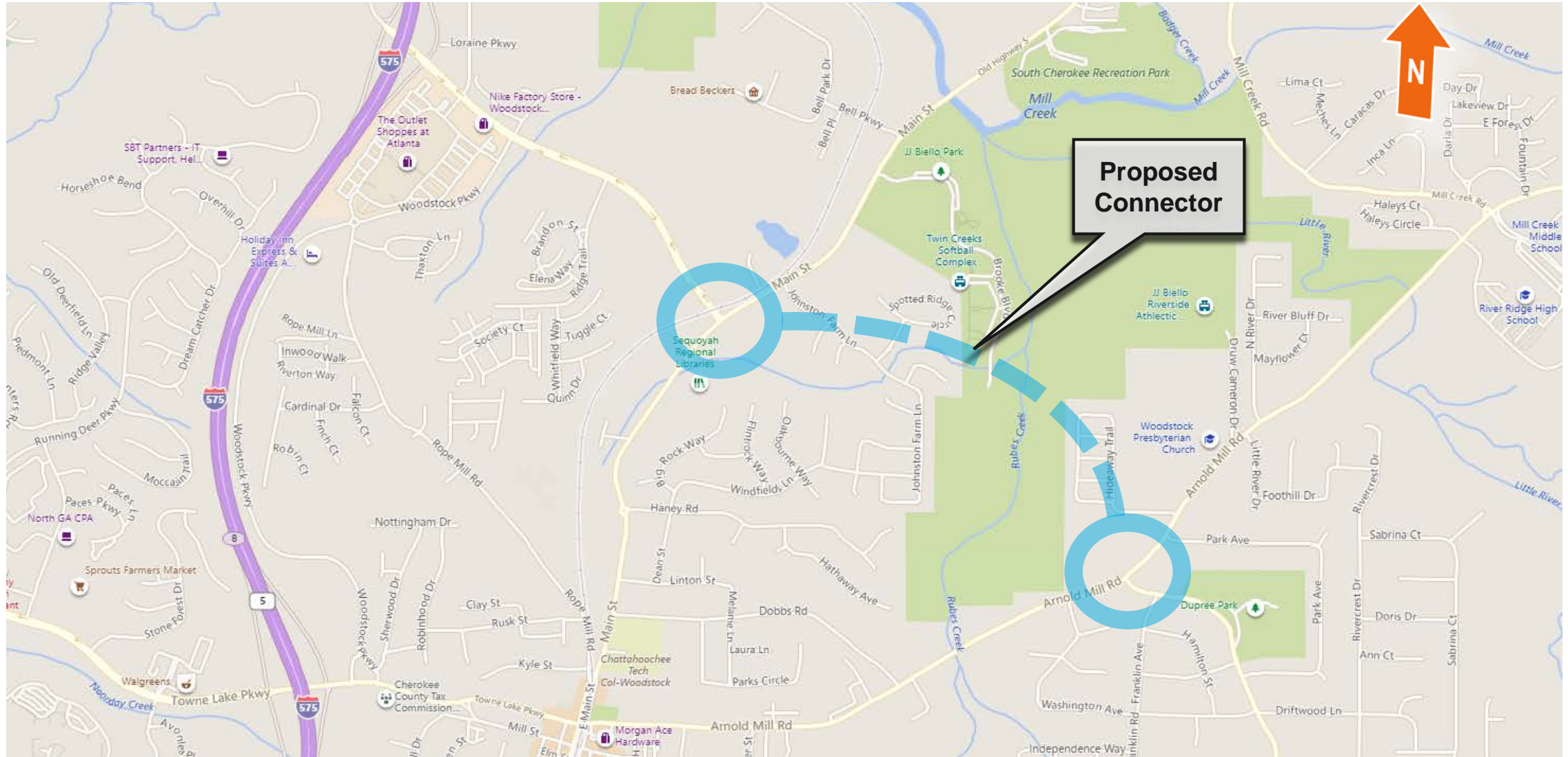


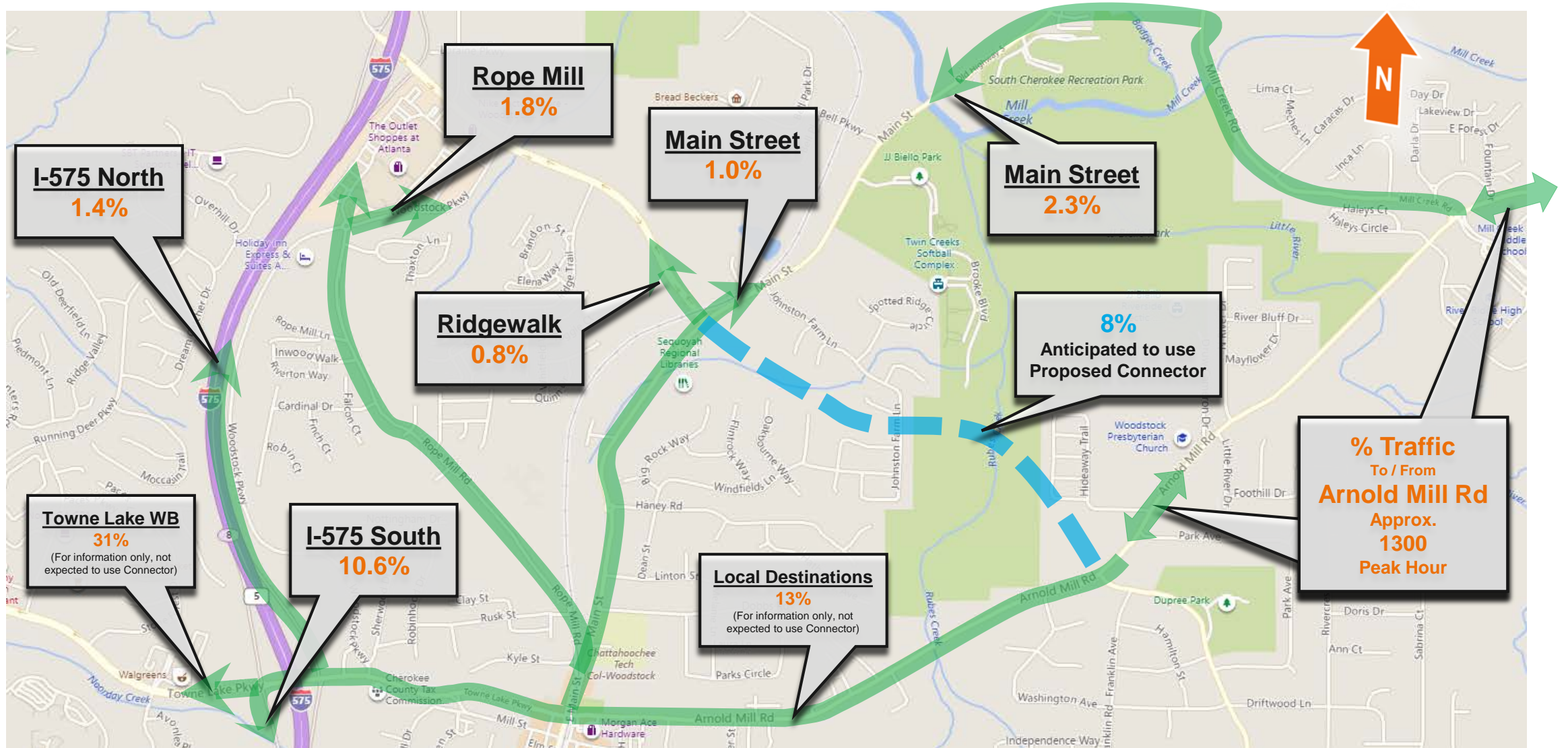
# Arnold Mill Connector Traffic Study and Alternative Review

Final Presentation to City Council  
March 18, 2019

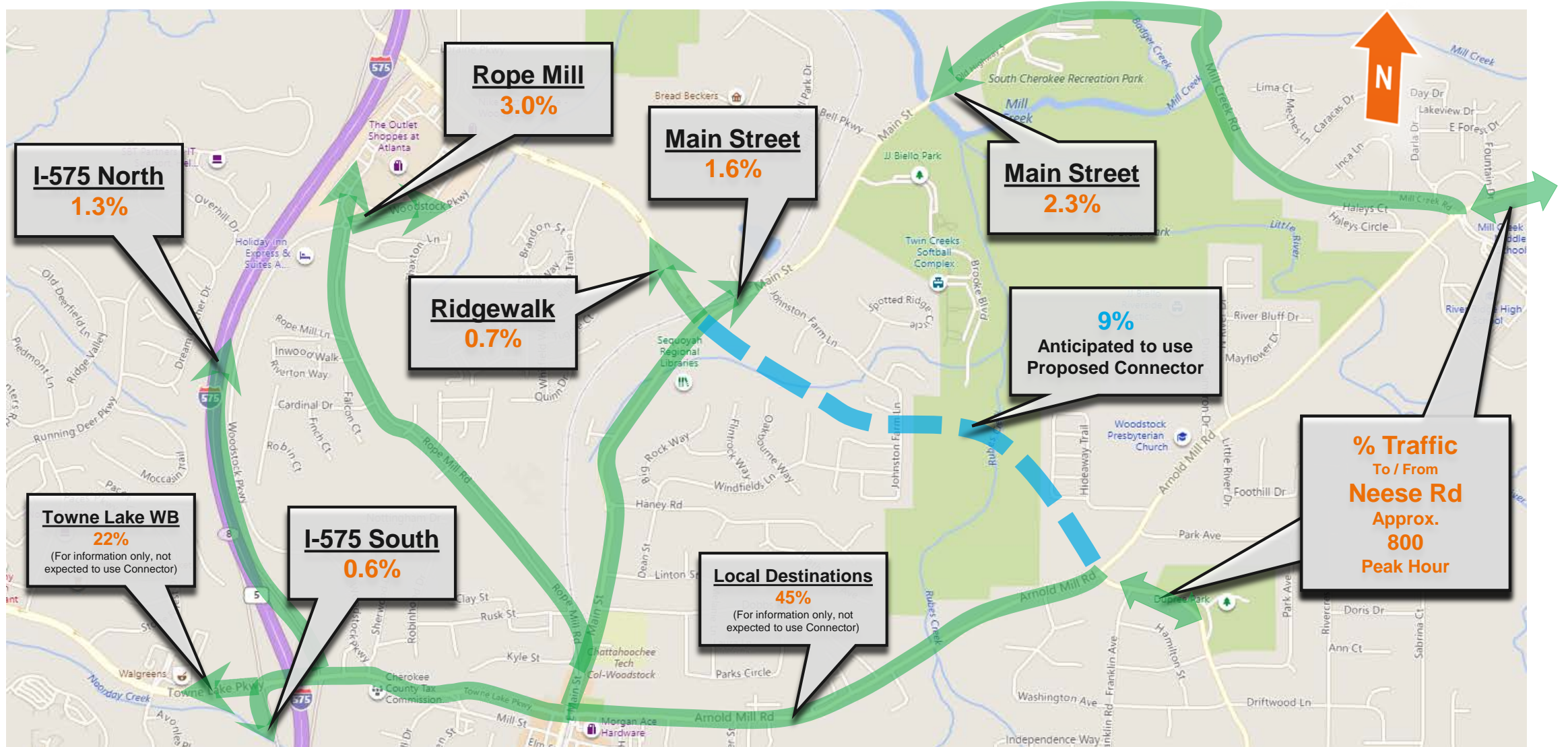
# Arnold Mill Connector – Introduction



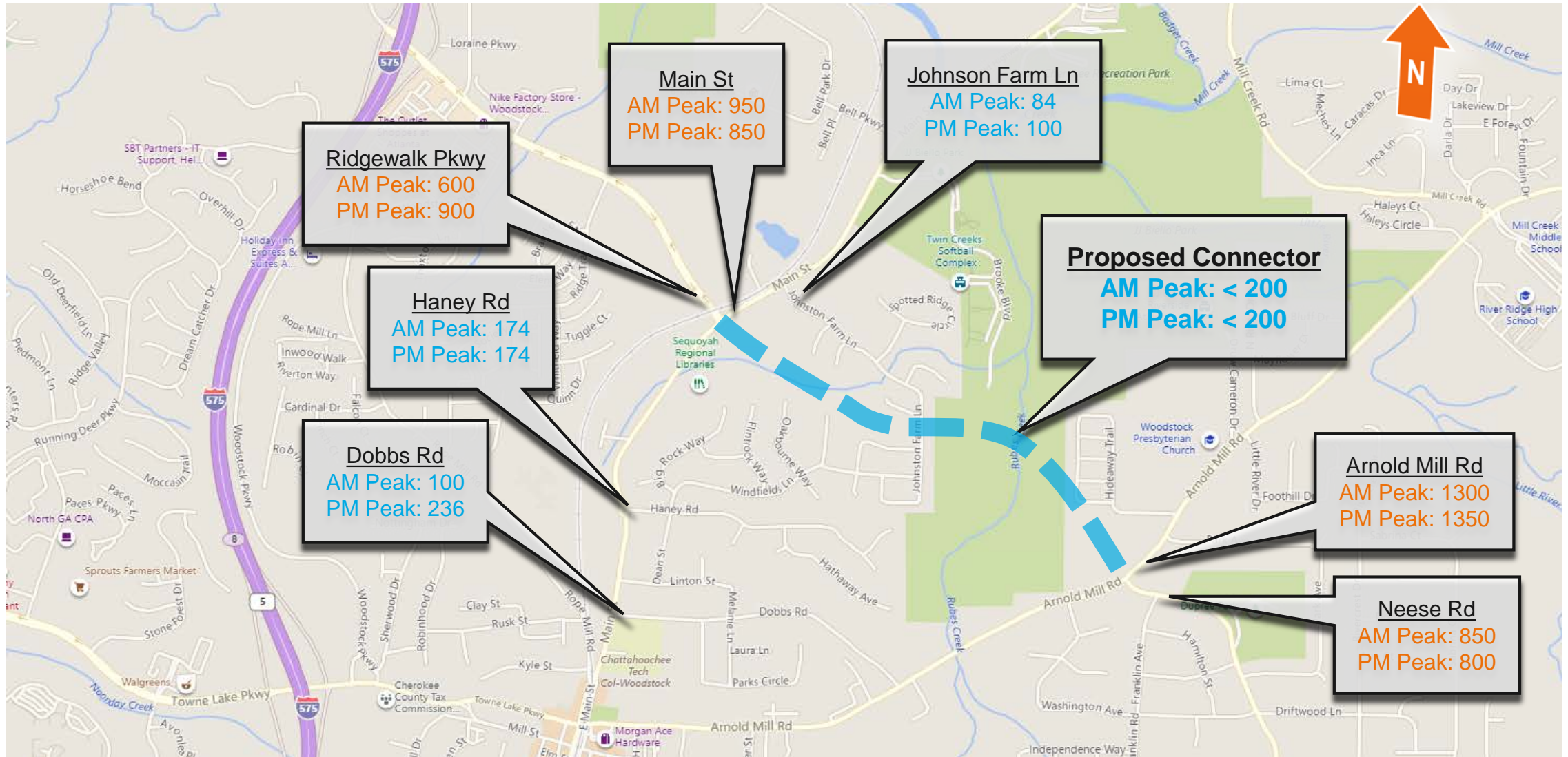
# Arnold Mill Connector – O/D Traffic Data from Arnold Mill Rd



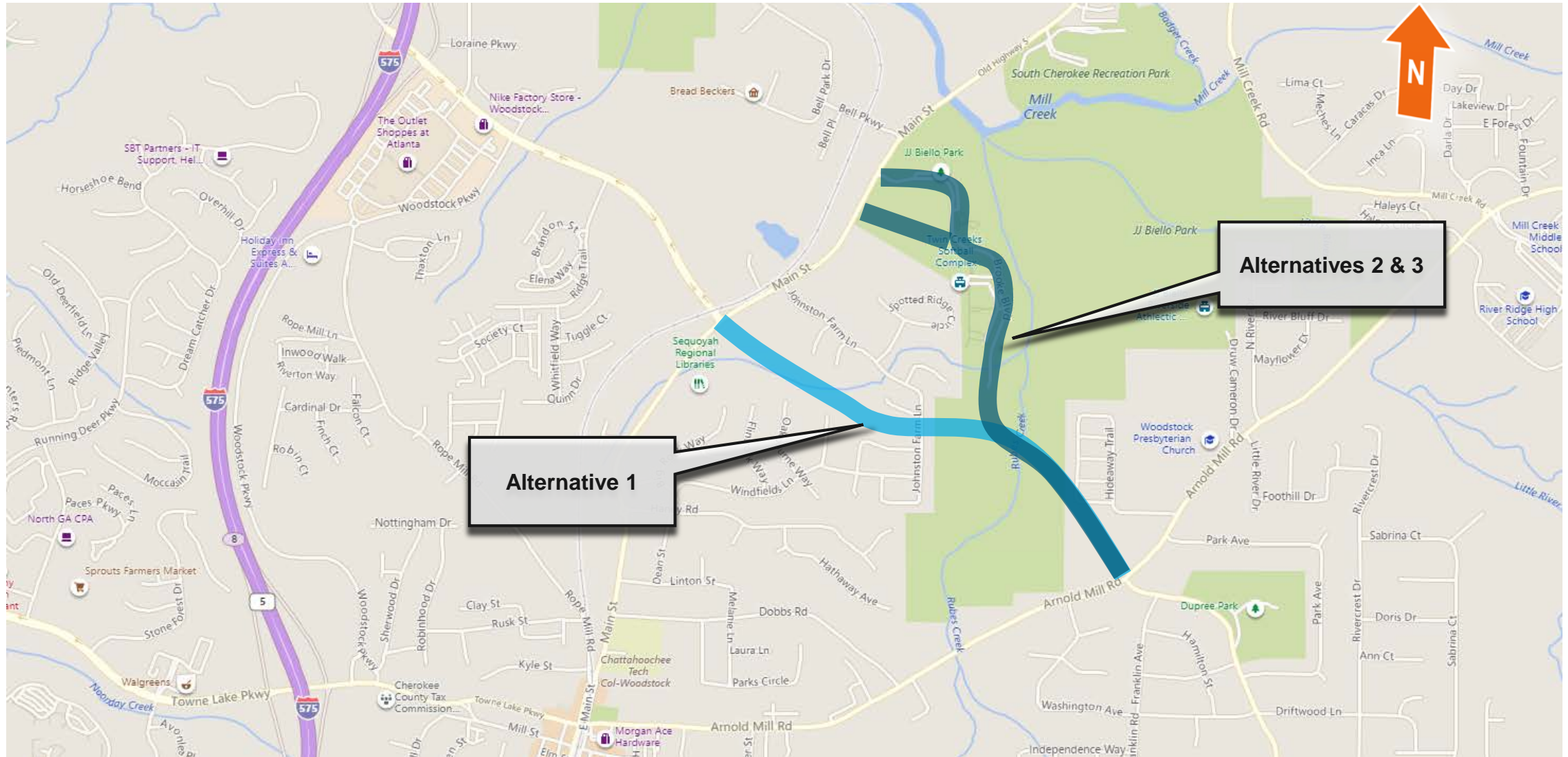
# Arnold Mill Connector – O/D Traffic Data from Neese Road



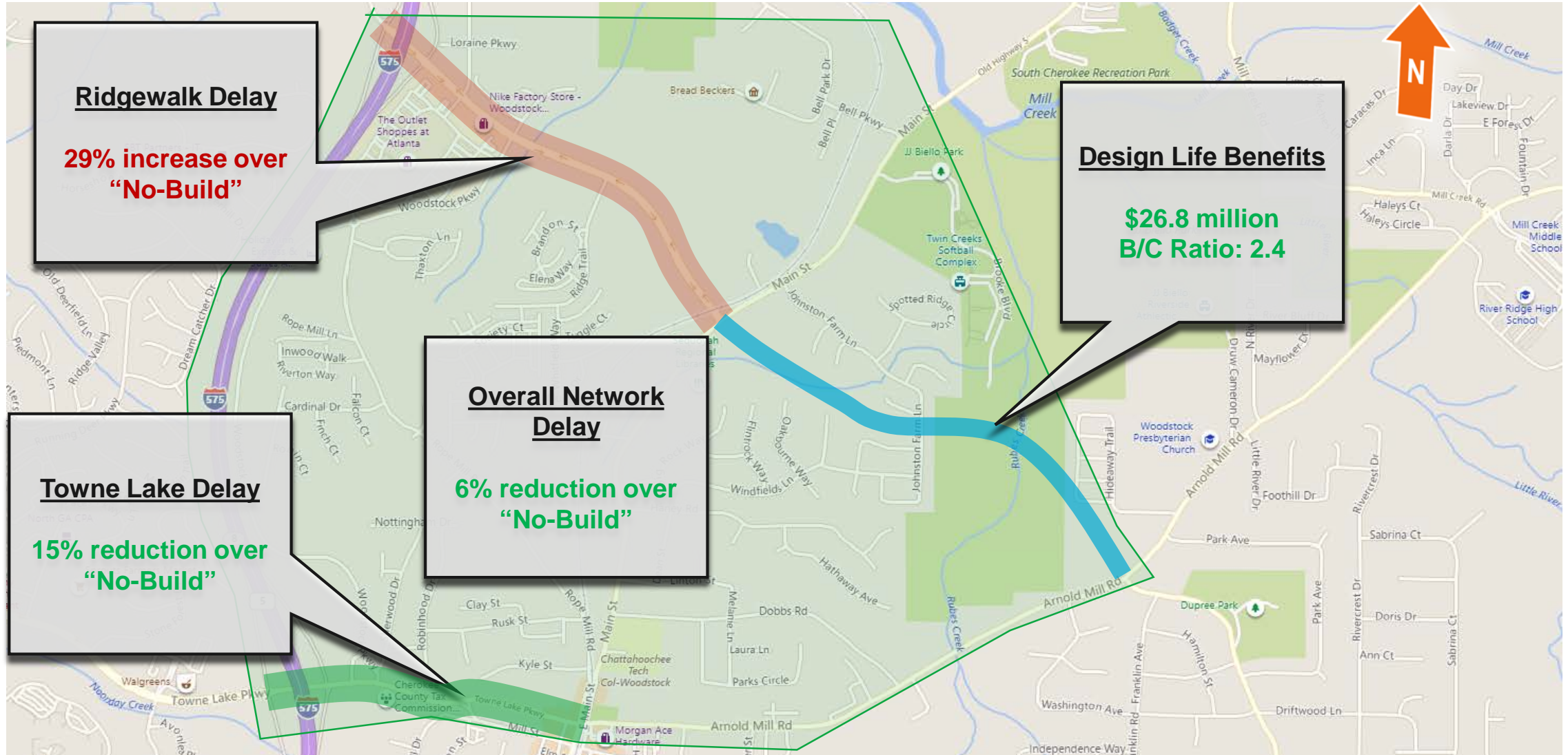
# Arnold Mill Connector – Estimated Traffic Volumes



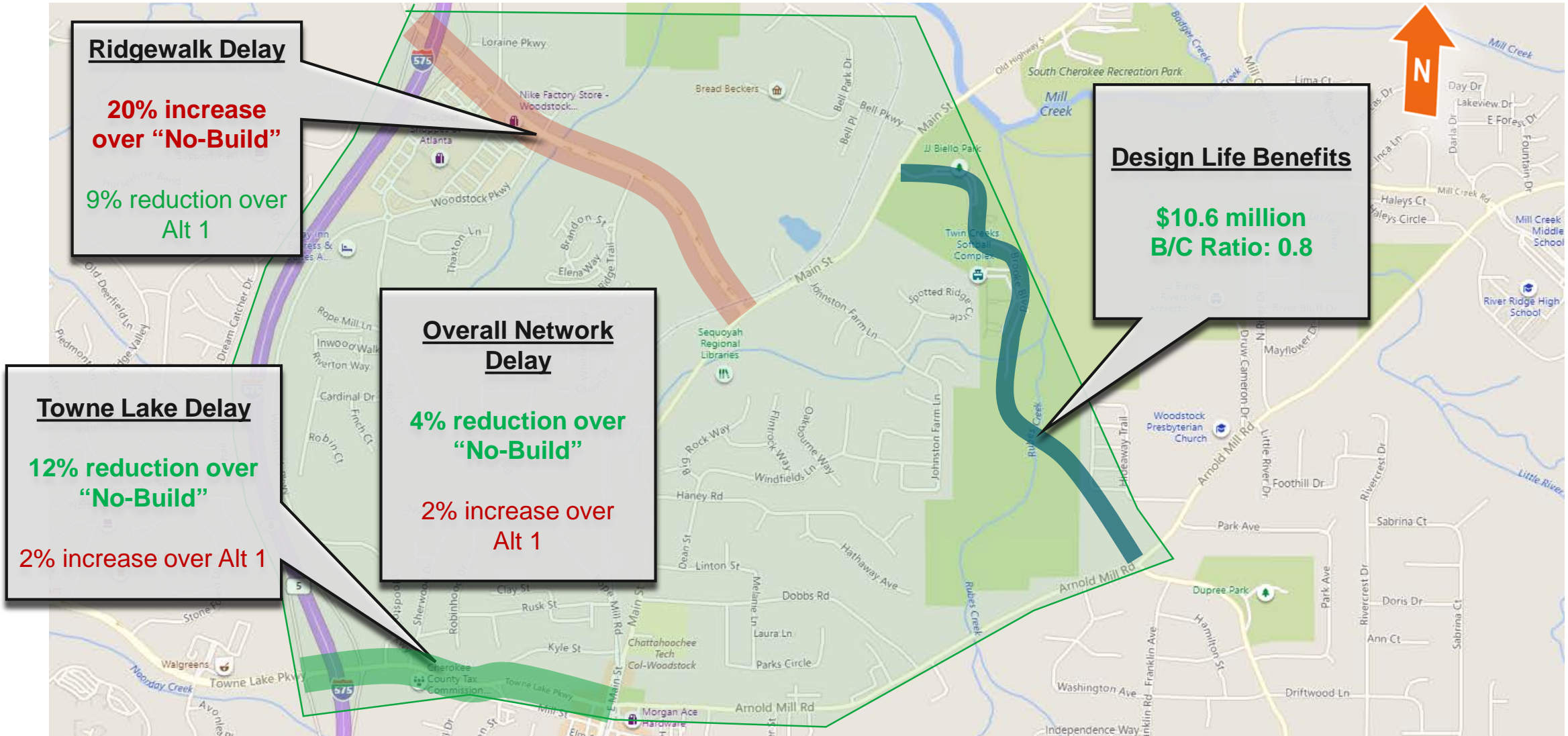
# Arnold Mill Connector – Alternatives Reviewed



# Arnold Mill Connector – Alt 1 – Design Year Traffic Results



# Arnold Mill Connector – Alt 2 – Design Year Traffic Results





# Arnold Mill Connector – Alternative Comparison

	Alternative 1	Alternative 2
Est. Project Cost	<b>\$11.3 million</b>	\$13.6 million
Design Life Benefits	<b>\$26.8 million</b>	\$10.6 million
Benefit / Cost Ratio	<b>2.4</b>	0.8
Design Speed	<b>45 mph</b>	30 mph
USACE Floodplain Property Impacts	3.7 acres	3.7 acres
JJ Biello Park Impacts	<b>None</b>	Impacts to one softball field, parking areas, and bisects planned park expansion
Woodstock Knoll Subdivision Impacts	Potential noise impacts and safety concerns with pedestrians crossing proposed connector	<b>None</b>

**Alternative 1 is preferred**

# Arnold Mill Connector – Conclusions

It is a logical connection, saving travel time for users, and relieving congestion on other roadways;  
However...

- Data indicates there is not significant user demand at this time
- Thus, relatively low traffic volumes are projected to use the roadway
- Provides an overall benefit, but benefit is fairly small due to low traffic volumes
- Would negatively impact some roadways / intersections (Ridgewalk Parkway)
- Benefit is derived from many small improvements spread over the entire network
- B/C is similar to other recommended project B/Cs, but not comparable due to:
  - A “larger net cast” to capture benefits for this project
  - Benefits for this project involve more risk due to uncertainty with user demand

# Arnold Mill Connector – Recommendations

- Focus on other projects until O/D data supports stronger user demand
- Keep the Project in the Long Range Plan
- Periodically obtain new O/D data as development and traffic patterns change
- Preserve the right-of-way dedicated for Alternative 1
- If the user demand supports the Project in the future, recommend Alt 1 due to:
  - Alt 1 has a greater anticipated B/C
  - Alt 1 has more direct route and higher design speed, encouraging more use
  - Alt 2 impacts to JJ Biello Park could be considered an adverse environmental impact

# Any Questions?



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