

Tracks radioactive usage sites

Regulations pertaining to waste disposal Generates 100 kg or less of hazardous waste per month

Generates 1,000 kg or more of hazardous waste during any month Generates more than 100 and less than 1000 kg of hazardous waste during any month

Non-Generators do not presently generate hazardous waste

Tracking of substances falling into the toxic substances category Heating oil tanks are exempt from registration

LUST incident spill incident cleanups are documented with a No Further Remediation Letter (NFR)

Lead Based Paint
Sampling Results and Report

Washington/Wabash Loop Elevated Station - Appendix D Lead Based Paint Sampling Results and Report



LEAD-BASED PAINT SURVEY REPORT

Washington / Wabash Loop Elevated CTA Station City of Chicago Department of Transportation Specification No. 105360

(ORIGINAL)

Prepared for:

Exp US Services Inc.

205 N. Michigan Ave., Suite 3600

Chicago, Illinois 60601-5924

June 4, 2013

Kowalenko Consulting Group, Inc.

33 West Monroe Street, Suite 1825

Chicago, IL 60603

Telephone (312) 739-1010 Fax (312) 739-1015

www.kowalenkogroup.com

LEAD-BASED PAINT SURVEY REPORT

Washington / Wabash Loop Elevated CTA Station City of Chicago Department of Transportation Specification No. 105360 (ORIGINAL)

Prepared for:

Exp US Services Inc. 205 N. Michigan Ave., Suite 3600 Chicago, Illinois 60601-5924

June 4, 2013

Kowalenko Consulting Group, Inc.

33 West Monroe Street, Suite 1825

Chicago, IL 60603

Telephone (312) 739-1010 Fax (312) 739-1015

www.kowalenkogroup.com

NOTICE: This document has been prepared by Kowalenko Consulting Group, Inc. (KCG), solely for the use and benefit of KCG's Client as identified herein. Any use of this document or the information contained herein by persons or entities other than KCG's Client without the express written consent of Kowalenko Consulting Group, Inc. shall be at the sole risk and liability of said person, and Kowalenko Consulting Group will not be liable for any damages resulting from such unauthorized use. This document may not include all information pertaining to the described Site.

TABLE OF CONTENTS

Executive Summary	
ntroduction	1
Methodology	2
_aboratory Results	
Conclusions	

APPENDICES

APPENDIX A: SAMPLE LOCATIONS AND PHOTOGRAPHS

APPENDIX B: CHAIN OF CUSTODY AND ANALYTICAL RESULTS

Executive Summary

Kowalenko Consulting Group, Inc. was retain ed by Exp US Services Inc. (Exp) to perform surveys of potential lea d-based paint (LBP) for the Madison/Wabash a nd Randolph/Wabash Rapid Transit Stations in Chicago, Illinois. The scope of the survey was to identify LBP that could potentially be disturbed by construction activities related to the planned stationhouse demolition project. The survey focused on the exterior of the station houses, platforms and superstructure of the rapid transit trestle. The survey was conducted on May 22, 2013.

Conclusions

Madison/Wabash Station

Paint material that contains greater than 0.5 % lead by weight is classified as LBP. The following materials were confirmed by laboratory analysis as LBP:

- Beige painted station support structure.
- Beige painted corrugated metal on old station.
- Beige painted sheet metal on old station.
- Beige painted canopy support.
- Red painted canopy roof (topside).
- Beige textured paint on old station.

Randolph/Wabash Station

The following materials were identified as LBP:

- Gray painted station support structure.
- Orange painted station support structure.
- Beige, with yellow undercoat, painted canopy support.
- Beige, with red undercoat, painted canopy support.

Introduction

Kowalenko Consulting Group, Inc. was retain ed by Exp US Services Inc. (Exp) to perform surveys of potential lea d-based paint (LBP) for the Madison/Wabash a nd Randolph/Wabash Rapid Transit Stations in Chicago, Illinois. The scope of the survey was to identify LBP that could potentially be disturbed by the proposed demolition of the existing stations and dreplacement with a new station at Washington Street. The survey focused on the exterior of the station houses, platforms and super structure of the elevated rapid transit tracks. The survey was conducted on May 22, 2013, by Mark A. Simmons, Illinois-licensed inspector.

General

The subject sites were two elevated rapid transit train stations and associated platforms located above Wabash Avenue. The structures were composed of a mi xture of metal suppor t superstructure with metal station s houses, wooden platform decks and metal canopie s positioned over the platforms.

Madison/Wabash Station

Observations made of the facility revealed beige painted structural steel (Photos 1 & 2); beige painted sheet and corrugated metal and textured paint on the old stationhouse (Photos 3 & 6). The metal platform canopy supports were painted beige, as well as the underside of the corrugated metal canopy proper (Photo 4). The topside of the corrugated metal canopy, as well as the metal roof of the old stationhouse, was painted red (Photos 5).

See Appendix A for photos and sample locations.

Randolph/Wabash Station

Observations made of the facility revealed gray and orange painted structural steel (Photo 7). The modern stationhouse features gray painted sheet metal (the old stationhouse is no lo nger present.). The metal platform canopy supports were painted beige with either a red or yellow undercoat of paint (Photo 4 for representative photo from Madison/Wabash Station). The underside of the corrugated metal canopy proper was painted beige. The topside of the corrugated metal canopy was not accessible or observable. Two heavy metal hangers were located on the lower station deck, which were painted yellow with a red undercoat (Photos 8).

See Appendix A for photos and sample locations.

Main Elevated Structure

Observations made of t he superstructure revealed brown and orange painted str uctural steel below the elevated tracks. In some locations, the brown paint I ayer was covering the gray/orange painted structure. There is gray painted sheet metal on the modern stationhouse (the old station is no longer present).

Methodology

Paint chip sampling was conducted on random surfaces that were determined to be homogenous to surfaces found within the proposed demolition are as. The inspection was conducted in accordance with the 1997 revision of the HUD Guidelines *for the Evaluation and Control of Lead-Based Paint Hazards in Housing*, using the single and /or multi-dwelling family unit approach.

HUD guidelines define lead-based paint as paint containing 0.5 percent (5000mg/ Kg) or greater lead by weight (when calculated as lead metal in a dried solid form), or 1.0 milligrams per square centimeter (mg/cm2) or greater using an XRF analyzer.

All paint chip samples were collected from the proposed a reas of renovation. A total of seven samples were collected from the Madison/Wabash Station and six samples were collected from the Randolph/Wabash Station. When samples indicated that lead bearing paint concentrations were measured above 0.5% by weight, the painted area was considered LBP.

All samples were analyzed using a Flame Atomic Absorption method at EMSL Lab oratories in Chicago, Illinois.

Laboratory Results

TABLE A
Sample Results from May 22, 2013
Madison/Wabash Street Station, Chicago, Illinois

Sample Number	Location	Paint Color	Substrate	Result (%)
L-01	Track Support Structure	Orange	Metal	0.025
L-02	Station Support Structure	Beige	Metal	9.9
L-03	Old Station-Corrugated	Beige	Metal	4.9
L-04	Old Station Sheet Metal	Beige	Metal	5.1
L-05	Canopy Support	Beige	Metal	9.8
L-06	Canopy Roof (topside)	Red	Metal	0.12
L-07	Old Station-Textured	Beige	Metal	5.4

Results reported in percent by weight of total material (%).

See Appendix A for photos and sample locations.

TABLE B
Sample Results from May 22, 2013
Randolph/Wabash Street Station, Chicago, Illinois

Sample Number	Location	Paint Color	Substrate	Result (%)
L-10	Station Support Structure	Gray	Metal	5.5
L-11	Station Support Structure	Orange	Metal	7.5
L-12	Corrugated Sheet Metal on Station	Gray	Metal	<0.010
L-13	Canopy Support	Beige with Yellow under coat	Metal	11
L-14	Canopy Support	Beige with Red under coat	Metal	4.8
L-15	Hangers	Yellow with Red undercoat	Metal	8.3

Results reported in percent by weight of total material (%).

See Appendix A for photos and sample locations.

Conclusions

Madison/Wabash Station

Six of the seven ma terials samples were identified a s LBP rep resenting the following homogenous areas:

- Beige painted station support structure.
- Beige painted corrugated metal on old station.
- Beige painted sheet metal on old station.
- Beige painted Canopy Support.
- Red painted Canopy Roof (topside).
- Beige textured paint on Old Station.

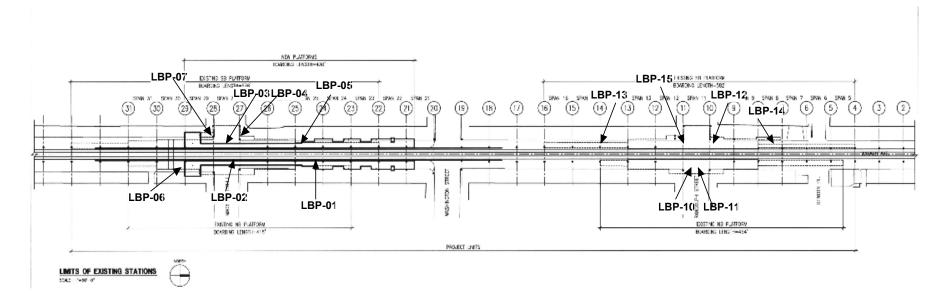
Randolph/Wabash Station

Five of the six samples were identified as LBP representing the following homogenous areas:

- Gray painted station support structure.
- Orange painted station support structure.
- Beige with yellow undercoat painted canopy support.
- Beige with red undercoat painted canopy support.

APPENDIX A: SAMPLE LOCATIONS AND PHOTOGRAPHS

LOCATIONS OF LEAD-BASED PAINT SAMPLES





LBP-02: LOWER LEVEL OF MADISON ST. STATION ABOVE STREET.



LBP-03: LOWER LEVEL OF MADISON ST. STATION ABOVE STREET. CORRUGATED METAL ON OLD MADISON ST. STATION.



LBP-04: LOWER LEVEL OF MADISON ST. STATION ABOVE STREET. CORRUGATED METAL ON OLD MADISON ST. STATION.



LBP-05: CANOPY SUPPORTS ON PLATFORM OF MADISON ST. STATION. (THIS WAS THE TYPE OF STRUCTURE FOR RANDOLPH ST. STATION LBP-13 & 14.)



LBP-06: ROOFTOOP OF CANOPY AT MADISON ST. STATION.



LBP-07: LOWER LEVEL OF MADISON ST. STATION ABOVE STREET. TEXTURED PAINT ON OLD STATION HOUSE.



LBP-10 & 11: LOWER LEVEL OF RANDOLPH ST. STATION ABOVE STREET.



LBP-15: HANGER SUPPORT ON LOWER LEVEL OF RANDOLPH ST. STATION ABOVE STREET.

LBP-12 WAS FROM THE CORRUGATED METAL OF THE NEW RANDOLPH ST. STATION (METAL BOX ON WEST SIDE).

Appendix E

Úublic Outreach and Project Coordination Information

Contents

Title

Public Involvement Matrix

Puk	slic	Invo	lvam	ant	Matrix
PUL)11(;	HIVC	uven	œm	IVIAITIX

Public Involvement Matrix

Outreach to Whom / When	Where / How	Type / Media	<u>Purpose</u>
Alderman, Business Community, Residents, Agencies	Address Contact Information	Meeting, Charrette, Article / Announcement, Website, Signage, Press Release	Project Awareness / EA / FONSI / Construction Staging / Closures / Parking / Traffic /
42nd Ward Alderman Brendan Reilly October 2012 through March 2013 Ongoing and Planned May - August	Alderman's Office - 325 West Huron Street, Suite 510, 60654 (312) 642- 4242 – 42nd Ward - Brendan.Reilly@cityofchic ago.org Site http://www.ward42chicago .com/	Meetings with Alderman and Constituents – Businesses & Residents In Person, Arranged by Alderman, E- Mail Updates via e-mail, Announcements for Distribution to 46th Ward Constituents/	Project Awareness
Chicago Transit Authority Ongoing	CTA Website Updates on CTA Website for the Public	Website, Online Media, Social Media	Project Awareness / Construction Staging / Closures / Parking / Traffic
Chicago Chamber of Commerce Planned, Public Meeting(s)	200 E Randolph St #2200 Chicago, IL 60601 - (312) 494-6700 http://www.chicagolandch amber.org/wdk_cc/	Meetings In Person at Organizational Meeting – Social Media -	Project Awareness / EA / FONSI / Construction Staging / Closures / Parking / Traffic /
Local Businesses Past Passed through Alderman October 2012 through March 2013	In Person at Business Locations, Through Alderman's Office	Meetings , Through Alderman's Office CDOT and CTA Websites, E-Mails, Pubic Meeting(s) Popular Media, Social Media, Public	Project Awareness
Ongoing, Planned for Public Meeting(s), During Entire Project through Construction and Demolition of both Stations		Radio, Local Newspapers, Online Media ex: http://www.dnainfo.com/chicago/ http://www.cityofchicago.org/city/en/de pts/cdot.html & CTA http://www.transitchicago.com/	
BOMA - Building Owners and Managers Association and similar group(s) Ongoing	http://www.bomachicago.o rg/ 115 South LaSalle St., 60603 (312) 236-5237	Meeting(s), Announcements In Person at Organizational Meeting – Social Media -	Project Awareness

Outreach to Whom / When	Where / How	Type / Media	<u>Purpose</u>
Alderman, Business Community, Residents, Agencies	Address Contact Information	Meeting, Charrette, Article / Announcement, Website, Signage, Press Release	Project Awareness / EA / FONSI / Construction Staging / Closures / Parking / Traffic /
Planned			
Institutions along Wabash – Universities, Colleges, Cultural Organizations	At Institution Location(s), Through Alderman's Office, at Institutions as Needed	In Person at Institution Meetings – Social Media – E-Mails, Press Releases	Project Awareness / EA / FONSI / Construction Staging / Closures / Parking / Traffic /
	In Person Meetings, Public Meeting(s)		
Popular Media – Television, Radio Newspapers, and Online Media	Various Media Outlets	Press releases, Articles, Interviews with CDOT Staff	Project Awareness
Planned			
All Constituents and Public at Large	Online Chicago Cultural Center,	Announcements, Updates, CDOT Website – CTA Website	Project Awareness
Ongoing Planned, Public Hearing	Chicago Architecture Foundation, or Harold Washington Library are possible venues for Public Hearing	CDOT & CTA Websites, Popular Radio, Print, and Online Media, Social Media	Project Awareness / EA / FONSI / Construction Staging / Closures / Parking / Traffic /
Illinois Historic Preservation Agency			
Ongoing	Consult with IHPA as design is finalized to ensure adherence to Standards (per 2007 IHPA Correspondence)	Engineering and Architectural Documents	Opportunity to review final design plans prior to construction
Final	Notifying IHPA of agreement with conditions and Standards (per 2007 IHPA Correspondence)		