



# Recommended Seven Corners Conceptual Street Network “Ring Road” Clarification

Seven Corners Task Force Meeting  
September 9, 2014



# Assumptions for Transportation Study

- Future roadways, in neighboring jurisdictions, have impacts to Seven Corners roadway network.
- For analysis, include all potential future connections, including those located in, and will be implemented by, neighboring jurisdictions.
- Model roads in neighboring jurisdictions at capacity levels desired by their implementing authority.
- Final network recommendation will not include future roadways in neighboring jurisdictions, where Fairfax County has no authority to implement transportation improvements.



# Potential Future Roads in the City of Falls Church for Seven Corners Transportation Study

➤ Source:



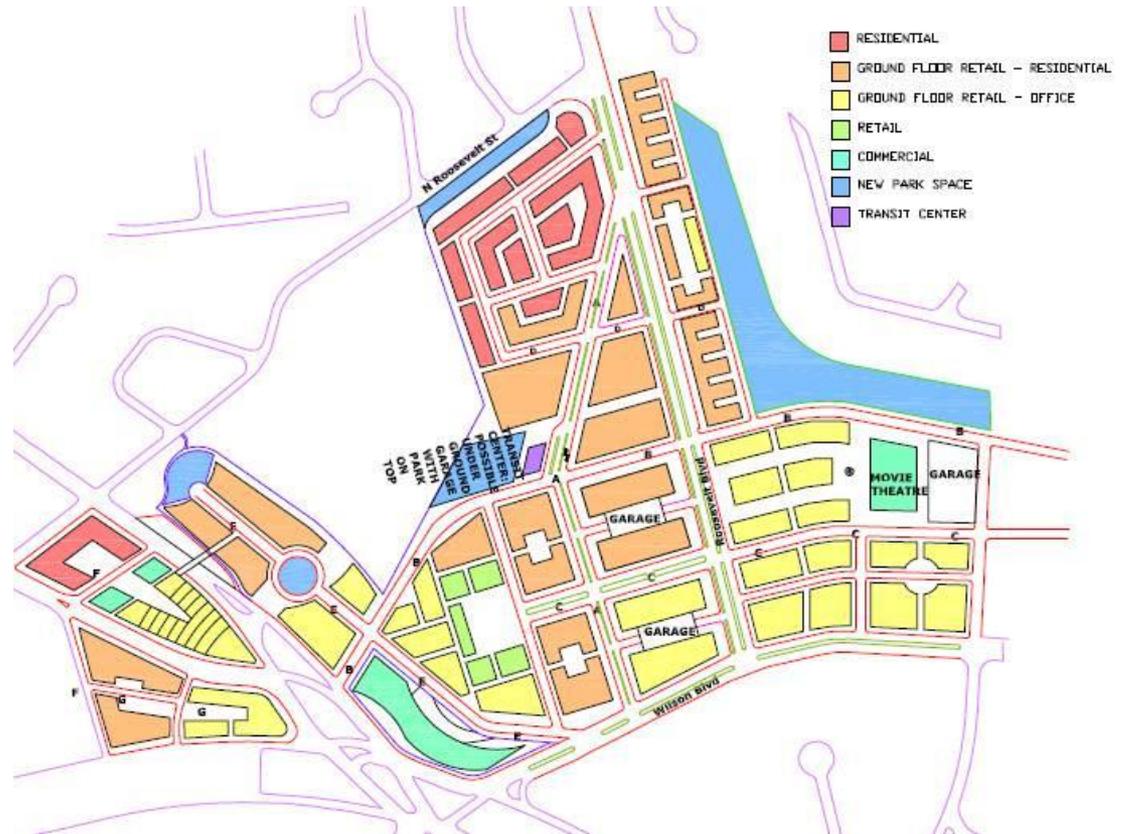
- Performed by: Virginia Tech Planning Studio Students 2009.
- Performed for: City of Falls Church Economic Development Director & City of Falls Church Development Services Director.
- Presented to Seven Corners Task Force: By City of Falls Church Planning Staff in Spring 2013.



## 2050 Falls Church EASTERN GATEWAY CONCEPT PLAN

### ➤ Plan for Eden Center:

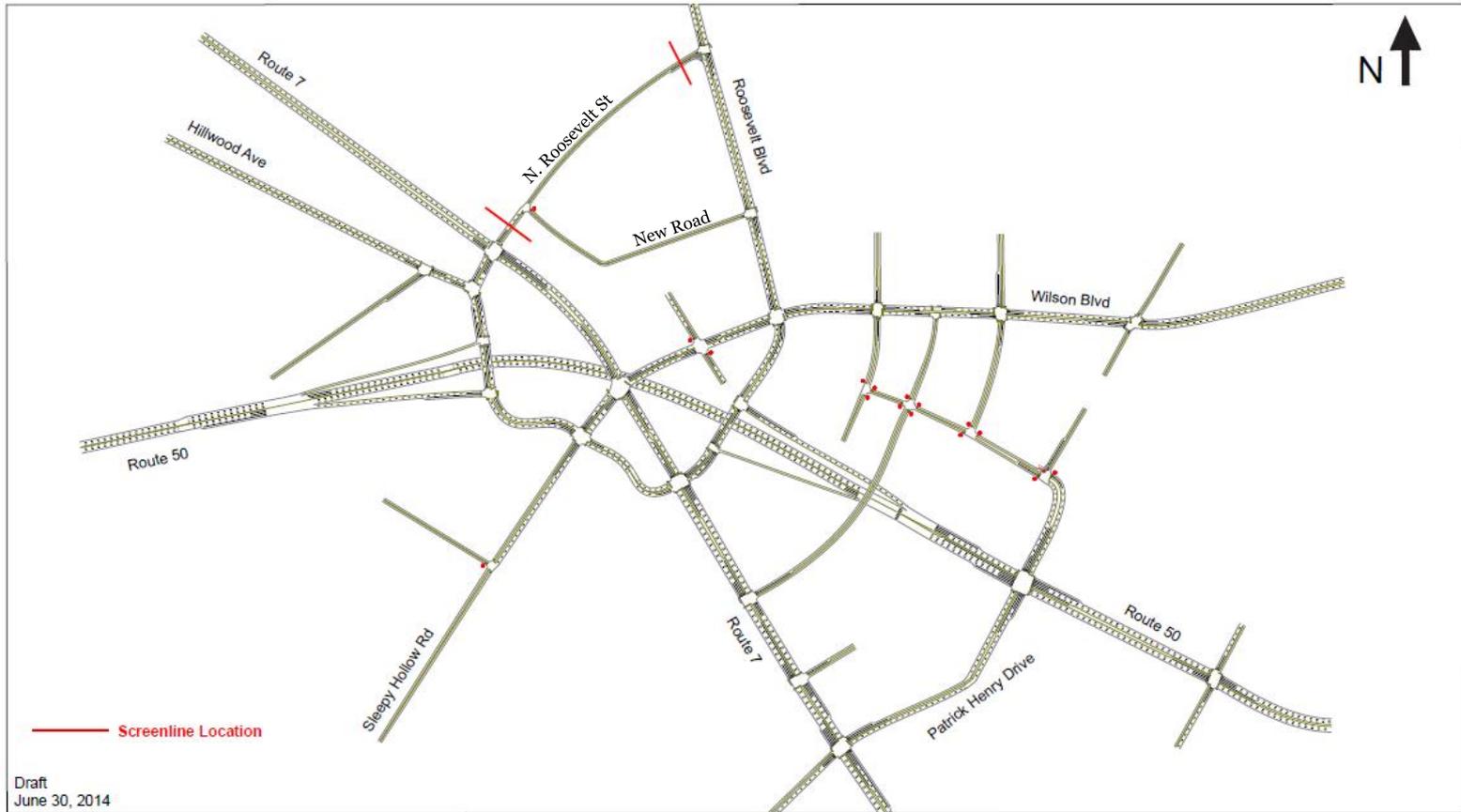
- New roadway connections from Roosevelt Blvd to Rt.7 and near N. Roosevelt St, behind Eden Center.
- Similar connections modeled in the Seven Corners Transportation Study, for all concepts analyzed, as low capacity, neighborhood streets, one-lane per direction.





# Network Analyzed for Concept B

Figure 15. Synchro Network for Concept B with Lane Assignments

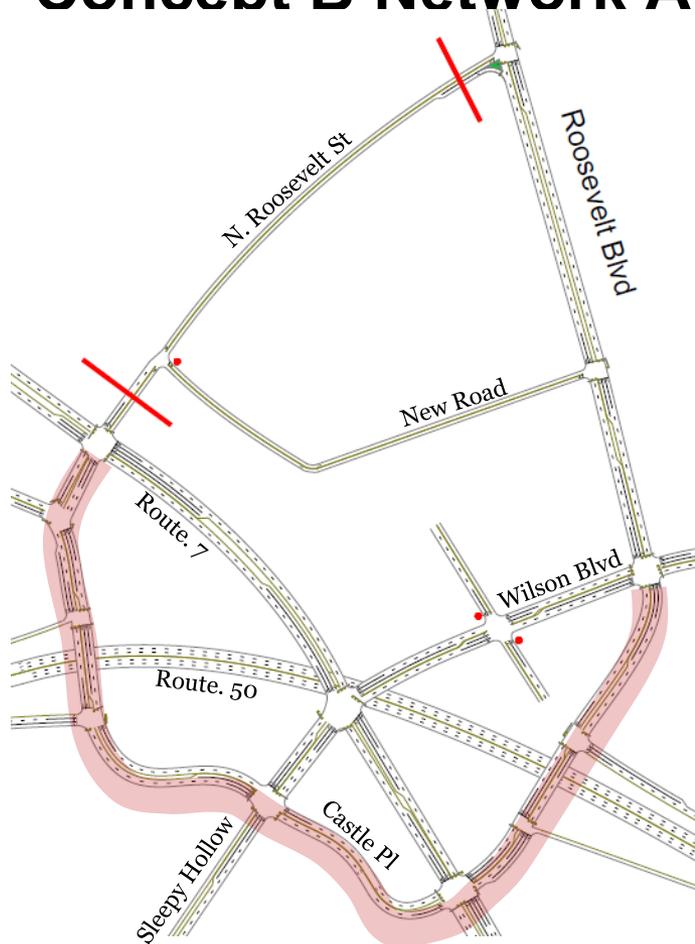


48

Note: Above network includes potential future roadway connections, similar to connections shown in the City of Falls Church 2050 Eastern Gateway Plan, that are outside of Fairfax County's authority to implement. These connections were included in the analysis to provide an accurate assessment of potential future conditions. It should be noted that the new Rt.50 crossing, on the west side of the Seven Corners Interchange, has been shifted east, outside of the City of Falls Church, in the final recommended roadway network for Seven Corners.



## Concept B Network Analyzed “Ring Road” Zoomed In



- N.Roosevelt St and “New Road” were modeled as low capacity, one-lane in each direction, neighborhood streets.
- All other links, including the “Ring Road”, were modeled as higher capacity, 2 to 3 lanes in each direction, streets.

- Screen Line Location:
- Ring Road:

Note: Above network includes potential future roadway connections, similar to connections shown in the City of Falls Church 2050 Eastern Gateway Plan, that are outside of Fairfax County’s authority to implement. These connections were included in the analysis to provide an accurate assessment of potential future conditions. It should be noted that the new Rt.50 crossing, on the west side of the Seven Corners Interchange, has been shifted east, outside of the City of Falls Church, in the final recommended roadway network for Seven Corners.



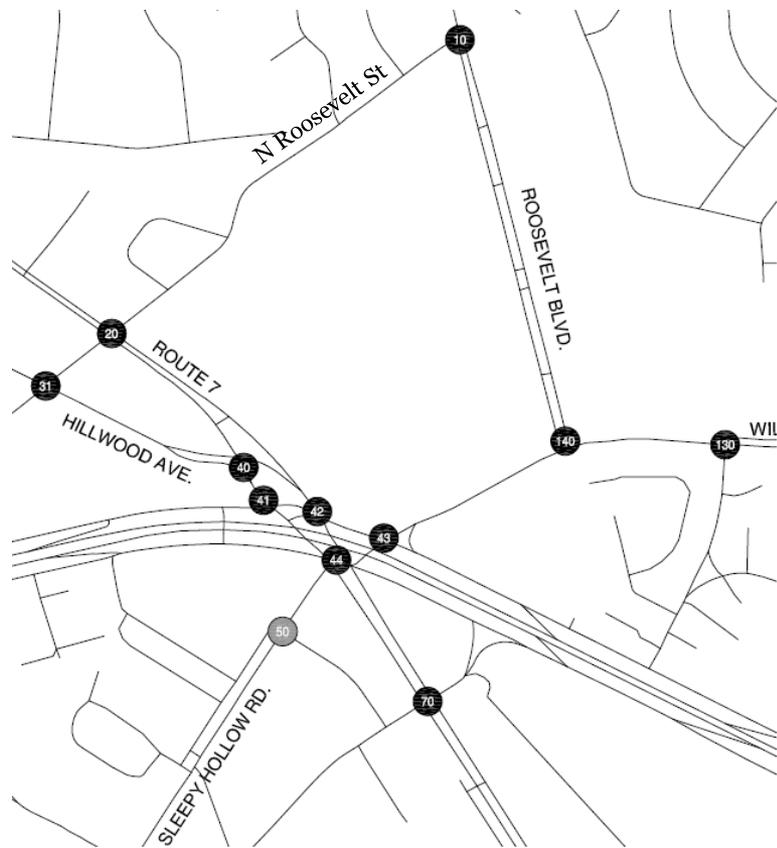
# Transportation Modeling Roadway Trip Assignments

- Based on:
  - Trip Origins and Destinations (Function of land-uses),
  - Roadway Desirability factors
    - Vehicle Capacity (number of lanes)
    - Roadway Speed (function of speed limit, capacity and volume)
    - Green time at signalized intersections (higher capacity roads get longer green time)
  
- Summary: The model assigns larger volumes of trips onto the most desirable routes, which are those with greatest capacity, vehicle speed and green time at signalized intersections.

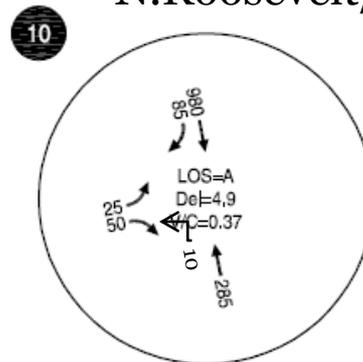


# N. Roosevelt Trip Assignments Comprehensive Plan Land-use and Transportation

Weekday PM Peak Hour

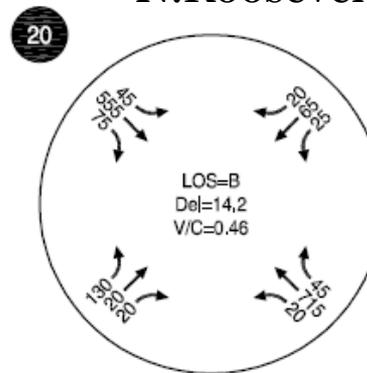


N.Roosevelt/Roosevelt Blvd



Total vehicles going to/from N. Roosevelt : 170

N.Roosevelt/Route. 7

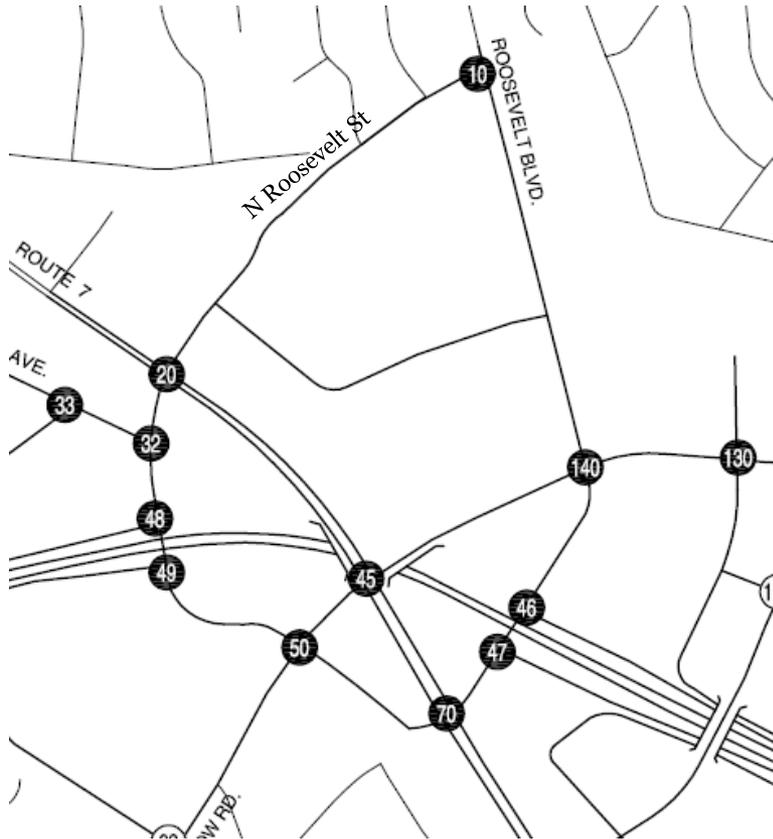


Total vehicles going to/from N. Roosevelt : 220

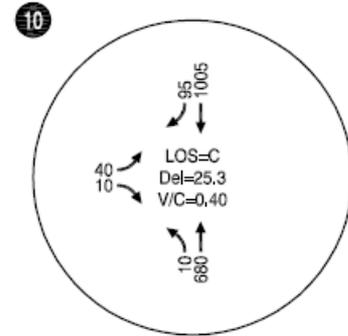
Note: Graphics and data above are shown in Figure 35 of the Seven Corners Transportation Study Phase II.



# N. Roosevelt Trip Assignments Concept B/Task Force Land-use Weekday PM Peak Hour

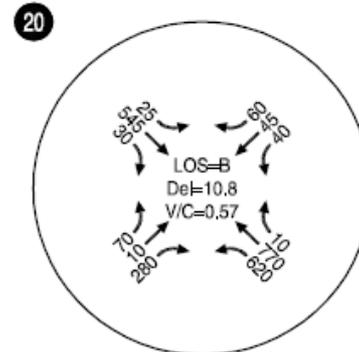


N.Roosevelt/Roosevelt Blvd



Total vehicles going to/from N. Roosevelt : 155

N.Roosevelt/Route. 7



Total vehicles going to/from N. Roosevelt : 190

Note: Above network includes potential future roadway connections, similar to connections shown in the City of Falls Church 2050 Eastern Gateway Plan, that are outside of Fairfax County's authority to implement. These connections were included in the analysis to provide an accurate assessment of potential future conditions. It should be noted that the new Rt.50 crossing, on the west side of the Seven Corners Interchange, has been shifted east, outside of the City of Falls Church, in the final recommended roadway network for Seven Corners. Figures and data above can be found in Figure 36 of the Seven Corners Transportation Study Phase II Final Report.



## **N. Roosevelt Trip Assignments Comprehensive Plan vs Concept B/Task Force Land-use Weekday PM Peak Hour**

<b>2040 Weekday PM Peak Hour Forecasted Trips to/from N. Roosevelt</b>		
<b>Intersection (Screenline Location)</b>	<b>Comprehensive Plan</b>	<b>Concept B</b>
N. Roosevelt St at Roosevelt Blvd	170	155
N. Roosevelt St at Route. 7	220	190

Note: Data for intersections compiled using Figures 35 & 36 in Seven Corners Transportation Study Phase II

---

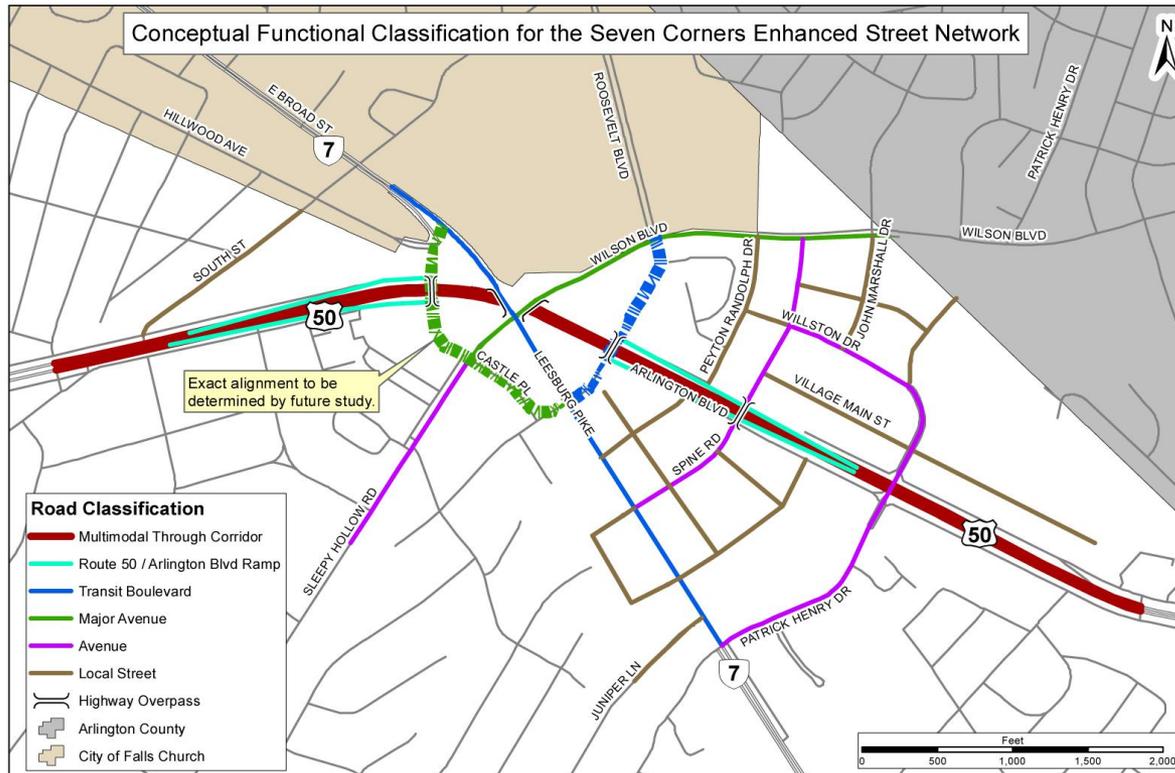


## Conclusions

- Concept B scenario results in fewer trips to/from N. Roosevelt St than Comprehensive Plan scenario in the Weekday PM Peak Hour.
  - Due to more desirable trip paths.
- N. Roosevelt St. wasn't modeled or intended to function as part of the "Ring Road".
- Excluding N. Roosevelt St. and other potential future roads within Falls Church City has little to no impact on how the recommended roadway network will function.



# Questions?



Note: Graphic above depicts the recommended Seven Corners roadway network included in the Seven Corners Comprehensive Plan update as of 9-9-14.