

March 9, 2022

**To:** Durham-Chapel Hill-Carrboro Board  
**From:** Caroline Dwyer, AICP, Project Manager, Renaissance Planning  
**Re:** Update on Orange County Transit Plan

## Background

With the discontinuation of the Durham-Orange Light Rail Transit (D-O LRT) project, a new Orange County Transit Plan is necessary to determine the priorities and projects that are most important and beneficial to Orange County and its constituent municipalities. In early 2020, Renaissance Planning was selected as the lead consultant to spearhead the effort of drafting a new Orange County Transit Plan. The project is organized into two main phases. Phase 1 introduces key transit planning concepts and frames choices in terms of easy-to-understand values to generate alternative conceptual transit scenarios. Phase 2 identifies proposed projects, prioritization criteria, and available revenues to produce implementation recommendations through 2040. The project team is currently completing Task 6 in Phase 2 and moving into the project's final two tasks.

Tasks by Phase		
Phase 1	T1	PSC Coordination
	T2	Transit Choices Brochure
	T2	Regional Connections Opportunities Report
	T3	Engagement Preparations
	T3	Engagement Wave 1
	T4	Conceptual Scenario Development
Phase 2	T5	Identify projects
	T5	Prioritization process development
	T5	Preferred Scenario
	T6	Engagement wave 2 prep
	T6	Engagement Wave 2
	T7	Revenue forecasting
	T7	Implementation Plan
	T8	Final Report

## Progress Summary

Several key project milestones have been met, including:







- Policy Steering Committee (PSC) retreat to identify community values (July 2021)
- Development and vetting of project recommendations and draft transit network with transit service providers, anchor institutions, and PSC
- Second round of public engagement was conducted from February 1, 2022 to March 4, 2022:
  - Online, paper, and in-person surveys in English and Spanish: 906 responses (through 2/28/22)
  - Approximately 25 individuals participated in two virtual focus groups (2/8/22, 2/16/22)

## NEXT STEPS



- Use feedback from community, service providers, and PSC to refine draft recommendations
- Vet refinements with PSC
- Create draft and final Transit Plan Update document
- Plan adoption

## Summary of Proposed Projects

### Operating Improvements

PROJECT	BRIEF DESCRIPTION	
 CW Route	Run 30-minute service all day	
 HS Route	Add weekend service that runs every 70 minutes	
 NS Route	Improve peak frequency to every 6 minutes; provide Saturday service to 11 PM and Sunday service to 9 PM	
 OCPT MOD	Run service 2 days per week, per zone	
 US 15-501 Projects 	<ul style="list-style-type: none"> <li>GoTriangle route 400/405 consolidation and midday frequency improvements</li> <li>CHT D route extension to Patterson Place</li> <li>CHT J route peak and midday frequency improvements</li> </ul>	

### Capital Improvements

PROJECT	BRIEF DESCRIPTION	
Stop and transfer improvements, US 15-501/ Fordham Blvd., and Ephesus Church Rd.	Improved stops and pedestrian crossing improvements supporting transfers between the D, F, and 400 routes	
Speed and reliability improvements, US 15-501/ Fordham Blvd., and Manning Dr.	Queue jump lane and shoulder running bus lane improvements on US 15-501/ Fordham Blvd. and Manning Dr. supporting improvements to the D and 400 routes	

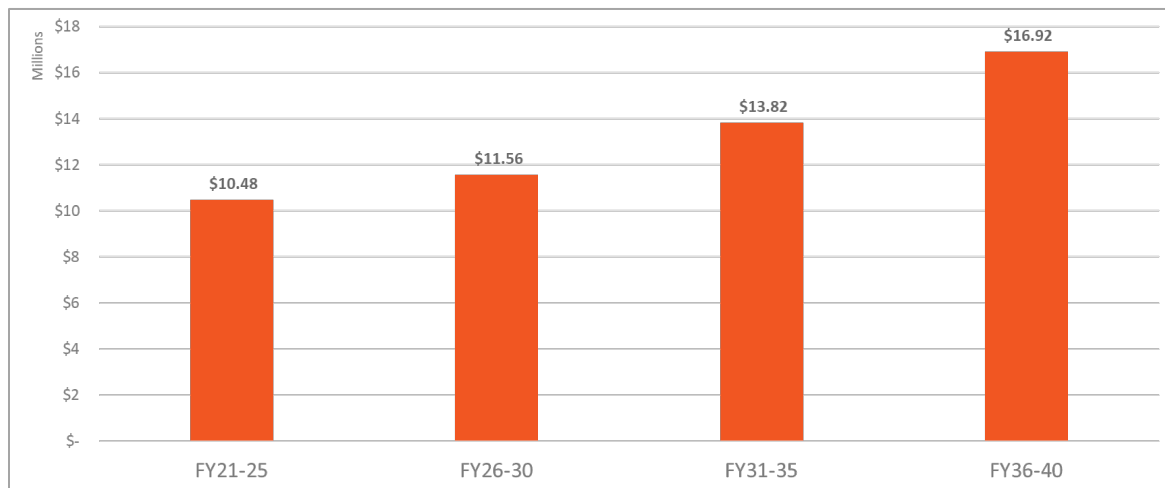
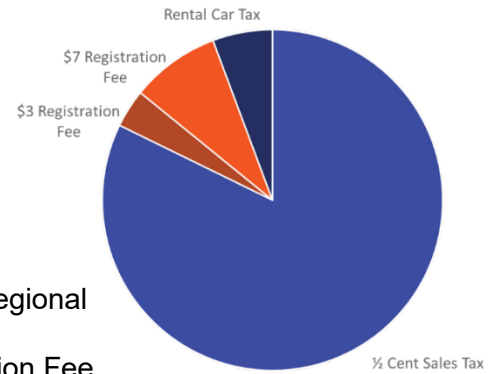
## More Detailed Financial Assumptions

### Funding Sources

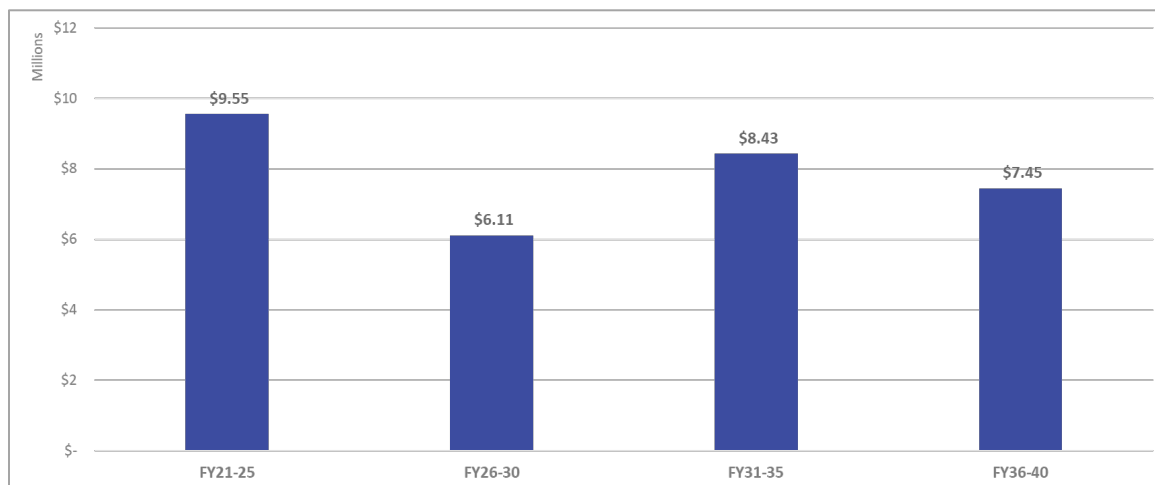
Where does local funding for transit come from?

#### Four dedicated funding streams:

- Article 43: Half-Cent Sales and Use Tax
- Article 50: 5% Vehicle Rental Tax
- Article 51: Three-Dollar increase to GoTriangle Regional Vehicle Registration Fee
- Article 52: Seven-Dollar County Vehicle Registration Fee

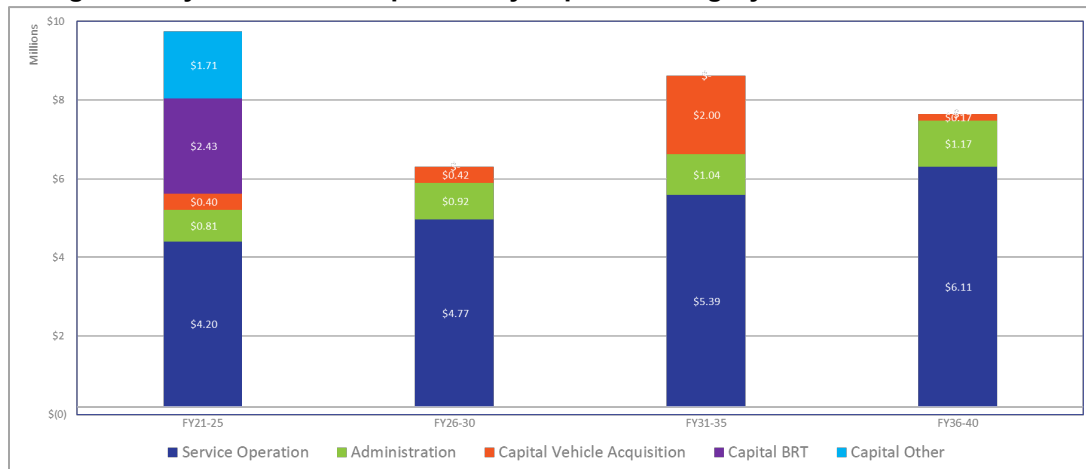


*Transit Tax District Revenues Available Each Year, Within Each 5-Year Period*



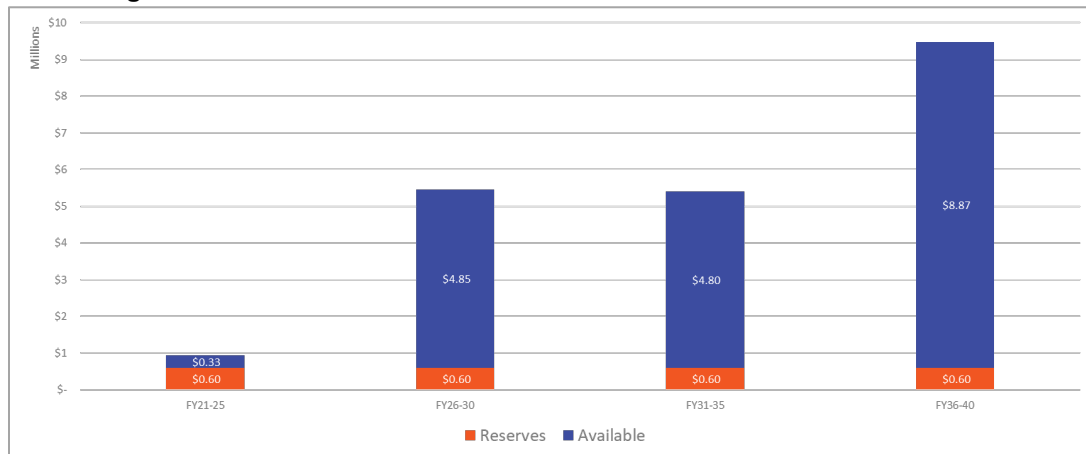
*Transit Tax District Average Expenses Per Year, for Each 5-Year Period (includes already programmed projects)*

## Orange County Tax District Expenses By Expense Category



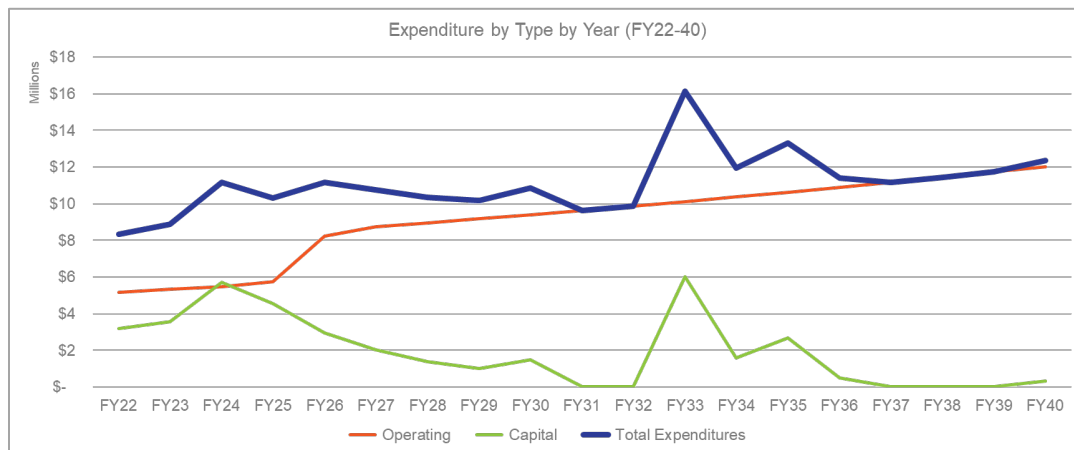
*Transit Tax District Average Expenses Per Year, by Expense Category, for Each 5-Year Period (includes already programmed projects)*

## Remaining Transit Tax Revenue



*Average Available Revenues and Reserves Each Year, for 5-Year Periods*

## Proposed Plan Financial Forecasts Orange County Transit Expenses by Type



*Capital expenses are lumpy in FY30-35 due to fleet replacement timing*

**Draft Project Cost Table**

<b>Transit Project/ Service</b>	<b>Net New Revenue Hours</b>	<b>Additional capital cost</b>	<b>Cost</b>	<b>Cost in 2040</b>	<b>In Plan Year</b>	<b>Notes</b>
<b>CW</b> Improve weekday midday service to 30 minutes.	1,500	\$0	\$177,000	\$290,035	FY2022	
<b>HS</b> weekend service with 1 bus (70 min frequency; 8 AM - 6:30 PM)	1,177		\$138,886	\$227,581	FY2025	
<b>NS</b> Improve morning peak frequency to every 6 minutes; Saturday service until 11 PM; Sunday service until 9 PM	2,300	\$1,680,000	\$271,400	\$444,721	FY2027	
<b>Mobility-on-Demand</b> ; 2 days per week by zone	3,200		\$217,600	\$356,563	FY2023	
<b>US 15-501 Projects</b>						
<b>400/405</b> 15-minute midday service; improved Sunday and evening service	8,176	\$0	\$1,093,064	\$1,791,113	FY2026	*Assumes 50/50 cost split, Durham and Orange Counties
<b>D</b> Extend service to Patterson Place; provide Saturday service until 9 PM	5,300	\$560,000	\$625,400	\$1,024,791	FY2026	*Assumes 40/60 cost split, Durham and Orange Counties
<b>J</b> AM peak frequency improved to 10 minutes; 15-minute service until noon; Saturday service until 11 PM; Sunday service until 9 PM	3,200	\$1,120,000	\$377,600	\$618,742	FY2026	
Stops and crossing improvements at Fordham & Ephesus Church for D/F & 400 transfer	0	\$1,000,000			FY2026	*\$5 million total cost; assume 80/20 split with federal grant for capital improvements
Queue jump lane and bus-on-shoulder lane supporting improved routes to/ from UNC Hospitals	0	\$2,000,000			FY2028-2029	*\$10 million total cost; assume 80/20 split with federal grant for capital improvements

**Project Implementation Summary**

ROUTE/ FACILITY	TYPE	DESCRIPTION	IMPLEMENTATION YEAR
CHT CW route	Operations	Midday frequency improvement	FY23
OCPT MOD	Operations	Expansion	FY23
CHT HS route	Operations	Weekend service	FY25
US 15-501 corridor	Operations	Bundled improvements (GoTriangle route 400/405; CHT D route; CHT J route improvements)	FY26
US 15-501/ Fordham Blvd. and Ephesus Church Rd.	Capital	Stop and transfer improvements (improved stops and ped improvements facilitating transfers between improved GoTriangle Route 400 and CHT D and F routes)	FY26
CHT NS route	Operations	Peak frequency improvement	FY27
US 15-501/ Fordham Blvd. and Manning Dr.	Capital	Speed and reliability improvements (queue jump lane and shoulder running bus lane improvements for the improved Route 400 path to/from UNC Hospitals)	FY28-29



GoTriangle Financial Model Revenues Used

Orange - Revenues	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37	FY38	FY39	FY40
Local Revenue (Not Project Specific) (\$ 000)																				
1/2 Cent Sales Tax	8,532,844	7,402,100	8,532,844	8,888,652	9,204,950	9,530,008	9,819,265	10,092,012	10,452,461	10,871,747	11,307,834	11,745,697	12,176,496	12,621,721	13,106,314	13,664,308	14,272,610	14,910,045	15,576,387	16,275,734
\$3 Increase Regional Registration Fee	350,958	337,000	350,958	356,222	361,566	366,989	372,494	378,081	383,753	389,509	395,352	401,282	407,301	413,411	419,612	425,906	432,295	438,779	445,361	452,041
\$7 County Vehicle Registration Fee	818,895	786,800	818,895	831,178	843,646	856,301	869,145	882,182	895,415	908,846	922,479	936,316	950,361	964,616	979,086	993,772	1,008,679	1,023,809	1,039,166	1,054,753
Rental Car Tax (Orange County Allocated)	481,695	432,400	481,695	493,737	506,081	518,733	531,701	544,994	558,619	572,584	586,899	601,571	616,610	632,026	647,826	664,022	680,622	697,638	715,079	732,956
Total Transit Tax Revenue	\$ 10,184,392	\$ 8,958,300	\$ 10,184,392	\$ 10,569,790	\$ 10,916,243	\$ 11,272,031	\$ 11,592,605	\$ 11,897,270	\$ 12,290,247	\$ 12,742,686	\$ 13,212,564	\$ 13,684,867	\$ 14,150,769	\$ 14,631,774	\$ 15,152,838	\$ 15,748,007	\$ 16,394,205	\$ 17,070,271	\$ 17,775,993	\$ 18,515,484
Sales Tax Growth Rate (Moody's Baseline FY24-FY50)	FY21 Actual	FY22 Adopted Plan	Match FY21 Actual	4.17%	3.56%	3.53%	3.04%	2.78%	3.57%	4.01%	4.01%	3.87%	3.67%	3.66%	3.84%	4.26%	4.45%	4.47%	4.47%	4.49%
\$3 Car Registration	FY21 Actual	FY22 Adopted Plan	Match FY21 Actual	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
\$7 Car Registration	FY21 Actual	FY22 Adopted Plan	Match FY21 Actual	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
Rental Car Tax	FY21 Actual	FY22 Adopted Plan	Match FY21 Actual	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%

“The attached [table] is what I plan on using for the FY23 Orange County Transit Work Plan model.

- FY21 – Actuals
- FY22 – What was adopted on the Transit Work Plan
- FY23 – Matched FY21 Actuals
- FY24-FY50 – Moody’s Baseline

FY23 methodology is similar to what I have done for Wake and Durham. The thought process is that FY21 was higher than anticipated but it can be due to the stimulus / enhanced benefits or just rebounding from a rough FY20. FY23 actuals matching can be conservative as inflationary prices will add to the sales tax % + the region in general is still adding people.”