



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

May 2, 2008

MEMORANDUM

TO: Derrick Beard, Work Zone Traffic Control Unit

FROM: Tristram Ford, Public Involvement and Community Studies

SUBJECT: TIP U-0624 Bicycle and Pedestrian Survey

U-0624 Project Description

TIP Number U-0624, located south of downtown Chapel Hill and adjacent to a portion of the UNC-CH campus, is a proposed project to widen South Columbia Street/ NC 86 from Purefoy Road (SR 1906) to Manning Drive (SR 1902). The purpose of the project is to provide safer conditions for bicyclists and pedestrians along the roadway. The existing two-lane roadway will be widened to provide two 12-foot travel lanes, a four-foot designated bicycle lane in the north-bound direction, a five-foot designated bicycle lane in the south-bound direction, as well as an 11-foot center turn lane. A five-foot sidewalk is also proposed along both sides of South Columbia Street.

Methodology

In order to determine the amount and frequency of bicycle and pedestrian activity as well as the use of mass transit along the proposed project corridor, two methods were employed. First of all, Public Involvement and Community Studies and Project Development and Environmental Analysis staff members conducted an on-site survey. The survey took place on April 17th from 9 AM until 6 PM. This entailed engaging people and administering the survey to those using South Columbia Street at the Manning Drive and Purefoy Road survey locations, the northern and southern project extents, respectively. In addition, all NCDOT personnel involved recorded general observations relating to the project corridor.

NCDOT staff surveyed to the best extent possible 100% of pedestrians and bicyclists using the roadway during the chosen survey time. The period of time that the survey was conducted, from morning to early evening, was specifically chosen to capture the greatest cross section of users as possible. However, there could have been additional users outside of these times that were consequently not surveyed. It is also important to note that some of the individual survey responses that were gathered actually represent multiple people that were traveling as one group. Furthermore, not all the surveys were answered in their entirety, hence the differing tally results for separate questions. There were also some hindrances that were encountered while conducting the on-site survey that prevented 100% participation. These included people that declined to respond to the

survey as well as a few instances of a language barrier that prevented fully engaging some Hispanic users of the roadway.

Survey Summary/Data Results

On April 17th, the day of the survey, the greatest numbers of surveys were administered between 9 AM and 11 AM and 4 PM to 6 PM. In total, there were 134 surveys collected by NCDOT staff. These 134 surveys represented 149 people, the total number of people that responded to the survey. Based on these figures, there was an average of 16.5 surveyed pedestrians or bicyclists per hour utilizing the roadway at the survey locations. This figure represents only the pedestrians and bicyclists that participated in the survey. The actual number of pedestrians and bicyclists using the roadway during this period of time is likely higher, as some users weren't surveyed. Other notable survey findings include:

- Of the 134 surveys collected, 104 of those were pedestrians, 22 were riding bicycles, and 8 respondents did not specify a mode of transportation
- The purpose of the respondents' trips breaks down as follows: 42% were on their way to or from work, 33% were on their way to or from school, 17% of respondents were walking or cycling for recreation, 3% were on their way to or from shopping, 3% were going to or from lunch/dinner, and 2% were utilizing the roadway for unspecified reasons
- 94 of the respondents stated that they used the roadway daily, while 30 stated that they used the roadway weekly
- The percentage of respondents that did own a car was 87% of 131 responses; 13% of 131 responses did not own a car
- The percentage of people who stated that they used mass transit was 74% of 134 responses; in addition, 56 respondents stated that they use mass transit daily
- The majority of respondents using mass transit utilized the Health Sciences Building-V line and the Purefoy Road bus stops
- Survey respondents were overwhelmingly in favor of the project and its inclusion of bicycle and pedestrian facilities
- Survey respondents generally indicated that although construction of the proposed project could result in some inconvenience, if bicycle and pedestrian access and bus service were maintained and/or detoured during that period it would be manageable

General Observations

- The weather was generally warm and sunny the day the survey was administered.
- NCDOT staff at the Purefoy Road survey location witnessed a number of near accidents involving vehicles making left turns (south) from Purefoy Road onto South Columbia Street as well as vehicles making left turns (south) out of Merritt's Store onto South Columbia Street.
- Observations of pedestrians utilizing the bus stops on the east and west sides of South Columbia Street, adjacent to the Purefoy Road intersection, demonstrate the need for designated pedestrian crosswalks and accompanying signage in this area.
- Construction workers and students were observed using the pay lot owned and operated by Merritt's Store and Grill, which is located on the west side of South Columbia Street adjacent to the store. NCDOT staff at the Purefoy Road survey location interviewed Bob Britt the owner of the establishment; Mr. Britt stated that his biggest concern was maintaining sufficient access to his store during and after construction (Bob Britt 919-942-4897)

- A number of different buses and converted vans of varying sizes were observed using South Columbia Street. These vehicles were operated by Person Transit, Chapel Hill Transit, Chatham Transit, Tarheel Transit, and PART Transit.
- A number of bicyclists were observed around the South Columbia Street/ Manning Drive survey location

General Cautionary Statements

There is a possibility that some people deliberately avoided the survey locations at the Manning Drive and Purefoy Road intersections because of the presence of NCDOT personnel. There is also a possibility that survey respondents were simply stating what they perceived that NCDOT would want to hear. Finally, the survey question relating to the possible restriction of access to the roadway during construction did not include specific plans or scheduled dates/ times making the question somewhat ambiguous.

cc: Ed Lewis, Public Involvement and Community Studies Group
Chris Howard, Work Zone Traffic Control Unit
Spencer Franklin, PE, HNTB
Michelle Ward, PE, HNTB

Attachments: