

Response of Staff to Proposed Light Rail Alignment by Terry Rekeweg

November 12, 2013

Executive Summary

At the August 2013 meeting of the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) Transportation Advisory Committee (TAC), Raleigh citizen Terry Rekeweg (Mr. Rekeweg) presented a proposed alignment for the Durham-Orange Light Rail Transit project (D-O LRT). Mr. Rekeweg's D-O LRT alignment (Conceptual Alignment) differs from the Locally Preferred Alternative (LPA) in four significant ways:

1. east of Downing Creek Parkway the Conceptual Alignment remains on the south side of NC 54 to the I-40 Interchange;
2. at the NC 54/I-40 Interchange the Conceptual Alignment turns south and generally parallels the eastbound lanes of the I-40 right-of-way (ROW);
3. the Conceptual Alignment enters the D&S Railroad Corridor near the interchange of NC 55 and I-40 and follows it northbound to the North Carolina Railroad Corporation (NCRR) Corridor. At that juncture, the Conceptual Alignment shifts onto the NCRR Corridor; and
4. west of Ninth Street, the Conceptual Alignment is within the NCRR Corridor and terminates in the vicinity of the Fulton Street/NC 147 Interchange.

Staff appreciates the time and effort spent by Mr. Rekeweg to consider alternative alignments for the D-O LRT project and to share his thoughts with DCHC MPO TAC. However, after reviewing Mr. Rekeweg's submissions, and as explained more fully below, it is the conclusion of staff that the Conceptual Alignment does not warrant further consideration at this time. Some reasons for this conclusion include, but are not limited to the following:

1. the Conceptual Alignment does not meet the Purpose and Need of D-O LRT;
2. the Conceptual Alignment is not responsive to existing or proposed land use plans and commuting patterns within the Durham-Chapel Hill Corridor (D-CH Corridor); and
3. the Conceptual Alignment includes a D-O LRT alignment previously considered, studied, and rejected by NCDOT, Chapel Hill, Durham, and the DCHC MPO.

Purpose and Need of D-O LRT

The Purpose and Need Statement for D-O LRT is documented in the 2012 D-O LRT Alternatives Analysis and was published in the Federal Register by the Federal Transit Authority in the April 2012 Notice of Intent. The Purpose and Need of D-O LRT are summarized generally as follows:

1. **Need to enhance mobility:** Alternatives to the automobile are needed to address the limited capacity of the existing and planned roadway systems, to accommodate increased travel demands, and to alleviate traffic congestion in the D-CH Corridor.
2. **Need to expand transit options between Durham and Chapel Hill:** Buses operate on increasingly congested roadways, have limited passenger capacity, and are not competitive with the automobile for most trips within the D-CH Corridor.
3. **Need to serve populations with high propensity for transit use:** Transit-dependent populations, students, and university and medical center employees comprise a significant percentage of the population living within the D-CH Corridor.
4. **Need to foster compact development:** Local governments recognize the need to limit sprawl and manage growth in conjunction with local land use plans. A proposed fixed guideway transit investment can channel future growth, provide a higher-capacity, time-reliable transit option to serve high-density development, and foster long-term economic development.

The Conceptual Alignment does not meet the Purpose and Need of D-O LRT

Substantial populations of students and employees commute to UNC, Duke, UNC Hospitals, the Durham VA Medical Center, Duke Medical Center, and Downtown Durham and live in the neighborhoods along the US 15-501 corridor. Presently, bus transit within this corridor is slowed due to traffic congestion, which results in longer travel times for transit passengers. Various limitations along the US 15-501 corridor make even modest bus transit improvements impractical or unworkable.

The Conceptual Alignment does not provide rail transit service to the major employment centers in Durham and Chapel Hill via the congested US 15-501 corridor. Instead, the Conceptual Alignment parallels the much higher-capacity and less congested NC 147 and uses the D&S Railroad Corridor (which supports active freight railroad service within a limited ROW). A substantial population of students and

workers who commute to Duke, the Durham VA Medical Center, UNC, and Downtown Durham lives in the neighborhoods along the US 15-501 corridor, and this population of commuters is wholly unserved by the Conceptual Alignment. By contrast, there are comparatively few workers and students traveling to these destinations living along Mr. Rekeweg's alignment – the D&S Corridor. Thus, demand for transit to D-O LRT's primary destinations and correspondingly, demand for transit service in general, is comparatively limited near the D&S Corridor, so less relief would be provided by building fixed guideway transit there.

What is more, current bus transit travel times face challenges from existing traffic in the US 15-501 corridor, where there is more automobile congestion than in the NC 55 / D&S Railroad Corridor. Further, multiple intersections and ROW constraints along the US 15-501 corridor make modest improvements like Bus-On- Shoulder-Systems (BOSS) difficult to implement and highway-based capacity expansion efforts that would benefit bus service infeasible. As a result, making a major transit investment away from the US 15-501 corridor – as Mr. Rekeweg proposes – would provide very limited relief (if any at all) to existing transit passengers.

Additionally, by remaining within the NCRR Corridor west of Ninth Street – in lieu of using Erwin Road – the Conceptual Alignment relocates the station serving the Durham VA and Duke Medical Centers. As a result, that station is almost one-half (½) mile further from the single largest job center in Orange and Durham Counties (as compared to the planned D-O LRT station). The Conceptual Alignment also reduces accessibility to the westernmost portion of the Duke University campus. As a consequence, many present-day transit riders will not have convenient access to rail service because the D-O LRT LaSalle Street Station is eliminated in the Conceptual Alignment.

Finally, Mr. Rekeweg contends that more lower-income residents are served by the Conceptual Alignment. This assertion is unsupported. The Conceptual Alignment eliminates all rail service to two lower-income census tracts in the City of Durham (i.e., near MLK, Jr. Parkway and the former South Square Mall area), thereby reducing service for communities with a high propensity for transit use.

Implementation of the D-O LRT project in the US 15-501 corridor has been determined to be the most reasonable alternative to expand transit capacity and provide dependable, time competitive travel options along this vital transportation artery. The Conceptual Alignment does not alter this conclusion.

The Conceptual Alignment is not in Accord with Current and Future Land Use Patterns

The Conceptual Alignment does not foster compact development within the D-CH Corridor, in direct contravention to current and future land use patterns established by local governments and other stakeholders. In the 2040 Metropolitan Transit Plan, DCHC MPO socioeconomic data reveals that future residential and job growth will be more heavily concentrated along the D-O LRT alignment, not within the Conceptual Alignment. For example, the D&S Railroad Corridor (which is part of the Conceptual Alignment) is projected to generate between 10-20 trips per acre by 2035. In contrast, the US 15-501 corridor rail segments included in the LPA (which are not included in the Conceptual Alignment) are generally projected to generate 25-50 trips per acre by 2035, and near Patterson Place it is estimated that 50-100 trips per acre are possible. This projected growth is also reflected in the map created by Triangle J Council of Governments in 2007, upon which the Special Transit Advisory Commission relied when it selected the proposed D-O LRT alignment as the primary location for the major transit investment within the D-CH Corridor. (A copy of the map entitled “2035 Trips by Travel Marketplace” is attached.) In short, D-O LRT serves the areas where the greatest density of trips is projected. The Conceptual Alignment does not.

The Conceptual Alignment Includes a Previously-Rejected Alignment

During the development of alternative alignments for D-O LRT within the D-CH Corridor, three separate alignment concepts (i.e., C1 – C3) between the Friday Center and Leigh Village stations were created for study. The C1 and C2 alignments will be studied further during the FTA Project Development Phase (i.e., the NEPA process)¹. The C3 alignment was rejected because it conflicted with planned

¹ The National Environmental Policy Act (NEPA) is a procedural statute with two aims: (i) the agency will carefully consider detailed information regarding significant environmental impacts of the proposed action; and (ii) relevant information will be broadly disseminated to state and federal regulatory and resource agencies and the public. The law requires that for major federal actions significantly affecting the quality of the human environment – like D-O LRT – a detailed statement must be prepared about: (i) the proposed action’s environmental impacts; (ii) any adverse environmental effects that cannot be avoided should the proposal be implemented; (iii) alternatives to the proposed action; (iv) the interrelatedness between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity; and (v) any irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented.

NEPA does not require an agency to analyze the environmental consequences of alternatives it has in good faith rejected as too remote, speculative, or ... impractical or ineffective. If an alternative is rejected on one of these bases, only a brief explanation for its rejection is required. Thus, an agency’s consideration of alternatives is sufficient if it considers an appropriate range of alternatives, even if it does not consider every available alternative.

NCDOT improvements at the I-40/NC 54 Interchange. Despite the elimination of the C3 alignment from further consideration, it is nevertheless included in the Conceptual Alignment, contrary to the analysis and determinations of the regulatory agencies and stakeholders.

Conclusion

An agency is not required to consider alternatives – like the Conceptual Alignment – which are infeasible, ineffective or inconsistent with the basic policy objectives for the action at issue. The D-O LRT, on the other hand, has been adopted by the DCHC MPO as the LPA to be advanced through the NEPA process, and it has been extensively vetted by experienced professionals, elected officials, and the public. Further, the D-O LRT meets the stated Purpose and Need for transit within the D-CH Corridor, it reinforces and supports current and future land use planning decisions made for Durham and Chapel Hill, it includes an appropriate range of alignment alternatives in response to concerns raised by key stakeholders and community institutions, and it complies with existing federal law. Based on the inability of the Conceptual Alignment to meet the stated Purpose and Need of D-O LRT, the extensive project planning and analysis, Mr. Rekeweg's proposal falls short of the requirements of the NOI; therefore, further review is not warranted.
