

September 21, 2005

**RE: Chapel Watch Village & Proposed Maywood Way Connector to Larkspur Subdivision**

Dear Mayor Foy and Members of the Chapel Hill Town Council:

I am writing to express four principal concerns regarding the proposed extension of Maywood Way as a vehicular connector between the Larkspur subdivision and the proposed Chapel Watch Village (CWV) development on Eubanks Rd. As a resident of the Larkspur subdivision, these by no means reflect all of my concerns, but I will limit my remarks to the following related topics:

**1. Use of the Maywood connector to reduce traffic on arterial roads**

The Town's Transportation Planner and the majority (four members) of the Transportation Board are in favor of a vehicular Maywood connector for the stated reason that the connector will reduce traffic on arterial roads. This position is highly problematic on at least three fronts:

- (a) It effectively sacrifices the relative safety of our residential neighborhood in favor of providing a 'relief valve' for the wider problem of congested arterial roads. In an urban community that values the safety of its citizens and preservation of their quality-of-life, I was frankly astounded to hear the Board's position articulated as a recommended public policy. Neither the residents of Larkspur nor the future residents of CWV should be asked to individually bear the very real safety risks associated with cut-through traffic for the benefit of non-residents seeking short-cuts to and from destinations external to the Larkspur and CWV subdivisions, or for some perceived benefit in helping to alleviate the systemic problem of congested arterial roads. Surely, there are more appropriate and fair solutions to this problem.
- (b) It contradicts the Town's 2005 Design Manual, which explicitly discourages through-traffic on local roads (pp. 79 and 90).
- (c) It stands in *direct* contradiction to the Transportation Board's own (flawed) conclusion that they would expect minimal cut-through traffic on Maywood Way. If a vehicular Maywood connector indeed has significant 'value' in helping reduce congestion on nearby arterial roads, then there must be an *a priori* expectation that a significant number of drivers would actually *use* Maywood as a cut-through road. In short, these two positions, as expressed by the Town's Transportation Planner and the majority of the Transportation Board members, are *mutually exclusive*. Therefore, at least one of these positions must be flawed (see point no. 4, below).

## 2. Precedents set by other neighborhoods opposed to connector roads, and how vehicular connectivity *via* Maywood Way would impact Larkspur.

While other residential Chapel Hill neighborhoods argued unsuccessfully against connector roads to new adjacent neighborhoods (*e.g.*, the Oaks residents' objections to a vehicular connector to Meadowmont), the residents of multiple other neighborhoods have voiced strong objections and successfully prevented vehicular connector roads to adjacent neighborhoods. These include:

- Coker Hills West Section 9 Subdivision
- Cobble Ridge Subdivision adjacent to Southern Village
- Chapel Ridge Apartments off Martin Luther King, Jr. (MLK) Blvd.
- Northwood Subdivision adjacent to Larkspur and, most recently,
- Wilson Assemblage on Erwin Rd.

While I am not familiar with the details of all the arguments for and against the vehicular connector roads proposed to/from these other subdivisions, the proposed Maywood connector appears to raise some unique and pressing concerns. I must point out that Larkspur residents do not oppose connectivity with adjacent residential neighborhoods *per se*. However, because of our strategic location, 'vehicular connectivity' *via* Maywood becomes an ominous proposition. As you are well aware, Larkspur is located (1) near the busy northwest urban boundary of Chapel Hill and within a few hundred feet of major commercial entities on Eubanks Road; (2) between Eubanks Rd., Weaver Dairy Rd. Ext., and MLK, Jr. Blvd., which are experiencing rapid increases in traffic volume; (3) near the busy I-40 interchange at Rt. 86 and shopping centers at Chapel Hill North and Timberlyne; and (4) near the looming major commercial developments represented by the Town Operations Center to our north and the proposed Carolina North campus to our south. In light of our location, a vehicular Maywood connector offers few, if any, direct advantages to the neighborhoods it would purportedly serve. On balance, any net benefit is far outweighed by the very real risks posed by cut-through traffic.

### **Cut-through incentive on Maywood Way.**

The temptation for drivers to use Maywood Way as a cut-through would be great. In some cases, drivers would be able to avoid multiple traffic signals on MLK Blvd. by cutting through Larkspur and CWV. This route also offers the shortest driving distance and driving time between several local intersections and locations. (As summarized in the Aug. 9 Larkspur Safety First presentation to the Transportation Bd., these travel-time data have been substantiated by multiple Larkspur residents driving the routes on multiple occasions at different times of the day. However, the Larkspur data stand in direct contrast to the inaccurate travel-time data presented in the 2005 CWV Traffic Impact Analysis, which were not reproducible under realistic driving scenarios and resulted in flawed study conclusions.) Nevertheless, one doesn't need a formal traffic impact analysis to reach the conclusion that cut-through traffic will be a concern; a simple map of northwest Chapel Hill makes this intuitively obvious. Similarly, one doesn't need an elaborate study of driver behavior to conclude that some drivers will

gladly drive through residential neighborhoods (despite their lower posted speed limits, stop signs, and other ‘traffic calming’ approaches) if it means they can essentially *keep moving* towards their destination, and avoid idling at one or more lengthy traffic signals on a busy arterial road.

**3. Although it is difficult to precisely estimate the number of cut-through drivers that would use the proposed Maywood connector, the risks associated with cut-through traffic are nevertheless real and have not been carefully considered.**

Let me assure you that the residents of Larkspur do *not* want the convenience of a vehicular Maywood connector, despite the fact that it would, for example, shorten our travel times and distances to the I-40 interchange and the Eubanks Rd. Recycling Center. Any added benefit of the connector to our residents would be overwhelmingly offset by the very real safety risks associated with cut-through traffic, and the reduced quality-of-life that additional neighborhood traffic would bring.<sup>1</sup> Almost by definition, cut-through drivers would be looking for the quickest, shortest way to their destination, and would be less motivated than residents of our own neighborhood to drive safely and obey posted speed limits.

Traffic experts predict that congested arterial road conditions, such as those expected on Eubanks Rd. near Chapel Watch Village at the intersection of MLK Jr. Blvd., will lead to cut-through traffic seeking alternate routes. Such traffic is increasingly associated with safety problems in residential neighborhoods.

**Texas Transportation Institute Study on the Impacts of Cut-Through Traffic.**

The Texas Transportation Institute sponsored a study that examined the impacts of cut-through traffic on residential neighborhoods (Bonneson *et al.*, 2000).<sup>2</sup> Some excerpts from their study report are of particular relevance to the safety concerns raised by Larkspur residents. On p. 1 of their report, the authors summarized the following conclusions:

“Steady increases in travel demand coupled with minimal increases in arterial street capacity have led to an increase in traffic-related safety problems in residential neighborhoods. These problems stem from the significant number of motorists that divert from the arterial to the residential street system in an effort to avoid arterial-related delays. Diverted motorists add to neighborhood traffic volumes and increase crash exposure for pedestrians, bicyclists, and other

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<sup>1</sup>Larkspur residents are already impacted by nearby facilities that benefit the greater Chapel Hill community, but which others would prefer not to ‘have in their backyard’. Specifically, we experience significant noise levels from the passing I-40 traffic, and our subdivision is bordered by high-tension power lines to the north and railroad tracks to the west, beyond which lies the Orange County landfill.

<sup>2</sup> Bonneson, J.A., Parham, A.H. and Zimmerman, K. (2000) Comprehensive Engineering Approach to Achieving Safe Neighborhoods. Texas Transportation Institute, Texas A&M University.  
<http://swuttc.tamu.edu/Reports/167707-1.pdf>

vehicles. In addition, diverted motorists often drive at excessive speed which increases both the potential for a crash and its severity.”

“...The data shown ..... indicate that most fatal crashes occur on minor arterials. However, an analysis of crash *rate* (i.e., crash frequency "normalized" by the amount of travel) indicates that local streets have the poorest safety record. These data indicate that the ***probability of a fatal crash on a local street is almost three times greater than that for an interstate highway*** [emphasis added]. This trend is likely due to the high probability that one of the participants in a local street crash is a pedestrian or bicyclist.”

“Excessive speed is a major contributing factor in crashes of all types. Excessive speed has serious consequences for pedestrians. The likelihood of a pedestrian being hit by a vehicle increases with speed. Motorists traveling at high speeds are less likely to see a pedestrian and if they see the pedestrian, are less likely to be able to stop in time to avoid hitting the pedestrian.”

Page 2 of the report continues:

“Many of the pedestrians in neighborhoods are children....Eighty percent of pedestrian-involved crashes with children under the age of 10 occurred within a half mile of their home.”

Page 15 of the report concludes:

“Many motorists simply regard any street in any location as, first and foremost, a place to drive. Further, they have certain expectations as to how a street system should operate, and if the street becomes congested beyond their tolerance, they will seek other paths. ...Unfortunately, the criteria used by a driver when selecting the “other path” has no bearing on the roadway’s functional classification. The result is that drivers use local streets for high-speed through trips instead of low-speed property access.”

**Model to predict cut-through traffic.**

These authors developed a model for predicting the percent of arterial drivers that would cut-through adjacent neighborhood streets. Depending on prevailing conditions, “percent cut-through traffic was found to range from 0.0 up to 30% of the arterial volume, with the higher percentage associated with oversaturated signalized intersections.”

If the conclusions of this model are applied, for example, to the projected traffic volumes at the intersection of Eubanks Rd. near MLK Jr. Blvd., a significant portion of drivers making the 11,000 average daily trips currently forecasted<sup>3</sup> for this congested intersection would be tempted to use the Maywood connector to cut-through Larkspur, thereby

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<sup>3</sup> 2003 Traffic Impact Analysis for the Chapel Hill Town Operations Center

avoiding the intersection and the traffic signals on MLK Jr. Blvd. If current trends continue, congestion at the Eubanks – MLK Jr. Blvd. intersection will continue to increase substantially, as depicted in the attached projected traffic volumes for 2030 (see Attachment 1). Concomitantly, cut-through traffic would be expected to increase.

The 2005 CWV Traffic Impact Analysis predicts that, when completed, the 86 homes in Larkspur alone will generate **800** daily trips on Larkspur roads. If we estimate that only 7% of the currently projected traffic (11,000 daily trips) approaching the Eubanks/MLK intersection instead uses the Maywood cut-through, this will result in a doubling of the traffic volumes on Larkspur roads to approximately **1600** average daily trips, *excluding all other potential sources of cut-through traffic*. Clearly, this greater-than-doubling of traffic volumes on Larkspur roads in the near term would have serious implications for our children’s safety and our quality-of-life.

#### 4. Access by emergency vehicles

Despite the fact that a vehicular Maywood connector would represent an attractive cut-through option for many drivers, it is important to note that such a connector would **not** facilitate access by emergency vehicles servicing Larkspur or CWV. Once again, the contrary conclusion of the majority of Transportation Board members is disappointing, superficial and incorrect. In contrast, the shortest distances to either Larkspur or CWV from their respective providers of fire and police protection would be directly *via* Weaver Dairy Road Extension and Eubanks Rd., respectively, *without* using the Maywood connector. In the unlikely event that an emergency vehicle would need to travel *directly* from Larkspur to CWV or vice-versa, the proposed Maywood pedestrian/bicycle/emergency vehicle connector (as favored by Larkspur residents as well as the developer of CWV) would allow such access.

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On balance, Larkspur residents believe there is little public good to be gained from a vehicular Maywood connector, and much to be lost in terms of public safety, particularly for our children. A pedestrian/bicycle/emergency vehicle connector between CWV and Larkspur would, however, be appropriate and welcome. If a second vehicular entrance/exit to Larkspur is required, extending Butterfield Court (for which a Larkspur stub-out already exists) to Weaver Dairy Rd Ext. would provide a safer and sensible alternative.

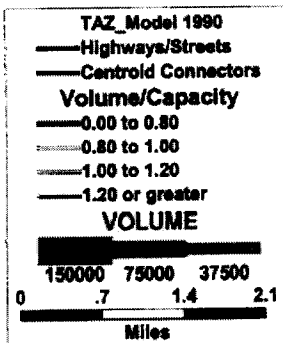
Many thanks for your consideration of these comments. Feel free to contact me if you have questions regarding the concerns and conclusions expressed herein.

Sincerely,

Demetra Vlachos  
Old Larkspur Way; Larkspur Subdivision; dvlachos@nc.rr.com

ATTACHMENT 1

PROJECTED TRAFFIC VOLUMES IN CHAPEL HILL  
(SOURCE: 2030 REGIONAL TRANSPORTATION PLAN)



# 2030 Volumes

## Chapel Hill Results

### Draft

17 June 2004