

Initial Alternatives Identification and Evaluation Report

May 2012

## **APPENDIX F**

Round 2 Combination Mode Alternatives



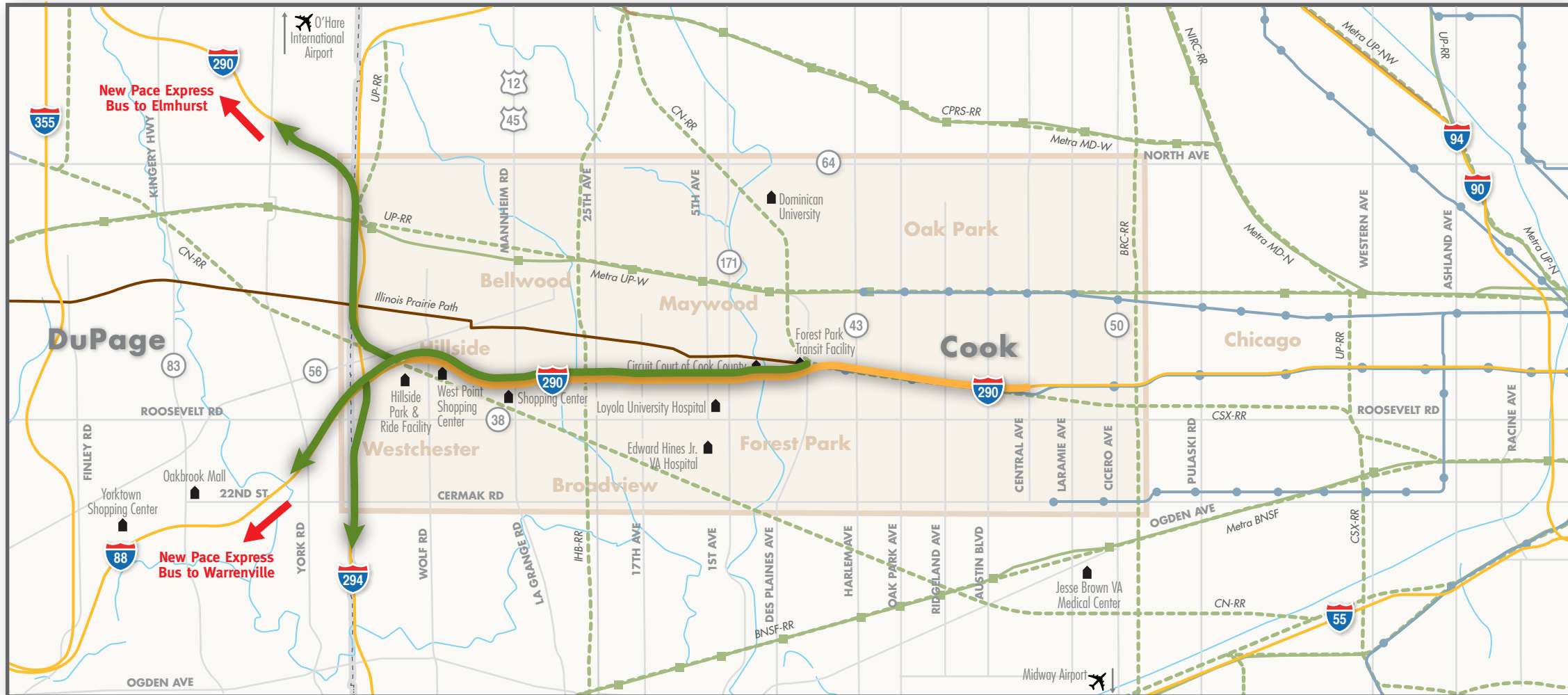
# I-290 PHASE I STUDY

## Round 2

### Initial Combo Alternatives Descriptions



# GP + EXP > General Purpose Add Lane & Express Bus Service



### Legend

- Interstate
- Metra Line/Station
- Existing CTA Rail /Station Access
- IL Prairie Path Multi-Use Trail
- Railroad
- I-290 Study Area
- County Boundary
- River

### Alternative

- General Purpose Add Lanes
- Express Bus Operating on Shoulder
- New Pace Express Bus Route

\*Not to scale

### GP Lanes

- > Add 2 Lanes (1 in each direction) along I-290 from I-88/290 Split to Central Avenue.
- > 7.5 miles

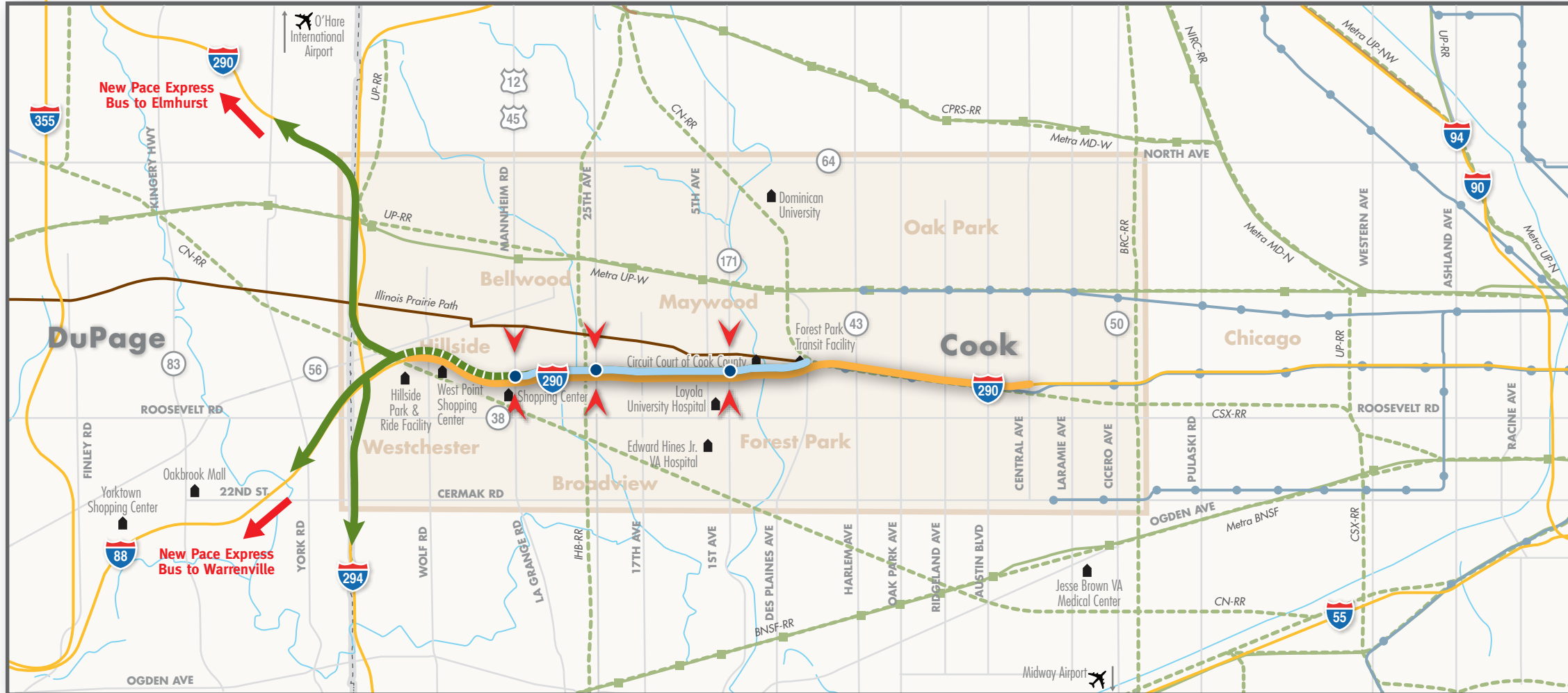
### Express Bus:

- > Express Bus Service on I-88 & I-290 to CTA Forest Park Terminal.
- > Enhanced local bus routes to run express to CTA Forest Park Terminal.
- > Express Bus service to use I-290 Shoulder.



# GP + HCT + EXP > General Purpose Add Lane & High Capacity Transit & Express Bus Service

I-290 PHASE I STUDY ROUND 2 September 29, 2011



### Legend

- Interstate
- Metra Line/Station
- Existing CTA Rail /Station Access
- IL Prairie Path Multi-Use Trail
- Railroad
- I-290 Study Area
- County Boundary
- River

### Alternative

- General Purpose Add Lanes
- HCT (At-Grade)
- Existing and New Express Bus
- Express Bus Operating on Shoulder
- New HCT Station
- New Pace Express Bus Route
- Local Bus Service Enhancement

### GP Lanes:

- > Add 2 Lanes (1 in each direction) along I-290 from I-88/290 Split to Central Avenue.
- > 7.5 miles

### High Capacity Transit (HCT):

- > HCT as Blue Line Extension (HRT) or Bus Rapid Transit (BRT).
- > Add HCT from CTA Forest Park Terminal to Mannheim Road in I-290 Median.

### High Capacity Transit (HCT): (con't)

- > 3 New HRT/BRT stations – Mannheim Road, 25th Avenue, 1st Avenue.
- > 3.5 miles

### Express Bus:

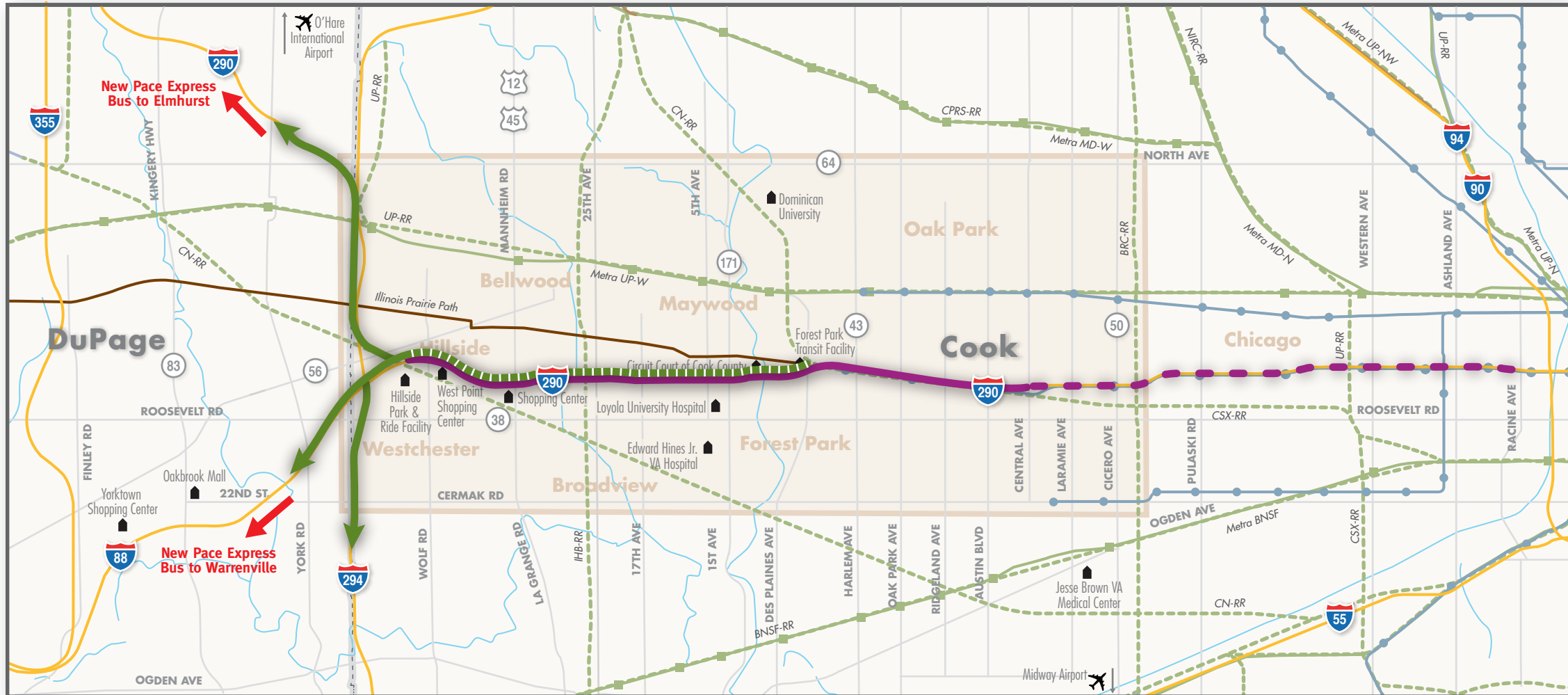
- > Express Bus Service on I-88 & I-290 to CTA Forest Park Terminal.
- > Enhanced local bus routes to run express to CTA Forest Park Terminal.
- > Express Bus service to use I-290 Shoulder.

\*Not to scale



# HOV + EXP > High Occupancy Vehicle Lanes (HOV) 2+ Occupants & Express Bus Service

I-290 PHASE I STUDY ROUND 2 September 29, 2011



### Legend

- Interstate
- Metra Line/Station
- Existing CTA Rail /Station Access
- IL Prairie Path Multi-Use Trail
- Railroad
- I-290 Study Area
- County Boundary
- River

### Alternative

- HOV 2+ Add Lanes
- HOV 2+ Lane Conversion
- Existing and New Express Bus
- Express Bus Operating in HOV Lanes
- New Pace Express Bus Route

N

\*Not to scale

## HOV 2+:

- > Add 2 HOV lanes (1 lane in each direction) on I-290 from I-88/290 Split to Central Avenue.
- > Convert 2 existing General Purpose lanes to HOV (1 lane in each direction) from Central Avenue to Racine Avenue.
- > HOV lane restricted to vehicles with two or more occupants (no toll).
- > 13 miles

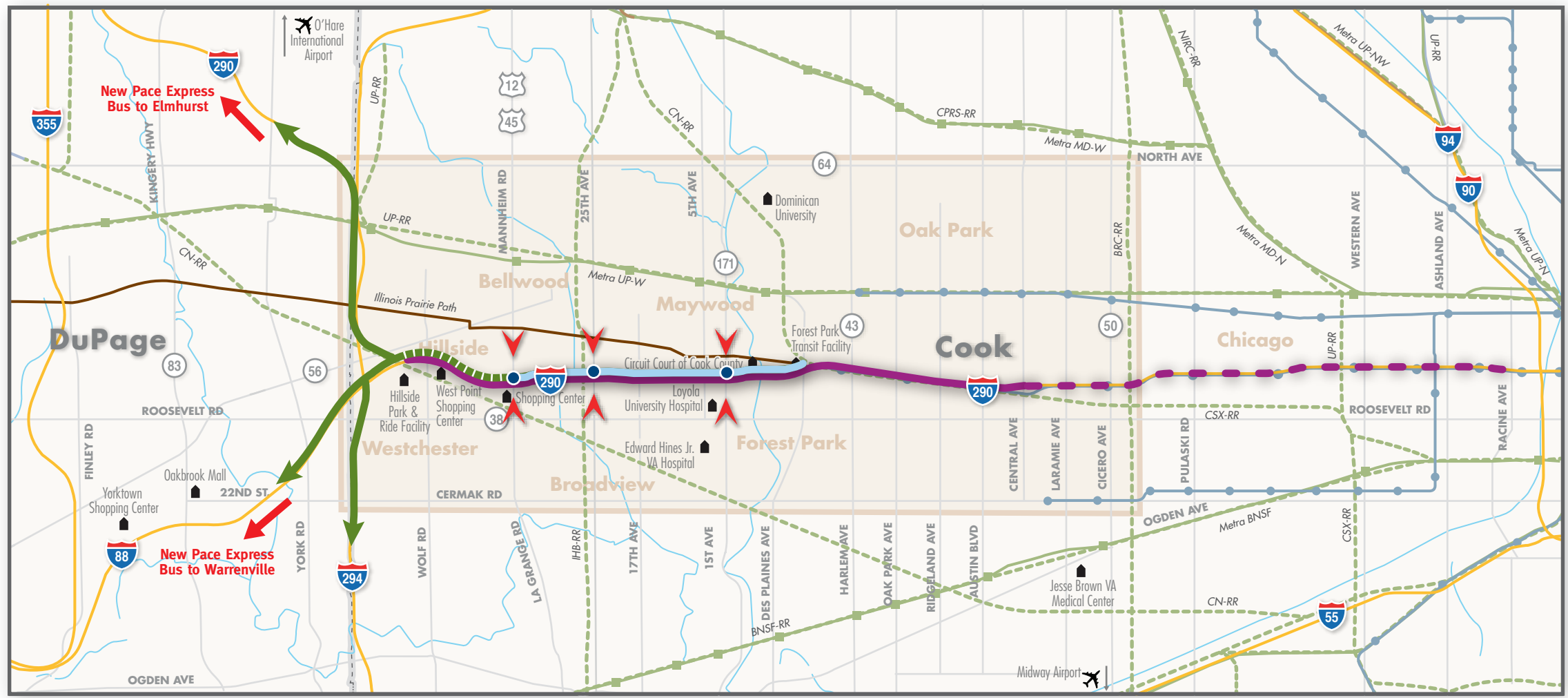
## Express Bus:

- > Express Bus Service on I-88 & I-290 to CTA Forest Park Terminal.
- > Enhanced local bus routes to run express to CTA Forest Park Terminal.
- > Express Bus Service to use HOV lanes.



# HOV + HCT + EXP > High Occupancy Vehicle Lanes (HOV) 2+ Occupants & High Capacity Transit (HCT) & Express Bus Service

I-290 PHASE I STUDY ROUND 2 September 29, 2011



### Legend

- Interstate
- Metra Line/Station
- Existing CTA Rail /Station Access
- IL Prairie Path Multi-Use Trail
- Railroad
- I-290 Study Area
- County Boundary
- River

### Alternative

- HOV 2+ Add Lanes
- HOV 2+ Lane Conversion
- HCT (At-Grade)
- Existing and New Express Bus
- Express Bus Operating in HOV Lanes
- New HCT Station
- New Pace Express Bus Route
- Local Bus Service Enhancement

- HOV 2+:**
- > Add 2 HOV lanes (1 lane in each direction) on I-290 from I-88/290 Split to Central Avenue.
  - > Convert 2 existing General Purpose lanes to HOV (1 lane in each direction) from Central Avenue to Racine Avenue.
  - > HOV lane restricted to vehicles with two or more occupants (no toll).
  - > 13 miles

- High Capacity Transit (HCT):**
- > HCT as Blue Line Extension (HRT) or Bus Rapid Transit (BRT).

- High Capacity Transit (HCT): (con't)**
- > Add HCT from CTA Forest Park Terminal to Mannheim Road in I-290 Median.
  - > 3 New HRT/BRT stations – Mannheim Road, 25th Avenue, 1st Avenue.
  - > 3.5 miles

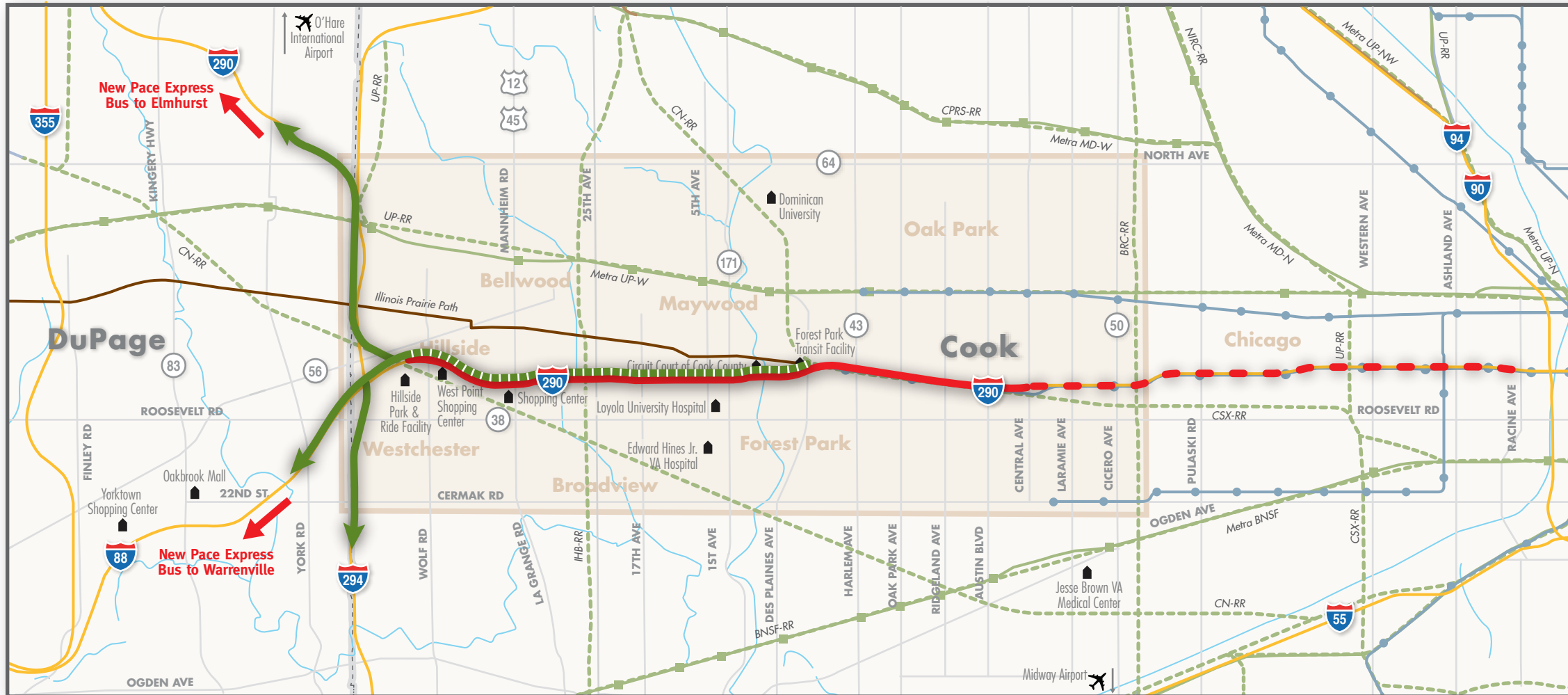
- Express Bus:**
- > Express Bus Service on I-88 & I-290 to HRT/BRT Mannheim Station.
  - > Enhanced local bus routes to run express to HRT/BRT Mannheim Station.
  - > Express Bus Service to use HOV lanes.

\*Not to scale



# HOT + EXP > High Occupancy Toll Lane (3+) & Express Bus Service

I-290 PHASE I STUDY ROUND 2 September 29, 2011



\*Not to scale

## HOT 3+:

- > Add 2 HOT lanes (1 lane in each direction) on I-290 from I-88/290 Split to Central Avenue.
- > Convert 2 existing General Purpose lanes to HOT (1 lane in each direction) from Central Avenue to Racine Avenue.
- > Single and double occupancy vehicles pay toll to enter HOT lane, 3 or more occupancy vehicles ride free.
- > 13 miles

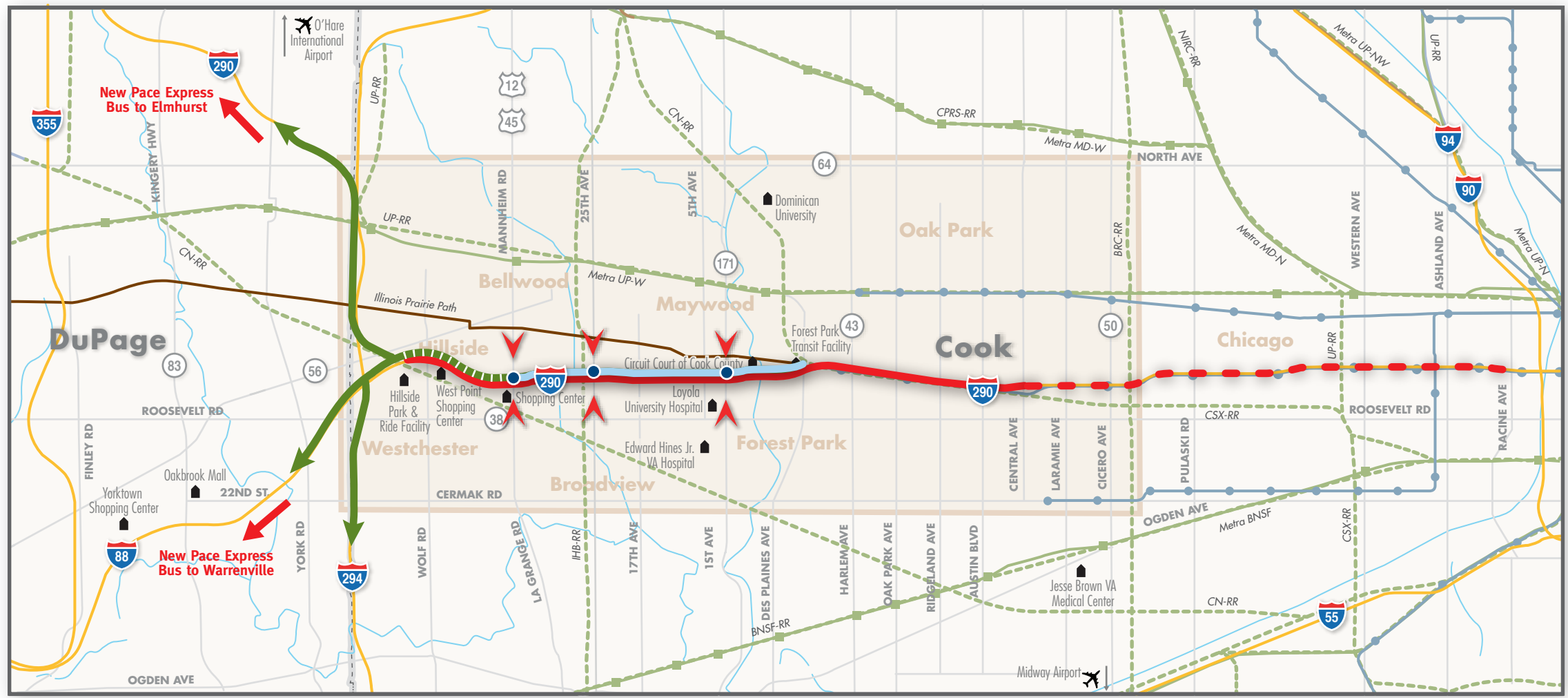
## Express Bus:

- > Express Bus Service on I-88 & I-290 to CTA Forest Park Terminal.
- > Enhanced local bus routes to run express to CTA Forest Park Terminal.
- > Express Bus Service to use HOT lanes at no charge.



# HOT + HCT + EXP > High Occupancy Toll Lanes (HOT) 3+ Occupants & High Capacity Transit & Express Bus Service

I-290 PHASE I STUDY ROUND 2 September 29, 2011



### Legend

- Interstate
- Metra Line/Station
- Existing CTA Rail /Station Access
- IL Prairie Path Multi-Use Trail
- Railroad
- I-290 Study Area
- County Boundary
- River

### Alternative

- HOT 3+ Add Lanes
- HOT 3+ Lane Conversion
- HCT (At-Grade)
- Existing and New Express Bus
- Express Bus Operating in HOT Lanes
- New HCT Station
- New Pace Express Bus Route
- Local Bus Service Enhancement

- HOT 3+:**
- > Add 2 HOT lanes (1 lane in each direction) on I-290 from I-88/290 Split to Central Avenue.
  - > Convert 2 existing General Purpose lanes to HOT (1 lane in each direction) from Central Avenue to Racine Avenue.
  - > Single and double occupancy vehicles pay toll to enter HOT lane, 3 or more occupancy vehicles ride free.
  - > 13 miles

- High Capacity Transit (HCT):**
- > HCT as Blue Line Extension (HRT) or Bus Rapid Transit (BRT).

- High Capacity Transit (HCT): (con't)**
- > Add HCT from CTA Forest Park Terminal to Mannheim Road in I-290 Median.
  - > 3 New HRT/BRT stations – Mannheim Road, 25th Avenue, 1st Avenue.
  - > 3.5 miles

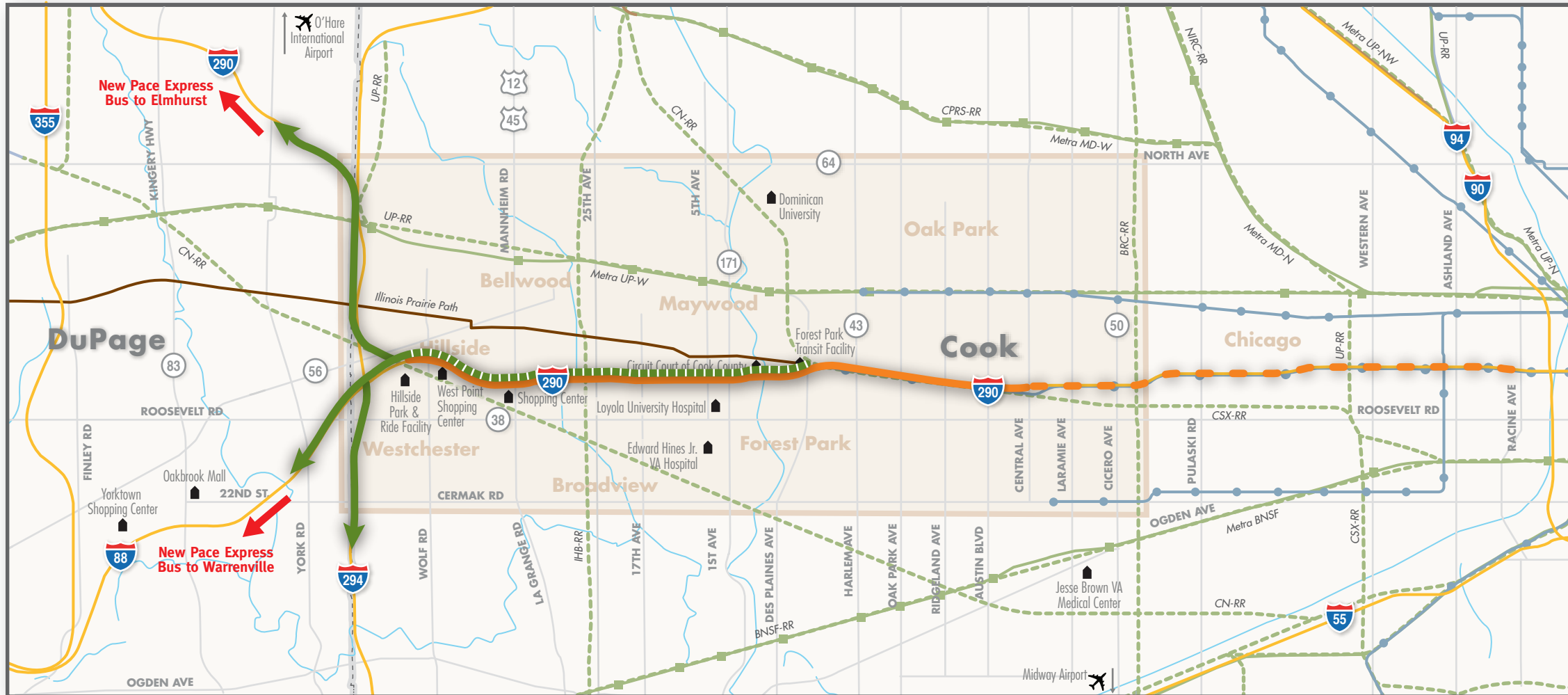
- Express Bus:**
- > Express Bus Service on I-88 & I-290 to HRT/BRT Mannheim Station.
  - > Enhanced local bus routes to run express to HRT/BRT Mannheim Station.
  - > Express Bus Service to use HOT lanes at no charge.





# TOLL + EXP > Toll Add Lanes & Express Bus Service

I-290 PHASE I STUDY ROUND 2 September 29, 2011



### Legend

- Interstate
- Metra Line/Station
- Existing CTA Rail /Station Access
- IL Prairie Path Multi-Use Trail
- Railroad
- I-290 Study Area
- County Boundary
- River

### Alternative

- Tolled Add Lanes
- Tolled Lane Conversion
- Existing and New Express Bus
- Express Bus Operating in Toll Lanes
- New Pace Express Bus Route

N

\*Not to scale

## Toll Lanes:

- > Add 2 Toll Lanes (1 lane in each direction) on I-290 from I-88/290 Split to Central Avenue.
- > Existing 3 Lanes between I-88/290 Split and Central to remain free.
- > Convert 2 existing General Purpose lanes to Toll Lanes (1 lane in each direction) from Central Avenue to Racine Avenue.
- > 13 miles

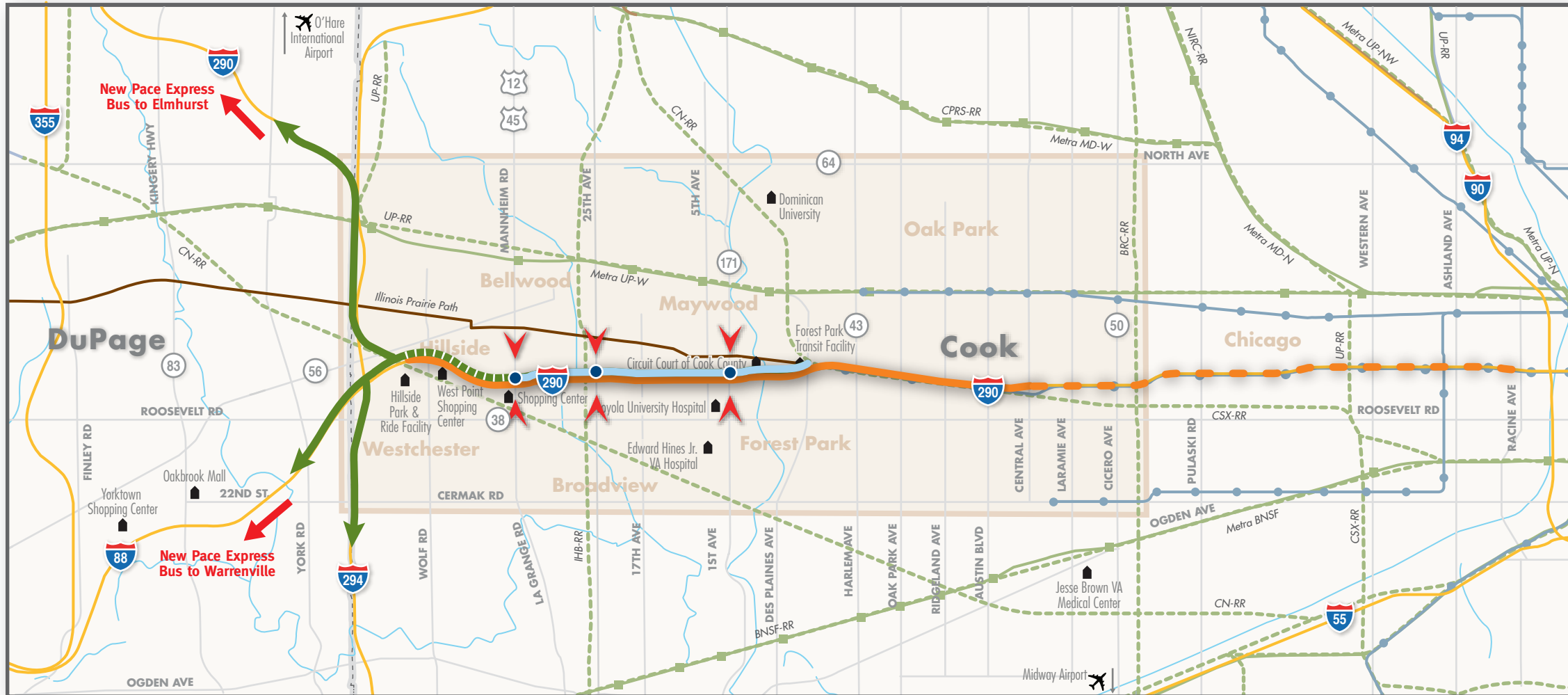
## Express Bus:

- > Express Bus Service on I-88 & I-290 to CTA Forest Park Terminal.
- > Enhanced local bus routes to run express to CTA Forest Park Terminal.
- > Express Bus Service to use HOT lanes at no charge.



# TOLL + HCT + EXP > Toll Add Lanes & High Capacity Transit & Express Bus Service

I-290 PHASE I STUDY ROUND 2 September 29, 2011



### Legend

- Interstate
- Metra Line/Station
- Existing CTA Rail /Station Access
- IL Prairie Path Multi-Use Trail
- Railroad
- I-290 Study Area
- County Boundary
- River

### Alternative

- Tolled Add Lanes
- Tolled Lane Conversion
- HCT (At-Grade)
- Existing and New Express Bus
- Express Bus Operating in Toll Lanes
- New HCT Station
- New Pace Express Bus Route
- Local Bus Service Enhancement

#### Toll Lanes:

- > Add 2 Toll Lanes (1 lane in each direction) on I-290 from I-88/290 Split to Central Avenue.
- > Existing 3 Lanes between I-88/290 Split and Central to remain free.
- > Convert 2 existing General Purpose lanes to Toll Lanes (1 lane in each direction) from Central Avenue to Racine Avenue.
- > 13 miles

#### High Capacity Transit (HCT):

- > HCT as Blue Line Extension (HRT) or Bus Rapid Transit (BRT).

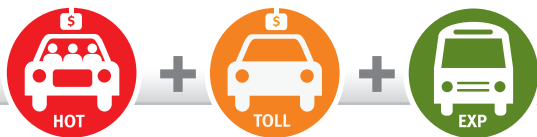
#### High Capacity Transit (HCT): (con't)

- > Add HCT from CTA Forest Park Terminal to Mannheim Road in I-290 Median.
- > 3 New HRT/BRT stations – Mannheim Road, 25th Avenue, 1st Avenue.
- > 3.5 miles

#### Express Bus:

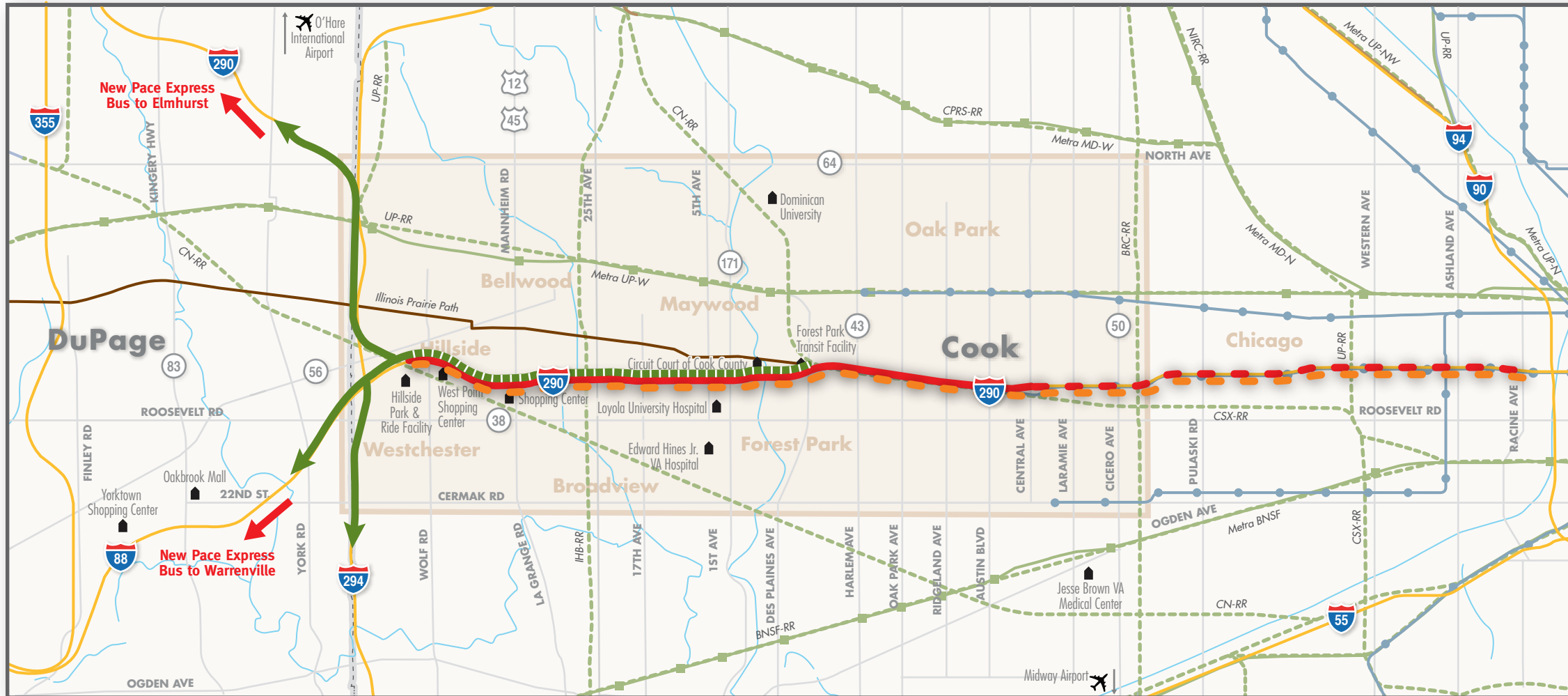
- > Express Bus Service on I-88 & I-290 to HRT/BRT Mannheim Station.
- > Enhanced local bus routes to run express to HRT/BRT Mannheim Station.
- > Express Bus Service to use toll lanes at no charge.

\*Not to scale



# HOT + TOLL + EXP > HOT Lanes & Toll All Existing Lanes & Express Bus Service

I-290 PHASE I STUDY ROUND 2 September 29, 2011



### Legend

- Interstate
- Metra Line/Station
- Existing CTA Rail /Station Access
- IL Prairie Path Multi-Use Trail
- Railroad
- I-290 Study Area
- County Boundary
- River

### Alternative

- HOT 3+ Add Lanes
- HOT 3+ Lane Conversion
- Tolled Lane Conversion
- Existing and New Express Bus
- Express Bus Operating in HOT Lanes
- New Pace Express Bus Route

\*Not to scale

### HOT Lanes:

- > Add 2 HOT lanes (1 lane in each direction) on I-290 from I-88/290 Split to Central Avenue.
- > Convert 2 existing General Purpose lanes to HOT (1 lane in each direction) from Central Avenue to Racine Avenue.
- > Single and double occupancy vehicles pay toll to enter HOT lane, 3 or more occupancy vehicles ride free.
- > 13 miles

### Toll Lanes:

- > Toll existing lanes from I-290/I-88 Split to Racine Avenue.
- > 13 miles

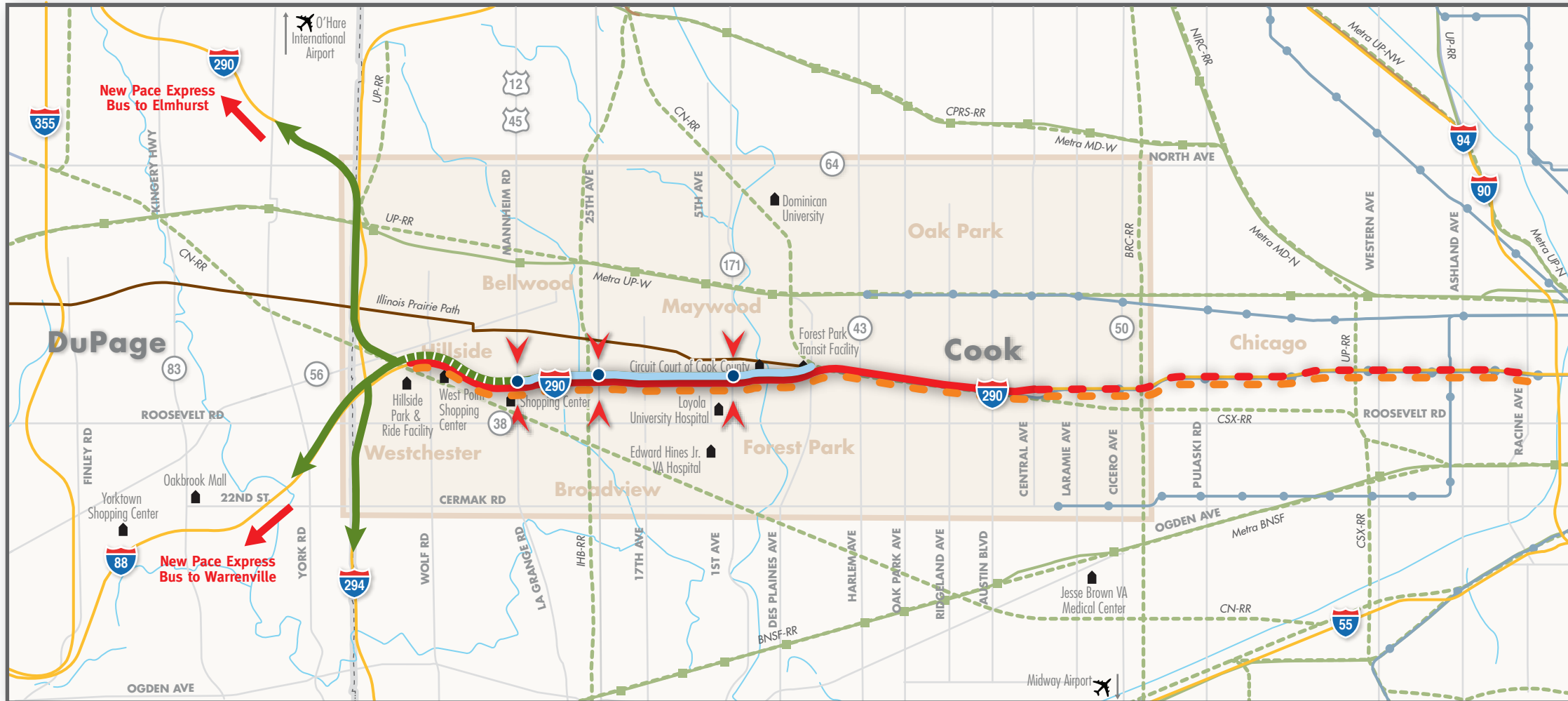
### Express Bus:

- > Express Bus Service on I-88 & I-290 to CTA Forest Park Terminal.
- > Enhanced local bus routes to run express to CTA Forest Park Terminal.
- > Express Bus Service to use HOT lanes at no charge.



# HOT + TOLL + HCT + EXP > HOT Lanes & Toll All Existing Lanes & High Capacity Transit & Express Bus Service

I-290 PHASE I STUDY ROUND 2 September 29, 2011



### Legend

- Interstate
- Metra Line/Station
- Existing CTA Rail /Station Access
- IL Prairie Path Multi-Use Trail
- Railroad
- I-290 Study Area
- County Boundary
- River

### Alternative

- HOT 3+ Add Lanes
- HOT 3+ Lane Conversion
- Tolled Lane Conversion
- HCT (At -Grade)
- Existing and New Express Bus
- Express Bus Operating in HOT Lanes
- New HCT Station
- New Pace Express Bus Route
- Local Bus Service Enhancement

\*Not to scale

### HOT Lanes:

- > Add 2 HOT lanes (1 lane in each direction) on I-290 from I-88/290 Split to Central Avenue.
- > Convert 2 existing General Purpose lanes to HOT Lanes (1 lane in each direction) from Central Avenue to Racine Avenue.
- > Single and double occupancy vehicles pay toll to enter HOT lane, 3 or more occupancy vehicles ride free.
- > 13 miles

### Toll Lanes:

- > Toll existing lanes from I-290/I-88 Split to Racine Avenue.
- > 13 miles

### High Capacity Transit (HCT):

- > HCT as Blue Line Extension (HRT) or Bus Rapid Transit (BRT).
- > Add HCT from CTA Forest Park Terminal to Mannheim Road in I-290 Median.
- > 3 New HRT/BRT stations – Mannheim Road, 25th Avenue, 1st Avenue.
- > 3.5 miles

### Express Bus:

- > Express Bus Service on I-88 & I-290 to HRT/BRT Mannheim Station.
- > Enhanced local bus routes to run express to HRT/BRT Mannheim Station.
- > Express Bus Service to run on HOT Lanes at no charge.