



Quarterly Update

Durham County

October 1, 2018

Introduction

- Dedicated Transit Revenues
- Transit Plan Capital Improvements
- GoTriangle Short-Range Plan
- Durham-Orange Light Rail Transit Project

Success Starts with Partnerships



Richard Major
Capital Development

Better Bus Stops
Program;
Capital Projects
Oversight

Terry Bellamy
Transportation Dept.

Approve Plans,
Projects, Budgets
and Schedules;
Tactical Transit!

Patrick Young
City-County Planning

New Streamlined
Development
Review Process

Better Bus Stops

A stakeholder-driven, data-supported approach to development of a methodology for prioritizing bus stop improvements:

- Continue providing clean, attractive, innovatively designed bus stops and transit facilities
- Focus on customers' safety, security, mobility, opportunity and accessibility
- Compliance with Title VI and Environmental Justice requirements
- Community Participation is Key!



PURPOSE

Provide equitably prioritized bus stop improvements and amenities that are safe, secure and accessible.



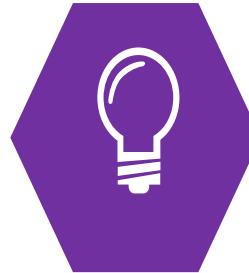
GOAL

- Adopt Better Bus Stops Initiative
- Identify Prioritization Method
- Flexible decision making
- Compliance with Title VI and EJ
- Continuous community feedback
- Assessment of all stops
- Attractive, well-maintained bus stops
- Align BBS & Bus Stop Guidelines



OBJECTIVES

- Increase the Ridership
- Incorporate Innovations
- Positive Image of Transit
- Culture of Safety
- Strengthen Partnerships
- Deliver Reliable Service
- Customer-Friendly Experience
- Engaged Community
- Attractive & Accessible Environment



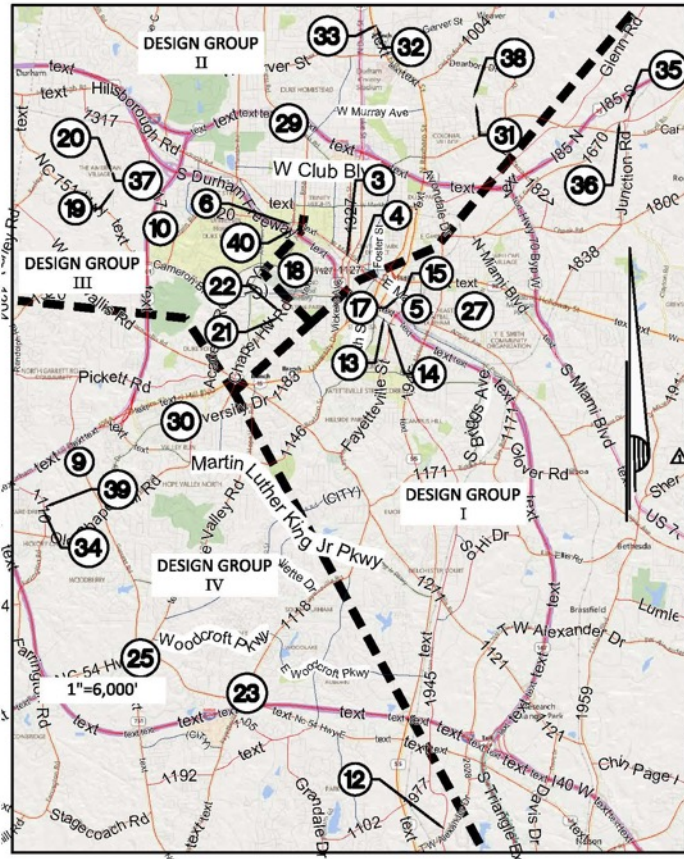
STRATEGY

- Team Kickoff Meeting: FY19 Q2
- Prepare WBS and ICE: FY19 Q2
- Hire Consultant: FY19 Q3
- Bus Stops Inventory: FY19 Q3
- Adopt BBS Policy: FY19 Q4
- Update BBS Process: Recurring

Initial meeting with cross-functional team will be held in October

On-Call Services to Design 31 Bus Stops

The City of Durham signed a multi-year contract for On-Call Professional Services with fourteen engineering firms to provide technical support for the three year period beginning in March 2016. A list of prioritized bus stop locations was then approved by the Transportation Department; and Supplemental Agreements were executed with four On-Call firms to design 31 bus stops.



Group	TTA Proj #	Proj #	Stop ID	Stop Name
I	DUR-13-028	5	6085	Durham Hosiery Mill - Angier at Main Stop 15 EB
I	DUR-16-025	13	5337	Lakewood Ave at Heritage Square
I	DUR-13-043	14	6330	Lakewood Ave at Fayetteville Rd
I	DUR-16-012	15	5280	Main at Dillard (eastbound)
I	DUR-16-013	17	6661	S Dillard St at Durham Public Health
I	DUR-13-035	27	6347	Taylor St at Hinton St (outbound)
I	DUR-13-022-1	35	6292	Walmart Glenview Station - Shopping Center
I	DUR-13-022-2	36	6304	Walmart Glenview Station - Gear St
II	DUR-13-002	3	5637	Main at Gregson - Brightleaf Square (Main) - BCC 7 EB
II	DUR-13-012	4	6381	Amtrak/West Village Stop 8 EB
II	DUR-16-019	18	5484	Chapel Hill St at Underwood Ave
II	DUR-16-051	29	6114	Queen Rd at Lamar St
II	DUR-17-027-2	31	5412	Hinson Dr - Red Oak
II	DUR-17-028-1	32	5606	Pacific at Roxboro EB
II	DUR-17-028-2	33	6624	Pacific at Roxboro WB
II	DUR-17-027-1	38	5525	Hinson Dr - Red Oak
III	DUR-13-031	40	6379	W Main at Swift Ave
III	DUR-13-013	6	6390	Main St at Irwell St, Ninth Street District Stop 27 WB
III	DUR-14-013	10	6551	Morrene Rd at Glasson St
III	DUR-16-047	19	5398	Constitution Dr at Forest Apts
III	DUR-16-048	20	6333	American Dr at Constitution Dr
III	DUR-16-033	21	5394	Chapel Hill Rd at Palmer St
III	DUR-16-034	22	5447	Chapel Hill Rd at Dean St
III	DUR-16-049	37	6042	American Dr at Constitution Dr EB
IV	DUR-14-002	9	6620	Garrett Rd at Oak Creek Apts
IV	DUR-13-033	12	6584	S Alston Ave at Falls Pointe Apartments, NE
IV	DUR-16-023	23	5793	Fayetteville Rd at Crooked Creek Pkwy
IV	DUR-16-031	25	6579	NC 54 at Garrett Rd
IV	DUR-16-057	30	5121	University Dr at Kinder Care
IV	DUR-17-029-1	34	1944	Durham Dr at Realm Dr SB
IV	DUR-17-029-2	39	1943	Durham Dr at Realm Dr NB

SHEET 0.1 - GENERAL NOTES AND SYMBOLS
SHEET 0.2 - DETAILS AND TYPICAL LAYOUT

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Siler Rd
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Phone: (919) 485-7555 Fax: (919) 485-7541

CITY OF DURHAM

GODURHAM

PROFESSIONAL SERVICES

SCOPING

SIGNATURE:

DRAWN BY: EWS

CHECKED BY: NAW

1 #40 IN GROUP 3 1/16/18

COVER SHEET

2017 BUS PROJECTS

GO Triangle

COVER

Schedule for Design of 31 Durham Bus Stops

Selected Four Engineering Firms

- A. Morton Thomas Assoc.
- Gannett Fleming
- Ramey Kemp & Assoc.
- VHB



Note: The General Contractor will be given immediate NTP with construction as site plans are approved .

GoDurham Bus Stop Sign Replacement

Created Custom Sign Concept Design

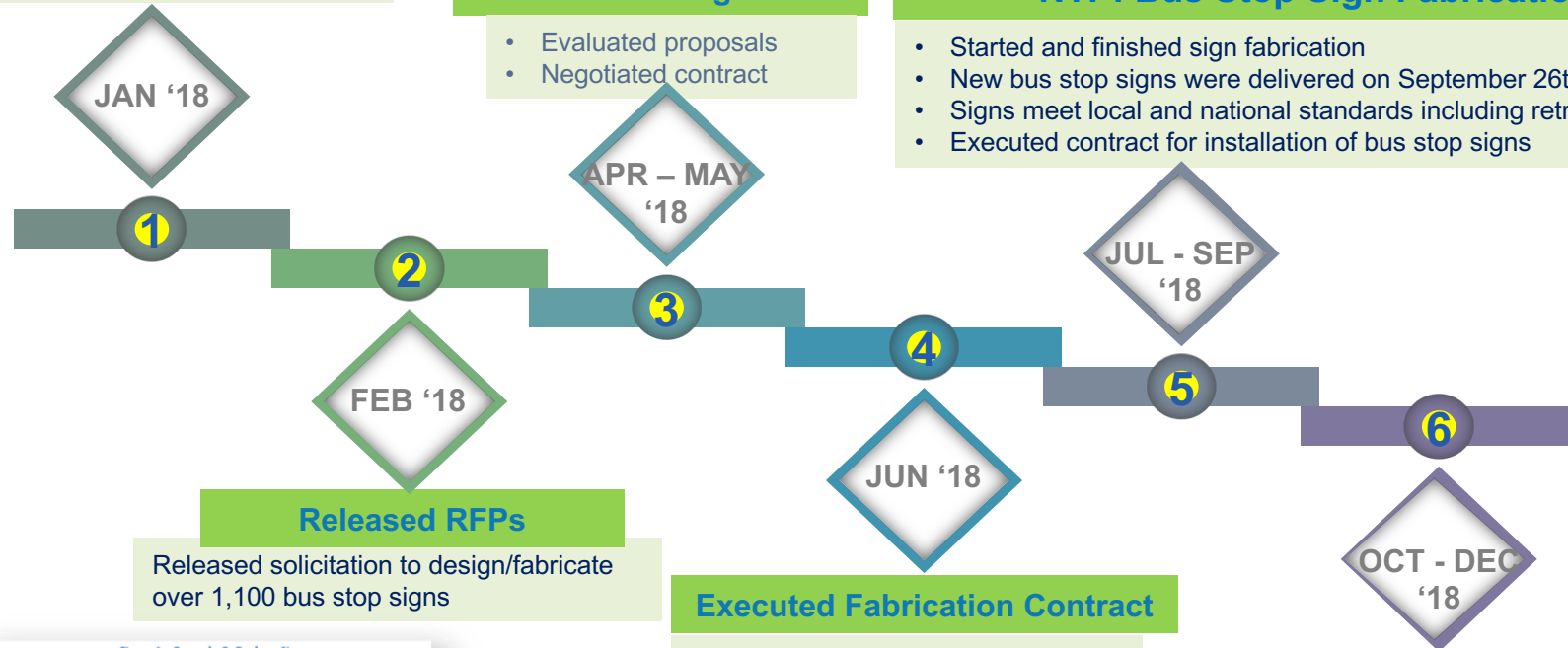
Cross-functional Team designed
12"x18"; 12"x24"; and 12"x30" signs

Evaluation & Negotiation

- Evaluated proposals
- Negotiated contract

NTP: Bus Stop Sign Fabrication

- Started and finished sign fabrication
- New bus stop signs were delivered on September 26th.
- Signs meet local and national standards including retroreflectivity
- Executed contract for installation of bus stop signs



Released RFPs

Released solicitation to design/fabricate
over 1,100 bus stop signs

Executed Fabrication Contract

- NTP with contract work
- Manufacturer delivered mockups
- Approved mockups

NTP: Start/Finish Sign Installation

- Issued NTP with installation
- Held Kick-Off Meeting on Sept. 27th
- Contract Completion Date: DEC 31st

- **“No Smoking”** symbol, as furnished by Durham County Department of Public Health, is used on all new bus stop signs. The symbol addresses both tobacco and e-cigarettes.

Figure 1 – Example GoDurham Signs



Problem Solving



Through Teamwork & Partnering

Addressing the Need for Amenities

Problem:

Support City of Durham Transportation Director, Mr. Terry Bellamy, with implementation of “Tactical Transit”, which is a deliberate, phased approach to instigating change; an offering of local ideas for local planning challenges; short-term commitment, realistic expectation and a low-risk, with possibly a high reward.

Solution & Benefits

Tactical Transit emphasizes identification of bus stop locations that have a critical need for improvements and expedited implementation of those improvements. This is especially important where Title VI and Environmental Justice objectives can be achieved.

This resulted in the following:

- Purchased and installed 18 standard benches
- Installed 4 new bus shelters with benches
- Installed 25 pole-mounted “Simme-Seat” benches
- Purchased 10 solar-light kits for retrofit into bus shelters
- Identified funding for purchase and installation of an additional 25 Simme-Seat benches
- Received formal thanks from riders, businesses and other stakeholders.
- Identify 50 bus stops for priority improvements



Standard Bench



Simme-Seat Bench

Reducing Bus Stop Design Costs

Problem Solving:

The cost to design a GoDurham bus stop, using the former Development Review process, averaged between \$15K and \$22K. Accordingly, the Development Review process was revised; and we sought to identify and implement an innovative procurement process.

Solution & Benefits

The City of Durham's Transportation Director recognized the benefit of reducing the scope-of-services to design bus stops, and approved a new approach to hiring firms. The FTA also approved our proposed solution.

- **Reduce the Scope of Services:** Rather than assign all 31 bus stops to one firm, we split the package into four groups.
- **Concurrent Design:** By assigning eight or so sites to four engineering firms, we achieved concurrent designs
- **Benefits:** Ensures that the work, which would normally take up to eighteen months, can be accomplished within 6 months
- **Cost Reduction:** By using smaller groups, we reduced the amount of time required to obtain approvals through Durham's new Development Services Center.

By negotiating individual agreements with four On-Call firms, and performing concurrent designs, our estimated cost was reduced from \$580K to **\$368K**. This amount represents a **36% reduction in estimated design costs!**



Budget Status Report

FY19 Stop Improvements

Cost Category	FY19 Budget	Contract Amount
Real Estate	\$0	\$0
Design & Engineering (See Note 1)	\$580,000	\$368,000
Construction	\$366,000	(See Note 2)
Oversight/Management	\$51,398	\$51,398
Total Capital Costs	\$997,398	

Notes

1. Design cost savings will be reinvested into related bus stop improvements.
2. Construction contract costs will be determined before approval of designs.

Durham and Orange Revenue

Durham

	2017		2018	
	Transit Plan Revenue Projection	Revenue Actuals*	Transit Plan Revenue Projection	Revenue Actuals*
Article 43 Half-Cent Sales and Use Tax	\$27.15 M	\$27.15 M	\$28.58 M	\$29.89 M
Article 50 Five-Percent Vehicle Rental Tax	\$1.17 M	\$1.22 M	\$1.22 M	\$1.25 M
Article 51 Three-Dollar Increase to Regional Vehicle Registration Fee	\$0.70 M	\$0.69 M	\$0.72 M	\$0.69 M
Article 52 Seven-Dollar County Vehicle Registration Fee	\$1.62 M	\$1.61 M	\$1.68 M	\$1.62 M
Total Dedicated Local Revenues	\$30.6 M	\$30.7 M	\$32.2 M	\$33.5 M

Orange

	2017		2018	
	Transit Plan Revenue Projection	Revenue Actuals	Transit Plan Revenue Projection	Revenue Actuals*
Article 43 Half-Cent Sales and Use Tax	\$6.69 M	\$6.85 M	\$7.00 M	\$7.34 M
Article 50 Five-Percent Vehicle Rental Tax	\$0.57 M	\$0.60 M	\$0.60 M	\$0.61 M
Article 51 Three-Dollar Increase to Regional Vehicle Registration Fee	\$0.35 M	\$0.33 M	\$0.36 M	\$0.33 M
Article 52 Seven-Dollar County Vehicle Registration Fee	\$0.81 M	\$0.78 M	\$0.84 M	\$0.77 M
Total Dedicated Local Revenues	\$8.4 M	\$8.6 M	\$8.8 M	\$9.1 M

Transit Plan Revenue Projections for 2017 and 2018 based on:

- Half-Cent Sales and Use Tax – Moody's analytics forecasts
- Five-Percent Vehicle Rental Tax – Dr. Michael Walden (NCSU) forecasts
- Three-Dollar Increase to Regional Vehicle Registration Fee – Dr. Michael Walden (NCSU) forecasts
- Seven-Dollar County Vehicle Registration Fee – Dr. Michael Walden (NCSU) forecasts

* FY18 revenue is based on un-audited actuals.

Purpose of the Short Range Transit Plan

- Provide a roadmap for transit in Durham County that incorporates a regional approach to mobility
- Define appropriate methods to serve both urban and rural needs in Durham County
- Integrate light rail into the future transit network in Durham County

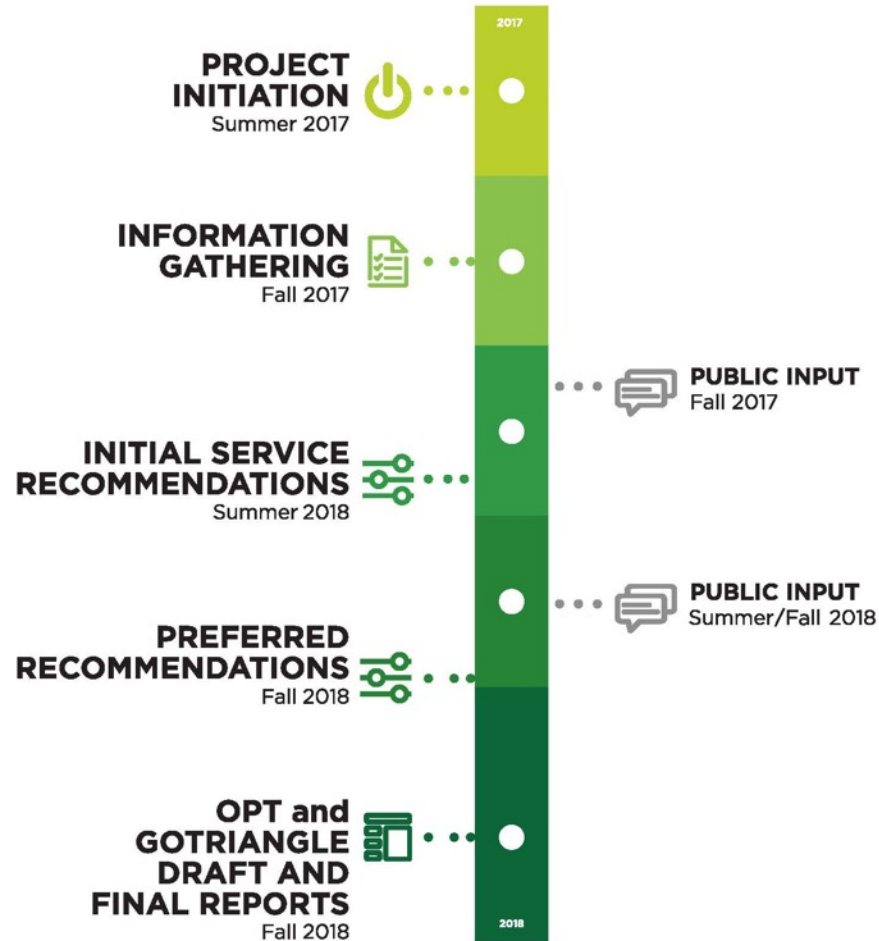
Short Range Transit Plan Goals

- Make service faster and more competitive
- Provide more frequent service
- Provide more all-day service

GoTriangle Short-Range Transit Plan

Route #	Name	Operator	Future Route #	Proposal	Start Year
400	Durham-Chapel Hill	GoTriangle	400	More direct, faster service between Durham and Chapel Hill. Service to SW Durham Dr would be removed. Other providers would cover that section. Along with Route 405, 15 minute service at peak	FY20
405	Durham-Chapel Hill-Carrboro	GoTriangle	405	Would serve Patterson Place. Along with Route 400, 15 minute service at peak	FY20
700	Durham-RTC	GoTriangle	700	Direct service between Durham Station and RTC	FY20
800	Chapel Hill-Southpoint-RTC	GoTriangle	800	A consistent pattern would be provided. Route 800 would take I-40 at all times and not use NC 54 in the middle of the day, nights, and weekends. Service on NC 54 would be provided by Route 805 and GoDurham services	FY20
800S	Chapel Hill-Southpoint	GoTriangle	800S	No changes	
805	Chapel Hill-Woodcroft-RTC	GoTriangle	805	Some underutilized reverse-peak direction trips will be removed	FY20
DRX	Durham-Raleigh Express	GoTriangle	DRX	No changes	
ODX	Orange-Durham Express	GoTriangle	ODX	Increased frequency from hourly to 30 minute at peak and a streamlined pattern using I-85 and I-40 instead of US-70	FY21
North Durham/Rougemont Vanpool Services				Vanpool services to serve Northern Durham	FY20

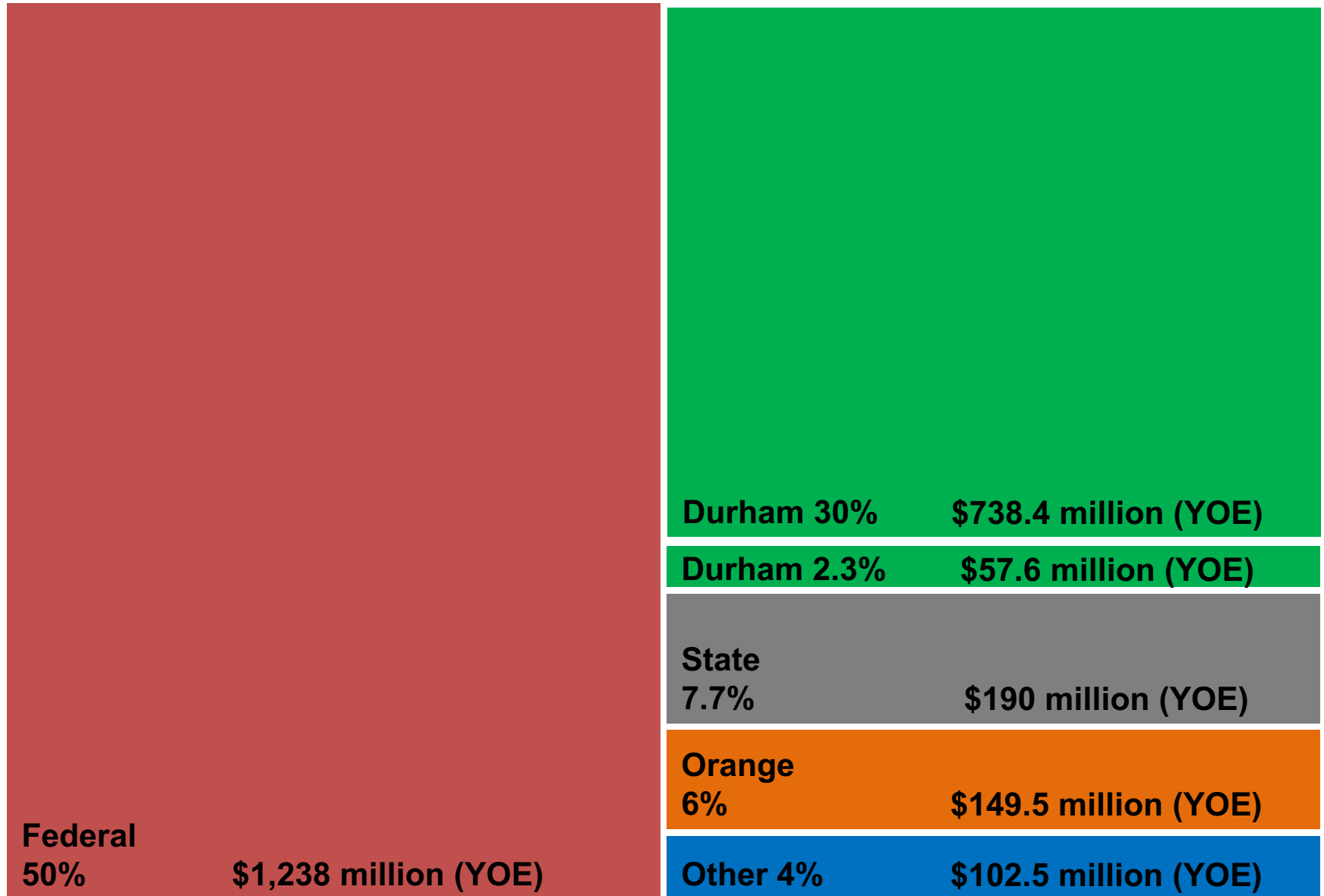
What are the project timelines?



Light Rail Update

- Still on track for a federal investment of over \$1 billion through anticipated grant agreement (FFGA) in September 2019.
- Letters confirmed plans to commit additional dedicated transit revenues from Durham County.
- Cost sharing agreement and transit plan updates anticipated January-February.

D-O LRT Project: \$190 million cap funding plan / updated



Tentative GoTriangle Federal Grant (FFGA) Schedule

- Anticipated execution of \$1.238 billion grant agreement in September 2019.
- Apply for grant agreement by April 2019.
- Execute remaining critical agreements and commit remaining non-CIG funding by early 2019.
- Risk Assessment tentative for October 2018.

Critical Agreements

- Working with our partners to execute agreements critical for the FFGA.
- Universities – NCCU, Duke, UNC
- Utilities – AT&T, PSNC, Duke Energy
- Municipalities – Durham and Chapel Hill
- Railroads – Norfolk Southern and NCR
- Durham VA Health Care System

Supplemental Environmental Assessment

- Supplemental Environmental Assessment (SEA) expected to be published end of October.
- SEA evaluates proposed refinements to the Light Rail design including:
 - Blackwell/Mangum Station, Gateway Station shift, Erwin Rd elevation, Pettigrew St adjustments, MLK Jr. Station park and ride, Shannon Rd underpass, Patterson Place Station shift, Alston Ave adjustments

Erwin Road

Challenges:

- Unique utilities beneath the road
- Emergency access to medical centers
- Avoiding expensive property impacts and impacts to strategically important facilities

Proposed Solution:

- Elevated structure from LaSalle east along Erwin and beyond. Elevated stations at LaSalle & Duke/VA Medical Centers.

Pettigrew Grade Crossings

Challenge:

- The abrupt change from sloping roadways to flat tracks at railroad crossings in downtown Durham would make it possible for large vehicles to bottom out near the tracks.

Proposed Solution:

- Raise the elevation of Pettigrew and connecting roadways to more closely match freight track elevation.

Blackwell Street

Challenge:

- Raising Pettigrew and connecting roadways at Blackwell St could cause significant impacts to the Old Bull Building, a national historic landmark.

Proposed Solution:

- Close Blackwell St at the railroad crossing in downtown Durham. Develop a mitigation to maintain bike and pedestrian connectivity.

Dillard Street

Challenge:

- Railroad gate timing and coordination in downtown Durham poses challenges to vehicular, pedestrian, and Light Rail traffic at the Dillard St railroad crossing.

Proposed Solution:

- One-way Dillard St southbound at the railroad crossing to reduce the potential for traffic conflicts and gate timing issues.

The Downtown Loop (Ramseur)

- SEA includes proposal to two-way the Loop from Dillard to Chapel Hill St.
- Provides westbound access for buses and other vehicles.
- Helps Durham achieve a major objective with matching federal funds as a part of the Light Rail Project.

Operations & Maintenance Facility

- GoTriangle seeking rezoning with a development plan, Future Land Use Map amendment, and annexation.
- Planning Commission hearing on October 9; Durham City Council action to follow.
- Project schedule requires action by the end of the calendar year.

Design Schedule

- The design has surpassed the 50% milestone and is progressing toward 90%.
- Informal over-the-shoulder reviews with third-party stakeholders are ongoing.
- 90% design anticipated by summer 2019.
- 100% design milestones anticipated beginning in November 2019.

DBE Participation

	Amount
Total DBE Firms Engaged [#]	28
Total DBE Participation to Date [\$]	\$9.7 M
Total DBE Participation to Date [%]	11%

Note: Table reflects amounts approved for payment through August 31, 2018 and includes contracts with the Project Development Consultant, General Engineering Consultant, Program Management Consultant, and Construction Management Consultant.

On track toward reaching DBE goals for the three primary consulting contracts:

- 14% for the GEC
- 14% for the PMC
- 15% for the CMC

Workforce Development

- Local sources of labor limit risks related to Light Rail construction costs.
- A broader coalition is needed to implement a robust workforce development program for the Light Rail Project.
- Significant opportunity for sustainable jobs is a large part of the return on Durham's investment in Light Rail.

Light Rail & Affordable Housing

- 2 out of every 3 DHA homes are in a Light Rail station area.
- Of roughly 11,000 Durham housing units in a station area, 15-20% are legally-binding affordable housing.
- Durham is planning for the future of affordable housing in downtown Light Rail station areas.



Questions