Get Involved Contact Form

Claire

Sent: 10/9/2015 9:15 AM

To: info@ourtransitfuture.com

Name: Claire

Phone Number:

Email Address:

Message Body:

Even after talking to transit representatives, it still does not make sense to me why the first foray of light rail in the Triangle isn't parallel to I-40. More people use 40 every day than go between Chapel Hill and Duke. You would have a lot more support for this plan if more people (like the thousands of people who commute from Orange county and further west to RTP every day) were positively impacted by giving them a mass transit option. Who really travels from UNC CH to Duke every day? You will not get the level of ridership that will support the huge expense involved in making the light rail follow the current plan. Most of RTP is in Durham county. You could easily make a light rail route from the already proposed Orange county route to parallel I-40 in Durham county to reach the Durham county area of RTP.

I voted for the Durham county sales tax increase to support light rail. However, if I had known the route would be as it is currently proposed, I would have never voted for it.

This e-mail was sent from a contact form on Our Transit Future (http://ourtransitfuture.com)

Get Involved Contact Form

| Lauren C | |
|--|-----------|
| Sent: 10/9/2015 11:19 AM | |
| To: info@ourtransitfuture.com | |
| | |
| Name: Lauren C | |
| Phone Number: | |
| Email Address: | |
| Message Body: I am in support of the Durham-Orange light rail transit project! This will help the roadway gridlock tremendously forward to using it! | . Looking |
| This e-mail was sent from a contact form on Our Transit Future (http://ourtransitfuture.com) | |
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- 1 54 corridor was the center of development,
- 2 and now the current center of development
- 3 is the 15/501 corridor between Durham,
- 4 Chapel Hill, and Chatham County, and the
- 5 developmental centers will continue to
- 6 change in the future.
- 7 How do we move tracks? The
- 8 project would waste local, state, and
- 9 federal funds. It is a flawed design that
- 10 will serve few and cost us all. I urge
- 11 you to support the no build option and at
- 12 the same time support more flexible mass
- 13 transit solutions like bus rapid transit,
- 14 which is a better fit for our area. Thank
- 15 you.
- 16 MR. JOYNER: Thank you. Next
- 17 speaker, please. You're welcome to do
- 18 that.
- MR. ALEX CABANES: Sorry whoever's
- 20 behind me. My name is Alex Cabanes,
- I stand before you to recommend a
- 24 no build option to the proposed light rail

Page 40

- 1 plan. The plan has numerous flawed
- 2 assumptions that impact the fiscal
- 3 feasibility and sustainability of this
- 4 project. One flawed project assumption is
- 5 25 percent state funding that's already
- 6 been -- brought fiscal feasibility into
- 7 question and has been capped by the state
- 8 at 10 percent.
- 9 The recent state budge
- 10 negotiations have highlighted that even
- 11 this assumption is highly questionable
- 12 with the current \$500,000 budget cap. In
- 13 addition, the projected 23,000 daily
- 14 boardings is built on numerous flawed
- 15 assumptions, such as the assumption that
- 16 40 percent of the area households within
- 17 the 57-square-mile corridor will be zero
- 18 vehicle residences, according to K2-27 of
- 19 the DEIS. Current zero vehicle households
- 20 comprise 10.4 percent in Durham, 7.4
- 21 percent in Chapel Hill, according to the
- 22 census bureau.
- 23 As a matter of fact, material
- 24 changes in the project, including travel

Page 41

- 1 times changing from 34 minutes in 2011 to
- 2 42 to 44 in the DIS, elimination of 700
- 3 parking spaces, changes in alignments,
- 4 such as C1 to C2A that was supposed to be
- 5 a minute shorter and increase a thousand
- 6 daily boardings, and all of the original
- 7 estimated daily boardings have been pushed
- 8 out five years to 2040, despite all of
- 9 these changes, the daily boarding
- 10 projections remain unchanged at 23,000
- 11 daily boardings. For this reason, these
- 12 are fatally flawed models and we recommend
- 13 no build. Thank you.
- 14 MR. JOYNER: Thank you.
- MS. RAMONA McGEE: There we go.
- 16 My name is Ramona McGee, and I'm an
- 17 attorney with the Southern Environmental
- 18 Law Center. Our address is
- 21 The Southern Environmental Law
- 22 Center or SELC is a 501(c)(3) non-profit
- 23 organization working to protect the
- 24 natural resources of the Southeast. In

DOLRT DEIS 1-5: Misleading and inaccurate UNC Student projections

Alex Cabanes

Sent: 10/4/2015 3:52 PM

To: info@ourtransitfuture.com

Cc: "NC54 Transit Impact"

DOLRT DEIS 1-5: MISLEADING and INACCURATE UNC Student projections

Much of this growth can be attributed to increased residential development for employees and students at UNC to keep pace with rising student enrollment. In 2007, UNC had just over 28,000 students and by 2017 total enrollment is projected to reach 33,000 students, a net increase of 18 percent. [DEIS 1-5]

CORRECTION:

UNC 2014 student population = **29,135** (or **4%** increase over last 8 years). Excluding online / distance students, would reduce the 2014 on campus population by approximately 4,646 students, making for a total of **24,489** on campus students versus the **inflated 33,000** cited in the DEIS.

According to UNC public records, student (under-graduate and graduate studies) enrollment were:

2007 = 28,136

2008 = 28,567

2009 = 28,916

2010 = 29,290

2011 = 29,137

2012 = 29,278

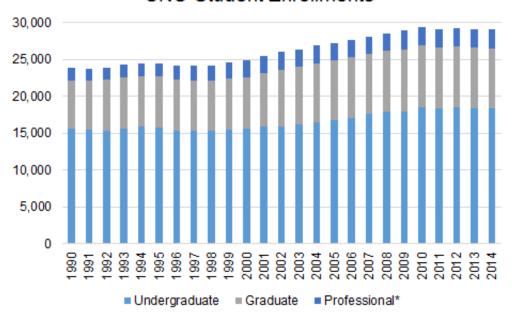
2013 = 29,127

2014 = 29,135

Given the 3.5% growth to date over the last 8 years, it is highly unlikely that UNC will grow to 33,000 students (or the 18% cited as the justification)

http://oira.unc.edu/facts-and-figures/student-data/enrollment-and-student-characteristics/historical-enrollment-by-education-level/

UNC Student Enrollments



Enrollments from UNC online/distance programs over the last 5 years:

2014-15 5,912

2013-14 4,646

2012-13 5,333

2011-12 5,781

2010-11 5,984

DOLRT DEIS 1-5: Substantially lower population projections from Alternative Analysis

Alex Cabanes

Sent: 10/4/2015 4:04 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact

DOLRT DEIS 1-5: Substantially lower population projections from Alternative Analysis

According to the DEIS page 1-5, Table 1.1-1, the current population within the 57 mile study corridor (DEIS 1-2, figure 1-0.1) is 27,000 growing 54,000 in 2040.

These population projections are inconsistent with earlier cited projections and substantially lower than those cited in the Alternative Analysis. According to the AA, the corridor study area is projected to have a population 231K residents in 2035 (up from 175K in 2005) or a 34% increase, not the cited 'double' and far less than the 64% and 52% cited within the DEIS.

http://ourtransitfuture.com/wp-content/uploads/2013/07/573 DO AA Final Report 8 Jun 12 web.pdf#page=33

DOLRT DEIS 1-8: Inconsistent population estimates

Alex Cabanes

Sent: 10/4/2015 4:23 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

DOLRT DEIS 1-8: Inconsistent population estimates

According to the US Census, there were 55,900 housing units in Orange County and 118,700 in Durham County in 2010. **The total number of housing units in all the proposed station areas** was 15,500, or 9 percent of the housing units in Orange and Durham counties combined.

North Carolina average household is 2.53 people per household, or approximately 39,215 people within station proximity.

- Durham County 2.36 persons per household @ http://quickfacts.census.gov/qfd/states/37/37063.html
- Orange County 2.45 persons per household @ http://quickfacts.census.gov/qfd/states/37/37135.html
- Chapel Hill 2.38 persons per household @ http://quickfacts.census.gov/qfd/states/37/3711800.html

This is inconsistent with population estimates from earlier referenced material.

For example, according to the DEIS page 1-5, Table 1.1-1, the current population within the 57 mile study corridor (DEIS 1-2, figure 1-0.1) is 27,000 growing to 54,000 (projected) in 2040.

These population projections are inconsistent with earlier cited projections and substantially lower than those cited in the Alternative Analysis used as the basis and justification for the DOLRT plan. According to the AA, the corridor study area is projected to have a population 231,000 residents in 2035 (up from 175,000 in 2005).

http://ourtransitfuture.com/wp-content/uploads/2013/07/573_DO_AA_Final_Report_8_Jun_12_web.pdf#page=33

DOLRT DEIS 1-12: Misrepresenting On-time Bus Route Performance

| Alay C | Cabanes | |
|--------|---------|--|
| AICX C | avalles | |
| | | |

Sent: 10/4/2015 4:43 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

DOLRT DEIS 1-12: Misrepresenting On-Time Bus Route Performance

DEIS 1-12, table 1.3-1 information is out-of-date concluding in 2013, and not reflecting more current data reflecting improved on-time performance. In addition, DEIS does not use consistent on-time performance metrics used by GoTriangle.

According to the latest 2015 On-time performance, GoTriangle has been exceeding the 85% on-time arrival goal, having achieved 87% on-time arrival in FY14 and FY15. This includes Route 400 which is now performing at 93% on-time arrivals.

Staff includes on-time performance as an unofficial performance indicator. "On Time" is defined as arriving at an end-of-line timepoint within five minutes of the published schedule. Triangle Transit aims to achieve more than 85% of trips arriving on time. In Q1 and Q2 of FY 2015, Triangle Transit met the goal with 87% of trips arriving on time to the end-of-line timepoints.

www.triangletransit.org/sites/default/files/files/February3,2015O%26FAgenda.pdf#page=11 www.triangletransit.org/sites/default/files/files/February3,2015O%26FAgenda.pdf#page=14 www.triangletransit.org/sites/default/files/files/February3,2015O%26FAgenda.pdf#page=15

DOLRT DEIS 1-6: Incomplete reference to proposed 90acre Leigh Village development

Alex Cabanes

Sent: 10/4/2015 4:50 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

DOLRT DEIS 1-6: Incomplete reference to proposed 90-acre Leigh Village development

Leigh Village is a 90 acre, future development to include 990 parking spaces for PnR and DOLRT station. The Leigh Village proposal has not been developed or rezoned for compact neighborhood usage.

As a point of comparison, the Meadowmont development is approximately 435 acres and already ion place, yet the DOLRT C1/C1A routing avoids the existing Meadowmont TOD, in favor of a smaller planned Leigh Village

DOLRT DEIS 1-6: Misrepresented travel times

Alex Cabanes

Sent: 10/4/2015 5:17 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact

DOLRT DEIS 1-6: Misrepresented travel times

According to the DEIS:

This results in increased travel times and reduced reliability of the transportation system between Chapel Hill and east Durham as discussed in DEIS chapter 3.

If left unmanaged, this rapid growth will not only continue to constrain corridor mobility,

The DEIS neglects to cite current or E+C travel times, or the fact that routing along NC54 corridor will actually exacerbate travel times by the traffic congestion that will be increased due to the DOLRT routing (as opposed to the more direct 15-501 DOLRT alignment).

The mean travel time to work according to the 2014 US Census is 21.5 minutes (Durham County) and 22.0 minutes (Chapel Hill).

2040 Existing+Committed projected to be **27 minutes**.

Yet according to the latest DEIS filing, the proposed 17 mile light rail train will take **42-44** minutes (versus the original **34** minutes projections in 2011).

As compared to bus service of **57 minutes** from UNC Hospital to Alston, or the earlier **BRT projected 39 minutes** (and less expensive). Include wait time for the next train, time to get to/from the station (via Park&Ride, Kiss&Ride, bicycle, walking, or bus transfer), it will be even LONGER than the projected 42-44 minutes.

In addition, a recent study U.S. Census Bureau shows that automobile commuting (2006-2013) has decreased 2.9%, surpassed only by San Francisco and Boston. So local commuting patterns have already started to change, without the need of this expensive project. https://nextcity.org/daily/entry/solo-driving-still-americas-choice-commute

DOLRT DEIS 1-6: Misleading statement about impact of road widening

Alex Cabanes

Sent: 10/4/2015 5:21 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

DOLRT DEIS 1-6: Misleading statement about impact of road widening

The existing built and natural environments limit the ability to widen the roadways to accommodate additional travel lanes, which could meet the increasing mobility needs as the population continues to grow.

The DEIS neglects to inform the reader that the DOLRT requires a 50' Right of Way which is the equivalent of 4 x 12' highway lanes.

The DEIS neglects to cite current or E+C travel times, or the fact that the DOLRT routing along NC54 corridor will actually exacerbate travel times by the increased traffic congestion created by the DOLRT routing (as opposed to the more direct 15-501 DOLRT alignment).

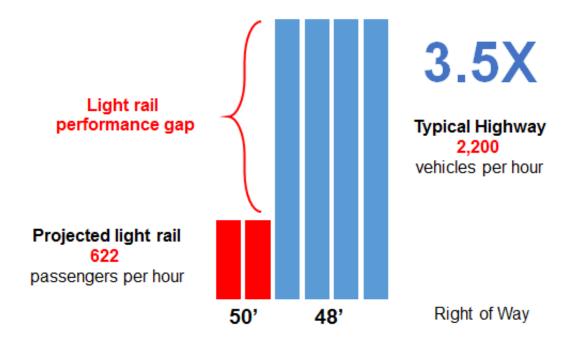
The mean travel time to work according to the 2014 US Census is 21.5 minutes (Durham County) and 22.0 minutes (Chapel Hill).

2040 Existing+Committed projected to be 27 minutes.

Yet according to the latest DEIS filing, the proposed 17 mile light rail train will take **42-44** minutes (versus the original **34** minutes projections in 2011).

In addition, the NC54 highway corridor is already planned to be widened to 6-lanes for consistent travel flow with other sections of the NC54 highway.

The DOLRT projected 23,000 boardings (in 2040) during 18.5 hours of daily operation across the 17 mile circuit (at a cost of \$1.6 BILLION or \$94 million per mile), by building a steel rail highway with exclusive 50' right of way or 622 passengers per hour (each track) X 2 or 1243 passengers in 50' right-of-way. Typical highways can accommodate 2,200 vehicles per lane per hour X 4 (human driven), utilizing 5% of roadway capacity or 8800 vehicles in 48' right-of-way And by 2040, highway capacity will dramatically increase with the introduction of autonomous vehicles.



DOLRT DEIS - NO BUILD - Flawed assumptions - 40% zero vehicle households

| Alex Cabanes | |
|--------------|--|
| MEX Capalles | |
| | |

Sent: 10/4/2015 5:34 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

I recommend a NO BUILD to this proposed DOLRT plan.

The plan has numerous flawed assumptions that impact the fiscal feasibility and sustainability of this project. One flawed project assumption of 25% state funding has already brought the fiscal feasibility into question and has been capped by the state at 10%, and the recent state budget negotiations have highlighted that even that assumption is highly questionable with the current \$500,000 budget cap.

In addition, the projected 23,000 daily boardings is built on numerous flawed assumptions, such as the assumption that 40% of the area households within the 57 square mile corridor will be zero-vehicle residences (DEIS K.2-27). Current zero-vehicle households comprise 10.4% in Durham and 7.4% in Chapel Hill according to the US Census Bureau's 2010-2013 American Community Survey.

As a matter of fact, material changes in the project including travel times changing from 34 minutes in 2011 to 42-44 minutes in the latest DEIS, or elimination of 700 parking spaces, or changes in alignments such as C1 to C2A alignments which was supposed to be 1 minute shorter and increase 1000 daily boardings, or the original estimated daily boardings being pushed out by 5 years to 2040 .. despite ALL of these changes, the daily boarding projection has remained unchanged at 23,000 daily boardings.

Or peer comparisons to Wake and Charlotte with substantially larger populations projecting 16,000 daily boardings for Wake and 16,000 daily boardings in Charlotte for the past 8 years. Yet, we are projecting 23,000 for a much smaller, less dense 57 square mile corridor with 231,000 people in 2040?

And all of this for an area where the mean commute time according to the 2014 US Census is 22 minutes (Chapel Hill / Durham), and the 2040 Existing+Committed projections is 27 minutes. And the DOLRT is currently projected to take 42-44 minutes (from the initial 34 minutes)? And not accounting for slower speeds due to heat advisories where LRT has to slow down on days over 90 degrees?

The current proposed DOLRT plan is fatally flawed and should not be built as currently designed. I urge you to recommend a NO BUILD decision.

DOLRT DEIS - Material Omission of Fact: Impact on DOLRT travel times due to heat advisory

Alex Cabanes

Sent: 10/4/2015 5:45 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

DOLRT DEIS - Material Omission of Fact: Impact on DOLRT travel times due to heat advisory

No where in the DEIS is there any discussion on the impact of travel times due to heat advisories. According to Portland TriMet system site,

http://howweroll.trimet.org/2015/06/23/ask-trimet-why-do-max-trains-have-to-slow-down-in-hot-weather/

At 90+ degrees, operators slow down for your safety

Our operators have to watch for both sagging power wires and "sun kinked" rails when it's really hot out. To be safe, they slow down to make sure nothing goes wrong. As it gets hotter, they have to slow down even more.

When temperatures hit the 90s, trains traveling in speed zones above 35 mph will need to run 10 mph slower. This will affect segments of all MAX lines and may cause minor service delays.

At 95 degrees, WES Commuter Rail trains must also run slower—no more than 30 mph—to ensure safety. This can cause up to 30-minute delays.

If temperatures climb above 100 degrees, MAX trains cannot go faster than 35 mph

A quick review of local temperatures between June thru September show over 40 days of 90+ degree weather.

http://www.accuweather.com/en/us/durham-nc/27701/june-weather/329821? monyr=6/1/2015

http://www.accuweather.com/en/us/durham-nc/27701/june-weather/329821? monyr=7/1/2015

http://www.accuweather.com/en/us/durham-nc/27701/june-weather/329821? monyr=8/1/2015

http://www.accuweather.com/en/us/durham-nc/27701/june-weather/329821?monyr=9/1/2015

DOLRT DEIS: GoTriangle Selection Bias

Alex Cabanes

Sent: 10/4/2015 6:20 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

GoTriangle DOLRT selection Bias

Accuracy of forecast model is highly questionable given that material changes in inputs and assumptions such as:

- Route selection of "C2A has fastest travel time & carries1,000 more daily riders than C1A" [DCHC-MPO], yet has no impact to ridership and travel time not reduced
- Forecast for 23,000 daily boardings shifts from 2035 to 2040 [DEIS 3-2], yet the change in population during those 5 years should increase as should boardings.
- Travel time increases from 34 minutes (2011) to 42-44 minutes [DEIS 3-13], yet no impact on boardings due to increase travel times
- 705 parking places removed [DEIS 3-2], yet no impact to Park'N'Ride estimate or total daily boardings

And despite all of these material changes, the daily boarding is still projected at 23,000?

Comparisons to alternatives, highly inflate costs of BRT and travel times relative to LRT.

As a point of comparison, the Chapel Hill BRT planned for the MLK corridor with dedicate BRT lane is projected to cost a total of \$25 million.

Transit Technologies Considered



SOURCE: http://ourtransitfuture.com/wp-content/uploads/2013/07/000681_REV_Scoping_Report_web.pdf#page=265

As point of comparison, H-3 is one of the most expensive Interstate Highways ever built, on a cost per mile basis. Its final cost was \$1.3 billion, or approximately \$80 million per mile (Hawaii) with tunnels, etc. SOURCE: https://en.wikipedia.org/wiki/Interstate_H-3

GOOGLE: "how much does a freeway cost?"

Construct a new 2-lane undivided road – about \$2-\$3 million per mile in rural areas, about \$3-5 million in urban areas.

Construct a new 4-lane highway — \$4-\$6 million per mile in rural and suburban areas, \$8-\$10 million per mile in urban areas.

DOLRT DEIS 1-10: Inaccurate claim regarding traffic congestion

| $\Lambda I \wedge V$ | Cabanes | |
|----------------------|----------|--|
| AIEX | Cauanes | |
| , | 04241100 | |

Sent: 10/4/2015 6:32 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

DOLRT DEIS 1-10: Inaccurate claim regarding traffic congestion

According to the DEIS:

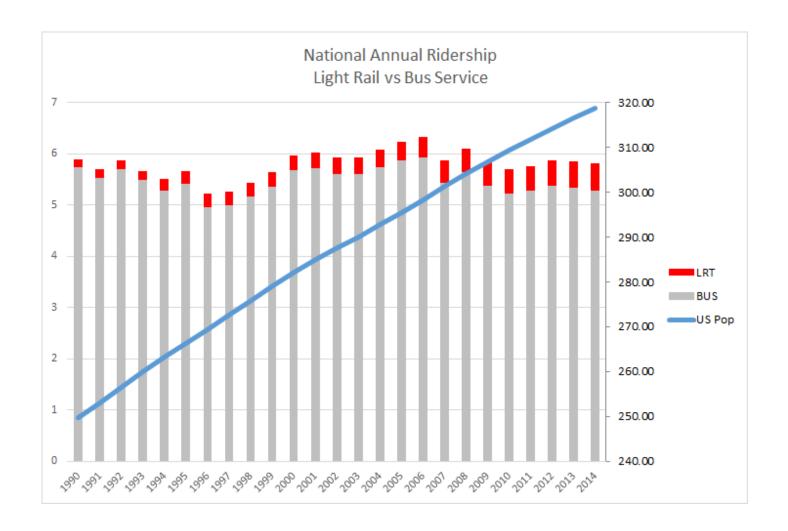
The existing roadway network experiences high levels of congestion, which will increase in severity with rises in population and employment within the D-O Corridor.

The DEIS neglects to cite current or E+C travel times, or the fact that the DOLRT routing along NC54 corridor will actually exacerbate travel times by the increased traffic congestion created by the DOLRT routing (as opposed to the more direct 15-501 DOLRT alignment). The mean travel time to work according to the 2014 US Census is 21.5 minutes (Durham County) and 22.0 minutes (Chapel Hill). 2040 Existing+Committed projected to be 27 minutes. Yet according to the latest DEIS filing, the proposed 17 mile light rail train will take 42-44 minutes (versus the original 34 minutes projected in 2011).

Light rail does not reduce traffic congestion. Total national ridership (APTA 1990-2014) reveals that despite massive light rail investments over past 25 years, combined ridership of light rail and bus service has stagnated at 5.7 billion annual trips. There is no evidence of increased ridership across these two modes of transportation, despite 28% population growth. Aggregate data suggests bus ridership shifted to expensive light rail and no measurable impact of reducing overall automobile traffic congestion.

SOURCE: Quarterly and Annual Totals by Mode - collected by American Public Transportation Association

http://www.apta.com/resources/statistics/Documents/APTA-Ridership-by-Mode-and-Quarter-1990-Present.xls



DOLRT DEIS 1-10: False implication of DOLRT service to NCCU and DTCC

| Alex Cabanes | |
|--------------|--|
| | |

Sent: 10/4/2015 6:44 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

DOLRT DEIS 1-10: False implication of DOLRT service to NCCU and DTCC

According to DEIS 1-10, implies service to NCCU and DTCC. In fact. DEIS neglects to state that NCCU (Historical Black College) and DTCC (Durham Technical Community College) are not served by DOLRT plan.

Major daily trip attractors within these subareas include Duke, Duke Medical Center, Durham VA Medical Center, downtown Durham, NCCU, and DTCC.

Attached is agreement letter (April 2014) between NCCU and GoTriangle that outlines in subsequent phases of DOLRT, NCCU will be included with a LRT station to connect NCCU with the rest of the Durham community..

Attachments: NC Central U letter.docx



April 13, 2014

Mr. David King General Manager Triangle Transit Authority P. O. Box 13787 Durham, NC 27709

Dear David,

I hope all is well and that you are beginning to focus on days filled with family and friends. However, before you set sail on your next adventure, I am writing to follow up on our recent conversations regarding Go Triangle's GoPass Program, Durham-Orange Light Rail Transit Project and North Carolina Central University.

Per our conversations, we are diligently working to incorporate the GoPass Program on our campus by the fall. My team has been working with your colleagues to make this happen and we are looking forward to the many opportunities and benefits this will provide for our students, faculty and staff, including reduced parking demand, options for regional mobility and savings to our commuters. Our university community will directly benefit from this program.

As you will also recall, I have spoken with you about the Durham-Orange Light Rail Project's failure to include a Light Rail stop on campus at North Carolina Central University. You and I have vetted this idea many times and reached a mutual understanding that although Phase One will not offer a stop on our campus, Phase Two will indeed incorporate a Light Rail stop at North Carolina Central University.

By this letter I urge you to share our intent and agreement with your successor, and I also respectfully request that you memorialize our agreement via letter to me reflecting your acquiescence.

I have enjoyed getting to know you and working with you and sincerely wish you all the best. You will be missed. Thank you for your patience, sincerity and for your integrity. I look forward to hearing from you soon.

In Truth and Service,

Dr. Debra Saunders-White

Chancellor

DOLRT DEIS 1-20: Misleading and inaccurate geographic references, and service areas

| Alex Cabanes | |
|--------------|--|
|--------------|--|

Sent: 10/4/2015 7:09 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

DOLRT DEIS 1-20: Misleading and inaccurate geographic references, and service areas

According to the DEIS 1-20:

In Durham, the highest concentrations of transit-dependent persons are located primarily around downtown Durham, along the NC 55 corridor, in south Carrboro, and in northern Chapel Hill (near the I-40 corridor). In Orange County, the areas with high concentrations of transit-dependent persons include the area surrounding Duke, Duke Medical Center, the Durham VA Medical Center, and the areas south of NCCU, north of I-85 between US 501 and US 501.

This statement is inaccurate and misleading.

- Carrboro is located in Orange County (not Durham County as referenced in the DEIS), and is not directly served by the DOLRT.
- Duke, Duke Medical Center, Durham VA and NCCU are located in Durham County (not Orange County as referenced in the DEIS). In addition, NCCU is not directly served by the DOLRT route.

DOLRT DEIS 1-23: Preservation of Environmental Resources

Alex Cabanes

Sent: 10/4/2015 7:21 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

DOLRT DEIS 1-23: Preservation of Environmental Resources

1.5.3.2 Existing Transit Infrastructure Does Not Support Preservation of Environmental Resources

Orange County is the headwaters for a number of rivers and streams in the Piedmont region. Water resources in Orange County flow into the Cape Fear, Neuse, and Roanoke River basins. Durham County lies on a ridgeline that separates the Cape Fear River Basin and the Neuse River Basin. When development began to sprawl outward in the late 1990s, development regulations in Durham were revised to better address environmentally significant features. More stringent measures were imposed in the 2000s through new Unified Development Ordinances from the city and county.

In Durham and Orange counties, several rivers have been dammed and several streams drain into drinking water reservoirs for the surrounding cities and towns. Ten of the fifteen watersheds in Orange County serve as water supply watersheds and, as such, Orange County was the first county in North Carolina to adopt watershed protection zoning. Adding a high capacity transit system will allow for a denser and less sprawling development pattern in areas slated for development and protect areas that are not.

The proposed placement of the ROMF at the Farrington location is counter to this DEIS statement and intent, and will compromise the the very water supplies that DOLRT is supposedly trying to preserve. The introduction of impervious surface area with the 90 acre Leigh Village proposed development, the introduction of 12 acres of parking spaces and the ROMF (and associated parking) at Farrington will further compound the adverse environmental impact to local water resources.

DOLRT DEIS 3-32: Table 3.2-3: Overall Intersection 2040 LOS - Omission of Littlejohn Road and Downing Creek Parkway

| Alex Cabanes | |
|--------------|--|
| | |

Sent: 10/10/2015 2:47 PM

To: info@ourtransitfuture.com

Cc:

DOLRT DEIS 3-32, Table 3.2-3: Overall Intersection 2040 LOS

Two intersections along NC54 highway between East Barbee Chapel and Huntington Road are omitted from report. Specifically, Littlejohn Road and Downing Creek Parkway are absent from traffic analysis or impact assessment.



Letter to the Editor - Oct 1, Durham Herald Sun - Let's set light rail aside - Rod Gerwe, Durham

Alex Cabanes

Sent: 10/10/2015 3:11 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

Letters to the Editor, Oct. 1

Let's set light rail aside

The Herald-Sun editorial supports light rail for unsound, vague reasons.

What, e.g., what does "livability" mean? A steadily enhanced bus system gradually paid for accomplishes most of what the light rail system can do and better. One 60-passenger bus replaces 30 two-passenger cars at rush hour and reduces road burden. Electrically powered buses would be non-polluting. Buses can serve all of Durham and connections to RTP, RDU and Chapel Hill; light rail won't. Bus routes can be designed to go where riders are, and to adjust to changing needs - a one-dimensional rail line cannot. The economics of the \$1.6 billion light rail are ridiculous. That's \$4,000/resident assuming 400,000 area residents. That's \$100 million/ mile. Even spreading per-passenger construction/startup costs over 20 years assuming an optimistic 20,000 riders/day, the per-passenger cost would be \$11, or \$5.50 per passenger over 40 years. That doesn't even begin to cover operating costs.

Comparisons with Charlotte area (three times Durham's population) are irrelevant. At 2.5 percent annual population growth it will take 45 years for our area to approach the current population of Charlotte. You say our legislature missed an opportunity for "leadership." Leadership is doing the right thing and preventing a project whose benefits do not justify cost. The paper is not exercising leadership. Let's set light rail aside for now and concentrate on plans for an enhanced bus system. The light rail/sales tax project vote four years ago is no longer valid; it doesn't cost and go where as formerly advertised.

Rod Gerwe

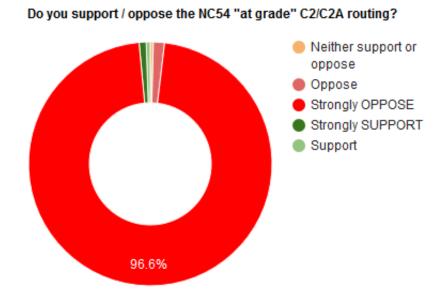
Durham

DOLRT DEIS - NO BUILD / OPPOSED C2/C2A routing - Communities South of NC54 in the Downing Creek Area

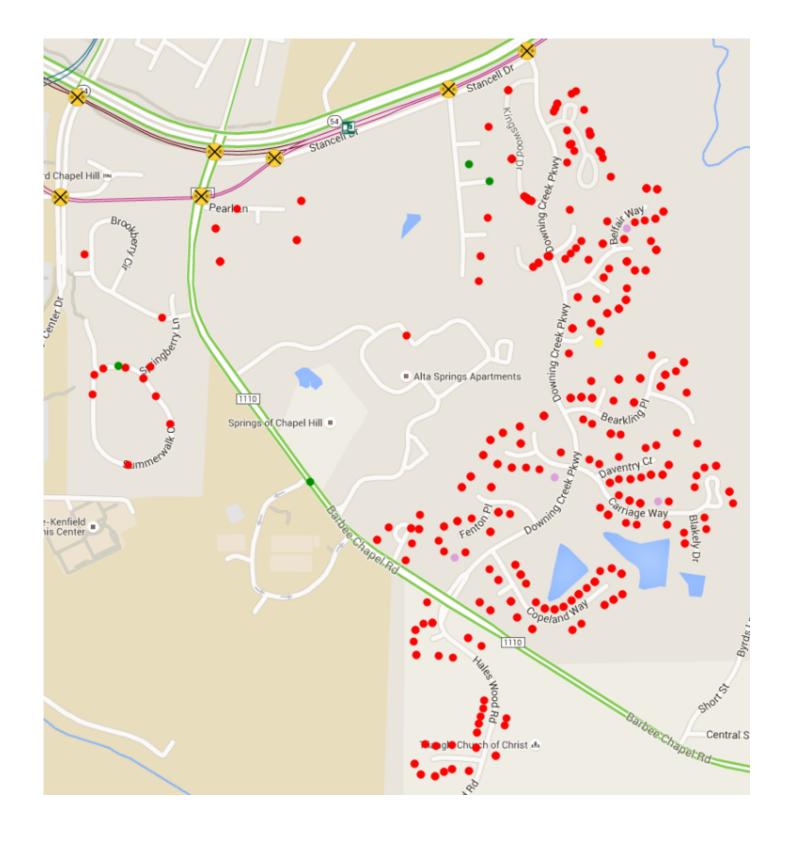
| Alex | Cabanes | | |
|-------|--|---------------|------------|
| Sent: | 10/11/2015 6:53 PM | | |
| To: | "Our Transit Future" <info@ourtransitfuture.com></info@ourtransitfuture.com> | | |
| Cc: | "NC54 Transit Impact" Creek Board" | "Lynn Culton" | , "Downing |

My name is Alex Cabanes and reside at 27 Tanyard Court, Chapel Hill, NC 27517.

As a resident of Downing Creek and surrounding communities, we oppose the proposed DOLRT C2/C2A routing along NC54 as it would introduce dangerous at-grade crossings at Downing Creek Parkway, littlejohn Road and Barbee Chapel. A poll of local residents showed that over 95% strongly opposed the proposed C2/C2A routing as it would adversely impact our local community, and as such we recommend a NO BUILD recommendation to the current proposal.



Map of local resident sentiment survey:



DOLRT DEIS - NO BUILD / OPPOSED C2/C2A routing - Communities South of NC54 in the Downing Creek Area - ADDENDUM

Alex Cabanes [alex_ncus@yahoo.com]

Sent: 10/12/2015 11:18 AM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact" <nc54.transit.impact@gmail.com>, "Lynn Culton" <downingcreek@gmail.com>, "Downing

Creek Board" <board@downingcreek.org>

Addendum to earlier email.

Survey form below. Attachment spreadsheet with 148 residents survey results.

C2 / C2A Light Rail Transit proposal — Community Survey Resident Survey for Durham - Orange Corridor Proposal for Woodmont Station and C2/C2A "at grade" route.

The proposed Woodmont Station is to be located on Stancell Road between the Citgo gas station and Little John Road. The proposed C2/C2A alternative is NOT an elevated track and will run "at grade" (same level as the street) along NC54 and Stancell with rail crossings Barbee Chapel Road, Little John Road (closed due to development of proposed Woodmont Station) and Downing Creek Parkway "at grade" level.

| 1. Do you support / oppose the NC54 Woodmont Station? | THE RESERVE OF THE PARTY OF THE | LRT Station with | Existing |
|---|--|--|--|
| The proposed Woodmont Station is to be located on Stancell Road | 经 的信息 | a Double-Sided Center Platform | Connection at Hwy. 54 to be Closed |
| between the Citgo gas station and Little John Road. NC54 access at | | | to be Crosed |
| Little John Road will be closed. According to the TTA, there will be NO | | 113 | THE PARTY NAMED IN |
| bus service. Mark only one choice | 《大学》 | | 10 CO 7 10 |
| ☐ Strongly Support | Mintelle British | | |
| Support | The same and sales | | LRT Tracks |
| ☐ Neither support or oppose | NAME OF TAXABLE PARTY. | AND DESCRIPTION OF THE PERSON | |
| ☐ Oppose | AND THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED | | ALC: NO LOS |
| Strongly Oppose | | | |
| | 医部分性皮肤炎 1 | Marie Control | Planned New Access |
| | and the same of th | 20030000 | Road and Connection |
| | THE RESERVE THE PARTY OF THE PA | STREET, STREET | to Hwy. 54 |
| 2. Do you support / oppose the NC54 "at grade" C2/C2A routing? | I AMERICAN AND A | Barrier on mont | 1 to |
| The proposed C2/C2A alternative is NOT an elevated track and will | | | |
| run "at grade" level along NC54 and Stancell with rail crossings | | | |
| Barbee Chapel Road, Little John Road (closed with the development | | | |
| of proposed Woodmont Station) and Downing Creek Parkway at grade | ES TOTAL PROPERTY AND | | |
| level. Mark only one choice | | | |
| Strongly Support | Company of the local division in which the | 神神(な) | |
| Support | | and what | A CONTRACTOR |
| Neither support or oppose | Esa | mple of approximate area ired for the LRT station site | 1 |
| Oppose | N with | approximately 200 and-ride spaces | |
| ☐ Strongly Oppose | (Not | 0,000 sf or 2.8 acres e: The example does | 1000 |
| | Woodmont (B) LRT Station | represent a specific location recommendation) | SALES OF |
| O Marriage and design | Section 2012 and the section of the | | |
| 3. My primary destination would be: | h = l = - | | |
| I would use the following destination on a regular basis. Mark only one of | noice | | |
| UNC Hospitals | | 80 | |
| ☐ Mason Farm Road ☐ Hamilton ☐ Durham-Orang | ge l | | |
| T I di Tillico II | (a) Sheet | AND THE PARTY OF T | |
| Friday Center Leigh Village | Project | Bullarus Bran | |
| Townsit | | Boulevard St | - S |
| Galeway | | | (8) |
| Patterson Place MLK Parkway | | Alaton Averos | |
| PO Box 530, | Warten Lander Nova N | | |
| South Square La Salle Street Accritical Bank of 27984 | Patricip | | |
| Duke / VA Medical Center | | | |
| Ninth Street | 30.0 | / autor \ \ \ | |
| Buchanan Blvd | P Paterson Place | II. Park and Ro | to New Hope Creek |
| Durham | | LRT States LRT States | New Hope Creek |
| Dillard Street | | Attendire Proposed Li | New Hope Creek |
| Alston Street | | Fail Algore C1 Alterwise | Potential Rail Goardiens and |
| NONE OF THE ABOVE | Lengt Village | ChAlterial | Trackly Lauston |
| Meado | | COA-Memal | County Boundary |
| Haveline La Rance d | | | |
| LIN CONTRACTOR OF THE PARTY OF | Visconary | | |
| Happins Description Chief | A THE | A | SORTA |
| 0.00 | | 937 17 | |

To learn more about the impact on Downing Creek and communities south of NC54, please visit Transit.DowningCreek.org

C2 / C2A Light Rail Transit proposal — Community Survey Resident Survey for Durham - Orange Corridor Proposal for Woodmont Station and C2/C2A "at grade" route.

| 4. I would use it at least: If the Light Rail Train was built, what is the minimum frequency that you would use the LRT? Mark only one choice Rarely, if ever Once a DAY Once per Week Only during work days Once per Month |
|---|
| 5. Do you use currently use public transit? Mark only one choice Yes No |
| 6. My average daily commute is typically less than: Mark only one choice 10 minutes 20 minutes 40 minutes greater than 40 minutes Not applicable, I don't commute |
| 7. I would be willing to pay no more than: What if the maximum fare you would be willing to pay for a one way ticket? Mark only one choice \$1 per trip \$2 per trip \$3 per trip \$4 per trip \$5 per trip \$10 per trip More than \$10 per trip |
| Tell us a little about yourself To better represent the Community and your point of view, we would like to better understand who you are so we can summarize for our community and have a factual discussion with planning agencies and associated representatives. |
| 8. Do you rent or own your current residence? Mark only one choice Rent Own |
| 9. Your name |
| 10. Your address |
| 11. Your email |
| 12. Signature |
| 13. Date |

To learn more about the impact on Downing Creek and communities south of NC54, please visit Transit.DowningCreek.org

---- Forwarded Message -----

From: Alex Cabanes <alex_ncus@yahoo.com> To: Our Transit Future <info@ourtransitfuture.com>

Cc: NC54 Transit Impact <nc54.transit.impact@gmail.com>; Lynn Culton <downingcreek@gmail.com>; Downing

Creek Board

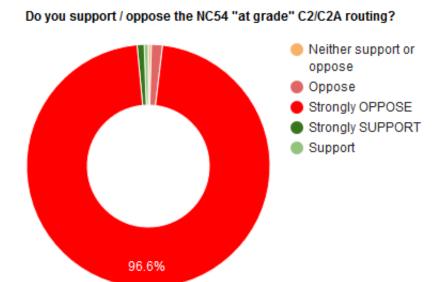
Sent: Sunday, October 11, 2015 6:53 PM

Subject: DOLRT DEIS - NO BUILD / OPPOSED C2/C2A routing - Communities South of NC54 in the Downing

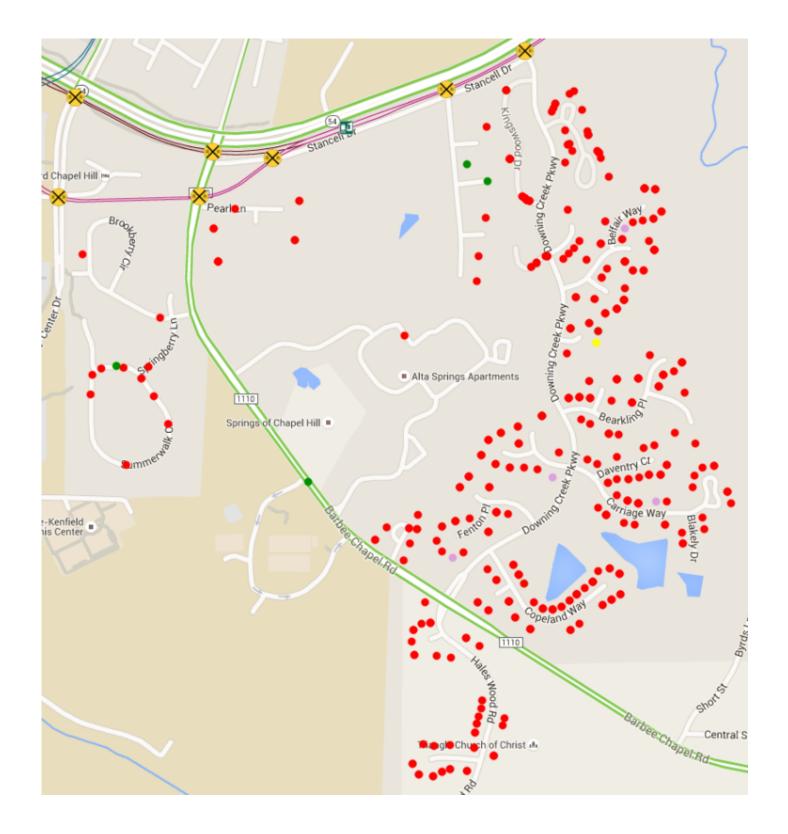
Creek Area

My name is Alex Cabanes and reside at 27 Tanyard Court, Chapel Hill, NC 27517.

As a resident of Downing Creek and surrounding communities, we oppose the proposed DOLRT C2/C2A routing along NC54 as it would introduce dangerous at-grade crossings at Downing Creek Parkway, littlejohn Road and Barbee Chapel. A poll of local residents showed that over 95% strongly opposed the proposed C2/C2A routing as it would adversely impact our local community, and as such we recommend a NO BUILD recommendation to the current proposal.



Map of local resident sentiment survey:



Attachments: DOLRT Downing Creek - Sentiment Survey 20150801.xlsx

DOLRT DEIS - Need to connect UNC and Duke University?

| $\Lambda I \wedge V C$ | Cabanes | |
|------------------------|---------|--|
| AICX C | avancsi | |
| | | |

Sent: 10/12/2015 7:52 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

A recent study by UNC Demographic Center concluded that approximately 1259 daily public-transit commuters travel across the Durham / Orange county line. This low inter-county public-transit usage is consistent with the 155 daily passengers using the RSX express bus service connecting UNC and Duke cited in DEIS 3-10.

A further examination of DEIS 3-16 shows that the daily boardings starting at the UNC Friday center for Alston-to-UNC Hospital boardings represents 1110 (x 2) or 2220 daily boardings, traffic that is exclusively within Orange County. A similar analysis starting at Woodmont station for UNC-to-Alston boardings represents 6830 (x 2) or 13660 daily boardings exclusively within Durham County.

The remaining 3670 (x 2) or 7340 daily boardings projections actually cross the Durham/Orange County line.

However, a closer analysis shows that if you exclude the non-existent (proposed) TOD communities within Durham County that border Orange County, the number of inter-county crossing drops dramatically to 1280 (x 2) or 2560 daily boardings. The other 2290 (x 2) or 4580 daily boardings are synthetic from non-existent Durham developments that will be created to serve as an extended parking lot for UNC (Chapel Hill). A much less costly alternative, in the form of structured parking at the UNC Friday Center could accomplish the same results, at substantially lower cost and the cost burden responsibility rightfully placed at the beneficiary of said parking lot, principally UNC.

SOURCE

http://demography.cpc.unc.edu/2015/09/03/nc-in-focus-commuting-by-public-transportation/http://ourtransitfuture.com/wp-content/uploads/2015/08/03_Chapter-3_Transportation.pdf#page=19http://ourtransitfuture.com/wp-content/uploads/2015/08/03_Chapter-3_Transportation.pdf#page=13

How many people use public transit between Durham / Orange counties?

D-O LRT Project DEIS/Draft Section 4(f) Evalua

UNC Demographic Study 9/3/2015 NC in Focus: Commuting by Public Transportation

Largest Cross-County Commuting Flows Using Public Transportation

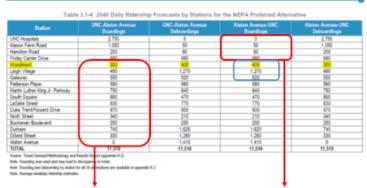
| From | To | Commuters |
|--------|-------------|-----------|
| Durham | Orange | 895 |
| Union | Mecklenburg | 452 |
| Wake | Durham | 366 |
| Orange | Durham | 364 |
| Durham | Wake | 257 |

Tabulations based on 2009-2013 American Community Survey County-to-County Commuting flows

1259 daily commuters cross between Durham / Orange counties using public transit

SOURCE: http://demography.cpc.unc.edu/2015/09/03/nc-in-focus-commuting-by-public-transportation/ http://demography.cpc.unc.edu/2015/09/03/nc-in-focus-commuting-by-public-transportation.of/bloogs-19 http://demography.cpc.unc.edu/2015/09/03/nc-in-focus-commuting-by-public-transportation.of/bpage-13 http://demography.cpc.unc.edu/2015/09/03/nc-in-focus-commuting-by-public-transportation/

People going in each direction:



6830 Durham county only

1110 Orange county only

3-16

3570 Cross county line (remaining) of which 2290 are bordering UNC in non-existing developments

1280 cross between Durham & Orange counties (projected)

X 2 = number of daily boardings in 2040

Daily ridership by station DEIS 3-16, table 3.1-4 & DEIS 3-10 table 3.1-1





in Marker Signa (SSS arrow Sellian collection between Date Shared), and SSC Dager NS. Though they an other had a second. To Star Date and the Februar are second from each other Tenta in origin also alread, and acting appropriate and date in markers of Starting arrows produced (second collection).

With the for Saberton Schola, Subschola without Suffaces may provide a rife, admittable site on the day or Saber to qualify for discontrol leave with valid. The ISS departs from and writes at 1 or No. House on trade between Saber both stops.

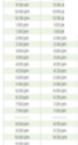
310 daily riders and operates 16 hours on weekday in 30 minute intervals in both directions. [DEIS 3-10]

Average of 5 passengers per bus every day

The 'demand' for student & faculty between UNC and Duke is

155 passengers (RT) per weekday

to use public transportation?





Capacity ≠ Usage

40 passengers capacity ≠ 5 passengers usage



Gillig Bus

Hybrid Engine Capacity

- 29: 28 seating
- 35': 32
- 40': 40

MPG = 4.65 mpg

Cost = \$580K each

DOLRT DEIS - NO BUILD alternative - misrepresentation of data

| | <u> </u> | |
|------|----------|--|
| ΔΙΔΥ | Cabanes | |
| | Cabanes | |

Sent: 10/12/2015 7:59 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

The DOLRT misrepresents the impact of NO BUILD alternative and neglects to cite current or E+C travel times, or the fact that the DOLRT C2/C2A routing along the NC54 highway corridor will actually exacerbate travel times by the traffic congestion that will be increased due to the DOLRT routing (as opposed to the more direct 15-501 DOLRT alignment).

The mean travel time to work according to the 2014 US Census is 21.5 minutes (Durham County) and 22.0 minutes (Chapel Hill). 2040 Existing+Committed projected to be 27 minutes. Yet according to the latest DEIS filing, the proposed 17 mile light rail train will take 42-44 minutes (versus the original 34 minutes projections in 2011).

As compared to bus service of **57 minutes** from UNC Hospital to Alston, or the earlier **BRT projected 39 minutes** (and less expensive). Include wait time for the next train, time to get to/from the station (via Park&Ride, Kiss&Ride, bicycle, walking, or bus transfer), it will be even LONGER than the projected 42-44 minutes.

Advocates portray No Build option as unsustainable urban sprawl, and that the only option is to build a light rail system.

The DOLRT projects 23,000 boardings (in 2040) during 18.5 hours of daily operation across the 17 mile circuit (at a cost of \$1.6 BILLION or \$94 million per mile), by building a steel rail highway with exclusive 50' right of way or 622 passengers per hour (each track) X 2 or 1243 passengers in 50' right-of-way required for DOLRT.

Typical highways can accommodate 2,200 vehicles per lane per hour X 4 (human driven), utilizing 5% of roadway capacity or 8800 vehicles in 48' right-of-way

With the introduction of autonomous vehicles, highway capacity will dramatically increase thereby significantly reducing traffic congestion thru the better utilization of our existing road infrastructure.

Build v. No-Build



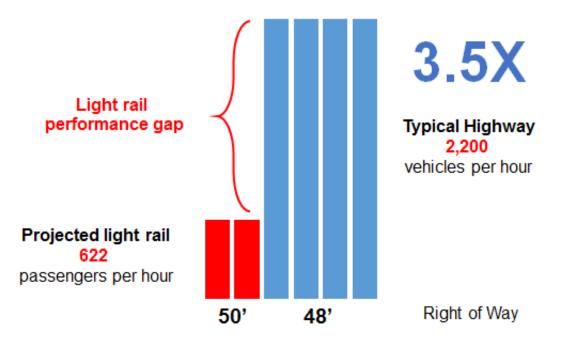


Projected light rail 622 passengers per hour



Typical Highway 2,200 vehicles per hour

22



DOLRT DEIS - LRT bias: Misrepresentation of BRT alternative cost estimates

Alex Cabanes

Sent: 10/12/2015 8:13 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

The DOLRT DEIS and the earlier Alternative Analysis artificially inflated the construction costs of alternatives like BRT and handicapped BRT time performance in favor of LRT bias.

Transit Technologies Considered



Estimated construction costs of US roadways.

Construction costs per mile of road depend on location, terrain, type of construction, number of lanes, lane width, durability, number of bridges, etc.

Some states have developed cost models to guide planning for their highway construction programs. These models give a ballpark figure for various kinds of highway improvements. The following are some examples:

- Construct a new 2-lane undivided road about **\$2-\$3 million** per mile in rural areas, about **\$3-5 million** in urban areas.
- Construct a new 4-lane highway \$4-\$6 million per mile in rural and suburban areas,

\$8-\$10 million per mile in urban areas.

- Construct a new 6-lane Interstate highway about **\$7 million** per mile in rural areas, **\$11 million** or more per mile in urban areas.
- Mill and resurface a 4-lane road about \$1.25 million per mile.
- Expand an Interstate Highway from 4 lanes to 6 lanes about \$4 million per mile.

The Florida Department of Transportation has published its generic cost per mile information for 2013 online.

The Arkansas Highway Department's estimated cost per mile for 2013 is available online.

SOURCE: http://www.artba.org/about/transportation-faqs/#20

DOLRT DEIS - Omission / Misrepresentation of DOLRT atgrade crossing hazards to neighboring communities

| Alex Cabanes | |
|--------------|--|
|--------------|--|

Sent: 10/12/2015 8:31 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact

DOLRT DEIS and GoTriangle during neighborhood outreach misrepresented hazards associated with proposed DOLRT project. During community meetings, GoTriangle portrayed LRT as safe and made comparisons to handling characteristics of a Honda Accord. At no time did GoTriangle reveal the true hazards of LRT travel to those on board and the neighboring communities impacted by the LRT routing. Below are some of the omitted information from the DEIS and GoTriangle community outreach on the dangers of at-grade crossings and should be included as part of the DEIS / FEIS.

Small sampling of LRT accidents and fatalities across the US:

- •Woman killed by Green Line light-rail train was Minnesota Senate employee St. Paul. 2015-04
- •1 hurt as car collides with Link light rail train in S. Seattle Seattle @ 2015-04
- •Pedestrian struck, killed by light rail train in Los Angeles Los Angeles @ 2015-04
- •Pedestrian Fatally Struck by Gold Line Train in Highland Park Los Angeles @ 2015-04
- •RTD Closed Portion Of Light Rail Line In Lakewood For Possible Death Investigation Denver @ 2015-04
- •Light rail trains delayed due to crash St Paul @ 2015-03
- •Portland Streetcar collisions? Nearly 1 a week, reports say Portland @ 2015-03
- •21 INJURED AFTER METRO TRAIN CRASHES INTO CAR NEAR USC CAMPUS Los Angeles @ 2015-03
- •Woman dies in light rail accident Houston @ 2015-03
- •RTD Light Rail service disrupted by pedestrian accident, mechanical problem Denver @ 2015-03
- •VTA Light Rail Car and Vehicle Crash in San Jose San Jose @ 2015-02
- •San Jose man hit, killed by light rail train San Jose @ 2015-02
- •Vehicle strikes Hudson-Bergen light rail train in Downtown Jersey City Jersey City @ 2015-02
- •Person injured after being hit by light rail train near Belleview station Denver @ 2015-02

- •Pedestrian struck, killed by Light Rail train near Colorado Convention Center in downtown Denver Denver @ 2015-02
- •Pedestrian struck, killed by Light Rail ID'd as Naythan Cordova; 41-year-old died on his birthday Denver @ 2015-02
- •Man Killed In Light Rail Train Accident Denver @ 2015-02
- •Light Rail, car collide near Speer & Stout in downtown Denver Denver @ 2015-02
- •Light rail service delayed after accident between train, car Baltimore @ 2015-02
- •Child, Driver Seriously Injured After Car Collides With Muni Train In SF's West Portal San Francisco @ 2015-01
- •3-YEAR-OLD DIES AFTER CAR HIT BY RIVER LINE LIGHT RAIL Philadelphia @ 2015-01
- •Man struck, killed by light rail train in Rancho Cordova ID'd Sacramento @ 2014-12
- •Denver police investigate fatal accident at RTD's Colorado Station Denver @ 2014-12
- •St. Paul Squad Car Collides With Light Rail Train St Paul @ 2014-11
- •Rancho Cordova teen killed by light-rail train. Hundreds flock to candlelight vigil Thursday night – Sacramento @ 2014-11
- •Bicyclist killed by light rail train Sacramento @ 2014-11
- •Man injured in Denver accident with light rail Denver @ 2014-11
- •Downtown Dallas light rail service restored following accident involving pedestrian, train Dallas @ 2014-11
- •NJ Transit light rail rams into car in Jersey City Jersey City @ 2014-10
- •Teen Girl Killed By Light Rail Train In Golden Denver @ 2014-10
- •Green Line train fatally hits woman wearing headphones St Paul @ 2014-09
- •Green Line light rail train hits pedestrian in St. Paul St Paul @ 2014-08
- •5 hurt in van, light-rail train crash in Rainier Valley Seattle @ 2014-08
- •Blue Line service restored after accident involving light rail train, truck Philadelphia @ 2014-08
- •1 injured after car hit by light rail Denver @ 2014-08
- •1 injured in crash between car, light-rail train in Castle Shannon Philadelphia @ 2014-07
- •Man dies in DART light rail accident at Dallas' Bachman Station Dallas @ 2014-07
- •Woman struck and killed by Blue Line light-rail train in south Minneapolis St Paul @ 2014-06

- •MAN FATALLY STRUCK BY VTA TRAIN WAS CHASING AFTER DOG San Jose @ 2014-06
- •Victim hospitalized after METRO light rail accident Houston @ 2014-05
- •Minneapolis Man, 62, Killed In Light Rail Train Accident St Paul @ 2014-01

According to the National Highway Traffic Safety Administration (NHTSA) at U.S. DOT:

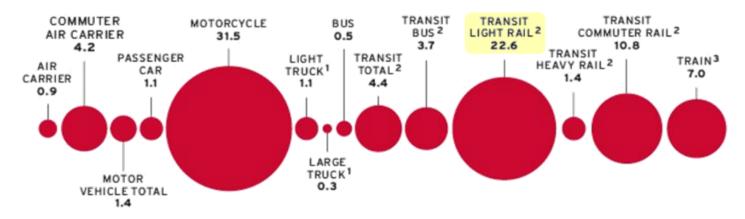
- Three out of four crashes occur within 25 miles of a motorist's home.
- 50% of all crashes occur within five miles of home.

A calculation of NHTSA statistics on the rate of deaths per collision in vehicle/vehicle crashes versus the FRA statistics of deaths per collision in vehicle/train crashes reveals:

 A motorist is almost 20 times more likely to die in a crash involving a train than in a collision involving another motor vehicle.

Light rail is safe?

Average fatality rates per 100 million miles, 2000-2011



1 Light trucks are defined as those less than 10,000 pounds gross vehicle weight rating, including pickups, vans, and SUVs. Large trucks are more than 10,000 pounds GVWR. 2 Transit bus refers to local service on fixed routes; light ratinefers to streetcars, transvays, and trolleys; heavy rail includes subways and stimilar electric rail service; commuter rail is electric or diesel rail service between suburbs and a central city (all transit data 2000–2008). 3 Train data includes both freight and passenger railroad operations.

SOURCE: http://www.caranddriver.com/features/howre-ya-dying-fatality-data-from-various-types-of-transportation-feature

LRT travelling on zero incline at 35 MPH with full brake will travel

or more than the length of a football field

~428 feet

in ~10 seconds

LRV Braking Distances for Unanticipated Stops

| LRV Speed (mph) | LRV Traveled Distance (ft) in 9.86 sec. | Full Service Braking Distance (ft) | Emergency Braking Distance (ft) | Distance of Low or Open Fence |
|-----------------------|---|--|--|--|
| 15 | 217 | 110 | 81 | 43 |
| 25 | 362 | 244 | 175 | 72 |
| 35 | 506 | 428 | 302 | 101 |
| 45 | 651 | 660 | 462 | 130 |
| 55 | 795 | 942 | 654 | 159 |

Fence Height

Based on distance of 506' covered in 9.86 seconds and 7' reaction time, fence height should not obstruct view 101' from crossing.

LRT Stopping Distance @ 35 mph on flat (0 degree) incline

428 feet

Length of football field

300 feet

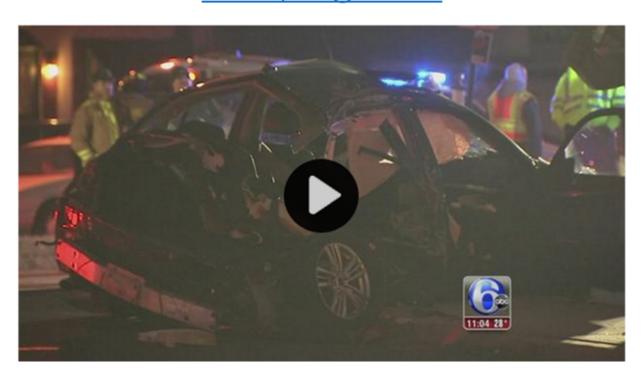


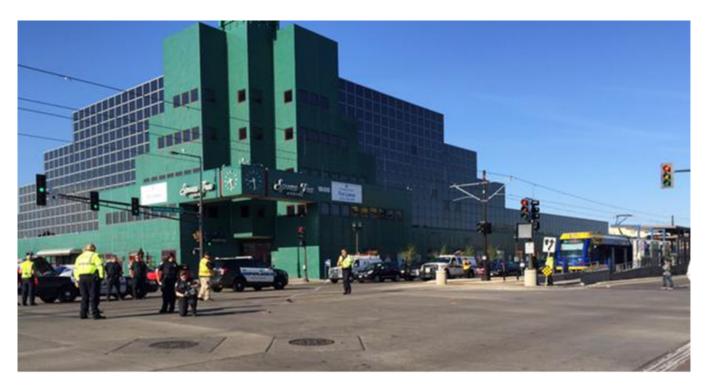
Multiple injuries after light rail, truck crash
Phoenix @ 2015-05



21 Injured after Metro Train crashes into car near USC Campus
Los Angeles @ 2015-05

3-YEAR-OLD DIES AFTER CAR HIT BY RIVER LINE LIGHT RAIL Philadelphia @, 2015-01





Woman killed by Green Line light-rail train was Minnesota Senate employee
St. Paul @ 2015-04



<u>Pedestrian Fatally Struck by Gold Line Train in Highland Park</u> <u>Los Angeles @ 2015-04</u>





DOLRT DEIS - Noncomplaince with City of Durham Unified Development Ordinance

| Alex Cabanes | |
|--------------|--|
|--------------|--|

Sent: 10/12/2015 8:33 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

Based on the City of Durham Unified Development Ordinance, Article 10: page 10-5, All passenger terminals require 1 vehicle parking per 200 square feet of waiting floor area + 1 per 2 employees. Minimum 10% of required vehicle parking. Minimum 8 spaces. Parking must be covered. This would require a minimum of 25 additional parking places to support the passenger terminal waiting area (approximately 270' x 18') just to accommodate a minimal passenger pickup at every single station within the City of Durham.

DOLRT DEIS - Alston PnR inconsistent estimates

Alex Cabanes [alex_ncus@yahoo.com]

Sent: 10/12/2015 8:43 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

The Alston Park'n'Ride projection of 940 daily boardings with only 940 parking spaces assumes 100% capacity utilization, substantially higher than the ~60% at other DOLRT stations. Durham Tech & NC Central approximately 1 mile away from Alston station, and beyond the 1/2 mile catchment area.



DOLRT DEIS - Leigh Village proposed TOD - inflated PnR + Walk-in projections

Alex Cabanes

Sent: 10/12/2015 6:51 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

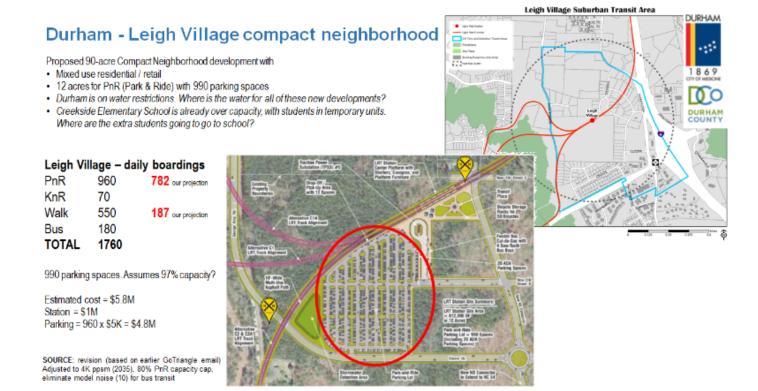
Cc: "NC54 Transit Impact"

The proposed Leigh Village development is focused on 90-acres of undeveloped land that has not been approved or rezoned for a compact neighborhood. The mixed use residential / retail development would dedicate 12 acres for PnR (Park & Ride) with 990 parking spaces (no parking structure) thereby adversely impacting sensitive wetlands / watershed areas with the introduction of impervious surfaces.

In addition, the city of Durham is on water restrictions, which raises the question of where the water is coming from for all of these new developments?

In addition, the neighboring Creekside Elementary School is already over capacity, with students in temporary units. Where are the extra students going to go to school?

Also, the projected 990 parking spaces are projected to drive 960 daily boardings, with an average 97% capacity utilization, which is out of line with estimates from other PnR facilities in the DOLRT project. Also, with the anticipated population density of 4000 people per square mile, the 550 walk in daily boardings seems particularly high. Using the 2040 projected density, would suggest a number closer to 187 daily boardings from walk in passengers in the surrounding (unapproved) future development.



DOLRT DEIS - Daily boardings station analysis - Woodmont + Leigh Village + Alston comparison

Alex Cabanes

Sent: 10/12/2015 7:25 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

Further analysis of DOLRT daily boardings by station highlight some inconsistent projections. For example, the Woodmont estimates are for a station with existing low-density residential properties, with 30 acres of undeveloped land. Development in the are has been consistently hampered by the proximity to sensitive wetlands and numerous (previous) attempts to develop the 30 acres have failed due to low-financial returns given city imposed development restrictions.

In addition, the proposed **30 acre Woodmont** development and associated Woodmont station would only serve the communities directly south of NC54, since the NC54 highway creates a barrier preventing passengers from the communities north of NC54 (specifically the **435 acre Meadowmont TOD**).

So using a projected **2040 population density of 4000 ppsm**, divided in half due to NC54 barrier, would suggest walk in daily boardings of approximately **100 people** (4000ppsm / 2 * 5%) as opposed to the overly optimistic **690** daily boardings projected for Woodmont station.

Given this background, it seems inconsistent that **690 daily boardings** would be projected for **30 acres**, versus the **550 daily boardings for the 90 acres** in the unapproved Leigh Village development. It also is inconsistent with projected **310 daily boardings for Alston terminus** which is supposed to serve the existing transit dependent communities located in East Durham.

In addition, the communities associated with the Woodmont station do not (nor are they planned to) have bus service. So the associated 10 daily boardings from bus transfers are rounding errors and 'noise' from the model. We would **recommend that any numbers 50 (or less) be eliminated** from these estimates as they are within the margin of error and serve to artificially inflate the projections.

Using the standard catchment area of ½ mile walk-up radius around each of the 17 stations, represents approximately 68,000 people within walking distance of a station. Given the national average for public transportation utilization is 5% (Durham 3%) suggests 6800 daily boardings (68K * 5% * 2) within the 57 square mile corridor study area, not the projected 12,180 daily boardings.

| Stations | PnR Access | KnR Access | Walk Access | Bus Transfers | Total |
|-----------------------|------------|------------|-------------|---------------|-------|
| UNC Hospitals | 0 | 40 | 810 | 1,890 | 2,750 |
| Mason Farm | 0 | 0 | 1,100 | 0 | 1,100 |
| Hamilton | 0 | 0 | 260 | 20 | 280 |
| Friday Center | 800 | 50 | 450 | 380 | 1,660 |
| Woodmont | 0 | 0 | 690 | 10 | 700 |
| Leigh Village | 960 | 70 | 550 | 180 | 1,760 |
| Gateway | 200 | 40 | 510 | 430 | 1,170 |
| Patterson Place | 0 | 0 | 1,140 | 120 | 1,270 |
| MLK | 290 | 30 | 1,100 | 170 | 1,590 |
| South Square | 520 | 70 | 740 | 50 | 1,360 |
| LaSalle | 0 | 0 | 1,020 | 370 | 1,400 |
| Duke at Trent/Flowers | 0 | 0 | 1,360 | 210 | 1,570 |
| Ninth | 0 | 60 | 490 | 10 | 550 |
| Buchanan | 0 | 0 | 500 | 0 | 500 |
| | | | | | |

20

140

60

580

650

500

310

12,180

1,420

270

110

5,640

2,360

1,590

1,410

23,020

Note: Numbers rounded to the tens digit; totals may not be exact due to rounding

Durham Station

Dillard

Alston

TOTAL

Projected daily boardings ... questionable projections

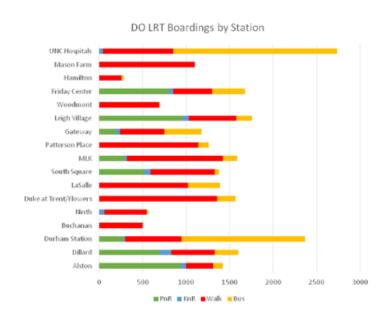
280

690

940

4,680

| Stations | PnR | KnR | Walk | Bus | Total |
|-----------------------|------|-----|-------|------|-------|
| UNC Hospitals | 0 | 40 | 810 | 1890 | 2740 |
| Mason Farm | 0 | 0 | 1100 | 0 | 1100 |
| Hamilton | 0 | 0 | 260 | 20 | 280 |
| Friday Center | 800 | 50 | 450 | 380 | 1680 |
| Woodmont | 0 | 0 | 690 | 10 | 700 |
| Leigh Village | 960 | 70 | 550 | 180 | 1760 |
| Gateway | 200 | 40 | 510 | 430 | 1180 |
| Patterson Place | 0 | 0 | 1140 | 120 | 1260 |
| MLK | 290 | 30 | 1100 | 170 | 1590 |
| South Square | 520 | 70 | 740 | 50 | 1380 |
| LaSalle | 0 | 0 | 1020 | 370 | 1390 |
| Duke at Trent/Flowers | 0 | 0 | 1360 | 210 | 1570 |
| Ninth | 0 | 60 | 490 | 10 | 560 |
| Buchanan | 0 | 0 | 500 | 0 | 500 |
| Durham Station | 280 | 20 | 650 | 1420 | 2370 |
| Dillard | 690 | 140 | 500 | 270 | 1600 |
| Alston | 940 | 60 | 310 | 110 | 1420 |
| TOTAL | 4680 | 580 | 12180 | 5640 | 23080 |



DOLRT DEIS - Downing Creek Parkway hazardous atgrade crossing - engineering / elevation

| Alex | Cabanes | |
|------|---------|--|
| ,, | | |

Sent: 10/13/2015 9:31 AM

To: "Our Transit Future" <info@ourtransitfuture.com>

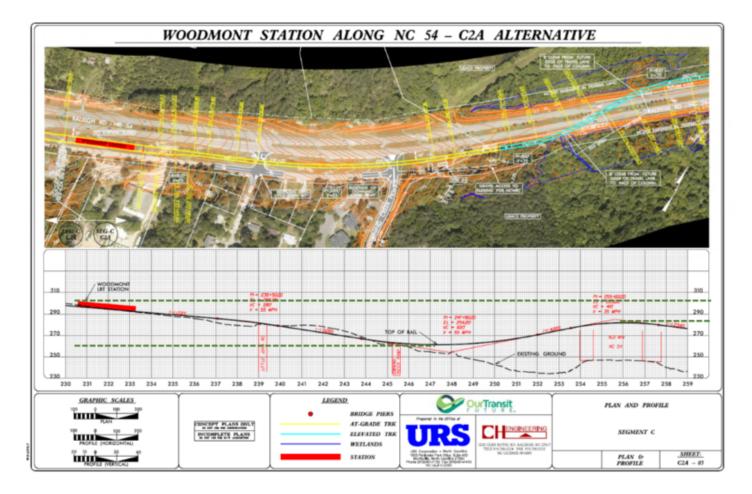
Cc: "NC54 Transit Impact"

A review of the engineering designs of C2/C2A routing (Woodmont section) along NC54 highway crossing Downing Creek Parkway shows that the elevation will drop from 300' down (or 285' on the East) to low of 260' at Downing Creek Parkway. This will create an incline that will be a 'gravity well' exacerbating stopping characteristics of train. Based on 35 mph travel speed, a zero-grade incline (level ground), would take the train approximately 428' to come to a complete stop. Even if the train is traveling at a lower speed, the topology and track incline will increase inertial momentum, especially as the train is coming from Durham into the Woodmont station, making the Downing Creek Parkway at-grade crossing particularly hazardous giving the poor braking capabilities of the train.

This traffic hazard is further compounded by the fact that their is not a traffic signal (current or planned) along NC54 highway, thereby providing no prioritized access for Downing Creek Parkway traffic to safely merge onto NC54 highway. Additionally, the NCDOT plans for NC54 widening in this section will consume an additional 22' (12' travel lane + 10' shoulder) making any potential remedies for merge lanes or other accommodation particularly problematic.

Additional soil analysis is recommended. The area's close proximity to wetlands will likely require additional concrete reinforcement to provide a solid track foundation over the wet soil. As such, an elevated track over this area should be considered as it would address the safety concerns, as well as potential engineering requirements.

Alex Cabanes



LRT travelling on zero incline at 35 MPH with full brake will travel

or more than the length of a football field

~428 feet

in ~10 seconds

LRV Braking Distances for Unanticipated Stops

| Sp | RV eed ph) | LRV Traveled Distance (ft) in 9.86 sec. | Full Service Braking Distance (ft) | Emergency Braking Distance (ft) | Distance of Low or Open Fence |
|----|------------------|---|--|--|--|
| 1 | 5 | 217 | 110 | 81 | 43 |
| 2 | 5 | 362 | 244 | 175 | 72 |
| 3 | 5 | 506 | 428 | 302 | 101 |
| 4 | 5 | 651 | 660 | 462 | 130 |
| 5 | 5 | 795 | 942 | 654 | 159 |

Fence Height

Based on distance of 506' covered in 9.86 seconds and 7' reaction time, fence height should not obstruct view 101' from crossing.

LRT Stopping Distance @ 35 mph on flat (0 degree) incline

428 feet

Length of football field

300 feet

DOLRT DEIS - Dangerous / Safety impact of C2/C2 routing along NC54 highway - Downing Creek + Llittlejohn

Alex Cabanes

Sent: 10/13/2015 9:46 AM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

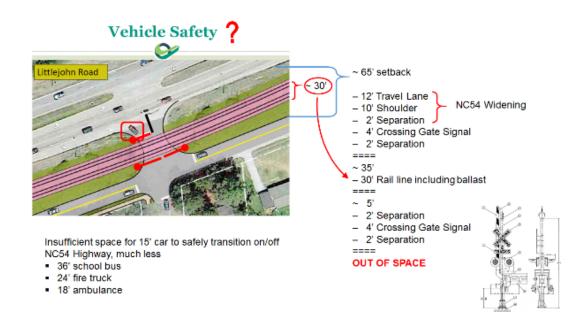
A review of the area topology around the Downing Creek, Littlejohn Road and Barbee Chapel reveal that there is insufficient space for the NC54 widening project and the proposed C2/C2 routing. Measurements along the section of road between NC54 highway and parallel Stancell Road shows that there is approximately 65' between both existing roads. DOLRT ROW of 50' is required per GoTriangle discussions.

Current NCDOT plans for NC54 highway widening will require an additional 12' for travel lane + 10' for shoulder.

Even if the 50' ROW for DOLRT was compromised, the sum of the required elements would still exceed available space as depicted below.

Furthermore, this would restrict or eliminate any traffic accommodation for potential merge lanes or 'pockets' for ingress/egress into the neighborhood. The net effect would be to back vehicles into travel lanes, creating dangerous congestion along NC54. In addition, egress out of the neighborhood would be constrained by the lack of any traffic prioritization onto NC54 (traffic signal or merge lane), thereby creating a dangerous situation where vehicles would have to 'sit' on the tracks as they waited to get onto NC54. Sample vehicle lengths provided below.

PAUSE 10 seconds



DOLRT DEIS - Downing Creek LOS / Traffic Counts hazard / fatalities

Alex Cabanes

Sent: 10/13/2015 9:57 AM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

An independent review of traffic level of service (LOS) for intersections along NC54 highway, specifically Downing Creek Parkway shows that the projected increased traffic flow compounded by the reduced time window due to train crossings will create more congestion and reduce the LOS further given the unique topology and traffic flow characteristics along the NC54 highway corridor. Current LOS D will deteriorate further. If desired LOS B is to be achieves, this would suggest a 40% capacity shortfall in traffic flow in this area. This is further compounded by the lack of traffic prioritization for merging traffic onto NC54 highway, and insufficient merge space once the NC54 widening project is completed. This creates a hazardous confluence of factors that will result in fatalities.

Traffic counts - GoTriangle via City of Durham DOT

40% capacity shortfall

requires LOS B to accommodate light rail crossing and NC54 Highway access

| L08 | Signalized Intersection | Unsignalized Intersection |
|-----|----------------------------|------------------------------|
| Λ | ≤10 sec | ≤10 sec |
| В | 10-20 sec | 10-15 sec |
| С | 20-35 sec | 15-25 sec |
| D | 35-55 sec | 25-35 sec |
| E | 55-80 sec | 35-50 sec |
| F | ≥80 sec | ≥50 sec |

152 cars per peak hour demand vs 90 cars per peak hour capacity ... ((60 min X 60 sec) – (12 train crossings X 40 sec)) / 35 sec per car

Example of light rail compounding traffic congestion, not relieving it

| | Existing Peak | Hour Traffic | 2040 Peak Hour | Traffic | |
|---|---------------|--------------|-----------------|---------|---------------------------|
| | (Both Dir | ections) | (Both Direction | ns) | |
| Roadway | AM | PM | AM | PM | LRT Alignment |
| Fordham Boulevard east of Old Mason Farm Road | 4,262 | 5,355 | 5,775 | 7,572 | Elevated |
| NC 54 east of E Barbee Chapel Road | 4,216 | 4,151 | 8,161 | 8,930 | Elevated |
| NC 751 west of Erwin Road | 1,776 | 1,792 | 2,346 | 2,450 | At-grade, median running |
| Erwin Road north of NC 751 | 1,316 | 1,287 | 1,670 | 1,700 | At-grade , median running |
| Friday Center Drive south of NC 54 | 1,022 | 1,009 | 924 | 1,340 | At-grade, side-running |
| University Drive west of Shannon Road | 502 | 983 | 1,347 | 2,156 | At-grade , median running |
| Shannon Road north of University Drive | 295 | 821 | 368 | 777 | At-grade , median running |
| Pope Road south of Old Chapel Hill Road | 357 | 388 | 715 | 696 | At-grade, roundabout |
| Littlejohn Road south of NC 54 | 88 | 88 | 116 | 116 | At-grade, side-running |
| Downing Creek Parkway south of NC 54 | 115 | 78 | 152 | 103 | At-grade, side-running |

Courtesy of: H. Wesley Parham, PE (via email 6/15/2015), Assistant Director of Transportation Department of Transportation, City of Durham 101 City Hall Plaza, 4th Floor, Durham, NC 27701 9 919-560 4366, ext. 36425 F Wesley Parham@durhamnc.gov w

F 919-560-4561 www.DurhamNC.gov

DOLRT DEIS 3-31: NC54 highway widening

Alex Cabanes

Sent: 10/13/2015 3:26 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

Despite recognizing NCDOT plans to widen the NC54 highway in DEIS 3-31:

NC 54 is currently a divided highway with at-grade intersections. Contiguous future projects would convert NC 54 to a superstreet corridor and widen the existing four-lane section to six lanes between Burning Tree Drive/Finley Golf Course Road and the interchange with I-40 [MTP 70 (U-5324A), 70.1, 70.2, and 70.3, and 69.1 (U-5324B)].

GoTriangle and the DEIS does not account, accommodate or reconciliation the impact of this future highway widening in any of the DEIS plans. DEIS 3-32, table 3.2-3 is particularly glaring by the conspicuous absence of two adversely impacted intersection in their LOS traffic assessment, specifically Littlejohn Road and Downing Creek Parkway (despite repeatedly being discussed and pointed out during multiple meetings with GoTriangle representatives).

As such, this DEIS is incomplete and does not adequately address (much less remediate) the impact on these and other intersections.

DOLRT DEIS - A Citizen's Perspective (or what GoTriangle didn't say)

| Alex Cabanes | |
|--------------|--|
|--------------|--|

Sent: 10/13/2015 3:38 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

Submitted for the public record, a researched (and cross-referenced) presentation that serves as a counter narrative to the GoTriangle DOLRT. It out lines why many in our community recommend NO BUILD option for the proposed DOLRT plan.

Attachments: DOLRT insight ac DEIS.pdf

SmartTransitFuture.org

Residents for Smart Transportation Serving the Triangle







Light Rail

A Citizen's perspective on proposed DOLRT plan

Prologue ...

Prologue ...

The proposed <u>Durham-Orange Light Rail Transit</u> (DO LRT) Project is a **17 mile light rail transit line** (started in 1992) which is projected to extend from UNC Hospitals to East Durham by way of the Friday Center, the I-40 corridor, Patterson Place and South Square areas, Duke Medical Center and downtown Durham with **17** stations planned and four-two-car trains running at five-minute intervals for an estimated construction cost of \$100 Million (in 1992). \$1.4B (2011), \$1.82B (2015), \$1.6B DEIS

Proposed <u>DO LRT line</u> does NOT connect Chapel Hill or Durham to major commercial, retail, or employment destinations east of the corridor like **Southpoint Mall, Research Triangle Park** or the **Raleigh/Durham Airport**, *(map)*

GoTriangle forecasts an average of 23,000 weekday light rail trips increased from original 12,000 daily boardings by the year 2035 2040. So assuming round trip travel, this would serve 11,500 passengers over 17 miles. Frequency of service reduced from the original proposal (of every 5 minutes) to every 20 minutes, and 10 minutes during peak commuting hours (Mon to Fri 6:00am – 9:30am & 3:30pm – 6:30pm). DOLRT estimated to take 34 39 42 42-44 minutes (+10 minutes at terminus) to travel from Chapel Hill (UNC Hospitals) to East Durham (Alston Avenue) at average 30 23 miles per hour.

DOLRT at a glance ...

The 25% local funding is comprised of a 0.5% sales tax, \$10 annual vehicle registration fee and 5% tax surcharge on car rentals.

Public transportation service that spans two or more counties and that server the man one municipality. Programmed funds pursuant to this submodules shall not exceed ten percent (10%) of any distribution region anocation. This sub-subdivision includes commuter rail, intercity man again rail. SOURCE: HB 672. 136-189.10. 3g

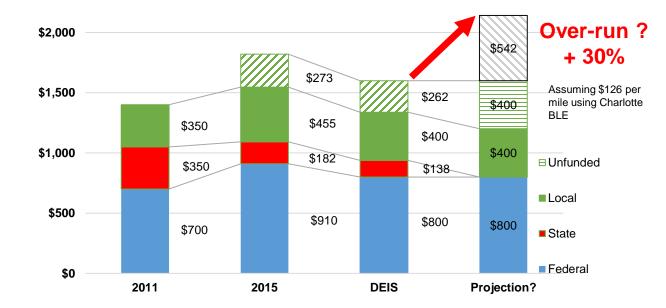
MAXIMUM FUNDING EXPENDED FOR LIGHT RAIL TRANSIT SYSTEM PROJECTS

SECTION 29.41.(a) G.S. 136-189.11 is amended by adding a new subsection to read: "(e1) Limitation on Funding for Light Rail Transit System Projects. – Notwithstanding any provision of this section to the contrary, the **cumulative amount of funds** subject to this section that are expended for light rail transit system projects shall not exceed the sum of **five hundred thousand dollars (\$500,000)** per project."

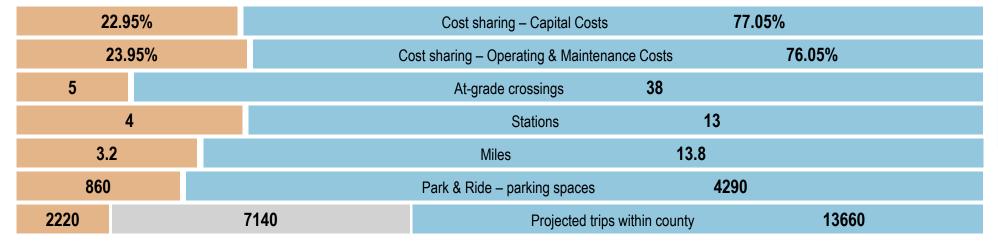
SECTION 29.41.(b) This section is effective when this act becomes law

DOLRT Funding



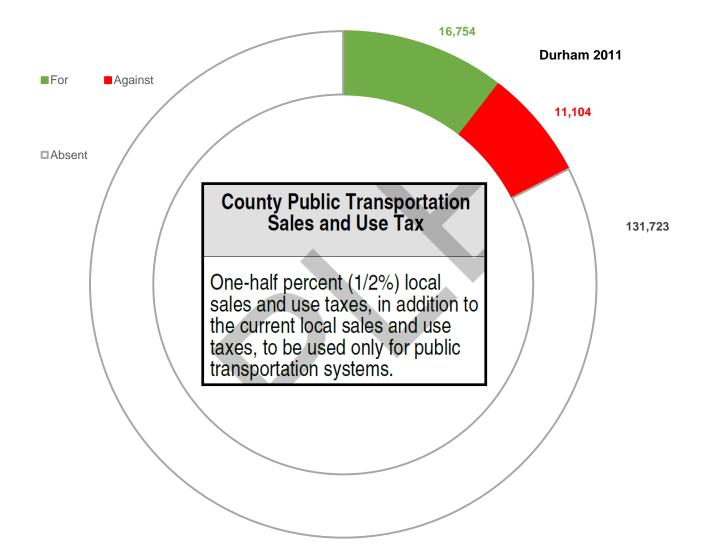






COUNTY

After Durham 2011 referendum NC GA passed § 163-287 due to low voter turnout



§ 163-287. Special elections; procedure for calling.

(a) Any county, municipality, or any special district shall have authority to call special elections as permitted by law. Prior to calling a special election, the governing body of the county, municipality, or special district shall adopt a resolution specifying the details of the election, and forthwith deliver the resolution to the local board of elections. The resolution shall call on the local board of elections to conduct the election described in the resolution and shall state the date on which the special election is to be conducted. In setting the date, counties, municipalities, and special districts are encouraged to set a date that will result in the highest possible voter turnout.

However, the special election may be held only as follows:

- 1) At the same time as any other State or county general election.
- (2) At the same time as the primary election in any evennumbered year.
- (3) At the same time as any other election requiring all the precincts in the county to be open.
- (4) At the same time as a municipal general election, if the special election is within the jurisdiction of the municipality only.
- (b) Legal notice of the special election shall be published no less than 45 days prior to the special election. The local board of elections shall be responsible for publishing the legal notice. The notice shall state the date and time of the special election, the issue to be submitted to the voters, and the precincts in which the election will be held. This subsection shall not apply to bond elections.
- (c) The last sentence of subsection (a) of this section shall not apply to any special election related to the public health or safety, including a vacancy in the office of sheriff or a bond referendum for financing of health and sanitation systems, if the governing body adopts a resolution stating the need for the special election at a time different from any other State, county, or municipal general election or the primary in any even-numbered year.
- (d) The last sentence of subsection (a) of this section shall not apply to municipal incorporation or recall elections pursuant to local act of the General Assembly.
- (e) The last sentence of subsection (a) of this section shall not apply to municipal elections to fill vacancies in office pursuant to local act of the General Assembly where more than six months remain in the term of office, and if less than six months remain in the office, the governing board may fill the vacancy for the remainder of the unexpired term notwithstanding any provision of a local act of the General Assembly.
- (f) This section shall not impact the authority of the courts or the State Board to order a new election at a time set by the courts or State Board under this Chapter. (1971, c. 835, s. 1; 1973, c. 793, s. 86; 1993 (Reg. Sess., 1994), c. 762, s. 65; 2011-31, s. 7; 2013-381, s. 10.1; 2014-111, s. 17.5(a).)

http://www.ncga.state.nc.us/gascripts/statutes/statutelookup.pl?statute=163-287

Longer commuting times?

The mean travel time to work according to the 2014 US Census is 22 minutes (Chapel Hill / Durham), 2040 Existing+Committed projected to be 27 minutes

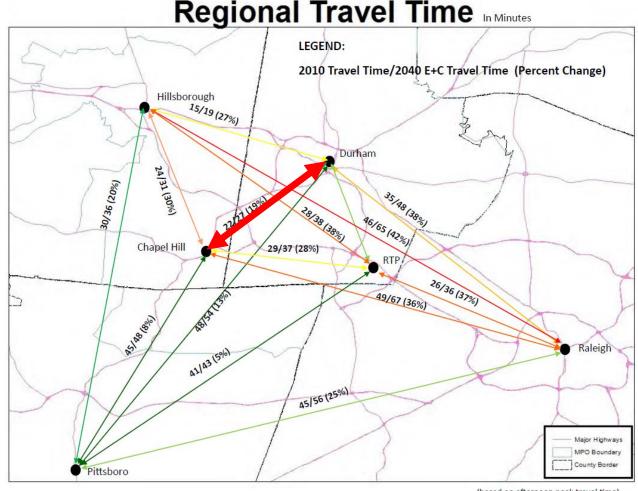
yet the proposed 17 mile light rail train will take 42-44 minutes

(vs BRT 39 minutes)

Include wait time for the next train, time to get to/from the station (via Park&Ride, Kiss&Ride, bicycle, walking, or bus transfer), it will be

even LONGER than 42-44 minutes.

How is this faster than the automobile that it is supposed to replace?



(based on afternoon peak travel time)

ravel Time 3-3

SOURCE:

http://ourtransitfuture.com/wp-content/uploads/2015/06/June-Public-Information-Session_final_june-4.pdf
Bus travel time estimate = DO Corridor Alternatives Analysis, Apr 2012, page 5-39
http://ourtransitfuture.com/wp-content/uploads/2015/08/02_Chapter-2_Alternatives_Considered-.pdf#page=48
http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=28481

DO LRT getting slower ...

The mean travel time to work according to the <u>2014 US Census</u> is **21.5** minutes (Durham County) and **22.0** minutes (Chapel Hill), 2040 Existing+Committed projected to be **27** minutes

yet the proposed 17 mile light rail train will take 42-44 minutes

(vs bus service **57** minutes) from UNC Hospital to Alston

(vs BRT 39 minutes)

Include wait time for the next train, time to get to/from the station (via Park&Ride, Kiss&Ride, bicycle, walking, or bus transfer), it will be

even LONGER than 42-44 minutes.

How is this faster than the automobile that it is supposed to replace?

Morning Rush Hour Travel Times

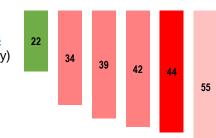


| Origin | Destination | Bus Today | Car Today | Light Rail 2025 & beyond |
|-------------------------|-----------------|---------------------|---------------------|------------------------------------|
| Alston Avenue | Patterson Place | 51 min. | 14-18 min. | 27 min. |
| Leigh Village | UNC Hospitals | 28 min. | 10-18 min. | 12 min. |
| Gateway Station | Downtown Durham | 51 min. | 14-20 min. | 28 min. |
| Woodmont Station | Duke/VA | 69 min. | 16-26 min. | 24 min. |
| Ninth Street | UNC Hospitals | 69 min. | 22-35 min. | 34 min. |
| MLK Jr. Parkway | Downtown Durham | 29 min. | 9-12 min. | 17 min. |

What buses / routes where used to determine these times, given that Leigh Village and Woodmont have not been built; and Woodmont has no current or planned bus service.

11

Mean travel time to work according to 2014 US Census 21.5 minutes (Durham County) 22.0 minutes (Chapel Hill)



This results in a 110-minute cycle time (round-trip time for a single train set), providing approximately 20 percent layover/recovery times. DEIS 2-46

proposed DOLRT 17 mile line will now take 42-44 minutes.

SOURCE:

http://ourtransitfuture.com/wp-content/uploads/2015/06/June-Public-Information-Session_final_june-4.pdf

Bus travel time estimate = DO Corridor Alternatives Analysis, Apr 2012, page 5-39

http://ourtransitfuture.com/wp-content/uploads/2015/08/02 Chapter-2 Alternatives Considered-.pdf#page=48

http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=28481

Heat advisory ... and even slower on hot days

At 90+ degrees, operators slow down for your safety
Our operators have to watch for both sagging power
wires and "sun kinked" rails when it's really hot out. To be
safe, they slow down to make sure nothing goes wrong.
As it gets hotter, they have to slow down even more.

When temperatures hit the 90s, trains traveling in speed zones above 35 mph will need to run 10 mph slower. This will affect segments of all MAX lines and may cause minor service delays.

At 95 degrees, WES Commuter Rail trains must also run slower—no more than 30 mph—to ensure safety. This can cause up to 30-minute delays.

If temperatures climb above 100 degrees, MAX trains cannot go faster than 35 mph



WHY OUR TRAINS SLOW DOWN WHEN IT HEATS UP

JUNE 23, 2019 [] JESSICA RIDGWAY

famy of you have asked why our trains slow down when it's hot outside. We know extra elays can be frustrating, but there are two important reasons why our speeds go down then temperatures go up—science and safety.

Like in other cities, the MAX light rall system is designed for the average temperature ranges of our local cilmate. When temperatures are at the extremes of that range, the materials in the system have a hard time adapting.

Steel and copper expand in the heat

in the case of extreme heat, the rails (made of steel) and the overhead power wires (made of copper) expand.

A one-mile stretch of rail in the MAX system may expand up to a few inches. This rail has to go somewhere, and when it gets too hot it can actually bend or lay over on its side! Our operators and controllers call this a "sun kink."

Additionally, the overhead power wires may also expand. Because copper expands more than steel, and because we can't allow the overhead wires to sag, we have a system of pulleys with counterweights that tug on the wires to keep them tight. (But sometimes, it gets so hot that the counterweights touch the ground and the wire starts to sag anyway!)



SOURCE:

http://howweroll.trimet.org/2015/06/23/ask-trimet-why-do-max-trains-have-to-slow-down-in-hot-weather/http://www.accuweather.com/en/us/durham-nc/27701/month/329821?monyr=6/01/2015
http://www.accuweather.com/en/us/durham-nc/27701/july-weather/329821?monyr=7/1/2015

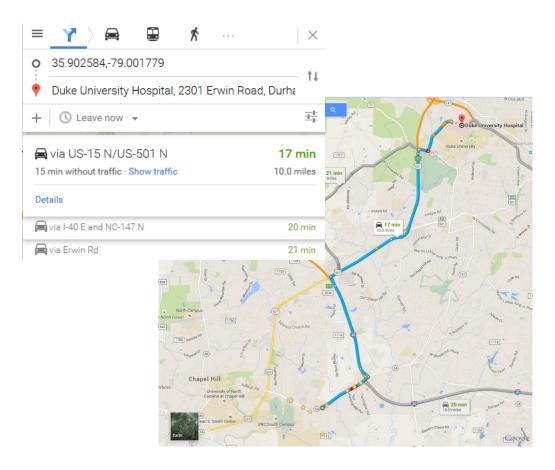


May 2015

Woodmont to Duke University Hospital

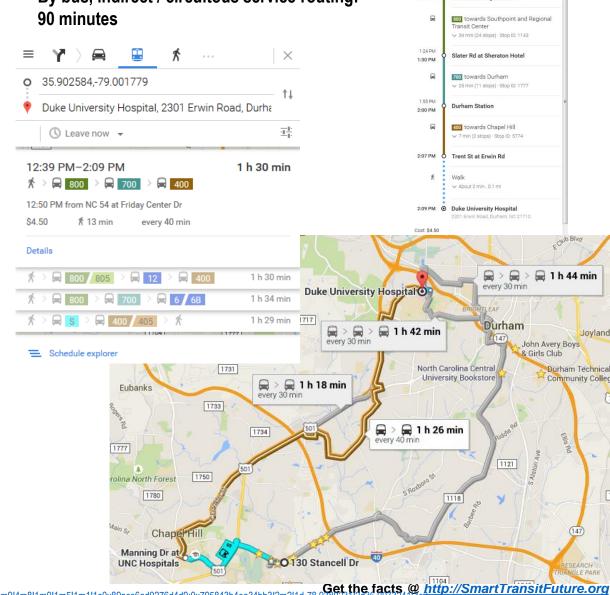
By car, most direct 10 miles:

- 15 minutes w/o traffic
- 17-21 minutes w/traffic depending on route (7/23/15)



Courtesy of Google

By bus, indirect / circuitous service routing:



12:39 PM O 35.902584-79.001779

Light Rail

MYTH – It's the only affordable way to grow?



GoTriangle DOLRT BIAS?

\$1.6 Billion / 17 miles \$94 Million per mile

How accurate is forecast model, when ...

- "C2A has fastest travel time & carries1,000 more daily riders than C1A" [DCHC-MPO] (no impact to ridership or time)?
- Forecast for 23,000 daily boardings shifts from 2035 to 2040 [DEIS 3-2] (5 year population increase, no impact)?
- Travel time increases from 34 min (2011) to 42-44 min [DEIS 3-13] (no impact)?
- 705 parking places removed [DEIS 3-2] (no impact to PnR estimate)?

FACTOID

H-3 is one of the most expensive Interstate Highways ever built, on a cost per mile basis. Its final cost was \$1.3 billion, or approximately **\$80 million per mile** (Hawaii) with tunnels

SOURCE: https://en.wikipedia.org/wiki/Interstate H-3

GOOGLE: "how much does a freeway cost?"

Construct a new 2-lane undivided road – about \$2-\$3 million per mile in rural areas, about \$3-5 million in urban areas.

Construct a **new 4-lane highway** — \$4-\$6 million per mile in rural and suburban areas, **\$8-\$10 million per mile in urban areas**.

Transit Technologies Considered



Reduce Traffic Congestion? Despite massive expenditures in light rail over the past 25 years ...

Claim: Light rail reduces traffic congestion? FALSE

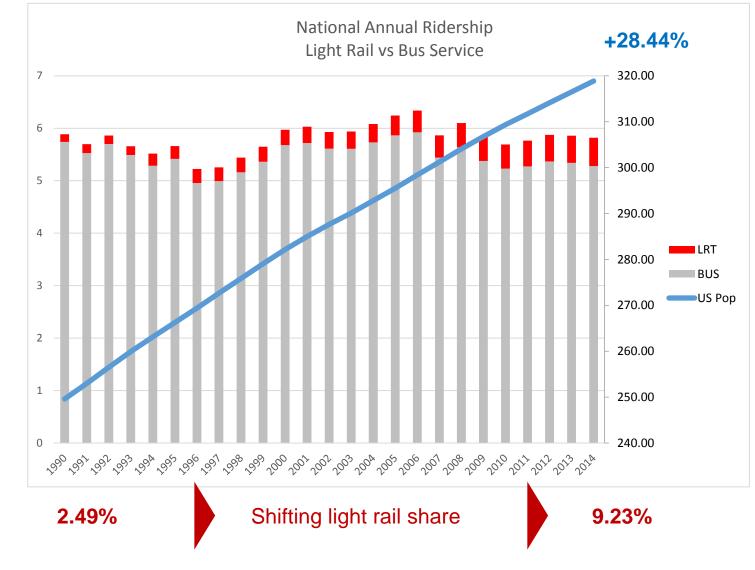
Total national ridership (APTA 1990-2014) reveals that despite massive light rail investments over **past 25 years**,

combined ridership of light rail and bus service has stagnated at 6 billion annual trips.

No evidence of increased ridership across these two modes of transportation, despite 28% population growth.

Aggregate data suggests bus ridership shifted to expensive light rail and

no measurable impact of reducing overall automobile traffic congestion.



SOURCE:

The Charlotte experience?

Lynx daily ridership stagnates @ 16,000 over last 7 years while population grew 17% and fuel prices had no apparent impact on ridership

Charlotte Observer: Lynx light rail ridership back to 2008 levels

However, the train's seven years have shown that it's been difficult for CATS to get new riders, even as uptown employment has grown significantly and thousands of new apartments have been built along the line in uptown and the South End.

Former UNC Charlotte transportation consultant David Hartgen, a transportation consultant, said ridership suggests light rail is losing market share in the commuting corridor along South Boulevard, Interstate 77 and Park Road.

"The fundamental assumption is that the Lynx traffic would increase as the region got denser," he said.

"That hasn't happened."

UC Berkeley INSTITUTE OF TRANSPORTATION STUDIES

Urban Densities and Transit A Multi-dimensional Perspective

Nevertheless, 10 rail systems fail to produce net positive benefits under the scenario. Charlotte, Buffalo, New Jersey Transit, Pittsburgh, and San Jose perform particularly badly. These systems do not have enough riders to produce the economies of scale that make transit provision by rail significantly less expensive than bus.

SOURCE

http://www.charlotteobserver.com/news/local/article9264719.html

http://www.its.berkeley.edu/sites/default/files/publications/UCB/2011/VWP/UCB-ITS-VWP-2011-6.pdf

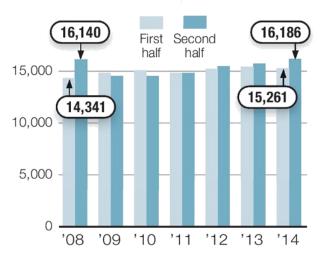
http://charlottechamber.com/clientuploads/Economic_pdfs/PopulationEstimates.pdf

Charlotte Lynx service started Nov 27, 2007

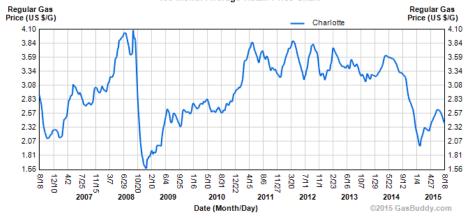
http://www.NorthCarolinaGasPrices.com/retail_price_chart.aspx?city1=&city2=Charlotte&city3=&crude=n&tme=108&units=us

Lynx back to peak levels

Ridership on the light rail line in the last six months of 2014 eclipsed the train's previous high from the last half of 2008. Trips remain above projections.







The Charlotte experience? Cost over-runs and budget cuts to follow

2015 Urban Mobility Scorecard rated
Charlotte First In Worst Traffic In North Carolina 8/31/2015

Charlotte's light-rail line was originally projected **\$225 million** in 2000. final cost **\$467 million** in 2007.

CityLYNX Gold Line facing City budget cuts!

The \$75 million the Charlotte City Council approved in 2014 to fund half the cost of constructing Phase 2 of the City LYNX Gold Line is being threatened. Due to City budget shortfalls, some Members of City Council are suggesting the \$75 million they already approved for the Gold Line be cut from the budget.

http://www.sustaincharlotte.org/city_lynx_gold_line_facing_budget_cuts

FEIS: http://charmeck.org/city/charlotte/cats/planning/BLE/Pages/FEIS.aspx

DEIS: http://charmeck.org/city/charlotte/cats/planning/BLE/Pages/deis.aspx
Reference: HB 117 §105-472. Allocation, distribution, and use of taxes collected

2015 Urban Mobility Scorecard: http://wfae.org/post/charlotte-first-worst-traffic-north-carolina

CityLYNX Gold Line facing City budget cuts: http://www.sustaincharlotte.org/city_lynx_gold_line_facing_budget_cuts

http://www.charlotteobserver.com/news/local/article20142609.html http://www.charlotteobserver.com/news/local/article20223261.html

The Charlotte Observer

Charlotte City Manager Ron Carlee to outline budget cuts Monday

At Monday's City Council meeting, Charlotte City Manager Ron Carlee will unveil his recommendations for closing a nearly \$22 million budget shortfall.

http://www.charlotteobserver.com/news/local/article20142609.html http://www.charlotteobserver.com/news/local/article20223261.html

Some highlights from the proposed plan to address budget shortfall includes: Tax-rate increase & Service cuts like

- closing 311 information service on weekends & holidays
- resurface about 16.5 fewer miles of streets a year
- budget cuts for Police and Fire
- eliminate more than 100 city jobs

Carlee and his staff, along with the mayor and City Council, have been grappling with unanticipated shortfalls in tax revenue as well as a proposed change in sales-tax sharing that, according to state and city projections, could cost Charlotte an estimated \$3 million to \$30 million annually.

Farebox recovery less than 20%

So lets do the math ...

\$16M Operating & Maintenance budget [DEIS K.29]

@ 20% farebox recovery planned (currently 15%)

\$3.2M collected in fares

\$2 fare (less than current \$3 GoTriangle EXPRESS fare) \$1.15

1.6M annual boardings

200 days (workdays only) 290

8000 daily boardings?

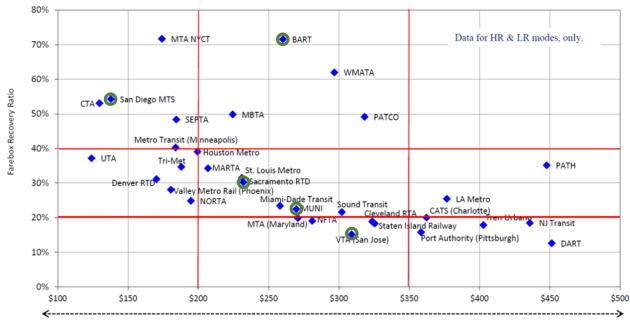
The DO LRT is planning 20% farebox recovery of the estimated \$16 Million O&M budget

represents \$12.8 Million in annual tax liability for Orange and Durham County residents.

Peer Comparison – Farebox Recovery Ratio



National Comparison of Light Rail and Heavy Rail systems



http://ourtransitfuture.com/wp-content/uploads/2015/08/Appendix-K29-Operating-and-Maintenance-Cost-Results.pdf#page=11 http://ourtransitfuture.com/wp-content/uploads/2014/09/Adopted-Orange-County-BRI-Plan-with-Appendices-revised-9-27-20121.pdf#page=24

Peer Comparison – Daily Boardings

Durham-Orange light rail boardings are overly optimistic.

Model assumes 40% zero-vehicle households.

10.4% Durham households w/o vehicles, Chapel Hill 7.4%

US Census Bureau's 2010-2013 American Community Survey

Charlotte area has

+70% larger population

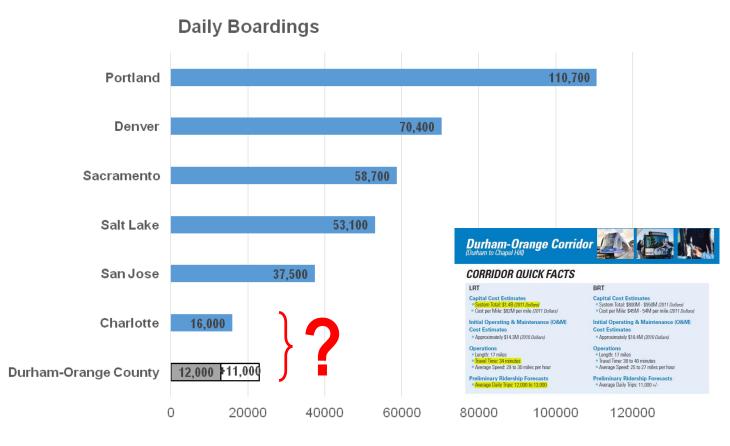
with **16,000** daily boardings over the last 7 years (service began Nov 27, 2007)

Using the Charlotte experience would

suggest less than 10,000 daily boardings

(vs **23,000** projected by GoTriangle, revised from original 2011 estimate of **12,000**)

Or compared to **Wake** LRT proposal of projected **16,000 daily boardings** with 1 million population



Are there initial ridership estimates available for the planned light rail project and commuter rail service?

The anticipated ridership for the Durham to Chapel Hill light rail project is currently estimated to be approximately 12,000 boardings per day. The anticipated ridership for the Durham to Raleigh Commuter Rail project is approximately 7,000 boardings per day. http://ourtransitfuture.com/wp-content/uploads/2013/08/QandADurhamBusRailInvestmentPlan v3.pdf#page=2

Source: Peer comparison from NTD 2010

SOURCE:

Peer Comparison – Daily Boardings

Durham-Orange Corridor(Durham to Chapel Hill)



CORRIDOR QUICK FACTS

LRT

Capital Cost Estimates

- System Total: \$1.4B (2011 Dollars)
- Cost per Mile: \$82M per mile (2011 Dollars)

Initial Operating & Maintenance (O&M) Cost Estimates

Approximately \$14.3M (2010 Dollars)

Operations

- Length: 17 miles
- Travel Time: 34 minutes
- Average Speed: 29 to 30 miles per hour

Preliminary Ridership Forecasts

Average Daily Trips: 12,000 to 13,000

BRT

Capital Cost Estimates

- System Total: \$800M \$950M (2011 Dollars)
- Cost per Mile: \$45M 54M per mile (2011 Dollars)

Initial Operating & Maintenance (O&M) Cost Estimates

Approximately \$10.4M (2010 Dollars)

Operations

- Length: 17 miles
- Travel Time: 38 to 40 minutes
- Average Speed: 25 to 27 miles per hour

Preliminary Ridership Forecasts

Average Daily Trips: 11,000 +/-

Are there initial ridership estimates available for the planned light rail project and commuter rail service?

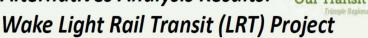
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SOURCE:

http://ourtransitfuture.com/wp-content/uploads/2013/08/QandADurhamBusRailInvestmentPlan_v3.pdf#page=2 http://www.waketransit.com/wp-content/uploads/2015/05/Expanded_TC_Report_-_REVISED_5-11-15_small1.pdf#page=25

http://www.penc.org/getdoc/15ee17ea-4c65-4aac-9d20-1f290db8cd56/TRTP-to-PENC-Feb-27-Webinar-Final--Presentation.aspx#page=13 http://www.penc.org/getdoc/15ee17ea-4c65-4aac-9d20-1f290db8cd56/TRTP-to-PENC-Feb-27-Webinar-Final--Presentation.aspx#page=18

Alternatives Analysis Results: Our Transit Future



· Recommended Project:

 LRT service on 19 miles of separate exclusive LRT tracks in NCRR and CSX /Triangle Transit rights-of-way

16 Stations

Est. Ridership: 17,500 boardings (2035)

- Travel Time: 38 minutes, avg. 35 mph

Capital Cost: \$1.5B (2011\$)

- O&M Cost: \$16.1M

• Minimum Operable Segment (MOS):

- 14 miles with 12 Stations

Estimated Ridership: 16,000 boardings (2035)

- Travel Time: 28 minutes, avg. 30 mph

Capital Cost: \$1.1B (2011\$)O&M Cost: \$14.2M (2011\$)

Implementation Schedule not yet established

www.ourtransitfuture.com

13

UNC Hospital to Alston

By car, 17.3 miles via proposed LRT route:

- 29 minutes w/o traffic
- 35 minutes w/traffic depending on route (7/23/15)

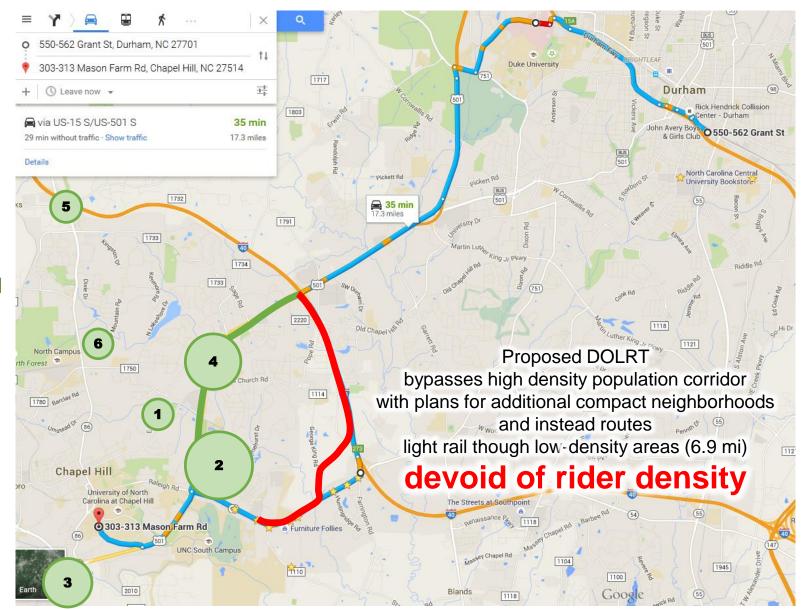
By car, 15.5 miles using direct route via 15-501

- 28 minutes w/o traffic
- 32 minutes w/traffic (7/23/15)

5.7 million sq ft office/retail/residential to be added Existing / Higher population density
New compact neighborhoods
10% shorter distance

| | Project | Office | Retail F | Residential * | Units |
|---|----------------|-----------|----------|---------------|-------|
| 1 | 123 W Franklin | 120,000 | 55,000 | 240,000 | 300 |
| 2 | Glen Lennox | 600,000 | 150,000 | 1,200,000 | 1,500 |
| 3 | Obey | 225,000 | 400,000 | 560,000 | 700 |
| 4 | Eph-Ford | 350,000 | 250,000 | 800,000 | 1,000 |
| 5 | Edge | 100,000 | 120,000 | 32,0000 | 400 |
| 6 | Central West | 40,000 | 20,000 | 140,000 | 175 |
| | TOTAL | 1,435,000 | 995,000 | 3,260,000 | 4,075 |

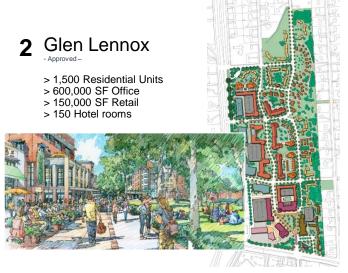
* = average 800 SF



Southpoint Mall approx. 1.3 million sq ft retail space

Chapel Hill - New compact neighborhood developments







Ephesus-Church/Fordham



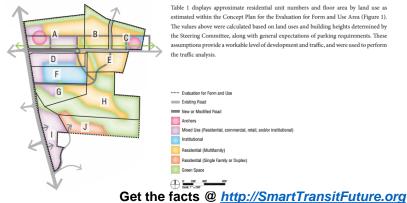




Central West (Small Area Plan)

- Approved RESIDENTIAL UNITS AND FLOOR AREA BY LAND USE

| Use | Area | | | | Total | | | | | | |
|-----------------------------|--------|----|--------|--------|-------|--------|--------|-----|--------|----|---------|
| | A | В | C | D | E | F | G | Н | - 1 | J | |
| Residential (units) | 175 | 80 | 70 | 36 | 76 | 0 | 32 | 139 | 0 | 12 | 620 |
| Office (square feet) | 40,000 | | | | | 10,000 | 10,000 | | 40,000 | | 100,000 |
| Retail (square feet) | 20,000 | | | | | | | | 5,000 | | 25,000 |
| Hotel (square feet) | 65,000 | | | | | | | | | | 65,000 |
| Commercial (square feet) | 20,000 | | | 10,000 | | | | | | | 30,000 |
| Institutional (square feet) | | | 20,000 | | | 30,000 | | | | | 50,000 |



Durham - Leigh Village compact neighborhood

Proposed 90-acre Compact Neighborhood development with

- Mixed use residential / retail
- 12 acres for PnR (Park & Ride) with 990 parking spaces
- Durham is on water restrictions. Where is the water for all of these new developments?
- Creekside Elementary School is already over capacity, with students in temporary units. Where are the extra students going to go to school?

Leigh Village - daily boardings

| | | aan, aanang |
|--------------|------|---------------------------|
| PnR | 960 | 782 our projection |
| KnR | 70 | |
| Walk | 550 | 187 our projection |
| Bus | 180 | |
| TOTAL | 1760 | |

990 parking spaces. Assumes 97% capacity?

Estimated cost = \$5.8M Station = \$1M Parking = 960 x \$5K = \$4.8M

SOURCE: revision (based on earlier GoTriangle email) Adjusted to 4K ppsm (2035), 80% PnR capacity cap, eliminate model noise (10) for bus transit



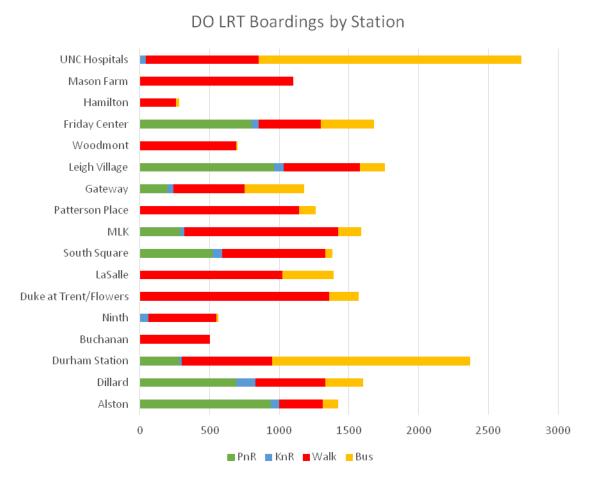
City Parks Building Footprints (City Only) Half Mile Buffer COUNTY

Leigh Village Suburban Transit Area

DURHAM

Projected daily boardings ... questionable projections

| Stations | PnR | KnR | Walk | Bus | Total |
|-----------------------|------|-----|-------|------|-------|
| UNC Hospitals | 0 | 40 | 810 | 1890 | 2740 |
| Mason Farm | 0 | 0 | 1100 | 0 | 1100 |
| Hamilton | 0 | 0 | 260 | 20 | 280 |
| Friday Center | 800 | 50 | 450 | 380 | 1680 |
| Woodmont | 0 | 0 | 690 | 10 | 700 |
| Leigh Village | 960 | 70 | 550 | 180 | 1760 |
| Gateway | 200 | 40 | 510 | 430 | 1180 |
| Patterson Place | 0 | 0 | 1140 | 120 | 1260 |
| MLK | 290 | 30 | 1100 | 170 | 1590 |
| South Square | 520 | 70 | 740 | 50 | 1380 |
| LaSalle | 0 | 0 | 1020 | 370 | 1390 |
| Duke at Trent/Flowers | 0 | 0 | 1360 | 210 | 1570 |
| Ninth | 0 | 60 | 490 | 10 | 560 |
| Buchanan | 0 | 0 | 500 | 0 | 500 |
| Durham Station | 280 | 20 | 650 | 1420 | 2370 |
| Dillard | 690 | 140 | 500 | 270 | 1600 |
| Alston | 940 | 60 | 310 | 110 | 1420 |
| TOTAL | 4680 | 580 | 12180 | 5640 | 23080 |



Population density for cost-effective light rail?

4052 ppsm in DOLRT study corridor by 2035 (231K / 57)



3071 ppsm *in DOLRT study corridor in 2005 (175K / 57)*

With ½ mile walk-up radius around each of the 17 stations or 68,000 people within walking distance of a station.

National average for public transportation utilization is 5% (Durham 3%)

suggesting **6800 daily boardings** (68K * 5% * 2) within corridor study area.

Required density is roughly equivalent to the entire UNC undergraduate class contained in one sq mile?

Durham Donato Corridor Location Map Durham-Change Corridor Durham-Change Co

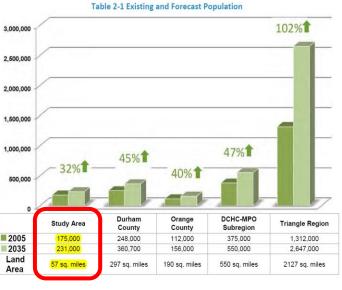
UC Berkeley study,

Urban Density and Transit: A Multi-dimensional Perspective:

"Our analysis suggests that light-rail systems need around 30 people per gross acre around stations ...

urban densities are the most critical factor in determining whether investments in fixed guideway transit systems are cost-effective.

640 acres per square mile, or



SOURCE:

http://ourtransitfuture.com/wp-content/uploads/2013/07/573 DO AA Final Report 8 Jun 12 web.pdf#page=33 http://ourtransitfuture.com/wp-content/uploads/2015/08/01 Chapter-1 Purpose and Need.pdf#page=3 http://www.its.berkeley.edu/sites/default/files/publications/UCB/2011/VWP/UCB-ITS-VWP-2011-6.pdf

Population density for cost-effective light rail?

4052 ppsm in DOLRT study corridor by 2035 (231K / 57)



3071 ppsm in DOLRT study corridor in 2005 (175K / 57)

Barcelona \$36M/mi €20M/km X 1,60934 km/mi X 1,12 €/\$

40,870 ppsm

Peer comparison - Barcelona

40,870 ppsm

Olatz Ortiz, who is charge of studies and projects for Tram Barcelona, said the two lines carried nearly **24 million passengers** last year, a number that is not high enough to justify the much greater cost of digging a subway. **[24M / 290 = 83K daily]**

"Everything is a [result] of demand," she told The Globe and Mail. "I mean, you have to take into account that constructing **one kilometre of tramway costs around €20-million [\$28.8-million CAD]** and constructing metro, it can cost around €100-million."

http://www.theglobeandmail.com/news/toronto/seeing-is-believing-when-it-comes-to-lrt/article15697736/

1/2 the cost per mile

10X of our future population density (projected)

- versus -

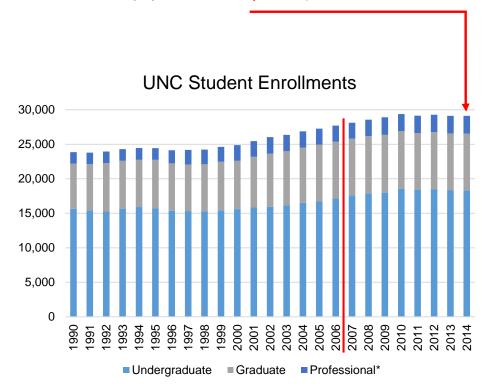
DOLRT \$94M/mi or Charlotte BLE \$126M/mi

COLIDCE

Projected population – Student demand?

Much of this growth can be attributed to increased residential development for employees and students at UNC to keep pace with rising student enrollment. In 2007, UNC had just over 28,000 students and by 2017 total enrollment is projected to reach 33,000 students, a net increase of 18 percent. [DEIS 1-5]

UNC 2014 student population = **29,135** (or **4%** increase over last 8 years)



SOURCE:

http://oira.unc.edu/facts-and-figures/student-data/enrollment-and-student-characteristics/historical-enrollment-by-education-level/ http://www.triangletransit.org/sites/default/files/maps-and-schedules/RoutesAndSchedules-rsx.pdf http://sites.duke.edu/durhamghqupdate/project-based-analysis-and-results/116-2/ http://www.durhamnc.gov/agendas_new/2012/cws20120618/8553_MEMO_GILLIG_BUS_MANUFACTURING__309051_454924.doc.PDF





| Monday | - Frie | |
|----------|---------|---|
| @UNC | @Dul | |
| 7:30 am | 7:30 a | |
| 8:00 am | 8:00 a | |
| 8:30 am | 8:30 a | |
| 9:00 am | 9:00 a | |
| 9:30 am | 9:30 a | |
| 10:00 am | 10:00 (| |
| 10:30 am | 10:30 ; | |
| 11:00 am | 11:00 a | |
| 11:30 am | 11:30 a | |
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| 4:00 pm | 4:00 pm | |
| 4:30 pm | 4:30 pm | |
| 5:00 pm | 5:00 pm | |
| 5:30 pm | 5:30 pm | |
| 6:00 pm | 6:00 pm | |
| 6:30 pm | 6:30 pm | |

310 daily riders and operates 16 hours on weekday in 30 minute intervals in both directions. [DEIS 3-10]

Average of **5 passengers per bus every day**

The 'demand' for student & faculty between UNC and Duke is 155 passengers (RT) per weekday to use public transportation?

Capacity ≠ Usage 40 passengers capacity \neq 5 passengers usage



Gillig Bus

Hybrid Engine Capacity

29: 28 seating

35': 32 40': 40

MPG = 4.65 mpg

Cost = \$580K each

How many people use public transit between Durham / Orange counties?

UNC Study 9/3/2015

NC in Focus: Commuting by Public Transportation

Largest Cross-County Commuting Flows Using Public Transportation

| From | To | Commuters | ; |
|-------------------|--------|-----------|---|
| Durham | Orange | 895 | |
| Union Mecklenburg | | 452 | |
| Wake | Durham | 366 | |
| Orange | Durham | 364 | J |
| Durham | Wake | 257 | |

Tabulations based on 2009-2013 American Community Survey County-to-County Commuting flows

1259 daily commuters cross between Durham / Orange counties using public transit

SOURCE:

http://demography.cpc.unc.edu/2015/09/03/nc-in-focus-commuting-by-public-transportation/http://ourtransitfuture.com/wp-content/uploads/2015/08/03 Chapter-3 Transportation.pdf#page=19 http://ourtransitfuture.com/wp-content/uploads/2015/08/03 Chapter-3 Transportation.pdf#page=13

People going in each direction:

D-O LRT Project
DEIS/Draft Section 4(f) Evaluation

Table 3.1-4: 2040 Daily Ridership Forecasts by Stations for the NEPA Preferred Alternative

| Station | UNC-Alston Avenue Boardings | UNC-Alston Avenue Deboardings | Alston Avenue-UNC Boardings | Alston Avenue-UNC Deboardings |
|--|---|----------------------------------|--------------------------------|----------------------------------|
| UNC Hospitals | 2,750 | 0 | 0 | 2,750 |
| Mason Farm Road | 1,050 | 50 | 50 | 1,050 |
| Hamilton Road | 200 | 80 | 80 | 200 |
| Friday Center Drive | 680 | 980 | 980 | 680 |
| Woodmont | 300 | (<mark>400</mark>) | 400 | 300 |
| Leigh Village | 490 | 1,270 | 1,270 | 490 |
| Gateway | 550 | 620 | 620 | 550 |
| Patterson Place | 590 | 680 | 680 | 590 |
| Martin Luther King Jr. Parkway | 750 | 840 | 840 | 750 |
| South Square | 890 | 470 | 470 | 890 |
| LaSalle Street | 630 | 770 | 770 | 630 |
| Duke Trent/Flowers Drive | 970 | 600 | 600 | 970 |
| Ninth Street | 340 | 210 | 210 | 340 |
| Buchanan Boulevard | 250 | 250 | 250 | 250 |
| Durham | 740 | 1,620 | 1,620 | 740 |
| Dillard Street | 330 | 1,260 | 1,260 | 330 |
| Alston Avenue | 0 | 1,410 | 1,410 | 0 |
| TOTAL | 11,510 | 11,510 | 11,510 | 11,510 |
| Source: Travel Demand Methodology and F | Results Report (appendix K.2). | | | |
| Note: Rounding was used and may lead to | discrepandy in totals. | | | |
| Note: Boarding and deboarding by station for | or all 24 allematives are available in appendix | K2. | | |
| Note: Average weekday ridership estimates | i. | | | |
| | + | | 1 | |

6830 Durham county only

1110 Orange county only

3570 Cross county line (remaining) of which 2290 are bordering UNC in non-existing developments

1280 cross between Durham & Orange counties (projected)

X 2 = number of daily boardings in 2040

Daily ridership by station DEIS 3-16, table 3.1-4 & DEIS 3-10 table 3.1-1

Light Rail

MYTH – It will relieve traffic congestion?



NO BUILD (Scary future)?

Advocates portray No Build option as unsustainable urban sprawl, and that the only option is to build a light rail system.

The DO LRT projects 23,000 boardings (in 2040) during 18.5 hours of daily operation across the 17 mile circuit (at a cost of \$1.6 BILLION or \$94 million per mile), by building a steel rail highway with exclusive 50' right of way

or 622 passengers per hour (each track) X 2 or 1243 passengers in 50' right-of-way

Typical highways can accommodate

2,200 vehicles per lane per hour X 4

(human driven), Utilizing 5% of roadway capacity
or 8800 vehicles in 48' right-of-way

And highway capacity will dramatically increase with the introduction of **autonomous vehicles**

Build v. No-Build

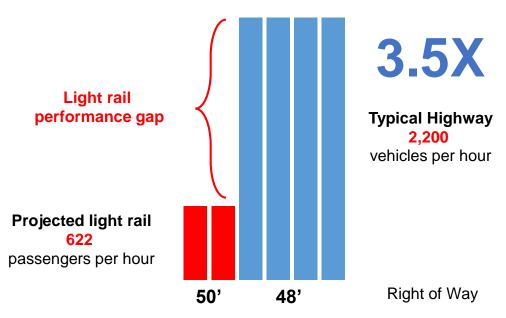






Typical Highway 2,200 vehicles per hour

22



How much does it cost to build a mile of road?

Construction costs per mile of road depend on location, terrain, type of construction, number of lanes, lane width, durability, number of bridges, etc.

Some states have developed cost models to guide planning for their highway construction programs. These models give a ballpark figure for various kinds of highway improvements. The following are some examples:

- Construct a new 2-lane undivided road about \$2-\$3 million per mile in rural areas, about \$3-5 million in urban areas.
- Construct a new 4-lane highway \$4-\$6 million per mile in rural and suburban areas, \$8-\$10 million per mile in urban areas.
- Construct a new 6-lane Interstate highway about \$7 million per mile in rural areas, \$11 million or more per mile in urban areas.
- Mill and resurface a 4-lane road about \$1.25 million per mile.
- Expand an Interstate Highway from 4 lanes to 6 lanes about \$4 million per mile.

The Florida Department of Transportation has published its generic cost per mile information for 2013 online. The Arkansas Highway Department's estimated cost per mile for 2013 is available online.

BRT (Bus Rapid Transit) coming to Chapel Hill

BRT planned for Wake County (rather than LRT)

Chapel Hill planning
BRT for MLK route
with dedicated bus lane

for \$25M

Why isn't Chapel Hill planning BRT for high-density 15-501 corridor

or NC54 corridor thereby alleviating need for \$1.6B DO-LRT





BRT (Bus Rapid Transit) faster than LRT

Sharing the road - **Interlining** refers to the ability of local bus routes, including feeder bus services to utilize the BRT running way for a portion of their trip. It is an accepted practice for BRT systems and allows more transit users to benefit from the guideway investment.

BRT travel time estimated

39 minutes

vs revised 42-44 minutes for light rail?

Why isn't Chapel Hill planning
BRT for high-density 15-501 corridor
or NC54 corridor
thereby alleviating need for
\$1.6B DOLRT



Table ES-1 Summary of Evaluation Results for LRT, BRT-High, and BRT-Low Alternatives

| Goals | Evaluation Criteria* | LRT | BRT-High | BRT-Low |
|--|---|---|--|---|
| Goal 1: Improve mobility through and within the study corridor. Goal 2: Increase transit efficiency and quality of | Ridership: Daily Project Boardings | 12,000 | BRT route: 5,700** Interlined Buses: 11,900 Total: 17,600 | BRT route: 4,600** Interlined Buses: 11,700 Total: 16,300 |
| service. Goal 3: Improve transit | Ridership: System-wide Trips*** | 140,500-141,600 | 142,800 | 141,100 |
| connections. | Transportation Operations: Traffic Impacts | Low | Low | Moderate |
| | Transportation Operations: Travel Time | 35 minutes | 39 minutes | 44 minutes |
| | Expansion Potential | No engineering constraints & consistent with regional plans | Could be inconsistent with regional connectivity goals | Could be inconsistent with regional connectivity goals |
| Goal 4: Support local and regional economic | Public and Agency Support | High | Moderate | Moderate |
| development and planned growth management initiatives | Economic Development Potential | Demonstrated ability to influence development | Unproven ability to influence development | Unproven ability to influence development |
| Goal 5: Foster environmental stewardship | Environmental Impacts | Moderate property acquisitions, high visual impacts, moderate stream/wetland & construction impacts, no air quality impacts | Moderate property acquisitions, visual impacts, stream/wetland & construction impacts, low air quality impacts | High property acquisitions, low visual impacts, low stream/wetland impacts, moderate construction & low air quality impacts |
| Goal 6: Provide a cost- effective transit | Estimated Cost (2011 \$) - Capital | \$1.37B | \$960M | \$810M |
| investment. | Estimated Cost (2011 \$) – O&M Cost (based on offered peak hour capacity of 800 and 1500 pax/hr [±]) | 800 pax/hr: \$14M 1500 pax/hr: \$15M | 800 pax/hr: \$11M 1500 pax/hr: \$13M | 800 pax/hr: \$11M 1500 pax/hr: \$13M |

^{*}Evaluation criteria include references to sections of the report where more information can be found. | **Daily boardings for BRT-High and BRT-Low routes without interlined buses could potentially be higher as the model estimated the ridership assuming interlined buses. Interlining refers to the ability of local bus routes to use of the guideway in addition to the exclusive BRT service. The BRT numbers thus do not account for passengers that would transfer from feeder buses to BRT if the feeder buses were not sharing the BRT guideway | ***System-wide trips refer to total transit trips in the three county Triangle Region (Durham, Orange, and Wake Counties). |
†passengers/hour

Major advances in transportation technology ... transforming society?

Electric trains introduced in 1881 by <u>Siemens</u>. With so many technology advances with electric batteries, autonomous vehicles and evolving 'sharing' business models ... why are we condemned with industrial 'mass transit' thinking?

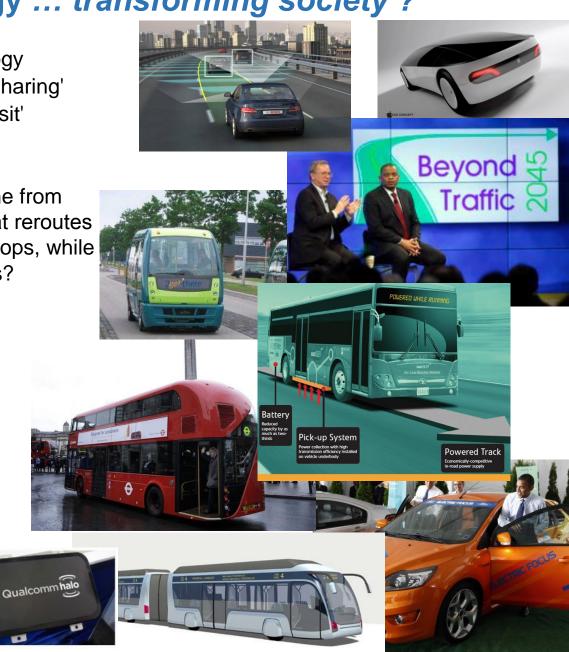
What if you could order an autonomous vehicle using your smartphone from Uber (or ZipCar or Tesla or Apple or Google, etc) and hitch a 'ride' that reroutes to match travel demand from origin to source skipping intermediate stops, while zipping along transportation corridors with synchronized traffic signals?

What happens to our transportation infrastructure,

if you change century's old inherent transit assumptions?

- Better (vehicle, roads) asset utilization?
- Less congestion?
- Need private cars?
- Need less parking?
- Need fewer cars?
- Fewer (taxi, bus, truck) drivers?

Where is our 20 year plan for this future ???



Major advances in transportation technology ... transforming society?

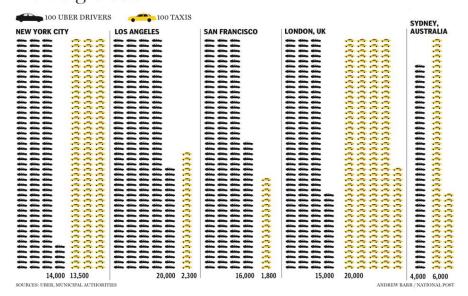
As the wealthy—and, as the prices of Uber and Lyft fall, the slightly less so— essentially remove themselves from the problems of existing mass transit infrastructure with Uber and other services, the urgency to improve or add to it diminishes. The people left riding public transit become, increasingly, the ones with little or no political weight to demand improvements to the system.

In Uber's grand vision, no one owns cars because nearly everyone is taken everywhere in a driverless, electric, omnisciently networked Uber conveyance that arrives precisely when it is needed for a price cheap enough that for many people it feels free.

SOURCE: http://www.theawl.com/2015/08/ubiquity



How big is Uber?





Get the facts @ http://SmartTransitFuture.org

Major advances in transportation technology ... transforming society?

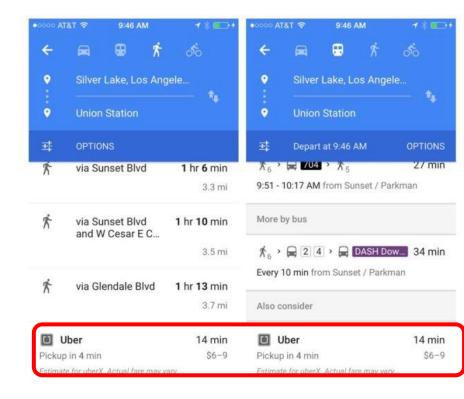
Because of the precipitous drop in prices thanks to uberX or the ridesharing services like UberPool (or LyftLine, or what have you), there are people—lots of people—who now use Uber to commute great distances to work EVERY DAY. Like this woman from San Francisco who decided not to buy a car and go "full Uber" for one year. She estimates she gave \$4,600 to Uber to fulfill her transportation needs during a 12-month period, which she compares to spending over \$10,000 a year on car payments, parking, gas, insurance, etc. In certain cities, using something like Uber is a better deal than owning a car. But it's taking those people off public transit.

This is already happening. Tampa's system is launching partnerships with Uber and Lyft to get riders from stations to their homes, essentially solving the first mile-last mile problem that steers a lot of potential riders away from transit. But think about that for a moment: Tampa wants people to ride its buses so badly that it is enlisting Uber to help get people to its bus stops. When Uber's rates go down even more as the service saturates the region, what's to stop them from riding that air-conditioned Prius all the way to work? Enough passengers do that and bus service is cut.

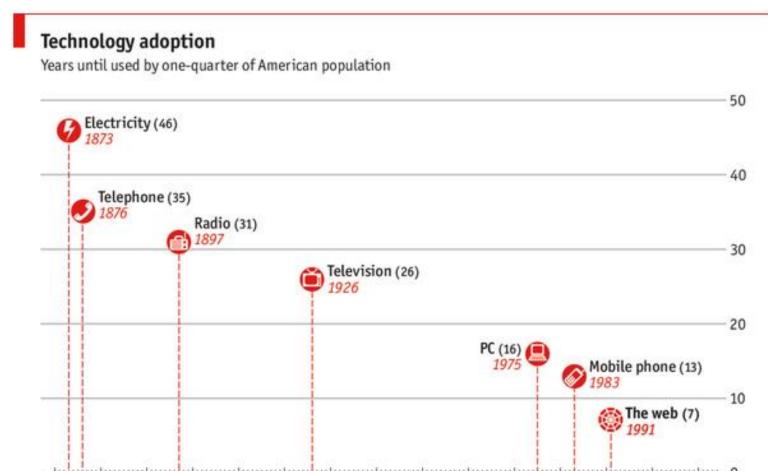
Buchanan points out this fear in his piece: That Uber's success will lead to what's essentially privatized mass transit. That's not really a concern in a place like New York City where ridership is very healthy and the subways are the best way to get to many places. But when you look at any smaller American city that's trying its darnedest to get a new transit system off the ground, ridership numbers make a difference. If elective riders—the people who have a choice—aren't boarding, that transit system is going to fail.

The taxi industry might be making the loudest complaints against Uber, but it's the struggling public transit system in Tampa that's really in trouble.

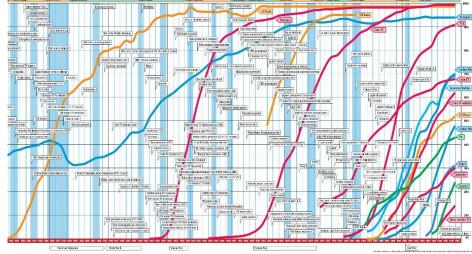
There's one more twist. Uber's push for self-driving tech is happening. Soon, among the uberX and UberPool options you might see a UberAutonomous button, summoning a self-driving vehicle to your doorstep. This cheapest option—cheapest because there's no labor—would be a slightly larger vehicle, almost like a van. The driverless technology would plot an efficient route using real-time traffic alerts but also choose the most economic path to your destination by scooping up other Uber customers along the way.



Accelerating technology adoption



First commercially available year



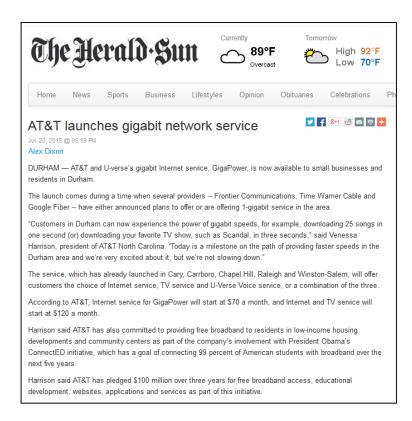
Source: Singularity.com Economist.com/graphicdetail

Work at home continues to grow ... changing traffic patterns

A nationwide study ... finds fiber-optic connections, the fastest type of

high speed Internet available, can add \$5,437\$ to the price of a \$175,000 home

— about as much as a fireplace, or half the value of a bathroom.



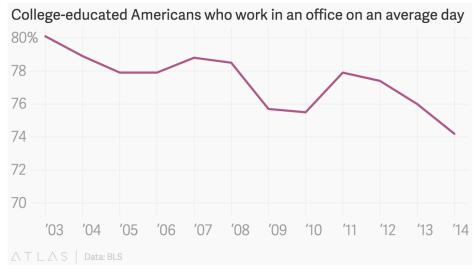
SOURCE:

http://qz.com/437121/the-9-to-5-office-workday-is-dying-in-america/http://www.heraldsun.com/news/x110779660/AT-T-launches-gigabit-network-servicehttp://www.wsj.com/articles/SB11064341213388534269604581077972897822358

The 9-to-5 office workday is dying in America

With the rise of flexible working schedules, the freelance economy, and video conferencing, more Americans are getting their jobs done without ever heading into an office, according to new data from the American Time Use Survey released by the Bureau of Labor Statistics.

Among all workers, 23% report spending all or part of their day working from home.



Get the facts @ http://SmartTransitFuture.org

Grand Jury findings?

ORANGE COUNTY TRANSPORTATION AUTHORITY AND LIGHT RAIL PLANNING

SUMMARY

he Orange County Transportation Authority's (OCTA) Board of Directors is scheduled to decide in December 1999 whether to proceed with the construction of a multi-billion dollar, 28-mile light rail system in the central Orange County "Corridor". That critical decision could commit the county to a significant financial and policy course and set the future of transit systems in Orange County. The Grand Jury has studied the process for that decision and found it wanting.

The OCTA has implicitly characterized the need for light rail is to lessen traffic congestion and pollution, and to promote economic development along the proposed line. The proposed light rail system is estimated by OCTA to carry, at best, a daily ridership of 60,000. Total Orange County daily ridership in 2020 is expected by OCTA to be 10 million people, up 2 million from today's ridership. The light rail portion would be less than 1% (0.6%) of total county ridership in the year 2020.

The national experience with urban light rail systems' ability to solve traffic congestion, air pollution and related urban problems has been poor. The Grand Jury examined the last 12 urban light rail systems developed in the U.S. The Grand Jury analysis strongly suggests that Orange County will experience that:

- Light rail will have negligible impact on traffic congestion because it attracts few automobile drivers from their cars.
- Demographic trends will make light rail much less effective than predicted by planners.
- Light rail is expensive. The most cost-effective, federally funded systems have required subsidies
 of \$5,000 and more per new ride. New rides are those riders brought out of their cars and into the
 transit system.
- Light rail is inflexible once in place. The OCTA's bus system routes are adjusted three times a
 year.
- Light rail cost and ridership forecasts will be erroneous and biased in favor of light rail.
- Light rail will not spur development. Development along light rail corridors is spurred by tax subsidies, not light rail.
- Light rail will not improve commuter travel times, energy conservation and safety.

There is a promotion of light rail by OCTA in its public Outreach/Center Line documents and briefings, rather than a process of study, analysis and evaluation as to light rail's merits and cost benefit.

Grand jury releases scathing VTA report





Dispatch file photo

Posted: Monday, June 1, 2009 12:00 am | Updated: 7:13 am, Wed Dec 28, 2011.

Michael Moore | ■ 0 comments

A scathing Civil Grand Jury report released Monday derides the Santa Clara Valley Transportation Authority as unresponsive and unaccountable to the public, disobedient to its own policies, and generally dishonest.

Share (1) Print (2) Font Size: (3)

"The more one learns about how the VTA executes its mission, the lower the confidence level in the board's ability to manage the agency," reads a line in the summary of the Santa Clara County Civil Grand Jury report entitled "Taking the public for a ride."

VTA spokeswoman Jennie Loft said the report contains nothing new, is full of factual errors, and its criticisms echo those heard during the November 2008 election season, when the agency sponsored three ballot measures that voters approved.



with restatements from anti-VTA and anti-BART (Bay Area toric, and that rhetoric was rejected by the voters in November," bk through the report you see opinions about the VTA or RT that are not based on fact."

ART, and to approve the agency's long-range transportation

I of the VTA, including a 2003-2004 Civil Grand Jury report, a e California State Auditor. Loft said the VTA has worked on of which is that the VTA board's advisory committees should be

f the Citizens Advisory Committee, a 16-member panel of and conducting independent audit reports. The report says by voters in 2000, created a Citizens Watchdog Committee,

true "watchdog" should be. It says its members are approved other transportation agencies in California. Plus, those

Santa Clara Valley Transportation Authority:

It Has Made Several Improvements in Recent Years, but Changes Are Still Needed

July 2008 Report 2007-129

http://www.ocgrandjury.org/pdfs/GJLtRail.pdf

https://www.bsa.ca.gov/pdfs/reports/2007-129.pdf

http://www.gilroydispatch.com/news/san_martin_county/grand-jury-releases-scathing-vta-report/article_db2c4254-7ed1-5ea4-be3a-28c7596545b5.html

Repeat of Orange County Grand Jury? Lack of transparency?

15CV009591



STATE OF NORTH CAROLINA WAKE COUNTY

FILENO. 15 CVS ___

THE NEWS AND OBSERVER
PUBLISHING COMPANY; THE
CHARLOTTE OBSERVER
PUBLISHING COMPANY; CAPITOL
BROADCASTING COMPANY,
INCORPORATED; BONEY
PUBLISHERS d/b/a THE ALAMANCE
NEWS; THE SOUTHERN
ENVIRONMENTAL LAW CENTER;
ZM INDY, INC. d/b/a INDY WEEK;
MEDIA GENERAL OPERATIONS,
INC., and THE NORTH CAROLINA
JUSTICE CENTER d/b/a NC POLICY
WATCH.

Plaintiffs,

PAT McCRORY, as Governor of North Carolina; JOHN E. SKVARLA, III, as Secretary of the North Carolina Department of Commerce; DONALD R. VAN DER VAART, as Secretary of the North Carolina Department of Environment and Natural Resources; Dr. ALDONA Z. WOS, as Secretary of the North Carolina Department of Health and Human Services; FRANK L. PERRY, as Secretary of the North Carolina Department of Public Safety; WILLIAM G. DAUGHTRIDGE, JR., as Secretary of the North Carolina Department of Administration; ANTHONY J. TATA, as Secretary of the North Carolina Department of Transportation; SUSAN W. KLUTTZ, as Secretary of the North Carolina Department of Cultural Resources; and LYONS GRAY, as Secretary of the North Carolina Department of Revenue,

Defendants.

Consequences of the Defendants' Violations

26. The defendants' repeated, concerted and systematic violations of the

Public Records Law described above have resulted in myriad instances in which the

COMPLAIN [COMP]

plaintiffs effectively have been denied access to public records despite the

defendants' tacit acknowledgement that the requested records are public.

Collectively these instances disclose patterns and practices of delay, obfuscation,

non-responsiveness, foot-dragging and stonewalling on the part of the defendants

that effectively defeat and defy the public policy of transparent and open

government that underlies the Public Records Law. For example:

Recent press coverage

Tom Swasey: Neighborhood streets no place for light rail line



BY TOM SWASEY Guest column

> The Durham-Orange Light Rail Transit Project is bringing light rail to town. That sounds like a great idea until you take a look at some of the proposed routes.

> I live in the Downing Creek community (on the Chapel Hill border, N.C. 54) and am now actively lobbying to keep light rail from creating dangerous traffic nightmares and diminishing the quality of life in our neighborhood. My objection is with the C2 and C2A

CHAPEL HILL: OPINION MARCH 27, 2015

The conversation: Readers debate the Durham-Orange Light Rail Transit Project

Bob Wilson: Light rail riles proposed track neighbors

BY BOR WILSON

Out-of-towners driving on N.C. 54 between I-40 and U.S. 15-501 Bypass in Chapel might wonder what small signs denouncing "C2" and "C2A" mean. One could say they denounce a sacred tenet of

Regardless of whether people support or oppose the Light Rail Transit Project, two issues greatly concern me.

Hauser: It's Time to Restart the Conversation about Transit

BY BONNIE HAUSER Commentary

Much has happened since Orange County voters approved a half-cent sales tax increase for transit. With a recovering economy. the tax is producing more money than expected, but there are signs that the project is running off the rails.

There's good news. A new Amtrak station is coming to Hillsborough, connecting their town center with Raleigh, Durham and points west. Also a small increase in funds will help improve service for Chapel Hill Transit and Orange Public Transit. New bus routes have been added for Mebane, Efland and northern Orange, and Chapel Hill is slowly adding off-peak service for shift workers at UNC.

Then there's light rail (LRT). The \$2.2 billion project has been beset with problems, and things are getting worse. State funding isn't coming, opposition is mounting against rail lines and maintenance facilities, and advocates are realizing it only serves a narrow corridor between UNC and Duke



http://www.newsobserver.com/news/local/community/chapel-hill-news/chn-opinion/article24985417.html http://www.newsobserver.com/news/local/community/chapel-hill-news/article24481459.html http://www.newsobserver.com/news/local/community/durham-news/dn-opinion/article23911525.html http://www.newsobserver.com/news/local/community/durham-news/dn-opinion/article21412206.html http://www.newsobserver.com/news/local/community/durham-news/article25493314.html http://www.newsobserver.com/news/local/community/chapel-hill-news/chn-opinion/article16205870.html http://www.heraldsun.com/news/localnews/x1222491721/Light-rail-route-options-stir-debate

Durham INC opposes N.C. 54 rail route

BY JIM WISE jwise@newsobserver.com

DURHAM - The InterNeighborhood Council ha record against a light-rail line past the Downing neighborhood and in favor of more consideration east of Alston Avenue.

In a resolution adopted at Tuesday's delegates calls on GoTriangle (formerly Triangle Transit) alternative to its preferred route across Little C along the south side of N.C. 54.



News Sports Business Lifestyles Opinion

Light rail route options stir debate

DURHAM - Alternative route options for the Durham-Orange Light Rail and options for a rail operation and facility have been stirring debates in neighborhoods around the city

Your letters: At-grade crossings unsafe he route over Little Creek, the area between the Hamilton Road station in Chapel

HIGHLIGHTS

Despite all of implied "safety" remedies implied by GoTriangle, all of which are also implemented in the 30-plus city systems across the nation, light rail fatalities continue to rise. Light rail at-grade crossings are fundamentally unsafe.

Some will compare the total number of light-rail fatalities and mistakenly conclude that light rail is safer than automobile travel Light rail has three times as many fatalities as automobile when normalized for passenger miles traveled.

Although GoTriangle has not specified or awarded the final contract, the Siemens S70 (or derivative) seems to be popular in North American light rail projects including the Charlotte LYNX. We estimate that each train car would be 90 feet long, 9 feet wide, vehicle empty weight of 96,500 lbs (47.5 tons) which is consistent with the model depictions. GoTriangle plans to initially use 2 car configurations (95 tons), with the ability to accommodate three-car configurations (142.5 tons) in the future, as demand

Even if the brakes are the best and can stop the wheel completely (without derailing), the physics of steel sliding on steel do not change the physics of a 95-ton train's momentum.

According to GoTriangle, the average speed will be 26 mph (17 miles / 39 minutes). Adjusting travel times by 30 seconds for each station stop across 17 stations (including 20 second dwell time), that means that the train will be averaging 35 mph when in motion and not in the station

ative (route) on the books here," Patrick McDonough of GoTriangle said. That Meadowmont Lane and crosses over property owned by the Army Corps of

moving the route away from its land. Which caused GoTriangle to create another nen in effect told GoTriangle that C1 would not be a viable option — taking it out

ity in Meadowmont Lane, GoTriangle came up with another other option — C2A.

imated costs of the new alternatives. C1A could cost between \$36 and \$54 2 costs between \$19 million and \$29 million, and C2A between \$14 million and

rborro Metropolitan Planning Organization meeting this week Durham County said concerns from the Downing Creek comes from where the rail alignment

streets that come out of the subdivision - Downing Creek Parkway and hird, Littlejohn Road that could also be impacted

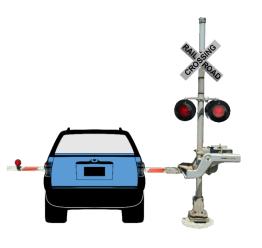
C2A — would be in the NCDOT right-of-way north of Stancell Drive," McDonough

n of the residents being able to pull out of the neighborhood and onto N.C. 54,

acts @ http://SmartTransitFuture.org

Light Rail

MYTH – Light Rail is safe



While advocates focus on the word *Light* ... we really should be focused on the word *RAIL*.

It is not a freight train (with infrequent crossings)

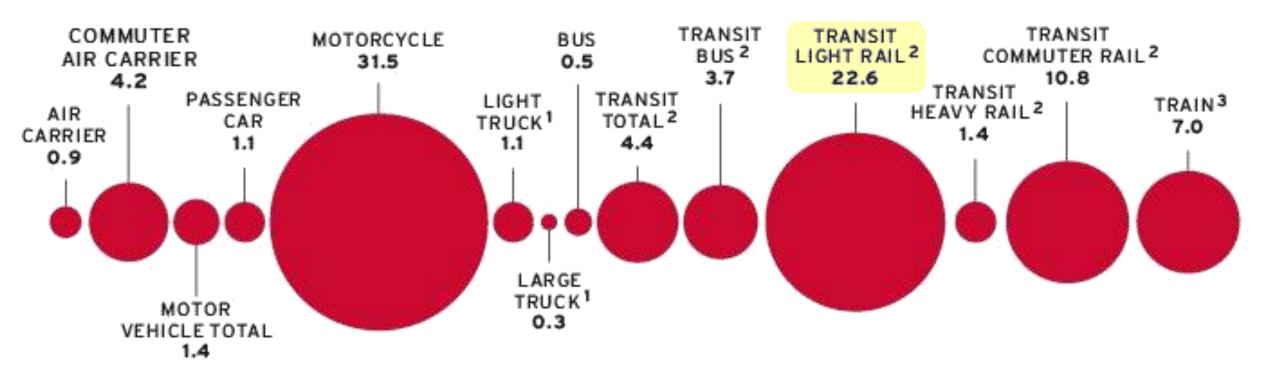
LRT is a 100-ton train will snake thru our community on those same steel wheels and steel tracks unable to swerve or stop quickly like other vehicles on the road ...

while crossing each and every gate

150 times on a typical work day !!!!

Light rail is safe?

Average fatality rates per 100 million miles, 2000–2011



1 Light trucks are defined as those less than 10,000 pounds gross vehicle weight rating, including pickups, vans, and SUVs. Large trucks are more than 10,000 pounds GVWR. 2 Transit bus refers to local service on fixed routes; light rail refers to streetcars, tramways, and trolleys; heavy rail includes subways and similar electric rail service; commuter rail is electric or diesel rail service between suburbs and a central city (all transit data 2000–2008). 3 Train data includes both freight and passenger railroad operations.

While many "light" rail transit advocates tout its safety, recent incidents across the nation suggest otherwise.

Despite the many safeguards,

the use of "at-grade" crossing gates with flashing lights and bells cede the "right of way" to train traffic at the expense of others on the road.



"right of way" and not ceding to other traffic "at-grade" crossing gates that are not regulated by traffic lights to synchronize automobile traffic flow.

The following is a small sampling of fatalities or CWI, also known as

"Collision With Individual"

across the United States since 2014.

According to the National Highway Traffic Safety Administration (NHTSA) at U.S. DOT:

Three out of four crashes occur within 25 miles of a motorist's home.

50% of all crashes occur within five miles of home.

A calculation of NHTSA statistics on the rate of deaths per collision in vehicle/vehicle crashes versus the FRA statistics of deaths per collision in vehicle/train crashes reveals:

A motorist is almost 20 times more likely to die in a crash involving a train than in a collision involving another motor vehicle.

LRT travelling on zero incline at 35 MPH with full brake will travel

or more than the length of a football field

~ 428 feet

in ~10 seconds

LRV Braking Distances for Unanticipated Stops

| LRV Speed (mph) | LRV Traveled Distance (ft) in 9.86 sec. | Full Service Braking Distance (ft) | Emergency Braking Distance (ft) | Distance of Low or Open Fence |
|-----------------------|---|--|--|--|
| 15 | 217 | 110 | 81 | 43 |
| 25 | 362 | 244 | 175 | 72 |
| 35 | 506 | 428 | 302 | 101 |
| 45 | 651 | 660 | 462 | 130 |
| 55 | 795 | 942 | 654 | 159 |

Fence Height

Based on distance of 506' covered in 9.86 seconds and 7' reaction time, fence height should not obstruct view 101' from crossing.

LRT Stopping Distance @ 35 mph on flat (0 degree) incline

428 feet

Length of football field

300 feet





Multiple injuries after light rail, truck crash
Phoenix @ 2015-05

- Woman killed by Green Line light-rail train was Minnesota Senate employee St. Paul, 2015-04
- 1 hurt as car collides with Link light rail train in S. Seattle Seattle @ 2015-04
- Pedestrian struck, killed by light rail train in Los Angeles Los Angeles @ 2015-04
- Pedestrian Fatally Struck by Gold Line Train in Highland Park Los Angeles @ 2015-04
- •RTD Closed Portion Of Light Rail Line In Lakewood For Possible Death Investigation Denver @ 2015-04
- <u>Light rail trains delayed due to crash St Paul @ 2015-03</u>
- Portland Streetcar collisions? Nearly 1 a week, reports say Portland @ 2015-03
- •21 INJURED AFTER METRO TRAIN CRASHES INTO CAR NEAR USC CAMPUS Los Angeles @ 2015-03
- Woman dies in light rail accident Houston @ 2015-03
- •RTD Light Rail service disrupted by pedestrian accident, mechanical problem Denver @ 2015-03
- VTA Light Rail Car and Vehicle Crash in San Jose San Jose @ 2015-02
- •San Jose man hit, killed by light rail train San Jose @ 2015-02
- Vehicle strikes Hudson-Bergen light rail train in Downtown Jersey City Jersey City @ 2015-02
- Person injured after being hit by light rail train near Belleview station Denver @ 2015-02
- Pedestrian struck, killed by Light Rail train near Colorado Convention Center in downtown Denver Denver @ 2015-02
- Pedestrian struck, killed by Light Rail ID'd as Naythan Cordova; 41-year-old died on his birthday Denver @ 2015-02
- Man Killed In Light Rail Train Accident Denver @ 2015-02
- <u>Light Rail, car collide near Speer & Stout in downtown Denver Denver @ 2015-02</u>
- Light rail service delayed after accident between train, car Baltimore @ 2015-02
- Child, Driver Seriously Injured After Car Collides With Muni Train In SF's West Portal San Francisco @ 2015-01
- •3-YEAR-OLD DIES AFTER CAR HIT BY RIVER LINE LIGHT RAIL Philadelphia @ 2015-01







21 Injured after Metro Train crashes into car near USC Campus

Los Angeles @ 2015-05



Or one can merely view recent incidents and fatalities in other Light RAIL Train projects across the nation.

Light RAIL Train with at-grade crossings are **NOT SAFE**.

Just do a GOOGLE search on "Light Rail Accident"

or review this list or this list.

Durham-Orange Light Rail Transit (D-O LRT) Project Draft Environmental Impact Statement and Public Comment Period

DEIS Review and Comment

The public, project partners, government agencies, and stakeholders can review the document in several ways:

- Review a copy of the DEIS on the D-O LRT Project web site at www.ourtransitfuture.com
- Review a copy of the DEIS at www.gotriangle.org
- Review a copy of the DEIS at public libraries in Durham and Orange counties
- Review a copy of the DEIS at GoTriangle's Administrative Offices
- There are many ways to provide comments (e.g., express support, concerns, or questions) about the proposed D-O LRT Project and the information in the DEIS:
- By email to info@ourtransitfuture.com
- By postal mail to: D-O LRT Project DEIS, c/o Triangle Transit, P.O. Box 530, Morrisville, NC 27560
- By comment card at two public information sessions in September
- Through the D-O LRT Project's website at www.ourtransitfuture.com
- In person during public hearings in Chapel Hill and Durham

Only comments received through these methods will be officially accepted. The use of these channels is important in maintaining the official project file for the Federal Transit Administration (FTA) and allows the project team to accurately compile the comments so that responses to all substantive comments can be tracked and responded to in the combined Final Environmental Impact Statement (FEIS)/Record of Decision (ROD). The combined FEIS/ROD is expected to be published in February 2016.

GoTriangle anticipates that the EPA will close the public review and comment period on October 12, 2015.







100 Friday Center Drive Chapel Hill, NC 27517

Show your DOLRT colors!



Public Information Sessions:

GoTriangle will hold two public information sessions on the DEIS in advance of public hearings on the document.





200 E. Main Street Durham, NC 27701

Public Hearings

Two formal public hearings on the DEIS will be held. Each speaker will be allowed two (2) minutes to comment. The dates for the public hearings are:

Durham Orange Light Rail Plan (DEIS) What We Know and What We Should Be Concerned About

Financial Risk and Uncertainty

- Expected NC State share of 25% (\$400M) recently capped by NC Legislature at \$500K
- Shortfalls may result in a burden borne by Durham / Orange Taxpayers
- Cost estimate of \$1.6B uncertain and may increase as project goes forward
- LRT ridership overestimated, corridor population lacks sufficient density
- Bus Rapid Transit far less costly and competitive on ridership

Alignment Not Supportive of Transit Oriented Development

Compact density build, mixed use land development plans not served

Safety Issues /Adverse Impacts

- At grade crossings are high risk for accidents even with gates and lights
- Farrington Road ROMF noise, lights, traffic, contamination and property values
- Light rail has 22 times more accidents per passenger mile travelled than cars

Social Justice

- East Alston low income, minority, transit dependent community not served
- NC Central University and Durham Tech are not served
- Affordable housing must compete with inevitable station area increased rents and land prices

Technology and Obsolescence

- Autonomous vehicles and rapid rise of ride share services impact LRT viability
- LRT fixed tracks not adaptable or flexible, LRT is a solution for the PAST not for future

Submit Comments

A substantive statement requiring a response

- What is the specific issue
- Why is it a concern
- What do you want done about it (Don't build it, Fix it, Change It, Eliminate it)
- Avoid emotion, use facts and logic

In person, by mail, e-mail or at GoTriangle's website.

- No limit number of comments you make
- No limit number of times you comment
- You do not have to be directly affected by the LRT to comment
- You can comment both publicly and in writing

written comments are important

Where can I get more information?

- Get the facts @ http://SmartTransitFuture.org
- Follow us on Twitter @NC54transit
- Sign the Online petition http://bit.ly/noDOLRT

SmartTransitFuture.org

Residents for Smart Transportation Serving the Triangle







Plan

<u>Durham-Orange Proposal</u> <u>Light Rail Bias?</u> Charlotte success? Light Rail Myths

Congestion?
Safe?

Faster?

Economical?

Efficient?

Environmental?

Growth?

Smart

Future?
Solution?
Projects?

Contact

Local State Federal Resources

Articles
Reports
Terminology

Hauser: It's Time to Restart the Conversation about Transit

Alex Cabanes

Sent: 10/13/2015 4:00 PM

To: info@ourtransitfuture.com

Cc:

News & Observer Editorial:

Hauser: It's Time to Restart the Conversation about Transit

By Bonnie Hauser

Commentary

http://www.newsobserver.com/news/local/community/chapel-hill-news/chn-opinion/article24985417.html

Much has happened since Orange County voters approved a half-cent sales tax increase for transit. With a recovering economy, the tax is producing more money than expected, but there are signs that the project is running off the rails. There's good news. A new Amtrak station is coming to Hillsborough, connecting their town center with Raleigh, Durham and points west. Also a small increase in funds will help improve service for Chapel Hill Transit and Orange Public Transit. New bus routes have been added for Mebane, Efland and northern Orange, and Chapel Hill is slowly adding off-peak service for shift workers at UNC.



contributed

Then there's light rail (LRT). The \$2.2 billion project has been beset with problems, and things are getting worse. State funding isn't coming, opposition is mounting against rail lines and maintenance facilities, and advocates are realizing it only serves a narrow corridor between UNC and Duke. Triangle Transit (TTA) has spent over \$40 million to study the rail corridor only to uncover more obstacles.

The last straw came last month when Wake County announced it is not pursuing LRT because it is "too costly and inflexible." Instead, Wake is considering options based on Bus Rapid Transit (BRT) and Rail Rapid Transit (RRT) which involves diesel-powered units using existing rail lines. Under any scenario, Wake's citizens will enjoy county-wide transportation sooner and for a lot less money than Orange County will spend for 17 miles of service between UNC and Duke.

Wake's announcement makes integrated regional transportation system less likely unless TTA-Orange-Durham changes course. Under a separate planning process, Wake will now compete for limited state and federal funds. Wake's larger population, and lower per-mile cost will quickly dwarf the TTA-Orange-Durham LRT plan.

It's worth noting that Wake's county leaders sought an independent view to get transit on the right track. Rather than rely solely on TTA, Wake Transit retained the expert advice of an independent consultant with no vested interest in LRT or any other outcome. Plus they invited representatives from all their towns to participate in the planning. Now everyone is excited about transit.

Compare that to the Orange-Durham LRT plan, which originated in the 1990s. Since then, our population and employment centers spread to Mebane and RTP, and more are coming to Chatham. Chapel Hill's own "2020 focus areas" are struggling without the benefit of transit to alleviate traffic impacts. Local transportation planners ignored the shift, and in the unlikely event that LRT goes forward, investors along N.C. 54 and downtown Durham win big – while low- income communities will continue to need cars to access better-paying jobs in Wake and Alamance counties.

Under the current contract, a change to the LRT project requires a unanimous decision from Orange, Durham and TTA. Given the challenges facing the implementation of LRT and the latest moves by Wake County, isn't it time to at least restart the conversation?

| Bonnie Hauser lives in Orange County and can be reached at | | | | |
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News & Observer - Your letters: At-grade crossings unsafe

Alex Cabanes

Sent: 10/13/2015 4:03 PM

To: info@ourtransitfuture.com

Cc:

News & Observer - Your letters: At-grade crossings unsafe

http://www.newsobserver.com/news/local/community/durham-news/dn-opinion/article23911525.html

At-grade unsafe

Despite all of implied "safety" remedies implied by GoTriangle, all of which are also implemented in the 30-plus city systems across the nation, light rail fatalities continue to rise. Light rail at-grade crossings are fundamentally unsafe.

Some will compare the total number of light-rail fatalities and mistakenly conclude that light rail is safer than automobile travel. Light rail has three times as many fatalities as automobile when normalized for passenger miles traveled.

Although GoTriangle has not specified or awarded the final contract, the Siemens S70 (or derivative) seems to be popular in North American light rail projects including the Charlotte LYNX. We estimate that each train car would be 90 feet long, 9 feet wide, vehicle empty weight of 96,500 lbs (47.5 tons) which is consistent with the model depictions. GoTriangle plans to initially use 2 car configurations (95 tons), with the ability to accommodate three-car configurations (142.5 tons) in the future, as demand warrants.

Even if the brakes are the best and can stop the wheel completely (without derailing), the physics of steel sliding on steel do not change the physics of a 95-ton train's momentum.

According to GoTriangle, the average speed will be 26 mph (17 miles / 39 minutes). Adjusting travel times by 30 seconds for each station stop across 17 stations (including 20 second dwell time), that means that the train will be averaging 35 mph when in motion and not in the station.

Light rail trains travelling at 35 mph with full brake will travel approximately 428 feet in less than 10 seconds before coming to a complete stop.

Consider, that according to the National Highway Traffic Safety Administration at U.S. Department of Transportation: Three out of four crashes occur within 25 miles of a motorist's home. Half of all crashes occur within five miles of home.

A calculation of NHTSA statistics on the rate of deaths per collision in vehicle / vehicle crashes vs. the FRA statistics of deaths per collision in vehicle/train crashes reveals: A motorist is almost 20 times more likely to die in a crash involving a train than in a collision involving another motor vehicle. (Operation Lifesaver, Crossing Collisions & Casualties by Year)

Or one can merely view recent light-rail incidents and fatalities in other cities with light rail across the nation. Light rail transit with at-grade crossings are NOT SAFE. Just Google "Light Rail Accident."

Alex Cabanes

News & Observer - Tom Swasey: Neighborhood streets no place for light rail line

Alex Cabanes

Sent: 10/13/2015 4:08 PM

To: info@ourtransitfuture.com

Cc:

News & Observer - Tom Swasey: Neighborhood streets no place for light rail line



Tom By Tom Swasey

The Durham-Orange Light Rail Transit Project is bringing light rail to town. That sounds like a great idea until you take a look at some of the proposed routes.

I live in the Downing Creek community (on the Chapel Hill border, N.C. 54) and am now actively lobbying to keep light rail from creating dangerous traffic nightmares and diminishing the quality of life in our neighborhood. My objection is with the C2 and C2A routes

proposed in the Durham-Orange section of the route alternatives. C2/C2A will cut off the main entrance/exits to Downing Creek and cross the already traffic jammed Barbee Chapel Road.

The original plan for light rail was the C1 route planned way back in 1995 to be part of the upscale Meadowmont community. "Meadowmont's approval in 1995, with its high density and mix of residential, commercial and retail uses, was conditioned upon the reservation of land for a mass transit line."

In the last couple of years there apparently was opposition to this plan by Meadowmont residents and they convinced Triangle Transit to consider alternative routes C2 and C2A, which would move the light rail across N.C. 54 to a location running along 54 on the south side crossing Downing Creek Parkway, Little John Road, Stancell Drive and Barbee Chapel Road and creating the Woodmont rail station. This station would have no parking, which would likely result in increased neighborhood parking.

These proposed alternative routes would negatively impact Downing Creek especially at peak commuting hours since trains would run every 10 minutes and cross all the streets mentioned above at-grade level forcing traffic to stop and make our present traffic nightmares even worse.

The at-grade crossing design is not just a potential traffic nightmare but more importantly it is a safety and emergency response time issue. There are hundreds of train-vehicle and/or pedestrian crossing accidents in the United States every year. One is too many! Grade-level crossings are an archaic design and most engineers would agree that elevated tracks are the better option. The engineers involved in C2/C2A's design have countered that elevated structures are too expensive, but if at-grade crossings are unsafe they shouldn't even be part of a modern design. Build it to optimum safety design standards or don't build at all.

The C2 and C2A routes travel through less densely populated areas than the C1/C1A (Meadowmont community) routes which would logically result in less ridership. Since this planned project does not go to the popular destinations like the RDU airport and Research Triangle Park, Triangle Transit may need every rider they can get to support the astronomical build and operation cost. The possibility of low ridership is real, and that ticket could end up being more than any of us want to pay.

For more info on these proposed routes visit transit.downingcreek.org/

Tom Swasey lives in Durham.

Read more here: http://www.newsobserver.com/news/local/community/durham-news/dn-opinion/article21412206.html#storylink=cpy

News & Observer - Durham INC opposes N.C. 54 rail route

Alex Cabanes

Sent: 10/13/2015 4:11 PM

To: info@ourtransitfuture.com

Cc:

News & Observer - Durham INC opposes N.C. 54 rail route

By Jim Wise

jwise@newsobserver.com

DURHAM

http://www.newsobserver.com/news/local/community/durham-news/article25493314.html

The InterNeighborhood Council has gone on the record against a light-rail line past the Downing Creek neighborhood and in favor of more consideration of a terminal east of Alston Avenue.

In a resolution adopted at Tuesday's delegates meeting, the INC calls on GoTriangle (formerly Triangle Transit) to use an alternative to its preferred route across Little Creek, which runs along the south side of N.C. 54.



Alternative routes for the proposed Durham-Orange Light Rail, crossing Little Creek between Hamilton Road in Chapel Hill and Leigh Village in Durham. GoTriangle prefers C2A, along N.C. 54, but Durham neighborhoods south of N.C. 54 are pressing for C1A, through the Meadowmont neighborhood, or a new routing away from their homes. GoTriangle Instead, the INC states, designers of the proposed light-rail route "should use every effort to follow the originally intended path through Meadowmont ... or an alternative route with less negative impact on our communities."

Residents of Downing Creek and nearby neighborhoods say the alignment near them – with four grade crossings within a half mile between their homes and the major N.C. 54 corridor – will add to traffic congestion and create unacceptable safety risks.

But Meadowmont residents, who live in Chapel Hill, west of Downing Creek and on the north side of N.C. 54, have some of the same issues with light rail cars running through their neighborhood – even though the community was conceived and designed, in the 1990s, to incorporate a light-rail line.

Though the resolution specifically refers to Meadowmont and the "C1A" track alignment through it, Downing Creek homeowner Tom Swasey said he and his neighbors "don't want this to be neighborhood against neighborhood.

"Downing Creek is looking at how this will impact us and neighborhoods around us," Swasey said. "We don't want this to turn into Meadowmont's bad and we're good."

INC President Philip Azar said he's heard sympathy around town for Downing Creek's concerns.

"Everybody, at least in Durham, thinks if you were a community designed for transit and transit comes ... you should be embracing it or at least accept it," Azar said.

Delegates from 14 neighborhood associations attended Tuesday's meeting.

Along with supporting Downing Creek, they endorsed the Northeast Central Durham Leadership Council's resolution opposing GoTriangle's preferred East Durham station site west of Alston Avenue, and for "a balanced assessment of the pros and cons" of a site east of Alston.

The light-rail line is proposed to run 17 miles from UNC Hospitals to a station originally planned a quarter-mile east of Alston Avenue. GoTriangle planners relocated the station a half-mile west, near Grant Street, after finding insufficient space for its double-track line to reach the east-side side along its original route.

The Leadership Council, and others including some City Council members, have objected that the west-side site, near Grant Avenue, does not serve East Durham neighborhoods as well as a site on the east side of Alston Avenue; and that GoTriangle has not considered a workable alternative route near the Durham Freeway corridor.

"It looks like it's feasible to get the station in there," said Jim Svara, speaking for the Leadership Council. "That's the thing we need to keep stressing.

"To push that, were it technically impossible, would not be responsible," Svara said. "It does appear this is technically possible."

| Wise: | |
|-------|---|
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News & Observer - Neighbors question Farrington Road light-rail center plan

Alex Cabanes

Sent: 10/13/2015 4:13 PM

To: info@ourtransitfuture.com

Cc:

News & Observer - Neighbors question Farrington Road lightrail center plan

Operations and maintenance facility would serve 17-mile rail line from Chapel Hill to Durham

Former Pepsi plant off Cornwallis Road in Durham is second preferred site

Federal transit officials reviewing draft light-rail plan required for funding

Neighbors concerned about traffic, quality of life, noise, lights, cost

By Tammy Grubb

tgrubb@newsobserver.com

http://www.newsobserver.com/news/local/community/chapel-hill-news/article31506434.html

DURHAM

More than 150 Chapel Hill and Durham residents overflowed a meeting Tuesday at Creekside Elementary School to learn more about a possible light-rail operations and maintenance center on Farrington Road.

Many also wanted to let transit officials know they don't support the current plans for light rail and to find out how they can help put on the brakes. The maintenance center would service and store train cars for the 17-mile route from UNC Hospitals to east of Alston Avenue in Durham. (See more, nando.com/dolr)

The Farrington Road site is one of two preferred, roughly 20-acre maintenance locations identified in GoTriangle's Draft Environmental Impact Statement, which has been submitted for Federal Transit Authority (FTA) review.

The FTA soon could publish the statement, required to apply for federal funding. A 45-day public comment period will follow, during which GoTriangle will collect comments for the final environmental statement, due in February.

GoTriangle officials split residents into groups Tuesday to answer questions about the Farrington Road site and ask how to make the plan better. Some residents wrestled with GoTriangle's checklist of prepared responses when they didn't see a "no build" option.

Why even consider an industrial facility for a site in the residential community, about a quarter-mile from a school, they asked. Others worried that potentially toxic chemicals could be used to clean or service the trains, putting a creek on the site at risk.

GoTriangle officials advised them to submit comments to the plan website and during the upcoming comment period.

Plans show the entrance to the Farrington Road site across the street from the Ephesus Church Road intersection. Maintenance buildings are located just north of Patterson's Mill Country Store, with more tracks and turnarounds north of the intersection. Trains would enter the maintenance center from spurs off the line as it parallels I-40, between N.C. 54 and Old Chapel Hill-Durham Road.

Officials expect construction to be less expensive for a Farrington Road center – \$62 million to \$93 million – but it also would displace six homes and require a lengthy rezoning and approval process.

The other preferred site is the former Pepsi-Cola bottling site off Cornwallis Road. The trains would enter the maintenance yard there from a track running behind the former Herald-Sun building and through a wooded area to parallel U.S. 15-501.

The construction of that center would displace a mini-storage facility and cost \$74 million to \$111 million. Go Triangle officials recently met with the nearby Judea Reform congregation and Levin Jewish Community Center to talk about their concerns.

While some Farrington Road area residents supported the light rail plan, others said they didn't see the need for it. Baker's Mill resident Morris Clarke said he's concerned about tractor-trailer deliveries to the site, the effect on nearby homes and whether the site encourages more investment.

"If it's visible, if it's noisy, if it affects traffic patterns, it will affect property values," he said. "It's going to probably cause commercial entrepreneurs or investors to try to develop this area to support those activities. It becomes a magnet for so many other things."

Culp Arbor resident Adele Mittelstadt also questioned an at-grade crossing on the south end of Farrington Road. Traffic would stop every 10 minutes, she said, causing bigger backups at peak times and delaying emergency responders, a vital service to her 55-and-up restricted community.

Supporters counter that the rail line would serve many existing riders, freeing buses to serve under- or unserved areas and taking more people off area roads. The stations also could attract dense residential and commercial development, they said, while the crossing delays would be brief.

Noise is a concern for Pope's Crossing residents, Kathleen Christian said, because the planned route lies behind their homes.

Her new website – stopthetrain.org – opposes the rail line, which she also doubts will be fast or attractive enough to lure drivers from their cars. The problem could grow, she said, if dense development brings more people – and more cars – to already congested corridors.

Buses are a better investment, she said, but could become a lesser budget priority if the rail line is built.

| Taniniy Glubb. | | |
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DOLRT DEIS - NO BUILD - fiscally flawed proposal for low density area

| Alex Cabanes | |
|--------------|--|
| | |

Sent: 10/13/2015 11:47 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact"

Every community that would be directly impacted by the DOLRT routing has actively voiced opposition to the routing and supposed 'benefits' bestowed upon them. "Progressive" Chapel Hill wants the benefits of DOLRT, but the original Meadowmont C1/C1A routing was aggressively opposed by local residents. The Chapel Hill Town Council unanimously voted to reroute DOLRT over on the "other side of the county line" in Durham along the NC54 highway. Polling of local residents around the Downing Creek area showed that over 95% are strongly opposed to the C2/C2A routing.

Chapel Hill Town Council (CHTC) opted to issue a letter of support for DOLRT project, prior to the completion of DEIS public comment period. I did not see CHTC present (exception of Maria Palmer who spoke as a private citizen) at the UNC Friday Center citizen hearing on DOLRT project.

We definitely need better transit options to connect Chapel Hill, Durham, Raleigh, RDU, RTP, and other parts of the Triangle. Chapel Hill needs \$80 million to replace its aging bus fleet. And we need to invest in the \$25 million for Bus Rapid Transit (BRT) with dedicated lanes along the MLK corridor.

Ironic many advocating for this DOLRT routing are safely located far away in Chapel Hill communities, far beyond the adverse impacts of DOLRT routing.

However, the \$1.6 BILLION DOLRT project funding continues to be a large unknown. Consuming approximately \$50 million to date, and consuming (distracting?) the time & attention of our elected officials. Yet CHTC and Durham continue head-long into a flawed plan based on flawed assumptions (like 40% zero-vehicle households). The original DOLRT plan expected 25% funding (\$400 million) from the state, which the state has already reduced to a maximum 10% (which garnered \$138 million using the latest state's appropriation formula) and the recent NC budget capped the state contribution to a cumulative \$500,000. In the mean time, the Federal government is anticipated to run out of funding (for the ENTIRE nation) in early November unless an emergency continuing spending resolution is passed by Congress, and Congress has not funded basic transportation investments.

But no matter, let's continue to borrow and spend. The bill for these fiscally flawed plans will come due upon the local taxpayers, once the political incumbents have long moved on. I guess anyone can 'afford' to be 'progressive' as long as they do not have to directly bear the full costs in blood or treasure.

Sincerely,

Alex Cabanes

http://transit.downingcreek.org http://SmartTransitFuture.org

DOLRT DEIS - Peer comparison omission - Charlotte experience

Alex Cabanes [alex_ncus@yahoo.com]

Sent: 10/12/2015 2:22 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact" <nc54.transit.impact@gmail.com>

The DOLRT DEIS makes no peer comparisons to Charlotte or other areas, providing the reader with no relative peer benchmarks to evaluate DEIS claims.

A DOLRT peer comparison to Charlotte Lynx which has daily ridership stagnating @ 16,000 over last 7 years while the area's population grew 17% and fuel prices had no apparent impact on ridership. In the mean time, DOLRT projection of 23,000 daily boardings, for a substantially smaller population with lower density than Charlotte? And despite all of these massive investments in Charlotte LRT, the 2015 Urban Mobility Scorecard rated *Charlotte First In Worst Traffic In North Carolina* 8/31/2015 (http://wfae.org/post/charlotte-first-worst-traffic-north-carolina)

Charlotte Observer: Lynx light rail ridership back to 2008 levels

However, the train's seven years have shown that it's been difficult for CATS to get new riders, even as uptown employment has grown significantly and thousands of new apartments have been built along the line in uptown and the South End.

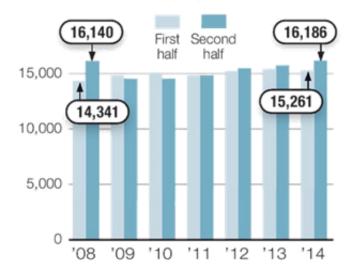
Former UNC Charlotte transportation consultant David Hartgen, a transportation consultant, said ridership suggests light rail is losing market share in the commuting corridor along South Boulevard, Interstate 77 and Park Road.

"The fundamental assumption is that the Lynx traffic would increase as the region got denser," he said.

"That hasn't happened."

Lynx back to peak levels

Ridership on the light rail line in the last six months of 2014 eclipsed the train's previous high from the last half of 2008. Trips remain above projections.





UC Berkeley INSTITUTE OF TRANSPORTATION STUDIES

Urban Densities and Transit A Multi-dimensional Perspective

Nevertheless, 10 rail systems fail to produce net positive benefits under the scenario. **Charlotte**, Buffalo, New Jersey Transit, Pittsburgh, and San Jose **perform particularly badly. These systems do not have enough riders to produce the economies of scale that make transit provision by rail significantly less expensive than bus.**

SOURCE:

http://www.charlotteobserver.com/news/local/article9264719.html

http://www.its.berkeley.edu/sites/default/files/publications/UCB/2011/VWP/UCB-ITS-VWP-2011-6.pdf

http://charlottechamber.com/clientuploads/Economic_pdfs/PopulationEstimates.pdf

Charlotte Lynx service started Nov 27, 2007

http://www.NorthCarolinaGasPrices.com/retail_price_chart.aspx?city1=&city2=Charlotte&city3=&crude=n&tme=108&units=us

DOLRT DEIS - Inflated Daily Boardings + Inflated 40% zero-vehicle households - Peer comparison to Charlotte + Wake

Alex Cabanes [alex_ncus@yahoo.com]

Sent: 10/12/2015 2:56 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact" <nc54.transit.impact@gmail.com>

Durham-Orange light rail boardings are overly optimistic.

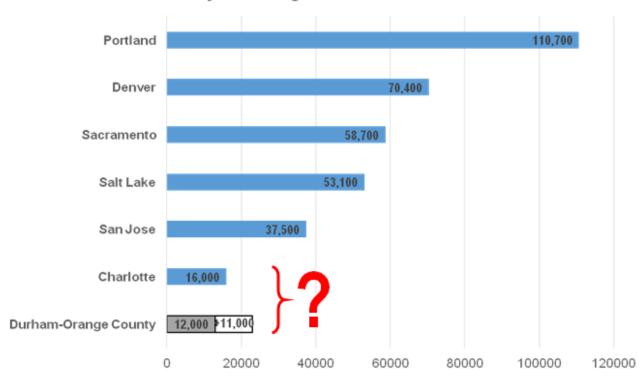
Model assumes 40% zero-vehicle households, when in fact Durham has 10.4% zero-vehicle households and Chapel Hill has 7.4% zero-vehicle households - according to the US Census Bureau's 2010-2013 American Community Survey.

Charlotte area has +70% larger population with 16,000 daily boardings over the last 7 years (service began Nov 27, 2007).

Using the Charlotte experience would suggest less than 10,000 daily boardings (vs 23,000 projected by GoTriangle, revised from the original 2011 estimate of 12,000 daily boardings).

Or compared to Wake's Coutny (defunct) LRT proposal of projected 16,000 daily boardings with 1 million population.

Daily Boardings



Are there initial ridership estimates available for the planned lightrail project and commuter rail service?

The anticipated ridership for the Durham to Chapel Hill light rail project is currently estimated to be approximately 12,000 boardings per day. The anticipated ridership for the Durham to Raleigh Commuter Rail project is approximately 7,000 boardings per day. http://ourtransitfuture.com/wp-content/uploads/2013/08/QandADurhamBusRaillnvestmentPlan v3.pdf#page=2

Durham-Orange Corridor (Durham to Chapel Hill)







CORRIDOR QUICK FACTS

LRT

Capital Cost Estimates

- System Total: \$1.4B (2011 Dollars)
- Cost per Mile: \$82M per mile (2011 Dollars)

Initial Operating & Maintenance (O&M) Cost Estimates

Approximately \$14.3M (2010 Dollars)

Operations

- Length: 17 miles
- Travel Time: 34 minutes
- Average Speed: 29 to 30 miles per hour

Preliminary Ridership Forecasts

Average Daily Trips: 12,000 to 13,000

BRT

Capital Cost Estimates

- System Total: \$800M \$950M (2011 Dollars)
- Cost per Mile: \$45M 54M per mile (2011 Dollars)

Initial Operating & Maintenance (O&M) Cost Estimates

Approximately \$10.4M (2010 Dollars)

Operations

- Length: 17 miles
- Travel Time: 38 to 40 minutes
- Average Speed: 25 to 27 miles per hour

Preliminary Ridership Forecasts

Average Daily Trips: 11,000 +/-

Alternatives Analysis Results: Our Transit Future Wake Light Rail Transit (LRT) Project

· Recommended Project:

 LRT service on 19 miles of separate exclusive LRT tracks in NCRR and CSX /Triangle Transit rights-of-way

- 16 Stations

- Est. Ridership: 17,500 boardings (2035)

- Travel Time: 38 minutes, avg. 35 mph

Capital Cost: \$1.5B (2011\$)

– O&M Cost: \$16.1M

Minimum Operable Segment (MOS):

- 14 miles with 12 Stations

- Estimated Ridership: 16,000 boardings (2035)

- Travel Time: 28 minutes, avg. 30 mph

Capital Cost: \$1.1B (2011\$)O&M Cost: \$14.2M (2011\$)

· Implementation Schedule not yet established

www.ourtransitfuture.com

13

SOURCE

http://ourtransitfuture.com/wp-content/uploads/2013/08/QandADurhamBusRailInvestmentPlan_v3.pdf#page=2 http://www.waketransit.com/wp-content/uploads/2015/05/Expanded_TC_Report_-_REVISED_5-11-15_small1.pdf#page=25 http://www.penc.org/getdoc/15ee17ea-4c65-4aac-9d20-1f290db8cd56/TRTP-to-PENC-Feb-27-Webinar-Final--Presentation.aspx#page=13

http://www.governing.com/gov-data/car-ownership-numbers-of-vehicles-by-city-map.html

http://www.penc.org/getdoc/15ee17ea-4c65-4aac-9d20-1f290db8cd56/TRTP-to-PENC-Feb-27-Webinar-Final-Presentation.aspx#page=18

DOLRT DEIS - Inflated Daily Boardings - cross reference with K.29 O&M budget

Alex Cabanes [alex_ncus@yahoo.com]

Sent: 10/12/2015 2:38 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

Cc: "NC54 Transit Impact" <nc54.transit.impact@gmail.com>

In reviewing the DOLRT DEIS proposal, the **23,000 daily boardings** (in 2040, vs the original 2035 projection) is highly inflated and inconsistent with estimated Operation & Maintenance budget projections filed in **DEIS K.29**.

For example, a calculation starting with the O&M budget and working backwards to estimate daily boardings, shows that the daily boardings projections are inconsistent with the financials cited in the DEIS. So either the daily boardings are over inflated, or the estimated O&M is significantly under represented.

METHOD #1 - using rough estimate

\$16M Operating & Maintenance budget [DEIS K.29]

@ 20% farebox recovery planned (currently 15%)

\$3.2M collected in fares

\$2 fare (less than current \$3 GoTriangle EXPRESS fare)

1.6M annual boardings

200 days (workdays only)

8000 daily boardings?

METHOD #2 - using GoTriangle provided estimates.

\$16M Operating & Maintenance budget [DEIS K.29]

@ 15% farebox recovery current

\$2.4M collected in fares

\$1.15 fare (less than current \$3 GoTriangle EXPRESS fare)

2.1M annual boardings

290 days based on GoTriangle informational exchange Oct 1, 2015

7241 daily boardings?

SOURCE:

http://ourtransitfuture.com/wp-content/uploads/2014/09/Adopted-Orange-County-BRI-Plan-with-Appendices-revised-9-27-20121.pdf#page=24 http://www.triangletransit.org/fares-and-passes http://www.slideshare.net/SCVTA/the-future-of-vta-light-rail-presentation-to-spur

DOLRT DEIS - Projected Travel Times - misrepresentation of NO BUILD option

Alex Cabanes [alex_ncus@yahoo.com]

Sent: 10/12/2015 2:12 PM

To: "Our Transit Future" <info@ourtransitfuture.com>

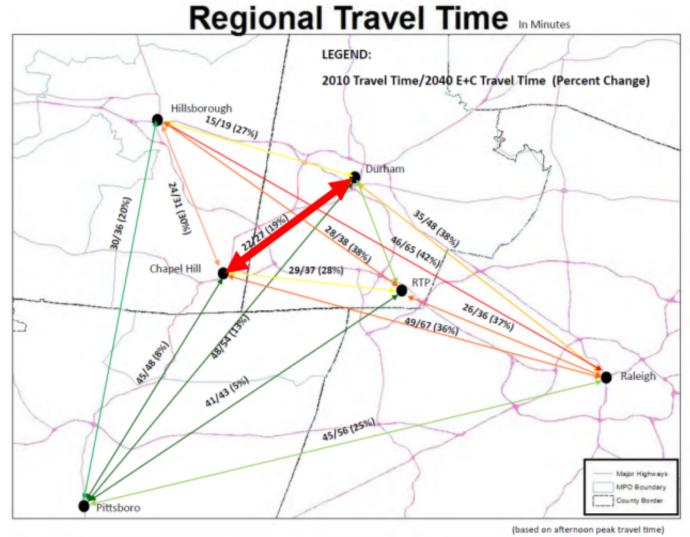
Cc: "NC54 Transit Impact" <nc54.transit.impact@gmail.com>

The DEIS NO BUILD option is misrepresented and does not fully articulate the impact of the NO BUILD option.

For example, the mean travel time to work according to the 2014 US Census is 22 minutes (Chapel Hill / Durham), with 2040 Existing+Committed projected to be 27 minutes.

Yet the proposed 17 mile light rail train will now take 42-44 minutes (vs BRT alternative of 39 minutes). Include wait time for the next train, time to get to/from the station (via Park&Ride, Kiss&Ride, bicycle, walking, or bus transfer), it will be even LONGER than 42-44 minutes.

How is this faster than the automobile that it is supposed to replace?



Travel Time 3-3

SOURCE:

http://ourtransitfuture.com/wp-content/uploads/2015/06/June-Public-Information-Session_final_june-4.pdf Bus travel time estimate = DO Corridor Alternatives Analysis, Apr 2012, page 5-39 http://ourtransitfuture.com/wp-content/uploads/2015/08/02_Chapter-2_Alternatives_Considered-.pdf#page=48 http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=28481

Oppose Light Rail - Safety - no traffic light

Pam Calderwood Sent: 10/13/2015 10:10 PM

To: info@ourtransitfuture.com

I oppose the proposed Durham – Orange Light Rail because there will be no traffic light at the Downing Creek Parkway and Hwy 54 intersection and it will be an at-grade crossing. Hwy 54 is a very busy highway and cars will run the real risk of the gate coming down behind the car that will have to be stopped on the tracks in order to get onto Hwy 54. The car will be trapped between the gate and cars on Hwy 54 and will get hit by the train. Please flag and investigate this intersection.

Sincerely,

Pam Calderwood

Oppose Light Rail - Federally Protected Wetlands

Pam Calderwood

Sent: 10/13/2015 10:12 PM

To: info@ourtransitfuture.com

I oppose the proposed Durham – Orange Light Rail because it will cross federally protected wetlands 140 times per day. The Army Corps of Engineers maintains this land. Building it will destroy the habitat and it will never be able to recover because of the constant crossing of the train. The Army Corps of Engineers should never have approved this route. They were led to believe that Downing Creek residents wanted the Woodmont station and this is not true. A survey shows that 90% of Downing Creek residents do NOT want the rail.

Pam Calderwood

Oppose Light Rail - noise and safety at grade level crossings

Pam Calderwood Sent: 10/13/2015 10:21 PM

To: info@ourtransitfuture.com

I oppose the proposed Durham – Orange Light Rail because the grade level crossings on the C2A route will create dangerous situations as people try to access NC54 without the benefit of traffic lights. Please either scrap the project and investigate alternative options, move C2A route to the north side of NC54 or elevate it to eliminate these dangerous intersections.

With kind regards,

Pam Calderwood

Oppose Light Rail - why MUST it be a train

| Pam Calderwood |
|---|
| Sent: 10/13/2015 10:22 PM |
| To: info@ourtransitfuture.com |
| |
| I oppose the proposed Durham – Orange Light Rail because there are other forms of transportation and technology being developed that will solve the transportation needs in a much more efficient and flexible way. Why spend \$1.8 billion on a system that cannot be moved as ridership needs change, is dangerous and will be obsolete before it's complete. I'd prefer my tax dollars to be spent more wisely and less frivolously. |
| With kind regards, |
| Pam Calderwood |
| |
| |
| |
| Copyright © 2003-2015. All rights reserved. |

Oppose Light Rail - it's simply a waste of taxpayer dollars

| Pam Calderwood |
|---|
| Sent: 10/13/2015 10:22 PM |
| To: info@ourtransitfuture.com |
| I oppose the proposed Durham – Orange Light Rail because with citizens budgets so tight there is no need to spend such an extravagant amount of money on this project when there are other forms of transportation and technology being developed that will solve the transportation needs in a much more efficient and flexible way. Why spend \$1.8 billion on a system that cannot be moved as ridership needs change, is dangerous and will be obsolete before it's complete. I'd prefer my tax dollars to be spent more wisely and less frivolously. |
| With kind regards, |
| Pam Calderwood |
| |

Oppose Light Rail - Safey - No Traffic Light

David Calderwood

Sent: 10/13/2015 10:16 PM

To: Info@ourtransitfuture.com

I oppose the proposed Durham – Orange Light Rail because there will be no traffic light at the Downing Creek Parkway and Hwy 54 intersection and it will be an at-grade crossing. Hwy 54 is a very busy highway and cars will run the real risk of the gate coming down behind the car that will have to be stopped on the tracks in order to get onto Hwy 54. The car will be trapped between the gate and cars on Hwy 54 and will get hit by the train. Please flag and investigate this intersection.

Sincerely,

David Calderwood

Fwd: Oppose Light Rail - Safey - No Traffic Light

David Calderwood

Sent: 10/13/2015 10:17 PM

To: info@ourtransitfuture.com

----- Forwarded message -----

From: David Calderwood

Date: Tue, Oct 13, 2015 at 10:16 PM

Subject: Oppose Light Rail - Safey - No Traffic Light

To: Info@ourtransitfuture.com

I oppose the proposed Durham – Orange Light Rail because there will be no traffic light at the Downing Creek Parkway and Hwy 54 intersection and it will be an at-grade crossing. Hwy 54 is a very busy highway and cars will run the real risk of the gate coming down behind the car that will have to be stopped on the tracks in order to get onto Hwy 54. The car will be trapped between the gate and cars on Hwy 54 and will get hit by the train. Please flag and investigate this intersection.

Sincerely,

David Calderwood

Oppose Light Rail - Safety, at-grade crossings

| David Calderwood |
|--|
| Sent: 10/13/2015 10:18 PM To: info@ourtransitfuture.com |
| I oppose the proposed Durham – Orange Light Rail because there are at-grade crossings and at-grade crossings are extremely dangerous for cars and pedestrians. |
| David Calderwood |
| |
| |
| |

Page 43

- 1 transportation solution will also benefit
- 2 overall community physical and mental
- 3 health.
- 4 While we are supportive of the
- 5 project and the routes, we appreciate that
- 6 some concerns remain regarding possible
- 7 equity and accessibility impacts as a
- 8 result of the project's location in
- 9 Durham.
- 10 Nonetheless, we are pleased that
- 11 GoTriangle has adopted a thoughtful
- 12 approach to collaborating with the
- 13 affected communities in resolving these
- 14 issues, and we are hopeful that this
- 15 collaboration will continue.
- 16 Again, SELC is happy to share our
- 17 overall support for this project and the
- 18 identified routes. We are carefully
- 19 reviewing the DEIS and will be submitting
- 20 more thorough written comments soon.
- 21 Thank you.
- 22 MR. JOYNER: Thank you. Next
- 23 speaker, please.
- 24 MR. KEITH CAMERON: My name is

1 Keith Cameron. I live at -- My address is

2

I pay taxes to

- 4 Durham City and County.
- 5 I gotta start now. An article in
- 6 the September 24th News & Observer quoted
- 7 a Democrat legislator from Durham as
- 8 saying Durham and Orange County voters
- 9 endorsed light rail when they levied the
- 10 local half cent sales tax to help pay for
- 11 it, closed quote. That is incorrect. The
- 12 tax was specified only for transportation
- 13 systems and said nothing about light
- 14 rail. I have a copy of the ballot right
- 15 here. I will read verbatim the entire
- 16 ballot. One-half percent local sales and
- 17 use taxes in addition to the current local
- 18 sales and use taxes to be used only for
- 19 public transportation systems. I want to
- 20 say again those last eight words, to be
- 21 used only for public transportation
- 22 systems.
- Buses are transportation, too, and
- 24 a far more efficient use of tax money than

Page 45

- 1 any permanently fixed rail line. The
- 2 routes can be changed very quickly as
- 3 needs change, whereas the rail lines
- 4 cannot. Buses are senior friendly and can
- 5 service the entire Durham-Orange area.
- 6 The Durham-Orange Light Rail could not
- 7 even help seniors get to a grocery store.
- 8 The rail line would likely use way more
- 9 than the funds allocated for
- 10 transportation systems. Therefore, where
- 11 will the money come from to assist with
- 12 the transpiration needs of our aging
- 13 population? I want to repeat, reemphasize
- 14 that this will not -- that any local rail
- 15 line will not get any cars off the road.
- 16 It didn't in Charlotte and it won't here.
- 17 And as far as low ridership, every
- 18 presentation I've ever seen by GoTriangle,
- 19 they've made it clear -- unless they've
- 20 changed, the ones I saw, they made it
- 21 clear that they really don't care if
- 22 nobody rides it apart from the ridiculous
- 23 low ridership, which can be documented.
- 24 They don't care if nobody rides it. They

Page 46

- 1 don't care about really anything else, the
- 2 egregious safety issues --
- 3 MR. JOYNER: Thank -- Thank you,
- 4 sir. Your two minutes are up.
- 5 MR. KEITH CAMERON: They just want
- 6 to force it through.
- 7 MR. JOYNER: Thank you, sir.
- 8 MS. ROSEMARIE WENZEL: I'm
- 9 Rosemarie Wenzel,
- I wanted to state that my daughter
- 12 lives in Houston, Texas, and the light
- 13 rail is not working there. People are not
- 14 riding it, and it's causing budget
- 15 overrides, and Houston, Texas, is the
- 16 fourth largest city in our state -- in our
- 17 United States.
- 18 Also this light -- light rail goes
- 19 through part of RTP that is not the growth
- 20 area of our region. It does not connect
- 21 to RDP [sic] and RDU in Wake County. It
- 22 is also underestimated on cost. Based on
- 23 Charlotte, 126 million per mile means over
- 24 \$2 billion in funding from the state is

No traffic light - LRT - oppose

Keith R. "KC" Cameron

Sent: 10/11/2015 7:59 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – Safety – no traffic light

I oppose the proposed Durham – Orange Light Rail because there will be no traffic light at the Downing Creek Parkway and Hwy 54 intersection and it will be an at-grade crossing. Hwy 54 is a very busy highway and cars will run the real risk of the gate coming down behind the car that will have to be stopped on the tracks in order to get onto Hwy 54. The car will be trapped between the gate and cars on Hwy 54 and will get hit by the train. Please flag and investigate this intersection.

Sincerely,
Keith R. Cameron

. Keith R. Cameron

Route - LRT - Against

Keith R. "KC" Cameron

Sent: 10/12/2015 8:57 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – Route

I oppose the proposed Durham – Orange Light Rail because the proposed route of the rail travels through low-density areas. Also, none of the entire region has a dense enough population for such a monster of transportation. This train does not service areas that would use it, nor does it take riders places that are needed, such as the Research Triangle Park, shopping, or the airport.

Sincerely,

Keith R. Cameron

Archaic mode of transportation - D-O LRT - Against

Keith R. "KC" Cameron

Sent: 10/12/2015 9:00 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – antiquated mode of transportation

I oppose the proposed Durham – Orange Light Rail because rail has become an antiquated mode of transportation for the 21st century. It is totally incompatible with up and coming technology.

Sincerely,

Keith R. Cameron

Unusable by seniors - D-O LRT - Against

Keith R. "KC" Cameron

Sent: 10/12/2015 9:03 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – unusable by the aging population

I oppose the proposed Durham – Orange Light Rail because it will not serve the aging population in this area. We have a very large aging population and transportation is becoming a huge issue for them and this population is getting larger every day. Seniors will need to ride buses that can take them to places they need to go and get closer to their doorstep for pick-up and drop-off. The financial resources used for this rail will use up any resources that could help seniors.

Sincerely,

Keith R. Cameron

Light rail never approved by voters - D-O LRT - AGAINST

Keith R. "KC" Cameron

Sent: 10/12/2015 9:08 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – Voters never voted on light rail

I oppose the proposed Durham – Orange Light Rail because the ballot that had the tax increase for transportation was only about "transportation systems," not rail. Rail was *never* mentioned on the ballot nor was it ever voted on. To say the people want light rail because they voted for it is a lie, or at best, ignorance. Do not consider the .05% tax increase a mandate for the rail; it is a mandate for improving "*transportation systems*."

Sincerely,

Keith R. Cameron

Is for Duke, UNC, and developers only - D-O LRT - Against

Keith R. "KC" Cameron ■

Sent: 10/12/2015 9:12 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – being built for Duke, UNC, and developers only

I oppose the proposed Durham – Orange Light Rail because it is clearly being built for Duke, UNC, and developers. Just follow the route and you can see, that is whom it serves and they want this for their private reasons at the expense of the taxpayers.

Sincerely,

Keith R. Cameron

No parking provided at stations - D-O LRT - Against

Keith R. "KC" Cameron

Sent: 10/12/2015 9:15 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – no parking at stations

I oppose the proposed Durham – Orange Light Rail because there will be little additional parking at most of the stations and several stations will have no parking at all, including the Woodmont station. Duke is not adding parking and neither is UNC. Most stations will be walk-up only and this will further minimize ridership, which, by the way, is extremely overstated by GoTriangle.

Sincerely,

Keith R. Cameron

Maintenance Facility - D-O LRT - Against

Keith R. "KC" Cameron

Sent: 10/12/2015 9:17 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – maintenance facility

I oppose the proposed Durham – Orange Light Rail because the proposed maintenance facility is in a rural but populated area close to a school. The originally proposed facility was to be in and area of Durham where most of the workers would reside and could walk to work and was close to the end of the line. This area is in the middle of the line so empty trains will have to come to it from either end of the line which means trains will be running empty deliberately and frequently. This is additional expense, pollution and noise. It is my understanding the original site for the facility was dropped because the land there is contaminated with chemical waste from a prior chemical plant and this would have to be cleaned-up in order to build the maintenance facility and GoTriangle did not want to spend that money. As a note, the residents in this poorer area of town still have to live with the toxicity and will not have the jobs they were promised.

Sincerely,

Keith R. Cameron

Minorities unserved - D-O LRT - Against

Keith R. "KC" Cameron

Sent: 10/12/2015 9:21 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – does not serve minorities

I oppose the proposed Durham – Orange Light Rail because it does not serve the poorest members of the population who need transportation and jobs more than Duke, UNC, and the developers.

Sincerely,

Keith R. Cameron

Cost - LRT - Against

Keith R. "KC" Cameron ■

Sent: 10/12/2015 8:54 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – Cost

I oppose the proposed Durham – Orange Light Rail because the construction will cost at least \$1.8 billion. This does not include cost over-runs. Based on accurate data, this rail will not even come close to solving traffic problems that could justify such an initial and on-going expense.

Sincerely,

Keith R. Cameron

No traffic light - LRT - oppose

Keith R. "KC" Cameron ■

Sent: 10/12/2015 8:45 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – Safety – no traffic light

I oppose the proposed Durham – Orange Light Rail because there will be no traffic light at the Downing Creek Parkway and Hwy 54 intersection and it will be an at-grade crossing. Hwy 54 is a very busy highway and cars will run the real risk of the gate coming down behind the car that will have to be stopped on the tracks in order to get onto Hwy 54. The car will be trapped between the gate and cars on Hwy 54 and will get hit by the train. Please flag and investigate this intersection.

Sincerely,

Keith R. Cameron



Safety - LRT - Against

Keith R. "KC" Cameron

Sent: 10/12/2015 8:49 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – Safety, at-grade crossings

I oppose the proposed Durham – Orange Light Rail because there are at-grade crossings and at-grade crossings are extremely dangerous for cars and pedestrians.

Sincerely,

Keith R. Cameron

- 1 Reform Synagog, Lerner Elementary School,
- 2 and the Jewish Federations Community
- 3 Center, all of which have high-density
- 4 population, day and night, weekday and
- 5 weekend.
- 6 Additionally, a ROMF at that site
- 7 implies land taking, literally eminent
- 8 domain taking of two to three acres of
- 9 land that is owned by the Jewish
- 10 Federation and slated for future
- 11 development. Finally, a ROMF at that
- 12 location would generate potential noise
- 13 and other things where quiet religious
- 14 activity occurs, and certainly during the
- 15 construction period between 2019 and 2026
- 16 and possibly thereafter. Thank you for
- 17 your consideration.
- 18 MR. JOYNER: Thank you, sir. Next
- 19 speaker.
- 20 MS. CAROLINE CAMERON: My name is
- 21 Caroline Cameron. I live at
 - I pay taxes in both.
- 24 There are numerous good reasons to

Page 36

- 1 be opposed to the Durham-Chapel Hill Light
- 2 Rail. The one point I would like to
- 3 address is that it is assumed by most that
- 4 the light rail will at least be safe.
- 5 This is a false assumption. The current
- 6 proposal includes at least one
- 7 intersection that will be extremely
- 8 dangerous. This is not just because it is
- 9 an intersection where the train runs at
- 10 grade level, ground level, but the key
- 11 danger is that there is not, nor will
- 12 there be, a traffic light at this
- 13 intersection. The intersection is Downing
- 14 Creek Parkway and Highway 54. NCDOT has
- 15 made it clear that there will -- they will
- 16 not put a traffic light in there. As cars
- 17 try to make their way onto the very busy
- 18 Highway 54, they will be forced to stop on
- 19 the tracks and run the real risk of the
- 20 rail gate coming down behind their car,
- 21 thus trapping them on the tracks.
- 22 Stopping on the tracks may be illegal, but
- 23 there will be no other way to get to
- 24 Highway 54 during most hours since the

Page 37

- 1 track -- the track will come very close to
- 2 the highway and there will be two tracks
- 3 side by side equaling a 30-foot span. A
- 4 car will be hard pressed to get onto
- 5 Highway 54 without stopping on the tracks
- 6 in order to get close enough to 54 to make
- 7 it into the traffic without a traffic
- 8 light.
- 9 Please note that the train will be
- 10 crossing this intersection 140 times every
- 11 day. Recipe for disaster. The danger is
- 12 not just to the people in the cars that
- 13 use this intersection but also to the
- 14 passengers on the train. Durham and
- 15 Chapel Hill officials involved in this
- 16 approval process, the NCDOT, and the
- 17 Federal Transit Administration all need to
- 18 take note and assume responsibility for
- 19 this potentially dangerous situation
- 20 they're proposing. I'm requesting the FTA
- 21 flag the Downing Creek-54 intersection and
- 22 research the safety of this intersection
- 23 before the rail is approved with any
- 24 federal monies. Thank you.

No Subject

Sincerely,

Sent: 10/11/2015 6:57 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail - Safety - no traffic light

I oppose the proposed Durham – Orange Light Rail because there will be no traffic light at the Downing Creek Parkway and Hwy 54 intersection and it will be an at-grade crossing. Hwy 54 is a very busy highway and cars will run the real risk of the gate coming down behind the car that will have to be stopped on the tracks in order to get onto Hwy 54. The car will be trapped between the gate and cars on Hwy 54 and will get hit by the train. Please flag and investigate this intersection.

Caroline Cameron

Caroline Cameron

Subject: Oppose Light Rail – Safety, at-grade crossings

Sent: 10/11/2015 7:00 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – Safety, at-grade crossings

I oppose the proposed Durham – Orange Light Rail because there are at-grade crossings and at-grade crossings are extremely dangerous for cars and pedestrians.

Sincerely,
Caroline Cameron

No Subject

Sent: 10/11/2015 7:08 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – federally protected wetlands

I oppose the proposed Durham – Orange Light Rail because it will cross federally protected wetlands 140 times per day. The Army Corps of Engineers maintains this land. Building it will destroy the habitat and it will never be able to recover because of the constant crossing of the train. The Army Corps of Engineers should never have approved this route. They were led to believe that Downing Creek residents wanted the Woodmont station and this is not true. A survey shows that 90% of Downing Creek residents do NOT want the rail.

Sincerely, Caroline Cameron

Caroline Cameron

Subject: Oppose Light Rail - Cost

Sent: 10/11/2015 7:09 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail - Cost

I oppose the proposed Durham – Orange Light Rail because the construction will cost at least \$1.8 billion. This does not include cost over-runs. Based on accurate data, this rail will not even come close to solving traffic problems that could justify such an initial and on-going expense.

Sincerely,

Caroline Cameron

Caroline Cameron

No Subject

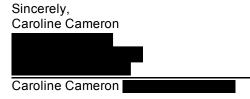
Sent: 10/11/2015 7:11 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail - Safety - no traffic light

I oppose the proposed Durham – Orange Light Rail because there will be no traffic light at the Downing Creek Parkway and Hwy 54 intersection and it will be an at-grade crossing. Hwy 54 is a very busy highway and cars will run the real risk of the gate coming down behind the car that will have to be stopped on the tracks in order to get onto Hwy 54. The car will be trapped between the gate and cars on Hwy 54 and will get hit by the train. Please flag and investigate this intersection.



Subject: Oppose Light Rail – Safety – no traffic light

Sent: 10/11/2015 7:15 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail - Safety - no traffic light

I oppose the proposed Durham – Orange Light Rail because there will be no traffic light at the Downing Creek Parkway and Hwy 54 intersection and it will be an at-grade crossing. Hwy 54 is a very busy highway and cars will run the real risk of the gate coming down behind the car that will have to be stopped on the tracks in order to get onto Hwy 54. The car will be trapped between the gate and cars on Hwy 54 and will get hit by the train. Please flag and investigate this intersection.

Caroline Cameron

Caroline Cameron

Sincerely,

No traffic light - oppose

Sent: 10/11/2015 7:21 AM

To: info@ourtransitfuture.com

I oppose the proposed Durham – Orange Light Rail because there will be no traffic light at the Downing Creek Parkway and Hwy 54 intersection and it will be an at-grade crossing. Hwy 54 is a very busy highway and cars will run the real risk of the gate coming down behind the car that will have to be stopped on the tracks in order to get onto Hwy 54. The car will be trapped between the gate and cars on Hwy 54 and will get hit by the train. Please flag and investigate this intersection.

Caroline Cameron

Caroline Cameron

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safety, at-grade crossings - oppose

Sent: 10/11/2015 7:26 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – Safety, at-grade crossings

I oppose the proposed Durham – Orange Light Rail because there are at-grade crossings and at-grade crossings are extremely dangerous for cars and pedestrians.

Sincerely, Caroline Cameron

Caroline Cameron

wetlands destroyed - oppose

Sent: 10/11/2015 7:27 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail - federally protected wetlands

I oppose the proposed Durham – Orange Light Rail because it will cross federally protected wetlands 140 times per day. The Army Corps of Engineers maintains this land. Building it will destroy the habitat and it will never be able to recover because of the constant crossing of the train. The Army Corps of Engineers should never have approved this route. They were led to believe that Downing Creek residents wanted the Woodmont station and this is not true. A survey shows that 90% of Downing Creek residents do NOT want the rail.

Sincerely,
Caroline Cameron

Caroline Cameron

cost - oppose

Sent: 10/11/2015 7:29 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail - Cost

I oppose the proposed Durham – Orange Light Rail because the construction will cost at least \$1.8 billion. This does not include cost over-runs. Based on accurate data, this rail will not even come close to solving traffic problems that could justify such an initial and on-going expense.

Sincerely,

Caroline Cameron

Caroline Cameron

route - LRT - oppose

Sent: 10/11/2015 7:31 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail - Route

I oppose the proposed Durham – Orange Light Rail because the proposed route of the rail travels through low-density areas. And in addition, the entire region does not have a dense enough population for such a monster of transportation. This train does not service areas that would use it, nor does it take riders places that are needed, such as the Research Triangle Park, shopping, or the airport.

Sincerely,
Caroline Cameron

Caroline Cameron

No traffic light - LRT - oppose

Sent: 10/11/2015 7:36 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail - Safety - no traffic light

I oppose the proposed Durham – Orange Light Rail because there will be no traffic light at the Downing Creek Parkway and Hwy 54 intersection and it will be an at-grade crossing. Hwy 54 is a very busy highway and cars will run the real risk of the gate coming down behind the car that will have to be stopped on the tracks in order to get onto Hwy 54. The car will be trapped between the gate and cars on Hwy 54 and will get hit by the train. Please flag and investigate this intersection.

Caroline Cameron

Caroline Cameron

Sincerely,

Safety at-grade - LRT - oppose

Sent: 10/11/2015 7:38 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – Safety, at-grade crossings

I oppose the proposed Durham – Orange Light Rail because there are at-grade crossings and at-grade crossings are extremely dangerous for cars and pedestrians.

Sincerely, Caroline Cameron

Caroline Cameron

Wetlands - LRT - oppose

Sent: 10/11/2015 7:40 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail - federally protected wetlands

I oppose the proposed Durham – Orange Light Rail because it will cross federally protected wetlands 140 times per day. The Army Corps of Engineers maintains this land. Building it will destroy the habitat and it will never be able to recover because of the constant crossing of the train. The Army Corps of Engineers should never have approved this route. They were led to believe that Downing Creek residents wanted the Woodmont station and this is not true. A survey shows that 90% of Downing Creek residents do NOT want the rail.

Sincerely,
Caroline Cameron

Caroline Cameron

Cost - LRT - oppose

Sent: 10/11/2015 7:41 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail - Cost

I oppose the proposed Durham – Orange Light Rail because the construction will cost at least \$1.8 billion. This does not include cost over-runs. Based on accurate data, this rail will not even come close to solving traffic problems that could justify such an initial and on-going expense.

Sincerely,

Caroline Cameron

Caroline Cameron

Maintenance facility - LRT - oppose

Sent: 10/11/2015 7:54 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail - maintenance facility

I oppose the proposed Durham – Orange Light Rail because the proposed maintenance facility is in a rural but populated area with a school close by. The originally proposed facility was to be in and area of Durham where most of the workers would reside and could walk to work and was close to the end of the line. This area is in the middle of the line so empty trains will have to come to it from either end of the line which means trains will be running empty deliberately and frequently. This is additional expense, pollution and noise. It is my understanding the original site for the facility was dropped because the land there is contaminated with chemical waste from a prior chemical plant and this would have to be cleaned-up in order to build the maintenance facility and GoTriangle did not want to spend that money. As a note, the residents in this poorer area of town still have to live with the toxicity and will not have the jobs they were promised.

Caroline Cameron

Route - LRT - oppose

Sent: 10/11/2015 7:42 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail - Route

I oppose the proposed Durham – Orange Light Rail because the proposed route of the rail travels through low-density areas. And in addition, the entire region does not have a dense enough population for such a monster of transportation. This train does not service areas that would use it, nor does it take riders places that are needed, such as the Research Triangle Park, shopping, or the airport.

Sincerely, Caroline Cameron

Caroline Cameron

antiquated rail - LRT - oppose

Sent: 10/11/2015 7:44 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – antiquated mode of transportation

I oppose the proposed Durham – Orange Light Rail because rail has become an antiquated mode of transportation for the 21st century. It is totally incompatible with up and coming technology.

Sincerely, Caroline Cameron

Caroline Cameron cscameron@att.net

Unusable rail - LRT - oppose

Sent: 10/11/2015 7:45 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – unusable by the aging population

I oppose the proposed Durham – Orange Light Rail because it will not serve the aging population in this area. We have a very large aging population and transportation is becoming a huge issue for them and this population is getting larger every day. Seniors will need to ride buses that can take them to places they need to go and get closer to their doorstep for pick-up and drop-off. The financial resources used for this rail will use up any resources that could help seniors.

Caroline Cameron

Caroline Cameron

Sincerely,

Aging population can't use - LRT - oppose

Sent: 10/11/2015 7:46 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – unusable by the aging population

I oppose the proposed Durham – Orange Light Rail because it will not serve the aging population in this area. We have a very large aging population and transportation is becoming a huge issue for them and this population is getting larger every day. Seniors will need to ride buses that can take them to places they need to go and get closer to their doorstep for pick-up and drop-off. The financial resources used for this rail will use up any resources that could help seniors.

Caroline Cameron

Caroline Cameron

Sincerely,

Voter did not approve - LRT - oppose

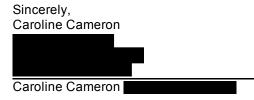
Sent: 10/11/2015 7:48 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – Voters never voted on light rail

I oppose the proposed Durham – Orange Light Rail because the ballot that had the tax increase for transportation was only about "transportation systems" not rail. Rail was never mentioned on the ballot nor was it ever voted on. To say the people want light rail because they voted for it is a lie, or at the best, it is ignorance. Do not consider the .05% tax increase a mandate for the rail; it is a mandate for improving transportation.



Not for the people - LRT - oppose

Sent: 10/11/2015 7:50 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – being built for Duke, UNC and developers only

I oppose the proposed Durham – Orange Light Rail because it is clearly being built for Duke and UNC and developers. Just follow the route, that is whom it serves and they want this for their private reasons at the expense of the taxpayers.

Sincerely, Caroline Cameron

Caroline Cameron

No parking - LRT - oppose

Sent: 10/11/2015 7:51 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail - no parking at stations

I oppose the proposed Durham – Orange Light Rail because there will be little additional parking at most of the stations and several stations will have no parking at all, including the Woodmont station. Duke is not adding parking and neither is UNC. Most stations will be walk-up only and this will further minimize ridership, which, by the way, is extremely overstated by GoTriangle.

Sincerely,
Caroline Cameron

Caroline Cameron

Not serve poor - LRT - oppose

Sent: 10/11/2015 7:55 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – does not serve the poorest of the population

I oppose the proposed Durham – Orange Light Rail because it does not serve the poorest members of the population who need transportation and jobs more than Duke, UNC and the developers.

Sincerely, Caroline Cameron

Caroline Cameron

Please don't build the ROMF at Cornwallis Road

fcassen

Sent: 9/29/2015 1:35 PM

To: info@ourtransitfuture.com

Dear GoTriangle:

While I support the light rail transit project, I would like to ask you to please not build the ROMF at Cornwallis Road. It will increase traffic and noise as well as security issues around the Jewish campus on Cornwallis Road. As a parent of two young children who use these facilities, I am very concerned about this. Thank you for your consideration.

Flora

Suggested additional station

Diane Catotti

Sent: 9/10/2015 5:26 PM

To: info@ourtransitfuture.com

With the NEPA preferred alternative NHC 2, I would like a new station considered at Garrett rd and 15-501.

Diane Catotti



Light-rail Comment

Robert & Pat Chappell

Sent: 9/13/2015 10:22 PM

To: info@ourtransitfuture.com

I was always surprised the first Chapel Hill line would be to Durham. I believe a Chapel Hill line to RTP and the airport would attract more riders and be on more sound financial footing.

Robert Chappell

- 1 in the back row can hear me. If not,
- 2 please wave your hand and let me know that
- 3 I need to speak a little louder or closer
- 4 to the microphone. And we'll try to do
- 5 the same for the speakers, as well, if
- 6 they're not able to be heard.
- 7 So with that, we'll go ahead and
- 8 begin. Any of our speakers that have the
- 9 number 1 on their card, if you would, walk
- 10 around to the back over to Jeffrey, who's
- 11 waving his hand or holding his hand up,
- 12 and we will get you lined up to speak.
- 13 And I failed to mention one piece
- 14 of logistics, as well. When the speakers
- 15 come up, the cards that you have, if you
- 16 would hand that to Robert, and he will
- 17 make sure that it gets to the court
- 18 reporter so that they'll have your name
- 19 and address.
- With that, our first speaker, if
- 21 you would approach the microphone.
- 22 MR. JAMES CHAVIS: Good
- 23 afternoon. My name is James Chavis. I
- 24 stay at

Page 11

1 known

- 2 as the east Durham area and District I.
- 3 I'm here today to tell you all
- 4 that our area, along with me, are
- 5 dissatisfied with this light rail system.
- 6 And the reason why we're dissatisfied,
- 7 because we got lied to. You said to us
- 8 you was coming to our area and asked us to
- 9 vote for this. Well, we voted for it, and
- 10 in the meantime you've been having
- 11 meetings and asking different questions
- 12 and still some of them have not been
- 13 answered.
- 14 Then found out at the very end we
- 15 are no longer going to be a part of what
- 16 our taxpayer money that drives -- you
- 17 know, drivers are paying for this. Well,
- 18 I am a driver, and I just got through
- 19 paying this year for it, again. So how do
- 20 you think I feel about it? I am very
- 21 dissatisfied, and I hope you'll find a way
- 22 that we can discontinue this. Thank you.
- 23 MR. JOYNER: If you would, please,
- 24 hand your card to Robert. Thank you.

Get Involved Contact Form

David Charters

Sent: 10/10/2015 9:16 AM

To: info@ourtransitfuture.com

Name: David Charters

Phone Number:

Email Address:

Message Body:

A viable transit network is an important component to improve the quality of life and sustain the economic development of a region. The Triangle Region is on the door step of embarking on a mission to provide a viable transit network to this area, and this opportunity should not be missed. A light rail transit system to compliment a robust bus network is the correct mix of transit modes for the Chapel Hill - Durham corridor. Running on an exclusive guideway, the light rail system will consistently and efficiently move students, faculty, family members, workers, business people and visitors to our wonderful region through this corridor. Having a light rail system will continue to attract businesses to this region as they envision a state-of-the-art transit system being planned, designed and constructed. It will focus the increasing number of developments around station areas to provide an environmentally friendly and sustainable use of the limited available land and natural resources

. The Triangle Region should complete the light rail transit system as soon as possible to take advantage of its many benefits.

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This e-mail was sent from a contact form on Our Transit Future (http://ourtransitfuture.com)

D-O Light Rail Project - DEIS

Susan Christopher

Sent: 10/12/2015 7:59 AM

To: info@ourtransitfuture.com

The proposed light rail project comes at a tremendous cost in terms of money, environmental impact, safety concerns, and community discord. It is scheduled to cost over \$1 billion, impact hundreds of acres of habitat, run adjacent to an elementary school, and potentially destroy a beautiful historic site. It does nothing to connect Chapel Hill with Raleigh; the I-40 Corridor connecting these cities is arguably our area's greatest traffic problem. Likewise, it will not take riders to Southpoint Mall or the airport, two popular destinations. Further, the proposed route does not branch out into neighborhoods; instead, riders must drive or take a bus to a station which could be 10-15 minutes from their home and then ride the train, potentially increasing their commute time and, we suspect, limiting ridership.

We have seen nothing that convinces us that the proposed project is worth the price that we are all being asked to pay.

Susan and Bill Christopher

light rail stop in East Durham, please

| Linda | Chupkowski | |
|-------|----------------------------|--|
| Sent: | 10/5/2015 5:34 PM | |
| То: | info@ourtransitfuture.com, | |

As a resident of Old East Durham, I strongly support and desire a light rail stop that goes beyond Alston Ave into my neighborhood (perhaps at Driver St.). I work in Chapel Hill and would use the light rail every day if it existed now.

Thanks, Linda Chupkowski

light-rail

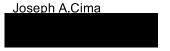
Sent: 9/8/2015 10:27 AM

To: info@ourtransitfuture.com

Sirs;

The idea of light rail joining UNC Hospitals to East Durham is a very poor idea. I object to it on many grounds. I do not want my tax money at either the local, state or federal used for such a boondogle. It will service a very select group of people, it will be very expensive, it will be prone to serious interruptions with our existing traffic patterns, it will be a night mare to fix and maintain traffic flow, parking to get have access will be expensive, it will detract from the present ambiance of the town, etc.

This is a ridiculuous idea and should be abdoned immediately.



Oppose Light Rail along NC54

Katy Cimo

Sent: 10/12/2015 11:27 AM

To: info@ourtransitfuture.com

I am <u>not</u> in favor of the light rail on the proposed NC54, and no Federal or State money should fund this project. This project would only (arguably) benefit the residents of Chapel Hill, NC and the Durham, NC communities. If these residents believe this to be a beneficial and effective method of transportation, they should fund this project themselves. This project does not benefit the non-Triangle residents of the State of North Carolina or the United States in any way. Next, this proposed light rail routes are unpopular and put environmental concerns above the needs and concerns of the local residents. This is not acceptable. There ARE much less disruptive routes that should be utilized, which do not devalue resident's property values to the extent these current routes do.

If this light rail plan is to be implemented, the impact on the human residents of the town of Chapel Hill and Durham should be considered more significantly than the environmental impact. This light rail plan will devalue the property values of communities adjacent to the light rail tracks, which will have a negative impact on many hard-working, middle class families who feel betrayed by their communities for pushing this plan.

The bottom line is that the current light rail routes are being foisted upon the town by the powerful affluent residents of certain neighborhoods (e..g, Meadowmont). These affluent citizens have pushed the light rail out of their neighborhoods and line of visibility, onto the middle-class neighborhoods that to do not have the political clout that Meadowmont does. The fact is, if the people of Chapel Hill thought light rail was such a good idea, then they would have embraced it and welcomed these routes, not pushed it out to the farthest boundaries, and less affluent footprints of their town.

These proposed light rail routes will be a disaster to the residents of Route 54NC and the light rail plan should be abandoned. It is already an outdated technology, and will only be more obselete by time it is built out.

I strongly urge you to vote AGAINST the Light Rail and to offer NO Federal money or State money to this project. Kathleen Cimo

Light rail comment

Sent: 9/17/2015 3:53 PM

To: info@ourtransitfuture.com

Hi,

This may sound counterintuitive in this time of sparse and threatened funding, but I think that the Orange & Durham Counties light rail project should not locate its eastern terminus on Alston Avenue. I think that the rail line should punch its way on to RDU and locate its terminus at the airport - not near the airport, but muscle its way onto the ground floor of the parking deck between the terminals.

RDU has roughly 10 million passengers arrival & departures per year. I think that only increases. Let's say 33% (3.3 million) of all RDU passengers originate from Orange / Durham counties. Of that number would 15 % (roughly 1/2million) ride the rails home? This added ridership could subsidize if not sustain the annual ridership required for solvency.

The additional few miles from Alston Avenue to RDU is mostly pastoral (or at least less congested) and would also pass through the RTP making the extra miles cost effective.

I understand that there may be vested (parking concession) interests involved, but that would be a worthy fight to have in the full light of public scrutiny.

Putting the eastern terminus at RDU, I heartily suggest, would be both forward thinking and financially sensible. You can't beat that.

Sincerely,

Gordon Clay

Durham-Orange Light Rail Transit Project Official Public Comment

| Name: Made Claud | | | |
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| Mailing Addres | Zip Code: | | |
| How to Comment on the DEIS 1. Email us at info@ourtransitfuture.com 2. Submit a web-based comment form: ourtransitfuture.com/comment 3. Mail a letter to D-O LRT Project - DEIS, C/O GoTriangle, Post Office Box 530, Morrisville, NO 4. Submit a written comment form at two public information sessions and two public hearing. 5. Sign-up to speak at a public hearing. | gs. | | |
| All methods of commenting will receive equal weight. All comments will be reviewed and conside combined Final Environmental Impact Statement (FEIS)/Record of Decision (ROD), which is expensive substantive comments will be included in the combined FEIS/ROD. | | | |
| Be advised that your entire comment, including name, address, phone number, email address, or information in your comment may be subject to the North Carolina Public Records Act (N.C.G.S. | | | |
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Durham-Orange Light Rail Transit Project Official Public Comment

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- 1 youngest citizens.
- 2 17 acres of trucks, repairmen, and
- 3 rail workers, how can this be safe?
- 4 MR. ANDY SLAUGHTER: My name is
- 5 Andy Slaughter, and I live at
- 7 And I'm just here to speak quickly
- 8 about my support for the light rail
- 9 system, as demonstrated. Mainly just
- 10 because I think that without a dedicated
- 11 transit corridor that the light rail will
- 12 provide, we're basically investing in more
- 13 sprawl and we're basically investing in
- 14 more congestion as our region grows over
- 15 the next few decades, which it inevitably
- 16 will. So thank you, and I -- again, I
- 17 support light rail and let's not be Wake
- 18 County.
- 19 MR. TOM CLARK: I'm Tom Clark. I
- 20 live at |
- 22 I've lived in Durham and Orange
- 23 all of my 68 years, so I've had a lot of
- 24 opportunities to step back and watch what

Page 74

- 1 goes on in the communities around here.
- 2 I heard a comment earlier about
- 3 the growth in the Triangle and that that
- 4 was one of the reasons we need this light
- 5 rail. Well, I disagree with that. Yes,
- 6 the Triangle is growing by leaps and
- 7 bounds, but it's not in Durham and Orange
- 8 County. It's in Wake County. Wake County
- 9 is not in the scope of what we're trying
- 10 to accomplish here.
- We do have a transportation
- 12 problem, but we're trying to solve it with
- 13 the wrong solution. One of my colleagues
- 14 at Duke had a great saying, you don't need
- 15 a cannon to kill a rat, and I think that's
- 16 what we're trying to do now.
- 17 It's a very expensive, inflexible
- 18 approach to a problem that we do have. I
- 19 like something that Wake County's talking
- 20 about with dedicated bus routes, not buses
- 21 on the regular streets, because they are
- 22 subject to whatever's going on with the
- 23 traffic. You have a wreck, you can't stay
- 24 on schedule.

Page 75

I think we need to do something 1 2 with a much more sophisticated bus -- bus system that has dedicated lanes it can be 3 4 in so that it can stay on schedule and provide service to our citizens. 5 I think this light rail has got 6 7 some very attractive destination points, yes, Chapel Hill, UNC, and downtown here 8 and over at Duke, et cetera, but how are 9 10 you going to get the people into the system to use it? People are not going to 11 12 drive their cars somewhere and park and 13 get on a train to go somewhere when they 14 can get there quicker without that, or 15 certainly people that don't have the 16 means, they're not going to hire a taxi to 17 take them to a train stop somewhere to get 18 on the train to get from point A to point 19 B. 20 It's not in our mindset to work 21 that way here. We don't have the 22 population density to support that way of 23 moving around. We're not Portland, 24 Oregon, or Norfolk or some of these other

- 1 places that have those densities, and I
- 2 really don't think we will because,
- 3 truthfully, I don't want us to have that
- 4 kind of density. I like the fact that
- 5 we're not overpopulated around here.
- 6 Thank you.
- 7 MS. LORISA SEIBEL: Hello. My
- 8 name is Lorisa Seibel. I live at
- 10 And I'm a member of the Durham People's
- 11 Alliance and also of Durham CAN, two local
- 12 groups that supported the referendum for
- 13 funding the light rail and improvements to
- 14 our bus system.
- We are in support of improving
- 16 transit for all residents of Durham, and
- 17 we're also in support of making sure that
- 18 that transit is accessible and that
- 19 housing is affordable around each transit
- 20 station so that everyone in Durham, no
- 21 matter what their income, can benefit from
- 22 transit improvements to be able to get to
- work, to school, to the doctors, and other
- 24 places.

Durham-Orange Light Rail Transit Project Official Public Comment

| Name: Tom Clark | Email | |
|--|---------------------|--------------|
| Mailing Address: | City: | Zip Code: |
| How to Comment on the DEIS 1. Email us at info@ourtransitfuture.com 2. Submit a web-based comment form: ourtransitfuture.com 3. Mail a letter to D-O LRT Project - DEIS, C/O GoTriangle, Polyander of the Submit a written comment form at two public informations of Sign-up to speak at a public hearing. | ost Office Box 530, | |
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www.ourtransitfuture.com

Durham-Orange Light Rail Transit Project

Official Public Comment

| Please leave your comment on the Draft Environmental Impact Statement: | Please return this form to the comment | | |
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Durham-Orange Light Rail Transit Project Official Public Comment Email: Telephon Zip Cod Mailing Addre City How to Comment on the DEIS Email us at info@ourtransitfuture.com Submit a web-based comment form: ourtransitfuture.com/comment Mail a letter to D-O LRT Project - DEIS, C/O GoTriangle, Post Office Box 530, Morrisville, NC 27560 3. Submit a written comment form at two public information sessions and two public hearings. Sign-up to speak at a public hearing. All methods of commenting will receive equal weight. All comments will be reviewed and considered as part of the development of the combined Final Environmental Impact Statement (FEIS)/Record of Decision (ROD), which is expected in February 2016. A response to substantive comments will be included in the combined FEIS/ROD. Be advised that your entire comment, including name, address, phone number, email address, or any other personal identifying information in your comment may be subject to the North Carolina Public Records Act (N.C.G.S. § 132.1 et seg.). Please leave your comment on the Draft Environmental Impact Statement:

Please Turn Over ----



Durham-Orange Light Rail Transit Project

Official Public Comment

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Submitting comments on DEIS

David Cocchetto

Sent: 9/26/2015 9:51 AM

To: info@ourtransitfuture.com

My understanding is that the Draft Environmental Impact Statement for the proposed Durham-Orange Light Rail Transit project is open for comment until October 12, 2015. I have been a resident of Durham for many years and I value the opportunity to provide comments. I am attaching a pdf of my letter (dated September 26, 2015) with comments on the DEIS.

Thank you for your consideration.

David Cocchetto

Attachments: Letter-to-TriangleTransit-Sept2015.pdf

David M. Cocchetto

D-O LRT Project – DEIS c/o Triangle Transit PO Box 530 Morrisville, NC 27560

RE: Comments in Response to Draft Environmental Impact Statement (EIS) for the proposed Durham-Orange Light Rail Transit Project

Dear Sir:

The purpose of this letter is to provide written comments for your consideration regarding the proposed Durham-Orange Light Rail Transit (D-O LRT) project. Based on public notices published in *The News & Observer* and posted on your website (http://ourtransitfuture.com), my understanding is that the project (including the draft EIS) is open for comment until October 12, 2015.

I have been a resident of the Durham and Chapel Hill area for over 30 years. During this time, my wife and I have owned homes in Chapel Hill and Durham. Currently, I reside on Marcella Court in a neighborhood off Farrington Road in Durham. I have worked and been active in the Durham community for many years. I have followed with keen interest the information and proposals regarding rail transit in the Triangle area.

In this letter, I am providing the following main comments along with information on the basis for my positions:

- I support the "no build" alternative. I am opposed to construction of the proposed light rail system in the Durham and Chapel Hill areas.
- I am opposed to all proposed routes with any rail line adjacent to Farrington Road.
- I am opposed to construction of a Rail Operations and Maintenance Facility (ROMF) on Farrington Road.

My opposition to the proposed D-O LRT system is due to the greatly diminished scope of this project, particularly following withdrawal of Wake County from participation in light rail. The proposed D-O LRT system will not provide rail service to many of the most popular destinations in the Durham and Chapel Hill areas, and it will not provide any rail service to any location in Wake County. The estimates of riders per day seem very high relative to the data on riders on the existing LRT system in Charlotte, NC. The LRT system slows travel, rather than speeding travel; projected travel between Chapel Hill and Durham in 2040 is

slower on D-O LRT (42-44 minutes) and faster by car (27 minutes) and bus rapid transit (39 minutes). Further, the pace of light rail must be even slower during the months when temperatures are above 90°. Taken together, the diminished scope of the project, lack of service to many popular destinations, inflexibility, high front-loaded cost of a static rail system, slow pace of travel, and apparent overestimates of riders will result in a higher than projected burden on taxpayers and an underutilized light rail system. For these reasons, the proposed D-O LRT should <u>not</u> be built.

My opposition to all routes that include any rail line adjacent to Farrington Road and my opposition to construction of a ROMF on Farrington Road are due to (1) the lack of prospective disclosure to homeowners in this area (while the future plan for construction of a light rail system in their development was prospectively disclosed to future homeowners in Meadowmont), (2) the inevitable increase in traffic congestion on the already congested corridors on NC 54, Farrington Road, and US 15-501, (3) the negative impact of increased traffic congestion and road-level rail crossings on timely service by emergency vehicles, (4) my support for the factors stated by the Durham City-County Planning Department that currently preclude construction of rail lines and the ROMF on Farrington Road, (5) noise pollution due to frequent, high decibel train horns imposed on homeowners along NC 54 and Farrington Road, (6) the negative impact on a historic site (Patterson's Mill Store) on Farrington Road, and (7) light rail cars on lines adjacent to I-40 comprising an additional distraction, potentially leading to more high-speed accidents, particularly for drivers in the eastbound lanes on I-40 between US 15-501 and NC 54.

The remaining pages of this letter provide additional comments in opposition to light rail transit, in particular my opposition to construction of a ROMF on Farrington Road and my opposition to construction of any route with a rail line adjacent to Farrington Road.

<u>Change in participating municipalities</u>: In 2011, we in Durham had the opportunity to vote on a new tax for public transportation. Since Wake County decided against a light rail system, the original premise for the tax is no longer valid and the markedly different plan (with a much shorter rail line, slower trains, and no stations serving many major venues) for light rail in Durham and Chapel Hill should be terminated.

Prospective disclosure: Those of us in neighborhoods adjacent to NC 54 and Farrington Road (e.g., Downing Creek, Falconbridge, Culp Arbor, and Glenview Park) had no prior notice before buying or building a home that our property would be adjacent to a light rail line or a Rail Operations Maintenance Facility. We had no prospective full disclosure. In contrast, future residents of Meadowmont had prospective disclosure - - they knew the site plan included light rail when they bought their lots and decided to build their homes. The Meadowmont site plan (as approved by local authorities) was designed and approved with light rail traveling through this development. It is wrong to transfer the burdens of the D-O light rail line from homeowners in Meadowmont who had prospective disclosure to homeowners in other neighborhoods who did not have disclosure prior to buying or building their homes.

<u>Popular venues without rail service</u>: As a longstanding resident of Durham, I would be interested in rail service if it provided a means of transportation to stations at popular venues. It is not obvious to me who would be interested in riding on D-O LRT due to the lack of stations at many of the area's most popular venues. The decision-making authorities for D-O LRT, reviewers, and people who review requests for funds should carefully consider the likelihood of failure of D-O LRT in view of the fact that rail service is <u>not</u> provided to stations at the following popular venues:

Downtown Chapel Hill (e.g., Franklin St.)
Carrboro (e.g., Main St., Carr Mill area)
UNC Chapel Hill campus
Duke University (main campus)
NCCU campus
Durham Technical Community College
Seymour Center
Durham Center for Senior Life
University Mall
Streets at Southpoint Mall
Northgate Mall

Kenan Stadium
Dean Smith Center
Wallace Wade Stadium
Cameron Indoor Stadium
Duke Regional Hospital
American Tobacco Campus
Durham Performing Arts Center
Durham Bulls Athletic Park
Raleigh-Durham Airport

Without stations at these popular venues, I understand why some of my neighbors have called the proposed D-O LRT the "train to nowhere".

Input from the Durham City-County Planning Department: I noted the written comments provided by the Durham City-County Planning Department to Triangle Transit on March 13, 2015. I commend the Durham City-County Planning Department for providing comments that are clear and specific regarding the location of the proposed ROMF and certain other aspects of light rail. Note that the required buffer for the stream on parcel 0709-03-32-5392 on Farrington Road may make construction of the proposed ROMF nonviable. I obtained additional information on this topic at the public meeting with GoTransit on September 15, 2015 at The Friday Center. At the meeting, I spoke with a representative of GoTransit about the stream on the property at Farrington Road, i.e., the proposed site of the ROMF. I asked about GoTransit's plan to meet the required buffer around the stream (as stated in a letter of March 13, 2015 from the Durham City-County Planning Department to Triangle Transit). I was informed that GoTransit proposes not to comply with the buffer, but rather to enclose the stream inside a culvert that will go under the ROMF's parking lot. Such a culvert is a bad idea and a deviation from Durham's current requirements. Residents of Durham and Chapel Hill will be familiar with two well publicized examples of culverts that have failed. In Durham, the Rockwood Building (at the intersection of University Drive and James Street) has a history multiple businesses with repeated flooding due in part to a culvert that fails to function properly in handling water from a stream. In Chapel Hill, Eastgate Shopping Center (1800 East Franklin Street) is built over a culvert that fails, periodically, to handle water from a stream. Multiple businesses at Eastgate Shopping Center have flooded due to problems with the culvert. In view of these prominent examples in our own communities, Durham County

should not accept GoTransit's proposal to enclose the stream on Farrington Road in an underground culvert. GoTransit should honor the required buffer as stated by the Durham City-County Planning Department.

I also want to highlight my support for the following statements in the letter (dated March 13, 2015) from the Durham City-County Planning Department:

- 1. Regarding the proposed Farrington Road location for a ROMF:
 - "We find an industrial use to be incompatible with the existing land use pattern and/or designated future land uses."
 - "It appears there may be a stream crossing parcel 0709-03-32-5392. If it is determined to be a perennial stream, a buffer of 100 feet would be required. An intermittent stream would require a buffer of 50 feet. This would significantly alter the proposed footprint of the ROMF."
- 2. Regarding the proposed Leigh Village:
 - "We find an industrial use to be incompatible with the existing land use pattern and/or designated future land uses."
 - "It appears there may be a stream crossing parcel 0709-03-32-5392. If it is determined to be a perennial stream, a buffer of 100 feet would be required. An intermittent stream would require a buffer of 50 feet. This would significantly alter the proposed footprint of the ROMF."

Location of ROMF: The NEPA preferred alternative for the location of the ROMF is the site on Farrington Road. However, through information in the DEIS, newspapers, and other sources, I have come to understand that the Farrington Road site was the only one of the alternative sites that was even viable. I was told at the public meeting on September 15 that the Cornwallis Road site was never viable due to property deeded to the neighboring Jewish congregation. I've read in various documents that the Alston Avenue site was not viable due to the location of a water tower and existing businesses, while the Patterson Place site was not viable due to issues with creek in that location. GoTransit should re-open consideration of location of the ROMF so that at least two truly viable locations are considered. Surely a forthright selection process must include more than one viable option for the location of the ROMF.

Adverse impact of routes on multiple neighborhoods: Many public comments have clearly stated that multiple rail routes will have multiple adverse impacts on longstanding residential neighborhoods along NC 54 and Farrington Road. Specifically, these neighborhoods include Culp Arbor, Downing Creek, and Falconbridge. Homeowners in these neighborhoods (who are all taxpayers in Durham County) have stated their concerns about the marked increase in congestion that will be caused by multiple street-level train crossings, as well as the adverse impacts of a ROMF on Farrington Road.

<u>Traffic congestion</u>: The proposed plans call for thousands of rail riders to drive on I-40, NC 54, and US 15-501 to parking lots near rail stations (e.g., The Friday Center, Leigh Village). The rail plans do not appear to account for the increase in volume of motor vehicles on these already congested roads or the increase in road congestion that will result from the multiple, proposed, road-level rail crossings along NC 54 (between the I-40 interchange at NC 54 and the intersection of NC 54 and US 15-501). These proposed crossings will impede motor vehicles and slow the very commuters the plan proposes to assist.

Road-level crossings are proposed to be operating 24 hours a day, 7 days a week, with traffic to be stopped every 10 minutes during peak hours. Such crossings will delay thousands of drivers every day. Such crossings will also delay emergency responders. Note that these crossings in the NC 54 corridor will also wreak havoc with UNC alumni, sports fans, and others attempting to travel to and from Kenan Stadium and the Dean Smith Center to attend games and other events.

Table 3.2-4 in the DEIS provides a roster of at-grade interfaces for the proposed light rail line. Note the large number of interfaces in the relatively short distances from UNC to US 15-501. Specifically, Table 3.2-4 lists 17 at-grade interfaces from UNC to NC 54 and an additional 13 at-grade interfaces from University Drive to US 15-501. This large number of interfaces, including multiple road-level crossings, will further increase congestion for emergency vehicles, automobiles, and buses on NC 54, US 15-501, and Farrington Road.

Crossing near Farrington Road: The C2A route includes a road-level crossing west of the intersection of Farrington Road and NC 54. Some of us residents along Farrington Road object to the delay of emergency vehicles caused by rail crossings and associated traffic congestion. Farrington Road is commonly used by emergency vehicles traveling to southwest Durham and Chapel Hill. Durham has two active fire stations on Farrington Road itself, i.e., 4200 Farrington Road and 6303 Farrington Road. Today, none of the emergency vehicles from these two stations are delayed by light rail. However, if routes with road-level crossings along NC 54 and near Farrington Road are implemented, emergency vehicles from these two fire stations, as well as police and other emergency vehicles, will be adversely impacted, inevitably prolonging emergency response times.

<u>Traffic on Farrington Road</u>: I live in a development off Farrington Road. I would be adversely impacted by the anticipated increase in traffic as employees of the ROMF (proposed for Farrington Road) drive to and from work. The ROMF would be open 24 hours a day, 7 days a week, thereby producing an increase, every day, in the number of drivers using Farrington Road. This source of increased traffic on Farrington Road is only one of the multiple, new sources of traffic and congestion fostered by light rail on Farrington Road, i.e.,

- Employees of the ROMF driving to and from work
- Commuters using Farrington Road to drive to lots where they can park and then board a light rail car
- drivers diverting to Farrington Rd in hope of avoiding congestion on NC 54 or US 15-501
- a road-level crossing near the intersection of Farrington Road and NC 54
- traffic congestion due to delayed emergency vehicles (who always have the right-of-way)

<u>Parking</u>: The proposed light rail system requires riders to get to stations where they can board a train. Many riders will get to a station by driving. Unfortunately, most stations appear to have inadequate parking adjacent to the stations. Lack of adequate parking, particularly free parking, will be a substantial disincentive to many riders to use light rail.

Potential for accidents on I-40: My understanding is that various rail routes take the train from the eastern side of Farrington Road to tracks that parallel I-40 (running below the road bridge, under Farrington Road and adjacent to I-40) until the train reaches 15-501, at which time the train proceeds north towards Durham. Just as human nature prompts many automobile drivers to be distracted and "rubber neck" at various sites along the highway, there is a very real danger that drivers along I-40 will be distracted by a train running on rails adjacent to the eastbound lanes of I-40. This additional distraction could increase the potential for high-speed accidents along this key interstate highway. Such accidents can adversely affect drivers and their passengers, as well commuters to work and travelers.

Projected riders: Officials have projected 23,000 boardings per day on D-O LRT. This projection seems much higher than any reasonable expectation based on this area's population and the limited locations to receive rail service. For comparison, consider that the light rail system in Charlotte, NC had an average of 16,186 boardings per weekday (for the period from July-December 2014; reference 1) in the context of a population of 809,958 (reference 2). Note that the population of Charlotte is more than 2.5 times as large as the combined population of the city of Durham (251,893; reference 2) plus the Town of Chapel Hill (59,376; reference 2). LRT in Durham and Chapel Hill is likely to have ridership that is much less than 16,000 boardings per day, resulting in higher costs for the sponsoring municipalities and their taxpayers for many years into the future.

Historic site: Patterson's Mill Country Store is a business that has been in operation at 5109 Farrington Road in Durham County since 1973. Its predecessor was Patterson and Company Store which opened in the 1870s at this same location. This historic site is open to the public. Visitors can see an extensive collection of medical and pharmaceutical items from the 1800s and 1900s, as well as other items, primarily collected by Ms. Elsie Booker (a pharmacist and UNC alumnus). The land around Patterson's Mill Country Store has been occupied since 1834 by five generations of Ms. Booker's mother's family (reference 3). From my perspective, it is a shame and a disservice to history that any consideration is being given to building the ROMF next to this historic property or displacing any part of this family and their multigenerational business with a route for light rail or a ROMF.

<u>Noise</u>: My understanding is that a train's horn makes a sound in the range of 105-110 decibels. The horn is used at road-level crossings and when approaching stations. The high frequency of the horn, as well as its high decibels, makes it a source of noise pollution for residents living in the NC-54 corridor and along Farrington Road. This noise pollution may substantially reduce the likelihood of selling a home and substantially reduce property values for individuals who own homes in those areas.

<u>Previous vote in Durham</u>: I have read a number of documents and heard multiple speakers say that voters in Durham supported use of a portion of taxes to pay for light rail service. Such verbal and written statements are a misrepresentation of the facts. "Light rail" or "rail" were not specified on the ballot for voters' consideration. Rather, voters were asked to cast ballots on whether to support use of a portion of taxes "... to be used only for public transportation systems". Therefore, it would be consistent with the vote to use these funds to improve existing bus services or evaluate bus rapid transit (to the total exclusion of the proposed D-O LRT).

<u>Alternatives to light rail</u>: Chapel Hill Transit and its partners are already progressing a plan to introduce bus rapid transit on the Martin Luther King Boulevard corridor. In view of this progress toward bus rapid transit, consideration should be given to bus rapid transit for the main corridors between Chapel Hill and Durham (i.e., US 15-501 corridor and the NC 54 corridor). Such bus rapid transit would be much more flexible and require much lower start-up funding than light rail.

The need for new, public transportation may be negated in the coming years by emerging technological and lifestyle advances. New technologies (e.g., hybrid buses and cars; electric cars and buses; vehicles powered by natural gas or fuel cells) and lifestyle options (e.g., telecommuting) are changing our country and seem likely to markedly alter the need for new public transportation. In view of these rapidly changing factors, our representatives and transit authorities would be wise to consider flexible, cost-effective options for transportation, rather than an inflexible LRT option requiring a large upfront capital investment and a decade or more from approval of the project to start of service. Some of these factors appear to have impacted the thinking in Wake County, prompting them to withdraw from construction of light rail.

Thank you for your consideration of these comments.

Sincerely,

David M. Cocchetto

Dani M. Conhetto

References

- 1. Lynx light rail ridership back to 2008 levels. The Charlotte Observer. January 21, 2015.
- 2. U.S. Census Bureau: State and County QuickFacts. Revised August 6, 2015.
- 3. http://www.ourstate.com/carolina-collectors/ August 2014

DOLRT comments from Gerry Cohen

Gerry Cohen

Sent: 10/13/2015 2:16 PM

To: info@ourtransitfuture.com

My name is Gerry Cohen. I have lived in the Triangle area since 1968, Orange County 1968-1984 and Wake County 1984-present. I visit Orange and Durham Counties quite frequently. I have relatives in Orange County (a first cousin and his family as well as my son's fiancée are Carrboro residents)

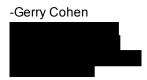
I have been actively involved in the development process for DOLRT. While on the staff at the General Assembly I staffed the 21st Century Transportation Committee in 2007-2008, which recommended legislation authorizing a 1/2% sales tax for transit in six counties and 1/4% in the other 96 counties. The reason for the differential was our study showed that the 1/2% tax would provide the necessary local funds for fixed guide way transit (light rail, commuter rail, heavy rail, etc). I also was the drafter of the legislation which authorized the tax and spoke at carious committee meetings. That legislation required a consensus proves of developing a financial plan by the affected local governments which was binding until changed through a similar consensus process, and which gave the voters necessary information on what the actual plans were prior to voting in the referendum. BOTH THE ADOPTED DURHAM AND ORANGE PLANS CALLED FOR LIGHT RAIL BETWEEN THE TWO COUNTIES. Durham's also called for heavy rail from Durham to Raleigh.

I served on the three county Special Transit Advisory Committee. that developed the regional plan. I testified at the mandatory Orange and Durham County public hearings before the boards of commissioners in favor of light rail. In at least the Orange County hearing, some testified against the referendum because it included light rail.

Each county conducted a referendum on the proposed tax which incorporated the underlying financial plans that included light rail. Explanatory literature and advertising all mentioned the light rail project. In both Orange and Durham Counties voters approved the tax, Durham in 2011 by 60-40 and Orange in 2012 59-41. Durham was vote on in an odd-year election where turnout was relatively light, while Orange in a presidential election where turnout was very heavy. Under both election models the results were nearly the same. While opponents of the project say that light rail was not part of the election, I observed opponents of the tax hand out leaflets at the Carrboro Town Hall early voting site for several days asking persons to vote no BECAUSE the plan included light rail.

I worked actively in both pro-referenda campaigns, serving on both the Orange and Durham campaign committees.

I am very supportive of the DOLRT plan and hope it is approved for federal funding. I do have one criticism. I support the C1A alternate through Meadowmont rather than the local preferred alternative down NC54 east of the Friday Center. Meadowmont was planned and approved as a community through which light rail was to be run. An easement from the developer was provided for the guideway and rails. Persons buying in that area knew full well of the proposed project, amnesia is not a defense here. I suggest that GoTransit continue to advance C1A as an active alternate and abandon it in favor of the current LPA only if it is rejected by the appropriate federal agencies.



Durham-Orange Light Rail Transit Project Official Public Comment

| Name: Janiel | W. | Cole | Email | elephone: | |
|------------------|----|------|-------|-----------|--|
| Mailing Address: | | | City: | Zip Code: | |

How to Comment on the DEIS

- 1. Email us at info@ourtransitfuture.com
- Submit a web-based comment form: ourtransitfuture.com/comment
- 3. Mail a letter to D-O LRT Project DEIS, C/O GoTriangle, Post Office Box 530, Morrisville, NC 27560
- 4. Submit a written comment form at two public information sessions and two public hearings.
- 5. Sign-up to speak at a public hearing.

All methods of commenting will receive equal weight. All comments will be reviewed and considered as part of the development of the combined Final Environmental Impact Statement (FEIS)/Record of Decision (ROD), which is expected in February 2016. A response to substantive comments will be included in the combined FEIS/ROD.

Be advised that your entire comment, including name, address, phone number, email address, or any other personal identifying information in your comment may be subject to the North Carolina Public Records Act (N.C.G.S. § 132.1 et seq.).

Please leave your comment on the Draft Environmental Impact Statement:

trey should be torcal to do by not brilding new boals 900 dollars a vide is little to pay ton no global warming, no cars on the road, and no or less or should us people boil around the rail. The buses are not used as none of them go to durhan though they are certainly used as a use them, students are part of the population so they an not owner on thing. Students are households so including them as not having a can is not a deception. It is already a trouth are and there is nothing we can do about it.

Please Turn Over ----



Durham-Orange Light Rail Transit Project Official Public Comment

Please leave your comment on the Draft Environmental Impact Statement:

The Cost effective Strategies

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the road uper puts cars on the roadfor example. Buses will not stop often enough for people to use. Time on public tronsportation is not lost as people con use time to do work. School is responsible for keeping the childen away from the romp and people are responsible for keeping themselves away from it. The train con be stopped for live and ampulances Charlotte is a bud example for how it can work as there road Syste is terrible. Adding a stop to the ramp is a good idea. If you stop on the train tracks the responsibility is yours not the governments. Rule abos don't drive. Saying the no buil option is not been an sidered is reduculous when the no build offtian is on a sign outside. The no can houses will increase as the light rail is built. Connections to RTP and Raleight con be added later People riding it is something



- 1 needs for their tax dollars than this
- 2 project.
- 3 MR. JOYNER: Thank you. Next
- 4 speaker, please.
- 5 MR. DANIEL COLE: Daniel Cole,
- 8 Public transportation is something
- 9 that we should all support. I live in
- 10 Finley Forest. This is going to go right
- 11 by where I would live. This is something
- 12 that would cause me to have to make
- 13 sacrifices. It would cause me to move --
- 14 to make it harder for me to move into the
- 15 Finley Forest neighborhood when I'm coming
- 16 from 54 into Summerwalk Circle, but we all
- 17 have to make sacrifices for the greater
- 18 good. This would be for the greater good.
- 19 Traffic on 54 is absolutely
- 20 terrible. It takes 30 minutes to go from
- 21 Finley Forest to the Food Lion down on the
- 22 other side of 40 at around 9 o'clock in
- 23 the morning and around 5 o'clock in the
- 24 afternoon. This is unacceptable. Buses

Page 18

- 1 will not work as well because they also
- 2 have to use the roads. Currently the
- 3 buses that run, the Chapel Hill buses that
- 4 run on 54, go around 54 because they
- 5 cannot use that road because there's too
- 6 many cars. They cannot go on 54 at 5
- 7 o'clock because there are too many cars.
- 8 The road will not work.
- 9 To help the environment, to help
- 10 the community, we have to get cars off the
- 11 road. Light rail is what does this. Yes,
- 12 it will cost money. All things cost
- 13 money. Development is going to happen.
- 14 We have to control how it happens, but you
- 15 cannot stop it.
- 16 If people don't use it, it is on
- 17 themselves for not using it. It's not for
- 18 us to make people use it, and it's not for
- 19 us to worry about what is going to affect
- 20 the cars on the road that there are
- 21 already too many of. What we need to do
- 22 is get the cars off the road, not build
- 23 things that will put more cars on the road
- 24 and affect and be good for the cars on the

| 1 | road. | | | Page 19 |
|---|-------|-------------|------------|---------|
| 2 | | MR. JOYNER: | Thank you. | |
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Rodalyn Coleman

Sent: 10/12/2015 3:00 PM

To: info@ourtransitfuture.com

Name: Rodalyn Coleman

Phone Number:

Email Address:

Message Body:

I am against rezoning Farrington Road to an Industrial Zone because pollutants and toxins from the proposed ROMF (see below), as well as the proposed densely populated Leigh Village Compact Neighborhood Tier will result in waste by-products from the ROMF and human use. These will poison the wetlands that surround us, destroying the residential character, preventing the further development of open space and green buffers and upset the fragile balance of the ecosystem in the Cape Fear River Watershed area.

Move the ROMF to a more reasonable location that has like properties (recommended by the Federal Transportation Association), such as noise, pollutants and lights, instead of inflicting these elements on the 22,000+ residents of Farrington Road and its vicinity.

Durham City and County has proposed the future land use changes to Leigh Village, to be located on NC 54/Interstate 40 and extending to Farrington Road, a 100% residential area with over 11,000 homes in the vicinity and Creekside Elementary School on adjacent Ephesus Church Road. Instead of the designated 356-acre Suburban Transit Area as established in 2005, Durham now plans to enlarge Leigh Village to include an additional 115 acres, west of George King Road and south of the Villas of Culp Arbor community. This addition will result in a Compact Neighborhood Tier of approximately 423 acres.

Liabilities will result from having both Leigh Village Compact Neighborhood Tier and the ROMF within approximately a 2 mile distance:

1.GoTriangle is proposing that Farrington Road be rezoned as an Industrial Zone. If this is approved, the ROMF (Rail Organization Maintenance Facility) will be built less than 100 yards from the Villas of Culp Arbor and less than 300 yards from Creekside School. The ROMF, by itself, will be provide enough toxins and pollutants to poison the wetlands. (These wetlands run into Jordan Lake that is already polluted).

2.Not only will the ROMF will located on Farrington but, if the proposal to include the 115 additional acreage is approved, than Leigh Village will also be a part of this development.

In addition to compact housing and the ROMF, there are 3 creeks that cross NC 54:

Northeast Creek, west of Alston Avenue, NC 55

New Hope Creek, east of 1-40 (several creeks flow into New Hope Creek, such as Third Fork Creek which flows along University Road, south of downtown, at Forest Hills)

Little Creek, east of Meadowmont

The ROMF – an office, industrial plant, rail yard and parking lot will create a flow of toxic storm water running first beneath I-40, then beneath Trenton Road, then into the Trenton wetlands adjoining New Hope Creek and the New Hope River Wildfowl Impoundment and ultimately into a polluted Jordan Lake. In heavy rain, the pipe beneath Trenton Road currently cannot handle the volume of runoff from the 6 lanes of interstate highway alone, and Trenton overflows with water, so factor in the cost of a new Trenton culvert and NCDOT interface. Runoff would fill Trenton wetlands, overflow into Trenton residents' yards and nature camps offered by Piedmont Wildlife in Leigh Farm Park. It would negatively impact the Army Corps' Waterfowl Impoundment and water quality in Jordan Lake.

QUESTION: What kind of checks and balances will be in place in case a malfunction becomes hazardous to the area's 11,000+ homes and to its vital ecosystem? What kind of collection system is being built to accumulate the varied toxins that emanate from the service areas.

DO NOT REZONE FARRINGTON ROAD: As NC taxpayers, we who live in the vicinity have the right to the best quality of life possible. Our neighborhood is filled with vibrant, active people who run, jog, bike and enjoy that which will be harmed by GoTriangle's ROMF. Rezoning Farrington Road to Industrial opens the door for urban blight, when the 'shiny, newness

| of the light rail and its operational cost wears away', we will be left with polluted wetlands, unsaleable homes and a minimum quality of life. | | | | |
|---|--|--|--|--|
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Ms. Cyndy Yu Robinson
AECOM Public Involvement and Communication
Environmental Planning, NC
1600 Perimeter Park Drive, Suite 400

Morrisville, NC 27560

RE: Oppose Go Triangle Light Rail

odalyw a Coleman

four of the intended lite rail
rotice the absonce of people;

reighborhoods ? businesses —

As a tax paying citizen and homeowner in Durham, NC, I am deeply troubled by the waste of my federal, state and local tax dollars as they will be allocated to the Durham/Chapel Hill Go Triangle Light Rail project.

I strongly oppose Go Triangle Light Rail. This project will have a negative monetary impact on my neighbors and me in Durham and Chapel Hill through taxation because taxes will be increased yearly and wasted on an inefficient transportation system. The future way of life for this culturally rich and beautiful area of Chapel Hill will not be improved by Go Triangle's unfulfilled 'dream' of the light rail and the area will still need reliable transportation.

Below is a summary of the estimated cost of Go Triangle Light Rail:

- A. \$1.82 BILLION- Total estimated cost in today's dollars
- B. \$107 MILLION PER MILE of 17 miles of track for construction.. (The completion of the light rail is not projected until 2025.)
- C. 80% ridership costs will be paid by the LOCAL TAXPAYER. (A total of \$12.8 MILLION in annual tax liability to Durham and Chapel Hill residents.)

I implore you to oppose this type of wasteful spending of our hard earned tax dollars and instead of raising taxes, lower them.

Sincerely.

Rodalyn A. Coleman

Sent: 9/18/2015 2:33 PM

To: info@ourtransitfuture.com

Name: Rodalyn A. Coleman

Phone Number:

Email Address:

Message Body:

Why do we need another mode of transportation, like the light rail, that will require constant and expensive maintenance, when many of GoTriangle's roadways and interstate highways, such as heavily used 54 & 55, have little to no maintenance over a 2 year period? Here in the Triangle area we have hazardous potholes on major roads, big enough to puncture a tire or damage the suspension, such as Alston Street, Farrington Road, Old Chapel Hill Blvd, University, Estes, Weaver Street, to name roadways in Chapel Hill and Durham.

How is GoTriangle planning to keep up a regular maintenance schedule when it does not have one now that meets the needs of our community, especially with the installation and daily maintenance costs of the light rail? (see projected installation costs below

- 1. \$1.8 Billion Dollars is estimated Total Cost; to increase through 2025.
- 2. Over \$100 Million Dollars for Each Mile will be spent.
- 3. Only 20% of the costs are recovered from the passenger fare.
- 4. Federal money will cover 50% of the construction and operational budgets.

But Federal money is not free; it is collected from every US taxpayer.

5. Nearly \$13 Million Dollars in annual taxes to Durham & Orange residents

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This e-mail was sent from a contact form on Our Transit Future (http://ourtransitfuture.com)

Rodalyn A. Coleman

Sent: 9/18/2015 3:30 PM

To: info@ourtransitfuture.com

Name: Rodalyn A. Coleman

Phone Number:

Email Address:

Message Body:

How will pollutants derived from clean and repairing light rail trains be stored and transported from GoTriangle's proposed Farrington Road, Durham, NC ROMF location to a storage facility or are the toxins going to be stored on site? My neighbors and I will live 500 feet from the ROMF and are deeply concerned about pollutants emitted from the light train maintenance facility, because of the many people over 65 who reside here at the Villas of Culp Arbor, as well as the 903 school children and staff members of Creekside Elementary School, 5000 feet from the ROMF.

According to the EPA (Environmental Protection Agency) lead, chromium, and cadmium are metals that form particle pollution during sanding and welding light rail trains. EPA's Air Toxics Health Effects Notebook has more information on lead, chromium, and cadmium, also by products of repairing the trains. Breathing particle pollution can cause respiratory problems and other harmful health effects.

From the EPA Particle Pollution Web Site:

People with heart or lung diseases, children and older adults are the most likely to be affected by particle pollution exposure. However, even if you are healthy, you may experience temporary symptoms from exposure to elevated levels of particle pollution.

Particle pollution - especially fine particles - contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Numerous scientific studies have linked particle pollution exposure to a variety of problems, including: premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing.

Thank you,

Rodalyn A. Coleman

This e-mail was sent from a contact form on Our Transit Future (http://ourtransitfuture.com)

| Rodalyn A. Coleman | | | | |
|--|--|--|--|--|
| Sent: 9/18/2015 3:39 PM To: info@ourtransitfuture.com | | | | |
| Name: Rodalyn A. Coleman | | | | |
| Phone Number: | | | | |
| Email Address: | | | | |
| Message Body: What kind of checks and balances will be in place in case a malfunction becomes hazardous to the area's 11,000+ homes and to its vital ecosystem? What kind of collection system is being built to accumulate the varied toxins that emanate from the service areas? | | | | |
| This e-mail was sent from a contact form on Our Transit Future (http://ourtransitfuture.com) | | | | |

Rodalyn A. Coleman

Sent: 9/21/2015 11:31 AM

To: info@ourtransitfuture.com

Name: Rodalyn A. Coleman

Phone Number: (

Email Address:

Message Body:

The 14 mile route GoTriangle has proposed will not accommodate the needs of those without cars or vehicles to provide them with reliable transportation. The following monies will be spent and still the people of Durham and Orange counties will not have adequate public transportation and their tax dollars are wasted. (see projected installation costs below:)

- 1. \$1.8 Billion Dollars is estimated Total Cost; to increase through 2025.
- 2. Over \$100 Million Dollars for Each Mile will be spent.
- 3. Only 20% of the costs are recovered from the rider fare.
- $4. \ \mbox{Federal}$ money will cover 50% of the construction and operational budgets.
- 5. Nearly \$13 Million Dollars in annual taxes to Durham & Orange residents.

This e-mail was sent from a contact form on Our Transit Future (http://ourtransitfuture.com)

Rodalyn A. Coleman

Sent: 9/21/2015 6:24 PM

To: info@ourtransitfuture.com

Name: Rodalyn A. Coleman

Phone Number:

Email Address:

Message Body:

The mean travel time to work, according the 2014 US Census, is 21.5 minutes (Durham) & 22.0 minutes (Chapel Hill(yet the proposed 17 mile proposed GoTriangle Light Rail Transit (D-O LRT) will take 42 minutes from end to end. At 90 degrees, the trains will have to slow because the electrical lines buckle! Is this really how the federal government wants to use our tax dollars on machinery that will soon be outdated. \$1.82 billion with \$105 million per mile and the residents have to make up 80% of the ridership costs. Not to mention a whopping \$12.8 tax liability to the residents in Durham and Chapel Hill.

This e-mail was sent from a contact form on Our Transit Future (http://ourtransitfuture.com)

Rodalyn A. Coleman

Sent: 10/5/2015 1:36 PM

To: info@ourtransitfuture.com

Name: Rodalyn A. Coleman

Phone Number:

Email Address:

Message Body:

D-O LRT DEIS Comment

Go Triangle's DEIS has not effectively addressed the environment and environmental consequences within the D-O LRT study areas found in Section 4.9 through 4.17.2.3, pages 4-199 to 4-302. There is some question as to the efficacy of GoTriangle's organization that is addressed on page 5 of this discussion. The sections comprise air quality, noise and vibration, as well as hazardous, contaminated and regulated materials and safety involving light-rail transit. In addition, acquisitions, construction and impacts also contained omissions. These topics will be subjected to comment and/or question; they are in the order in which they occur in the DEIS. GoTriangle has clarified in the first section of the DEIS that neither comment nor question will receive answers.

Light Rail Transit Car Body Repair and Paint Shop: GoTriangle failed to include any data on the Light Rail Transit Car Body Repair and Paint Shop. Had the data been included it would have been linked to the following DEIS sections.

- Section 4.9 Air Quality, page 4-199
- Section 4:12 Safety and Security, page 4-241
- Section 4.11 Hazardous Contaminated and Regulated Materials, page 282
- 1. (EPA) Environmental Protection Agency reported... "(Light transit) body and paint shops emit pollutants such as hazardous air pollutants (HAPs), particle pollution (dust), and volatile organic compounds (VOC). While federal, state and local regulations limit the amount of emissions from body shops, dangerous releases of HAPs can occur if a shop does not operate in compliance with regulations." See list below, but keep in mind that many of these toxins will be used at both the body and paint shop and the ROMF (Rail Organization Maintenance Facility) and require underground storage tanks:
- Paints, cleaners, and paint strippers "...used in light transit body shops...' can release HAPS (Hazardous Air Pollutant) and VOC (Volatile Organic Compound). Chemicals in these substances can form ground-level ozone, which has been linked to a number of respiratory effects, such as asthma and COPD. http://www2.epa.gov/ust/revising-underground-storage-tank-regulations-revisions-existing-requirements-and-new
- Lead, chromium, and cadmium are metals that form particle pollution during sanding and welding and found in the light rail body and paint shops.
- o Particle pollution especially fine particles contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems.
- o Diisocyanates are hazardous air pollutants emitted during painting operations.

Question: Why did GoTriangle neglect to report any information about the Car Body Repair and Paint Shop in the DEIS?

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Section 4:10 Noise and Vibration – Page 4-204 through 4-231

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Section 4.11 Hazardous, Contaminated and Regulated Materials, Page 4-423

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- Opened 18 hours per day, 7 days per week, the ROMF will be an out of place industrial facility in a 100% residential area. Pollution, from noise, light and vibration caused by the ROMF will disrupt the daily activities and quality of life for all 22,000+ homeowners in this area. http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_155.pdf
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- With an at-grade crossing less than a mile away from the entrance to the ROMF, all the inhabitants of Farrington Road will experience the effect of extreme traffic congestion from additional cars at ROMF shift changes.
- All emergency personnel are to the South of Farrington. Those living on Farrington are to the North.
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- 100 yards away from the ROMF is the 'over 55' community of the Villas of Culp Arbor, where 134 home owners and taxpayers reside. Many of the residents are active & vibrant; however, some are in wheelchairs, use walkers and on oxygen.
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Comment: If GoTriangle builds the ROMF in any 100% residential, pollutant free neighborhood, this act will turn the area into a medium to high risk toxin zone with a potential hazardous impact on the public's health from contaminated materials, used both at the ROMF and transported from the facility to the transit body and paint shop... resulting in an ironic course of action! (See page 4-238, Table 4.11-2: Summary of High Risk Sites)

Section 4:13 Energy

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Question: Where is the reliable LRT transportation for those living in East Durham, beyond Alston Avenue, who have limited or no modes of travel?

Section 4.14 Acquisitions, Relocations and Displacements, Page 4-255 Section 4.16 Construction, Page 4.269

Section 4.17 Indirect and Cumulative Impacts, Page 4-288

Below is a summary of the estimated cost of GoTriangle Light Rail:

A. \$1.82 BILLION – Total estimated cost in today's dollars

B. \$107 MILLION PER MILE of 17 miles of track for construction. (The completion of the lite rail is not projected until 2025.) C. 80% ridership costs will be paid by the LOCAL TAXPAYER. (A total of 12.8 MILLION in annual tax liability to Durham and Chapel Hill residents.)

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Question: With the lack of organizational skills and management evident in 4 very simple meetings, as well as the poorly written DEIS, how can the taxpayers of Durham-Chapel Hill, Orange and Durham counties, trust GoTriangle to make the right monetary decisions that benefits all of the residents of this large area of NC? \$1.82+ billion dollars are at stake...

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Question: Farrington Road is a 100% residential area and also pollutant free.

Why couldn't the ROMF be constructed so that it would situated with the same major stationary noise sources, such as power plants, industrial facilities, rail yards and airports, downtown buildings? These noise and vibration manufacturing locations also act as natural receivers and their pollutants can be more easily contained.

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This e-mail was sent from a contact form on Our Transit Future (http://ourtransitfuture.com)

Rodalyn A. Coleman

Sent: 10/10/2015 9:16 AM

To: info@ourtransitfuture.com

Name: Rodalyn A. Coleman

Phone Number:

Email Address:

Message Body:

D-O LRT DEIS Comment

Go Triangle's DEIS has not effectively addressed the environment and environmental consequences within the D-O LRT study areas found in Section 4.9 through 4.17.2.3, pages 4-199 to 4-302. There is some question as to the efficacy of GoTriangle's organization that is addressed on page 5 of this discussion. The sections comprise air quality, noise and vibration, as well as hazardous, contaminated and regulated materials and safety involving light-rail transit. In addition, acquisitions, construction and impacts also contained omissions. These topics will be subjected to comment and/or question; they are in the order in which they occur in the DEIS. GoTriangle has clarified in the first section of the DEIS that neither comment nor question will receive answers.

Light Rail Transit Car Body Repair and Paint Shop: GoTriangle failed to include any data on the Light Rail Transit Car Body Repair and Paint Shop. Had the data been included it would have been linked to the following DEIS sections.

- Section 4.9 Air Quality, page 4-199
- Section 4:12 Safety and Security, page 4-241
- Section 4.11 Hazardous Contaminated and Regulated Materials, page 282
- 1. (EPA) Environmental Protection Agency reported... "(Light transit) body and paint shops emit pollutants such as hazardous air pollutants (HAPs), particle pollution (dust), and volatile organic compounds (VOC). While federal, state and local regulations limit the amount of emissions from body shops, dangerous releases of HAPs can occur if a shop does not operate in compliance with regulations." See list below, but keep in mind that many of these toxins will be used at both the body and paint shop and the ROMF (Rail Organization Maintenance Facility) and require underground storage tanks:
- Paints, cleaners, and paint strippers "...used in light transit body shops...' can release HAPS (Hazardous Air Pollutant) and VOC (Volatile Organic Compound). Chemicals in these substances can form ground-level ozone, which has been linked to a number of respiratory effects, such as asthma and COPD. http://www2.epa.gov/ust/revising-underground-storage-tank-regulations-revisions-existing-requirements-and-new
- Lead, chromium, and cadmium are metals that form particle pollution during sanding and welding and found in the light rail body and paint shops.
- o Particle pollution especially fine particles contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems.
- o Diisocyanates are hazardous air pollutants emitted during painting operations.

Question: Why did GoTriangle neglect to report any information about the Car Body Repair and Paint Shop in the DEIS?

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According to Durham firemen, police and emergency room physicians, this will slow the process of rescue considerably. WHY? Because trains will cross at the at-grade level crossing train track approximately every 5 minutes at peak times. In addition, traffic from the ROMF personnel added to an already heavily traveled road will further delay emergency vehicles. When an incident happens at the end of a school day with buses and excessive traffic, the hazard is doubly increased.

Lives can be irreparably damaged or death may occur.

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Rodalyn A. Coleman

Sent: 10/10/2015 9:21 AM

To: info@ourtransitfuture.com

Name: Rodalyn A. Coleman

Phone Number:

Email Address:

Message Body:

Car Body Repair and Paint Shop

In 24 June 2015, Villas of Culp Arbor ROMF meeting on Farrington Road, the residents were shown slides with drawings of the ROMF. The drawing of the Farrington Road ROMF displayed a "Future Car Body Repair and Paint Shop". We were told that the drawing was incorrect and decision on a "paint shop" had not been made.

In their response (08/08/2015) to the meeting question, When will the body repair and paint shop be built? GoTriangle's reply was: "Light rail vehicle body repairs and painting will be contracted to an off-site business that does body and paint work. This type of work will not be done at the ROMF. There are no plans to construct a paint and body shop on site".

In the Draft Environmental Impact Statement (DEIS), I can find no reference to a "Body Repair and Paint Facility.

Because of the following information, it is my opinion that no environmental statement should be released, much less approved, without identifying the location of this facility, providing studies on the impact of this facility and letting us know exactly how they intend to protect our environment and people from the pollutants generated.

From the EPA: What kinds of pollutants are emitted from body shops?

Body shops emit pollutants such as hazardous air pollutants (HAPs), particle pollution (dust), and volatile organic compounds (VOC). These pollutants can contribute to health problems that may affect shop employees and the community. While Federal, state, local, and Tribal regulations limit the amount of emissions from body shops, dangerous releases of HAPs can occur if a shop does not operate in compliance with regulations.

• Paints, cleaners, and paint strippers can release some HAPs and VOC. Chemicals in these substances can also react in the air to form ground-level ozone, which has been linked to a number of respiratory effects. EPA has developed a Web site on ground-level ozone.

From the EPA Ground-Level Ozone Web Site:

Breathing ground-level ozone can trigger a variety of health problems, particularly for children, the elderly, and people of all ages who have lung diseases such as asthma. Ground level ozone can also have harmful effects on sensitive vegetation and ecosystems. Children are at greatest risk from exposure to ozone because their lungs are still developing and they are more likely to be active outdoors when ozone levels are high, which increases their exposure.

- Lead, chromium, and cadmium are metals that form particle pollution during sanding and welding. EPA's Air Toxics Health Effects Notebook has more information on lead, chromium, and cadmium.
- Breathing particle pollution can cause respiratory problems and other harmful health effects. EPA has developed a Web site on particle pollution.

From the EPA Particle Pollution Web Site:

People with heart or lung diseases, children and older adults are the most likely to be affected by particle pollution exposure. However, even if you are healthy, you may experience temporary symptoms from exposure to elevated levels of particle pollution.

Particle pollution - especially fine particles - contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Numerous scientific studies have linked particle pollution exposure to a variety of problems, including: premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing.

• Diisocyanates are hazardous air pollutants emitted during painting operations. These compounds are a leading cause of occupational asthma.

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| Helen Compton | | | | |
|--|--|--|--|--|
| Sent: 10/2/2015 9:42 AM | | | | |
| To: info@ourtransitfuture.com | | | | |
| | | | | |
| Name: Helen Compton | | | | |
| Phone Number: | | | | |
| Email Address: | | | | |
| Message Body: I support Light Rail in Durham and Orange Counties. I want it built now! I hope the project will be expanded to include Wake County. | | | | |
| This e-mail was sent from a contact form on Our Transit Future (http://ourtransitfuture.com) | | | | |
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15
            MR. GARY COOK: I may not -- I may
16
    not need this. If I need it, let me know.
17
            MR. JOYNER: Sir, you will.
18
            MR. GARY COOK: Okay.
            My main reason for being here --
19
    My name is Gary Cook. I was born in 1951
20
21
     in the old Watts Hospital, so I have my
22
     roots in Durham. Went to Durham High
```

School. Graduated in 1969. I went to

Campbell College, which is now Campbell

MR. JOYNER: Thank you.

14

23

24

Page 60

- 1 University. Graduated from there. I got
- 2 my master's at Duke in 1974 -- no, I think
- 3 it was '75 because I did it at night
- 4 school.
- 5 I did it at night school because
- 6 it only cost a little bit. I think it
- 7 cost me \$2,000. We need to revert back to
- 8 looking at how much things cost. With me
- 9 having a master's in accounting, I have
- 10 several CPAs. I have a long list of
- 11 properties that I will be selling due to
- 12 return on investment.
- When I no longer get a return on
- 14 investment, I -- I -- passed 65, I will
- 15 slowly divest. Now, what does that mean?
- 16 I give opportunities to young people that
- 17 want to learn how to invest in real
- 18 estate. I will owner finance. I will do
- 19 things to return Durham to a great city.
- Now, putting in this type of rail
- 21 doesn't mean Durham is going to be a great
- 22 city. It just means that we're going to
- 23 change the traffic a little. My
- 24 alternative for this would be to have some

Page 61

- 1 type of rail system starting from the Old
- 2 South Square running right into Franklin
- 3 Street and see how that works. Try that
- 4 and let's see how it works.
- 5 We know what it's like to run from
- 6 south -- the Southpoint Mall and try to
- 7 get to Franklin Street. We know that's
- 8 bad. Well, let's first put a monorail
- 9 like they have in Las Vegas. You ever
- 10 been to Las Vegas? They got that. Let's
- 11 try that and run the numbers on that. Gas
- 12 is pretty cheap. Gas being cheap, you're
- 13 going to get more cars on the road. Now,
- 14 that's going to make traffic worse.
- 15 Now, we do need something. Let's
- 16 try something at a lower cost. You put
- 17 the monorail up, you don't have railroad
- 18 tracks with runoff. You can even put this
- 19 system over --
- 20 MR. JOYNER: Sir, your time is up.
- 21 MR. GARY COOK: Okay. I'm sorry.
- 22 My reason -- I'm going to -- they're going
- 23 to take my building. That's job loss.
- MR. JOYNER: Thank you.

LRT project

Carolyn Coolidge and Timothy Riggs

Sent: 10/13/2015 6:19 PM

To: info@ourtransitfuture.com

I am Carolyn Coolidge, and I live in Durham County, at 2511 W Club Boulevard.

I believe that we need mass transit in the Triangle, to limit use of fossil fuels and reduce highway congestion. Having come from Berkeley, California, where I lived from 1963-1993, before, during, and after the installation of BART (the Bay Area Rapid Transit system), I am excited to think of what changes the Light Rail system will provide. In the Bay Area, we were initially concerned about the proposed single-line system, as are people in this area. However, we found there, as surely we will here, that feeder lines from other transit systems will be provided. For ten years, before I moved here, I commuted easily between Berkeley and San Francisco.

My concerns about this plans are:

1)cost, and will there be transfers available between bus and light-rail lines?

2)the proposed route along Farrington Rd: would not the Cornwallis Rd route displace fewer homes and reduce grade crossings? I think the Judea Reform congregation is able to manage with the loss of some of their land.

Carolyn Coolidge, 10/13/15

Light rail project

Coombs, Randall Floyd

Sent: 10/13/2015 11:58 AM

To: info@ourtransitfuture.com

I support the NO BUILD option for the proposed light rail from Durham to Chapel Hill for the following reasons:

- (1) Rail travel has been shown to be <u>less safe</u> than auto, bus, or even motorcycle transportation.
- (2) The <u>cost</u> of this project is exorbitant and we will continue to pay for it indefinitely because fare for travel will only cover 20 to 25% of the costs to maintain and run the rail system
- (3) There will be <u>limited ridership</u>. Comparing our surrounding population to that of much larger metropolitan areas with rail systems makes it apparent that the rail will not carry the number of passengers estimated by the proponents of the rail system.
- (4) There will be profound <u>negative environmental effects</u> on surrounding neighborhoods

For all of the above reasons, I urge you to vote against all of the proposals for the light rail system between Durham and Chapel Hill.

Randall F. Coombs, M.D.
Professor of Anesthesiology
UNC at Chapel Hill Medical Center

Print | Close Window

Thanks.

Corey

Subject: south hoover road, durham

Date: Tue, Sep 01, 2015 9:44 am
To: "info@ourtransitfuture.com" <info@ourtransitfuture.com>

Regarding the Light Rail Transit Project, will the following address be effected in any way...

Light rail

Courtland Coon

Sent: 9/28/2015 6:30 PM

To: info@ourtransitfuture.com

I am writing to express my concern over the Safety concerns for the location of the service facility so close to creek side elementary. Please do not approve the light rail.

Sincerely, Donna Coon

Sent from my iPad

No to Light rail

Donna Coon

Sent: 9/28/2015 6:35 PM

To: info@ourtransitfuture.com

What is the reason for the light rail when it only covers a part of Chapel Hill and Durham. It does not service the true growth areas such as RTP and RDU, Wake County. This is not a fiscally sound plan with unsubstantiated ridership. The use of RBT allows for changes to be made as growth patterns changed and doesn't involve the cost of fixed rail.

Donna Coon

Sent from my iPad

- 1 everybody can hear and understand,
- 2 particularly for our court reporters to
- 3 understand what you're saying. So thank
- 4 you.
- 5 MS. WALLIS COOPER: My name is
- 6 Wallis Cooper. My address is
- 9 I have to apologize -- start by
- 10 apologizing. I'm a native New Yorker and
- 11 I naturally speak extremely fast, so I'm
- 12 going to slow down too, only fast.
- 13 When I attended a recent
- 14 information session here, I asked one of
- 15 the GoTransit representatives what is
- 16 better about light rail when the buses are
- 17 now running less than half full? And he
- 18 said, it's going to have lots of amenities
- 19 and it's going to have really good
- 20 branding. So in exchange for all the
- 21 costs, noise, danger, and fierce
- 22 objections, apparently what we are
- 23 actually going to gain are amenities and
- 24 branding. That's according to one of the

- 1 representatives of GoTransit.
- Now, there's something more
- 3 disturbing to me, and that is a comment
- 4 that one of the previous speakers that
- 5 just left had said about students, which
- 6 made me realize that when GoTransit is
- 7 using a figure of 40 percent of no cars
- 8 that there may be a deep deception there
- 9 if they're including students, which then
- 10 makes one wonder what other deceptions are
- 11 involved. Thank you.
- 12 MR. JOYNER: Thank you. Next
- 13 speaker, please.
- 14 MR. HENRY LISTER: Good
- 15 afternoon. My name is Henry Lister. I
- 16 live at
 - , right down the street here.
- 18 When I came back from Italy last
- 19 year, I was completely all in for light
- 20 rail, having experienced it there.
- 21 However, the more I learned about this
- 22 project, the less enthused I became. As
- 23 stated previously, I agree that the
- 24 proposed light rail plan does not serve

Get Involved Contact Form Ms. Wallis Cooper Sent: 9/14/2015 8:42 PM To: info@ourtransitfuture.com Name: Ms. Wallis Cooper Phone Number: Email Address: Message Body: If, as in your own comments, traffic in 20 years will be so intolerable on 15-501 and I40, how is light rail for NC 54 a solution?

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This e-mail was sent from a contact form on Our Transit Future (http://ourtransitfuture.com)

Durham-Orange Light Rail Transit Project Official Public Comment

| Name: WALLIS | COOPBR | E | Telepho | |
|------------------|--------|-------|-----------|--|
| Mailing Address. | | City: | Zip Code: | |

How to Comment on the DEIS

- 1. Email us at info@ourtransitfuture.com
- 2. Submit a web-based comment form: ourtransitfuture.com/comment
- 3. Mail a letter to D-O LRT Project DEIS, C/O GoTriangle, Post Office Box 530, Morrisville, NC 27560
- 4. Submit a written comment form at two public information sessions and two public hearings.
- 5. Sign-up to speak at a public hearing.

All methods of commenting will receive equal weight. All comments will be reviewed and considered as part of the development of the combined Final Environmental Impact Statement (FEIS)/Record of Decision (ROD), which is expected in February 2016. A response to substantive comments will be included in the combined FEIS/ROD.

Be advised that your entire comment, including name, address, phone number, email address, or any other personal identifying information in your comment may be subject to the North Carolina Public Records Act (N.C.G.S. § 132.1 et seq.).

Please leave your comment on the Draft Environmental Impact Statement:

| HOW WILL LICHT RAIL RELIBVE CONGESTION ON 40+ 15-50 IF TRAFFIC IS GETTING HEAVIER ON N.C. 54 HW WILL ADDING LIGHT RAIL INTERNETERANCE HELP SPEED TRAFAC MODIO. ALL- TO GETHER A OVERLY EXPRISIVE, THOUGHTLESS WASTE OF MUCH MONEY NOW AND FOR YEARS TO COME |
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| LIGHT RAIL INTERFERENCE HELP SPEED TRAFAC MONG. ALL- TO GETUSE A OVERLY EXPRISIVE, THOUGHTLESS WASTE OF |
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| MUCH MONEY NOW AND FOR YEARS TO COME |
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Durham-Orange Light Rail Transit Project Official Public Comment

| Please leave your comment on the Draft Environmental Impact Statement: | Please return this form to the comment | | |
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Sent: 10/12/2015 3:12 PM

To: info@ourtransitfuture.com

I oppose the proposed Durham – Orange Light Rail because the construction will cost at least \$1.8 billion. This does not include cost over-runs. Based on accurate data, this rail will not even come close to solving traffic problems that could justify such an initial and on-going expense.

Sincerely,

Randy Cork

Fast, Secure, NetZero 4G Mobile Broadband. Try it. http://www.netzero.net/?refcd=NZINTISP0512T4GOUT2

Sent: 10/12/2015 3:13 PM

To: info@ourtransitfuture.com

I oppose the proposed Durham – Orange Light Rail because the proposed route of the rail travels through low-density areas. And in addition, the entire region does not have a dense enough population for such a monster of transportation. This train does not service areas that would use it, nor does it take riders places that are needed, such as the Research Triangle Park, shopping, or the airport.

Sincerely,

Randy Cork

Meet the Graviteers: Ezekiel Victor

My name is Zeke! I find it hard to pick favorites because I get sick of too much of one thing. Read more â†' http://thirdpartyoffers.juno.com/TGL3131/561c0696c36a569626aest03vuc

Sent: 10/12/2015 3:14 PM

To: info@ourtransitfuture.com

I oppose the proposed Durham – Orange Light Rail because the ballot that had the tax increase for transportation was only about "transportation systems" not rail. Rail was never mentioned on the ballot nor was it ever voted on. To say the people want light rail because they voted for it is a lie, or at the best, it is ignorance. Do not consider the .05% tax increase a mandate for the rail; it is a mandate for improving transportation.

Sincerely,

Randy Cork

Meet the Graviteers: Ezekiel Victor

My name is Zeke! I find it hard to pick favorites because I get sick of too much of one thing. Read more â†' http://thirdpartyoffers.juno.com/TGL3131/561c06d3e939d6d330d1st03vuc

Sent: 10/12/2015 3:15 PM

To: info@ourtransitfuture.com

I oppose the proposed Durham – Orange Light Rail because the proposed maintenance facility is in a rural but populated area with a school close by. The originally proposed facility was to be in and area of Durham where most of the workers would reside and could walk to work and was close to the end of the line. This area is in the middle of the line so empty trains will have to come to it from either end of the line which means trains will be running empty deliberately and frequently. This is additional expense, pollution and noise. It is my understanding the original site for the facility was dropped because the land there is contaminated with chemical waste from a prior chemical plant and this would have to be cleaned-up in order to build the maintenance facility and GoTriangle did not want to spend that money. As a note, the residents in this poorer area of town still have to live with the toxicity and will not have the jobs they were promised.

Sincerely,

Randy Cork

Meet the Graviteers: Cristin Nicholson

Hi, i'm Cristin. I could eat empanadas for breakfast, lunch and dinner. Read more â†' http://thirdpartyoffers.juno.com/TGL3131/561c071bcf9097104f27st04vuc

Sent: 10/12/2015 3:16 PM

To: info@ourtransitfuture.com

I oppose the proposed Durham – Orange Light Rail because based on figures submitted by GoTriangle in the DEIS, it serves less than 5% of the population. There are more flexible and cost efficient ways such as Bus Rapid Transit to address the transportation issue than spending \$1.8 billion on such a small number of people.

Sincerely,

Randy Cork

Meet the Graviteers: Ezekiel Victor

My name is Zeke! I find it hard to pick favorites because I get sick of too much of one thing. Read more â†' http://thirdpartyoffers.juno.com/TGL3131/561c074e9a5e74d1c26st01vuc

Sent: 10/12/2015 3:17 PM

To: info@ourtransitfuture.com

I oppose the proposed Durham – Orange Light Rail because there are other forms of transportation and technology being developed that will solve the transportation needs in a much more efficient and flexible way. Why spend \$1.8 billion on a system that cannot be moved as ridership needs change, is dangerous and will be obsolete before it's complete. I'd prefer my tax dollars to be spent more wisely and less frivolously.

Sincerely,

Randy Cork

Meet the Graviteers: Cristin Nicholson

Hi, i'm Cristin. I could eat empanadas for breakfast, lunch and dinner. Read more â†' http://thirdpartyoffers.juno.com/TGL3131/561c078a5d64a78a26cbst01vuc

Sent: 10/12/2015 3:18 PM

To: info@ourtransitfuture.com

I oppose the proposed Durham – Orange Light Rail because with citizens working hard to make ends meet, state and local officials making cuts to budgets in the areas of education and health, I think that spending \$1.8 billion on a system that serves a minor segment of the population, causes environmental impacts and disrupts the lifestyles of many is a waste of money. As we, the taxpayers must take care of our personal budgets and spend our hard earned money as responsibly as possible, I would expect you to do the same with the contributions we make to our economy. Please be responsible with my tax dollars and look into other more progressive and less expensive ways to solve our traffic issues. Don't invest in a system that will be obsolete before it's complete and leave a tax burden behind. I'd prefer my tax dollars to be spent more wisely and less frivolously.

Sincerely,

Randy Cork

Meet the Graviteers: Ezekiel Victor

My name is Zeke! I find it hard to pick favorites because I get sick of too much of one thing. Read more â†' http://thirdpartyoffers.juno.com/TGL3131/561c07c7416cd7c72fa9st01vuc

Official Public Comment

| Name: | Joel | Conferd- | Smith | Email: | | Telephone: | |
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Official Public Comment

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| How to Comment on the DEIS | | | |

- 1. Email us at info@ourtransitfuture.com
- 2. Submit a web-based comment form: ourtransitfuture.com/comment
- 3. Mail a letter to D-O LRT Project DEIS, C/O GoTriangle, Post Office Box 530, Morrisville, NC 27560
- 4. Submit a written comment form at two public information sessions and two public hearings.
- Sign-up to speak at a public hearing.

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Be advised that your entire comment, including name, address, phone number, email address, or any other personal identifying information in your comment may be subject to the North Carolina Public Records Act (N.C.G.S. § 132.1 et seq.).

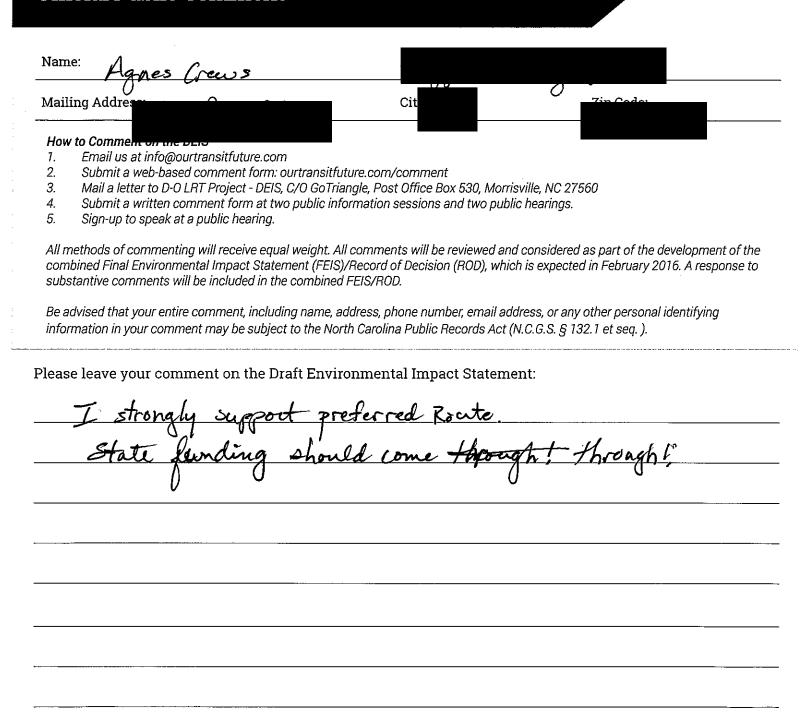
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| How to Comment on the UEIS | | | | |

- Email us at info@ourtransitfuture.com
- Submit a web-based comment form: ourtransitfuture.com/comment
- Mail a letter to D-O LRT Project DEIS, C/O GoTriangle, Post Office Box 530, Morrisville, NC 27560
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Please leave your comment on the Draft Environmental Impact Statement:

| Please histern to the majerity of people who objected to this project for many VALID BEASOTS—COSAS, # of RIDERS, Safety, Etc. |
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| Why are states à Docal officials (DOT) Not making changes on 15/501 É 54 |
| to REduce trappio congestion— E.g., desote I love in Am FPM to |
| car proling & bus linear to move traffice Reprilly without billions of dollars. Try to umprove what Exists before costing |

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- 1 support this very important improvement in
- 2 our community. Thank you.
- 3 MR. JOYNER: Thank you. Is there
- 4 anyone else that's signed up to speak?
- 5 Yes, ma'am. If you would hand it -- yes.
- 6 I'm sorry. And please state your name and
- 7 address for the record.
- 8 MS. LYNN CULTON: My name is Lynn
- 9 Culton. I live at |
- I don't understand how 1.6, 1.8
- 12 billion dollars can be spent on a project
- 13 that covers only 17 miles and a limited
- 14 portion of our county and serve a small
- 15 population. The 17-mile route will not
- 16 take riders with their baggage to the
- 17 airport or a stress-free ride to work in
- 18 Mebane or Carrboro or any of the other
- 19 rapidly-growing surrounding areas. The
- 20 rail serves a specific group of people
- 21 traveling between UNC and Duke. It snakes
- 22 through residential areas causing safety
- 23 issues at its grade-level crossings. Bus
- 24 rapid transit can provide the same service

Page 84

- 1 at a fraction of the cost. It can be
- 2 expanded to areas that were eliminated
- 3 from the original deal -- the plan.
- 4 BRT is flexible in that it can be
- 5 adjusted as ridership changes, and it can
- 6 go -- grow with the growth in the areas.
- 7 Light rail does not offer this
- 8 option. Once the tracks are in the
- 9 ground, they're there and that's it,
- 10 you're stuck with it. I believe this
- 11 option is not sustainable. It leaves
- 12 behind a significant tax burden. The
- 13 project will be obsolete before it's
- 14 complete. It can serve the same
- 15 population -- BRT can serve the same
- 16 population at a lower cost.
- 17 I believe the expense is
- 18 irresponsible and frivolous, and I would
- 19 hope that our taxpayer dollars would be
- 20 spent more wisely.
- 21 MR. JOYNER: Thank you. Is there
- 22 anyone else that has signed up to speak?
- 23 Okay. We'll take a quick break while we
- 24 wait for others to come. We will be here

Page 85

- 1 until 7 o'clock -- at least 7 o'clock, so
- 2 anyone that wants to speak or comes
- 3 between now and 7 o'clock will have an
- 4 opportunity to sign up to speak, but we'll
- 5 take a -- a quick break until we have
- 6 others that will -- that come in to
- 7 speak. Thank you.
- 8 (RECESS.)
- 9 MR. JOYNER: Okay. I'm going to
- 10 bring us back to order. We've got a
- 11 couple more speakers. If there's anyone
- 12 else that has signed up to speak, if you
- 13 want to come forward and -- and sit down,
- 14 that would be fine. For those who have
- 15 just joined us, our ground rules are here
- 16 for the speakers. I'll call you up. You
- 17 will hand your card to the court
- 18 reporters. They will be doing a
- 19 transcript of this public hearing. So
- 20 you'll hand that, and then you'll stand at
- 21 the microphone, state your name and
- 22 address for the record. Once you've done
- 23 that, your two minutes will start. You'll
- 24 have two minutes to speak. Robert has a

Oppose Light Rail - Safety - At Grade Crossing Not included DEIS Traffic Study

Sent: 10/13/2015 6:34 AM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – Safety – Downing Creek Parkway Crossing not in DEIS Traffic Study

The grade level crossing at the intersection of Downing Creek Parkway and NC54 was inadequately studied in the DEIS Traffic Simulations. No traffic counts were performed for this intersection that is a major ingress/egress from a neighborhood of over 400 residences. Without adequate information, how can Go Triangle consider this intersection as safe? Please have this area investigated further for adequate mitigation before proceeding.

Sincerely,

Lorna Lynn Culton

Voters approved tax increase for transportation system - not light rail.

Sent: 10/13/2015 7:14 PM

To: info@ourtransitfuture.org

I oppose the Durham Orange Light Rail Project because:

Advocates say that the voter approved this projected when voting for a tax increase in 2011. That increase was for the transportation system. Light rail was not on the ballot.

Lorna Lynn Culton

Oppose Light Rail - Safety - No traffic light at busy grade level crossings!

Sent: 10/12/2015 12:47 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – Safety – no traffic light

I oppose the proposed Durham – Orange Light Rail because there will be no traffic light at the Downing Creek Parkway and Hwy 54 intersection and it will be an at-grade crossing. Hwy 54 is a very busy highway and cars will run the real risk of the gate coming down behind the car that will have to be stopped on the tracks in order to get onto Hwy 54. The car will be trapped between the gate and cars on Hwy 54 and will get hit by the train. Please flag and investigate this intersection.

Sincerely,

Lorna Lynn Culton

Oppose Light Rail - Does not serve "The People"

Sent: 10/12/2015 12:18 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – does not serve "the people"

I oppose the proposed Durham – Orange Light Rail because it will not serve "the people". When a significant amount of taxpayer dollars are being spent for the people, I think of a project that would serve a large number of people. This project will run along a small and very specific area and serve a very small percentage of the population. As folks in the area are crying for transit to take them to RTP and the airport, we are spending \$1.8 billion to help people commute between UNC and Duke. If you look at traffic numbers, there is a much greater need in many areas along I-40 then in this small and less traveled corridor along NC 54 and 15/501. There is rapid growth going towards Burlington and Carrboro as well. Let's really help "the people" and look into safer, flexible and less expensive forms of transportation that can be expanded and get folks to the areas that they really want to travel to. I'd prefer my tax dollars to be spent more wisely and less frivolously.

Sincerely,

Lorna L. Culton

Oppose Light Rail - Safety, at-grade Crossings

Sent: 10/12/2015 12:45 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – Safety, at-grade crossings

I oppose the proposed Durham – Orange Light Rail because there are at-grade crossings and at-grade crossings are extremely dangerous for cars and pedestrians.

Sincerely,

Lorna Lynn Culton

Oppose Light Rail - Will not sustain itself!

Sent: 10/12/2015 12:20 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – will not sustain itself

I oppose the proposed Durham – Orange Light Rail because it will not sustain itself and become a financial burden to the taxpayers for years to come. There is no need to spend such an extravagant amount of money on this project when there are other forms of transportation and technology being developed that will solve the transportation needs in a much more efficient and flexible way. Why spend \$1.8 billion on a system that cannot be moved as ridership needs change, is dangerous and will be obsolete before it's complete. I'd prefer my tax dollars to be spent more wisely and less frivolously.

Sincerely,

Lorna Lynn Culton

Oppose Light Rail - Simply a waste of taxpayer dollars.

Sent: 10/12/2015 12:21 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – it's simply a waste of our taxpayer dollars

I oppose the proposed Durham – Orange Light Rail because with citizens working hard to make ends meet, state and local officials making cuts to budgets in the areas of education and health, I think that spending \$1.8 billion on a system that serves a minor segment of the population, causes environmental impacts and disrupts the lifestyles of many is a waste of money. As we, the taxpayers must take care of our personal budgets and spend our hard earned money as responsibly as possible, I would expect you to do the same with the contributions we make to our economy. Please be responsible with my tax dollars and look into other more progressive and less expensive ways to solve our traffic issues. Don't invest in a system that will be obsolete before it's complete and leave a tax burden behind. I'd prefer my tax dollars to be spent more wisely and less frivolously.

Sincerely,

Lorna Lynn Culton

Oppose Light Rail - Extragavant use of taxpayer dollars!

Sent: 10/12/2015 12:23 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – An extravagant use of taxpayer dollars

I oppose the proposed Durham – Orange Light Rail because with citizens budgets so tight there is no need to spend such an extravagant amount of money on this project when there are other forms of transportation and technology being developed that will solve the transportation needs in a much more efficient and flexible way. Why spend \$1.8 billion on a system that cannot be moved as ridership needs change, is dangerous and will be obsolete before it's complete. I'd prefer my tax dollars to be spent more wisely and less frivolously.

Sincerely,

Lorna Lynn Culton

Oppose Light Rail -- Why MUST it be a train?

Sent: 10/12/2015 12:24 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – why MUST it be a train

I oppose the proposed Durham – Orange Light Rail because there are other forms of transportation and technology being developed that will solve the transportation needs in a much more efficient and flexible way. Why spend \$1.8 billion on a system that cannot be moved as ridership needs change, is dangerous and will be obsolete before it's complete. I'd prefer my tax dollars to be spent more wisely and less frivolously.

Sincerely,

Lorna Lynn Culton

Oppose Light Rail - Will not solve traffic issues.

Sent: 10/12/2015 12:25 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – does not solve the traffic issues

I oppose the proposed Durham – Orange Light Rail because is not a complete solution to our traffic issues. Studies have shown that drivers will continue to drive cars on a daily basis and LRT riders will be the same ones currently using buses.

Sincerely,

Lorna Lynn Culton

Oppose Light Rail - Noise and safety at grade level crossing concerns!

Sent: 10/12/2015 12:26 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – noise and safety at grade level crossings

I oppose the proposed Durham – Orange Light Rail because the grade level crossings on the C2A route will create dangerous situations as people try to access NC54 without the benefit of traffic lights. Please either, scrap the project and investigate alternative options, move C2A route to the north side of NC54 or elevate it to eliminate these dangerous intersections.

Sincerely,

Lorna Lynn Culton

Oppose Light Rail - Serves less than 5% of population!

Sent: 10/12/2015 12:28 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – serves less than 5% of population

I oppose the proposed Durham – Orange Light Rail because based on figures submitted by GoTriangle in the DEIS, it serves a population of 231,000 with 11,500 riders which is less than 5% of the population. There are more flexible and cost efficient ways such as Bus Rapid Transit to address the transportation issue than spending \$1.8 billion on such a small number of people.

Sincerely,

Lorna Lynn Culton

Oppose Light Rail - Does not serve the poorest of the population!

Sent: 10/12/2015 12:30 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – does not serve the poorest of the population

I oppose the proposed Durham – Orange Light Rail because it does not serve the poorest members of the population who need transportation and jobs more than Duke, UNC and the developers.

Sincerely,

Oppose Light Rail - Parking issues

Sent: 10/12/2015 12:34 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – no parking at stations

I oppose the proposed Durham – Orange Light Rail because there will be little additional parking at most of the stations and several stations will have no parking at all, including the Woodmont station. Duke is not adding parking and neither is UNC. Most stations will be walk-up only and this will further minimize ridership, which, by the way, is extremely overstated by GoTriangle.

Sincerely,

Lorna Lynn Culton

Oppose Light Rail - Doesn't address the real needs of the community!

Sent: 10/12/2015 12:40 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – Doesn't address the real needs of the community

I oppose the proposed Durham – Orange Light Rail because it is clearly being built for Duke and UNC and private developers who plan to build along this small route. The route goes 17 miles from UNC, directly to Duke. Follow the route, and you will see that this doesn't address major traffic concerns of people traveling to RTP, RDU, Burlington, Raleigh, Carrboro or other growing areas with traffic demands. Let's spend the money to serve the real needs!

Sincerely,

Lorna Lynn Culton

Oppose Light Rail - Not convenient for the elderly

Sent: 10/12/2015 12:43 PM

To: info@ourtransitfuture.com

To: Federal Transportation Administration

Subject: Oppose Light Rail – unusable by the aging population

I oppose the proposed Durham – Orange Light Rail because it will not serve the aging population in this area. We have a very large aging population and transportation is becoming a huge issue for them and this population is getting larger every day. Seniors will need to ride buses that can take them to places they need to go and get closer to their doorstep for pick-up and drop-off. The financial resources used for this rail will use up any resources that could help seniors.

Sincerely,

Lorna Lynn Culton

Get Involved Contact Form

Al and Karen Crumbliss

Sent: 9/14/2015 3:58 PM

To: info@ourtransitfuture.com

Name: Al and Karen Crumbliss

Phone Number:

Email Address:

Message Body:

To Whom It May Concern:

We have lived in the City of Durham since 1970 and have always been involved in and relatively well informed about our community. When we first heard that light transit was being considered, we were interested, having used it in other cities. It has many advantages in ease of use, minimal noise distraction, and attractive vehicles. When routes were being considered, we did not see sufficient news to grab our attention, excepting the conflicts about where the Duke Medical Center stop would be located. Perhaps we were away when it was put out for the public, but that was our experience.

Recently, we were rather suddenly made aware that the location of the vehicle maintenance center was being considered and meetings were occurring. At one of those meetings, we realized where the path of the light transit is projected to be located for Durham and Orange County. We became quite concerned.

Our primary concerns are these:

- * Route touches only a very limited area of Durham and the same is true of Chapel Hill/Orange. Therefore only a small percentage of Durham residents will benefit.
- * Given the above, the cost projected is extremely high.
- * We have seen very little about the parking needed for those who don't live in walking distance of the stops. Have the calculations been done for the relative advantage of someone who has to drive to park to get on the train? Given the distance and time from home to park ,and park to destination on transit, isn't it likely more advantageous to simply drive? Or take the bus which reaches far more residential and business areas of the counties?
- * How much consideration has been given to the number of streets which will be crossed by the light transit and how the cross traffic will be affected by the needed signals?

In sum, we feel Durham and Orange Counties are way too spread out to be viable communities for the cost/benefit ratio to its citizens. In order to be viable, it would have to go to the RTP, the airport, and Raleigh. Until that is in the plan we are not supportive.

We also agree with the editorial comments of Eric Ghysels in the Durham Herald-Sun on August 28, 2015, "Durham-Orange light rail is train wreck in the making."

Thank you for the opportunity to register our opinions.

Karen and Al Crumbliss



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This e-mail was sent from a contact form on Our Transit Future (http://ourtransitfuture.com)

Light Transit

Karen Crumbliss

Sent: 9/14/2015 3:59 PM

To: info@ourtransitfuture.com

To Whom It May Concern:

We have lived in the City of Durham since 1970 and have always been involved in and relatively well informed about our community. When we first heard that light transit was being considered, we were interested, having used it in other cities. It has many advantages in ease of use, minimal noise distraction, and attractive vehicles. When routes were being considered, we did not see sufficient news to grab our attention, excepting the conflicts about where the Duke Medical Center stop would be located. Perhaps we were away when it was put out for the public, but that was our experience.

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Our primary concerns are these:

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- We have seen very little about the parking needed for those who don't live in walking distance of the stops. Have
 the calculations been done for the relative advantage of someone who has to drive to park to get on the train?
 Given the distance and time from home to park, and park to destination on transit, isn't it likely more advantageous
 to simply drive? Or take the bus which reaches far more residential and business areas of the counties?
- How much consideration has been given to the number of streets which will be crossed by the light transit and how the cross traffic will be affected by the needed signals?

In sum, we feel Durham and Orange Counties are way too spread out to be viable communities for the cost/benefit ratio to its citizens. In order to be viable, it would have to go to the RTP, the airport, and Raleigh. Until that is in the plan we are not supportive.

We also agree with the editorial comments of Eric Ghysels in the Durham Herald-Sun on August 28, 2015, "Durham-Orange light rail is train wreck in the making."

Thank you for the opportunity to register our opinions.

Karen and Al Crumbliss



Print | Close Window

Subject: C2A

From: "Mary Cummings, Ph.D."

Date: Thu, Aug 27, 2015 11:00 am

To: "info@ourtransitfuture.com" <info@ourtransitfuture.com>

Hello

I am an engineering professor at Duke who lives in Chapel Hill. I am wholeheartedly in support of the C2A plan. I think it is very well thought out and will dramatically increase the quality of life, as well as provide significant economic opportunities for both Durham and Orange Counties. I applaud the effort and appreciate all the thoughtful planning.

Mary Cummings

Official Public Comment

| Vame: Karen Cufin | Email | elephone: |
|---|--|---------------------------|
| Mailing Address: | City | Zip Code |
| How to Comment on the DEIS 1. Email us at info@ourtransitfuture.com 2. Submit a web-based comment form: ourtransi 3. Mail a letter to D-O LRT Project - DEIS, C/O Go 4. Submit a written comment form at two public 5. Sign-up to speak at a public hearing. | Triangle, Post Office Box 530, Morrisv | |
| All methods of commenting will receive equal weight combined Final Environmental Impact Statement (FE substantive comments will be included in the combin | EIS)/Record of Decision (ROD), which | |
| Be advised that your entire comment, including name | | |
| information in your comment may be subject to the I | North Carolina Public Records Act (N. | C.G.S. § 132.1 et seq.). |
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- 1 to the consultants' reports, which are, in
- 2 our opinion, public domain documents under
- 3 the North Carolina Public Records Act.
- 4 They have not been provided. I think the
- 5 ridership exaggeration and the lack of
- 6 transparency make this project even more
- 7 suspect. Thank you.
- 8 MR. PATRICK CURLEY: My name is
- 9 Patrick Curley. I live at
- 11 It is in Durham County.
- 12 When a half-cent tax increase was
- 13 proposed from Durham County some years
- 14 ago, I voted for the temporary increase
- 15 because the funds were to be used to look
- 16 at providing a regional transportation
- 17 system solution, including a possible
- 18 light rail solution.
- 19 I oppose this particular light
- 20 rail project as outlined by GoTriangle.
- 21 The following seven reasons are most
- 22 compelling. First, this project is
- 23 fiscally unsound with a high annual
- 24 operating subsidy of almost \$14 million.

Page 46

- 1 I did not vote for a permanent tax
- 2 increase.
- 3 Second, the noise pollution, light
- 4 pollution, and runoff pollution.
- 5 Third, the limited service area
- 6 provided by this particular route.
- 7 Fourth, safety concerns about the
- 8 proposed new at-grade crossings.
- 9 Fifth, adverse traffic impact to
- 10 already congested areas because of the
- 11 proposed at-grade crossings.
- 12 Six, the lack of coordination with
- 13 the North Carolina Department of
- 14 Transportation and their future plans for
- 15 the Highway 54 corridor.
- 16 Seventh, no connectivity with Wake
- 17 County or RDU.
- 18 I have three recommendations to
- 19 all of the deciding entities for the
- 20 Durham-Orange Light Rail Transit. First,
- 21 hold a voter referendum and ask the Durham
- 22 and Orange County residents if this
- 23 specific proposed light rail project is
- 24 what they expected and what they truly

- 1 want.
- Second, if any light rail project
- 3 is approved and built, let the riders pay
- 4 for the full cost of ridership. That
- 5 means no subsidies from our tax dollars to
- 6 pay for the annual operating expenses.
- 7 And, third, if any light rail
- 8 project is approved and built, during the
- 9 course of the planning and the building of
- 10 the new tracks, no new at-grade crossings
- 11 should be built. Existing at-grade
- 12 crossings, where utilized, should be
- 13 upgraded to appropriate safety standards,
- 14 but no new at-grade crossings should be
- 15 built.
- 16 MR. DICK HAILS: Good afternoon.
- 17 My name is Dick Hails. I live at
- I've worked for 24 years in
- 21 leadership positions with the Durham
- 22 City-County Planning Department. I've
- 23 also worked as planning director of the
- 24 transit planner, consultant with other