



MEMORANDUM

TO: Mayor and Town Council

FROM: W. Calvin Horton, Town Manager

SUBJECT: Update on Traffic Signal and Sign Improvements Recommended by the Transportation Advisory Board

DATE: January 8, 2001

The following report provides an update on the status of improvements identified by the Transportation Advisory Board for implementation throughout the Town.

BACKGROUND AND DISCUSSION

At its August 28, 2000 meeting, the Council received and referred a petition from the Transportation Advisory Board. The petition identified a variety of recommended improvements throughout Town, on both local and state roadways. The Council referred the petition to the Manager for follow-up.

The following table notes the primary Transportation Board recommendations and the current implementation status.

Recommendation	Status
1. Enforcement of Red Light Signal Violations by Cameras.	A Public Forum is scheduled on January 16, 2001 to receive comments on video traffic surveillance for red light violations. An action item is scheduled for Council consideration on February 12.
2. Install Light Green Pedestrian Signs throughout the Town.	Approximately, 80% of the signs in Town have been upgraded to the new high visibility yellow-green standards. We expect to have remaining signs installed within the next 60 days.
3. Change the signal timing on major arterials to provide better coordination.	Staff from the Town and the NCDOT are working together on this, and expect to complete the work in February, 2001.
4. Crosswalk and Pedestrian signal improvements at several signalized intersection.	Please see the attached spreadsheet for the status of each intersection.

Most of the improvements requested at signalized intersections would require approval of the State, since they involve roads and equipment under State control. We contacted State staff and

received the attached written response noting that they will evaluate the requested improvements on state roads. We are presently working with State staff to complete investigations at several intersections. We will provide another update report in the spring, following completion of our investigations.

ATTACHMENTS

1. Letter from NCDOT (p. 3).
2. Status of Intersection Improvements Spreadsheet (p. 4).
2. August 28, 2000 Council Memorandum (begin new page 1).



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JAMES B. HUNT JR.
GOVERNOR

DIVISION OF HIGHWAYS

DAVID McCOY
SECRETARY

November 30, 2000

Mr. Kumar Neppalli
Traffic Engineer
Town of Chapel Hill
306 North Columbia Street
Chapel Hill, NC 27516

Subject: List of Intersections with Requests for Improvements from the
Chapel Hill Transportation Board

Dear Mr. Neppalli:

This letter is in response to the requests that you forwarded to me concerning intersection improvement requests compiled by Loren Hintz with the Chapel Hill Transportation Board dated August 17, 2000.

We will look into these requests and perform the appropriate traffic studies needed and make our decisions based on the results of these studies and engineering judgement. Some of the items listed are currently being studied and a few items have already been approved and are awaiting installation.

We should have results back from the studies performed on the new items by the spring of 2001.

If you have any questions please give me a call at (336) 334-3192.

Sincerely,

Mark W. Aldridge
Assistant Division Traffic Engineer

MWA:mwa

cc: P. E. Eason, P. E., Division Operations Engineer
V. E. Barham, Division Traffic Engineer

Status of Intersection Improvements Transportation Board Recommendations

Intersection	Recommendation	Status	By
1. Airport Rd and Weaver Dairy Rd	Crosswalk and pedestrian signals on both sides of Airport Rd (north and south approaches).	Under Investigation Town staff concurs with the recommendation	NCDOT
2. Erwin Rd and Weaver Dairy Rd	Crosswalk and pedestrian signal across Weaver Dairy Rd and one side of Erwin Rd.	Under investigation Not recommended due to very low pedestrian volume	NCDOT
3. Manning Dr and Ridge Rd	Need signs with arrows for pedestrian push buttons. Repaint of crosswalks.	Completed by Town staff (Dec. 2000)	Town
4. Manning Dr and East Dr	Remove no turn on red sign. Change signal timing.	Completed by Town staff (Nov. 2000)	Town
5. Manning Dr and Hibbard Rd	Add left turn signal and repaint the crosswalks.	Repainted crosswalk. Adding left turn signal is under investigation	NCDOT
6. Manning Dr and Fordham Blvd	Crosswalk and pedestrian signal on west side. Concrete island needs a handicap ramp.	Under investigation	NCDOT
7. Fordham Blvd and Old Mason Farm Rd	Need a crosswalk/pedestrian signal on north side.	Under investigation	NCDOT
8. Columbia St and Culbreth Rd	Need a crosswalk pedestrian signal on west side.	Not recommended due to very low pedestrian volume	NCDOT
9. Ephesus Church Rd and Legion Rd	Need to change signal timing. Add a lane or change signal. Bus stop nearby lacks sidewalk.	Currently NCDOT and Town are working together to find solutions to the problems.	Town and NCDOT
10. Ephesus Church Rd and Fordham Blvd	Need a crosswalk on Ephesus Ch Rd from hotel side to connect with the existing crosswalk.	Under investigation Town staff concurs with the recommendation	NCDOT

Status of Intersection Improvements Transportation Board Recommendations

Intersection	Recommendation	Status	By
11. Cameron Ave and Pittsboro St	Need crosswalk and pedestrian signal across Cameron Ave. Warning sign for pedestrians and cyclists explaining that light may be green for traffic in the opposite direction.	Under investigation Town staff concurs with the recommendation for crosswalk and pedestrian signal	Town and NCDOT
12. Cameron Ave and Ransom St	Need to add a pedestrian signal and button across Cameron Ave. Crosswalk needs to be repainted.	Crosswalk will be repainted as a part of the Council authorized restriping plan. Pedestrian signal is under investigation	Town
13. Homestead Rd and Seawell Rd	This light may need a turn signal or a no turn on red sign due to poor visibility for turning cars	Under investigation	Town
14. Estes Dr Ext. and Seawell Rd	Need a crosswalk and pedestrian signal on west side of Estes Dr. Light is not triggered by bikes.	Not recommended due to very low pedestrian volume and no sidewalks.	Town
15. Umstead Rd Crosswalk	Need to repaint the crosswalk	Completed by Town staff (October, 2000).	Town
16. NC 54 and Burning Tree Dr	Need crosswalk and pedestrian signal on west side of NC 54	Under investigation Town staff concurs with the recommendation	NCDOT
17. NC 54 and Hamilton Rd	Implement Hamilton Rd/NC 54 workgroup recommendations.	Construction FY 2002	Town and NCDOT
18. NC 54 and Friday Center	Need one crosswalk and pedestrian signal across NC 54	Not recommended due to very low pedestrian volume.	NCDOT
19. Columbia St with NC 54 ramps	Need crosswalk on ramp (east side of Columbia) and need southern village bike lane	Crosswalk is under investigation Southern Village bike Lane is planned next year	NCDOT

Status of Intersection Improvements Transportation Board Recommendations

Intersection	Recommendation	Status	By
20. Columbia St and Mason Farm Rd	Crosswalk needed on both streets.	Crosswalk exists at the intersection. No action needed.	Town
21. Columbia St and Frat Court	Need wheel chair ramps for crosswalk	Recommended to NCDOT	NCDOT
22. Franklin St and Merritt Mill Rd	No turn on red sign is need and perhaps a pedestrian signal that stops traffic in all directions.	Under investigation	NCDOT
23. Rosemary Street Signal Intersections (all the signals on Rosemary Street)	Need Crosswalks to cover all the street intersections.	Under Investigation	Town
24. Franklin St and Boundary Ln	Need wheelchair ramps for crosswalk.	Recommended to NCDOT	NCDOT
25. Franklin St and Raleigh Rd	Crosswalk needed on north side.	Under investigation	NCDOT
26. Franklin St and Estes Dr	Reposition buttons and add signs showing direction of crossing for each button.	Completed by Town staff (Dec. 2000)	Town
27. Franklin St and Elliott Rd	Needs pedestrian signal	Crosswalks, pedestrian signals, and left turn signals from Elliott Rd to Franklin St planned. Construction scheduled: February, 2000	NCDOT
27. Franklin St and Eastgate Entrance	Need Crosswalk on Eastgate Rd. Need Crosswalk, button, pedestrian signal on east side of Franklin St.	To be installed as a part of the Town's Greenway Project	Town and NCDOT
28. Fordham Blvd and Europa Dr	Need a crosswalk on Europa Rd near service road. Need a crosswalk and signal on Fordham Blvd.	Town and NCDOT are working on improving this intersection with "super street" concept. Super Street concept will provide opportunity for safe pedestrian mobility at this location.	Town and NCDOT
29. Smith Level Rd with NC 54 Ramps and Merritt Mill Rd	Need Pedestrian signal and button at current crosswalk on ramp.	Under Investigation	NCDOT

* RECEIVED AND
REFERRED
AGENDA #3b(4)

(12)

MEMORANDUM

TO: Mayor and Town Council

FROM: W. Calvin Horton, Town Manager

SUBJECT: Report on Intersection Improvements

DATE: August 28, 2000

Attached is a petition from the Transportation Board regarding proposed intersection improvements for pedestrians. We recommend that the petition be referred to the Town Manager for a response.

Memorandum

Date: August 17, 2000
To: Chapel Hill Town Council
From: Loren Hintz
Transportation Board Chair
Re: Intersections

Contents:

1. Cover letter outlining process and major conclusions.
2. Detailed list of recommendations.
3. List of intersections provided by Mr. David Brown. (appendix 1)
4. Sample Intersection Evaluation Form (appendix 2)
5. Spreadsheet summary(appendix 3)

COVERLETTER:

Over the past two years, the Transportation Board has had numerous discussions about the flow of both vehicular and nonvehicular traffic in Chapel Hill. We have noted that some neighborhoods have become islands because they are cut off from the rest of Chapel Hill by major streets and highways. Problems associated with crossing streets have been an ongoing concern of the T- Board but were reemphasized after the pedestrian fatality on Manning Dr. last year. Bus riders need to be able to quickly and safely cross streets in order to reach their destinations. In order to reduce traffic congestion and air pollution we need to increase bus ridership and the use of non motorized transportation.

The Transportation Board requests that the town of Chapel Hill modify and improve both the safety and "user friendliness" of a number of intersections and crossings. We feel that these intersection improvements will be relatively inexpensive and will make Chapel Hill a better place. Mr. David Brown provided the T-Board with a list of intersections with stoplights. (See appendix one.) The T-Board chair discussed this project with Mr. Small after Mr. Brown left. During the summer, members visited every intersection and noted problems. (see appendix 2.) We focused on ways they could be made safer and more accessible. We noted traffic flow problems. In some cases we noted areas where no signals exist but where people, especially bus riders, would cross.

Based upon the analysis by both current and former Transportation Board members, we offer the following general recommendations.

1. Install the red light runner cameras authorized by the state and increase the education and enforcement of traffic laws. Several members noted in their reports that some drivers ignored the existing intersection signals and signs.

2. In general we recommend that crosswalks and handicapped access ramps and/ or curb cuts be placed at all existing signalized intersections. Crosswalks should be drawn to connect existing sidewalks. We were pleased that many intersections with stoplights already have crosswalks, but we note below other areas that need them.

3. Crosswalks should be added at certain non signalized intersections and at midblock points near major bus stops. The recent pedestrian crossing signs on 15-501 and Manning Rd. are a good beginning. Airport Rd., Erwin , Ephesus, Rosemary and Mason Farm Rd. also need attention.

4. Intersections undergoing construction (Morgan Creek bridge area, Manning, NC 54) have been disrupted for many months (years). Temporary measures such as clearly marking the temporary crosswalks, temporary bike lane and the temporary access to the bus stop need to be taken to protect users. Signal timing needs to be readjusted and temporary turn lanes need to be created.

5. We are aware of the importance of maintaining good vehicular flow. Increasing the number of crosswalks and pedestrian signal heads should have little effect on flow if the controls are coordinated and sequenced. Current traffic jams seem to be due to construction, reduction in number of lanes, moving from unsignaled highway to in town roads with signals, increased number of single occupancy vehicles and failure to use buses and nonmotorized transport. Unless people feel comfortable walking to the bus stop, ridership will not increase. Making intersections safer is an important step in enabling Chapel Hill to use alternative means of transportation.

We request that these improvements be referred by council to the town engineer and that a time table be created stating when changes can be implemented and prioritizing expenditures. In the

case of changes requiring only minimal cost and limited labor such as crosswalk painting and signal retiming we request that they be done within the next few months. The T-Board is very willing to do additional work if that will speed up the timeline. In the case of damage to crosswalks, bike and street markings due to construction we continue to recommend that they will be repaired within the current two week limit. A few of our recommendations are near the Carrboro line and would have to be addressed (if desired) by Carrboro. We are aware that other committees and task forces have made recommendations and would urge that those also be implemented.

LIST OF INTERSECTIONS WHICH NEED IMPROVEMENTS BASED UPON SURVEYS BY TRANSPORTATION BOARD.

Information is listed by Dept. Of Transportation Intersection number; major street and then minor street: suggested improvement(s) followed by commentary. The list is not in any priority order.

07-0958 Airport and Weaver Dairy: Need North/South crosswalk, pedestrian signal and button on both sides of Airport Rd.

Major intersection with new sidewalks and bikeways.

07-1657 Erwin and Weaver Dairy: Need crosswalk and pedestrian signal across Weaver Dairy and one side of Erwin.

Currently no accommodations for pedestrians even though C/L bus stop is nearby.

07-1010 Manning and Ridge: Need signs with arrows for pedestrian buttons.

07-0507,0183,0182 Manning at West, Hibbard and East: Remove no turn on red sign. Change signal timing. Add a left turn signal.

The no turn on red sign on East is slowing traffic and does not seem to help pedestrians. The timing for the length of green seems too long for exiting Gravely Drive and other driveways from the north from the hospitals to get on to Manning and is slowing traffic on Manning. Lack of a left turn lane signal at Manning and Hibbard is also slowing traffic. Crosswalks at Hibbard are in bad shape due to construction. A temporary repainting may help.

07-0505 Fordham (54, 15-501) and Manning: It needs a cross walk and pedestrian signal and button on the west side so people can cross. The concrete island also needs a handicapped access ramp.

This is especially a problem walking south to north when no cars trigger the light. This intersection connects the Morgan Creek/ Kings Mill neighborhood to the UNC campus and hospital. It is in one of the town's walk zones.

07-1709 Fordham (15-501) and Old Mason Farm Rd: Need a crosswalk and button on west side.

This is a pedestrian connector to the Botanical Garden.

07-0576 Columbia (15-501) and Culbreth : Need crosswalks/ pedestrian signal and button; also needs the Southern Village Bike lanes that were promised.

Dangerous intersection that connects Southern Village, Merritt Pasture, Culbreth School with the rest of town.

07-1883 Ephesus and Legion: Need to change timing. Bus stop nearby lacks sidewalk.
Major traffic delay. At peak time almost impossible to turn right onto Ephesus from Legion due to backup.

07-0530 Fordham(15-501) and Ephesus. Need a crosswalk on Ephesus from hotel side to connect with existing crosswalk on Fordham 501 and Ephesus. Also need to reengineer intersection since traffic on Ephesus is often backed up all the way to Legion.

07-1014 Cameron and Pittsboro: Need to add a pedestrian signal, button and crosswalk across Cameron. Warning sign for pedestrians and cyclists explaining that light may be green for traffic in the opposite direction.

This is an unusual intersection since the light may be green for the westbound traffic and red for the eastbound. It is a logical place to cross Cameron but currently is dangerous.

CH -0202 Cameron and Ransom: Need to add a pedestrian signal and button across Cameron. Crosswalk needs to be repainted. Need wheelchair ramps.

This T intersection has poor visibility for pedestrians. Cars often speed. The green light is only triggered by cars.

07-1609 Homestead and Seawell: This light may need a turn signal or a no turn on red sign due to poor visibility for turning cars.

07-1159 Estes Ext. and Seawell needs a crosswalk and pedestrian signal on west side of Estes. Light is not triggered by bikes. This is the access to the Park and Ride lots and city park.

In this area(Homestead to Estes Ext.) there are several intersections with no signal lights which students cross. A signal at High School and Seawell would slow traffic and make the intersection safer. At High School and Homestead there needs to at least have an intersection warning sign since this is a blind exit. Also we continue to advocate for sidewalks in this area.

CH-0007 Umstead X-walk: Need to repaint the crosswalk.

Near Umstead Park need a crosswalk at Village and Umstead. (No light needed.)

07-1238 South (54) and Burning Tree: Need crosswalk and pedestrian signal on west side of 54. East bound post end 35mph zone sign.

This connects bus stop, restaurant, apartments, golf course.

07-531 South (54) and Hamilton Rd: Textured crosswalks and signs have not been added. NEED TO IMPLEMENT TASK FORCE'S RECOMMENDATIONS.

07-1665 NC54 and Friday Center: Need one crosswalk and pedestrian signal across NC54.

Road under construction. Currently a pedestrian disaster. This is the access to the Friday Center, some hospital buildings and the Chapel Hill and TTA buses.

07-0578; 0248 Columbia and 54 ramps : Need cross walk on ramp (east side of Columbia) and need the Southern Village bike lane.

07-0573 Columbia and Mason Farm : Crosswalk needed on both streets.

A number of students and faculty walk to the health sciences areas.

07-1222 Columbia and Frat Court: Need wheelchair ramps for crosswalk.

07-0534 Franklin and Merritt Mill: No turn on red sign is needed and perhaps a pedestrian signal that stops traffic in all directions.

This is an especially difficult intersection to cross especially on the south side.

CH-0107, 0108, 0110, 0111 intersections with Rosemary: Need crosswalks to cover all the street intersections.

(It appears that this street is being repaved. Hopefully the crosswalks are already included in the plans.)

07-0515 Franklin and Boundary: Need wheelchair ramps for crosswalk

07-0512 Franklin and Raleigh : Crosswalk needed on north side

07-0527 Franklin and Estes: Current arrangement of three pedestrian buttons is confusing. Reposition buttons and add signs showing direction of crossing for each button

07-0531 Franklin and Elliot has button and crosswalk but needs Pedestrian Signal

07-0590 Franklin and Eastgate: Need Crosswalk on Eastgate Rd. Need Crosswalk, button and Pedestrian Signal on East side of Franklin.

Important intersection with bus stops on both sides of Franklin.

07-0382 Fordham (15-501) and Europa: Need a crosswalk on Europa Rd. near service Rd. Need crosswalk and signal on Fordham.

This is a dangerous intersection. People cross here to get to work and to use the bus. The traffic flow is confusing to drivers.

07-1037,0571 Smith level Rd with 54 ramp and Merritt Mill Rd: Need pedestrian signal and button at current crosswalk on ramp and Merritt Mill Rd. Need cross walk to bus stop on Greensboro Rd (in Carrboro).

Note: This intersection is mentioned in resolution 99-3-22/R-6 March 22, 1999. Was any action taken? Are Smith Level Rd and Culbreth Rd; FPG school signal lights in Carrboro? They did not appear on the list. Need crosswalk on Culbreth Rd

The T-Board has detailed intersection evaluations if additional information is needed to clarify the above recommendations.

10/7/99 U. Brown

Appendix

Inter. #	Major Street	Minor Street	Signal Operation			Crosswalks		Pedestrian Signals			Remarks
			Pre-timed	Semi-Actuated	Fully Actuated	Major Street	Minor Street	Major Street	Minor Street	Pre-timed	
07-1245	Franklin										Flasher
07-0958	Airport	Weaver Dairy			✓						
CH-0007	Umstead	X-Walk		✓		✓					
07-1802	Weaver Dairy	High School			✓			✓		✓	
07-1655	NC54	Friday Center			✓						
07-1609	Homestead	Seawell School			✓						
07-1159	Estes	Seawell			✓						
07-1657	Erwin	Weaver Dairy			✓						
07-4000	501										
07-1883	Ephesus	Legion			✓						
07-0523	South	Raleigh			✓		✓				
CH-0107	Rosemary	Roberson			✓		✓			✓	
CH-0108	Rosemary	Church		✓							No Heads
07-0517	Columbia	Rosemary	✓			✓		✓			
CH-0110	Rosemary	Henderson		✓							
CH-0111	Hillsborough	Rosemary		✓							
07-0534	Franklin	Merritt Mill		✓							
07-0514	Franklin	Graham	✓								
07-0510	Franklin	Mallette	✓								
07-0511	Franklin	Columbia			✓		✓		✓		
07-0218	Franklin	NCNB X-walk		✓		✓		✓		✓	Audio
07-0512	Franklin	Henderson	✓			✓		✓			
07-0902	Franklin	Moreland X-walk		✓		✓		✓		✓	
07-0513	Franklin	Raleigh	✓								
07-0515	Franklin	Boundary	✓								
07-0909	Merritt Mill	Cameron			✓		✓			✓	
07-1222	Columbia	Frat Court		✓		✓		✓		✓	
CH-0202	Cameron	Ransom		✓							
07-1014	Cameron	Pittsboro		✓			✓			✓	
07-0518	Columbia	Cameron			✓		✓			✓	
CH-0205	Cameron	Raleigh	✓								
07-1024	Pittsboro	McCauley			✓		✓			✓	
07-0519	Columbia	South			✓		✓			✓	
07-0524	South	Bell Tower			✓		✓			✓	

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Inter. #	Major Street	Minor Street	Signal Operation			Crosswalks		Pedestrian Signals			Remarks	
			Pre-timed	Semi-Actuated	Fully Actuated	Major Street	Minor Street	Major Street	Minor Street	Pre-timed		Push Buttons
07-0522	South	Country Club			✓	✓	✓		✓		✓	
07-0573	Columbia	Mason Farm			✓							
07-0520	Columbia	Manning			✓							
07-0595	Columbia	Health Science		✓		✓		✓			✓	Audio
07-0507	Manning	Hospital West		✓		✓		✓			✓	
07-0182	Manning	Hospital East			✓	✓		✓			✓	
07-0183	Manning	Hibbard			✓	✓		✓			✓	
07-1010	Manning	Ridge			✓	✓	✓	✓			✓	
07-1031	Airport	Hillsborough			✓	✓	✓	✓	✓		✓	
07-0532	Airport	Estes			✓	✓	✓	✓			✓	
07-0965	Airport	Piney Mountain			✓	✓	✓	✓			✓	No Heads
07-1019	Airport	Homestead →			✓	✓	✓	✓			✓	
07-0527	Franklin	Estes			✓	✓	✓	✓	✓		✓	
07-0556	Estes	Willow			✓	✓	✓	✓	✓		✓	
07-0529	Fordham	Estes			✓	✓	✓	✓			✓	
07-0506	Fordham	Willow			✓	✓	✓	✓			✓	
07-0531	Franklin	Elliott			✓	✓	✓	✓			✓	
07-0547	Fordham	Elliott			✓	✓	✓	✓			✓	
07-0590	Franklin	Eastgate		✓		✓		✓				
07-0530	Fordham	Ephesus			✓	✓	✓	✓			✓	
07-0382	Fordham	Europa			✓	✓	✓	✓				
07-0370	15-501	Sage			✓	✓	✓	✓			✓	
07-0211	15-501	Eastowne			✓	✓	✓	✓			✓	
07-1011	15-501	West Lakeview			✓	✓	✓	✓			✓	
07-0521	South	Hamilton			✓	✓	✓	✓			✓	
07-1238	South	Burning Tree			✓	✓	✓	✓				
07-1696	15-501	NC54			✓	✓	✓	✓				
07-0248	Columbia	54 Ramps A&B			✓	✓	✓	✓				
07-0578	Columbia	54 Ramps C&D			✓	✓	✓	✓				
07-0576	Columbia	Culbreth			✓	✓	✓	✓				
07-1037	Smith Level	54 Ramp			✓	✓	✓	✓				
07-0571	Smith Level	Merritt Mill			✓	✓	✓	✓			✓	
07-0219	Estes	Caswell			✓	✓	✓	✓				
07-0505	Fordham	Manning			✓	✓	✓	✓				

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Appendix 2 Chapel Hill Transportation Advisory Board Intersection Evaluation

Intersection Signal Number _____

Date of Survey _____

Major Street

Minor Street

Name _____

Signal Operation _____

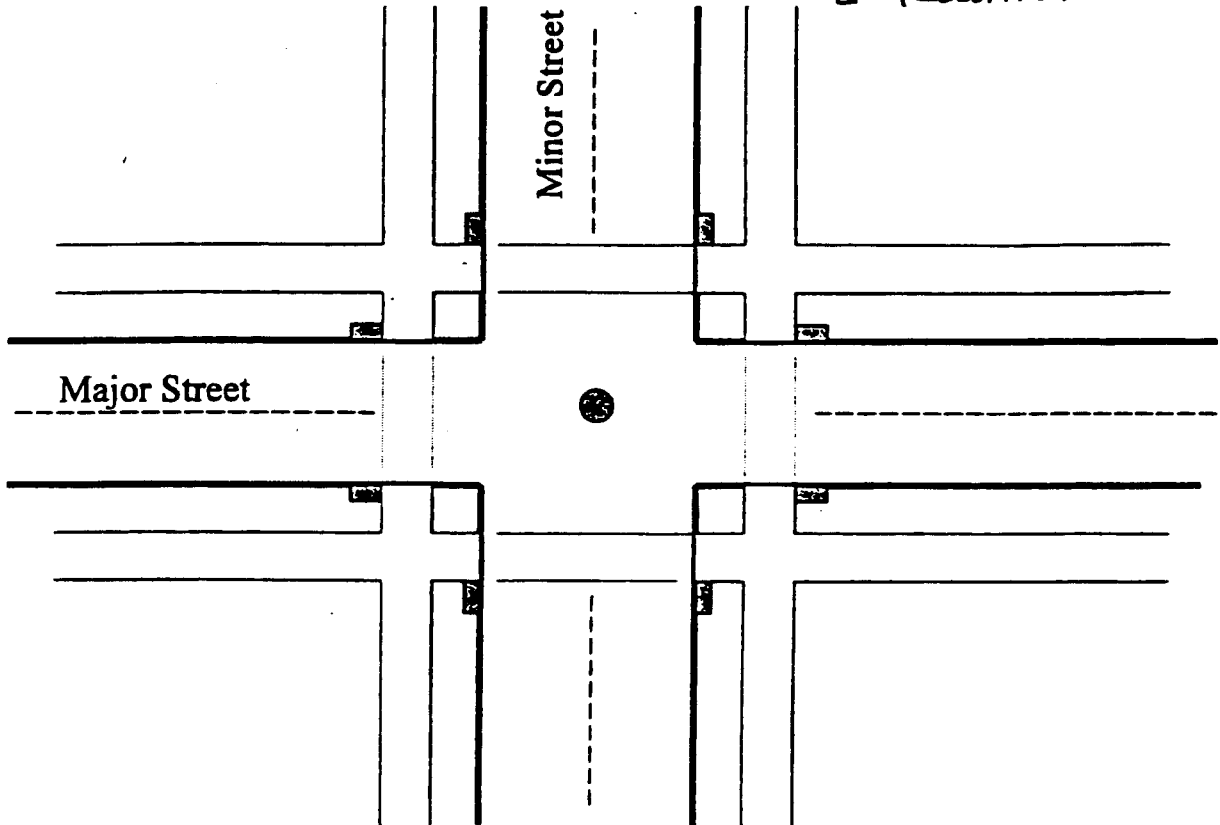
Pedestrian Signal _____

Cross out missing items.
Add Comments below.

Traffic Signal

Pedestrian Signal

Pedestrian Button



APPENDIX 3 SUMMARY	
Intersection # and street name	suggested change
07-0958 Airport and Weaver Dairy	Need North/South crosswalk, pedestrian signal and button on both sides of Airport Rd.
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07-1709 Fordham (15-501) and Old Mason Farm Rd	Need a crosswalk and button on west side.
07-0576 Columbia (15-501) and Culbreth	Need crosswalks/ pedestrian signal and button; also needs the Southern Village Bike lanes that were promised.
07-1883 Ephesus and Legion	Need to change timing, add a lane or change the signal. Bus stop nearby lacks sidewalk.
07-0530 Fordham(15-501) and Ephesus	Need a crosswalk on Ephesus from hotel side to connect with existing crosswalk.
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07-1609 Homestead and Seawell	This light may need a turn signal or a no turn on red sign due to poor visibility for turning cars.
07-1159 Estes Ext. and Seawell	Need a crosswalk and pedestrian signal on west side of Estes. Light is not triggered by bikes.
CH-0007 Umstead X-walk	Need to repaint the crosswalk.
07-1238 South (54) and Burning Tree	Need crosswalk and pedestrian signal on west side of 54..
07-531 South (54) and Hamilton Rd	Implement task force's recommendations
07-1665 NCS4 and Friday Center	Need one crosswalk and pedestrian signal across NC54
07-0578; 0248 Columbia and 54 ramps	Need cross walk on ramp (east side of Columbia) and need the Southern Village bike lane.
07-0573 Columbia and Mason Farm	Crosswalk needed on both streets.
07-1222 Columbia and Frat Court	Need wheelchair ramps for crosswalk.

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07-0515 Franklin and Boundary	Need wheelchair ramps for crosswalk.
07-0512 Franklin and Raleigh	Crosswalk needed on north side.
07-0527 Franklin and Estes	Reposition buttons and add signs showing direction of crossing for each button .
07-0531 Franklin and Elliot	Has button and crosswalk but needs Pedestrian Signal.
07-0590 Franklin and Eastgate	Need Crosswalk on Eastgate Rd. Need Crosswalk, button and Pedestrian Signal on East side of Franklin.
07-0382 Fordham (15-501) and Europa	Need a crosswalk on Europa Rd. near service Rd. Need cross walk and signal on Fordham.
07-1037,0571 Smith level Rd with 54 ramp and Merritt Mill Rd	Need pedestrian signal and button at current crosswalk on ramp and Merritt Mill Rd. Need cross walk to bus stop on Greensboro Rd (in Carrboro).