Board 1: Blue Line Study Area

History of the CTA Blue Line / I-290 system

- Blue Line / I-290 infrastructure is 55 years old
- First integrated transit / highway facility in the U.S.

Project Study Area

- Existing CTA Blue Line: From Clinton Station to Forest Park Station
- IDOT Expansion Alternative: Forest Park Station to Mannheim Road

A map showing the study area: The Study area captures the complete Blue Line from Clinton to Forest Park, and also allows for the evaluation of alternatives that could continue to Mannheim Road in coordination with I-290 EIS study.

Specifically, a red box delineates the study area from 1 block east of Clinton station at Canal Street (east) to Mannheim Road (west), Madison Street (north) to Roosevelt Road (south).

A photo of the Blue Line / I-290 Corridor with traffic congestion in four westbound lanes and the Blue Line approaching a station.

Board 2: Existing Conditions Assessment

Review and update transit data

Assess and document existing conditions

- Rail transit deficiencies and needs
- Platform design and access
- Station access and entry
- Remaining useful life

Elements Evaluated

- TRACK: Contaminated ballast, deteriorated ties, poor drainage, worn rail
- SIGNALS: Recently upgraded
- STATIONS: Over 50 years old, need modern enhancements
- STRUCTURES: Nearing end of life expectancy
- TRACTION POWER: Elements require upgrading
- COMMUNICATIONS SYSTEM: Need technological improvements

Recommendation

• Complete Reconstruction and Modernization

Photo of a CTA Blue Line head house with stairs leading down to platform level.

Photo of a CTA Blue Line train running on track in the corridor.

Board 3: Three distinct market segments

CLINTON TO IMD

- More jobs than population 3 to 1
- Most commuters come into area for work 55,000
- Lowest residents who work outside of area 6,000

WESTERN TO AUSTIN

- Kedzie-Homan highest population 7,600
- Highest no access to car population 4,000
- Most employment outside study area 14,000
- Low amount of local jobs 7,000

OAK PARK TO FOREST PARK

- Oak Park 2nd highest population 7,400
- Lowest no access to car population & some jobs 600 and 3,800
- Forest Park is a major transfer station for 9 Pace bus routes

A CTA system map is displayed in the background.

Board 4: Study Area Demographics

WALKSHEDS AND POPULATION

A map showing a walking distances to each station on the Blue Line Forest Park Branch. The following notes can be discerned from the map:

- Walk-in entry is the primary method of access for all stations on the Blue Line Forest Park Branch, with the exception of Forest Park (which does not provide a consistent walkshed area surrounding the station).
- Walking distance from station access points along pedestrian paths (including all sidewalks) is shown at .5 mile as well as .25 mile and 500 feet from station areas using different color markings.
- Analysis considered Green Line and Pink Line Stations so a shorter walkshed was depicted for Blue Line access when an adjacent Pink or Green Line station would be closer.

A chart showing total population and households within a half mile of each station, as described in the following table:

Blue Line Station	Population	Minority	Households	Low Income
		Population	Housenolus	Households

Blue Line Station	Population	Minority Population	Households	Low Income Households		
Study Area Total	113,304	79,682 (70.3%)	109,563	20,754 (18.9%)		
Clinton to Illinois Medical District						
Clinton	2,782	1,045 (37.6%)	1,742	290 (16.6%)		
UIC-Halsted	4,493	1,629 (36.3%)	2,129	557 (26.2%)		
Racine	5,607	2,477 (44.2%)	2,778	1,156 (41.6%)		
Illinois Medical District	3,099	2,511 (81.0%)	1,646	1,225 (74.4%)		
Sub Total	15,981	7,662 (47.9%)	8,295	3,228 (38.9%)		
Western to Austin						
Western	5,593	4,594 (82.1%)	2,146	1,332 (62.1%)		
California*	3,694	3,566 (96.5%)	1,217	827 (68.0%)		
Kedzie-Homan	7,593	7,408 (97.6%)	2,374	1,437 (60.5%)		
Pulaski	6,722	6,672 (99.3%)	2,243	1,397 (62.3%)		
Kostner*	4,252	4,226 (99.4%)	1,325	814 (61.4)%		
Cicero	2,845	2,810 (98.8%)	965	541 (56.1%)		
Central*	1,422	1,372 (96.5%	460	246 (53.5%)		
Austin	7,074	4,483 (63.4%)	2,739	999 (36.5%)		
Sub Total	39,195	35,131 (89.6%)	13,469	7,593 (56.4%)		
Oak Park to Forest Park						
Oak Park	7,441	2,201 (29.6%)	2,839	566 (19.9%)		
Harlem	4,420	1,814 (41.0%)	1,856	514 (27.7%)		
Forest Park	2,745	1,155 (42.1%)	1,401	484 (34.5%)		
Sub Total	14,606	5,170 (35.4%)	6,096	1,564 (25.7%)		

Source: ESRI Census 2012 Population, Household and Minority Estimate. Notes: *Closed station. Percents calculated from Total Population and Total Households column.

A chart showing vehicle availability for households within a half-mile of each station, as described in the following table:

Blue Line Station	Total Occupied Housing Units	Zero Car Available	1 Vehicle Available	2 or More Vehicle Available		
Study Area Total	43,412	11,547 (26.6%)	20,088 (46.3%)	11,776 (27.1%)		
Clinton to Illinois Medical District						
Clinton	2,908	175 (6.0%)	603 (20.7%)	160 (5.5%)		
UIC-Halsted	1,904	302 (15.9%)	1,203 (63.2%)	400 (21.0%)		
Racine	2,826	631(22.3%)	1,500 (53.1%)	694 (24.6%)		
Illinois Medical District	1,469	745 (50.7%) 528 (35.9%)		196 (13.3%)		
Sub Total	9,107	1,853 3,834		1,450		
Western to Austin						
Western	2,115	514 (24.3%)	1,084 (51.3%)	515 (24.3%)		
California*	962	396 (41.2%)	379 (39.4%)	186 (19.3%)		
Kedzie-Homan 2,043		675 (33.0%)	895 (43.8%)	472 (23.1%)		

Blue Line Station	Total Occupied Housing Units	Zero Car Available	1 Vehicle Available	2 or More Vehicle Available			
Pulaski	2,392	1,041 (43.5%)	917 (38.3%)	434 (18.1%)			
Kostner*	1,420	413 (29.1%)	702 (49.4%)	306 (21.5%)			
Cicero	989	347 (35.1%) 405 (41.0%)		235 (23.8%)			
Central*	504	160 (31.7%)	160 (31.7%) 222 (44.0%)				
Austin	2,908	560 (19.3%)	560 (19.3%) 1,347 (46%)				
Sub Total	13,333	4,106 5,951		3,271			
Oak Park to Forest Park							
Oak Park	2,622	195 (7.4%)	1,073 (40.9%)	1,353 (51.6%)			
Harlem	1,739	185 (10.6%)	740 (42.6%)	813 (46.8%)			
Forest Park 1,729		224 (13.0%) 923 (53.4%)		584 (33.8%)			
Sub Total	6,090	604	2,736	2,750			

Source: ACS 2005-2009 Data Estimate (sum of owner and rental occupied housing units). Percents calculated from Total Occupied Housing Units column.

WALKSHEDS AND EMPLOYMENT

A chart showing station area employment within a half-mile of each station, as described in the following table:

Blue Line Station	ue Line Station Population Employment Population Employm	Employment	Population and Employment	Employment Filled	Employment Filled	Residents with		
				by Residents Inside	by Residents Outside	Employment Outside		
			.5 Mile Area	.5 Mile Area	Study Area			
Study Area Total	113,304	173,734 ²	287,038	6,218 (3.6%) ¹	167,516 (96.4%) ¹	37,919		
		Cli	nton to Illinois Medi	cal District				
Clinton	2,782 (2.5%)	16,866 (9.7%)	19,648 (6.8%)	54 (0.9%)	16,812 (10.0%)	864 (2.3%)		
UIC-Halsted	4,493 (4.0%)	18,015 (10.4%)	22,508 (7.8%)	87 (1.4%)	17,928 (10.7%)	1,713 (4.5%)		
Racine	5,607 (4.9%)	2,658 (1.5%)	8,265 (2.9%)	13 (0.2%)	2,645 (1.6%)	2,192 (5.8%)		
Illinois Medical	2 000 (2 7%)	17 224 (0.0%)	20 222 (7 1%)	81 (1 3%)	17 1/3 (10 2%)	1 102 (2 1%)		
District	5,055 (2.778)	17,224 (9.976)	20,323 (7.176)	01 (1.576)	17,145 (10.276)	1,195 (3.170)		
Sub Total	15,981 (14.1%)	54,763 (31.5%)	70,744 (24.6%)	235 (3.8%)	54,528 (32.6%)	5,962 (15.7%)		
Western to Austin								
Western	5,593 (4.9%)	677 (0.4%)	6,270	12 (0.2%)	665 (0.4%)	2,329 (6.1%)		
California*	3,694 (3.3%)	610 (0.4%)	4,304	14 (0.2%)	596 (0.4%)	1,171 (3.1%)		
Kedzie-Homan	7,593 (6.7%)	1,119 (0.6%)	8,712	24 (0.4%)	1,095 (0.7%)	2,247 (5.9%)		
Pulaski	6,722 (5.9%)	243 (0.1%)	6,965	1 (0.0%)	242 (0.1%)	1,907 (5.0%)		
Kostner*	4,252 (3.8%)	360 (0.2%)	4,612	0 (0.0%)	360 (0.2%)	1,330 (3.5%)		
Cicero	2,845 (2.5%)	2,601 (1.5%)	5,446	4 (0.1%)	2,597 (1.6%)	1,097 (2.9%)		
Central*	1,422 (1.3%	1,300 (0.7%)	2,722	1 (0.0%)	1,299 (0.8%)	379 (1.0%)		
Austin	7,074 (6.2%)	436 (0.3%)	7,510	17 (0.3%)	419 (0.3%)	3,595 (9.5%)		
Sub Total	39,195 (34.6%)	4,697 (2.7%)	20,290	22 (0.4%)	4,675 (2.8%)	6,401 (16.9%)		
Oak Park to Forest Park								
Oak Park	7,441 (6.6%)	1,705 (1.0%)	9,146	58 (0.9%)	1,647 (1.0%)	3,356 (8.9%)		
Harlem	4,420 (3.9%)	1,315 (0.8%)	5,735	37 (0.6%)	1,278 (0.8%)	2,186 (5.8%)		
Forest Park	2,745 (2.4%)	814 (0.5%)	3,559	29 (0.5%)	785 (0.5%)	1,090 (2.9%)		
Sub Total	14,606 (12.9%)	3,834 (2.2%)	18,440	124 (2.0%)	3,710 (2.2%)	6,632 (17.5%		

Source: ESRI Census 2012 Population Estimate, Employment Census LEHD 2011. *Closed station. (¹) percent calculated from total study area employment (²). Station area percents calculated from column totals.

A map showing the density of study area employers, as described in the table supporting Slide 11 above (Employment column).

Board 5: Blue Line Evaluation and Options

An image showing characteristics of the existing stations, the existing context near the station, and station options being considered in the study, described below:

Existing station characteristics include the station type (terminal, subway, or number of entrances), ADA accessibility, presence of an existing wide platform, and presence of weather and noise protection.

- Forest Park terminal station, ADA accessible, wide platform, no weather and noise protection
- Harlem double-ended station with ramps and stairs, not currently accessible, does not currently have a wide platform, no weather and noise protection
- Oak Park double-ended station with ramps and stairs, not currently accessible, does not currently have a wide platform, no weather and noise protection
- Austin double-ended station with ramps and stairs, not currently accessible, does not currently have a wide platform, no weather and noise protection
- Cicero double-ended station with ramps and stairs, not currently accessible, does not currently have a wide platform, no weather and noise protection
- Pulaski double-ended station with ramps and stairs, not currently accessible, does not currently have a wide platform, no weather and noise protection
- Kedzie-Homan double-ended station with ramps and stairs, ADA accessible, does not currently have a wide platform, no weather and noise protection
- Western single-ended station ramp, not currently accessible, does not currently have a wide platform, no weather and noise protection
- Illinois Medical District triple-entry station with ramps and stairs, ADA accessible, does not currently have a wide platform, no weather and noise protection
- Racine double-ended station with ramps and stairs, not currently accessible, does not currently have a wide platform, no weather and noise protection
- UIC-Halsted triple-entry station with ramps and stairs, ADA accessible, does not currently have a wide platform, no weather and noise protection
- Clinton subway station, not currently accessible, wide platform, no noise protection

The existing context considers if the station is currently served by a bus route, a bike route, and if the street is easy to cross (less than or equal to 3 lanes).

- Forest Park bus route, no bike route, not easy to cross street
- Harlem bus route, no bike route, easy street to cross (Circle only)
- Oak Park bus route, bike route, not easy to cross street
- Austin bus route, bike route, easy street to cross (Lombard only)
- Cicero bus route, no bike route, easy to cross street (Lavergne only)
- Pulaski bus route, bike route, easy street to cross (Keeler only)
- Kedzie-Homan bus route, bike route, not easy to cross street
- Western bus route, bike route, not easy to cross street

- Illinois Medical District bus route, bike route, not easy to cross street
- Racine no bus route, bike route, not easy to cross street
- UIC-Halsted bus route, bike route, easy to cross street (Peoria only)
- Clinton bus route, bike route, not easy to cross street

Station options considered include basic renovation, wider platform, compact design, and a connection between the post office and union station. The options available to each station are listed below:

- Forest Park renovation
- Harlem renovation, wider platform, and compact layout
- Oak Park renovation, wider platform, and compact layout
- Austin renovation, wider platform, and compact layout
- Cicero renovation, wider platform, and compact layout
- Pulaski renovation, wider platform, and compact layout
- Kedzie-Homan renovation, wider platform, and compact layout
- Western wider platform, and compact layout
- Illinois Medical District renovation, and wider platform
- Racine renovation, wider platform, and compact layout
- UIC-Halsted renovation and wider platform
- Clinton renovation, connection between post office and union station

Board 6: Double Entry Station Concepts

A summary of the three station concepts are shown in profile (from north to south) and from the side (looking east to west).

The Renovation Concept Option would keep the existing profile the same with similar platform widths, but would renovate the station and improve the existing infrastructure. This option retains existing ramps and does not provide ADA accessibility, wider platforms, or weather/noise protection. However, it does provide multimodal connections.

The Wider Platforms Concept Option would use additionally available CTA right-of-way within the transportation corridor. An optional pedestrian bridge could be added to the middle of the station for an additional community access point. This option would provide for retrofitted ramps or elevators, allowing for ADA accessibility. It would also offer wider platforms and potentially improved weather/noise protection. It also provides multimodal connections.

The Compact Station Concept Option would shift the platform of the station to below the major bridge or arterial that supports the station. This option would provide station head houses / access points on either side of the main street the meets the station. The compact design would be similar to a station on the Dan Ryan / Red Line South Branch of the CTA system where platforms are directly below the roadway instead of between two major roadways (like the existing Blue Line Forest Park Branch design). This option would provide ADA-accessible elevators to the platform level, wider platforms, improved weather/noise protection, and improved multimodal connections over other options since bus transfer passengers could enter the station on both the north and south sides of the street. However, it would reduce total access points at each station.

Board 7: Double Entry Station Concept: Renovation

The Renovation station concept is shown in profile (from north to south), from the side (looking east to west), and from an aerial view.

The Renovation Concept Option would keep the existing profile the same with similar platform widths, but would renovate the station and improve the existing infrastructure. This option retains existing ramps and does not provide ADA accessibility, wider platforms, or weather/noise protection. However, it does provide multimodal connections.

Board 8: Double Entry Station Concept: Renovation

The structure of the Renovation station concept is shown in a rendering view within the existing transportation corridor, adjacent to the I-290 highway and existing CSX rail tracks. The image showing the structure is very similar to existing conditions, with long ramps leading to a center platform between the access points at the overhead bridges.

The Renovation Concept Option would keep the existing profile the same with similar platform widths, but would renovate the station and improve the existing infrastructure. This option retains existing ramps and does not provide ADA accessibility, wider platforms, or weather/noise protection. However, it does provide multimodal connections.

Board 9: Double Entry Station Concept: Compact

The Compact station concept is shown in profile (from north to south), from the side (looking east to west), and from an aerial view. The aerial view shows the tracks adjacent to the platform would need to be relocated to accommodate the wider platform, which has been shifted to either the north or south of the existing location.

The Compact Station Concept Option would shift the platform of the station to below the major bridge or arterial that supports the station. This option would provide station head houses / access points on either side of the main street the meets the station. The compact design would be similar to a station on the Dan Ryan / Red Line South Branch of the CTA system where platforms are directly below the roadway instead of between two major roadways (like the existing Blue Line Forest Park Branch design). This option would provide ADA-accessible elevators to the platform level, wider platforms, improved weather/noise protection, and improved multimodal connections over other options since bus transfer passengers could enter the station on both the north and south sides of the street. However, it would reduce total access points at each station.

Board 10: Double Entry Station Concept: Compact

The structure of the Compact station concept is shown in a rendering view within the existing transportation corridor, adjacent to the I-290 highway and existing CSX rail tracks. The image showing the structure has head houses on both sides of the roadway with elevators and stairs leading down to the platform on both sides of the street/overhead bridge.

The Compact Station Concept Option would shift the platform of the station to below the major bridge or arterial that supports the station. This option would provide station head houses / access points on

either side of the main street the meets the station. The compact design would be similar to a station on the Dan Ryan / Red Line South Branch of the CTA system where platforms are directly below the roadway instead of between two major roadways (like the existing Blue Line Forest Park Branch design). This option would provide ADA-accessible elevators to the platform level, wider platforms, improved weather/noise protection, and improved multimodal connections over other options since bus transfer passengers could enter the station on both the north and south sides of the street. However, it would reduce total access points at each station.

Board 11: Double Entry Station Concept: Wider Platforms

The Wider Platform station concept is shown in profile (from north to south), from the side (looking east to west), and from an aerial view. The aerial view shows the tracks adjacent to the platform would need to be relocated to accommodate the wider platform.

The Wider Platforms Concept Option would use additionally available CTA right-of-way within the transportation corridor. An optional pedestrian bridge could be added to the middle of the station for an additional community access point. This option would provide for retrofitted ramps or elevators, allowing for ADA accessibility. It would also offer wider platforms and potentially improved weather/noise protection. It also provides multimodal connections.

Board 12: Double Entry Station Concept: Wider Platforms

The structure of the Wider Platform station concept is shown in a rendering view within the existing transportation corridor, adjacent to the I-290 highway and existing CSX rail tracks. The image showing the structure is similar to existing conditions, but with a wider platform, a pedestrian bridge providing an additional access point to the community in between the existing access points, with an elevator located at the new mid-platform head-house location. There are still long ramps leading to the wider center platform between the original access points at the overhead bridges.

The Wider Platforms Concept Option would use additionally available CTA right-of-way within the transportation corridor. An optional pedestrian bridge could be added to the middle of the station for an additional community access point. This option would provide for retrofitted ramps or elevators, allowing for ADA accessibility. It would also offer wider platforms and potentially improved weather/noise protection. It also provides multimodal connections.

Board 13: Model Stations: Inside

Whether renovated or rebuilt completely, Blue Line stations could have adequate canopies, wind protection, daylight and seating.

An image of the renovated Belmont Red, Brown and Purple Line station platform is shown, that shows extensive canopies with permeable panels (improving daylight on the platform) and sufficient space for furniture and circulation.

Removing columns and windbreaks from the platform would make its width more usable. This would be recommended especially if the platform were not widened. Additional benefits from removing these items would be making windbreaks continuous and incorporating noise control.

An rendering of a modified Harlem Green Line station shows the station encapsulated by permeable panels allowing daylight to enter, but providing a continuous windbreak and noise control.

An image of the Morgan Green, Pink Line Station is shown with canopy-support columns placed on the exterior edge of the platform, allowing for improved circulation and a more open design.

Board 14: Model Stations: Outside

Station houses should be welcoming to all users. Ample sidewalks should lead to and from them. Bus stops, seating, and places to lock bicycles should be located near station house entries.

From the outside, stations should be easily visible and attractive additions to the neighborhood landscape.

A rendering of a Cermak-McCormack Place Green Line Station shows a small plaza in front of the station entrance with street furniture (chairs/benches), bike racks to the side, and an open walkway to the station entrance. The station head house is built of glass or other light-permeable material that invites the customer into the entrance. An architecturally designed canopy is provided over the plaza between the station entrance and the street providing ample lighting facing down and also protection from weather elements.

An image of the Morgan Green Line Station is shown from a block away to the south with the prominent MORGAN STATION lettering on the track structure, and the architecturally pleasing station at the side with a prominent CTA logo on the façade of the station. This is an example of a station that is easily visible and provides an architecturally attractive addition to the neighborhood.

An image of the Belmont Red, Purple, and Brown Line Station entrance shows the columns supporting the track structure enhanced with art design showing diverse faces made of mosaic tile. Inside the station, a consistent theme is applied and more images can be seen against the back wall. This is an example of a station that uses art to integrate itself as an attractive addition to the community

Board 15: Model Streets and Highway Overpasses

Three approximately 700 foot wide decks cover a portion of Interstate 696 in Southfield and Oak Park, Michigan. A close-up aerial image of one of the three parks, with sprawling paths and spacious open areas, over the expressway is shown. These landscaped pedestrian plazas allow residents to cross the highway easily. An larger-scale aerial image shows the span of highway that includes the three park segments as the highway crosses through development on either side.

A bridge with retail frontage continues the urban scale over Interstate 670 in Columbus, Ohio. An aerial image of the bridge with retail on either side is shown, over the expressway, is shown. A street-view image shows pedestrians walking in front of the retail store fronts including an al fresco dining area with umbrellas and bordering planters. This street view image looks like the pedestrians are walking on any urban street, as opposed to a bridge over a highway.

A protective median and mid-block crossing are provided at CTA's Sox-35th Station on the Red Line. An image shows the pedestrian striping across the 35th Street to provide safer pedestrian crossings. Additionally, in the image, the canopy over the crosswalk is shown, which protects pedestrians from weather elements, and a large refuge area between the north and southbound traffic provides a place for pedestrians to stop mid-crossing if necessary.

Chicago's State Street has two travel lanes in each direction, with reclaimed space converted into the Gateway, a landscaped median with social potential. An image of mid-street pedestrian area with chairs, benches, and landscaping is shown.

An image of Dusty Folwarczny's sculpture Give, located on State Street in downtown Chicago is shown as an appealing art installation that improves the public space.

Board 16: Model Street Design

Complete Streets Chicago: Design Guidelines (Chicago Department of Transporation, 2013) provides a model (and in Chicago, direction) for the treatment of the streets along the Blue Line. Streets should serve (in this order): pedestrians, public transit riders, bicyclists, motorists.

The two diagrams shown on this board summarize the main points: crosswalks should never cross more than three lanes, medians should be at least 8 feet wide; no more than one lane in each direction should be up to 11 feet wide; and the rest should be no more than 10 feet wide.

Board 17: Blue Line Schedule

An image shows the project schedule, described by the following notes:

- One-year vision study
- Since the beginning of the study in Spring 2013, the following tasks have been completed: Data Collection and Station Concept Development
- Public and Agency Outreach Meetings are scheduled for Fall 2013 (current meetings) and Spring 2014
- Remaining project work includes Corridor Service Evaluation and Station Concepts Evaluation before study completion in Spring 2014

(Note: the project schedule has been updated from earlier versions to reflect delays. The project was originally scheduled to be completed in early (Winter) 2014, but will now be completed in Spring 2014.)

Process:

- Evaluate existing infrastructure and market conditions
- Conduct early outreach to project stakeholders
- Identify short and long-term service strategies for the CTA Blue Line
- Analyze funding options

Purpose

- Determine long-term vision
- Coordinate transit and I-290 expressway improvements

Board 18: Conclusions and Next Steps

Conclusions:

- Based on existing conditions, full modernization is recommended.
- Based on corridor demographics, transit access is essential to study area
- Station access should be evaluated and improved
 - Within the station
 - From the neighborhood via bike and pedestrian
 - From roadway for PNR (park-and-ride) and potentially KNR (kiss-and-ride).
- Large employment generators from Clinton to IMD suggest that turn-back track for O'Hare branch should be west of IMD (currently between UIC and Racine).

Next Steps:

- Develop conceptual service patterns
 - Service variations (near-term and long-term)
 - Support facilities
- Evaluate alternatives
 - Physical features
 - Travel time, ridership, and capacity estimates
 - Capital, operating and maintenance costs
 - Operational impacts and compatibility

Project updates:

http://www.transitchicago.com/blueweststudy