

DECEMBER 2019

# TRIANGLE TRANSPORTATION DEMAND MANAGEMENT UPDATED PLAN

TRIANGLE J COUNCIL OF GOVERNMENTS





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# TRANSPORTATION IN THE TRIANGLE

The Triangle Region of central North Carolina has seen significant development over the past few decades due to a boom in employment and educational opportunities. While this rapid expansion has boosted economic prosperity for the region, it has also put significant stress on infrastructure and the natural environment. In a region that has become known for high average vehicle miles traveled (VMT) for work commuters, a majority of residents are reliant on automobiles for transportation, overtaxing the existing roadway infrastructure. With projected levels of population growth expected to outpace construction of new roads, additional strategies to reduce or avoid road congestion, protect air quality, provide more reliable commute choices, and improve traveler safety are vital to regional resiliency.

Each year, hundreds of millions of dollars are spent in the region on the supply side of mobility: building and maintaining roads, buying and operating buses, building sidewalks and bicycle facilities. However, some of the most cost-effective mobility investments are on the demand side: encouraging commuters to use our transportation facilities as efficiently as possible by carpooling, vanpooling, taking transit, telecommuting, walking, or bicycling. These marketing and outreach efforts targeted to commuters and the employers they work for are called Transportation Demand Management, or TDM.



# TRIANGLE TDM PROGRAM

Transportation Demand Management, or TDM, is the application of strategies and policies to reduce reliance on single-occupancy vehicles (SOV) for travel by encouraging options such as carpooling, vanpooling, public transit, biking, walking, teleworking, and flexible work weeks.

In 2003, the North Carolina Department of Transportation (NCDOT) adopted a statewide TDM plan. In 2007, GoTriangle brought together the organizations then working on and/or funding TDM-related programs in the Triangle to create a long-term TDM improvement plan. The result was the Triangle Region 7-Year Long Range TDM Plan.

This 7-year Long Range TDM Plan was first updated in 2014 to revise the list of Activities and update the hotspots, which are targeted priority areas for program funding.

This document reflects the second update to the Plan, completed in Dec 2019.

More information about the Triangle TDM Program can be found at [TJCOG.org](http://TJCOG.org).



# ROLES & RESPONSIBILITIES

## NC DEPARTMENT OF TRANSPORTATION

The NC Department of Transportation (NCDOT) provides the overall policy framework for TDM in North Carolina and provides state funding and fiscal oversight for regional TDM programs and individual Transportation Management Associations. NCDOT has contributed funding to the Triangle TDM Program since 2007.

## METROPOLITAN PLANNING ORGANIZATIONS

The two Triangle MPOs, Capital Area Metropolitan Planning Organization (CAMPO) and Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO), provide federal Congestion Mitigation and Air Quality Improvement Program funding for the Triangle TDM Program. Triangle TDM has been a part of the Metropolitan Transportation Improvement Programs since 2008.

## TRIANGLE J COUNCIL OF GOVERNMENTS

Triangle J Council of Governments (TJCOG) has the primary responsibility to administer the TDM program in the Triangle region. It coordinates an annual, competitive solicitation of TDM projects to disburse \$2- \$3 million in grant funding. It also evaluates and reports on the impacts of the funded TDM activities.

## REGIONAL SERVICE PROVIDER

GoTriangle is the only Regional Service Provider in Triangle TDM program. They implement and coordinates regional TDM services and is the lead agency on all regional marketing and outreach initiatives. GoTriangle coordinates closely with Local Service Providers through the GoPartners committee to plan and conduct numerous initiatives, campaigns, and services. GoTriangle also coordinates the region's ridematching system and vanpool services.

## LOCAL SERVICE PROVIDERS

Local Service Providers are primarily responsible for developing and implementing campaigns that market TDM services and provide TDM outreach in their specific hotspots. Local Service Providers are expected to be the local experts in their target audiences' characteristics and needs and to craft campaigns to increase participation locally.



# LOCAL SERVICE PROVIDERS

Local Service Providers (LSPs) are the managers of each hotspot, typically being a local government or university. The Triangle TDM grant program typically funds a maximum of one “Core” program grant application per organization or local government.

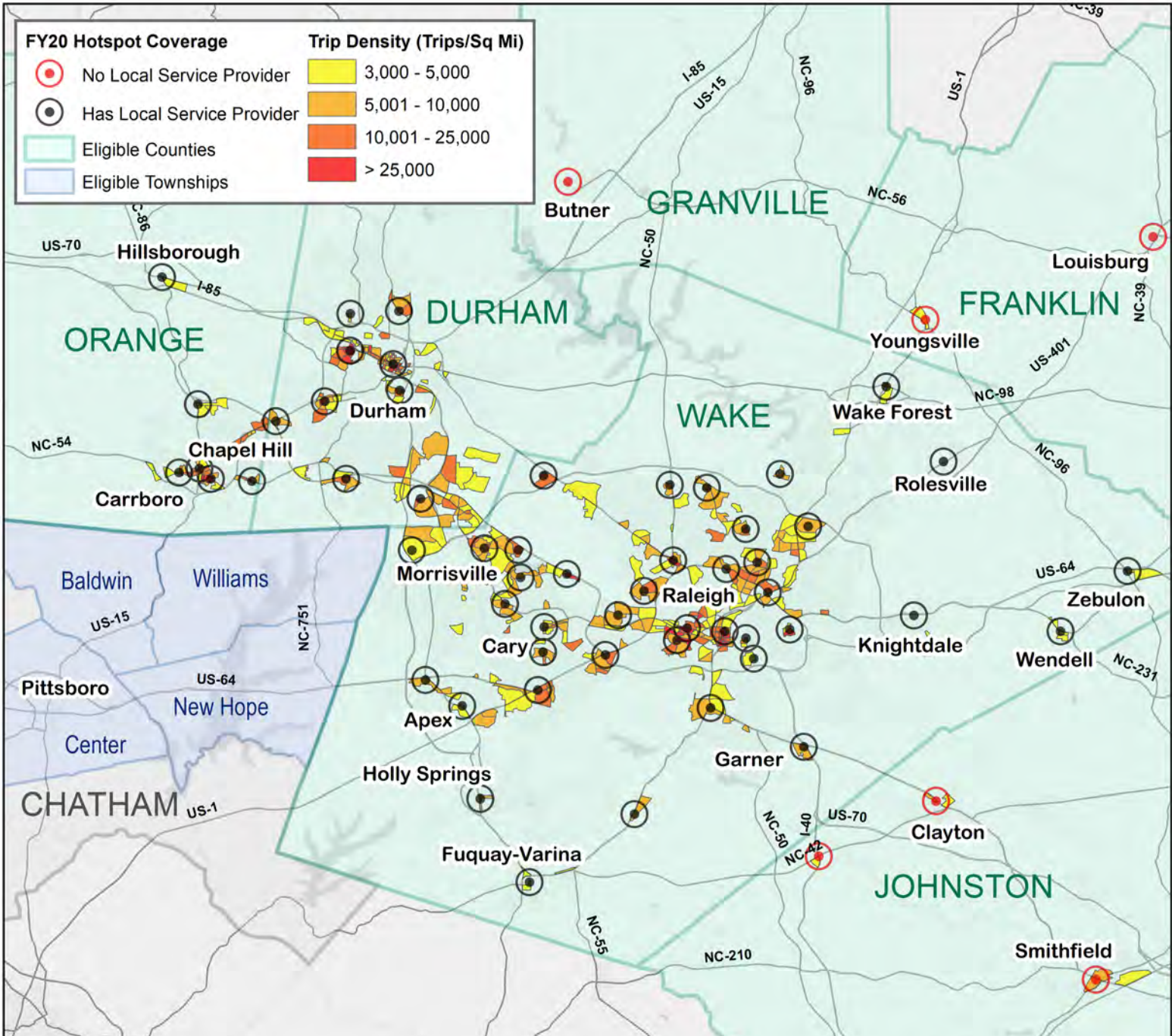
There are 12 LSPs in the FY2020 grant cycle:

- Duke University
- NC State University
- NC Central University
- Wake Tech Community College
- Town of Chapel Hill
- City of Raleigh
- City of Durham
- Orange County
- Research Triangle Foundation
- Wake County
- Best WorkPlace for Commuters
- Univeristy of North Carolina at Chapel Hill

The TDM Program releases its Request for Proposals every December. New applicants are always encouraged to apply.







# HOTSPOTS

The map displayed on this page shows the geographic locations of the 61 “hotspots” in the Triangle with the best opportunity for prioritizing funding for TDM services. Hotspots were selected because they: 1) are located in traffic analysis zones (TAZs) with greater than 3,000 daily home-based work trips per square mile, 2) are universities and/or large employers with multiple work sites, and 3) are central business districts, highway corridors with high concentrations of retail, and areas of concentrated office development. In 2019, 12 Local Service Providers and 1 Regional Service Provider deliver TDM services at 55 of the 61 eligible hotspots. Many of them cover more than a single hotspot. The full methodology for determining hotspots can be found at [tjco.org](http://tjco.org).

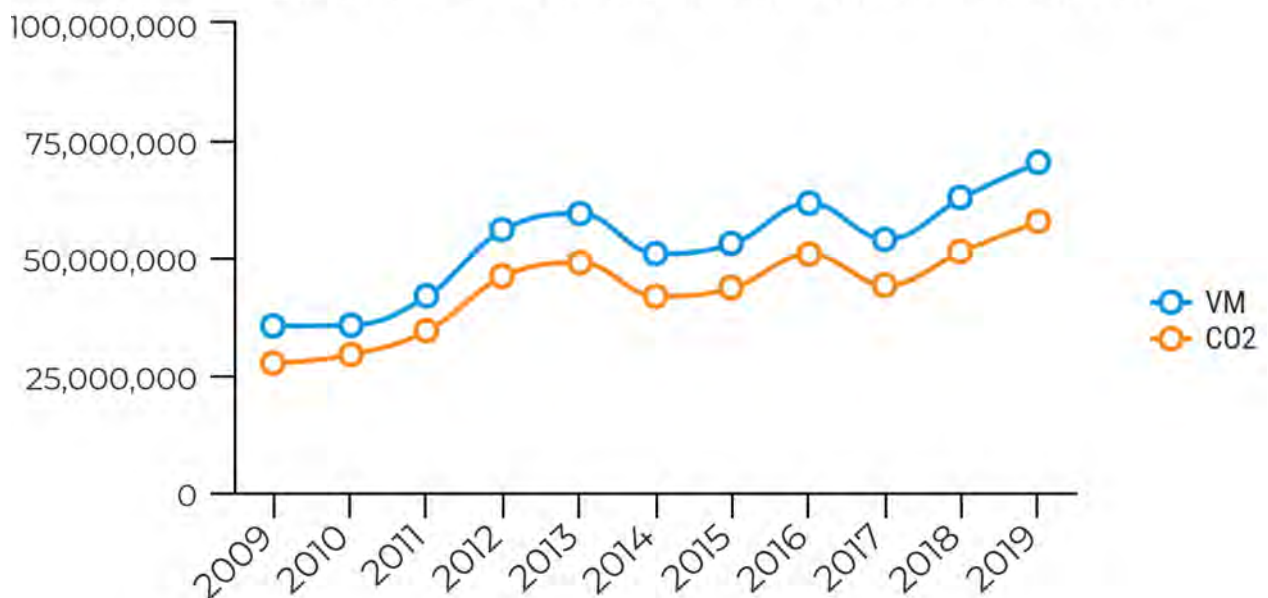
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community



# 10 YEARS OF TRIANGLE TDM SUCCESS

Since the first TDM Impact Report was released in 2009, the program has reached significant milestones in reducing SOV travel in the Triangle. Over 340,000 commuters have been assisted, reducing over 50 million trips and 580 million vehicle miles.

**Vehicle Miles Avoided and CO2 Emissions Reduced**



# 10 YEARS OF TDM IMPACTS 2009-2019

**50 MILLION  
VEHICLE TRIPS  
AVOIDED**

**Nearly 870,000  
days not spent  
driving a car**

**24 MILLION  
GALLONS OF GAS  
SAVED**

**Equal to 2,860 tanker  
trucks full of gas**

**475 MILLION LBS  
OF CO2 EMISSIONS  
PREVENTED**

**Over 37,600 homes  
not using electricity  
for a year**

**580 MILLION  
COMMUTE MILES  
PREVENTED**

**Nearly 200,000 trips  
from New York to San  
Francisco**



# WHY THE NEW TDM GOALS

The 7-Year Long Range Triangle TDM Plan (2007) had a single goal of reducing annual commute VMT (vehicle miles traveled) growth by 25%; this goal was established largely to assist NCDOT in meeting its obligations under Senate Bill 953.

The Triangle TDM Program has surpassed its 25% VMT reduction goal for many years now, and Senate Bill 953 has since expired. Additionally, it is important to revisit and update the original goal to current times. With new technology-based mobility entrants such as Uber and Lyft, arrival of modes such as scooters, increasing congestion, and adverse impacts on health from increasing vehicular traffic, it is critical that the Triangle TDM makes itself more relevant to the changing transportation landscape in the state.

Lastly, the Triangle TDM Program has historically relied on VMT as the measurement of its success though it provides many additional benefits such as reduced congestion, better environmental quality, reduced road construction and better public health and safety. It is important to measure and communicate these benefits to better promote alternate commuting.

# THE PROCESS OF GOAL DEVELOPMENT

The process started in April 2019 and took about nine months to complete. NCDOT's technical consultants from Gresham Smith kicked off the process and conducted a series of five focus group sessions for targeted engagement of TDM stakeholders. The 5 Focus Groups were: TDM Oversight Committee (OC), TDM Service Providers, Employers, Economic Developers and Universities & Colleges.

In May 2019, Gresham Smith submitted a technical report with a set of recommendations based on the above focus groups and evaluation of enhanced performance metrics and peers with similar TDM programs in the country.

This report was discussed with the OC and based on the feedback received, the goals were revised. The final goals were submitted to DCHC MPO's and CAMPO's Technical Committee and Executive Board meetings. Subsequently, these were opened for public comment.





# GOAL #1: REFINE AND ENHANCE PROGRAM EVALUATION METHODS

## OUTCOME

Utilize improved processes for collecting data, tracking progress, and reporting enhanced performance metrics to more effectively monitor and communicate program impacts.

## RELEVANT ACTIVITIES

- a. Update and refine data collection and reporting processes.
- b. Simplify and standardize impact calculations by transitioning to using the FHWA TDM ROI Calculator, sharing best practices and lessons learned with other TDM programs across the state.
- c. Incorporate broader TDM impacts into the development of new, enhanced metrics. Impacts to be considered include, but not limited to reduced vehicle crashes, reduction in traffic congestion, deferral of new road construction, and improved personal health,
- d. Establish new program-performance benchmarks and metrics that encourage TDM Service Providers to move from baseline to achievement.





## GOAL #2: ALIGN FUNDING CYCLES WITH PERFORMANCE

### OUTCOME

Ensure accountability and performance from TDM Service Providers while providing them with the assurance and continuity of multi-year funding.

### RELEVANT ACTIVITIES

- a. Collaborate with the three program funders (NCDOT, CAMPO and DCHC MPO) to shift the current annual nature of funding to performance-based multi-year cycles in the future.
- b. Manage the available funds so that adequate levels of annual funding are available for new applicants and innovative projects.
- c. Determine the time interval for regularly updating the TDM Plan after multi-year funding cycles have been established.





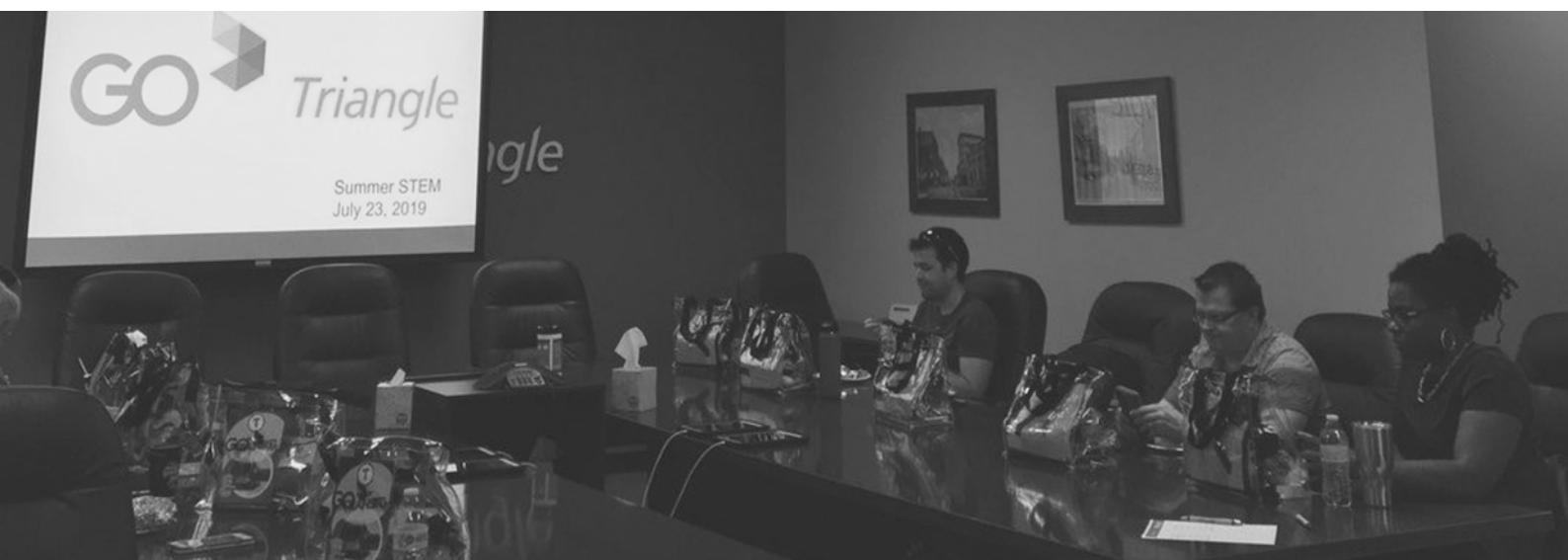
## GOAL #3: EXPAND PROGRAM MARKETING AND OUTREACH

### OUTCOME

Create widespread awareness of the TDM program among commuters, policy makers, professionals and organizational staff leading to higher rate of alternative commuting.

### RELEVANT ACTIVITIES

- a. Identify and engage new Service Providers critical to expanding the TDM program in the Triangle region.
- b. Place a renewed emphasis on using appropriate social media platforms for wider and better outreach.
- c. Organize educational events on alternative commuting for transportation and planning professionals in MPOs, local government, local transit and economic development agencies, and universities and colleges.
- d. Establish a regional information clearinghouse and e-library targeted to transportation professionals and associated stakeholders.
- e. All Service Providers develop consensus and adopt regional branding of the Program including usage for the promotional items.
- f. Plan an annual regional event to promote alternative commute options.







## GOAL #4: GET INNOVATIVE

### OUTCOME

Take advantage of existing and emerging opportunities and nontraditional demand management strategies to keep pace with rapidly changing technologies and trends.

### RELEVANT ACTIVITIES

- a. Encourage innovative projects through the Triangle TDMs Request for Proposal (RFP) process.
- b. Engage in educational peer group learning and training activities to draw from TDM strategies successful elsewhere in the nation.
- c. Identify and promote opportunities for Service Providers to develop relationships with nontraditional TDM stakeholders, such as health providers, sustainability offices and parking operators.





# GOAL #5: INTEGRATE WITH LOCAL AND REGIONAL PLANNING EFFORTS

## OUTCOME

The Triangle TDM Program establishes itself as an indispensable component of several related local and regional programs, policies and plans.

## RELEVANT ACTIVITIES

- a. Conduct cross-departmental meetings to solicit support and opportunities for collaboration on TDM programming in traditional TDM-related planning efforts such as Metropolitan Transportation Plans, and Bike-Ped, Land-Use and Corridor Planning.
- b. Focus outreach to organizations located along corridors and in hotspots with significant transit investments.
- c. Work closely with MPOs and transportation planning staff to bring a regional planning focus on Triangle TDM hotspots and to include alternative commute data in their surveys and models.
- d. Maintain presence and voice in local and regional planning efforts on issues related to TDM.
- e. Benchmark overall program performance against internal program goals.





## ACKNOWLEDGEMENTS

The Triangle TDM Program would like to acknowledge and express its sincere appreciation for all those who have contributed in the development of this Plan. It would like to begin by thanking all the TDM partners, local employers and other members of the Triangle community who participated in the focus group surveys in April 2019. NCDOT's technical consultant team from Gresham Smith provided support and technical guidance throughout the duration of Update process and was an important partner in the entire process. A special thanks goes to members of the Oversight Committee of the Program. They stayed invested over the entire duration of the process engaging in discussions, providing guidance and feedback several times.

## THANK YOU

The Triangle TDM Program would like to thank its funders for their continued support over the past eleven years, as well as active engagement and guidance as the members of Program's Oversight Committee.





## MORE INFORMATION

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