

## **Slide 1: CTA Blue Line Forest Park Branch Feasibility/Vision Study**

[Presented on July 16, 2013]

## **Slide 2: Overview of the Blue Line Feasibility / Vision Study**

- PURPOSE
  - Determine long-term vision
  - Coordinate transit & highway improvements
- PROCESS
  - Evaluate existing infrastructure & market conditions
  - Conduct early outreach to project stakeholders
  - Identify short & long term service strategies for the CTA Blue Line
  - Analyze funding options

## **Slide 3: Project Background & 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, from 1 block east of Clinton station at Canal Street (east) to Mannheim Road (west), Madison Street (north) to Roosevelt Road (south).

## **Slide 4: Project Schedule**

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

- 12-month vision study

- Service concepts and potential alternatives will be presented to public in Fall 2013, final concepts and station prototypes will be presented to public in Spring 2014
- Updates will be made public via website as project advances
- Continued coordination with project partners, key community stakeholders, and outreach to public

#### **Slide 5: 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
- STATUS
  - INFRASTRUCTURE CONDITION ASSESSMENT: Technical Memorandum is nearing completion
  - Final document anticipated in July 2013

#### **Slide 6: Existing Conditions Assessment (continued)**

- ELEMENTS EVALUATED: Results
  - 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

#### **Slide 7: Transit Market Analysis**

- ASSEMBLE & ANALYZE EXISTING DATA
  - Transit market and ridership statistics
  - Commuter surveys
  - Local land use and transportation plans
  - Transit and highway studies
  - Access and mobility assessments
  - STATUS
  - TRANSIT MARKET ANALYSIS:  
Technical Memorandum is nearing completion
  - Final document anticipated in July 2013

**Slide 8: Station Area Walksheds**

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.

**Slide 9: Station Area Demographics – ½ mile Walkshed**

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 Population	Households	Low Income Households
<b>Study Area Total</b>	<b>113,304</b>	<b>79,682 (70.3%)</b>	<b>109,563</b>	<b>20,754 (18.9%)</b>
<b>Clinton to Illinois Medical District</b>				
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%)

Blue Line Station	Population	Minority Population	Households	Low Income Households
<b>Sub Total</b>	15,981	7,662 (47.9%)	8,295	3,228 (38.9%)
<b>Western to Austin</b>				
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%)
<b>Sub Total</b>	39,195	35,131 (89.6%)	13,469	7,593 (56.4%)
<b>Oak Park to Forest Park</b>				
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%)
<b>Sub Total</b>	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.

### Slide 10: Station Area Demographics – ½ Mile Walkshed

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
<b>Study Area Total</b>	<b>43,412</b>	<b>11,547 (26.6%)</b>	<b>20,088 (46.3%)</b>	<b>11,776 (27.1%)</b>
<b>Clinton to Illinois Medical District</b>				
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%)
<b>Sub Total</b>	<b>9,107</b>	<b>1,853</b>	<b>3,834</b>	<b>1,450</b>
<b>Western to Austin</b>				
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%)
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%)	222 (44.0%)	122 (24.2%)
Austin	2,908	560 (19.3%)	1,347 (46%)	1,001 (34.4%)

Blue Line Station	Total Occupied Housing Units	Zero Car Available	1 Vehicle Available	2 or More Vehicle Available
<b>Sub Total</b>	13,333	4,106	5,951	3,271
<b>Oak Park to Forest Park</b>				
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%)
<b>Sub Total</b>	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.

**Slide 11: Station Area Employment - ½ mile Walkshed**

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

Blue Line Station	Population	Employment	Population and Employment	Employment Filled by Residents Inside .5 Mile Area	Employment Filled by Residents Outside .5 Mile Area	Residents with Employment Outside Study Area
<b>Study Area Total</b>	<b>113,304</b>	<b>173,734<sup>2</sup></b>	<b>287,038</b>	<b>6,218 (3.6%)<sup>1</sup></b>	<b>167,516 (96.4%)<sup>1</sup></b>	<b>37,919</b>
<b>Clinton to Illinois Medical District</b>						
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 District	3,099 (2.7%)	17,224 (9.9%)	20,323 (7.1%)	81 (1.3%)	17,143 (10.2%)	1,193 (3.1%)
<b>Sub Total</b>	<b>15,981 (14.1%)</b>	<b>54,763 (31.5%)</b>	<b>70,744 (24.6%)</b>	<b>235 (3.8%)</b>	<b>54,528 (32.6%)</b>	<b>5,962 (15.7%)</b>
<b>Western to Austin</b>						
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%)
<b>Sub Total</b>	<b>39,195 (34.6%)</b>	<b>4,697 (2.7%)</b>	<b>20,290</b>	<b>22 (0.4%)</b>	<b>4,675 (2.8%)</b>	<b>6,401 (16.9%)</b>
<b>Oak Park to Forest Park</b>						
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%)
<b>Sub Total</b>	<b>14,606 (12.9%)</b>	<b>3,834 (2.2%)</b>	<b>18,440</b>	<b>124 (2.0%)</b>	<b>3,710 (2.2%)</b>	<b>6,632 (17.5%)</b>

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

### **Slide 12: Study Area Employment**

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

### **Slide 13: Transit Access is Essential to Study Area**

- STUDY AREA 2012 ESTIMATED POPULATION – 113,000
  - 11% of households have no access to a car
  - 70% Minority population
  - 19% Low income population
- STUDY AREA 2011 ESTIMATED EMPLOYMENT – 174,000
  - 97% of jobs in study area filled by outside workers
  - 33% of residents leave study area for employment
  - 5% live and work in the study area

### **Slide 14: Station Area - within ½ mile walkshed area**

- STATION AREA POPULATION
  - NO ACCESS TO CAR: IMD 51% and Pulaski 44%
  - HIGH MINORITY POPULATION: IMD 81%, Western 82%, Kedzie-Homan 98%, Cicero 99% and Austin 64%
  - LOW INCOME: IMD 74%, Western 62%, Kedzie-Homan 61% and Cicero 56%
- STATION AREA EMPLOYMENT
  - FILLED BY OUTSIDE WORKERS: Clinton 10%, UIC-Halsted 11% and IMD 10%
  - LEAVE FOR EMPLOYMENT: Austin 9% and Oak Park 9%
  - LIVE AND WORK: UIC-Halsted 1.3% and IMD 1.4%

### **Slide 15: Station Areas by 3 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

**Slide 16: Station Access & Design Concepts**

- DEVELOP CONCEPTUAL DESIGNS FOR STATION MODERNIZATION
  - Station redesign options
  - Station access alternatives
  - Roadway network improvements
  - Deficiency resolution
  - Local plan and study integration
- STATUS
  - STATION ACCESS & DESIGN:  
Technical Memorandum is 25% complete
  - Vetting concepts with stakeholders

**Slide 17: Conceptual Planning for Station Access**

- ELEMENTS CONSIDERED
  - ADA Compliance
  - Pedestrian
  - Bicycle

- Bus Connectivity
- Park and Ride
- Kiss and Ride
- Adjacent Roadway
- Current CTA Design Standards

### **Slide 18: Station Prototype Goal and Assumptions**

An image describing the station prototype goals and assumptions, in text here:

- Goals are supported by
  - Assumptions about related elements and guidelines

At the station level:

- Accessible / ADA compliant; Code compliant egress
  - Elevators, ramps, and stairs
- Comfortable, safe and convenient for passengers
  - Platforms to meet CTA guidelines of 24' center / 14' side
  - Wind, sound, and rain protection
- Easy and secure to operate
  - Clear lines of sight
- Easy to maintain
  - Durable materials

At the neighborhood level:

- Easy to find
  - Highly visible, clearly identifiable
- Seamlessly and safely connected to streets and transit
  - Short distances between trains and streets

### **Slide 19: Station Types**

An image showing station types, ADA compliance, and approximate existing platform width for each station location, described here:

- Forest Park – terminal station, ADA accessible, 28' platform
- Harlem – double-ended station with ramps and stairs, not currently accessible, 13' platform
- Oak Park – double-ended station with ramps and stairs, not currently accessible, 13' platform
- Austin – double-ended station with ramps and stairs, not currently accessible, 13' platform
- Central – closed station, single-ended station ramp, 13' platform

- Cicero – double-ended station with ramps and stairs, not currently accessible, 12' platform, with a former station house/entry point closed
- Kostner – closed station, single-ended station ramp, 12' platform
- Pulaski – double-ended station with ramps and stairs, not currently accessible, 12' platform, with a former station house/entry point closed
- Kedzie-Homan – double-ended station with ramps and stairs, ADA accessible, 12' platform
- California – closed station, single-ended station ramp, 13' platform
- Western – single-ended station ramp, not currently accessible, 15' platform
- Illinois Medical District – triple-entry station with ramps and stairs, ADA accessible, 15' platform
- Racine – double-ended station with ramps and stairs, not currently accessible, 15' platform
- UIC-Halsted – triple-entry station with ramps and stairs, ADA accessible, 15' platform
- Clinton – subway station, not currently accessible, 20' platform

#### **Slide 20: CONCEPTUAL OPTION B: WIDER PLATFORM**

This slide shows an image of a typical station with long ramps in the median of the expressway, including wider platforms. This image is supported by the following text notes:

- Added station house at mid platform
- Pedestrian bridge
- Improve existing station houses
- Widen platform – relocate 1 track
- Improved access + bus connection
- New canopy + platform elements

#### **Slide 21: CONCEPTUAL OPTION C: COMPACT LAYOUT AT BRIDGE**

This slide shows an image of a station concept that is more compact and placed underneath the overhead bridge which crosses over the highway. Access and egress are achieved through stairs from the overhead bridge. The image is supported by the following text notes:

- New station houses at bridge
- Wider center platform
- Improved access + bus connection
- New canopy + platform elements

#### **Slide 22: CONCEPTUAL OPTION D: SIDE PLATFORMS**

This slide shows an image of a typical station with long ramps in the median of the expressway, but has two platforms on the outside of the rail tracks instead of one center platform. This image is supported by the following text notes:

- New station houses and ramps
- New platforms – relocate 1 track
- Potential noise mitigation
- Improved access + bus connection
- Wind and weather protection

#### **Slide 23: CONCEPTUAL OPTION E: STAGGERED BERTHING**

This slide shows an image of a typical station with short ramps in the median of the expressway, but with a very long platform area, with trains stopping in each direction at opposite ends of the long platform instead of directly across from each other on a standard center platform. This image is supported by the following text notes:

- New station houses and vertical circulation
- Extend platform – same width
- No track relocation
- Potential noise mitigation
- Improved access + bus connection
- Wind and weather protection
- Added station house at mid platform
- Pedestrian bridge

#### **Slide 24: 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 neighborhood via bike and ped,

- from roadway for PNR and potentially KNR.
- 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).

**Slide 25: Next Steps**

- COMPLETE STUDY AREA CONDITIONS ASSESSMENT REPORT
- COMPLETE STUDY AREA MARKET ANALYSIS REPORT
  - DEVELOP CONCEPTUAL SERVICE PATTERNS
  - Service variations (near-term and long-term)
  - Support facilities
- EVALUATE ALTERNATIVES
  - Physical features
  - Travel time, ridership, & capacity estimates
  - Capital, operating & maintenance costs
  - Operational impacts & compatibility