

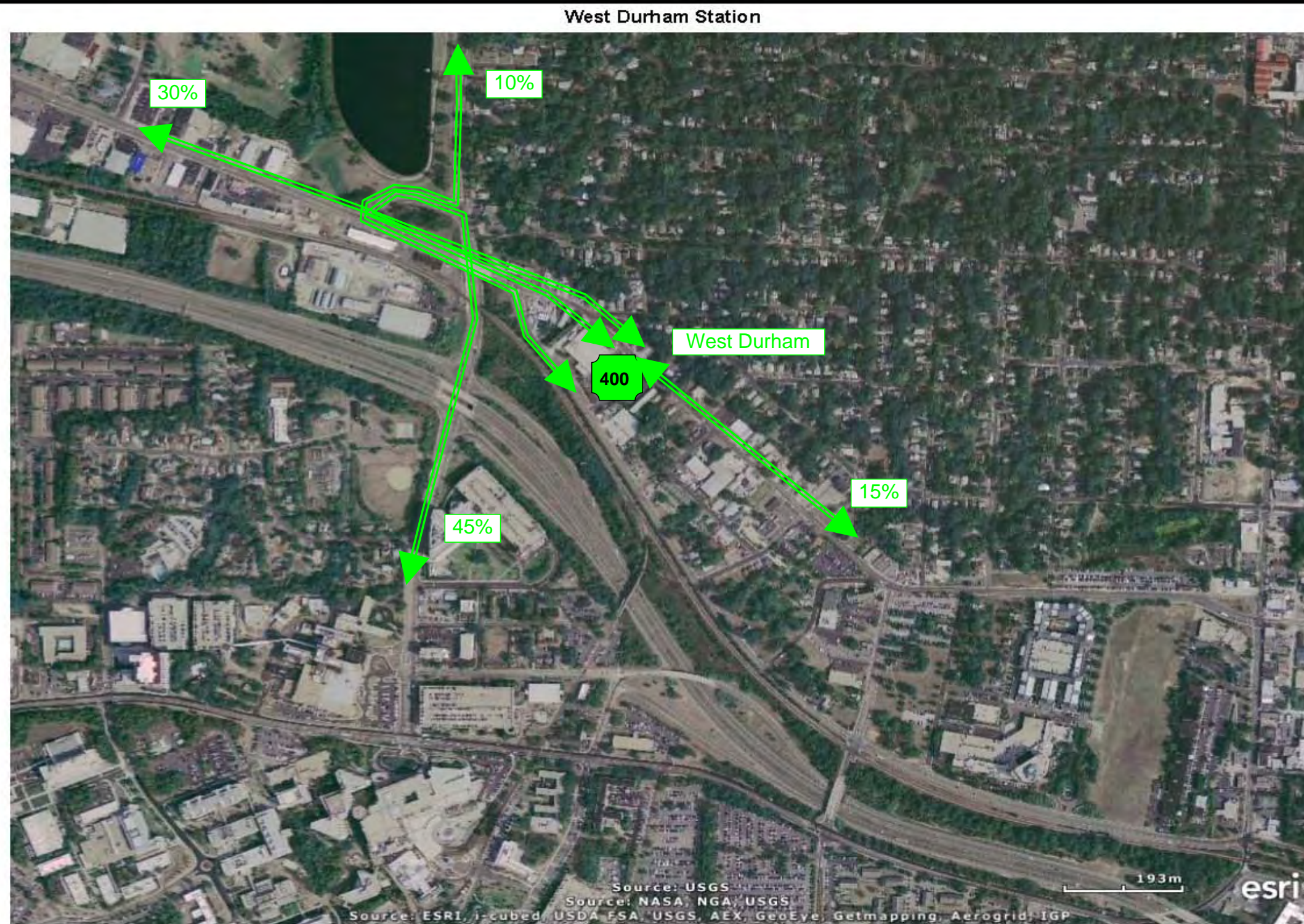


Appendix D – Build Forecast Development

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Overall Trip Distribution

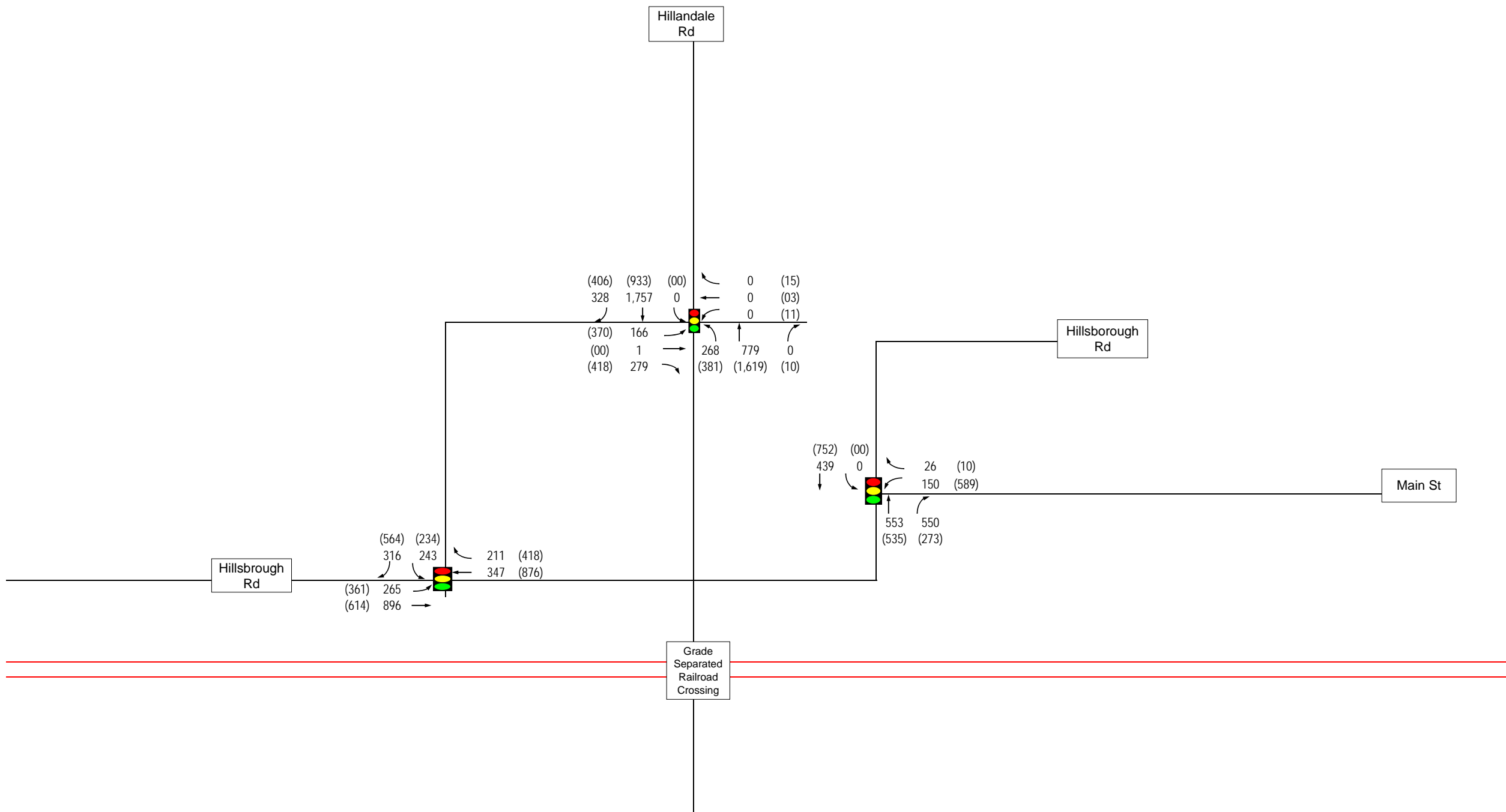
NOTES



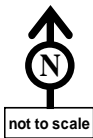
It was assumed that 30% of the traffic would be from the west along Hillsborough Road, 10% from the area to the north along Hillendale Road, 45% from the area to the south along Fulton Street, 15% from Hillsborough Road to the east. Given that the station can be accessed from Hillsborough Road and Main Street, it was assumed that 50% of the traffic coming from the west would access the station from Hillsborough Road.

Trip Generation Summary

ITE Land Use Code 90		
AM Peak Equation	Trips = (0.83 * Parking Spaces) - 43.4	
PM Peak Equation	Trips = (0.63 * Parking Spaces) - 5.94	
Percent Entering	AM Peak	PM Peak
Percent Exiting	19%	77%
West Durham		
Parking Spaces	400	
	AM Peak	PM Peak
Total Trips	289	246
Entering	234	57
Exiting	55	189

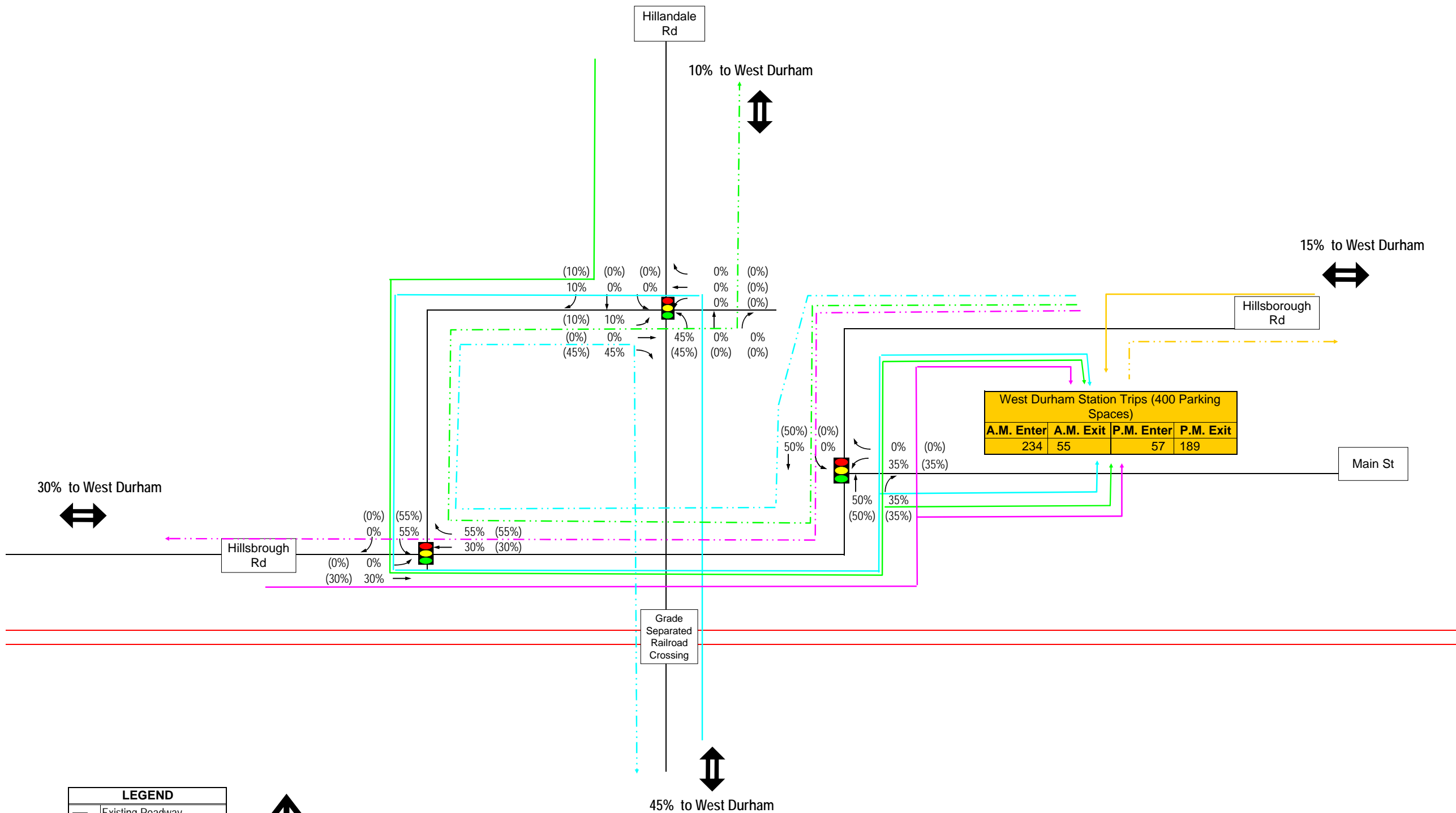


LEGEND	
	Existing Roadway
	Light Rail
	Turning Movement
	Signal Controlled Intersection
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume



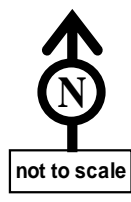
W

Triangle Transit - 2035 No-Build Volumes - Durham-Wake Corridor - West Durham

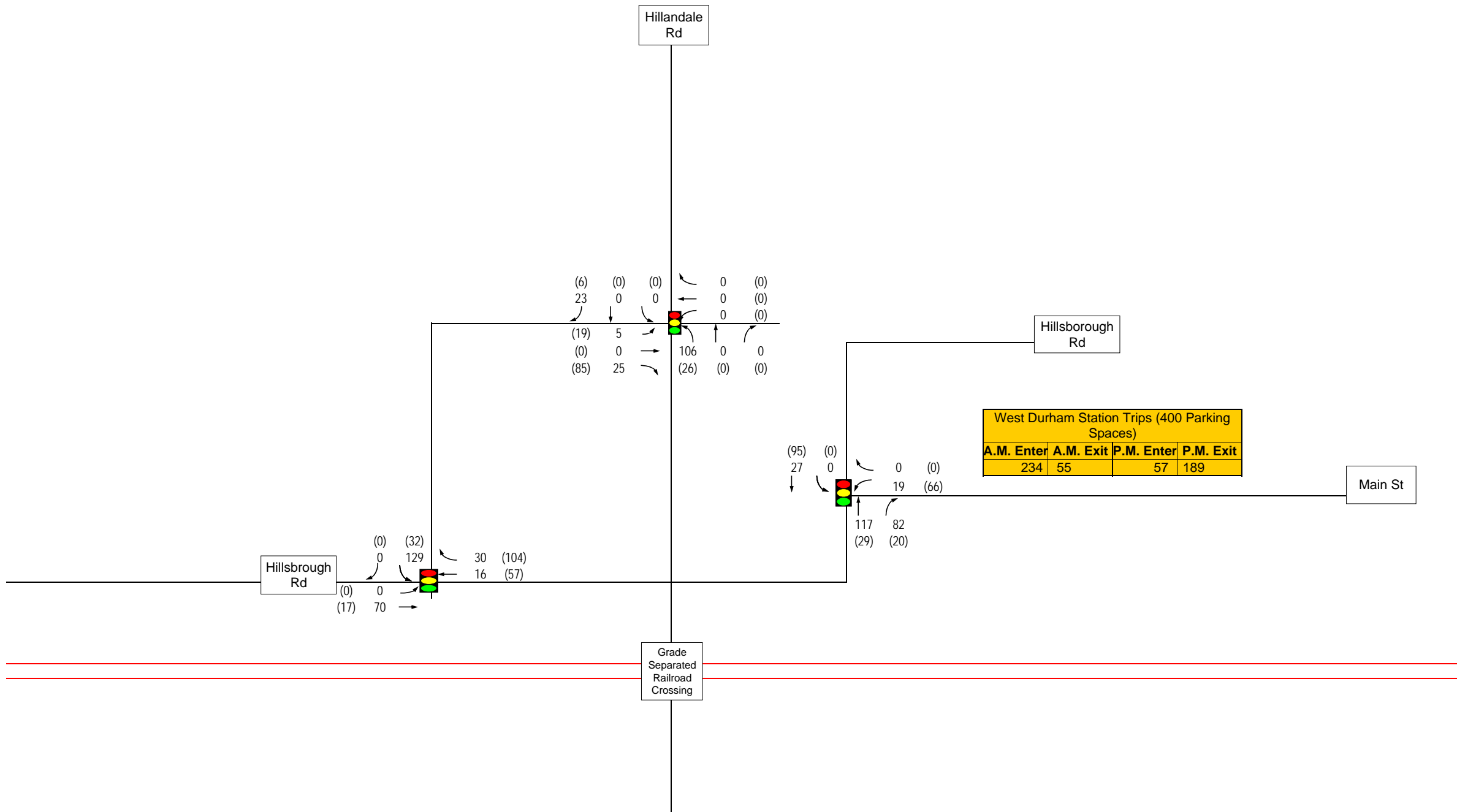


LEGEND

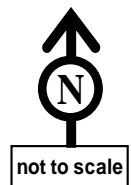
—	Existing Roadway
—	Light Rail
→	Turning Movement
🚦	Signal Controlled Intersection
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume



Triangle Transit - Trip Distribution - Durham-Wake Corridor - West Durham

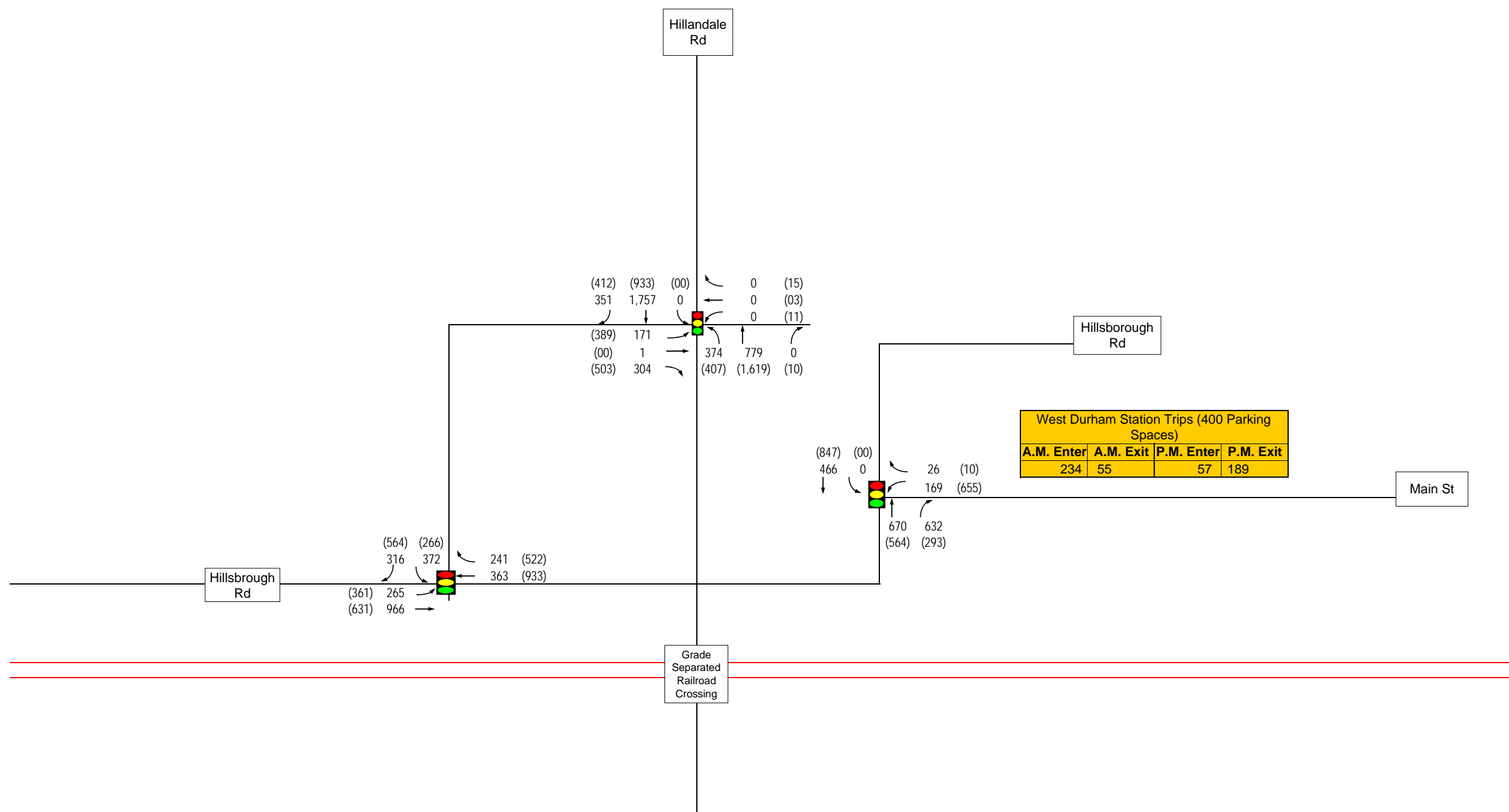


LEGEND	
	Existing Roadway
	Light Rail
	Turning Movement
	Signal Controlled
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume



Triangle Transit - Trips - Durham-Wake Corridor - West Durham

Note: Some volumes may be modified slightly to allow the individual volumes to sum to the total trips generated



Triangle Transit - 2035 Build Volumes - Durham-Wake Corridor - West Durham

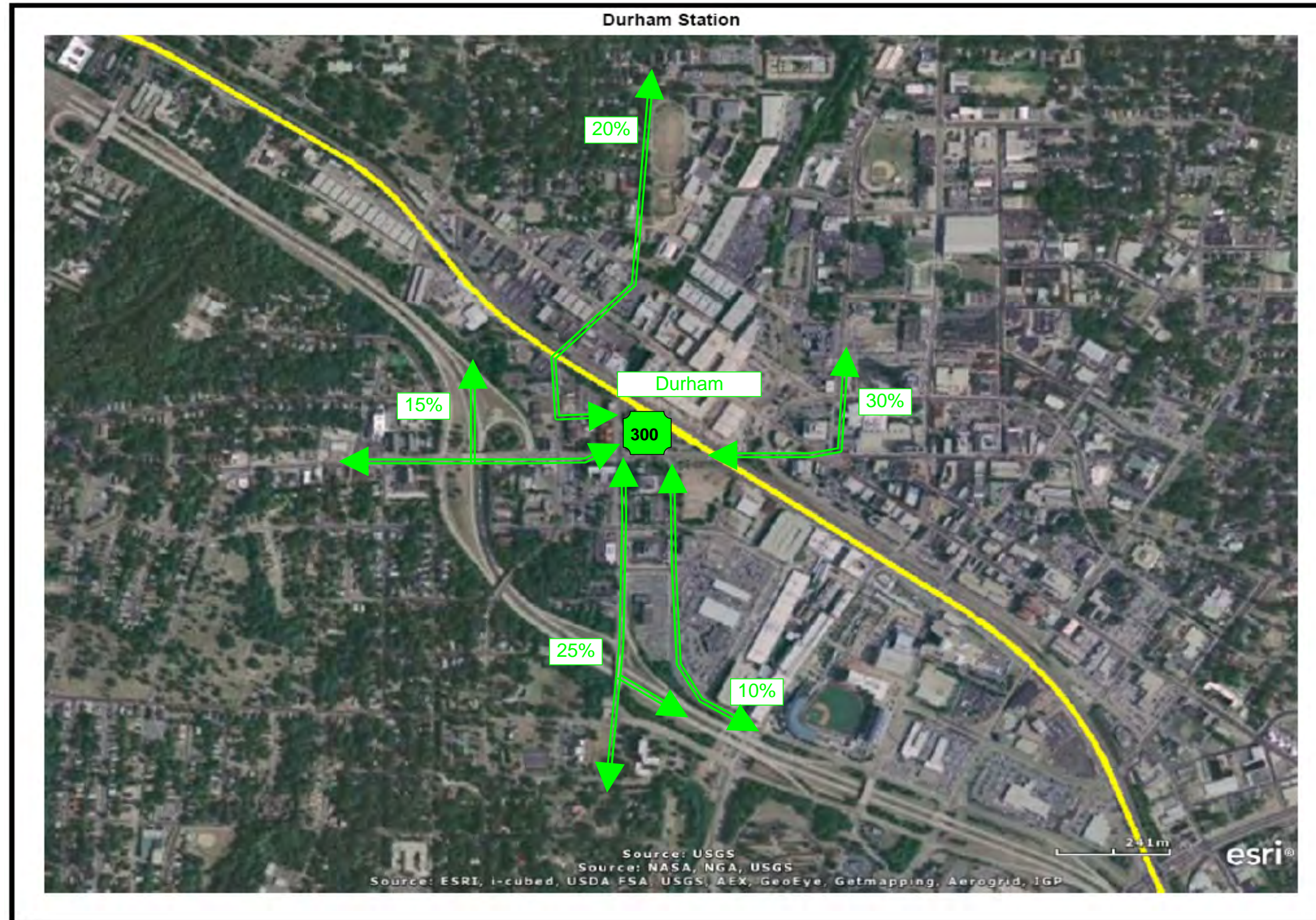
Overall Trip Distribution

NOTES

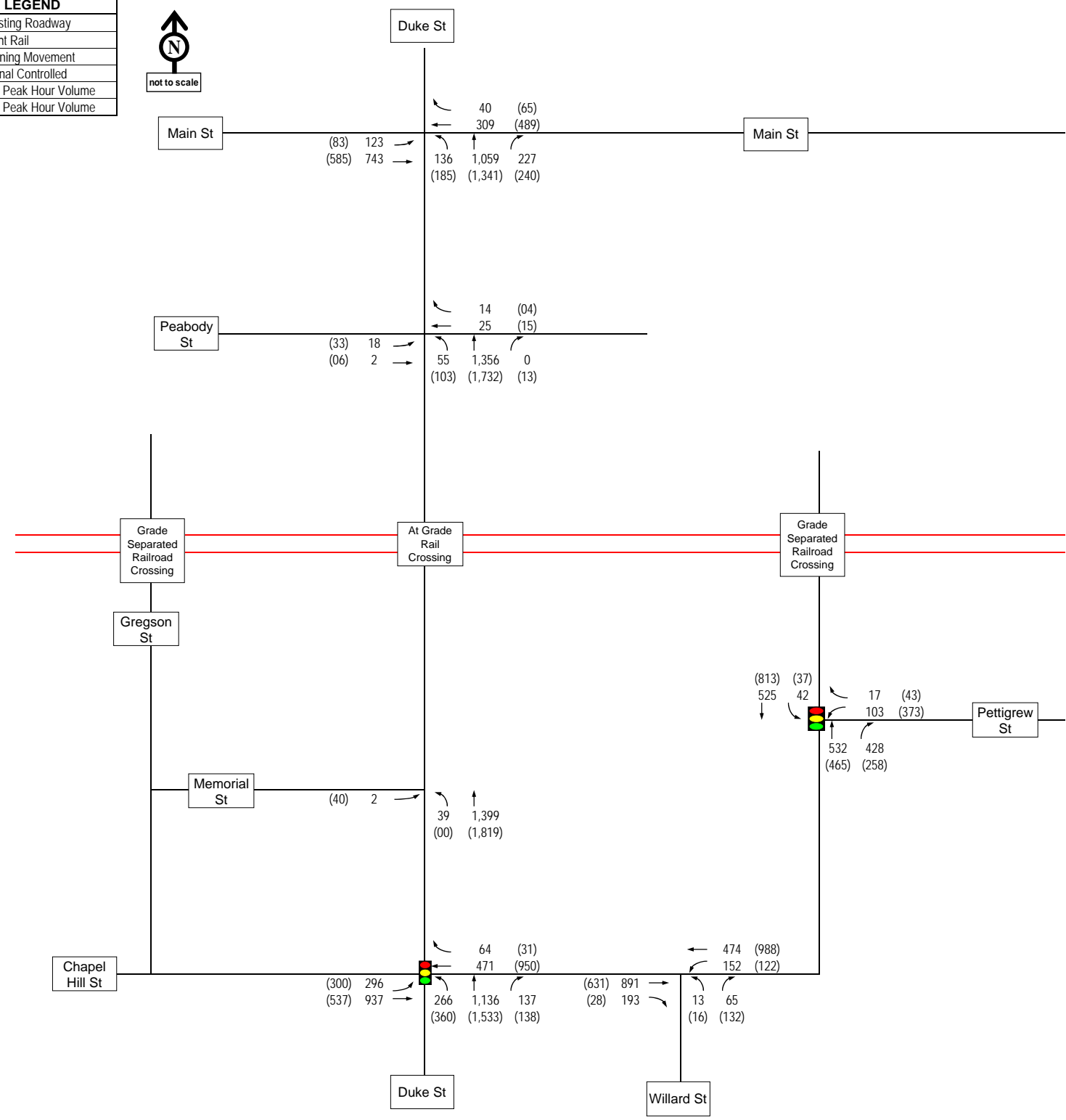
It was assumed that 20% of the traffic would be from the north along Gregson and Duke Streets, 15% from the area to the west along Chapel Hill Street, 10% from the South Roxboro area, 25% from Duke Street to the South, and 30% from Chapel Hill Street to the east.

Trip Generation Summary

ITE Land Use Code 90		
AM Peak Equation	Trips = (0.83 * Parking Spaces) - 43.4	
PM Peak Equation	Trips = (0.63 * Parking Spaces) - 5.94	
	AM Peak	PM Peak
Percent Entering	81%	23%
Percent Exiting	19%	77%
Durham Station		
Parking Spaces	300	
	AM Peak	PM Peak
Total Trips	206	183
Entering	167	42
Exiting	39	141

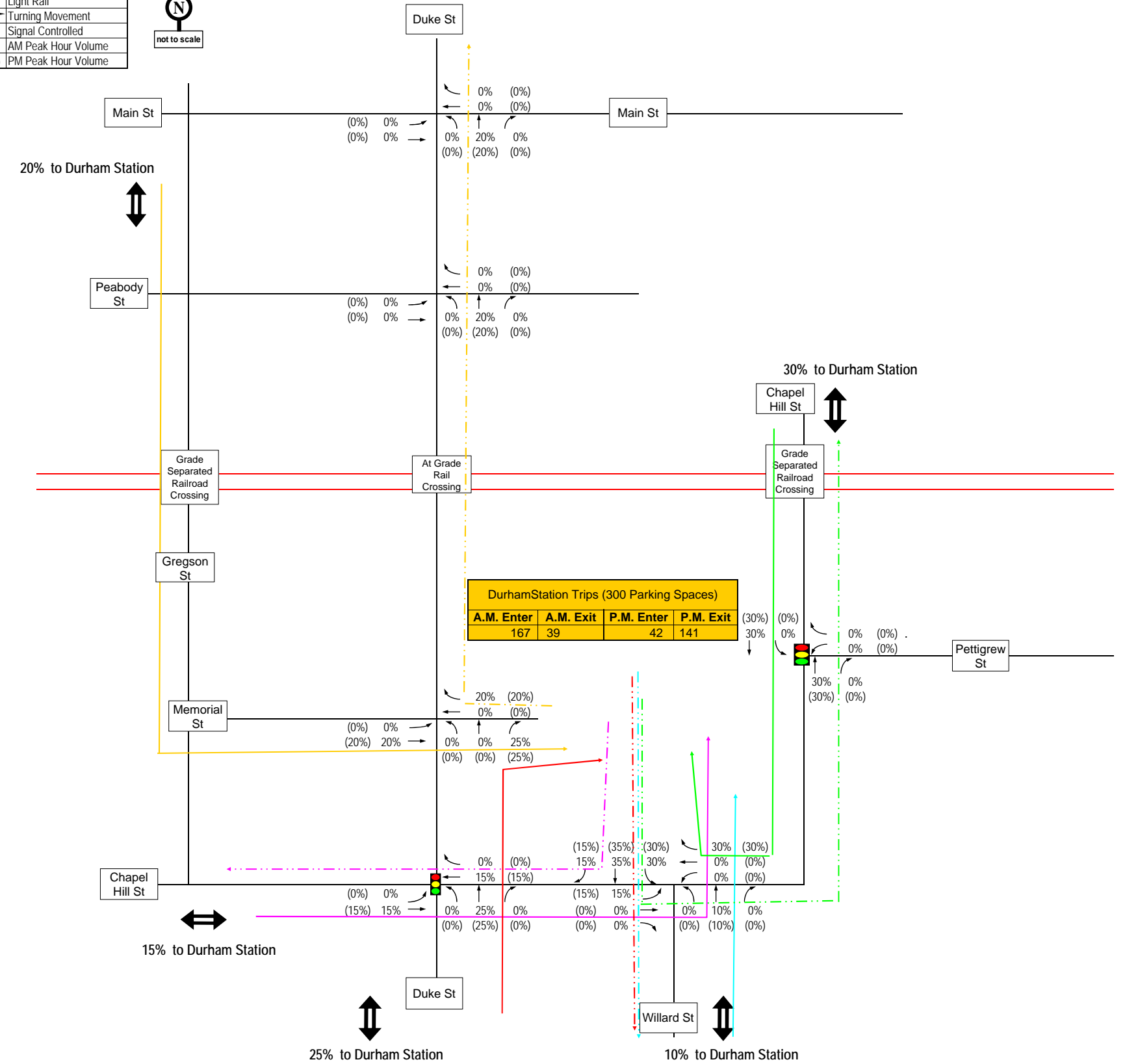
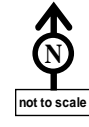


LEGEND	
—	Existing Roadway
—	Light Rail
→	Turning Movement
🚦	Signal Controlled
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume



Triangle Transit - 2035 No-Build Volumes - Durham-Wake Corridor - Durham Station

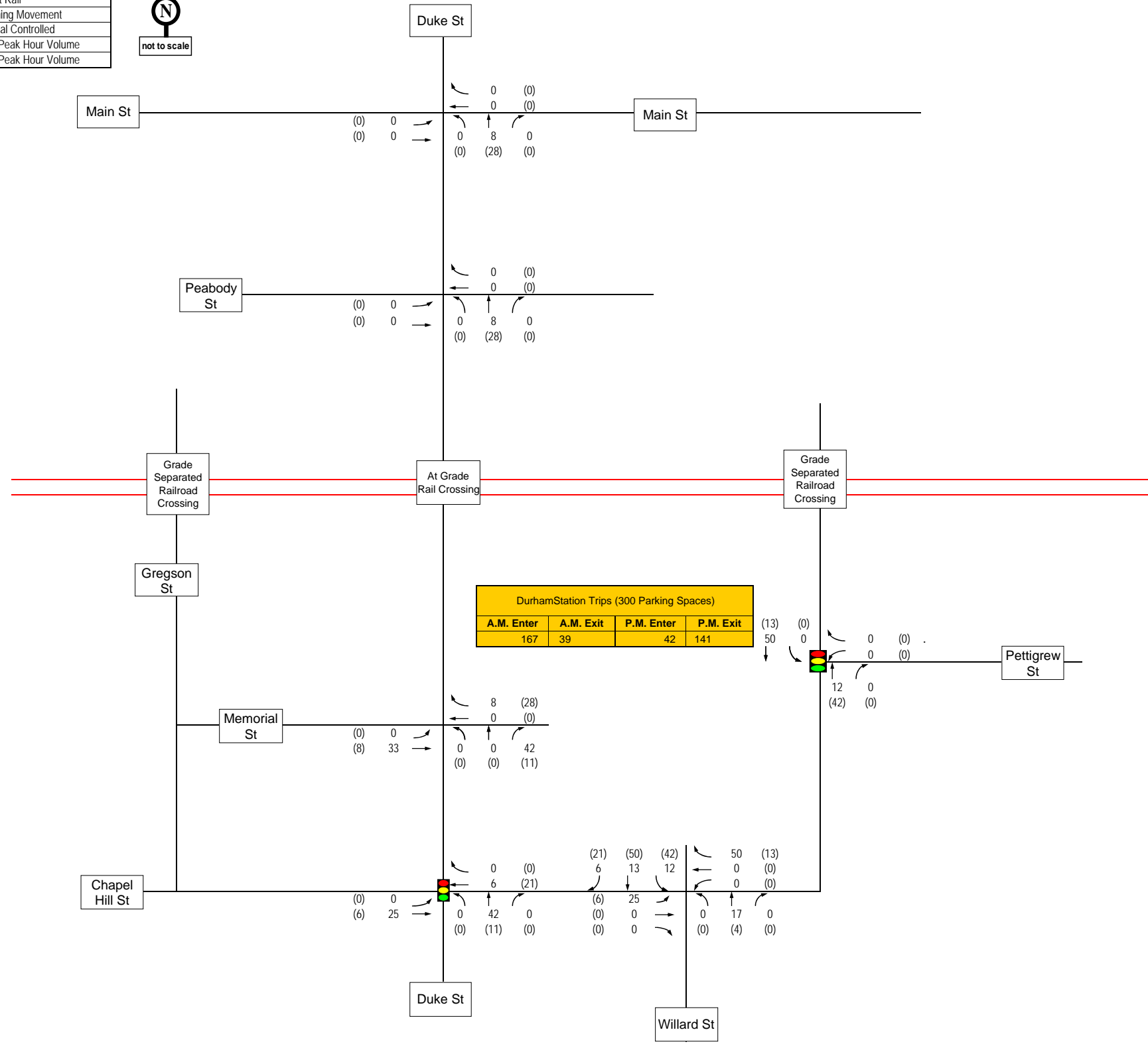
LEGEND	
	Existing Roadway
	Light Rail
	Turning Movement
	Signal Controlled
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume



Durham Station Trips (300 Parking Spaces)			
A.M. Enter	A.M. Exit	P.M. Enter	P.M. Exit
167	39	42	141

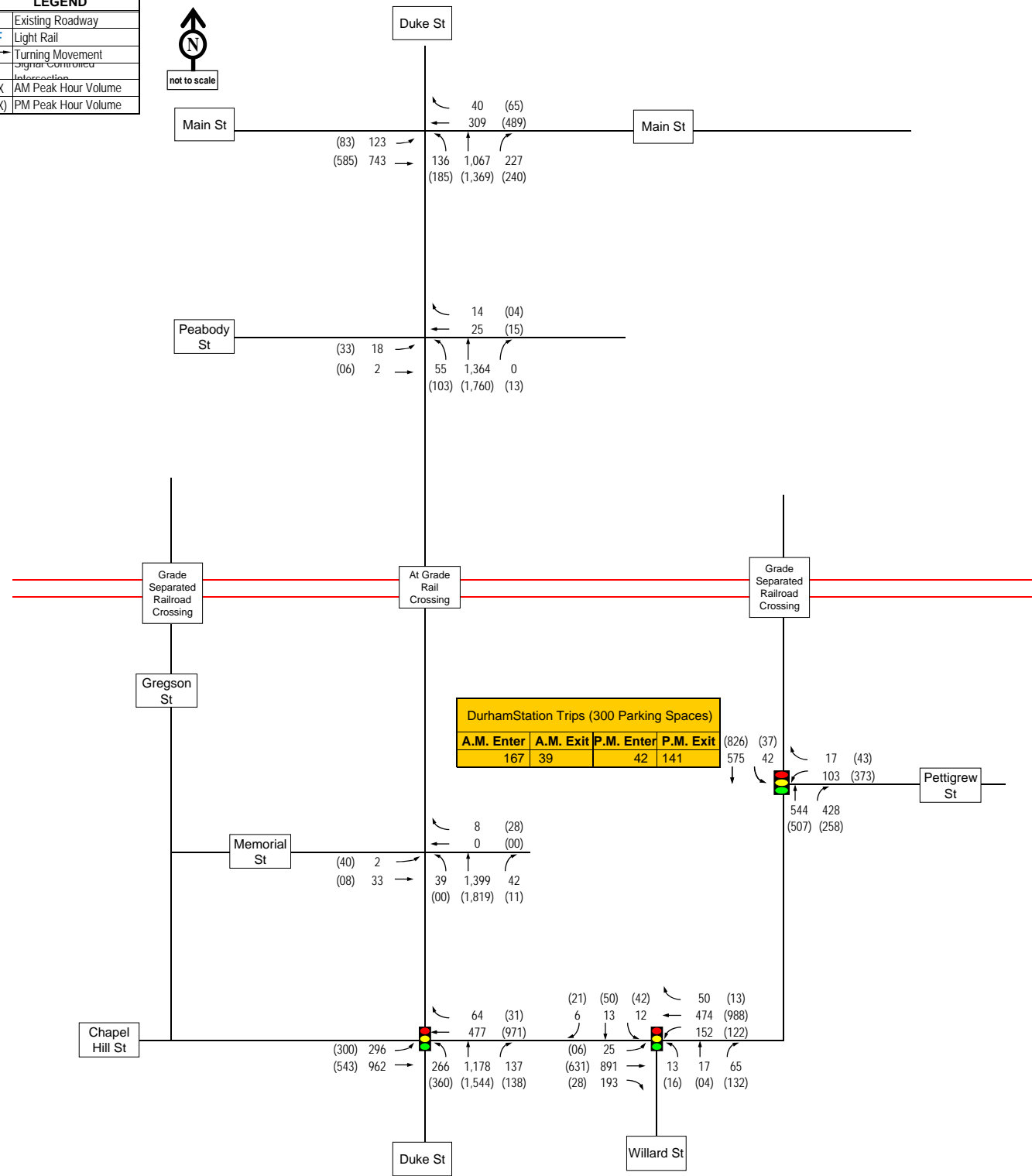
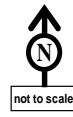
Triangle Transit - Trip Distribution - Durham-Wake Corridor - Durham Station

LEGEND	
	Existing Roadway
	Light Rail
	Turning Movement
	Signal Controlled
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume



Triangle Transit - Trips - Durham-Wake Corridor - Durham Station

LEGEND	
	Existing Roadway
	Light Rail
	Turning Movement
	Intersection
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume



Triangle Transit - 2035 Build Volumes - Durham-Wake Corridor - Durham Station

Overall Trip Distribution

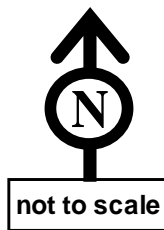
NOTES



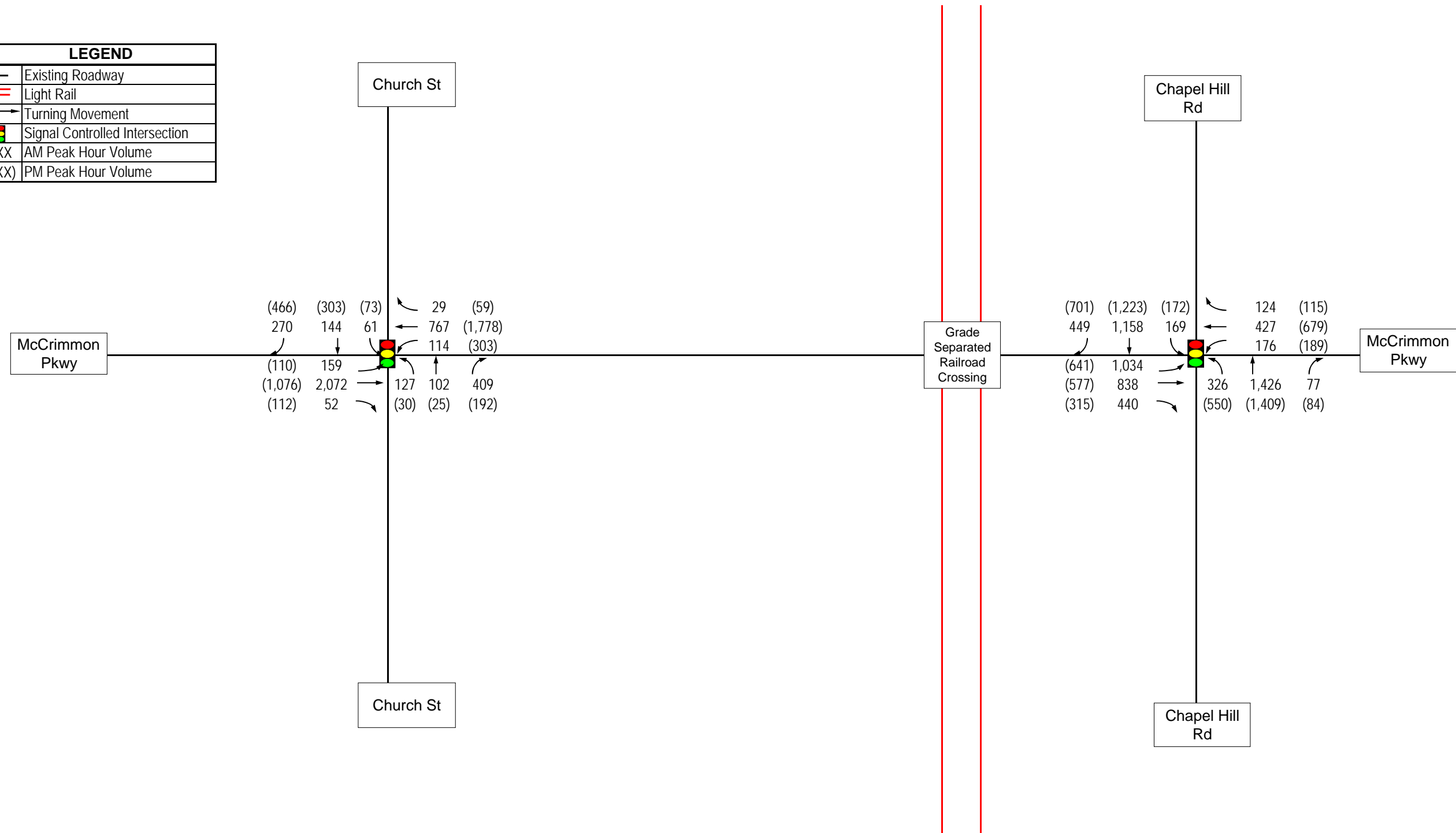
It was assumed that 45% of the traffic would be from the west along McCrimmon Parkway, 20% from Church Street (10% in the south, and 10% in th north) , 15% from the NC 54 to the north, and 20% from NC 54 to the south.

Trip Generation Summary

ITE Land Use Code 90		
AM Peak Equation	Trips = (0.83 * Parking Spaces) - 43.4	
PM Peak Equation	Trips = (0.63 * Parking Spaces) - 5.94	
	AM Peak	PM Peak
Percent Entering	81%	23%
Percent Exiting	19%	77%
McCrimmon		
Parking Spaces	400	
	AM Peak	PM Peak
Total Trips	289	246
Entering	234	57
Exiting	55	189



LEGEND	
—	Existing Roadway
==	Light Rail
→	Turning Movement
🚦	Signal Controlled Intersection
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume

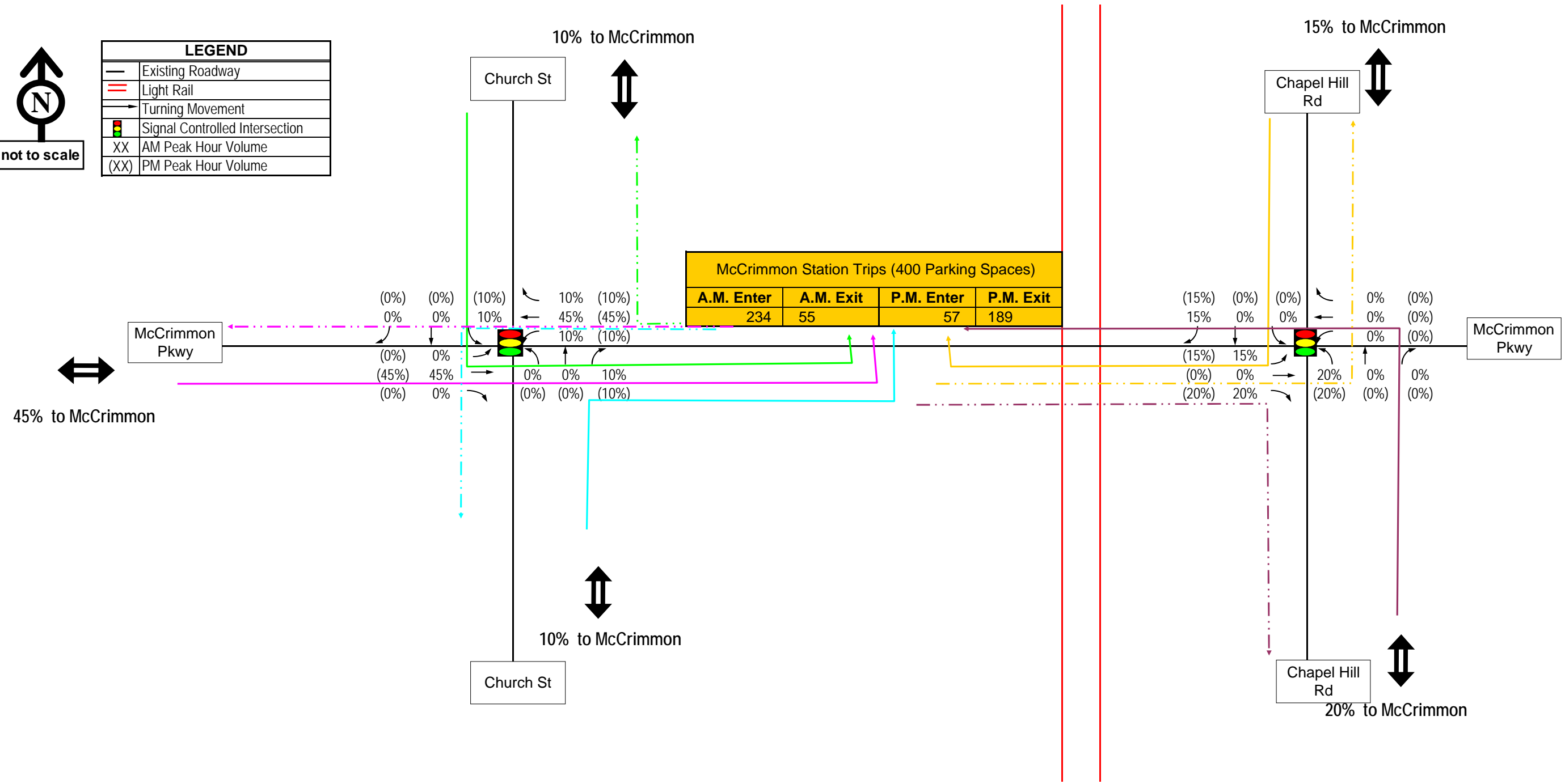


Triangle Transit - 2035 No-Build Volumes - Durham-Wake Corridor - McCrimmon

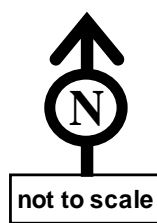
LEGEND

- Existing Roadway
- Light Rail
- Turning Movement
- Signal Controlled Intersection
- XX AM Peak Hour Volume
- (XX) PM Peak Hour Volume

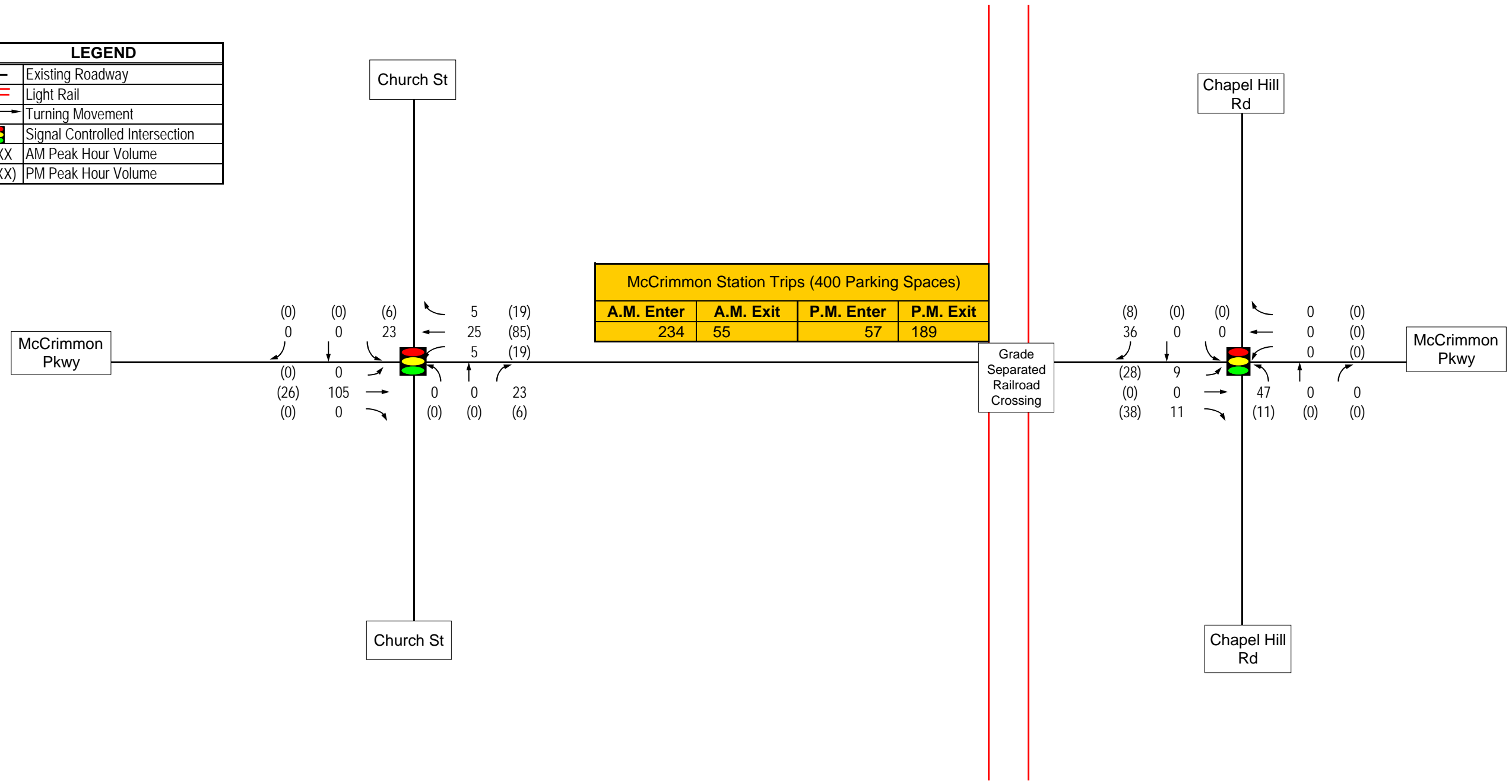
not to scale



Triangle Transit - Trip Distribution - Durham-Wake Corridor - McCrimmon

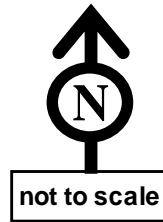


LEGEND	
—	Existing Roadway
—	Light Rail
→	Turning Movement
🚦	Signal Controlled Intersection
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume

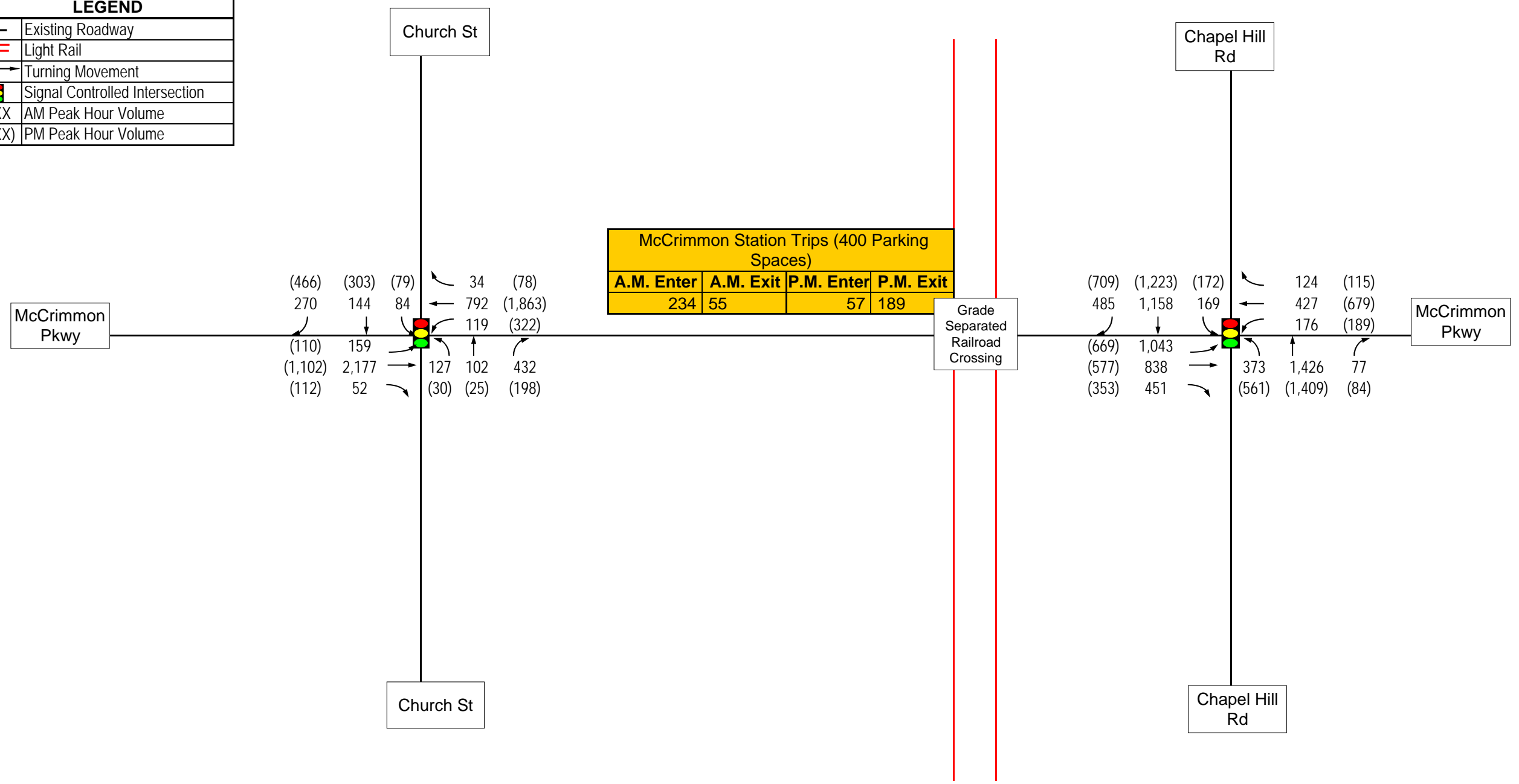


Triangle Transit - Trips - Durham-Wake Corridor - McCrimmon

Note: Some volumes may be modified slightly to allow the individual volumes to sum to the total trips generated



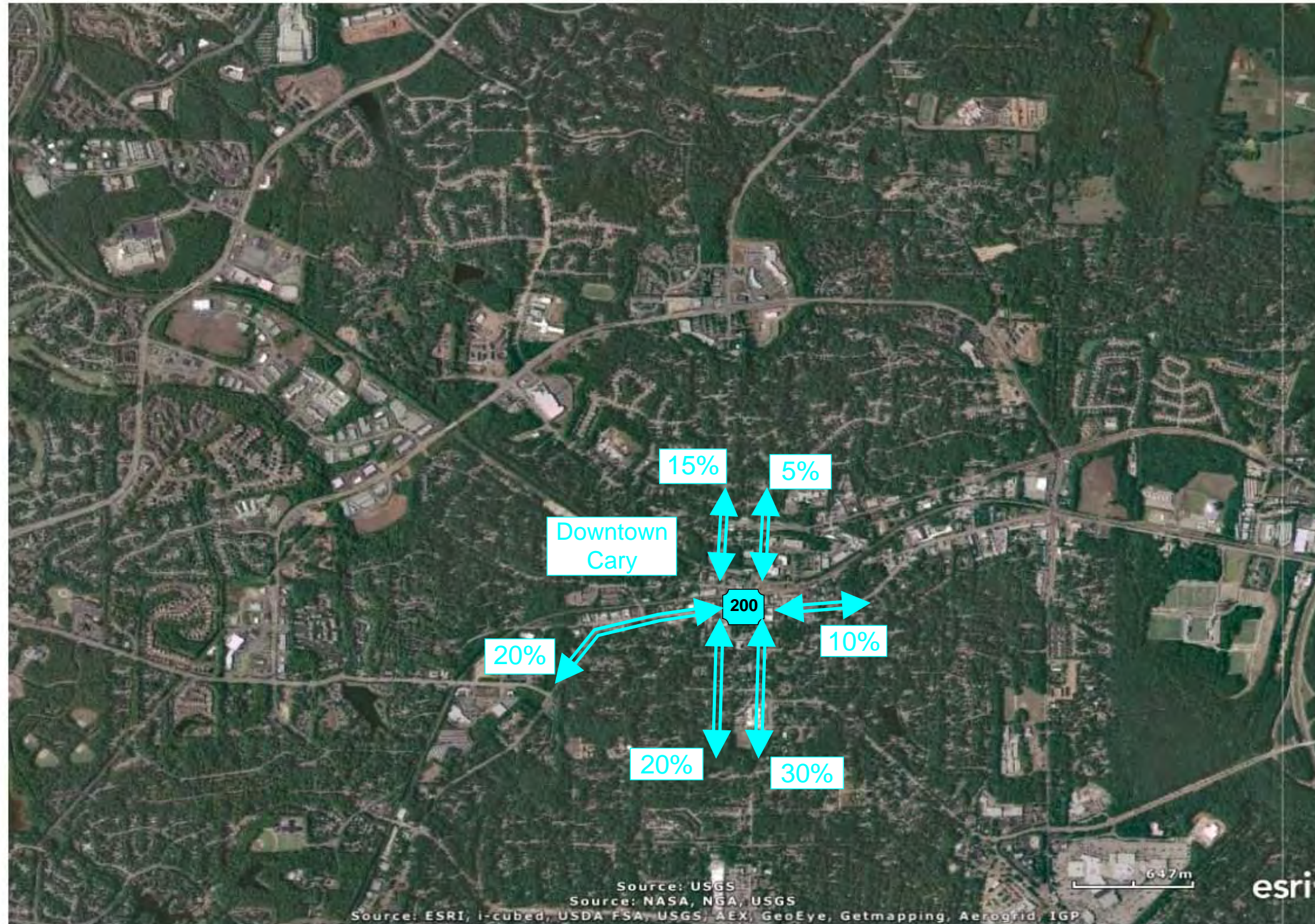
LEGEND	
—	Existing Roadway
==	Light Rail
→	Turning Movement
🚦	Signal Controlled Intersection
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume



Triangle Transit - 2035 Build Volumes - Durham-Wake Corridor - McCrimmon

Overall Trip Distribution

Cary Area Stations

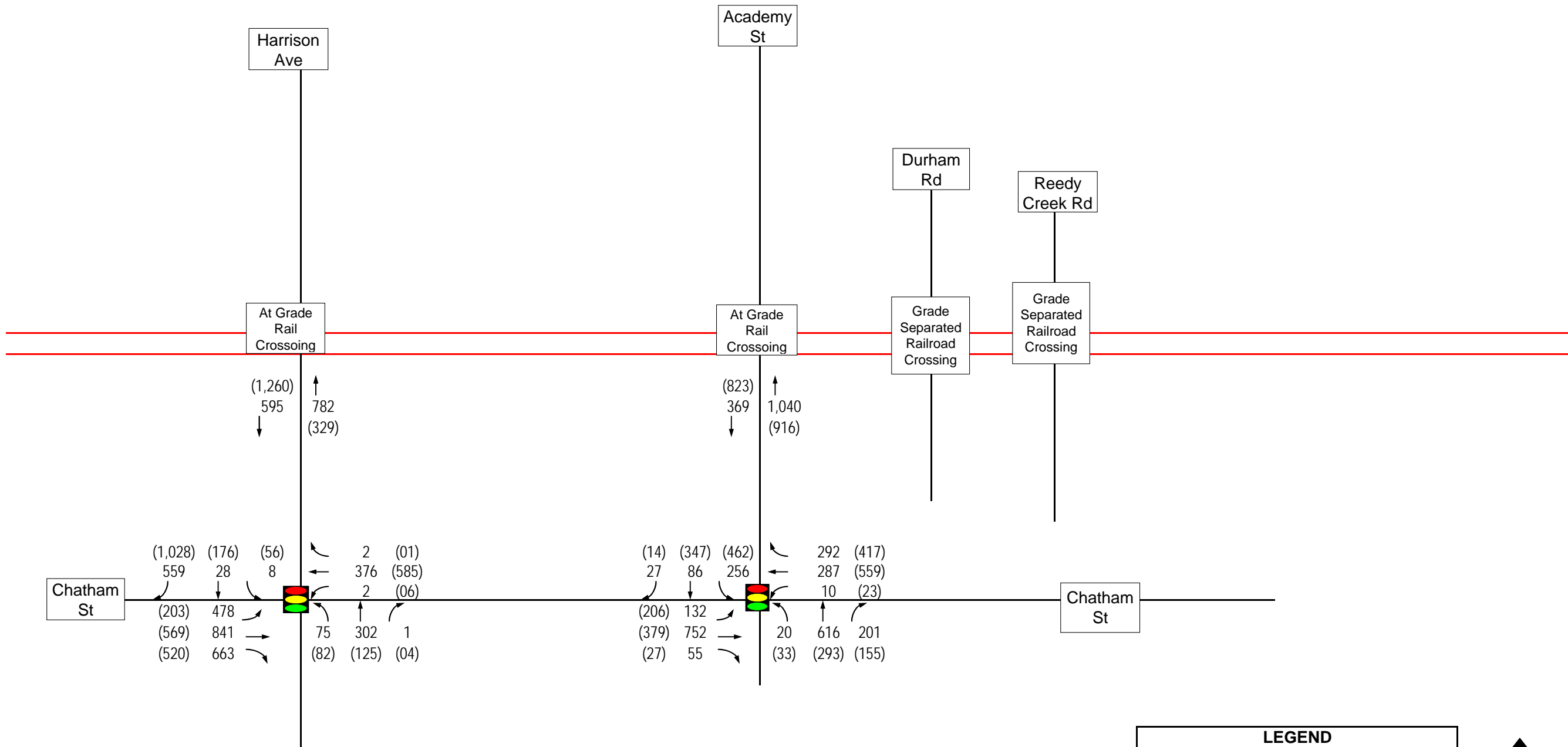


NOTES

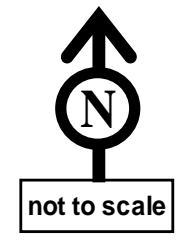
It was assumed that 20% of the Downtown Cary Station traffic would come from W. Chatham Street, 20% from S. Harrison Avenue, 30% from S. Academy Street, 10% from E. Chatham Street, 5% from N. Academy Street, and 15% from N. Harrison Avenue.

Trip Generation Summary

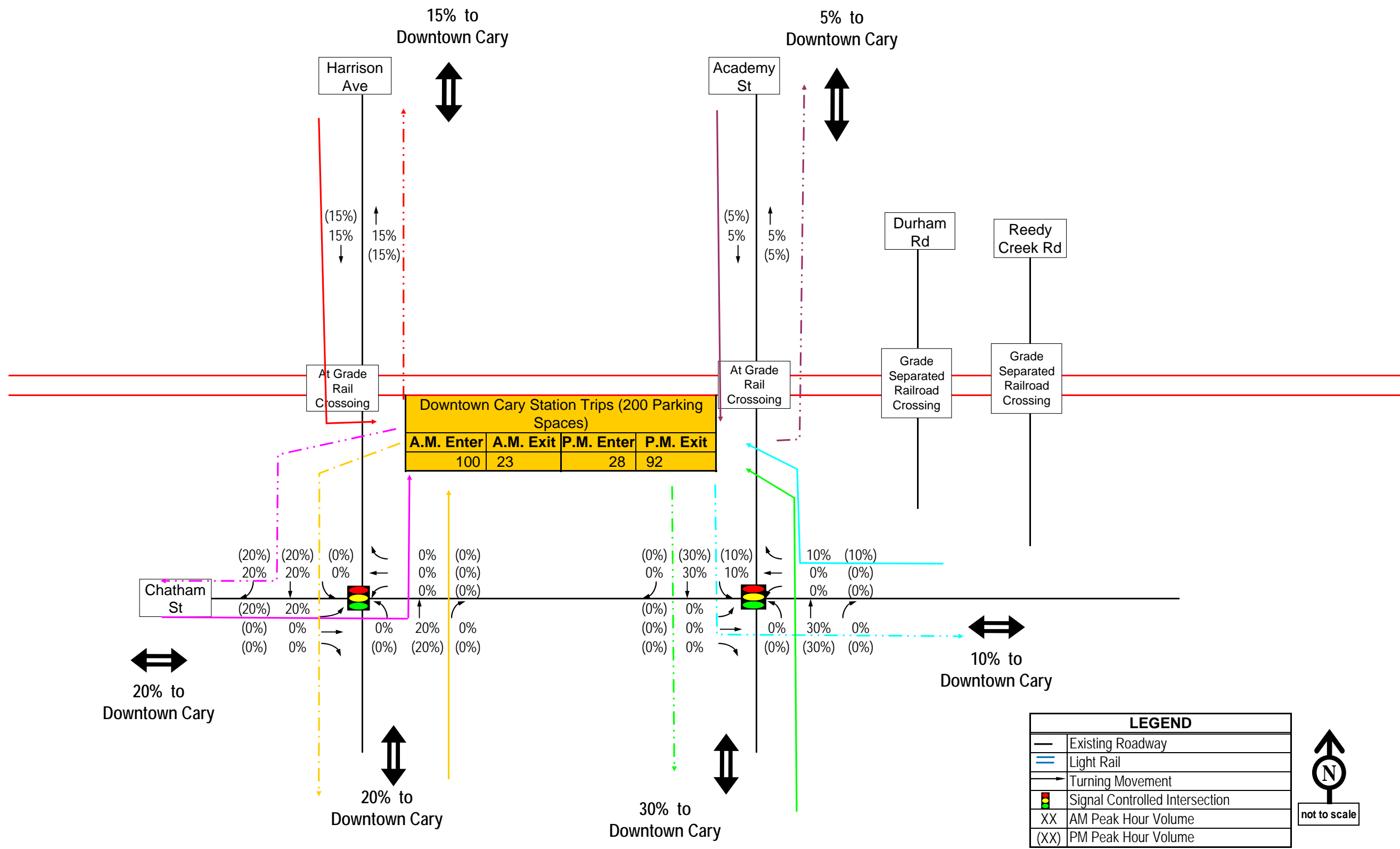
	ITE Land Use Code 90	
AM Peak Equation	Trips = (0.83 * Parking Spaces) - 43.4	
PM Peak Equation	Trips = (0.63 * Parking Spaces) - 5.94	
	AM Peak	PM Peak
Percent Entering	81%	23%
Percent Exiting	19%	77%
Downtown Cary		
Parking Spaces	200	
	AM Peak	PM Peak
Total Trips	123	120
Entering	100	28
Exiting	23	92



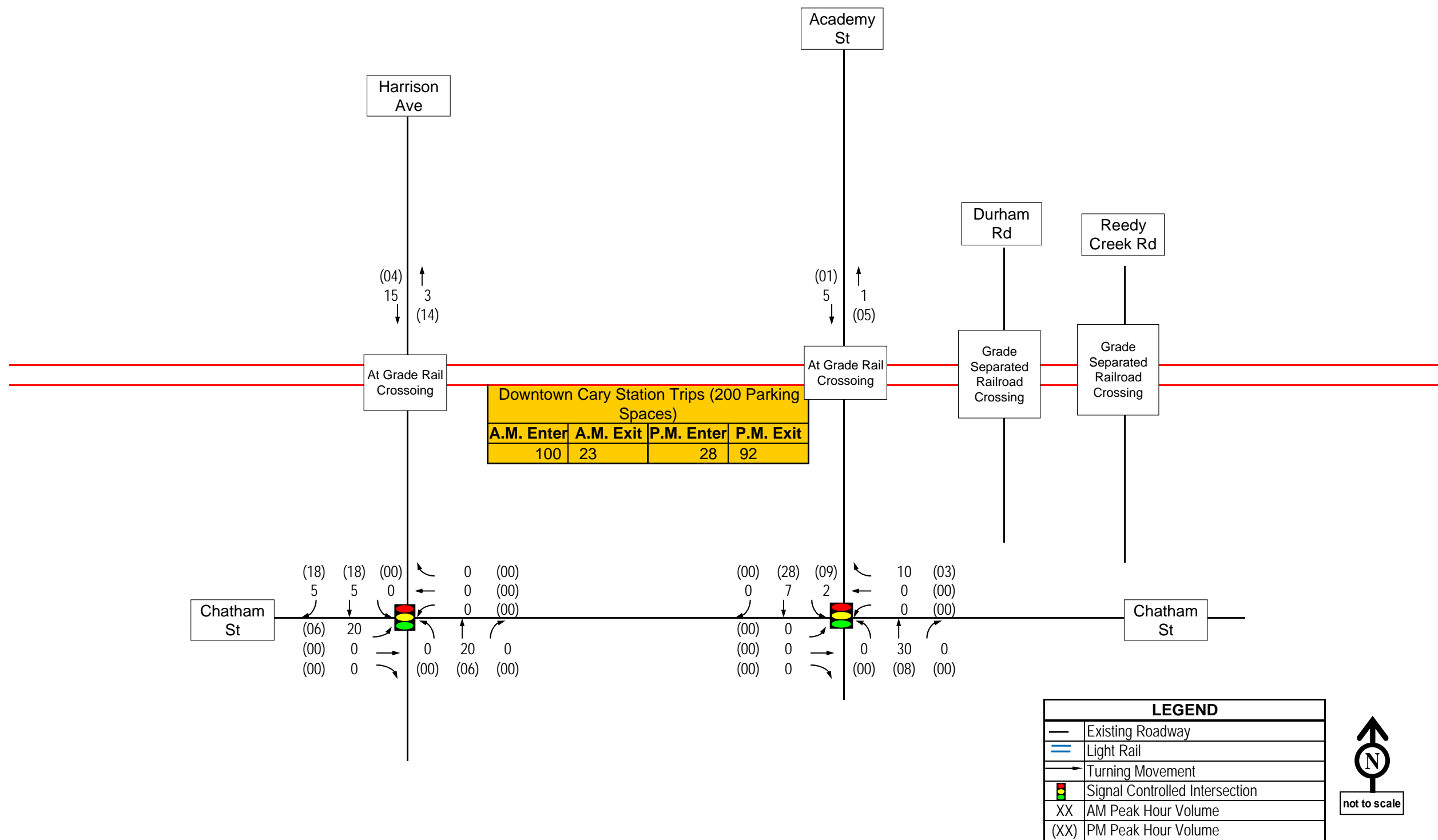
LEGEND	
—	Existing Roadway
==	Light Rail
→	Turning Movement
⬆️⬇️⬆️	Signal Controlled Intersection
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume



Triangle Transit - 2035 No-Build Volumes - Durham-Wake Corridor - Cary

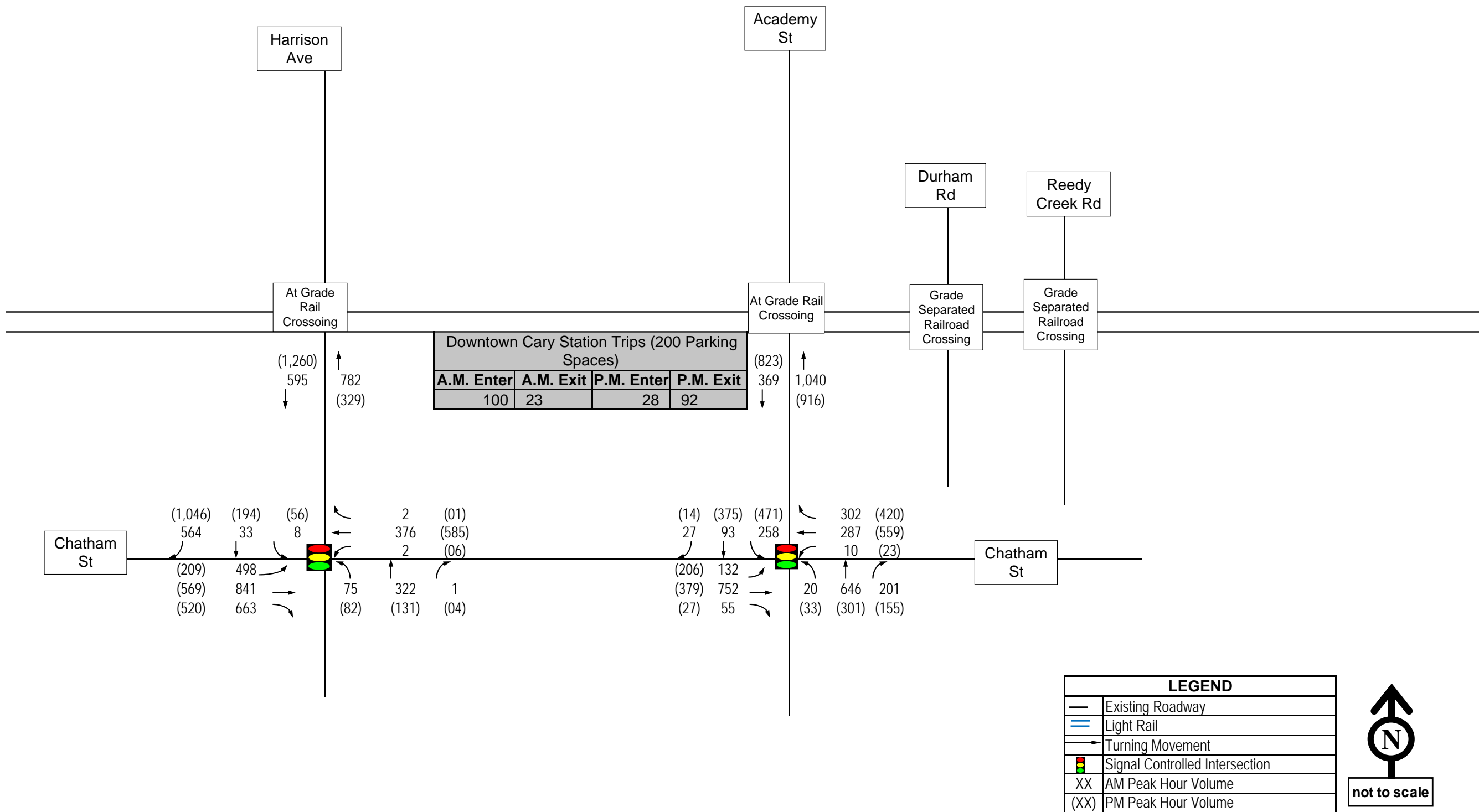


Triangle Transit - Trip Distribution - Durham-Wake Corridor - Downtown Cary



Triangle Transit - Trips - Durham-Wake Corridor - Cary

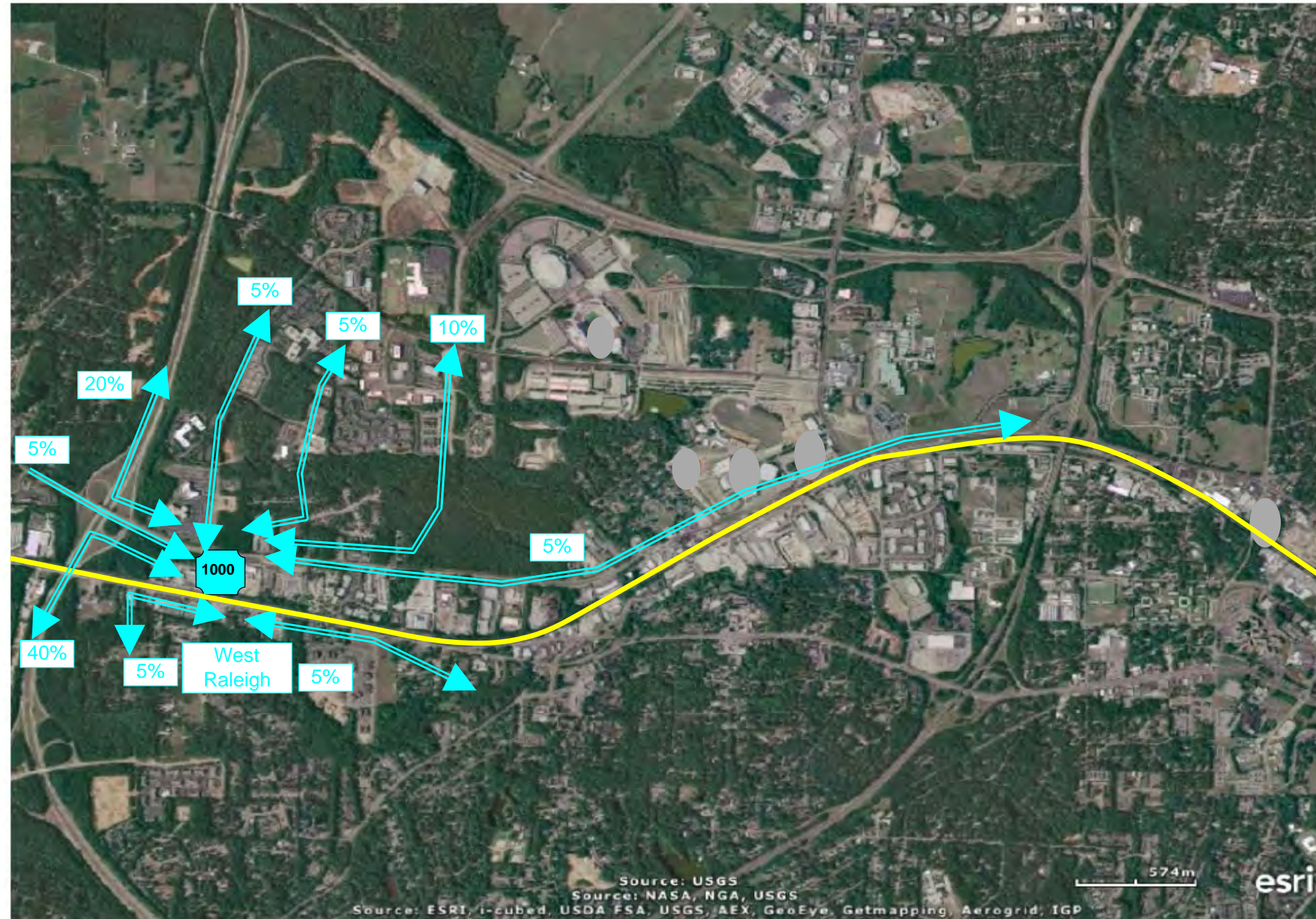
Note: Some volumes may be modified slightly to allow the individual volumes to sum to the total trips generated



Triangle Transit - 2035 Build Volumes - Durham-Wake Corridor - Downtown Cary

Overall Trip Distribution

Fairgrounds Subarea



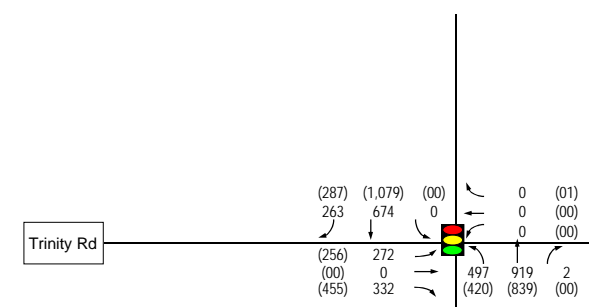
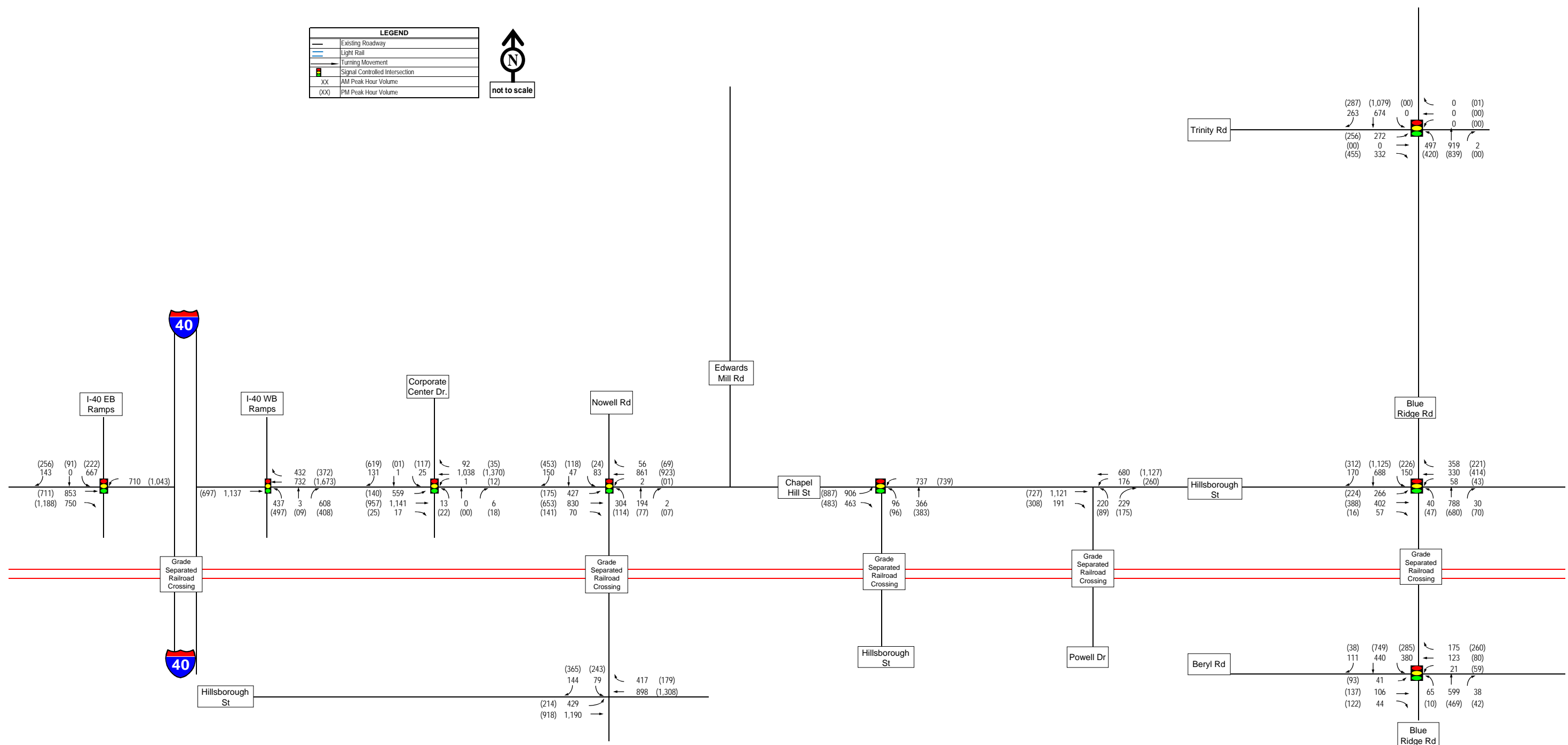
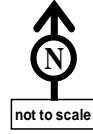
NOTES

It was assumed that 10% of the traffic at the West Raleigh station would be from the area south of Hillsborough Street, 60% from I-40 via NC 54, 20% from the area north of Chapel Hill Road (5% from Corporate Center, 5% from Nowell and 10% from Edwards Mill), 5% from Chatham Street west of the station, and 5% from Hillsborough Street east of the station.

Trip Generation Summary

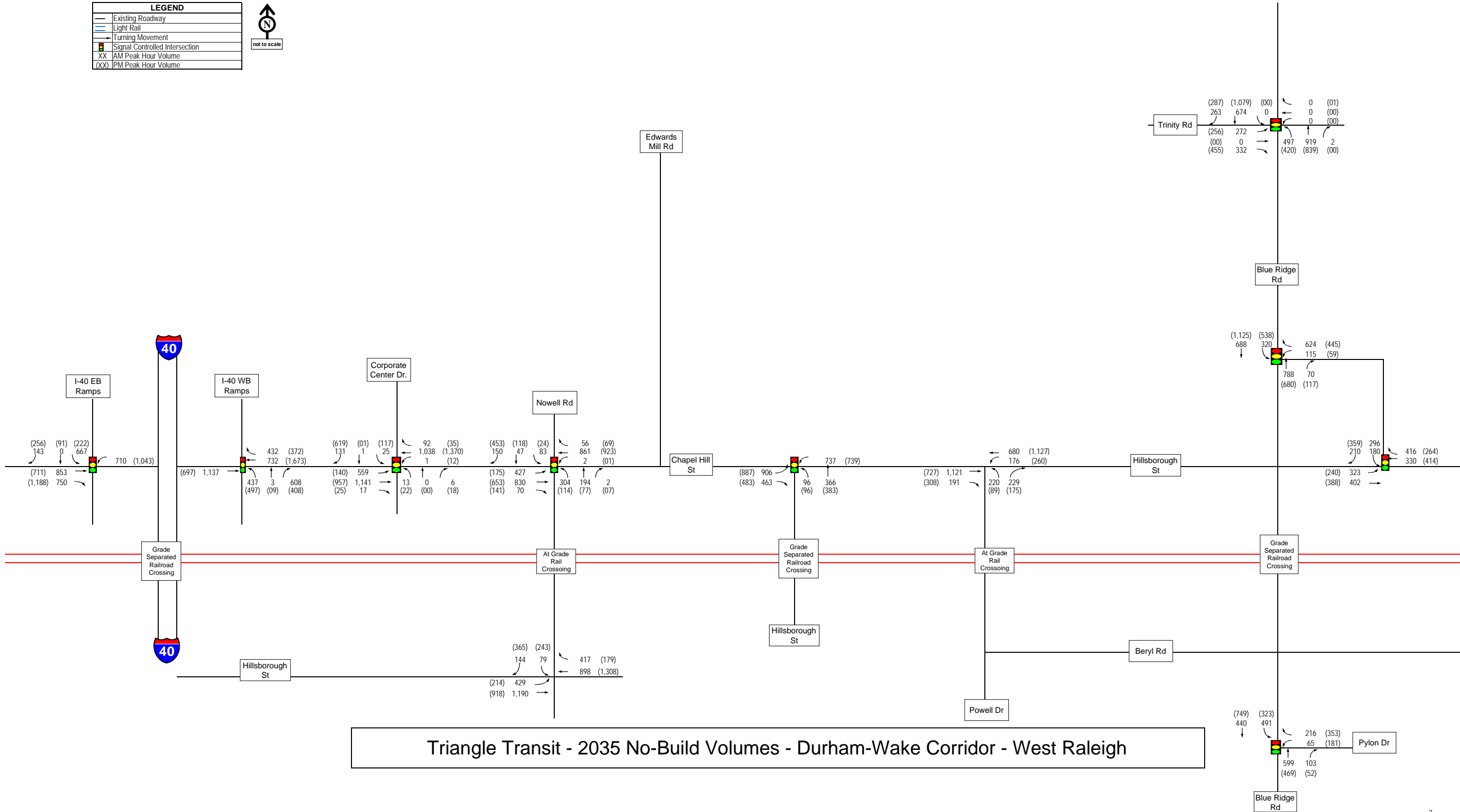
ITE Land Use Code 90		
AM Peak Equation	Trips = (0.83 * Parking Spaces) - 43.4	
PM Peak Equation	Trips = (0.63 * Parking Spaces) - 5.94	
	AM Peak	PM Peak
Percent Entering	81%	23%
Percent Exiting	19%	77%
West Raleigh		
Parking Spaces	1000	
	AM Peak	PM Peak
Total Trips	787	624
Entering	637	144
Exiting	150	480

LEGEND	
	Existing Roadway
	Light Rail
	Turning Movement
	Signal Controlled Intersection
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume

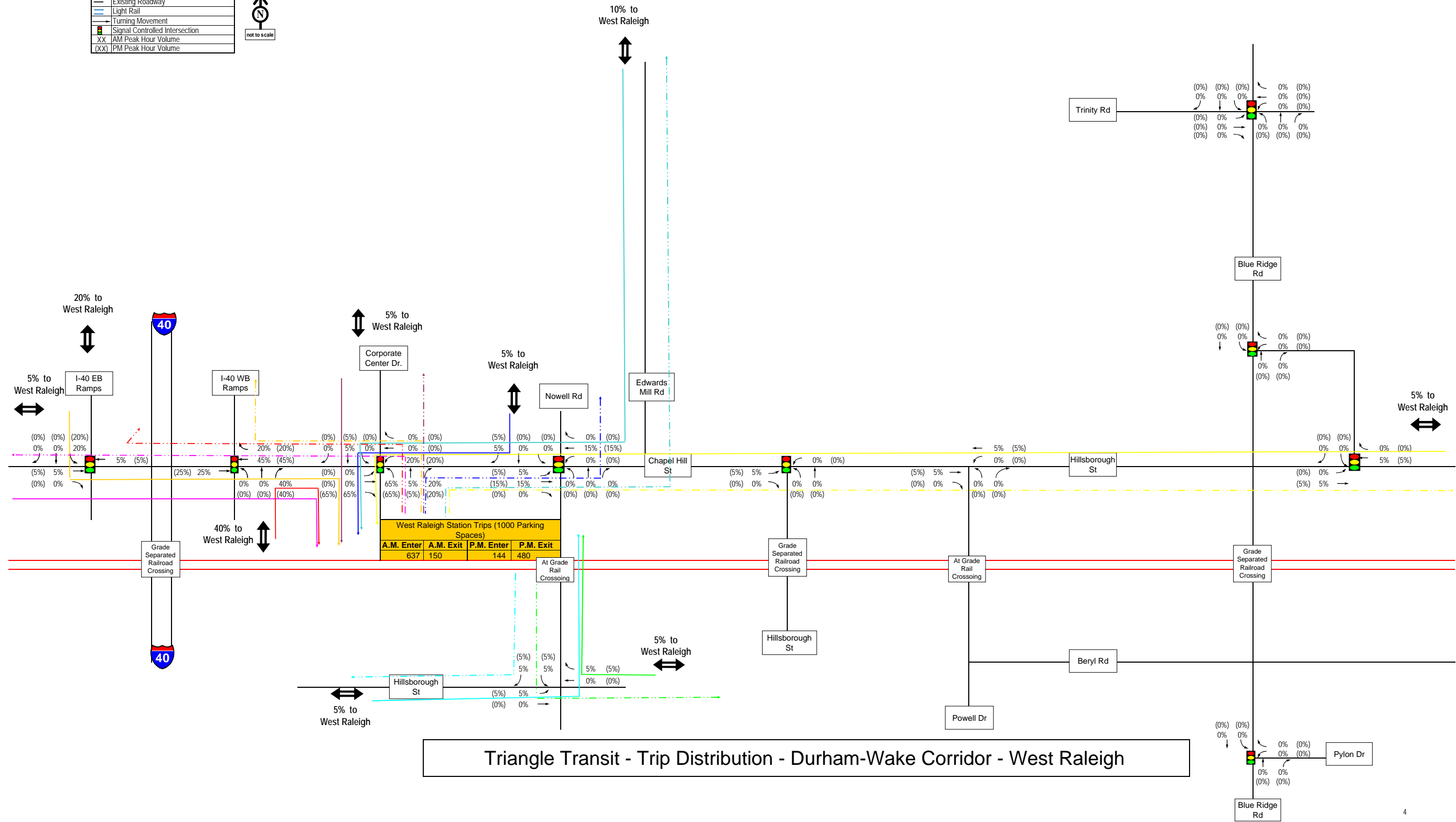


Triangle Transit - 2035 No-Build Volumes - Durham-Wake Corridor - West Raleigh

LEGEND	
	Existing Roadway
	Light Rail
	Turning Movement
	Signal Controlled Intersection
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume

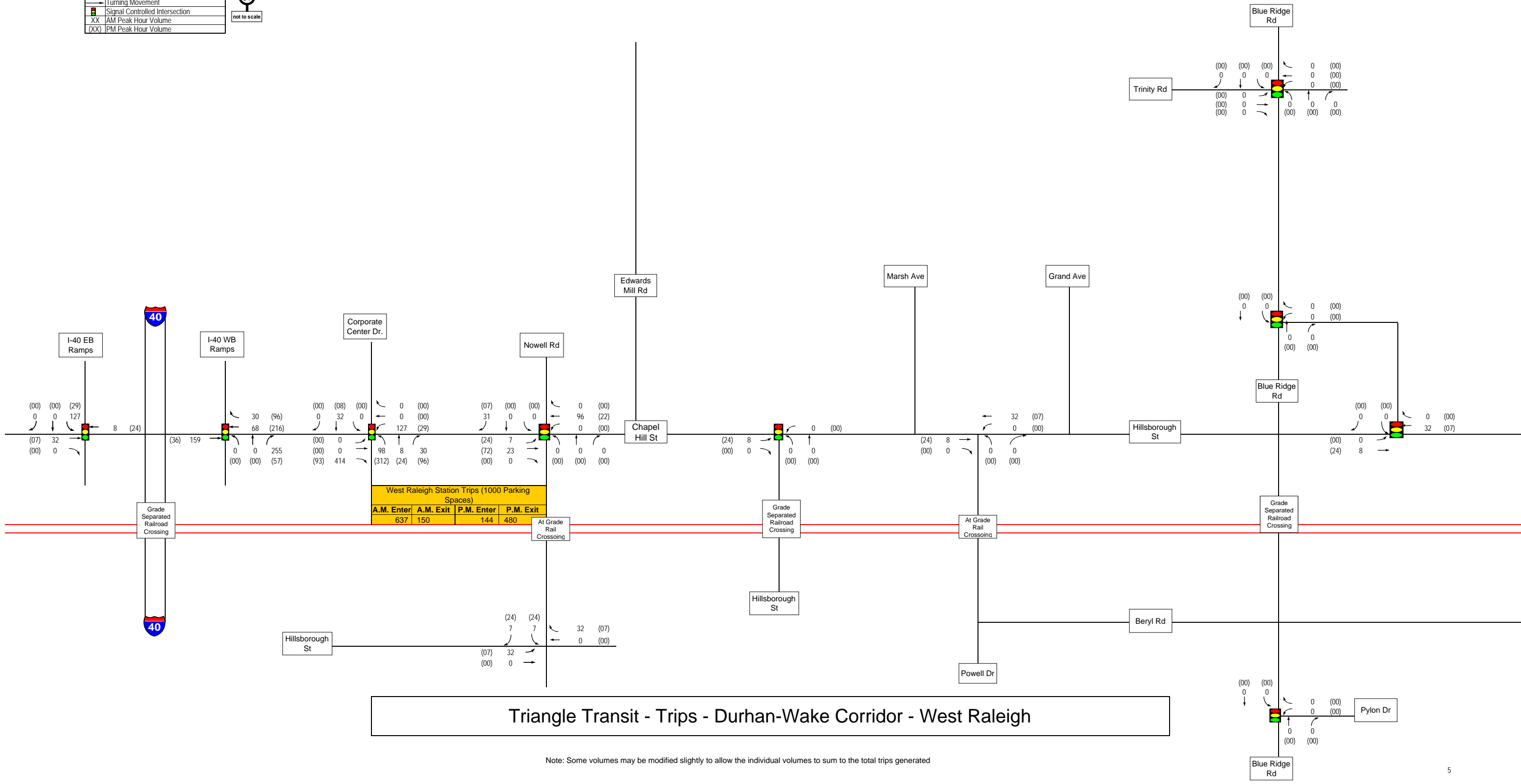


LEGEND	
	Existing Roadway
	Light Rail
	Turning Movement
	Signal Controlled Intersection
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume



Triangle Transit - Trip Distribution - Durham-Wake Corridor - West Raleigh

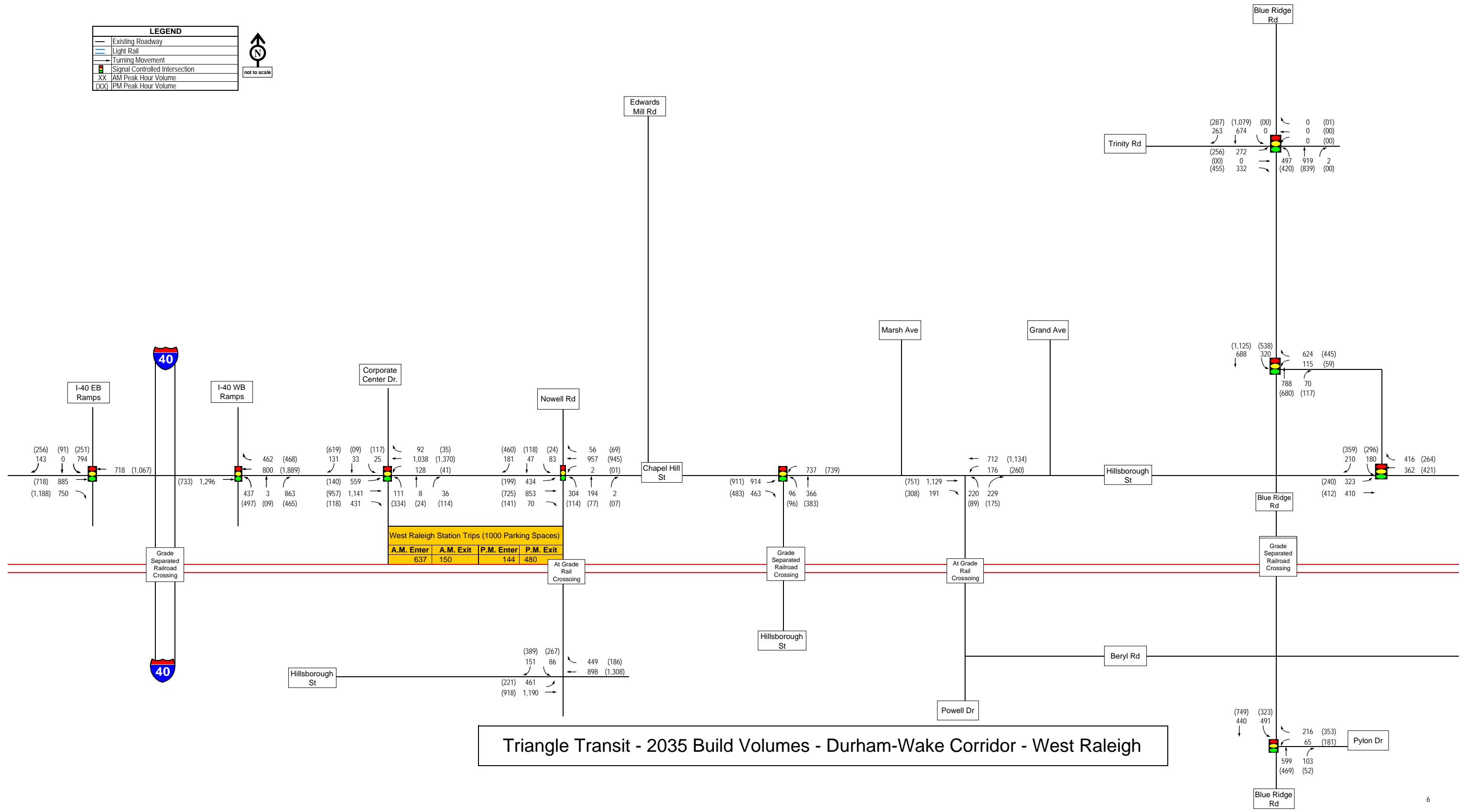
LEGEND	
	Existing Roadway
	Light Rail
	Turning Movement
	Signal Controlled Intersection
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume



Triangle Transit - Trips - Durhan-Wake Corridor - West Raleigh

Note: Some volumes may be modified slightly to allow the individual volumes to sum to the total trips generated

LEGEND	
	Existing Roadway
	Light Rail
	Turning Movement
	Signal Controlled Intersection
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume



Triangle Transit - 2035 Build Volumes - Durham-Wake Corridor - West Raleigh

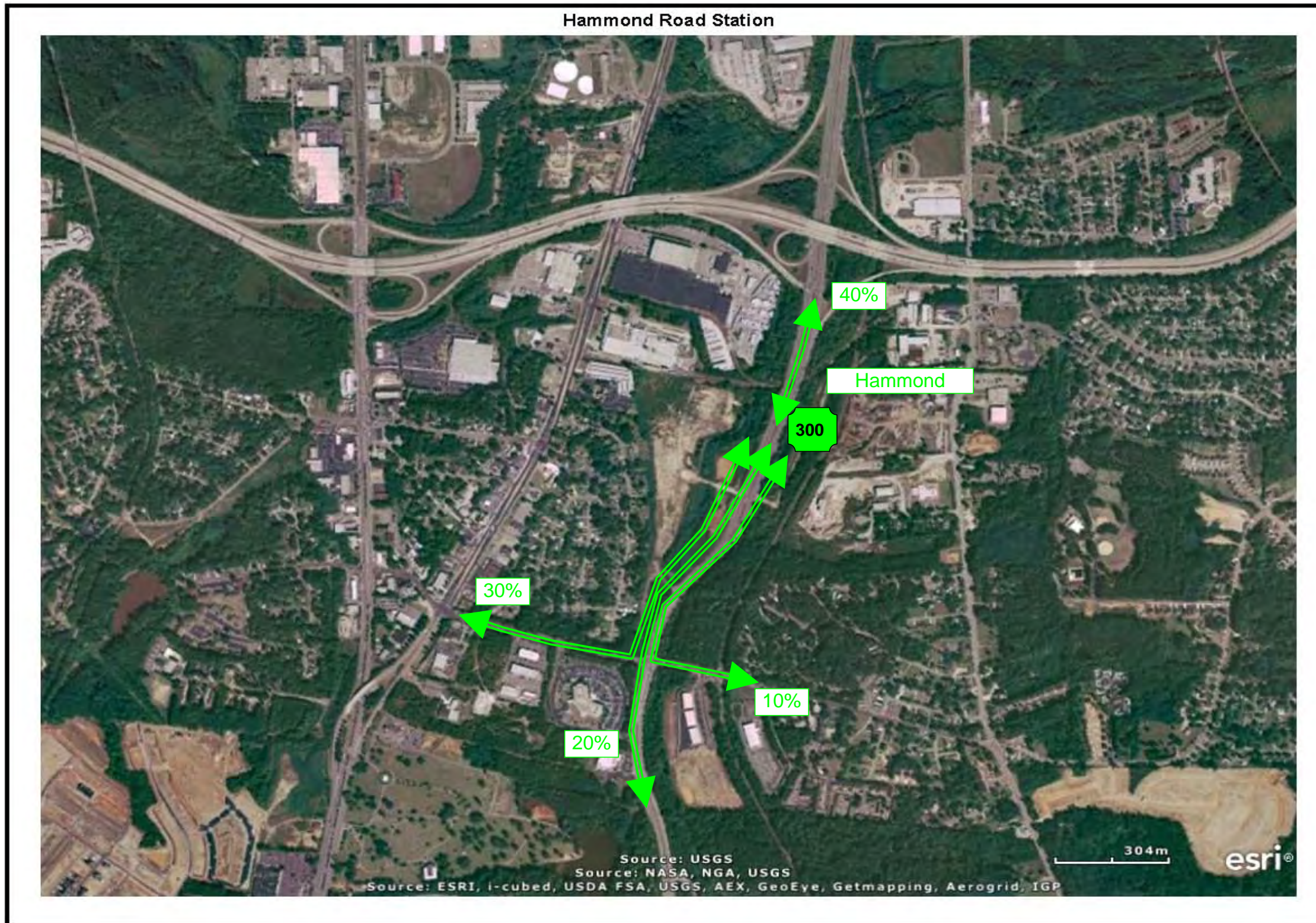
Overall Trip Distribution

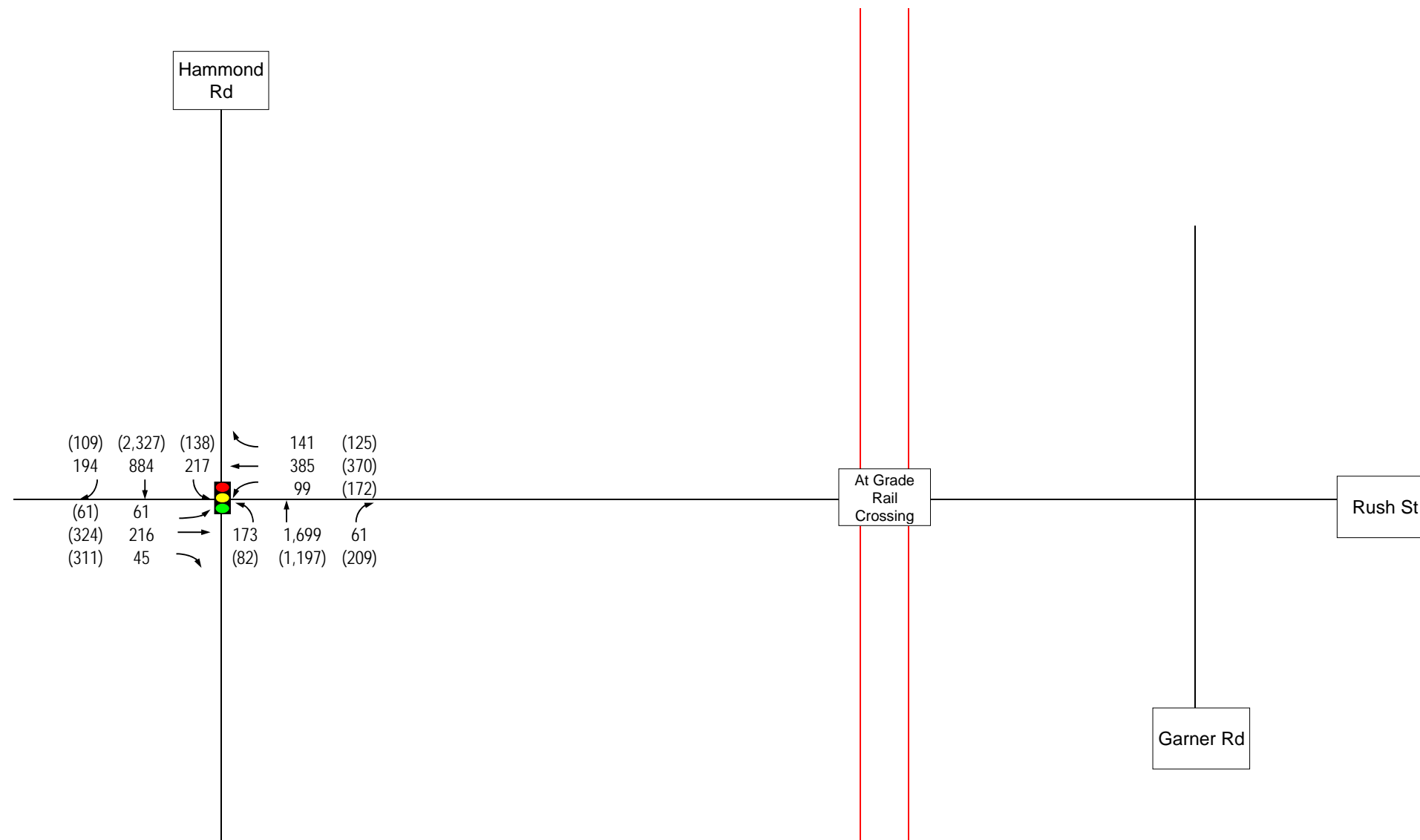
NOTES

It was assumed that 40% of the traffic would be from the north along Hammond Road (including traffic from I-40), 30% from the area to the west along Rush Street, 10% from the area to the east along Rush Street, and 20% from the south along Hammond Road.

Trip Generation Summary

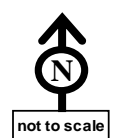
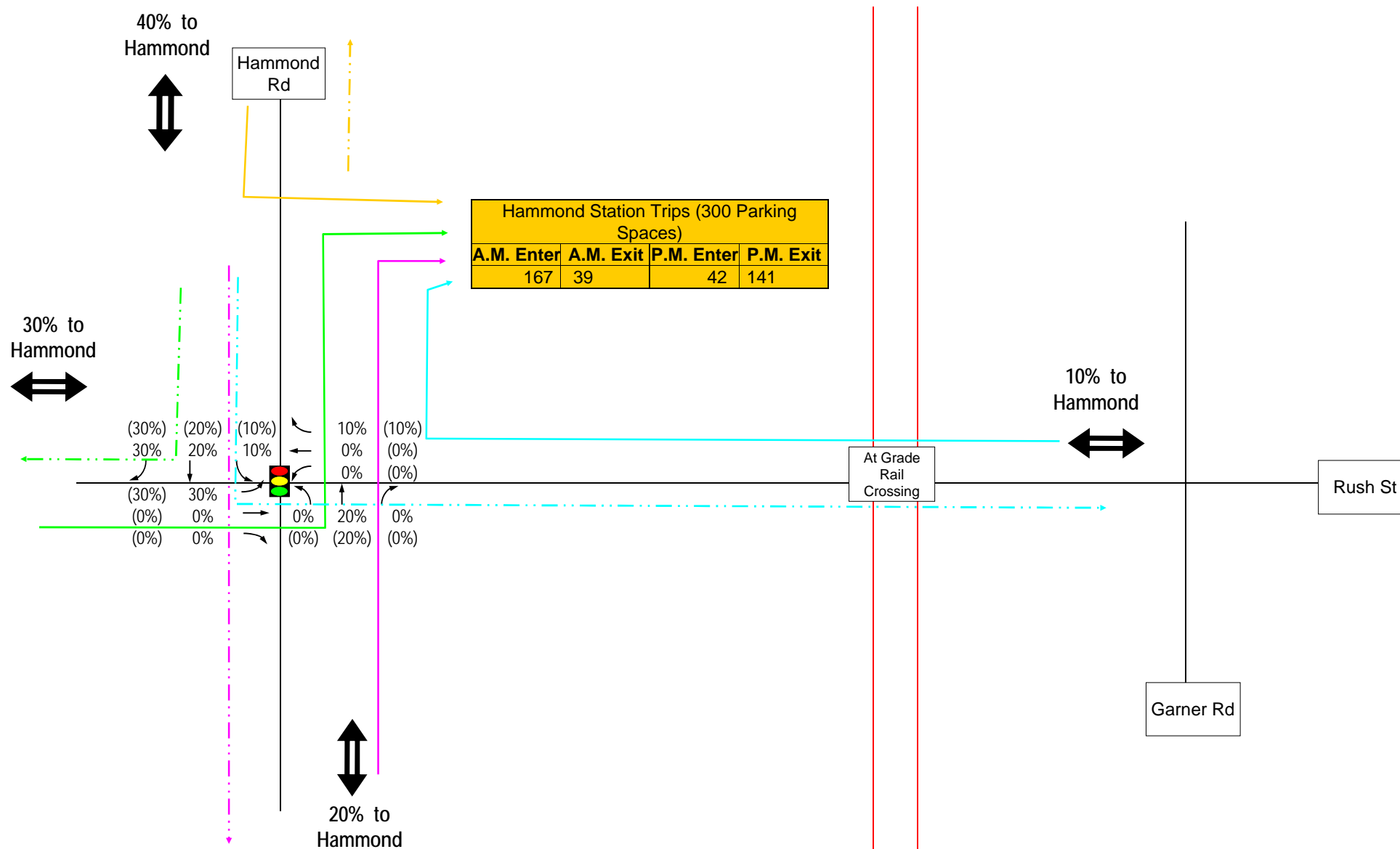
ITE Land Use Code 90		
AM Peak Equation	Trips = (0.83 * Parking Spaces) - 43.4	
PM Peak Equation	Trips = (0.63 * Parking Spaces) - 5.94	
	AM Peak	PM Peak
Percent Entering	81%	23%
Percent Exiting	19%	77%
Hammond		
Parking Spaces	300	
	AM Peak	PM Peak
Total Trips	206	183
Entering	167	42
Exiting	39	141





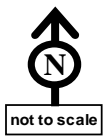
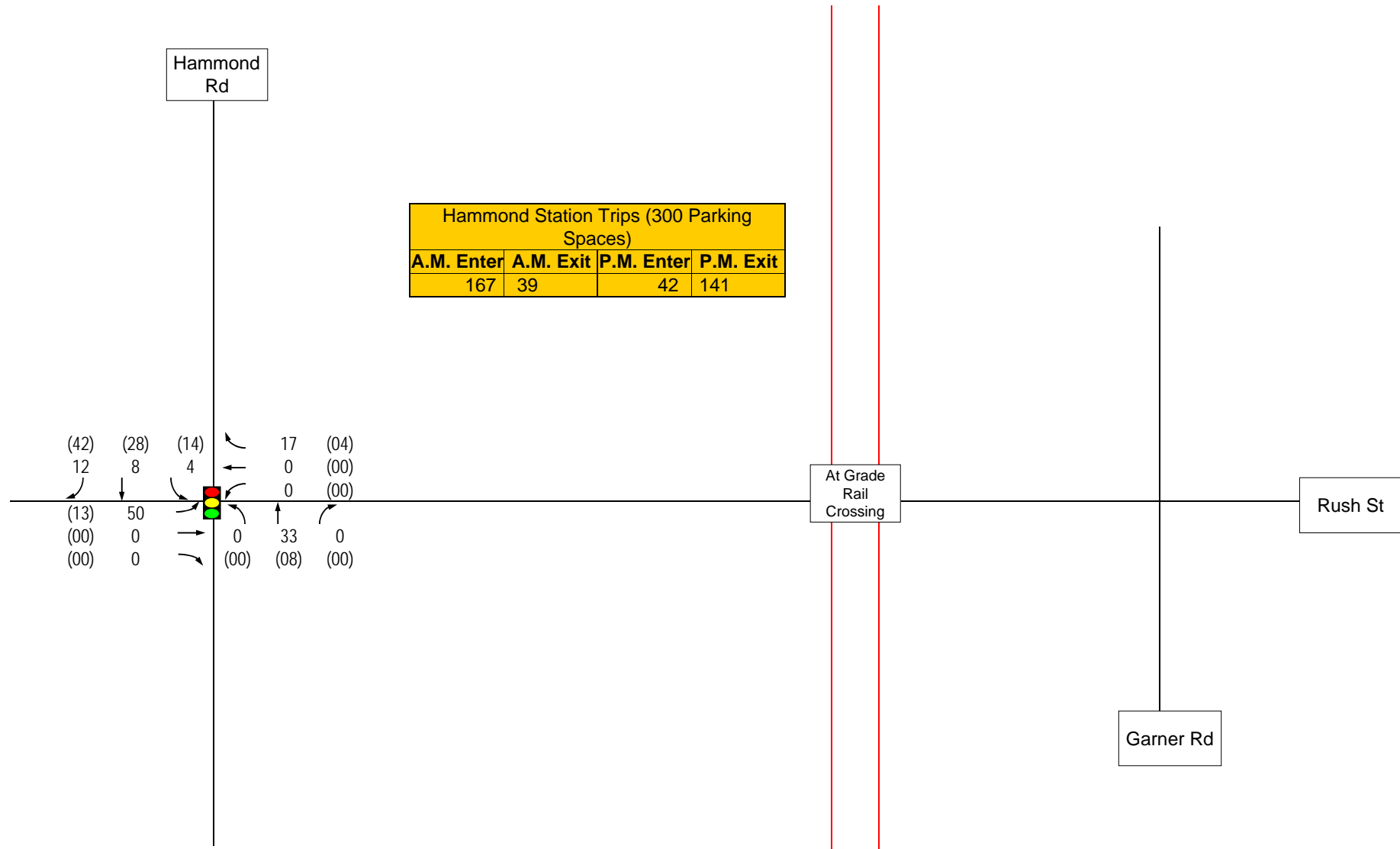
LEGEND	
—	Existing Roadway
==	Light Rail
→	Turning Movement
🚦	Signal Controlled Intersection
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume

Triangle Transit - 2035 No-Build Volumes - Durham-Wake Corridor - Hammond



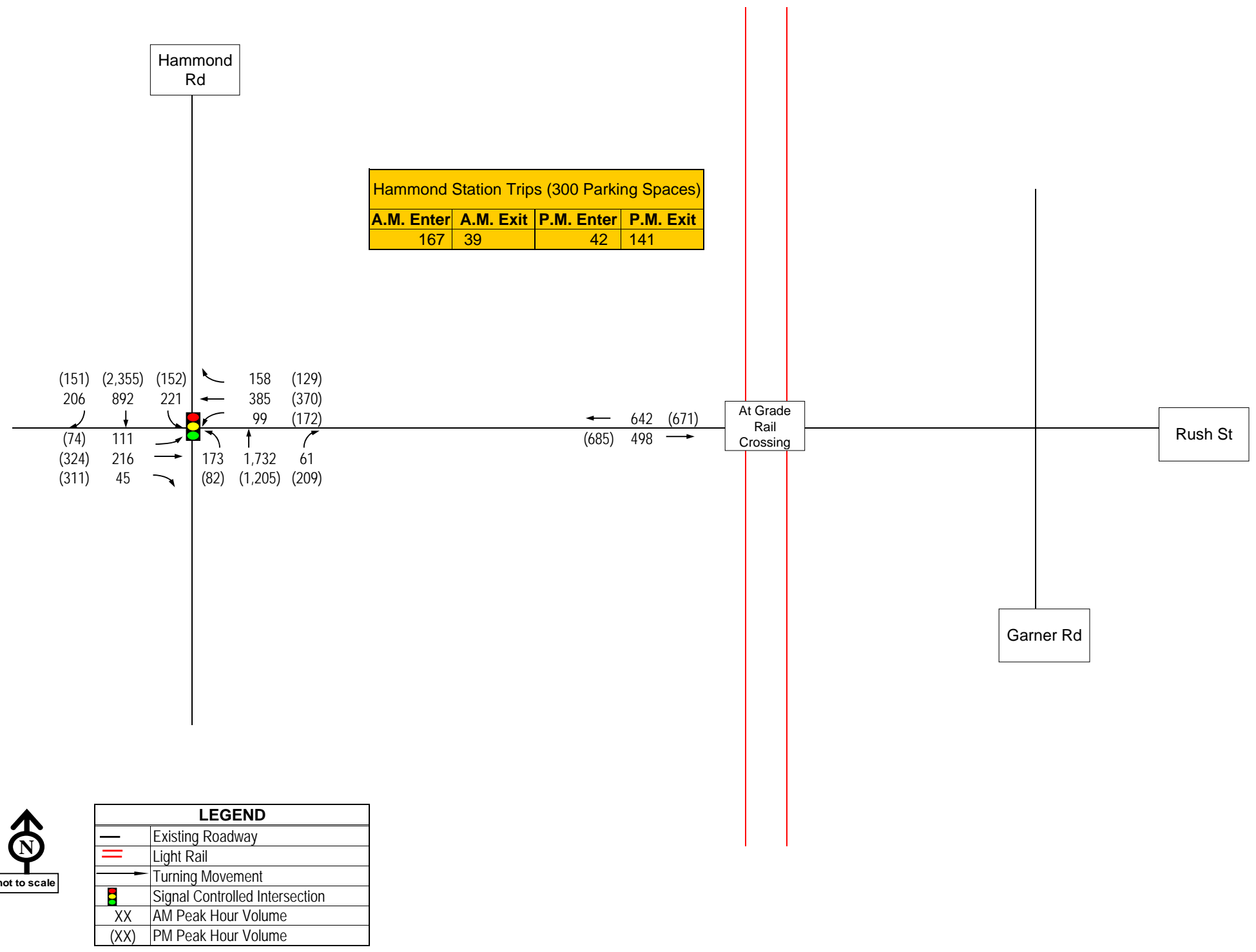
LEGEND	
—	Existing Roadway
==	Light Rail
→	Turning Movement
🚦	Signal Controlled Intersection
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume

Triangle Transit - Trip Distribution - Durham-Wake Corridor - Hammond



LEGEND	
	Existing Roadway
	Light Rail
	Turning Movement
	Signal Controlled Intersection
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume

Triangle Transit - Trips - Durham-Wake Corridor - Hammond



Triangle Transit - 2035 Build Volumes - Durham-Wake Corridor - Hammond

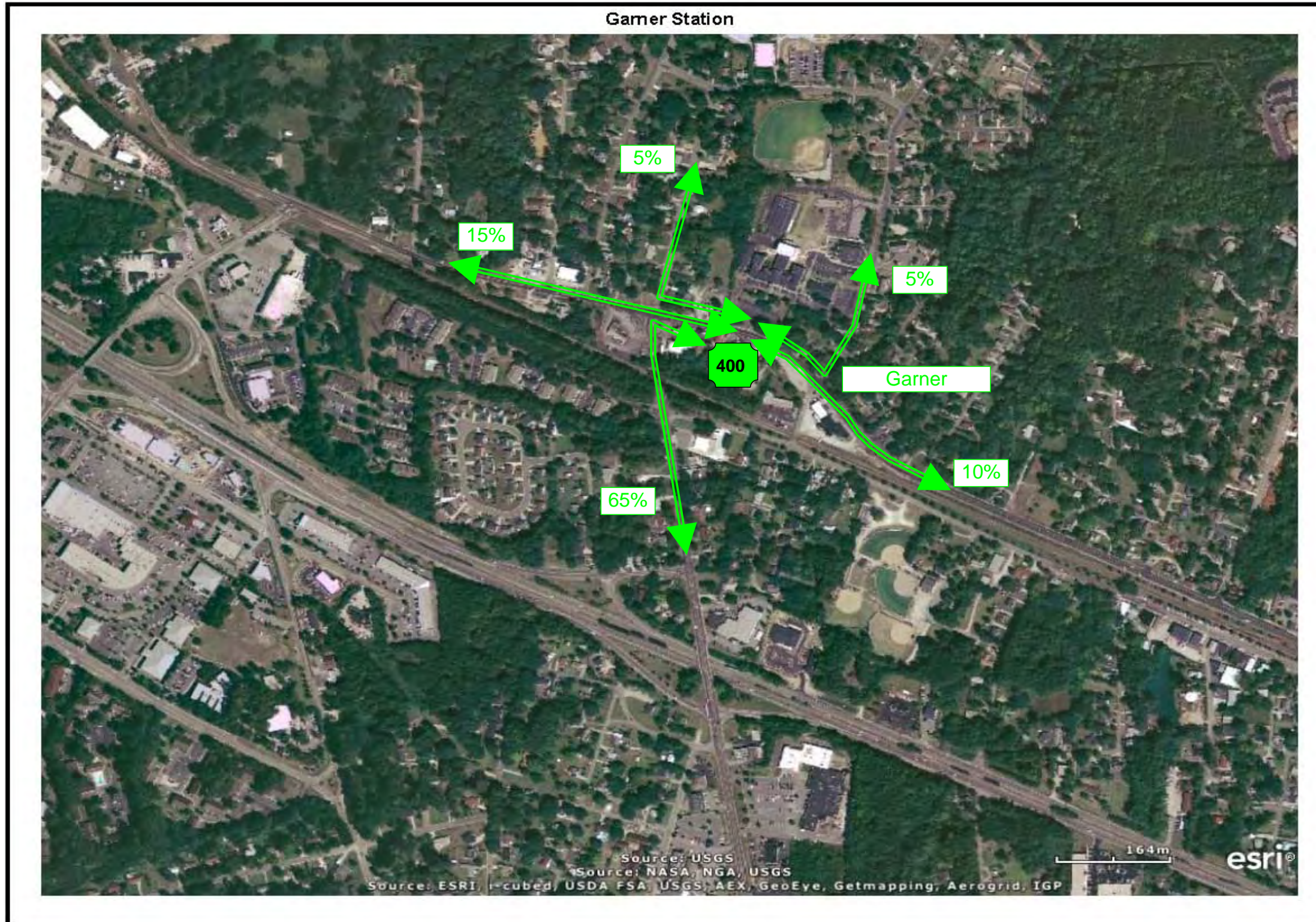
Overall Trip Distribution

NOTES

It was assumed that 65% of the traffic would be from the south along Benson Road, 15% from the area to the west along Garner Road, 10% from the area to the east along Garner Road, 5% from Avery Street, and 5% from Broughton Street.

Trip Generation Summary

ITE Land Use Code 90		
AM Peak Equation	Trips = (0.83 * Parking Spaces) - 43.4	
PM Peak Equation	Trips = (0.63 * Parking Spaces) - 5.94	
Percent Entering	AM Peak	PM Peak
Percent Exiting	19%	77%
Garner		
Parking Spaces	400	
	AM Peak	PM Peak
Total Trips	289	246
Entering	234	57
Exiting	55	189



Overall Trip Distribution

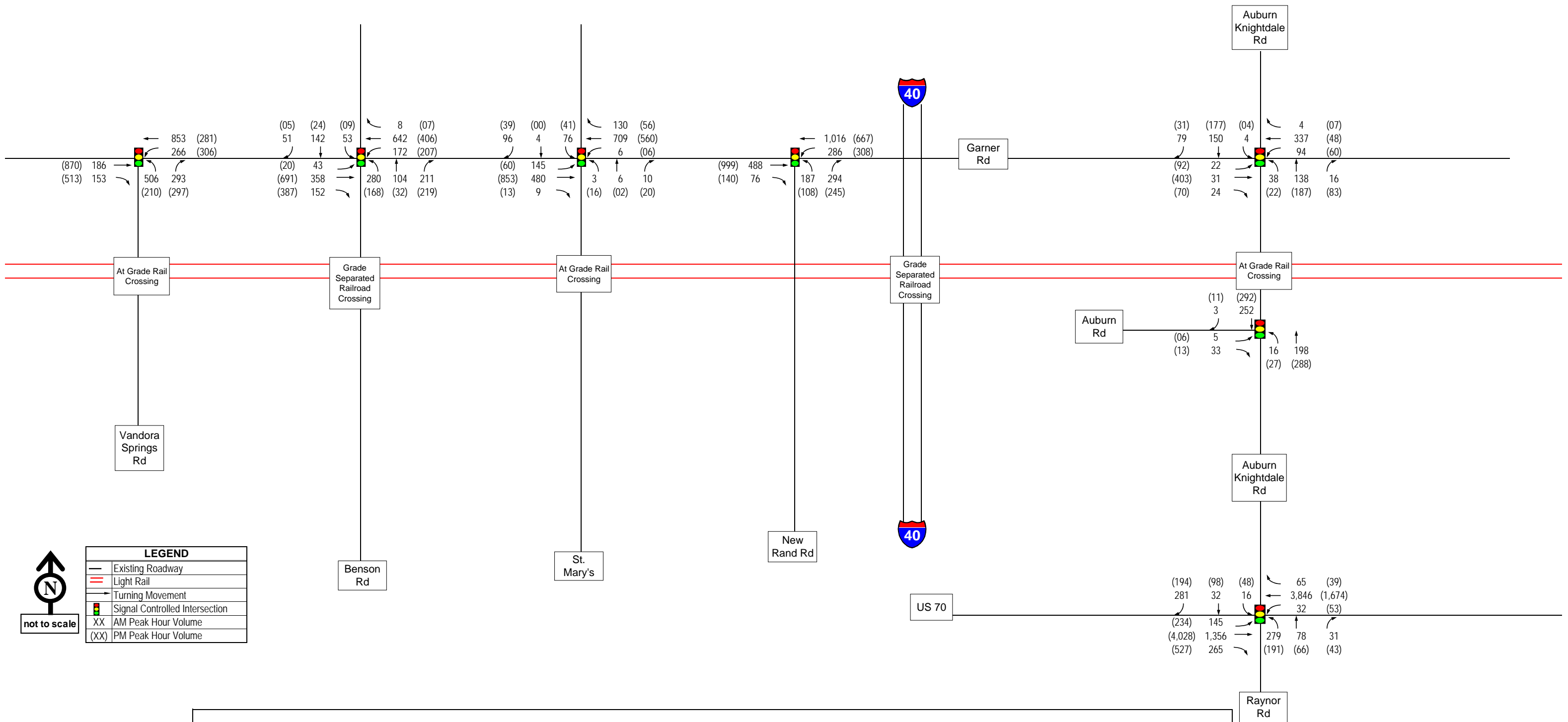
NOTES

It was assumed that 55% of the traffic would be from the east along US 70, 10% from the area to the south along Raynor Road, 25% from the area to the west along US 70, 6% from Garner Road (split evenly between the east and west), and 4% from the north along Auburn Knightdale Road.

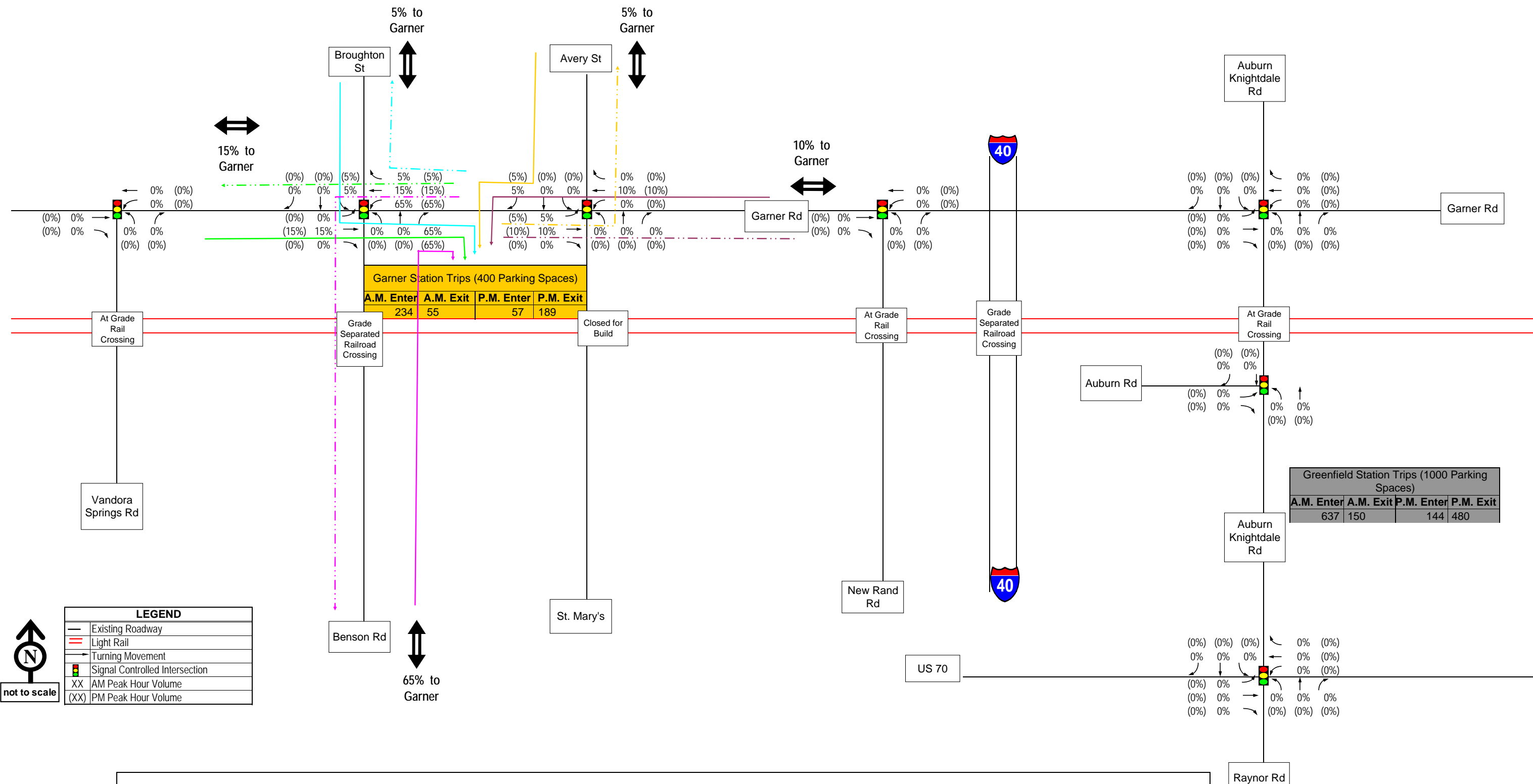
Trip Generation Summary

	ITE Land Use Code 90	
AM Peak Equation	Trips = (0.83 * Parking Spaces) - 43.4	
PM Peak Equation	Trips = (0.63 * Parking Spaces) - 5.94	
	AM Peak	PM Peak
Percent Entering	81%	23%
Percent Exiting	19%	77%
Greenfield		
Parking Spaces	1000	
	AM Peak	PM Peak
Total Trips	787	624
Entering	637	144
Exiting	150	480





Triangle Transit - 2035 No-Build Volumes - Durham-Wake Corridor - Garner/Greenfield



Garner Station Trips (400 Parking Spaces)

A.M. Enter	A.M. Exit	P.M. Enter	P.M. Exit
234	55	57	189

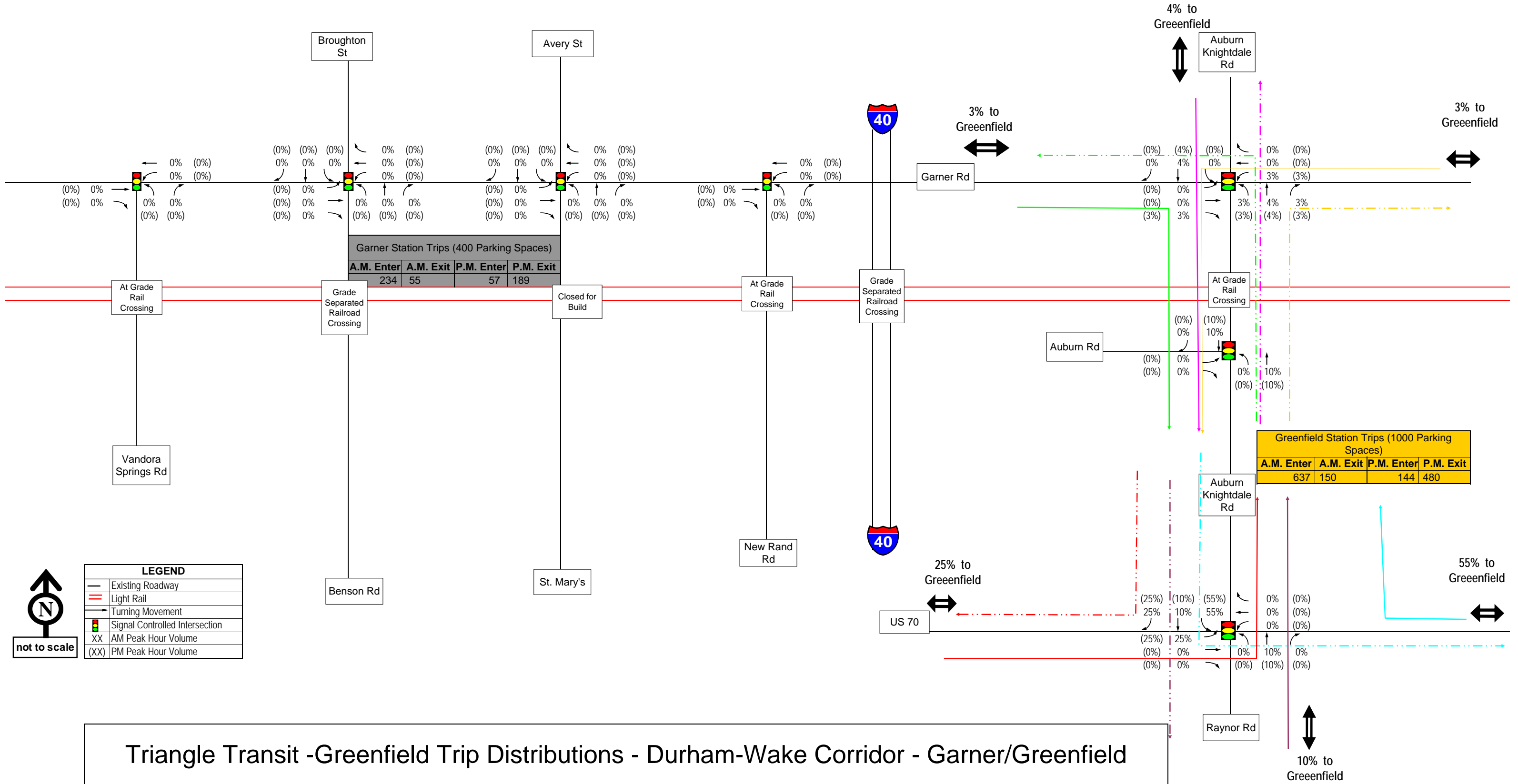
Greenfield Station Trips (1000 Parking Spaces)

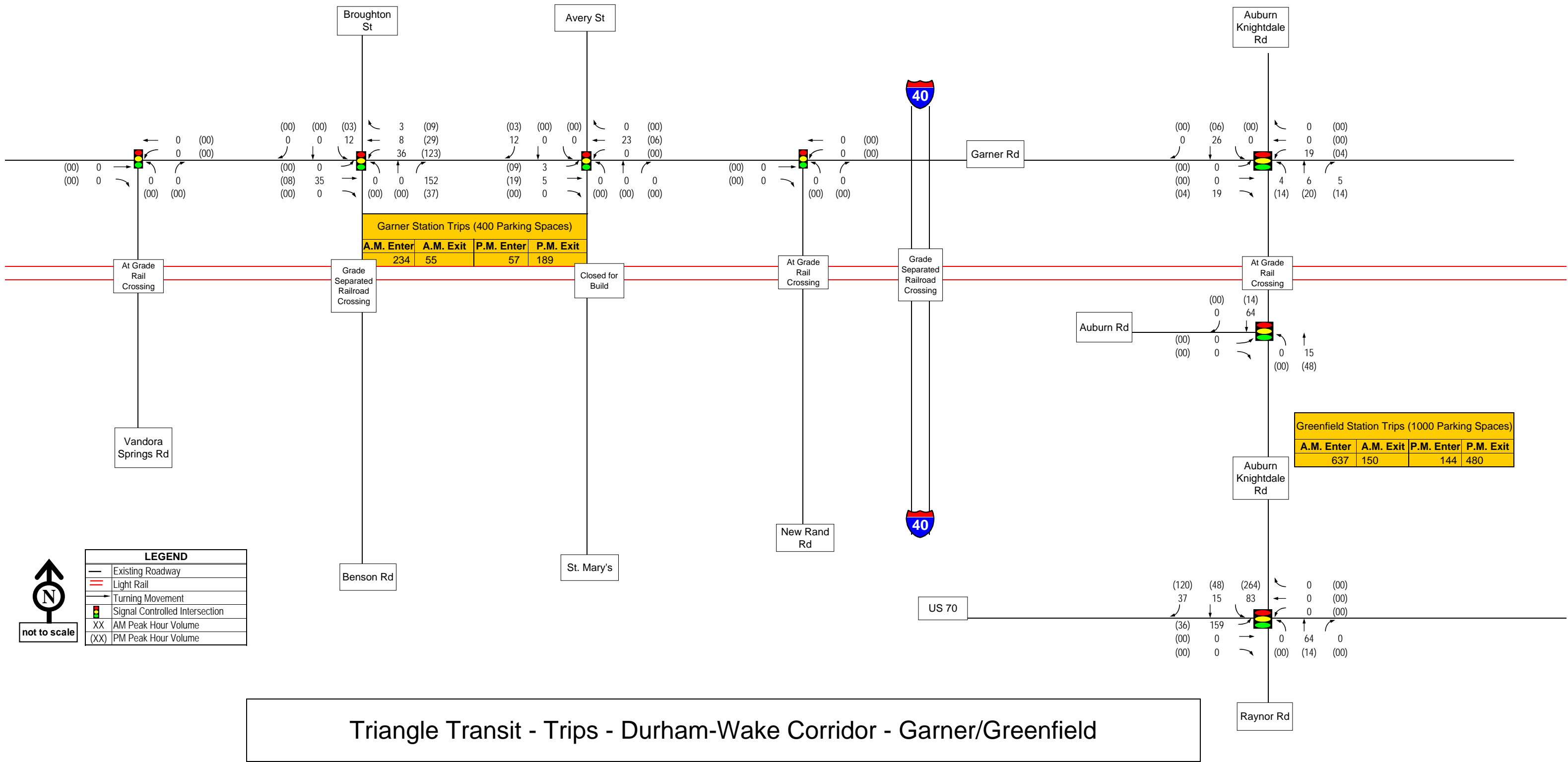
A.M. Enter	A.M. Exit	P.M. Enter	P.M. Exit
637	150	144	480

LEGEND

	Existing Roadway
	Light Rail
	Turning Movement
	Signal Controlled Intersection
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume

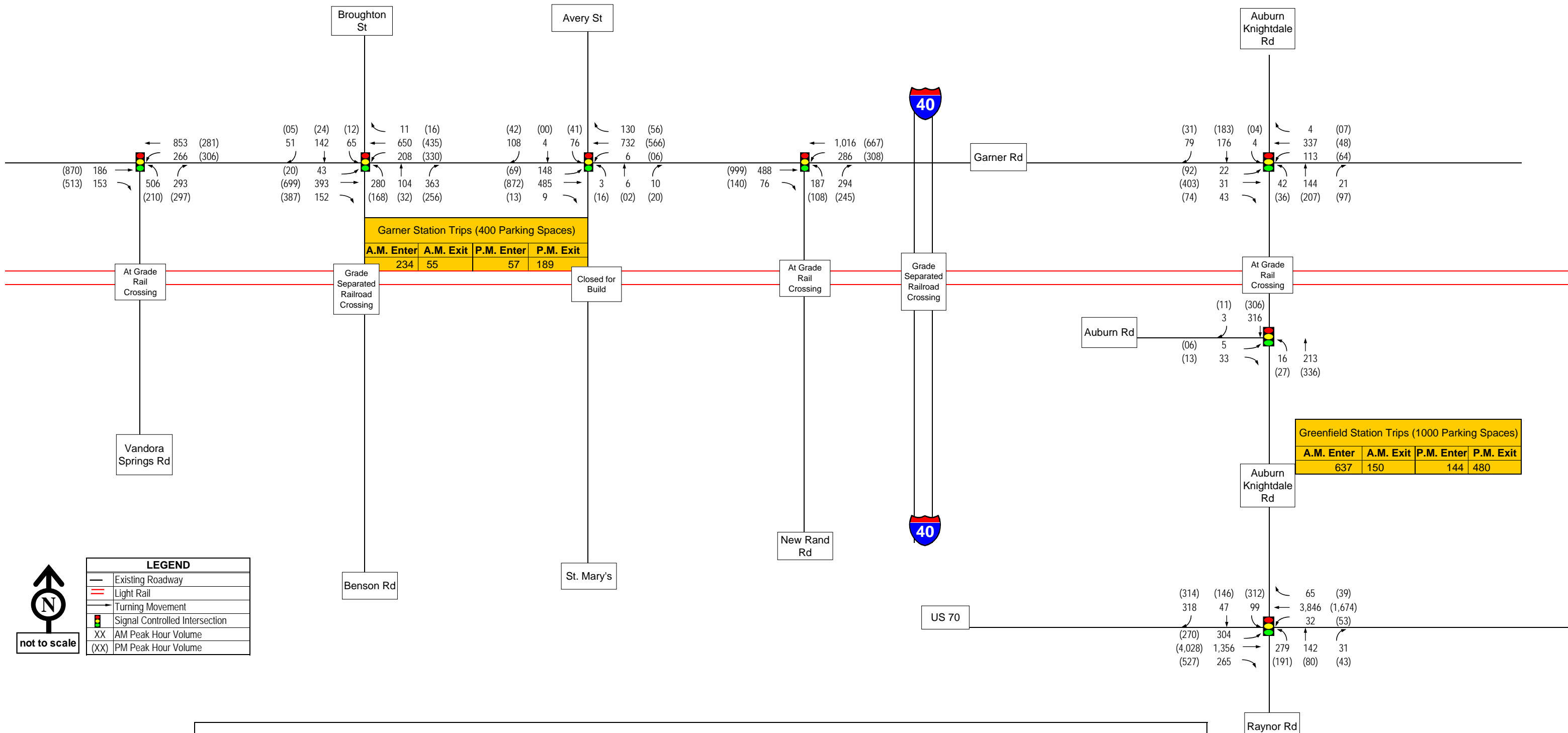
Triangle Transit -Garner Trip Distributions - Durham-Wake Corridor - Garner/Greenfield



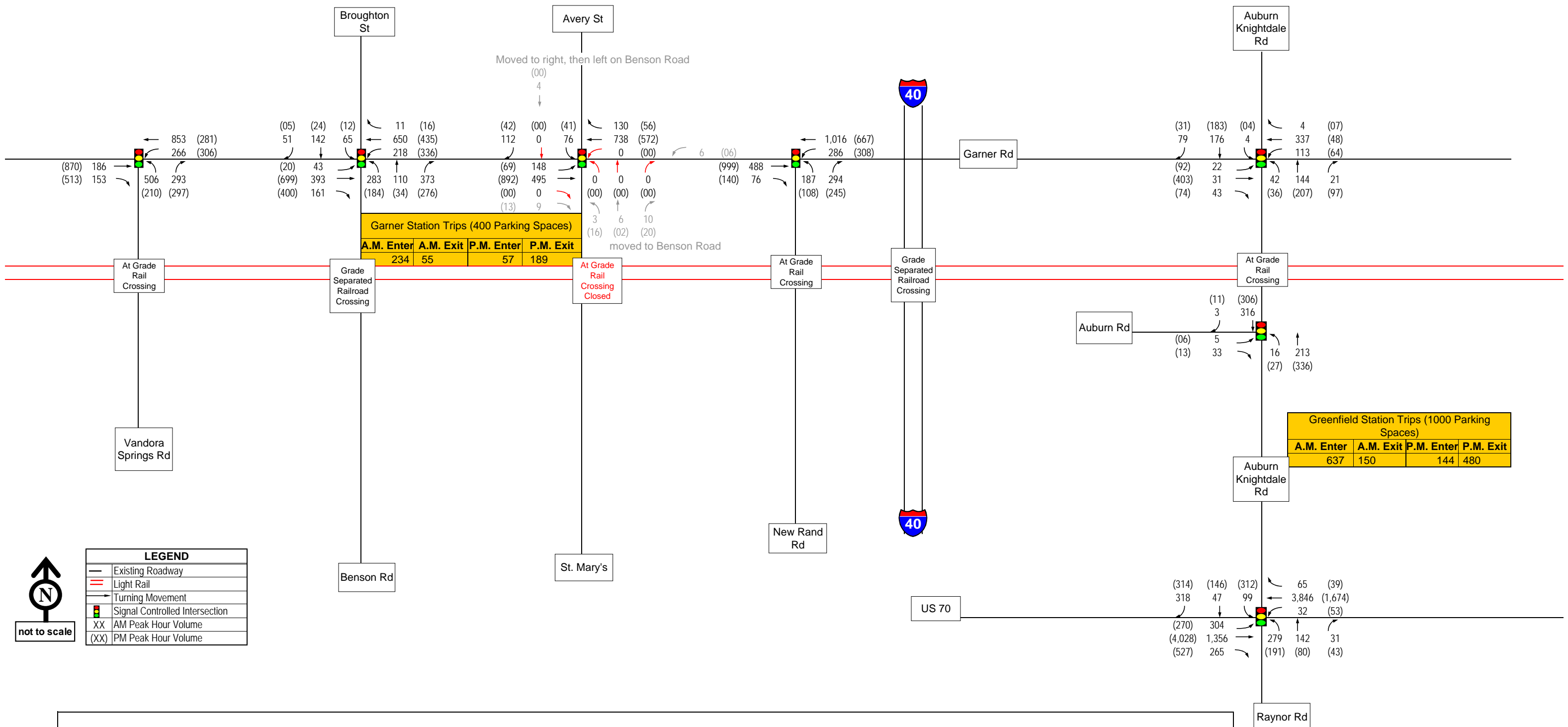


Triangle Transit - Trips - Durham-Wake Corridor - Garner/Greenfield

Note: Some volumes may be modified slightly to allow the individual volumes to sum to the total trips generated



Triangle Transit - 2035 Build Volumes - Durham-Wake Corridor - Garner/Greenfield



Triangle Transit - 2035 Build Volumes - Durham-Wake Corridor - Garner/Greenfield - Redistributed

