



Implementation Plan

Introduction

All long-range plans benefit from a good implementation plan. One way to think of the implementation plan is as a group “to do” list with annual reviews to keep track of its progress. Some of the items listed in this Implementation Plan are outside the scope of what the Town can accomplish on its own; however, the Planning Director should be held accountable for initiating the process and reporting to the Board of Commissioners on status and results.

Recommendations in the *Fuquay-Varina Community Transportation Plan* will be contingent on numerous elements, but none more important than the ability for the Town to secure funding for recommended improvements. Periodic “friend-raising” efforts are critical in promoting mutual needs and collaboration. The most effective of these efforts will be members of the Board of Commissioners contacting key officials with the following organizations:

- § Elected State and federal Senators and Representatives
- § Local business leaders
- § North Carolina Board of Transportation members
- § Senior North Carolina Department of Transportation (NCDOT) officials
- § TAC members with the Capital Area MPO in Raleigh
- § Norfolk Southern Railroad officials and NCDOT Rail Division officials

Last but certainly not least, in order to implement the plan, the Town must continue to work with Fuquay-Varina and surrounding Wake County citizens and businesses. Public support can streamline implementation, while opposition can significantly delay a project.

Short-Term Action Plan (initiate or complete by October 2007)

1. Adopt this plan. No federal, state, or local requirements exist to adopt a Community Transportation Plan; progress on improvement projects will be accelerated, however, if the Town Board makes a clear statement of intent to implement this plan.



2. Once adopted by the Town, the plan should be presented to the Capital Area MPO for action before submittal to NCDOT Transportation Planning Branch. The plan will then be forwarded to the Federal Highway Administration staff in Raleigh.
3. Amend the current CAMPO *Thoroughfare Plan*. The plan recommends the following changes to the current *Thoroughfare Plan* described below:
 - § Several segments should be either upgraded or downgraded in classification based on the current CAMPO *Thoroughfare Plan*. This re-designation would require most facilities to be downgraded, while other facilities will be upgraded and therefore rehabilitated to accommodate larger traffic volumes and provide better accessibility facilities. The following roadways should be considered for a classification change based on the current CAMPO *Thoroughfare Plan*:
 - Rouse Road – downgrade from Major Thoroughfare to Local Street
 - Wade Nash Road – downgrade from Major Thoroughfare to Local Street
 - South Main Street – from county line to Judd Parkway, downgrade from Boulevard to Major Thoroughfare
 - Main Street – from Judd Parkway to Ennis Street, downgrade from Major Thoroughfare to Minor Thoroughfare
 - Vance Street – from Main Street to Angier Road, downgrade from Major Thoroughfare to Minor Thoroughfare
 - Angier Road – from Vance Street to Judd Parkway, downgrade from Major Thoroughfare to Minor Thoroughfare
 - Academy Street – from the western Judd Parkway alignment to the eastern Judd Parkway alignment, downgrade from a Major Thoroughfare to a Minor Thoroughfare
 - Broad Street – from Judd Parkway to Main Street, downgrade from a Major Thoroughfare to a Minor Thoroughfare
 - Main Street/US 401 – from Ennis Street to Johnson Pond Road, downgrade from Boulevard to Major Thoroughfare
 - Main Street/US 401 – Johnson Pond Road to Ten Ten Road, upgrade from Boulevard to Expressway

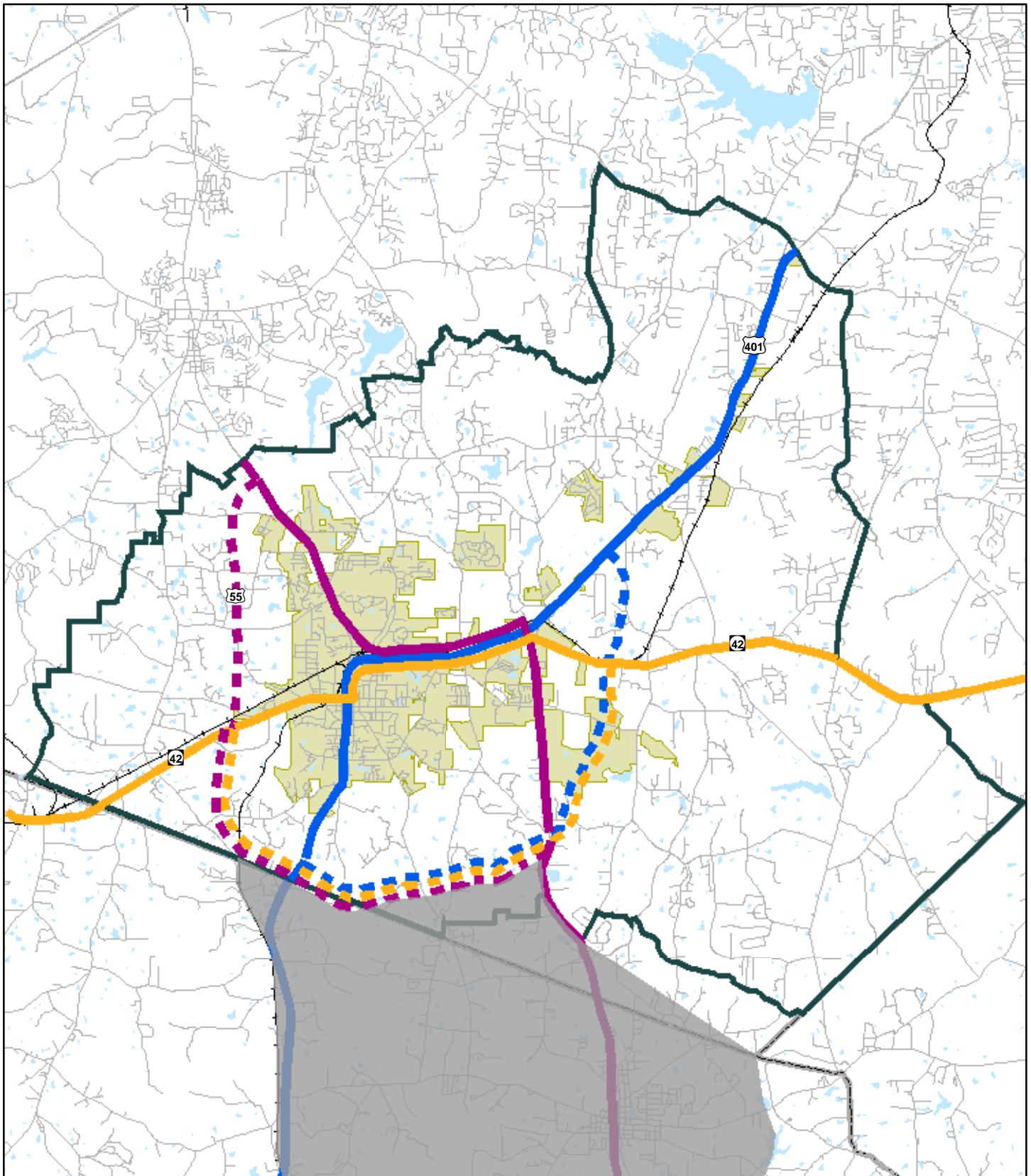


- Kennebec Road – from NC 42 to Bud Lipscomb Road, downgrade from Major Thoroughfare to Minor Thoroughfare
 - Lake Wheeler Road – from Ten Ten Road to Hilltop Needmore Road, downgrade from Major Thoroughfare to Minor Thoroughfare
- § Three new alignments should be added to the thoroughfare plan.
- The extension of Broad Street between Sunset Lake Road and Johnson Pond Road to allow better connectivity on the north side of the railroad tracks and to decrease congestion at railroad crossings.
 - Lake Wheeler Road should be extended from US 401 to intersect with Hilltop Road. This connection would provide relief for the intersection of US 401 with Hilltop Needmore Road, Air Park Road, and Hilltop Road, which currently operates at an unacceptable level.
 - The realignment of the intersection between NC 42 and NC 55 south to create more spacing between this intersection and the intersection of Fayetteville Road with NC 55/NC42.
- § Re-designate US 401 to follow the route of the planned Eastern Parkway. Re-designate NC 55 to follow the route of the planned Western Parkway. Re-designate NC 42 to follow the route of the planned Eastern Parkway. These future state road designations can be seen in Figure 7.1. Based on discussions with CAMPO officials, other alternatives were established for these facilities. These alternatives shift the alignment and can be seen in Figure A.1 in Technical Report Appendix A. Further coordination with NCDOT, CAMPO, Harnett County, and the towns of Holly Springs and Angier is needed to best develop these future state road designations.
4. Revise local development ordinances to require sidewalks on both sides of all streets (except Interstates and cul-de-sacs).
 5. Form and support a Fuquay-Varina/Wake County Business Roundtable with a transportation subcommittee. Nominate a delegate to the Triangle Regional Transportation Alliance (RTA). Similar efforts in Charlotte-Mecklenburg, Raleigh, and the Triad are underway and producing successful results. In these unstable economic times, the voices of business leaders are heard and respected. Fuquay-Varina should invest in the power of public-private partnerships, and can contact Joe



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6. Pursue “spot safety funds” through the NCDOT Division office. Funds are needed for immediate improvements to the following locations, based on three-year crash statistics that show higher than the statewide average crash rate for similar type roadways and intersections:
 - § Hilltop Needmore Road and Johnson Pond Road, where 70% of 20 crashes over a 3-year period caused some type of injury.
 - § NC 42 and Old Stage Road, where 12 out of 19 crashes in a 3-year span involved an injury.
 - § US 401-Fayetteville Road and Banks Road, which had a crash rate of 244.79 crashes per 100 million vehicles entering the intersection.
 - § Angier Road and Purfoy Road, where high speed crashes have more than a 50% chance in causing an injury.
 - § US 401/Main Street and Purfoy Road/Sunset Lake Road where high levels of congestion lead to stop and go driving, resulting in a large proportion of rear-end collisions.
 - § US 401/Main Street and NC 42/NC55, where the combination of high speeds and an overpass restrict sight distance approaching the signalized intersection.
 - § NC 42 and Hilltop Road, where high speed conditions and left turning vehicles create a situation where rear-end collisions are prevalent and cause injuries in 64% of crashes.
 - § Purfoy Road and Old Honeycutt Road where one of the few fatalities within the city limits occurred.
 - § Judd Parkway and East Broad Street, where large traffic volumes have led to an increase in collisions occurring at the intersection.
 - § US 401/Fayetteville Road and Chandler Ridge where vertical curve approaches and high peak hour volumes produce turning movement collisions to and from the Wake County Technical Campus.



Fuquay-Varina Community Transportation Plan
Figure 7.1 - Future State Roads



Kimley-Horn
 and Associates, Inc.

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|---|------------------|------------------|
| Study Area | US 401, Existing | US 401, Proposed |
| County Boundary | NC 55, Existing | NC 55, Proposed |
| Town of Fuquay-Varina | NC 42, Existing | NC 42, Proposed |
| Area for Future Coordination with Town of Angier, Harnett County, and NCDOT | | |



0 0.25 0.5 1 1.5 2 Miles



7. Budget monies in the Town's general fund and request that the NCDOT Rail Division initiate a Rail Corridor Study of the rail corridor parallel to US 401 through Fuquay-Varina as well as the railway parallel to West NC 42 (Academy Street). The local funds should be used to pay back NCDOT if the Town subsequently decides not to implement the recommendations. The study should investigate multi-use path development along unused rail corridors (emanating from Varina going to the southeast and another going to the northwest), safety histories at all at-grade crossings, projected increases in rail traffic, existing and projected safety exposure rates, immediate safety investments at at-grade crossings, multi-lane widening of arterials crossing the railroad, mid-term use for parallel multi-use path (north side of North Main Street), and longer-term recommendations for grade separations.
8. Request a review and evaluation of traffic signal timing and coordination along North Main Street between Judd Parkway and NC 55/NC 42/US 401. As appropriate, request State implementation of a closed-loop signal system along this stretch of North Main Street to reduce delay for through traffic on US 401. Town Board should consider a moratorium on new traffic signals in this stretch as well as conversion of the center "suicide" left-turn lane replaced with a raised-curb median. Signalized intersections should be modified to accommodate anticipated increase in U-turn movements if a raised median is constructed.
9. Schedule a one-day summit with local leaders to discuss the recommendations of this plan and determine an action plan for a potential local bond issue (and referendum). Consideration should be given to funding the following projects in a near-term bond referendum (detailed cost estimates for these projects can be found in Technical Report Appendix C):
 - a. Complete the northeast and western sections of Judd Parkway, including sufficient right-of-way acquisition for eventual 4-lanes with median-divided section, access only at public intersections, parallel sidewalks or multi-use paths on both sides, and generous planting strips to grow street trees that provide shade.
(Otherwise change name from a "parkway" to "road.")
Approximate Cost = \$22,400,000
 - b. Complete Broad Street Extension between Sunset Lake Road and Johnson Pond Road as a three lane facility with sidewalks on both sides and street trees.
Approximate Cost = \$4,600,000
 - c. Implement a closed-loop traffic signal coordination system on North Main Street and Sunset Lake Road.
Approximate Cost = \$287,500



- d. Intersection improvements including:
- § Widen to allow for more left-turn storage along Judd Parkway from railroad tracks to Old Honeycutt Road and along Sunset Lake Road/Purfoy Road from railroad tracks to Old Honeycutt Road. Add exclusive left-turn lanes on westbound US 401 at NC 55 and NC 42 and on southbound Sunset Lake Road at US 401.
 - § Add exclusive right-turn lanes on northbound Judd Parkway at Broad Street, on eastbound US 401 at NC 55 and NC 42, and on southbound Judd Parkway at E. Academy Street.
 - § Install traffic signal at Judd Parkway and Old Honeycutt Road.
 - § Upgrade traffic signals with metal poles and mast arms at various other locations.
- Approximate Cost = \$3,318,000*
- e. Implement a process which would allow developers the option to receive aid from the Town to construct bridges instead of culverts at specific locations where a bridge would benefit the public based on environmental sensitivities. A specific set of criteria should be developed to disperse funds appropriately.
- Approximate Cost = \$2,000,000*
- f. Improve connectivity by constructing the following specific bicycle and pedestrian improvements, as well as overall spot improvements:
- § Build sidewalks to extend mobility to pedestrian-oriented business districts in historic downtown Fuquay as well as in historic Varina.
 - § Build sidewalks on Judd Parkway between end of existing sidewalk at US Post Office and E. Academy Street.
 - § Study traffic calming measures along Broad Street through the Varina district to improve pedestrian safety and mobility. The study should commence after completion (and re-opening to traffic) of Wake Chapel Road.
 - § Restripe Academy Street between South Main Street and Judd Parkway SE to provide bicycle lanes on both sides of the street.
- Approximate Cost = \$1,800,000*
- g. Improve connectivity within greenway network by constructing the following greenways:
- § from Carroll Howard Johnson Environmental Education Park to South Park
 - § from South Park to Fuquay Mineral Spring Park – Heritage Trail Greenway



- § from Fuquay Mineral Spring Park to Pine Acres Community Center – Heritage Trail Greenway Phase 2
Approximate Cost = \$267,000
- h. Fund studies, design, and right-of-way acquisition for extension of Johnson Pond Road east from Sunset Lake Road. The Town should require construction funds from adjacent property owners as development occurs there.
- i. Fund studies, design, and right-of-way acquisition for the Wake County portion of Eastern Parkway, timing the completion of this work to coincide with Congressman Etheridge’s efforts to make US 401 a multi-lane facility from Fayetteville to Wake County. A multi-lane US 401 must not pass through historic downtown Fuquay, with the Town’s recent investment in a high-quality two-lane pedestrian-oriented streetscape.
- j. Fund studies of the Western Parkway that critically evaluate growth forecasts prepared by the Town of Holly Springs for lands west of Fuquay-Varina’s urban service boundary. Very large employment and household forecasts prepared by Holly Springs and propagated by the Capital Area MPO in the form of the regional traffic model are suspected as overly optimistic to occur by the year 2030. If realized, the Piney Grove–Wilbon Road corridor would need to be revised with multi-lanes even if the Western Parkway were built as planned. The notion of having Judd Parkway, a multi-lane Western Parkway, and a multi-lane Piney Grove–Wilbon Road is not reasonable given the lack of public funds to build such roads.

Mid-Term Action Plan (complete by 2015)

- 10. Prepare an action plan and implement a second bond initiative for more transportation projects serving all modes of travel including consideration of a local bus service (or connection to the regional TTA bus service).

Longer-Term Action Plan (complete by 2030)

- 11. Complete the network of transportation projects recommended in this plan.