



# *Corridor Advisory Group and Task Force Meeting #8*

*January 27, 2011*



# Agenda



- Recap CAG/TF #7  
*(9:00 – 5 minutes)*
- Purpose and Need – Full Draft  
*(9:05 – 5 minutes)*
- Initial Alternatives Summary  
*(9:10 – 45 minutes)*
- Typical Section Review  
*(9:55 – 30 minutes)*
- Next Steps  
*(10:25 – 5 minutes)*



# *CAG/TF #7 Recap*





- Purpose & Need Development
- Initial Alternatives Development
- Alternatives Workshop



# *Purpose & Need – Update*



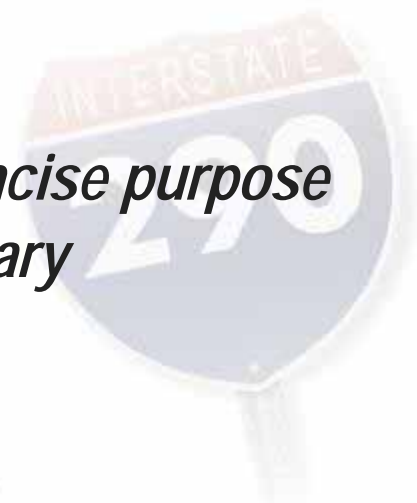
# What is a Purpose & Need Statement?



- A summary of the transportation problems
- Provides a basis for evaluating alternatives
- Does not discuss solutions
- Written broadly to allow a range of solutions

***“Every effort should be made to develop a concise purpose and need statement that focuses on the primary transportation challenges to be addressed”***

\* FHWA Environmental Guidebook, Guidance on “Purpose and Need”



# Full Draft Purpose & Need



- Full draft to expand upon the outline format
- Written as the first chapter of an EIS
- Initial full draft under development
- Addressing outline comments received
- Initial full draft by next CAG/TF meeting



# *Summary of Suggested Alternatives*



# Suggested Alternatives Summary



## Over 170 suggested alternatives

- Public Meeting #1
- CAG/TF Meeting #7
- Cook-DuPage Corridor Study

## Submitted by:

- Corridor Advisory Group/Task Force Members
- Transportation Agencies
- Public



# Heavy Rail Transit (HRT)



\*Not to scale

# Bus Rapid Transit (BRT)



\*Not to scale

# Commuter Rail



*\*Not to scale*

# Automated Guideway Transit / Light Rail Transit (AGT/LRT)



\*Not to scale

# Local and Express Bus



\*Not to scale

# Expressway Improvements



\*Not to scale

# Managed Lanes



\*Not to scale

High Occupancy Vehicle Lanes (HOV) and High Occupancy Toll Lanes (HOT)

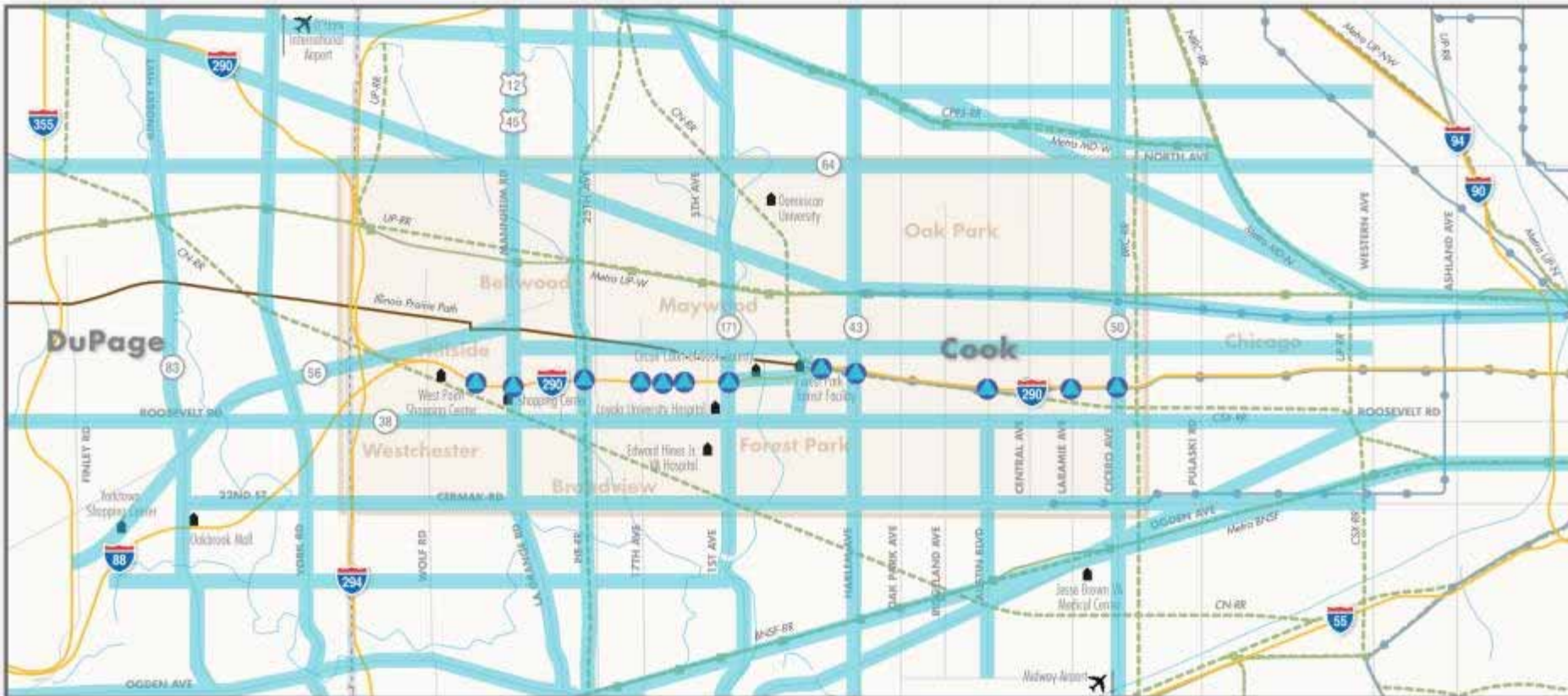
# Arterial Improvements



\*Not to scale



# Traffic Management (TSM / TDM / ITS / ATM)



\*Not to scale

# Non-Motorized



\*Not to scale

# Other



\*Not to scale

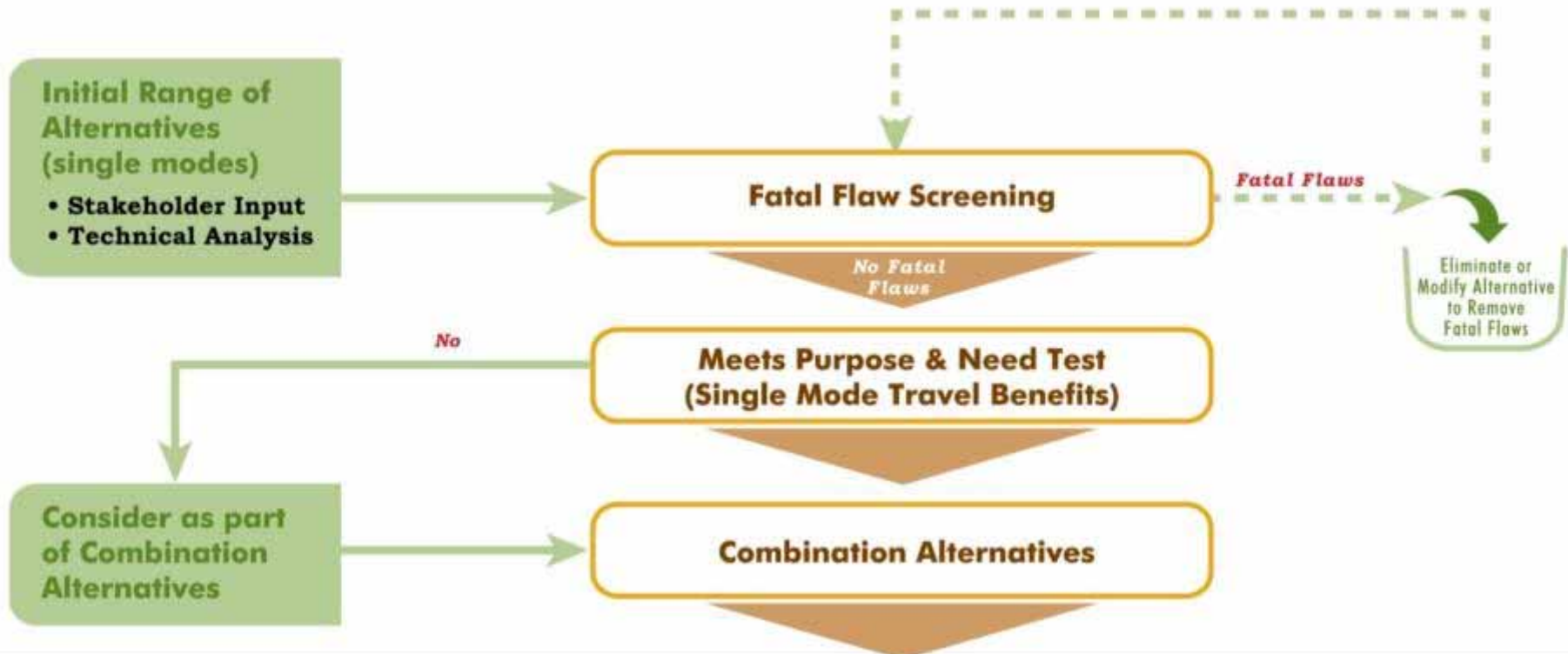
# *Alternatives Development and Evaluation*



# Alternatives Development & Evaluation Process



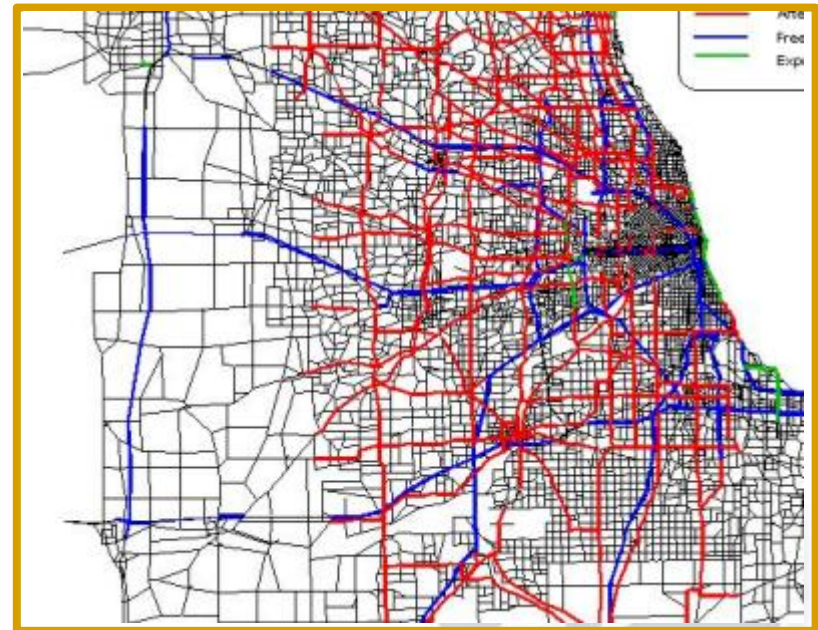
## Round 1 Screening





## Travel Demand Modeling

- Computer model of regional roadway and transit systems developed by Chicago Metropolitan Agency for Planning (CMAP)
- Provides estimates of:
  - Amount of travel
  - Travel times & distances
  - Auto vs. transit trips (aka “mode choice”)



# Preparation For Travel Modeling



- Identify suggested alternatives that can be modeled
  - Major transit improvements
  - Major highway improvements
  - Minor highway and minor transit improvements grouped
- Consolidate similar alternatives
- Model representative alternatives
- Transportation agency coordination:
  - Pace
  - CTA
  - Metra
  - RTA
  - Illinois Tollway



# Preliminary List of Alternatives for Travel Modeling



- Blue Line (HRT) Extension from Forest Park:
  - to 1<sup>st</sup> Avenue
  - to Mannheim Road along I-290
  - to Oak Brook along I-290
  - to Mannheim Road along the Prairie Path\*
  - to Oak Brook along the Prairie Path\*
- Bus Rapid Transit (BRT) from Forest Park:
  - to Mannheim along I-290
  - to Oak Brook along I-290
  - to Mannheim along the Prairie Path\*
- Commuter Rail
- Express Bus & Local Bus

*Note: Modeled Alternatives are subject to discussions with operating agencies*

\* Alternative tested only if difference in model



# Preliminary List of Alternatives for Travel Modeling



- General Purpose Add Lane (Between 25<sup>th</sup> Ave and Austin Boulevard)
- High Occupancy Vehicle (HOV) Lane:
  - 2+ Riders from I-88 to Austin Boulevard
  - 3+ Riders from I-88 to Austin Boulevard
  - I-355 to Ashland Avenue
- High Occupancy Toll (HOT) Lane:
  - I-88 to Austin Boulevard (peak period tolling only)
  - I-88 to Austin Boulevard (All day tolling)
  - I-355 to Ashland Avenue
- Arterial Improvements
- TSM / TDM / ITS / ATM

*Note: Modeled Alternatives are subject to discussions with operating agencies*



# Purpose & Need Test



- **Improve Local and Regional Travel**
  - Congestion measures (volumes, volume/capacity, vehicle miles & hours of travel)
  - Auto diversions to transit
  - Job accessibility
- **Improve Safety for All Users**
  - Potential for safety improvements
- **Improve Modal Connections & Opportunities**
  - Potential to improve access to transit facilities
  - Potential for improved non-motorized connections
- **Improve Facility Condition/Design**
  - Potential to address I-290 facility condition & design deficiencies



# Initial Alternatives Summary



Questions?

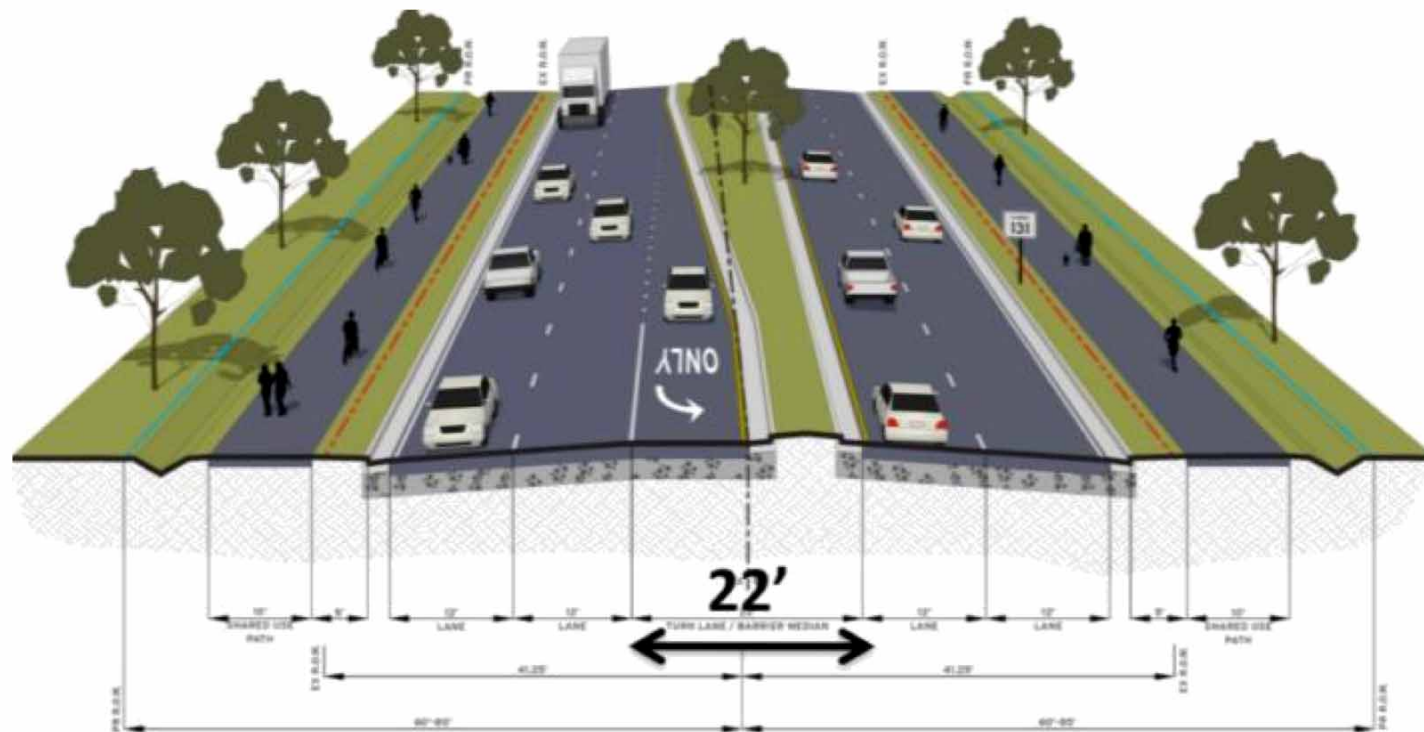
# *Typical Section Review*



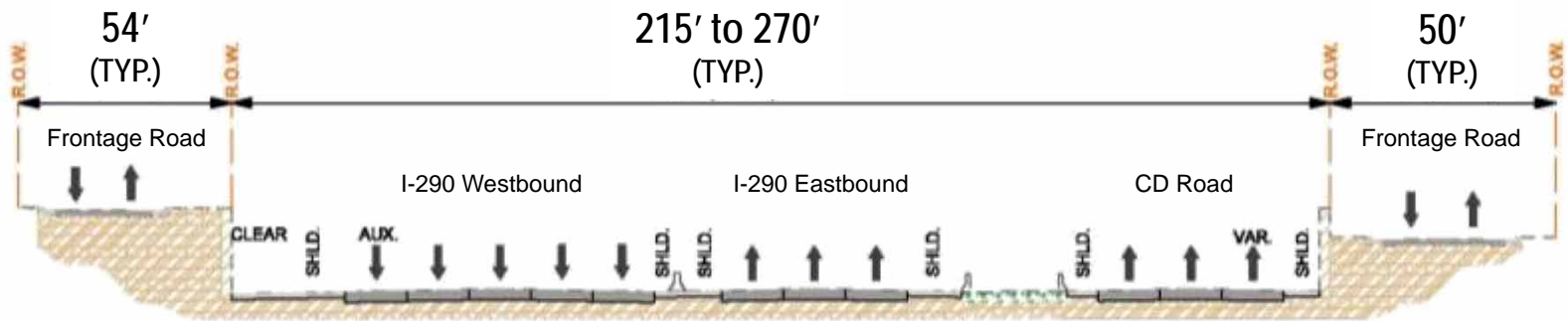
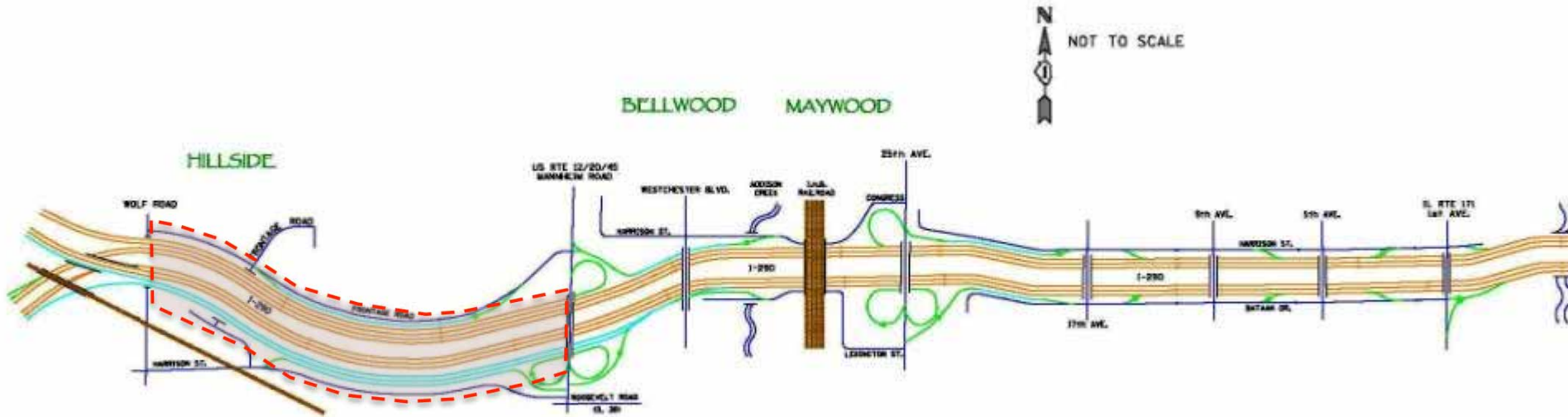
# What is a Typical Section?



- Cut away view of the facility that is representative of its design
- Illustrates dimensions of existing or proposed conditions
- First step in determining “footprints” for alternatives

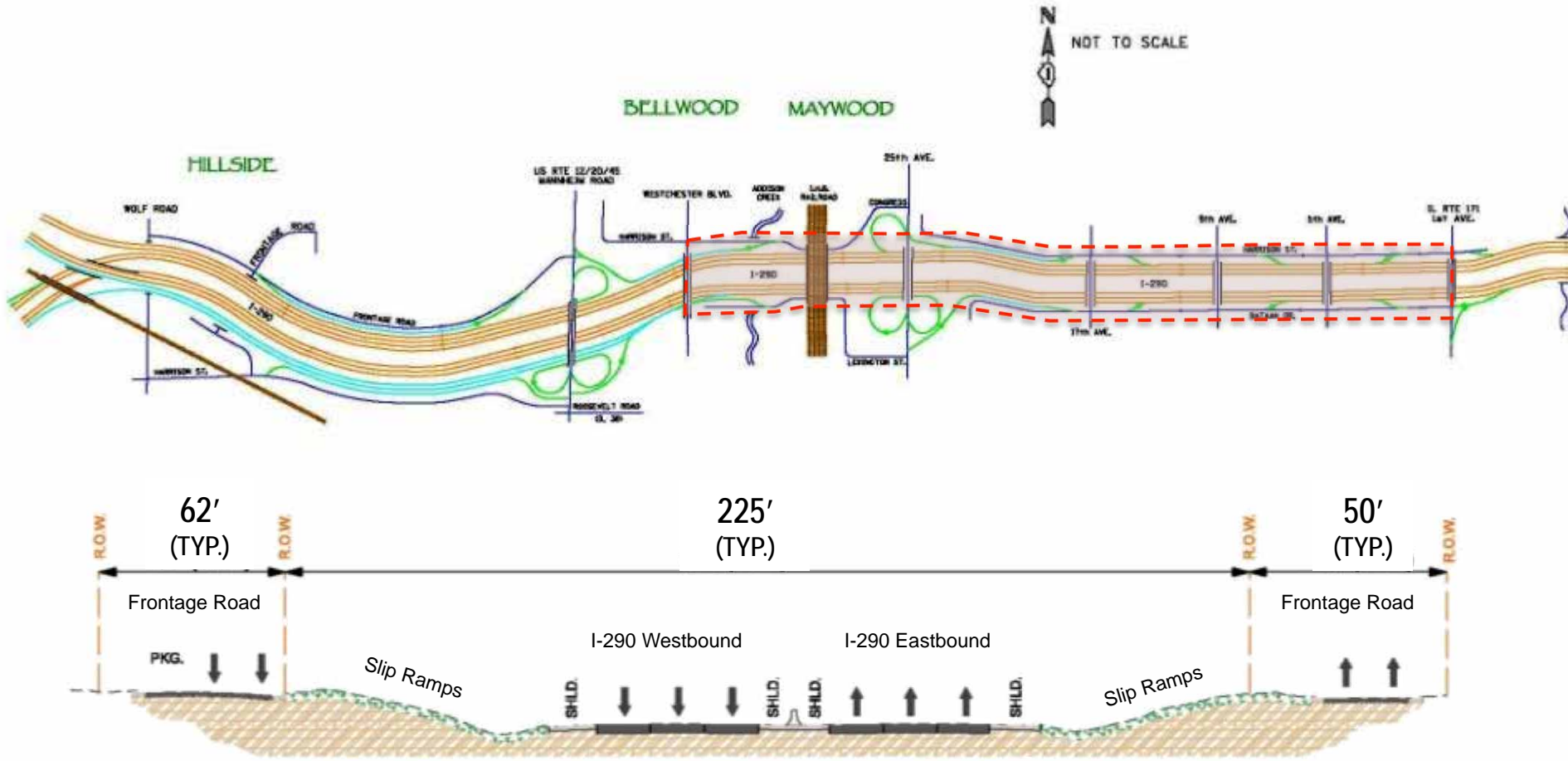


# I-290 Mainline Existing Typical Sections



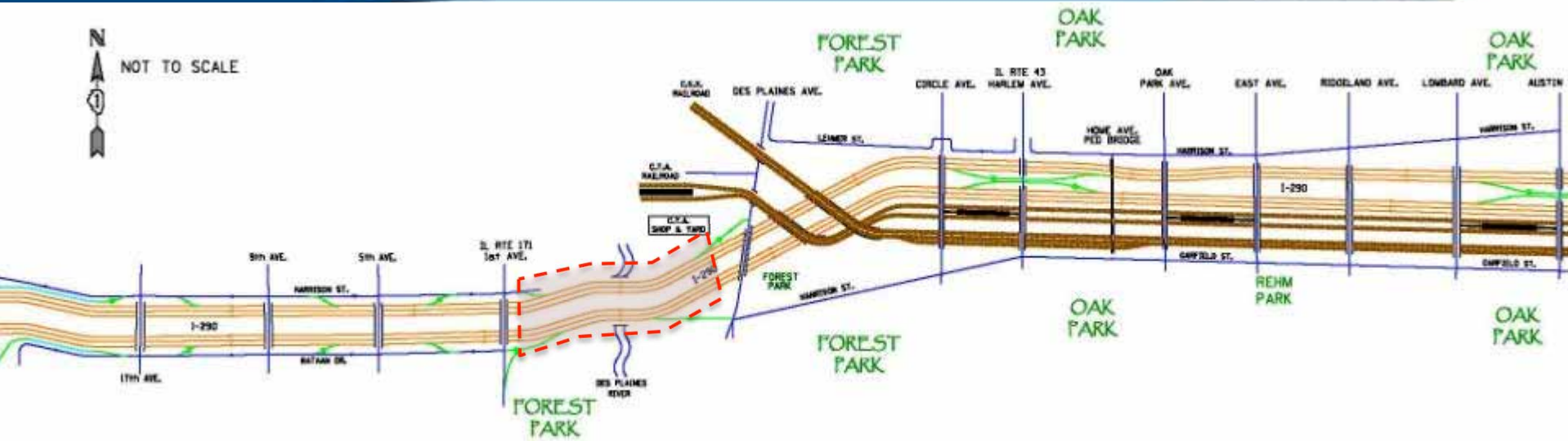
Wolf Road to Mannheim Road  
Hillside

# I-290 Mainline Existing Typical Sections

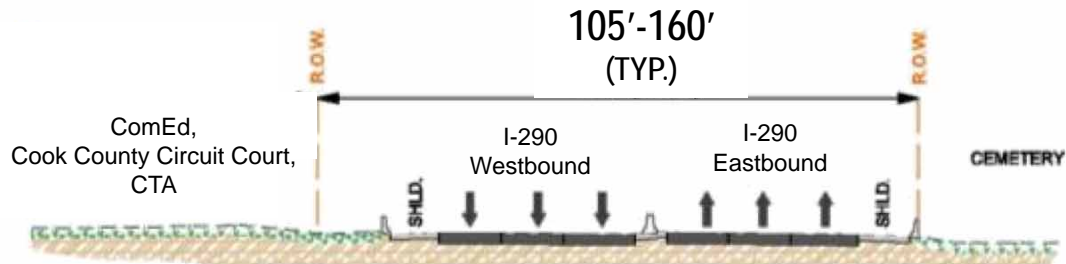


Addison Creek to 1<sup>st</sup> Avenue  
Bellwood, Westchester, Broadview, Maywood

# I-290 Mainline Existing Typical Sections



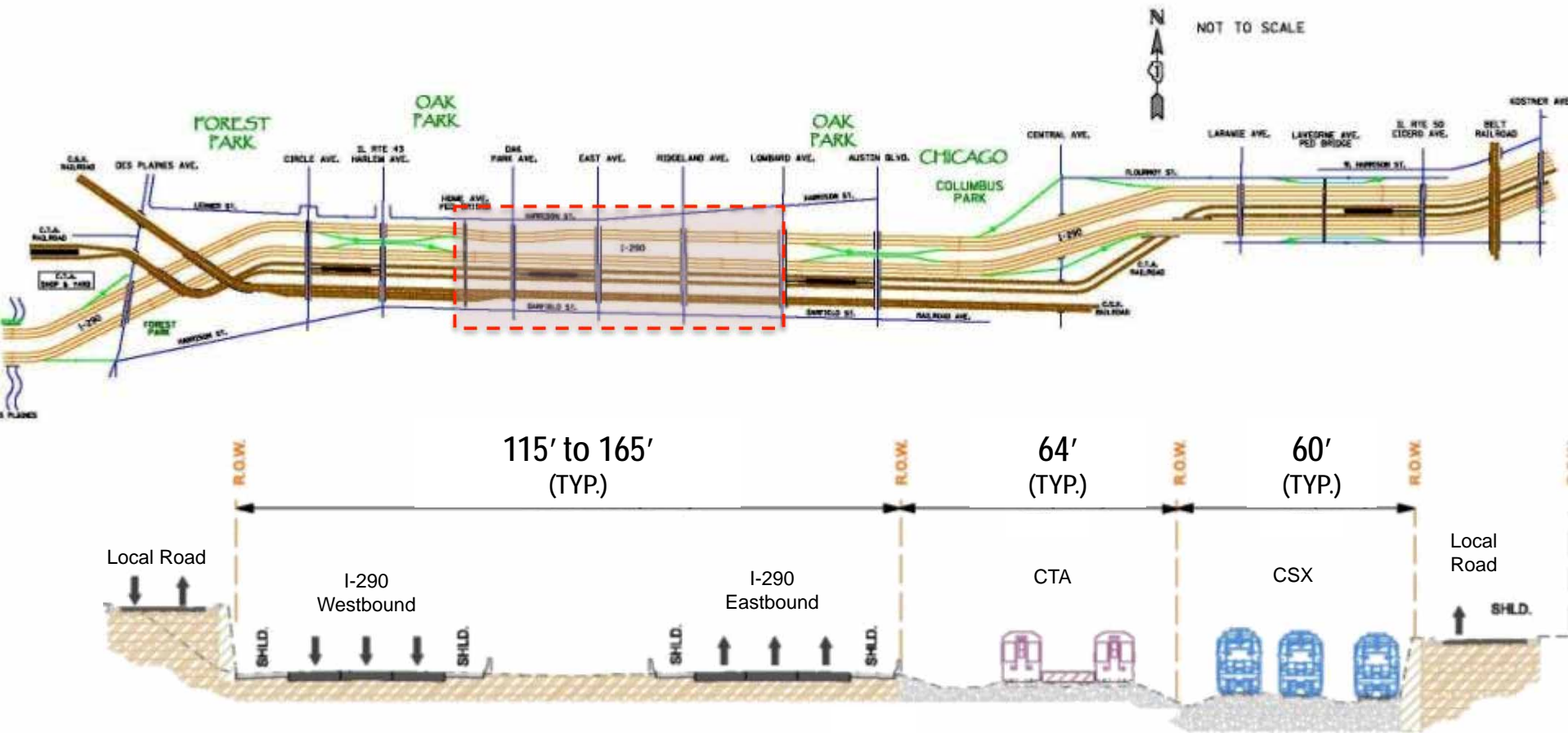
BROADVIEW



1<sup>st</sup> Avenue to DesPlaines Avenue  
Forest Park

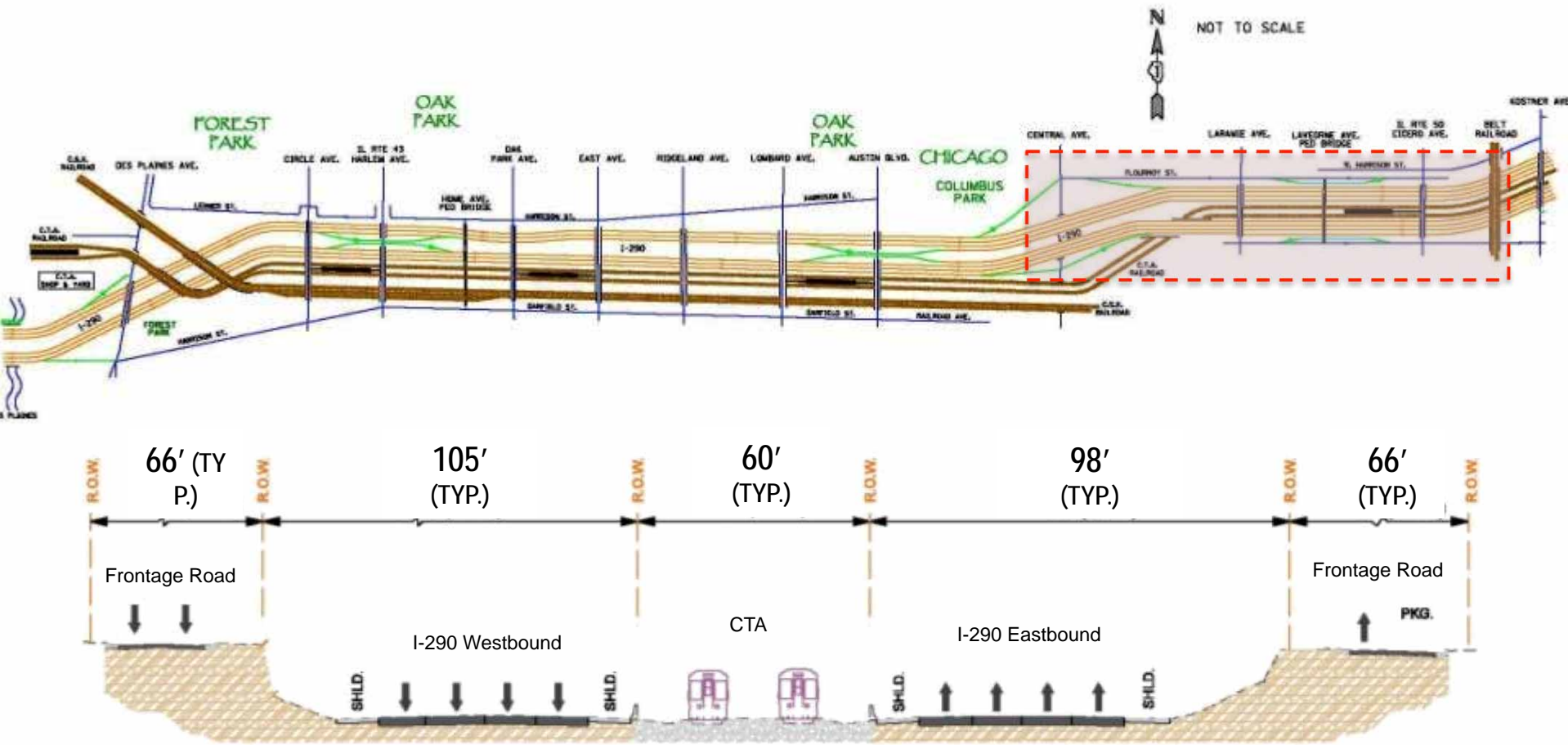


# I-290 Mainline Existing Typical Sections



Home Avenue to Lombard Avenue  
Oak Park

# I-290 Mainline Existing Typical Sections

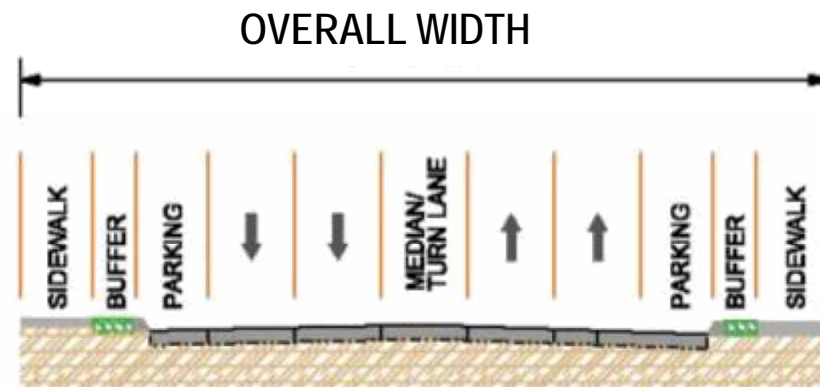


Central Avenue to Belt Railroad  
Chicago

# Existing Arterial Typical Sections



Arterial	Overall Width**
	Range
Mannheim Road	<b>110.5'</b>
25th Avenue	<b>60' to 72'</b>
1st Avenue	<b>55' to 63'</b>
Harlem Avenue	<b>64' to 64.5'</b>
Austin Avenue	<b>59' to 71'</b>
Central Avenue	<b>74' to 88'</b>
Laramie Avenue	<b>54' to 77'</b>
Cicero Avenue	<b>58' to 68'</b>
Roosevelt Road	<b>65' to 100'</b>

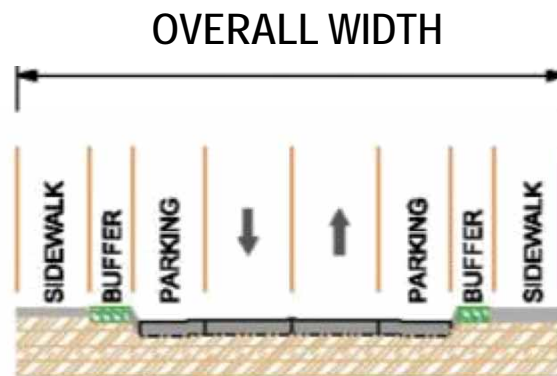


\*\*Overall widths are for road sections adjacent to the north or south of I-290 (except for Roosevelt Rd.)

# Existing Minor Cross Streets



Arterial	Overall Width**
	Range
17th Avenue	61' to 71'
9th Avenue	62'
5th Avenue	60'
DesPlaines Avenue	77' to 100'
Circle Avenue	36' to 60'
Oak Park Avenue	62'
East Avenue	64'
Lombard Avenue	74'

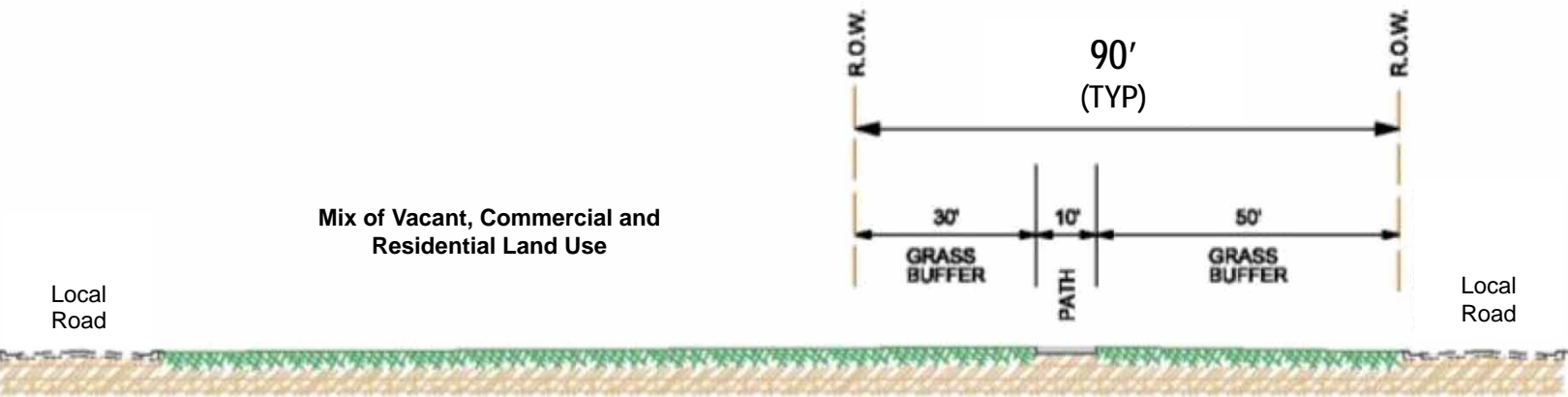


\*\*Overall widths are for road sections adjacent to the north or south of I-290 (except for Roosevelt Rd.)

# Existing Prairie Path



## Butterfield Road to Eastern Ave



## 19<sup>th</sup> Ave to 11<sup>th</sup> Ave

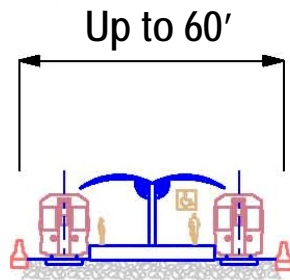
# *Conceptual Typical Sections*



# Heavy Rail Transit (HRT)

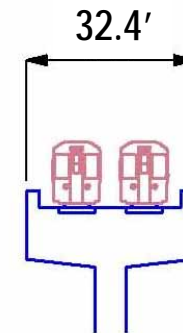


## Ground Level CTA Track Section & Station



- Provides 24' ADA platform
- 2 tracks
- Space for maintenance
- Flexibility to reduce width (dependent on safety & site conditions)

## Elevated CTA Track Section



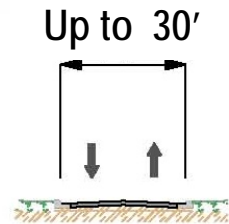
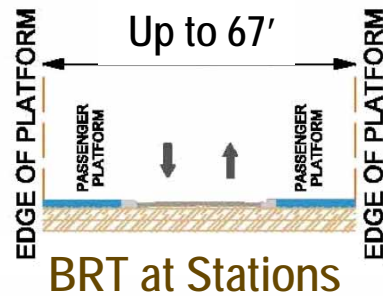
- 2 Tracks
- Station requires additional 24' width
- Eliminates at-grade rail crossings



# Bus Rapid Transit (BRT)

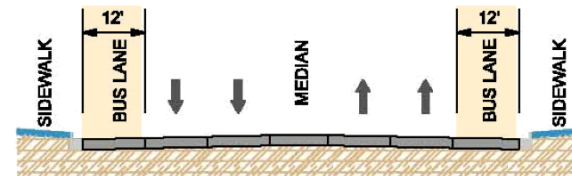


## Stand Alone BRT Facility



## BRT on Existing Facilities

BRT Width = 24'

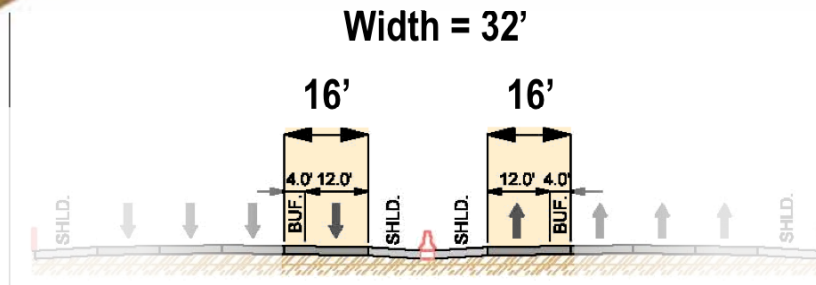


## BRT between Stations

- Ground level facility with at-grade crossings, or elevated (similar to HRT).

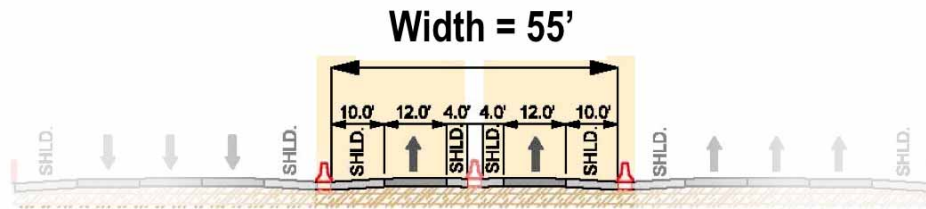


# Highway Managed Lane Alternatives



## Buffer Separated

- Adds a 12' lane with 4' buffer in each direction



## Barrier Separated

- Adds a 12' barrier separated lane & 4 shoulders
- Barrier limits access, provides better operations



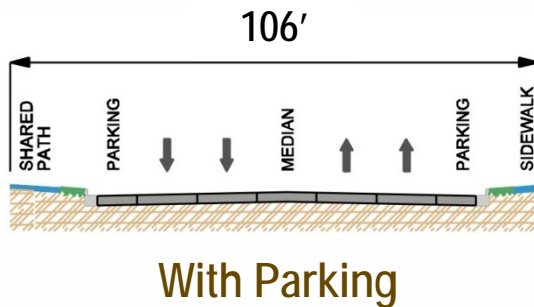
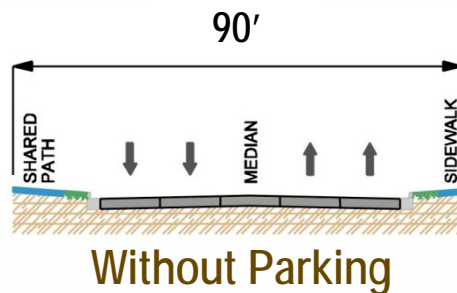
- Applies to HOV, HOT, or BRT
- Flexibility to reduce width with design variances (dependant upon safety & site conditions)



# Arterial Improvements & Bicycle Lanes

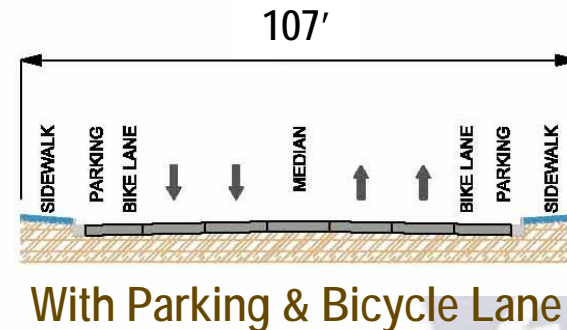
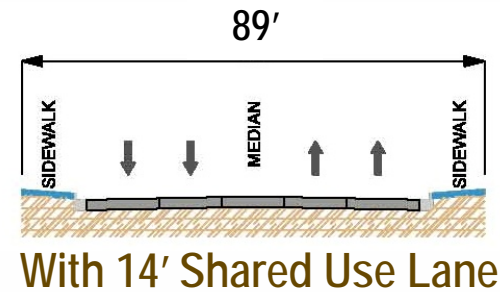


## Off-Street Bicycle Accommodations



- Provides standard 12' wide lanes + median
- 11' lane widths allowable
- Accommodates IDOT's Complete Streets Policy

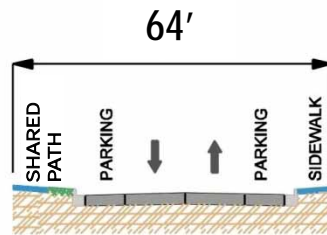
## On-Street Bicycle Accommodations



# Minor Crossroads & Frontage Roads

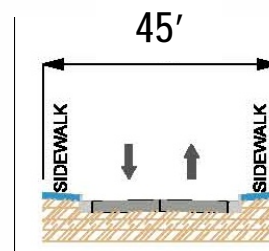


## Off-Street Bicycle Accommodations

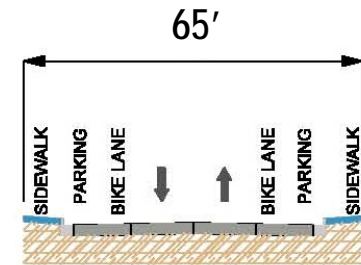


With Parking

## On-Street Bicycle Accommodations



14' Shared Use Lanes  
Without Parking



With Parking &  
Bicycle Lane

- Provides standard pavement widths from face of curb to face of curb
- Additional lanes or sidewalk buffer strips require additional width
- Accommodates IDOT's Complete Streets Policy



# *Next Steps*



# Next Steps



- Full Draft Purpose and Need
- Public meeting #2
- Single mode evaluation results
- Identify combination alternatives

Consideration based on following factors:

- Performance in meeting Purpose and Need
  - Providing multi-modal benefits and rounding out transportation system
  - Addressing an identified need that is difficult to test
- Evaluate combination alternatives
    - GIS footprint/impacts
    - Performance in meeting Purpose and Need



# Upcoming Meeting



SAVE THE DATE...



Corridor  
Advisory Group  
and Task Force  
Meeting #9

**March 1, 2011**

The Carleton Hotel  
of Oak Park