

South Suburban Commuter Rail Feasibility Study

APPENDICES



and

⇒ ICF KAISER

April 1999

Appendix A

Downtown Terminals and Candidate Alignments Dropped from Further Consideration

Metra's RFP for this project identified three potential alternative routes [i.e., "alignments"; one each serving Randolph Street Station (designated as Alignment A), LaSalle Street Station (Alignment B) and Union Station (Alignment C)], leaving the consultant to identify connections to downtown terminals and any other alignment possibilities. The UP/CSX portion, of course, was common. ICF Kaiser's proposal developed four additional alignments, designated Alignments D through G. Alignments D and E would be routed into LaSalle Street, while Alignments F and G would be routed into Randolph Street.

After initiation of the contract, identification of other alternative routes continued, with new Alignments CA, EA, and FA defined as alternatives to Alignments C, E, and F, respectively, resulting in a total of ten different candidate alignments. This Appendix is a compilation of support material regarding terminals and rail facility upgrades for those potential alignments and segments that were dropped from further consideration after joint discussions of their potential utilities and difficulties. A schematic map of the locations of the different alignment options can be found at the end of this Appendix. The matrix listing each of the original ten short-listed alignment alternatives is also provided there.

Downtown Terminals Dropped from Further Consideration

In the course of studying the alternative routings and terminals with Metra, it was agreed that the potential SouthEast Service (SES) should complement, rather than compete with, the existing Metra route structure. Use of the Metra Electric District (MED) to enter Chicago would not fulfill this goal. This section discusses the particular considerations surrounding both Randolph Street Station (RSS) and Chicago Union Station (CUS) as candidate downtown terminals for the potential SES. Several operating issues, taken together, ultimately led to an agreement that all routes to RSS and CUS should be dropped from further consideration.

Randolph Street Station - MED and South Shore

The Randolph Street complex actually consists of two terminals side-by-side. MED trains arrive and depart in a subterranean terminal, extending as far north as South Water Street. South Shore Line trains operate out of a separate grade-level open-air terminal to the east of the MED facility. Each of these terminals has five tracks available for loading and unloading passengers. The three-track MED line feeds directly into its terminal, while South Shore Line trains use a ladder track off the MED to access their station. All but one of the platforms in these two stations are high-level, serving commuter rail cars (electric multiple units or EMUs) that are different from those on other lines in the Metra system that utilize more-conventional locomotive-hauled gallery cars. Therefore, assuming that potential SES trains probably would use conventional locomotives and commuter coaches, only the single platform would be suitable for passenger loading and unloading.

Under current operating schemes, the low-level platform is surrounded in midday by stored South Shore consists. Freeing up this platform for use by potential SES trains would require the construction of additional storage tracks south of Monroe Street. [The MED right-of-way appears to be sufficiently wide to allow additional storage tracks to be built there, but some of that space would be usurped by the City of Chicago's planned busway from downtown hotels (Lake and Stetson entrance ramp) to McCormick Place.] One way of increasing the operating options for the potential SES would be to use cars which can load or unload from high-level platforms. This would then allow the SES trains to use any platform at RSS. However, that would require construction of high-level platforms at all of the potential suburban station sites, which could prove to be impractical.

In addition, potential SES consists could not be stored midday at Weldon Yard, as this facility has little or no available capacity in the midday. Weldon Yard has been further constrained recently by land transactions between Metra and the City of Chicago for the recently completed realignment of Lake Shore Drive in that area. This land swap permitted relocation of South Lake Shore Drive immediately east of Weldon, as well as allowing for the extension of Roosevelt Road over the MED right-of-way.

There is another consideration to operating diesel-powered trains in and out of the MED portion of RSS. This concerns provision of ventilation in the subterranean facility. Before 1958 (when the Prudential Building was built), the station was basically open to the air. In the intervening years, the terminal has been completely enclosed with the construction of additional buildings comprising Illinois Center. With this enclosure, an idling diesel locomotive would create an undesirable accumulation of exhaust fumes, and suitable ventilation would be required solely to accommodate operation of the potential SES trains.

Another deterrent to operating the potential SES trains over the MED is the lack of a suitable diesel servicing facility in the downtown area. This situation would force Metra either to provide such facilities at the outer terminal of the potential route (counter to its operating policies on all other lines), or to find it necessary to deadhead the diesel locomotives and consists to KYD (123rd Street) for servicing. Provision of a new diesel servicing facility for the small number of trains at start-up (as currently envisioned) would not be cost-effective. Similarly, deadheading to and from KYD would be a considerable extra operating expense.

Another basic problem with using the MED is the availability of timetable paths for the potential SES trains. In the morning peak, there are as many as 21 revenue train arrivals in a one-hour period, with four revenue departures in that same hour. During the evening peak, the MED and South Shore dispatch a maximum of 20 train departures in one hour, with five arrivals during that same hour. These peak-period volumes work out to a revenue movement every 2½ minutes on-average in the peak direction. For example, under the current timetable there is a MED train arrival at 0756, followed by two simultaneous MED arrivals at 0757. There are many other instances where trains arrive one to two minutes apart.

There is also considerable deadheading of trains, particularly on the MED in and out of RSS, depending on the time of day. In the a.m. peak, MED trains are being laid up on "4 storage track" (opposite Grant Park) and in Weldon Yard. After the peak is over, trains are also laid up midday on "2 main" (center) track. Following the a.m. peak, some equipment deadheads to KYD. Only the longer-distance deadhead moves are shown in the MED employee (operating) timetable. South Shore deadhead moves are occurring at the same time, consisting primarily of trains being put into storage south of Monroe Street. There is also some "moving around" of cars and trains within the terminal. For example, an eight-car South Shore train is laid up on the low-level platform midday, but this train did not arrive in the terminal on that track. Current operations see this train unload at a high-level platform, then it is moved out via the ladder track, and moved back in to lay up on Track 9.

As constrained as operations are in the central area, the current signal system is also a significant limiting factor on the MED. Improvements could also be made to the track in order to ease or remove some of the speed restrictions. However, to load the costs of these improvements onto the potential SES rail project would not be cost-effective. The choice of downtown terminals for commuters originating in the south suburbs is also a concern. While the MED has good distribution along the east side of the Loop, there may be some advantage to routing potential SES trains to one of the terminals further west across the Loop, thereby offering potential SES passengers a choice of terminals by choosing either of the lines.

Another fundamental consideration about the use of Randolph Street Station as the downtown terminal for the potential SES is the fact that this would require use of the MED over some distance (depending on the route alignment) to access this terminal. This situation could adversely affect the ability of the service to attract new riders, which would be contrary to the desire to have the new route complement, rather than compete with, the existing Metra route network. For these reasons, elimination of any route alternative using the MED or terminating at Randolph Street Station was recommended.

Chicago Union Station - SWS, HC, and BNSF

The South Concourse at Chicago Union Station (CUS) is used by Metra trains from the SouthWest Service (SWS), Heritage Corridor (HC), and Burlington Northern Santa Fe (BNSF). Two options exist for using this facility to accommodate the potential SES trains. The trains could use the stub tracks which terminate on the South Concourse. There are 13 of these stub tracks, ten of which provide sufficient clearance to be used by all Metra gallery-type cars. (Three stub tracks have restrictions on the 8100 series cars and/or the 8400 series cab cars.) SES trains would unload passengers, crews would change ends, and the consist could deadhead either south to the BNSF's 14th Street Coach Yard or north to Western Avenue Coach Yard for storage and servicing (see next two subheadings for discussion of other difficulties).

The other arrangement would be to route the potential SES trains via Tracks 28 or 30, which combine to run through the station as Track 25 which in turn becomes Track 19 (or by cross-over, Track 21). Track "River 7" also has a rail-height boarding edge that is Americans with Disabilities Act (ADA)-compliant. This makes a total of six boarding positions (Tracks River 7, 19, 21, 25, 28 and 30) of varying lengths, and from various platform heights, which are available as run-through boarding areas from the south. Of the six positions, four tracks (River 7, 21, 25 and 30) do not meet all of the standards which seem to apply to other Metra Union Station boarding positions. Those four have one or more of the following characteristics:

- C The areas for Metra's low-level boarding are short; 25 is hemmed in by turnouts to other tracks, while the platform for 30 is mostly high-level with a ramp down to a short low-level boarding area.
- C There are no Union Station variable message train boards adjacent to the doors (7, 25 and 30).
- C The boarding areas are accessed (on foot) only by crossing over another track; River 7 is accessed for boarding by crossing both 25 and River 7 itself; 21 is accessed by crossing 19 and 21 itself.

As a result, only two track positions (19 and 28) exist which seem practical to be used for run-through station stops. However, they both are common to the most active run-through track (25). Using them in a run-through scenario, trains would discharge passengers and proceed northward, past the North Concourse stub tracks and out to Metra's Western Avenue Coach Yard on the Milwaukee District. This latter operation is the plan currently in effect for the SWS and HC trains.

Union Station already deals with a significant volume of train movements, with the most intense activity occurring on the South Concourse tracks during the peak periods. The levels of activity vary between the stub tracks and the run-through tracks. In reality, there are two separate combinations of run-through tracks past the station concourse, but of the two, only the combination of Tracks 19-25-28 have high-quality platform access. The feasibility of using these run-through tracks is discussed in greater detail below.

Analysis of Metra Traffic on Run-Through Tracks

In the a.m. peak, a HC train uses the run-through track, arriving at 0730. This train then deadheads north through the station and operates over the Milwaukee District tracks to Western Avenue Coach Yard for servicing and midday storage. On these tracks it joins the “parade” of Milwaukee District consists arriving and departing from the North Concourse of CUS. The Milwaukee District has three tracks once outside of the station, allowing it to accommodate the various moves required, albeit on a rather tight schedule.

Three Metra trains arrive from the south and use the run-through track between 0800 and 0859. First, a SWS train arrives at 0800. Next, a HC train is scheduled at 0810, followed by another SWS train at 0831. As with the previous arrivals, these trains discharge their passengers and proceed northward to Western Avenue Coach Yard. In the p.m. peak, several deadhead movements make the reverse trip via the run-through tracks from Western Avenue to CUS. As of August 1997, there were two HC and three SWS deadheads making this move. However, there are a number of constraints on when and how the run-through moves can be made. Also, there are constraints on the feasibility of servicing the potential SES trains at 14th Street, south of Union Station, instead of via the run-through tracks at Western Avenue, north of Union Station.

The only equipment serviced at the 14th Street Coach Yard is that which is used under the purchase-of-service agreement with the BNSF railroad. This work is performed by BNSF forces. Purchase-of-service is the only type of agreement that Metra now has where personnel from other railroads serve as the Metra operating crews and maintain the rolling stock. As a result, current union agreements require that the equipment in SWS and HC service, which is not under purchase-of-service, must be serviced by Metra employees. Hence the need for run-throughs to Metra’s Western Avenue Coach Yard.

For Union Station run-throughs, Metra would prefer to use the 19-25-28 track series because it is a straighter alignment and results in a shorter push back into the station than the 21-7-38 track series. Amtrak uses 19-25-28 twice daily for the combination of its “Empire Builder” and “City of New Orleans” trains. The same equipment which arrives from one of these trains is cleaned in place on these tracks and then used for the loading and departure of the other train a few hours later. As of August 1997, for example, the “City of New Orleans” is scheduled to arrive from the south at 0915. That equipment stays on tracks 19-25-28 and later departs to the north as the “Empire Builder” at 1320. In the reverse direction the times for the arrival-departure blockage of tracks 19-25-28 is 1515 to 1950 (i.e., “Empire Builder” arrival and “City of New Orleans” departure).

As a result, the available scheduled window for Metra trains to use Tracks 19-25-28 is as follows (actual windows would be less by as much as five minutes allowing for train departure and signal clearing times):

- C Before 0915 (a.m.-peak Metra deadheads go north to Western Avenue)
- C From 1320 to 1515 (p.m.-peak Metra deadheads go south to 14th Street or the South Concourse)
- C After 1950 (after the p.m. peak, the route is open but is primarily used for equipment shuffling)

Because the p.m. peak run-through window is so early, all but one of the deadheads are serviced at Western Avenue and then moved to 14th Street for storage there until they are dispatched into the South Concourse platform tracks at the appropriate time. Only one deadhead from Western Avenue immediately pushes back into its loading position in the South Concourse without first going to the 14th Street Coach Yard.

The now-discontinued "Broadway Limited" between Chicago and New York sometimes loaded from 19-25-28 before proceeding out the south end of Union Station. This operation occurred because of a simultaneous concentration of Amtrak and Metra operations on the stub tracks. During the holiday peak-travel season, Amtrak has also used the run-through track to load longer-length trains. (The platform serving Tracks 22 and 24, Amtrak's normal South Concourse stub tracks, can accommodate 15 cars, which is the highest capacity of any South Concourse stub tracks.) Although Amtrak has recently moved away from originating long-distance trains in Chicago (e.g., in the "Empire Builder" and "City of New Orleans" example above), future Amtrak operations might revert to similar additional activity.

Metra non-revenue moves (work trains, equipment transfers, etc.) between the Milwaukee District in general (including the Western Avenue Coach Yard and Shops) and the rest of the Metra system (including 47th Street Yard and Shops on the Rock Island District) are also made on Union Station run-through tracks 19-25-28 when possible, especially in off-peak periods. Tracks 21-7-38 serve as a back-up route for these movements. In certain instances when those two routes are not available, Metra can use the Union Pacific Railroad's Rockwell Subdivision and Conrail trackage to make these movements, but as of this writing there is no standing agreement in place to make such deadhead movements on a regular basis.

Analysis of Metra Traffic on Stub Tracks

The South Concourse stub tracks are used by Metra's BNSF trains and Amtrak trains for destinations to the east, south and west. Metra SWS trains, which arrive northbound and depart southbound to make an outbound SWS trip, also use these stub tracks. Scheduled Metra service on the ten usable South Concourse stub tracks consists of a peak volume of 21 trains in the hour between 0700-0759, when there are 15 arrivals and six departures. There are also deadhead moves of BNSF consists to 14th Street Coach Yard. The physical plant of the South Concourse does allow for simultaneous arrivals and departures, such as a scheduled BNSF arrival at 0748 at the same time as a scheduled SWS departure.

From 0800 to 0859, there are 11 scheduled BNSF arrivals and departures on the stub tracks. Ten of these arrivals also result in deadhead moves to 14th Street Coach Yard. In the p.m. peak, activity on the stub tracks is also frequent. Between 1600 and 1659, there are eight scheduled BNSF operations as well as two SWS operations. Deadheading of both BNSF and SWS trains from 14th Street to the South Concourse also begins in earnest, with consists lining up one behind the other from the yard all the way north to the throat of the station, near Harrison Street. Between 1700 and 1759, the BNSF schedules 15 train operations over the stub tracks. BNSF trains are departing every four to five minutes from 1700 until 1748. There are nine deadhead moves into the South Concourse during this hour as well. One SWS train arrives on a stub track at 1714 and departs at 1730. In addition, as mentioned earlier, there is also inbound and outbound Amtrak activity during this hour to be added into the Metra traffic.

Candidate Alignments Dropped from Further Review

To perform the short-listing, the project team reviewed approximately 50 different railroad segments which could be used to connect the south suburban municipalities to downtown Chicago. The alignments and segments included high-density freight mainlines, Metra and Amtrak passenger lines, little-used freight lines, and abandoned railroad rights-of-way. Metra and ICF Kaiser cooperatively developed ten alternatives for the potential SouthEast Service (SES) from the original universe of possibilities (see schematic map and matrix at the end of this Appendix). Six of the original ten alignments were dropped; each of them is addressed in the following discussion.

Alignments Dropped from Further Consideration

- A** UP/CSX to MED at 119th Street to Randolph Street Station
- C** UP/CSX to UP at Dolton Junction to SWS at 74th Street to Union Station
- E** UP/CSX to CR at Dolton Junction to RID at 103rd Street to LaSalle Street Station
- EA** UP/CSX to CSX (ex-B&OCT) at Dolton Junction to MED at Riverdale to Randolph Street Station
- F** UP/CSX to CN at Thornton Junction to MED at Harvey to Randolph Street Station
- G** UP/CSX to CSX (ex-B&OCT) at Chicago Heights to MED at Harvey to Randolph Street Station

Alignment A - UP/CSX to MED at 119th Street

The MED already provides service to this general area of the region, although its alignment is on a steady southwest orientation from near 47th Street in the City of Chicago to University Park. While potential SES alignment options would run on the west side of the MED route within the City of Chicago, the further south one travels into the suburbs (where the UP/CSX line is east of the MED), the further west the MED is encountered. This has created a perceived need for a north-south line to the southeastern suburbs; the UP/CSX line could provide this route.

The potential SES, while it would likely attract some new Metra riders, might also take ridership away from the MED, as commuters originating between the two alignments (particularly those closer to downtown or having easier access to the potential SES) could tend to prefer it over the MED. Although some might consider this a significant drawback, early studies of this nature for the 2½-year-old North Central Service (NCS) predicted that some riders would divert from their present line to the new service, but also pointed out that those riders would be replaced by others (potential commuters who have been thwarted by the lack of parking) on their former lines. The pending results from the first NCS follow-up studies appear to indicate that this is happening.

Alignment A would connect the UP/CSX to the MED at 119th Street in Chicago. At 119th Street, the UP/CSX line passes over the Illinois Central (IC) and MED tracks on a concrete bridge. At present, no track connection is provided, but there is vacant land available to build a connecting structure to the IC tracks. The connection would be made to IC's "14 Pocket" track on the east side of the IC right-of-way, which in turn connects to IC's Track 4 south of Kensington interlocking. (Note that the IC tracks are freight-only.) From this location two existing routes are available, but there are problems with both approaches:

- C** From IC Track 4, potential SES trains could cross over to the MED tracks using the South Shore ladder track. However, the South Shore is linked to the MED by this single track, and there are already times when it becomes an operational bottleneck (particularly for the South Shore). Introducing additional train movements over this track could aggravate the problem, resulting in delays for both the potential SES and existing South Shore lines.
- C** Potential SES trains could use the existing track-to-track crossovers between the IC tracks north of the Kensington Interlocking, which would require upgrading these tracks and switches. However, no connection exists between the IC freight tracks and the MED tracks at the Kensington Station or anywhere further north, requiring further new construction. In either case, the IC freight tracks would require considerable upgrading to make them suitable for regular use by passenger trains.

There are additional considerations about operations through Kensington. The interlocking at this location is old and due for renewal. The South Shore is already subject to delays because of the single-track connection to and from the MED. This aforementioned bottleneck has prompted the South Shore to propose a “Kensington Bypass” track, which would connect into MED Track 4. It is possible that as part of the potential SES project, this bypass track could be constructed and used by both the SES and South Shore trains. Renewal of the interlocking might also be programmed as part of the potential SES project.

Yet another possibility would be to have the potential SES trains operate on the IC freight track from the connection with the UP/CSX to a point further north of Kensington. However, no track connections between the IC and MED currently exist in this area. IC Tracks 4 and 3 end at 71st and 67th Streets, respectively. To cross over to or from the MED north of 67th Street would not be practical, as this is the most densely trafficked portion of the service where trains from the MED Main Line and both branch lines are operating over the same sections of track. In addition, this would be an inferior arrangement for Metra, as it would require trackage rights on the IC while paralleling an existing Metra-owned right-of-way.

The extent of the work required at both 119th Street and near Kensington to connect to the MED would present formidable obstacles. When these circumstances were combined with the Randolph Street situation, Alignment A was dropped from further consideration.

Alignment C - UP/CSX to UP at Dolton Junction to SWS at 74th Street

While operation of potential SES trains to and from Union Station could probably be made workable, the station's South Concourse sees some intense peak-period activity by BNSF commuter trains and Amtrak intercity operations. Servicing facilities exist north (Western Avenue) and south (14th Street) of Union Station; either of these might be able to accommodate potential SES servicing and storage requirements. Operating to and from Union Station would offer a choice of downtown terminals for south side commuters. However, given the earlier discussion of CUS congestion, the closely related Alignment CA, which diverts from the SWS line at 21st Street in order to access LaSalle Street Station, would seem to be a better choice.

Alignment E - UP/CSX to CR at Dolton Jct to RID at 103rd/Washington Hts

For Alignment E, potential SES trains would follow the UP/CSX line up to Dolton Junction, serving all of the originally proposed station locations. At Dolton Junction, these trains would use the “B&O Lead” track to access the CSX line that goes to Barr Yard in Riverdale, and then cross over to the former Conrail (CR) “Panhandle Division”. Such a crossover does not currently exist, and would have to be constructed as part of the potential SES project. The CR line is used to transport hot-metal trains to Acme Steel on the south side of the Little Calumet River (approximately 130th Street).

The CR line has been removed north of the Acme Steel plant, but the right-of-way remains intact up to the intersection with the RID at 103rd Street/Washington Heights. The CR bridge over the Little Calumet River remains, but the right-of-way extending up to 127th Street (including the bridge) was previously sold to Acme. From 127th Street north to 106th Street, CR has been actively trying to dispose of the right-of-way. Negotiations with the City of Chicago are currently in progress on the sale of the right-of-way for conversion to a bike path, including the entire section of line which would be restored under Alternative E. From 103rd to 106th Streets, this right-of-way is now Metra’s property, and is currently used to provide parking for the RID Washington Heights Station.

Even assuming that Metra could purchase the right-of-way from the steel company, complete construction of a suitable rail line would be required. Design to FRA Class 4 standards is possible, as the right-of-way is arrow-straight from 127th Street north. However, there are numerous grade crossings between 127th and 103rd Streets which would require protective signaling and roadway rebuilding for the reinstalled grade crossings. Major thoroughfares crossed are 127th, 119th/Halsted, 115th, 111th and 107th Streets. In addition, the CR route crosses the MED/Blue Island Branch at grade; the old crossing would have to be restored. Suitable connection tracks and crossovers at the RID would also be required.

The only real advantage of using the CR alignment for potential SES trains is that it would give Metra an exclusive right-of-way at least from 127th Street to 103rd Street. North from Washington Heights, potential SES trains would operate over the RID. A transfer station with the MED Main Line at Riverdale (an existing MED station) is precluded, since the MED station is at 137th Street while the CR line passes under the MED around 135th Place (a distance of 1½ blocks). No transfer station would be provided at the crossing of the MED/Blue Island Branch near 120th Street, where the service frequency is comparatively low. From an operational standpoint, no other in-city stations would be proposed on the CR alignment.

The interest of the City of Chicago in the right-of-way, and the status of negotiations between Conrail and the City, are a definite deterrent to the possible use of the line for potential SES trains. Given the added issue for that portion of the line currently owned by Acme Steel, this alternative was deemed unworkable, and dropped from further consideration.

Alignment EA - UP/CSX to CSX at Dolton Jct to MED at Riverdale

Trains following Alignment EA would leave the UP/CSX line at Dolton Junction, connecting to the CSX (ex-B&OCT) line which operates northwest from the junction. At approximately 135th Street in Riverdale, this line passes under the IC/MED right-of-way, before turning west to enter CSX's Barr Yard. A single connecting track links the CSX line to IC Track 4, and via a crossover to IC Track 3. These tracks would require upgrading if they were to be used by the potential SES trains. In addition, totally new connecting tracks would be required to cross IC Tracks 1 and 2, and afterward to connect to the parallel MED trackage. As in several of the previously described alternatives, the prime detractor to Alignment EA is the proposed use of the MED to enter and leave Chicago. For this reason, and the earlier discussion about the limitations of the Randolph Street Station, this alignment was dropped from further consideration.

Alignment F - UP/CSX to CN at Thornton Jct to MED at Harvey

The UP/CSX line would be used for Alignment F up to Thornton Junction. At this point, potential SES trains would use a new connection to the CN line to follow this alignment diagonally northwest to Harvey. This connection could be to the eastbound main, thereby avoiding the "East Pass" track, which is frequently used for car storage. The existing CN physical plant is double-tracked and in good condition, with a maximum speed of 60 mph in effect for passenger trains. The existing crossover between the eastbound and westbound tracks could be used to access the existing CN-IC connecting track at Harvey, which would require upgrading in order to raise the operating speed. Bi-directional operation would be required over a short stretch of the eastbound track. In addition, a crossover tying the normal eastbound CN track to the westbound track would be required, as the connecting track to the IC feeds only the westbound CN track.

The extent of the work required to connect to the MED at Harvey, the competitive concerns over using the MED to and from Chicago, and the superiority of the LaSalle Street Station as the downtown terminal resulted in this alignment being dropped from further consideration. Alignment FA, which continues northwest to connect with the RID south of Blue Island, seemed to be the better choice.

Alignment G - UP/CSX to CSX in Chicago Heights to MED at Harvey

When operational, this separate CSX line (ex-B&OCT) passed under the what is now the UP/CSX line (ex-C&EI) just north of Joe Orr Road in Chicago Heights. A few years ago, when the rehabilitation of the UP/CSX bridge over the CSX line came due, the decision was made to fill in the overpass. The CSX right-of-way remains north of the UP/CSX line, although vegetation is quickly encroaching as the line passes through the middle of a Forest Preserve.

For Alignment G, connection to the CSX line would require a crossover between the two main tracks on the UP/CSX, south of the former grade-separated intersection with the CSX line. (There is an existing crossover, but it is north of this old junction.) A connecting structure and track work dropping down to the grade-level CSX line would be required. New track construction would be required up to approximately 194th Street, from which point the CSX track is intact.

CSX and CN train operation extends down to the Thornton quarries from the north. For some time, the line has not been operated south of the quarries, which extend to just south of 183rd Street. The track on the CSX line would require renewal/upgrading, and could be brought up to FRA Class 4 standards. The CSX line is single-track with passing sidings, and existing structures on the line, such as the bridge over Butterfield Creek on the west side of Glenwood, appear to be in good condition. Passing sidings were observed north of 175th Street, although the side track appeared unused, and trees and other vegetation were growing over the track at this location. Freight-service frequency might be such that upgrading the existing physical plant into a single-track-with-passing-siding configuration could be suitable, at least for the initial service plan.

However, a significant consideration of this alternative is the CSX line's ability to handle more-frequent train service in both directions, such as might be desired if SES trains to the potential South Suburban Airport would be introduced sometime in the future. (Note that a study which proposed extension of MED service to the potential Airport has already been performed; at the present time, that is the more-likely scenario.) The line is surrounded by Forest Preserves from Joe Orr Road up to Glenwood, making introduction of a second track environmentally problematic. Through the quarries, the line is on a narrow shelf, again restricting double-tracking possibilities. Similarly, where the line crosses 159th Street, it is surrounded by industry and other users, constraining right-of-way width. However, the existence of a passing track north of 175th Street could demonstrate that there is available right-of-way for a second track.

Signaling on the line includes color position lights and semaphores. This system would require major upgrade under any service scenario, but especially at such time as the volume of potential SES movements increased beyond start-up levels. Grade-crossing protection includes flashers but no gates at several locations, so that would also require considerable upgrade. Operation via this CSX line would mean that proposed station locations in Glenwood, Thornton, South Holland and Dolton would go unserved. Alternate sites are possible at the crossing of Glenwood-Chicago Heights Road in Glenwood, the crossing of 175th Street in Thornton, and near 159th Street in South Holland.

However, none of these “replacement” station sites are as well-located as the suggested station sites along the UP/CSX line. The replacement Glenwood site is surrounded by Forest Preserve, and to the south of the crossing, the CSX line crosses Butterfield Creek on a single-track bridge. Furthermore, this site is more remote from the developed part of Glenwood, compared to the UP/CSX site. Similarly, in Thornton, the CSX line crosses 175th Street just east of Ridge Road. It appears possible to locate a replacement station in the southwest quadrant of the crossing, but again this site is a significant distance from the commercial center of the community. The location where the CSX line crosses 159th Street is physically constrained, and is within one mile of the MED Harvey station.

The work required to connect the UP/CSX and CSX lines at Joe Orr Road, as well as the magnitude of construction required to connect the CSX to the CN and then to the IC/MED would be considerable. In addition, the amount of upgrade required to bring this CSX line into conformance with Metra standards is a major consideration. It was agreed that Alignment G would be dropped from further consideration.

Use of the Rock Island District (RID) to LaSalle Street Station

A review of train and passenger capacity at downtown terminals concluded that the RID and its Chicago terminal at LaSalle Street Station had the greatest capacity to accept both the additional train movements and servicing requirements comprising the potential SES. It was acknowledged that some construction might be required at Metra’s 47th Street Yard and Shops in order to accommodate the SES trains.

Alignment B would use the RID from around 73rd Street north, requiring construction of connecting ramps and trackage with the SES route north of the 79th Street RID overpass. Alignment D would use the RID from Gresham Junction north (approximately 88th Street, south of the Gresham Station), although the Chicago Rail Link segment between Oakdale (UP) and Gresham would require considerable upgrading to be suitable for commuter train operation.

Alignment E would have used the RID from 103rd Street north, where the Conrail (ex-PRR) right-of-way is intersected. It would involve the construction of 3.5 miles of track on the Conrail right-of-way, from 130th Street to 103rd Street. The right-of-way in the vicinity of RID’s Washington Heights Station (103rd to 106th) is being used for commuter parking, which would have to be relocated if the rail line were to be reconstructed. For these reasons, as well as the aforementioned Acme Steel ownership and the City of Chicago’s bike-path interests, Alignment E was dropped from further consideration.

In developing Alignment CA, it was agreed that there might be an advantage to using the Metra SouthWest Service (SWS) ex-C&WI trackage. This line has an existing connection to the UP line through the junctions at 81st Street onto NS trackage; the potential SES trains could be routed into LaSalle Street Station via new connections at 21st Street and 16th Street. The 21st to 16th Streets linkage would utilize existing IC tracks. The link from 16th to 21st Streets also has the added benefit of making it possible for Metra to divert SWS and Heritage Corridor trains to LaSalle Street.

Finally, Alignment FA would use the RID from Blue Island Junction north. Connecting ramps and trackage between the CN (GT) and RID would be required. This alignment bypasses the operational choke-points located at Yard Center and Dolton Junction. Moreover, by continuing further west on the CN alignment rather than Alignment F, which would have used the CN into Harvey to connect to the MED, Alignment FA presents the possibility for an I-57 Park-and-Ride station in the Harvey/Dixmoor area.

METRA SOUTH SUBURBAN COMMUTER

RAIL - ALTERNATE ROUTES



ROUTE	CARRIERS/OPERATORS	DOWNTOWN TERMINAL
A	UP/CSX,MED	RANDOLPH ST.
B	UP/CSX,RID	LASALLE ST.
C	UP/CSX,BRC,NS,MSW	UNION STATION
D	UP/CSX,CRL,RID	LASALLE ST.
E	UP/CSX,CR,RID	LASALLE ST.
F	UP/CSX,CN,MED	RANDOLPH ST.
G	UP/CSX,CSX,MED	RANDOLPH ST.

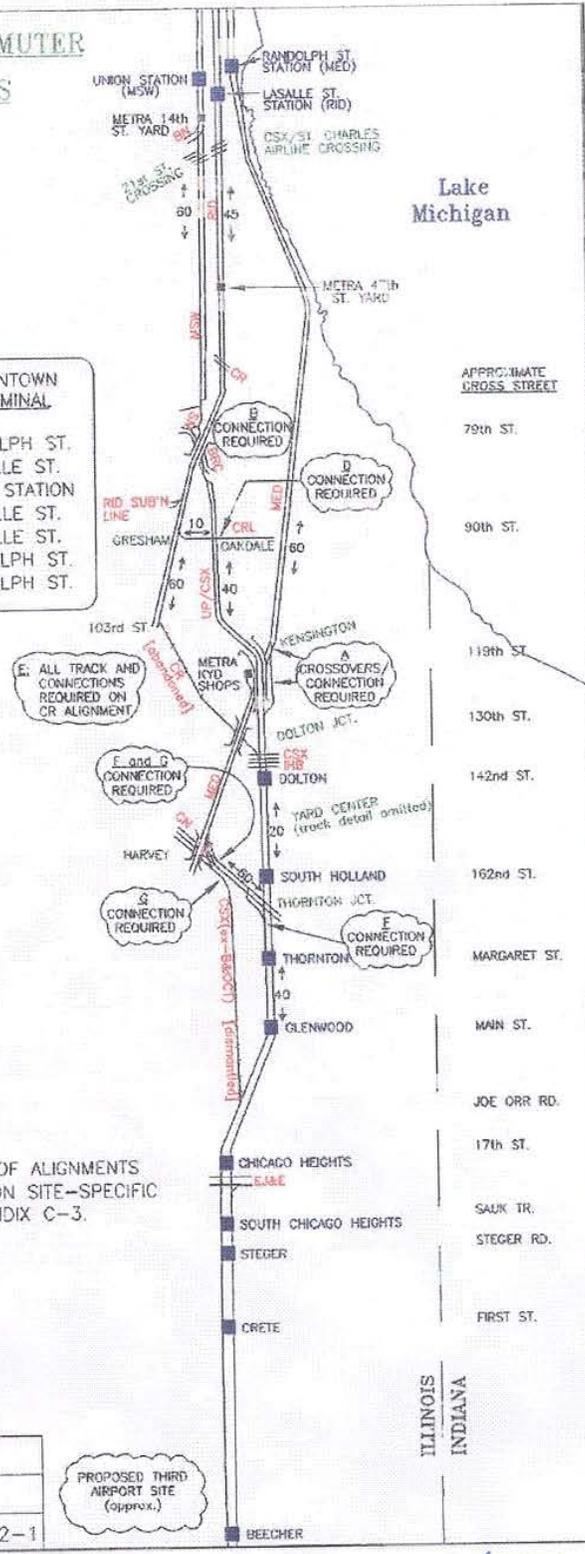
KEY TO RAIL CARRIERS/OPERATORS	
BRC	BELT RAILWAY OF CHICAGO
CN	CANADIAN NATIONAL (ex-GT)
CR	CONRAIL
CRL	CHICAGO RAIL LINK
CSX	CSX TRANSPORTATION
MED	METRA ELECTRIC DISTRICT
MSW	METRA SOUTHWEST SERVICE
NS	NORFOLK SOUTHERN
RID	ROCK ISLAND DISTRICT
UP	UNION PACIFIC

- POSSIBLE STATION LOCATIONS
- ABANDONED/DISMANTLED RAIL LINES

NOTE: MAXIMUM SPEEDS ON SECTIONS OF ALIGNMENTS ARE SHOWN. FOR INFORMATION ON SITE-SPECIFIC SPEED RESTRICTIONS, SEE APPENDIX C-3.

NOT TO SCALE

FIGURE: 2-1	
DATE: 12/14/95	DR.: TRH
SCALE: NTS	FILE NAME: METRA2-1



Evaluation Matrix for Ten Short-Listed Alignments

Alignment	A	B	C	CA	D	E	EA	F	FA	G
Terminal	Randolph	LaSalle	Union	LaSalle	LaSalle	LaSalle	Randolph	Randolph	LaSalle	Randolph
Metra Route	MED	RID	SWS *	SWS *	RID	RID	MED	MED	RID	MED
Connection to Metra	119th St	79th St	74th St	74th St	89th St	103rd St	135th St	Harvey	Blue Island	Harvey
Intermediate Rail Route	n / a	old r-o-w	old r-o-w / NS	old r-o-w	CRL	CR (PRR)	CSX	CN (GT)	CN (GT)	CSX / CN
Diversion from UP/CSX	119th St	88th St	88th St	88th St	Oakdale	Dolton Jct	Dolton Jct	Thornton Jct	Thornton Jct	Chicago Hts
Approx. Route Length	39 miles	40.5 miles	38 miles	38.5 miles	39 miles	38 miles	39 miles	43 miles	41 miles	38 miles
% owned by Metra	39%	20%	27%	19%	25%	31%	44%	46%	40%	52%
Total Suburban Stations	10	10	10	10	10	10	10	11	11	6
UP/CSX	9	9	9	9	9	9	9	7	7	5
CN	n / a	n / a	n / a	n / a	n / a	n / a	n / a	3	3	n / a
RID (transfer)	n / a	1	n / a	1	1	1	n / a	n / a	1	n / a
MED (transfer)	1	n / a	1	n / a	n / a	n / a	1	1	n / a	1
Track Improvements or New Connections	119th St	79th St	n / a	21st St 16th St	Oakdale Gresham	3.5 track mi	Riverdale	Harvey	Blue Island Jct	3.0 track mi Harvey
Tight Turns	n / a	n / a	n / a	n / a	Oakdale Gresham	n / a	n / a	Harvey	Blue Island Jct	159th St
Potential for Freight Congestion	Yard Center + Dolton Jct	Yard Center + Dolton Jct	Yard Center + Dolton Jct	Yard Center + Dolton Jct	Yard Center + Dolton Jct	Yard Center + Dolton Jct	Yard Center + Dolton Jct	n / a	n / a	n / a
Terminal Difficulties	High-level platforms + ventilation	n / a	Lack of Capacity	n / a	n / a	n / a	High-level platforms + ventilation	High-level platforms + ventilation	n / a	High-level platforms + ventilation
Recommendation	Drop	Study	Drop	Study	Study	Drop	Drop	Drop	Study	Drop

n / a = not available or not applicable

* Route splits at 21st Street Junction

Appendix B

Dispatcher Data for Four Representative Days at CP 74th Street

Dispatcher Data for Four Representative Days at 74th Street

In order to ascertain the circumstances of freight-train movements through and near 74th Street, and the likelihood of potential SES trains using Alignments C or CA being delayed, dispatching records from four sample dates over a one-year period were examined. The CORA Guide and railroad rule books/operating timetables were used as a reference with regard to allowable speeds, control responsibility and for any other site-specific considerations.

The total number of trains operated through CP 74th Street appeared to be increasing over the period in question. The fact that most trains operated outside the peak periods certainly helps to avoid delays to SWS trains. However, besides the uncertainty of future freight movements, Metra is actively studying additional SWS trains, up to 30 in the first phase following improvements to the infrastructure. The amount of time some trains spend within the limits of CP 74th Street increases the possibility of interference to potential SES trains, particularly if the trend in the number of freight train movements continues to increase as well.

Monday, August 7, 1995

- C Most Conrail trains enter or leave Metra trackage at 47th Street, although changes to the physical plant around 47th Street would eliminate these moves in the future. Only one Conrail movement operated as far south as CP 74th Street; this occurred near the end of the morning peak, at a time when the possibility for interference with peak-period commuter traffic was diminished.
- C Amtrak movements through this location occurred in midday.
- C Of the two BRC movements recorded through this location, one occurred before the morning peak period, while the other operated southbound through CP 74th Street after 8:00 a.m.
- C One NS train operated through CP 74th Street, just before noon, clear of commuter train activity.
- C Two UP movements were recorded (only one passed through CP 74th Street, before the a.m. peak).

Monday, December 4, 1995

- C Metra records showed one Amtrak train northbound at 8:03 a.m. (possibility of interference with peak-period, peak-direction commuter train traffic).
- C One northbound BRC train passed through CP 74th Street well before the a.m. peak; the train was in the limits of CP 74th Street for 13 minutes.
- C Two NS trains (one in each direction); both passed after the a.m. peak.
- C Two southbound UP train operated outside of the peak period; the entry for one of the UP movements indicates it was at CP 74th Street for 48 minutes.
- C Dispatcher records indicate that some train movements are unhurried, a fact that was corroborated during observations conducted in a field inspection in late 1996.

Wednesday, April 10, 1996

- C One northbound Amtrak train passed well before the a.m. peak.
- C Two BRC trains passed, a northbound well in advance of the a.m. peak, but a southbound in the midst of the morning peak; the latter remained within the limits of CP 74th Street for 12 minutes.
- C Four NS trains passed: one southbound outside the peak periods and three northbounds, with one just after midnight, the next after the a.m. peak and the last after the p.m. peak.
- C Six UP trains (all southbounds) passed through, two before the a.m. peak, one midday and three after the p.m. peak.

Thursday, June 6, 1996

- C Three Amtrak trains movements were recorded, two southbounds after the p.m. peak and one northbound after the a.m. peak.
- C Three BRC trains were recorded: two southbounds, one at the close of the a.m. peak and the other before the p.m. peak, and a northbound train before the a.m. peak.
- C One Conrail train operated southbound before the a.m. peak.
- C One northbound NS train passed just after noon.
- C Eight UP train operations occurred: one northbound in the pre-dawn hours, and seven southbounds of which two operated before the a.m. peak, one ran early in the a.m. peak (remaining within the CP 74th Street limits for 14 minutes), one operated towards the close of the a.m. peak (spending 25 minutes in the limits of CP 74th Street) and the other three all ran after the p.m. peak period.

Appendix C

Profiles of Communities in South Suburban Study Area

Profiles of Communities in South Suburban Study Area

Project staff visited each community along the UP/CSX, meeting with local planners and officials to review their zoning maps, comprehensive plans, and other municipal documents. In addition, following the identification of the CN route as an option, similar meetings were held with communities along that line. The following material is the result of these community reviews. Circumstances in each community were compiled and summarized on the basis of location, demographics, major employers, land uses, and development trends. **Note that most of this material was compiled in the Summer and Fall of 1996.**

THE VILLAGE OF BEECHER

The Village is located 35 miles south of Chicago in eastern Will county. It occupies approximately 1,200 acres and is surrounded primarily by unincorporated agricultural land. Peotone lies to the west, Crete to the north, Kankakee to the south, and Indiana to the east. Dixie Highway (IL 1) runs north-south through Beecher; it connects the Village to the Bishop Ford Expressway and the Dan Ryan Expressway to downtown Chicago. Major east-west routes include Indiana Avenue at the southern end of the Village, Penfield Road running through the traditional downtown, and Church Road at the northern end of the Village.

Demographics

Beecher's growth has been consistent and steady through the '90s, with an upswing in 1995, after minimal growth from 1980 to 1990 (a total of only eight people). The 1990 census showed 2,032 residents in Beecher, while an interim 1995 census showed 2,348 residents, a 16% increase. The 1989 median household income was \$40,417, only 2% lower than the Will County median. Median home value in Beecher was \$88,100, similar to the value of homes overall in Will County of \$89,900.

Employment and Major Employers

Beecher is primarily a residential community. The 1990 unemployment rate for the community was 3.8%. Seventy-six percent of the working population worked outside of Beecher, and took an average of 25 minutes to get to work. Dovatech Inc., located on the south side of Beecher, is the community's largest employer (150 employees); H&R Industries (35 employees) is also located on the south side of town. Beecher also has a 100-130 bed nursing home.

Land Uses

Currently, approximately 50% of Beecher's land area is vacant or agricultural, while 40% of the land is residential. Beecher's residential areas are focused along IL 1 and surrounding the traditional downtown along the UP/CSX. Residential lots are compact in the traditional center of Beecher, while peripheral development has larger lot sizes. Presently 92% of the Village is planned for residential development.

The historic downtown, focusing on Penfield, Reed, Gould, and Indiana Roads, is the focus for the community's historic preservation and commercial area. The Fire Station, Post Office, Village Hall and the Community Building are also located within this area. There is additional commercial activity along IL 1. Beecher presently has relatively small industrial areas, with an office research park being developed on the northern boundary west of IL 1.

Development Trends

Beecher issued 82 building permits between 1990 and 1995, an average of 14 per year. Building permits peaked at 31 in 1992. In its 1996 Comprehensive Plan, the Village foresees growth within the community. Although actual numbers differ between community-developed forecasts and regionally developed forecasts, plans remain for Beecher to retain its rural character. Presently there is no mail service to Beecher residents. Due to a postal ordinance that denies door-to-door delivery of mail, and a Village ordinance that does not allow street-side mail boxes, mail must be retrieved at the downtown Village Post Office.

A historic downtown redevelopment plan calls for buildings, landscapes, and facades to be restored to the appearance of downtown in 1905. With this plan, the Village hopes to retain the local character while bringing in new commercial endeavors. The first commercial commitment is for a 5,000 to 6,000 square-foot Hallmark store, to be located south of Penfield Road and east of the UP/CSX tracks. Beecher's plans are for a traditional downtown with modern amenities, including a small theater and specialty stores.

In 1994, Highlington Golf Properties opened single-family-detached homes on the Shady Lawn Golf Course. These homes range in size from 1,750 square feet to 3,500 square feet, priced from \$300,000 to \$400,000. Other golf-course-related residential development has been proposed for the area, including garden homes on the east side of the golf course catering primarily to retirees. South of downtown and south of Indiana Avenue, local investors have developed Southfield Knolls, with home prices ranging from \$125,000 to \$150,000. North of downtown, Beecher plans to develop homes in a neo-traditional pattern.

Beecher also plans for a business/industrial park to be located along Church Road on the northern end of the Village. It is presently in the preliminary engineering phase. The industrial park will be supported by a Tax Increment Financing (TIF) district. Beecher's changing growth will be a direct result of some of the surrounding area's developments. For example, siting of the proposed South Suburban Airport just west of Beecher would substantially increase the potential for residential, commercial, and industrial growth. If the airport were to be implemented, Village officials could foresee development of an industrial park to the south of the Village. Capacity on the existing transportation network would need to be substantially improved.

THE VILLAGE OF CRETE

The Village is located along Main Street (IL 1) in Will County. Its eastern edge is the Bishop Ford Expressway (IL 394). Crete is bordered by Steger to the north, Park Forest to the northwest, University Park to the west, and unincorporated land to the south and east. There are nearly ten miles of unincorporated land separating Crete from Beecher, its nearest neighbor to the south. IL 1/Dixie Highway/Main Street is the primary north-south route through Crete. The key east-west roads are Exchange Street, which runs through the center of town, and Burville Road in the south.

Demographics

In 1990, Crete had a population of 6,773, a 25% increase over the 1980 population of 5,417. Median household income in 1989 was \$46,283, 12% higher than the median income for Will County and the highest median income for the communities in this study. In 1990, median home value in Crete was \$106,900, almost 20% higher than the median home value for Will County and the highest value for all of the communities in the study area.

Employment and Major Employers

In 1990 the unemployment rate in Crete was 4.0%. The working population took an average of 30 minutes to get to work. Major employers include the Crete/Monee School District located on Dixie Highway, which employs 450 people, and American Lock Company on West Exchange Street, which employs 310 people. In 1994, Walt's Foods opened just west of IL 394. Presently Crete is developing a TIF district along North Main Street to encourage business and industry in the Village. The TIF is paired with a Heritage Preservation Ordinance which identifies architectural guidelines that are used to preserve existing character of the buildings of Crete. The Village has also identified a niche market for antiques.

Land Uses

Crete is primarily a residential community, with much open space and a number of golf courses. The housing is primarily single-family; multi-family housing comprises only 10% of the residences. Residential areas are concentrated in the southwestern and northeastern parts of the Village. Crete's commercial areas are located in the eastern part of town, close to the Bishop Ford Expressway, and along Exchange Street and Main Street in the traditional town center. Land uses along the UP/CSX alignment vary. In the southern part of Crete, land adjacent to the railroad is primarily residential. North of Exchange Street is zoned for business. Presently, the land from 5th Street north to the bridge over the Little Calumet River is vacant/agriculture. However, this land (part of Crete's TIF district) may be considered for small manufacturing and commercial uses.

Development Trends

The Village of Crete has issued approximately 50 single-family home-building permits per year since 1990. They issued 47 in 1995, and by August of 1996 they had already surpassed that number by issuing 50 permits for single-family homes. Of all of the communities in the study area, Crete has the highest and most consistent permit issuance. The Village of Crete has a lot of opportunity for growth, with a number of developments platted but not yet built. They are also proceeding aggressively with annexation, including land from the existing eastern border to the Bishop Ford Expressway, and south from the current boundary to Balmoral Race Track.

Mirroring the established TIF district, the historic district follows Main Street with the goal of achieving an 1890-1920s look. The Heritage and Architecture Commission has established guidelines for existing and new buildings, and includes a vision for a commuter rail station along the UP/CSX. The Station Plan locates the station adjacent to an existing park, with through access to the Village's new public library.

THE VILLAGE OF STEGER

Steger is located at the southeastern edge of Cook County, straddling the Will County line at Steger Road. It is bordered by the Bishop Ford Expressway (IL 394) to the east, South Chicago Heights to the north, Crete to the south, and Forest Preserve to the west. Chicago Road (IL 1) is the major north-south route through the Village; it runs parallel to the railroad tracks. Steger Road (also the Cook-Will County Line) is the major east-west route through the Village.

Demographics

Steger's 1990 population of 8,584 represented a 7.4% decline over the 1980 count of 9,269. The 1994 Census estimate was 8,749, indicating a 1.9% increase in four years. The 1989 median household income was \$29,903, 8.5% lower than Cook County and 27% lower than the Will County median. The median home value in 1990 was \$55,300, considerably lower than medians in Cook or Will Counties.

Employment and Major Employers

The Village's major employers are Gooch Foods (300 employees) and K-Mart (150 employees). There is also an industrial park with 29 small manufacturing businesses. In 1990, the unemployment rate was 7.0%.

Land Uses

The primary commercial area for the Village is centered at Steger Road and Chicago-Vincennes Road to the east and west of the railroad tracks. The area has convenience-oriented shopping in several small strip shopping centers, and a free-standing K-Mart. The K-Mart has a large municipally owned parking lot that would be able to serve commuters. The former train station on the west side of the tracks south of Steger Road is now leased to a construction firm. Other uses south of the former station include a lumber yard, junk yard, and single-family homes. An auto service garage is on the east side of the tracks south of Steger Road.

Land use in the vicinity of the railroad tracks includes residential use at the far northern edge of the Village, with retail and small-scale warehouse/industrial use south of 31st Street. Zoning along the west side of the right-of-way is primarily B-1 (business district - limited retail) and B-1 PBD (planned business district) north of 34th Place, B-3 (service and wholesale) between 34th Place and 36th Street, M-2 (manufacturing - general) between 36th and 37th Streets, and B-2 (business district - general retail) south of 37th Street. On the east side of the railroad tracks, zoning is primarily B-1 north of 34th Street, with a small piece zoned B-3 at 33rd Street. Zoning is B-2 south of 34th Street to 37th Street and B-3 south of 37th Street.

Development Trends

Between 1990 and 1995, Steger issued building permits for 151 residential units, an average of 25 per year. With the original part of Steger largely built-out, the Village in 1990 annexed land from State Street to the Bishop Ford Expressway. Most of the new residential development is occurring in this part of the Village. Most of the homes are single-family units (which the Village encourages) between 1,800 and 3,000 square feet, considerably larger than the older homes in the Village. These homes are situated on at least one-acre lots, and have wells and septic systems. The area can accommodate approximately 700 homes without Village sewer and water; 500 have already been built. One newer development has some town homes.

The Village has a TIF district south of 35th Street in Will County. Centennial Village, a senior housing development with 81 units, will break ground by the end of 1996. A senior citizen center will be built adjacent to the residential development. There has been limited commercial development in the Village over the past few years, although a video store is locating on the site of a former restaurant in the downtown area.

THE VILLAGE OF SOUTH CHICAGO HEIGHTS

South Chicago Heights is located in southern Cook County along IL 1. Its neighbors include Chicago Heights to the north, Sauk Village to the west, Steger to the south, and Forest Preserve to the east. In general, South Chicago Heights is a land-locked community. IL 1 is the community's main north-south street and Sauk Trail Road is the main east-west road.

Demographics

In 1990, 3,597 people lived in South Chicago Heights, a 9.3% decrease from 1980. The 1989 median household income was \$27,604, 15% lower than the Cook County median household income of \$32,673. The median home value for South Chicago Heights was \$59,000 in 1989.

Employment and Major Employers

The 1990 unemployment rate in South Chicago Heights was 6.3%, and on average it took 22 minutes for its residents to travel to work. The community's larger employers include a Jewel Food Store and Portion Packaging, each with over 100 employees.

Land Uses

The Village is part residential, part industrial. For the most part, the eastern part of the Village (east of the UP/CSX) is industrial. The western part of the town is residential. There is, however a section of land south of the industrial area and bordering Steger, which is newly subdivided and prepared for residential building. Sauk Trail Road and IL 1 are the main commercial areas for South Chicago Heights.

Development Trends

Building permit activity in South Chicago Heights has recently declined, from 23 in 1993 to 13 in 1994 and only six in 1995. While most of South Chicago Heights' residential land is built-out, there is some residential growth on the west end (about fifty single-family dwellings) neighboring the Forest Preserve. South of the industrial area and bordering Steger, land has been recently subdivided for 26 houses and eight town homes.

THE CITY OF CHICAGO HEIGHTS

Chicago Heights is located south of Homewood, east of Flossmoor, Olympia Fields and Park Forest, north of South Chicago Heights, and west of Ford Heights. It is centered along Lincoln Highway (US 30) and Chicago Road (IL 1). The City has excellent access to IL 394 at US 30. In addition to Chicago Road, major north-south roads include State Street, Cottage Grove Avenue, Dixie Highway and Western Avenue.

Demographics

Chicago Heights registered a 10.7% decrease in its population between 1980 and 1990 (37,026 to 33,072). By 1994, the Census population estimate was 33,713, a 1.9% increase in four years. The 1989 median household income was \$27,551, 16% below the median in Cook County. The median home value in 1990 was \$62,500, 39% lower than the Cook County median.

Employment and Major Employers

Unemployment in Chicago Heights in 1990 was 9.8%, although it has declined in recent years. According to the Illinois Department of Employment Security, the unemployment rate in Chicago Heights has dropped to 5.2% in 1993 and 4.0% in 1995, lower than that of Cook County or the Chicago PMSA.

Chicago Heights has one of the largest employment bases in the south suburbs. According to data from the Illinois Department of Employment Security, in 1994 Chicago Heights had 15,227 private-sector employees. The City had 704 private business establishments in 1994, only three less than it had in 1991. The largest employment sector is manufacturing, employing 39% of all private-sector workers. Other major industries include health services (17%) and retail trade (14%). The major employers in the City are Ford Motor Company (1,994 employees), Thrall Car Manufacturing (948), Rhone-Poulenc (315), United Globe Nippon (285), Calumet Steel (245), and Cub Foods (225). St. James Hospital, which is located downtown, is also one of the largest employers with over 1,000 employees.

Land Uses

The area in the vicinity of the railroad tracks is primarily a mix of industrial and residential, with a limited amount of commercial use. Zoning on the east side of the tracks north of 14th Street is M-3 (heavy industrial) and B-3 (general service and wholesale business) south of 14th Street to Independence Avenue. Zoning south to the City limits is M-1 (limited manufacturing). Land use is more diverse on the west side of the tracks. At the north end of the City, property is zoned R-1 (single-family residential) to 10th Street, although portions of Forest Preserve directly border the tracks. Between 10th and 15th Streets, land is zoned B-3. Between 15th Street and Independence Avenue, zoning is B-5 (central business district), while the block between Independence Avenue and Main Street is zoned B-2 (limited service business). South of Main Street is mostly M-1.

In the downtown area, which is the likely station location, the area to the west of the tracks is the older core of the downtown. This had been a vibrant retail hub thirty years ago, but the major department stores closed and left the area with many vacancies. There is one large office building that formerly housed the First National Bank, several smaller office buildings, a VFW hall, some marginal retail buildings, and warehouse/storage and industrial uses. A vacant City-owned lot, which could be used for commuter parking, is west of the tracks between 17th Street and Illinois Street. To the east of the tracks in the downtown area are offices containing the Cook County Housing Authority and apartments for elderly and handicapped persons. According to the City's planner, most of the land adjacent to the railroad is owned by the UP.

Development Trends

The City issued a total of 90 residential building permits between 1990 and 1995, an average of 15 per year. Most of the commercial development in Chicago Heights has occurred at the western edge along Lincoln Highway near the Olympia Fields border. This includes retail projects, such as the former Kline's Department Store and Cub Foods in the City's TIF districts. The City also has a TIF district in its industrial park; several business expansions have occurred here, as well as in other industrial areas, in recent years.

THE VILLAGE OF GLENWOOD

Glenwood is located between 187th Street on the north, Vollmer Road on the south, Halsted Street (IL 1) on the west, and the Bishop Ford Expressway (IL 394) on the east. The Village is east of Homewood and south of Thornton. The community is somewhat isolated from its neighbors, the result of being surrounded on most sides by Forest Preserves, a country club, a golf course, a cemetery, and the Glenwood School for Boys. This gives the Village an almost pastoral feel, quite unique in the Chicago metro area. The major access roads for the Village are Glenwood-Dyer Road connecting the Village southeast to IL 1, and Glenwood-Lansing Road connecting the Village with communities directly to the east. The road network to the west is more limited, and frequent freight trains further impede the flow of traffic. Halsted Street, State Street, and Cottage Grove Avenue provide north-south access.

Demographics

The Village had a 1990 population of 9,289, an 11.8% decrease from the 1980 count of 10,538. The 1994 Census estimate shows a stable population of 9,249. Village officials consider the 1990 numbers to be too low, but they did not want to undertake the expense of a special census. NIPC projects a population increase because of recent annexations. The 1989 median household income was \$44,880, 37% higher than that of Cook County. The 1990 median home value was \$86,000, 16% lower than the median for Cook County.

Employment and Major Employers

Glenwood is primarily a residential community, with a limited tax and employment base, and a 5.5% unemployment rate. An industrial park on the southwest side of the Village on Glenwood-Chicago Heights Road is a TIF district. It is now almost fully developed, and has added four new businesses in the past year. The largest employer, Landauer (285 employees), makes radiation detectors. Other large employers include Northern Illinois Gas (235), Signature Group (235), Raco Steel (125), Morrison Timing and Screw (70), Dober Group (62), Trans Continental Systems (60), Culligan Water Systems (45), and Mahs Trucking (45).

Land Uses

At present, the land along the railroad tracks is zoned R-3 and R-4, with B-1 zoning along Main Street. The west side of the tracks is single-family residential. On the east side of the tracks are a few businesses at the corner of Main and Young Streets, with multi-family and single-family residential north of that. The land north of Center Street on the east side of the tracks is currently vacant. A Forest Preserve is north of this vacant parcel. The proposed Village Center redevelopment plan (described below) would change the character of the area along the railroad tracks into a mix of residential, commercial, and public uses.

Development Trends

Between 1990 and 1995, Glenwood issued only 22 residential building permits. Recent large-scale development includes the annexation of the 209-acre Glenwoodie Country Club on the south side of the Village at State Street and Glenwood-Dyer Road. The Village purchased the property, renovated the club house and hired a firm to manage the golf course. They are looking at a range of development opportunities for an additional 130 acres that will include housing development along the golf course.

Glenwood recently annexed 18 acres of land south of Glenwood-Dyer Road near the Bishop Ford Expressway for future commercial development. Glenwood Plaza, the Village's major shopping center, is currently undergoing renovation. Approximately 600 acres of unincorporated land located southeast of the Village could be available for residential development, although no plans for this annexation currently exist.

The Village is also actively targeting development of a Village Center to be created on land to the east and west of the railroad tracks north of Main Street. This includes 18 acres of vacant land owned by the Village along the east side of the tracks, which is being reserved for future commuter parking. Glenwood launched a national design competition to submit plans for a new Village Hall, town square and potential train station. From 173 submissions, a jury of four architects selected an Albany, New York-based architect to develop more detailed plans for the project. The Village will try to recruit a master developer for the project.

As proposed, the redevelopment will include a parking lot with passenger drop-off along the west side of the railroad tracks north of Main Street. To the west of this will be a town square, new Village Hall, the existing police station and water tower, retail and office space, and housing for the elderly. The potential train station would be sited on the east side of the railroad tracks north of Center Street, with additional parking on the Village-owned parcel north of this site. The existing buildings at Main and Young Streets would remain, with new development along Center Street, most likely office and multi-family residential. The development plan is intended to create a "sense of place" for the downtown and Village overall.

THE VILLAGE OF THORNTON

The Village is located south of the Tri-State Tollway (I-80/I-294) between the Bishop Ford Expressway (IL 394) and Halsted Street (IL 1). Homewood and East Hazel Crest are to the west. The main roads in Thornton are Margaret Street (east-west) and Williams Street (north-south). Sixty percent of Thornton is occupied by stone quarries.

Demographics

In 1990 Thornton's population was 2,778, an 8% drop from the 1980 population of 3,022. The 1989 median household income was \$37,314, about \$5,000 higher than the Cook County median. Median home value in 1989 was \$71,000.

Employment and Major Employers

The unemployment rate for Thornton in 1990 was 5.4%. The Village's largest employer is Material Service Corporation, which does limestone mining and processing. It took an average of 23 minutes for Thornton residents to get to work.

Land Uses

Thornton's major land use is the quarries, with the primary residential area located on the east side of town. Since the Village is landlocked, the residential area is primarily built-out. There are some minor commercial and business areas along Margaret and Williams Streets. The UP/CSX line runs north-south through town.

Development Trends

Recently Thornton has implemented two large-scale TIF redevelopment districts, one for its downtown and another for its northern industrial area. The downtown TIF runs through the traditional downtown of Thornton up to the north along Williams Street. The residents were surveyed to assess their preference for types of commercial businesses to go into the TIF district. They include laundry facilities, farmer's market, repair services and equipment rental. The Metropolitan Water Reclamation District has proposed to turn one of Thornton's northern quarries into a reservoir. Thornton has also identified this site in its Industrial TIF Redevelopment District.

THE VILLAGE OF SOUTH HOLLAND

South Holland is located immediately to the west of I-94, between I-80/I-294 on the south and Sibley Boulevard on the north. It borders Harvey and Phoenix on the west, Dolton on the north, Calumet City on the east, and Thornton on the south. In addition to I-94, the major north-south thoroughfares are Cottage Grove Avenue, South Park Avenue, and State Street/Indiana Avenue. The major east-west roads are Sibley Boulevard, 159th/162nd Street, and I-80. Highway access to South Holland is good, as I-80/I-294 and I-94 intersect at the southeast corner of the Village. However, only three streets in the Village cross the railroad tracks and only two streets cross I-94, making some local travel difficult.

Demographics

The Village of South Holland had a 1990 population of 22,105, which represented an 11.5% decrease over the 1980 count of 24,977. The 1994 Census estimate showed a further 2.0% decrease to 21,673. The 1989 median household income was \$45,211, 38% higher than Cook County and the second highest of the communities in the study area (slightly lower than Crete). According to the Illinois Department of Employment Security, the unemployment rate in South Holland has been consistently below that of Cook County and the Chicago PMSA. In 1990, the unemployment rate in South Holland was 3.9%. Over the past three years, the rate ranged from a low of 6.0% in 1993 to 4.5% in 1995. The median home value in 1990 was \$90,600, 11% below that of the Cook County median.

Employment and Major Employers

South Holland has a significant employment base, second only to Chicago Heights among the communities in the study area. As of 1994, the Illinois Department of Employment Security showed its private-sector employment to be 9,689. This represents a slight decline (1.7%) since 1991. The number of private sector establishments has grown by nine since 1991 to a total of 711 businesses. South Holland's employment base is diverse with 23% in manufacturing, 15% in retail trade, 10% in contract construction, and 8% each in wholesale trade and health services.

South Holland has a strong manufacturing base with major employers including J.L. Prescott Co. (425 employees), Carl Buddig & Co. (300), Levelor Corp. (212), Midwest Fastener Co. (175), South Holland Food Products (175) and Bell Packaging Corp. (150). The largest non-manufacturing employers include South Suburban College (800), Thornton Township School District (320), Resthaven Convalescent Home (200), Jewel Food Stores (160) and South Holland Bancorp (160).

Land Uses

Most of the land along the UP/CSX right-of-way is zoned for industrial use, although there are sections north of 162nd Street on the west side of the tracks that are single-family residential. Near 162nd Street, the tracks are on an embankment; commercial, residential and civic uses are adjacent to the railroad. Senior citizen housing will be built in the southwest quadrant of the railroad tracks and 162nd Street. Directly south of the junction with the Canadian National (Grand Trunk) railroad is an industrially zoned area that is currently undeveloped. South of 168th Street on the east side of the tracks is an area with single-family homes.

Development Trends

South Holland is a mature suburb with little vacant land remaining for new development. However, between 1990 and 1995, a total of 45 residential building permits were issued. A 100-unit subdivision (Parkview Estates) is planned. Other recent commercial development projects include new retail and other commercial construction along US Route 6 (162nd Street). These include remodeling or expansion of several car dealers, conversion of an existing building into an athletic club, several small office buildings, and senior housing adjacent to the UP/CSX railroad tracks. In other parts of the Village, an all-suites hotel is scheduled to start construction near Halsted Street. Additions and remodeling of small commercial buildings, and the expansion of an industrial building, have been approved and should start soon.

THE VILLAGE OF DOLTON

The Village occupies six square miles immediately south of the Chicago City Limits. It is bordered by Calumet City on the east, the City of Chicago on the north, South Holland on the south, and Riverdale on the west. Most of the Village is located between I-94, Indiana Avenue, 138th Street (Chicago border), and Sibley Boulevard, although small portions of the Village lie to the west of Indiana and to the south of Sibley. The Village is well-served with north-south roads, including I-94, Lincoln Avenue, Greenwood Road, Chicago Road, and Indiana Avenue. East-west access is more limited due to the railroad tracks and frequency of train traffic. Only Sibley Boulevard at the south side of the Village provides unrestricted east-west travel, since it crosses the railroad on an overpass.

Demographics

Dolton's population experienced a 7.7% decline between 1980 and 1990, from 24,766 to 23,930, although the estimated 1994 population increased by 2% to 25,256. The median household income in 1989 was \$36,724, approximately 12% higher than Cook County's median income of \$32,673. According to the Illinois Department of Employment Security, the unemployment rate for the past three years in Dolton has ranged from a high of 8.6% in 1993 to 6.5% as of 1995. This rate is consistently higher than that of Cook County and the Chicago PMSA (5.5% and 5.1%, respectively, in 1995). The median home value in Dolton in 1990 was \$65,100, considerably less than the Cook County median of \$102,100.

Employment and Major Employers

Data from the Illinois Department of Employment Security show that 3,892 people were employed in the private sector in 1994 in Dolton. Just over 30% of private-sector employment is in manufacturing, with another 29% in retail trade, 12% in health services, and 5% in contract construction. Dolton's unemployment

rate was 6.8% in 1990. Major employers include Consolidated Medical Transport (850 employees), Ball-Foster Glass Container Co. (458), Dolton Aluminum Company (250), Menard's Home Improvement Center (165), K-Mart (124), Jefferson Smurfit Corporation (102), and Safety Kleen Corporation (100).

The Villages of Dolton, Riverdale and Calumet City are part of the Calumet Region Enterprise Zone, a designation that offers a variety of incentives to business. These include property tax abatements, permit and fee waivers, sales tax exemption on construction materials, pollution control facilities and machinery and equipment used in the zone, jobs and investment tax credits, utility tax exemption, and business financing through the Illinois Development Financing Authority. Dolton also has a TIF district that stretches along Sibley Boulevard from the I-94 interchange to Avalon Avenue on the west. New development to date includes a facility for CoMed Ambulance Service and the Menard's store.

Land Uses

Land use along the proposed alignment is primarily industrial and residential, with some commercial uses. According to the Village zoning map, south of 144th Street the land along the railroad is M-1 (limited manufacturing district), with a small section on the east side of the tracks R-4 (two-family residential). Between 142nd and 144th Street, the area west of the tracks is zoned R-3 (single-family residential); a small portion is zoned for public use. East of the tracks is also R-3, with a small section zoned M-1 and another for public use. North of 140th Street, the adjacent land use is either M-1 or B-3 (general business district).

In the vicinity of downtown Dolton, near the potential station site, commercial and single-family residential predominate on the east side of the tracks. Several smaller industrial/quasi-industrial uses such as an auto body shop, trucking facility, and warehouse are along the tracks as well. The Dolton Village Hall is also immediately east of the railroad tracks. Along the west side of the tracks, south of 142nd Street, there is a residential neighborhood that has a new school under construction. Heavy industrial uses are found to the north of 142nd Street. Yard Center begins south of 144th Street.

Development Trends

Dolton is largely built-out, so most new developments are of an in-fill nature. Between 1990 and 1995, Dolton issued a total of 80 permits for new residential construction, an average of 13 per year. Many of these homes were built along former Conrail property [ex-Pennsylvania Railroad (PRR) "Panhandle Division"] at the south end of the Village. According to the Village Administrator, approximately 50 more units could be built in town, most of which would be single-family with some four-unit buildings. The Village otherwise has a moratorium on multi-family development.

There has been a limited amount of new commercial development in the Village. The largest recent project was the 160,000-sq.ft. Menard's Home Improvement Center that opened in 1996 along Sibley Boulevard at I-94. Other projects include the CoMed Ambulance facility, renovation of the K-Mart store on Sibley Boulevard, a new car wash, and a new restaurant on the site of a shuttered one. Other recent and planned development includes a 100-unit senior citizen center, completed in 1994, and a new recreation center.

THE VILLAGE OF PHOENIX

The Village is a one-square-mile community located 12 miles south of Chicago's southern border. The Village is surrounded by South Holland on the east and Harvey on the west. The main roadways are Halsted Avenue running north-south on the Village's western border, and Thornton-Blue Island Road (Vincennes) running northwest-southeast through town.

Demographics

The population of Phoenix declined by 22% from a 1980 population of 2,850 to 2,217 in 1990. The interim 1994 census shows a continual decline to a population of 2,208. The 1989 median household income was \$21,853, significantly below the Cook County average of \$32,763. The median home value was \$42,800.

Employment and Major Employers

There are no large employers in Phoenix. The 1990 Census identified an unemployment rate of 15.6%. Employment in Phoenix has been directly associated with industrial employment in the surrounding communities of Harvey and South Holland.

Land Uses

Phoenix is predominately a residential bedroom community. There is one inactive industrial site, which the Village now owns.

Development Trends

Phoenix is both impacted by and tied to the development trends in the neighboring communities of Harvey and South Holland. The Village of Phoenix is also part of the Cook County South Suburban Enterprise Community as designated in 1994, along with Ford Heights, Dixmoor, Harvey, and Robbins. Phoenix has used Community Development Block Grants (CDBG) for housing rehabilitation and has 24 new single-family homes constructed on former tax-delinquent land.

THE CITY OF HARVEY

The City is located north and east of I-294/I-80 and east of I-57. The City is bordered on the east by Phoenix and South Holland, on the south by Hazel Crest and East Hazel Crest, on the west by Markham, and on the north by Posen, Dixmoor and Riverdale. Harvey's main roads include 159th Street and 147th Street (Sibley Boulevard) running east-west, and Halsted Street, Wood Street, and Dixie Highway running north-south. Harvey is intersected by the Illinois Central and the Canadian National (Grand Trunk) railroads.

Demographics

Between 1980 and 1990, the population in Harvey decreased from 35,810 to 29,771 (17%). However, interim 1994 statistics identified an increase in population to 30,651. The 1989 median household income was \$23,201, 29% lower than the median household income for Cook County (\$32,673). Harvey's median home value was \$49,900.

Employment and Major Employers

The 1990 unemployment rate in Harvey was 17.4%. The City of Harvey has a large amount of industrial activity. Major industrial employers include Allied Tube and Whiting Corporation, both having over 1,000 employees. The Canadian National (CN) has also relocated their intermodal terminal to an area adjacent to Harvey's Industrial Park. Harvey is home to Ingall's Memorial Hospital and many other medical facilities. Data gathered from the Illinois Department of Employment Security shows a 1991-1995 decline in private-sector employment for Harvey. In 1995 there were 8,830 private-sector employees, a decrease of nearly 900 from 1991. Of all employees residing in Harvey in 1990, 16% were in the health care field, 15% were in finance, insurance and real estate, 11% were in manufacturing and 10% were in transportation.

Land Uses

Land uses along the railroads in Harvey are predominately industrial, with a large portion of land along the Illinois Central devoted to the new CN Intermodal Terminal. Land uses along the CN are also industrial, but there are also some residential parcels. Harvey has two existing Metra train stations: one in the downtown area at 154th Street, and a second to the north at 147th Street (Sibley Boulevard). The existing downtown train station area, which includes over 800 parking spaces, is also the site for a planned Pace transfer facility, providing a bus turnaround. This facility will bring approximately 2,000 riders into downtown Harvey every day.

Harvey has a large residential base, but much of the housing (over 88%) was built before 1969. As a result of age and disrepair, 10% to 20% of the housing is considered blighted. The City of Harvey is presently rehabbing much of its housing stock and demolishing substandard housing units in residential neighborhoods on a street-by-street basis.

Development Trends

Harvey is a part of the 1994 South Suburban Enterprise Community (with Dixmoor, Ford Heights, Phoenix, and Robbins) as well as a state-designated Enterprise Zone. These programs provide local and state tax exemptions for business property and tax credits for investment in the zone. The City is presently developing a City-wide comprehensive plan as well as a plan to promote economic development. The economic development plan will target the redevelopment of the downtown area and the expansion of the City's new Industrial and Trade Zone. Three of Harvey's main thoroughfares [Sibley Boulevard, Halsted Street (IL 1), and 159th Street] have been designated for rehabilitation by the Department of Transportation. The rehabilitation of these streets will also support economic development along the interior corridors.

The City of Harvey is currently using TIF districts and other financial instruments to catalyze economic development. The first TIF is a commercial area located at Dixie Highway and 154th Street, which is the site of the former Dixie Square Shopping Center. This TIF, designated in 1983, includes nearly 55 acres of land, and is accessible to I-57 via the Sibley Boulevard exit and Dixie Highway. Three acres of the land have been used for the construction of a new police headquarters. A ComEd facility has also been built here, and a new DCFS facility will break ground in early Spring of 1998. The rest of the site is being considered for retail and commercial development. The shopping center structure remains on site, while the City negotiates for its demolition. This location is surrounded by various land uses including light industrial, highway commercial, and single-family residential.

The second TIF is located east of the intersection between the CN and the Metra Electric District/Illinois Central (IC) Railroad. This TIF, which includes nearly 259 acres, was designated in 1995 and identified for commercial, manufacturing and industrial activities. The area west of the TIF is the new home of the Canadian National Intermodal Terminal. Adjacent to the CN facility, the IC is constructing a \$30 million rail facility of their own. New developments in this TIF include three hotels adjacent to I-80: Sleep Inn, Comfort Inn, and Holiday Inn Express. New developments along Halsted Street include trucking depots, warehousing facilities, and new restaurants/fast-food facilities, with some built to accommodate trailer trucks. One hundred sixty-six (166) new businesses have recently located in Harvey. This includes a new sports bar/grill and entertainment complex on Halsted near 147th Street.

The abandoned Wyman-Gordon plant, located adjacent to the CN tracks at Wood Street and Sibley Boulevard, is also a target area for redevelopment. Harvey plans to demolish the main plant and entertain proposals for a mixed-use development to include commercial, retail, manufacturing, and housing within the 100-acre site. The area surrounding this site is residential and commercial.

THE VILLAGE OF DIXMOOR

The Village is a 1½-square-mile community, bounded by 139th Street on the north, Sibley Boulevard on the south, Wood Street on the east and Western Avenue on the west. I-57 runs in a northeast-southwest direction through the Village. Dixmoor is a landlocked community with Blue Island on the north, Riverdale, Harvey and a Forest Preserve on the east, Harvey on the south, and Posen on the west. The major north-south roads are Western Avenue and Wood Street. The major east-west streets are 139th Street, 143rd Street, and Sibley Boulevard. I-57 has an exit nearby in Posen, at Sibley Boulevard and Western Avenue/Dixie Highway.

Demographics

In 1990, Dixmoor's population was 3,646, a 10% decline from 1980's population of 4,050. The estimated 1994 population was 3,654, a 0.2% increase since 1990. The median household income in 1989 was \$21,970, well below Cook County's \$32,673. The 1990 median home value was \$47,400.

Employment and Major Employers

Current unemployment data are not available from the Illinois Department of Employment Security for municipalities under 25,000. However, at the time of the 1990 Census, the unemployment rate in Dixmoor was 10.7%. According to NIPC, Dixmoor has a limited employment base, with only 894 people employed in the Village as of 1990. The Village has several industrial plants and auto-related uses, including the new A Reliable Auto Parts. The largest employers are Witco Chemical (300 employees), Chicago Magnesium (150), Vitco Steel (75) and General Tube (50).

Land Uses

Most of the land uses along the railroad right-of-way are industrial or residential. ComEd lines are at the southern edge of the right-of-way in the southeastern part of the Village, and along Robey Street.

Development Trends

Dixmoor is in the process of facilitating new development and redevelopment within its borders. The Village has two adjoining TIF districts at the far west side near Dixie Highway and I-57. The Village would like to attract more retail uses along Western Avenue/Dixie Highway north of the I-57 interchange at Sibley Boulevard. The second TIF district is north of I-57 along Mancuso Boulevard (141st Street). This is an industrial area which currently has A Reliable Auto Parts, Witco Chemical and Chicago Magnesium, the Village's largest employers. A new loop road will be built over the CSX railroad tracks to facilitate transportation through the industrial area.

The Village is in the process of developing a new police station and Village Hall on land which currently houses a trailer used as a temporary Village Hall. This would be proximate to the CN right-of-way. The Village is also actively promoting new residential development. Over the past five years, 40 single-family-detached housing permits were issued. The Village would like to see more residential development on the southeast side to replace vacant lots.

THE VILLAGE OF POSEN

The Village is bounded by 139th Street, Sibley Boulevard, Dixie Highway and Kedzie Parkway. Adjacent communities include Dixmoor to the east, Harvey to the southeast, Markham to the south, Midlothian to the west, Robbins to the northwest and Blue Island to the north. I-57 runs through the south side of the Village and I-294 intersects the west side. The main local roadways are Dixie Highway and Sibley Boulevard.

Demographics

In 1990, Posen's population was 4,225, a decrease of nearly 11% from the 1980 population count of 4,642. The 1994 interim census however, shows a different trend with the population increasing to 4,454. The 1989 median household income was \$31,990, only 2% lower than the Cook County median income of \$32,673. The median home value in Posen was \$60,100, substantially lower than that of Cook County (\$102,100).

Employment and Major Employers

Posen is predominately a working-class community that supplies workers for the factories of Blue Island and Harvey. The Village leaders identified no major employers. In 1990, the unemployment rate was 5.3%, significantly below the Cook County unemployment rate of 8.0%.

Land Uses

The land use throughout Posen is primarily residential. Commercial areas exist along Sibley Boulevard and Dixie Highway. Posen has a few pockets of industrially zoned land, one adjacent to the CN in the northern portion of the community, and another in the southern portion adjacent to I-57.

Development Trends

Since 1992, the Village of Posen has issued permits for 113 new single-family homes, averaging nearly 20 per year. Housing has been developed in the southern part of the Village directly west of the I-57/Sibley Boulevard

interchange. Posen has established a TIF district along Sibley Boulevard and Dixie Highway, extending to land around the railroads located in the northern portion of the Village. The intent of the TIF is to create a commercial and industrial base for the Village. Activities within the TIF include the planned development of a 12-acre parcel at the northwest corner of Dixie Highway and Sibley Boulevard (adjacent to I-57), which may include a car dealership, hotel, fast-food restaurant, and retail store. While a majority of the TIF is proposed for commercial development, the northern end of the TIF (adjacent to the CN tracks) is proposed for industrial development. Village leaders have identified nearly five acres in this vicinity as a potential station site.

THE CITY OF BLUE ISLAND

Blue Island, located 13 miles south of the Chicago Loop, is generally bounded by 119th Street on the north, 139th Street on the south (the far southwestern portion of the City extends to 143rd Street), I-57 on the east and Kedzie Avenue on the west. Neighboring communities include Calumet Park on the east, Alsip, Merrionette Park, and Robbins on the west, the City of Chicago on the north, and Dixmoor and Posen on the south. Major highways include I-57, with exits at 119th and 127th Streets in the City, and I-294, with an exit at 127th Street approximately two miles west of the City. Western Avenue is the major north-south road through the City, while 127th Street provides the primary east-west access.

Blue Island already has extensive Metra commuter rail service, with 41 trains leaving Blue Island on Metra's Electric District (MED) and Rock Island District (RID) lines. Downtown Chicago is a 35-minute commute from the City's six Metra stations – Vermont Street (two stations, one on each line), Burr Oak (127th Street), Prairie Street, 123rd Street and 119th Street.

Demographics

Blue Island's population declined by 6.5% between 1980 and 1990, from 22,665 to 21,203. The estimated 1994 population was 21,762, 2.6% higher than in 1990. The median household income in 1989 was \$28,760, approximately 12% below that of Cook County's median income of \$32,673. The 1990 median home value in Blue Island was \$64,300, considerably less than Cook County's median of \$102,100.

Employment and Major Employers

Current unemployment data are not available from the Illinois Department of Employment Security for municipalities under 25,000. However, at the time of the 1990 Census, the unemployment rate in Blue Island was 8.5%, slightly above that of Cook County (8.0%). Private sector employment in 1995 was 8,888, a 3.1% decline from 1991. Major industries and their share of total employment include manufacturing (27%), health services (24%), and retail trade (19%). The City's largest employers are St. Francis Hospital (1,600 employees), Modern Drop Forge (400), Blue Island Industrial Terminal (400), Clark Oil (300), G & W Electric (300), and Robertson Transformer (250-300). A relatively high share of residents (23%) worked within Blue Island in 1990. Another high share of residents (9%) traveled to work by train in 1990.

Land Uses

Land use along the alignment is a combination of industrial and residential. The City is a landlocked community that is largely developed. Several in-fill sites have been redeveloped in recent years.

Development Trends

Since 1992, a total of 135 permits have been issued for new residential construction. These include 64 on the south side of town adjacent to the RID, 24 on Vermont Street several blocks west of existing Metra stations, and a planned 100-unit town-home development along the Meadows Golf Course at the northwest side of the City. To date, 40 units have been built there.

The City is well along with a downtown revitalization effort through the Main Street Partnership Program. Over the past few years, vacant stores have been filled, buildings rehabbed and an old theater has been given new life as home to a professional theater company (Dream Street). The Main Street organization has applied for a transit-oriented-development grant to enhance landscaping and to visually link the Vermont Street Metra stations with the Western Avenue business district.

The City is an enterprise zone, and it has three TIF districts. All of the TIFs are located along the RID, which could also be used by potential SES trains (if the CN route should become the best option). TIF I is a 92-acre closed landfill located at the northeast corner of the City between 119th and 123rd Streets from I-57 to Vincennes Road. The City hopes to attract major employment to this area. TIFs II and III are located on the south side of the City, adjacent to each other between 135th Street and 141st Place to the east of the RID. TIF II is an industrial TIF which has some vacant land, but includes a number of significant businesses; several have expanded over the past few years. TIF III is a residential TIF where 64 new homes were built in recent years.

Appendix D

Aerial Photos of Potential Station Sites



South Suburban Commuter Rail
Feasibility Study
BEECHER SITE 1 AND 2



UP/CSX

Miller Street

Gould Street

#1

HISTORIC RENOVATION DISTRICT

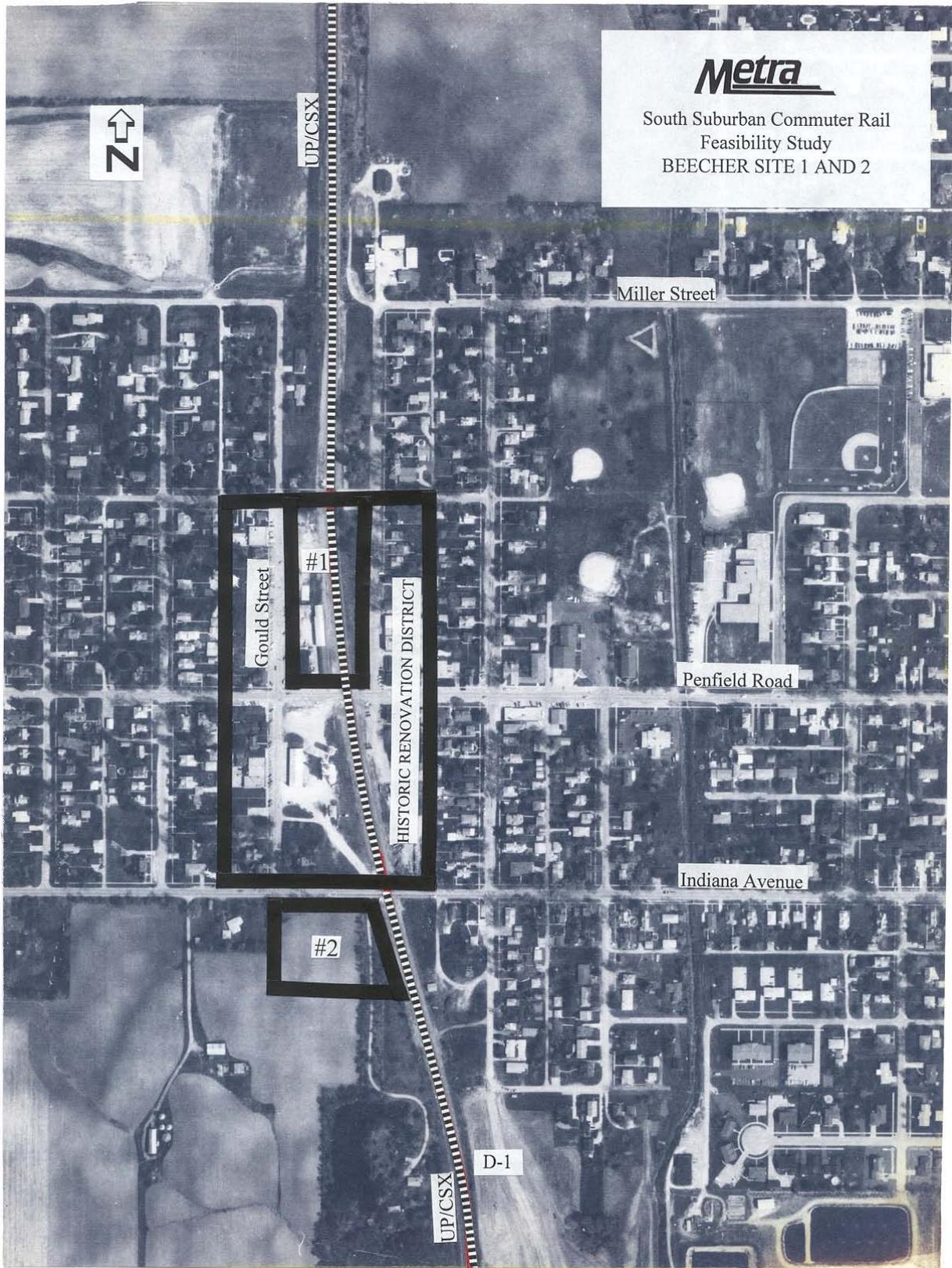
Penfield Road

Indiana Avenue

#2

UP/CSX

D-1





#3

Church Road

Metra

South Suburban Commuter Rail
Feasibility Study
BEECHER NORTH

UP/CSX

D-2

Miller Street



1000000
1000000
1000000



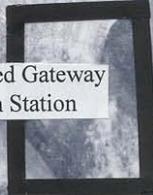
Metra

South Suburban Commuter Rail
Feasibility Study
CRETE BALMORAL AREA

UP/CSX

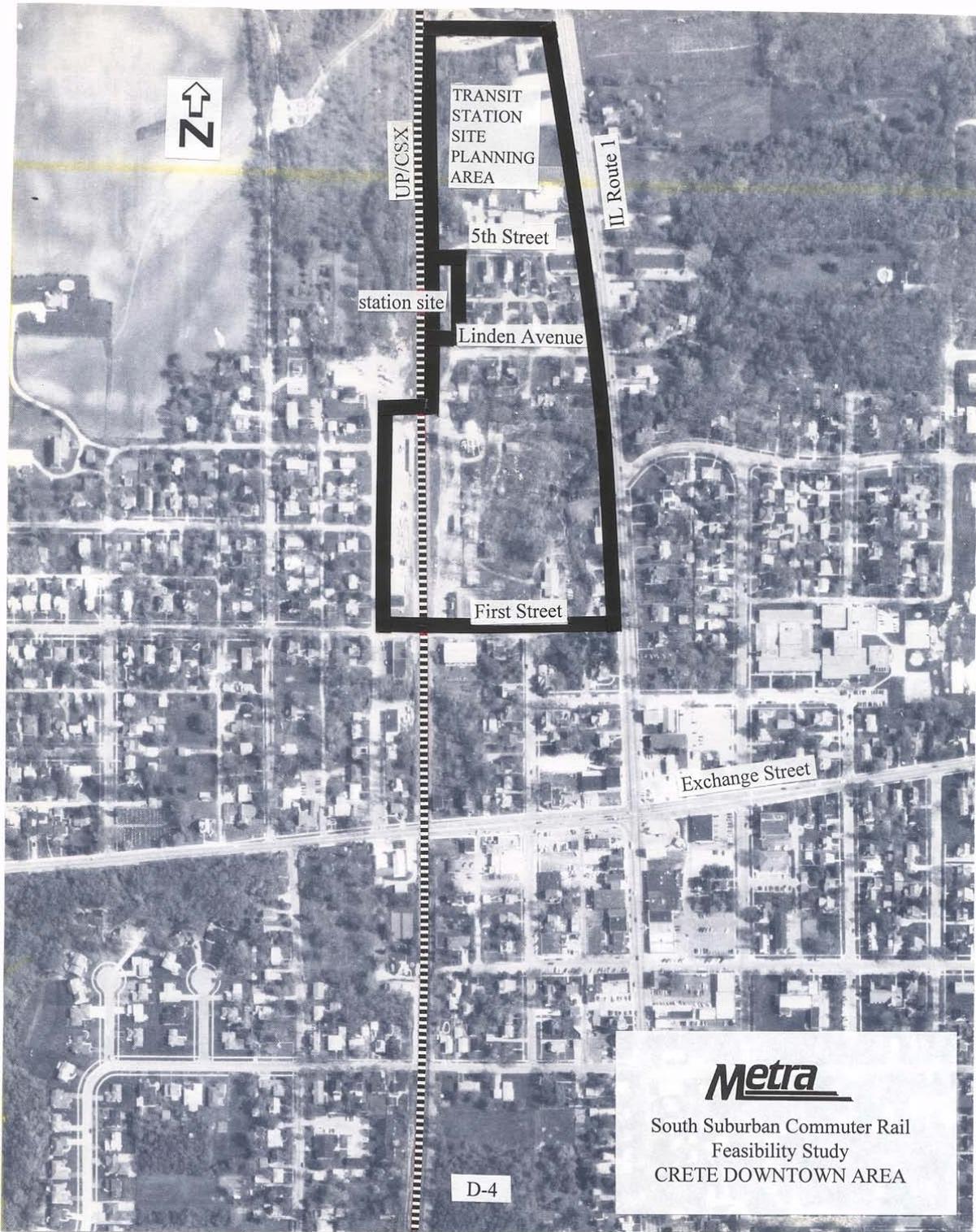
IL Route 1

BALMORAL RACETRACK



Proposed Gateway
to Train Station

D-3



TRANSIT
STATION
SITE
PLANNING
AREA

UP/CSX

IL Route 1

5th Street

station site

Linden Avenue

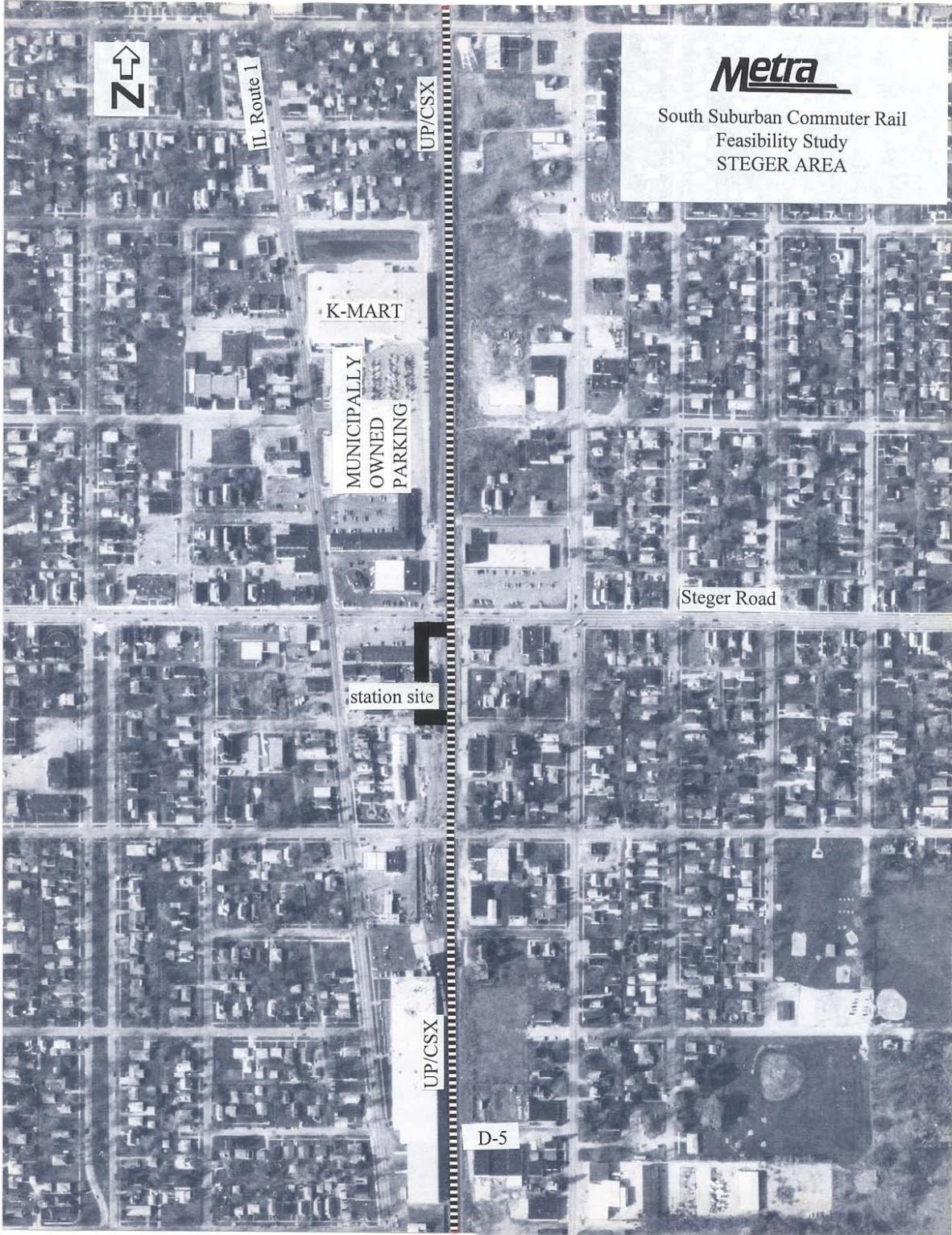
First Street

Exchange Street

Metra

South Suburban Commuter Rail
Feasibility Study
CRETE DOWNTOWN AREA

D-4



IL Route 1

UP/CSX

Metra
South Suburban Commuter Rail
Feasibility Study
STEGER AREA

K-MART

MUNICIPALLY
OWNED
PARKING

Steger Road

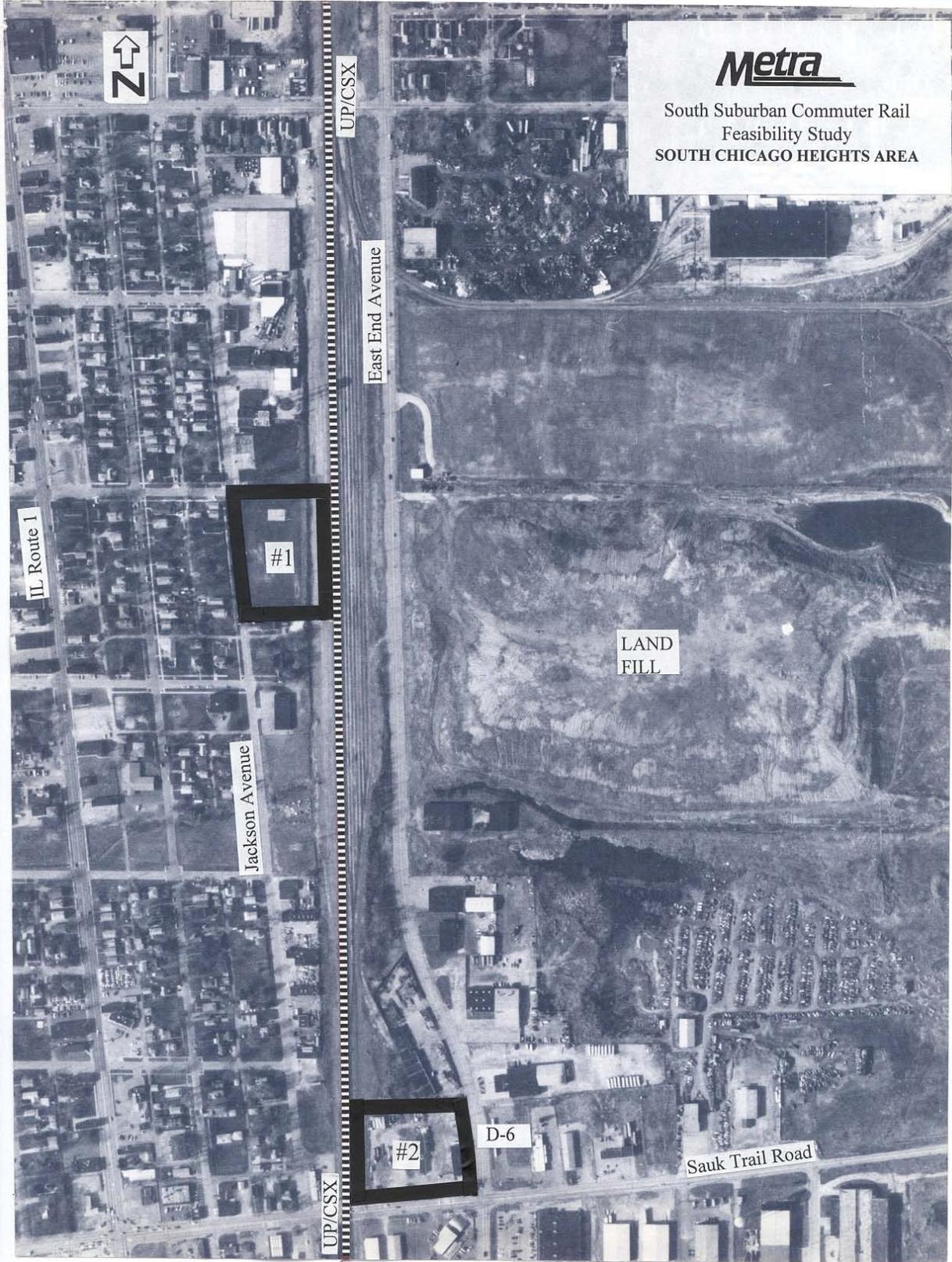
station site

UP/CSX

D-5



South Suburban Commuter Rail
Feasibility Study
SOUTH CHICAGO HEIGHTS AREA



UP/CSX

East End Avenue

IL Route 1

#1

Jackson Avenue

LAND
FILL

UP/CSX

#2

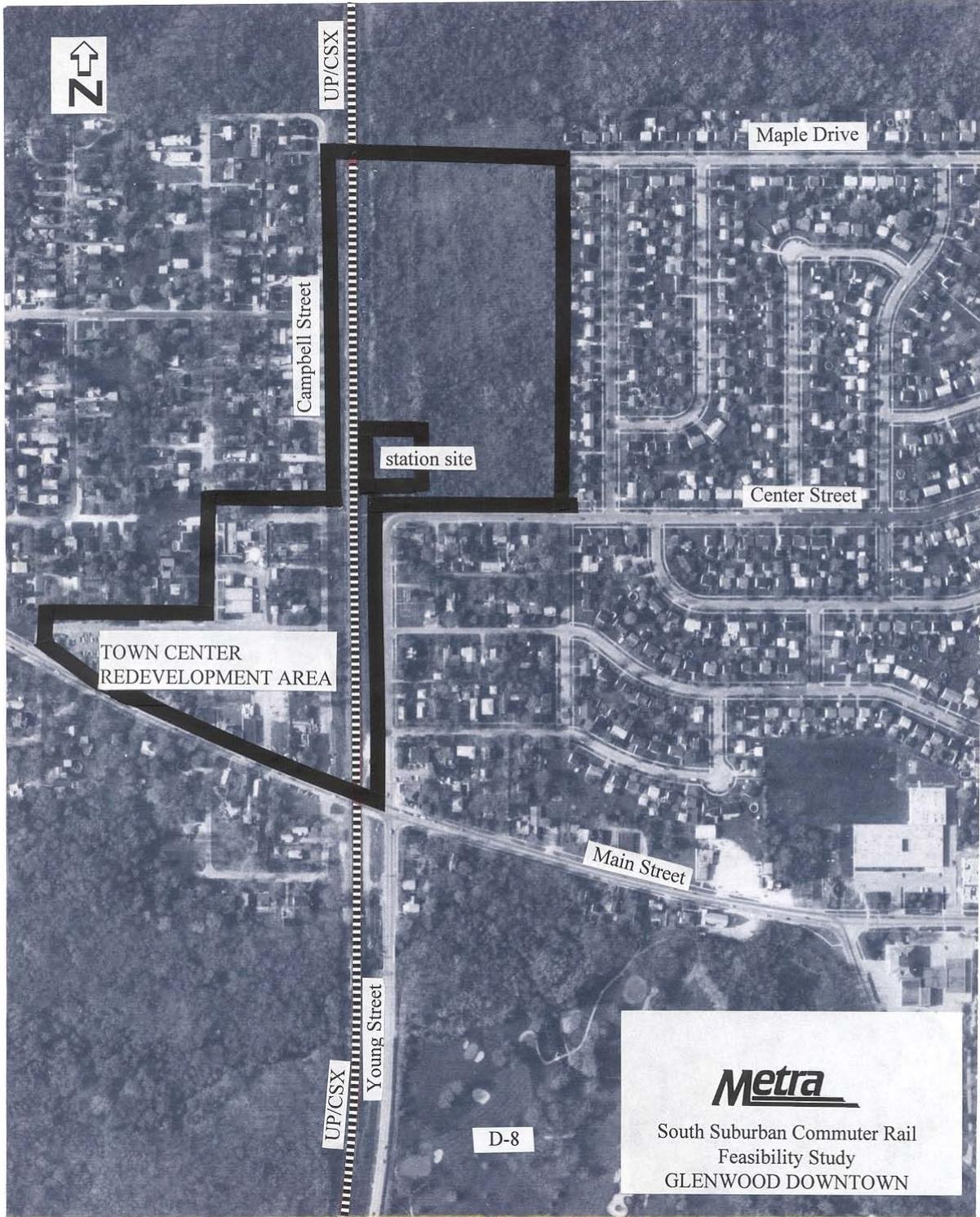
D-6

Sauk Trail Road



Metra

South Suburban Commuter Rail
Feasibility Study
CHICAGO HEIGHTS



UP/CSX

Maple Drive

Campbell Street

station site

Center Street

TOWN CENTER REDEVELOPMENT AREA

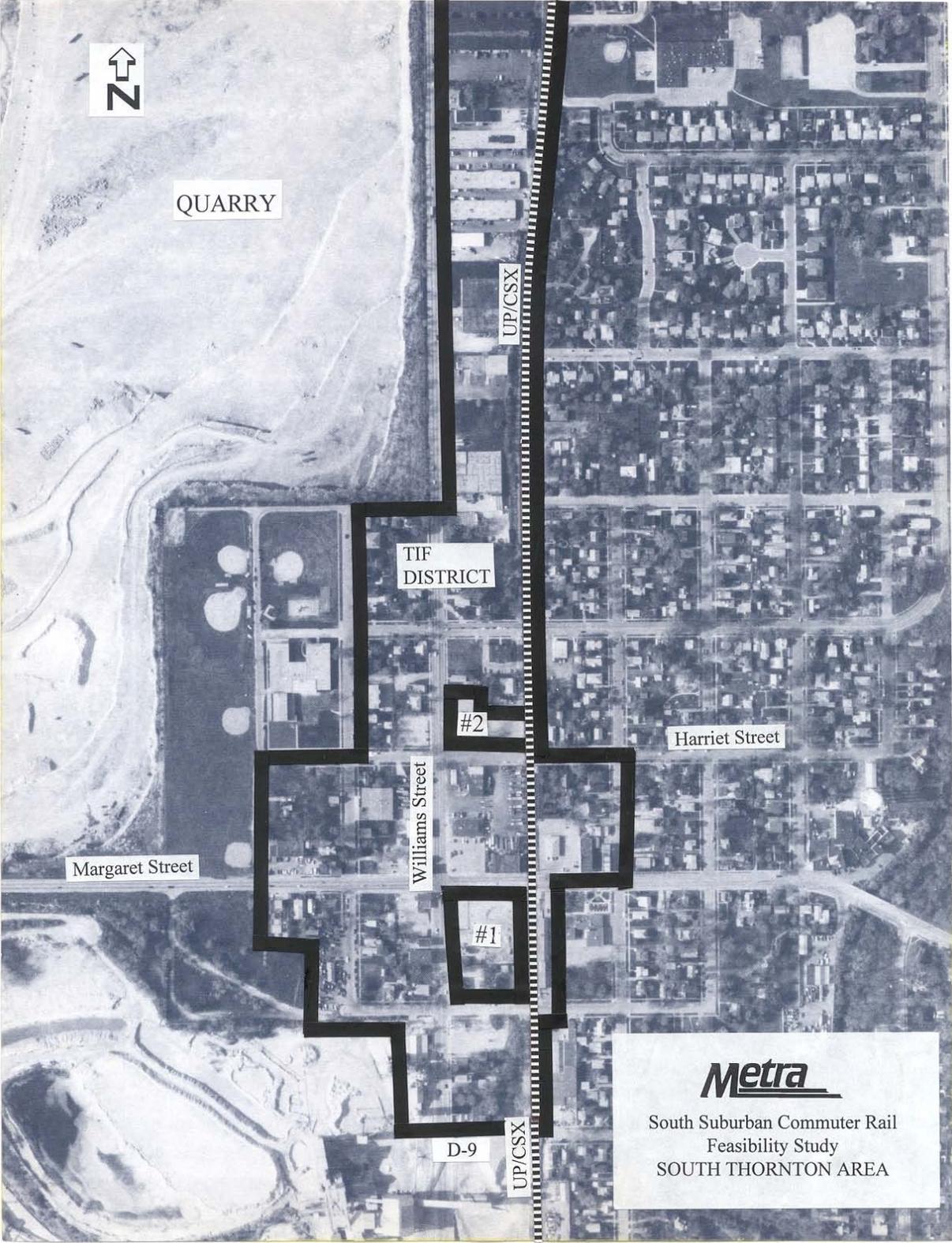
Main Street

UP/CSX

Young Street

D-8

Metra
South Suburban Commuter Rail
Feasibility Study
GLENWOOD DOWNTOWN



QUARRY

TIF DISTRICT

Margaret Street

Williams Street

Harriet Street

#2

#1

D-9

UP/CSX

UP/CSX

Metra

South Suburban Commuter Rail
Feasibility Study
SOUTH THORNTON AREA



Metra

South Suburban Commuter Rail
Feasibility Study
SOUTH HOLLAND - THORNTON

Vincennes Road

UP/CSX

173rd Street

SOUTH HOLLAND

#4

I-80/94

THORNTON

#3

North Williams Street

UP/CSX

D-10

TIF
DISTRICT





South Suburban Commuter Rail
Feasibility Study
SOUTH HOLLAND



166th Street/Taft Drive

#2

State Street

UP/CSX

#3b

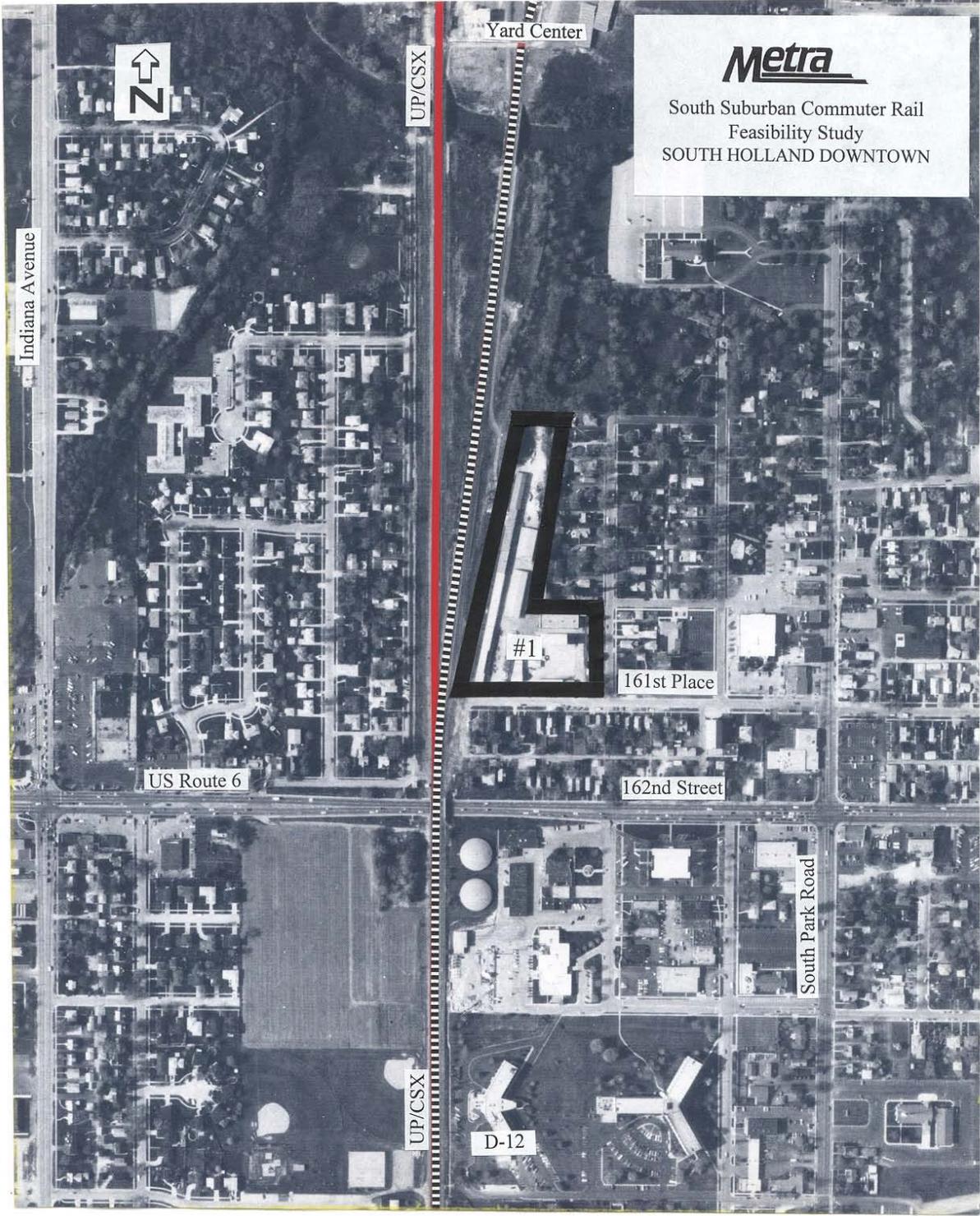
168th Street

CN

#3a

D-11





Metra

South Suburban Commuter Rail
Feasibility Study
SOUTH HOLLAND DOWNTOWN

Yard Center

UP/CSX

Indiana Avenue



US Route 6

#1

161st Place

162nd Street

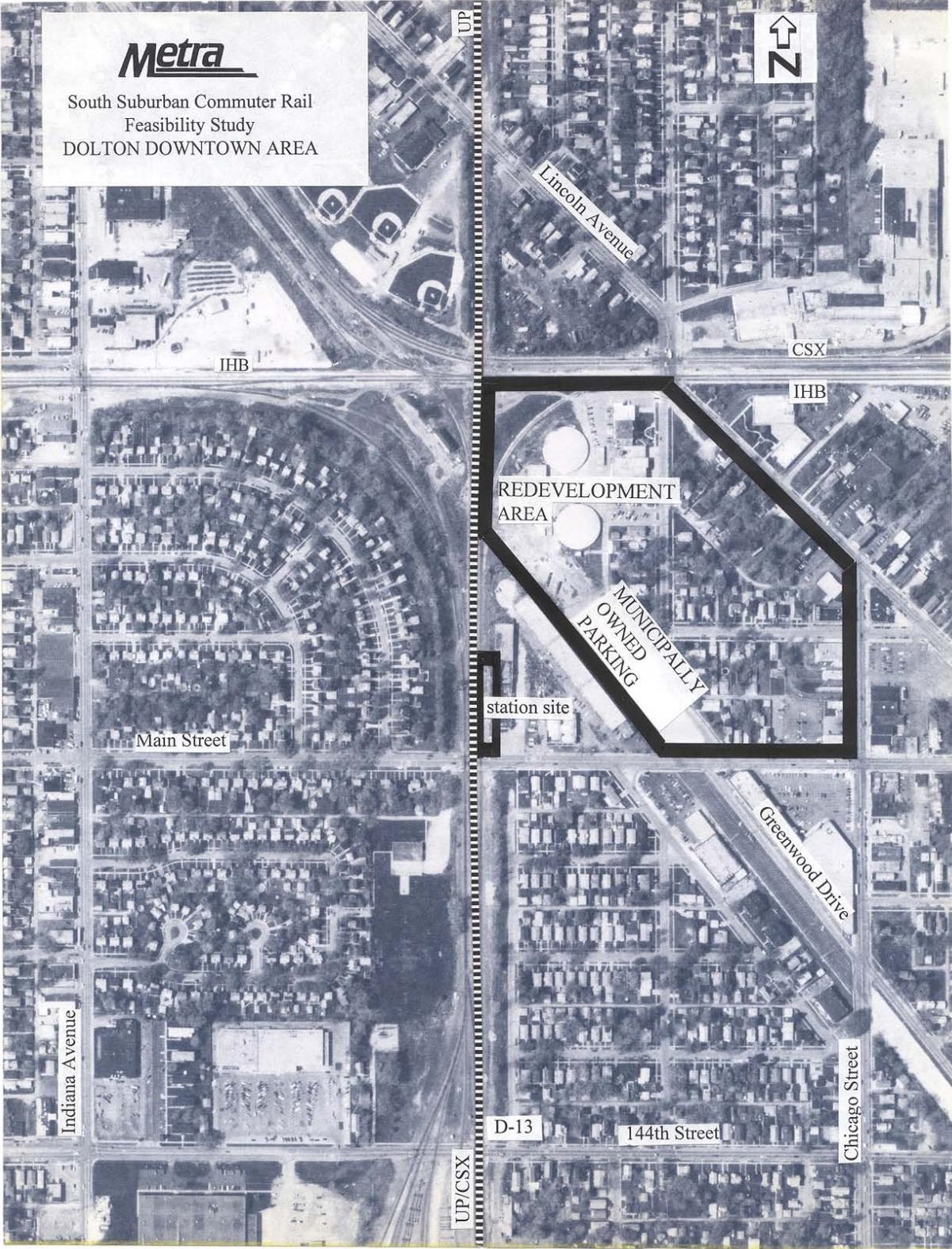
UP/CSX

South Park Road

D-12



South Suburban Commuter Rail
Feasibility Study
DOLTON DOWNTOWN AREA





DIXMOOR



Sibley Boulevard

station site

Wood Street

CN

HARVEY

D-14

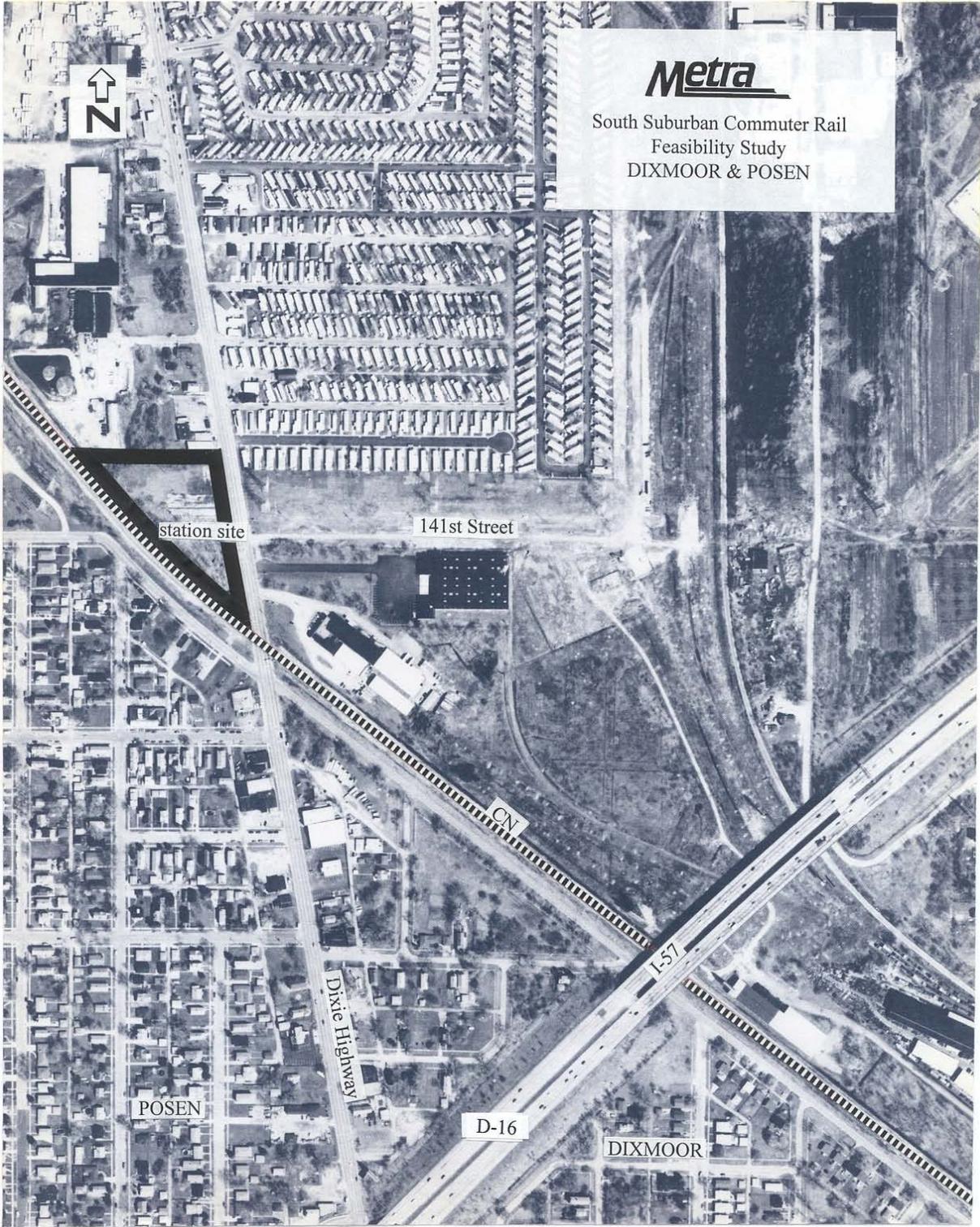
Metra

South Suburban Commuter Rail
Feasibility Study
HARVEY & DIXMOOR



Metra
South Suburban Commuter Rail
Feasibility Study
DIXMOOR

D-15



Metra
South Suburban Commuter Rail
Feasibility Study
DIXMOOR & POSEN



station site

141st Street

CN

I-57

Dixie Highway

POSEN

D-16

DIXMOOR

Appendix E

Comparative Assessment of Suggested Candidate Station Sites

Comparative Assessment of Suggested Candidate Station Sites (page 1)

Potential Station Site	Aerial Photo	UP/CSX Mile Post	Access N-S	Access E-W	Plans for Station Area	Adjacent Land Uses	Development Potential	Positive Factors	Negative Factors	Open Questions
Beecher South	#2	37.8	Fair	Good	No	Residential Agricultural	High	Potential adjacent yard and maintenance facility	n/a	n/a
Beecher Downtown	#1	37.6	Good	Good	Yes	Commercial Residential	High	Best choice for Beecher	Might be physically constrained	n/a
Beecher North	#3	36.7	Poor	Good	No	Agricultural Planned Industrial	Low	n/a	No surrounding activities	n/a
Crete / Balmoral Race Track	#2	32.3	Good	Fair	No	Agricultural Commercial	High	Opportunity for TOD +/- or large regional parking	Not incorporated into Crete	Alternate terminal and yard site
Crete Downtown	#1	30.4	Good	Fair	Yes	Commercial Residential / Park	Moderate	Enhancement to existing development	n/a	n/a
Steger Downtown	n/a	28.8	Good	Good	No	Commercial	Moderate	Enhancement to existing development	Environmental conditions at site	Station spacing *
South Chgo. Hts. Sank Trail Rd.	#2	28.0	Good	Good	No	Commercial	Moderate	Best choice for South Chicago Heights	n/a	Station spacing *
South Chgo. Hts. Jackson Ave.	#1	27.5	Good	Fair	No	Residential Landfill	Low	Local neighborhood access	Park-and-ride access	n/a
Chicago Heights E&E	#2	27.0	Good	Fair	No	Industrial Residential	Low	n/a	No available land for park-and-ride	Only useful as E&E transfer
Chicago Heights Downtown	#1	26.5	Good	Fair	Yes	Commercial Institutional	High	Potential for transportation center and CBD revival	n/a	n/a
Glenwood Downtown	n/a	23.4	Good	Good	Yes	Residential	High	Already planned as local gov't center	n/a	n/a
Thornton Downtown	#1	21.7	Good	Good	No	Industrial Institutional	High	Potential catalyst to recreate modest CBD	Might be physically constrained	Station spacing *
Thornton Harriet St.	#2	21.6	Good	Poor	No	Industrial Residential	Low	n/a	Physically constrained	n/a
Thornton North	#3	21.0	Good	Poor	No	Industrial Residential	Low	n/a	Physically constrained	n/a

Comparative Assessment of Suggested Candidate Station Sites (page 2)

Potential Station Site	Aerial Photo	UP/CSX Mile Post	Access N-S	Access E-W	Plans for Station Area	Adjacent Land Uses	Development Potential	Positive Factors	Negative Factors	Open Questions
South Holland Ball Field	#4	20.9	Fair	Poor	No	Industrial	Low	n/a	Industrial area **	n/a
South Holland 168th St.	#3a	20.3	Fair	Fair	No	Industrial Residential	Low	Best choice for South Holland if CN Option chosen -- possibility of joint Amtrak stop	Industrial area **	Depends on chosen Option
South Holland 168th St.	#3b	20.2	Fair	Fair	No	Industrial Residential	Low		Industrial area **	Depends on chosen Option
South Holland Taft Road	#2	20.0	Poor	Poor	No	Industrial	Low	n/a	Industrial area **	n/a
South Holland Downtown	#1	19.5	Good	Good	No	Residential Commercial	Moderate	Best choice for station if CN Option not chosen	n/a	Depends on chosen Option
Dolton South Main St.	n/a	17.1	Fair	Good	No	Industrial Comm. / Resid.	Moderate	Allows full platform length	Abuts residential area -- utility easement	n/a
Dolton Downtown	n/a	17.0	Fair	Good	No	Industrial Comm. / Resid.	Moderate	Parking already available at Expro Center	Relocate track signal -- short platform space	Impacts to Yard Center activities
Harvey -- Sibley Blvd. / Wood St.	n/a	n/a	Good	Good	No	Abandoned Indus. Residential	High	Planned for mixed-use redevelopment	Brownfield site -- factory torn down	Station spacing * -- chosen Option
Dixmoor Spaulding Ave.	n/a	n/a	n/a	n/a	No	n/a	Moderate	Adjacent to planned new Village Hall	n/a	Station spacing * -- chosen Option
Posen Dixie Hwy.	n/a	n/a	n/a	n/a	No	n/a	Moderate	Near I-57 interchange	Brownfield site? -- was lumber yard?	Station spacing * -- chosen Option
Blue Island Vermont St.	n/a	n/a	Good	Good	Yes	Commercial Residential	Moderate	Existing RID station -- suitable for transfers	n/a	n/a
Blue Island 120th St.	n/a	n/a	n/a	n/a	No	n/a	High	TIF district	n/a	On RID -- need for station?

n/a = not available or not applicable

* = refers to relative station spacing between towns, not alternate sites within towns

** = could be suitable as work place destination for reverse commuters if / when schedule expanded

Appendix F

Capital Cost Estimates by Route Segments and Junctions

**South Suburban Commuter Rail Feasibility Study
Track and Signal Capital Cost Estimates (1997 dollars)**

Categories of Capital Infrastructure Requirements	Unit	Unit Cost	Segment # 7		21st St / 16th St Junctions		Thornorton Junction		
			Oakdale Jct to Gresham Jct. ¹⁹		Cermak Rd (SWS) to 14th St (RID)		UP/CSX to CN		
			Improve CRL Track / Add Second Track	Quantity	Estimated Cost	Quantity	Estimated Cost	Quantity	Estimated Cost
New Track, including Grading (Ground Level)	Track-mile	\$ 1,500,000	0.4	\$ 600,000	1.2	\$ 1,800,000	1.0	\$ 1,500,000	See Note 22
Major Excavation and Grading (New Embankment)	Track-mile	\$ 1,000,000							
Rehabilitate Existing Track	Track-mile	\$ 500,000	0.4	\$ 200,000	0.7	\$ 350,000			
Install Turnouts	Each	\$ 150,000			6	\$ 900,000	2	\$ 300,000	
Install Crossovers	Each	\$ 300,000			4	\$ 1,200,000	4	\$ 1,200,000	See Note 22
Install Diamonds	Each	\$ 300,000			4	\$ 1,200,000			
Subtotal Track Work				\$ 800,000		\$ 5,450,000		\$ 3,000,000	
New Bridges	Linear Foot	\$ 10,000							
Rehabilitate Existing Bridges	Linear Foot	\$ 4,000							
Miscellaneous Building or Road Modifications	Lump Sum	n/a							
Subtotal Bridges and Structures				\$ -		\$ -		\$ -	
Rebuild Existing Track Crossing	Each	\$ 25,000	5	\$ 125,000					
Place Second Track through Crossing and Rebuild	Each	\$ 105,000							
Upgrade Existing Crossing to CFBG	Each	\$ 200,000							
Add Second Track, Rebuild Crossing, Relocate Signals	Each	\$ 355,000	5	\$ 1,775,000					
Add Constant Warning Time Devices	Each	\$ 150,000	5	\$ 750,000					
Subtotal Grade Crossings				\$ 2,650,000		\$ -		\$ -	
Install New Interlockings	Each	\$ 1,500,000			2	\$ 3,000,000			18th St / SCAL ²¹
Modify Existing Interlockings	Each	\$ 500,000			2	\$ 1,000,000	1	\$ 500,000	Thornorton Jct
Install Intermediate Signals, Bi-Directional CTC	Each	\$ 450,000							
Install Intermediate Signals, One Track/One Direction	Each	\$ 150,000							
Subtotal Track Signals				\$ -		\$ 4,000,000		\$ 500,000	
Park-and-Ride Stations	Lump Sum	n/a							
Overnight Coach Storage Yard / Maintenance Facility	Lump Sum	n/a							
Midday Storage / Servicing Facilities at 47th St. Yard	Lump Sum	n/a							
Subtotal Stations and Coach Storage Yard				\$ 3,450,000		\$ 9,450,000		\$ 3,500,000	
Contingency (30%)				\$ 1,035,000		\$ 2,835,000		\$ 1,050,000	
Engineering, Design, and Construction Management (12%)				\$ 414,000		\$ 1,134,000		\$ 420,000	
TOTAL ESTIMATED CAPITAL COST (millions of 1997 dollars)				\$ 4,899,000		\$ 13,419,000		\$ 4,970,000	
Notes:				¹⁷ CN is 4.7 miles of double track from west of Thornton Jct to diversion point south of 139th St. for Blue Island connection to RID		²⁰ Double-track (C improvement) 0.3 miles south of 18th St, plus new Metra double track from 18th to 14th St, new right-of-way required for latter, rehab existing 21st St connecting track under CTA viaduct, and add second connection which is 0.5 miles of double track		²¹ St Charles Air Line recently straightened so it is different from '95 aerial photos; bridge on SCAL for former C&EI underpass has been removed;	
				¹⁸ Indiana Ave bridge assumed to be 120' long (4 lanes on a diagonal), bridge over Calumet Union Drainage Ditch assumed to be 40' long		²² Two crossovers on CN west of diamonds, and two new crossovers on UP south of connection which is 0.5 miles of double track			
				¹⁹ CRL is 0.4 miles single track between junctions; install second track to avoid bottleneck, the					

**South Suburban Commuter Rail Feasibility Study
Track and Signal Capital Cost Estimates (1997 dollars)**

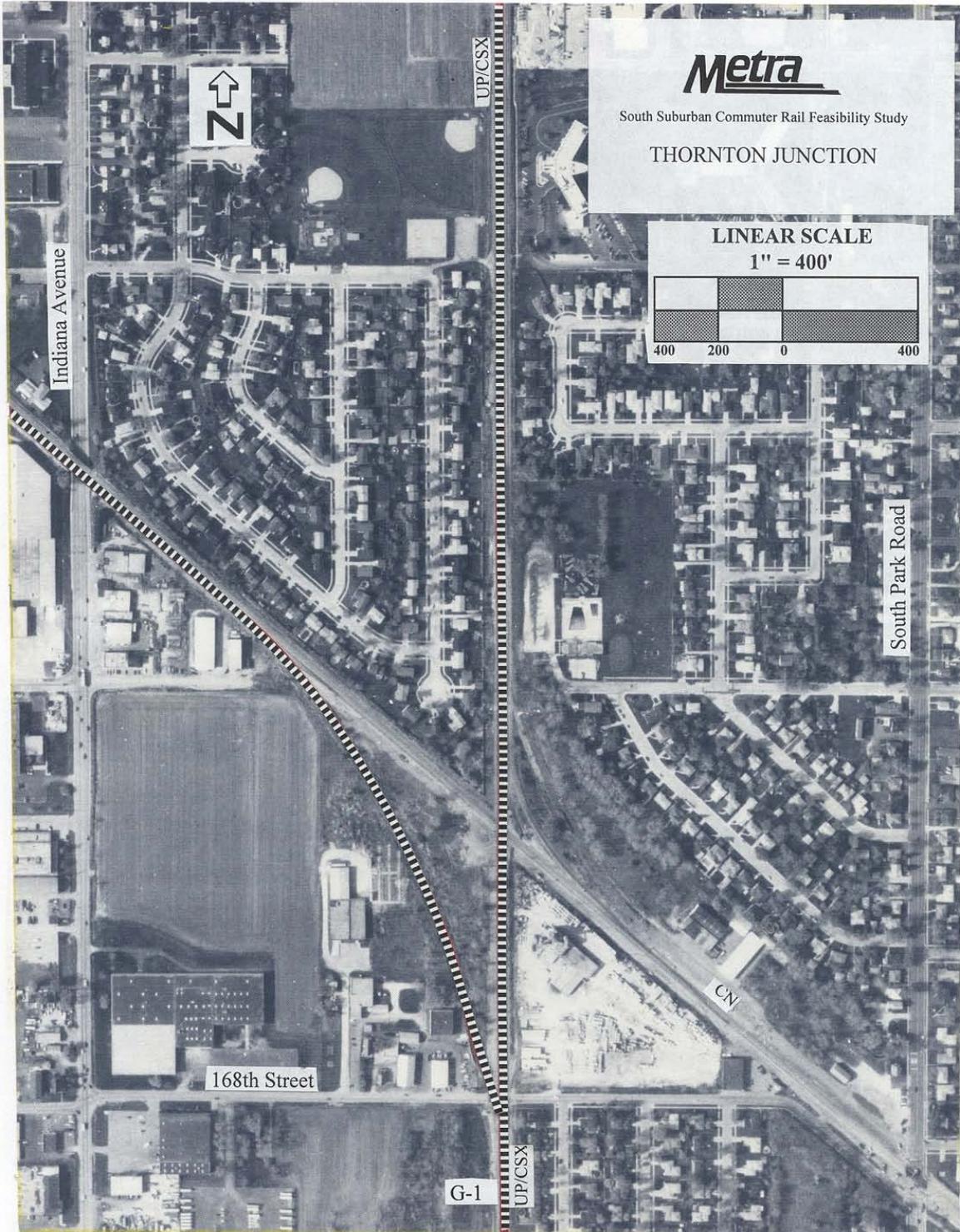
Categories of Capital Infrastructure Requirements	New Blue Island Connection		Oakdale Junction		Gresham Junction	
	Quantity	Estimated Cost	Quantity	Estimated Cost	Quantity	Estimated Cost
Categories of Capital Infrastructure Requirements	Unit	Unit Cost	19th St (CN) to RID		UP to CRL Connection	
			New Double Track Main		Improve Connection / Add Second Track	
New Track, including Grading (Ground Level)	Track-mile	\$ 1,500,000	1.6	\$ 2,400,000	0.4	\$ 600,000
Major Excavation and Grading (New Embankment)	Track-mile	\$ 1,000,000	2.6	\$ 2,600,000		
Rehabilitate Existing Track	Track-mile	\$ 500,000				
Install Turnouts	Each	\$ 150,000	4	\$ 600,000	4	\$ 600,000
Install Crossovers	Each	\$ 300,000	4	\$ 1,200,000	2	\$ 600,000
Install Diamonds	Each	\$ 300,000				
	Subtotal Track Work			\$ 6,800,000		\$ 1,200,000
New Bridges	Linear Foot	\$ 10,000	800	\$ 8,000,000		
Rehabilitate Existing Bridges	Linear Foot	\$ 4,000				
Miscellaneous Building or Road Modifications	Lump Sum	n/a		\$ 100,000		\$ 17,200
	Subtotal Bridges and Structures			\$ 8,100,000		\$ -
Rebuild Existing Track Crossing	Each	\$ 25,000				
Place Second Track through Crossing and Rebuild	Each	\$ 105,000	1	\$ 105,000		
Upgrade Existing Crossing to CFBG	Each	\$ 200,000	1	\$ 200,000		
Add Second Track, Rebuild Crossing, Relocate Signals	Each	\$ 355,000				
Add Constant Warning Time Devices	Each	\$ 150,000				
	Subtotal Grade Crossings			\$ 305,000		\$ -
Install New Interlockings	Each	\$ 1,500,000	2	\$ 3,000,000		
Modify Existing Interlockings	Each	\$ 500,000			1	\$ 500,000
Install Intermediate Signals, Bi-Directional CTC	Each	\$ 450,000				
Install Intermediate Signals, One Track/One Direction	Each	\$ 150,000				
	Subtotal Track Signals			\$ 3,000,000		\$ 500,000
Park-and-Ride Stations	Lump Sum	n/a				
Overnight Coach Storage Yard / Maintenance Facility	Lump Sum	n/a				
Midday Storage / Servicing Facilities at 47th St Yard	Lump Sum	n/a				
	Subtotal Stations and Coach Storage Yard					
Subtotal for Physical Plant including Stations and Yard				\$ 18,205,000		\$ 1,700,000
Contingency (30%)				\$ 5,461,500		\$ 510,000
Engineering, Design, and Construction Management (12%)				\$ 2,184,600		\$ 204,000
TOTAL ESTIMATED CAPITAL COST (millions of 1997 dollars)				\$ 25,851,100		\$ 2,414,000
	Notes:					
	²³ New r-o-w fill on 0.8 miles of open field;					
	1.3 miles of existing or adjacent r-o-w (RID);					
	bridges are on RID over CN and IHB					
	²⁴ Access road to yard site; additional right-of-way					
	likely necessary before and beneath 139th St					
	highway overpass, as well as contingency					
	for replacement of maintenance-of-way building					
	and storage area; none of this included in cost					
	²⁵ Reinstalls former single-track connection from					
	double-track UP and adds second track					
	connection to newly double-tracked CRL;					
	²⁶ Additional r-o-w likely necessary at Gresham					
	for second track connection					
	²⁷ Uses existing RID crossovers north end of Jct					
	²⁸ Gresham Jct interlocking would be modified to					
	to cover CRL easternmost end of wye					
	²⁹ New crossover on UP south of connection;					
	two new turnouts on CRL for connection					
	³⁰ 6' chain link fence to separate connection from					
	park and baseball field					

**South Suburban Commuter Rail Feasibility Study
Track and Signal Capital Cost Estimates (1997 dollars)**

Additions to UP/CSX Physical Plant to Increase Line Capacity		Segment # 1	
Add Third Main Track and Related Infrastructure		Beecher to Thornton Jct	
Categories of Capital Infrastructure Requirements		Improve Double Track (UP/CSX)	Remarks
Description	Unit	Quantity	Estimated Cost
New Track, including Grading (Ground Level)	Track-mile	17.6	\$ 26,400,000
Major Excavation and Grading (New Embankment)	Track-mile		
Rehabilitate Existing Track	Track-mile	35.2	\$ 17,600,000
Install Turnouts	Each	1	\$ 150,000
Install Crossovers	Each	14	\$ 4,200,000
Install Diamonds	Each	2	\$ 600,000
	Subtotal Track Work		\$ 48,950,000
New Bridges	Linear Foot	1670	\$ 16,700,000
Rehabilitate Existing Bridges	Linear Foot	1670	\$ 6,680,000
Miscellaneous Building or Road Modifications	Lump Sum	n / a	
	Subtotal Bridges and Structures		\$ 23,380,000
Rebuild Existing Track Crossing	Each	50	\$ 1,250,000
Place Second Track through Crossing and Rebuild	Each		
Upgrade Existing Crossing to CFBG	Each	10	\$ 2,000,000
Add Third Track, Rebuild Crossing, Relocate Signals	Each	35	\$ 12,425,000
Add Constant Warning Time Devices	Each	35	\$ 5,250,000
	Subtotal Grade Crossings		\$ 20,925,000
Install New Interlockings	Each	4	\$ 6,000,000
Modify Existing Interlockings	Each	8	\$ 4,000,000
Install Intermediate Signals, Bi-Directional CTC	Each	32	\$ 14,400,000
Install Intermediate Signals, One Track/One Direction	Each		
	Subtotal Track Signals		\$ 24,400,000
Park-and-Ride Stations	Lump Sum	n / a	
Overnight Coach Storage Yard / Maintenance Facility	Lump Sum	n/a	
Midday Storage / Servicing Facilities at 47th St Yard	Lump Sum	n/a	
	Subtotal Stations and Coach Storage Yard		
Subtotal for Physical Plant including Stations and Yard			\$ 117,655,000
Contingency (30%)			\$ 35,296,500
Engineering, Design, and Construction Management (12%)			\$ 14,118,600
TOTAL ESTIMATED CAPITAL COST (millions of 1997 dollars)			\$ 167,070,100
	Notes:		
		1 UP is 17.6 miles of double track to potential coach storage yard site south of downtown	
		Beecher (yard entrance south of Indiana Ave)	
		2 Bridges at Indiana Ave, Goodenow Rd, Plum Creek, IL 1 (Main St), Righton Rd, US 30, Joe Orr Rd, Deer Creek, Thorn Creek, and I-80	

Appendix G

Aerial Photos of Route Segments and Junctions



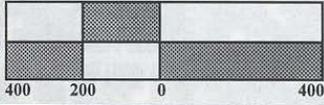
Metra

South Suburban Commuter Rail Feasibility Study

THORNTON JUNCTION

LINEAR SCALE

1" = 400'



Indiana Avenue



UP/CSX

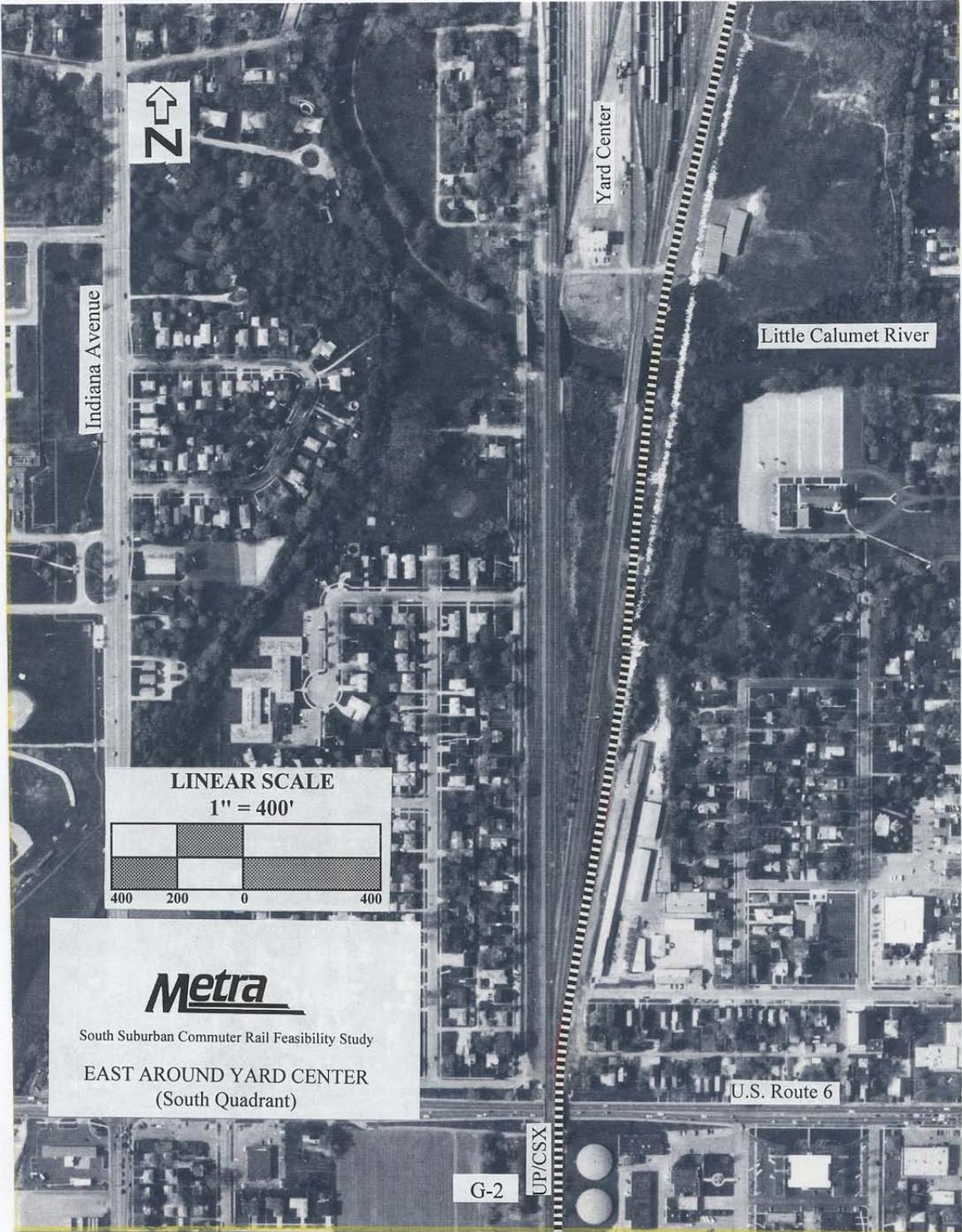
168th Street

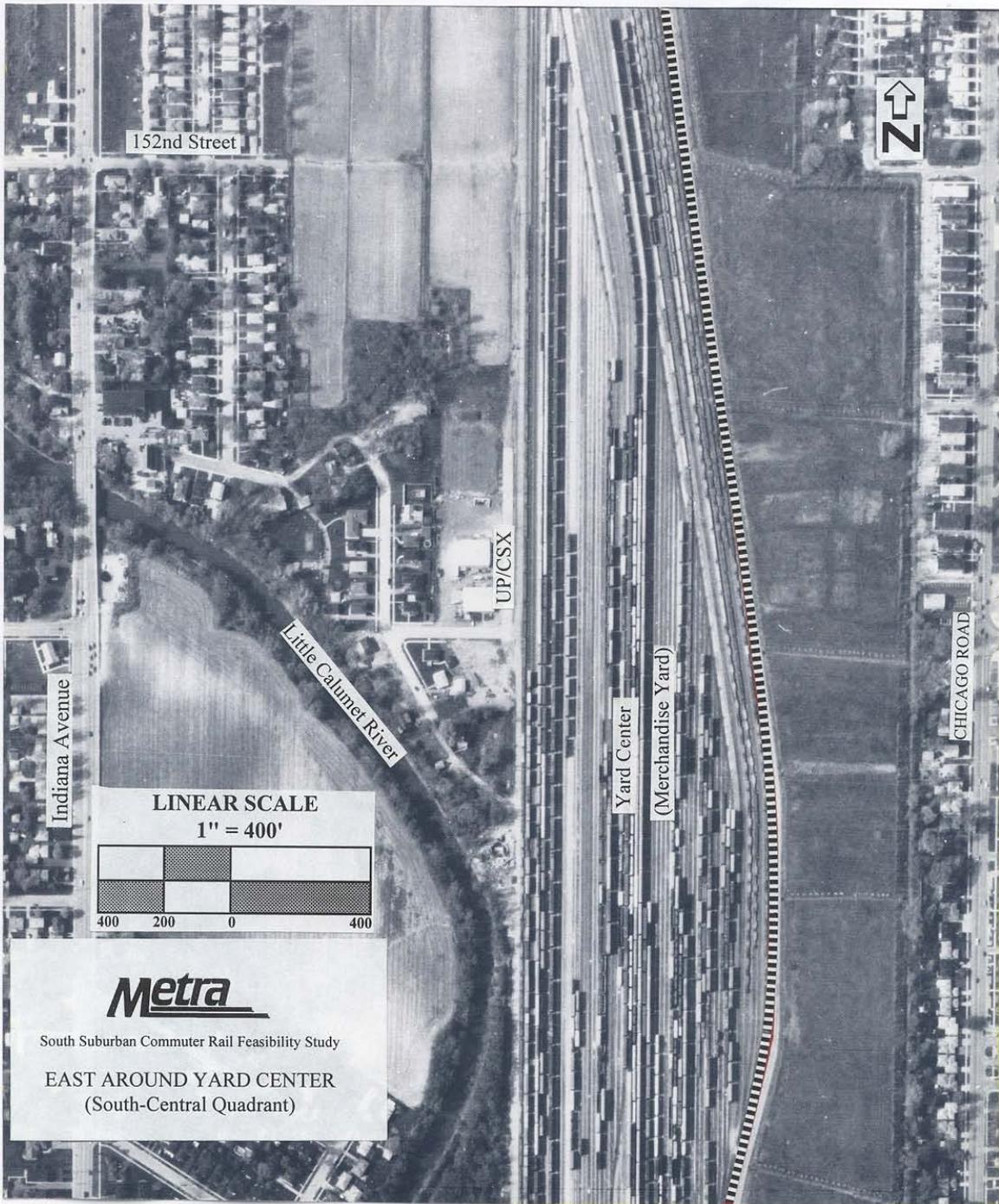
G-1

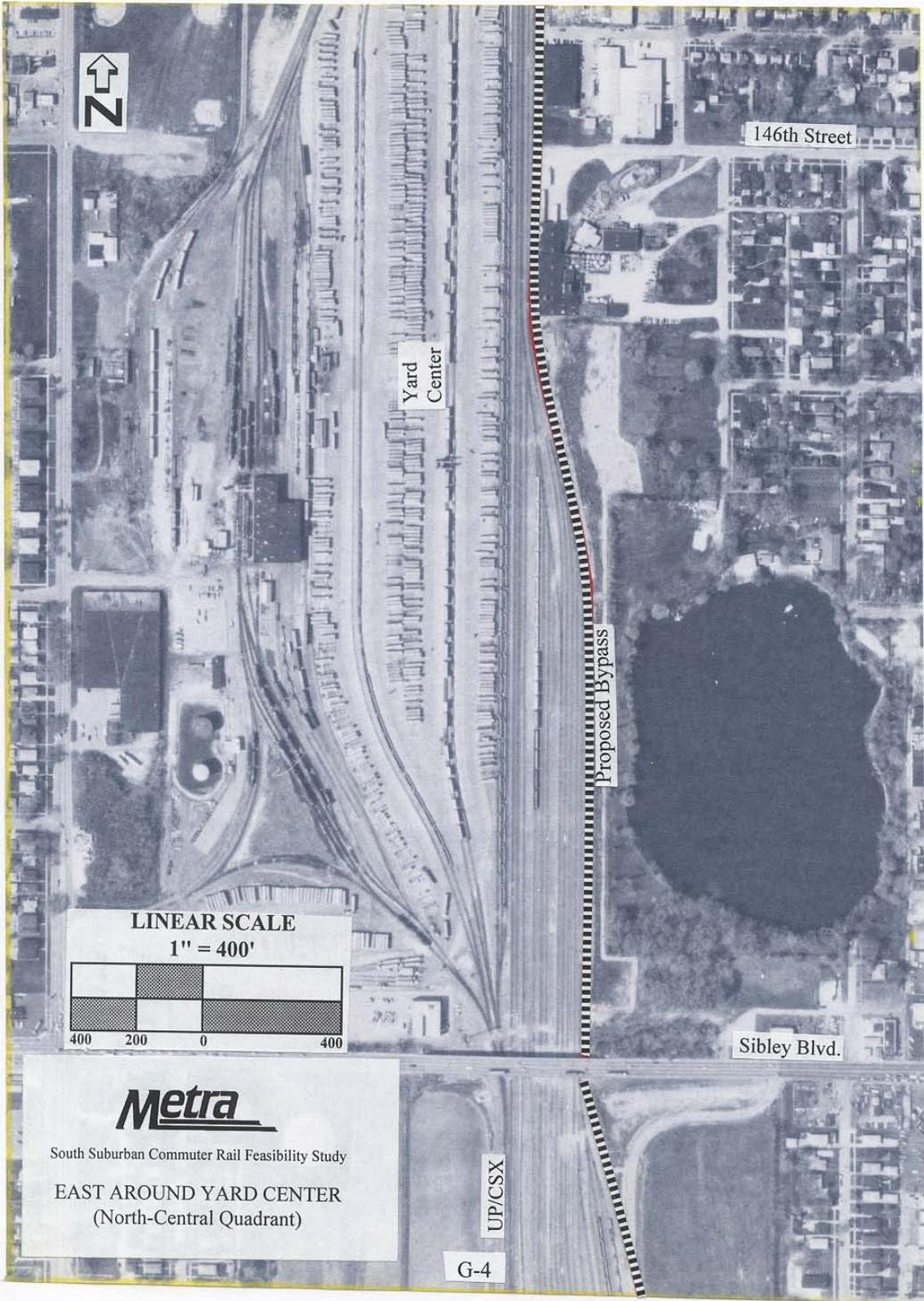
UP/CSX

CN

South Park Road







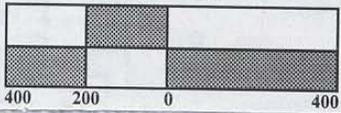
146th Street

Yard Center

Proposed Bypass

Sibley Blvd.

LINEAR SCALE
1" = 400'



Metra

South Suburban Commuter Rail Feasibility Study

EAST AROUND YARD CENTER
(North-Central Quadrant)

UP/CSX

G-4



Metra

South Suburban Commuter Rail Feasibility Study

EAST AROUND YARD CENTER
(North Quadrant)

LINEAR SCALE

1" = 400'



Indiana Avenue

UP

Dolton Jct.

CSX

IHB



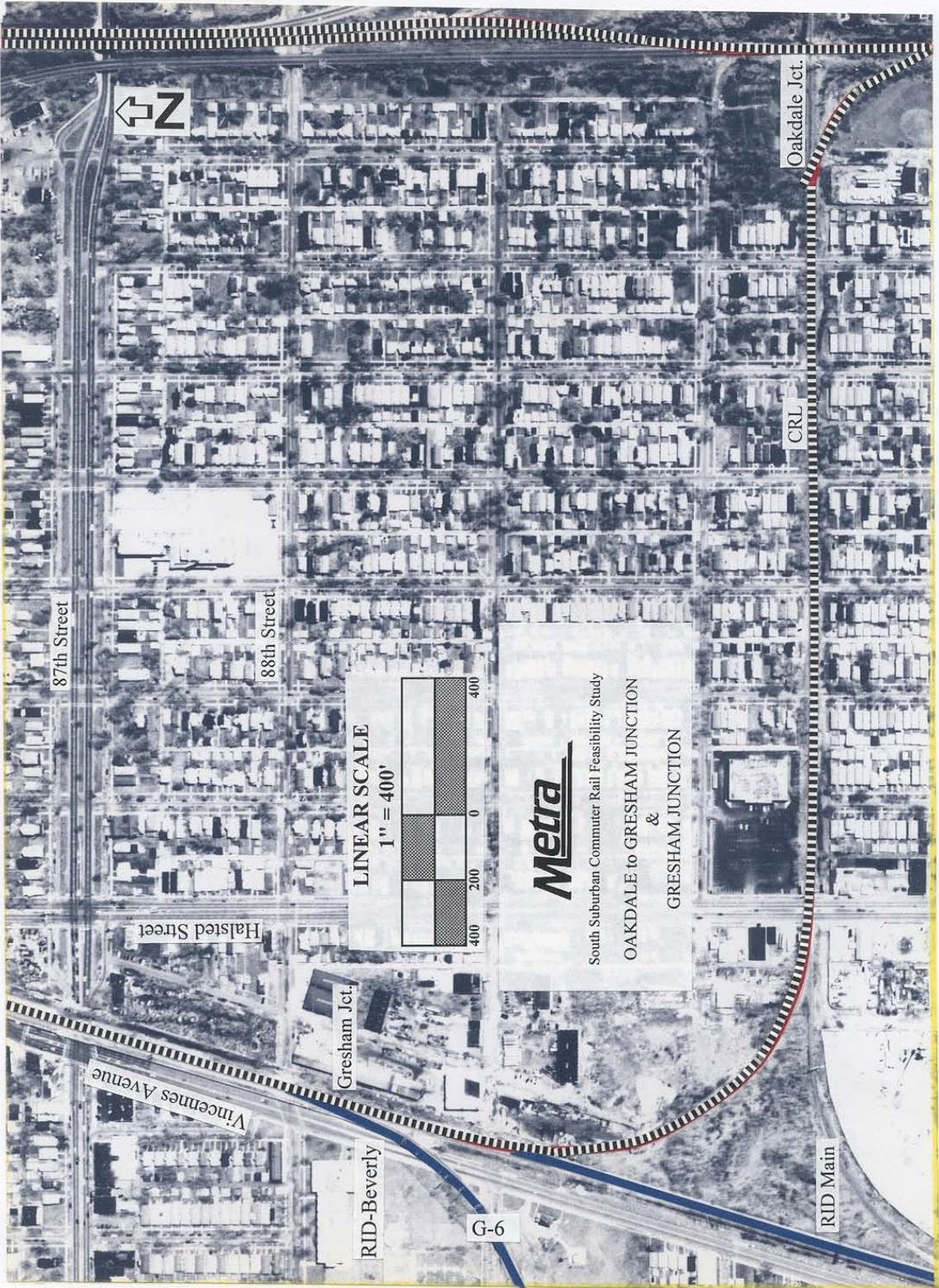
UP/CSX

142nd Street

144th Street

Yard Center

G-5



87th Street

88th Street

Halsted Street

Vincennes Avenue

Gresham Jct.

RID-Beverly

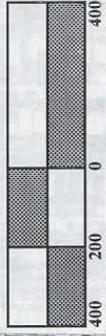
G-6

Oakdale Jct.

CRL

RID Main

LINEAR SCALE
1" = 400'

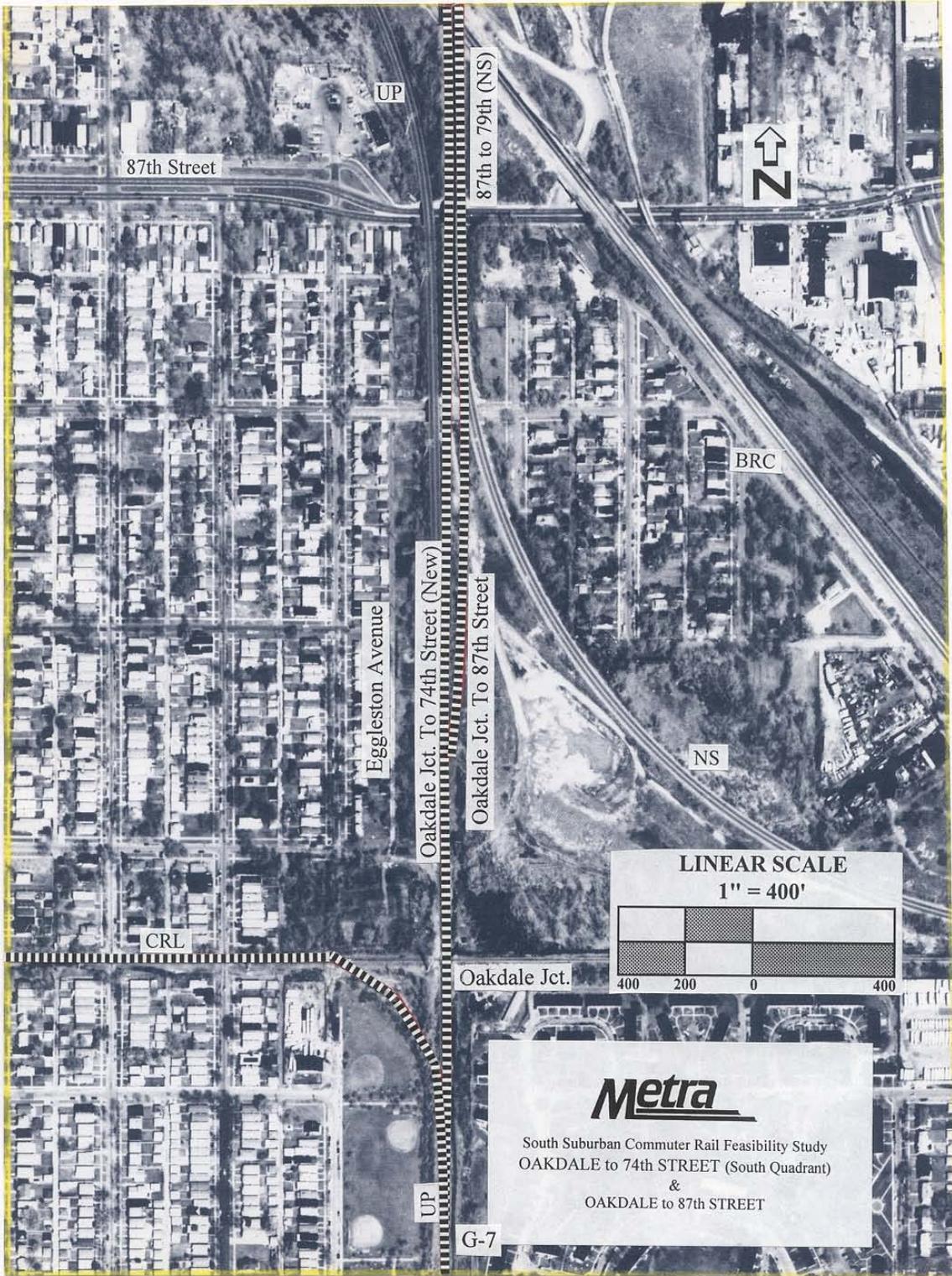


Metra

South Suburban Commuter Rail Feasibility Study

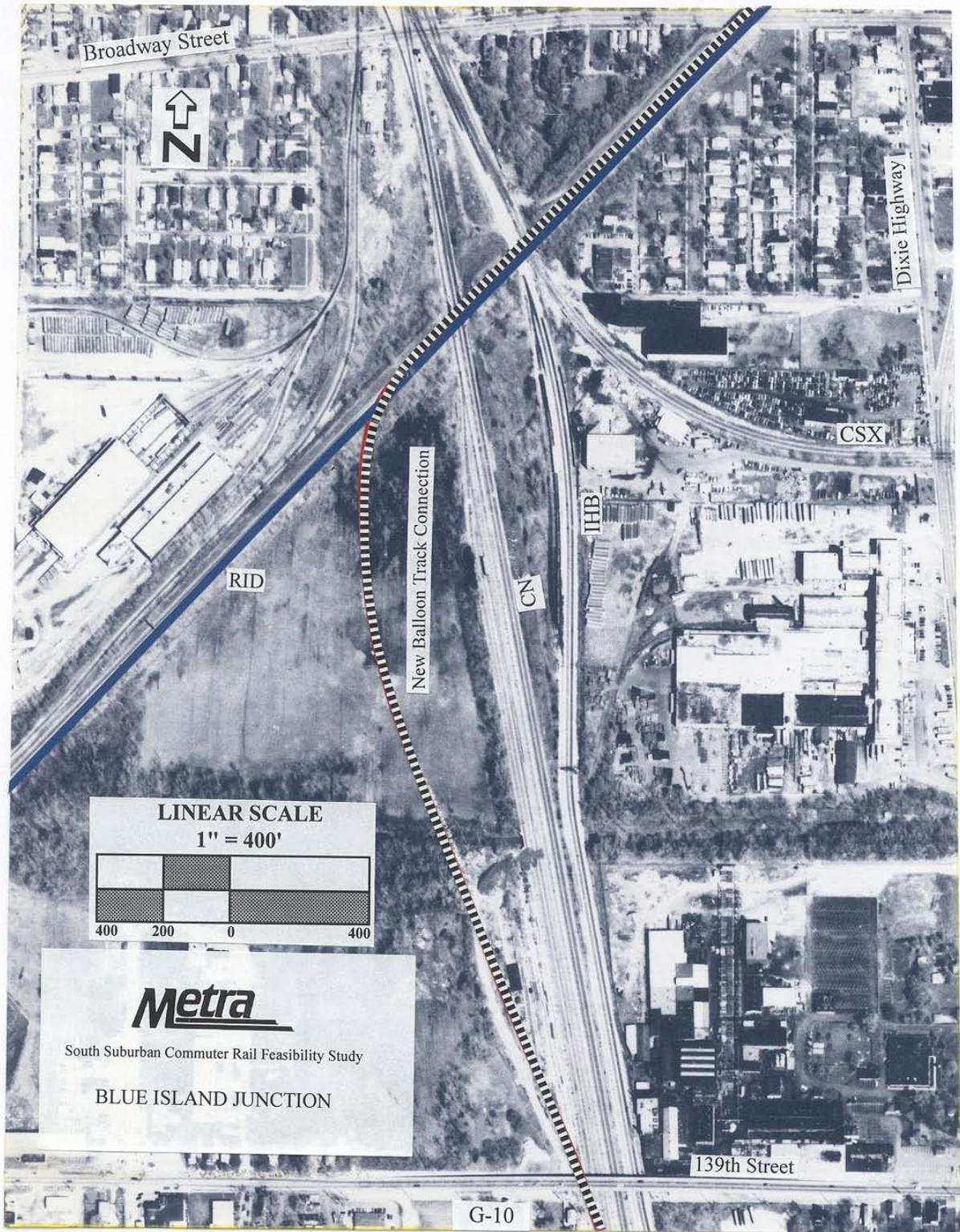
OAKDALE to GRESHAM JUNCTION

&
GRESHAM JUNCTION

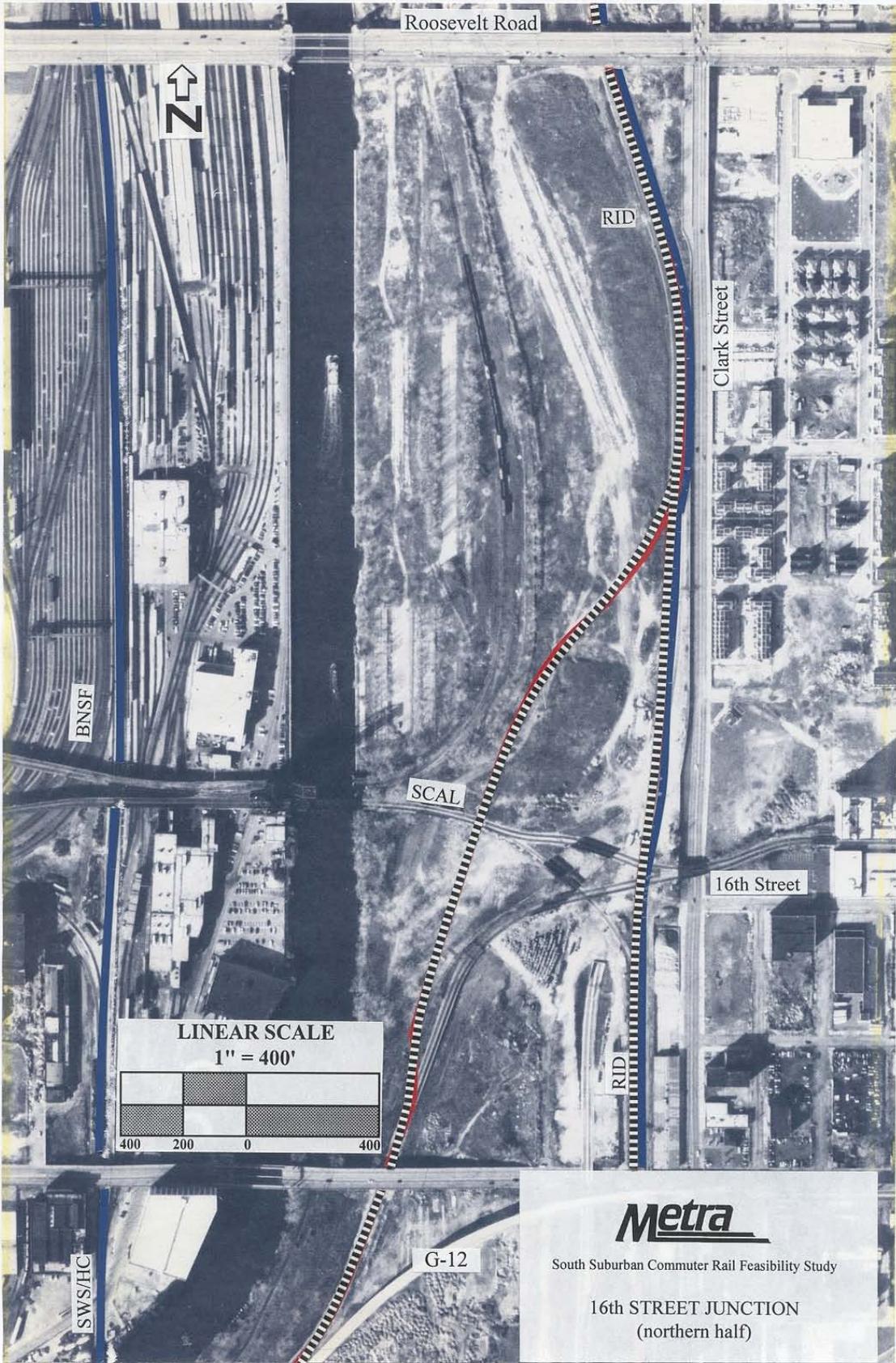












Roosevelt Road



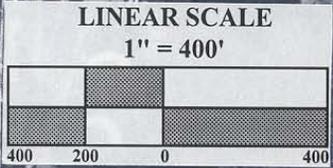
RID

Clark Street

BNSF

SCAL

16th Street



RID

SWS/HC

G-12

Metra
South Suburban Commuter Rail Feasibility Study
16th STREET JUNCTION
(northern half)