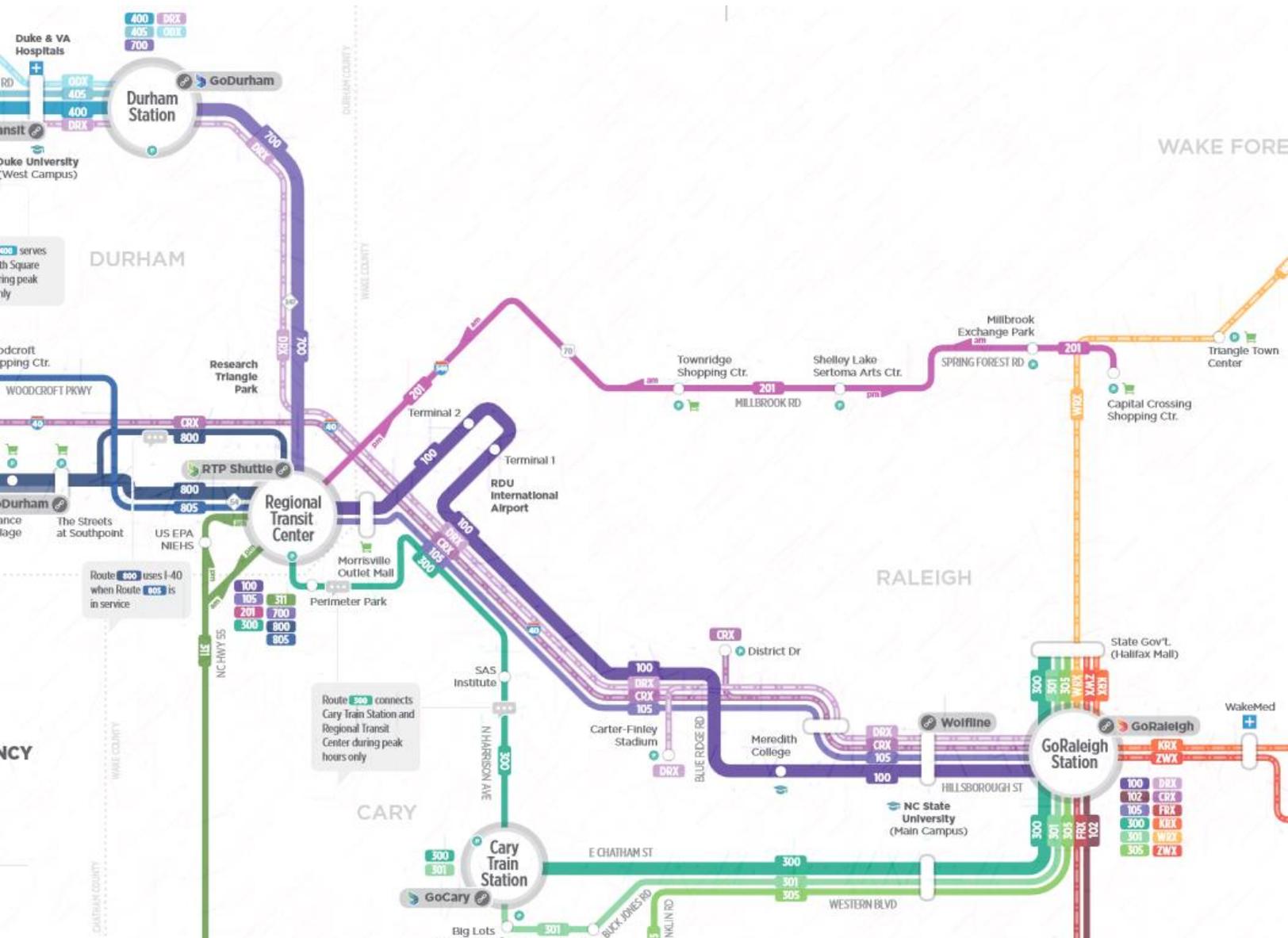




FY 2019 Annual Bus Service Performance Report

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February 26, 2020



DURHAM

RALEIGH

CARY

WAKE FOREST

WakeMed

CHATHAM COUNTY

CHATHAM COUNTY

DURHAM COUNTY
WAKE COUNTY

Duke & VA Hospitals
Duke University (West Campus)

Woodcroft Shopping Ctr.
WOODCROFT PKWY

US EPA NIEHS
The Streets at Southpoint

Big Lots
BANK AVENUE

Durham Station
GoDurham

Regional Transit Center
RTP Shuttle

Cary Train Station
GoCary

Terminal 1
Terminal 2
RDU International Airport

GoRaleigh Station

Shelley Lake Sertoma Arts Ctr.
MILLBROOK RD

Merced College
HILLSBOROUGH ST

Millbrook Exchange Park
SPRING FOREST RD

NC State University (Main Campus)

Triangle Town Center
Capital Crossing Shopping Ctr.

State Gov'L (Halifax Mall)

Route 400 serves South Square during peak hours only

Route 800 uses I-40 when Route 805 is in service

Route 300 connects Cary Train Station and Regional Transit Center during peak hours only

Introduction

In September 2003, GoTriangle's Board of Trustees adopted the Regional Bus Service Standards to establish performance expectations for the agency's fixed-route services. The intent was to drive improvements in productivity by routinely and systematically evaluating bus service performance against quantifiable indicators. Since the adoption of the Standards, the annual performance reporting process has been incrementally adjusted to provide the most useful information about GoTriangle's bus service.

The GoTriangle performance indicators presented in this report are:

- **Daily Boardings** – how many people are using the service provided?
- **Boardings per Revenue Hour** – how cost-effective is this service compared to others?
- **On-Time Performance** – how well is the service meeting the expectations set by the schedule?

This report provides a summary of GoTriangle's regional bus service performance during fiscal year 2019, with comparisons to fiscal year 2018 and prior years in order to illustrate changes and trends in performance.

Key Findings

- Ridership on the GoTriangle system increased by 1% to 1,674,324 boardings in FY 2019, against the trend of ridership declines that began in FY 2015.
- Routes 300 and DRX continue to have the greatest increases in ridership, partially due to service increases funded by the County Transit Plans. In FY 2019, Route 300's ridership increased by over 23,000 annual boardings and Route DRX's by over 13,000. Ridership is also up for the other core routes (100, 400, 700, and 800) on weekends, building on an earlier investment from the County Transit Plans.
- In the first year of the Youth GoPass program, GoTriangle had 53,694 boardings with Youth GoPasses, which is 3% of total ridership.
- Routes 400, 700, 805, and CRX had declines in weekday ridership. Identifying the specific causes will require additional research. Ridership also decreased for Go OnDemand, the pilot demand-response service in the Research Triangle Park. (GoTriangle discontinued Go OnDemand and replaced it with RTP Connect in FY 2020.)
- Routes 405, 700, and DRX remain GoTriangle's highest-productivity routes in terms of boardings per hour. Routes 311, KRX, and WRX remain the lowest.
- On-time performance remained at 88%, which exceeds GoTriangle's goal of 85%.

What Changed in FY 2019

GoTriangle usually implements major service changes in August of each year. The August 2018 service changes affected only a few routes:

Route	Service Change
100 (Raleigh – Airport – RTC)	Extended Sunday service by two hours. Previously, service ended around 7:00 PM, but now service ends around 9:00 PM.
300 (Raleigh – Cary)	
400 (Durham – Chapel Hill)	
700 (Durham – RTC)	
800 (Chapel Hill – Southpoint – RTC)	
DRX (Durham – Raleigh Express)	Added ten trips per day and adjusted the schedule to account for traffic congestion.
CRX (Chapel Hill – Raleigh Express)	Adjusted the schedule to account for traffic congestion (but did not add trips).

GoTriangle also adopted a new holiday schedule, reducing the number of holidays with no transit service from seven to two (Thanksgiving Day and Christmas Day) and improving consistency with the local systems. The Wake, Durham, and Orange County Transit Plans funded these improvements.

At the same time, GoTriangle and our partner agencies began the Youth GoPass program. Riders age 13 through 18 can obtain a free Youth GoPass and ride GoTriangle, GoRaleigh, GoCary, and GoDurham at no cost.

In January 2019, GoTriangle made another set of minor service changes:

Route	Service Change
Go OnDemand (RTP)	Discontinued midday service, and increased peak service from three vehicles to four.
100 (Raleigh – Airport – RTC)	Minor schedule changes.
300 (Raleigh – Cary)	Minor schedule changes.
305 (Raleigh – Cary – Lake Pine)	Minor schedule changes.
311 (Apex – Lake Pine – RTC – EPA)	Minor schedule changes.

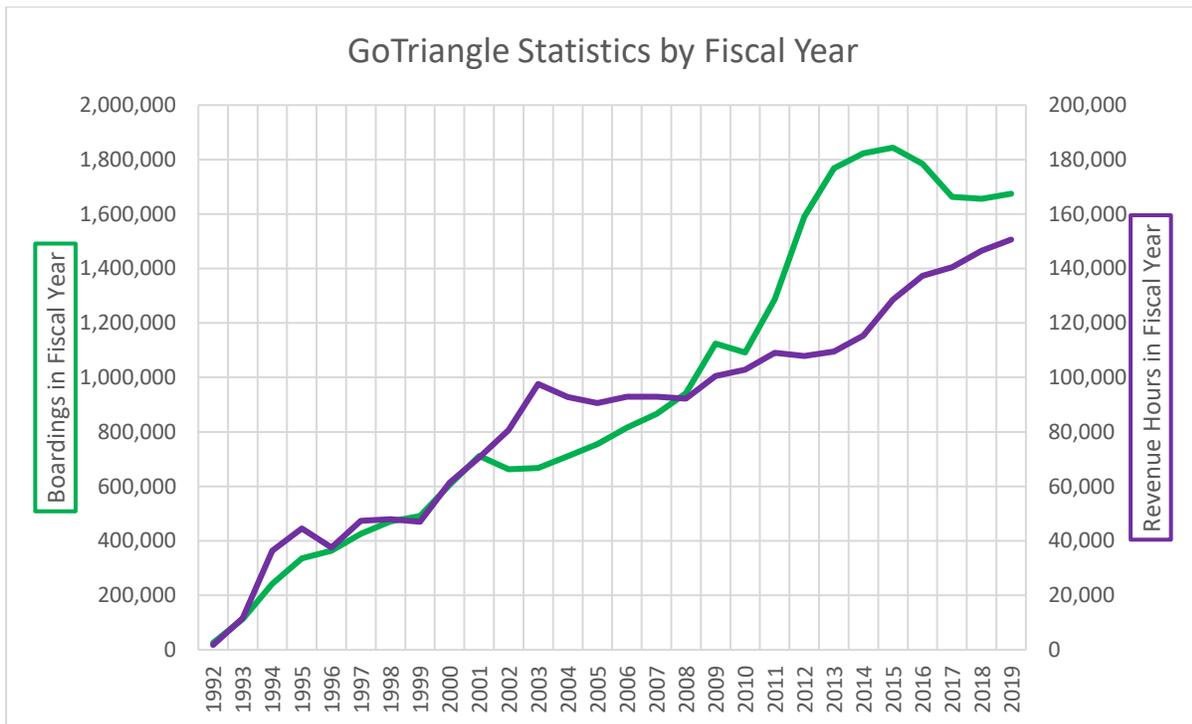
Two key changes implemented in FY 2018 continued to affect ridership in FY 2019: the expansion of off-peak service on Routes 100, 300, 700, and 800, and the replacement of the RTP Shuttles with Go OnDemand.

System Ridership

Across the system and including contracted services, GoTriangle had 1,674,324 customer boardings in FY 2019. This represents a 1% increase from FY 2018 (1,656,150 boardings).

The creation of Youth GoPass contributed to the ridership increase. There were 53,694 Youth GoPass boardings on GoTriangle in FY 2019. Meanwhile, the number of reduced-fare boardings (which previously included youth) and high school student GoPass boardings decreased by only 25,850 from FY 2018 to FY 2019. Details about ridership for each fare program are included in Attachment D.

The following chart compares annual ridership (green) to the amount of service provided in revenue hours (purple).

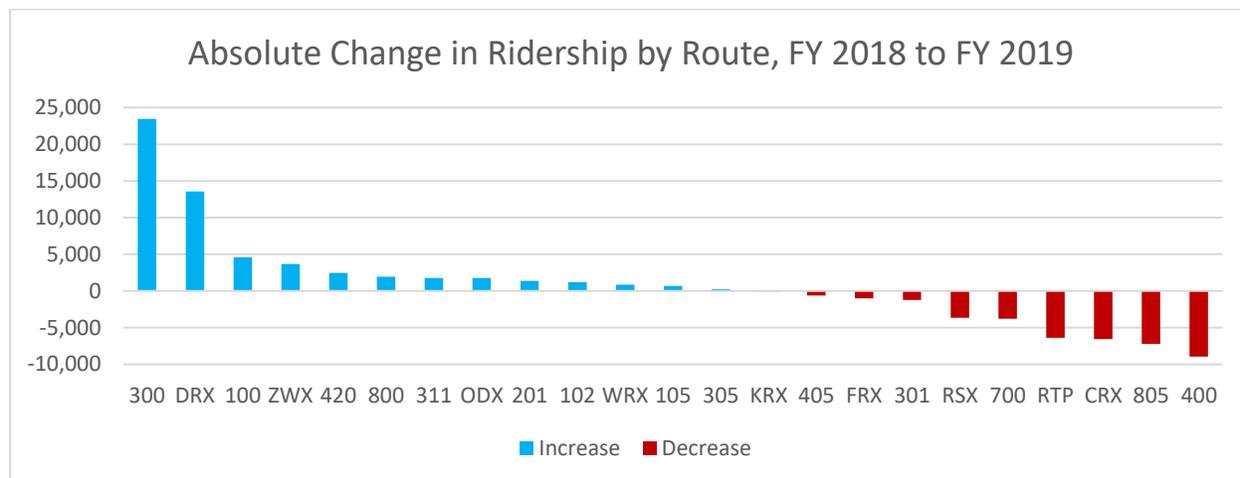


From FY 1992 to FY 2010, GoTriangle's ridership increased more or less in proportion with the amount of service offered. In FY 2011 – 2013, ridership expanded dramatically, even as the amount of service offered remained stable. This expansion began to reverse in FY 2014: GoTriangle began adding more service each year, but the ridership growth moderated, and eventually turned into a decline. (These patterns correspond well with the price of gasoline, which increased rapidly in FY 2011 and 2012, and decreased rapidly in FY 2015 and 2016. GoTriangle also increased fares in FY 2015.)

It is important to note that despite the recent year-to-year decreases, GoTriangle is still on a long-term trend of increasing ridership. The future of ridership is always difficult to predict, but comparisons can be drawn to FY 2002 and 2003: GoTriangle increased service sharply, and ridership declined in the moment, but it caught back up to the service offered – and indeed, began to grow beyond the level of service offered – in FY 2008.

Changes in Ridership by Route

The relatively minor 1% increase in ridership from FY 2018 to FY 2019 masks larger changes at the route level. Details about the ridership of each route are included in Attachment B. As an overview, this chart shows the absolute change in ridership for each route on the system:



Most of the significant increases in ridership can be linked to recent service changes.

Route 300 (Raleigh – Cary) continues to boast impressive year-over-year ridership gains. (The table to the right shows the average daily boardings for each time period.) GoTriangle began Route 300 in its modern form in August 2015 – before, different routes connected Raleigh and Cary during peak and off-peak times. Route 301 ran during peak hours, with a winding course through southeast Cary, and the more direct Route 303 ran only midday and Saturday. Since August 2015, Route 300 has provided a direct link at all times of day.

Route 300	FY '18	FY '19	Δ
Weekday	474	544	+15%
Peak (Ral.-Cary)	176	201	+14%
Peak (Cary-RTC)	122	123	+1%
Midday	148	180	+22%
Evening	29	40	+39%
Saturday	180	243	+35%
Sunday	78	139	+78%

GoTriangle added evening and Sunday service, and increased the frequency of midday and Saturday service, in August 2017, then extended Sunday service by a further two hours in August 2018. Ridership has increased on the core Raleigh-Cary segment, at all times of day, each year since August 2015. This shows the benefit of operating service consistently at all times of day.

Route DRX (Durham – Raleigh Express) has also experienced ridership growth in the years leading up to FY 2019, though unlike Route 300, it has not received increases in service. Rather, ridership has increased naturally thanks to greater employment in downtown Raleigh and downtown Durham and greater congestion on I-40 and NC-147.

GoTriangle added ten trips to Route DRX's schedule at the beginning of FY 2019 to capitalize on the growth, and ridership increased from an average of 470 daily boardings in FY 2018 to 527 in FY 2019 – a 12% increase.

Ridership on GoTriangle's weekend service on the core routes (Routes 100, 300, 400, 700, and 800) has also increased, thanks to improvements to Saturday service in August 2016/2017 and improvements to Sunday service in August 2018.

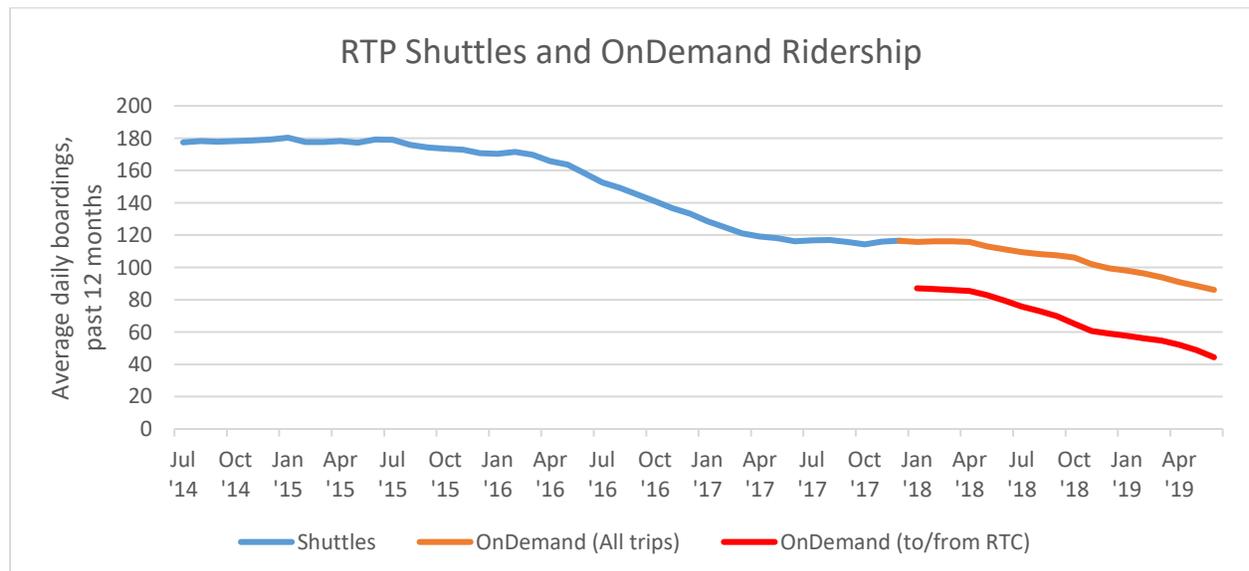
Route	Saturday			Sunday		
	FY '18	FY '19	Δ	FY '18	FY '19	Δ
100 (Raleigh – Airport – RTC)	431	451	+5%	238	283	+19%
300 (Raleigh – Cary)	180	243	+35%	78	139	+78%
400 (Durham – Chapel Hill)	340	370	+9%	184	214	+16%
700 (Durham – RTC)	258	268	+4%	151	167	+11%
800 (Chapel Hill – Southpoint – RTC)	252	257	+2%	117	122	+4%
Total	1,461	1,589	+9%	767	925	+21%

However, several routes had noticeable declines in weekday ridership. (In the case of Routes 400 and 700, this canceled out the growth in weekend ridership.)

Route	FY '18	FY '19	Δ	Most affected direction
400 (Durham – Chapel Hill)	767	722	-6%	Both ways, peak & midday
700 (Durham – RTC)	465	446	-4%	From Durham to RTC
805 (Chapel Hill – Woodcroft – RTC)	380	352	-7%	From RTC to Chapel Hill
CRX (Chapel Hill – Raleigh Express)	394	370	-6%	From Chapel Hill to Raleigh

Ridership and productivity remain healthy on these routes, but year-over-year ridership change has been negative for the past three years. Identifying the specific causes will require additional research.

Finally, the replacement of the RTP Shuttles with Go OnDemand has continued to decrease ridership in the Research Triangle Park. In calendar year 2017, the last full year of service for the RTP shuttles, they had an average of 116 daily boardings. In FY 2019, after eighteen months of service, Go OnDemand had an average of 83 daily boardings – a decrease of 28%. In addition, almost half of the boardings on Go OnDemand were direct trips within the RTP area, which did not connect to other GoTriangle routes at the Regional Transit Center. (This may be contributing to reduced ridership on Route 700 in particular.)



Productivity by Route

GoTriangle’s Regional Bus Service Standards establish categories for routes, and compare routes to one another within each category. A route is considered “high performing” if its number of boardings per revenue hour is above 125% of the average for its service category, and “low performing” if its number of boardings per revenue hour is below 75% of the average for its service category.

The Wake Transit Service Standards and Performance Measures set a different process for evaluating route performance, by comparing each route’s productivity to a fixed standard for the service category. Attachment C compares the performance of GoTriangle routes to the Wake Transit standards.

Peak Services

Peak services¹ are divided into two categories: Regional and Express.

Regional Routes	Productivity	Performance
405 (Durham – Chapel Hill/Carrboro)	20.4	High
700 (Durham – RTC)	17.5	High
800 (Chapel Hill – Southpoint – RTC)	16.8	High
400 (Durham – Chapel Hill)	13.6	Average
420 (Hillsborough – Chapel Hill)	13.5	Average
805 (Chapel Hill – Woodcroft – RTC)	12.8	Average
102 (Raleigh – Garner)	12.0	Average
300 (Raleigh – Cary – RTC)	11.7	Average
105 (Raleigh – RTC)	11.7	Average
100 (Raleigh – Airport – RTC)	8.3	Low
305 (Raleigh – Cary – Lake Pine)	8.2	Low
301 (Raleigh – Southeast Cary)	7.0	Low
201 (North Raleigh – RTC)	6.8	Low
311 (Apex – Lake Pine – RTC – EPA)	5.8	Low
Go OnDemand	4.1	Low
Category Average – FY 2019	12.5	
Category Average – FY 2018	12.5	

Routes 405, 700, and 800 have been consistently high performing by this measure for several years. Routes 201, 301, 305, and 311 have been consistently low performing, but the Wake Bus Plan includes proposals to address the productivity of each of these routes. GoTriangle implemented changes for Routes 201 and 311, as well as Go OnDemand, in FY 2020, and will address Routes 301 and 305 in future fiscal years – see the “What’s Next?” section on page 13 for more information.

Route 100’s low performing status is challenging to solve. It performs well off-peak, but it overlaps with the faster Routes 105, CRX, and DRX during peak hours. The Wake Bus Plan and Short-Range Transit Plan do not include any proposals that address its relationship with these routes, but the Wake Transit Vision Plan update will examine it.

¹ Because of constraints on the available data, all weekday service for Route RSX is included in the “Peak” category, as is the midday service for Go OnDemand (which ended in January 2019).

Express Routes	Productivity	Performance
DRX (Durham – Raleigh Express)	14.7	High
CRX (Chapel Hill – Raleigh Express)	12.0	Average
ZWX (Zebulon – Wendell – Raleigh Express)	10.7	Average
ODX (Orange – Durham Express)	10.2	Average
FRX (Fuquay-Varina – Raleigh Express)	8.1	Low
RSX (Robertson Scholars Express)	7.3	Low
WRX (Wake Forest – Raleigh Express)	5.6	Low
KRX (Knightdale – Raleigh Express)	5.5	Low
Category Average – FY 2019	10.9	
Category Average – FY 2018	11.4	

Route DRX has always been the highest-performing express route due to its strong bidirectional demand. Its productivity was even higher (18.2 boardings per hour) in FY 2018, and decreased when GoTriangle added ten trips per day – ridership has increased, but has not yet caught up to the added service. Route DRX nevertheless remains the only express route classified as high performing.

GoTriangle discontinued Routes KRX and RSX in FY 2020. GoTriangle Routes 400 and 405 continue to provide service in the same corridor as Route RSX, and GoRaleigh introduced a new local route to Knightdale to replace Route KRX. In addition, work on new Park-and-Rides is underway for Routes FRX and WRX. More details about these changes are available in the “What’s Next?” section on page 13.

Attachment B section 2 shows the ridership and productivity of peak-hour service to each of the four key commute destinations (Raleigh, Durham, Chapel Hill, and the Regional Transit Center/greater Research Triangle Park), with ridership split by direction for routes serving two destinations.² This table summarizes the FY 2019 totals for each destination:

Destination	Boardings	Rev. Hours	Productivity
Raleigh	308,000	31,827	9.7
Durham	209,955	15,732	13.3
Chapel Hill	395,543	22,664	17.5
RTC/Greater RTP	242,875	27,719	8.8

² Example: On Route DRX, which serves Durham and Raleigh, ridership on trips from Raleigh to Durham in the morning and Durham to Raleigh in the afternoon is in the “Durham” category, and ridership on trips from Durham to Raleigh in the morning and Raleigh to Durham in the afternoon is in the “Raleigh” category. However, on Route ODX, all ridership is included in the “Durham” category.

Off-Peak Services

Off-peak services are split into categories based the time of day: Midday, Evening, Saturday, and Sunday. High performing routes are highlighted in blue, and low performing routes in orange.

Route	Midday	Evening	Saturday	Sunday
100 (Raleigh – Airport – RTC)	11.8	10.0	8.4	10.2
300 (Raleigh – Cary)	12.5	11.4	9.4	10.1
400 (Durham – Chapel Hill)	11.4	9.8	7.1	8.1
700 (Durham – RTC)	13.7	12.7	10.0	12.3
800 (Chapel Hill – Southpoint – RTC)	9.8	8.7	5.0	4.7
RSX (Robertson Scholars Express)			6.8	4.1
Category Average – FY 2019	11.6	10.2	7.6	8.4
Category Average – FY 2018	11.7	10.0	7.2	8.1

The core routes all operate at a similar level of productivity (Route 700 has higher productivity mainly because it is shorter). The exception is Route 800, which is slightly less productive than the other routes on weekdays and much less productive on weekends, despite its high peak-hour productivity. The probable cause is that it operates on NC-54 instead of I-40 during off-peak times, which makes the trip between Chapel Hill and points east much slower than driving. GoTriangle plans to realign Route 800 to use I-40 at all times shortly after this report's publication, which will both reduce costs and attract customers who may not use the route today because of the slow trip.

On-Time Performance

GoTriangle considers a trip on time if it arrives at its end-of-line timepoint no more than five minutes later than the scheduled time. The defined goal is for 85% of trips to arrive on time. For FY 2019, GoTriangle met this goal with 88% of trips arriving on time – the same as FY 2018.

The following routes did not meet the 85% mark:

Route	Time	FY 2018	FY 2019	Δ
102 (Raleigh – Garner)	Peak	77%	84%	+7 pt
201 (North Raleigh – RTC)	Peak	88%	83%	-5 pt
305 (Raleigh – Cary – Lake Pine)	Peak	80%	83%	+3 pt
800 (Chapel Hill – Southpoint – RTC)	Peak	81%	80%	-
WRX (Wake Forest – Raleigh Express)	Peak	78%	80%	+2 pt
300 (Raleigh – Cary – RTC)	Midday	88%	83%	-5 pt
300 (Raleigh – Cary – RTC)	Saturday	72%	79%	+7 pt
400 (Durham – Chapel Hill)	Saturday	81%	84%	+3 pt

The following routes failed to meet the standard last year, but did meet it this year:

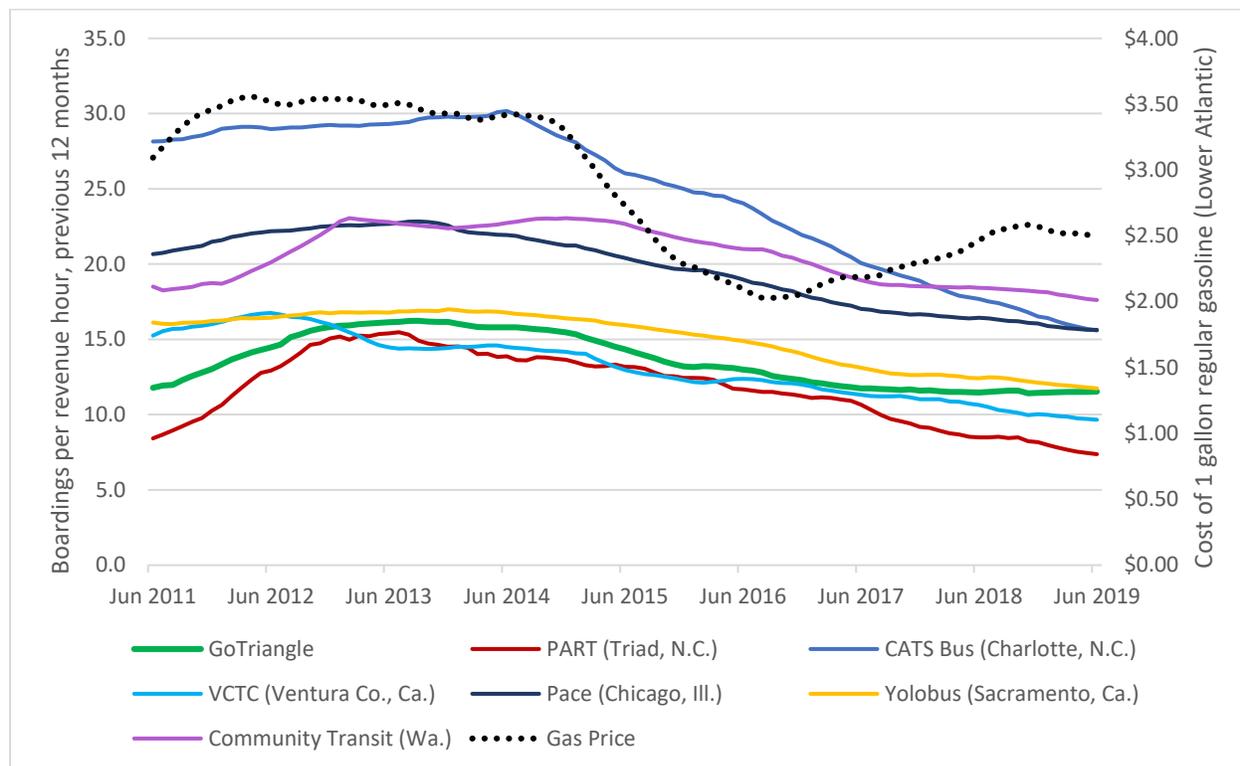
Route	Time	FY 2018	FY 2019	Δ
CRX (Chapel Hill – Raleigh Express)	Peak	84%	86%	+3 pt
DRX (Durham – Raleigh Express)	Peak	78%	85%	+7 pt
KRX (Knightdale – Raleigh Express)	Peak	83%	86%	+3 pt
300 (Raleigh – Cary – RTC)	Sunday	79%	88%	+9 pt

Route DRX's increase in on-time performance can be attributed to schedule changes implemented in August 2018 – with the opportunity to add revenue hours and vehicles, GoTriangle could rebuild the schedule from scratch and add layover time to the trips that needed it. Most other routes do not have the same opportunity. GoTriangle adjusts schedules periodically (for example, Route 305 received schedule adjustments in January 2019), but without more revenue hours or vehicles, the resulting improvements in on-time performance are limited.

On-time performance data for each route is included with ridership data in Attachment B.

Peer Comparison

Other transit systems in the United States have been experiencing a trend of decreasing ridership and productivity over the past few years. This chart shows productivity (in terms of boardings per revenue hour) for other transit agencies that have been identified as GoTriangle's peers.



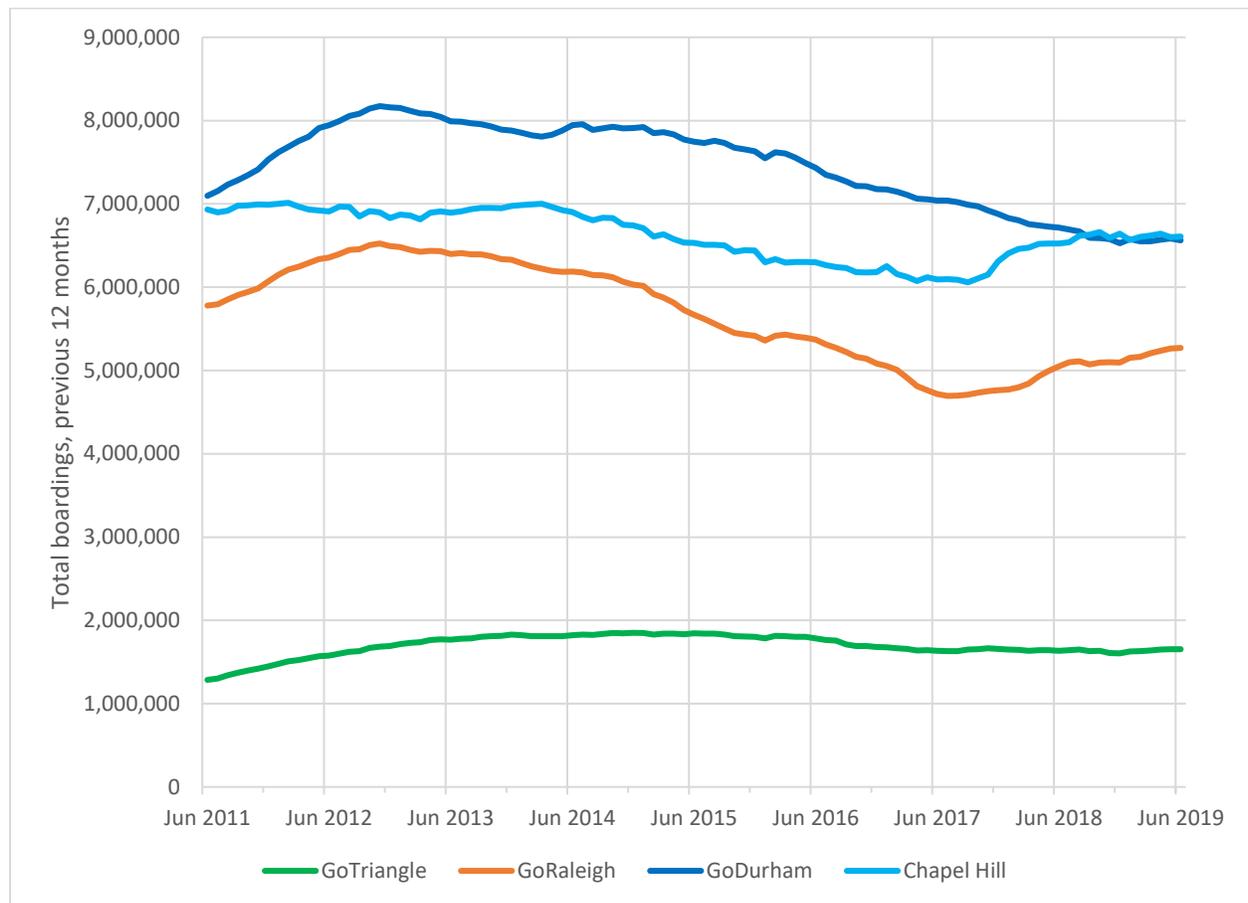
From June 2018 to June 2019, GoTriangle's productivity decreased by around 1.5%, but our peers had a sharper decrease: 4-5% for Community Transit, Pace, and Yolobus, 9% for VCTC, 12% for CATS, and 13% for PART.

GoTriangle's relative position within the peer group has not changed. PART, VCTC, and Yolobus are our closest peers: they provide regional express bus as their basic service type, operate in regions without a single dominant city, coordinate with multiple municipal transit systems, and do not operate rail service. Accordingly, GoTriangle's productivity is comparable to those systems. If we maintain and improve our system's productivity, we are likely to overtake Yolobus.

While CATS, Community Transit, and Pace serve entire regions and operate express service, their basic service type is urban (or suburban) local bus service, which tends to have higher productivity on the basis of boardings per hour. Their regions have rapid transit rail service, and a single central business district on which express buses can focus. Accordingly, their productivity is much higher than GoTriangle's. These systems are included as aspirational peers.

It is worth noting that the price of gasoline was relatively stable during FY 2019, following two years of increase. Gas prices are one of the leading external factors that influence transit ridership, but if they were driving the national decline, one would expect the trend to be reversing for more agencies by this point. This suggests that other factors in the transportation market and the broader economy may ultimately be responsible.

GoTriangle’s partner agencies in the Triangle are also seeing fewer effects from the national decline. From June 2018 to 2019, GoRaleigh’s annual ridership increased by 4% (thanks in part to new service funded by the Wake County Transit Plan), Chapel Hill Transit’s has increased by 1%, and GoDurham’s decreased by only 2% after years of sharper declines.



What's Next?

The Wake Bus Plan and the GoTriangle Short-Range Transit Plan recommended several service changes for FY 2020. GoTriangle has already implemented many of these changes:

- Created Route 310 (Wake Tech – RTC), an all-day shuttle route connecting the Wake Tech RTP campus and Perimeter Park to the Regional Transit Center. When the McCrimmon Parkway extension is completed, GoTriangle will extend Route 310 to the Cary Depot.
- Converted Route 201 (North Raleigh – RTC) into Route NRX (North Raleigh – RTC Express), which provides express service via I-540 instead of running on local streets. Route NRX serves Park-and-Rides at Bent Tree Plaza (on Falls of Neuse Road) and Triangle Town Center.
- Replaced Go OnDemand with the RTP Connect pilot program. Instead of providing on-demand trips in the RTP with GoTriangle vehicles, GoTriangle subsidizes the fare for Uber or Lyft trips.
- Realigned Route 311 (Lake Pine – Apex – RTC) to serve the Kit Creek Road area (Cisco, Biogen, NetApp, and other employers) instead of EPA and NIEHS. Stops around Kit Creek Road had the highest ridership on Go OnDemand.
- Discontinued Routes 102 (Garner – Raleigh) and KRX (Knightdale – Raleigh Express) so GoRaleigh could implement new routes in their place (Route 20 in Garner and Route 33 in Knightdale). The new routes provide all-day local service instead of peak-only express service.
- Discontinued Route RSX (Robertson Scholars Express), since it duplicated GoTriangle Routes 400/405 (which still operate in the same corridor). The Robertson Scholars Foundation now contracts with Carolina Livery to operate an express service meeting their requirements.
- Realigned Route 800 (Chapel Hill – Southpoint – RTC) to use I-40 at all times, instead of using I-40 at peak and NC-54 off-peak. This will provide faster service from Chapel Hill to the Research Triangle Park, RDU Airport, and Raleigh at off-peak times.

The Wake Bus Plan and Short-Range Transit Plan recommend additional route changes for FY 2021 and the subsequent years. To support these changes, GoTriangle has planning studies underway for multiple facilities, including several new or improved Park-and-Rides (for Routes 305, 311, CRX, DRX, NRX, ODX, WRX, and ZWX), a bus facility at Raleigh Union Station, and an improved Regional Transit Center.

The first new facility to open will be a Park-and-Ride at Wake Tech's Southern Wake Campus for Route FRX, which will allow the route to serve trips to Wake Tech along with commutes to Raleigh. GoTriangle and NCDOT also plan to implement the Bus on Shoulder System (BOSS) on I-540 for Route NRX.

Durham, Orange, and Wake counties are updating their county transit plans in FY 2020. When complete, they may include recommendations for regional bus service beyond GoTriangle's current plans.

Finally, GoTriangle, GoRaleigh, GoCary, and GoDurham plan to deploy the Delerrok TouchPass account-based fare collection system in 2020. TouchPass will allow riders to pay their fares using a mobile phone application or a smartcard, and automatically "cap" riders who pay for transit one ride at a time at the price of a 1-day, 7-day, or 31-day pass. This will save money for existing riders and reduce the barrier to entry for new riders, which the partners expect will lead to increased ridership.

Section 1: System and Route Totals

(Details for specific destinations and times of day are on the following pages.)

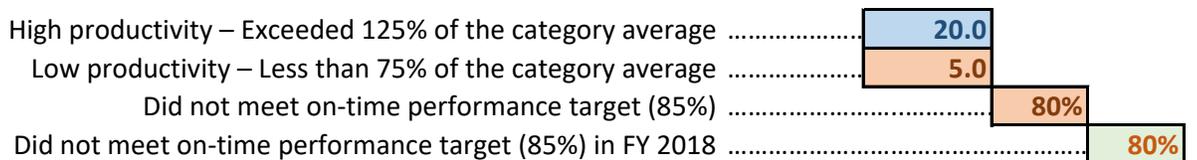
Route	Annual Boardings	Annual Rev. Hours	Avg. Daily Boardings	5-Year Trends	Boardings per Hour	On-Time Perf. (FY18)	
Whole System	1,674,324	150,610			11.1	88%	88%
Weekday	1,534,369	132,806	6,162		11.6	87%	89%
Peak	1,157,273	97,943	4,648		11.8	87%	87%
Midday	274,674	23,686	1,103		11.6	89%	92%
Night	74,298	7,301	298		10.2	92%	94%
Saturday	84,960	11,232	1,634		7.6	89%	87%
Sunday	54,995	6,572	948		8.4	94%	93%
Core Routes (Seven-Day Service)	898,221	78,767			11.4	88%	90%
100 Raleigh – Airport – RTC	170,353	17,391	(see pg. 16)		9.8	91%	93%
300 Raleigh – Cary – RTC	156,171	13,468	(see pg. 16)		11.6	85%	87%
400 Durham – Chapel Hill	211,375	18,984	(see pg. 16)		11.1	87%	88%
700 Durham – RTC	134,775	9,501	(see pg. 16)		14.2	97%	97%
800 Chapel Hill – Southpoint – RTC	225,547	19,422	(see pg. 16)		11.6	83%	85%
Peak-Only Routes	722,905	62,027	2,903		11.7	87%	86%
102 Raleigh – Garner	17,982	1,494	72		12.0	84%	77%
105 Raleigh – RTC	54,189	4,645	218		11.7	89%	90%
201 North Raleigh – RTC	13,853	2,039	56		6.8	83%	88%
301 Raleigh – Southeast Cary	29,639	4,264	119		7.0	91%	90%
305 Raleigh – Cary – Lake Pine	23,993	2,934	96		8.2	83%	80%
311 Apex – Lake Pine – RTC – EPA	21,252	3,675	85		5.8	89%	91%
405 Durham – Chapel Hill/Carrboro	122,833	6,020	493		20.4	88%	85%
420 Hillsborough – Chapel Hill	45,784	3,404	184		13.5	89%	92%
805 Chapel Hill – Woodcroft – RTC	87,726	6,841	352		12.8	87%	90%
CRX Chapel Hill – Raleigh Exp.	92,010	7,698	370		12.0	86%	84%
DRX Durham – Raleigh Exp.	131,119	8,890	527		14.7	85%	78%
FRX Fuquay-Varina – Raleigh Exp.	14,702	1,805	59		8.1	89%	86%
KRX Knightdale – Raleigh Exp.	7,689	1,399	31		5.5	86%	83%
ODX Orange – Durham Exp.	27,436	2,686	110		10.2	89%	94%
WRX Wake Forest – Raleigh Exp.	13,684	2,448	55		5.6	80%	78%
ZWX Zebulon – Wendell – Raleigh Exp.	19,014	1,785	76		10.7	85%	88%
Special Services							
RTP Go OnDemand	21,419	5,272	86		4.1	n/a	n/a
RSX Robertson Scholars Exp.	31,779	4,544	(see pg. 16)		7.0	89%	91%



Section 2: Peak Hour Commutes

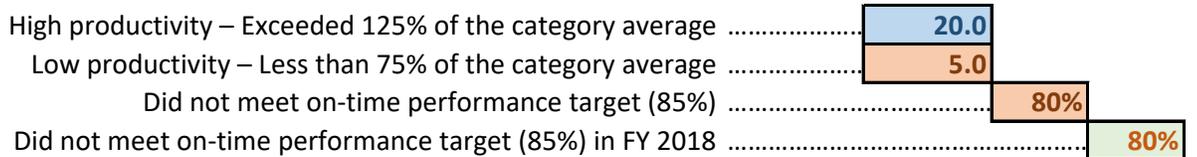
(Routes marked with ⇄ are split in two based on commute flow. For example, "DRX To Raleigh / From Durham" has data for trips from Durham to Raleigh in the morning, and trips from Raleigh back to Durham in the afternoon.)

Route	Annual Boardings	Annual Rev. Hours	Avg. Daily Boardings	5-Year Trends	Boardings per Hour	On-Time Perf.	(FY18)
Peak Commute to Raleigh	308,900	31,827	1,241		9.7	87%	86%
100 From RTC/Airport ⇄	21,231	2,709	85		7.8	92%	94%
102 From Garner	17,982	1,494	72		12.0	84%	77%
105 From RTC ⇄	23,580	2,124	95		11.1	91%	92%
300 From Cary (Raleigh-Cary section only)	50,013	3,806	201		13.1	86%	88%
301 From Southeast Cary	29,639	4,264	119		7.0	91%	90%
305 From Cary/Apex	23,993	2,934	96		8.2	83%	80%
CRX From Chapel Hill ⇄	33,417	3,576	134		9.3	86%	83%
DRX From Durham ⇄	53,956	3,482	217		15.5	88%	78%
FRX From Fuquay-Varina	14,702	1,805	59		8.1	89%	86%
KRX From Knightdale	7,689	1,399	31		5.5	86%	83%
WRX From Wake Forest	13,684	2,448	55		5.6	80%	78%
ZWX From Zebulon/Wendell	19,014	1,785	76		10.7	85%	88%
Peak Commute to Durham	209,955	15,732	843		13.3	86%	87%
400 From Chapel Hill ⇄	32,709	3,084	131		10.6	79%	85%
405 From Chapel Hill/Carrboro ⇄	50,779	2,939	204		17.3	87%	84%
700 From RTC ⇄	21,868	1,616	88		13.5	93%	93%
DRX From Raleigh ⇄	77,163	5,407	310		14.3	84%	79%
ODX From Hillsborough/Mebane	27,436	2,686	110		10.2	89%	94%
Peak Commute to Chapel Hill	395,543	22,664	1,589		17.5	87%	87%
400 From Durham/Patterson Place ⇄	59,251	3,667	238		16.2	91%	91%
405 From Durham ⇄	72,054	3,081	289		23.4	89%	86%
420 From Hillsborough	45,784	3,404	184		13.5	89%	92%
800 From RTC/Southpoint ⇄	96,167	4,476	386		21.5	82%	82%
805 From RTC/Woodcroft ⇄	63,694	3,915	256		16.3	90%	91%
CRX From Raleigh	58,593	4,122	235		14.2	86%	84%
Peak Commute to RTC	242,875	27,719	975		8.8	85%	88%
100 From Raleigh/Airport ⇄	25,109	2,877	101		8.7	87%	87%
105 From Raleigh ⇄	30,609	2,521	123		12.1	87%	89%
201 From North Raleigh	13,853	2,039	56		6.8	83%	88%
300 From Cary (Cary-RTC section only)	30,733	3,071	123		10.0	89%	93%
311 From Apex/Lake Pine	21,252	3,675	85		5.8	89%	91%
700 From Durham ⇄	34,221	1,596	137		21.4	93%	93%
800 From Chapel Hill/Southpoint ⇄	41,647	3,742	167		11.1	77%	79%
805 From Woodcroft ⇄	24,032	2,926	97		8.2	83%	90%
RTP Go OnDemand	21,419	5,272	86		4.1	n/a	n/a



Section 3: Ridership by Time Period (for all-day routes)

Route	Annual Boardings	Annual Rev. Hours	Avg. Daily Boardings	5-Year Trends	Boardings per Hour	On-Time Perf. (FY18)
Core Routes – Weekday Peak Service	412,949	30,644	1,658		13.5	86%
100 Raleigh – Airport – RTC	46,340	5,586	186		8.3	89%
300 Raleigh – Cary – RTC	80,746	6,877	324		11.7	87%
400 Durham – Chapel Hill	91,960	6,752	369		13.6	85%
700 Durham – RTC	56,089	3,212	225		17.5	93%
800 Chapel Hill – Southpoint – RTC	137,814	8,217	553		16.8	80%
Core Routes – Weekday Midday Service	274,674	23,686	1,103		11.6	89%
100 Raleigh – Airport – RTC	66,126	5,622	266		11.8	85%
300 Raleigh – Cary	44,810	3,585	180		12.5	83%
400 Durham – Chapel Hill	68,536	6,017	275		11.4	90%
700 Durham – RTC	42,468	3,107	171		13.7	98%
800 Chapel Hill – Southpoint – RTC	52,734	5,354	212		9.8	88%
Core Routes – Weekday Evening Service	74,298	7,301	298		10.2	92%
100 Raleigh – Airport – RTC	18,026	1,799	72		10.0	95%
300 Raleigh – Cary	9,912	868	40		11.4	94%
400 Durham – Chapel Hill	19,219	1,965	77		9.8	85%
700 Durham – RTC	12,584	994	51		12.7	99%
800 Chapel Hill – Southpoint – RTC	14,557	1,675	58		8.7	86%
Core Routes – Saturday Service	82,647	10,894	1,589		7.6	89%
100 Raleigh – Airport – RTC	23,466	2,779	451		8.4	97%
300 Raleigh – Cary	12,657	1,343	243		9.4	79%
400 Durham – Chapel Hill	19,224	2,717	370		7.1	84%
700 Durham – RTC	13,934	1,399	268		10.0	99%
800 Chapel Hill – Southpoint – RTC	13,366	2,656	257		5.0	85%
Core Routes – Sunday Service	53,653	6,242	925		8.6	93%
100 Raleigh – Airport – RTC	16,395	1,606	283		10.2	98%
300 Raleigh – Cary	8,046	794	139		10.1	88%
400 Durham – Chapel Hill	12,436	1,533	214		8.1	90%
700 Durham – RTC	9,700	789	167		12.3	100%
800 Chapel Hill – Southpoint – RTC	7,076	1,520	122		4.7	89%
Robertson Scholars Express	31,779	4,544			7.0	89%
RSX Weekday Service	28,124	3,876	175		7.3	88%
RSX Saturday Service	2,313	338	75		6.8	93%
RSX Sunday Service	1,342	330	43		4.1	99%



The Wake Transit "Service Guidelines and Performance Measures" document sets standards for routes' performance on four measures. GoTriangle and other providers make this information available to TPAC, but each provider retains the primary responsibility for evaluating route performance and making changes. Routes which consistently underperform or overperform may be considered for changes in funding when the Wake Bus Plan is updated.

Performance for routes serving Wake County as of FY 2019 Q4

Route	Project Began		Boardings per Trip	Cost per Boarding	Farebox Recovery	On-Time Performance
Core Regional Routes						
Target			16.0	\$7.20	16%	85%
100 Raleigh – Airport – RTC	Aug. 2017	◆	8.9	◆ \$12.98	◆ 7%	● 94%
300 Raleigh – Cary – RTC	Aug. 2017	◆	8.5	◆ \$10.01	◆ 9%	● 87%
Express (Peak-Only) Routes						
Target			12.0	\$12.00	12%	85%
102 Raleigh – Garner	N/A		● 11.0	● \$8.69	◆ 8%	◆ 79%
105 Raleigh – RTC	N/A		● 8.4	● \$10.67	◆ 9%	● 94%
201 North Raleigh – RTC	N/A	●	◆ 8.0	◆ \$16.09	◆ 5%	● 85%
301 Raleigh – Southeast Cary	N/A	●	◆ 5.8	◆ \$18.70	◆ 5%	● 94%
305 Raleigh – Cary – Lake Pine	N/A		● 8.4	◆ \$15.95	◆ 6%	● 85%
311 Apex – Lake Pine – RTC – EPA	N/A	●	◆ 7.1	◆ \$21.78	◆ 4%	● 89%
CRX Chapel Hill – Raleigh Exp.	Aug. 2018		● 13.6	● \$11.07	● 13%	● 89%
DRX Durham – Raleigh Exp.	Aug. 2018*		● 16.2	● \$8.42	● 16%	● 87%
FRX Fuquay-Varina – Raleigh Exp.	July 2017		● 8.7	◆ \$17.25	◆ 8%	● 96%
KRX Knightdale – Raleigh Exp.	July 2017	◆	◆ 6.5	◆ \$17.74	◆ 6%	● 85%
WRX Wake Forest – Raleigh Exp.	N/A	●	◆ 7.0	◆ \$20.60	◆ 6%	● 85%
ZWX Zebulon – Wendell – Raleigh Exp.	N/A		● 14.7	● \$10.01	● 13%	● 87%

- July 2017 Route is being evaluated according to Wake Transit service standards
- Aug. 2018* Route is in 18-month development period after major service change
- N/A No Wake Transit funding
- ◆ Route is underperforming per standards (3 or more measures have missed standards for 3 or more quarters)
- Route would be underperforming if it was subject to standards
- Meeting standard for measure
- ▲ Missed standard for 1 or 2 quarters (does not apply to any route this quarter)
- ◆ Missed standard for 3 or more quarters

Fare Program	FY 2019		FY 2018		Year over Year	
	Boardings	% of Total	Boardings	% of Total	Boardings	% Change
Generally Available	877,164	52.4%	841,951	50.8%	35,213	+4%
Full Fare Cash/Passes	597,165	35.7%	624,699	37.7%	-27,534	-4%
Reduced Fare Cash/Passes*	165,925	9.9%	170,781	10.3%	-4,856	-3%
Free Fare	34,827	2.1%	28,461	1.7%	6,366	+22%
Youth GoPass*	53,694	3.2%			53,694	<i>new</i>
NC By Train Transit Pass	818	0.0%	556	0.0%	262	+47%
Go OnDemand (No Fare)**	21,419	1.3%	12,700	0.8%	8,719	+69%
Unknown	3,316	0.2%	4,754	0.3%	-1,438	
Employee/Student GoPass	797,160	47.6%	814,199	49.2%	-17,039	-2%
UNC Chapel Hill	379,056	22.6%	387,714	23.4%	-8,658	-2%
Duke University	184,888	11.0%	181,456	11.0%	3,432	+2%
NC State University	97,486	5.8%	94,852	5.7%	2,634	+3%
State Government	47,899	2.9%	45,463	2.7%	2,436	+5%
Durham Tech	19,135	1.1%	23,646	1.4%	-4,511	-19%
Research Triangle HS*			20,994	1.3%	-20,994	<i>ended</i>
City of Raleigh	13,509	0.8%	11,838	0.7%	1,671	+14%
American Tobacco	9,184	0.5%	9,067	0.5%	117	-
City of Durham	7,509	0.4%	5,414	0.3%	2,095	+39%
NC Central University	7,249	0.4%	3,618	0.2%	3,631	+100%
Red Hat	7,069	0.4%	7,730	0.5%	-661	-9%
GoTriangle	6,719	0.4%	5,583	0.3%	1,136	+20%
Other GoPasses (8)	17,457	1.0%	16,824	1.0%	633	+4%
Total Boardings	1,674,324		1,656,150		18,174	

FY 2019 Boardings:



* Before Youth GoPass, youth age 13-18 paid reduced fare. Many of GoTriangle's youth riders had a student GoPass from Research Triangle High School, which is no longer offered since Youth GoPass is available.
 ** FY 2018 includes only six months of Go OnDemand service.