



Transportation Impact Analysis

Initial Modeling Results

INFORMATIONAL with PAG ACTION ITEM

Planning Advisory Group #14
April 21, 2009

Presented by
Alan Snook, **DKS** Associates

AIRPORT FUTURES

CHARTING A COURSE FOR PDX

10 Step Plan

Step One: Begin Analysis

B) Conduct a viability assessment using the 90th Percentile forecast for testing purposes

E) Analyze impacts of traffic noise, and natural resources using the forecast 90th and 10th percentiles at a high level to inform City's Land Use Plan



PAG Information and Action

- The consultant and staff conclude that the results of the 90th Percentile traffic modeling suggest that no additional analysis of the Decentralized Terminal concept is required.
- Does the PAG agree?


AIRPORT FUTURES TRANSPORTATION IMPACT ANALYSIS

Initial Modeling Results

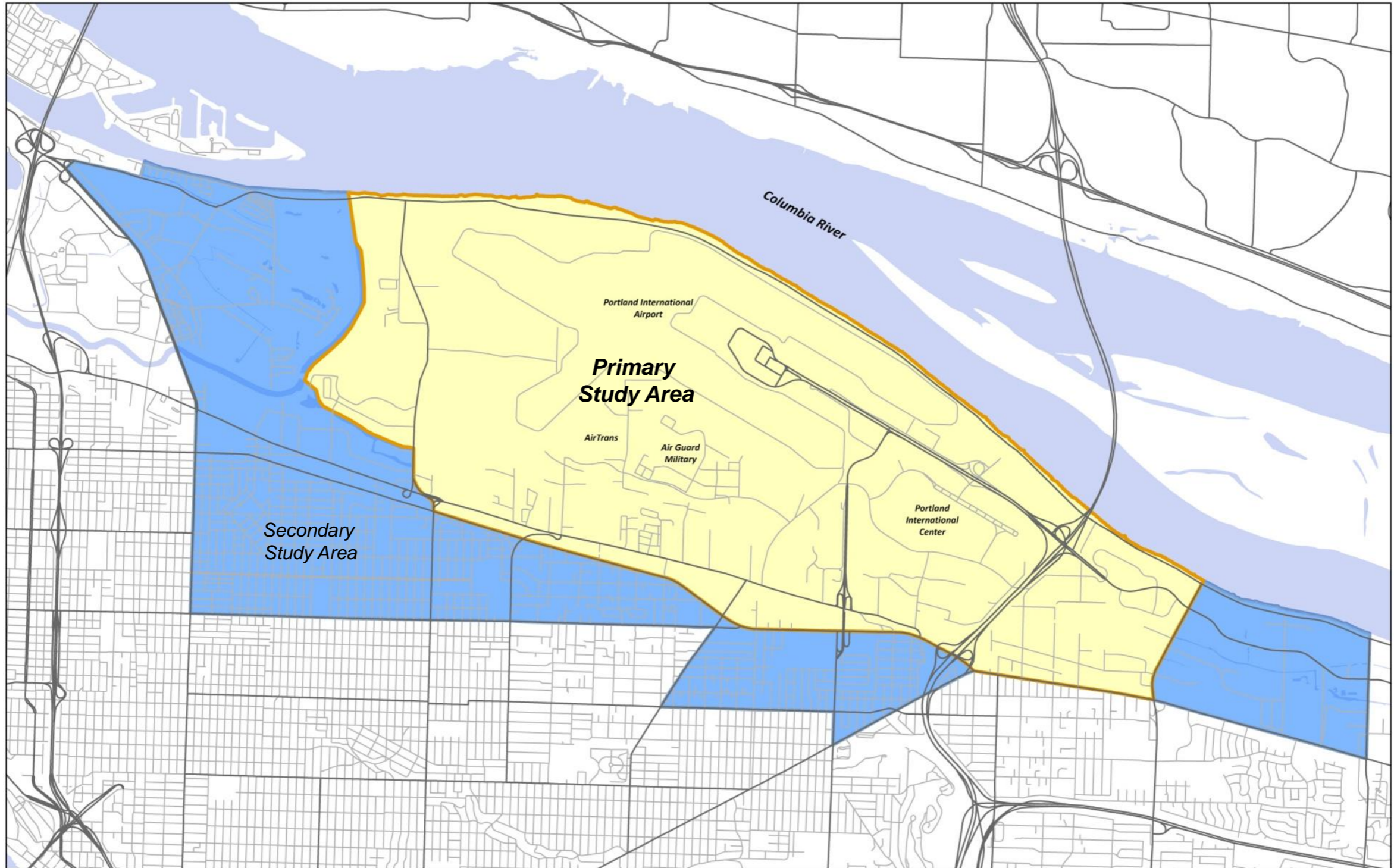


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 **PORT OF PORTLAND**
Possibility. In every direction.

Study Areas



Modeling 101

- Regional Travel Demand Model
- Transportation Analysis Zones (TAZs)
- Links
- Nodes
- Volume-to-Capacity (V/C) ratio
- Trip Distribution




EXISTING 2005 MODEL



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Existing (2005) Results

V/C Plot



Secondary Study Area



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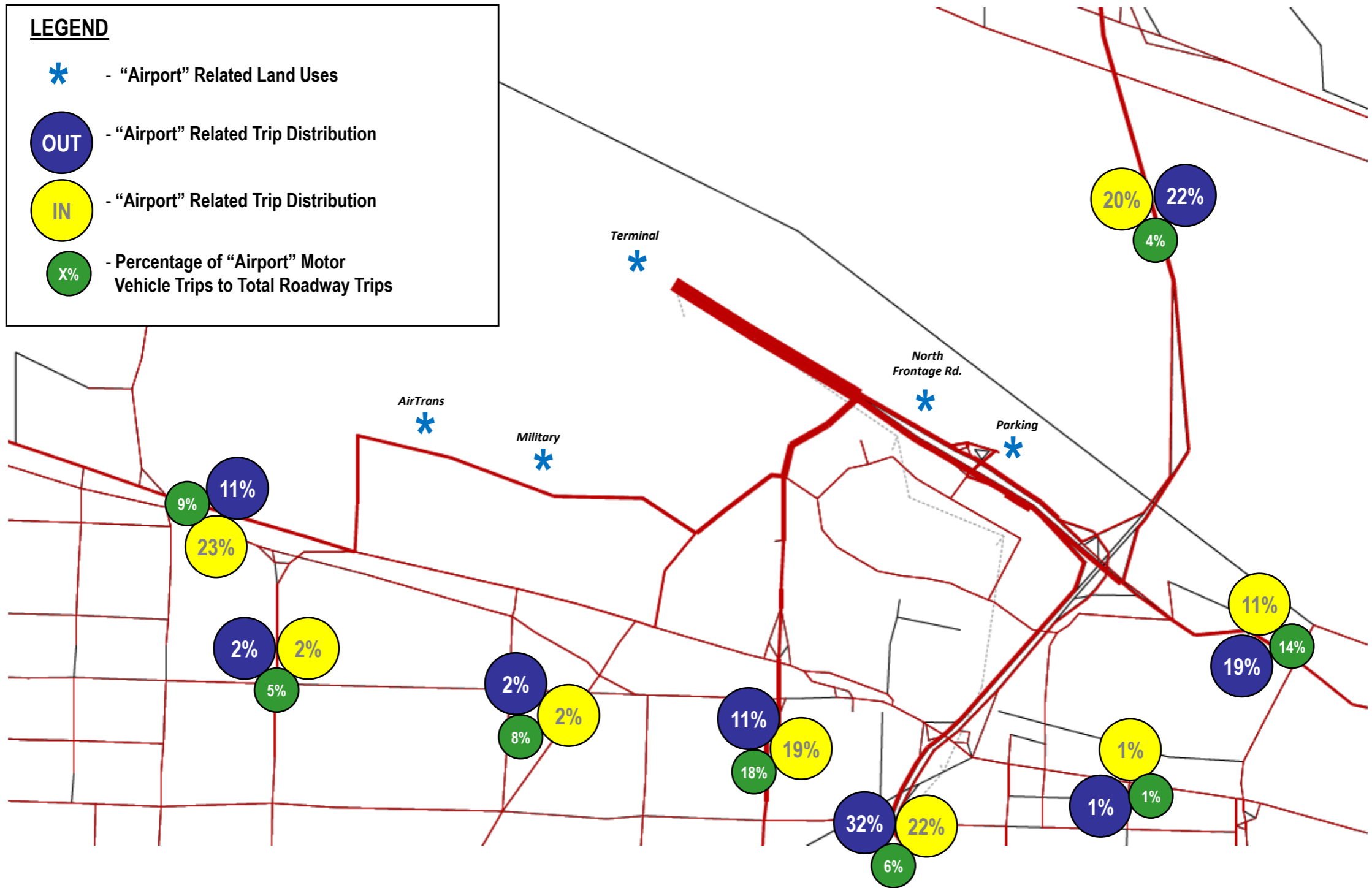
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Existing (2005) Model

Airport Trip Distribution

LEGEND

-  - "Airport" Related Land Uses
-  - "Airport" Related Trip Distribution
-  - "Airport" Related Trip Distribution
-  - Percentage of "Airport" Motor Vehicle Trips to Total Roadway Trips



FUTURE 2035 MODEL

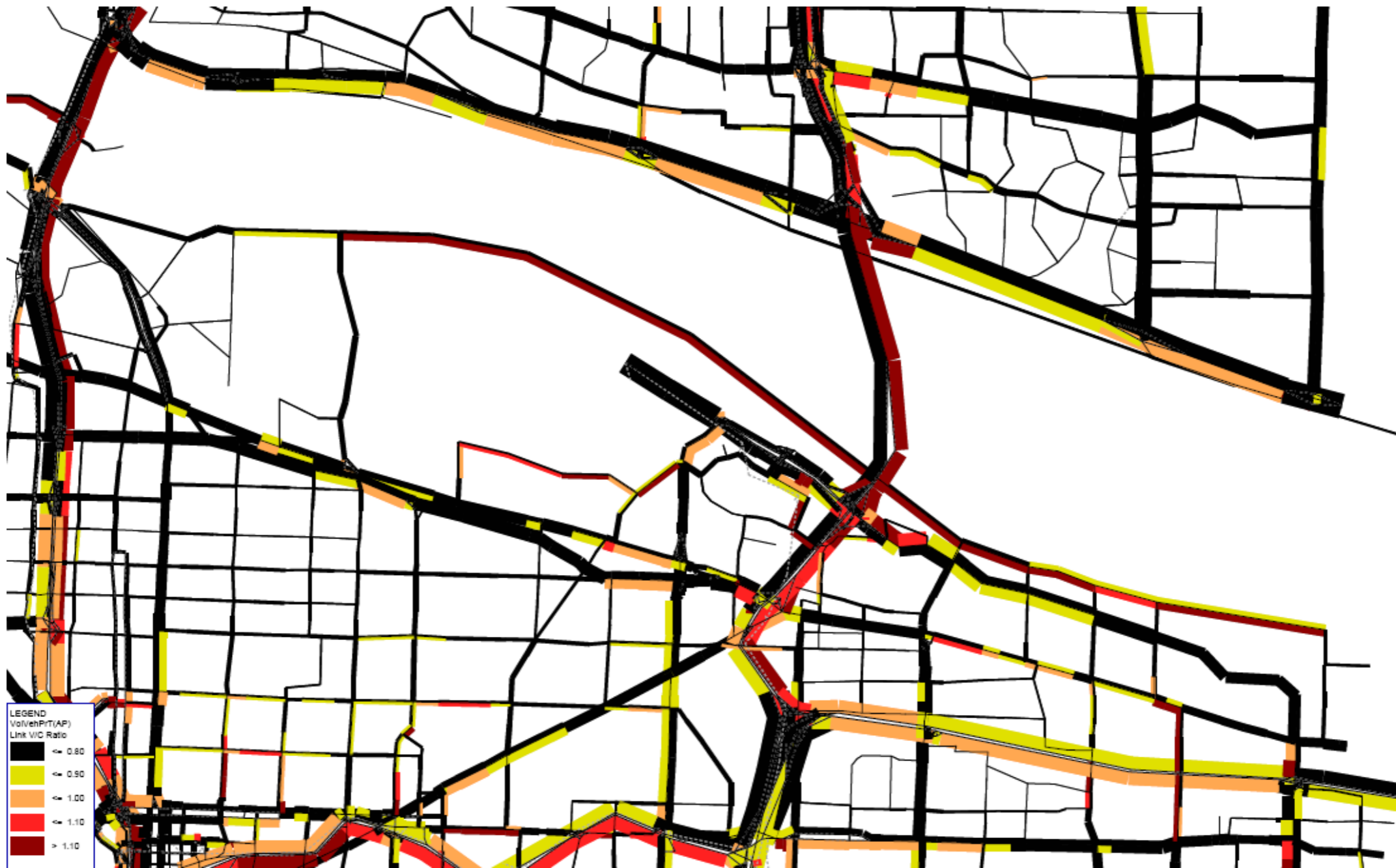
50% Centralized Results



Future (2035) Results

V/C Plot

50% Centralized



Secondary Study Area



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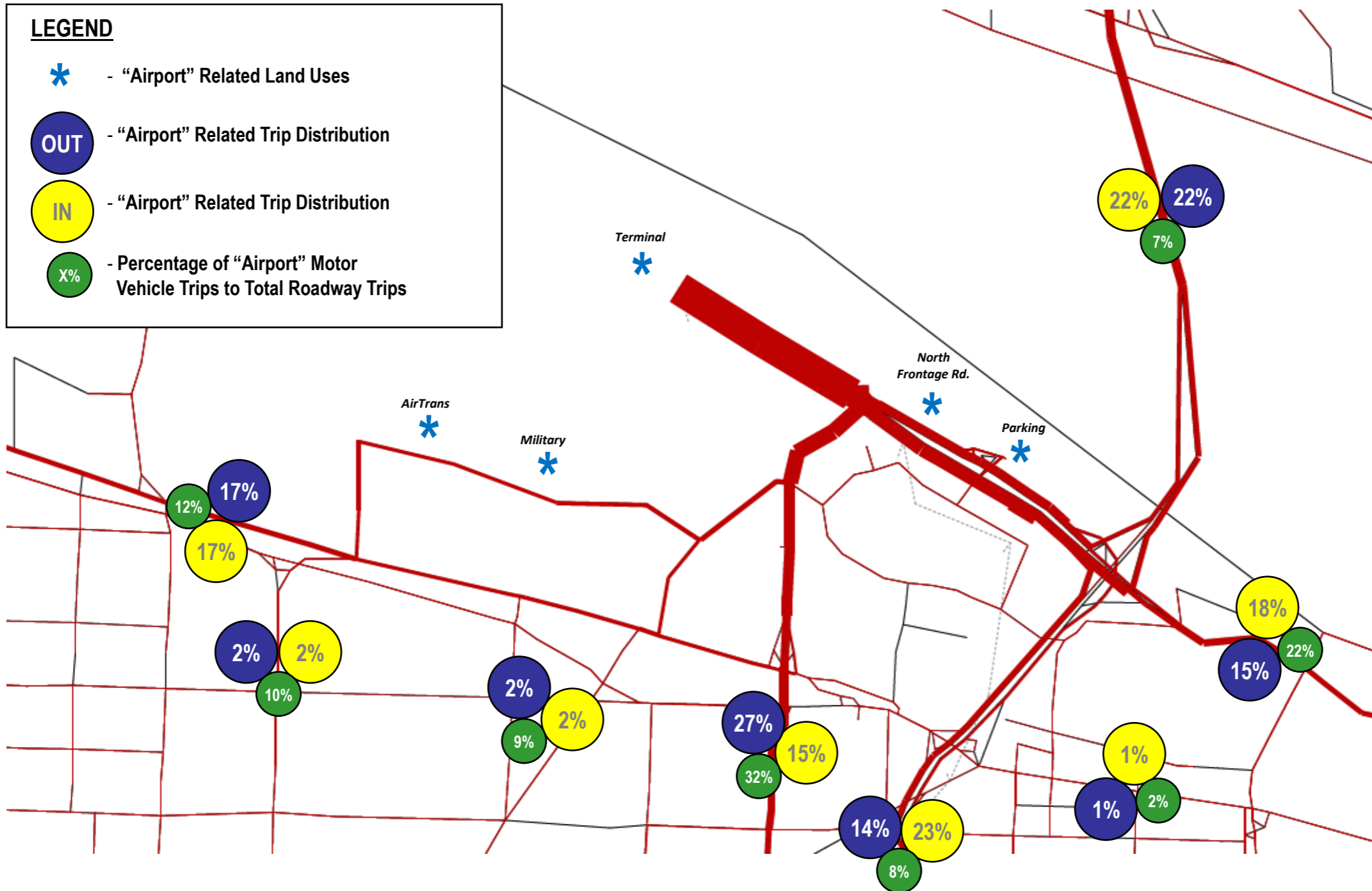


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Future (2035) Model

Airport Trip Distribution

50% Centralized



FUTURE 2035 MODEL

90% Centralized Results
90% Decentralized Results



Future (2035) Results

90% Centralized

V/C Plot



Secondary Study Area



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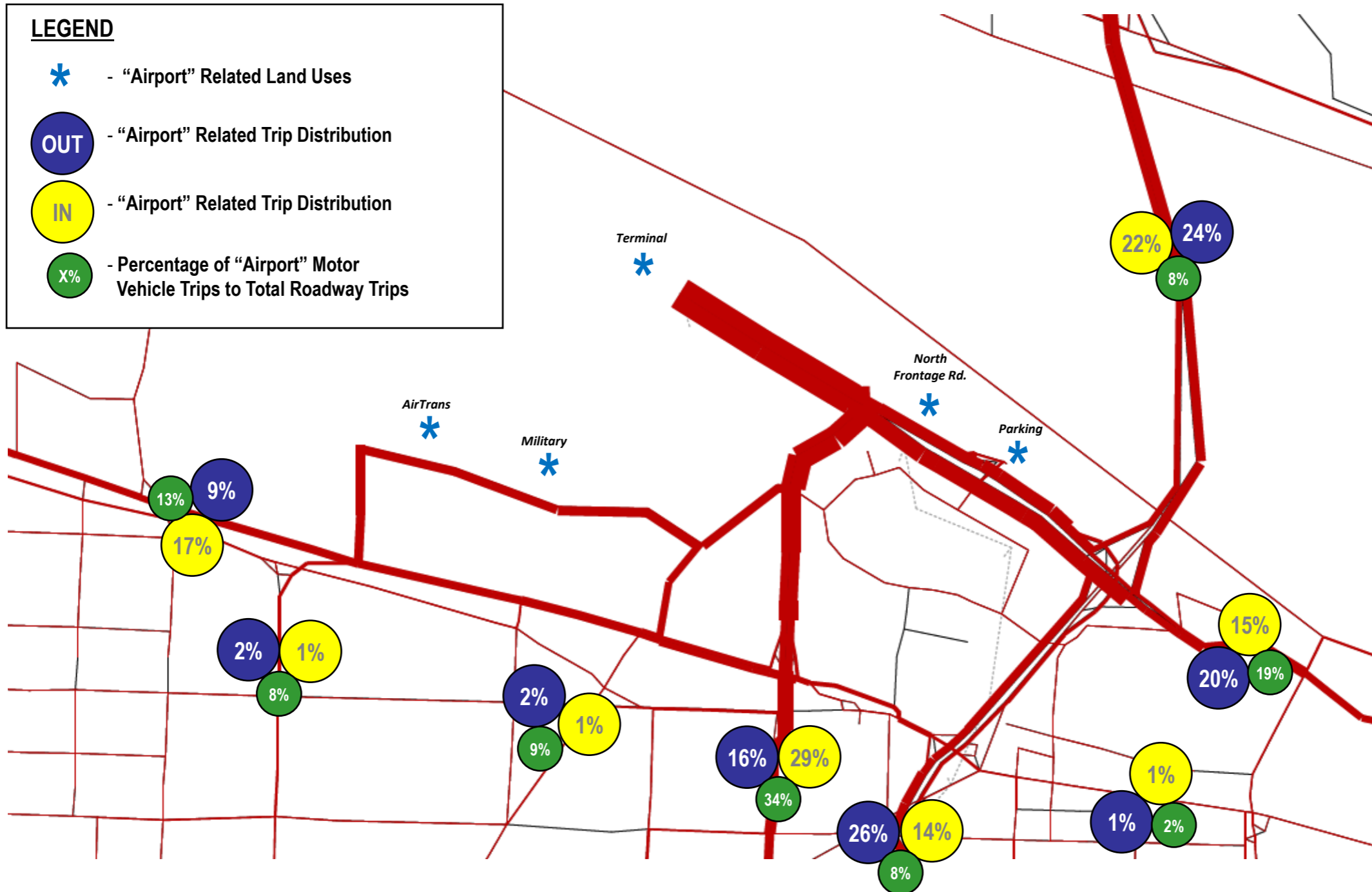
Future (2035) Results

90% Centralized

Airport Trip Distribution

LEGEND

- * - "Airport" Related Land Uses
- OUT - "Airport" Related Trip Distribution
- IN - "Airport" Related Trip Distribution
- X% - Percentage of "Airport" Motor Vehicle Trips to Total Roadway Trips



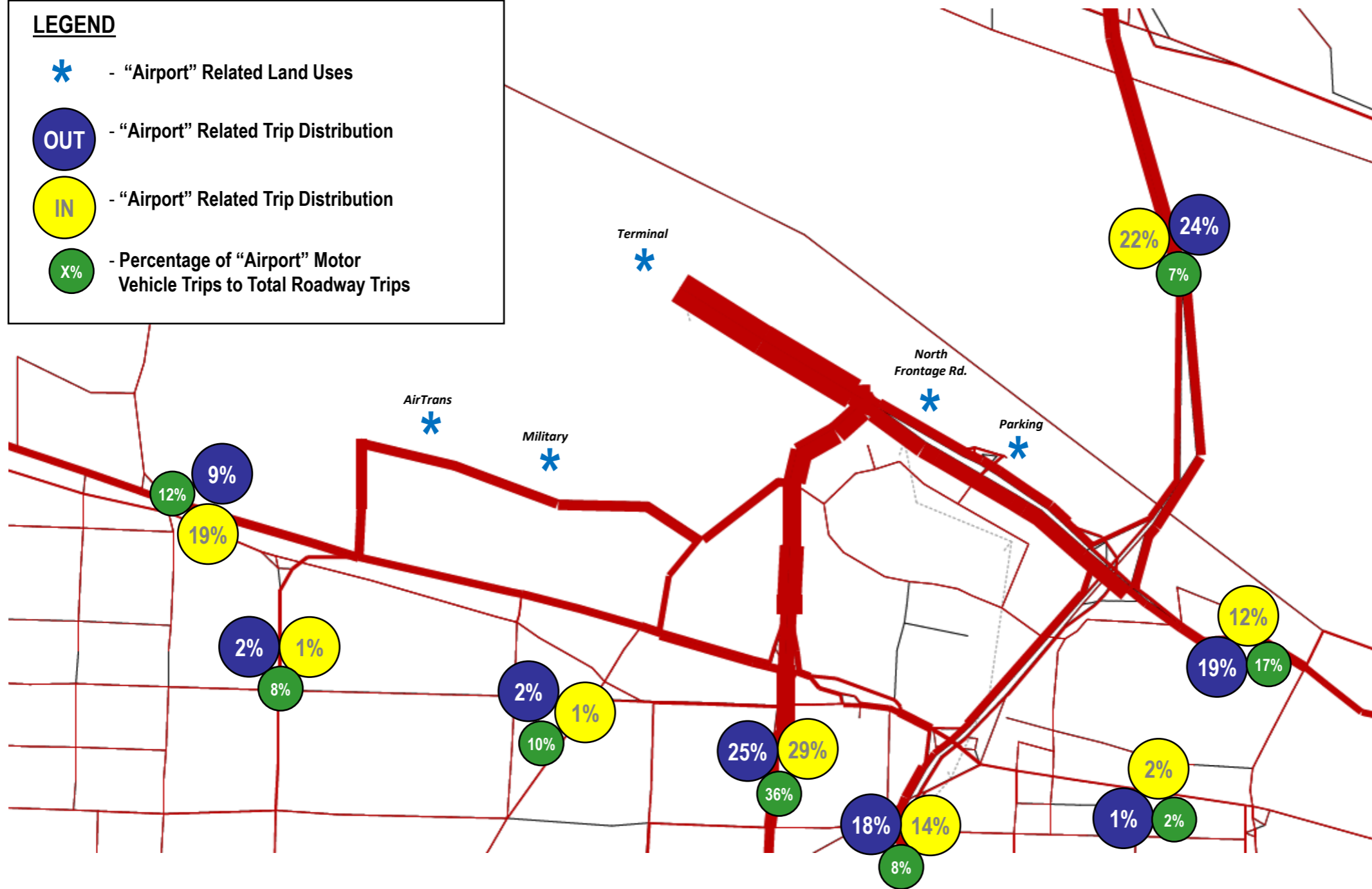
Future (2035) Results

90% Decentralized

Airport Trip Distribution

LEGEND

- * - "Airport" Related Land Uses
- OUT - "Airport" Related Trip Distribution
- IN - "Airport" Related Trip Distribution
- X% - Percentage of "Airport" Motor Vehicle Trips to Total Roadway Trips



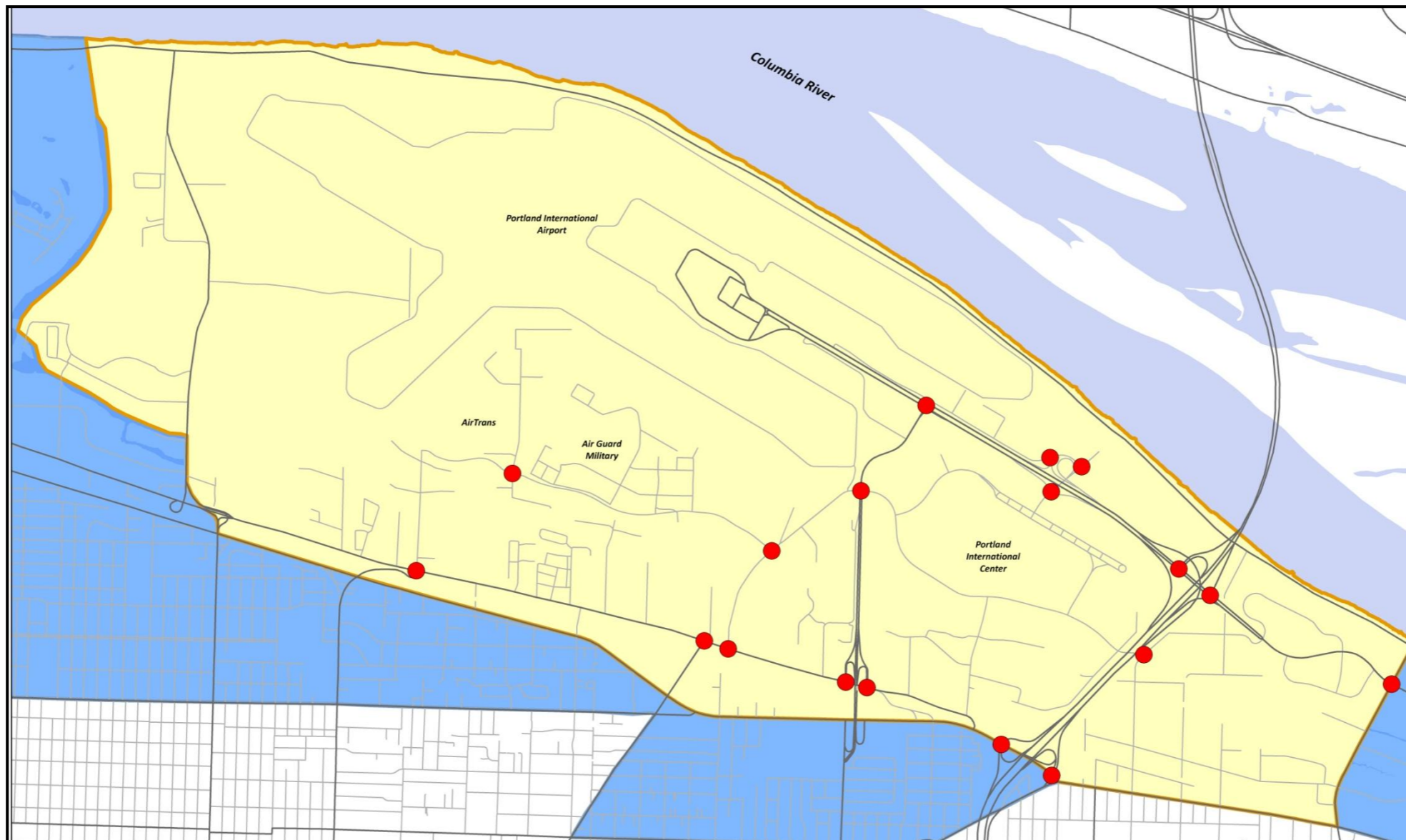
General Conclusions

- Heavier dependence on arterials in future
- Minor intrusion into neighborhoods from “Airport” traffic
- 50% Centralized vs. 90% Centralized
 - More impacts on NE Columbia Boulevard
 - More impacts on NE 82nd Avenue
 - NE Cornfoot Road as a cut-through
- Differences in Centralized vs. Decentralized at the 90% level are localized



Next Steps

- Intersection analysis for future 2035 planning horizon
- Interim planning year horizon analysis (2022)




PAG Questions and Discussion



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