



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

March 30, 2021

MEMORANDUM TO: Michelle Howes
Corridor Development Unit

FROM: Chris McKoy
Traffic Forecasting Group

SUBJECT: Traffic Forecast for Project H111195
Four-laning SR 1009 (Old Charlotte Hwy) from SR 1377 (Wesley
Chapel Stouts Rd) to SR 1349 (Airport Road), Union County

Please find attached the 2021/2045 traffic forecast for H111195 in Union County.

The forecast includes the following scenarios:

- Base Year (2021) Project No-Build
- Future Year (2045) Project No-Build
- Future Year (2045) Project Build

Fiscal Constraint:

Within an MPO area travel demand forecasts assume the construction of projects listed within an MPO's Metropolitan Transportation Plan (MTP). This forecast is consistent with the Charlotte Regional Transportation Planning Organization 2045 MTP adopted March 2018. This forecast also assumes that all projects listed within the NCDOT 2020-2029 STIP will be constructed and open to traffic by 2045.

Development Activity:

No substantial current development is presently under construction, however, substantial future development is expected within the vicinity of the project.

Forecast Methodology:

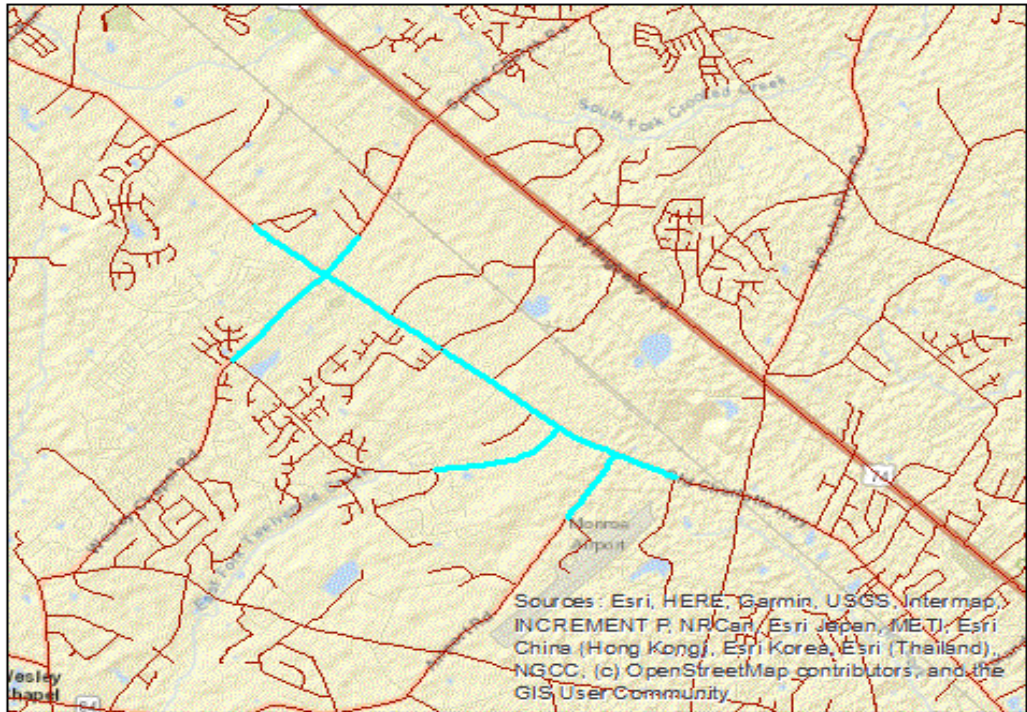
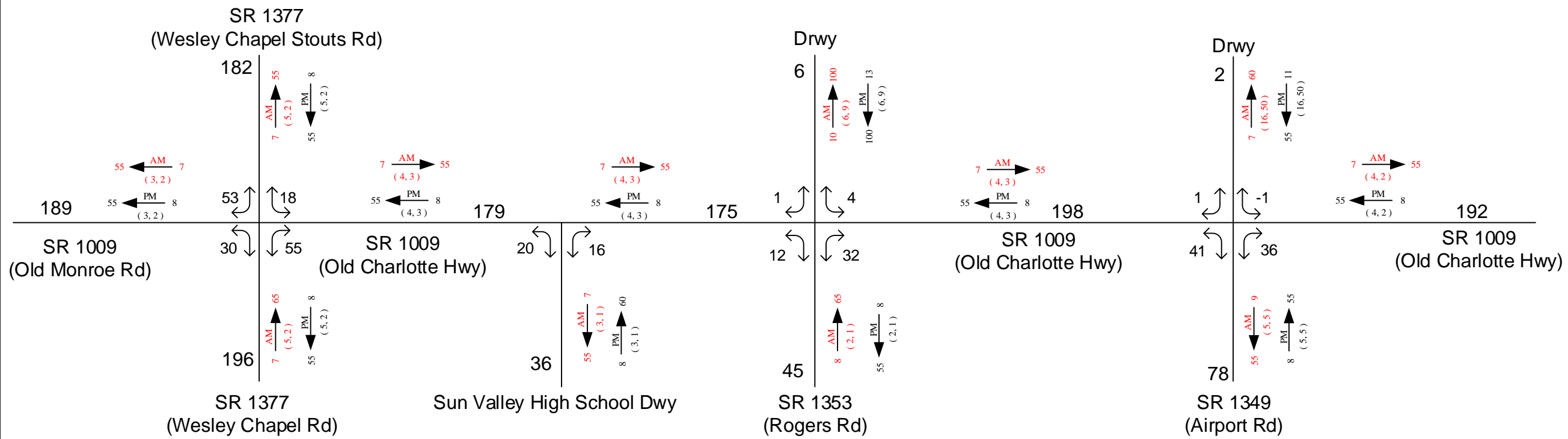
The 2021 Estimate is based upon current traffic counts and historical AADT trends. This Estimate is consistent with the 2017 No-Build Estimate prepared by RS&H for projects U-4714 and U-4713A because AADT has not substantially changed along SR 1009 since 2007.

The 2045 forecast was developed based upon consideration of output from the Metrolina Regional Model (MRM19v1.0).

The use of straight-line interpolation to estimate AADT for years between 2021 and 2045 is acceptable.

If it is determined that any of these assumptions have become inconsistent with the project and surrounding area activity, please request an updated forecast.

If we can be of any further assistance please do not hesitate to contact me at 707-0939, email: cdmckoy@ncdot.gov, or Michael Orr, Traffic Forecasting Group Supervisor, at mlorr@ncdot.gov.

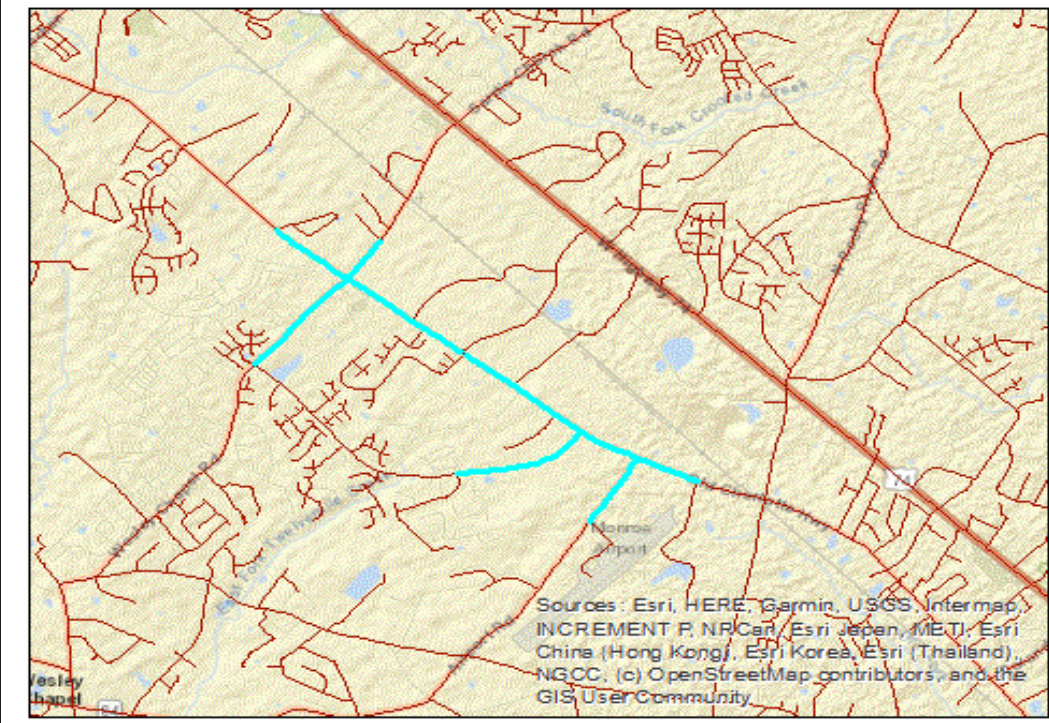
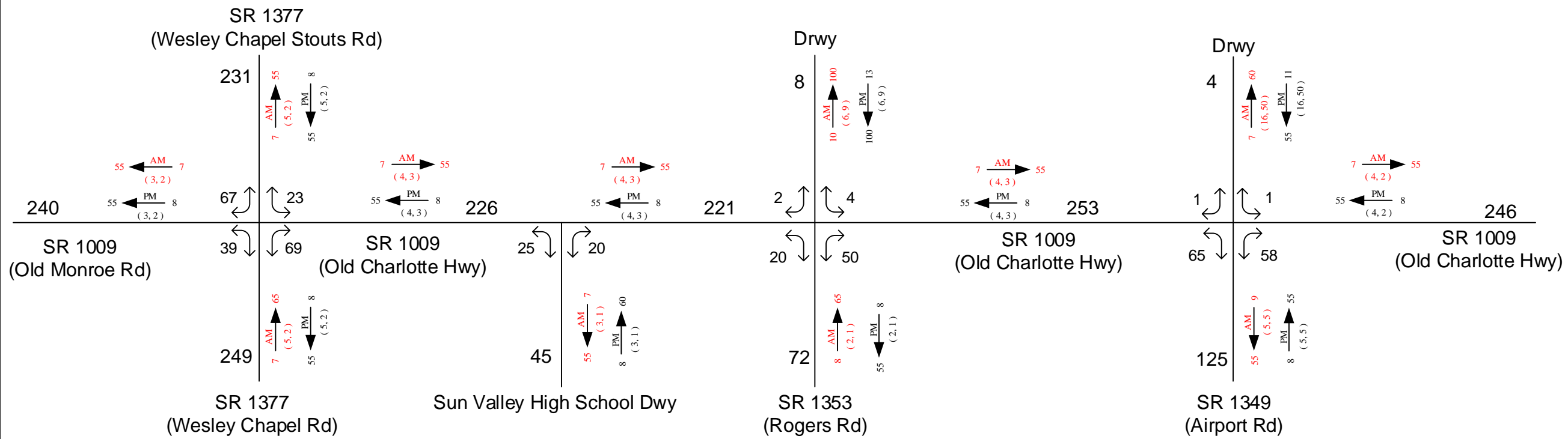


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2021 No-Build

AVERAGE ANNUAL DAILY TRAFFIC

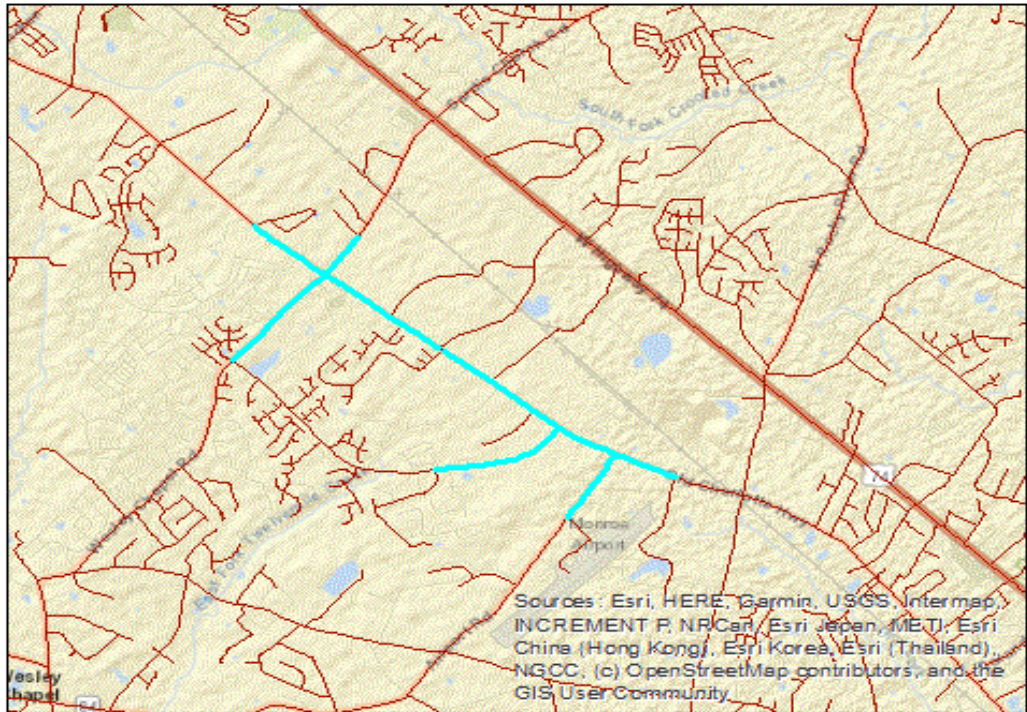
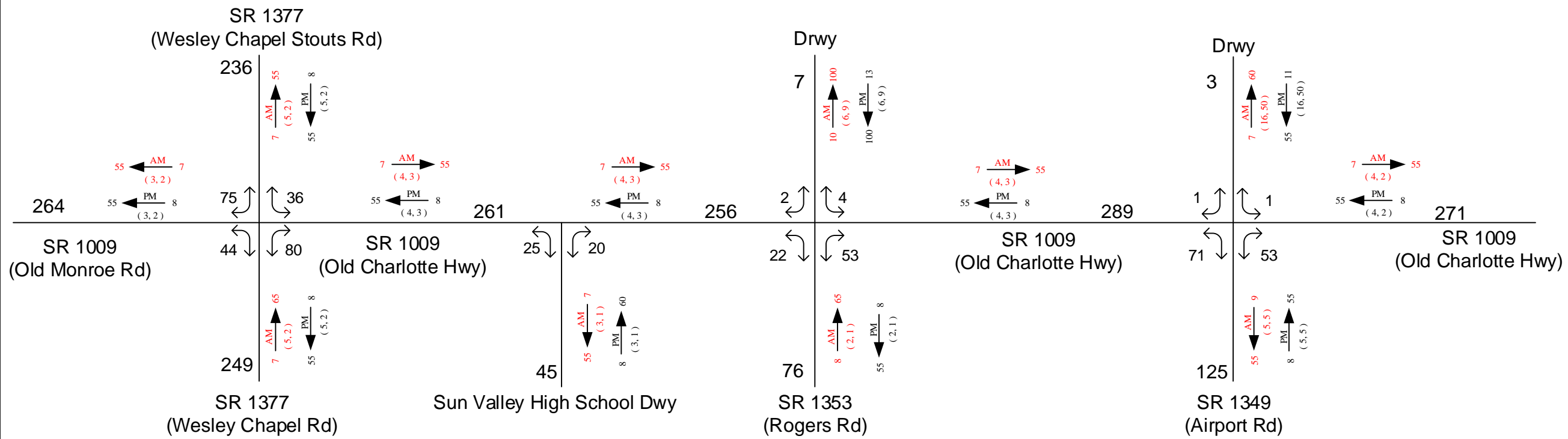
<p style="text-align: center;">LEGEND</p> <p style="text-align: center;">K ^{AM/PM} → D (d, t)</p> <p>### No. of Vehicles Per Day (VPD) in 100s</p> <p>1- Less than 50 VPD</p> <p>X Movement Prohibited</p> <p>(d,t) Duals, TT-STs (%)</p> <p>K Design Hour Factor(%)</p> <p>PM/AM PM Peak Period</p> <p>D Peak Hour</p> <p>Directional Split (%)</p> <p>→ Indicates Direction of D</p>	<p>TIP: H111195</p>	<p>WBS: 34263.1.1</p>
	<p>COUNTY: Union</p>	<p>DIVISION: 10</p>
	<p>DATE: 3-30-2021</p>	
	<p>PREPARED BY: Chris McKoy</p>	
	<p>LOCATION: SR 1009(Old Charlotte Hwy)</p>	
	<p>PROJECT: 4-laning SR 1009 (Old Charlotte Hwy)</p>	



2045 No-Build

AVERAGE ANNUAL DAILY TRAFFIC

LEGEND		TIP: H111195	WBS: 34263.1.1
###	No. of Vehicles Per Day (VPD) in 100s	K	Design Hour Factor(%)
1-	Less than 50 VPD	PM/AM	PM Peak Period
X	Movement Prohibited	D	Peak Hour
(d,t)	Duals, TT-STs (%)	→	Directional Split (%)
		→	Indicates Direction of D
		DATE: 3-30-2021	
		PREPARED BY: Chris McKoy	
		LOCATION: SR 1009(Old Charlotte Hwy)	
		PROJECT: 4-laning SR 1009 (Old Charlotte Hwy)	



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2045 Build

AVERAGE ANNUAL DAILY TRAFFIC

LEGEND		TIP: H111195	WBS: 34263.1.1
###	No. of Vehicles Per Day (VPD) in 100s	K	Design Hour Factor(%)
1-	Less than 50 VPD	PM/AM	PM Peak Period
X	Movement Prohibited	D	Peak Hour
(d,t)	Duals, TT-STs (%)	→	Indicates Direction of D
		DATE: 3-30-2021	DIVISION: 10
		PREPARED BY: Chris McKoy	
		LOCATION: SR 1009(Old Charlotte Hwy)	
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