

Strategic Regional Arterial

**Archer Avenue/Pershing Road
from I-90/94 to Illinois 50**



**Operation
GreenLight**

**Illinois Department of Transportation
September 1994**

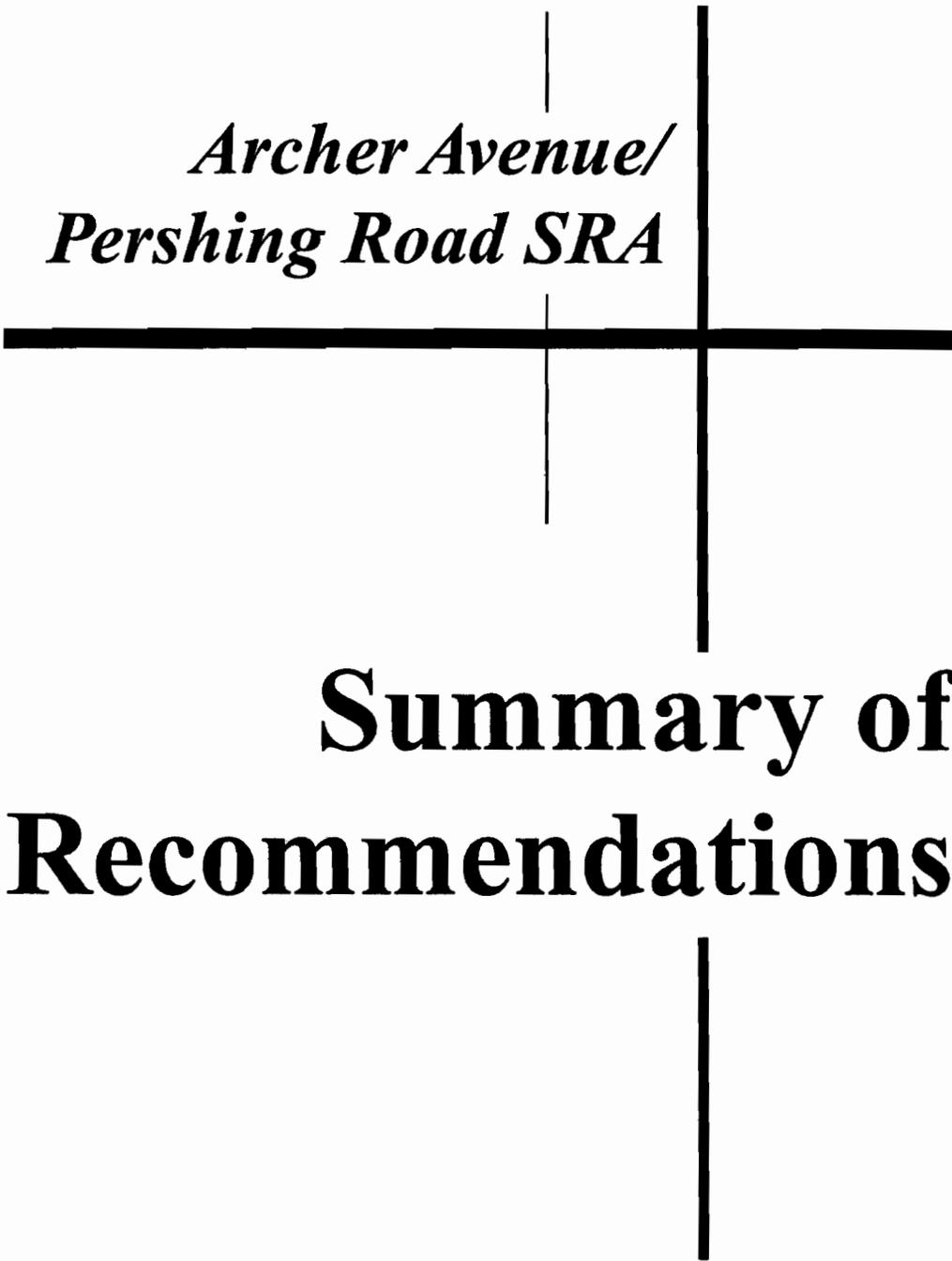
Foreword

Archer Avenue/Pershing Road is a Strategic Regional Arterial (SRA) from I-90/I-94 (Dan Ryan Expressway) to Illinois 50. ESM Engineering, in association with CH2M HILL, Inc., has prepared this SRA report for Archer Avenue/Pershing Road for the Illinois Department of Transportation and the Strategic Regional Arterial Subcommittee of the Work Program Committee of the Chicago Area Transportation Study.

As a SRA route, Archer Avenue/Pershing Road is intended to function as part of a regional arterial system, carrying high volumes of long-distance traffic in conjunction with other SRA routes and the regional expressway and transit systems. This report is one element of a long-range plan for all routes in the SRA network. Together, the route studies constitute a comprehensive, coordinated plan for the entire SRA network.

This report includes a description of the SRA study objectives and process, a detailed exposition and analysis of the existing route conditions, recommendations for ultimate and basic improvements, and documentation of the public involvement process including citizen comments.

*Archer Avenue/
Pershing Road SRA*



**Summary of
Recommendations**

Summary of Recommendations

For study purposes, the Archer Avenue/Pershing Road Strategic Regional Arterial (SRA) was divided into two segments (see Exhibit S-1, attached following this section). The following is a summary of the major recommendations for each segment.

Segment I: Pershing Road (3.1 Miles)

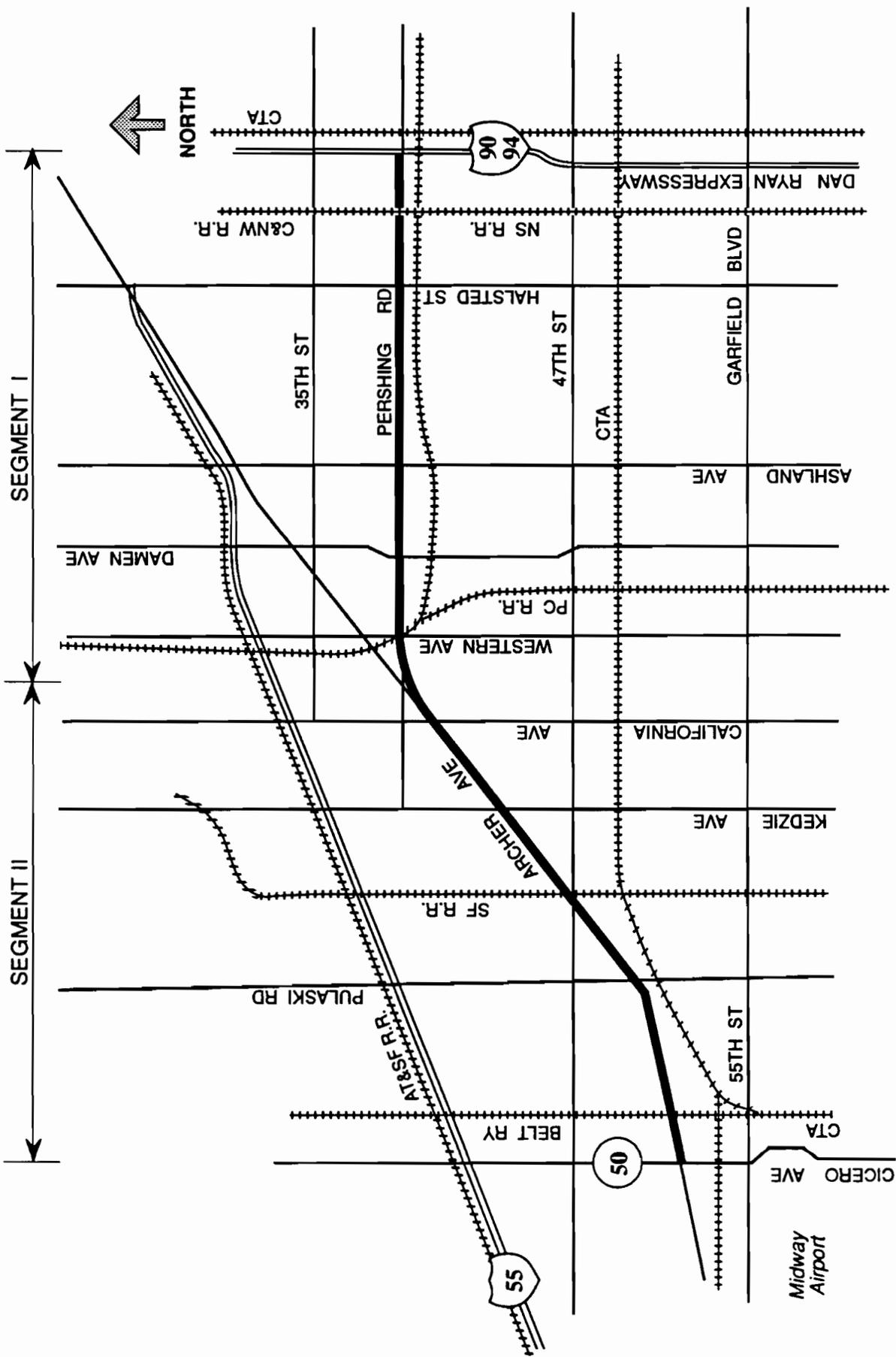
- Lengthen left-turn storage lanes at Ashland Avenue and at Morgan Street to improve capacity for trucks and to reduce congestion
- Control future access to the planned Stockyards development through location of access roads and signals
- Acquire small portions of right-of-way to improve the Pershing/Archer intersection with Rockwell Street
- Improve the intersections with the Western Avenue SRA and Western Boulevard
- Improve the Archer Avenue intersection with Rockwell Street by closing the south leg of Rockwell Street and restricting the north leg of Rockwell Street to one-way operation away from the intersection (available only for Chicago Transit Authority buses)
- Provide four through travel lanes (two lanes in each direction) between Western Avenue and Rockwell Street by removing parking and using off-street lots for replacement parking
- Prohibit parking on both sides of Pershing Road between Wentworth Avenue and Halsted, and provide four through travel lanes (two lanes in each direction)
- Prohibit parking on Pershing Road between Ashland Avenue and Paulina Street
- Increase clearances at the PC Railroad and the C&WI Railroad structures

Segment II: Archer Avenue (3.3 Miles)

- Provide four through travel lanes (two lanes in each direction) with 8-foot parking lanes
- Acquire an additional 7 feet of right-of-way for a total of 80 feet (consistent with the remainder of this segment), from 47th Street to Lawndale Avenue
- Improve California Avenue intersection
- Improve intersections at Pope John Paul II Drive and Kedzie Avenue by closing the south leg of Albany Avenue to remove one leg of the five-leg intersection
- Improve intersection at Pulaski Road by closing 50th Street to remove one leg of the five-leg intersection
- Implement other intersection improvements to improve capacity (i.e., lengthening turning lanes and removing parking)
- Prohibit left turns where there are no signals or left-turn protection
- Remove parking at specific locations where there are no signals to provide left-turn lanes for access to residential streets
- Increase vertical and/or horizontal clearance at the Santa Fe Railroad crossing
- Provide a grade separation at the Belt Railway crossing, close to Knox Avenue and Kolmer Avenue



LOCATION MAP ARCHER AVE/PERSHING RD



Strategic Regional Arterial Study Archer Avenue/Pershing Road

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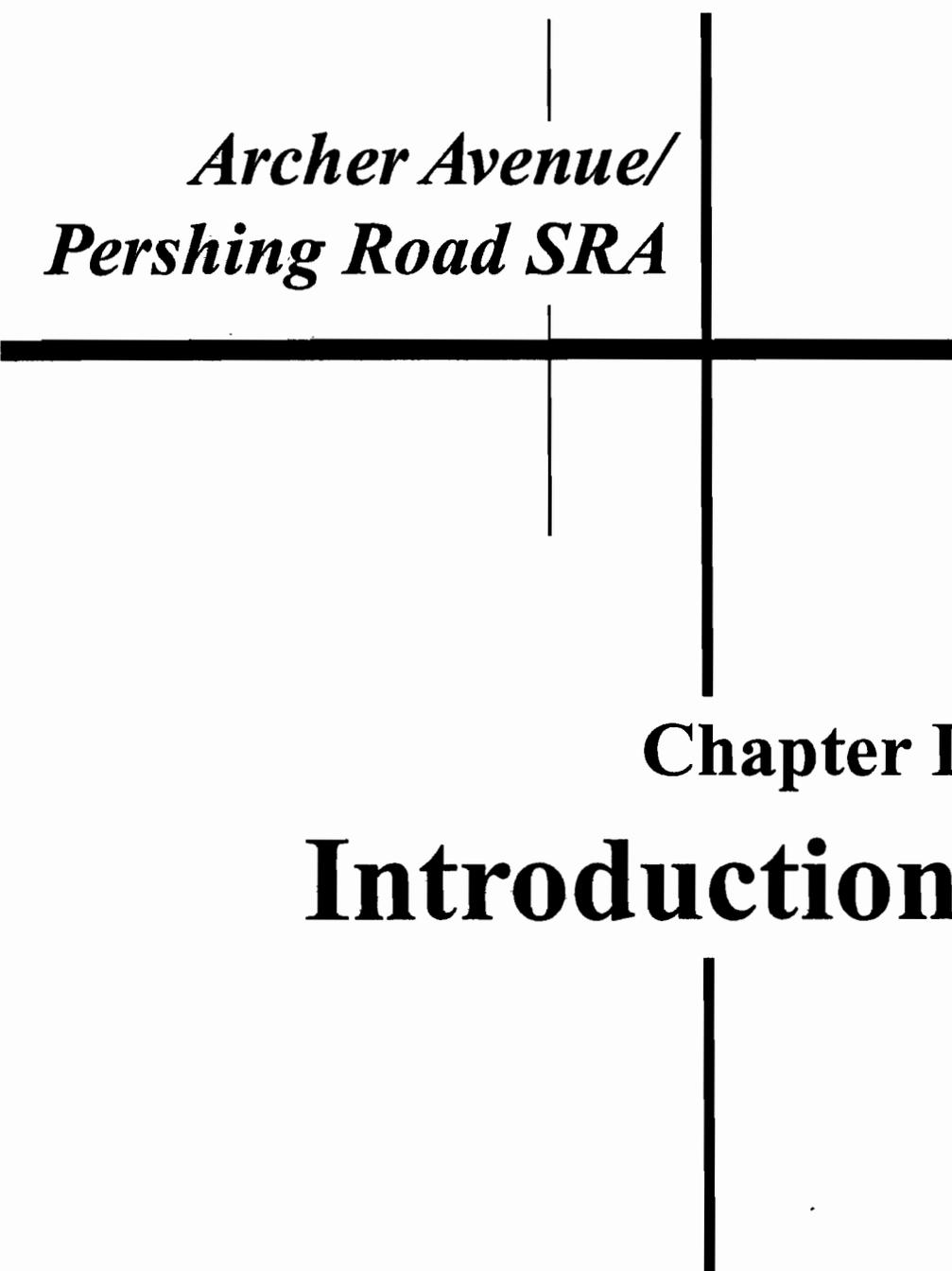
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*Archer Avenue/
Pershing Road SRA*

Chapter I

Introduction

Chapter I Introduction

The 2010 Transportation System Development Plan adopted by the Chicago Area Transportation Study (CATS) and the Northeastern Illinois Planning Commission (NIPC) recognizes that not all long-distance highway travel can be handled by the expressway system. Realizing that the arterial system will have to carry some long-distance trips, the 2010 Plan designated a system of Strategic Regional Arterials (SRAs) to supplement the expressway system.

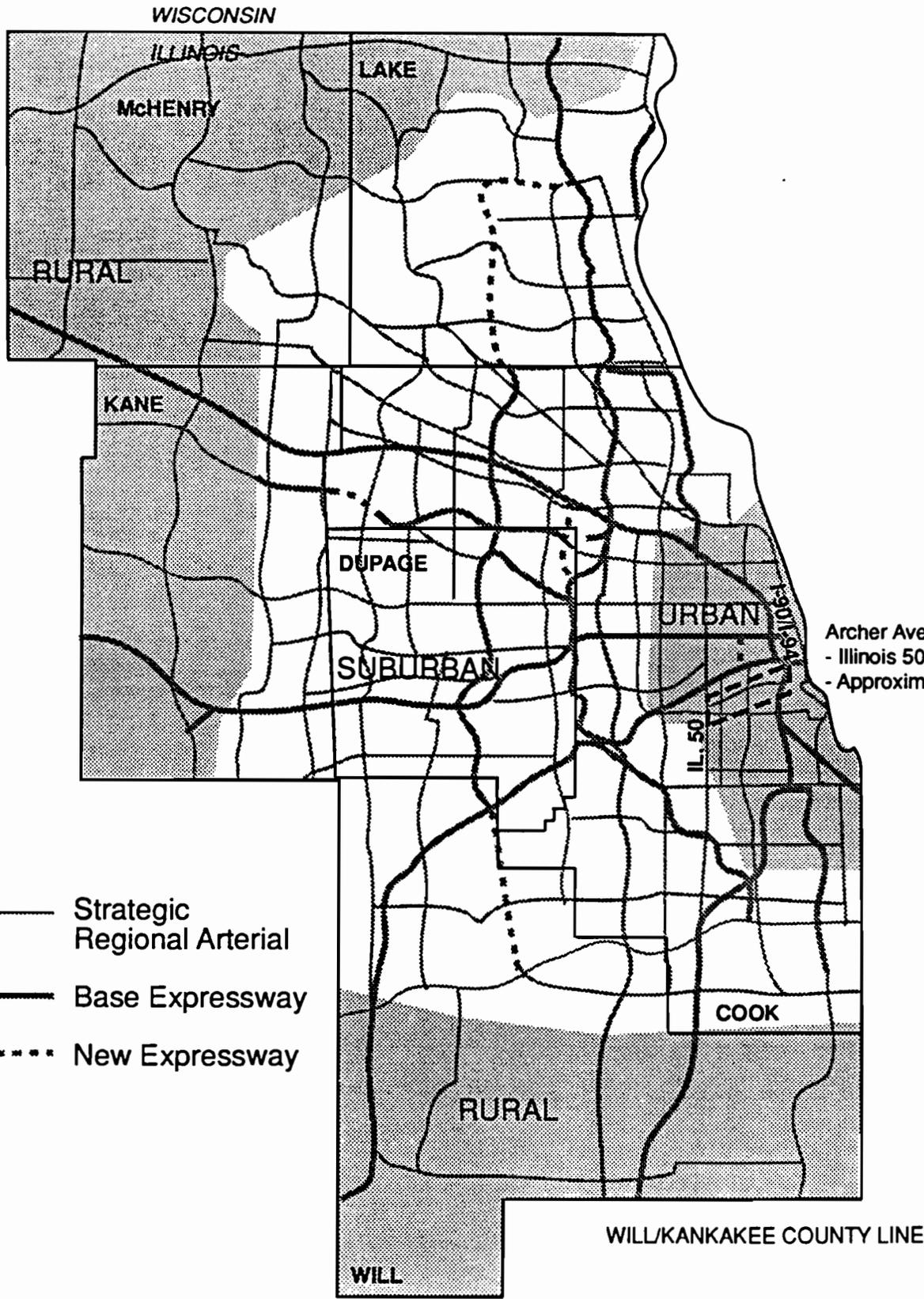
The SRA system is a 1,340-mile network of existing roads in the northeastern Illinois region. They create a network of 66 routes intended to serve as a second tier to the expressway system. The regional highway system, consisting of existing and planned expressways and SRAs, is shown in Exhibit 1.

Identification of routes that comprise the SRA system was determined based upon the projected levels of future travel demand within different parts of the region, with spacing ranging from about 3 miles apart in the more densely developed areas to about 8 miles apart in predominantly rural areas. Within this network, there are significant differences in the roadway environment:

- Urban routes
- Suburban routes
- Rural routes

The designation of route types within the overall SRA system reflects the expected density of long-range development in different portions of the region.

This report is concerned with Archer Avenue/Pershing Road (hereafter “Archer/Pershing”), which has been designated a SRA corridor from I-90 and I-94 (the Dan Ryan Expressway) to Illinois 50 (Cicero Avenue). The corridor is highlighted in Exhibit 1. The entire length of the Archer/Pershing SRA is within the City of Chicago, and is classified as an “urban” arterial.



Archer Ave/Pershing Rd
 - Illinois 50 to I-90/I-94
 - Approximately 6.4 Miles

- Strategic Regional Arterial
- Base Expressway
- New Expressway

ROUTE TYPES ON THE STRATEGIC REGIONAL ARTERIAL SYSTEM

SRA Planning Objectives

The SRA system is intended to accomplish certain specific objectives within the overall regional transportation system:

- Supplement an expanded expressway system by:
 - Improving access to expressways
 - Providing alternatives for some portions of expressway travel
 - Providing a lower-cost substitute for expressways in some corridors
- Enhance public transportation and personal mobility by:
 - Improving access to rail transit stations
 - Improving operating conditions for buses and other transit vehicles
 - Identifying opportunities for future transit facilities
 - Maintaining pedestrian accessibility
- Accommodate commercial vehicle traffic by:
 - Improving structural clearances
 - Maximizing through traffic movement

SRA Design Concept

A report on design concepts for the SRA system, prepared by Harland Bartholomew & Associates, Inc., was endorsed by the CATS Policy Committee. These concepts have been used as a guide, but not as a policy, in developing the improvement plan for the Archer/Pershing SRA that this report describes.

Organization of the Report

This report presents a summary of the SRA planning study for the Archer/Pershing corridor. It is organized as follows:

- **Existing Conditions (Chapter II)**
 - This section describes the existing physical characteristics, traffic operation, safety, transit operations, environmental concerns, and land uses in the Archer/Pershing corridor.
- **Planning Framework (Chapter III)**
 - This section describes the framework within which the recommended SRA plan will be situated. The chapter includes a description of route design characteristics, design criteria, travel forecasts, future land use zoning and development, future roadway and transit planning, future areas of concern, and a summary of the roadway recommendations.
- **Recommended SRA Plan (Chapter IV)**
 - This section describes the recommended SRA corridor plan including lane arrangement, right-of-way, an arterial operations and level of service analysis, construction and right-of-way costs, and short-term recommendations.
- **Public Involvement (Chapter V)**
 - This section documents the public involvement process undertaken for the SRA study of Archer/Pershing. It is divided into three major sections: Panel Advisory Meetings, Newsletters, and the Public Hearing. These three opportunities for participation allowed the general public or their elected officials to voice opinions concerning Archer/Pershing.

Time Frame

The SRA study of the Archer/Pershing corridor began in May 1991 and has continued into calendar year 1994. Conclusions and recommendations are based on conditions existing during the study period as well as known developments and plans by others that were current at this time.

SRA planning for the Archer/Pershing SRA involved the Illinois Department of Transportation (IDOT), CATS, and the City of Chicago (the only community through which the route passes). Input was received through a series of three meetings with the SRA Advisory Panel. Also, a public hearing was held March 18, 1993, to present the draft recommendations.

*Archer Avenue/
Pershing Road SRA*

Chapter II

Existing Conditions

Chapter II Existing Conditions

The Archer/Pershing SRA corridor study area extends from the Dan Ryan Expressway (I-90/94) to the Cicero Avenue SRA (Illinois 50). The entire 6.4-mile length of the route is within the Chicago city limits. As shown in Exhibit 2, the corridor has been divided into two segments for purposes of analysis and planning:

- Segment I——“Pershing Road” (Dan Ryan Expressway to Rockwell Street)
- Segment II——“Archer Avenue” (Rockwell Street to Cicero Avenue)

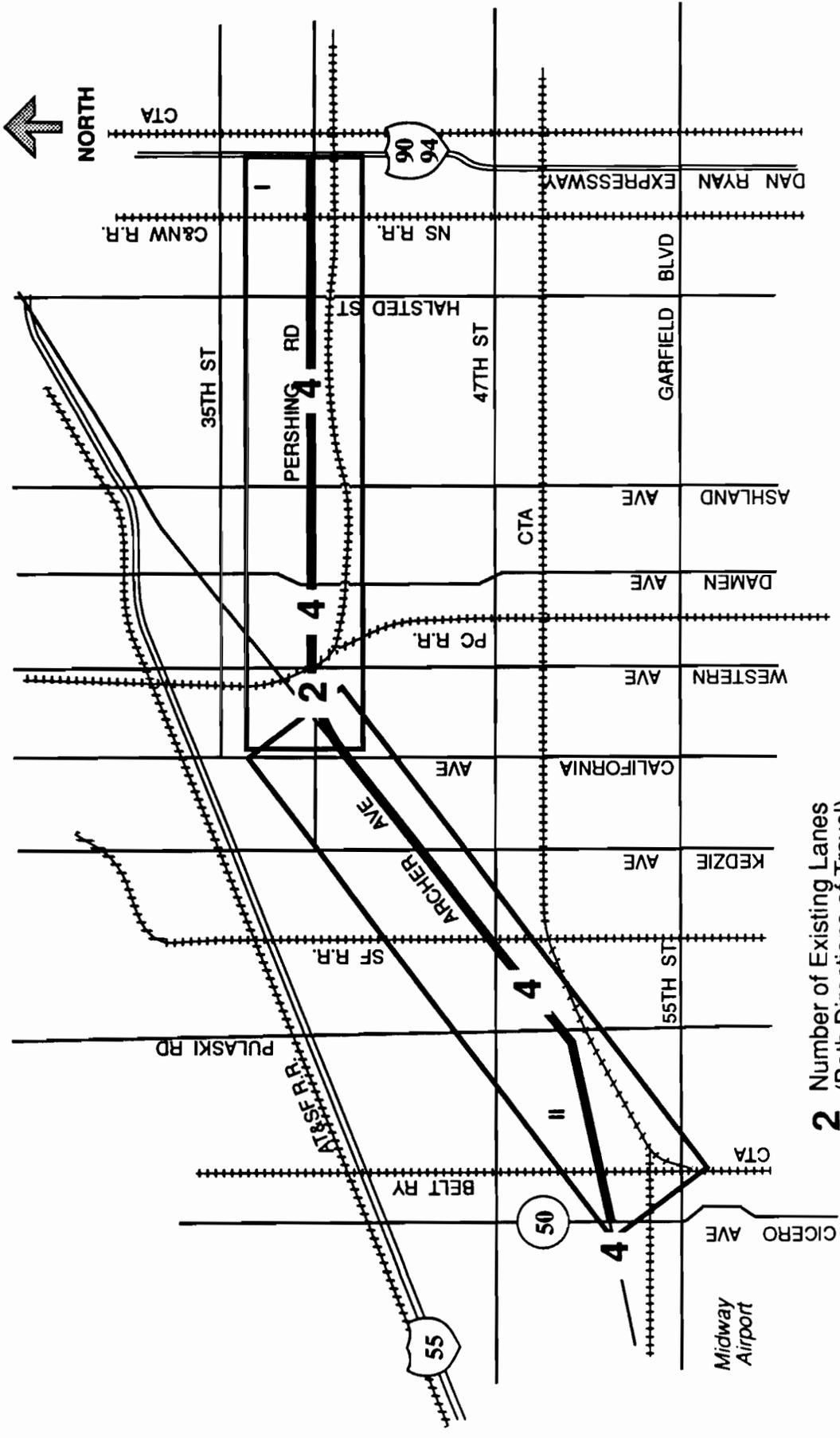
The Archer/Pershing corridor links the expressway system and intermodal freight yards, providing a vital connection that serves industrial uses in the corridor. Archer Avenue and Pershing Road serve local and regional trips. The Archer Avenue corridor parallels the Stevenson Expressway (I-55), and Pershing Road is a major access route to the Dan Ryan Expressway. Various SRA routes, including Western Avenue, Pulaski Road, and Cicero Avenue, intersect or meet the Archer/Pershing corridor. Residential, commercial, and industrial uses predominate in the corridor, although they are more intense in the Archer Avenue segment.

Existing physical characteristics, and safety, traffic, and transit data for the two segments were collected from numerous sources (see Table 1). Information also was obtained from field reconnaissance, and from discussions with local officials and City of Chicago technical staff at the Advisory Panel Meetings.

Corridor Overview

The corridor generally has four through travel lanes (two lanes in each direction), except for a ¼-mile portion of Pershing Road between Western Avenue and Rockwell Street where there is one through travel lane in each direction. There are no continuous medians for most of the corridor, except on Pershing Road at the Dan Ryan Expressway interchange, between LaSalle Street and Princeton Avenue (raised median), and on Pershing Road between Union Avenue and Halsted Street (flush median). Archer Avenue has left-turn lanes at major intersections.

ARCHER AVE/PERSHING RD ILLINOIS 50 to I-90/I-94 (Approx. 6.4 Miles)



2 Number of Existing Lanes
(Both Directions of Travel)

II Segment Number

Table 1	
Sources of Data Describing Traffic and Transportation Characteristics of Archer Avenue/Pershing Road in 1991/1992	
Item	Data Source
Traffic Volumes <ul style="list-style-type: none"> • Average Daily Traffic • Intersection Turning Movement Counts 	<ul style="list-style-type: none"> - City of Chicago Traffic Counts - Illinois Department of Transportation, Office of Planning and Programming
Accidents	- City of Chicago
Transit <ul style="list-style-type: none"> • Routes • Ridership 	<ul style="list-style-type: none"> - Regional Transportation Authority - Chicago Transit Authority - Metra - Pace
Traffic Control <ul style="list-style-type: none"> • Signalized Intersection Locations • Other Traffic Control 	- Field Reconnaissance
Cross Section <ul style="list-style-type: none"> • Roadway Widths • Lane Widths and Arrangements 	<ul style="list-style-type: none"> - As-Built Plans - Field Reconnaissance
Right-of-Way	<ul style="list-style-type: none"> - As-Built Plans - Field Reconnaissance
Curb/Roadside Use <ul style="list-style-type: none"> • Parking • Bus and Loading Zones 	- Field Reconnaissance
Structures	- Field Reconnaissance
Other Features	- Field Reconnaissance

Existing right-of-way on Pershing Road varies from 66 to 82 feet. On Archer Avenue, the right-of-way is 80 feet, except between 47th Street and Lawndale Avenue where the right-of-way is 73 feet.

On-street parking is permitted throughout most of the corridor. Metered parking on Archer Avenue serves commercial and retail activity. Regulations restrict parking on both Pershing Road and Archer Avenue during peak periods.

The corridor is a non-access-controlled facility with numerous signalized intersections. Because Archer Avenue is a diagonal street, several multi-leg and offset intersections are

present along the route. A grade-separated interchange exists at Pershing Road and the Dan Ryan Expressway (I-90/94).

A number of major streets intersect the corridor, including three SRA routes (Western Avenue, Pulaski Road, and Cicero Avenue). Other major intersecting streets include Halsted Street, Ashland Avenue, Damen Avenue, California Avenue, and Kedzie Avenue. These intersections occur at 1-mile intervals, except between Ashland and Western Avenues, where major intersections occur at ½-mile intervals. Two SRA routes travel parallel to Pershing Road: North Avenue, approximately 7 miles north, and 55th Street, approximately 2 miles south. Other major through streets that parallel Pershing Road are 35th Street, ½ mile to the north, and 47th Street, 1 mile to the south. Local streets in the corridor are spaced on a typical urban grid system of eight to 16 streets per mile.

As shown in Table 2, existing traffic demand in the Archer/Pershing corridor ranges from 14,000 to 31,000 vehicles per day (vpd). The lowest average daily traffic, 14,000 vpd, occurs on Pershing Road between Western Avenue and the intersection of Pershing Road, Rockwell Street, and Archer Avenue. The highest traffic volume, 31,000 vpd, occurs between 47th Street and Lawndale Avenue.

Location	ADT (vpd)
Dan Ryan Expressway (I-90/94) to Halsted Street	18,000
Halsted Street to Ashland Avenue	21,000
Ashland Avenue to Damen Avenue	20,000
Damen Avenue to Western Avenue	16,000
Western Avenue to Pershing Road/Rockwell Street/Archer Avenue	14,000
Pershing Road/Rockwell Street/Archer Avenue to Kedzie Avenue	24,000
Kedzie Avenue to 47th Street	29,000
47th Street to Lawndale Avenue	31,000
Lawndale Avenue to Keeler Avenue	25,000
Keeler Avenue to Cicero Avenue	22,000

Under current traffic conditions, peak period congestion exists throughout the corridor, particularly at major intersections. Pershing Road serves as a major truck route, providing access between the Dan Ryan Expressway and industries in the corridor.

During certain periods of the day, heavy truck traffic causes severe congestion in the eastern segment of Pershing Road.

The eastern end of this corridor is located ½ mile south of Comiskey Park, a major traffic generator during baseball season. Parking facilities serve the park within one block of the corridor. During the baseball season, significant congestion occurs around the park on game days.

Table 3 lists the other passenger transportation facilities that cross and serve the Archer/Pershing corridor, including the Chicago Transit Authority (CTA) Dan Ryan Rapid Transit line, the new CTA Southwest Rapid Transit line that is scheduled to begin service in 1993, and numerous CTA express and local bus routes. CTA plans to discontinue express bus service that the new rapid transit line would replace. Local bus services will be reconfigured to serve the rapid transit stations. One Pace bus route crosses the SRA corridor at Cicero Avenue. Although Metra commuter rail lines either cross or operate parallel to the corridor, no Metra stations are located along the corridor (the nearest Metra station is on the Heritage line in Summit, 3.7 miles west of the Archer/Pershing SRA).

Table 3 also lists the freight rail lines that cross the corridor. The Belt Railway crosses Archer Avenue west of Kolmar Avenue at grade near the western terminus of the corridor. Other freight rail lines, including the PC Railroad and AT&SF Railroad, are grade separated.

Heavy development characterizes the land use along most of the route. Land uses include parks, housing, industry, institutions, and commercial and retail establishments. One large site, the Stockyards, is available for industrial redevelopment. Institutions include schools and churches, as well as the Chicago Board of Education. The surrounding neighborhoods support local commercial activity; at the intersection of Archer and Cicero Avenues, near the western terminus of the Archer/Pershing SRA, a large shopping center attracts regional consumers. A recently-renovated CTA bus garage is located where Pershing Road, Rockwell Street, and Archer Avenue intersect. A large intermodal transfer yard, owned by the Atchison, Topeka & Santa Fe (AT&SF) Railway Company, abuts the corridor at 47th Street and Archer Avenue.

**Table 3
Existing Transit Facilities and Operation Along Archer Avenue/Pershing Road**

Route	Frequency	Location of Facility	Average Weekday Boardings ^a
Metra Lines and Nearest Stations			
Norfolk Southern Line (No nearby station)	Weekday: 4 inbound, 4 outbound Weekday: peak hour service only No Saturday, Sunday, or holiday service	(No nearby station)	N/A
Metra Heritage Corridor (No nearby station)	Weekday: 2 inbound, 2 outbound Weekday: peak hour service only No Saturday, Sunday, or holiday service	(No nearby station)	N/A
CTA Rapid Transit Lines and Nearest Stations			
CTA-Dan Ryan Line 35th Station	"AB" stop handles all trains. 24-hour service, frequent, except during late evening and owl service.	35th Street at the Dan Ryan Expressway	2,550
CTA-Southwest Line 35th/Archer Station	All stops. 24-hour service, frequent, except during late evening and owl service.	35th Street and Damen Avenue	N/A
CTA-Southwest Line Western Station (Western/49th Street)	All stops. 24-hour service, frequent, except during late evening and owl service.	49th Street and Western Avenue	N/A
CTA-Southwest Line Kedzie Station (Kedzie/49th Street)	All stops. 24-hour service, frequent, except during late evening and owl service.	49th Street and Kedzie Avenue	N/A
CTA-Southwest Line Pulaski Station (Pulaski/51st Street)	All stops. 24-hour service, frequent, except during late evening and owl service.	51st Street and Pulaski Road	N/A
CTA-Southwest Line Midway Station (59th Street/Kilpatrick)	All stops. 24-hour service, frequent, except during late evening and owl service.	59th Street and Kilpatrick Avenue	N/A
CTA Bus Routes			
CTA 39b	Morning 15 Minutes	Along corridor on Pershing Road	214
CTA 24	Base 12 Minutes	Crosses on Wentworth Avenue and LaSalle Street	750
CTA 44	Evening 6.7 Minutes	Crosses on Wallace Street	1,017

**Table 3
Existing Transit Facilities and Operation Along Archer Avenue/Pershing Road**

Route	Frequency			Location of Facility	Average Weekday Boardings ^a
CTA 8	6.5 Minutes	9 Minutes	6.2 Minutes	Crosses on Halsted Street	875
CTA 42 ^c	10.2 Minutes	No Service	9 Minutes	Crosses on Halsted Street	597
CTA 9	5 Minutes	7.5 Minutes	5.4 Minutes	Crosses on Ashland Avenue	1,402
CTA 45 ^c	8 Minutes	No Service	11 Minutes	Crosses on Ashland Avenue	549
CTA 129 ^c	6 Minutes	No Service	5.6 Minutes	Along corridor on Pershing Road from Ashland Avenue to Wood Street and from Archer Avenue/Rockwell Street to Ashland Avenue	279
CTA 48 ^d	8.1 Minutes	15 Minutes	15 Minutes	Crosses on Damen Avenue	542
CTA 49	5.6 Minutes	10 Minutes	7 Minutes	Crosses on Western Avenue	1,216
CTA 61 ^c	3.5 Minutes	No Service	3.2 Minutes	Along corridor on Archer Avenue	1,865
CTA 62 ^e	5.5 Minutes	8 Minutes	4 Minutes	Along corridor on Archer Avenue	1,464
CTA 62 Express ^c	3.2 Minutes	10 Minutes	3.3 Minutes	Along corridor on Archer Avenue	2,258
CTA 94	5.2 Minutes	15 Minutes	5 Minutes	Crosses on California Avenue	1,059
CTA 52 ^f	10 Minutes	12 Minutes	10 Minutes	Crosses on Kedzie Avenue	523
CTA 52A ^f	7.5 Minutes	15 Minutes	7.5 Minutes	Terminates at Archer Avenue on Kedzie Avenue	569
CTA 47 ^g	7.3 Minutes	10 Minutes	10 Minutes	Crosses on 47th Street; terminates at Archer Avenue on Cicero Avenue	1,015
CTA 53A ^h	6 Minutes	10 Minutes	7.1 Minutes	Crosses on Pulaski Road	1,544
CTA 162 ^c	3.8 Minutes	No Service	4.8 Minutes	Crosses on Pulaski Road	1,479
CTA 99 ^c	6.9 Minutes	30 Minutes	5.8 Minutes	Along corridor on Archer Avenue between Pulaski Road and Cicero Avenue except during peak hours	1,513
CTA 164 ^c	6.9 Minutes	30 Minutes	9.3 Minutes	Along corridor on Archer Avenue between Pulaski Road and Cicero Avenue except during peak hours	1,513
CTA 54B	12 Minutes	15 Minutes	12 Minutes	Crosses on Cicero Avenue	345
CTA 99M ^c	10.7 Minutes	No Service	12.4 Minutes	Crosses on Cicero Avenue	485
CTA 55 ⁱ	4.8 Minutes	7.5 Minutes	6 Minutes	Terminates at Archer Avenue on Cicero Avenue	1,209
Pace Bus Route					
Pace 831	Weekday: 4 northbound, 4 southbound Saturday: 6 northbound, 6 southbound Sunday: 6 northbound, 6 southbound			Crosses on Cicero Avenue	189 ^j

Table 3

Existing Transit Facilities and Operation Along Archer Avenue/Pershing Road

Route	Frequency	Location of Facility	Average Weekday Boardings ^a
Other Rail Lines			
C&WJ RR, PC RR	N/A	Crosses over Pershing Road at Stewart Avenue	N/A
CR RR	N/A	Crosses under Pershing Road with Racine Avenue	N/A
PC RR, B&O CT RR, Chessie System, C&RI RR, PCC&STL RR	N/A	Crosses over Pershing Road at Western Avenue	N/A
AT&SF RR	N/A	Crosses over Archer Avenue at 47th Street/Central Park Avenue	N/A
Belt Railway	N/A	Crosses Archer Avenue at grade between Kolmar and Knox Avenues	N/A

^a For CTA buses, this column represents the "One-Hour Passenger Volume at Maximum Load Point" as a sum of 1 hour of the morning rush travel and 1 hour of the evening rush travel.

^b Upon the opening of the CTA-Southwest line, CTA 39 will be terminated at Damen Avenue to re-route northbound to the 35th/Archer Station on the CTA-Southwest Line. A new route, CTA 35W, will continue service from the 35th/Archer Station along Archer Avenue, then westbound on Pershing Road.

^c CTA 42, 45, 61, 62 Express, 99, 99M, 129, 162, and 164 will be discontinued with the opening of the CTA-Southwest line.

^d Midday service on the CTA 48 will be extended from 47th Street to the 35th/Archer Station with the opening of the CTA-Southwest line.

^e Upon the opening of the CTA-Southwest line, CTA 62 will terminate at the 51st/Pulaski Station, except during late evening and owl periods it will be extended to Archer/Harlem. CTA 62A, 62H, and 62N will be new routes that will provide service on Archer Avenue west of Pulaski Road.

^f CTA 52 and 52A will both terminate at the Kedzie Station with the opening of the CTA-Southwest line.

^g Upon the opening of the CTA-Southwest line, CTA 47 will divert its buses to Kedzie Avenue to serve the 49th/Kedzie Station.

^h Upon the opening of the CTA-Southwest line, CTA 53A will receive additional service, and possibly "limited-stop" service.

ⁱ Upon the opening of the CTA-Southwest line, CTA 55 will terminate at the 59th/Kilpatrick Station.

^j The ridership trend for the Pace 831 route deviates from other routes. Average weekend ridership is higher than average weekday ridership. Saturday ridership is 302 and Sunday ridership is 316.

Sources: Metra and Pace, "Future Agenda for Suburban Transportation" (April 1992), CTA, "Service Delivery Planning" (June 1992), and Pace, "Quarterly Route Review: January-March, 1992" (June 1992)

In addition to limited right-of-way and substandard railroad structure clearance, there are several other physical and environmental concerns along the Archer/Pershing corridor. Sensitive areas include historic sites and parks, leaking underground storage tank (LUST) sites, and a Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) site. Sources for these data are listed in Table 4.

Current Planning, Design, and Construction Activity

There are several current planning, design, and construction activities that have a direct bearing on the Archer/Pershing corridor. The study considered the following activities, because of their current status, as “existing conditions.” The projects in progress or proposed along the route for the next 5 years include: improving vertical clearance at the Penn Central structure where Western Avenue intersects Pershing Road, at the AT&SF Railway crossing of Archer Avenue near 47th Street; improving the viaduct at Damen Avenue; and redeveloping the Stockyards as a commercial site.

The development of the recommended plan (which is described in Chapter IV), considered each of these projects.

Summary of Findings

The existing physical characteristics, traffic operation, safety, public transportation, environmental concerns, and land use in the two segments defined along the Archer/Pershing SRA route are presented below. Both segments are located entirely within the City of Chicago.

Segment I——“Pershing Road” (Dan Ryan Expressway to Rockwell Street)

Segment I of the Archer/Pershing SRA route, approximately 3.1 miles long, extends from LaSalle Street (which provides access to the Dan Ryan Expressway) to Rockwell Street.

Table 4
Sources of Environmental and Land Use Data
Along Archer Avenue/Pershing Road

Item	Data Source
Parkland and Other Open Space	<p>Listing of Land and Water Conservation Fund (LAWCON) Projects; U.S. Department of the Interior, National Park Service</p> <p>1985 Bikeways Plan; Northeastern Illinois Planning Commission</p> <p>Illinois Natural Areas Inventory; Illinois Department of Transportation, District 1, Project and Environmental Studies</p> <p>Northeastern Illinois Regional Greenways Plan; Northeastern Illinois Planning Commission, 1992</p> <p>Illinois Nature Preserves System 1987-1988 Report and 1990 Update; Illinois Nature Preserves Commission</p> <p>Cook County Forest Preserve Maps</p> <p>City of Chicago Bikeway System, Bureau of Traffic Engineering and Operations</p> <p>Visual Survey (7/91)</p>
Wetlands	National Wetlands Inventory Map; United States Department of the Interior, U.S. Fish and Wildlife Service
Floodplains	<p>FIRM, Flood Insurance Rate Map; Federal Emergency Management Agency</p> <p>FLOODWAY, Flood Boundary and Floodway Map; United States Department of Housing and Urban Development</p>
Hazardous Materials	<p>Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) Listing, 5/91; U.S. EPA Superfund Program</p> <p>Leaking Underground Storage Tank (LUST) Listing, 12/88; Illinois Environmental Protection Agency</p>
Historic Sites	<p>The National Register of Historic Places; 1990; U.S. Department of the Interior</p> <p>Illinois State Historical Markers Text Book, 1973; Illinois Historic Structures Survey</p> <p>Commission on Chicago Historical and Architectural Landmarks—Individual Resource Forms</p>

Physical Characteristics

Throughout most of Segment I, there are two through travel lanes in each direction. Parking is permitted throughout this segment, except when prohibited by peak hour restrictions. The existing roadway width could accommodate a separate lane in each direction for parking, but only west of Ashland Avenue. East of Halsted Street, curb through lanes are used for parking. Off-street parking lots between Halsted Street and Ashland Avenue effectively eliminate the need for parking along Pershing Road. The right-of-way between the Dan Ryan Expressway and Halsted Street is generally 66 feet, and between Halsted Street and Western Avenue, the right-of-way is 82 feet. With the exception of a 3-foot raised median at the Dan Ryan Expressway and a flush median between Union Avenue and Halsted Street, no medians exist in Segment I. Sidewalks, curbs, and gutters exist throughout the segment.

The vertical alignment in this segment is level and consists of mild grades. Various bridges that cross over Pershing Road do not satisfy the minimum SRA vertical clearance standards. At the Chicago and Western Indiana Railroad bridge at Stewart Avenue (which is also used by other rail lines, including Metra's Norfolk & Southern commuter rail line), the vertical clearance is 14 feet/4 inches. At the railroad bridge at Western Avenue (which is shared by CSX, BOCT, and CTA's Southwest Rapid Transit line), the vertical clearance is 13 feet/6 inches. Table 5 lists structures along Segment I.

IDOT Structure Reference	Feature		
	Over	Under	Clearance (feet/inches)
016-0398	Dan Ryan Expressway	—	—
016-0397	—	Metra- NS Line, C&WI RR, PC RR	14/4
016-0396	CR RR and Racine Avenue	—	—
016-6133	—	Ashland Avenue	—
—	—	Damen Avenue Viaduct	—
016-6317	—	PC RR, B&O CT RR, Chessie System, C&RI RR, PCC&STL RR	13/6
—	—	CTA-SW Line	—

Horizontal alignment along the segment also is straight. Horizontal clearance at the Western Avenue intersection is constrained by columns supporting the railroad structure.

Traffic Control, Operations, and Safety

Major intersections within this segment include the Dan Ryan Expressway (LaSalle Street provides ramp access), Wentworth Avenue, Halsted Street, Ashland Avenue, Damen Avenue, Western Boulevard, the Western Avenue SRA, and Archer Avenue (a multi-leg intersection with Rockwell Street). Signals control each of these intersections. All parking is prohibited when snowfalls exceed 2 inches. The speed limit is generally 30 mph.

Left-turn lanes exist for traffic from Pershing Road onto LaSalle Street and from Pershing Road onto Wentworth Avenue. At Halsted Street and Ashland Avenue, left-turn lanes serve traffic in all directions. Left- and right-turn lanes exist from the Damen Avenue southbound exit ramp onto Pershing Road. A turn lane allows right-turning movements eastbound to southbound from Pershing Road onto Western Boulevard, and left-turn lanes exist from Western Boulevard. A right-turn lane carries westbound traffic traveling from Pershing Road onto Western Avenue northbound. Both Western Avenue and Archer Avenue have left-turn lanes onto Pershing Road. Left-turn phases are provided from Pershing Road onto LaSalle Street (eastbound), Wentworth Avenue (westbound), Morgan Street (eastbound), and Ashland Avenue.

When daily truck traffic is greatest, delays occur in both directions east of Morgan Street. This congestion is magnified when Conrail trains cross Morgan Street at grade, just south of Pershing Road. Traffic congestion also occurs during morning and evening peak hours.

Existing traffic demand within this section (see Exhibits A-1 to A-5), based on City of Chicago and IDOT traffic counts for the years 1980 to 1986, ranges from 18,000 vpd between the Dan Ryan Expressway and Halsted Street, approximately 20,000 vpd between Halsted Street and Damen Avenue, 16,000 vpd between Damen Avenue and Western Avenue, and 14,000 vpd between Western Avenue and the Pershing Road/Rockwell Street/Archer Avenue intersection. The highest traffic counts in this segment occur in the office and industrial areas along Pershing Road.

Accident data (see Exhibits A-1 to A-5) were obtained for 1986, 1987, and 1988. Intersection accident rates of 9.8 accidents per million entering vehicles (MEV) were calculated at Western Avenue, 1.2 accidents per MEV at Damen Avenue, 2.9 accidents per

MEV at Ashland Avenue, 2.6 accidents per MEV at Halsted Street, and 0.88 accidents per MEV at Wentworth. Accident rates at these intersections are below statewide averages.

Public Transportation

The CTA provides public transit service to this segment of the corridor. CTA Route 39 supplies bus service along Pershing Road throughout the segment. CTA Route 129 operates along Pershing Road westbound from Ashland Avenue to Wood Street, and eastbound from Archer Avenue/Rockwell Street to Ashland Avenue. Other CTA bus routes that cross this segment include: 24, 44, 8, 42, 9, 45, 48, and 49.

Two CTA elevated lines cross the corridor in this segment. The Dan Ryan line, a heavily-used line that provides 24-hour service, crosses under the corridor with the Dan Ryan Expressway at the eastern limit of the corridor. The Dan Ryan station closest to this segment is at 35th Street (the station serves an average of 2,550 daily entering passengers). The Southwest Transit line, which is scheduled to begin service in the spring of 1993, crosses over the corridor at the Western Avenue intersection. Its nearest stations are located at the 35th Street/Archer Avenue and 49th Street/Western Avenue intersections.

The Norfolk Southern line is the only Metra line that crosses Segment I. No stations are close to the corridor. Service on this line includes four trains in each direction, Monday through Friday; the line primarily provides peak hour commuter service to downtown Chicago in the morning and from downtown Chicago in the late afternoon/early evening.

Table 3 presents characteristics of the public transportation services along the Archer/Pershing SRA.

Environmental Constraints and Land Use

Environmental concerns within this segment (see Table 6 and Exhibits B-1 to B-5) consist of parkland, historic sites, and LUST sites. McKinley Park is located between Damen Avenue and Western Avenue in this segment. There are many historic structures along Segment I: the Chicago Public Schools Administration Center, Goodyear Tire & Rubber Company, and the Central Manufacturing District Union Freight Station. All the structures identified as historic sites within Segment I are not designated on the National Register of Historic Places. They are, however, identified by the Commission on Chicago Historical and Architectural Landmarks—Individual Resource Forms.

Table 6
Summary of Environmentally Sensitive Land Uses and Sites
Along Segment I of Archer Avenue/Pershing Road

Item	Exhibit No.	Reference	Description
Historic Sites	B-3	H-3	Chicago Public Schools Administration Center, 1731-1855 W. Pershing Road
	B-4	H-4	Goodyear Tire & Rubber Company, 1901-27 W. Pershing Road
	B-5	H-2	St. Agnes Parish Center, 3916-24 S. Archer Avenue ^c
	B-4	H-5	Central Manufacturing District Union Freight Station, 1937-2011 W. Pershing Road
CERCLIS Sites ^a	—	—	None Noted
LUST Sites ^b	B-2	L-2	GMC Trucks, 1015 W. Pershing Road
	B-2	L-3	BJ Transportation, 970 W. Pershing Road
	B-2	L-4	Associated Properties, 815 W. Pershing Road
	B-5	L-1	Chicago Transit Authority, 2600 W. Pershing Road ^c

^aCERCLIS = Comprehensive Environmental Response, Compensation, and Liability Act Information System.

^bLUST = Leaking Underground Storage Tank.

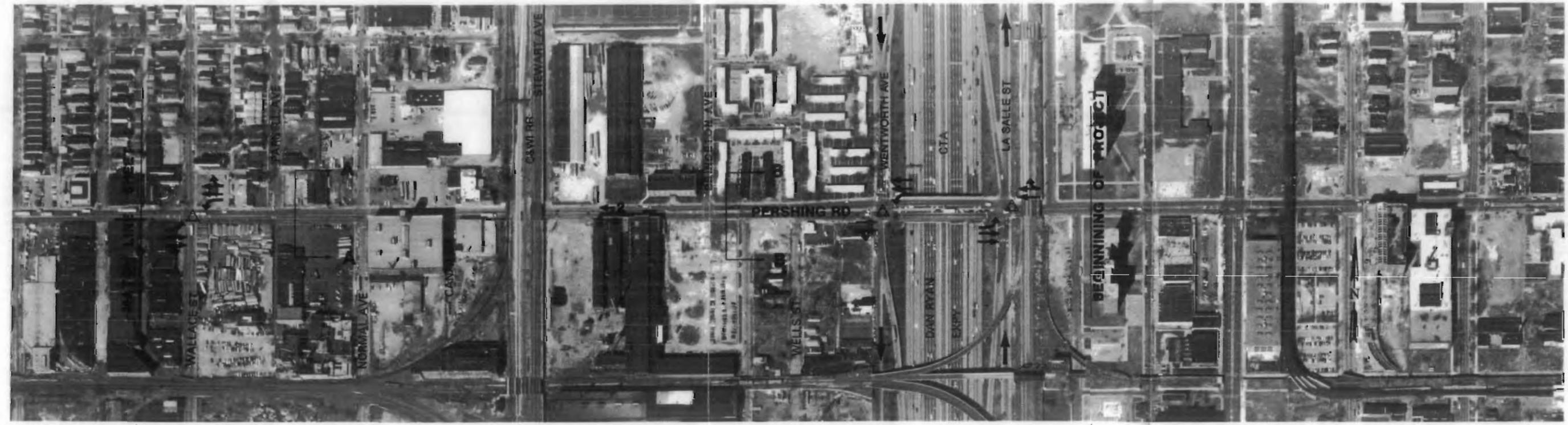
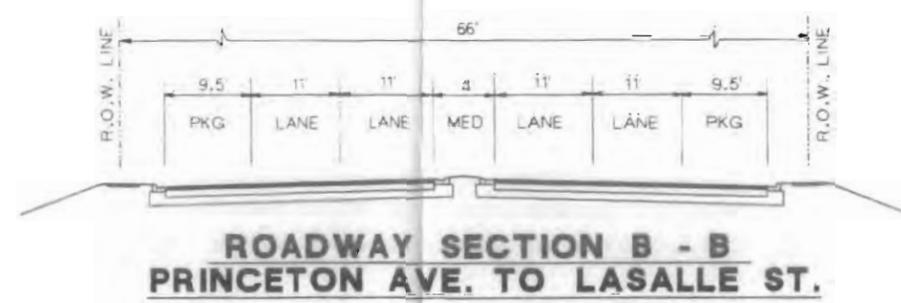
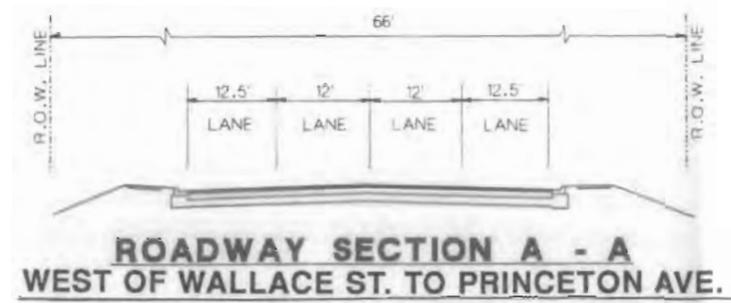
^cThese sites are located at the border of both Segments I and II and, therefore, are listed in both segments.

LUST sites include Associated Properties, BJ Transportation, GMC Trucks, and a CTA facility. Most of these sites occur between Halsted and Morgan Streets. Some of these LUST sites may have been remediated since this list was compiled. No CERCLIS sites are noted for this segment.

The land use changes as the segment progresses to the west. In the eastern portion of the segment, land use near the Dan Ryan Expressway and Princeton Avenue is residential. Between Princeton Avenue and Halsted Street, it becomes commercial, and also features some industrial and office development. Between Halsted Street and Ashland Avenue, land use changes abruptly to industrial with low-density development. Between Ashland Avenue and Western Avenue, land use is mainly office space, with some industrial use on the south side of the street and residential areas on the north side of the street. McKinley Park (on the north side of Pershing Road) is located in this area. In the remaining two blocks of this segment, west of Western Avenue, the land use is residential. Residential streets parallel and intersect Pershing Road frequently. Higher-order streets, such as Morgan Street, Racine Avenue, and side streets south of the corridor between Ashland Avenue and Western Avenue, serve industrial and commercial uses and have major intersections.

LEGEND

-  SIGNALIZED INTERSECTION
-  LANE ARRANGEMENTS AT KEY INTERSECTIONS
-  PARKING ALLOWED
-  PARKING PROHIBITED
-  NO POSTED RESTRICTIONS
-  DESIGNATED BUS STOP
-  RAPID TRANSIT STATION
-  METRA STATION



1988 - 1990
AVERAGE
DAILY
TRAFFIC

ACCIDENT
RATE

TRANSIT
ROUTES

EDGE OF ROAD USE

	18,000			
	▲	▲	▲	▲
	0.88/MEV			
	CTA RAIL RIDERSHIP NONE			
	CTA BUS ROUTES 39 (* PEAK BUS HOUR)			
NORTH	P	P 7-8 4-6	P	P
SOUTH	P	P	P	P

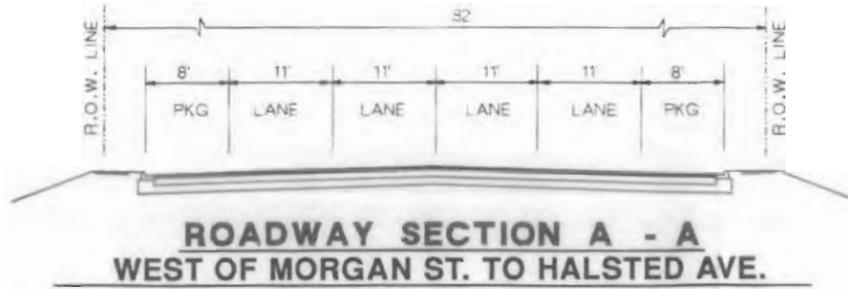
ARCHER AVE/ PERSHING RD - EXISTING CONDITIONS

Prepared by CH2M HILL in association with
METRO Transportation Group and EJM Engineering

ILLINOIS DEPARTMENT OF TRANSPORTATION



LEGEND	
	SIGNALIZED INTERSECTION
	LANE ARRANGEMENTS AT KEY INTERSECTIONS
	PARKING ALLOWED
	PARKING PROHIBITED
	NO POSTED RESTRICTIONS
	DESIGNATED BUS STOP
	RAPID TRANSIT STATION
	METRA STATION



1988 - 1990
AVERAGE
DAILY
TRAFFIC

ACCIDENT
RATE

TRANSIT
ROUTES

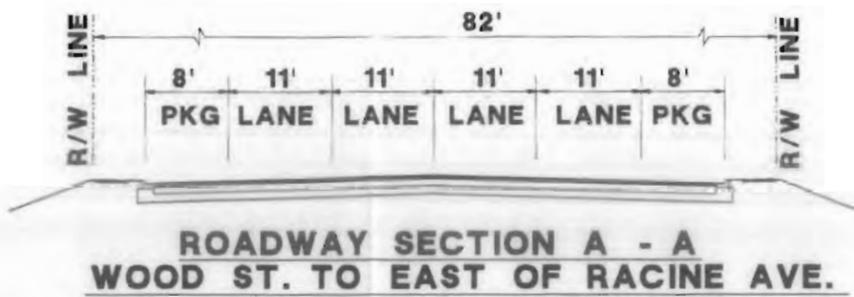
EDGE OF NORTH
ROAD USE SOUTH

	21,000	18,000
	2.56/MEV	
	CTA RAIL RIDERSHIP NONE	
	CTA BUS ROUTES 39	

ARCHER AVE/PERSHING RD - EXISTING CONDITIONS

LEGEND

- △ SIGNALIZED INTERSECTION
- ↔ LANE ARRANGEMENTS AT KEY INTERSECTIONS
- (P) PARKING ALLOWED
- (P) PARKING PROHIBITED
- (NR) NO POSTED RESTRICTIONS
- ⊞ DESIGNATED BUS STOP
- CTA RAPID TRANSIT STATION
- METRA METRA STATION



1988 - 1990
AVERAGE
DAILY
TRAFFIC

ACCIDENT
RATE

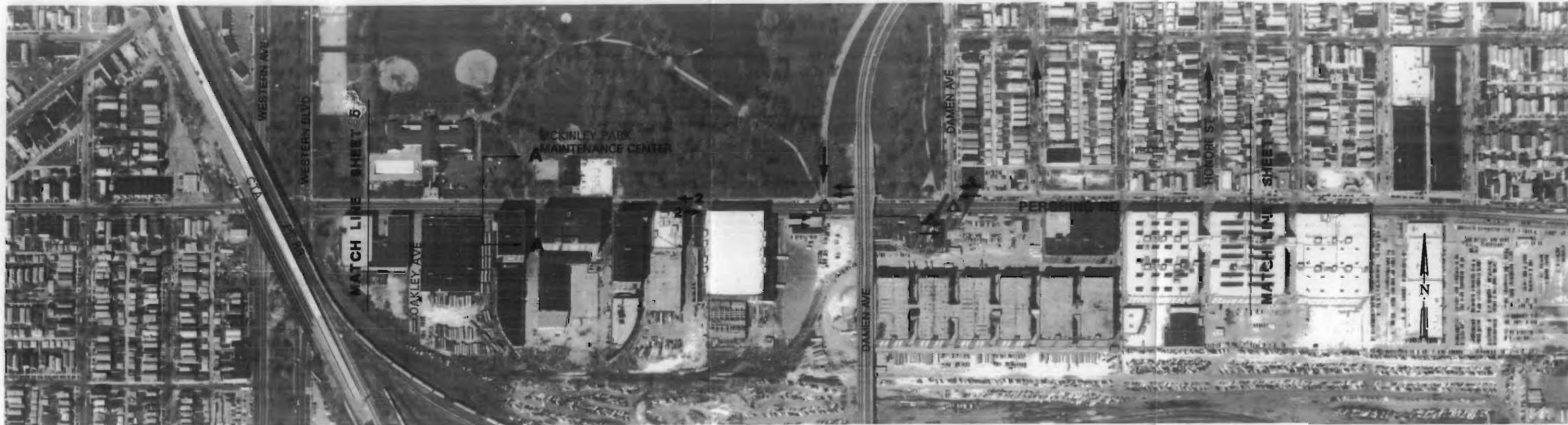
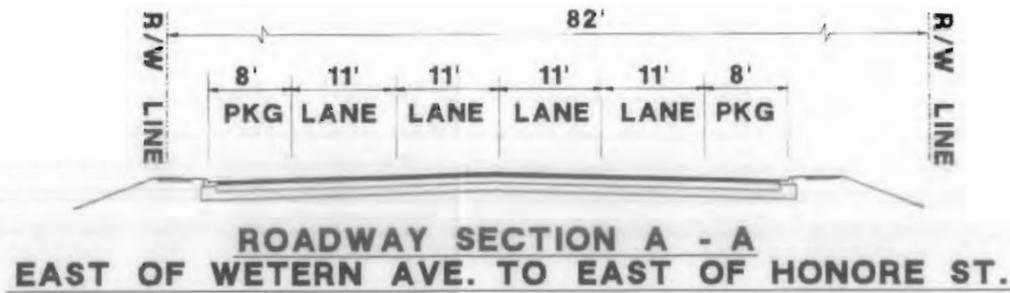
TRANSIT
ROUTES

EDGE OF
ROAD USE

20,000	21,000
△ 2.86/MEV	
CTA RAIL RIDERSHIP NONE	
CTA BUS ROUTE 39, 129	CTA BUS ROUTES 39,129
(P) 7AM-9PM 1 HR. (P) 7-9	(P) 7AM-9PM 1 HR. (P) 7-9 (P) 4-6
(P) 7-9 MON-FRI (P) 7-9 (P) 4-6	(P) 7-9 (P) 4-6
NORTH	SOUTH

ARCHER AVE/PERSHING RD - EXISTING CONDITIONS

LEGEND	
△	SIGNALIZED INTERSECTION
↔	LANE ARRANGEMENTS AT KEY INTERSECTIONS
P	PARKING ALLOWED
P	PARKING PROHIBITED
NR	NO POSTED RESTRICTIONS
B	DESIGNATED BUS STOP
CTA	RAPID TRANSIT STATION
METRA	METRA STATION



**1988 - 1990
AVERAGE
DAILY
TRAFFIC**

**ACCIDENT
RATE**

**TRANSIT
ROUTES**

**EDGE OF
ROAD USE**

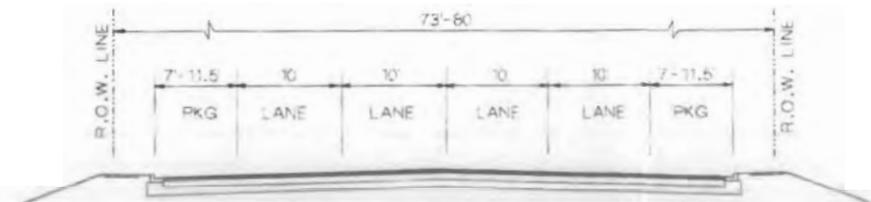
NORTH
SOUTH

16,000	20,000
△	
△	
1.22/MEV	
CTA RAIL RIDERSHIP NONE	
CTA BUS ROUTES 39, 129	
P 4-8	P 4-8
P 7-9	P 7-9
	P 7AM-9PM
	P 7AM-9AM

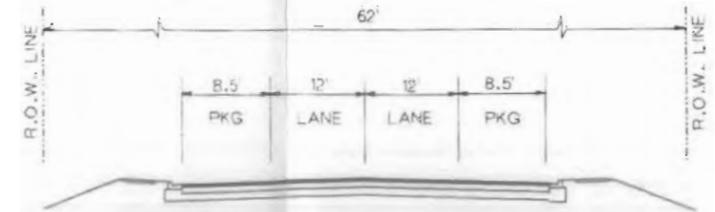
ARCHER AVE/PERSHING RD - EXISTING CONDITIONS

LEGEND

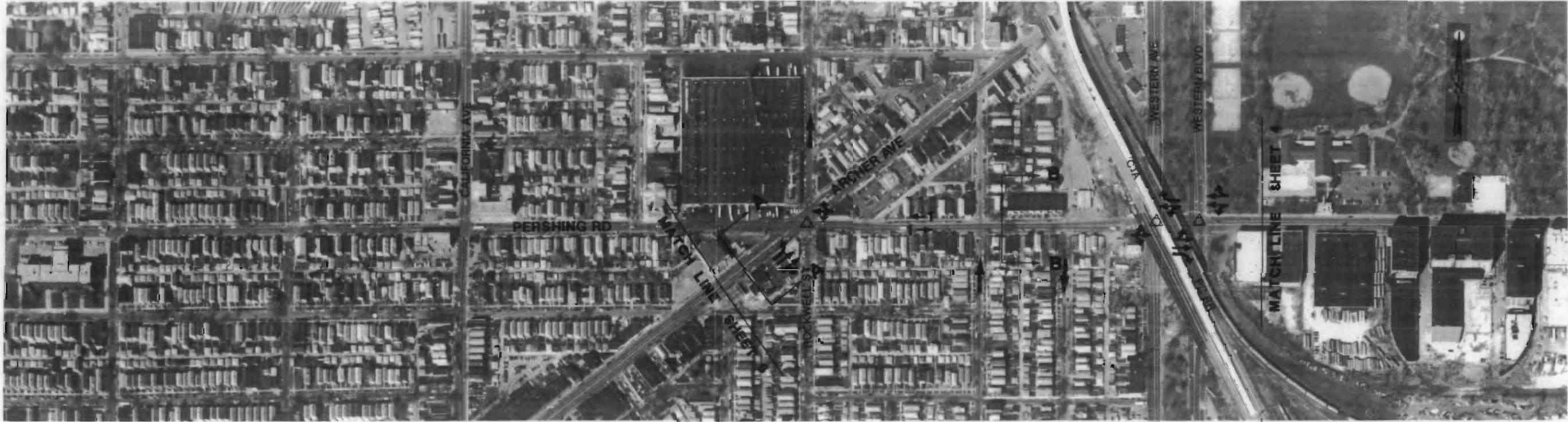
△	SIGNALIZED INTERSECTION
↔	LANE ARRANGEMENTS AT KEY INTERSECTIONS
P	PARKING ALLOWED
P	PARKING PROHIBITED
NR	NO POSTED RESTRICTIONS
■	DESIGNATED BUS STOP
CTA	RAPID TRANSIT STATION
METRA	METRA STATION



**ROADWAY SECTION A - A
WEST OF ROCKWELL ST. TO PERSHING RD.**



**ROADWAY SECTION B - B
ARCHER AVE. TO WESTERN AVE.**



1988 - 1990
AVERAGE
DAILY
TRAFFIC

ACCIDENT
RATE

TRANSIT
ROUTES

EDGE OF
ROAD USE

14,000
1.47/MEV
9.6/MEV
CTA RAIL RIDERSHIP NONE
CTA BUS ROUTES 39
P 4-6
P 7-8

ARCHER AVE/ PERSHING RD - EXISTING CONDITIONS

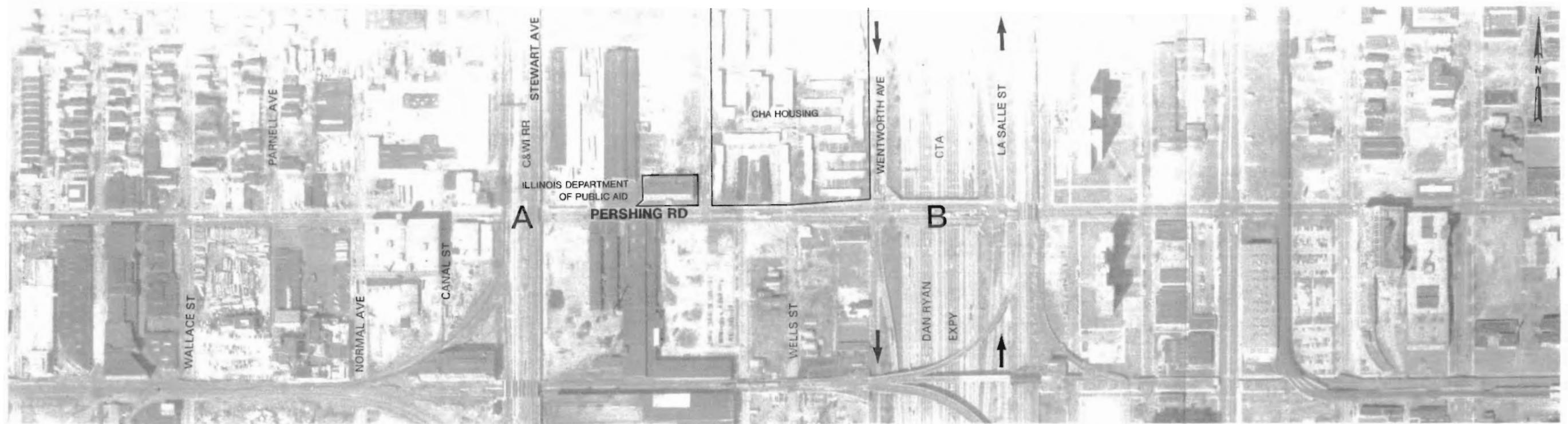
PLANNING FOCUS AREAS

A) METRA - NORFOLK/SOUTHERN AND PENN - CENTRAL RAILROAD

- Limited horizontal clearance

B) INTERSTATE 90 AND 94 (DAN RYAN EXPRESSWAY)

- Limited horizontal clearance



URBAN SRA -- 96' TO 110' RIGHT OF WAY (DESIRABLE)

LEGEND	
A	Planning Focus Area I.D.
(C1)	Hazardous Waste Site
U	Leaking Underground Storage Tank
(H1)	Historic Building/District
*	Wetland
†	Church/Synagogue/Religious Institution
---	Agricultural Land
---	Special Use Areas
—○—	Major Utility Lines

ARCHER AVE/ PERSHING RD

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ILLINOIS DEPARTMENT OF TRANSPORTATION



SRA Strategic Regional Arterial Planning Study **EXHIBIT B-1**

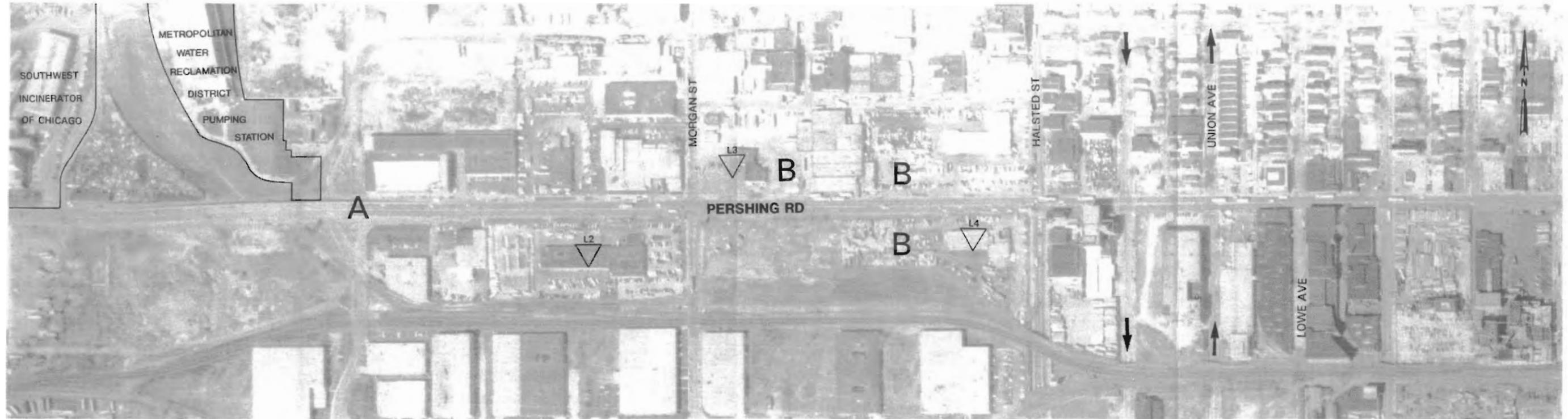
PLANNING FOCUS AREAS

A) PERSHING ROAD BRIDGE OVER RACINE AVENUE

- Limited horizontal clearance

B) MORGAN STREET TO HALSTED STREET

- Multiple driveway access points may affect SRA operation



URBAN SRA -- 96' TO 110' RIGHT OF WAY (DESIRABLE)

LEGEND

- A Planning Focus Area I.D.
- (C1) Hazardous Waste Site
- L1 Leaking Underground Storage Tank
- (H1) Historic Building/District
- * Wetland
- † Church/Synagogue/Religious Institution
- Agricultural Land
- Special Use Areas
- Major Utility Lines

ARCHER AVE/PERSHING RD

SRA Strategic Regional Arterial Planning Study **EXHIBIT B-2**

Prepared by CH2M HILL in association with METRO Transportation Group and EJM Engineering

ILLINOIS DEPARTMENT OF TRANSPORTATION

Scale: 0 100 200 feet

PLANNING FOCUS AREAS

A) ASHLAND AVENUE BRIDGE

- Limited horizontal clearance



URBAN SRA -- 96' TO 110' RIGHT OF WAY (DESIRABLE)

LEGEND

- A Planning Focus Area I.D.
- (H) Hazardous Waste Site
- ▽ Leaking Underground Storage Tank
- (H) Historic Building/District
- * Wetland
- † ☆ Church/Synagogue/Religious Institution
- Agricultural Land
- Special Use Areas
- Major Utility Lines

ARCHER AVE/PERSHING RD

SRA Strategic Regional Arterial Planning Study **EXHIBIT B-3**

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PLANNING FOCUS AREAS

A) CTA RAPID TRANSIT - MIDWAY LINE AND PENN - CENTRAL RAILROAD BRIDGE AT WESTERN AVENUE

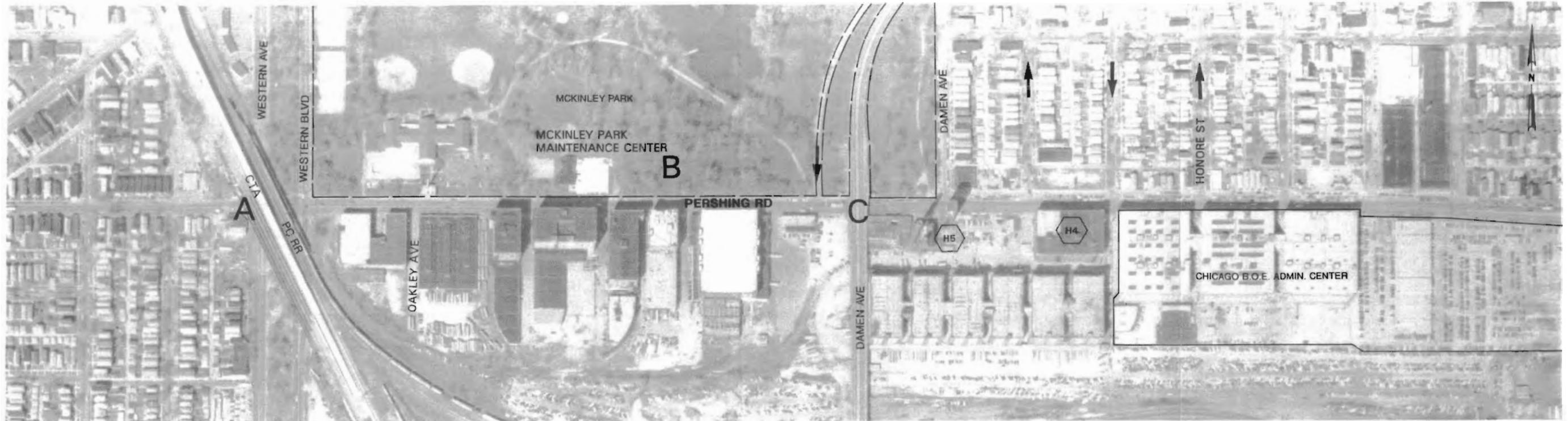
- Intersecting SRA
- Limited horizontal clearance

B) MCKINLEY PARK

- Limited available right-of-way

C) DAMEN AVENUE BRIDGE

- Limited horizontal clearance



URBAN SRA -- 96' TO 110' RIGHT OF WAY (DESIRABLE)

LEGEND

- A Planning Focus Area I.D.
- (C1) Hazardous Waste Site
- (L) Leaking Underground Storage Tank
- (H1) Historic Building/District
- * Wetland
- † Church/Synagogue/Religious Institution
- - - Agricultural Land
- Special Use Areas
- Major Utility Lines.

ARCHER AVE/PERSHING RD

SRA Strategic Regional Arterial Planning Study **EXHIBIT B-4**

Prepared by CH2M HILL in association with METRO Transportation Group and EJM Engineering

ILLINOIS DEPARTMENT OF TRANSPORTATION



PLANNING FOCUS AREAS

A) ROCKWELL STREET TO WESTERN AVENUE INTERSECTIONS

- On-street parking on both sides of the street limits through capacity of existing roadway



URBAN SRA -- 96' TO 110' RIGHT OF WAY (DESIRABLE)

LEGEND	
A	Planning Focus Area I.D.
(H)	Hazardous Waste Site
L1	Leaking Underground Storage Tank
(H)	Historic Building/District
*	Wetland
†	Church/Synagogue/Religious Institution
---	Agricultural Land
---	Special Use Areas
□	Major Utility Lines

ARCHER AVE/ PERSHING RD



Segment II—“Archer Avenue” (Rockwell Street to Cicero Avenue)

Segment II of the Archer/Pershing SRA route is approximately 3.3 miles long, and extends from Rockwell Street to Cicero Avenue (Illinois 50).

Physical Characteristics

There are two travel lanes in each direction for the length of this segment. Parking generally is permitted except when prohibited by peak hour restrictions. Parking meters, which are located in several areas, limit the amount of time a vehicle may park. The existing roadway width, which varies along the segment, is enough to accommodate a separate parking lane on each side of the street. Archer Avenue is 56 feet wide in densely commercial areas, where sidewalks are as wide as 12 feet. Elsewhere, sidewalk width varies from 6½ to 10 feet, and the width of the roadway is approximately 60 feet. No medians are present along this segment of Archer Avenue. Right-of-way width in Segment II is 80 feet, except between 47th Street and Lawndale Avenue (one block) where right-of-way is only 73 feet.

The vertical alignment along this segment is level with no significant grades. Vertical clearance is a concern at the AT&SF Railroad bridge to the north of the Archer Avenue intersection, where clearance is 13 feet/2 inches. The railroad has an intermodal yard just north of the intersection, which experiences a significant level of truck activity. The limited vertical clearance may present a clearance problem for some trucks passing under the low bridge. There is also limited horizontal clearance at the 47th Street intersection where the AT&SF Railroad crosses over Archer Avenue. The roadway at this location is 53 feet wide and has support columns at the edge of the roadway. Table 7 lists existing structures in Segment II of the Archer/Pershing SRA.

Table 7 Existing Structures Along Segment II (Rockwell Street to Cicero Avenue) of Archer Avenue/Pershing Road			
IDOT Structure Reference	Feature		Clearance (feet/inches)
	Over	Under	
016-0490	—	AT&SF RR at 47th Street/Central Park Avenue	13/2

Traffic Control, Operations, and Safety

Major intersections within this segment include Pershing Road, California Avenue, Kedzie Avenue, Pulaski Road, and Cicero Avenue (Illinois 50). The Pershing Road intersection marks the easternmost boundary of Segment II of the Archer/Pershing SRA. The intersections with Pulaski Road and Cicero Avenue (which are designated SRAs) are controlled by signals. Several multi-leg intersections exist in Segment II, including Pershing Road/Rockwell Street, California Avenue/40th Place, Sacramento Avenue/42nd Street, Pope John Paul II Drive/Albany Avenue, Pulaski Road/50th Street, 51st Street/Kildare Avenue, and 51st Street/Kolin Avenue. Regulations prohibit all parking along the route when snowfalls exceed 2 inches.

Speed limits range from 25 to 35 mph throughout Segment II. The speed limit is 30 mph east of California Avenue, 25 mph between California Avenue and Kedzie Avenue, 30 mph between Kedzie Avenue and Homan Avenue, 35 mph between Homan Avenue and Komensky Avenue, and 30 mph west of Komensky Avenue.

Left-turn lanes exist from Archer Avenue onto Pershing Road, California Avenue, Kedzie Avenue, Pulaski Road, and Cicero Avenue. A right-turn lane exists from Archer Avenue eastbound onto Cicero Avenue. Pulaski Road and Cicero Avenue have left-turn lanes onto Archer Avenue, and Cicero Avenue has right-turn lanes onto Archer Avenue. Signals with left-turn phases serve traffic from Archer Avenue onto Kedzie Avenue, Lawndale Avenue (westbound), Pulaski Road (westbound), and Cicero Avenue.

Existing traffic demand within this section (see Exhibits A-6 to A-11), based on City of Chicago and IDOT traffic counts for the years 1980 to 1986, is approximately 24,000 vpd between the Pershing Road/Rockwell Street/Archer Avenue intersection and Kedzie Avenue, 29,000 vpd between Kedzie Avenue and 47th Street, 31,000 vpd between 47th Street and Lawndale Avenue, 25,000 vpd between Lawndale Avenue and Keeler Avenue, and 22,000 vpd between Keeler Avenue and Cicero Avenue.

Accident data (see Exhibits A-6 to A-11) were obtained for 1986, 1987, and 1988. Intersection accident rates ranged from 0.81 accidents per MEV to 2.7 accidents per MEV. The highest intersection accident rates of 2.7 accidents per MEV and 2.6 accidents per MEV were calculated at Cicero Avenue and 47th Street, respectively.

Public Transportation

CTA provides transit service to this segment of the corridor. Archer Avenue carries CTA Route 61, 62, and 62 Express buses throughout Segment II. Except during peak hours, CTA Routes 99 and 164 travel along Archer Avenue between Pulaski Road and Cicero Avenue. CTA bus routes that cross the corridor in this segment include 94 at California Avenue; 52 and 52A at Kedzie Avenue; 47 at 47th Street and at Cicero Avenue; 53A and 162 at Pulaski Road; and 54B, 55, and 99M. Pace Route 831 crosses Segment II at Cicero Avenue.

CTA's Southwest line will begin service in the spring of 1993. This line will travel a somewhat parallel course just south of Archer Avenue and will supplement transit in this corridor. The nearest Southwest line stations are at 49th Street and Kedzie Avenue, 51st Street and Pulaski Road, and 59th Street and Kilpatrick Avenue.

The only Metra line that operates near this segment is the Heritage Corridor line, which has no stations in the corridor (the nearest station is at Summit, approximately 3½ miles west of the corridor). Service on this line consists of two peak period trains in each direction, Monday through Friday.

Table 3 describes public transportation services for the Archer/Pershing SRA.

Environmental Constraints and Land Use

The environmental concerns within this segment (see Table 8 and Exhibits B-6 to B-11) consist of parkland, historic sites, and one CERCLIS site. Curie Park, adjacent to Curie High School, is located just east of the Pulaski Road intersection. There are many historic structures, including the buildings housing St. Agnes Parish Center, Car-X Muffler Shop, Walgreens Drug Store, Brighton Theater, Brighton Florist and Gift Shop, and Szykowny Funeral Home. All the structures identified as historic sites within Segment II are not designated on the National Register of Historic Places. They are, however, identified by the Commission on Chicago Historical and Architectural Landmarks—Individual Resource Forms. The CERCLIS site is located at the Chicago Park District Curie Park.

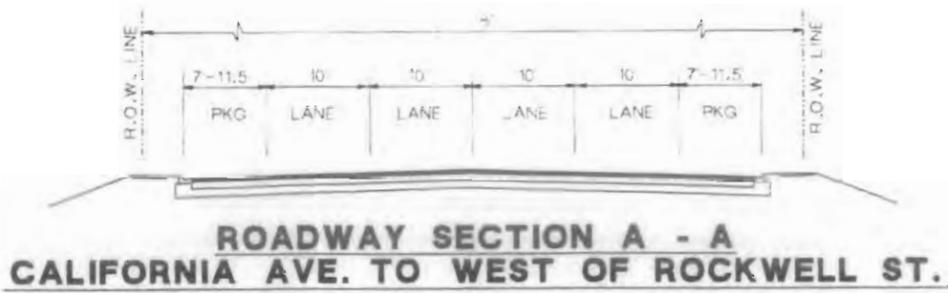
Land use in this segment is mostly commercial, with a high-density commercial district between California and Kedzie Avenues. Some industrial land uses occur near the 47th

Street intersection, including the nearby AT&SF Railroad intermodal yard. Frequent residential streets parallel and intersect Archer Avenue. Kedzie Avenue, Pulaski Road, and Cicero Avenue have commercial uses, and 47th Street serves mixed commercial and industrial uses.

Table 8			
Summary of Environmentally Sensitive Land Uses and Sites Along Segment II of Archer Avenue/Pershing Road			
Item	Exhibit No.	Reference	Description
Historic Sites	B-6	H-2	St. Agnes Parish Center, 3916-24 S. Archer Avenue ^c
	B-6	H-6	Car-X Muffler Shop, 3956 S. Archer Avenue
	B-6, B-7	H-7	Walgreen Drug Store, 4100 S. Archer Avenue
	B-7	H-8	Brighton Theater, 4221-25 S. Archer Avenue
	B-7	H-9	Brighton Florist and Gift Shop, 4236 S. Archer Avenue
	B-9	H-10	Szykowny Funeral Home, 4901 S. Archer Avenue
CERCLIS Sites ^a	B-9	C-1	Chicago Park District Curie Park, 4949 S. Archer Avenue
LUST Sites ^b	B-6	L-1	Chicago Transit Authority, 2600 W. Pershing Road ^c
^a CERCLIS = Comprehensive Environmental Response, Compensation, and Liability Act Information System. ^b LUST = Leaking Underground Storage Tank. ^c These sites are located at the border of both Segments I and II and, therefore, are listed in both segments.			

LEGEND

△	SIGNALIZED INTERSECTION
↔	LANE ARRANGEMENTS AT KEY INTERSECTIONS
P	PARKING ALLOWED
P	PARKING PROHIBITED
NR	NO POSTED RESTRICTIONS
S	DESIGNATED BUS STOP
CTA	RAPID TRANSIT STATION
METRA	METRA STATION



1988 - 1990
AVERAGE
DAILY
TRAFFIC

ACCIDENT
RATE

TRANSIT
ROUTES

24,000
△
CTA RAIL RIDERSHIP NONE
CTA BUS ROUTES 61, 62X, 62LOC
P ⁴⁻⁶
P ⁷⁻⁹

EDGE OF ROAD USE

NORTH
SOUTH

ARCHER AVE/ PERSHING RD - EXISTING CONDITIONS

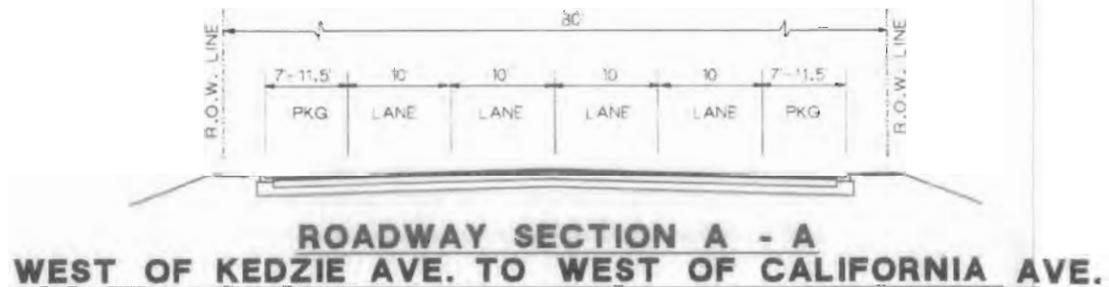
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ILLINOIS DEPARTMENT OF TRANSPORTATION

SRA Strategic Regional Arterial Planning Study

EXHIBIT A-6

Scale: 1" = 100'

LEGEND	
	SIGNALIZED INTERSECTION
	LANE ARRANGEMENTS AT KEY INTERSECTIONS
	PARKING ALLOWED
	PARKING PROHIBITED
	NO POSTED RESTRICTIONS
	DESIGNATED BUS STOP
	RAPID TRANSIT STATION
	METRA STATION



**1988 - 1990
AVERAGE
DAILY
TRAFFIC**

29,000

24,000

**ACCIDENT
RATE**

0.81/MEV

**TRANSIT
ROUTES**

CTA RAIL RIDERSHIP NONE

CTA BUS ROUTES 61, 62X, 62LOC

**EDGE OF
ROAD USE** NORTH
SOUTH

4-6
2 HR.

4-6
2 HR.

4-6
2 HR.

4-6
2 HR.

7-9

7-9

7-9

7-9

ARCHER AVE/ PERSHING RD - EXISTING CONDITIONS

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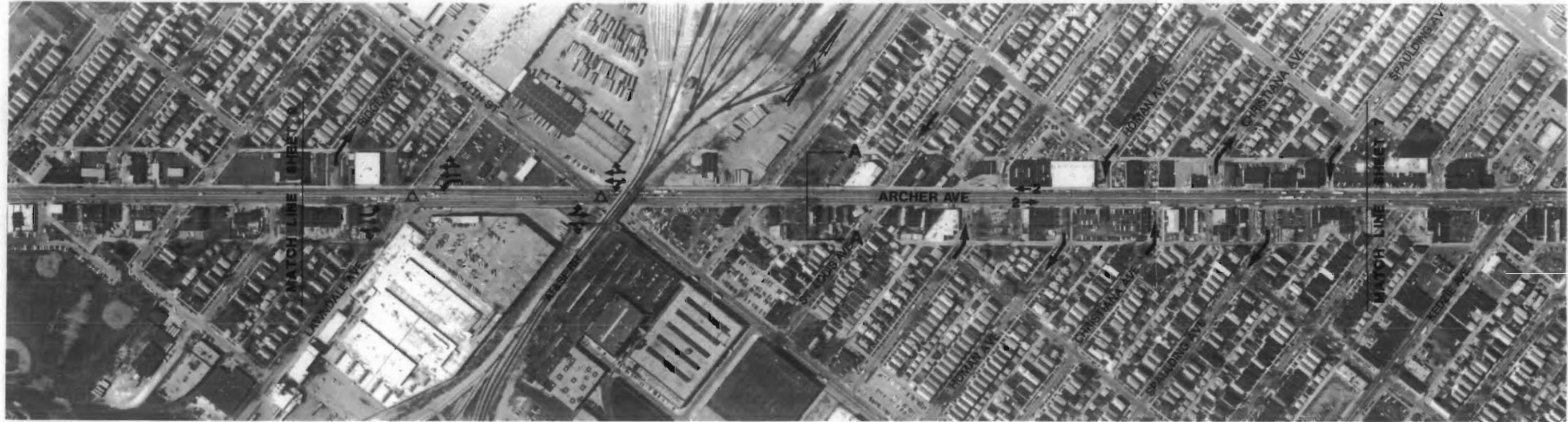
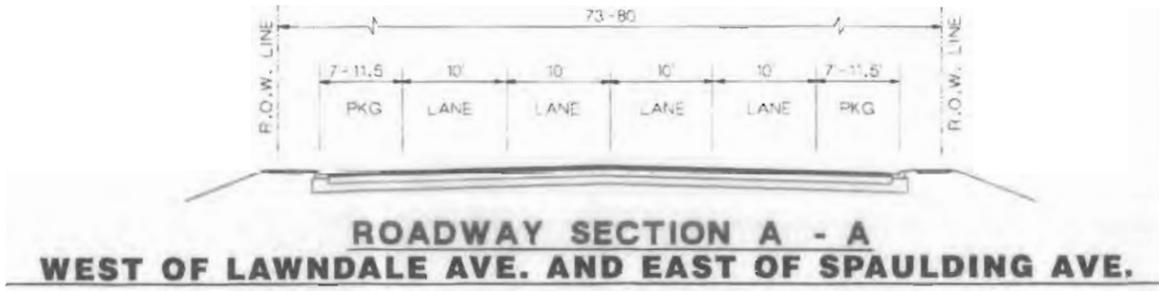
ILLINOIS DEPARTMENT OF TRANSPORTATION

SRA Strategic
Regional
Arterial **EXHIBIT A-7**
Planning Study



LEGEND

-  SIGNALIZED INTERSECTION
-  LANE ARRANGEMENTS AT KEY INTERSECTIONS
-  PARKING ALLOWED
-  PARKING PROHIBITED
-  NO POSTED RESTRICTIONS
-  DESIGNATED BUS STOP
-  RAPID TRANSIT STATION
-  METRA STATION



**1988 - 1990
AVERAGE
DAILY
TRAFFIC**

**ACCIDENT
RATE**

**TRANSIT
ROUTES**

**EDGE OF
ROAD USE** NORTH
 SOUTH

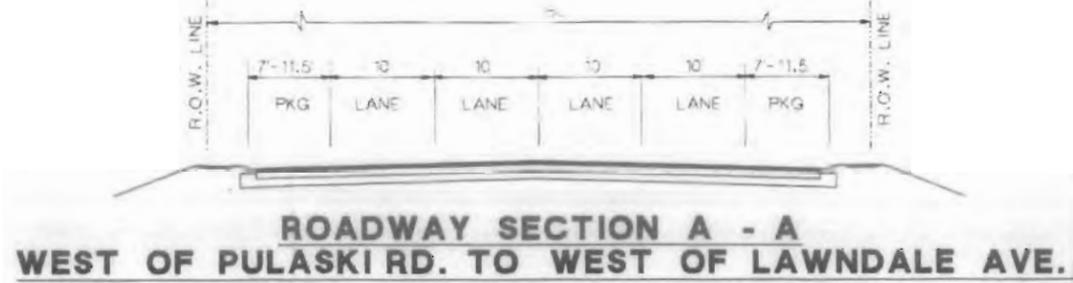
	25,000	31,000	29,000
			
	1.16/MEV	2.58/MEV	
	CTA RAIL RIDERSHIP NONE		
	CTA BUS ROUTES 61, 62LOC, 62X		
		 ⁴⁻⁸	 ⁴⁻⁸
	 ⁷⁻⁸		 ⁴⁻⁸
			 ⁷⁻⁸

ARCHER AVE/ PERSHING RD - EXISTING CONDITIONS

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LEGEND	
△	SIGNALIZED INTERSECTION
—+—+—+—	LANE ARRANGEMENTS AT KEY INTERSECTIONS
(P)	PARKING ALLOWED
(P)	PARKING PROHIBITED
(NR)	NO POSTED RESTRICTIONS
⊞	DESIGNATED BUS STOP
CTA	RAPID TRANSIT STATION
METRA	METRA STATION



1988 - 1990
AVERAGE
DAILY
TRAFFIC

ACCIDENT
RATE

TRANSIT
ROUTES

EDGE OF
ROAD USE

25,000			
△			
CTA RAIL RIDERSHIP NONE			
CTA BUS ROUTES 61, 62LOC, 62X			
(P) ³⁻⁶	(P)	(P)	(P)
(P) ⁷⁻⁹	(P)	(P)	(P) ⁷⁻⁹

ARCHER AVE/ PERSHING RD - EXISTING CONDITIONS

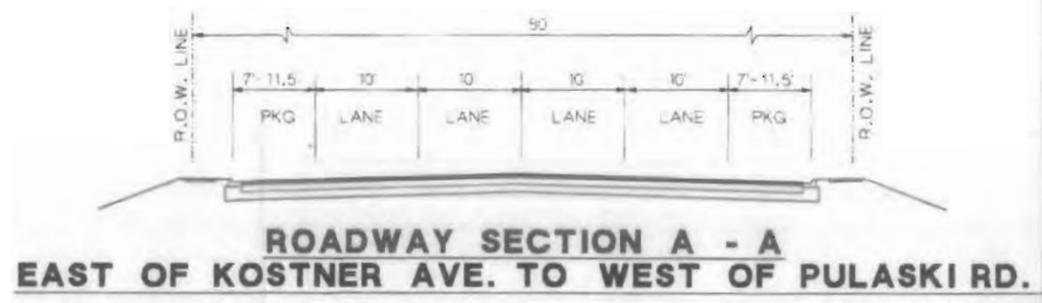
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SRA Strategic Regional Arterial Planning Study **EXHIBIT A-9**

Scale: 0 100 200 feet

LEGEND

- SIGNALIZED INTERSECTION
- LANE ARRANGEMENTS AT KEY INTERSECTIONS
- PARKING ALLOWED
- PARKING PROHIBITED
- NO POSTED RESTRICTIONS
- DESIGNATED BUS STOP
- RAPID TRANSIT STATION
- METRA STATION



1988 - 1990
AVERAGE
DAILY
TRAFFIC

ACCIDENT
RATE

TRANSIT
ROUTES

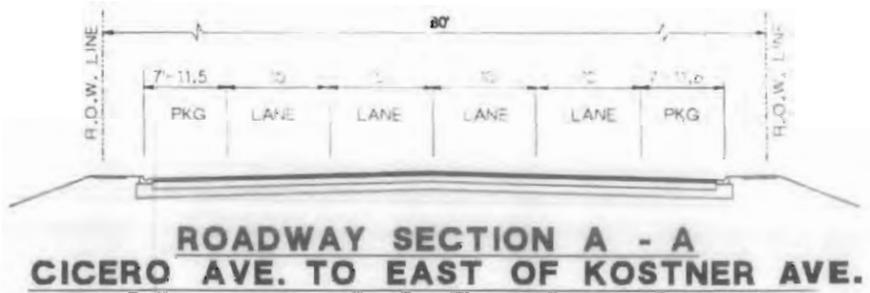
EDGE OF
ROAD USE

22,000		25,000	
▲		▲	
1.27/MEV			
CTA RAIL RIDERSHIP NONE			
CTA BUS ROUTES 61, 62LOC, 62X, 99, 164			
P ⁴⁻⁸	P ⁴⁻⁸	P ⁴⁻⁸	P ⁴⁻⁸
P	P	P ⁸⁻⁸ 2 HR.	P

ARCHER AVE/ PERSHING RD - EXISTING CONDITIONS

LEGEND

- △ SIGNALIZED INTERSECTION
- ↔ LANE ARRANGEMENTS AT KEY INTERSECTIONS
- (P) PARKING ALLOWED
- (P) PARKING PROHIBITED
- (NR) NO POSTED RESTRICTIONS
- B DESIGNATED BUS STOP
- CTA RAPID TRANSIT STATION
- METRA METRA STATION



1988 - 1990
AVERAGE
DAILY
TRAFFIC

ACCIDENT
RATE

TRANSIT
ROUTES

EDGE OF
ROAD USE

	22,000
△	△
2.74/MEV	
CTA RAIL RIDERSHIP NONE	
CTA BUS ROUTES 61, 62LOC, 62X, 99, 164	
(P) 7-9 TRUCKS	(P) 4-8
(P) 7-9	(P) 4-8
(P) 7-9	(P) 7-9

ARCHER AVE/ PERSHING RD- EXISTING CONDITIONS

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ILLINOIS DEPARTMENT OF TRANSPORTATION

SRA

Strategic
Regional
Arterial
Planning Study

EXHIBIT A-11

Scale: 0 100 200 feet

PLANNING FOCUS AREAS

A) SACRAMENTO AVENUE TO CALIFORNIA AVENUE

- Offset intersections may affect SRA operations

B) CALIFORNIA AVENUE/40th PLACE INTERSECTION

- Multi-leg high volume intersection limits through capacity of Archer Avenue and California Avenue

C) PERSHING ROAD/ARCHER AVENUE/ROCKWELL STREET INTERSECTION

- Multi-leg high volume intersection limits through capacity of all intersecting streets



URBAN SRA -- 96' TO 110' RIGHT OF WAY (DESIRABLE)

LEGEND

- A Planning Focus Area I.D.
- ⊖ Hazardous Waste Site
- ▽ Leaking Underground Storage Tank
- ⬢ Historic Building/District
- * Wetland
- † Church/Synagogue/Religious Institution
- Agricultural Land
- Special Use Areas
- Major Utility Lines

ARCHER AVE/ PERSHING RD



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PLANNING FOCUS AREAS

A) POPE JOHN PAUL II DRIVE/ALBANY AVENUE INTERSECTION

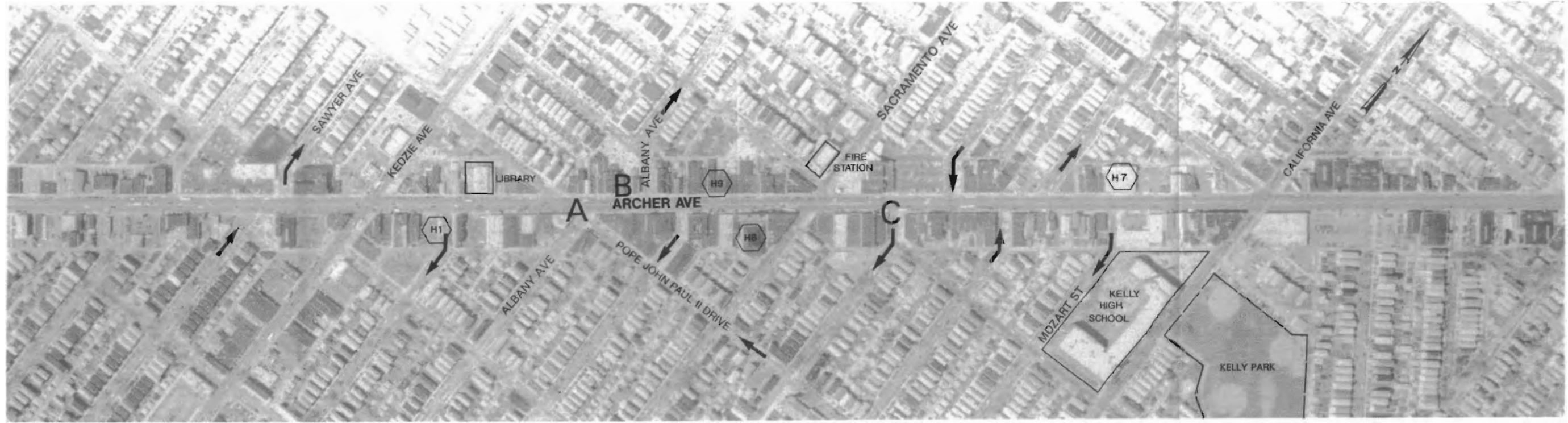
- Multi-leg high volume intersection limits through capacity of Archer Avenue and Pope John Paul II Drive

B) ALBANY AVENUE INTERSECTIONS

- Offset intersections may affect SRA operations

C) ST. LOUIS AVENUE TO CALIFORNIA AVENUE

- Offset intersections may affect SRA operations



URBAN SRA -- 96' TO 110' RIGHT OF WAY (DESIRABLE)

LEGEND

- A Planning Focus Area I, D
- (G1) Hazardous Waste Site
- (L1) Leaking Underground Storage Tank
- (H1) Historic Building/District
- * Wetland
- † Church/Synagogue/Religious Institution
- Agricultural Land
- Special Use Areas
- Major Utility Lines

ARCHER AVE/ PERSHING RD

SRA Strategic Regional Arterial Planning Study **EXHIBIT B-7**

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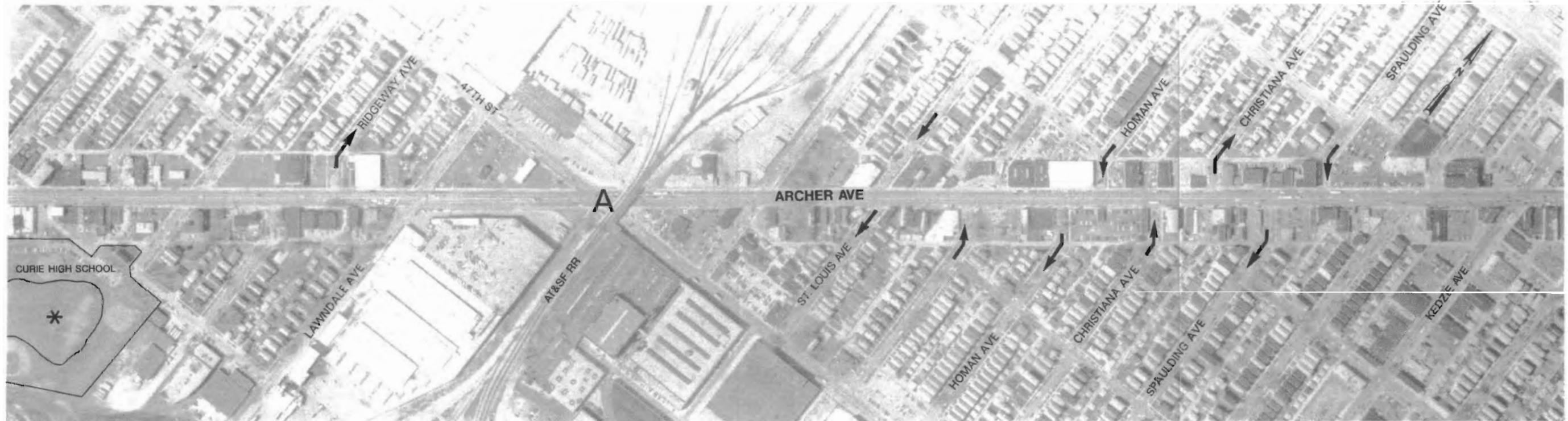


PLANNING FOCUS AREAS

A) 47th STREET INTERSECTION AND ATCHISTEN, TOPEKA, AND SANTA FE RAILROAD BRIDGE

Skewed geometry

- Limited horizontal clearance
- Proximity of railroad bridge may affect intersection sight distance



URBAN SRA -- 96' TO 110' RIGHT OF WAY (DESIRABLE)

LEGEND	
A	Planning Focus Area I.D.
⊖	Hazardous Waste Site
⊕	Leaking Underground Storage Tank
⊙	Historic Building/District
*	Wetland
†	Church/Synagogue/Religious Institution
—	Agricultural Land
—	Special Use Areas
—	Major Utility Lines

ARCHER AVE/ PERSHING RD

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SRA Strategic Regional Arterial Planning Study **EXHIBIT B-8**

PLANNING FOCUS AREAS

A) PULASKI ROAD

- Intersecting SRA

B) LAWDALE AVENUE TO 47th STREET INTERSECTION

Limited available right-of-way



URBAN SRA -- 96' TO 110' RIGHT OF WAY (DESIRABLE)

LEGEND

- A Planning Focus Area I.D.
- (C1) Hazardous Waste Site
- ▽ Leaking Underground Storage Tank
- (H1) Historic Building/District
- * Wetland
- † ⬠ Church/Synagogue/Religious Institution
- Agricultural Land
- Special Use Areas
- Major Utility Lines

ARCHER AVE/ PERSHING RD



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PLANNING FOCUS AREAS

A) 51st STREET INTERSECTION

- Skewed geometry



URBAN SRA -- 96' TO 110' RIGHT OF WAY (DESIRABLE)

LÉGEND

- A Planning Focus Area I.D.
- (C1) Hazardous Waste Site
- ▽ Leaking Underground Storage Tank
- (H) Historic Building/District
- * Wetland
- † ⚙ Church/Synagogue/Religious Institution
- Agricultural Land
- Special Use Areas
- Major Utility Lines

ARCHER AVE/ PERSHING RD

SRA Strategic Regional Arterial Planning Study **EXHIBIT B-10**

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Scale: 0 100 200 feet

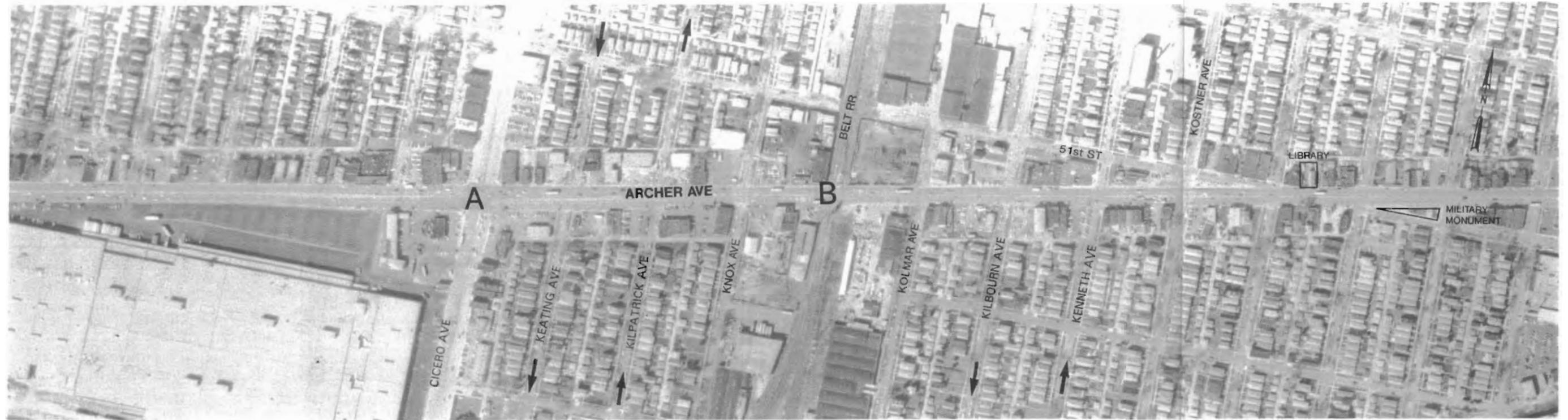
PLANNING FOCUS AREAS

A) CICERO AVENUE

- Intersecting SRA

B) BELT RAILROAD CROSSING (BETWEEN KOLMAR AVENUE AND KNOX AVENUE)

- Through traffic may be affected by at-grade railroad crossing



URBAN SRA -- 96' TO 110' RIGHT OF WAY (DESIRABLE)

LEGEND

- A Planning Focus Area I.D.
- ⊖ Hazardous Waste Site
- ▽ Leaking Underground Storage Tank
- ⊕ Historic Building/District
- * Wetland
- † Church/Synagogue/Religious Institution
- Agricultural Land
- Special Use Areas
- Major Utility Lines

ARCHER AVE/ PERSHING RD

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Scale: 0 100 200 feet

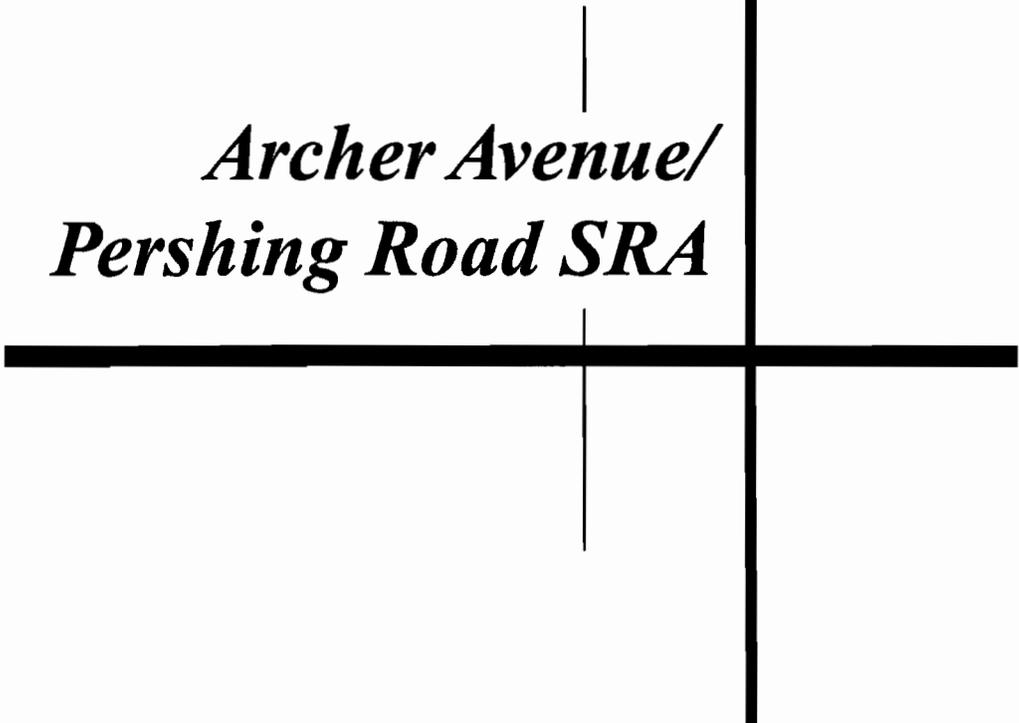
SRA Strategic Regional Arterial Planning Study **EXHIBIT B-11**

Summary

The Pershing Road/Archer Avenue SRA corridor, which is approximately 6.4 miles long, is characterized by many different land uses and environmental concerns. The character of the roadway varies in many places along Pershing Road, although it is fairly consistent along Archer Avenue. The corridor is urban in nature and is characterized by mature development, which would make roadway expansion difficult and costly.

The intense development, coupled with several sensitive sites within the corridor area (numerous historic sites, LUST sites, a park, and a CERCLIS site), restrict the options for improving traffic capacity on Pershing Road/Archer Avenue. Traffic volumes are highest along Archer Avenue where commercial activity is more intense. Over the next 20 years, traffic volumes are expected to increase substantially. Redevelopment of the Stockyards along Pershing Road would contribute to the traffic increase, but traffic volume also is expected to grow along Archer Avenue.

Chapter III describes the planning framework within which the recommended plan was developed. Topics discussed in Chapter III include route design considerations, expected year 2010 transportation system changes and traffic volumes, year 2010 land use planning and development information, and any future areas of concern identified during improvement planning.



*Archer Avenue/
Pershing Road SRA*

Chapter III

**Archer/Pershing SRA
Planning Framework**



Chapter III

Archer Avenue/Pershing Road SRA Planning Framework

Long-range planning for the Archer Avenue/Pershing Road corridor must be based on a range of transportation, land use, and community concerns. Regional transportation needs require balancing with local interests, plans, and constraints.

This chapter outlines the planning framework within which the Archer/Pershing SRA corridor should be viewed. Discussion in this chapter addresses both existing problems and conditions, as well as expected or forecast conditions for the long range. The following is a summary of the important elements of the Archer/Pershing planning framework:

- Functional classification (the roles of SRAs in general, and the Archer/Pershing route specifically, in serving regional transportation needs)
- SRA route design considerations and characteristics
- Long-range forecasts of highway traffic activity along Archer Avenue and Pershing Road
- Other planned transportation improvements within, crossing, or near the Archer/Pershing corridor
- Long-range land use plans for the Archer/Pershing corridor
- Existing safety and traffic operational problems along the Archer/Pershing corridor
- Existing environmental conditions and constraints
- Community concerns, interests, and attitudes

These comprehensive and often conflicting considerations were used to establish a basic concept for the Archer/Pershing corridor that specifies:

- The number of continuous through lanes in each direction along the Archer/Pershing SRA
- Locations of future major signalized intersections
- Locations of special intersection design needs
- A general approach to access management
- The need for and locations of special or unique transportation system solutions
- Provision for enhancement of public transportation, including additional stops, park-and-ride facilities, and the interaction of parking facilities with Metra, Pace, and CTA services.

Functional Classification

Previous planning efforts by IDOT and CATS have established the Archer Avenue/Pershing Road corridor as a SRA. Furthermore, the corridor is classified as urban for its entire length, from the Dan Ryan Expressway to Cicero Avenue. As an urban SRA, the desirable characteristics of the route include four basic continuous through lanes (two lanes in each direction of travel) with a flush or painted median as appropriate.

Other desirable features include providing sidewalks; implementing left-turn lanes at all signalized intersections; removing parking to minimize conflicts and friction effects with through traffic; improving vertical clearances to provide 14 feet/6 inches of clearance; and improving horizontal clearances to allow four through travel lanes plus 2 feet from curb to structure. These desirable features represent initial goals in planning, with recognition that they may not be achievable.

Route Design Considerations

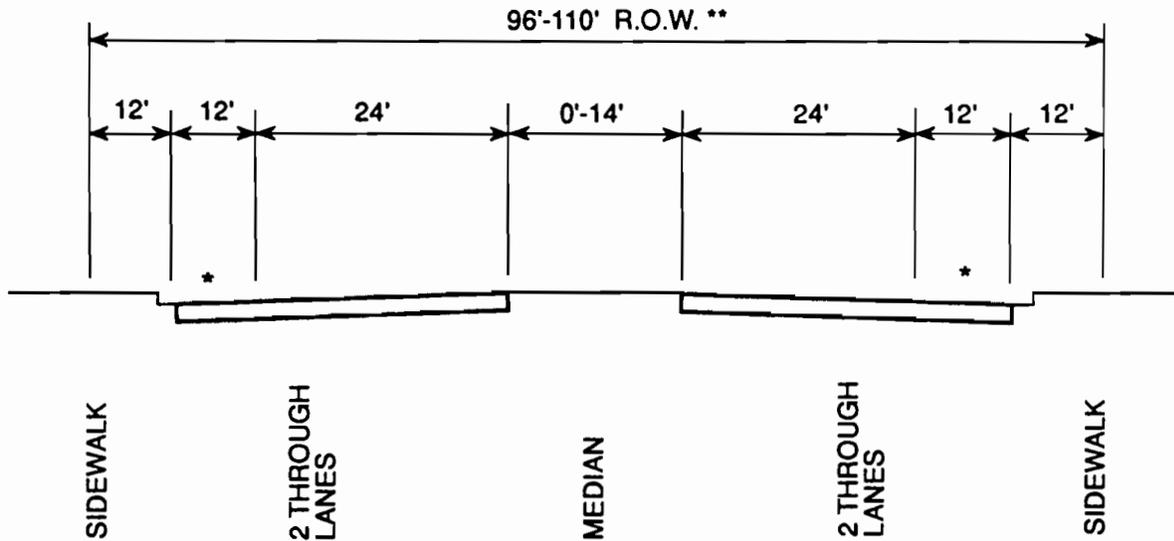
The SRA Design Concept Report, which serves as a guide in the planning of the SRA system, presents desirable cross sections for each SRA route designation in order to ensure adequate traffic service and geometric design within the right-of-way width indicated. Exhibit 3 illustrates the SRA desirable cross section for the urban designation.

The desirable urban SRA concept cross section requires 96 to 110 feet of right-of-way, but the cross section could be 72 to 86 feet wide if bus/high-occupancy vehicle lanes were eliminated. This width accommodates a four-lane roadway (two 11- or 12-foot lanes in each direction), a median up to 14 feet wide, curbs and gutters 1 to 2 feet wide, and 10-foot-wide sidewalks. In the Archer/Pershing SRA corridor, right-of-way width varies from 62 to 82 feet. At its narrowest, the width of right-of-way is 10 feet less than the minimum acceptable standard, and 34 feet less than the desirable cross section. Table 9 lists other information about the desirable route characteristics of an urban SRA.

Except in the Stockyards area and where parks exist, continuous development characterizes the corridor. Buildings frequently are built right up to the property lines, making acquisition of additional right-of-way difficult and intrusive. Historic sites compound the problem of right-of-way acquisition. In some portions of the Pershing Road segment (Segment I), on-street parking presents additional constraints to improving through travel capacity.

The 2010 Transportation Network

Exhibit 4 illustrates the Archer/Pershing corridor in a regional context. The corridor is bounded by the Dan Ryan Expressway (I-90/94) at the eastern end, and the Cicero Avenue SRA (Illinois 50) at the western end. In addition, two other SRA routes—Western Avenue and Pulaski Road—cross the corridor. As previously noted, two SRA routes travel parallel to Pershing Road: North Avenue, approximately 7 miles north of the corridor, and 55th Street, 2 miles south of the corridor. Together, these routes form a network of roadways intended to serve



NOTE: 11' LANES MAY BE USED
IF R.O.W. IS RESTRICTED

* BUS/HOV ONLY
IN PEAK HOUR
(SEE SECTION 5.4)

** TYPICALLY NO BUS/HOV ONLY
LANES, R.O.W. IS 72'-86'

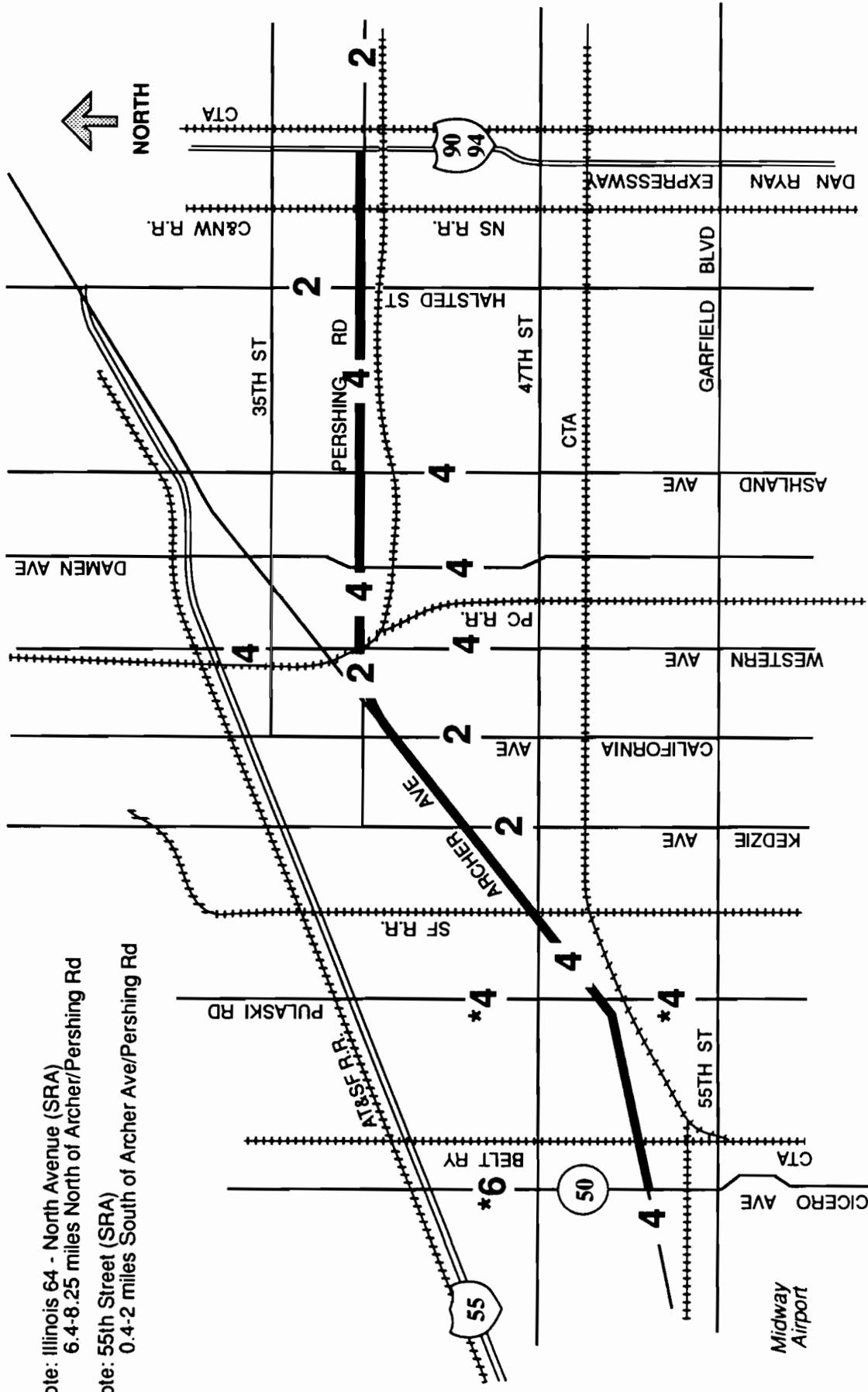
Urban Classification I-90 and I-94 To Illinois 50

Table 9
Year 2010 Desirable Route Characteristics for Urban SRAs

Right-of-Way Width	96 to 110 feet ^a
Level of Service (Peak Hour)/Design Speed	D/35 mph
Number of Through Lanes	Two in each direction; 12-foot width desirable 11-foot width acceptable
Median Width	14 feet desirable
Right Turns	Yes, in curb lane
Left Turns	Permitted along entire length of arterial
Shoulders	Not applicable
Curbs	Yes, with 1- to 2-foot gutters
Sidewalks	Yes, 10-foot width when adjacent to curb
Parking	Not recommended, replace with off-street parking
Cross Street Intersections	Signals with arterials and collectors
Curb Cut Access	Right-in/right-out preferred
Transit	Bus/HOV lanes in peak hours; Local bus service with signs, shelters, and signal pre-emption potential
Number of Traffic Signals per Mile	Four are desirable
Signalization	Synchronized network with pedestrian actuation where needed
Freight: Vertical Clearances	14'6"
Loading	Loading zone with peak hour restrictions or alley loading
^a 72 to 86 feet where bus/HOV lanes are not provided.	

Note: Illinois 64 - North Avenue (SRA)
 6.4-8.25 miles North of Archer/Pershing Rd

Note: 55th Street (SRA)
 0.4-2 miles South of Archer Ave/Pershing Rd



- 2** Number of Existing Lanes (Both Directions of Travel)
- *4** SRA Route to be Studied. Number of Lanes Shown Reflect Desirable per the SRA Design Concept Report.

CORRIDOR MAP ARCHER AVE/PERSHING RD

regional travel in the area. To the extent that they are complete, this study considered plans for the other SRA routes.

As discussed in Chapter II, numerous local streets, as well as major streets that serve collector and arterial functions, travel parallel to and intersect the Pershing Road segment of the corridor. The two major streets that are parallel to Pershing Road are 35th Street, ½ mile north, and 47th Street, 1 mile south. As alternate routes, neither 35th Street nor 47th Street can provide sufficient capacity to satisfy the traffic volume demand of the wider Pershing Road.

Because Archer Avenue is a diagonal street, there are no parallel streets; however, numerous local and major streets intersect Archer Avenue. Archer Avenue, as a diagonal street, is a preferred route for access from the southwest area of Chicago to the downtown. No other streets have the necessary characteristics to act as alternate routes for Archer Avenue.

Between LaSalle Street and Cicero Avenue, numerous freight and passenger rail lines cross the Archer/Pershing corridor. CTA operates two of these crossing lines: the Dan Ryan Rapid Transit line, and the new Southwest Rapid Transit line (which will open in the spring of 1993). Two Metra commuter lines, the Norfolk & Southern and the Heritage Corridor, cross or travel parallel to the corridor, although they do not provide direct service. Freight lines cross on structures at Stewart Avenue, at Western Avenue, and at 47th Street, and the Belt Railway crosses at grade west of Kolmar Avenue.

Year 2010 and Existing Traffic

Forecasts of traffic volumes were prepared by CATS to illustrate the level and pattern of traffic under expected future conditions. The forecasts were based on regional land use assumptions furnished by the NIPC, and assume a network as specified in the year 2010 plan with the full SRA system in place.

The traffic forecasts were used as a reference only, not as a primary tool in corridor sizing. They provide a means, particularly when compared to existing traffic, of judging the long-range need for corridor improvements. In short, traffic volumes can be expected to increase over the next 20 years. Employment and population are projected to increase in the City of Chicago between 1990 and 2010, reversing the trend of the past 20 years. This general increase, as well as the projected continued growth in suburban employment

that will generate increased “reverse” commuting, could affect the travel growth projections. With the exception of the planned commercial district redevelopment of the Stockyards, land use in the already mature corridor is not expected to change dramatically over the next 20 years.

As Table 10 shows, the projected volume of traffic along the Archer/Pershing SRA varies from a low of 24,000 vpd between Keeler and Cicero Avenues at the western end of the corridor to 45,000 vpd on Pershing Road between Western Avenue and Archer Avenue. These projections represent increases over current volumes in the range of 10 to 200 percent.

Location	Existing ADT (vpd) (1980-1986)	2010 ADT (vpd) Forecast
Dan Ryan Expressway to Halsted Street	18,000	33,000
Halsted Street to Ashland Avenue	21,000	32,000
Ashland Avenue to Damen Avenue	20,000	34,000
Damen Avenue to Western Avenue	16,000	45,000
Western Avenue to Pershing Road/Archer Avenue	14,000	42,000
Pershing Road/Archer Avenue to Kedzie Avenue	24,000	33,000
Kedzie Avenue to 47th Street	29,000	35,000
47th Street to Lawndale Avenue	31,000	35,000
Lawndale Avenue to Keeler Avenue	25,000	33,000
Keeler Avenue to Cicero Avenue	22,000	24,000

^aSource: Chicago Area Transportation Study.

Other Corridor Planning Activities

Roadway Improvements

Previous and current planning information was obtained for the Archer/Pershing SRA corridor from IDOT, CATS, and the City of Chicago. Some of the projects that these documents cover should be completed within the next 5 years. Table 11 presents a list of studies relevant to the corridor.

Comprehensive Plans

Plans and programs prepared by local and regional agencies were reviewed to gather information regarding other local transportation plans, land use plans, and community improvement projects affecting the Archer/Pershing corridor. Table 11 lists the plans that were reviewed in conjunction with overall corridor planning.

Table 11 Summary of Previous and Current Planning Studies Relevant to Archer Avenue/Pershing Road		
Study, Plan, or Report	Source	Status as of 1992
Transportation Planning Studies		
• CATS 2010 Transportation System Development Plan	CATS	Official
• Capital Improvements Program (1992-1996)	Chicago	Official
Land Use and Comprehensive Plans		
• Stockyards Tax Increment Financing (TIF) District	Chicago	Preliminary
Other Plans and Studies (none noted)	—	—

Transit Improvements

The CTA is the principal provider of extensive transit service in this mature urban corridor. Transit services that either intersect the corridor, or operate within it, also are well established, including local bus service in the Pershing Road segment (Segment I) and local and express bus services in the Archer Avenue segment (Segment II).

In the spring of 1993, the new Southwest Rapid Transit line will commence service and replace the express buses that now operate in the corridor. In addition, local bus routes will be reconfigured to provide “feeder” service to the transit stations. Because construction of the new transit line is complete, the transit service changes are incorporated into Table 3 (see Chapter II). Southwest line stations in the corridor area include: 35th Street at Leavitt Street, Western Avenue at 49th Street, Kedzie Avenue at 49th Street, and Pulaski Road at 51st Street.

The region's 2010 Transportation System Development Plan includes addition of another major transit facility to serve the western end of this corridor (see Table 12). The proposed facility, the "O'Hare/Ryan Interline Connector," would run between the O'Hare Rapid Transit line (connecting at either the Jefferson Park or Montrose Avenue stations) and the Dan Ryan line at 87th Street. The north-south portion of the line would travel parallel to Cicero Avenue, and would connect to the newly-constructed Southwest Rapid Transit line. The line also would provide connections to the three other rapid transit and five intersecting commuter rail lines.

Table 12 Future Transit Facilities and Operations Proposed and/or Planned By Others for Archer Avenue/Pershing Road		
Transit Facility or Route	Location	Status/Comment
CTA-Rapid Transit O'Hare/Ryan Line Connector	Crosses just east of Cicero Avenue	New line designed to serve connections between O'Hare and Midway Airports and 87th Street on the Dan Ryan Rapid Transit Line.

Future Land Use and Development

Information regarding existing and future land use plans was obtained from field observations, comments provided by the Archer/Pershing SRA Advisory Panel, and from the neighborhoods served by the Archer/Pershing SRA (see Table 11).

Future Conditions

Land use in this mature corridor is not expected to change substantially. The corridor currently is characterized by commercial development; residential use; institutions including the Chicago Board of Education, schools, and churches; parks; and industrial development.

The Union Stockyards, which is bounded on the north by Pershing Road and occupies a site approximately 1 square mile in area, provides the primary opportunity for substantial new development in the corridor. As a first stage in redevelopment, a 93-acre area within the site was designated as "blighted" by the Commercial District Development Commission. Subsequently, a tax increment financing (TIF) district was established by the City of Chicago to finance construction of the public road system within the site that will be needed to replace

the private roads and to generate redevelopment. The roads are projected for completion by fall of 1994.¹ Redevelopment of this large area could generate substantial traffic in the eastern segment of the Archer/Pershing SRA.

Existing Environmental Constraints, Unique Conditions, and Areas of Concern

Pershing Road: Dan Ryan Expressway to Rockwell Street/Archer Avenue

A number of concerns exist in this segment of the corridor. At some locations, development limits available right-of-way to only 66 feet at both the eastern and western ends of the Pershing Road portion of this SRA. Residential and other restrictive land uses in these areas, such as numerous historic structures (see Chapter II), complicate acquisition of additional right-of-way.

There are a number of major intersections along this segment that need to be addressed properly, including: Halsted Street, Ashland Avenue, Damen Avenue, and Western Avenue (SRA). Sufficient capacity at these major signalized intersections is essential to providing adequate operation along Pershing Road. Heavy truck traffic in the industrial area of the corridor causes considerable congestion, particularly on weekdays. Improving truck flow through the intersections is also a concern.

McKinley Park provides recreational use for the surrounding neighborhoods, whose residents use the park often. On-street parking adjacent to the park is used intensely, particularly during the summer months and on weekends. Existence of on-street parking, however, conflicts with the cross section requirements for the SRA.

Pershing Road is very narrow in the ¼-mile segment between Western Avenue and Rockwell Street where the primary land use is residential. Currently, parking is permitted on both sides of the street, effectively restricting through traffic to one lane in each direction of travel. Maintaining sufficient parking and providing four continuous through lanes will need to be resolved.

¹Source: *Capital Improvement Program, 1992-1996*. City of Chicago.

Visual, horizontal, and vertical clearance problems are associated with the railroad bridge that crosses the corridor at Western Avenue. The limited sight lines in the vicinity of this bridge, in addition to the insufficient horizontal and vertical clearance, require improvements at this location. Reconstruction/modification of this structure will be complex and expensive because it is used by several active rail lines.

Archer Avenue: Rockwell Street/Pershing Road to Cicero Avenue

Because Archer Avenue is a diagonal street, numerous multi-leg and offset intersections complicate traffic flow. Defining specific traffic patterns that maximize service to the commercial activities on the street, while addressing the requirements of the residential streets, is an important consideration.

Achieving safe access to Curie High School, from both Archer Avenue and from the new Southwest Rapid Transit line, also should be considered.

The Archer Avenue/Central Park Avenue/47th Street intersection, which provides access to the AT&SF Railroad intermodal yards, should be improved. Vertical clearance should be increased at the railroad bridge that crosses the corridor at this location. Another railroad crossing, the Belt Railway, crosses Archer Avenue at grade between Knox and Kolmar Avenues. This restricts capacity along Archer Avenue when trains block the roadway.

Community Concerns, Interests, and Attitudes

The interests of the neighborhoods through which the Archer/Pershing corridor passes are important factors in the development of a reasonable consensus plan for the SRA. A Corridor Advisory Panel was established, comprised of elected officials and technical staff from the City of Chicago. Three panel meetings were held to present SRA concepts, to discuss the corridor, and to provide the IDOT consultant with background information related to community interests, concerns, etc.

Chapter V contains minutes from the three meetings, held on October 16, 1991, April 23, 1992, and January 25, 1993. The following summarizes the key concerns raised during these meetings:

- Residents of the 11th Ward are concerned about traffic on 35th Street before and after games at Comiskey Park. They would like to have the 35th Street ramps to the Dan

Ryan Expressway closed at these times, and divert traffic to 39th Street to clear congestion in the residential areas.

- Heavy truck traffic and industrial land uses contribute to congestion at intersections on Pershing Road from Halsted Street to Ashland Avenue.
- Planned development may impact traffic from Halsted Street to Ashland Avenue.
- Truck access to Pershing Road should be controlled through driveway consolidations.

Recommended SRA Corridor Concept for Archer Avenue/Pershing Road

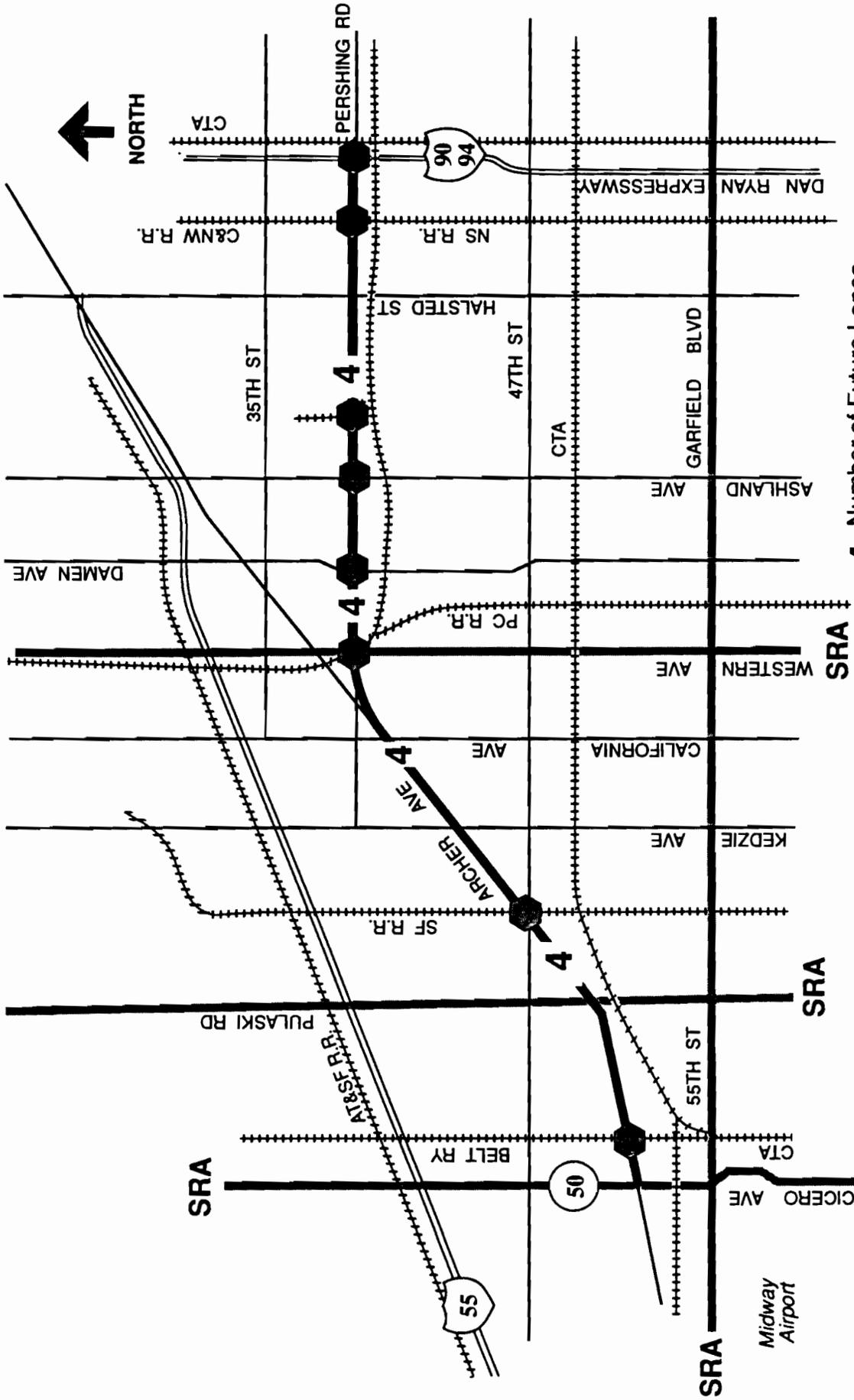
Based on the above information, the recommended corridor concept illustrated in Exhibit 5 was established for the Archer/Pershing SRA.

Basic Number of Lanes

The Archer/Pershing SRA connects the southwest area of the City of Chicago to the Dan Ryan Expressway (I-90/94) and the downtown. As noted earlier, travel volumes in some areas of the corridor are projected to increase significantly by the year 2010.

Strictly from a regional transportation perspective, the need for a continuous four-lane arterial is evident. Development of a feasible corridor concept, however, must be based on the effects of its implementation on adjacent land use, environmental considerations, and other non-transportation factors.

Much of the right-of-way on Pershing Road is only 66 feet, and between Western Avenue and Rockwell Street, it narrows further to 62 feet. At its widest, existing right-of-way is 82 feet; throughout most of the Archer Avenue segment, the right-of-way is 80 feet. There are no locations where existing right-of-way would permit implementation of the most desirable standard urban SRA cross section of 96 to 110 feet. Where right-of-way dimensions are most constrained, the nature of adjacent land uses, predominantly residential, may prevent widening. In these instances, the only way to achieve four travel lanes is to remove parking and to replace it at alternative locations (if demand warrants replacement).



4 Number of Future Lanes
(Both Directions of Travel)

 Grade Separations
and/or Interchanges

RECOMMENDED SRA CORRIDOR CONCEPT ARCHER AVE/PERSHING RD

Given these constraints, this study recommends that the Archer/Pershing corridor be planned as a continuous, four-lane arterial throughout, with right-of-way ranging from 62 to 82 feet.

Intersection Improvements

An important and cost-effective approach to improving the SRA corridor focuses on improving the operation of major intersections. Maintaining reasonable average speeds and achieving peak period levels-of-service in accordance with SRA criteria will require intersection improvements along Archer Avenue and Pershing Road. These improvements include: lengthening left-turn storage lanes, adding left-turn phases to signals, improving signal coordination, and removing parking within 150 feet of signalized intersections to improve intersection operations and to provide space for bus stops. At non-signalized intersections where bus stops are located, a standard 105 feet is reserved for bus stops. At select locations such as six-leg intersections, left turns may be prohibited.

Access Control

The frequency, spacing, and complexity of access points and the locations of signalized intersections are important considerations in operating the recommended four-lane arterial. The concept plan identifies adequate spacing of access points and future signals for laying out street systems for new developments such as the Stockyards. Where they exist, medians are flush rather than raised, primarily because of right-of-way limitations. Medians that have been incorporated into the plans are at least 10 feet wide to provide sufficient width to shelter left-turn movements. Generally, there are no medians in the Archer Avenue segment of the SRA route.

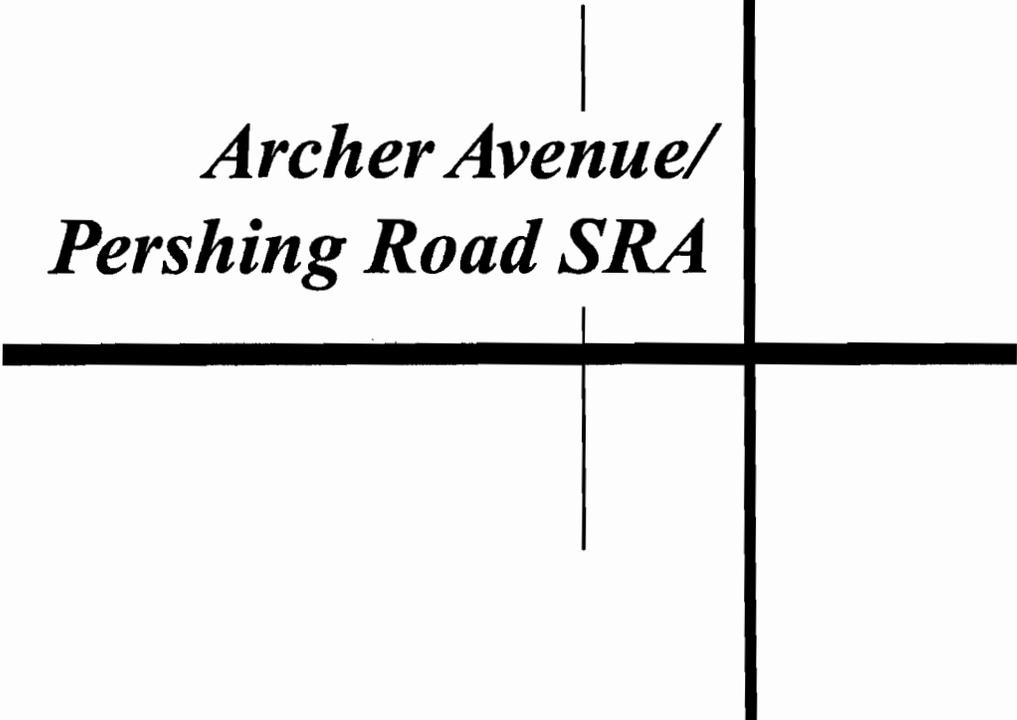
Where there are no medians, it is recommended that left turns from the SRA be prohibited at non-signalized intersections. In the western end of the corridor, where distances between signals tend to be greater than ¼ mile, left-turn lanes should be installed at regular intervals to permit safe access to the side streets.

It is also recommended that “right turns on red” onto Archer Avenue and Pershing Road be prohibited, but that “right turns on red” from Archer Avenue and Pershing Road to intersecting streets be permitted. Where possible, streets at six-leg intersections should be closed to minimize the complexity of intersection operation and to improve vehicular/pedestrian safety.

Special Features

To improve the operation of the western end of this SRA, it is recommended that the Belt Railway line, which crosses the roadway at grade, be converted to a grade-separated crossing. In addition, the railroad bridge that crosses the corridor at Western Avenue should be improved to enhance sight lines and clearances, with the ultimate objective of redesigning and rebuilding the structure.

Chapter IV discusses in detail the proposed plan for implementing the SRA concept for the Archer/Pershing SRA corridor.



*Archer Avenue/
Pershing Road SRA*

Chapter IV

**Recommended
Archer/Pershing
SRA Plan**

Chapter IV

Recommended Archer Avenue/Pershing Road SRA Plan

This chapter describes in detail the recommended plan for the Archer Avenue/Pershing Road SRA corridor. For clarity, the discussion has been divided into the previously-defined segments noted in Chapter II (see page II-1). Specific geometric and/or operational recommendations, and unique features or special roadway designs, are presented.

The plan is supplemented by an evaluation of the operational characteristics of the plan (i.e., level of service and operating speed under future traffic conditions). In addition, a planning-level opinion of potential construction and right-of-way acquisition costs is presented for each segment of the corridor. All costs are based on unit generalized costs as furnished by IDOT for SRA planning purposes.

Right-of-way costs are based on a general assessment of acreage required based on the proposed typical section, existing right-of-way, and current unit costs of right-of-way acquisition as furnished by IDOT. In general, specific building acquisitions and/or damages are not identified. Actual right-of-way acquisition, damages, or both would be determined during Phase I studies.

Construction costs reflect the general magnitude of the proposed SRA relative to the existing roadway. Quantities were estimated on a per-mile basis, with provisions for major items such as new bridges, interchanges, and major intersection improvements.

The exhibits that accompany each segment discussion present the layout of the proposed roadway in relation to the existing roadway. The traveled way (i.e., edge of pavement to edge of pavement) is highlighted in the plan. Additional right-of-way required, lane arrangements at intersections, locations of proposed and existing signals, and the proposed cross section also are shown.

Segment I——“Pershing Road” (Dan Ryan Expressway to Archer Avenue)

Segment I of the Archer/Pershing SRA is approximately 3.1 miles long, and extends from LaSalle Street, which provides access to and egress from the Dan Ryan Expressway, to Archer Avenue and Rockwell Street (see Exhibits C-1 to C-5). Segment I is located entirely within the City of Chicago.

Cross Section and Geometric Characteristics

Future right-of-way width varies considerably throughout this segment. Right-of-way at the Dan Ryan Expressway is 80 feet, but to the west between Princeton Avenue and Halsted Street, it tapers to only 66 feet. Further west, it increases to 82 feet. From Halsted Avenue to Western Avenue, right-of-way is 82 feet wide. In the narrowest portion of this segment, between Western Avenue and Archer Avenue, the right-of-way is only 62 feet.

The broad variations in right-of-way dimensions necessitate different cross sections in the Pershing Road portion of the corridor. The principal objectives in developing cross sections for this segment of the route are to achieve four continuous through lanes, with a median where possible, and to maintain continuity in traffic flow.

The following summary describes the cross section characteristics recommended for Segment I:

- From the Dan Ryan Expressway to Union Avenue, four 12-foot travel lanes and sidewalks;
- From Union Avenue to Paulina Street, four 12-foot travel lanes, a 12-foot flush median, and sidewalks;
- From Paulina Street to Western Avenue, four 11-foot travel lanes, a 12-foot flush median, an 8-foot parking lane, and sidewalks; and

- From Western Avenue to Archer Avenue, four 11-foot travel lanes and sidewalks.

There is only one location where right-of-way acquisition will be required (see Exhibit C-5). Right-of-way should be acquired at the northeast quadrant of the Archer Avenue/Pershing Road intersection, where a commercial pet store currently exists. At this location, acquisition of 11 feet of additional right-of-way would allow implementation of two left-turn lanes and a through travel lane in the westbound direction, and still would provide enough space for two through travel lanes in the eastbound direction. The total right-of-way along Pershing Road at the intersection would be 73 feet.

Traffic Control, Operations, and Safety

Except for the land between Halsted Street and Ashland Avenue, the land use and local street system are well established, and are not expected to change significantly. The land between Halsted Street and Ashland Avenue once was the northern limit of the Stockyards district. Now abandoned, this land may soon be claimed for commercial development. The specific planned development region consists of a square-shaped area bordered by Pershing Road, 43rd Street, Racine Avenue, and Ashland Avenue. It is essential that the SRA corridor plan for this area establish a long-range framework that reinforces the operational and safety objectives of the Pershing Road corridor. Long-term considerations include the locations of future traffic signals and the development of median access control.

The diagrams along the top of each SRA plan exhibit indicate locations of existing and proposed signalized intersections, the lane arrangements at these locations, and spacing to adjacent signals. Locations of future signals were identified based on existing and future land uses, safety and operational considerations, and overall system needs.

There are two general recommendations that apply throughout Segment I. The plan would prohibit “right turns on red” onto Pershing Road, but permit “right turns on red” from Pershing Road to intersecting streets. The plan also recommends prohibiting parking within 150 feet of signalized intersections to provide for turning movements, bus stops, and greater left-turn storage capacity.

The traffic control plan for Segment I would eliminate traffic signals at Union and Emerald Avenues, and possibly at Wood Street depending on the future use of the Chicago Board of Education property. The plan would implement an additional signal to serve the commercial redevelopment of the northwest quadrant of the Union Stockyards; this signal would be placed either 660 or 1,320 feet to the east of the Ashland Avenue intersection, depending on the configuration of the future Stockyards redevelopment.

With a few exceptions, traffic signals in Segment I are spaced generally at minimum ¼-mile intervals consistent with SRA standards. At Wentworth Avenue and LaSalle Street, both of which serve as one-way frontages to the Dan Ryan Expressway, signals are spaced 500 feet apart. Damen Avenue and the Damen Avenue exit ramp, both of which are signalized at Pershing Road, are spaced 480 feet apart. Western Avenue and Western Boulevard, intersections that also are signalized at Pershing Road, parallel each other 200 feet apart. Because of the requirements of the intersections served by these signals, no changes in spacing for any of these intersections is recommended.

Coordinated signal cycles occur from LaSalle Street to Morgan Street, Wood Street to Damen Avenue, and Western Avenue to Archer Avenue. There is an isolated signal at Ashland Avenue. The 11 signals between and including Ashland Avenue and Kedzie Avenue (in Segment II) should be coordinated to provide through traffic progression. A future engineering study is recommended to identify opportunities for improving progression, including the application of updated technologies.

In Segment I, most signals do not have left-turn phases. Exceptions occur for eastbound traffic at LaSalle Street, westbound traffic at Wentworth Avenue, eastbound traffic at Morgan Street, and both directions of traffic at Ashland Avenue. Left-turn signal phases should be implemented at other high-volume intersections in this segment if warranted.

As a general rule, the recommended plan provides for storage of left-turning vehicles at all intersections, except where one-way streets meet the route and where medians are not recommended because of insufficient space. In this latter instance, the plan eliminates left turns onto Wells Street, Stewart Avenue, Canal Street, Normal Avenue, Parnell Avenue, and Lowe Avenue. Left-turn lanes on Pershing Road at Ashland Avenue should be lengthened to 300 feet to accommodate large trucks and heavier peak-period volume.

Improving the operation of the intersections at Halsted Street, Western Boulevard, the Western Avenue SRA, and the Archer Avenue SRA (the south leg of this SRA) is an important objective of this study.

Truck traffic congestion is an issue at Halsted Street. Parking should be removed along Pershing Road in concert with the recommended cross section; along Halsted Street, parking should be removed within 400 feet of the intersection to enable implementation of two through lanes and one left-turn lane in each direction on both streets. In addition, the left-turn lanes on Pershing Road at both Halsted and Morgan Streets should be lengthened to 200 feet to accommodate large trucks. Exhibit D-1 shows the intersection detail at Halsted Street/Pershing Road.

At Western Boulevard and Western Avenue, recommended channelization improvements are needed to accommodate high volumes of traffic on both intersecting streets. At Western Boulevard, recommendations include two through lanes and one left-turn lane in each direction for both intersecting streets. At the SRA to SRA intersection of Pershing Road and Western Avenue, two levels of improvement are recommended: long-term and short-term. The long-term solution recommends reconstruction of the PC railroad structure to eliminate piers within the intersection. Reconstruction of this structure would provide adequate horizontal clearance to accommodate left-turn lanes in all directions as well as three through lanes in each direction along Western Avenue.

Due to the expense of reconstructing the PC Railroad, two short-term or intermediate improvements are proposed. Improved lighting, signing, and marking on the approaches to the intersection can improve traffic operations and safety. Second, restricting or prohibiting some or all left-turn movements at the intersection would further enhance traffic operations. Left-turn movements would be temporarily accommodated at other intersections. Exhibit D-2 illustrates the intersection detail at Pershing Road and Western Avenue.

The proposed SRA plan recommends improvements to the Pershing Road/Rockwell Street/Archer Avenue intersection. To minimize the number of approaches at this intersection, the plan recommends closing the south leg of Rockwell Avenue. On the north leg, the plan would convert Rockwell Avenue to one-way operation northbound. Subsequent to these recommendations, the Pershing Road/Archer Avenue/Rockwell Street

intersection would operate as a conventional four-leg intersection. Channelization improvements are also recommended. Westbound on Pershing Road at Archer Avenue (where the Pershing Road SRA ends and the Archer Avenue SRA begins), one through lane and two left-turn lanes are recommended. Two left-turn lanes on Pershing Road would channel traffic along the SRA, providing the necessary movement continuity required of an SRA. Two through lanes are recommended eastbound on Pershing Road (left and right turns would be shared with the through movements). On northbound Archer Avenue, the plan includes two through lanes and a right-turn lane to help channel traffic along the SRA. Left turns would be prohibited from northbound Archer Avenue to Rockwell Street. The plan, however, would permit CTA buses to turn left at Rockwell Street. Recommendations for southbound Archer Avenue include two through lanes; the plan shows that right turns would be permitted onto Rockwell Street and Pershing Road, but left turns would not be permitted on this leg of this intersection. Maintaining access to the CTA garage in the northwest quadrant of the Rockwell Street and Pershing Road intersection will be an important part of any solution at this intersection. Two possible alternatives include:

- 1) Maintain existing access and egress to/from CTA Garage off of Pershing Road and provide mountable curb along the north side of Pershing Road west of Rockwell Avenue.
- 2) Limit driveways to CTA Garage to one-way operation. Either restrict access from Pershing Road to entrance only or exit only. Provide mountable curb along the north side of Pershing Road west of Rockwell Avenue.

Exhibit D-3 shows intersection detail for this area.

Currently, parking is permitted throughout most of Segment I with some restrictions. Peak hour parking restrictions exist on both sides of the street throughout most of this segment. In addition, parking is prohibited on this designated “snow route” when snowfall accumulations exceed 2 inches. The plan recommends removing some on-street parking in Segment I, including removal of parking from both sides of the street between the Dan Ryan Expressway and Paulina Street, and also between Oakley Avenue and Archer Avenue. For this latter section, the plan calls for development of two off-street

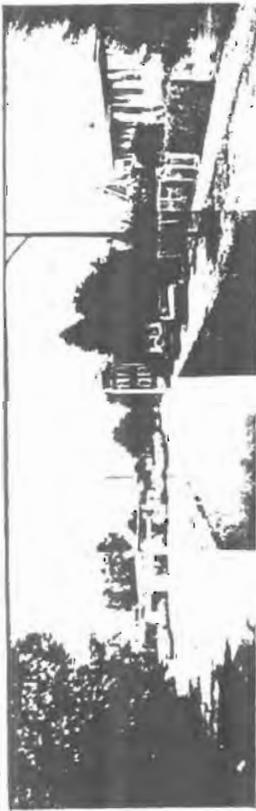
parking lots between Archer Avenue and Pershing Road on Campbell Avenue (35 spaces) and Artesian Avenue (25 spaces). Exhibits 6a and 6b illustrate special parking details for these two locations. Parking prohibition also is recommended on the north side of the street between Paulina Street and Oakley Avenue. Throughout much of this segment, the minimum SRA standard of four travel lanes cannot be achieved without removal of parking.

To verify the reasonableness of the recommended improvements, a planning-level intersection capacity analysis was performed. Table 13 shows the results of that analysis for all signalized intersections in Segment I. The analysis utilized CATS year 2010 SRA forecast traffic volumes as a general reference. As noted in Table 13, assumptions for unavailable minor crossroad traffic volumes were made. Other capacity analysis assumptions are detailed in Appendix A.

The capacity analysis indicates that the recommended plan should produce reasonable volume to capacity (V/C) ratios at about 60 percent of the intersections in this segment. Intersections where the year 2010 V/C ratio exceeds theoretical capacity are Western Boulevard (1.27) and Western Avenue (1.35).

Public Transportation

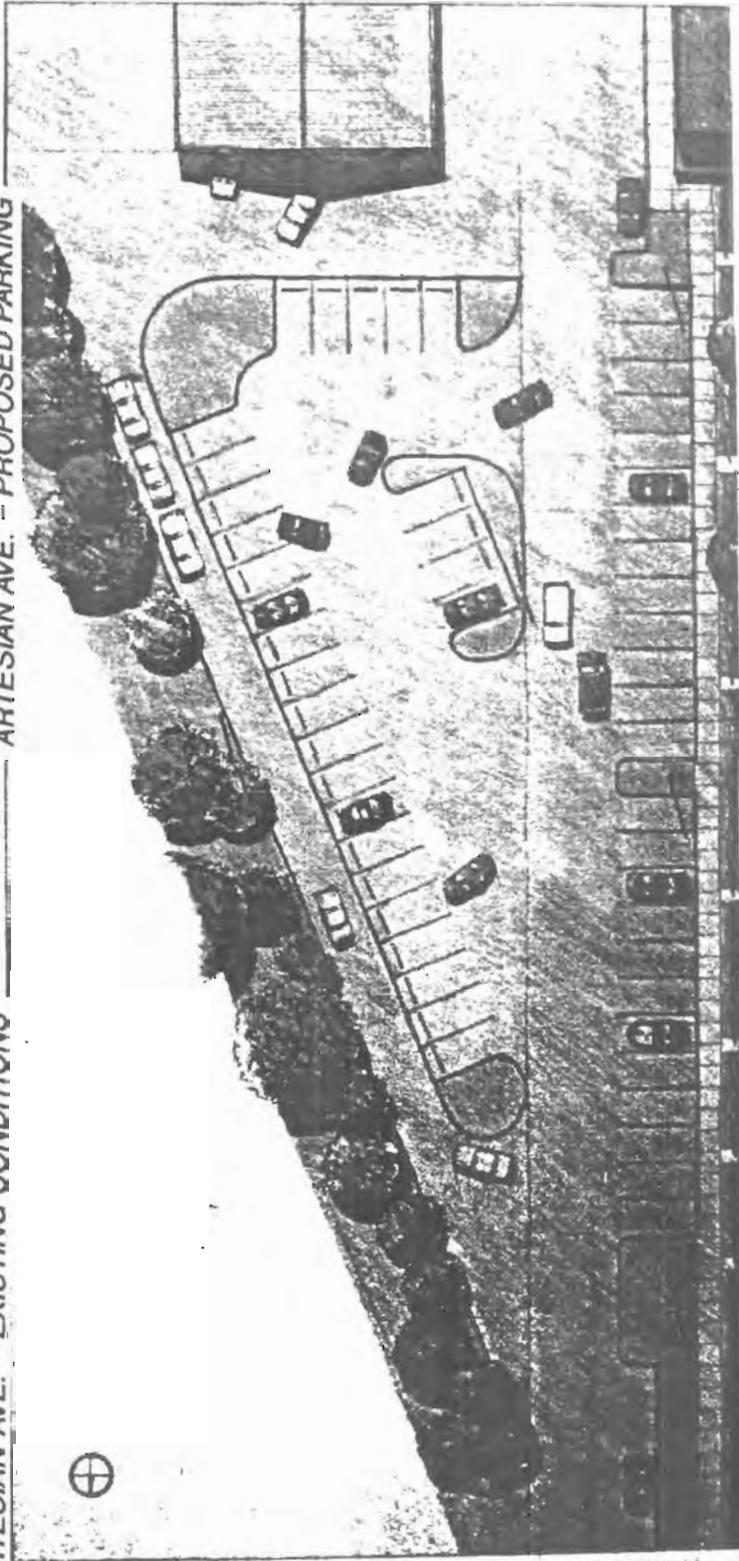
Public transportation serves Segment I well, including two CTA elevated transit lines and several CTA bus routes. Although Metra's Norfolk Southern line does not have a station on the corridor, it does cross the route at Stewart Avenue. CTA's Dan Ryan Rapid Transit line crosses the Pershing/Archer SRA in the median of the Dan Ryan Expressway, and has a station ½ mile north of the corridor at 35th Street.



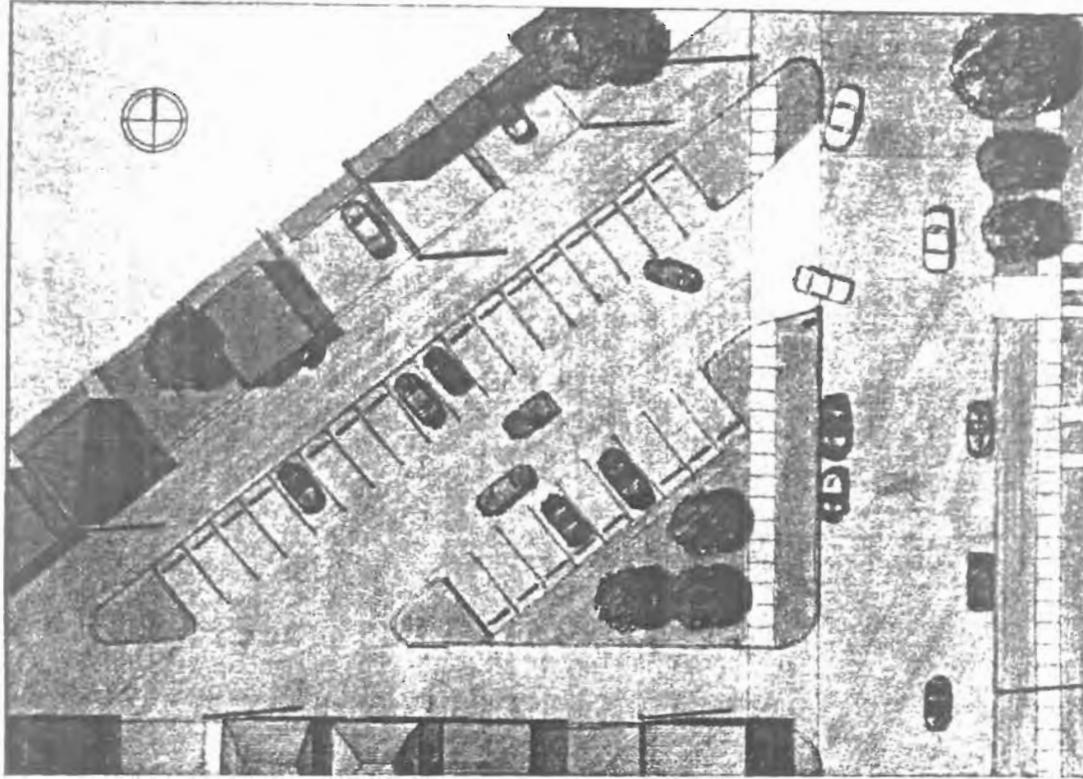
ARTESIAN AVE. - EXISTING CONDITIONS



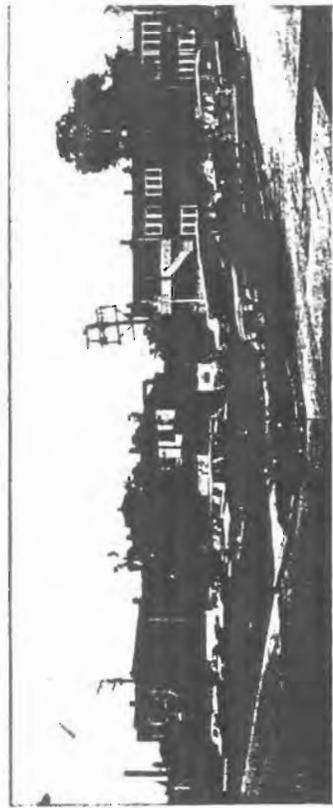
ARTESIAN AVE. - PROPOSED PARKING



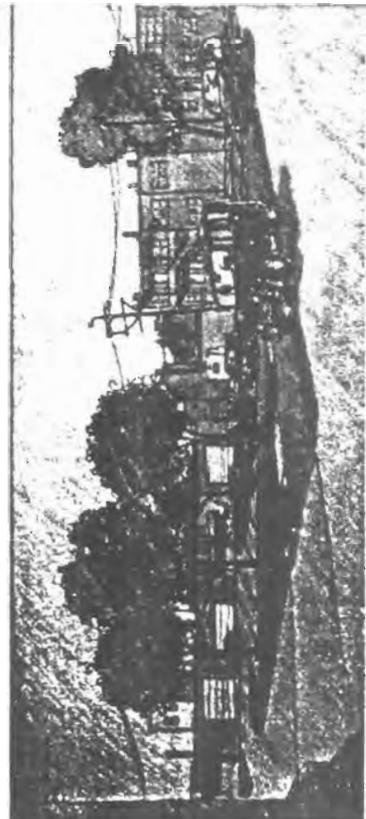
ARTESIAN AVE. - PROPOSED PARKING



CAMPBELL AVE. - (PLAN VIEW)



CAMPBELL AVE. - EXISTING CONDITIONS



CAMPBELL AVE. - PROPOSED MID-BLOCK PARKING
(VIEW FROM SOUTH)

Table 13
Evaluation of Signalized Intersection Operations Along
Segment I (Dan Ryan Expressway to Archer Avenue) of Archer Avenue/Pershing Road

Intersection of Illinois 22 and:	Lane Arrangements ^b		Year 2010 ADT (vpd) ^c		V/C for Intersection ^d
	SRA	Cross Street	SRA	Cross Street	
LaSalle Street ^e	T-TR L-TT	L-LT-TR-R	31,500	20,000	0.82
Wentworth Avenue ^e	L-T T-TR	L-LT-TR-R	31,700	20,000	0.82
Wallace Street ^e	L-T-TR	LTR	33,700	5,000	0.73
Halsted Street ^e	L-T-TR	L-T-TR	34,800	21,100	0.93
Morgan Street ^e	L-T-TR	L-TR	34,800	12,000	0.92
N. W. Quadrant Union Stockyards Development	L-TT T-TR	L-R	29,500	5,000	0.66
Ashland Avenue Ramps	L-T-TR L-TT-R	L-R	30,300	39,300	0.68
Wood Street ^e	T-TR L-TT	L-R	30,300	5,000	0.68
Damen Avenue ^e	T-TR L-TT	L-R	41,300	5,000	0.80
Damen Avenue ^e Exit Ramp	TT	L-R	41,300	5,000	0.80
Western Boulevard ^e	L-T-TR	L-T-TR	48,900	20,000	1.27
Western Avenue ^e	L-T-TR	L-TT-TR	48,900	44,100	1.34
Archer Avenue Pershing Road/(Rockwell Street)	T-TR LT-TR-R	LT-TR LL-TR	35,400	18,700	0.90

Note: ^eDenotes SRA corridor.
^aAssumed for unavailable volumes: 20,000 vpd for major arterials, 12,000 vpd for minor arterials, and 5,000 vpd for local roadways.
^bL = Left-turn lane; T = through lane; R = right-turn lane; and TR = through and right-turn lane.
^cADT = Average Daily Traffic.
^dV/C = Volume to Capacity Ratio.

The newly-constructed CTA Southwest line (which began service in the spring of 1993) crosses at Western Avenue, and has two stations near the corridor: one station at 35th Street/Archer Avenue, located ½ mile north of the corridor, and a second station at 49th Street/Western Avenue, located 1 ¼ miles south of the corridor. Rail stations should be marked clearly along the corridor, and access to the stations should be visible from the SRA.

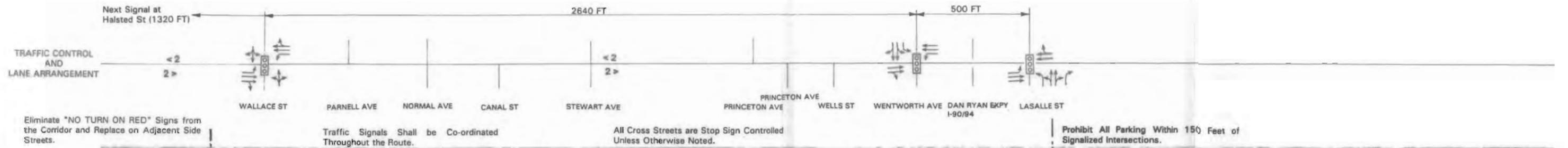
If space permits, bus shelters should be installed at stops throughout the corridor. CTA currently plans to equip its entire fleet for signal pre-emption; signals along Pershing Road should be equipped similarly. Because signal pre-emption works best with “far-side” stops, bus stops should be located beyond signalized intersections. Also, locating Pershing Road bus stops after signalized intersections, while retaining near-side stops for intersecting routes, minimizes pedestrian crossings to transfer to connecting bus routes.

Construction and Right-of-Way Costs

The consultant’s opinion of the total cost of the recommended plan for Segment I is \$8.7 million in 1991 dollars (see Table 14). This total includes roadway construction costs, reconstruction of structures, and right-of-way acquisition. The roadway reconstruction cost is estimated to be \$8.6 million, which includes roadway rebuilding, structures and retaining walls, and improving intersections and signalization.

Table 14
Opinions of Construction and Right-of-Way Cost
for SRA Improvements Along Segment I
(Dan Ryan Expressway to Archer Avenue) of
Archer Avenue/Pershing Road
(1991 Dollars)

Roadway Reconstruction	\$2,770,000
Intersections (Western Avenue and Union Stockyards)	1,100,000
Structures (C&NW and PC Railroad)	4,500,000
Other (Transit Signal Pre-emption)	240,000
Subtotal	<u>\$8,610,000</u>
Right-of-Way	50,000
TOTAL	<u>\$8,660,000</u>



Eliminate "NO TURN ON RED" Signs from the Corridor and Replace on Adjacent Side Streets.

Traffic Signals Shall be Co-ordinated Throughout the Route.

All Cross Streets are Stop Sign Controlled Unless Otherwise Noted.

Prohibit All Parking Within 150 Feet of Signalized Intersections.



Prohibit Left Turns onto Parnell Ave., Normal Ave., Canal St., Stewart Ave., and Wells St.

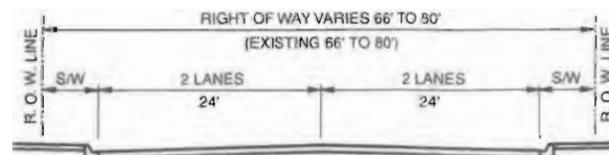
Increase Vertical Clearance at the C & WI RR to 14' 6".

Prohibit Parking on Both Sides of Pershing Rd. from the Dan Ryan Expy. to West of Wallace St. (10 Spaces). Do Not Replace.

Bus Stops are Co-ordinated to Minimize Pedestrian Crossings.

LEGEND

- EXISTING SIGNAL
- POTENTIAL SIGNAL
- SIGNAL TO BE REMOVED
- PROPOSED LANE ARRANGEMENT
- NUMBER OF LANES
- FUTURE RIGHT OF WAY LINE
- BUS STOP



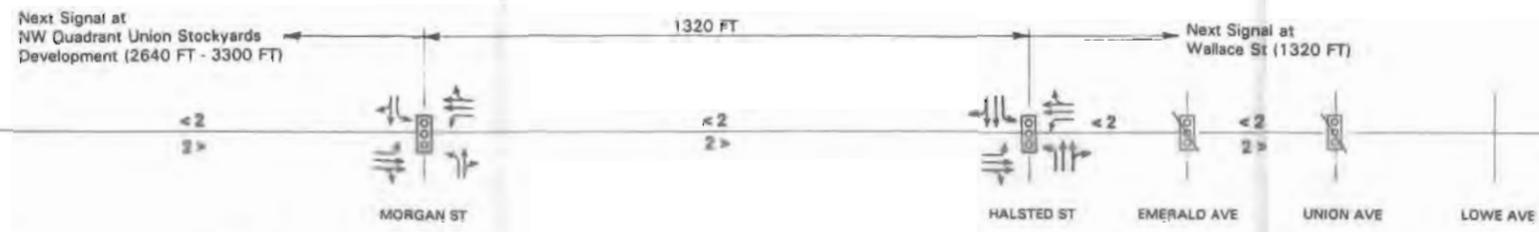
ARCHER AVE/PERSHING RD - PROPOSED PLAN

Prepared by CH2M HILL in association with METRO Transportation Group and EJM Engineering

ILLINOIS DEPARTMENT OF TRANSPORTATION



TRAFFIC CONTROL AND LANE ARRANGEMENT



Eliminate "NO TURN ON RED" Signs from the Corridor and Replace on Adjacent Side Streets.

Traffic Signals Shall be Co-ordinated Throughout the Route.

All Cross Streets are Stop Sign Controlled Unless Otherwise Noted.

Prohibit All Parking Within 150 Feet of Signalized Intersections.



(Existing R.O.W. = 82')

Maintain Existing Right-of-Way Line On North Side of Pershing Road.

Maintain Existing Right-of-Way Line On South Side of Pershing Road.

(Existing R.O.W. = 66')

Widen and Lengthen the Left Turn Lanes on all Intersecting Streets at Morgan St. and Halsted St. to 200 Feet.

At Halsted St and Union Ave See Intersection Detail Exhibit D-1

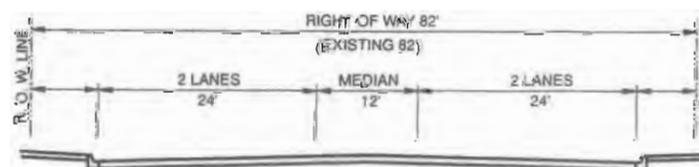
Prohibit Parking on Both Sides of Pershing Rd. from East of Lowe Ave. to Halsted St. Do Not Replace.

Bus Stops are Co-ordinated to Minimize Pedestrian Crossings.

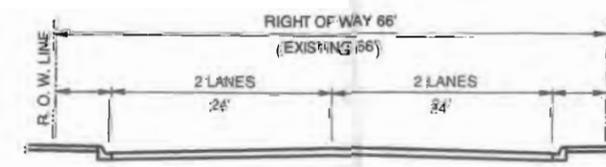
Prohibit Left Turns onto Lowe Ave

LEGEND

- EXISTING SIGNAL
- POTENTIAL SIGNAL
- SIGNAL TO BE REMOVED
- PROPOSED LANE ARRANGEMENT
- NUMBER OF LANES
- FUTURE RIGHT OF WAY LINE
- BUS STOP



**ROADWAY SECTION B-B
UNION AVE TO WEST OF MORGAN ST**



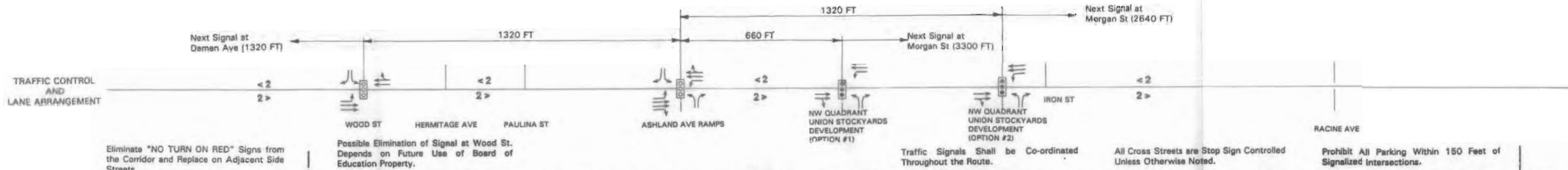
**ROADWAY SECTION A-A
EAST OF LOWE AVE TO UNION AVE**

ARCHER AVE / PERSHING RD - PROPOSED PLAN



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ILLINOIS DEPARTMENT OF TRANSPORTATION





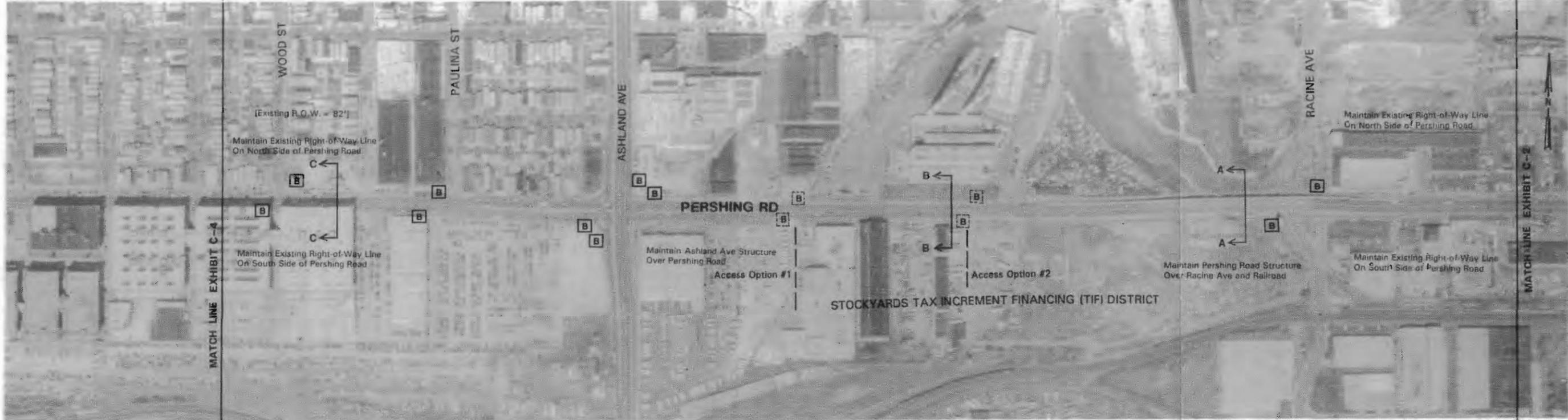
Eliminate "NO TURN ON RED" Signs from the Corridor and Replace on Adjacent Side Streets.

Possible Elimination of Signal at Wood St. Depends on Future Use of Board of Education Property.

Traffic Signals Shall be Co-ordinated Throughout the Route.

All Cross Streets are Stop Sign Controlled Unless Otherwise Noted.

Prohibit All Parking Within 150 Feet of Signalized Intersections.



Prohibit Parking on Both Sides of Pershing Rd. from Ashland Ave. to Paulina St. (19 Spaces). Do Not Replace.

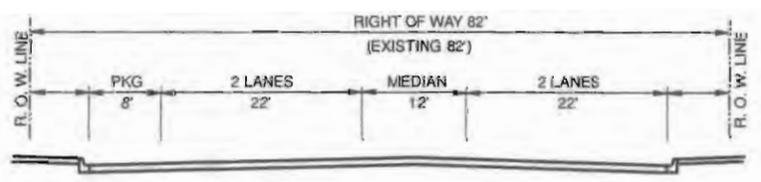
Widen Roadway Symmetrically from 60 Feet to 64 Feet From Paulina St to West of Wood St

Acquire R.O.W. at N.E. Quadrant of Ashland Avenue to Reconstruct Curb to Accommodate Right Turning Trucks. Lengthen Left Turn Lanes on Pershing Rd. at Ashland Ave. to 300 Feet.

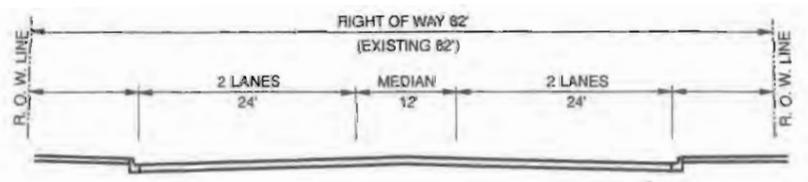
Bus Stops are Co-ordinated to Minimize Pedestrian Crossings.

LEGEND

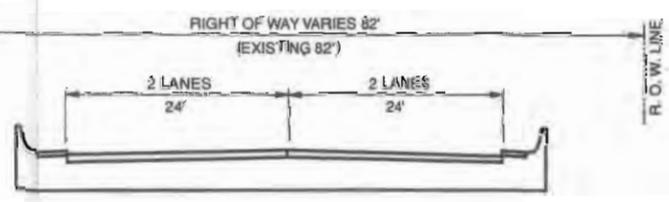
- EXISTING SIGNAL
- POTENTIAL SIGNAL
- SIGNAL TO BE REMOVED
- PROPOSED LANE ARRANGEMENT
- NUMBER OF LANES
- FUTURE RIGHT OF WAY LINE
- BUS STOP



ROADWAY SECTION C-C
PAULINA AVE TO WEST OF WOOD ST



ROADWAY SECTION B-B
EAST OF ASHLAND AVE TO PAULINA ST



ROADWAY SECTION A-A
EAST OF RACINE AVE TO EAST OF ASHLAND AVE
(ON STRUCTURE)

ARCHER AVE/PERSHING RD - PROPOSED PLAN

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ILLINOIS DEPARTMENT OF TRANSPORTATION



Scale: 0 100 200 feet

TRAFFIC CONTROL AND LANE ARRANGEMENT

Next Signal at Western Blvd (1960 FT) ← 480 FT → Next Signal at Wood St (1320 FT)

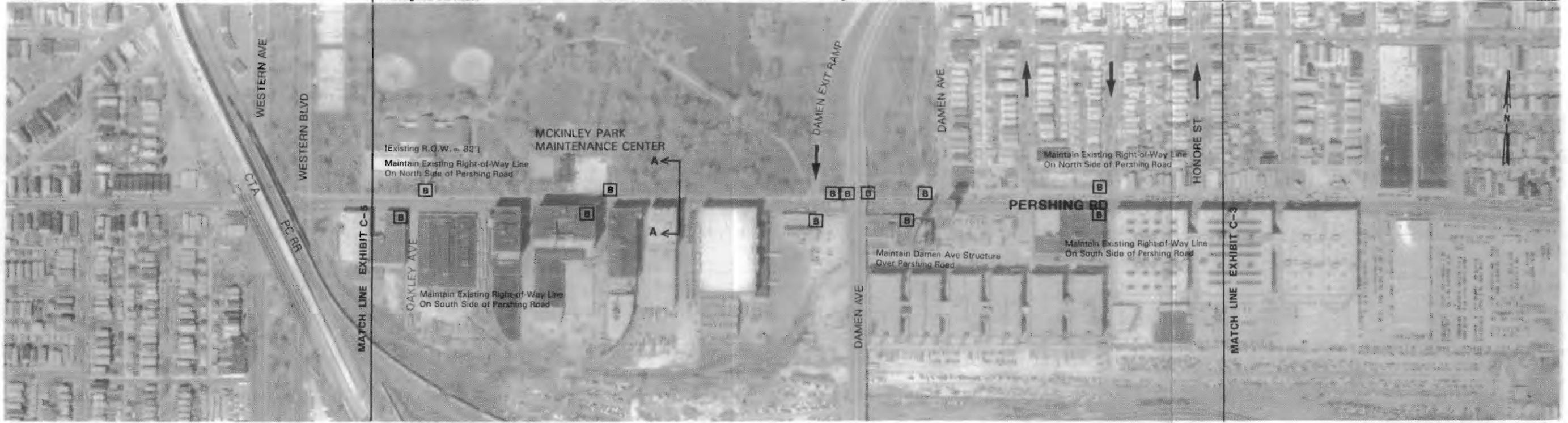
OAKLEY AVE IRVING AVE LEAVITT ST HAMILTON AVE HOYNE AVE DAMEN AVE WINCHESTER AVE WOLCOTT AVE/LINCOLN ST HONORE ST

Eliminate "NO TURN ON RED" Signs from the Corridor and Replace on Adjacent Side Streets.

Traffic Signals Shall be Co-ordinated Throughout the Route.

All Cross Streets are Stop Sign Controlled Unless Otherwise Noted.

Prohibit All Parking Within 150 Feet of Signalized Intersections.



SRA

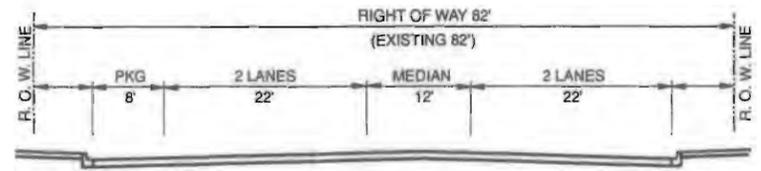
Prohibit Parking Adjacent to McKinley Park. Potential Replacement of Parking in Expanded Lot Adjacent to McKinley Park Maintenance Center.

Widen Roadway Symmetrically from 60 Feet to 64 Feet from East of Honore St. to Western Ave.

Bus Stops are Co-ordinated to Minimize Pedestrian Crossings.

LEGEND

- EXISTING SIGNAL
- POTENTIAL SIGNAL
- SIGNAL TO BE REMOVED
- PROPOSED LANE ARRANGEMENT
- NUMBER OF LANES
- FUTURE RIGHT OF WAY LINE
- BUS STOP



ROADWAY SECTION A-A EAST OF HONORE ST TO WEST OF OAKLEY AVE

ARCHER AVE/PERSHING RD – PROPOSED PLAN

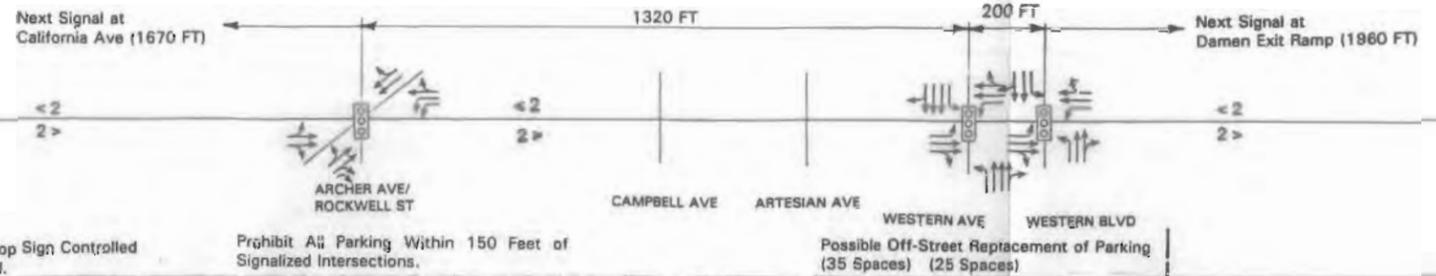
Prepared by CH2M HILL in association with METRO Transportation Group and EJM Engineering

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Scale: 0 100 200 feet

TRAFFIC CONTROL AND LANE ARRANGEMENT



Eliminate "NO TURN ON RED" Signs from the Corridor and Replace on Adjacent Side Streets.
 Traffic Signals Shall be Co-ordinated Throughout the Route.

All Cross Streets are Stop Sign Controlled Unless Otherwise Noted.

Prohibit All Parking Within 150 Feet of Signalized Intersections.

Possible Off-Street Replacement of Parking (35 Spaces) (25 Spaces)



Prohibit Parking on Both Sides of Pershing Rd. from Western Ave. to Archer Ave./Rockwell St. (49 Spaces). Utilize Potential Off-Street Parking Lots.

At Pershing Road and Archer Ave./Rockwell St. See Intersection Exhibit D-4

At Western Ave and Western Blvd See Intersection Detail Exhibit D-3

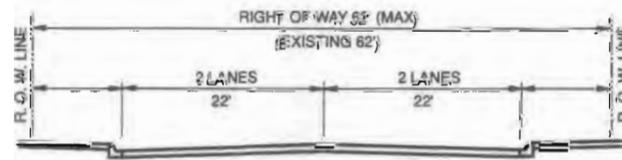
Increase Vertical Clearance at the P C RR to 14' 6".

Bus Stops are Co-ordinated to Minimize Pedestrian Crossings.

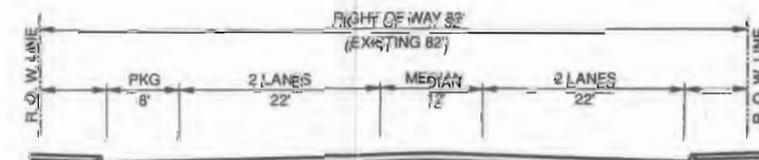
LEGEND

- EXISTING SIGNAL
- PROPOSED SIGNAL
- SIGNAL TO BE REMOVED
- PROPOSED LANE ARRANGEMENT
- NUMBER OF LANES
- FUTURE RIGHT OF WAY LINE
- BUS STOP

Widen Roadway from 40 feet to 44 feet Symmetrically from East of Western Ave to Rockwell St/Archer Ave



**ROADWAY SECTION B-B
WESTERN AVE TO ROCKWELL ST/ARCHER AVE**



**ROADWAY SECTION A-A
EAST OF WESTERN BLVD TO WESTERN AVE**

ARCHER AVE/PERSHING RD - PROPOSED PLAN

Prepared by CH2M HILL in association with METRO Transportation Group and EJM Engineering

ILLINOIS DEPARTMENT OF TRANSPORTATION



Scale: 0 100 200 feet

GENERAL NOTES

CHANNELIZATION DETAILS TO REFLECT IDOT DESIGN STANDARDS AND CRITERIA AT TIME OF FINAL PLAN PREPARATION.

ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB.

MAINTAIN EXISTING RIGHT-OF-WAY UNLESS OTHERWISE NOTED. FINAL RIGHT-OF-WAY REQUIREMENTS TO BE DETERMINED IN PHASE 1 PLANNING.

PARKING TO BE PROHIBITED WITHIN A MINIMUM OF 150 FEET OF SIGNALIZED INTERSECTIONS.

TAPERS TO BE DESIGNED IN ACCORDANCE WITH IDOT STANDARDS

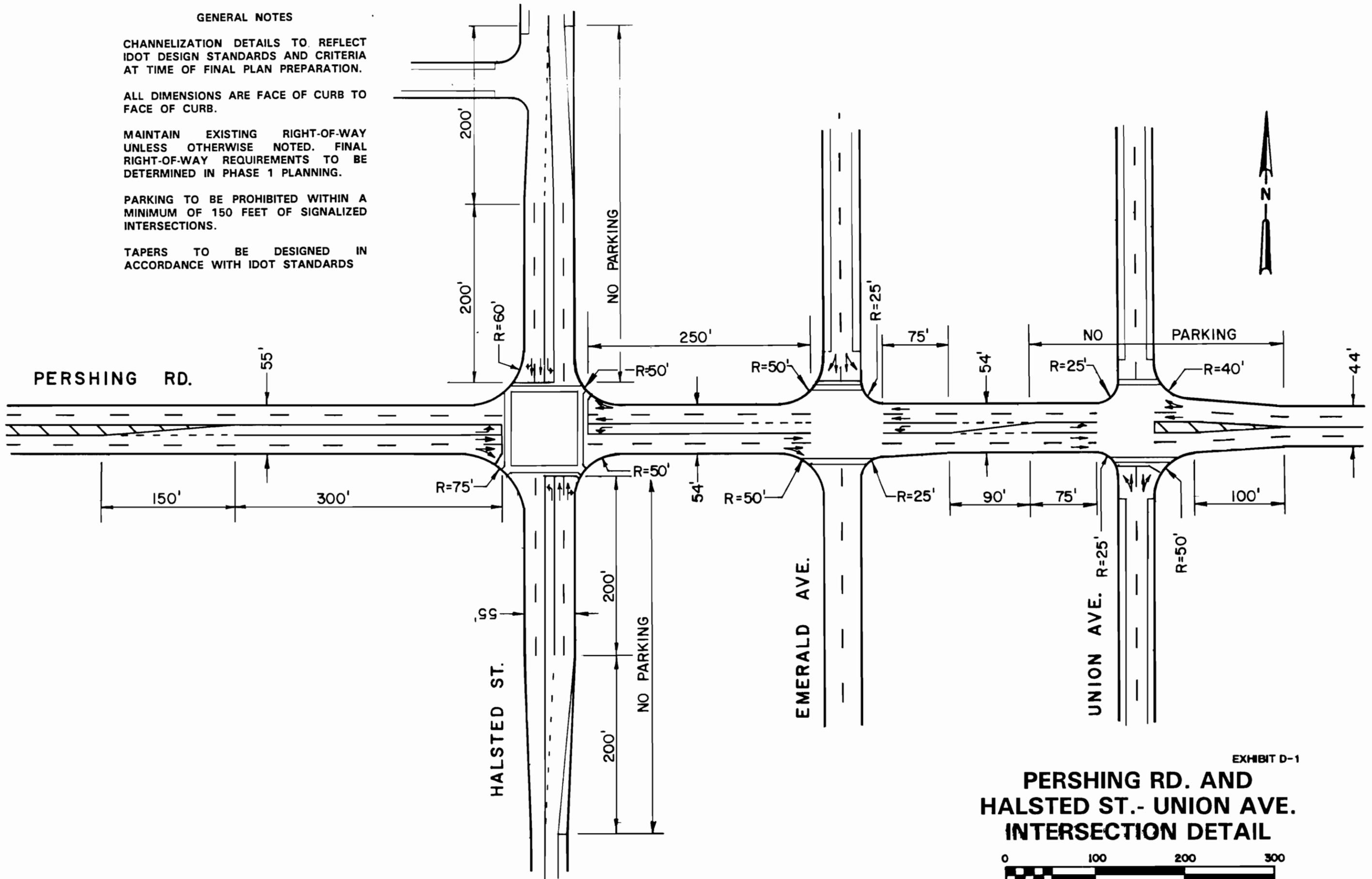


EXHIBIT D-1

PERSHING RD. AND HALSTED ST.- UNION AVE. INTERSECTION DETAIL



SCALE 1"=100'

GENERAL NOTES

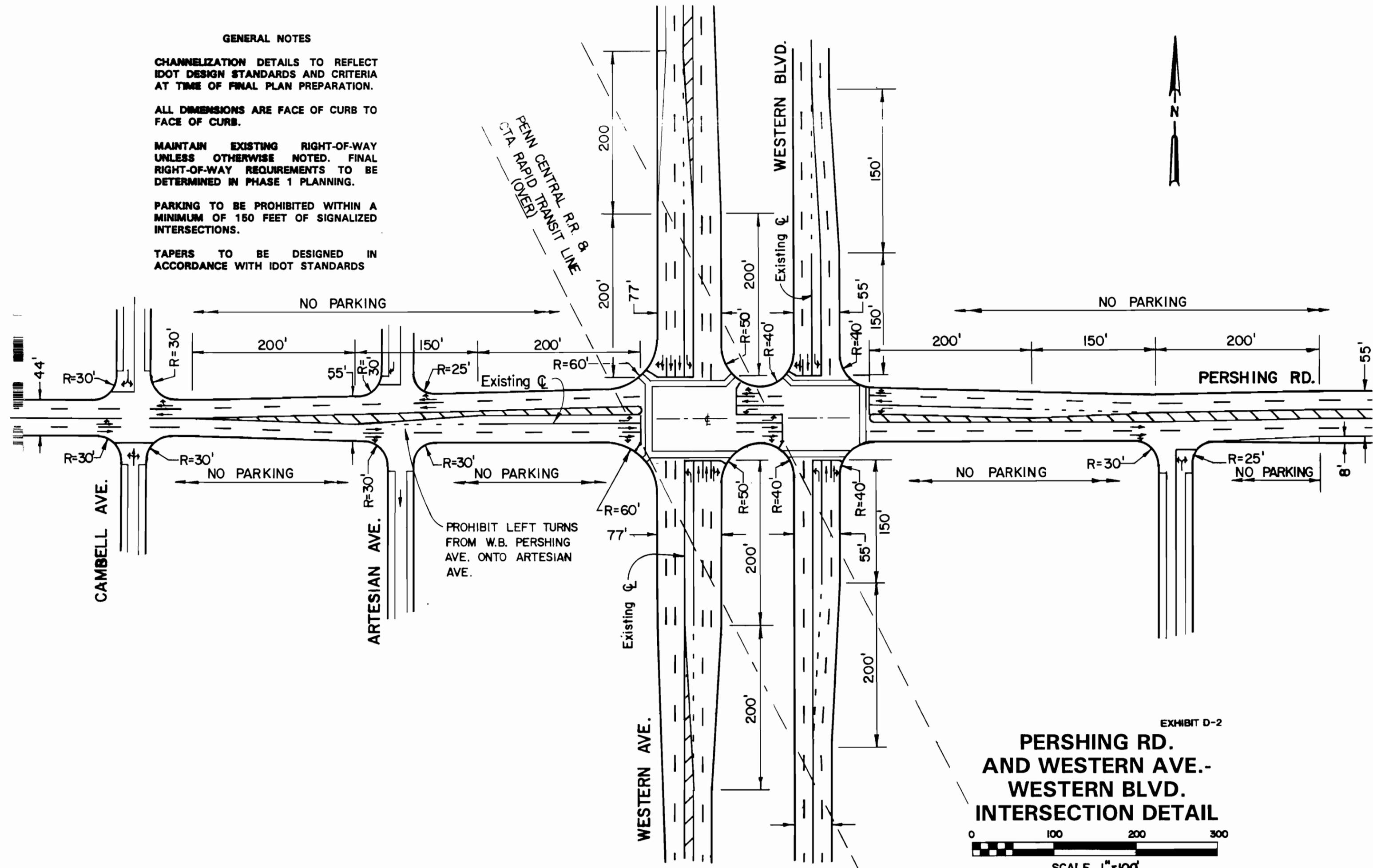
CHANNELIZATION DETAILS TO REFLECT IDOT DESIGN STANDARDS AND CRITERIA AT TIME OF FINAL PLAN PREPARATION.

ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB.

MAINTAIN EXISTING RIGHT-OF-WAY UNLESS OTHERWISE NOTED. FINAL RIGHT-OF-WAY REQUIREMENTS TO BE DETERMINED IN PHASE 1 PLANNING.

PARKING TO BE PROHIBITED WITHIN A MINIMUM OF 150 FEET OF SIGNALIZED INTERSECTIONS.

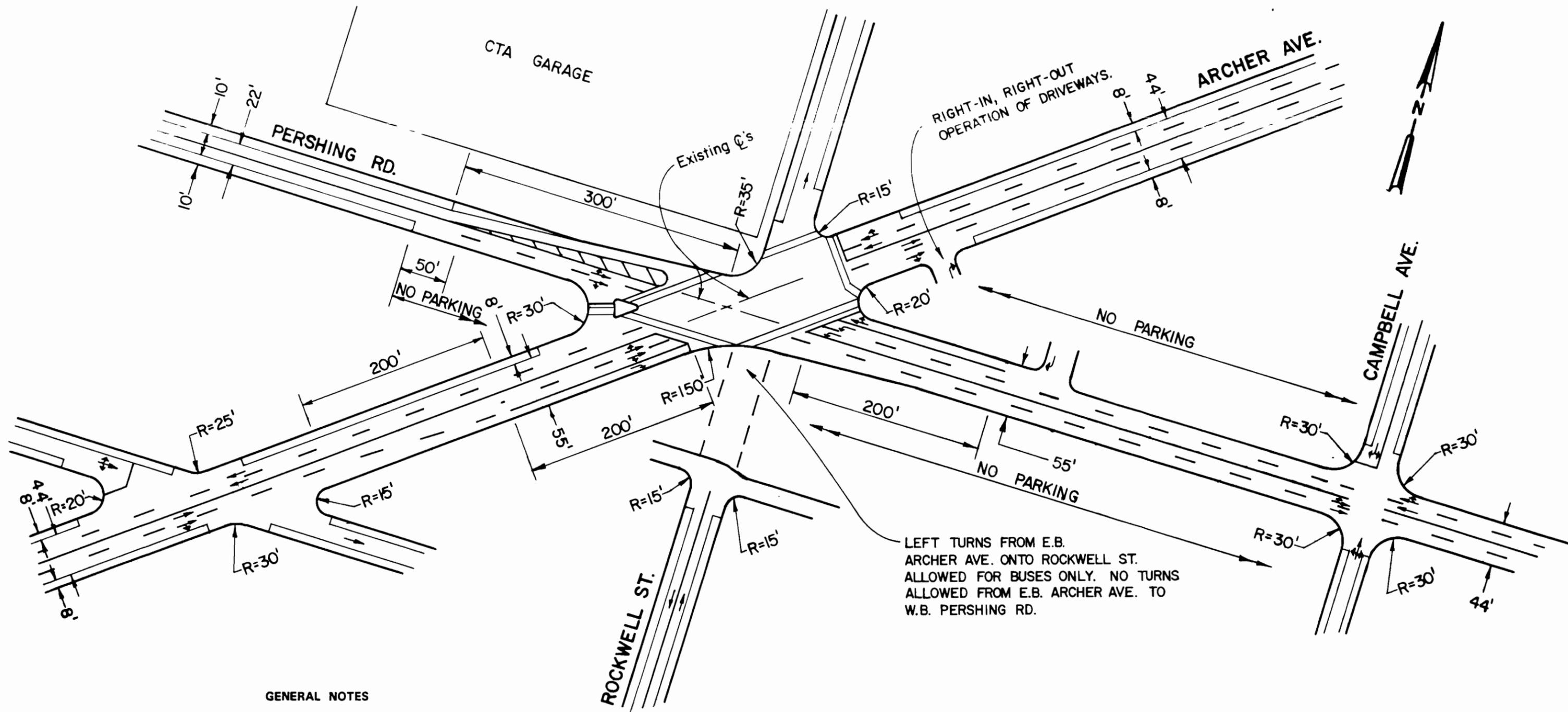
TAPERS TO BE DESIGNED IN ACCORDANCE WITH IDOT STANDARDS



PROHIBIT LEFT TURNS FROM W.B. PERSHING AVE. ONTO ARTESIAN AVE.

EXHIBIT D-2
**PERSHING RD.
 AND WESTERN AVE.-
 WESTERN BLVD.
 INTERSECTION DETAIL**

0 100 200 300
 SCALE 1"=100'



GENERAL NOTES

CHANNELIZATION DETAILS TO REFLECT IDOT DESIGN STANDARDS AND CRITERIA AT TIME OF FINAL PLAN PREPARATION.

ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB.

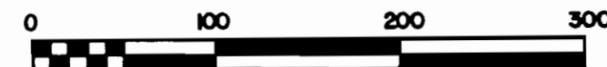
MAINTAIN EXISTING RIGHT-OF-WAY UNLESS OTHERWISE NOTED. FINAL RIGHT-OF-WAY REQUIREMENTS TO BE DETERMINED IN PHASE 1 PLANNING.

PARKING TO BE PROHIBITED WITHIN A MINIMUM OF 150 FEET OF SIGNALIZED INTERSECTIONS.

TAPERS TO BE DESIGNED IN ACCORDANCE WITH IDOT STANDARDS

EXHIBIT D-3

ARCHER AVE. AND PERSHING RD. INTERSECTION DETAIL



SCALE 1"=100'

Segment II——“Archer Avenue” (Pershing Road to Cicero Avenue)

Segment II of the Archer/Pershing SRA is approximately 3.3 miles long, extending from the Pershing Road/Rockwell Street/Archer Avenue intersection to the Cicero Avenue SRA (see Exhibits C-6 to C-11). Segment II is located entirely within the City of Chicago.

Cross Section and Geometric Characteristics

The existing right-of-way is fairly consistent throughout this segment (80 feet), except between 47th Street and Lawndale Avenue, which has only 73 feet of right-of-way. The principal objectives in developing cross sections for Segment II are to achieve four through lanes and to maintain continuity in traffic flow. The recommended cross section for Segment II consists of four 12-foot travel lanes, two 8-foot parking lanes, and two 8-foot sidewalks (see Exhibits C-6 to C-11). Implementing the recommended cross section will require widening the roadway from 60 feet to 64 feet, except between California Avenue and Kedzie Avenue, where the existing pavement would be widened from 56 feet to 64 feet.

Right-of-way acquisition will be required from 47th Street to Lawndale Avenue. Industrial/office use characterizes this area, and a gas station is located on the corner at 47th Street. Acquisition of 7 feet would increase the total right-of-way in this area from 73 to 80 feet.

Traffic Control, Operations, and Safety

The land use and local street system in Segment II are well established, and are not expected to change significantly. It is essential that the SRA corridor plan for this segment establish a framework that reinforces the operational and safety objectives of the SRA system. Increasing the safety and efficiency of traffic operations in this segment would include improved traffic controls, signal systems, and access control.

The diagrams along the top of each SRA plan exhibit indicate locations of existing and proposed signalized intersections, the lane arrangements at these locations, and spacing to adjacent signals.

There are two general recommendations that apply throughout Segment II. The plan would prohibit “right turns on red” onto Archer Avenue, but permit “right turns on red” from Archer Avenue to intersecting streets. The plan also recommends prohibiting parking within 150 feet of signalized intersections to provide for turning movements, bus stops, and greater left-turn storage capacity.

The traffic control plan for Segment II would retain all signals that are currently in place. Because Archer Avenue is a diagonal arterial, conventional spacing, such as for a typical grid pattern, is not achieved. The spacing between most signalized intersections on Archer Avenue meets the SRA spacing criteria of ¼ mile or greater, except from Sacramento Avenue to Pope John Paul II Drive, located 970 feet apart; from Pope John Paul II Drive to Kedzie Avenue, located 750 feet apart; from 47th Street to Lawndale Avenue, located 690 feet apart. No changes in spacing are recommended at these intersections.

Signals are coordinated from California Avenue to Kedzie Avenue, from 47th Street to Pulaski Road, and from Keeler Avenue to Kostner Avenue. The 11 signals between and including Ashland Avenue (in Segment I) and Kedzie Avenue should be coordinated to provide through traffic progression. Signals from Lawndale Avenue to Cicero Avenue also should be coordinated. Future engineering studies would be required to identify opportunities for improving progression, including application of updated technologies.

In Segment II, several signals have left-turn phases for left-turning traffic along Archer Avenue. Intersections with left-turn phasing include Kedzie Avenue (both directions of traffic), westbound at Lawndale Avenue, westbound at Pulaski Road, and in both directions at Cicero Avenue. Further study should be performed to determine if left-turn phases should be implemented at other high-volume intersections in this segment.

Provision is made for storage of left-turning vehicles at all intersections, except where one-way streets exit onto the corridor, or where a median is not recommended because of insufficient space. In this latter instance, the plan calls for eliminating left turns onto the

side streets crossing Archer Avenue. Left turns still would be permitted where left-turn lanes are provided, including all signalized intersections, Christiana Avenue (eastbound), Homan Avenue (westbound), Kenneth Avenue (eastbound), Kilbourn Avenue (westbound), Kilpatrick Avenue (eastbound), and Keating Avenue (westbound). These intersections were chosen to serve residential areas that are not near signalized intersections. Parking should be removed on both sides of Archer Avenue near these intersections.

Recommended access control improvements include closing the south leg of Albany Avenue where Archer Avenue meets Pope John Paul II Drive. This would reduce the number of legs at the intersection from five to four. Also, closing the 50th Street leg where Archer Avenue meets Pulaski Road is recommended to reduce the number of legs in the intersection from five to four. Fiftieth Street could be redesignated as a two-way street between Komensky Avenue and Pulaski Road.

To improve the operation of Archer Avenue in the vicinity of the Belt Railway, the proposed plan recommends grade separating Archer Avenue and the Belt Railway. Grade separating the Belt Railway will require adjusting the profile of Archer Avenue. This will affect access between Knox Avenue and Kolmar Avenue and will require closing the Knox Avenue and Kolmar Avenue intersections with Archer Avenue.

Improving the operation of the intersections at California Avenue (where significant congestion occurs), Pope John Paul II Drive, Kedzie Avenue, and Pulaski Road is an important objective of this study. Parking would be removed on Archer Avenue within 550 feet of the California Avenue intersection, and on California Avenue within 300 feet of the intersection. This parking removal would allow installation of longer left-turn lanes in all directions. Exhibit D-4 shows an intersection detail of this area.

Intersection improvements are needed at Pope John Paul II Drive and Albany Avenue. The south leg of Albany Avenue would be closed to reduce the number of legs in this intersection to four. A left-turn lane would be designated on Pope John Paul II Drive in both directions. East of the intersection, parking would be eliminated to Whipple Street on the south side of Pope John Paul II Drive. West of the intersection, parking would be eliminated within 400 feet of the intersection. To improve the intersection and to install longer left-turn lanes at Kedzie Avenue, parking would be removed on Archer Avenue

within 200 feet of the intersection. On Kedzie Avenue, parking would be removed from the intersection to permit two through lanes in each direction. Exhibit D-5 presents the intersection detail at this location.

At Pulaski Road and 50th Street, 50th Street would be closed and redesignated as a two-way street, which would eliminate one leg of this five-leg intersection. Parking would be removed on Archer Avenue within 550 feet of the intersection, and on Pulaski Road within 150 feet of the intersection. Also, a 175-foot-long drop-off bay on Archer Avenue would be implemented to serve Curie High School. Exhibit D-6 illustrates the intersection details for this area.

Intersection improvements are also recommended at Archer Avenue and 47th Street. In the proposed year-2010 plan, left-turn lanes would be implemented along all four intersection approaches. Along Archer Avenue and 47th Street this would require widening the pavement at the intersection by 10 to 12 feet. Pavement widening for left-turn channelization would be isolated to the intersection approaches only. The proximity of bridge piers, supporting the AT&SF Railroad structure, in relation to the Archer Avenue and 47th Street intersection makes intersection widening difficult and adds to the cost of improving this intersection. Complete reconstruction of the AT&SF Railroad structure over Archer Avenue and 47th Street would be required before left-turn lanes could be implemented.

Due to the complexity of implementing this intersection improvement and the potential cost required for reconstructing the AT&SF Railroad structure, an interim improvement is recommended. A number of interim alternatives would be possible at this location; two are offered here for consideration. The first alternative would be to implement peak-period left-turn restrictions along Archer Avenue and 47th Street. This would enable two lanes of through traffic in each direction of travel without impedance from unprotected left turns, and without the need to reconstruct the AT&SF Railroad. The second alternative would be to remove the existing intersection of 47th Street at Archer Avenue and route 47th Street traffic through Lawndale and Drake. To accomplish this, 47th Street, west of Archer Avenue, would be relocated to tie into the intersection of Lawndale and Archer Avenue, while 47th Street, east of Archer Avenue, would be relocated to tie into the intersection of Drake and Archer Avenue. This would require modification of the existing stop-controlled intersection at Drake and Archer Avenue to a

conventional four-legged intersection with signalization. Exhibit D-7, shown at the end of this chapter, depicts schematically this alternative.

These interim alternatives are intended to provide adequate operation along Archer Avenue without immediate reconstruction of the AT&SF Railroad structure. At the time it becomes necessary or reasonable (i.e., significant structural rehabilitation, or increased travel demand) to reconstruct the railroad structure, the intersection approaches could be widened and left-turn channelization added.

Parking generally is permitted throughout Segment II, with some restrictions. Peak hour parking restrictions exist on both sides of the street throughout most of this segment. In addition, parking is prohibited on this designated “snow route” when snowfall accumulations exceed 2 inches. The plan does call for additional parking removals, as described earlier in the Segment I discussion, to improve the capacity of the intersections.

To verify the reasonableness of the recommended improvements, a planning-level intersection capacity analysis was performed. Table 15 shows the results of that analysis for all signalized intersections in Segment II. The analysis utilized CATS year 2010 SRA forecast traffic volumes as a general reference. As noted in the table, assumptions for unavailable minor crossroad traffic volumes were made. Other capacity analysis assumptions are detailed in Appendix A.

The capacity analysis indicates that the recommended plan should produce reasonable V/C ratios at about 60 percent of the intersections in this segment. The intersections with year 2010 V/C ratios exceeding theoretical capacity are Pulaski Road (1.5) and California Avenue (1.04). Pulaski Road handles a great deal of regional traffic, as does California Avenue (although to a lesser extent). California Avenue, however, also serves the thriving commercial district at the Archer Avenue/California Avenue intersection.

Table 15
Evaluation of Signalized Intersection Operations Along
Segment II (Pershing Road to Cicero Avenue) of Archer Avenue

Intersection of Archer Avenue and:	Lane Arrangements ^b		Year 2010 ADT (vpd) ^c		V/C for Intersection ^d
	SRA	Cross Street	SRA	Cross Street	
Archer Avenue/ Pershing Road/(Rockwell Street)	T-TR LT-TR-R	LT-TR LL-TR	35,400	18,700	0.90
California Avenue/(40th Place) ^a	L-T-TR	L-TR	35,400	12,000	1.04
Sacramento Avenue ^a	L-T-TR	LTR	30,300	5,000	0.73
Pope John Paul II Drive ^a	T-TR TT	L-TR L-LR	30,300	12,000	0.93
Kedzie Avenue ^a	L-T-TR	T-TR	35,200	20,000	0.95
47th Street ^a	L-T-TR	L-T-TR	35,200	20,000	0.96
Lawndale Avenue ^a	L-T-TR	LTR	35,100	5,000	0.81
49th Street/Avers Avenue ^a	L-T-TR	LTR	35,100	5,000	0.81
Pulaski Road ^a	L-T-TR	L-T-TR	35,100	48,600	1.50
Keeler Avenue ^a	L-TT T-TR	LR LTR	25,400	5,000	0.58
Kostner Avenue ^a	L-T-TR	LTR	25,400	5,000	0.59
Cicero Avenue ^a	L-TT-TR L-TTT-R	L-TTT-R	21,500	48,900	0.79

Note: ^a Denotes SRA corridor.
^a Assumed for unavailable volumes: 20,000 vpd for major arterials, 12,000 vpd for minor arterials, 5,000 vpd for local roadways.
^b L = Left-turn lane; T = through lane; R = right-turn lane; and TR = through and right-turn lane.
^c ADT = Average Daily Traffic.
^d V/C = Volume to Capacity Ratio.

Public Transportation

Public transportation serves Segment II well, including one CTA elevated transit line, one Pace bus route, and numerous CTA bus routes. Although Metra's Heritage Corridor does not have a station on Archer Avenue (its nearest station is in Summit), it follows a path parallel to Segment II just over 1 mile to the north. CTA's newly-constructed Southwest line also follows a parallel path just south of the corridor, and has several nearby stations: the Kedzie Station at Kedzie Avenue and 49th Street, $\frac{5}{8}$ mile south of the corridor; the Pulaski Station at Pulaski Road and 51st Street, $\frac{1}{8}$ mile south of the corridor; and the Midway Station at 59th Street and Kilpatrick Avenue, $\frac{7}{8}$ mile south of the corridor. Rail stations should be marked clearly, and access to the stations should be visible from the SRA. Pedestrian access between Curie High School and the Pulaski Station on the Southwest line also should be improved. If feasible, the platform should be extended across Pulaski Road to provide access at the east side of Pulaski Road. Otherwise, the crosswalk at 51st Street should be marked and pedestrian signals should be installed.

If space permits, bus shelters should be installed at stops throughout the corridor. CTA currently plans to equip its entire fleet for signal pre-emption; signals along Pershing Road should be equipped similarly. Because signal pre-emption works best with "far-side" stops, bus stops should be located after signalized intersections. Also, locating Pershing Road bus stops after signalized intersections, while retaining near-side stops for intersecting routes, minimizes pedestrian crossings to transfer to connecting bus routes.

Construction and Right-of-Way Costs

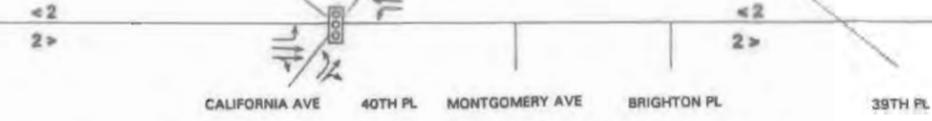
The consultant's opinion of the total cost of the recommended plan for Segment II is \$11.4 million in 1991 dollars (see Table 16). This total includes construction costs, reconstruction of structures, retaining walls, and right-of-way acquisition. The roadway reconstruction cost is estimated to be \$11.3 million, which includes roadway rebuilding, structures and retaining walls, and improving intersections and signalization.

Table 16
Opinions of Construction and Right-of-Way Cost
for SRA Improvements Along Segment II
(Pershing Road to Cicero Avenue) of Archer Avenue/Pershing Road
(1991 Dollars)

Roadway Reconstruction	\$4,980,000
Intersections (Cicero Avenue and Pulaski Avenue)	2,000,000
Structures/Retaining Walls (AT&SF and Belt Railway Structures and Retaining Walls)	4,100,000
Other (Transit Signal Pre-emption)	220,000
Subtotal	<u>\$11,300,000</u>
Right-of-Way	70,000
TOTAL	<u>\$11,370,000</u>

Next Signal at Sacramento Ave (1670 FT) Next Signal at Pershing Rd/Rockwell St (1670 FT)

TRAFFIC CONTROL AND LANE ARRANGEMENT



Eliminate "NO TURN ON RED" Signs from the Corridor and Replace on Adjacent Side Streets.

Traffic Signals Shall be Co-ordinated Throughout the Route.

All Cross Streets are Stop Sign Controlled Unless Otherwise Noted.

Prohibit All Parking Within 150 Feet of Signalized Intersections.



Widen Roadway from 56 Feet to 64 Feet Symmetrically from California Ave. to the West.

At California Ave/40th Pl See Intersection Detail Exhibit D-4

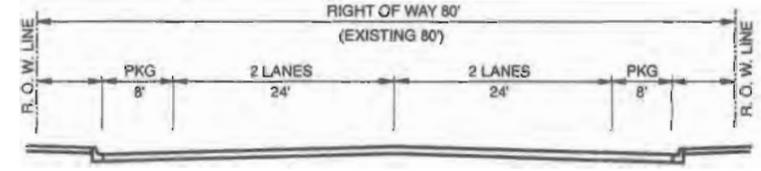
Widen Roadway from 60 Feet to 64 Feet Symmetrically from Pershing Rd. to California Ave.

Remove Parking on Archer Ave. on Approaches to California Ave. (550 Feet), and Lengthen Left Turn Lanes. Also, Remove Parking on California Ave. on Approaches to Archer Ave. (300 Feet). Develop Left Turn Lanes on Both Approaches.

Bus Stops are Co-ordinated to Minimize Pedestrian Crossings.

LEGEND

- EXISTING SIGNAL
- POTENTIAL SIGNAL
- SIGNAL TO BE REMOVED
- PROPOSED LANE ARRANGEMENT
- NUMBER OF LANES
- FUTURE RIGHT OF WAY LINE
- BUS STOP



ROADWAY SECTION A-A NORTH OF 39TH PL TO WEST OF CALIFORNIA AVE

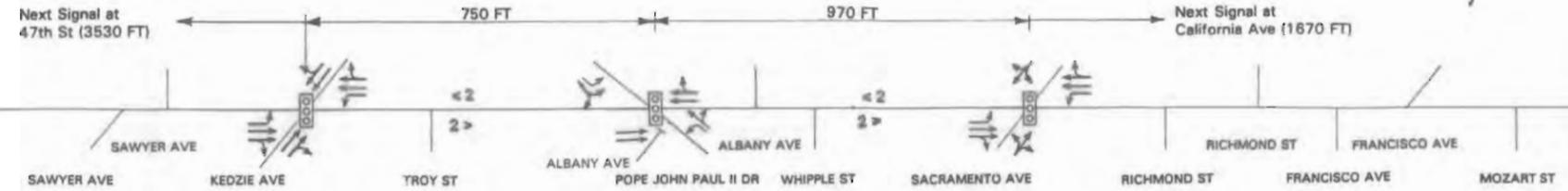
ARCHER AVE/PERSHING RD - PROPOSED PLAN

Prepared by CH2M HILL in association with METRO Transportation Group and EJM Engineering

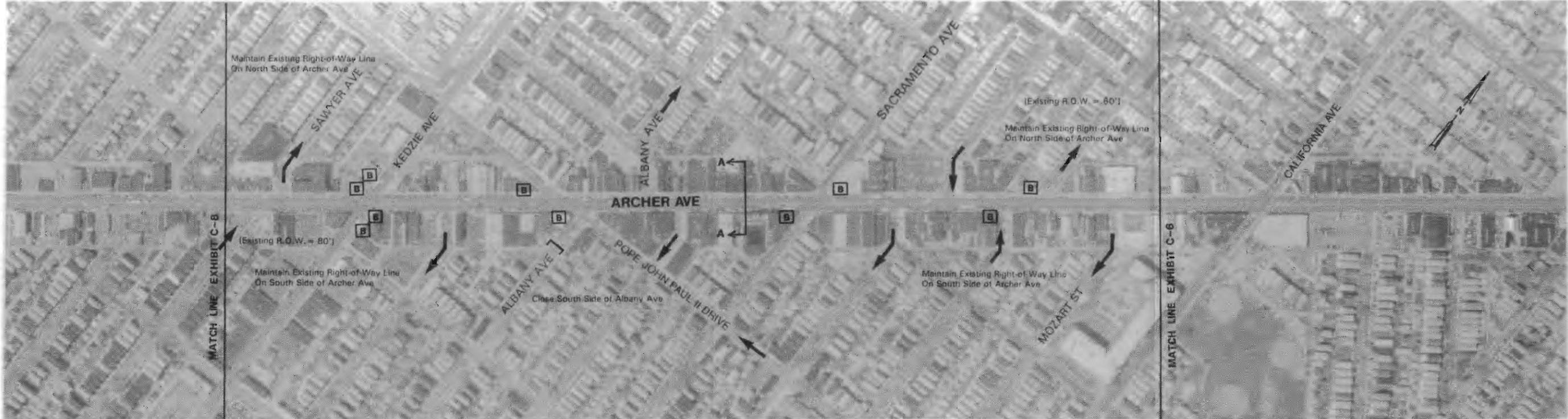
ILLINOIS DEPARTMENT OF TRANSPORTATION



TRAFFIC CONTROL AND LANE ARRANGEMENT



Eliminate "NO TURN ON RED" Signs from the Corridor and Replace on Adjacent Side Streets.
 Traffic Signals Shall be Co-ordinated Throughout the Route.
 All Cross Streets are Stop Sign Controlled Unless Otherwise Noted.
 Prohibit All Parking Within 150 Feet of Signalized Intersections.

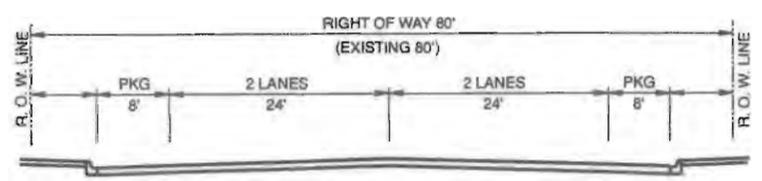


At Kedzie Ave See Intersection Detail Exhibit D-5 | Lengthen Left Turn Lanes. Prohibit Left Turns on Kedzie Ave. to Archer Ave. and Develop an Additional Through Lane on Kedzie Ave. at the Intersection.
 Remove Parking on Archer Ave. on Approaches to Kedzie Ave. (200 Feet).
 At Pope John Paul II Dr./Albany Ave. See Intersection Detail D-5
 Remove Parking on Archer Ave. on Approaches to Pope John Paul II Dr. (150 Feet) and Lengthen Left Turn Lanes. Remove Parking on Pope John Paul II Dr. (100 Feet) and Develop Left Turn Lanes on Both Approaches.
 Widen Roadway from 56 Feet to 64 Feet Symmetrically from East of Mozart St. to Kedzie Ave. | Bus Stops are Co-ordinated to Minimize Pedestrian Crossings.

LEGEND

- EXISTING SIGNAL
- POTENTIAL SIGNAL
- SIGNAL TO BE REMOVED
- PROPOSED LANE ARRANGEMENT
- NUMBER OF LANES
- FUTURE RIGHT OF WAY LINE
- BUS STOP

Widen Roadway from 60 Feet to 64 Feet Symmetrically from Kedzie Ave. to the West.



**ROADWAY SECTION A-A
EAST OF MOZART ST TO WEST OF SAWYER AVE**

ARCHER AVE/PERSHING RD - PROPOSED PLAN

Prepared by CH2M HILL in association with METRO Transportation Group and EJM Engineering
ILLINOIS DEPARTMENT OF TRANSPORTATION



TRAFFIC CONTROL AND LANE ARRANGEMENT

Next Signal at 49th St/Avers Ave (1430 FT) 690 FT Next Signal at Kedzie Ave (3530 FT)

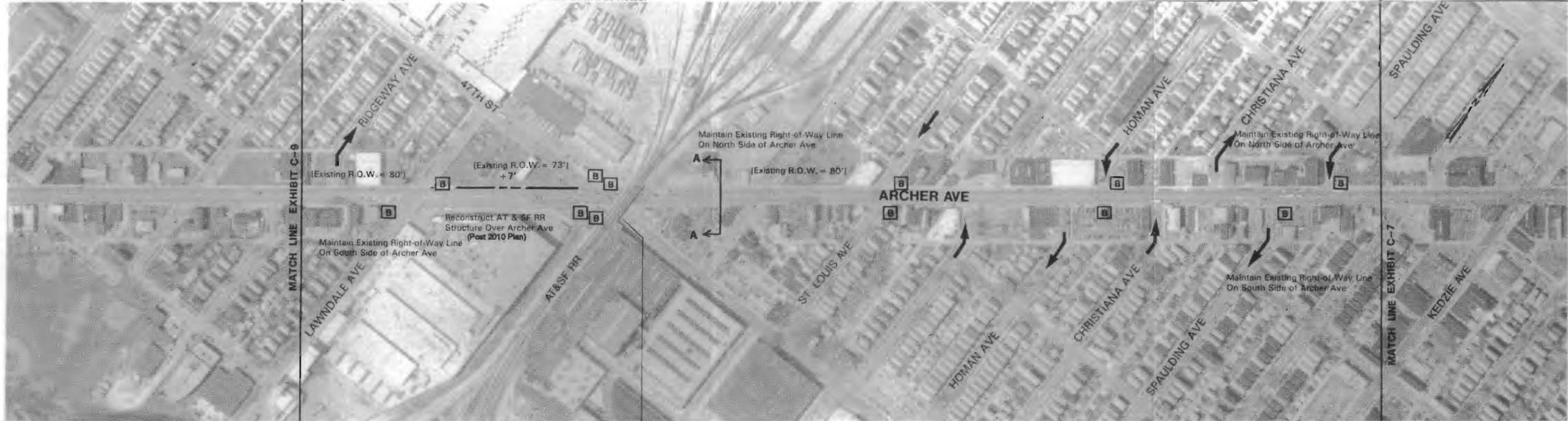


Eliminate "NO TURN ON RED" Signs from the Corridor and Replace on Adjacent Side Streets.

Traffic Signals Shall be Co-ordinated Throughout the Route.

All Cross Streets are Stop Sign Controlled Unless Otherwise Noted.

Prohibit All Parking Within 150 Feet of Signalized Intersections.



Widen Roadway from 60 Feet to 64 Feet Symmetrically from East of Spaulding Ave. to West of Lawndale Ave.

Increase Vertical Clearance at the Santa Fe RR to 14' 6".

Remove Parking on Both Sides of Roadway Near Intersection. Install Left Turn Lane to Homan Ave. (Westbound).

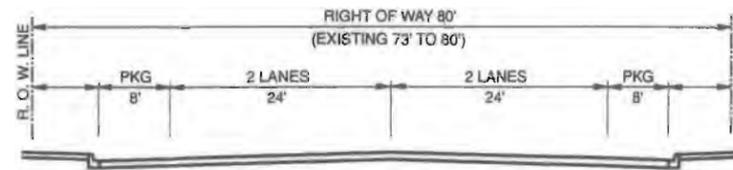
Remove Parking on Both Sides of Roadway Near Intersection. Install Left Turn Lane to Christiana Ave. (Eastbound).

Bus Stops are Co-ordinated to Minimize Pedestrian Crossings.

LEGEND

- EXISTING SIGNAL
- POTENTIAL SIGNAL
- SIGNAL TO BE REMOVED
- PROPOSED LANE ARRANGEMENT
- NUMBER OF LANES
- FUTURE RIGHT OF WAY LINE
- BUS STOP

Acquire Seven Feet of R.O.W. on North Side of Archer Ave. from 47th St. to Lawndale Ave.



ROADWAY SECTION A-A
EAST OF SPAULDING AVE TO WEST OF RIDGEWAY AVE

ARCHER AVE/PERSHING RD – PROPOSED PLAN

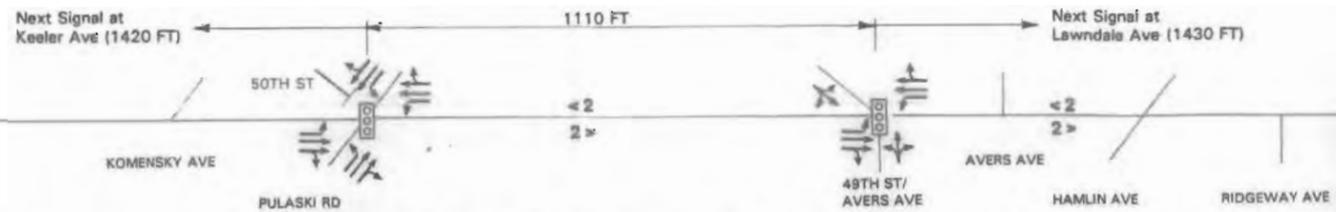
Prepared by CH2M HILL in association with METRO Transportation Group and EJM Engineering

ILLINOIS DEPARTMENT OF TRANSPORTATION



Scale: 0 100 200 feet

TRAFFIC CONTROL AND LANE ARRANGEMENT



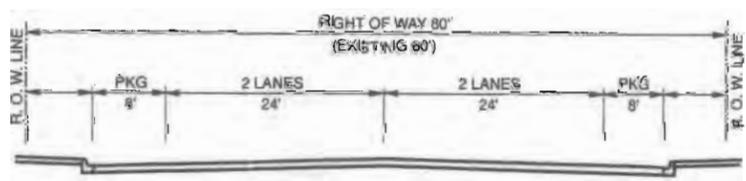
Eliminate "NO TURN ON RED" Signs from the Corridor and Replace on Adjacent Side Streets.
 Traffic Signals Shall be Co-ordinated Throughout the Route.
 All Cross Streets are Stop Sign Controlled Unless Otherwise Noted.
 Prohibit All Parking Within 150 Feet of Signalized Intersections.



Improve Pedestrian Access from Curie High School to the S.W. Transit Station. Mark Crosswalk at 51st St. and Pulaski Rd. Potentially Install Pedestrian Signal.
 At Pulaski Rd/50th St See Intersection Detail Exhibit D-6
 Provide a Drop Off/Pick Up Bay for Curie High School.
 Widen Roadway from 60 Feet to 64 Feet Symmetrically from East of Ridgeway Ave to West of Komensky Ave
 Bus Stops are Co-ordinated to Minimize Pedestrian Crossings.

LEGEND

- EXISTING SIGNAL
- POTENTIAL SIGNAL
- SIGNAL TO BE REMOVED
- PROPOSED LANE ARRANGEMENT
- NUMBER OF LANES
- FUTURE RIGHT OF WAY LINE
- BUS STOP



**ROADWAY SECTION A-A
EAST OF RIDGEWAY AVE TO WEST OF KOMENSKY AVE**

ARCHER AVE/PERSHING RD - PROPOSED PLAN



Prepared by CH2M HILL in association with METRO Transportation Group and EJM Engineering
ILLINOIS DEPARTMENT OF TRANSPORTATION



TRAFFIC CONTROL AND LANE ARRANGEMENT

Next Signal at Kostner Ave (1350 FT) ← → Next Signal at Pulaski Rd (1420 FT)



Eliminate "NO TURN ON RED" Signs from the Corridor and Replace on Adjacent Side Streets.

Traffic Signals Shall be Co-ordinated Throughout the Route.

All Cross Streets are Stop Sign Controlled Unless Otherwise Noted.

Prohibit All Parking Within 150 Feet of Signalized Intersections.

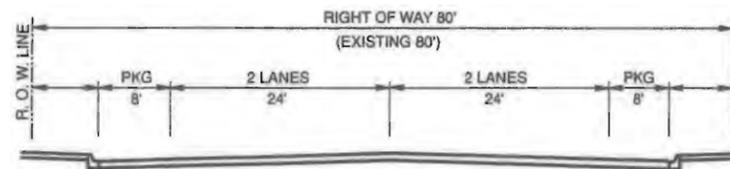


Widen Roadway from 60 Feet to 64 Feet Symmetrically from East of Karlov Ave. to West of Kolin Ave.

Bus Stops are Co-ordinated to Minimize Pedestrian Crossings.

LEGEND

- EXISTING SIGNAL
- POTENTIAL SIGNAL
- SIGNAL TO BE REMOVED
- PROPOSED LANE ARRANGEMENT
- NUMBER OF LANES
- FUTURE RIGHT OF WAY LINE
- BUS STOP



ARCHER AVE/PERSHING RD – PROPOSED PLAN

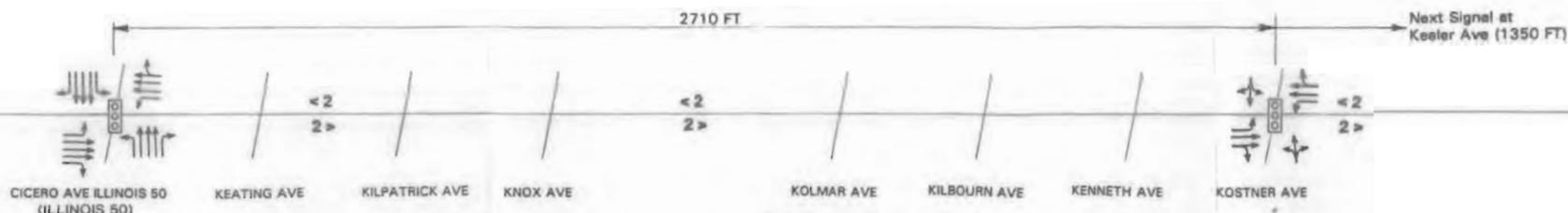
Prepared by CH2M HILL in association with METRO Transportation Group and EJM Engineering

ILLINOIS DEPARTMENT OF TRANSPORTATION

SRA Strategic Regional Arterial Planning Study EXHIBIT C-10

Scale: 0 100 200 feet

TRAFFIC CONTROL AND LANE ARRANGEMENT



Eliminate "NO TURN ON RED" Signs from the Corridor and Replace on Adjacent Side Streets.

Traffic Signals Shall be Co-ordinated Throughout the Route.

All Cross Streets are Stop Sign Controlled Unless Otherwise Noted.

Prohibit All Parking Within 150 Feet of Signalized Intersections.



Remove Parking on Both Sides of Roadway Near Intersection. Install Left Turn Lane to Kilpatrick Ave. (Eastbound)

Railroad Grade Separation is Needed at the BELT R.R. Minimum Vertical Clearance Should Be 14'6". Close Knox Ave. and Kolmar Ave.

Remove Parking on Both Sides of Roadway Near Intersection. Install Left Turn Lane to Kilbourn Ave. (Westbound)

Remove Parking on Both Sides of Roadway Near Intersection. Install Left Turn Lane to Kenneth Ave. (Eastbound)

Bus Stops are Co-ordinated to Minimize Pedestrian Crossings.

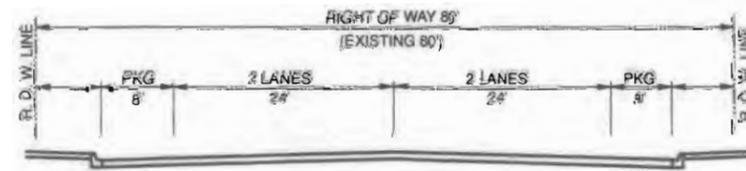
LEGEND

- EXISTING SIGNAL
- POTENTIAL SIGNAL
- SIGNAL TO BE REMOVED
- PROPOSED LANE ARRANGEMENT
- NUMBER OF LANES
- FUTURE RIGHT OF WAY LINE
- BUS STOP

End SRA

Limit of Profile Change

Limit of Profile Change



**ROADWAY SECTION A-A
EAST OF KOSTNER AVE TO CICERO AVE**

ARCHER AVE/PERSHING RD - PROPOSED PLAN

Prepared by CH2M HILL in association with METRO Transportation Group and EJM Engineering
ILLINOIS DEPARTMENT OF TRANSPORTATION

SRA Strategic Regional Arterial Planning Study EXHIBIT C-11



GENERAL NOTES

CHANNELIZATION DETAILS TO REFLECT IDOT DESIGN STANDARDS AND CRITERIA AT TIME OF FINAL PLAN PREPARATION.

ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB.

MAINTAIN EXISTING RIGHT-OF-WAY UNLESS OTHERWISE NOTED. FINAL RIGHT-OF-WAY REQUIREMENTS TO BE DETERMINED IN PHASE 1 PLANNING.

PARKING TO BE PROHIBITED WITHIN A MINIMUM OF 150 FEET OF SIGNALIZED INTERSECTIONS.

TAPERS TO BE DESIGNED IN ACCORDANCE WITH IDOT STANDARDS

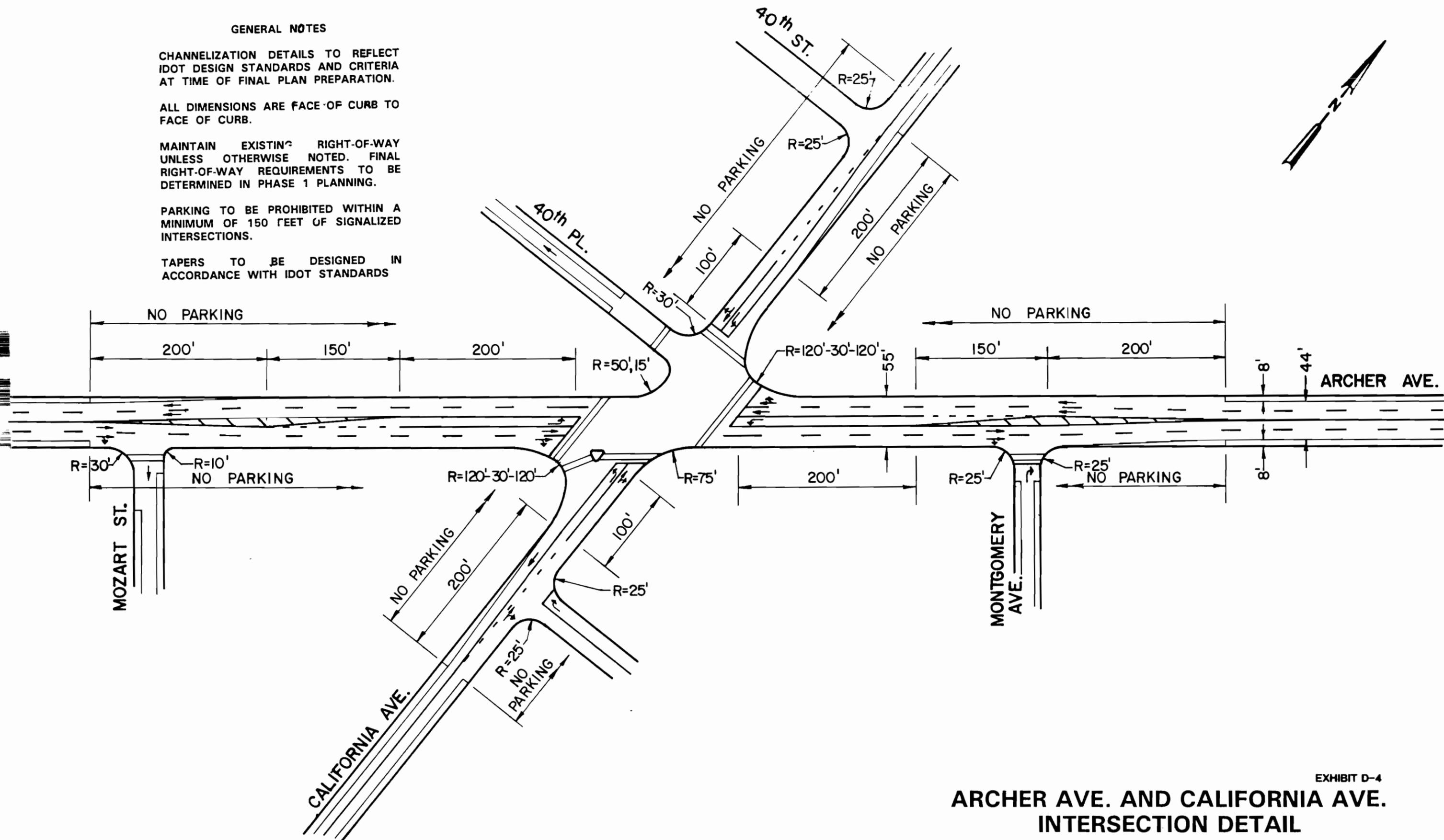
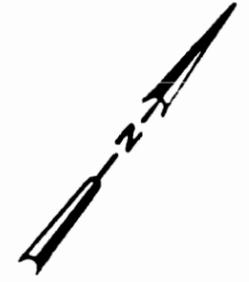
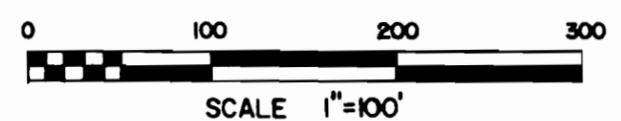


EXHIBIT D-4

ARCHER AVE. AND CALIFORNIA AVE. INTERSECTION DETAIL



GENERAL NOTES

CHANNELIZATION DETAILS TO REFLECT IDOT DESIGN STANDARDS AND CRITERIA AT TIME OF FINAL PLAN PREPARATION.

ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB.

MAINTAIN EXISTING RIGHT-OF-WAY UNLESS OTHERWISE NOTED. FINAL RIGHT-OF-WAY REQUIREMENTS TO BE DETERMINED IN PHASE 1 PLANNING.

PARKING TO BE PROHIBITED WITHIN A MINIMUM OF 150 FEET OF SIGNALIZED INTERSECTIONS.

TAPERS TO BE DESIGNED IN ACCORDANCE WITH IDOT STANDARDS

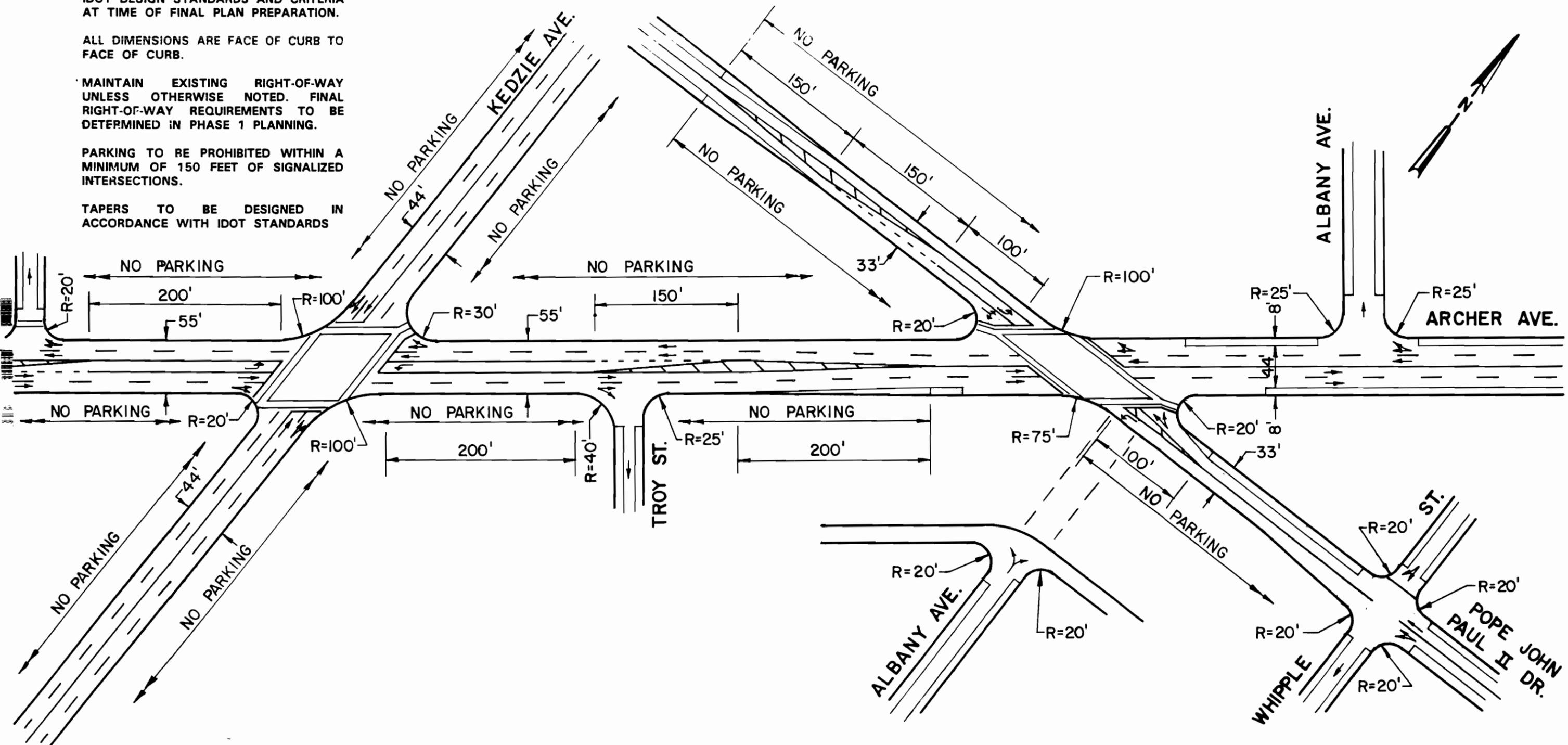
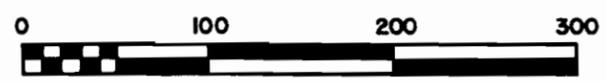
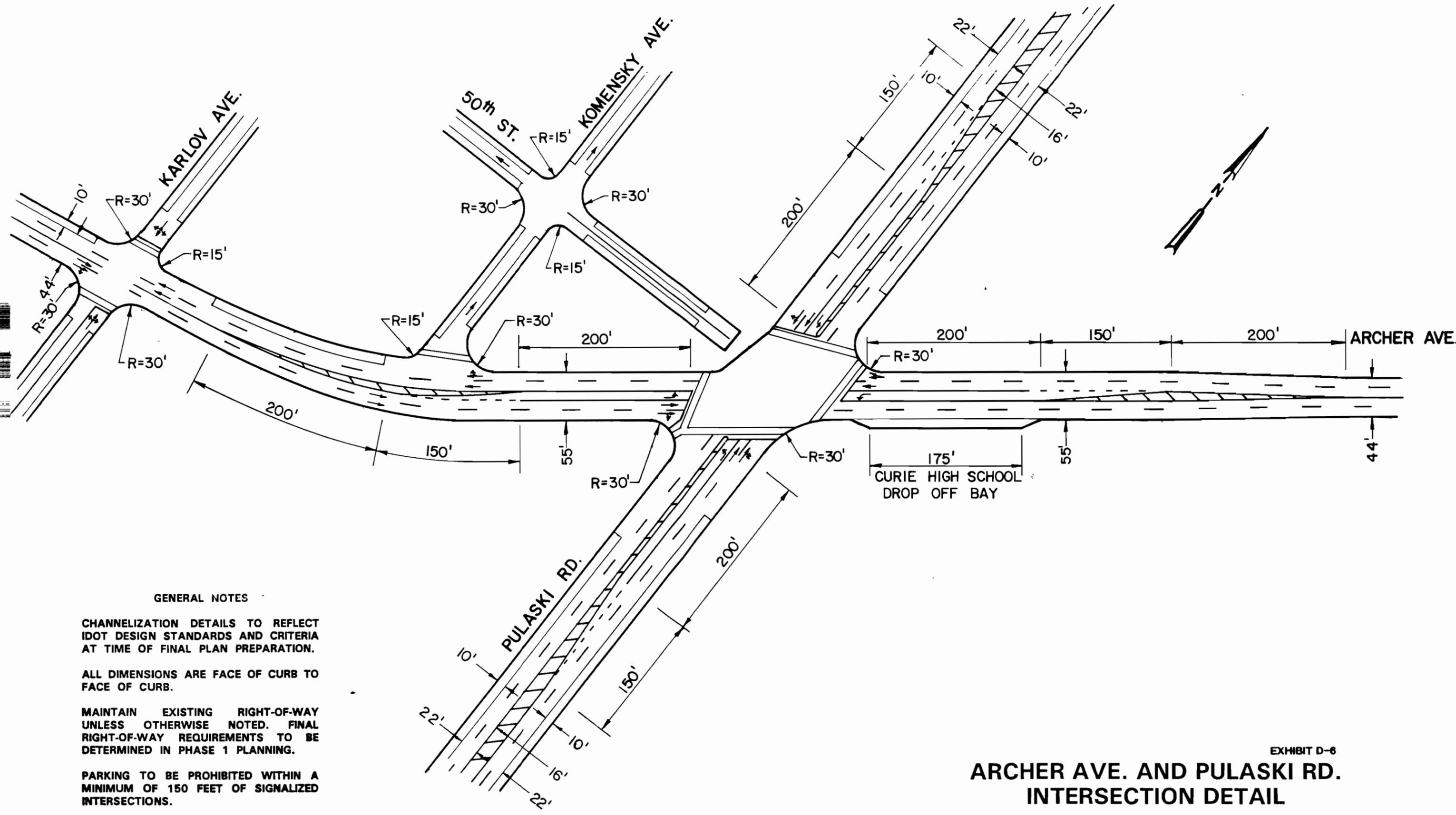


EXHIBIT D-6

**ARCHER AVE. AND
KEDZIE AVE.- POPE JOHN PAUL II DR.
INTERSECTION DETAIL**



SCALE 1"=100'



GENERAL NOTES

CHANNELIZATION DETAILS TO REFLECT IDOT DESIGN STANDARDS AND CRITERIA AT TIME OF FINAL PLAN PREPARATION.

ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB.

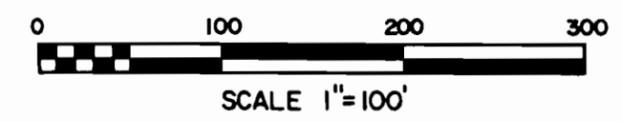
MAINTAIN EXISTING RIGHT-OF-WAY UNLESS OTHERWISE NOTED. FINAL RIGHT-OF-WAY REQUIREMENTS TO BE DETERMINED IN PHASE 1 PLANNING.

PARKING TO BE PROHIBITED WITHIN A MINIMUM OF 150 FEET OF SIGNALIZED INTERSECTIONS.

TAPERS TO BE DESIGNED IN ACCORDANCE WITH IDOT STANDARDS

EXHIBIT D-6

**ARCHER AVE. AND PULASKI RD.
INTERSECTION DETAIL**

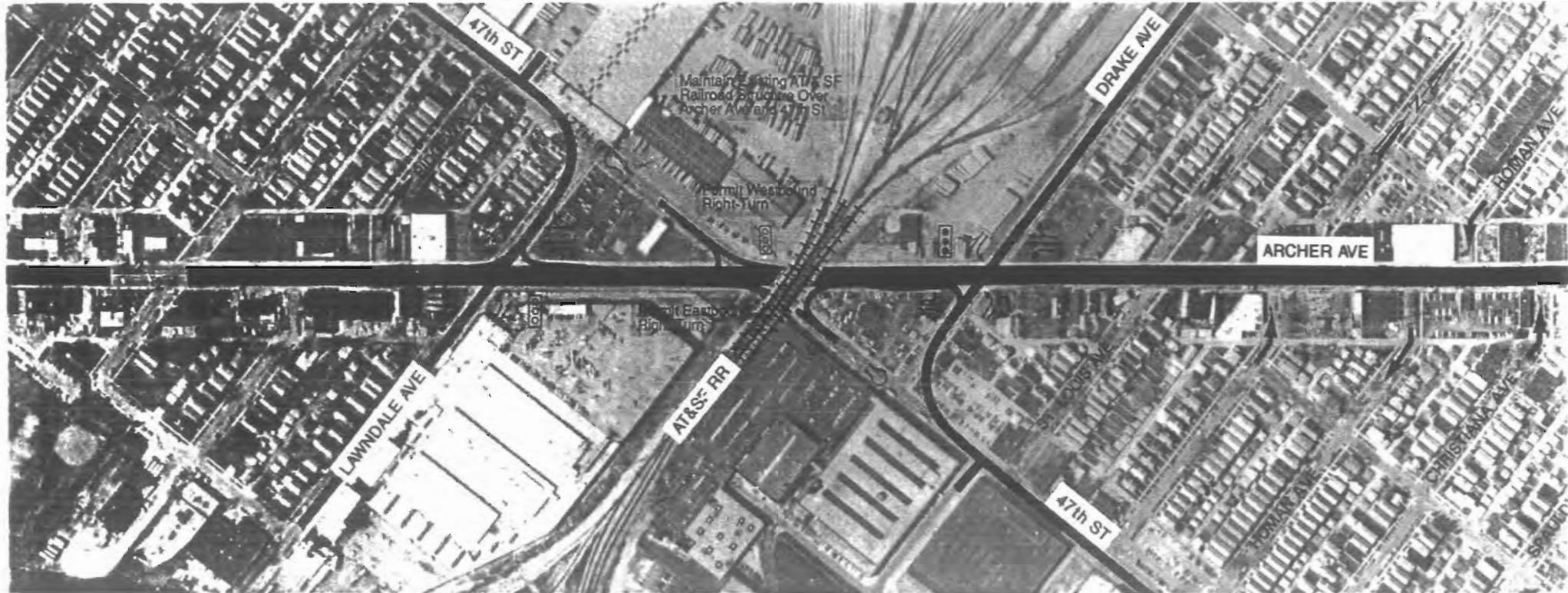


ADVANTAGES

- Need to Reconstruct AT&SF Railroad Structure is Delayed
- Provides Less Costly Improvement
- Improved Sight Distance to Signalized Intersection (Locates Intersection Away from Railroad Structure)
- Better Intersection Spacing
- 55th Street Provides Good Alternative East-West Route with Greater Continuity than 47th Street

DISADVANTAGES

- Disrupts Continuity of 47th Street (47th Street Continues 2.5 Miles to the west where it terminates)
- Creates additional turning traffic at the Archer Avenue Intersections of Lawndale and Drake
- Increased right-of-way requirements associated with 47th Street Relocation



LEGEND

- EXISTING SIGNAL
- POTENTIAL SIGNAL
- PROPOSED LANE ARRANGEMENT
- NUMBER OF THROUGH LANES
- SIGNAL TO BE REMOVED



Exhibit D-7
 POSSIBLE INTERIM IMPROVEMENT ALTERNATIVE
 AT ARCHER AVENUE AND 47TH STREET

Archer Avenue/Pershing Road Corridor Summary

This study addresses long-range transportation needs along the Archer Avenue/ Pershing Road SRA. The following discussion summarizes the expected operations and capacity of the Archer/Pershing SRA under future conditions. The summary also includes an opinion of costs to implement the plan as recommended. In addition, because of the significant investment required for implementing the recommended plan, a scheme for establishing priorities was developed and is discussed below.

Operational Analysis of the Archer Avenue/Pershing Road Corridor

An evaluation of traffic operations during high demand (peak) periods was performed for the entire corridor. The evaluation used techniques, procedures, and assumptions consistent with the *1985 Highway Capacity Manual (HCM)*, published as Transportation Research Board Special Report 209. The corridor was evaluated as an urban multi-lane arterial for its entire length.

The year 2010 CATS SRA traffic forecast was used to develop theoretical peak period traffic volumes for analysis purposes. Assumptions were made for the general volumes of crossroad traffic and for patterns of turning movements.

Other assumptions for signalization (green time/cycle, cycle lengths, effects of progression) were made consistent with the intersection analyses. These assumptions are documented in Appendix A. All data requirements or assumptions are compatible with the SRA concept and guidelines in the *HCM*.

The quality of operation of the Archer/Pershing SRA is a function of the character of the arterial (which affects the safe operating speed under free flow conditions), the number and spacing of signalized intersections, and the delay and level of service at those intersections. Appendix A shows a planning-level operational analysis of each signalized intersection along the Archer/Pershing SRA. Table A-2 in Appendix A summarizes the operational assumptions that were used to generate the arterial analysis for each intersection and arterial segment.

Table 17 summarizes the arterial analysis of the entire Archer/Pershing SRA corridor. The year 2010 CATS forecast traffic can be accommodated at level of service D or better for 5.75 miles of the 6.4-mile corridor. The exception is the section between the Damen Avenue exit ramp from I-90/94 and the Archer Avenue/Pershing Road intersection, which is projected to achieve a level of service of F. This section is projected to reach the highest traffic volume in this corridor by the year 2010. The projected traffic volume between Damen Avenue and Western Avenue would be 45,100 vpd, and for Western Avenue to the Archer Avenue/Pershing Road intersection, the projected traffic volume would reach 42,200 vpd.

Implementation Costs

A total investment of \$20.0 million in 1991 dollars will be necessary to implement the recommended plan for Archer Avenue/Pershing Road. The opinion of cost, detailed in Table 18, includes approximately \$19.9 million in roadway, intersection/interchange and structural improvements, and \$0.12 million in right-of-way acquisition. Because of the significant investment required for implementation, a scheme for establishing priorities was developed. The total cost was divided into short-term, basic, and post-2010 recommended sections.

Project Prioritization

The \$20.0-million implementation cost for Archer Avenue/Pershing Road is substantial. The SRA plan will require construction over many years. Table 19 presents a suggested program of priority improvements, categorized by short-term, basic, and post-2010 recommended sections.

Short-Term Recommendations

Short-term implementation recommendations represent plan elements or projects that address immediate problems and/or needs, that are generally low cost in nature, or that are intended to reflect specific known plans, activities, etc. that are expected to occur well before the year 2010. Examples of short-term improvements along the Archer/Pershing corridor include relatively low-cost TSM (transportation system management) projects, or projects that are related to improvements that are expected to be completed within the next several years.

Table 17

Summary of Archer Avenue/Pershing Road Urban Arterial Analysis

Segment	Segment Length (Miles)	Number of Signalized Intersections	Free Flow Operating Speed (mph)	100% of CATS "2010" Forecast	
				Average Peak Period Speed (mph)	LOS*
Dan Ryan Expressway (I-90/94) to Wallace Street	0.61	2	30	20	B
Wallace Street to Wood Street	1.50	5	30	20	B
Wood Street to Damen Avenue Exit Ramp	0.34	2	30	17	C
Damen Avenue Exit Ramp to Archer/Pershing Road	0.66	3	30	5	F
Archer/Pershing Road to Kedzie Avenue	0.96	4	30	13	C
Kedzie Avenue to Cicero Avenue	2.29	7	30	13	D
Overall Average Arterial Speed (mph)				15	—

*LOS = Level of service.

Table 18
Opinions of Construction and Right-of-Way
Costs for SRA Improvements
Along Archer Avenue/Pershing Road (1991 Dollars)

Summary of Total Cost—All Segments

	Short Term^a	Basic 2010 Plan^a	Recommended Post-2010^a	Total^b
Roadway Reconstruction	\$ -0-	\$ 7,750,000	\$ -0-	\$ 7,750,000
Intersections/Interchanges	-0-	3,100,000	-0-	3,100,000
Structures and Retaining Walls	-0-	1,600,000	8,000,000	8,600,000
Other	460,000	-0-	-0-	460,000
Subtotal	\$460,000	\$11,450,000	\$8,000,000	\$19,910,000
Right-of-Way	-0-	120,000	-0-	120,000
Total	\$460,000	\$11,570,000	\$8,000,000	\$20,030,000

^aSee items listed in Table 19.

^bThe total column is the sum of the Short Term and Basic 2010 Plan columns.

**Table 19
Pershing Road/Archer Avenue SRA Implementation Plan**

Exhibit No.	Description of Improvement	Priority of Improvement*	Comment
Segment I			
C-1	Eliminate "NO TURN ON RED" signs from the corridor and replace on adjacent side streets. Coordinate traffic signals. Prohibit all parking within 150 feet of signalized intersections. Coordinate bus stops. Increase vertical clearance at the C&WI railroad overpass. Prohibit left turns onto Parnell Avenue, Normal Avenue, Canal Street, Stewart Avenue, and Wells Street. Install directional signs to the 35th Street Station on the CTA-Rapid Transit Dan Ryan line.	S S S S B S S	
C-2	Eliminate "NO TURN ON RED" signs from the corridor and replace on adjacent side streets. Coordinate traffic signals. Prohibit all parking within 150 feet of signalized intersections. Coordinate bus stops. Prohibit left turns onto Lowe Avenue Implement recommended cross section.	S S S S S S B	
C-3	Eliminate "NO TURN ON RED" signs from the corridor and replace on adjacent side streets. Coordinate traffic signals. Prohibit all parking within 150 feet of signalized intersections. Coordinate bus stops. Implement recommended cross section.	S S S S S B	
C-4	Eliminate "NO TURN ON RED" signs from the corridor and replace on adjacent side streets. Coordinate traffic signals. Prohibit all parking within 150 feet of signalized intersections. Coordinate bus stops. Implement recommended cross section.	S S S S S B	
C-5	Eliminate "NO TURN ON RED" signs from the corridor and replace on adjacent side streets. Coordinate traffic signals. Prohibit all parking within 150 feet of signalized intersections. Coordinate bus stops. Increase vertical clearance at the PC Railroad. Prohibit left turns onto Campbell Avenue and Artesian Avenue. Reconstruct and redesign railroad overpass at Western Avenue. Install directional signs to the Archer/35th Street and Western/49th Street Stations on the CTA-Rapid Transit Southwest line. Implement recommended cross section.	S S S S P S P S B	

*S = Short Term; B = Basic 2010 Plan; P = Post 2010

Exhibit No.	Description of Improvement	Priority of Improvement*	Comment
Segment II			
C-6	<p>Eliminate "NO TURN ON RED" signs from the corridor and replace on adjacent side streets. Coordinate traffic signals. Prohibit all parking within 150 feet of signalized intersections. Coordinate bus stops. Remove parking at the Archer Avenue/California Avenue intersection to develop extended left-turn lanes. Prohibit left turns to non-signalized intersections. Implement recommended cross section.</p>	<p>S S S S S S B B</p>	
C-7	<p>Eliminate "NO TURN ON RED" signs from the corridor and replace on adjacent side streets. Coordinate traffic signals. Prohibit all parking within 150 feet of signalized intersections. Coordinate bus stops. Remove parking on Pope John Paul II Dr. at the Archer Avenue intersection to develop left-turn lanes. Close south leg of Albany Avenue. Remove parking on Archer Avenue at the Kedzie Avenue intersection to develop extended left-turn lanes. Prohibit left turns to non-signalized intersections. Install directional signs to the Kedzie/49th Street Station on the CTA-Rapid Transit Southwest line. Implement recommended cross section.</p>	<p>S S S S B B B S S S B</p>	
C-8	<p>Eliminate "NO TURN ON RED" signs from the corridor and replace on adjacent side streets. Coordinate traffic signals. Prohibit all parking within 150 feet of signalized intersections. Coordinate bus stops. Remove parking on both sides of Archer Avenue to install eastbound left-turn lane to Christiana Avenue. Remove parking on both sides of Archer Avenue to install westbound left-turn lane to Homan Avenue. Increase vertical and horizontal clearance at the AT&SF Railroad overpass. Prohibit left turns to non-signalized intersections except where indicated. Implement recommended cross section.</p>	<p>S S S S B B P B B</p>	

*S = Short Term; B = Basic 2010 Plan; P = Post 2010

Exhibit No.	Description of Improvement	Priority of Improvement ¹	Comment
C-9	<p>Eliminate "NO TURN ON RED" signs from the corridor and replace on adjacent side streets. Coordinate traffic signals. Prohibit all parking within 150 feet of signalized intersections. Coordinate bus stops. Provide a drop-off/pick-up bay for Curie High School. Close access to 50th Street. Improve pedestrian access from Curie High School to the Southwest Transit Station. Install directional signs to the Pulaski/51st Street Station on the CTA-Rapid Transit Southwest line. Prohibit left turns to non-signalized intersections. Implement recommended cross section.</p>	<p>S S S S B B S S S B</p>	
C-10	<p>Eliminate "NO TURN ON RED" signs from the corridor and replace on adjacent side streets. Coordinate traffic signals. Prohibit all parking within 150 feet of signalized intersections. Coordinate bus stops. Prohibit left turns to non-signalized intersections. Implement recommended cross section.</p>	<p>S S S S S S B</p>	
C-11	<p>Eliminate "NO TURN ON RED" signs from the corridor and replace on adjacent side streets. Coordinate traffic signals. Prohibit all parking within 150 feet of signalized intersections. Coordinate bus stops. Remove parking on both sides of Archer Avenue to install eastbound left-turn lane to Kenneth Avenue and Kilpatrick Avenue. Remove parking on Both Sides of Archer Avenue to install westbound left-turn lane to Kilbourne Avenue and Keating Avenue. Construct grade separation of Belt Railway. Close Knox Avenue and Kolmar Avenue. Install directional signs to the Cicero/59th Street Station on the CTA-Rapid Transit Southwest line. Prohibit left turns to non-signalized intersections except where indicated.</p>	<p>S S S S B B P P S B</p>	

¹S = Short Term; B = Basic 2010 Plan; P = Post 2010

Examples of short-term improvements include signalization upgrading, parking removal, and sign placement. The total cost of the short-term plan is estimated to be \$0.5 million in 1991 dollars.

Basic SRA Plan

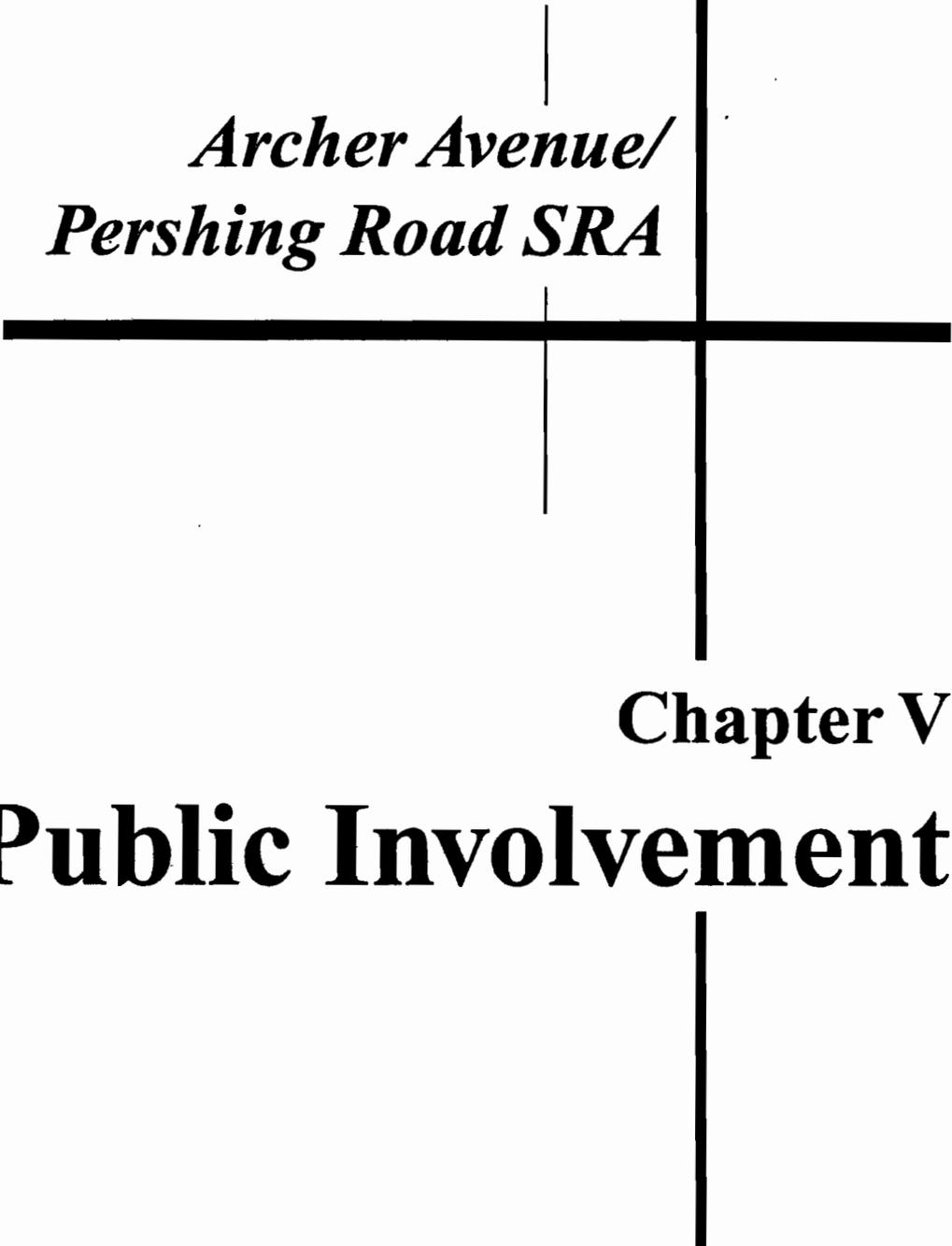
Basic SRA plan recommendations represent those elements or projects that would be constructed within the normal course of prioritization for any SRA project. These recommendations generally include most plan elements not designated as short term, including, roadway widening and resurfacing as well as major intersection improvements. The total cost of the basic SRA plan is estimated to be \$11.5 million in 1991 dollars.

Post-2010 Plan

Post-2010 plan recommendations represent elements of the SRA plan that are considered lower priority for a number of reasons. They generally include high-cost elements (e.g., new interchanges, river crossings, etc.) for which operational needs may not occur for many years. A small portion of the Archer/Pershing SRA plan represents such long-term needs.

One post-2010 plan recommendation is to redesign and reconstruct the railroad bridge over the Western Avenue intersection. Vertical clearance improvements are also needed at this location.

A second post-2010 plan recommendation is to construct a new railroad grade separation of the Belt Railway, which crosses Archer Avenue between Kolmar and Knox Avenues. This project would close Kolmar and Knox Avenues when the grade of Archer Avenue is changed. Reconstruction of the AT&SF Railroad structure over Archer Avenue and 47th Streets is also a recommended post-2010 plan. This improvement would provide greater horizontal clearance under Archer Avenue and 47th Street, permitting the implementation of left-turn lanes. The total cost for the post-2010 plan is estimated to be \$8 million in 1991 dollars.



*Archer Avenue/
Pershing Road SRA*

Chapter V

Public Involvement

Chapter V

Public Involvement

The Public Involvement Process

The public involvement process includes three elements: the SRA Advisory Panel Meetings, the bimonthly newsletters, and the Public Hearing.

An Advisory Panel was established to assist/comment on the study of the Archer Avenue/Pershing Road corridor, which extends from the Dan Ryan Expressway (I-90/94) to Cicero Avenue (Illinois 50). The panel included elected officials and technical staff representatives of the City of Chicago. Three Advisory Panel Meetings were held at key junctures throughout the study. At the first Advisory Panel Meeting on October 16, 1991, the existing conditions and concerns along the Archer Avenue/Pershing Road corridor were presented. The second Advisory Panel Meeting was held April 23, 1992. At this meeting, the overall long-range alternatives for Archer Avenue/Pershing Road were discussed and comments were requested. The third Advisory Panel Meeting was held January 28, 1993. At this meeting, the draft final report was reviewed with panel members.

In addition, bimonthly newsletters were published and distributed to panel coordinators, panel members, and local community officials. These newsletters were intended to update the local representatives on the progress of the study and any issues. Copies of the corridor newsletters are enclosed in this chapter.

Finally, a Public Hearing was held on March 18, 1993. This hearing was held prior to final publication of the Archer Avenue/Pershing Road SRA corridor report to allow the public to comment on the recommended plan. Public Hearing meeting minutes are enclosed.

Copies of the meeting minutes for each Archer Avenue/Pershing Road Advisory Panel Meeting and the Public Hearing minutes are contained in this chapter. Each section is separated by a single title sheet.

Advisory Panel Meeting Minutes

Corridor 10
Pershing Road/Archer Avenue
Wednesday, October 16, 1991
Chicago City Hall
121 North LaSalle Street

First Advisory Panel Meeting

List of Attendees

Mary Alice Brice	11th Ward	representing Ald. Patrick M. Huels
Donna DeGrazia	11th Ward	representing Ald. Patrick M. Huels
Martin Becklenberg		Chicago Dept. of Public Works
Steve Valenziano		Chicago Dept. of Planning
John Reilly		Chicago Area Transportation Study
Eugene Ryan		Chicago Area Transportation Study
Rich Starr		Illinois Dept. of Transportation
Tim Neuman		CH2M Hill
Elizabeth McLean		EJM Engineering
Joanne Schroeder		EJM Engineering
Paul J. Byrne		EJM Engineering

The meeting began at 2:18pm.

John Reilly from CATS introduced the panel to the 2010 Transportation System Development Plan and spoke about the SRA planning process.

Rich Starr of IDOT spoke about the Design Concept Report and methods on the SRA approach.

Tim Neuman of CH2M Hill described the handout.

Elizabeth McLean of EJM Engineering spoke about the individual panel sheets and elaborated on the "Planning Focus Areas".

Panel members added comments about areas of concern. Mary Alice Brice and Donna DeGrazia (11th Ward) addressed the Comiskey Park traffic flows. Presently, police guards re-route traffic near the ballpark before and after ballgames. It is their opinion that completely closing the entrances to 35th Street from the expressway may be necessary to insure that Comiskey Park traffic does not flow into residential areas. The 39th Street entrance to the Dan Ryan Expressway is their preferred alternative.

Also, Mary Alice Brice and Donna DeGrazia (11th Ward) spoke about the heavy truck traffic that exists along the east sections of the corridor. Commercial and industrial land uses meet at the intersection of Pershing Road and Halsted Street, increasing the traffic volumes.

From Halsted Street to Emerald Avenue planned development may also affect the traffic flows.

Also, Steve Valenziano (Chicago Dept. of Planning) mentioned the planned re-development of the Stockyards Northwest Quadrant located along Pershing Road starting at Ashland Avenue.

Martin Becklenberg (Chicago Dept. of Public Works) mentioned the investigation currently underway for a possible increase in vertical clearance for southbound traffic on Western Avenue at Pershing Road with the Penn Central Railroad viaduct. The current clearance is 13'6", but proposals may bring about improvements to 13'9". No actual programming for this improvement has been done.

Martin Becklenberg (Chicago Dept. of Public Works) also talked about the motor vehicle fuel tax bond issue released in order to improve vertical clearance at 47th Street/Santa Fe Railroad tracks. If any money remains, then intersection improvements may result. Operating within this intersection is difficult for trucks. The nearby railroad yard is 300 acres in size. The entrance to the yard is at Kedzie Avenue and is located 1 1/2 miles from Interstate 55 (Stevenson Expressway), but truck traffic to and from this yard affects Archer Avenue also. This yard is the largest in the United States.

The meeting closed at about 3:10pm.

MEETING MINUTES

TO: Rich Starr, IDOT

COPIES: Tim Neuman, CH2M Hill
Dave Miller, Metro
Liz McLean, EJM
Joanne Schroeder, EJM

FROM: Paul Byrne, EJM

DATE: April 23, 1992

TIME: 10:43 a.m. until 11:15 a.m.

SUBJECT: Strategic Regional Arterial System
Second Advisory Panel Meeting
Archer Avenue/Pershing Road
Corridor Limits- Cicero Avenue to the Dan Ryan Expressway (I- 90/94)

ATTENDEES: Jim Saag, CH2M Hill
Tim Neuman, CH2M Hill
Charles McLean, EJM
Joanne Schroeder, EJM
Paul Byrne, EJM
Tom Willman, CATS
Kathleen Rodi, CATS
Martin Becklenberg, Chicago DOT
John Byrnes, representing Alderman Patrick M. Huels, 11th Ward

Tim Neuman introduced the meeting. He gave a brief summary about the purpose of the SRA system. He mentioned that the SRA system is a substitute for the expressways, intended to alleviate some of the expressway congestion. He also gave a summary of what has been accomplished so far in this study. He then introduced this particular meeting stating that it is about a "broad focus" development (smaller scale exhibits).

Charles McLean gave the corridor presentation. He began with the "Existing Conditions" exhibit. In the "Existing Conditions" he mentioned that some parking restrictions exist, and in some areas parking is absent even if not controlled. He pointed out some areas of limited right-of-way, especially at the two ends of Pershing Road. He mentioned the existing traffic range. Then, he talked about the existing cross section, pointing out that two lanes exist in each direction, except in the area between Western Avenue and Rockwell Street, which is a constrained section.

In the "Planning Framework" exhibit, Charles McLean talked about the notes on the exhibits pertaining to the "City of Chicago Capital Improvement Program" future planning areas. Future

traffic ranges were then mentioned. He noted that traffic volumes will increase in the future. However, on Pershing Road, the projected traffic range east of Western Avenue is drastically higher than the projected traffic range west of Western Avenue. Afterwards, Charles McLean briefly discussed the ideal cross section.

In the "Alternatives Being Considered" exhibit, Charles McLean began speaking about the recommended cross sections. He said that the right-of-way changes throughout the corridor, so the cross sections also change throughout the corridor. Various cross sections were presented. The "General Alternatives" information was discussed. Within the "General Alternatives" information, Charles McLean talked about the multi-leg intersections, and in particular, mentioned that Archer Avenue is a diagonal street among other streets in a rectangular grid system. The frequency of multi-leg intersections occurs mainly because of this situation.

After the presentation, Tim Neuman added some comments. He mentioned the four Archer Avenue alternative cross sections. Also, he elaborated on the two cross section alternatives on Pershing Road between Rockwell Street and Western Avenue. He mentioned that either alternative would have a negative impact on the adjacent residential area. Because of the constrained right-of-way in this section, the only two alternatives are eliminating parking or acquiring the adjacent buildings.

Martin Becklenberg asked about extending the SRA of Archer Avenue further northeastward to Western Avenue to accommodate traffic turning between Archer Avenue and Western Avenue.

John Byrnes mentioned the truck traffic turning congestion at Pershing Road intersections between Ashland Avenue and Halsted Street. Also, numerous driveways enter the roadway allowing access that slows through traffic. We need to engineer a way to consolidate the driveways so trucks can enter without interfering through traffic.

Tim Neuman then stated that over the next 6 to 8 weeks we will decide which alternative is most reasonable. Particular input is needed in the section between Rockwell Street and Western Avenue.

John Byrnes would like to receive some information on what will be done, not just where the occurrences are located. A narrative is needed that is more translatable to the local area.

John Byrnes mentioned that he will provide the other two wards on the corridor our information, and then supply their input back to us if they have any comments.

MEETING MINUTES

TO: Rich Starr, IDOT

COPIES: Tim Neuman, CH2M Hill
Dave Miller, Metro
Liz McLean, EJM
Joanne Schroeder, EJM

FROM: Paul Byrne, EJM

DATE: January 25, 1993

TIME: 9:30 a.m. until 10:30 a.m.

SUBJECT: Strategic Regional Arterial System
Third Advisory Panel Meeting
Archer Avenue/Pershing Road
Corridor Limits- Dan Ryan Expressway (I- 90/94)
to Cicero Avenue (IL 50)

ATTENDEES: Rich Starr, IDOT
Tim Neuman, CH2M Hill
Charles McLean, EJM
Joanne V. Schroeder, EJM
Paul Byrne, EJM
Kathleen Rodi, CATS
Barbara Maloof, CDOT
John Tomczyk, CDOT
Duane Davy, Chicago DPD
Mary Alice Brice, representing Alderman Patrick M. Huels, 11th Ward
Tabatha McIntire, representing Alderman Mark J. Fary, 12th Ward
Dan Zochowski, representing Alderman James Laski, 23rd Ward

Tim Neuman introduced the meeting. He gave a brief summary about the purpose of the SRA system. He mentioned that the SRA system is a substitute for the expressways, intended to alleviate some of the expressway congestion. He also gave a summary of what has been accomplished so far in this study. He then introduced this particular meeting by summarizing the "Draft Final Report". He showed a brief overview of the chapters and mentioned that Chapter 4 will be covered in this meeting.

Charles McLean gave the corridor presentation. He began by briefly stating the traffic volumes and land uses. Then, in detail, he discussed the recommended plan exhibit sheets. Along Pershing Road, between the Dan Ryan Expressway and Ashland Avenue, parking generally does not occur. Official elimination of parking is recommended throughout this area to implement the desired cross section. Vertical clearance improvements are needed at railroad adjacent to Stewart

Avenue and railroad above Western Avenue. He also mentioned that the consultants recognize that the local community does not want to remove the traffic signals at Emerald and Union. Additional recommendations include prohibiting parking at Halsted Street for 400 feet from the intersection, adding 9' of R.O.W. on both sides of Pershing Road west of Halsted Street, adding one traffic signal east of Ashland Avenue to serve the Union Stock Yards commercial development, bus stop relocations, and the removal of 19 parking spaces from Pershing Road between Ashland Avenue and Paulina Street.

Dan Zochowski asked if parking will be removed from the service drive, which parallels Pershing Road between Wolcott Street and Damen Avenue. Charles McLean said that parking will not be removed there.

Charles McLean mentioned that McKinley Park officials are against the recommendation to remove parallel parking adjacent to the park and to expand the existing lot in McKinley Park. They believe that the existing parallel parking acts as a buffer for pedestrians against Pershing Road traffic. Also, expanding the parking lot to replace the parallel parking would be unrealistic because it would take a large amount of parkland.

Further west on Pershing Road, Charles McLean mentioned that the existing railroad bridge at Western Avenue is a problem. Also, the Pershing Road R.O.W. is narrow west of this area. Parking needs to be eliminated. Nearby vacant lots can be turned into designated off-street parking facilities. Part of the parking to be replaced will benefit the CTA garage employees. Tabatha McIntire asked if the CTA is planning additional parking for its garage. Charles McLean mentioned that the garage has recently been renovated and that additional parking is not part of their plan.

Charles McLean talked about the need to reduce the number of legs at the intersection where Pershing Road meets Archer Avenue. The recommendation is to close Rockwell Street south of Pershing Road. North of Pershing Road, Rockwell Street would be a one-way street away from the intersection. Left turns onto this street can only be made from CTA buses on Archer Avenue. Other recommended improvements further west on Archer Avenue include removing parking and extending left turn lanes at California and Kedzie Avenues, eliminating the left turn to Pope John Paul II Drive, and eliminating the south leg from Albany Avenue.

At Pulaski Road, three recommendations were discussed. A drop off/pick up bay is recommended on Archer Avenue to Curie High School. 50th Street is to be closed at the Archer Avenue/Pulaski Road intersection. Also, pedestrian access between the S.W. Transit Line and the east side of Pulaski Road needs to be improved. Unfortunately, extending the platform is not feasible. An alternative recommendation would be installing pedestrian signals and well-marked cross walks across Pulaski Road.

John Tomczyk asked about more detailed information about the relocation of bus stops. Joanne Schroeder said that she went over to CTA to explain this matter. CTA has traditionally favored near-side bus stops, but with the introduction of signal preemption, far-side bus stops will be necessary.

Barbara Maloof told the panelists that if they have any further questions or comments, they can send them to John Tomczyk.

Charles McLean talked about the Belt Railroad where a structure is recommended. Since this will be a grade separation, Kolmar and Knox Avenues may be closed from Archer Avenue.

John Tomczyk said that the city wants a detailed study of any proposed changes before any decisions are made. Barbara Maloof mentioned that she has reviewed many phase I studies in the past. Tim Neuman assured that this project is not even in the phase I stage as of yet. He calls this a pre-phase I stage.

Mary Alice Brice asked if these studies will eventually be broken up into the various wards. Tim Neuman replied that it will not be broken up any differently in the future, therefore, the projects will show no distinction between wards.

Panelist provided a suggested location for the public hearing. Barbara Maloof then said that at least 30 days notice is necessary before the public hearing for the consultant to provide related information to the public.

John Tomczyk stated that recommendations for this project will undergo processes for capital improvements, budgeting, etc.... before any plans are constructed.

Tim Neuman concluded by saying that local input is needed from the wards about these and any new recommendations.

These minutes were prepared by Paul Byrne, EJM Engineering. Please forward any additions or corrections.

Bimonthly Newsletters

SRA SPOTLIGHT

PERSHING/ARCHER CORRIDOR ADVISORY PANEL

THE SRA PROJECT

Introduction

The 2010 Transportation System Development Plan adopted by the Chicago Area Transportation Study (CATS) and the Northeastern Illinois Planning Commission (NIPC) recognizes that not all long-distance highway travel can be handled by the expressway system. Realizing that the arterial system will have to carry some long-distance trips, the 2010 Plan designated a system of Strategic Regional Arterials (SRAs) to supplement the expressway system.

The SRA system is a 1,340-mile network of existing roads in the Northeastern Illinois region. They create a network of 66 routes intended to serve as a second tier to the expressway system. The regional highway system, consisting of existing and planned expressways and strategic regional arterials is shown on the map to the right.

Spacing of routes that comprise the SRA system was determined based upon the projected levels of future travel demand within different parts of the region, ranging from about 3 miles apart in the most densely developed areas to about 8 miles apart in predominantly rural areas. CATS estimates travel in the year 2010 will be 23 percent more than for 1980.

Design Concepts

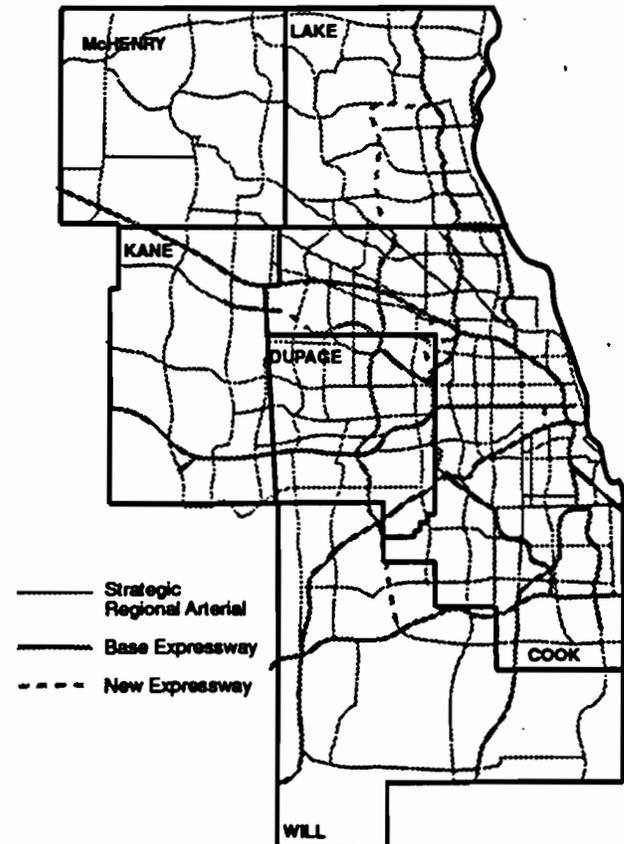
A report on design concepts for the SRA system, prepared by Harland Bartholomew & Associates, Inc., was endorsed by the CATS Policy Committee on January 31, 1991, for use as a guide but not policy in the planning of the SRA system. Some of the design techniques and concepts recommended for use in implementing the objectives of the SRA system are:

- **Signalization**—Including provision of new signals, interconnection of signals, and signal timing;

- **Intersection Improvements**—Consisting of provision of turn lanes, channelization, and restriction of certain movements;
- **Adding Lanes**—To achieve a desirable cross section for urban, suburban, and rural areas;
- **Bus Service Improvements**—Including bus stops and traffic signal preemption;

(Continued on Page 4)

2010 STRATEGIC REGIONAL ARTERIAL SYSTEM



SRA—ONE PART OF OPERATION GREEN LIGHT

SRA is one part of a much larger project to address traffic congestion: Operation Green Light. Other activities are outlined below.

Develop Major Transit/Highway Facilities

This element will contribute to freeway and transit projects in the 2010 Plan. Also, it will begin engineering studies and preserve right-of-way for future routes.

Improve Other Key Arterial Roadways

If the SRA network is to carry regional traffic, the remaining roadways must play a more important role in carrying local traffic. This element will address improvements that will make them more efficient.

Identify Strategic Transit Improvements

There are two goals for this element: (1) to make

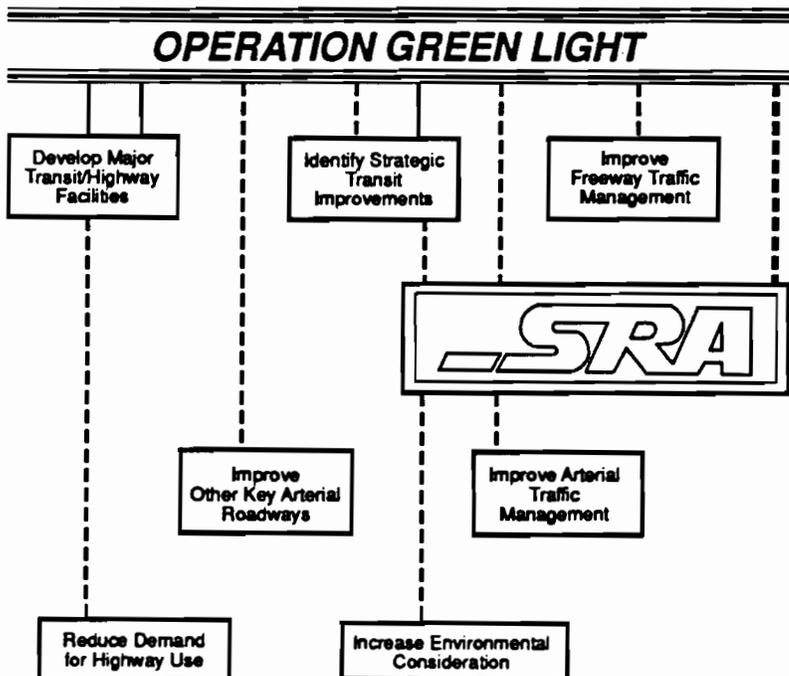
transit more convenient and swift and (2) to encourage more pedestrian and bicycle routes.

Improve Freeway Traffic Management

Information about accidents and blocked lanes is available almost immediately. This element will develop ways to provide this information to other drivers and to emergency personnel more quickly. Other priorities are controlling the rate at which vehicles enter the freeway and continuing the installation of new toll collection equipment.

Improve Arterial Traffic Management

Like freeways, better information systems for these routes will reduce congestion. Providing this information to individual drivers will require sophisticated systems. New equipment for private cars is being tested. Traffic signal networks are also very important. SRA will address these same topics.



Reduce Demand for Highway Use

This element examines ways to reduce the number of vehicles on the road, particularly at rush hours. Increasing the number of people in each vehicle is the purpose of most strategies. Ride-sharing and mass transit offer ways that commuters can help. Businesses could offer preferred parking to people sharing rides and support the costs of sharing rides. This element also encourages shifting work schedules.

Increase Environmental Consideration

Studies of ways to reduce noise and air pollution, to improve the appearance of roads, and to increase cooperation among local governments are all part of this element.

STRATEGIC REGIONAL ARTERIALS AND THE ROADWAY HIERARCHY

As shown in the illustration below, the two most important factors that define the classification of a street are its access function and movement function. Street classifications range from the freeway, which has complete access control and carries mostly through traffic, to local streets with unrestricted access and no through traffic.

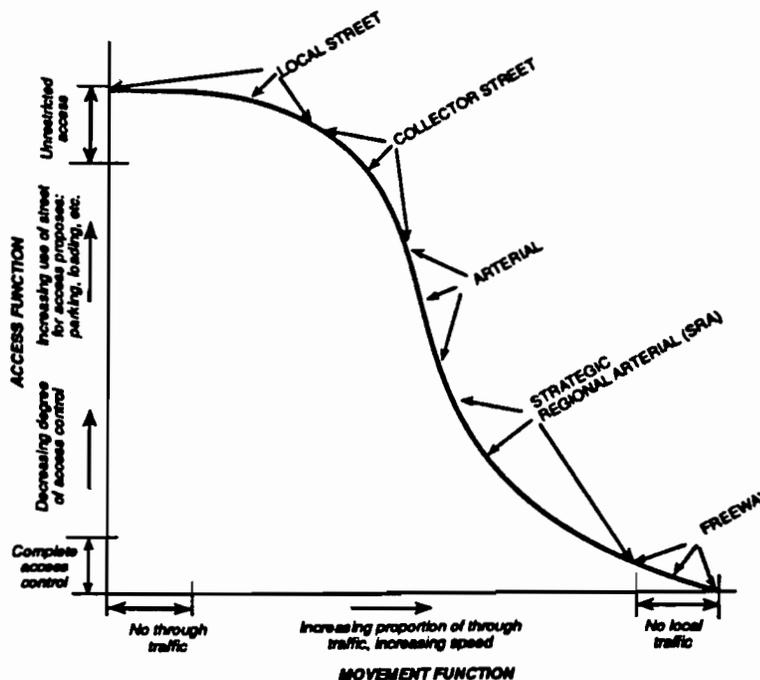
Freeway—The function of a freeway is to provide regional transportation for large volumes of traffic over long distances. There is no parking on a freeway. Access is controlled by on- and off-ramps that are generally spaced at least a mile apart. Distance or height often separate the freeway from the land around it. Expressway, superhighway, parkway, and tollway are all terms used to describe freeway-like roads.

Strategic Regional Arterial (SRA)—A second tier to the freeway system. These routes were selected because they carry, or are projected to carry, large volumes of long-distance traffic. As a group, they form a network that can carry such traffic to and from locations the freeway system cannot. They can also handle some of the overflow from the freeway system. Because of their strategic importance to regional travelers, IDOT and CATS are working to ensure they receive needed improvements. Recommendations concerning parking, access, traffic control, transit, lane additions, and intersection widening are examples of typical improvements.

Arterial—An arterial has two functions: (1) the primary purpose of an arterial road is to carry traffic within the region; and (2) it serves the homes and businesses along it. Parking is sometimes allowed, especially in older commercial centers. Other streets and the properties along it are connected directly. Usually, the roadway is not separate from the land around it.

Collector—The collector street directs traffic from local streets to arterials or local destinations such as shopping, schools, and office developments. The collector looks like the arterial, but it covers less distance, so it carries less regional traffic.

Local—A local street provides access to property. Moving traffic is a secondary function. Local streets route traffic onto a collector or arterial street as quickly as possible. Parking is usually allowed.



MOVEMENT ACCESS FUNCTION OF ROADWAY TYPE

Reference: Institute of Traffic Engineers. *System Considerations for Urban Arterial Streets*. October 1968. (Modified by CH2M HILL)

THE SRA PROJECT (Continued from Page 1)

- Access Management—To reduce conflicts and improve safety;
- Median Control—To provide for left-turning vehicles, direct turning movements to desired locations, and reduce centerline conflicts;
- Structural Clearance Improvements—Both vertical and horizontal clearances;
- Traffic Operational Improvements—Such as signing and pavement markings; and
- Drainage Problem Correction—Whenever required.

The design concepts also address criteria and conditions from removal of curb parking and implementation of high-occupancy vehicle (HOV) lanes.

Studies of SRA Routes

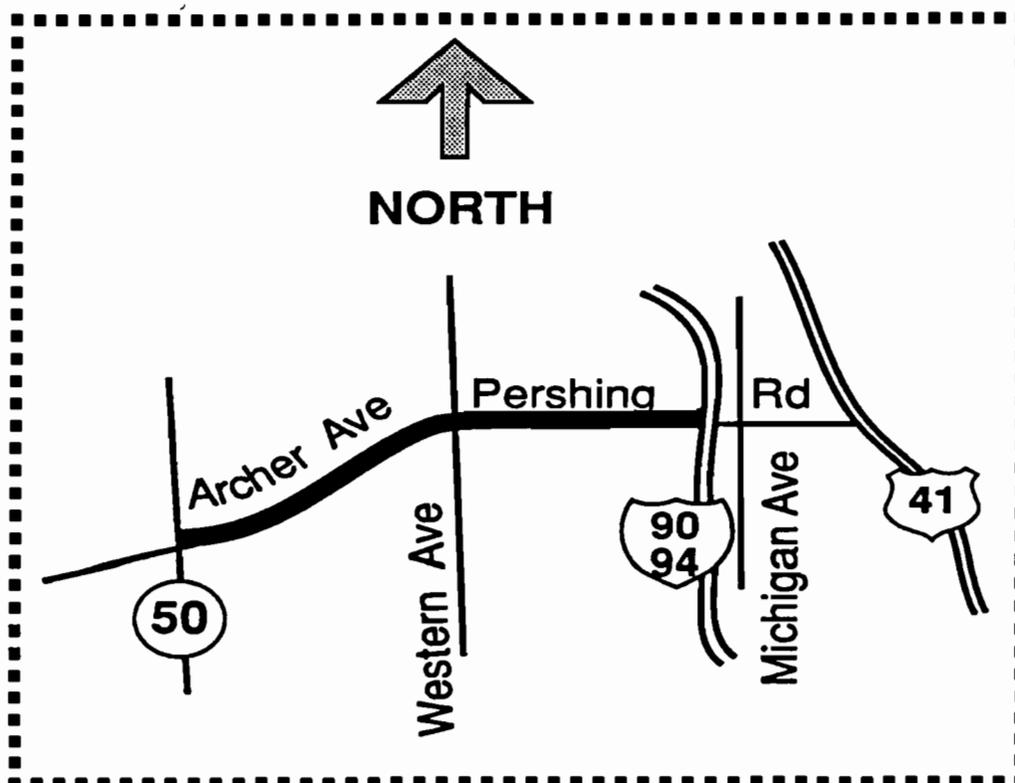
The concepts and standard developed thus far and modified or enlarged upon as work progresses will be applied to the entire 1,340 miles of SRA routes in five consecutive studies. This study, being accomplished by the consulting firm of CH2M HILL, Inc., is concerned with a total of 305 miles of SRA routes in 12 corridors. The routes selected for this phase of the SRA study

process reflect a variety of area types—from rural U.S. 14 in McHenry County to suburban settings such as Barrington Road in Cook County or County Farm Road in Du Page County, and urban Pershing Road and Archer Avenue in the City of Chicago. The resultant plans for each of these routes will include both short- and long-term improvements. Studies will be made of additional sets of roadways each year beginning in 1992 until the entire SRA system has been completed.

A second part of this project consists of identifying and evaluating performance parameters to be used for increasing the effectiveness of various improvements along the SRA routes. This work will be carried on concurrently with the individual SRA corridor analyses.

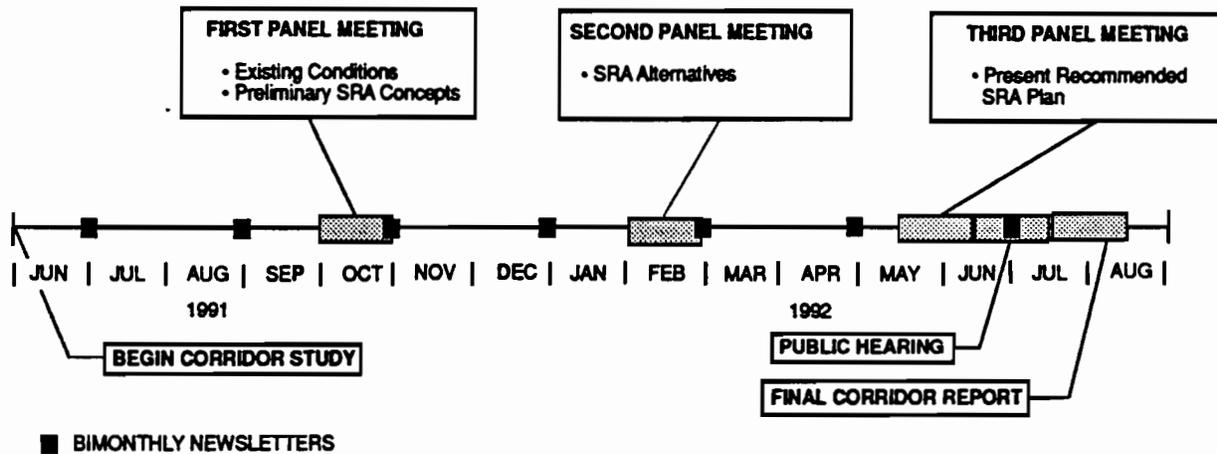
The Pershing/Archer Corridor

The map pictured below shows the extent of the Pershing Road/Archer Avenue SRA Corridor that is the concern of this Advisory Panel. The corridor, which is located in Cook County, extends from Interstate 90/94 (Dan Ryan Expressway) to Illinois Route 50. The total length of this corridor is approximately 6 miles.



STUDY PROCESS AND SCHEDULE

CORRIDOR 10—PERSHING ROAD/ARCHER AVENUE FROM I-90/94 TO ILLINOIS ROUTE 50



ROLE OF THE ADVISORY PANEL

Who should be on the Panel?

The panel is composed of government representatives of jurisdictions along this corridor. The panel may also wish to add representatives from business and community organizations along the route.

What are the duties of the Panel?

The panel is responsible for reviewing and commenting on the study recommendations and conclusions. Panel members also assist the consultant team by identifying and assembling specific data and information about land use, transportation, and development within their respective jurisdiction. During July and August, the Chicago Area Transportation Study (CATS) will be contacting the advisory panels on behalf of the consultant team to gather corridor-specific data.

How often will the Panel meet?

There are three planned Panel meetings involving the consultant, the Illinois Department of Transportation, and CATS. The Advisory Panel may also elect to meet at other times. It would be the responsibility of the coordinator of the Panel to inform members of topics and arrange the program.

Will the consultants be available to meet separately with representatives of all the communities along the route?

No. The Advisory Panels are the only formal community contact included within the contract for consultant services. However, the consultant team does plan to meet informally with community officials, as needed, to gather information and identify local concerns.

SPOTLIGHT ON THE SPOTLIGHT

What to Expect in Future Editions. . .

The SRA Spotlight will be issued about every 2 months during the course of the study. Future issues will be designed to keep you abreast of study progress and answer your questions. Some features of future Spotlights will be:

- Reports on project developments such as panel meetings, public hearings, and other forums;
- A regular section presenting answers to questions raised at corridor meetings for this corridor, or in other corridors if the information would be universally useful;
- A status report to keep you up-to-date on study findings, and recommendations; and
- Announcements of forthcoming activities that will involve panel members and others in the corridor.

There is also a form on the facing page that you are encouraged to use to give us your views and ideas regarding future issues of the Spotlight.

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SRA SPOTLIGHT
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Publisher:

The Illinois Department of Transportation

Editor:

CHM HILL

For:

The Strategic Regional Arterials Plan

Advisory Panel

Coordinator:

Marty Becklenberg
Chicago Department of Public Works

Panel Members:

Chicago

For More Information, Please Contact:

Marty Becklenberg
Chicago Department of Public Works
320 N. Clark Street
Chicago, Illinois 60610

SRA SPOTLIGHT

PERSHING/ARCHER CORRIDOR ADVISORY PANEL

SRA ROUTE TYPES

The extent of the Strategic Regional Arterial (SRA) network was described in Newsletter Number One. It consists of 1340 miles of existing roads in Northeastern Illinois, encompassing 146 route segments in the six-county area. Within this network there are significant differences in the roadway environment which determine how various types of routes may function in the system. Three different types of SRA routes have been designated, corresponding to three different types of roadway environment

- **Urban Routes**
- **Suburban Routes**
- **Rural Routes**

The designation of route types within the overall SRA system reflects the density of development within the different portions of the region. The projected density of households for the year 2010 was used as the criterion for defining density of development for the route types. Densities which correspond to each of these route types are:

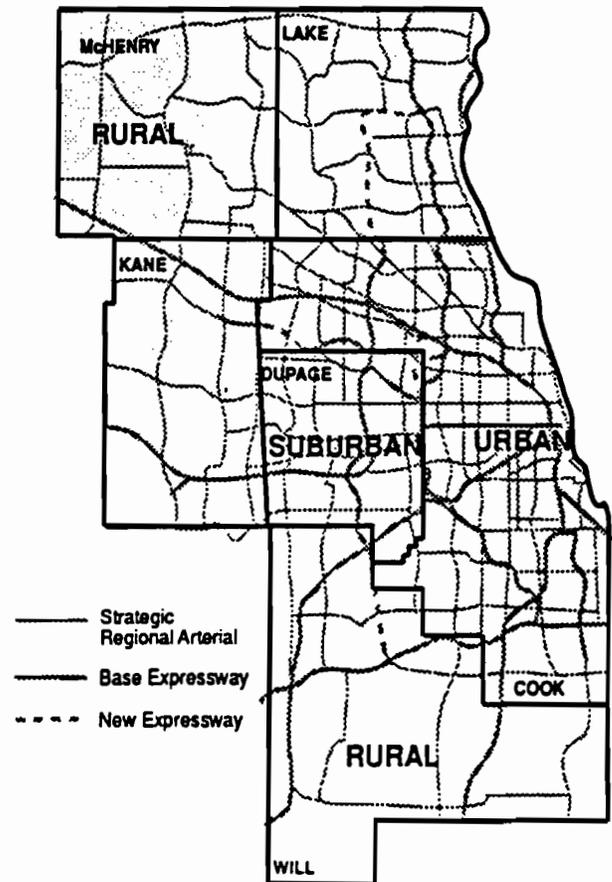
- **Urban routes: Densities over 5.0 households per acre by 2010.**
- **Suburban routes: Densities between 0.5 and 5.0 households per acre by 2010.**
- **Rural routes: Densities less than 0.5 households per acre by 2010.**

The areas for each route type are shown in the accompanying map. Urban routes are located in the City of Chicago and adjacent portions of more densely

developed suburbs such as Oak Park. Suburban route designations encompass most of suburban Cook and Lake Counties, all of DuPage County, and the more developed portions of McHenry, Kane and Will Counties. Within each of the three areas, continuity of route type is maintained based upon the overall density of 2010 development.

The *Design Concept Report*, prepared in 1990 and endorsed by the Policy Committee of the Chicago Area

2010 STRATEGIC REGIONAL ARTERIAL SYSTEM



ROADWAY FEATURES RELATED TO TYPE OF FACILITY

Transportation Study (CATS) earlier this year, set out desirable characteristics for each type of SRA route in year 2010.

Urban Routes

The desirable cross-section for SRA routes in urban areas is shown below. It consists of two traffic lanes in each direction, preferably with a median to separate the traffic flows and provide protection for turning vehicles. An additional curb lane may be provided in some circumstances for use by buses or other high-occupancy vehicles (HOV's). Curb parking is not recommended; it should be replaced in offstreet facilities wherever possible.

All major intersections on urban SRA routes would be signalized and interconnected into signal networks or signal systems with pedestrian actuation where needed. Intersections would also provide left- and right-turn lanes where right-of-way is available.

Transit service enhancements would be considered on urban SRA routes which accommodate bus routes. Actions would also be taken to manage access thereby improving traffic operations and enhancing safety.

Suburban Routes

The desirable cross-section for SRA routes in suburban areas is shown below. Recommended features are three through lanes in each direction, a raised median and turn lanes at intersections. Capacity increasing measures also include signal synchronization, transit and pedestrian amenities, and policies related to access and parking.

Major intersections and interchanges with other SRA routes are of prime concern in the suburban areas (and in rural areas, discussed next). Left- and right-turn lanes would be provided at all major signalized intersections. At many suburban intersections, turning movements are very high and may warrant double left turn lanes. A grade-separated interchange would be considered, at intersections between two SRA routes, if right-of-way is available and if conditions warrant.

Access management is another key consideration

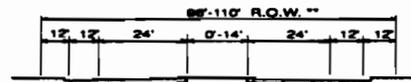
in suburban areas. It is recommended that access to abutting properties be limited to right-in, right-out traffic movements. In suburban areas where there are numerous curb cut access points to properties, these may be combined into a single point.

Rural Routes

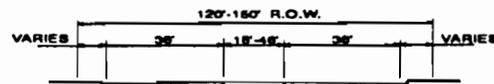
Desirable cross-sections for SRA routes in rural areas are shown below for facilities with and without frontage roads. The rural SRA route would consist of two travel lanes in each direction with left-turn lanes at all intersections and a wide median. As with suburban routes, all major intersection would be signalized and a grade-separated interchange would be considered wherever two SRA routes intersect.

Frontage roads would be considered on rural SRA routes if there are a number of closely spaced driveways and/or groupings of potentially dangerous intersections. Particular attention would be paid to the treatment of frontage road intersections at cross streets that access the SRA systems.

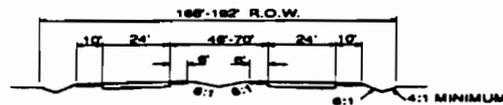
CROSS SECTIONS



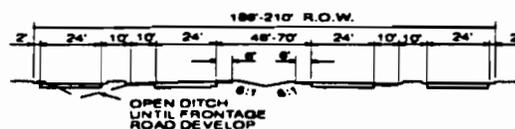
URBAN



SUBURBAN



RURAL



RURAL WITH FRONTAGE ROADS

ROUTE TYPE CONSIDERATION IN THE PERSHING/ARCHER CORRIDOR

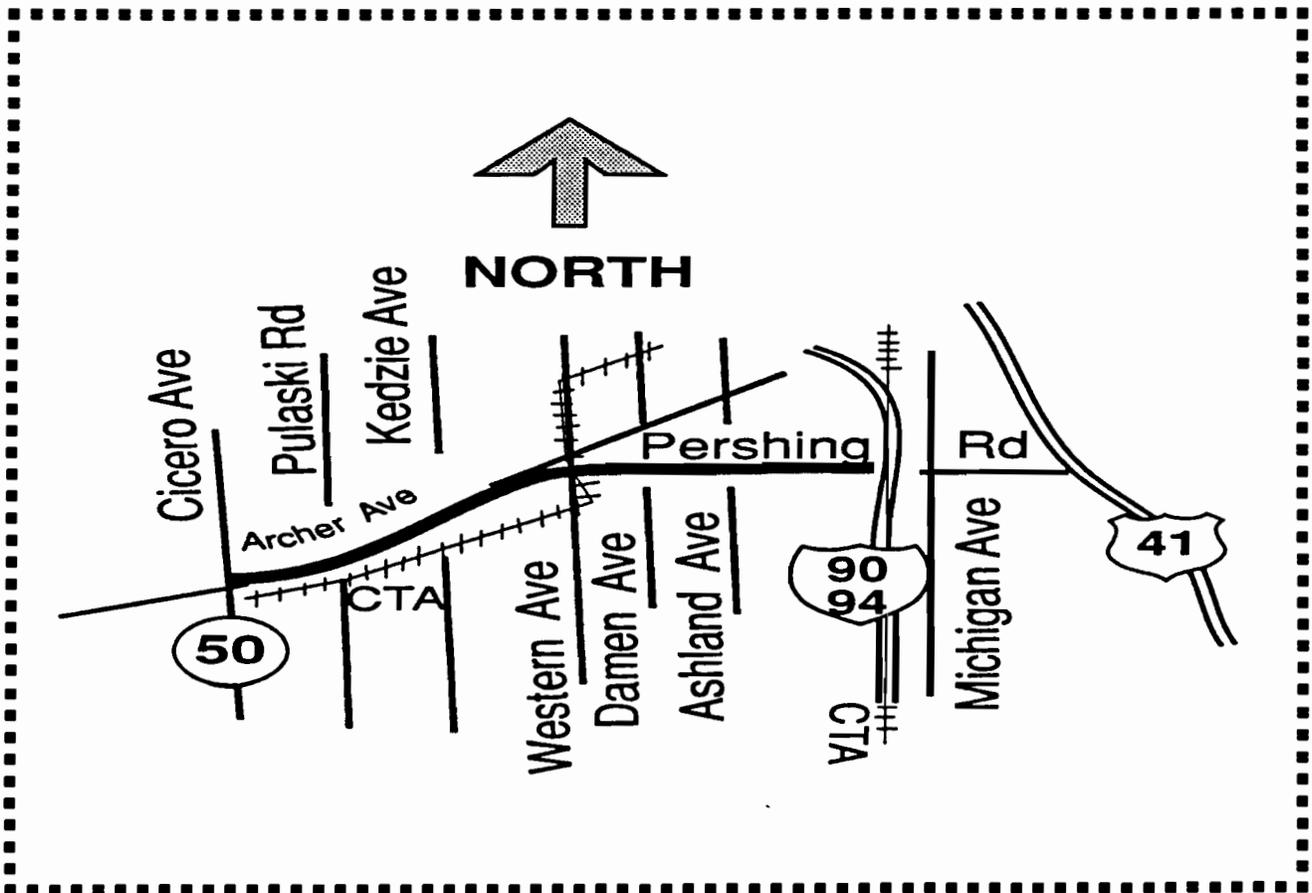
The Pershing/Archer Corridor

The Pershing Road/Archer Avenue corridor travels through an urban area within the Chicago city limits. This corridor has been designated as an urban SRA from Illinois Route 50 to Interstate 90/94. The accompanying map illustrates the corridor.

The ultimate 2010 desirable characteristics of an urban SRA, could include a minimum of two through lanes in each direction of travel within a 96- to 110-foot right-of-way. In addition, enhancements to existing transit service should be reviewed and applied where appropriate.

The Pershing Road/Archer Avenue corridor has two through lanes in each direction of travel, with an additional lane for curb parking. The existing right-of-way width on Archer Avenue is 80 feet. Along Pershing Road there are two lanes in each direction, parking is permitted along some segments, and the existing right-of-way width is 66 feet.

Extensive CTA bus service covers Archer Avenue (#61, #62, #99, #129, and #164) and Pershing Road (#39). A rapid transit line is under construction to serve passengers between Midway Airport and downtown Chicago. Several elevated stations are located in the corridor, specifically at 59th Street/Cicero Avenue, Pulaski Road, Kedzie Avenue, Western Avenue, Damen Ave, Ashland Ave, and 35th Street/Archer Avenue. There is also METRA rail service to the Pershing/Archer corridor, with the first stop on the Heritage Corridor Line located beyond the city limits in Summit.



YOU CAN HELP

There are a number of ways that you, as a panelist for this SRA route segment, can assist in producing the best and most acceptable plan for this corridor.

- A call has gone out earlier for copies of background data, reports, and other information pertaining to the SRA route. It is extremely important that the project engineers and planners have access to previous as well as ongoing work. If you have not yet responded please provide copies to the panel coordinator as soon as possible. Also, if there are any additional areas of concern that you feel should be considered in this process, your panel coordinator should be made aware of this information.

- Please plan to attend panel meetings. These are important sessions that can set the tone for the remainder of the planning study.

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SRA SPOTLIGHT
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Publisher:

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Editor:

CEMHILL

For:

The Strategic Regional Arterials Plan

Advisory Panel

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Panel Members:

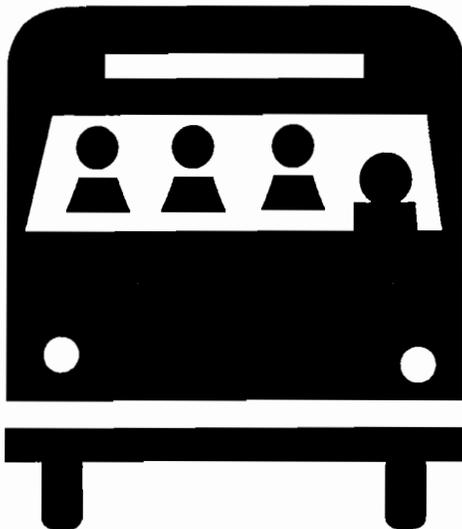
Chicago

Mark J. Fary
Patrick M. Haels
James Laski
Bobby L. Rush

SRA SPOTLIGHT

PERSHING/ARCHER CORRIDOR ADVISORY PANEL

PUBLIC TRANSIT



The success of today's transportation system and the viability of its future depend on a "balanced" system, one that provides a mixture of modes and optimizes mobility in terms of convenience, comfort, safety, and economy. A key element of this balanced system has long been to give preferential treatment to public transit and other high-occupancy vehicles (HOV).

The Strategic Regional Arterial (SRA) system is intended to accomplish certain specific objectives within the overall transportation system, one of which is to enhance public transportation and personal mobility. This may be accomplished by:

- Improving access to rail transit stations
- Improving operating conditions for buses and other vehicles
- Identifying opportunities for future transit facilities
- Maintaining pedestrian accessibility

These strategies are being investigated for application in plans for each of the SRA routes under study.

Improved Transit Station Accessibility

Existing transit stations along SRA routes will be evaluated for potential improvements to increase accessibility from the SRA. Increased accessibility may motivate more people to make regional trips utilizing transit, thereby reducing the number of vehicles on the SRA. Accessibility could be improved by one or more of the following techniques.

- **Actuated Traffic Signals**—Transit station usage is extremely intensive during peak periods. Incorporating traffic signals with phasing and timing that responds to varying daily traffic levels will make transit stations more accessible and reduce delays. If new traffic signals are proposed at transit stations, they should meet the established traffic warrants and spacing of signals criteria.
- **Turn Lanes**—To maximize through traffic movements for vehicles not wishing to access transit stations, channelized right- and left-turn lanes could be constructed for vehicles turning into transit stations. If demand is high enough, dual left- and/or right-turn lanes might be constructed. Appropriate storage bays for turning vehicles must also be implemented.
- **Parking Improvements**—Parking lot expansion for commuters will be investigated. Preferential parking stalls nearest to transit stations could be designated for HOV. Secure bicycle parking also should be provided at most suburban transit stations.
- **Pedestrian Grade Separations**—If substantial parking for a transit station is located on the opposite side of a SRA, grade separation for the pedestrian movement could be considered. This would tend to reduce delays on the SRA caused by at-grade pedestrian flow, and would also improve safety and convenience for the pedestrians.

Improved Operating Conditions for Buses

A number of transit enhancements will be considered both to relieve traffic congestion and improve operating conditions for buses.

Bus Service on Rural SRAs

Bus services operating on rural SRAs should, if possible, be limited to express service. The buses should have signal preemption capability that can be deployed when they are running behind schedule. Because of the high-speed characteristics of these facilities, flag stops are not considered appropriate. Wherever possible, bus stops on these routes should be planned as public-private cooperative ventures in conjunction with activity centers. These off-the-road sheltered stops would also serve connecting routes and incorporate park-and-ride facilities. They would be located at 2- to 5-mile intervals. Bus stops should be located on the actual SRA routes when there are no opportunities for off-road facilities, and/or to serve riders transferring from connecting services.

Bus Service on Suburban SRAs

Similar to bus services for rural SRAs, bus services on suburban SRAs should be express buses. Where possible or feasible express bus service should be equipped with priority signal preemption capability that can be deployed when they are running behind schedule. Bus stop locations should occur every one-half to 1 mile. Variable factors to consider in locating the stops are:

- Whether there are intersecting bus routes with a corresponding potential for transferring riders; and
- Whether there are significant residential, commercial/retail, or office developments to be served along the route.

The stops would be designed as turnouts and would accommodate connecting services. Walkways to stops of intersecting services would facilitate transfers and promote safety. Near-side and far-side bus stop configurations would be planned to minimize distance between connecting lines.

Bus Service on Urban SRAs

On urban SRA routes that accommodate bus service, a number of transit service enhancements will be reviewed to determine their potential for relieving traffic congestion. One basic technique would be to remove parking from the bus travel lanes, and strictly enforce parking restrictions. Signal system modification represents another potential area for enhancement.

Bus stop turnouts are not considered practical on urban SRAs. On a route-specific basis, however, both the locations and spacing of bus stops will be reviewed. Major objectives would be to eliminate stops in excess of one per block, and to eliminate conflicts with right turns. Where the blocks are short, as in the central area, stops could be located at every second block.

Exclusive Bus Lanes

Another strategy to improve travel times is to establish exclusive lanes for buses and HOV during the morning and evening peak travel periods. This approach would be reserved for SRAs with at least three traffic lanes in each direction (see Figure 1, which illustrates the "diamond lane" concept). A companion measure essential to the effectiveness of exclusive lanes is minimizing access points to the roadway by eliminating curb cuts wherever possible.

Figure 2 illustrates median bus lane treatment on an urban SRA route. If this treatment is adopted, automobile left turns from the urban SRA route should be permitted only at other SRA routes.

Lanes on urban SRA routes could also be dedicated to buses that travel in the reverse direction from the normal traffic flow. Figure 3 gives an example of a typical transit contra-flow lane. Contra-flow lanes have been used in downtown Chicago, and have been very effective in reducing both bus travel times and bus operating expenses. However, because of accident potential, transit contra-flow lanes are generally only recommended when additional lanes cannot be added easily because of space limitations and where reserve capacity is available in the non-peak direction.

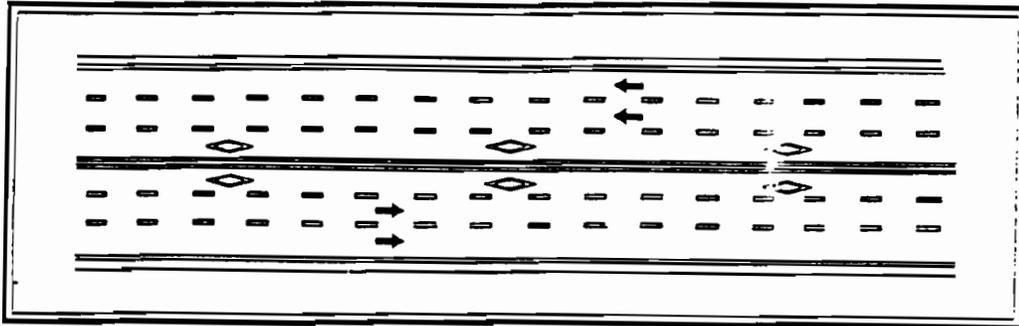


Figure 1 "Diamond Lanes"

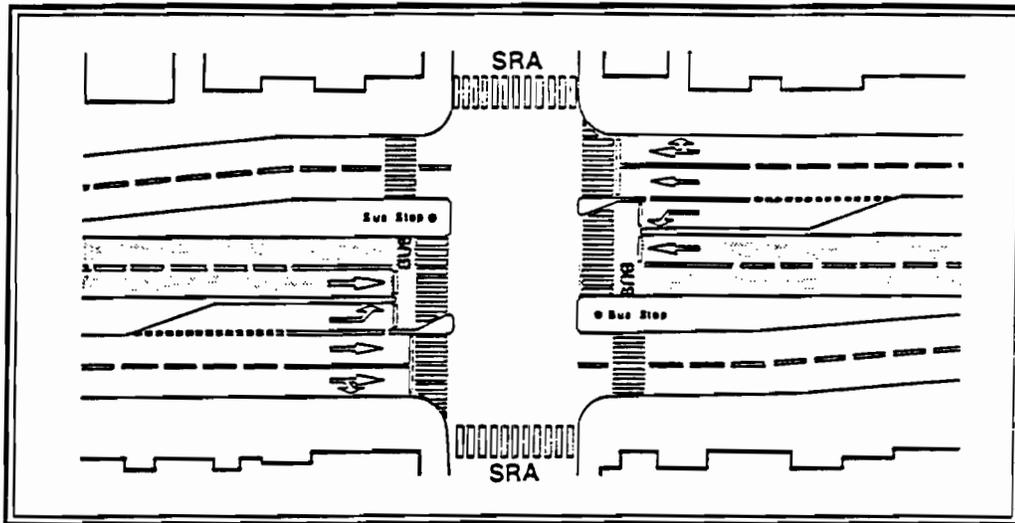


Figure 2 Center Bus Lane Treatment - Urban SRA

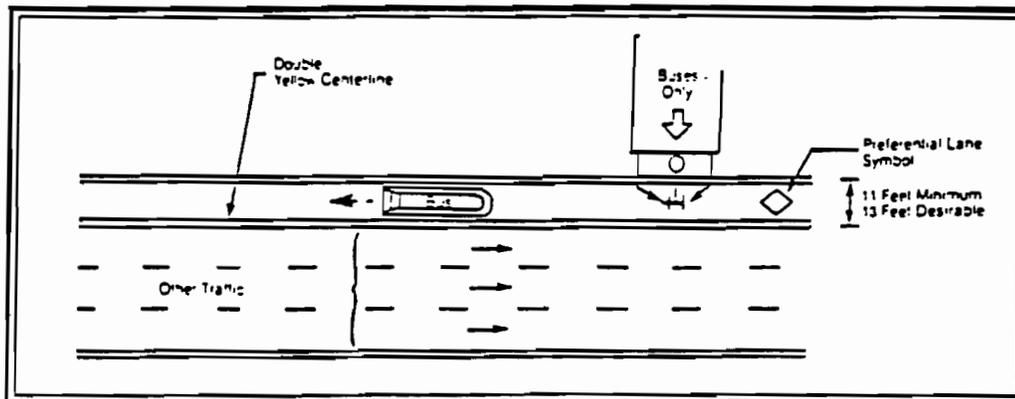


Figure 3 Typical Transit Contra-Flow Lane

Identifying Opportunities for Future Transit Facilities

Plans for SRA routes will consider opportunities to incorporate future transit and associated facilities such as:

- Busways
- High-Occupancy Vehicle (HOV) Lanes
- Ridesharing Facilities

Furthermore, SRA routes will consider incorporating future light - rail systems or circulator and shuttle systems where future plans already exist.

Maintaining Pedestrian Accessibility

Safe movement and accessibility are key issues for bicycles and pedestrians. The urban SRA corridors are likely to experience the greatest concentration of pedestrians and cyclists. The density of developments coupled with shorter trip-making encourage these travel modes. Additionally, the urban SRA routes experience heavy traffic volumes. In these urban areas, close parallel routes are usually present and continuous. These parallel facilities should be identified as bicycle routes so that the SRA routes can focus on their primary responsibility—carrying regional traffic. The design of most urban SRA routes already includes sidewalks for pedestrians and should continue to do so under maximum design. Handicapped access ramps for pedestrians also will be considered at intersections and curb cut locations.

On rural and suburban SRA routes, more options are available for handling pedestrian and bicycle access. For example, while right-of-way availability is still a critical issue, dense development immediately adjacent to the roadway may not be as common an occurrence as in urban areas. In certain cases provisions for bicycles and pedestrians may be accommodated within the SRA right-of-way itself. In these situations, alternative parallel routes may not always be available. The choice of how to provide access within the SRA corridor will be based on each unique situation. Where an existing bicycle and pedestrian facility already exists, the goal is to have a continuous system of bicycles and pedestrian facilities.

Pershing/Archer Project Status

To date, about 30 percent of the study of Pershing/Archer is complete. In October, IDOT and the consultant team held the first Advisory Panel Meeting. At this meeting, the existing conditions of the Pershing/Archer corridor were reviewed with panel members. The second Advisory Panel Meeting is scheduled for late March or early April. Advisory Panel members will be contacted in the near future to set the date, time, and location. At this second meeting, the panel will discuss long-range alternatives for improvements to the Pershing/Archer corridor. The third Advisory Panel Meeting is scheduled to take place in the summer of 1992, and a Public Hearing is scheduled tentatively for the fall of 1992.

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Advisory Panel

Coordinator:

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Chicago Department of Public Works

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Chicago -

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SRA SPOTLIGHT

PERSHING/ARCHER CORRIDOR ADVISORY PANEL

Relationship of Transportation Planning to Land Use and Development

Land Use and the SRA Plan

The success of today's transportation system and the viability of its future depend upon integrating arterial improvements with future development plans. Road improvements have the potential to stimulate land use changes, which in turn, can impact the efficiency of the transportation system. Improved accessibility, a common component of transportation system improvement plans, can influence land development, particularly when combined with other contributing factors such as land availability, market trends, local zoning and land use policies, water and sewer extension policies, and proximity to population centers.

The Strategic Regional Arterial (SRA) network, which consists of 1,340 miles of existing roads, encompasses 146 routes in Cook, DuPage, Kane, Lake, McHenry, and Will Counties. Within this network there are significant differences in the roadway environment that determine how various types of routes may function in the system. Land use impacts also will vary, depending upon whether the route traverses an urban, suburban, or rural area. In rural or suburban areas, there may be large tracts of vacant land that may undergo development, requiring coordinated access; in urban areas, maintaining or improving access and parking to existing developments are primary issues.

In high-demand areas, consideration of access management and design improvements are necessary to ensure maintenance of a good level of service. A key element of the SRA plan is to balance the goals of an arterial's function, to carry high volumes of long-distance traffic, with existing and future land use access needs. This may be accomplished by:

- Understanding future regional growth trends; and
- Understanding and accommodating local planning efforts.

Understanding Future Regional Growth Trends

By the year 2010, substantial increases in population, number of households, and employment are projected for the Chicago metropolitan region. Total population is projected to grow by 17.2 percent—from 7.1 million in 1980 to over 8.3 million by 2010. Population growth will be most significant outside of Cook County (which contains the city of Chicago) in the suburban counties. Each of the six counties, with the exception of Cook County, is projected to grow by nearly 50 percent over the 30-year period (1980 to 2010). The following table details population growth and percent change over the 30-year period.

Projected Population Change, 1980-2010				
County	1980	2010	Population Increase	Percent Change
Cook	5,253,700	5,567,400	313,700	6.0
DuPage	658,800	985,600	326,800	50.0
Kane	278,400	426,100	147,700	53.1
Lake	440,400	640,700	200,300	45.5
McHenry	147,900	235,800	87,900	59.4
Will	324,500	472,400	147,900	45.6
Region	7,103,600	8,327,900	1,224,300	17.2

Source: Northeastern Illinois Planning Commission

Changing demographics have altered household structure, bringing a dramatic increase in the number of single-person and single-parent-headed households, a factor that will continue to shape markets in the coming years. In the region, the number of households is projected to increase by 31.1 percent (774,000 new house-

Pershing / Archer Corridor

holds) between 1980 and 2010—reaching over 3.2 million. Nearly half of the new households will be in Cook County, which will add close to 350,000 households. Lake, Kane, McHenry, Will, and DuPage Counties will see the greatest percent change—with households increasing by well over 50 percent of 1980 levels.

Projected Household Change, 1980-2010

County	1980	2010	Household Increase	Percent Change
Cook	1,879,400	2,228,000	348,600	18.5
DuPage	222,000	368,500	146,500	67.0
Kane	93,700	160,100	66,400	70.9
Lake	139,700	240,200	100,500	72.0
McHenry	49,100	87,800	38,700	78.8
Will	103,100	170,900	67,800	65.7
Region	2,486,700	3,260,700	774,000	31.1

Source: Northeastern Illinois Planning Commission

The region's employment is projected to increase by 34.6 percent by 2010—to over 4.5 million jobs. Cook, DuPage, and Lake Counties will continue to be the major employment centers in the region. Employment in DuPage County is projected to more than double over the 30-year time period—from 284,700 to 641,500 jobs. In Lake County, the number of jobs will increase from 162,000 to 306,700 between 1980 and 2010.

Projected Employment Change, 1980-2010

County	1980	2010	Employment Increase	Percent Change
Cook	2,697,000	3,249,100	551,100	20.5
DuPage	284,700	641,500	356,800	125.3
Kane	119,100	174,400	55,300	46.4
Lake	162,000	306,700	144,700	89.3
McHenry	47,000	73,200	26,200	55.7
Will	91,700	134,100	42,400	46.2
Region	3,401,400	4,579,100	1,177,700	34.6

Source: Northeastern Illinois Planning Commission

Understanding and Accommodating Local Land Use Plans

To provide an SRA corridor plan that addresses future development, comprehensive land use plans requested from each community have been integrated into the SRA transportation planning effort. From these land use plans, it is possible to make a better determination of:

- Potential future access locations
- Need for frontage roads, collector roads, etc.
- Optimal future traffic signal locations
- Potential for development of transit plans

In existing or future areas of intense commercial development, SRA corridor planning can focus on:

- Consolidating driveways, coordinating closely-spaced access points
- Mitigating impacts to on-street parking
- Optimal median types and dimensions (such as raised versus flush medians)

In residential areas, or near parks and schools, the corridor plan can focus on:

- Accommodating pedestrian activities
- Addressing aesthetic issues to minimize adverse visual impacts of corridor improvements

It is important to note that local units of government control land use and development. The SRA corridor plan attempts to coordinate future transportation needs based on community plans, but if land use policy changes, or if a land use plan is not implemented, the transportation system will be affected. Thus, a good transportation system depends upon implementation of effective land use controls and enforcement of land use plans.

Land Use Considerations in the Pershing/Archer Corridor

This SRA segment includes areas along Pershing Road/Archer Avenue between I-90/I-94 and Cicero Avenue. The corridor is shown on the accompanying map.

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The corridor is designated as an "urban" SRA route, and travels through an older, established urban area. Notable areas where land use is changing, or where trends imply future potential access concerns, are:

- Chicago's Midway Airport is located just beyond the study corridor, at Cicero Avenue. With discussion of building a third Chicago-area airport, future plans for this area are unknown.
- Between Racine and Ashland Avenues is a 93-acre redevelopment area known as the Stockyards Tax Increment Financing District. Commercial development is planned for the area. The City of Chicago will make public improvements to the area, including new streets and utilities, scheduled for completion by the fall of 1994.

Considerations for mitigating potential adverse impacts of future development could include providing access control, requiring additional right-of-way reservation for frontage roads, or providing enhanced access to the development or site.

Pershing/Archer Corridor Project Status

The second Advisory Panel Meeting for the Pershing/Archer Corridor is scheduled for April 23, 1992. At this meeting, alternative improvements under consideration will be presented and discussed, and input will be solicited from the panel members. The project team will continue to detail the plan, which will be presented and discussed at the third panel meeting late in the summer of 1992.

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Chicago Department of Transportation

Panel Members:

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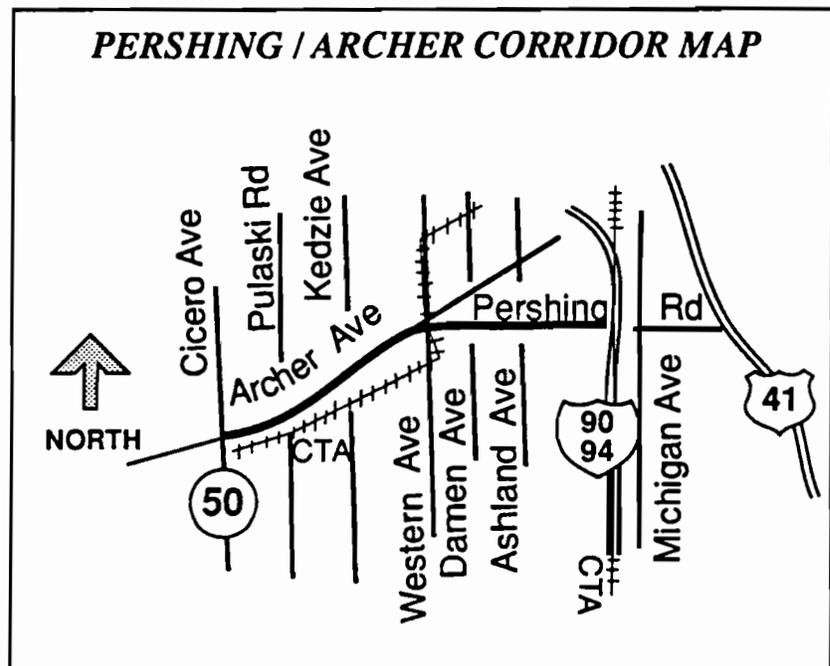
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PERSHING / ARCHER CORRIDOR MAP



SRA SPOTLIGHT

PERSHING/ARCHER CORRIDOR ADVISORY PANEL

The Function of a Strategic Regional Arterial

For streets and highways in metropolitan areas to operate efficiently, the functions they are to perform must be classified, and the types of facilities that best accommodate these functions must be identified. Facilities designed specifically for a given type of movement suit that purpose best; matching use and design helps to ensure consistent, uniform flow, which contributes to operational efficiency and safety.¹ An area's street and highway system can be classified schematically by relating the proportion of *movement* function to *access* function. This concept is illustrated graphically in the accompanying chart. At its functional extreme, a local access or residential street is devoted almost entirely to providing access to abutting properties; the freeway, on the other hand, serves only the movement function.

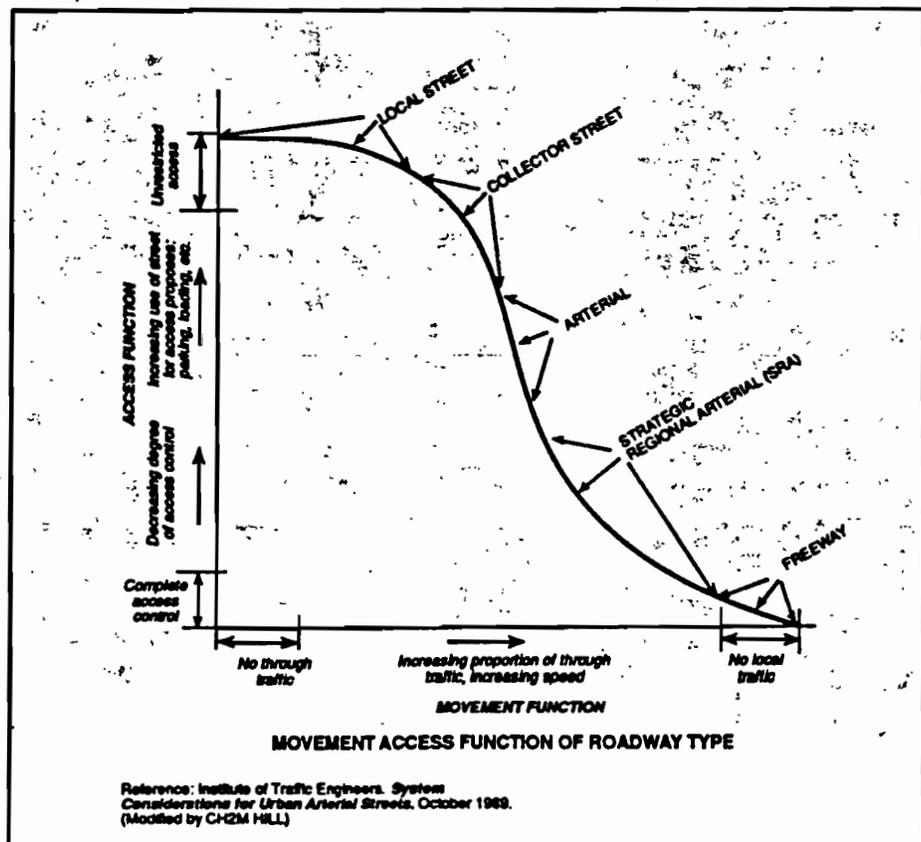
The Illinois Department of Transportation (IDOT) has designated 1,340 miles of existing roadways in northeastern Illinois as *Strategic Regional Arterials* (SRAs). This functional classification falls between the general "arterial" category and "freeway" class.

SRAs are intended to provide more of the movement function, and less access to abutting land uses, than

"arterial" roadways. Also, on SRAs trip lengths will be longer and movement will be faster than on other arterial or collector streets. However, despite the focus on accommodating the movement function, considering the access function also is vital because SRA routes pass through numerous villages and cities.

SRA Benefits

Communities affected by SRAs often ask: "What is achieved by the SRA system?" or "How will SRA improvements benefit my community?" The remainder



¹Gruen Associates. *Traffic Circulation Planning for Communities*. 1974.

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of this newsletter addresses and provides answers to these questions.

Local communities benefit from SRA designation and planning by realizing the following improvements:

- Enhanced traffic safety
- Improved traffic operations
- Reduced environmental impacts
- Reduced neighborhood impacts
- Increased local land use and transportation planning

These benefits may result from physical improvement of SRA routes and/or the overall planning process leading to implementation of the SRA concept.

Improvement Benefits

Benefits in safety, traffic operations, and the environment result directly from SRA improvements to the number and arrangement of driving lanes, traffic and access controls, and lane arrangements at intersections.

Safety

Driver and pedestrian safety on SRAs may be enhanced by improving intersections and medians, by controlling access, and, in some instances, by restricting or prohibiting parking.

Intersection Improvements

Research shows that adding a channelized left-turn lane at an intersection reduces accidents significantly. Although adding turning lanes is the most obvious example of a physical intersection improvement, coordinating traffic signal timing between several intersections or revising signal phasing, which are less obvious, also are important improvement considerations. Separate signal phases for pedestrians and cyclists also may be implemented to enhance safety on a SRA.

Median Improvements

Providing a raised or a painted median for a SRA separates opposing traffic flows and affords a "refuge" for pedestrians crossing the street. Two-way left-turn lanes that allow left turns at all locations along the SRA have been shown to result in accident reductions of 25 percent or more.

For higher-speed rural facilities, dramatic safety improvements result when a four-lane divided highway can be implemented (versus a two- or four-lane undivided roadway).

Access Management

Frequent access drives along a SRA—with consequent turns into and out of roadside development—are another source of accidents. Research shows that restricting the frequency of driveways, or restricting left turns at driveways at a minimum, will result in a lower accident rate. Improved access management, which goes along with development of the SRA system, also can enhance driver and pedestrian safety.

Parking Regulation

Eliminating or restricting curb parking on some portions of the SRA system will not only promote better traffic flow, but will eliminate accidents that may be attributed to parking and "un-parking" maneuvers. In order to support local activity and to satisfy parking demand, parking spaces that are removed from the curb usually will need to be replaced in off-street facilities, where parking can be managed easily and accessed safely.

Traffic Operations

Along with safety enhancements, physical improvements to the street system such as adding lanes, providing a median, or controlling access also promote better traffic operations. Drivers will be able to complete their journey on a SRA with fewer starts and stops, and at consistent, acceptable, and safe speeds.

Pershing/Archer Corridor

Environmental Impacts

Good traffic operations produce an important benefit: reduced fuel consumption and a resultant air quality improvement. Vehicles travelling smoothly emit less pollutants than vehicles under congested flow conditions. In the Chicago metropolitan area, which has been designated a "severe non-attainment area" for air quality, maintaining smooth, efficient traffic operations is critical. Motor vehicles contribute as much as 60 percent of ozone-forming pollutants—a significant component of the smog that occurs on hot days. Pollutant emissions are a particular problem in areas of congestion; high emissions result from frequent stops, long periods of vehicle idling, and very low speeds. More efficient traffic flow on the SRA network, therefore, will help the Chicago area to meet its clean air objectives.

System Benefits

Along with direct safety, operations, and environmental benefits that will result from SRA improvements, there also are several important systemwide advantages to be gained from the SRA program.

Neighborhood Impacts

Ultimately, the objective of designating functional classifications for the street and highway system is to ensure that the specific roadway category is used by the type of driver for which it is intended. When "through" traffic intrudes into residential neighborhoods, the blame almost always can be placed on inadequacies in the arterial system (which the drivers should have used for those trips instead). A key objective of planning and providing an effective SRA system is to afford and to promote a viable travel alternative and, consequently, to rid local streets of unnecessary and unwanted through traffic. The result will be safer, quieter, cleaner, and generally more pleasant residential neighborhoods.

Business District Impacts

Many SRAs pass through local business districts. Optimizing traffic flow into and through the business

district at safe speeds can help the district to retain its vitality and to reinforce consumer attraction. It is important to strike a balance between the needs of shoppers and pedestrians, and the needs of drivers approaching and passing through the business district. Relocation of on-street parking, special attention to transit stops, and selected intersection improvements all serve to maintain and to enhance both accessibility to the business district (and improve SRA operations).

Land Use and Transportation Planning

The present, ongoing SRA studies fall under the category of feasibility studies or advance planning. The various improvements to the SRA system that are proposed in these plans will be implemented in increments over a relatively long time span. The plans take on added importance, therefore, as the framework for a comprehensive long-range transportation program.

Once the number of traffic lanes and access controls for a particular SRA have been determined, local communities along the route will be able to implement plans and regulations to preserve the required right-of-way, to plan for access to future development, to provide adequate setbacks, and to support appropriate zoning. Because each SRA route penetrates numerous communities, a long-range comprehensive plan also affords local agencies an opportunity to cooperate and coordinate their land use and transportation planning efforts, which will facilitate implementation.

SRA Benefits for Pershing/Archer

The SRA plan for the Pershing/Archer corridor should produce a range of benefits to the public and the Chicago community. Currently, corridor improvements are being investigated and evaluated. In general, improvements will focus on increasing intersection capacity and improving operations. Existing two-lane sections (one lane in each direction) will be expanded to four lanes and, where left-turn protection does not exist, turning lanes will be added or left-turn restrictions recommended. These improvements would allow corridor traffic and relatively heavy truck traffic to travel in a safer, smoother manner.

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Additional improvements at intersections and along the corridor are designed to minimize parking removal. Generally, parking removal is associated with intersection improvements; in these situations, parking is being removed only at the intersection approaches. The removed parking would be replaced in a better, safer location of the corridor.

These and other SRA improvements would help relieve existing congestion, and improve the existing safety and operations of the corridor.

Corridor Planning Status

The Pershing/Archer Advisory Panel met on April 23, 1992. At that meeting, alternative improvements under consideration were presented and discussed. Since the meeting, consultant and IDOT staff have worked to develop and to refine the SRA plan. Pershing/Archer is being planned as a four-lane urban arterial. Various cross-sectional treatments designed to accommodate local constraints and needs will be recommended.

The consultant is in the process of developing a pre-draft of the SRA report, which will include final alternative recommendations. Following IDOT's review of the recommended corridor plan and pre-draft report, a third panel meeting will be scheduled.

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PERSHING/ARCHER CORRIDOR ADVISORY PANEL

Environmental Considerations in SRA Transportation Improvement Planning

Discussion of Issues

In planning and implementation of roadway design projects, engineers and officials frequently face environmental considerations that complicate the projects' standard engineering aspects. Environmental considerations play a significant part in engineering design decisions, as highway designers and planners deal with the stringent requirements of various environmental regulatory agencies, and state and local governments (see table on page 2). Typical roadway design environmental issues include air quality, wetlands, and impacts to both sensitive land uses and to publicly-owned land (socioeconomic impact and potential land use change to the area also are considered, as discussed in Newsletter No. 4). Plans to avoid, minimize, or mitigate such impacts are integral to the design of a project and, ultimately, affect engineering solutions.

As part of the SRA project, an environmental analysis component has been conducted to inventory existing conditions and to identify environmental and land use characteristics that may conflict with, or be affected by, proposed roadway improvements. This initial inventory and identification would be supplemented by detailed analysis of these environmental effects as individual projects proceed to more advanced design. This newsletter reviews notable environmental and land use issues typically encountered in transportation projects, and discusses how they impact design decisions.

Wetlands

Wetlands are areas that are inundated or saturated by surface or groundwater, and support a variety of plant and animal species adapted to these conditions.

Wetlands generally include swamps, marshes, bogs, and similar areas, and:

- Filter pollutants naturally;
- Enhance water quality;
- Provide natural watershed storage;
- Control flooding;
- Reduce erosion;
- Provide habitat for bird and animal life; and
- Provide aesthetic, recreational, educational, and socioeconomic benefits.

Because of these values, wetlands are protected by a variety of regulations at the local, state, and federal levels. Provisions for wetland protection, restoration, or replacement often are required before a project can proceed.

The presence of wetlands in the vicinity of road improvements influences location and design decisions. If possible, the project must *avoid* damage to wetlands. If avoidance is impractical, the project then must attempt to *minimize* adverse environmental impacts. Lastly, if wetland losses are unavoidable, the project's owner must arrange to *compensate* for destroyed or degraded wetlands through a process of restoring damaged wetlands or creating new ones.

Parkland

Public parkland is protected by federal regulatory provisions, and special effort must be made to preserve and protect such lands. These provisions apply to public recreation areas, including forest preserves; conservation districts; publicly-owned golf courses; state, county, or local parks; and sites and structures listed in the National Register of Historic Places.

Projects that would acquire or adversely affect public recreation land require additional federal

... continued on page 3

Pershing Road/Archer Avenue Corridor

Federal Legislation for Resource Protection

Legislation	Resource Affected	Responsible Agency	Summary
<i>Section 4(f) Evaluation</i>	Public park and recreation land; historic resources	Federal Highway Administration	Requires consideration, consultation, and alternative studies to determine that there are no feasible and prudent alternatives to the use of land from a publicly-owned park, recreation area, or wildlife and waterfowl refuge of significance, as determined by the official officer having jurisdiction. Also must address measures to minimize harm. Applies to properties eligible for the National Register of Historic Places.
<i>Section 6(f) of the Land and Water Conservation (LAWCON) Act</i>	Public recreation land developed with LAWCON funding	Federal Highway Administration	Recreation land purchased or improved under the LAWCON Act cannot be used unless replacement land of equal value, use, and size can be supplied. Precedes completion of the Section 4(f) Evaluation.
<i>Section 106 of the Historic Preservation Act</i>	Cultural resources	Advisory Council on Historic Preservation	Requires evaluation of the proposed project's effect on properties included, or eligible for inclusion, in the National Register of Historic Places, and allows the Advisory Council a reasonable opportunity to comment prior to project approval. Requires documentation of special effort to avoid or to minimize harm to any landmark that may be affected adversely. Precedes completion of the Section 4(f) Evaluation.
<i>Section 404 of the Clean Water Act</i>	Waterways and wetlands	U.S. Army Corps of Engineers and U.S. EPA	Requires permit for discharge of dredged or fill materials into jurisdictional waters of the United States, including wetlands. These waters include navigable waters and their tributaries, interstate waters, lakes, and intermittent streams.
<i>Wetlands Executive Order 11990</i>	Wetlands	Federal Highway Administration	Directs federal agencies to avoid unnecessary alteration or destruction of wetlands, and requires implementation of actions to minimize the loss or degradation of wetlands affected by a federal project, or by any project that receives federal funding.

Pershing Road/Archer Avenue Corridor

continued from page 1 . . .

regulatory review and approval, and must include all possible measures to minimize harm. These measures might include replacement of lands, replacement of facilities impacted by the project, restoration of disturbed areas, incorporation of design features to minimize or avoid impact, or monetary compensation.

Sensitive Land Uses

Sensitive land uses also are a factor in road improvement and design decisions. Typical sensitive land uses include hospitals, schools, cemeteries, police and fire departments, and other community facilities. Emergency access is one consideration; roadway changes can impact access to and from facilities such as hospitals and police and fire departments. Noise standards (moving a roadway closer to buildings may exceed acceptable noise levels) and business and residential relocation issues are other factors to be considered. Finally, effort should be made to avoid impact to these sensitive facilities because they are integral to the physical and social fabric of the community. Whenever possible, adjustments in road design should be made to avoid disrupting such facilities.

Air Quality

Improved traffic operations produce an important benefit: reduced fuel consumption and a resultant air quality improvement. Vehicles traveling smoothly emit less pollutants than vehicles under congested flow conditions. In the Chicago metropolitan area, which has been designated a "severe non-attainment area" for air quality, maintaining smooth, efficient traffic operations is critical. Motor vehicles contribute as much as 60 percent of ozone-forming pollutants—a significant component of the smog that occurs on hot days. Pollutant emissions pose a particular problem in areas of congestion; high emissions result from frequent stops, long periods of vehicle idling, and very low speeds. More efficient traffic flow on the SRA network, therefore, will help the Chicago area to meet its clean air objectives.

How Do These Environmental Considerations Affect Roadway Design?

Each of these environmental considerations contributes to the basic SRA improvement concept and affects design solutions. Engineering design is tailored to avoid or minimize effects by:

- Adjusting the alignment (e.g., focus widening to one side of the facility or the other; realign the roadway to avoid an impact)
- Incorporating retaining walls to minimize the amount of right-of-way needed
- Adjusting cross-sectional features, such as median width, to minimize the right-of-way needed
- Implementing curb-and-gutter and closed drainage systems to minimize right-of-way taking

In some cases, the presence and location of sensitive or protected land uses affect the basic SRA corridor concept. In keeping with overall planning objectives, the ability to implement a full, desirable SRA cross section must be balanced against the environmental impacts that could result. Decisions to "downsize" a corridor segment because of environmental concerns have been made on many SRA corridors.

Environmental Concerns and SRA Planning for Pershing Road/Archer Avenue

The SRA study to determine recommended improvements for Pershing Road/Archer Avenue has considered numerous environmentally sensitive areas including parks and historic sites.

The corridor is bounded by the Dan Ryan Expressway on the east, and by Cicero Avenue (Illinois 50) on the west. Land uses vary throughout the corridor from predominantly manufacturing and institutional in the eastern segment, to commercial and residential, with occasional institutional and other uses, along Archer Avenue. Several freight rail lines intersect the corridor.

Pershing Road/Archer Avenue Corridor

The Union Stockyards were formerly located on Pershing Road, east of Ashland Avenue.

A Chicago Transit Authority garage is located on Pershing Road where the SRA joins Archer Avenue. To improve traffic flow in the vicinity of the garage, and to minimize the facility's impact on the community, plans call for closing the south access between Rockwell Street and Pershing Road, and instituting one-way northbound traffic on Rockwell Street north of the Pershing Road intersection.

Parks along the corridor include McKinley Park on Pershing Road, and Kelly Park on California Avenue, one block from Archer Avenue. Plans for the corridor are drawn to avoid impacts on the parks, and to provide safe and improved access to the parks for pedestrians and other park users. Because SRA standards call for providing two travel lanes in each direction, it will be necessary to remove on-street parking from Pershing Road. To accommodate those users who drive to McKinley Park, a paved parking lot within the park ground near an existing maintenance facility would be enlarged, but encroachment on the park would be minimal.

Finally, a number of environmentally sensitive buildings such as schools and historic buildings are adjacent to or near the existing facility. The list includes Curie High School and Kelly High School, the Chicago Board of Education, the St. Agnes Parish Center, the Brighton Theater, a funeral home, and various other industrial and commercial sites. Plans are being drawn to avoid impacts to these important structures.

Corridor Status

Geometric plans have been prepared and submitted to the Illinois Department of Transportation for review, and the Pershing Road/Archer Avenue Draft Final Report is currently being prepared. This report will describe the recommended plan to improve the Pershing Road/Archer Avenue SRA to two continuous lanes in each direction of travel throughout the corridor. It will also contain recommendations for improving truck turning movements on Pershing Road, and for minimizing conflict between left-turning vehicles and through traffic on Archer Avenue. The third panel meeting will be scheduled for early winter at a time and place to be announced.

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Public Hearing Meeting Responses

MEMORANDUM

CH2M HILL

TO: Illinois Department of Transportation

COPIES: Rich Starr/IDOT
Tim Neuman/CH2M HILL

FROM: Dick Stafford/CH2M HILL

DATE: December 6, 1993

SUBJECT: Archer Avenue and Pershing Road-SRA Public Hearing

PROJECT: CHI 31495.10.A5

This memorandum summarizes written and oral comments taken by IDOT, the consultant team staff and the court reporter at the public hearing for the Archer Avenue/Pershing Road SRA held on March 18th, 1993. There were no comments collected at the public hearing and therefore, no responses.

The public hearing transcript is attached.

IN RE:)
)
STRATEGIC REGIONAL ARTERIAL)
)
OPERATION GREENLIGHT)
)
PERSHING ROAD/ARCHER AVENUE)
FROM INTERSTATE ROUTE 90/94)
(THE DAN RYAN EXPRESSWAY))
TO ILLINOIS ROUTE 50)
(CICERO AVENUE))

PUBLIC HEARING AT MCKINLEY PARK

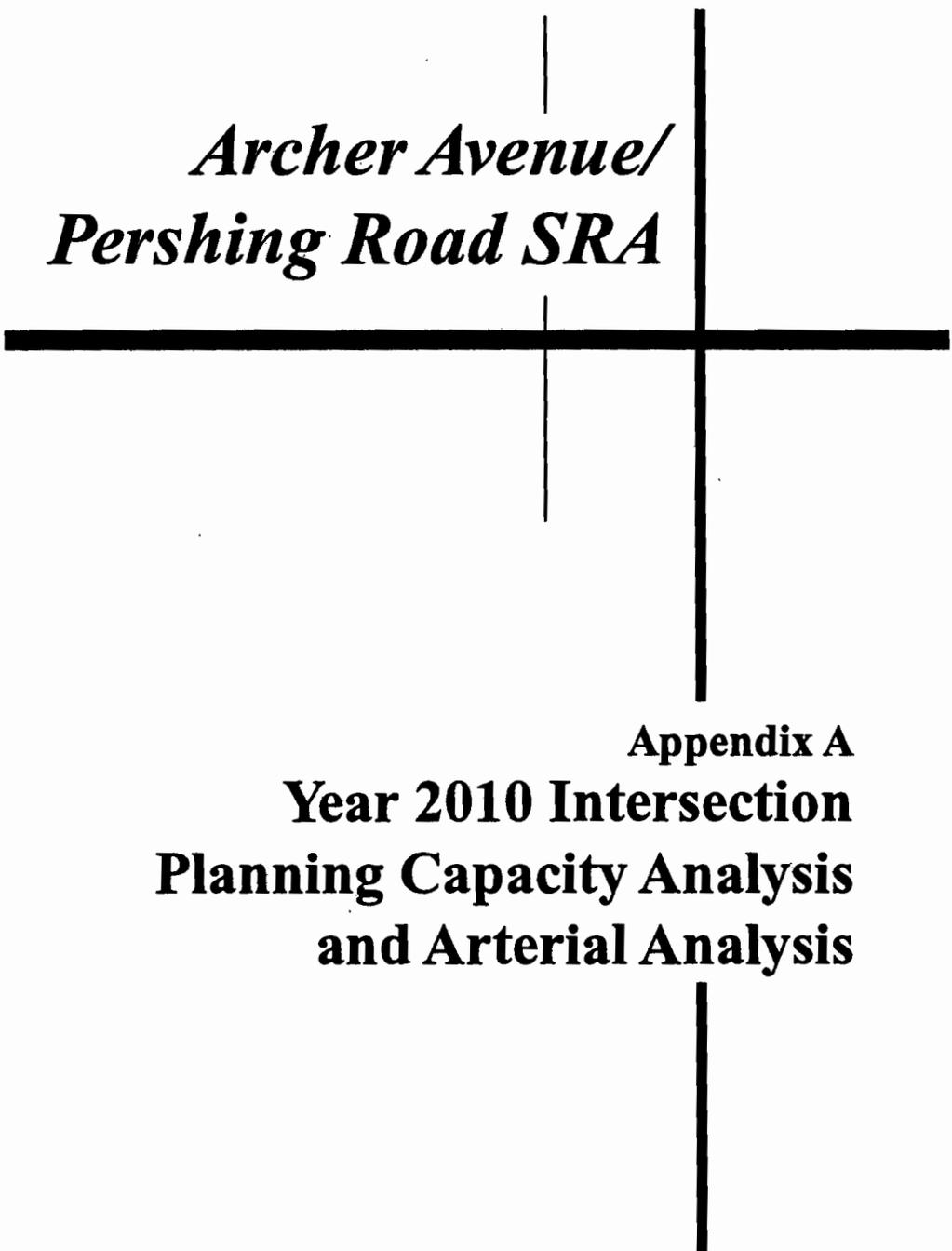
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STATE OF ILLINOIS)
) SS.
COUNTY OF DU PAGE)

I, JOAN M. KENNY, C. S. R., a Notary Public in and for the County of DuPage, State of Illinois, do hereby certify that on the 18th day of March, A. D. 1993, during the hours of 2:00 P. M. and 7:00 P. M., at the McKinley Park Field House, 2210 West Pershing Road, Chicago, Illinois, there was no request by the public that I record any comments and/or statements at the public hearing regarding the the above-entitled matter.



Joan M. Kenny
Notary Public



*Archer Avenue/
Pershing Road SRA*

**Appendix A
Year 2010 Intersection
Planning Capacity Analysis
and Arterial Analysis**

Table A-1

Archer Avenue/Pershing Road
Year 2010 Intersection Planning Capacity Analysis

Archer Ave./ Pershing Rd. AND:	Archer Avenue/Pershing Road						Cross Street						Total V/C				
	Two-Way ADT	K	D	Roadside Friction	% Turns	Left Turn Volume	Lanes On Approach	V/C	Two-Way ADT	K	D	Roadside Friction		% Turns	LT Turn Volume	Lanes On Approach	V/ C
LaSalle St.	31500	8%	50	0.94	20%	250	T-TR L-TT	0.55	20000	8%	50	0.94	30%	240	L-LT-TR-R	0.2 7	0.82
Wentworth Ave.	31700	8%	50	0.94	30%	380	L-TT T-TR	0.55	20000	8%	60	0.94	30%	290	L-LT-TR-R	0.2 4	0.82
Wallace St.	33700	8%	55	0.94	10%	0	L-T-TR	0.56	5000	8%	55	0.94	10%	20	LTR	0.1 7	0.73
Halsted St.	34800	8%	55	0.94	10%	150	L-T-TR	0.58	21100	8%	55	0.94	10%	90	L-T-TR	0.3 5	0.93
Morgan St.	34800	8%	55	0.99	10%	150	L-T-TR	0.56	12000	8%	60	0.99	20%	120	L-TR	0.3 6	0.92
N.W. Quadrant Union Stockyards Development	29500	8%	55	0.94	10%	130	L-TT T-TR	0.49	5000	8%	60	0.94	100%	240	L-R	0.1 7	0.66
Ashland Ave. Ramps	30300	8%	55	0.94	10%	130	L-T-TR L-TT-R	0.51	8000	8%	50	0.94	30%	470	L-R	0.1 7	0.68
Wood St.	30300	8%	55	0.94	10%	130	T-TR L-TT	0.51	5000	8%	55	0.94	100%	220	L-R	0.1 7	0.68
Damen Ave.	41300	8%	50	0.94	10%	170	T-TR L-TT	0.63	5000	8%	60	0.94	100%	200	L-R	0.1 7	0.80
Damen Ave. Exit Ramp	41300	8%	55	0.94	0%	0	TT	0.63	5000	8%	60	0.94	100%	240	L-R	0.1 7	0.80
Western Blvd.	48900	8%	60	0.88	10%	230	L-T-TR	0.91	20000	8%	55	0.88	10%	90	L-T-TR	0.3 6	1.27
Western Ave.	48900	8%	55	0.94	10%	215	L-T-TR	0.82	44100	8%	55	0.94	10%	190	L-TT-TR	0.5 3	1.34

**Table A-1
Archer Avenue/Pershing Road
Year 2010 Intersection Planning Capacity Analysis**

	Archer Avenue/Pershing Road					Cross Street									
	35400	8% 55	0.88	30%	10	T-TR LT-TR-R	0.46	18700	8% 60	0.88	30%	270	LT-TR LL-TR	0.4	0.90
California Ave./ (40th Pl.)	35400	8% 55	0.88	10%	160	L-T-TR	0.64	12000	8% 55	0.88	10%	50	L-TR	0.4	1.04
Sacramento Ave.	30300	8% 55	0.88	10%	130	L-T-TR	0.55	5000	8% 55	0.88	10%	20	LTR	0.1	0.73
Pope John Paul II Dr.	30300	8% 55	0.88	10%	0	T-TR TT	0.55	12000	8% 55	0.88	50%	260	L-R L-LR	0.3	0.93
Kedzie Ave.	35200	8% 50	0.88	10%	140	L-T-TR	0.59	20000	8% 50	0.88	20%	0	T-TR	0.3	0.95
47th St.	35200	8% 60	0.94	5%	8	L-T-TR	0.61	20000	8% 50	0.94	20%	100	L-T-TR	0.3	0.96
Lawndale Ave.	35100	8% 55	0.94	10%	150	L-T-TR	0.59	5000	8% 60	0.94	30%	70	LTR	0.2	0.81
49th St./ Avers Ave.	35100	8% 55	0.94	10%	150	L-T-TR	0.59	5000	8% 60	0.94	30%	70	LTR	0.2	0.81
Pulaski Rd./ (50th St.)	35100	8% 55	0.88	10%	150	L-T-TR	0.63	48600	8% 55	0.88	10%	210	L-T-TR	0.8	1.50
Keeler Ave.	25400	8% 50	0.94	10%	100	L-TT T-TR	0.36	5000	8% 60	0.94	50%	120	LR LTR	0.2	0.58
Kostner Ave.	25400	8% 55	0.94	10%	110	L-T-TR	0.42	5000	8% 55	0.94	10%	20	LTR	0.1	0.59
Cicero Ave.	21500	8% 50	0.88	10%	90	L-TT-TR L-TTT-R	0.24	48900	8% 55	0.88	10%	220	L-TTT-R	0.5	0.79

TABLE A 2
Urban Arterial Level of Service Analysis Inputs
Archer/Pershing

Intersection	Intersection Operations					Assumed Signal Operation						
	SRA V/C	V/C	Left Turn Volume	Number of Left Turn Lanes	G/C for Left Turn	Thru G/C	Capacity	Cycle Length	Arrival Type	Progression Factor	Spacing to Next Intersection	Arterial Type/Class and Speed
LaSalle St.	0.55	0.82	250	1	0.17	0.50	1613	100	IV	0.828	500	III-30
Wentworth St.	0.55	0.82	380	1	0.25	0.42	1336	90	III	1.000	2710	III-30
Wallace St.	0.56	0.73	0	1	0.00	0.77	2455	90	IV	0.785	1340	III-30
Halsted St.	0.58	0.93	150	1	0.10	0.52	1676	120	IV	0.872	1320	III-30
Morgan St.	0.56	0.92	150	1	0.10	0.51	1628	100	IV	0.868	2640	III-30
Union Stockyards Dev.	0.49	0.66	130	1	0.09	0.66	2098	100	IV	0.792	1320	III-30
Ashland Ave. Ramps	0.51	0.68	130	1	0.09	0.66	2123	100	IV	0.760	1320	III-30
Wood St.	0.51	0.68	130	1	0.09	0.66	2123	100	IV	0.816	1320	III-30
Damen Ave.	0.63	0.80	170	1	0.11	0.67	2157	100	III	1.000	480	III-30
Damen Ave. Exit Ramp	0.63	0.80	0	1	0.00	0.79	2520	90	III	1.000	1960	III-30
Western Blvd.	0.91	1.27	230	1	0.15	0.56	1802	120	IV	0.900	200	III-30
Western Ave.	0.82	1.34	230	1	0.15	0.46	1468	120	IV	0.900	1320	III-30
Archer/Pershing	0.46	0.90	10	1	0.01	0.50	1614	120	IV	0.860	1670	III-30
California Ave.	0.64	1.04	160	1	0.11	0.51	1628	120	IV	0.900	1670	III-30
Sacramento Ave.	0.55	0.73	130	1	0.09	0.67	2134	120	III	1.000	970	III-30
Pope John Paul II Dr.	0.55	0.93	0	1	0.00	0.59	1892	100	III	1.000	750	III-30
Kedzie Ave.	0.59	0.95	140	1	0.09	0.53	1689	100	III	1.000	3350	III-30
47th St.	0.61	0.96	140	1	0.09	0.54	1735	120	III	1.000	700	III-30
Lawandale Ave.	0.59	0.81	150	1	0.10	0.63	2011	120	IV	0.824	1430	III-30
49th St./Avers Ave.	0.59	0.81	150	1	0.10	0.63	2011	120	IV	0.824	1110	III-30
Pulaski Rd./50th St.	0.63	1.50	150	1	0.10	0.32	1024	120	IV	0.900	1420	III-30
Keeler Ave.	0.36	0.58	100	1	0.07	0.55	1773	100	IV	0.696	1350	III-30
Kostner Ave.	0.42	0.59	110	1	0.07	0.64	2043	100	IV	0.708	2710	III-30
Cicero Ave.	0.24	0.79	90	1	0.06	0.24	1170	120	IV	0.815		III-30

From Intersection Planning Capacity Analysis - Table A-1

$$G/C \text{ for Left turns} = \frac{LT \text{ Vol}/LT \text{ Lanes}}{1500}$$

$$G/C \text{ for through movement} = \frac{V/C \text{ for SR}}{V/C \text{ for intersection}} \times G/C \text{ for Left turns}$$

Capacity = 1,600 x number of through lanes x G/C (for through movement)

Assumptions:

2-Phase signals: 60-90 seconds

3-Phase signals: 90-100 seconds

4-Phase signals: 120-150 seconds

Assume Type III, IV or Type V, depending on spacing of signals relative to SRA guidelines per Highway Capacity Manual

Per Highway Capacity Manual Table 11-6

Per Highway Capacity Manual - Assume Types I or II for suburban SRAs