Metra Connects SAFETEA-LU

UP-Northwest Line & UP-West Line
Locally Preferred Alternatives
September/October 2007

On the web at
metraconnects.metrarail.com

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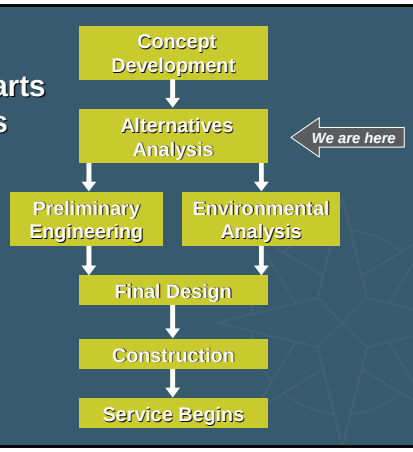
FTA New Starts Process



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Steps in Alternatives Analysis

Public Involvement Throughout

- Develop Purpose & Need
- Identify Initial Alternatives (Part I: Modes & Technologies)
- Screen Initial Alternatives
- Further Define as Conceptual Alternatives (Part II: Modes & Alignments)
- Screen Conceptual Alternatives
- Refine & Evaluate Feasible Alternatives
- Select Locally Preferred Alternative (LPA)

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Public Involvement

- Technical Advisory Committee meetings
- Public Informational meetings
- Website www.metraconnects.metrarail.com
- Agency coordination
- Pace & CTA coordination meetings
- Councils of Mayors Updates
- ON THE BI-LEVEL commuter newsletter
- Comment cards

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UP-NW Project Purpose

- Address growing demand for traditional commute into Central Chicago
- Address growing demand for suburb-to-suburb and reverse commute service
- Improve access from northeast McHenry County and northwest Lake County
- Improve travel time
- Improve operational efficiency with modernized facilities

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Initial Alternatives Modes & Technologies

Rail Alternatives


Heavy Rail Rapid Transit


Light Rail Transit


Streetcar


High Speed Rail


Push/Pull Diesel Operations


Electric Multiple Units

Bus Alternatives


Express Bus


Local Bus


Bus Rapid Transit

Other Modes and Technologies


Magnetic Levitation (Maglev)


Automated People Mover


Personal Rapid Transit

Highway Improvements

UP-NW Alternatives Considered

- Alternative 0: No-Build
- Alternative 1: TSM/Baseline (Express Bus)
- Alternative 2: Commuter Rail Improvements
- Alternative 3: Commuter Bus to Downtown Chicago
- Alternative 4: Commuter Bus to Northwest Suburbs

UP-NW Alternatives Considered

- Alternative 0: No-Build
- ~~Alternative 1: TSM/Baseline (Express Bus)~~
- Alternative 2: Commuter Rail Improvements
- ~~Alternative 3: Commuter Bus to Downtown Chicago~~
- Alternative 4: Commuter Bus to Northwest Suburbs

UP-NW Final Screening

- **Summary**

Evaluation Criteria	No-Build Alternative	Commuter Rail Alternative	Commuter Bus Alternative
Increase Transit Capacity	O	+	+
Increase Transit Ridership	O	+	O
Minimize or Avoid Negative Impacts to the Environment	O	+	–
Decrease Travel Time	O	+	–
Provide Compatibility with Transit Supportive Development	+	+	–
Improve Operating Efficiency	O	+	–

+ Comparatively Better O Neither Better nor Worse – Comparatively Worse

Recommended UP-NW LPA

- Recommended LPA is **Commuter Rail Alternative**
- Greatest ridership and user benefits
- Supports existing and planned station-area development
- Competitive with other New Starts across the United States
- Improved suburb-to-suburb commute and reverse commute options
- Two new modernized yards
- Additional express service

Note: Although general alternative will remain the same, the LPA will be further refined as project moves forward into preliminary and final engineering.

UP-NW Locally Preferred Alternative

UP-NW Final LPA Results

- **Benefits of UP-NW Project**

Increase in Regional Transit Ridership[1]	4,400
Transportation System User Benefits (hours per weekday)	8,900
Total Capital Cost[2]	$381.5 M
Annualized Capital Cost[2]	$ 30.6 M
Annual Operating and Maintenance Costs[2]	$ 9.0 M
Cost Effectiveness Index	$16.47
Cost Effectiveness Rating	Medium

Notes: 1. Ridership reflects the change in transit person trips versus the No-Build; 2030 daily trips.
2. Estimated Capital and Operating & Maintenance Costs are expressed in millions of 2007 dollars. Costs are subject to change.

ALL RIDERSHIP AND COST ESTIMATES ARE PRELIMINARY AND SUBJECT TO FURTHER REVISION.

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Union Pacific West Line AA Study Area

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UP-W Project Purpose

- Relieve Highway Congestion
- Ease Congestion on Parallel Metra Lines (BNSF & MD-W)
- Meet Mobility Needs of Growing Activity Centers
- Serve Non-Traditional Travel Markets (Reverse-Commute and Suburb-to-Suburb Commute)
- Maintain Competitive Advantage of the Study Area

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Initial Alternatives Modes & Technologies

Rail Alternatives


Heavy Rail Rapid Transit


Light Rail Transit


Streetcar


High Speed Rail


Push/Pull Diesel Operations


Electric Multiple Units

Bus Alternatives


Express Bus


Local Bus


Bus Rapid Transit

Other Modes and Technologies


Magnetic Levitation (Maglev)


Automated People Mover


Personal Rapid Transit

Highway Improvements

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UP-W Alternatives Considered

- Alternative 0: No-Build
- Alternative 1: TSM/Baseline (Express Bus)
- Alternative 2: Commuter Rail Improvements to the UP-W
  - 2a: UP-W Full
  - 2b: UP-W Moderate Option 1
  - 2c: UP-W Moderate Option 2
  - 2d: UP-W Minimum
- Alternative 3: Commuter Rail Improvements to the BNSF
- Alternative 4: Bus Rapid Transit

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UP-W Alternatives Considered

- Alternative 0: No-Build
- ~~Alternative 1: TSM/Baseline (Express Bus)~~
- Alternative 2: Commuter Rail Improvements to the UP-W
  - 2a: UP-W Full
  - 2b: UP-W Moderate Option 1
  - 2c: UP-W Moderate Option 2
  - ~~2d: UP-W Minimum~~
- ~~Alternative 3: Commuter Rail Improvements to the BNSF~~
- ~~Alternative 4: Bus Rapid Transit~~

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UP-W Final Screening

- Summary

Project Goal	0 No-Build	2a UP-W Full	2b Moderate Option 1	2c Moderate Option 2
Improve Mobility	O	+	+	O
Improve Reliability of Existing Service	O	+	+	+
Support Economic Development	O	+	+	+
Support Transit Oriented Land Use	O	+	+	O
Respond to Demands of New Travel Markets	O	+	+	O
Ensure Economic Vitality of Freight Operations	O	+	+	O
Provide a Cost Effective Investment	O	+	+	O
Minimize Negative Impacts on the Human and Natural Environment	O	O	O	O

+ Comparatively Better O Neither Better nor Worse – Comparatively Worse

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Recommended UP-W LPA

- Recommended LPA is
  Alternative 2a, UP-W Full
- Greatest ridership and user benefits
- Provides positive benefits to other corridors
  - A-2 improves travel times on UP-W, MD-N, MD-W, & NCS
  - Additional service & improved travel times will attract riders from BNSF, frees up capacity for other BNSF riders
- Improved suburb-to-suburb commute and reverse commute options
- Additional express service
- Competitive with other New Starts across the United States

Note: Although general alternative will remain the same, the LPA will be further refined as project moves forward into preliminary and final engineering.

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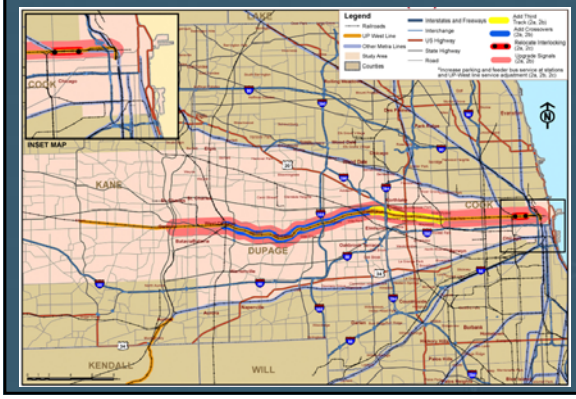
UP-W Locally Preferred Alternative



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UP-W Final LPA Results

- **Benefits of UP-W Project**

Increase in Regional Transit Ridership[1]	2,900
Transportation System User Benefits (hours per weekday)	7,400
Total Capital Cost[2]	$491.2 M
Annualized Capital Cost[2]	$ 39.2 M
Annual Operating and Maintenance Costs[2]	$ 7.6 M
Cost Effectiveness Index	$23.25
Cost Effectiveness Rating	Medium

Notes: 1. Ridership reflects the change in transit person trips versus the No-Build; 2030 daily trips.
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UP-W & UP-NW

FTA PE Application Submittals	**Sept. 7, 2007**
FTA/PMOC LPA Workshop	**Sept. 13, 2007**
Metra Board Presentation	**Sept. 14, 2007**
FTA Project Tours	**Sept. 25 & 27**
CMAP/MPO Presentations	
- Transportation Committee	Sept. 28, 2007
- CMAP Program Committee & Board	Oct. 10, 2007
- MPO Policy Committee	Oct. 11, 2007
Environmental Assessment	**Starting 2007**
Preliminary Engineering	**Starting 2008**

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STAR Line & SouthEast Service

- **Currently completing Travel Demand (Ridership) Modeling on both corridors**
- **Next steps on both corridors include:**
  - **Technical Advisory Committee Meetings**
  - **NEPA Scoping**
  - **Public Meetings**
  - **LPA Selection / Endorsement**
  - **FTA Submittal – application to enter Preliminary Engineering**

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