



Town of Chapel Hill Aura TIA Model



Presentation to Transportation and
Connectivity Advisory Board

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Town of Chapel Hill

Town-wide Transportation Model

Use in TIA Process

- Replaces Synchro as Primary Evaluation Tool
- Would Still Adhere to Town/NCDOT TIA Preparation Process
- Use of LOS as Evaluation Threshold
- Would Need to Establish Additional Guidelines for Model Use/Application



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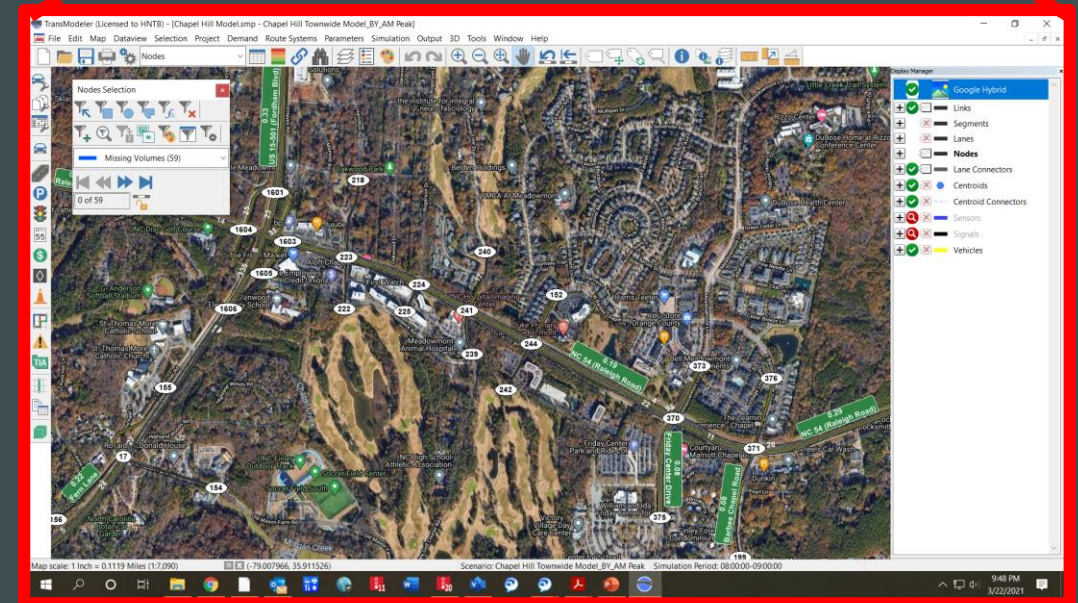
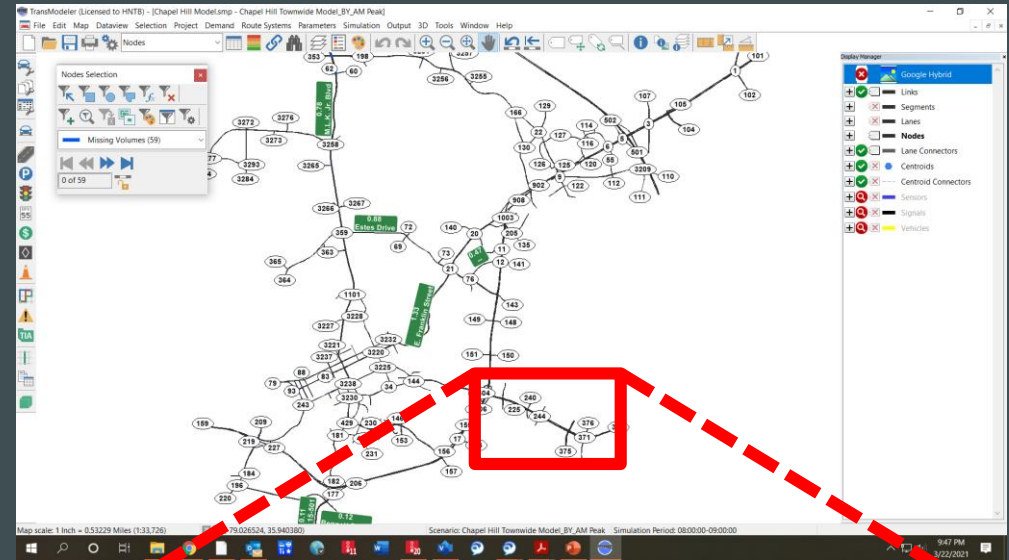
Town of Chapel Hill

Aura TIA Model

Use in TIA Process



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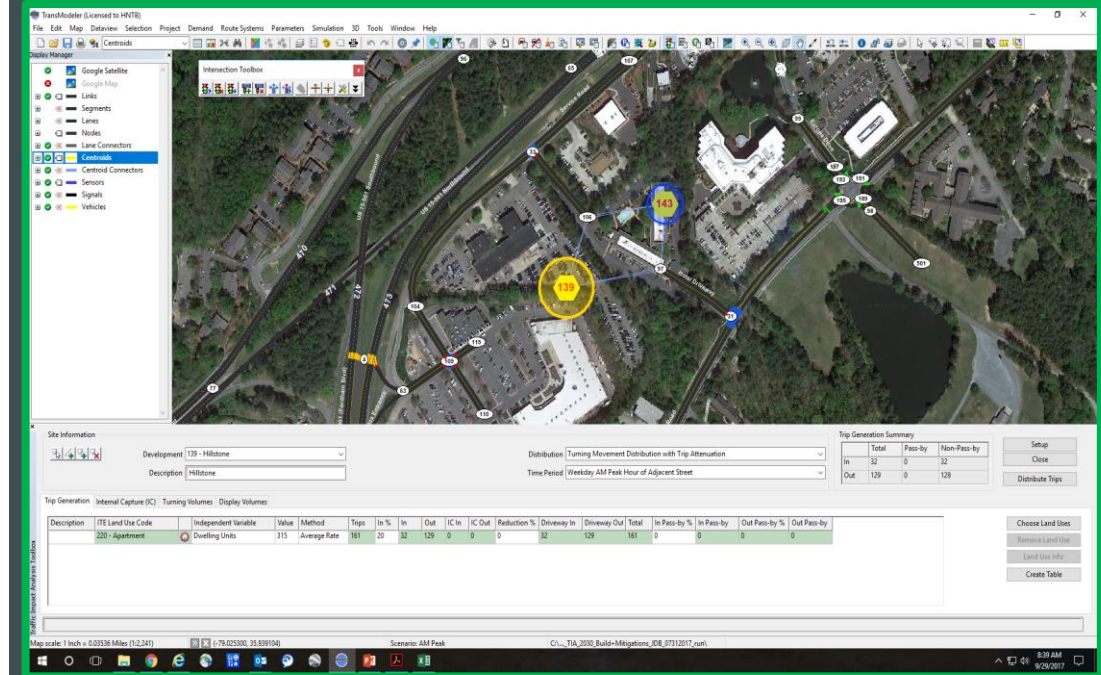
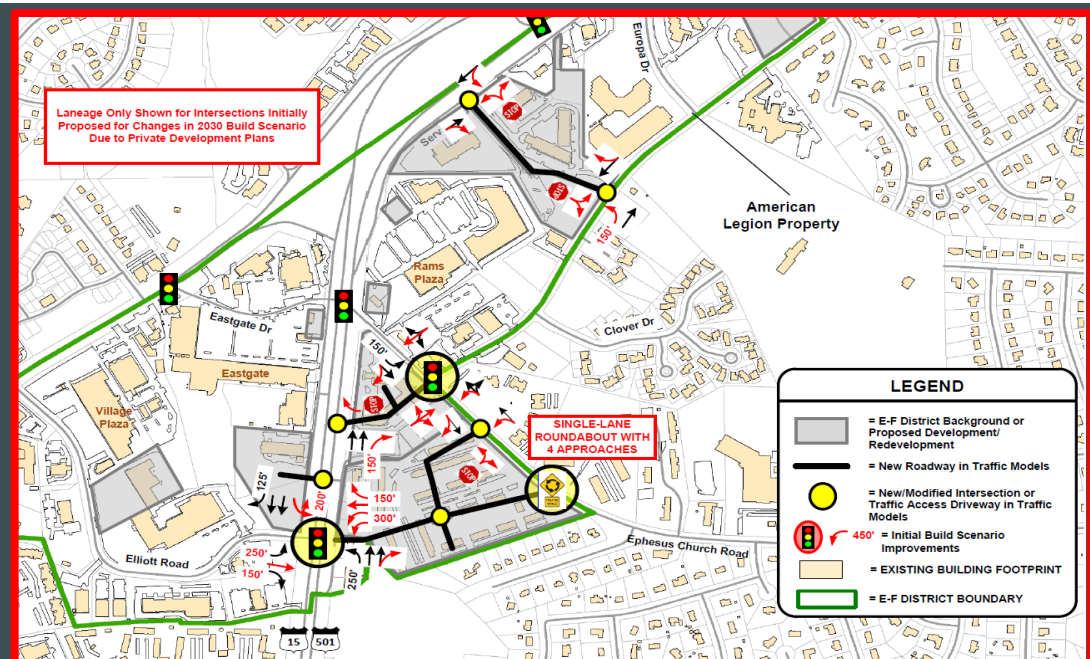
Model Development

New Roadways

New Development Traffic Generated / Assigned Using "TIA Toolbox"



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Aura TIA Model

Aura TIA Comparison

2024 Build+Recommended
Improvements

PM Peak Hour



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Intersection and Approach	Traffic Control	Town-Wide Model	Aura TIA
MLK Blvd and Airport Rd	Unsignalized	-	-
Eastbound		C - 16.7	C - 17.8
MLK Blvd and Estes Dr	Signalized	D - 39.8	D - 52.3
Eastbound		D - 53.9	E - 66.5
Westbound		D - 39.3	E - 69.9
Northbound		D - 37.1	D - 50.2
Southbound		C - 28.3	C - 33.5
MLK Blvd and Piney Mountain Rd	Signalized	B - 17.0	B - 10.8
Eastbound		E - 65.4	E - 72.0
Westbound		E - 61.6	E - 71.3
Northbound		A - 4.9	A - 5.5
Southbound		A - 8.0	A - 8.6
MLK Blvd and Homestead Rd	Signalized	C - 27.5	C - 20.7
Eastbound		D - 50.1	D - 54.6
Westbound		E - 67.5	E - 58.6
Northbound		B - 14.6	B - 13.3
Southbound		B - 10.7	B - 19.6
Estes Dr and Somerset Dr	Unsignalized	-	-
Southbound		C - 24.6	E - 36.1
Estes Dr and Caswell Dr	Signalized	C - 25.4	C - 21.1
Eastbound		A - 8.0	A - 8.0
Westbound		B - 18.2	C - 24.6
Northbound		D - 50.5	D - 35.0
Southbound		C - 33.6	E - 57.3
Estes Dr and Franklin St	Signalized	D - 49.3	E - 59.6
Eastbound		E - 55.7	E - 70.0
Westbound		E - 55.4	E - 66.0
Northbound		D - 43.7	E - 68.4
Southbound		C - 27.1	D - 40.0
MLK Blvd and Future Access #1	Unsignalized	-	-
Westbound		B - 14.7	C - 22.8
Estes Dr and Future Access #2	Unsignalized	-	-
Southbound		C - 24.6	F - 97.3

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Aura TIA Model

Model Demonstration

- Aura TIA Model
- TIA Toolbox



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QUESTIONS AND DISCUSSION



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