

# WINSTON-SALEM BICYCLE MASTER PLAN

City of Winston-Salem Public Works Committee

August 13, 2019



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# NEED FOR A NEW BICYCLE MASTER PLAN

- Community Growth and Change
- Accomplishments
- Bicycle Friendly Community Designation
- Infrastructure Developments



Photo Credit: Stitch Design Shop



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# BICYCLE MASTER PLAN TEAM

- City of Winston-Salem
- AECOM
- Stewart
- Simon Resources, Inc.
- Steering Committee

**AECOM**

  
STEWART

 SIMON  
RESOURCES, INC.



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# BICYCLE MASTER PLAN PROCESS

## Network Analysis

## Public Input

- Large public meetings (3)
- Pop Up Events (13)
- Website – [www.wsbikeplan.com](http://www.wsbikeplan.com)

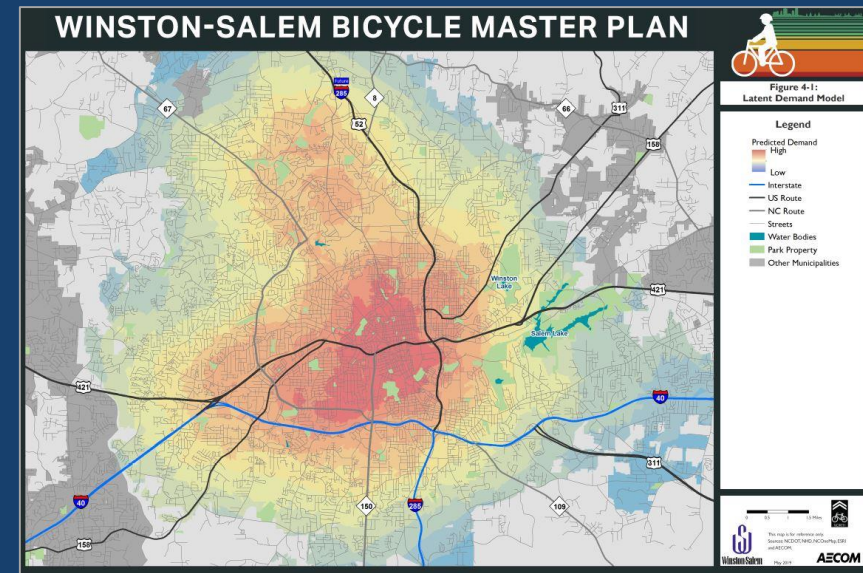
## Plan Development

- Bicycle Facility Recommendations
- Program Recommendations
- Institutional Recommendations
- Support Infrastructure Recommendations
- Implementation



# NETWORK ANALYSIS - LATENT DEMAND

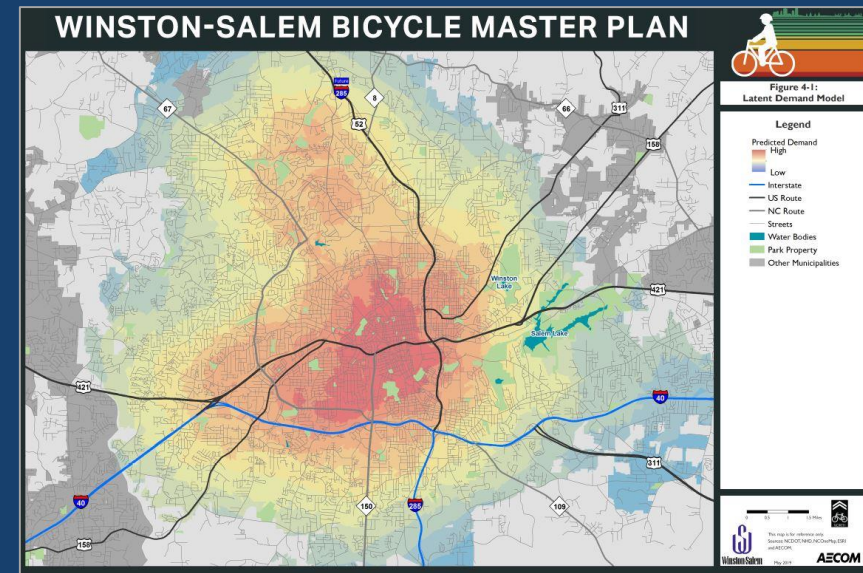
- Zero-Car Household Density
- Minority Populations
- Low Income Populations
- Single-Car Household with Multiple Commuter Density
- Job Density
- Retail/Accommodation/Food Service Density



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# NETWORK ANALYSIS - LATENT DEMAND

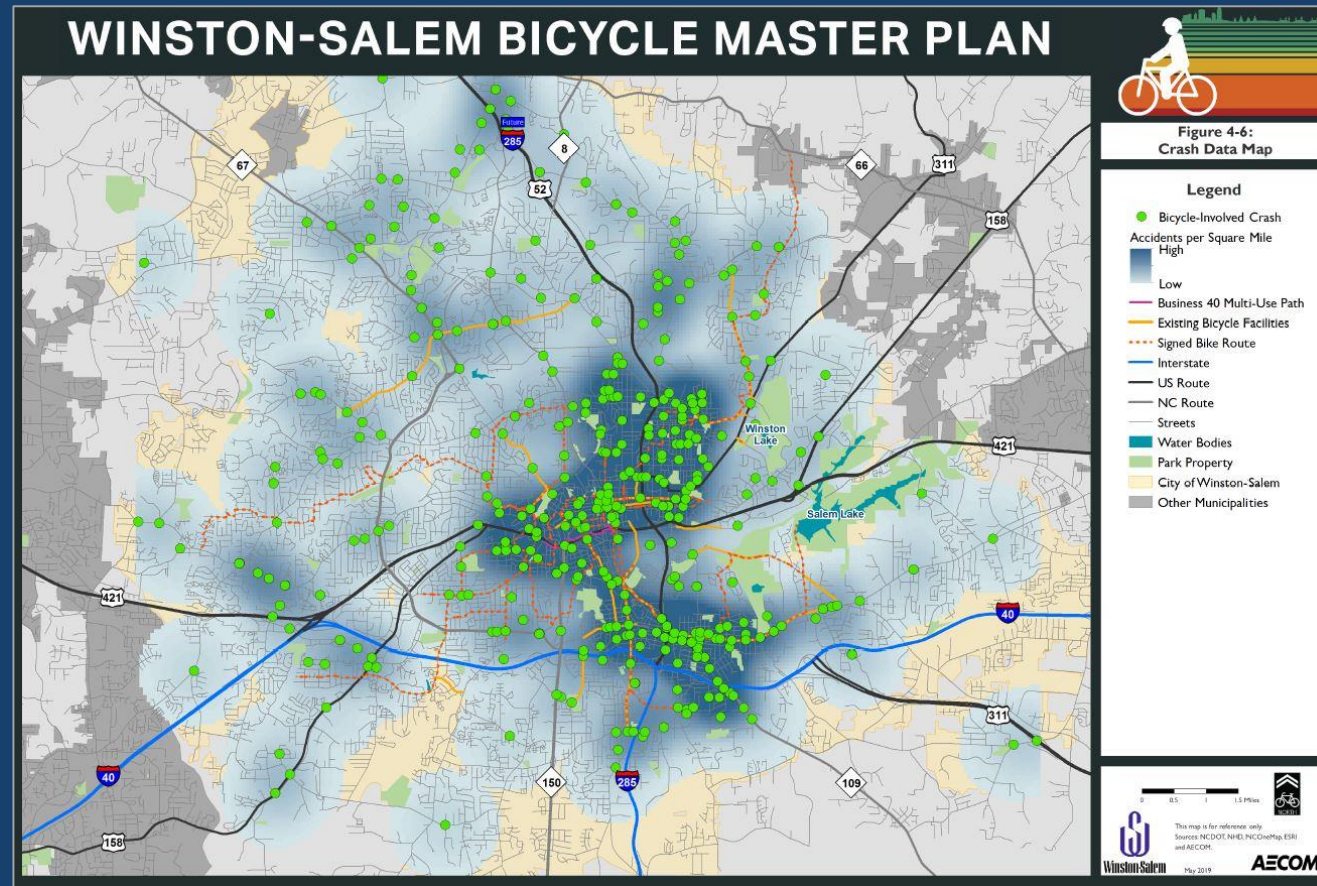
- Distance to Schools, Colleges, Universities
- Distance to Parks
- Distance to Greenway Entrances
- Distance to Bus Stops
- Population Density
- Short Distance Commuter Density



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# NETWORK ANALYSIS – CRASH DATA

- Location
- Year
- Time of Day
- Day of Week
- Hour of Day
- Age of Victim
- Crash Types



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# NETWORK ANALYSIS – STRESS LEVEL

- Traffic Volume
- Traffic Speed
- Lane Width



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# PUBLIC INPUT MEETINGS

## Large Public Input Meetings

1. Introduction to Plan Process
2. Review Draft Recommendations
3. Review Draft Plan



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# PUBLIC INPUT MEETINGS

## Pop Up Public Input Events

- Transit Center
- Walk & Roll Winston-Salem
- East Ward Town Hall Meeting
- Piedmont Environmental Alliance Earth Day Fair
- Creek Week Keynote
- Safe Kids Coalition Bike Safety Day
- Inmar/Innovation Quarter Bike Month Ride
- Temple Emanuel Environmental Movie Event
- Sierra Club Meeting
- Baptist Medical Center Employee Wellness Day
- Fairgrounds Farm Market
- Neighbors for Better Neighborhoods Grand Opening
- Tour To Tanglewood



# PUBLIC INPUT - WEBSITE

[www.wsbikeplan.com](http://www.wsbikeplan.com)

## WINSTON-SALEM BICYCLE MASTER PLAN

 Winston-Salem Bicycle Master Plan Translate

You're going to want to bike in the Dash! The City of Winston-Salem is in the process of creating a new bicycle master plan for the City. The goal of the plan is to help the City determine which bicycle facilities are the most critically needed to improve safety and connectivity, as well as promote active transportation for all abilities. The results of the analysis will help the City streamline and prioritize implementation. Your input on the bicycling needs of the community is vital to a successful planning process. Please check back frequently to stay informed.

**Please join us for our final public meeting on April 4th from 5:30 to 7:30 at Salem Lake Marina! Come out and view the draft master plan, ask questions, and provide your thoughts. We look forward to seeing you there! The Plan can also be found in the document section!**

# PLAN ELEMENTS – FACILITY RECOMMENDATIONS

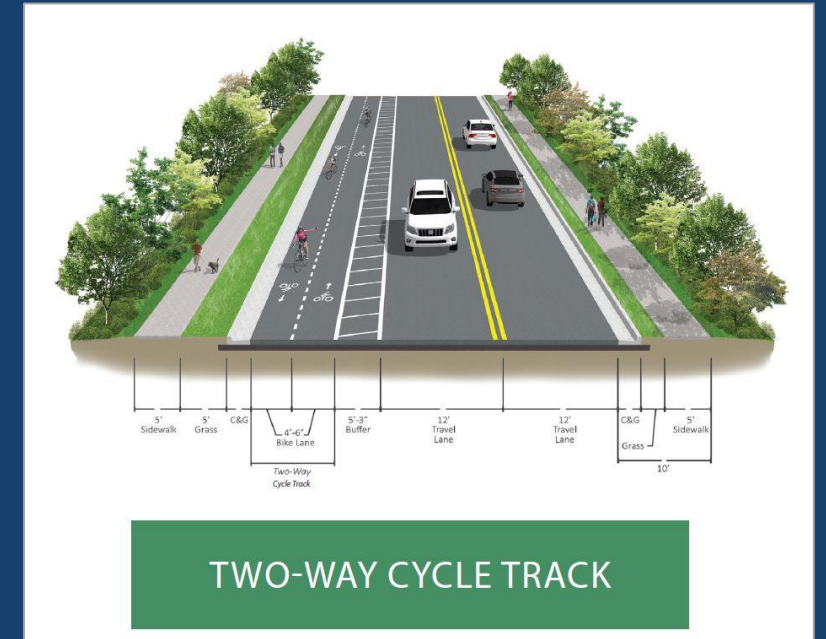
## Facility Type Recommendations

Class I – Shared Use Paths: 88 Miles

Class II – Dedicated Bicycle Lanes: 253 Miles

Class III – Shared Streets and Bicycle Boulevards: 54 Miles

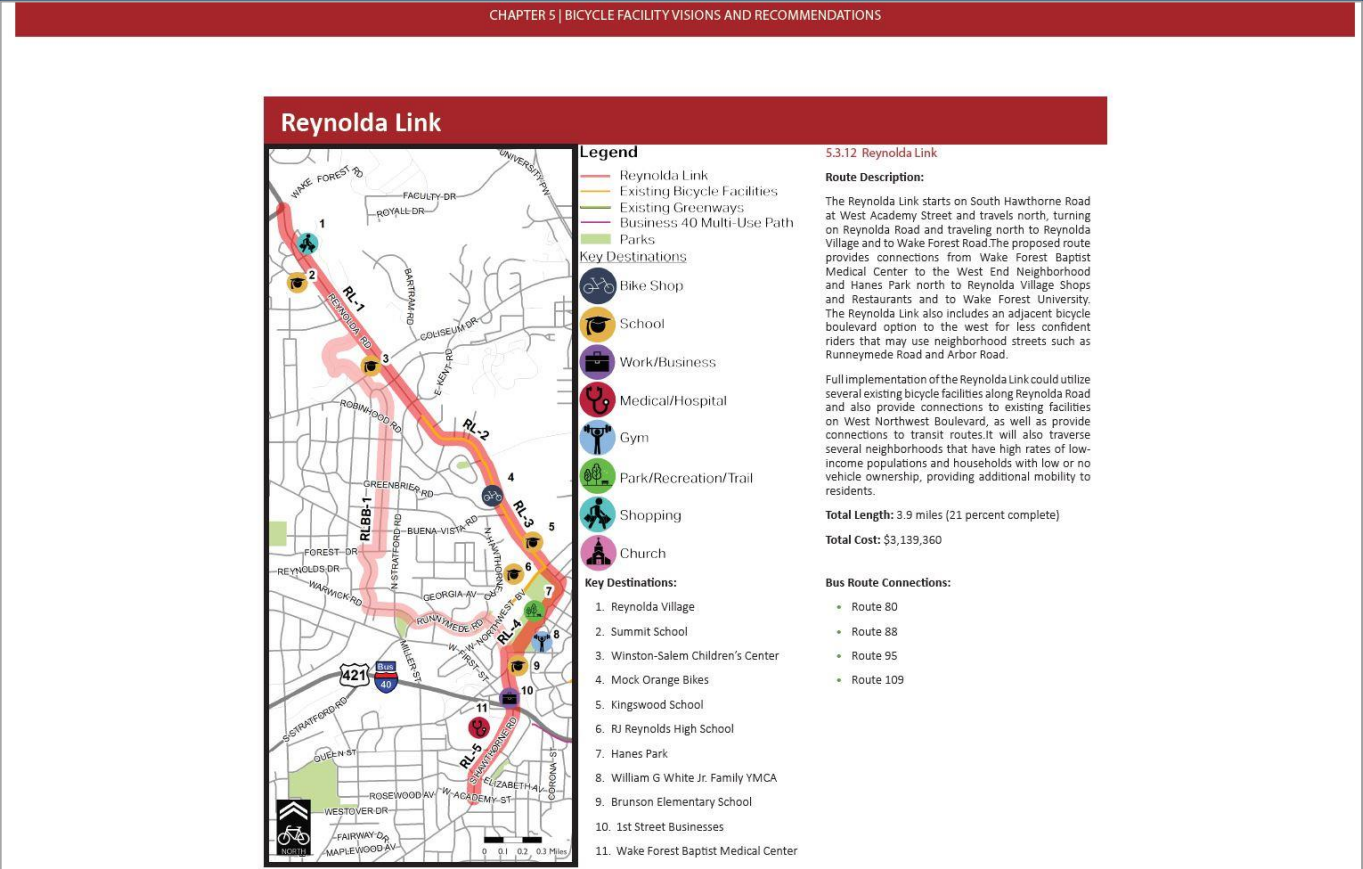
Class IV – Protected Cycle Tracks: 18 miles



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# PLAN ELEMENTS – FACILITY RECOMMENDATIONS

## 17 Priority Corridors (Existing/Proposed On-Street/Proposed Trail)



# PLAN ELEMENTS – FACILITY RECOMMENDATIONS

## CHAPTER 5 | BICYCLE FACILITY VISIONS AND RECOMMENDATIONS

Table 5-13: Reynolda Link

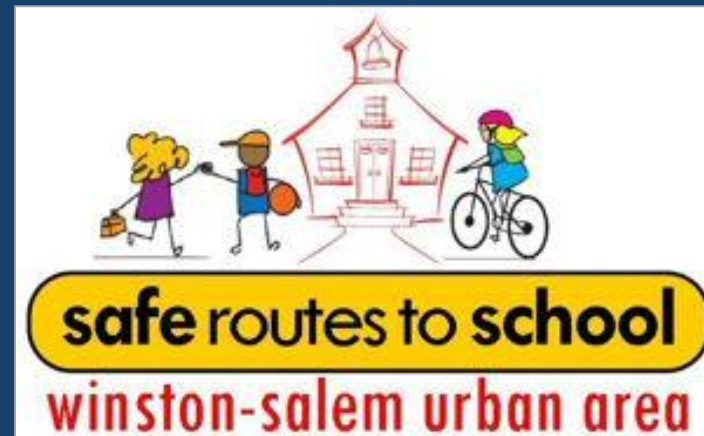
Map Label	Segment Location	Typical Cross Section or Improvement Type	Existing	Total Length	Stress Level	Social Equity Connections	Cost Estimate	Implementation Notes
RL-1	Reynolda Road from Wake Forest Road to Stratford Road	Class II – Dedicated Bike Lanes	No	1.1 miles	High	Yes	\$1,193,600	Upgrade Reynolda Road to complete street including dedicated bicycle facilities with roadway improvements. Include upgrades for pedestrians and transit.
RL-2	Reynolda Road from Stratford Road to Robinhood Road	Class II – Dedicated Bike Lanes	Yes	0.8 miles	Moderate	Yes	N/A	
RL-3	Reynolda Road from Robinhood Road to the Proposed Peters Creek Greenway Trail	Class II – Dedicated Bike Lanes	No	0.5 miles	High	Yes	\$505,800	Review opportunities for lane reallocation with center turn lane and turning movement counts at Reynolda Road and Northwest Boulevard. Seek opportunities to include dedicated bicycle accommodations. Coordinate with Railroad on complete streets retrofit with bridge placement.



# PLAN ELEMENTS – PROGRAM RECOMMENDATIONS

## Education

- Cycling and Walking Audits
- Safe Routes to School
- Targeted Driver and Cyclist Education



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# PLAN ELEMENTS – PROGRAM RECOMMENDATIONS

## Encouragement

- Transportation Demand Management
- Engagement with External Agencies



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# PLAN ELEMENTS – PROGRAM RECOMMENDATIONS

## Evaluation

- Expansion of Bicycle and Pedestrian Counting Program
- Bicycle Crash Analysis
- Project Evaluations



# PLAN ELEMENTS – PROGRAM RECOMMENDATIONS

## Enforcement

- Watch for Me NC
- Bicycle Lane Parking
- Share the Road



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# PLAN ELEMENTS – INSTITUTIONAL RECOMMENDATIONS

- Vision Zero
- Bicycle & Pedestrian Advisory Committee
- Complete Streets Policy
- Unified Development Ordinance and Design Standards



# PLAN ELEMENTS – SUPPORT RECOMMENDATIONS

- Bicycle Parking
- Micromobility and Bike Share
- Public Bicycle Repair Stands
- Inductive Loop Tuning
- Public Transit



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# IMPLEMENTATION

## Key Elements

- Strategy
- Funding
- Implementation Notes

### CHAPTER 7 | IMPLEMENTATION, PHASING, AND FUNDING

Table 7-3: Funding Strategies (Mid-Term)

Mid-Term Implementation Projects				
Segment Label	Location	Project Type	Funding Sources	Implementation Notes
NT-5	North Peace Haven Road	Corridor Project	CIP Funding	Review turning movement data on N Peace Haven Road to determine trade-offs between bike lane, through lanes and continuous center turn lane between Polo Road and Chester Road.
ET-5	E Linville Road	Corridor Project	CIP Funding	Add dedicated bicycle facilities on E Linville Road with roadway improvements; Add Class I sidepath between Salem Lake Greenway and future Fiddlers Creek Greenway.
LC-3	Old Vineyard Road	Corridor Project	CIP Funding	Opportunity to restripe with bicycle lanes and narrow lanes as traffic calming measure and to improve bicycling connection.
NT-4	Polo Road	Corridor Project	CIP Funding, WS MPO	Upgrade Polo Road to complete street including dedicated bicycle facilities with roadway improvements. Include upgrades for pedestrians and transit.

