

**INTERSTATE 290**

*Corridor Advisory Group and Task Force Meeting #12*

December 1, 2011

Illinois Department of Transportation

**Eisenhower** expressway

## Agenda


<ul style="list-style-type: none"> <li>■ Recap CAG/TF Meeting #11</li> <li>■ Purpose and Need Update</li> <li>■ Where Are We in the Process?</li> <li>■ Summary of Round 1 Findings</li> </ul>	9:00-9:45
<ul style="list-style-type: none"> <li>■ Additional Combo Alternatives Discussion</li> <li>■ Next Steps</li> </ul>	9:45-10:30
<ul style="list-style-type: none"> <li>■ Travel Demand Modeling Workshop</li> <li>■ Adjourn</li> </ul>	10:30-11:15

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*CAG/TF #11 Recap*



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- **CAG/TF Format**
- **Single Mode Alternatives Evaluation (Cont.)**
  - Alternatives Development & Evaluation Process
  - Additional Single Mode Alternatives
  - Transit vs. Highway Alternatives Summary
- **Tolling/HOT Lane Legislation**
- **Combination Alternatives Discussion**
  - 10 initial combination alternatives assembled

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## Purpose & Need Update

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- **Additional Stakeholder Input Sought for Purpose and Need**
  - Refined Purpose and Need made available to the public on **October 28, 2011**
  - Formal review and comment period ended at midnight on **November 30, 2011**
  - **11 Stakeholder Comments** received regarding the Purpose & Need *(as of noon on November 30)*

## Summary of Comments Received During the Formal Comment Period



- 11 Purpose & Need comments received  
(as of noon on November 30):
  - Place more emphasis on I-290 as a multi-modal corridor & clarify working relationship with transit agencies
  - Additional consideration for the inclusion of:
    - Transit facility condition
    - Needs related to frontage roads and railroads within the study area
    - Environmental impacts
- Specific alternative suggestions



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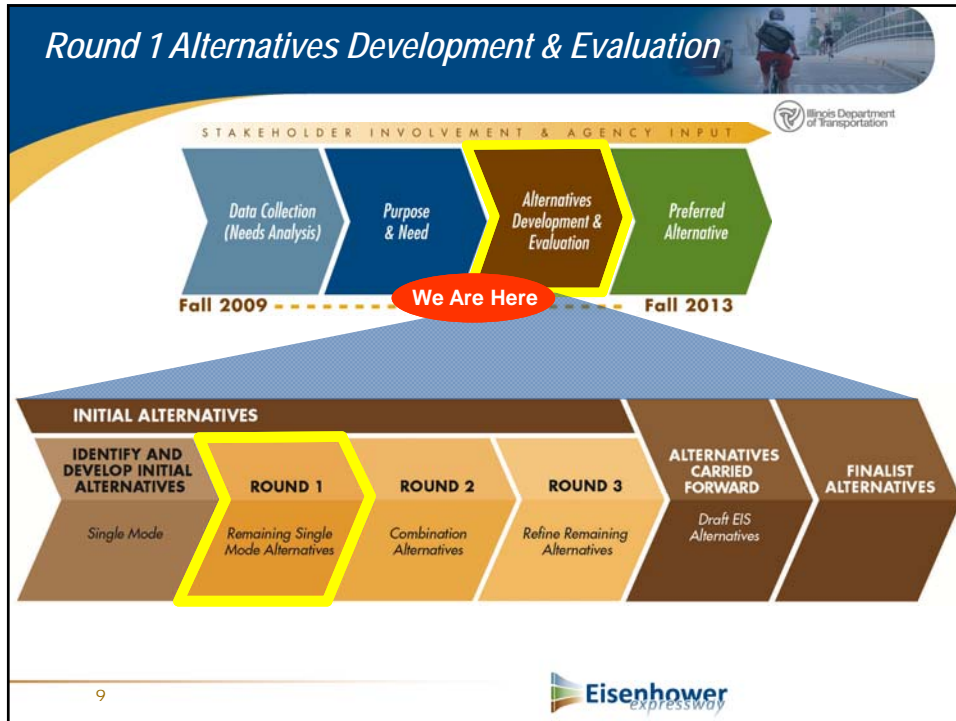


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### Where Are We in the Process?

Map showing transit routes and icons for various transit modes: HOV, EXP, HRT, TOLL, HOT, BRT.

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## Initial Alternatives Evaluation



Identified **7 transportation modes** that make up **21 single mode alternatives**, based on:

- Stakeholder input
- Technical analysis
- Purpose & Need context screening
- Fatal flaw analysis

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## Single Mode Alternatives - Expressway Conclusions









### Findings: Expressway Alternatives...





- Have best improvement to I-290 travel performance
- Have best improvement to local & regional travel
- Improve peak period arterial performance
- Best improvement to job accessibility
- Best safety performance



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## Single Mode Alternatives - Expressway Conclusions

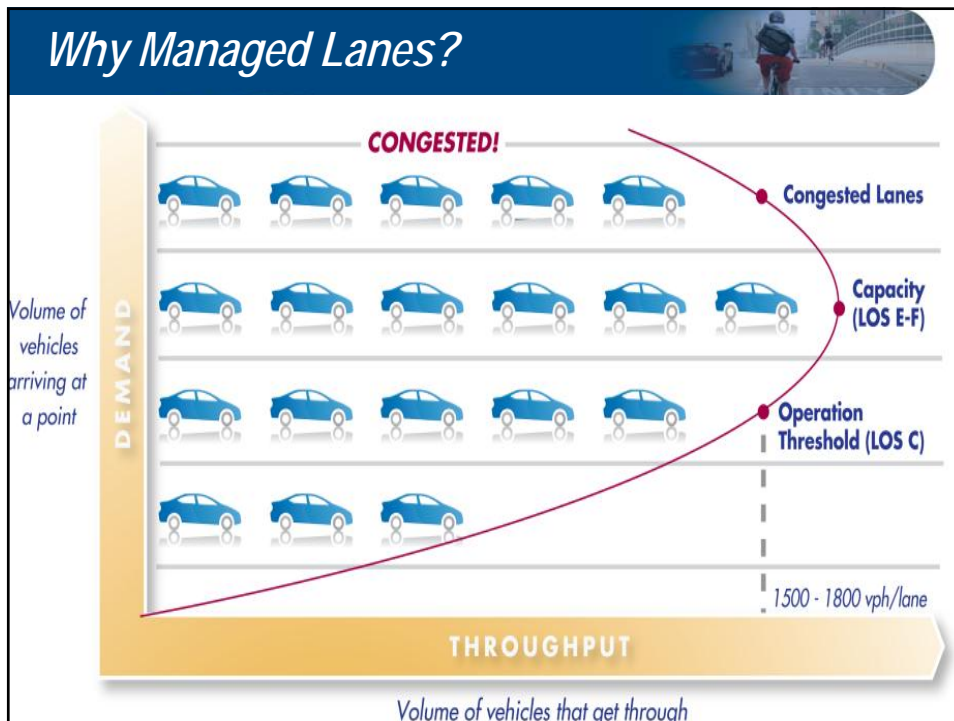


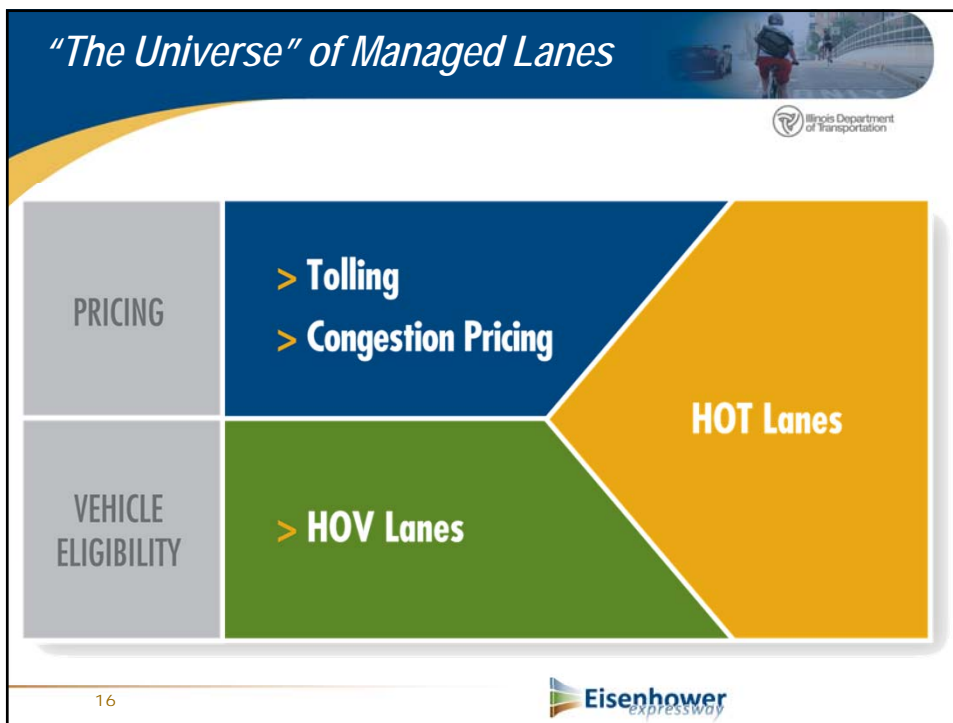
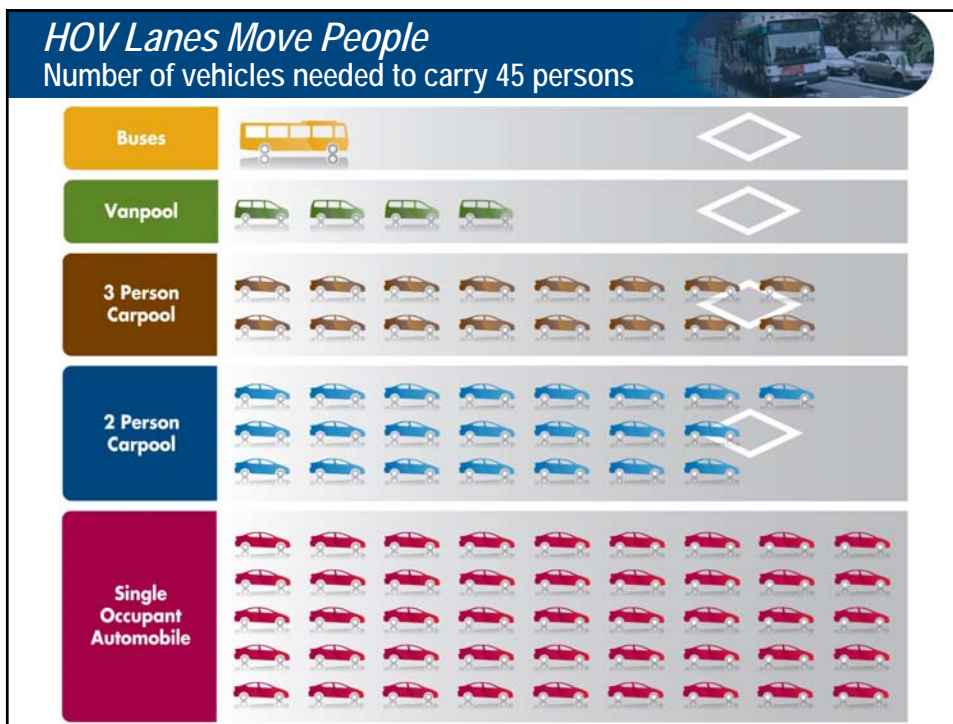





**Because expressway improvements...**



- Benefit largest travel market
- Provide I-290 performance improvements:
  - Increased person throughput (up to 30,000 more persons)
  - Increased speeds (up to 9 mph faster during peak period)
  - Existing 3-lane bottleneck correction (up to 26% faster in GP lanes)
  - New capacity management (up to 54% less time on I-290)
- Divert longer distance traffic off of arterials











## Single Mode Alternatives- Transit Conclusions







### Findings: Transit Modes...

- Do not improve I-290 performance
- Generates new transit trips, but diverts riders from other transit services
- Increased transit access to jobs
- Are compatible with expressway alternatives




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## Travel Market

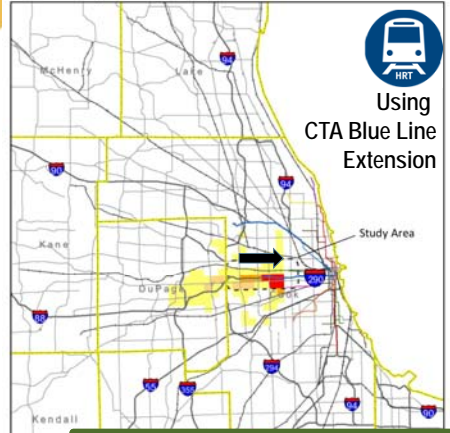
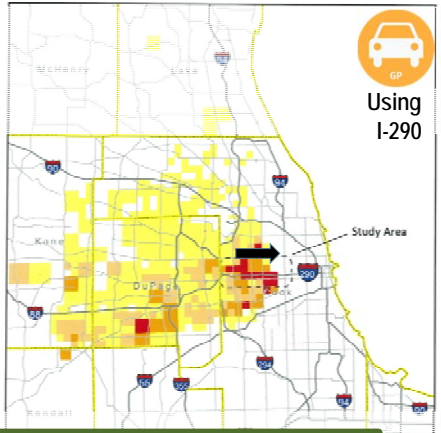
### Traditional Commute Trip Origins



Using  
CTA Blue Line  
Extension



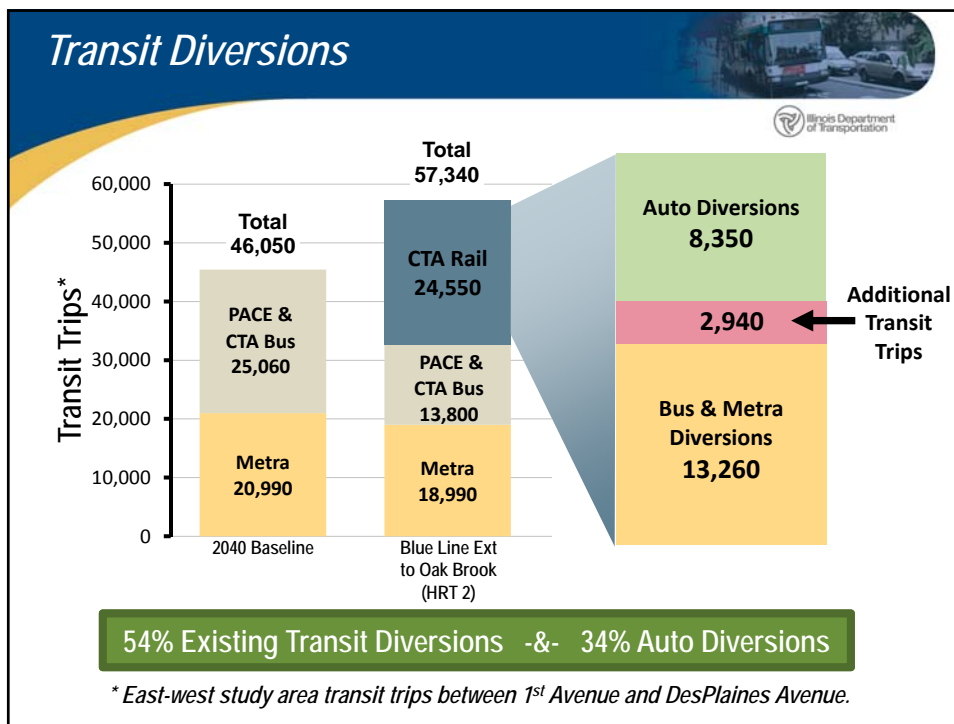
Using  
I-290

Small travel market served by CTA Blue Line relative to I-290

0 - 1    2 - 100    101 - 250    251 - 500    501 or more

No trips    1 - 100    101 - 250    251 - 500    501 or more



### Round 1 Conclusions – Alternatives Not Carried Forward

The following single mode alternatives will not be carried forward:

#### Arterial Widening

- Fatally Flawed – Roosevelt & Madison
- Unacceptable number of displacements
- Other arterial improvements may emerge

#### Existing Blue Line Conversion to BRT

- Blue Line conversion performance similar to Blue Line
- Potential capacity issues with BRT
- HRT & BRT have similar footprints
- Existing Blue Line will be modeled as representative mode

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## Round 1 Overall Conclusions



- Single mode **Expressway Alternatives** have overall best performance
- Standalone single mode **Transit Alternatives** do not improve I-290 performance
- **Transit Alternatives** have other benefits

Opportunities exist to improve the performance of *expressway alternatives by combining them with transit*

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## Combination Alternatives



### 10 Initial Combination Alternatives

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### Combination Alternatives Characteristics

- All contain expressway mode capacity improvement
  - General Purpose Lane, or
  - Managed Lane(s) (HOV, HOT, Toll)
- All contain express bus (from Forest Park or Mannheim)
- Each expressway/express bus alternative also paired with High Capacity Transit (HCT) extension
  - HCT extension along I-290
  - HCT extension to Mannheim Road

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## HCT Extensions in Combination Mode Alternatives



- HCT extensions evaluated in combination:
  - High capacity transit extensions from Forest Park could be BRT or HRT
  - BRT and HRT extensions have similar footprint
  - Blue Line (HRT) extension will be modeled as representative mode
  - Coordination with Transit Agencies responsible for planning and implementation of transit improvements

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## Combination Alternatives Characteristics




- Illinois Prairie Path transit alignment:
  - Similar HRT/BRT Performance along I-290 in median vs. Prairie Path
  - Alignment along I-290 diverts fewer riders from Metra UP-W line
  - Potential conflicts with recreational context of Prairie Path
  - Prairie Path HCT alignment **not carried forward**



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## Combination Alternatives Characteristics




### HCT Extension to Mannheim Rd.

- Blue Line extension showed majority of travel benefits to Mannheim vs. extending to Oak Brook
  - 69 % of increase in **daily person throughput**
  - 71% of increase in **new jobs accessible**
  - 89 % of increase in **regional transit trips**
  - 95 % of reduction in **regional vehicle miles traveled**
  - At less than ½ the length (3.5 vs. 8 miles)



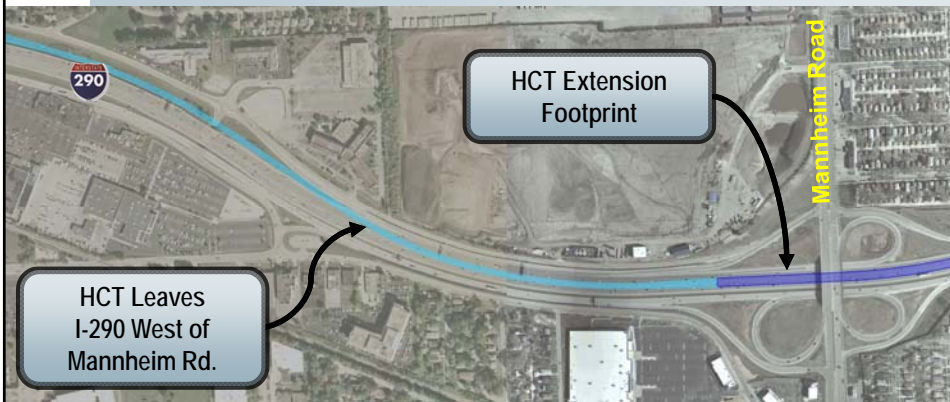
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## Combination Alternatives Characteristics



### HCT Extension to Mannheim Rd.

- Does not preclude HCT extensions further west
  - Extensions west of Mannheim would leave highway footprint





HCT Leaves  
I-290 West of  
Mannheim Rd.

HCT Extension  
Footprint

Mannheim Road

## Footprint Variations


- Expressway alternatives are reduced to either *general purpose* or *managed lanes*
  - Each with Express Bus
  - Each requires roughly the same footprint

+



- High Capacity Transit (HCT) alternatives are reduced to an *Extension*
  - Footprint evaluation reduced to transit right-of-way preservation



2 Footprint Variations

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## Policy / Operation Decisions





- 
  - *General Purpose lanes*
- 
  - *Managed lanes*
    - HOV
    - HOT
    - Toll

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- 
  - *HCT Extension*
    - Future detailed analysis by transit agencies

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## Transit Agency Coordination



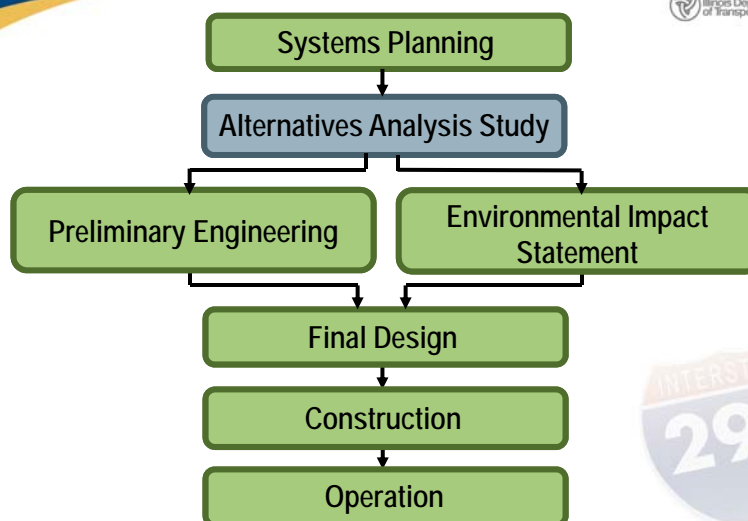
- I-290 Study is starting point for evaluation of corridor transit alternatives
- To be eligible for federal funding, major new fixed guideway transit projects must go through Federal Transit Administration (FTA) New Starts process



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## FTA's New Starts Process



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## Alternatives Evaluation Report



### ■ Draft Alternatives Evaluation Report Available

- Interim Report Summary of:
  - Alternatives development and evaluation process
  - Evaluation measures
  - Initial alternatives identification and screening
  - Round 1 findings
- Draft Document that will be updated as the process advances
- Available on Project Website:
  - [www.eisenhowerexpressway.com](http://www.eisenhowerexpressway.com)





*Next Steps*



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**Corridor Advisory Group and Task Force Meeting #13**

**TBD**

The Carleton Hotel of Oak Park

- Finalization of P & N until DEIS
- Combination Evaluation Results
- Cross Road and Interchange Approach

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*Additional Combination Alternatives Discussion*



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