NORTH RED & PURPLE LINE VISION STUDY

(Addison to Linden)

- 1. Review Exhibits On Display
- 2. Talk With CTA Staff
- 3. Provide Us With Your Input About:
 - Service Issues
 - Corridor Issues
 - Safety Issues
 - Neighborhood Planning Issues
 - Environmental Issues

PROJECT: OVERVIEW

What:

- Built in 1920's
- 71,000 riders each weekday
- 9 mile corridor
- 21 stations
- 71 viaducts (bridges)
- Signals and power systems

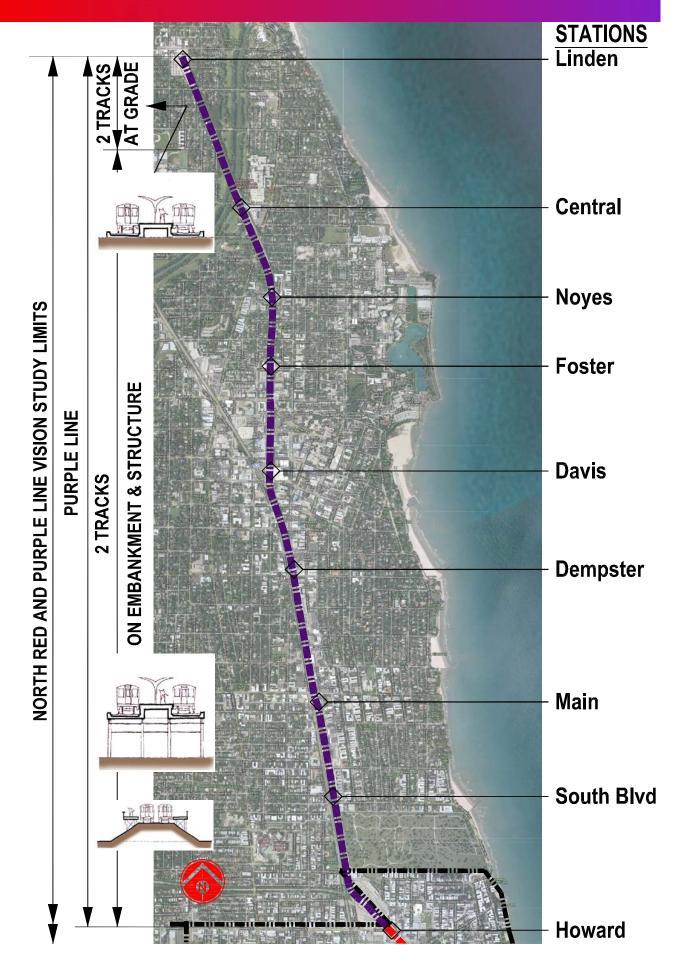
Why:

- Create Vision for transforming 1920 system to 2020 system
- Include public feedback in that Vision
- Take necessary steps to prepare for future project

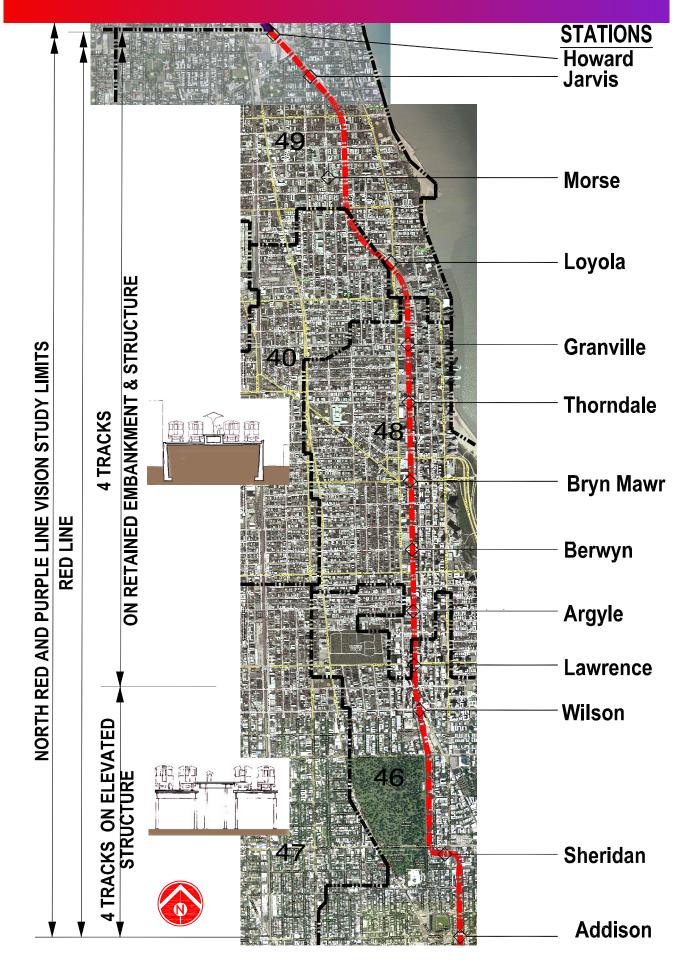
Scope:

- Transit service
- Infrastructure improvements
- Station reconstruction

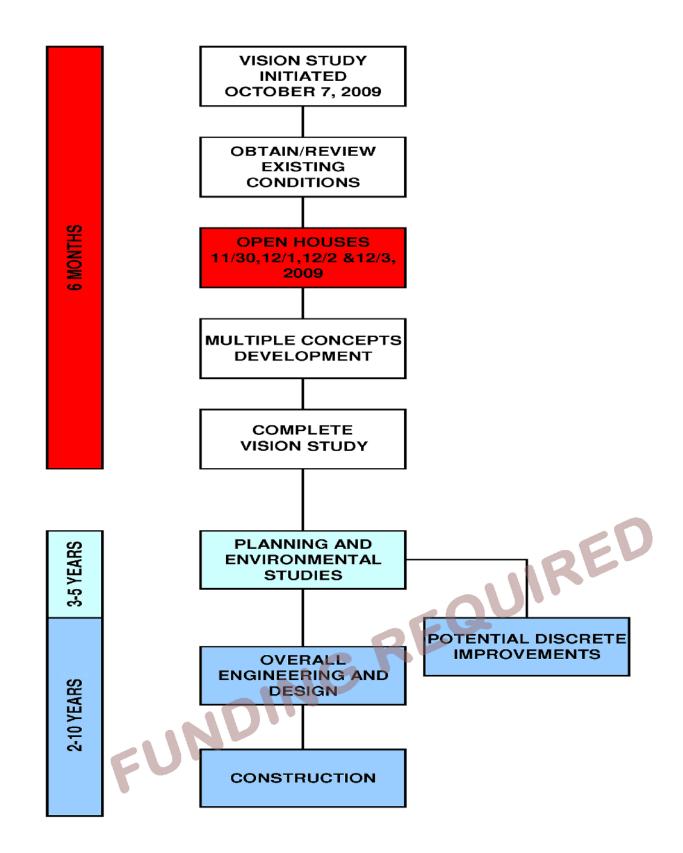
PROJECT: SCOPE



PROJECT: SCOPE



PROJECT: SCHEDULE



Project Challenges:

- Deterioration of existing conditions
- Coordinated service during construction
- Limited right-of-way (ROW)
- Identify funding source

Project Opportunities:

- New stations
- ADA Accessibility
- Improved viaducts
- Maintenance of reliable service
- Improved service
- Transit-oriented development (TOD)

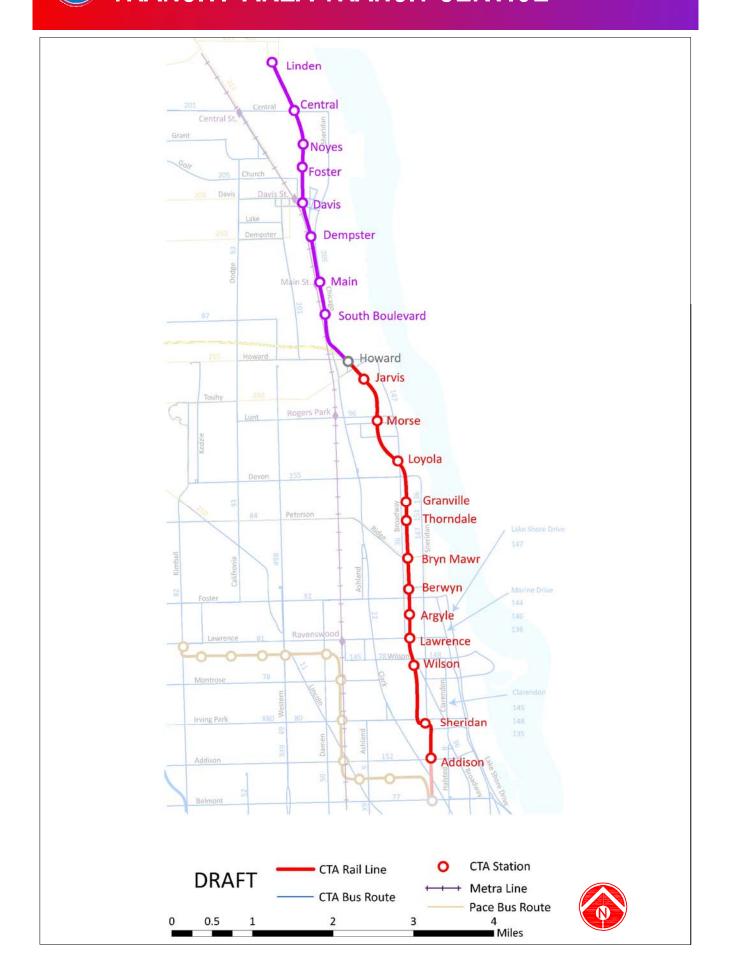


- Provide your comments
- Review comments
- Develop concepts for service and stations
- Complete Vision Study (publish Spring 2010)
- Seek project support and funding

TRANSIT: BUS AND RAIL SYSTEM



TRANSIT: AREA TRANSIT SERVICE

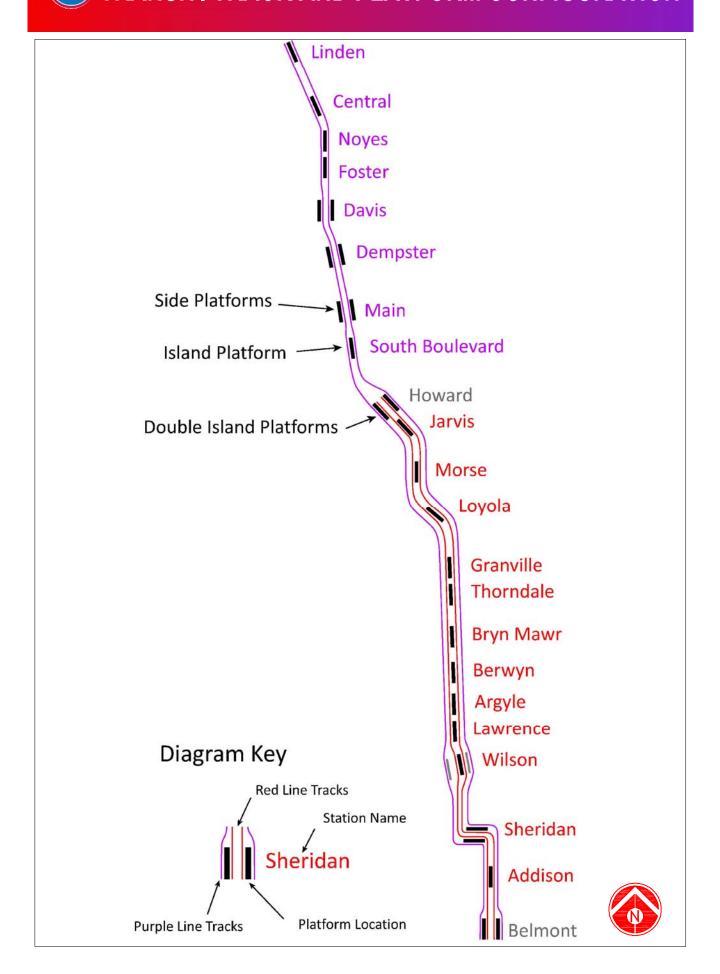




TRANSIT: ACCESS AND CONNECTIONS

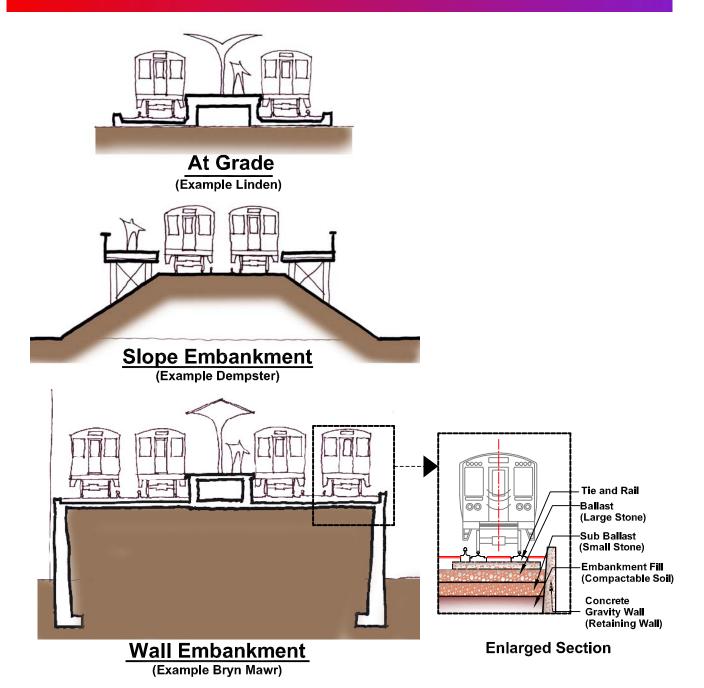
		Station	Population w/in 1 mi.	Avg. Weekday Ridership	Connecting Bus Routes
0		Linden <u>&</u> P	3,424	1,120	Pace: 421, 422, 423
0		Central	2,952	890	201
		Noyes	3,838	680	None
0		Foster	5,229	790	None
•		Davis 🛦 🖺 🔀	5,538	3,850	93, 201, Pace: 205, 208, 213, 250
0		Dempster	4,833	800	205
0		Main 🖺	6,892	1,210	205
		South Blvd	6,820	770	205
C		Howard <u>ዜ</u> (P) ①	13,0 51	6,290	22, 97, 147, 151, 201, 205, 206, Pace: 215, 290
		Jarvis 💆	10,732	1,540	None
	•	Morse ₩	17,607	4,400	96, 155
	•	Loyola (동) 💆	14,411	6,160	147, 151, 155
	•	Granville 🕭 👪	12,228	3,890	36
	•	Thorndale 💆	11,762	2,870	36
		Bryn Mawr 💆	14,756	4,740	36, 84, Pace: 210
		Berwyn 🐉	10,142	3,400	36, 92, 144, 146 Pace: 210
	•	Argyle	10,574	2,690	36
	•	Lawrence 💆	12,791	3,450	36, 81
		Wilson 🖥	16,656	6,530	36, 78, 145, 148
		Sheridan	16,471	5,270	X9, 80, X80, 151 (P) Park & Ride
		Addison (&) 🜌	11,516	9,660	152, walk to 22 Accessbile Station Transfer Station
CC	0	Belmont (&) & Soon		11,490	77, walk to 22 Sheltered bicylce parking

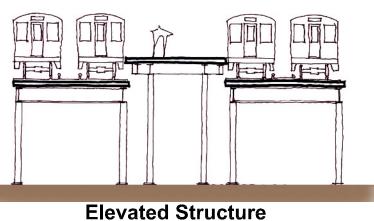
TRANSIT: TRACK AND PLATFORM CONFIGURATION





INFRASTRUCTURE: TYPICAL CROSS SECTIONS





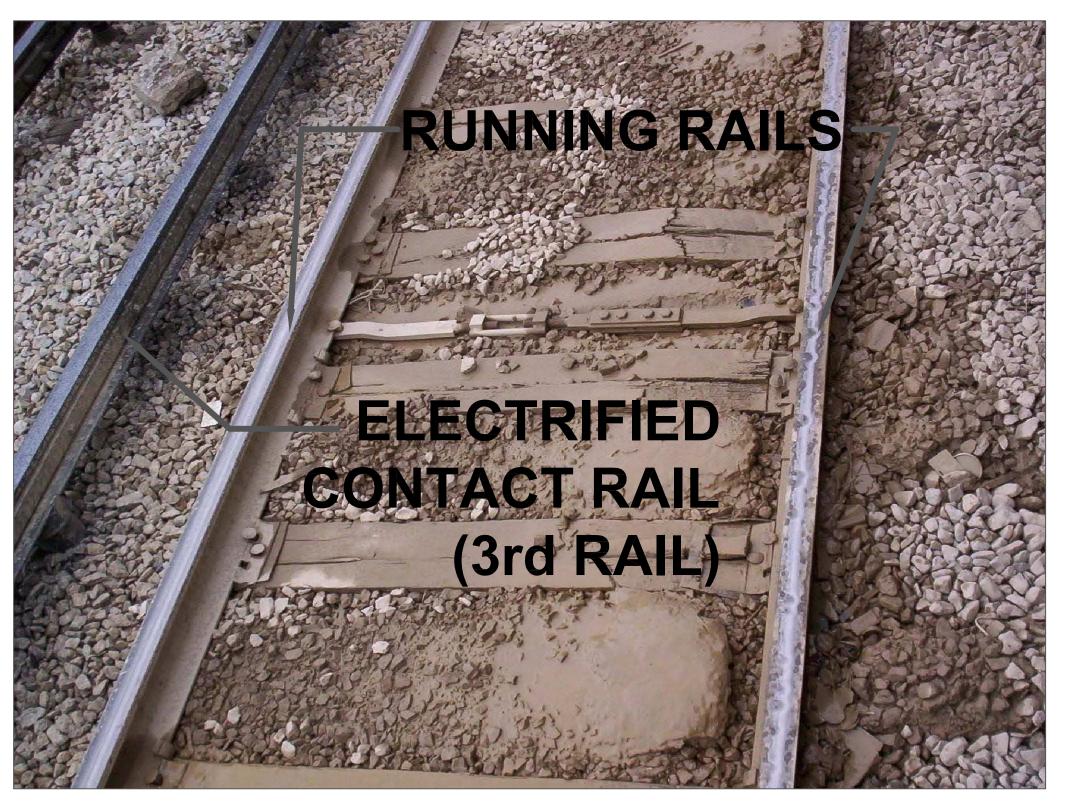
(Example Sheridan)



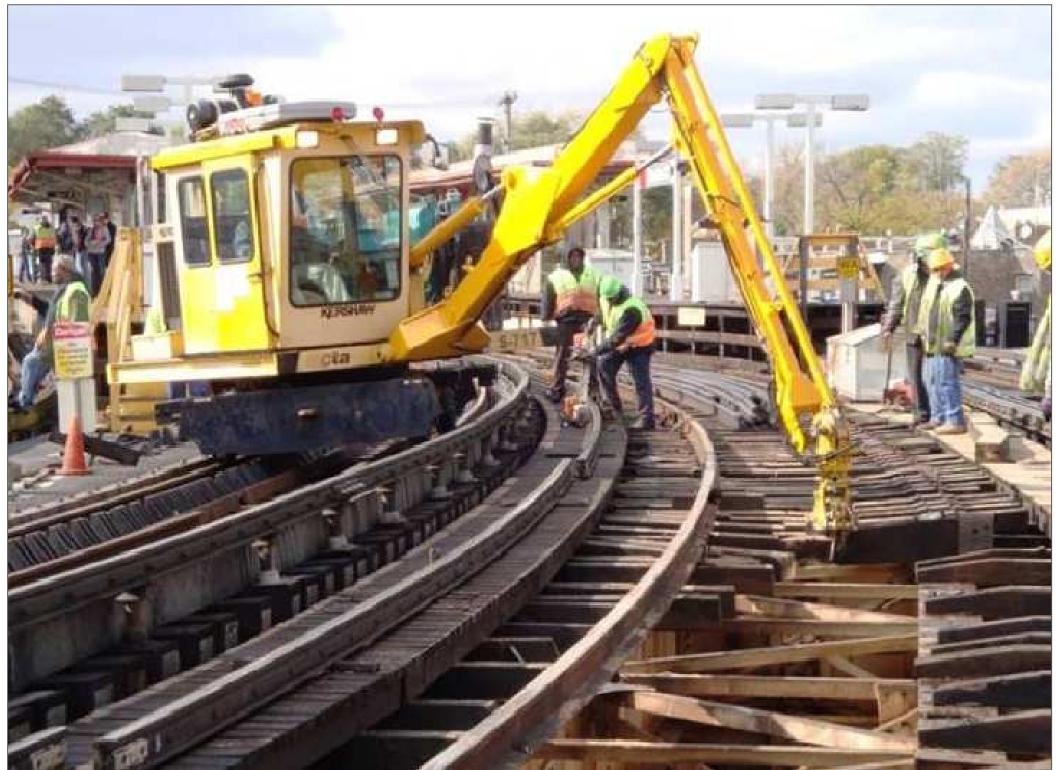
INFRASTRUCTURE: TRACK

ISSUES:

- SLOW ZONES
- SERVICE QUALITY
- SAFETY ASSURANCE

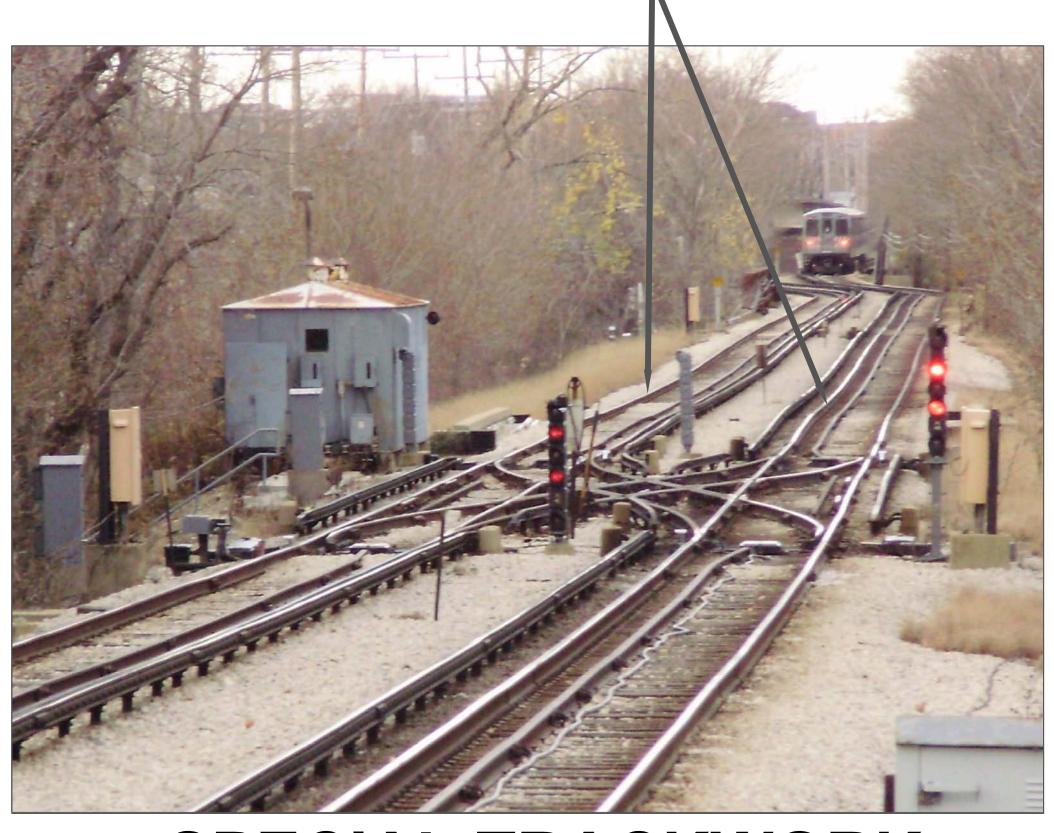


AGING TIES & WORN BALLAST



REPLACING AGING OPEN **DECK TRACK AND FOOTWALK**

TRACK PROFILE **IRREGULARITIES**



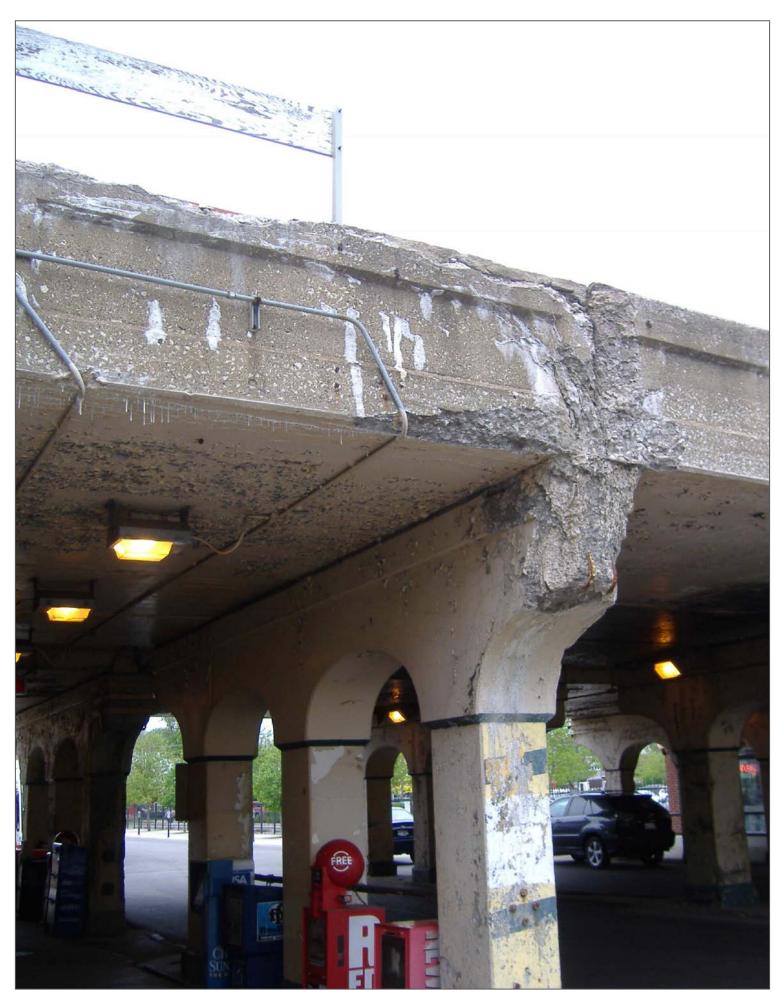
SPECIAL TRACKWORK (DOUBLE CROSSOVER)



AGING TIES IN WORN BALLAST LACKING DRAINAGE



INFRASTRUCTURE: STRUCTURES





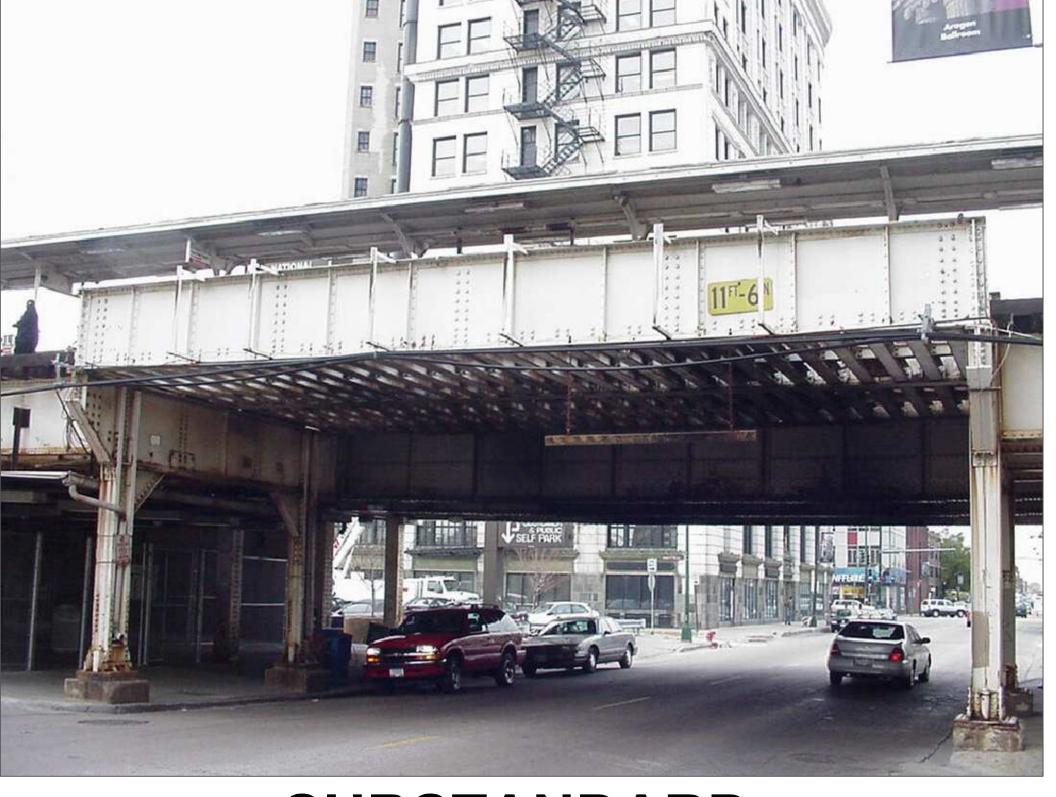
ISSUES:

- SLOW ZONES
- CLEARANCE ON **CITY STREETS**

CRUMBLING CONCRETE TEMPORARY SUPPORTS OF PIER & PARAPET WALL



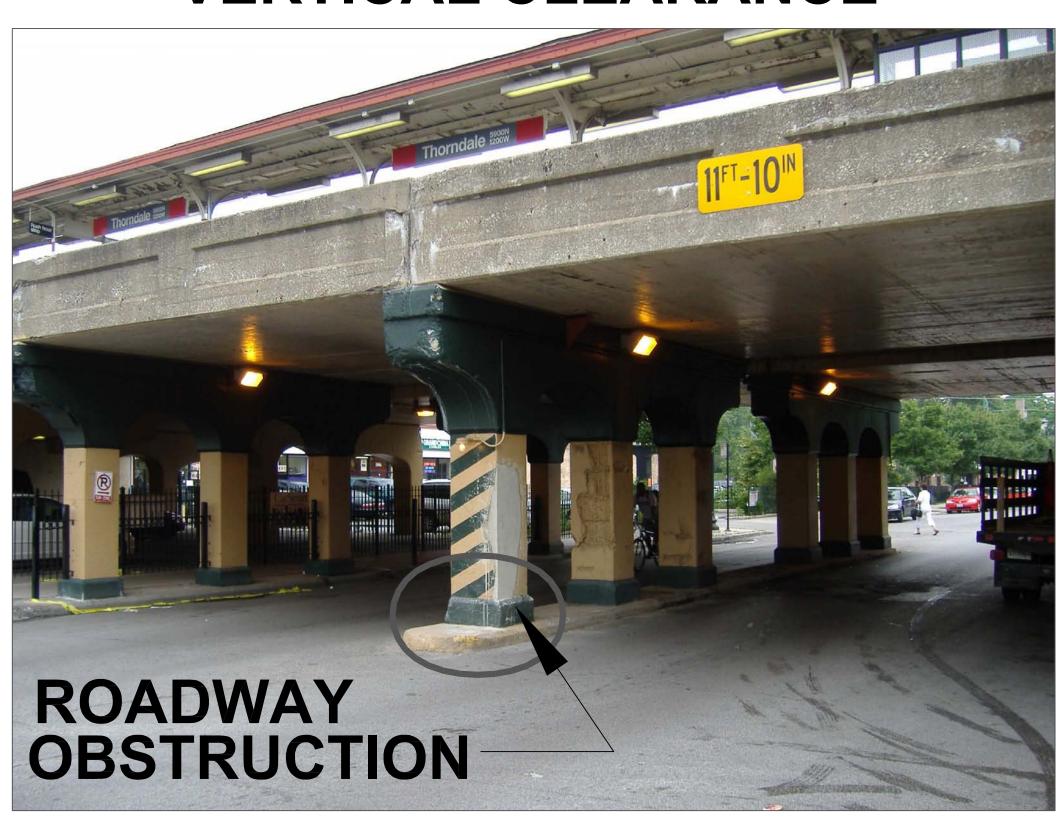
CORROSION



SUBSTANDARD **VERTICAL CLEARANCE**



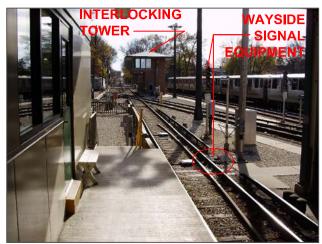
TEMPORARY VIADUCT SHORING



SUBSTANDAR HORIZONTAL CLEARANCES



INFRASTRUCTURE: SIGNALS



LINDEN TERMINAL

ISSUES:

- **RELIABILITY**
- **SAFETY ASSURANCE**
- **SERVICE FLEXIBILITY**
- **SERVICE CAPACITY**
- CONSTRUCTABILITY



SIGNAL EQUIPMENT



SWITCH CONTROL PANEL



INTERLOCKED CROSSOVER



HOWARD INTERLOCKING PLANT



INFRASTRUCTURE: POWER

ISSUES:

- RELIABILITY
 - CAPACITY
- INCREASED POWER REQUIREMENTS
 - EXCESSIVE DISTANCE BETWEEN SUBSTATIONS
- AGING EQUIPMENT



COMMONWEALTH EDISON HIGH VOLTAGE POWER LINES



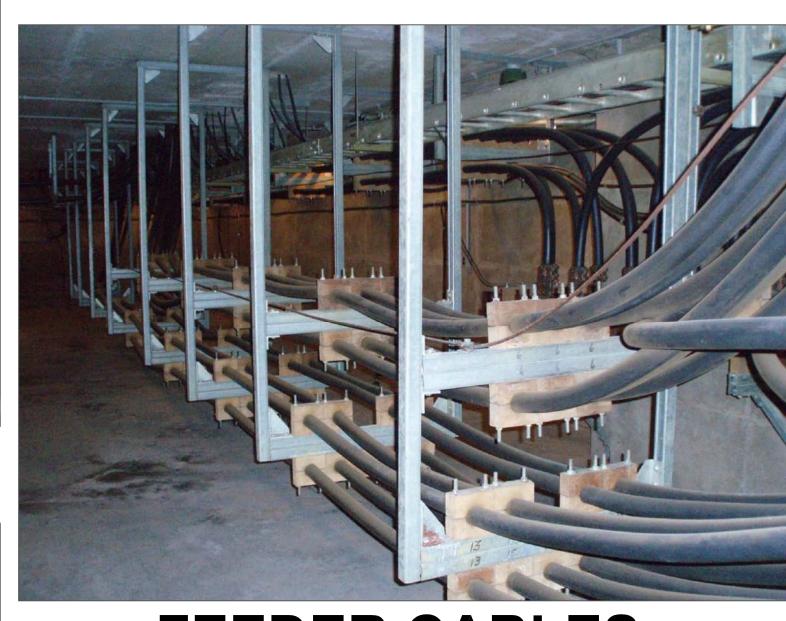
SUBSTATION

POWER FURNISHED BY COMMONWEALTH **EDISON** 12,500 VOLTS AC

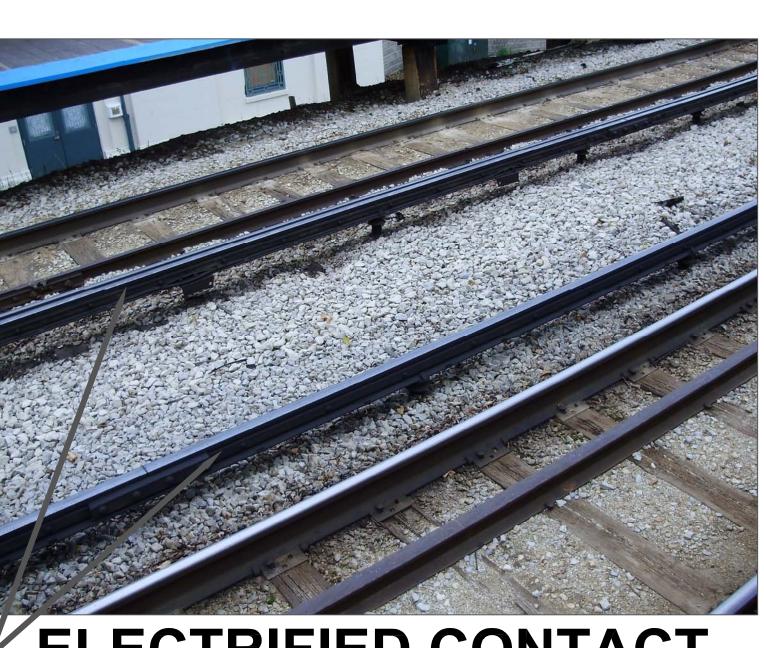
CTA **SUBSTATIONS CONVERT POWER TO** 600 VOLTS DC

TRANSMISSION CABLES FEED **POWER TO** 3rd RAIL

POWER IS PICKED UP BY RAIL CARS **THRU TROLLEY** SHOES IN CONTACT **WITH** 3rd RAIL



FEEDER CABLES



ELECTRIFIED CONTACT RAILS (3rd RAILS)

- Customer comfort and convenience
- Narrow/ deteriorating platforms
- ADA accessibility
- Leakage/ water damage to station and canopy
- Outdated utilities
- Outdated communications
- Deteriorating and difficult to maintain materials



STATIONS: TYPICAL INTERIM IMPROVEMENTS

TYPES OF INTERIM IMPROVEMENTS:

- NEW PLATFORM LIGHTING
- STATION CEILING LIGHTING
- NEW PLATFORM CANOPY
- NEW PLATFORM STAIR ENCLOSURES
- FRESH PAINT
- STAIRS REFURBISHED



NEW STATION



PLATFORM LIGHTING



ANTI-GRAFITTI STAIR ENCLOSURES



CEILING & LIGHTING



PAINT