SEPTEMBER 2021
SERVICE UPDATE
OVERVIEW

RTA OF CENTRAL MARYLAND
APRIL 2021
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Proposed Changes Quick Reference

Ellicott City Regional Changes

Route 405 restructured from a Columbia - Ellicott City route in to two different routes:

- a new “405” Ellicott City-focused circulator route, and
- a new “505” Columbia - Ellicott City - Catonsville route
- Routes 405 and new 505 will have a timed transfer

405

- Expands service footprint west to Pine Orchard Ln
- Adds service to Charleston Place Apartment homes south of Normandy Dr
- Adds new timed arrivals/departures from Historic Ellicott City

505

- Creates new connection between RTA system to Catonsville Walmart bus hub
  - MTA bus connections to MARC, Inner Harbor, and Johns Hopkins now available
- Shortens transit commutes between Ellicott City and Catonsville by over two hours

Laurel Regional Changes

301

- Route restructured to connect between Towne Centre Laurel - Main Street - South Laurel
- Takes over “Laurel Loop” service from the 302, becoming a direct north-south connection
- Would only operate Monday-Friday to give the Sunday 302 a second vehicle.

302

- Route restructured to be an hourly, two-bus connection between Towne Centre Laurel, UM Laurel Medical Center, Muirkirk MARC, Beltsville, and Greenbelt Metro
- Would operate the same pattern 7 days a week
- Improves productivity and better utilizes a long layover scheduled at Towne Centre Laurel, while “thickening up” service in areas that have limited or no service at all

502

- Route slightly restructured around Laurel to take over some services left behind by other route restructuring
- Improves the amount of end of line productivity and better utilizes a long layover scheduled at Towne Centre Laurel
Ellicott City Coverage Overview

Below: Existing RTA service in Ellicott City

Above: Proposed RTA service in Ellicott City

(RTA 405 converts to Ellicott City-only service, new 505 connects south to Columbia)
Laurel Coverage Overview

Below: Existing RTA service in Laurel

Above: Proposed RTA service in Laurel

(RTA 409, 503 experience essentially no change, RTA 301, 302, 502 would experience changes)
**Route 405**

**Ellicott City Circulator**

**Existing**
- 60-minute frequency
- **Weekdays** 6:00 am - 9:52 pm
- **Saturdays** 8:00 am - 9:52 pm
- **Sundays** 9:00 am - 5:52 pm

**Proposed**
- 60-minute frequency
- **Weekdays** 5:30 am - 6:15 pm
- **Saturdays** 7:30 am - 6:15 pm
- **Service Notes:**
  - Expands footprint of service along US-40 and becomes an Ellicott City-focused route
  - Areas with discontinued service are transferred to the new 505 route
  - Includes timed connection with route 505, to facilitate transfers toward Columbia or Catonsville

**Legend**
- Existing Route 405
- Proposed Route 405
- Terminus point
Route 405: Ellicott City Circulator

Current Strengths
Route is in the top third of all RTA routes in terms of absolute ridership.
Route effectively services a number of locations and connects important government services to the rest of the RTA network.

Current Weaknesses
Currently has lots of extra layover time at Ellicott City Walmart (Carls Ct / Ridge Rd) that could be better utilized.
Multitude of patterns and dynamic call-based service to the Circuit Court building makes real-time predictions hard to offer to riders.

Proposed Opportunities
By restructuring this route to become a two-bus, Weekday through Saturday Ellicott City circulator route, service footprint can expand west along US-40 to Pine Orchard Ln and east to Wheaton Way.
Areas newly served include the US-40 Goodwill, Orchard Park Apartments, and Charleston Park Apartments.
One-hour frequency would effectively run along the US-40 corridor, with connections to historic Ellicott City and the Ellicott City Senior Center / Miller Library.
Connections would be possible to Catonsville and Mall in Columbia with a timed transfer point at Carls Ct / Ridge Rd.
Within .25 miles of stops, the current 405 services...
- a population of 15,931, according to ACS
- 4,911 households
- 10,178 jobs, according to CTPP
Within .25 miles of stops, the new 405 and 505 services...
- A population of 18,452 (14.7% increase)
- 5,656 households (14.1% increase)
- 15,308 jobs (40.3% increase)
- No significant change in number of non-White or Hispanic communities served

Proposed Tradeoffs
No longer a one-seat ride between outlying regions of Ellicott City and Mall in Columbia.
Route 402A (counter-clockwise Long Reach loop) would be discontinued, only 402B (clockwise loop) service would continue, to free up hours for the new 405/505 launch.
Route 407-extra service between Columbia and Owen Brown service would stay discontinued and not be reinstated when the 406 and 414 are, to free up hours for the new 405/505 launch.
Proposed service span (new route)
60-minute frequency

**Weekdays** 6:00 am - 9:45 pm

**Saturdays** 8:00 am - 9:45 pm

**Sundays** 9:00 am - 5:45 pm

**Service Notes:**
- Takes over longhaul service between Columbia and Ellicott City from route 405, and expands connection east to Catonsville Walmart bus hub
- Creates new connection between RTA and MTA services (CityLink Purple, LocalLink 77), shortening transit commutes to/from Catonsville by over two hours
Route 505: Mall in Columbia - Catonsville

Current Strengths

Route currently does not exist, but proposed route mimics our current evening and Sunday 405 pattern.

Provides good, express-like service to/from Ellicott City Walmart.

Current Weaknesses

Due to limitations provided by a one-hour headway (with one vehicle), not much more than Walmart and immediate surrounding area gets a connection to Mall in Columbia during operating hours.

Proposed Opportunities

By operating every day with two vehicles, a direct bus connection between all Mall in Columbia bus services (401, 402, 403, 404, 406, 407, 408, 501, 503) and Catonsville bus services (LocalLink 77 to West Baltimore MARC, CityLink Purple to downtown Baltimore and Johns Hopkins Hospital) is made possible.

Timed transfer is planned between route 505 and the proposed 405 circulator service, so that Ellicott City residents can travel to/from Columbia as quickly as they can now, as well as a new connection to Catonsville.

Increased connectivity along the US-40 corridor would be substantial.

- A hypothetical citizen on Rogers Ave can get to Catonsville in 10 minutes via car, traveling just 4 road miles.
- It takes that citizen at least 3 hours via current transit routes (as they must travel south of Elkridge before finding services that connect into Baltimore).
- That same citizen could get to Catonsville in less than 48 minutes by utilizing these new 405 and 505 routes.
- This is a time savings of at least 375%.

Would establish a new, convenient connection between RTA and MTA-operated paratransit systems.

Within .25 miles of stops, the current Ellicott City service covers...

- a population of 15,931, according to ACS
- 4,911 households
- 10,178 jobs, according to CTPP

Within .25 miles of stops, the new combined 405 and 505 services...

- A population of 18,452 (14.7% increase)
- 5,656 households (14.1% increase)
- 15,308 jobs (40.3% increase)
- No significant change in number of non-White or Hispanic communities served

Proposed Tradeoffs

Like mentioned in the proposed 405, connections between Ellicott City and Columbia require a transfer.
**Route 301**
**Towne Centre Laurel - South Laurel**

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**Legend**
- Existing Route 301
- Proposed Route 301
- Terminus point

**Existing**
- 60-minute frequency
- **Weekdays** 7:25 am - 7:14 pm
- **Saturdays** 9:25 am - 7:14 pm
- No Sunday service

**Proposed**
- 60-minute frequency
- **Weekdays** 7:00 am - 6:54 pm
- No Saturday service
- No Sunday service

**Service Notes:**
- Areas with discontinued service are transferred to the new 302 route
- Main Street “Laurel Loop” gains counter-clockwise service, becoming bi-directional
- South Laurel P&R gains southbound service, becoming bi-directional
Route 301: Towne Centre Laurel - South Laurel

Current Strengths
Route currently provides an hourly connection to South Laurel Dr, a community separated from the rest of Laurel by MD-295. Mobility around this community is very limited, and the 301 provides great value to residents and businesses here.

Route currently provides an hourly connection to UM Laurel Medical Center.

Route is one of RTA’s most consistently on-time routes.

Current Weaknesses
Route currently departs Towne Centre Laurel bus hub on the :25 of every hour, matching a departure pulse with just route 302, and departs 5 minutes before route 503. Connections to and from routes 409 and 502 require riders to wait approximately 35 minutes.

Route is one of the least ridden routes in the RTA network. Every month, 301 ridership ranks in the bottom 25% of routes, in both absolute measurement and per revenue hour.

Vehicles operating the 301 have to make a three-point U-turn at the end of South Laurel Dr to continue on route.

Proposed Opportunities
By offloading most of the current alignment to route 302, route 301 would have enough time to complete the Laurel Loop and add bi-directional service to Main Street Laurel.

Residents along current alignment at Muirkirk Rd and Contee Rd would now have multiple options – traveling toward the Hospital (as they can do now) can take route 302, but residents that want to go past Towne Centre Laurel without a transfer can do so from Laurel Bowie Rd.

Residents at Park View apartments or riders from South Laurel P&R now have a bidirectional connection – inbound to Towne Centre Laurel (as they do now) as well as outbound to South Laurel and Muirkirk services.

Proposed Tradeoffs
Riders coming from South Laurel Dr would have to transfer on Laurel Bowie Rd to route 302 if they needed to get to a destination on Contee Rd or were traveling to UM Laurel Medical Center.

Residents on South Laurel Dr would need to walk to Muirkirk Rd for Saturday service.
Route 302
Towne Centre Laurel - Greenbelt Metro

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Legend

Existing Route 302, daily service

Existing Route 302, Monday - Friday only

Existing Route 302, Monday - Saturday only

Existing Route 302, daily service

Proposed Route 302

Terminus point

existing

Proposed

Service Notes:
• Unified route pattern operating 7-days a week between Greenbelt, Beltsville, Muirkirk and Laurel
• Removes a dangerous U-turn from middle of route, expanding options along Muirkirk Rd
• Arrives to Laurel just before 301/409/502 departures, shortening most transfers by 50 minutes

Existing
60-minute frequency

Weekdays 6:00 am - 9:15 pm
Saturdays 9:00 am - 7:05 pm
Sundays 10:00 am - 6:50 pm

Proposed
60-minute frequency

Weekdays 6:00 am - 8:50 pm
Saturdays 9:00 am - 6:50 pm
Sundays 10:00 am - 6:50 pm
Route 302: Towne Centre Laurel – Greenbelt Metro

Current Strengths

Route currently provides an hourly connection to/from FDA’s Muirkirk Campus, although it is estimated that the majority of riders at that stop are residents from the surrounding neighborhoods. Route provides an extremely fast connection from Old Baltimore Pike to Greenbelt Metro trains and buses. No WMATA or Prince George’s County bus service operates on Old Baltimore Pike.

Route provides direct service to Laurel Main Street.

Current Weaknesses

After servicing FDA Muirkirk Campus, vehicles have to make a U-turn on Muirkirk Rd, which can be challenging at rush hour or when cars on the road are traveling at high speeds. Servicing FDA consumes 5 minutes of travel time each direction, or 10 minutes roundtrip. A more linear alignment in this area would service more origins/destinations without necessarily increasing real travel time.

An hourly loop around historic Laurel is combined into this route, routinely referred to as the “Laurel Loop”. These services are duplicative of WMATA services in the region, and only run in a clockwise direction. Travel time on the Laurel Loop is so quick that 302 operators routinely layover at the Towne Centre Laurel bus hub for more than half an hour, every hour during revenue service.

Inbound route currently arrives to Towne Centre Laurel bus hub on the :10 of every hour, making connections to other RTA services challenging. For example, riders connecting northbound to routes 409 and 502 are required to wait approximately 50 minutes.

Route 302 has three separate route patterns that operate Weekdays, Saturdays, and Sundays. Communicating this service under one single route identifier is difficult, and origins/destinations along Old Baltimore Pike have no bus service at all on weekends. Further, many RTA stops on US-1 north of Beltsville are not paired, and among those that are, northbound stops are challenging for riders to get to, with limited pedestrian road crossings.

Proposed Opportunities

By removing the Laurel Loop from the 302, offloading certain Laurel services to other RTA routes, and increasing the length of the outbound one-way travel time, route 302 could operate with the same route pattern 7 days a week, while maintaining service at most Beltsville origins/destinations.

By continuing service past FDA to/from Laurel via Muirkirk Rd to Laurel Bowie Rd, high-density housing can gain transit service. This new route alignment would provide residents clear, hourly service between Greenbelt, Beltsville, Muirkirk, and areas like Contee Rd/US-1 and UM Laurel Medical Center.

Average layover time at Towne Centre Laurel would decrease from 30 minutes to 10 minutes.

Proposed Tradeoffs

Select stops, such as near Muirkirk Meadows Dr, Cherrywood Ln south of Greenbelt Metro, and Laurel Main St would lose direct RTA service, though they still would be accessible via sidewalks. Select stops, such as Kenilworth Ave / Crescent Rd, would lose RTA service.

Riders traveling from Greenbelt, Old Baltimore Pike, or along Muirkirk Rd would have to transfer to route 502 if they needed to get to a destination just north of Contee Rd, such as Laurel Lakes Centre.

End-to-end travel time from Greenbelt to Towne Centre Laurel increases by approximately 12 minutes.
Route 502
Towne Centre Laurel - Arundel Mills

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Legend

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<th>Description</th>
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<tbody>
<tr>
<td>Green</td>
<td>Existing Route 502, unchanged</td>
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<tr>
<td>Green</td>
<td>Proposed Route 502, new alignment</td>
</tr>
<tr>
<td>Red</td>
<td>Existing Route 502, discontinued alignment</td>
</tr>
<tr>
<td>Circled</td>
<td>Terminus point</td>
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**Existing**

- 60-90 minute frequency
- **Weekdays** 6:00 am - 10:37 pm
- **Saturdays** 9:00 am - 10:22 pm
- **Sundays** 10:00 am - 8:22 pm

**Proposed**

- 60-90 minute frequency
- **Weekdays** 6:00 am - 10:45 pm
- **Saturdays** 9:00 am - 10:30 pm
- **Sundays** 10:00 am - 8:30 pm

**Service Notes:**

- Adds Contee Rd and Laurel Lakes service to route 502, expanding connectivity to Maryland City and Arundel Mills
- Simplified weekend patterns enable Russett Green Walmart service both inbound/outbound, instead of just inbound
Route 502: Towne Centre Laurel - Arundel Mills

**Current Strengths**

Route currently provides East Laurel / Maryland City residents and businesses a way to connect to other transit services at Towne Centre Laurel bus hub and Arundel Mill Mall bus hub. To most of these areas, RTA is the only transit service available.

Savage MARC (Camden Line) connection was added in November and has already exceeded ridership expectations.

When ridership is measured as a ratio to revenue hours, route 502 is the third-highest performing route in the RTA network.

**Current Weaknesses**

Even after the addition of Savage MARC to most weekday trips, run times still average 41 minutes outbound to Arundel Mills and 36 minutes inbound to Laurel. Running an hourly headway, layover time at end of line is still relatively high compared to other routes in the RTA network.

**Proposed Opportunities**

If the 502 took on services south of Towne Centre Laurel that were offloaded by routes 301 and 302, overall network mobility would increase. Further utilization of total run time could make route 502 more productive without increasing current hours allocations.

Residents and businesses in Maryland City would gain a direct hourly connection to/from Contee Rd and Laurel Lakes Centre businesses.

National Business Parkway would be accessible without a transfer for riders coming from the multiple apartment complexes and residences along Contee Rd.

**Proposed Tradeoffs**

Residents along Cherry Ln would have to walk to/from MD-197 to ride route 502 (approximately 900 feet from current bus stops for outbound trips, and 450 feet for inbound trips).

End-to-end travel time from Laurel to Arundel Mills increases by approximately 7 minutes.