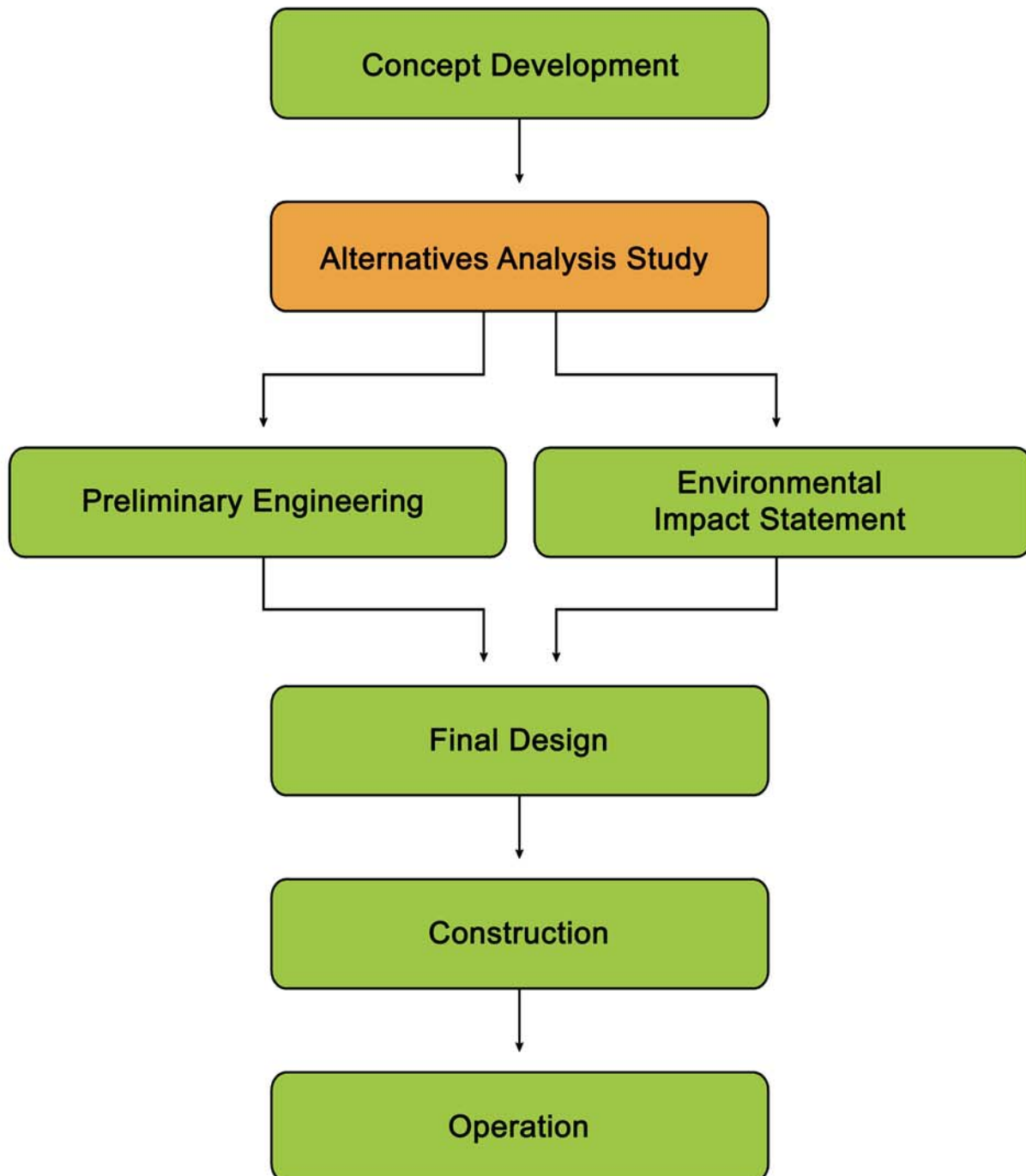


FTA's New Starts Process



**Red Line Extension
Alternative Analysis Study**



Purpose and Need

Transportation Needs

- Significant bus and passenger congestion at 95th Street Red Line Station
- Lengthy bus trips to access 95th Street Red Line Station
- Far South Area residents experience 20% longer commute than rest of City
- Traffic congestion is expected to grow along with study area population and employment

Opportunity for Improvement

- Extend rapid transit service south from 95th Street Red Line Station
- Improve access to, within, and beyond study area
- Stimulate economic development and job opportunities
- Shorten transit travel times through faster and more direct routings



Community Participation

Community participation is one of the key components of the alternatives analysis.

Community Outreach

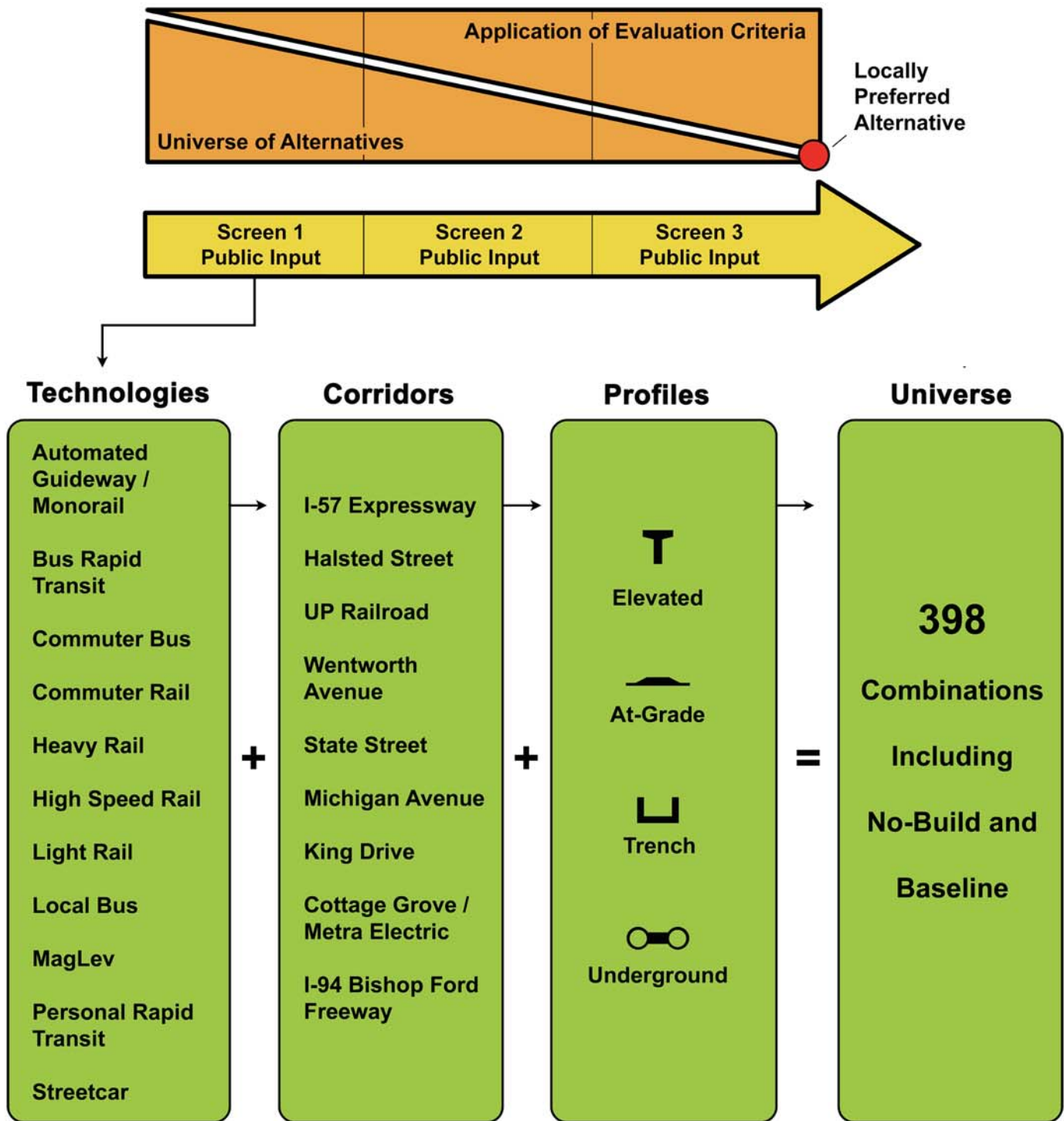
- General Public
- Elected and Appointed Officials
- Community and Civic Organizations
- Faith-Based Organizations
- City and State Agencies

Ongoing Public Involvement/Input

- Meetings announced through public notices and advertisements
- Project updates on the CTA web site :
www.transitchicago.com, accessible at local public libraries



Alternatives Analysis Process



**Red Line Extension
Alternative Analysis Study**



Technologies Evaluated



Automated Guideway/Monorail

- Service Area: Airports, theme parks, circulators, ½ to 5 miles
- Typical Speeds: 15 to 30 mph
- Station Spacing: ½ to 2 miles



Bus Rapid Transit

- Service Area: Urban and suburban uses, 1 to 10 miles or more
- Typical Speeds: 15 to 25 mph
- Station Spacing: ¼ to 1 mile



Commuter Bus

- Service Area: Suburbs to city, 15 to 100 miles
- Typical Speeds: 30 to 50 mph
- Station Spacing: 3 to 7 miles, or at end points



Commuter Rail

- Service Area: Suburbs to city, 15 to 100 miles
- Typical Speeds: 30 to 50 mph
- Station Spacing: 3 to 7 miles



Technologies Evaluated



Heavy Rail

- Service Area: Urban uses and loadings, 1 to 10 miles or more
- Typical Speeds: 25 to 40 mph
- Station Spacing: ¼ mile downtown, up to 2 miles in neighborhoods



High Speed Rail

- Service Area: Intercity, 150 to 300 miles
- Typical Speeds: 110 to 186 mph
- Station Spacing: 20 to 50 miles



Light Rail

- Service Area: Urban or suburban uses, 1 to 10 miles or more
- Typical Speeds: 15 to 25 mph
- Station Spacing: ¼ to 1 mile



Local Bus

- Service Area: Urban and suburban uses, ½ to 5 miles
- Typical Speeds: 10 mph
- Station Spacing: 2 to 4 blocks



Technologies Evaluated



MagLev

- Service Area: Intercity, 100 to 300 miles
- Typical speeds: 250 to 340 mph
- Station Spacing: 20 to 50 miles



Personal Rapid Transit

- Service Area: Small area networks or campuses, 1 to 5 miles
- Typical Speeds: 15 mph
- Station Spacing: ¼ to 1 mile

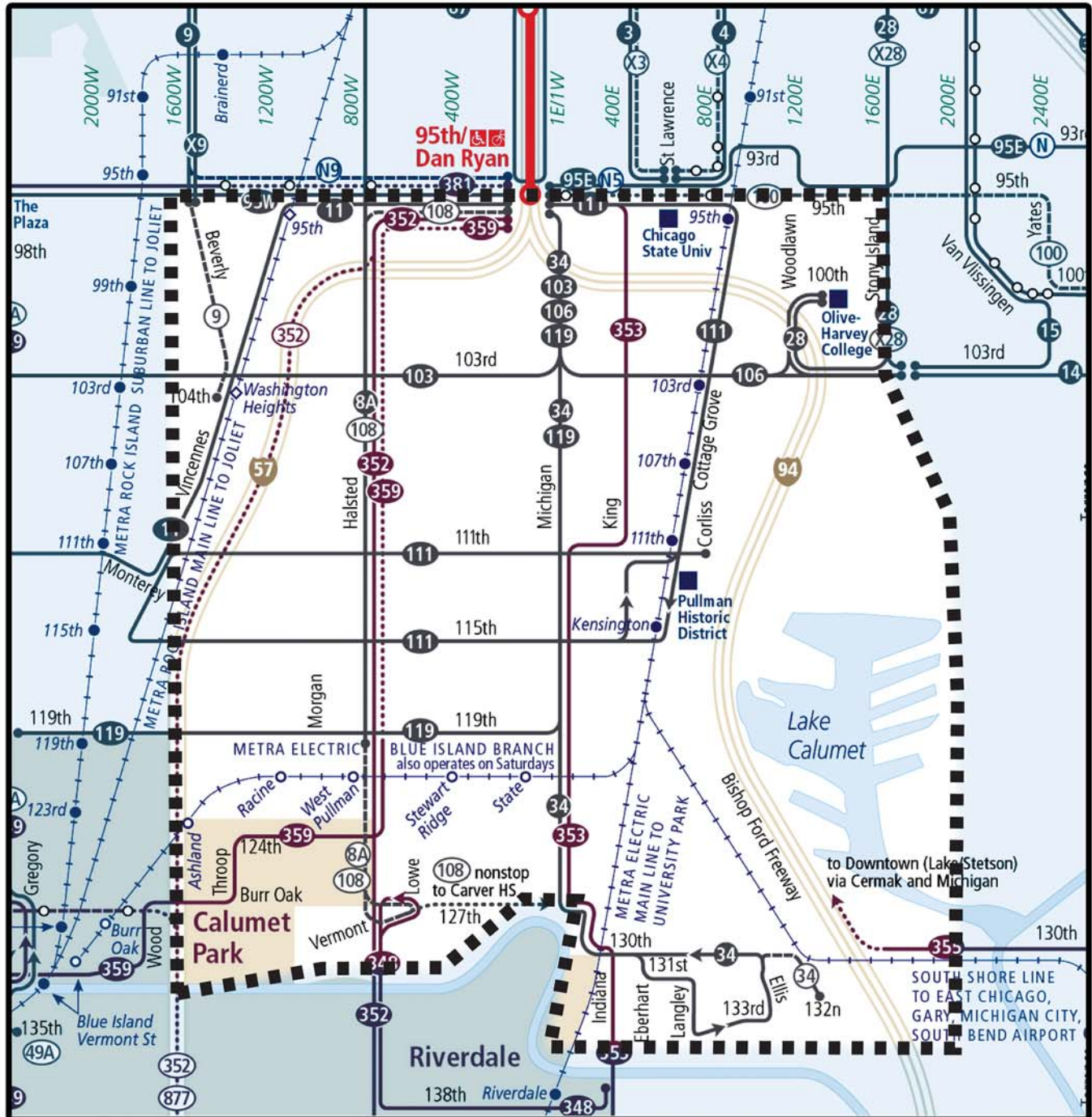


Streetcar

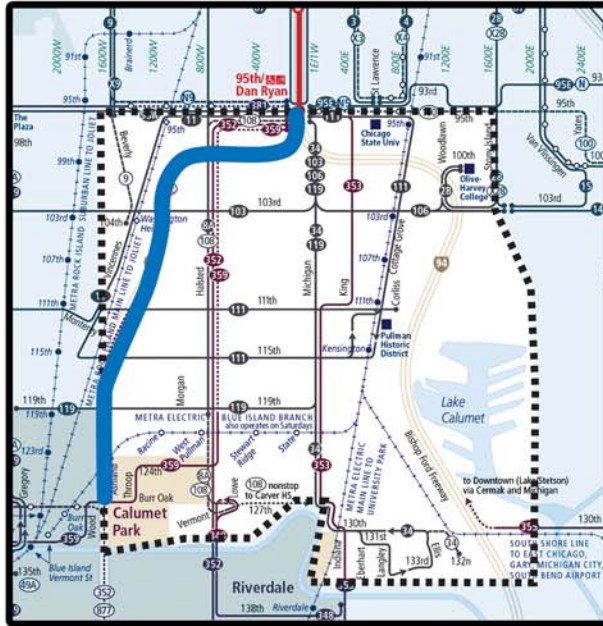
- Service Area: Urban and suburban streets, ½ to 6 miles
- Typical Speeds: 10 mph
- Station Spacing: 2 to 4 blocks



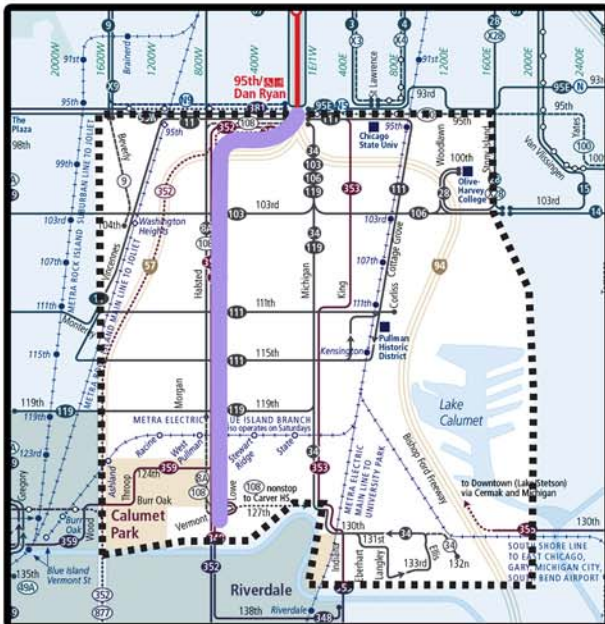
Study Area



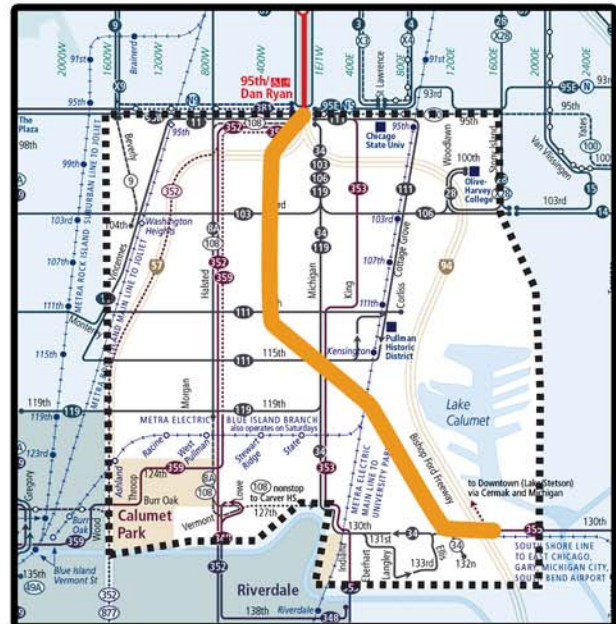
Corridors Evaluated



I-57 Expressway Corridor



Halsted Street Corridor



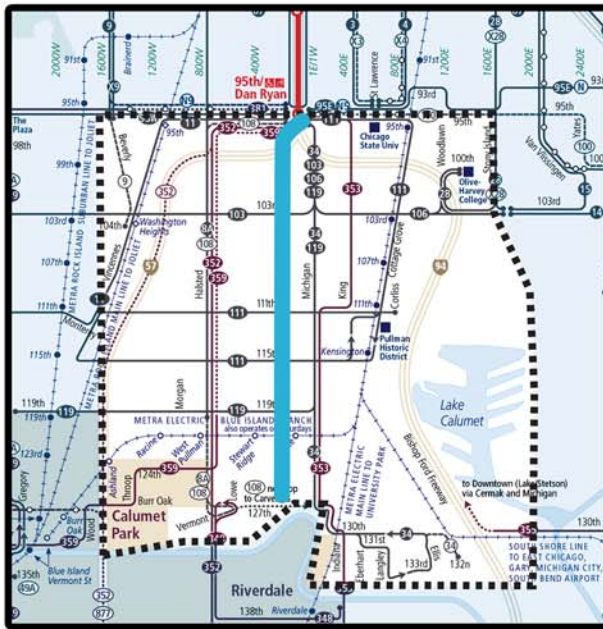
UP Railroad Corridor



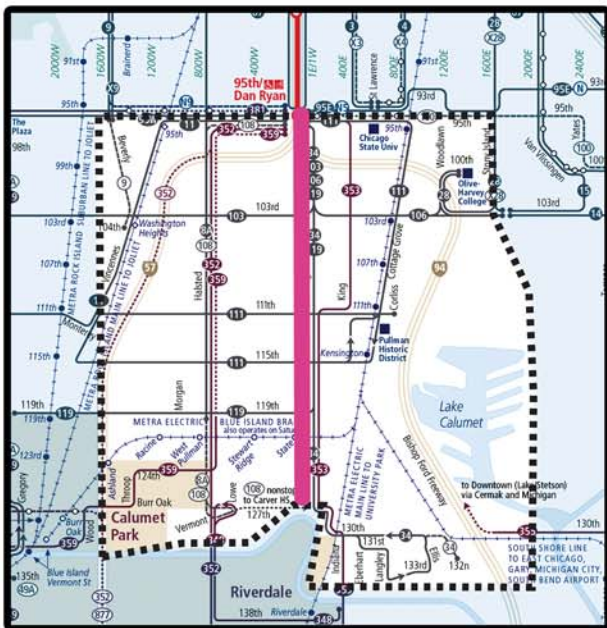
**Red Line Extension
Alternative Analysis Study**



Corridors Evaluated



Wentworth Avenue Corridor



State Street Corridor

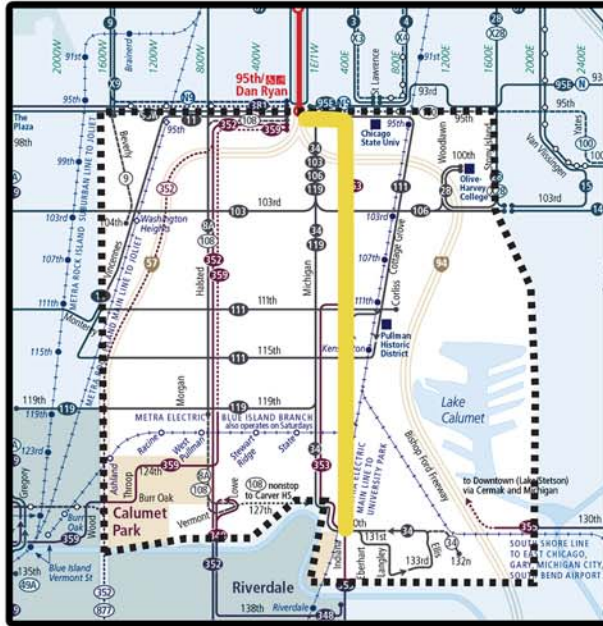


Michigan Avenue Corridor

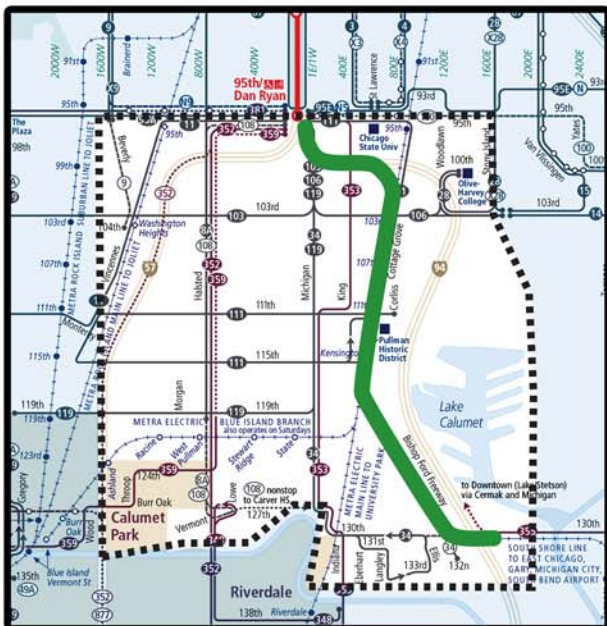
Red Line Extension Alternative Analysis Study



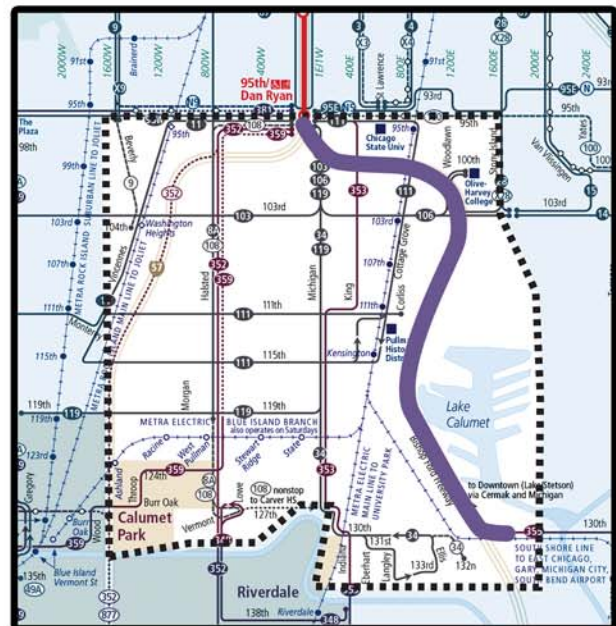
Corridors Evaluated



King Drive Corridor



Cottage Grove / Metra Electric Corridor



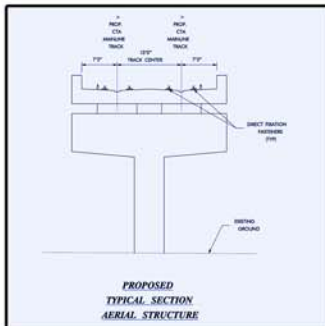
I-94 Bishop Ford Freeway Corridor



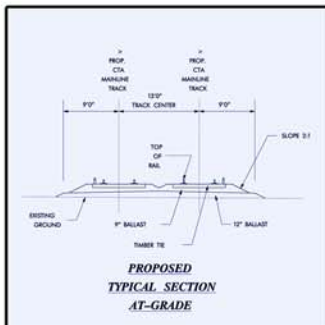
**Red Line Extension
Alternative Analysis Study**



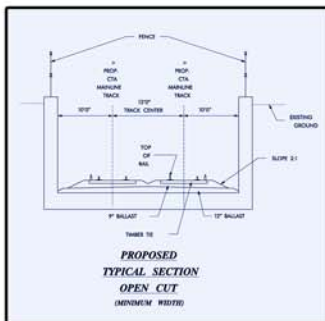
Profiles Evaluated



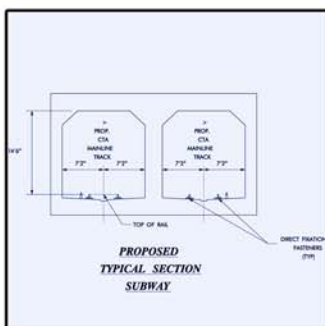
T
Elevated



At Grade



Trench



Underground



**Red Line Extension
Alternative Analysis Study**



Step 1: Technology Evaluation

Technology	Does Mode Meet the Measure of Effectiveness?				Advance for Further Screening?
	Length of Commute	Typical Station Spacing	Operating Speed	System Applicability	
Automated Guideway	●	●	●	●	YES
Bus Rapid Transit	●	●	●	●	YES
Commuter Bus	X	X	●	●	NO
Commuter Rail	X	X	●	●	NO
Heavy Rail Rapid Transit	●	●	●	●	YES
High Speed Rail	X	X	X	X	NO
Light Rail Transit	●	●	●	●	YES
Local Bus	●	X	X	●	NO
MagLev	X	X	X	X	NO
Personal Rapid Transit	●	X	●	X	NO
Streetcar	●	X	X	●	NO

● Yes X No







**Red Line Extension
Alternative Analysis Study**



Step 2:

Technology & Profile Evaluation

Technology	Profile	Air Quality	System Capacity	Travel Time	Compatibility	Traffic	Project Cost	Advance for Further Screening?
Automated Guideway Transit 	Elevated	○	○	-	-	+	○	NO
	Trench	○	○	-	-	○	○	NO
	Underground	○	○	-	-	+	-	NO
Bus Rapid Transit 	Elevated	○	○	○	-	+	○	NO
	At-Grade	○	○	○	+	○	+	YES
	Trench	○	○	○	-	○	○	NO
	Underground	○	○	○	-	+	-	NO
Heavy Rail Transit 	Elevated	○	+	+	+	+	○	YES
	Trench	○	+	+	+	○	○	YES
	Underground	○	+	+	+	+	-	YES
Light Rail Transit 	Elevated	○	○	○	-	+	○	NO
	At-Grade	○	○	○	-	-	+	NO
	Trench	○	○	○	-	○	○	NO
	Underground	○	○	○	-	+	-	NO

+ Better than other alternatives ○ Comparable to other alternatives - Worse than other alternatives



**Red Line Extension
Alternative Analysis Study**



Step 3:

Corridor Evaluation

Corridor \ Criteria	Land Use	Neighborhood	Under-served	Transit Usage	Accessibility	Advance for Further Screening?
I-57 Expressway	+	○	○	-	-	NO
Halsted Street	+	+	+	+	○	YES
UP Railroad	+	+	+	+	+	YES
Wentworth Street	-	+	+	○	+	NO
State Street	-	+	+	○	+	NO
Michigan Avenue	+	+	+	+	+	YES
King Drive	-	+	○	○	+	NO
Cottage Grove / Metra Electric	-	○	○	+	○	NO
I-94 Bishop Ford Freeway	+	-	-	-	-	NO

+ Better than other alternatives ○ Comparable to other alternatives - Worse than other alternatives





**Red Line Extension
Alternative Analysis Study**



Step 4:

Combined Evaluation

Technology	Profile	Recommended to Advance for Detailed Evaluation		
		Halsted Corridor	UPRR Corridor	Michigan Corridor
Bus Rapid Transit 	Elevated	NO	NO	NO
	At-Grade	YES	NO	YES
	Trench	NO	NO	NO
	Underground	NO	NO	NO
Heavy Rail Transit 	Elevated	YES	YES	YES
	Trench	NO	YES	NO
	Underground	YES	NO	YES



Preliminary Findings

Bus Rapid Transit



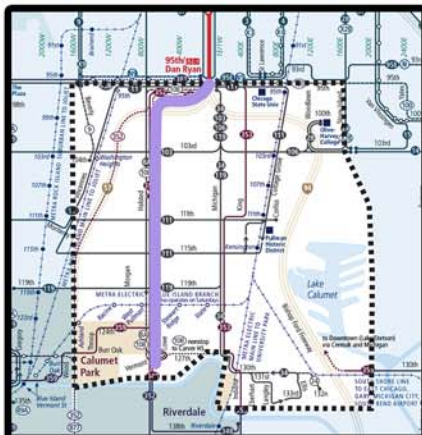
Halsted Street Corridor



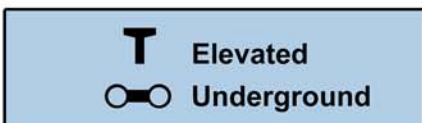
Michigan Avenue Corridor



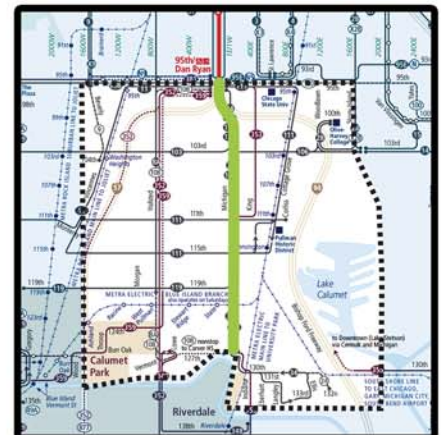
Heavy Rail Transit



Halsted Street Corridor



UP Railroad Corridor



Michigan Avenue Corridor



**Red Line Extension
Alternative Analysis Study**

