

Federal Transit Administration's  
New Starts Process

# Orange Line Extension Alternatives Analysis Study

April 2009



# Schedule for Tonight's Meeting

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- **Structure of the meeting**
- **Questions and answers process**
  - **Submit your comments in writing on comment cards**
  - **Comments and questions will be grouped and answered by topic**
  - **All comments and questions will be addressed on CTA's website - [www.transitchicago.com](http://www.transitchicago.com)**
  - **An interpreter for the hearing impaired and translators for the Polish and Spanish speaking communities are available this evening**

## Tonight's Speakers

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- **Darud Akbar – Moderator**
  - Chicago Transit Authority
- **Jeffrey Busby – Strategic Planning Manager**
  - Chicago Transit Authority
- **Ronald Shimizu – Orange Line Study Area Manager**
  - Parsons Brinckerhoff

# Outline of the Presentation

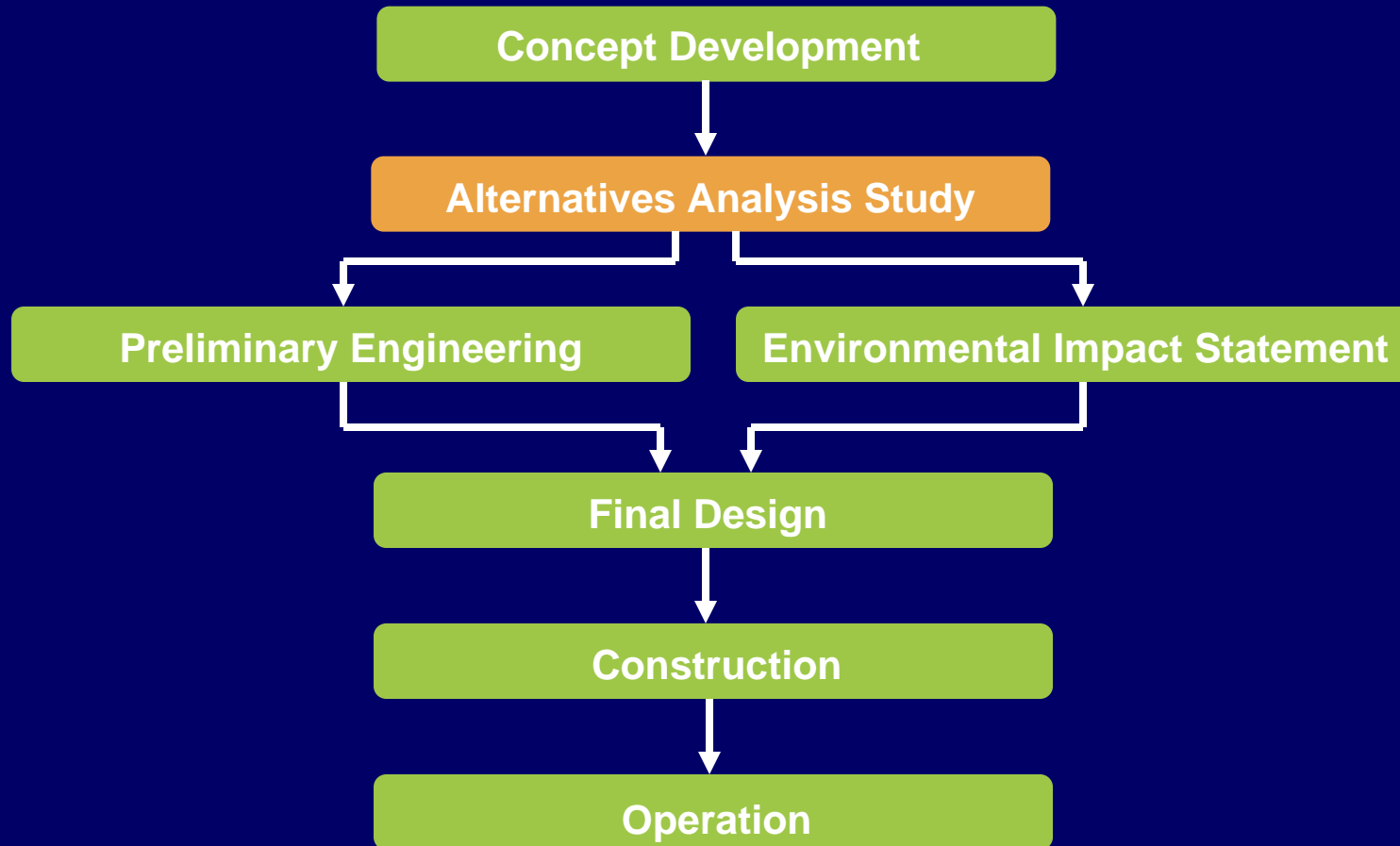
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- **Discuss Status of Orange Line Extension Alternatives Analysis Study**
  - New Starts Overview
  - Screen 1 Findings
- **Screen 2 Preliminary Findings**
- **Public Involvement Process**

# Status of Study



# FTA's Required New Starts Process



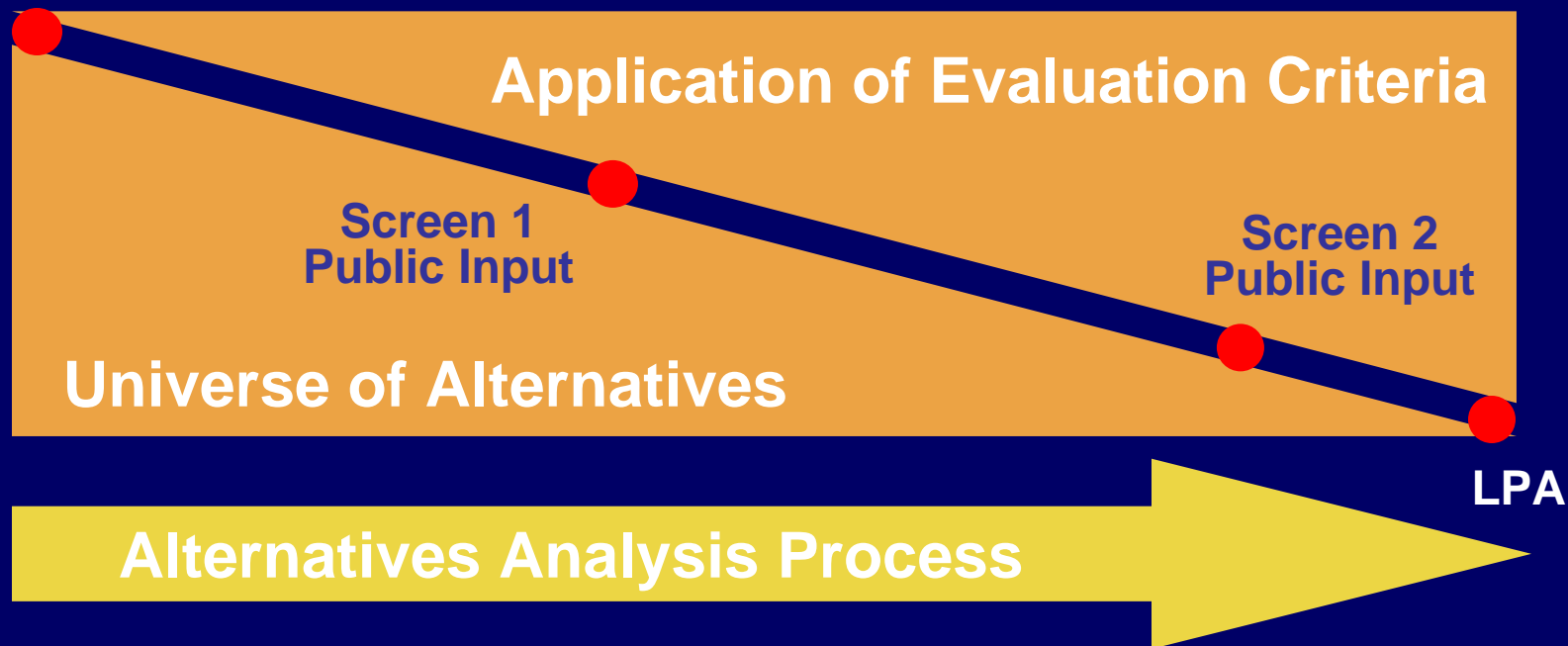
## **Alternatives Analysis (AA) Studies**

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- **FTA Requirement for federal funding for transit expansion (New Starts)**
- **Identifies transit opportunities and ensures all practical solutions are considered**
- **Ensures planning is consistent among all New Starts projects throughout the country**
- **Provides opportunity to gather information and receive public input**
- **Identifies Locally Preferred Alternative**

# FTA Evaluation Process

The Purpose and Need is first defined, the evaluation criteria are applied, and options within the Universe of Alternatives are eliminated until, at the end of the process, there is a Locally Preferred Alternative (LPA).





## Purpose and Need

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- **Relieve roadway, bus and passenger congestion at Midway Airport Orange Line station**
- **Better accommodate tremendous growth in employment opportunities along Cicero Avenue and air travel at Midway since the opening of the Orange Line in 1993**
- **Reduce lengthy bus trips to access Orange Line**
- **Alleviate traffic congestion due to expected growth in study area population and employment**

## Screen 1 Process

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1. Define the Universe of Alternatives
2. Evaluate all Potential Technologies
3. Evaluate all Potential Alignments  
(Corridors and Profiles)
4. Evaluate all Potential Combinations of  
Technological and Alignment Alternatives
5. Advance Strongest Combinations to Screen 2

# Universe of Alternatives - Technologies

## TECHNOLOGIES

Automated Guideway/Monorail

Bus Rapid Transit

Commuter Bus

Commuter Rail

Heavy Rail Transit

High Speed Rail

Light Rail Transit

Local Bus

MagLev





Personal Rapid Transit

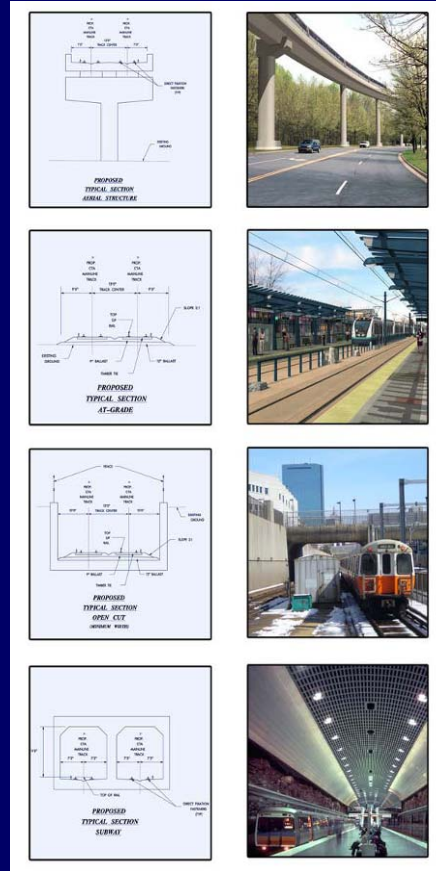
Streetcar



# Universe of Alternatives - Profiles

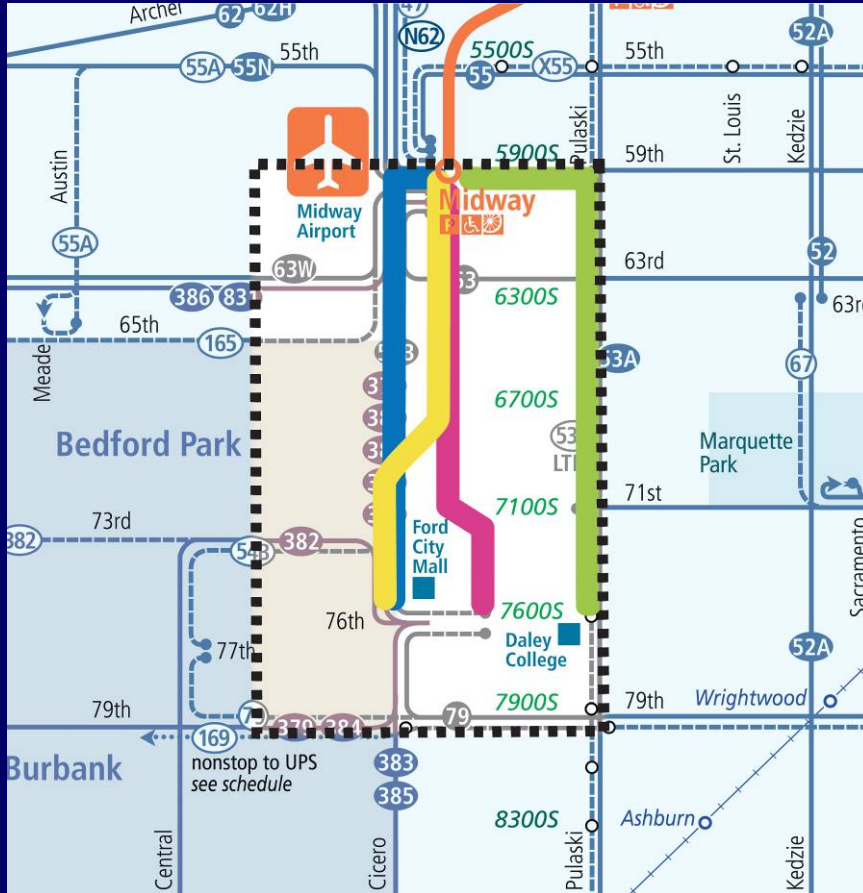
**PROFILES**

Elevated	
At-Grade	
Trench	
Underground	



# Screen 1

## Corridors Considered in the AA Study

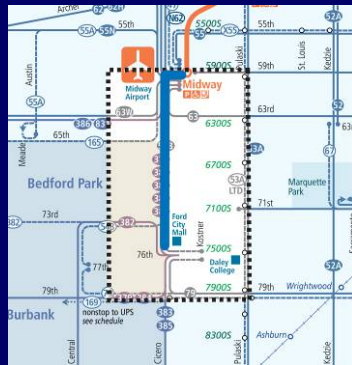


-  Cicero Avenue
-  Belt Railway / Cicero Avenue
-  Belt Railway / Kostner Avenue
-  Pulaski Road

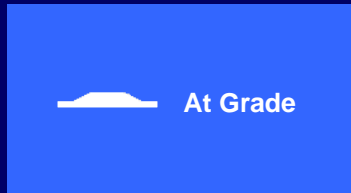
# Screen 1

## Screen 1 Evaluation Process Findings

### Bus Rapid Transit



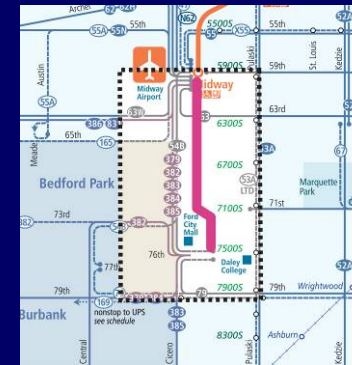
Cicero Avenue Corridor



### Heavy Rail Transit



Belt Railway / Cicero Corridor



Belt Railway / Kostner Corridor



## Screen 1 Public Involvement Process

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- **Public Meeting on August 19, 2008 at Ford City Mall**
- **More than 100 people attended the public meeting**
- **Met with stakeholders and elected officials**
- **108 comments submitted and answered**

# Screen 2 Analysis



## Screen 2 Process

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- **Step 1 – Alternatives Definition**
  - Conceptual Alignment Refinement
  - Operating Plans
- **Step 2 – Detailed Evaluation**
  - Physical Constraints
  - Social & Economic Factors
  - Environmental Factors
  - Transportation Factors
  - Capital Cost Comparison
  - Operating and Maintenance (O&M) Cost Comparison
  - Ridership Potential

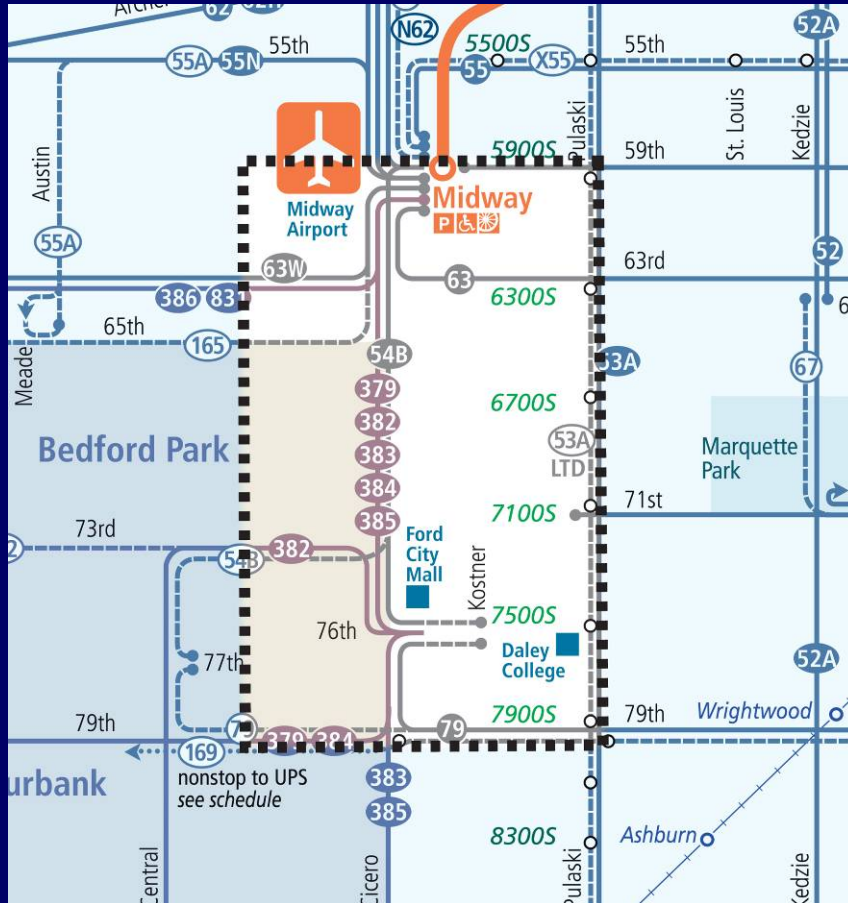
## Alternatives Definition

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- **No Build Alternative**
- **Transportation System Management (TSM) Alternative**
  - **Bus Rapid Transit (BRT) combined with TSM Alternative**
- **Heavy Rail Transit (HRT) Extension via Belt Railway/Cicero Avenue**
- **Heavy Rail Transit (HRT) Extension via Belt Railway/Kostner Avenue**

## Screen 2

# No Build Alternative

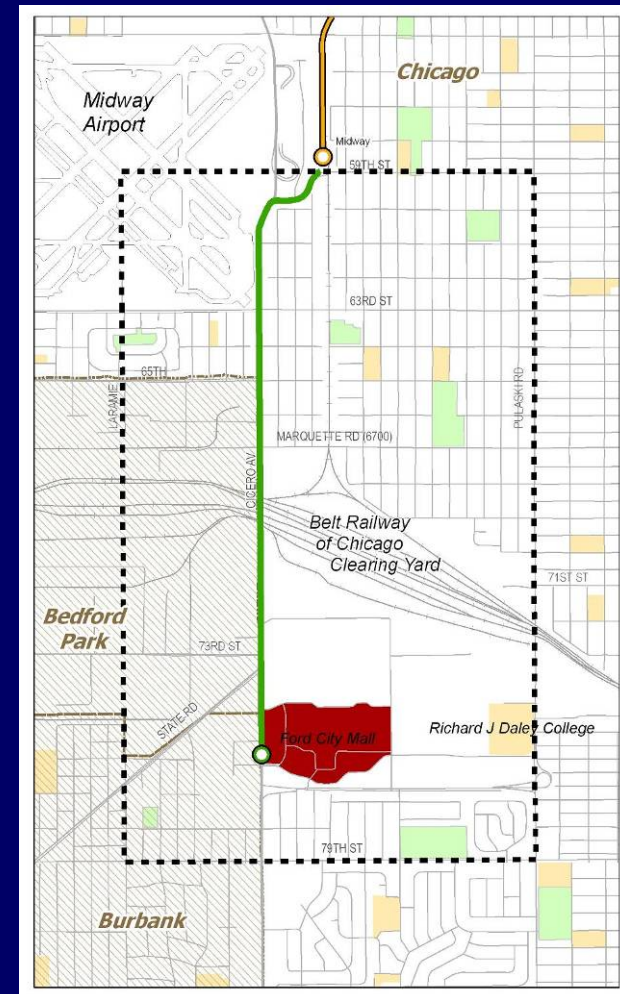


- Existing CTA heavy rail transit service terminating at the Midway station
- Existing CTA and Pace bus service

## Screen 2

# TSM Alternative

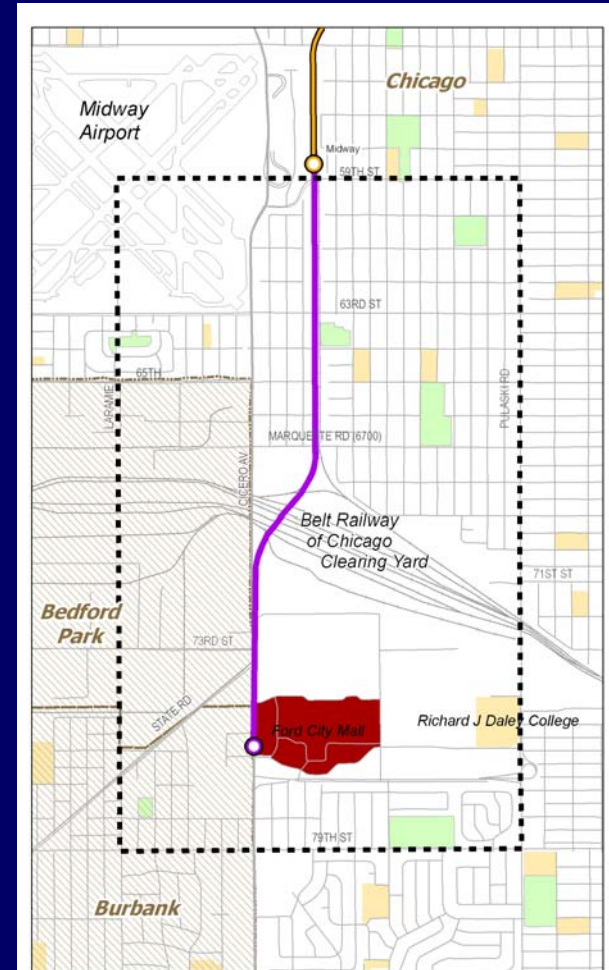
- BRT redefined to be part of TSM Alternative
- Express bus between CTA Midway station and Ford City Mall
  - No exclusive lanes
  - No intermediate stops
  - Transit signal priority



## Screen 2

# HRT Alternative – Belt Railway/Cicero Ave.

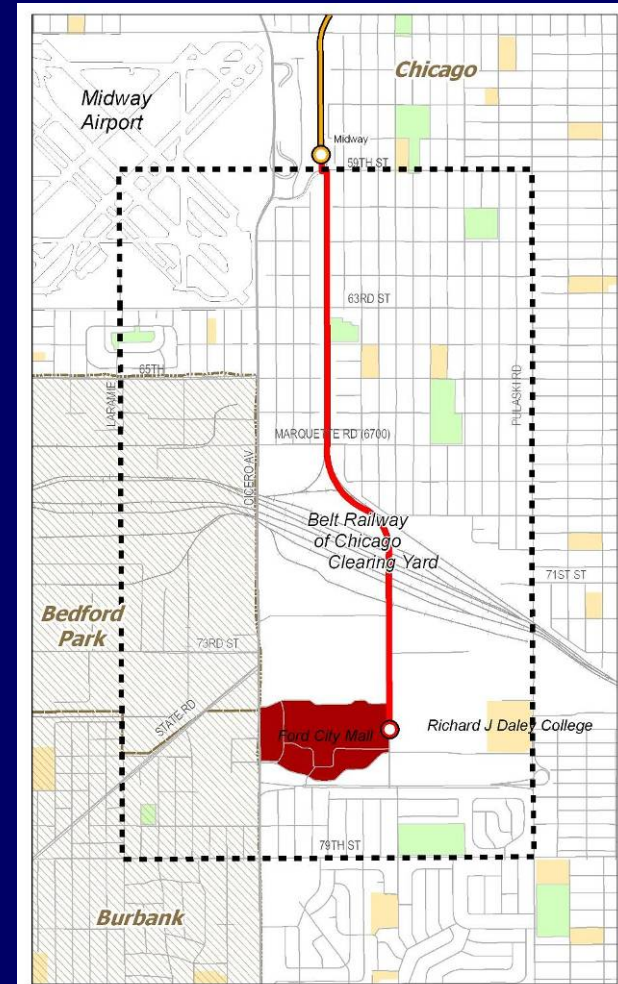
- **Belt Railway section**
  - HRT under 59<sup>th</sup> St.
  - HRT under 63<sup>rd</sup> St.
  - HRT over Marquette Rd.
  - Around new Lee Pasteur/Hurley School
  - Over west side of railroad yard
- **Cicero Ave. section**
  - Above Cicero Ave. or
  - On east side of Cicero Ave.



## Screen 2

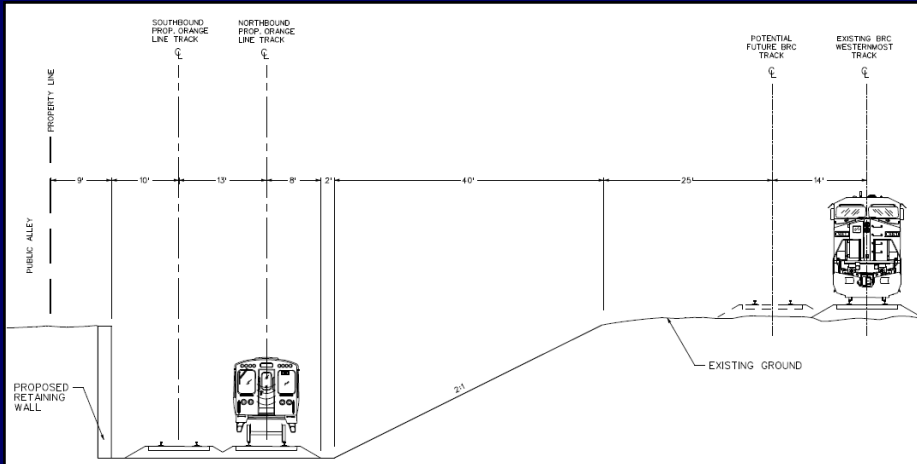
# HRT Alternative – Belt Railway/Kostner Ave.

- **Belt Railway section**
  - HRT under 59<sup>th</sup> St.
  - HRT under 63<sup>rd</sup> St.
  - HRT over Marquette Rd.
  - HRT turns to east just north of railroad yard
  - HRT over railroad yard
- **Kostner Ave. section**
  - Above Kostner Ave.



Screen 2

# HRT Alternative – Belt Railway Section



63<sup>rd</sup> Street



Screen 2

## HRT Alternatives – Elevated Example



**SB Cicero Avenue**

Orange Line Extension Alternatives Analysis Study





## Step 2 – Detailed Evaluation

- **Evaluation Factors**
  - **Physical Constraints**
    - Right-of-Way Requirements
  - **Social & Economic factors**
    - Demographics and Employment
  - **Environmental Factors**
    - Noise, Visual, Natural and Cultural Resources
  - **Transportation Factors**
    - Travel Time, Transit Connectivity and Traffic
  - **Capital Cost**
  - **Operating & Maintenance Cost**
  - **Ridership Potential**

## Screen 2

Factor	TSM	HRT BRC/ Cicero	HRT BRC/ Kostner
Physical	0	0	-
Social/Economic	0	0	0
Environmental	0	0	0
Transportation	-	+	+
Capital Costs	+	0	-
O&M Costs	+	0	0
Ridership	0	+	+
Summary	+1	+2	0
LPA Recommend	NO	YES	NO

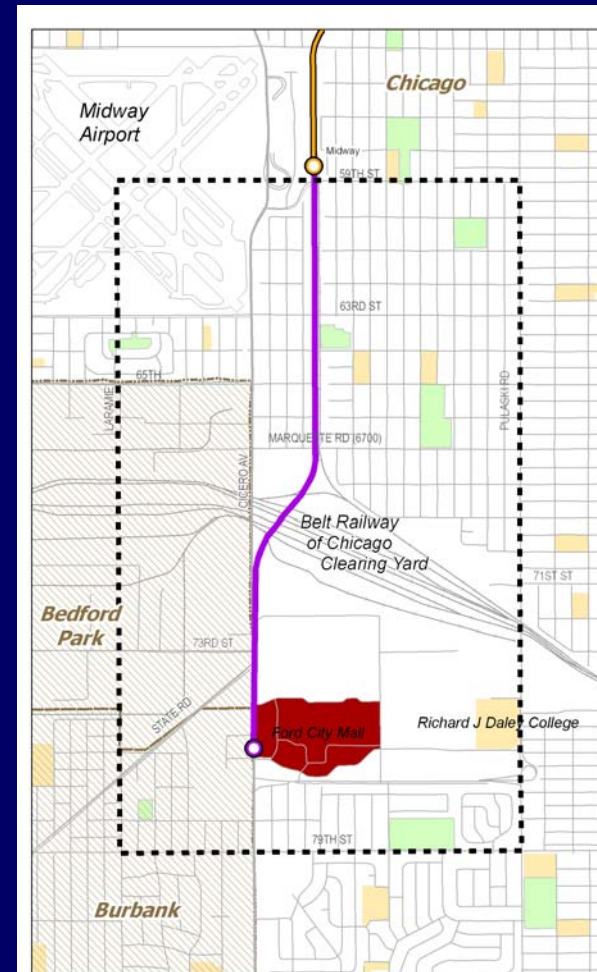
## Screen 2

Factor	TSM	HRT BRC/ Cicero	HRT BRC/ Kostner
Physical	0	0	-
Social/Economic	0	0	0
Environmental	0	0	0
Travel Time Ford City to Library (minutes)	42	30	30
Capital Cost (YOE)	\$40 M	\$400 M	\$700 M
O&M Cost (annual)	\$2.6 M	\$4.3 M	\$4.3 M
Ridership (annual)	0.5 M	3.0 M	3.0 M
Summary	+1	+2	0
LPA Recommend	NO	YES	NO

# Screen 2 Evaluation – Preliminary Findings

- Locally Preferred Alternative Preliminary Recommendation

**Heavy Rail Transit Extension via Belt Railway / Cicero Avenue**



# Next Steps

## Next Steps

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- Incorporate public comments
- Confirm Screen 2 preliminary findings for LPA and conclude Alternatives Analysis study
- Review findings with FTA
- CTA Board to approve LPA
- Ongoing public involvement
  - Sign-in cards will be used to create a contact list to send notices and updates
  - Project updates on CTA web site - [www.transitchicago.com](http://www.transitchicago.com)

# Questions and Comments

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- CTA representatives are available to answer additional questions
- Written comments and questions accepted through May 6, 2009 (two weeks from today)

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