

NEW RIVER VALLEY

Regional Transit Study

2015

PROJECT OVERVIEW

- Investigate potential enhancements
 - Overlapping service locations
 - High-volume bus stops
- Physical appearance of bus stops
- Access to information about services
- Elevate the presence of public transit

POTENTIAL ENHANCEMENTS?

- Operating/service adjustments:
 - Travel time
 - Convenience
 - Comfort
 - Reliability
 - Perceived personal security/safety
 - Perceived “image” of the system

TCRP H-32: Interim Guidebook, 2005. Retrieved:
http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_webdoc_32.pdf

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Linking
Design and
Performance
Measures

TCRP H-32: Interim Guidebook, 2005. Retrieved:
http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_webdoc_32.pdf

POTENTIAL ENHANCEMENTS?

| Strategy | Service Environment | | | | |
|--|---------------------|---------|---------|-------|--------|
| | L urban | M urban | S urban | Rural | Suburb |
| Increase route coverage | + | + | + | + | + |
| Route restructuring | + | + | + | + | + |
| Improved schedule/route coordination | + | + | + | + | + |
| Increased service frequency | + | + | + | - | + |
| Increased span of service | + | + | + | - | + |
| Improved reliability/on-time performance | + | + | + | - | + |
| Improved travel speed/reduced stops | + | + | - | - | + |
| Targeted services | + | + | + | + | + |
| Passenger facility improvements | + | + | + | - | + |
| New/improved vehicles | + | + | + | - | + |
| Increased security | + | + | + | + | + |
| Increased safety | + | + | + | + | + |

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| Improved travel speed/reduced stops | + | + | - | - | + |
| Targeted services | + | + | + | + | + |
| Passenger facility improvements | + | + | + | - | + |
| New/improved vehicles | + | + | + | - | + |
| Increased security | + | + | + | + | + |
| Increased safety | + | + | + | + | + |

PHYSICAL APPEARANCE

- Establishing transit centers
- Enclosing bus shelters
- Pedestrian/Bicycle Access
- Appearance is only a single component
 - Routes
 - Schedules
 - Fare reductions
 - Unlimited travel pass (tripled ridership in university towns and cities)

ACCESS TO INFORMATION

- Basic/Curbside Stop
 - Designated point on the side of a road
 - May include bus shelter, fewest additional amenities
 - Does not communicate permanence
 - Difficult to attract new riders
 - Minimum: should include branding elements of service

ACCESS TO INFORMATION

- Enhanced Stop
 - Designated point for passengers
 - May include a shelter, information, seating, lighting, and branding elements.
 - Typically smaller in scale than stations
 - Recommended when:
 - budget is limited
 - quick deployment is a priority
 - travel demand is expected to be low
 - space limitations

ACCESS TO INFORMATION

- Transit Station
 - Substantial facility
 - May include shelter, level boarding, advanced fare collection, unique name, distinctive look and feel, information, lighting and security, seating, and other features.
 - Used in high-demand areas (multimodal facility)

APTA Standards Development Program, APTA BTS-BRT-RP-002-10, 2010. Retrieved:
<http://www.apta.com/resources/standards/Documents/APTA-BTS-BRT-RP-002-10.pdf>

ACCESS TO INFORMATION

- Technology:
 - Real-time information
 - Fares
- Physical Maps:
 - Information regarding services
 - Orientation to surrounding area

CASE STUDY 1 - ENHANCING THE PRESENCE OF TRANSIT

- CIVITAS GUARD, 2010.
- Increasing attractiveness of transit
- Modernizing infrastructure
- Installing high quality waiting facilities (seating, shelters, etc.)
- Easing access to stops (pedestrian and bicycle infrastructure, signs, etc.)



CIVITAS
Cleaner and better transport in cities



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POLICY ADVICE NOTES

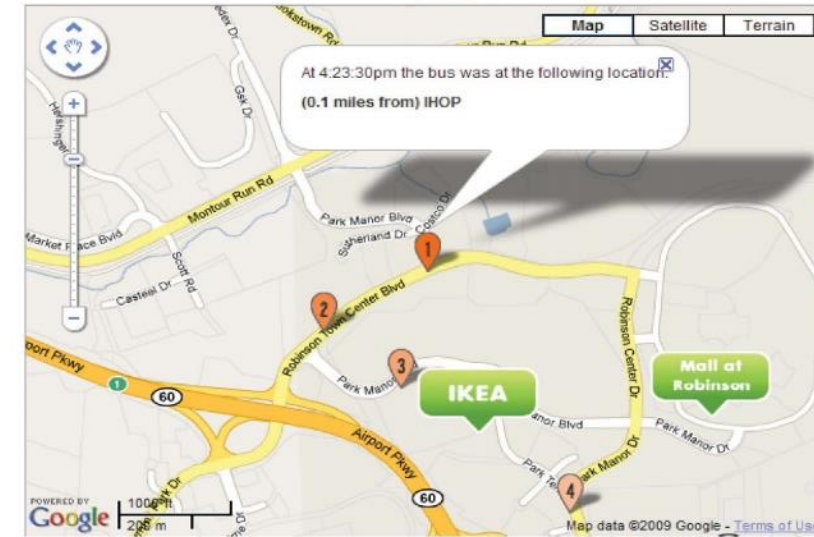
Enhancing the quality of public transport services

**POLICY
ADVICE
NOTES**

The CIVITAS Initiative is a European action that supports cities in the implementation of an integrated sustainable, clean and energy efficient transport policy. Lessons learned during the planning, implementation and operation phases of the activities are summarised in twelve Policy Advice Notes and give an idea on how to cope with urban transport problems which cities of the European Union have to face in the future.

CASE STUDY 1 - ENHANCING THE PRESENCE OF TRANSIT

- Invest in the redesign and adaptation of stops. Example: Pennsylvania Community Transportation Initiative.
- Amplifying positive effects: automatic vehicle location, environmentally friendly vehicles, innovative pricing schemes, access to other environmentally friendly transport modes.



Automatic Vehicle Locator Technology



CASE STUDY 2 – CREATING ACCESS TO INFORMATION

- City of Fort Wayne, 2013
- Enhance high-use bus stop locations with amenities and technology to improve bus riding experience.
- Evaluate service delivery options that optimize ridership potential.
- Education that expands ridership among transit dependent and choice riders.



CASE STUDY 2 – CREATING ACCESS TO INFORMATION

- Policy 5, Action Step C:
 - Pursue and support continued advancements in provider and rider technology: creating better knowledge and understanding of destinations, schedules, fares, and overall service delivery.

RIDERS' SURVEY

Gathering information on the users' perspective –

- What will make their ride and their wait better?
- What will make them use transit more?
- For example...
 - Who is using the bus?
 - Why are they using transit?
 - What amenities and services exist at their stop?
 - What amenities and services do they think are missing?
 - How long is their wait to catch the bus, to change buses?



RIDERS' SURVEY

- On-line survey launched on June 18
- Open until end of September
- Signs posted at study's stops July 4 weekend
- In-person surveys during August/September
- Responses to date – nearly 300



Tell us what you think
about this
bus stop.



<http://bit.ly/NRVRiderSurvey>
or call (540) 639-9313 x209



EARLY DATA: RIDERS ARE

- evenly distributed across
 - age: from <25 to 64
 - sex
- employed
- riding to save money & be “green”



EARLY DATA: LEVEL OF RESPONSE

- Highest system responses: Blacksburg Transit (48%), Radford Transit (36%)
- Systems' stops with most feedback:
 - BT: Squires
 - PAT: NRCC
 - RT: Lot A
 - Smartway: Squires
- Most frequent "Other" comments are about increasing frequency and # of stops



EARLY DATA

- Top choice of desired conveniences
 1. Bus schedule
 2. Shelter
 3. Seating
- People appear to feel comfortable and safe at their chosen stops
- Favorite and desired features
 1. Shelter
 2. Seating
 3. Visibility
 4. Convenient access



CHRISTIANSBURG SCHEDULE

| BLUE LOOP | STOP # | | | | | | |
|--|--------|------|------|-------|-------|------|------|
| NRV Mall | ▲1 | | 8:52 | 10:45 | 12:45 | 2:45 | 4:45 |
| Spradlin Farm | 3 | | 8:59 | 10:53 | 12:53 | 2:53 | 4:53 |
| CVS (33-Kroger) on Franklin | 6 | | 9:06 | 11:02 | 1:02 | 3:02 | 5:02 |
| Depot/New Wbnd @ the Library | 7 | | 9:07 | 11:03 | 1:03 | 3:03 | 5:03 |
| Courthouse (32-Town Hall) | 10 | | 9:12 | 11:09 | 1:09 | 3:09 | 5:09 |
| Free Clinic (31-Community Action) @ Roanoke/Evans Ebnd | 11 | | 9:13 | 11:10 | 1:10 | 3:10 | 5:10 |
| Montgomery County Govt Center (29-Roanoke/East) | ▲13 | 7:15 | 9:20 | 11:15 | 1:15 | 3:15 | 5:15 |
| Park & Ride | 27 | 7:20 | | | | | |
| Electric Way/Hubbell | 26 | 7:23 | | | | | |
| Republic/Salem @The Bluffs | 14 | 7:28 | 9:24 | 11:19 | 1:19 | 3:19 | 5:19 |
| Aquatic Center | ▲16 | 7:35 | 9:30 | 11:30 | 1:30 | 3:30 | 5:30 |
| K-Mart | 18 | 7:38 | 9:34 | 11:34 | 1:34 | 3:34 | 5:34 |
| DMV on Arbor @ Hampton Inn | 20 | 7:41 | 9:37 | 11:37 | 1:37 | 3:37 | 5:37 |
| Shoppers Way @Best Buy | 23 | 7:43 | 9:40 | 11:40 | 1:40 | 3:40 | 5:40 |

DoM times indicate PM hours. All times are approximate.

EARLY DATA

- Using the bus 1 or 2 days a week (>50%)
- But 18% using it 5 days a week
- Riders are drivers, too (>50%)
- Using the bus for school and work (64%)
 - For work: most spending 15-29 minutes on the bus, <15 in a car
 - For school: Most spending <15 minutes on the bus and in the car



OVERLAPPING SERVICE LOCATIONS

- There are 8 overlapping service locations
- The services that overlap include the following combinations
 1. Blacksburg Transit and Smart Way
 2. Blacksburg Transit, Radford Transit, and Smart Way
 3. Blacksburg Transit, Radford Transit, the Smart Way, and District 3
 4. Blacksburg Transit and Radford Transit;
 5. Pulaski Area Transit and Radford Transit



New River Valley Mall/ Regal NRV Theatre

Overlapping Transit Authorities:

- BT, RT, PAT

Overlapping Schedules:

- RT, BT, Pat
 - Overlaps only during the 1:00-2:00 PM hour
- BT & RT
 - M-Sa: starts at 3:00-4:00 PM, ending during the 5:00-6:00 PM
 - F-Sa: extends to end during 12:00-1:00 AM
- BT & PAT
 - M-F: starts at 8:00-9:00 AM hour, ending during the 1:00-2:00 PM hour



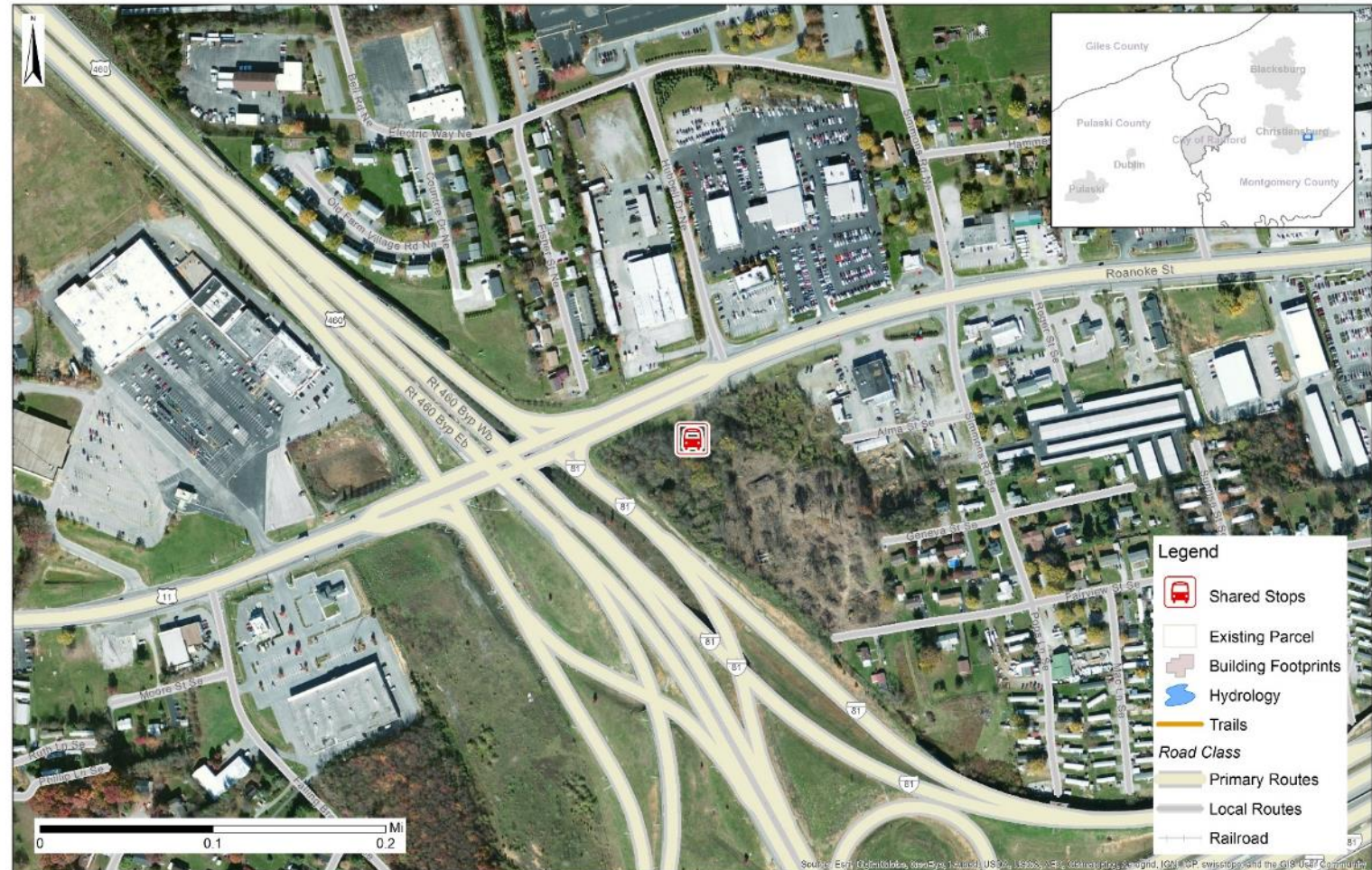
Exit 118 Park and Ride

Overlapping Transit Authorities:

- BT, RT, The Smart Way, and District 3

Overlapping Schedules:

- BT, The Smart Way, District 3
 - M, W: All three stop during the 8:00-9:00 AM hour
- The Smart Way & District 3
 - M, W: Ends overlap during the 3:00-4:00 PM
- The Smart Way & BT
 - M-F: Starts 7:00-8:00 AM; ends 6:00-7:00 PM



CRC- Pratt Drive

Overlapping Transit Authorities:

- BT and The Smart Way

Overlapping Schedules:

- Two overlapping times:
 - M-F: 8:00-9:00 AM; 5:00-6:00 PM (The Smart Way comes first during this second time)



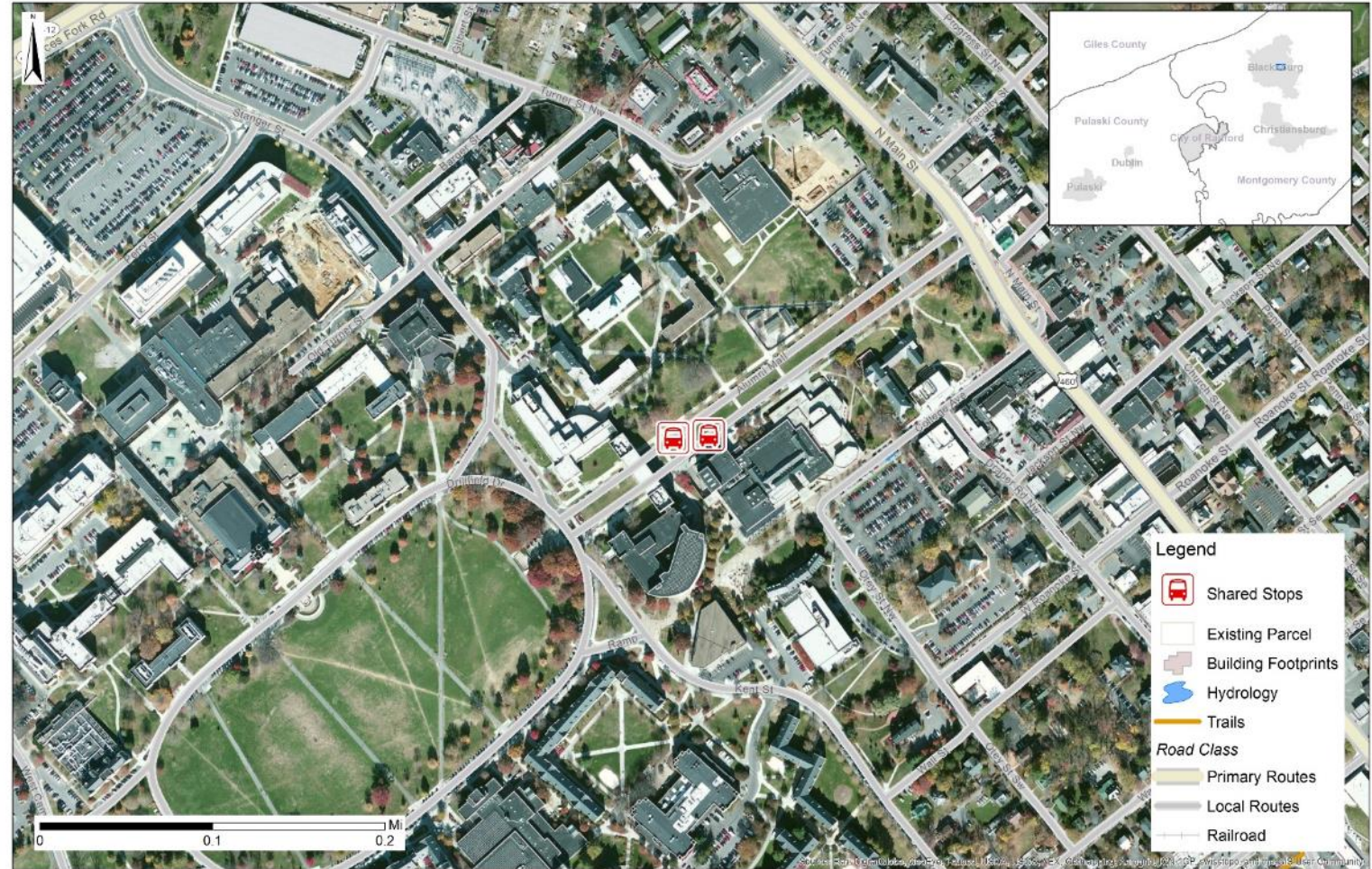
Squires Student Center

Overlapping Transit Authorities:

- BT, RT, and The Smart Way

Overlapping Schedules: (Squires Ebnd)

- BT, RT, & The Smart Way
 - M-F: starts 3:00-4:00 PM hour, ends at 9:00-10:00 PM
 - Sat: starts 11:00-12:00 PM hour (BT, TSM, RT), ends during the 9:00-10:00 PM hour
- The Smart Way & BT
 - M-F: starts 7:00-8:00 AM hour, ends during the 9:00-10:00 PM hour (BT, TSM)



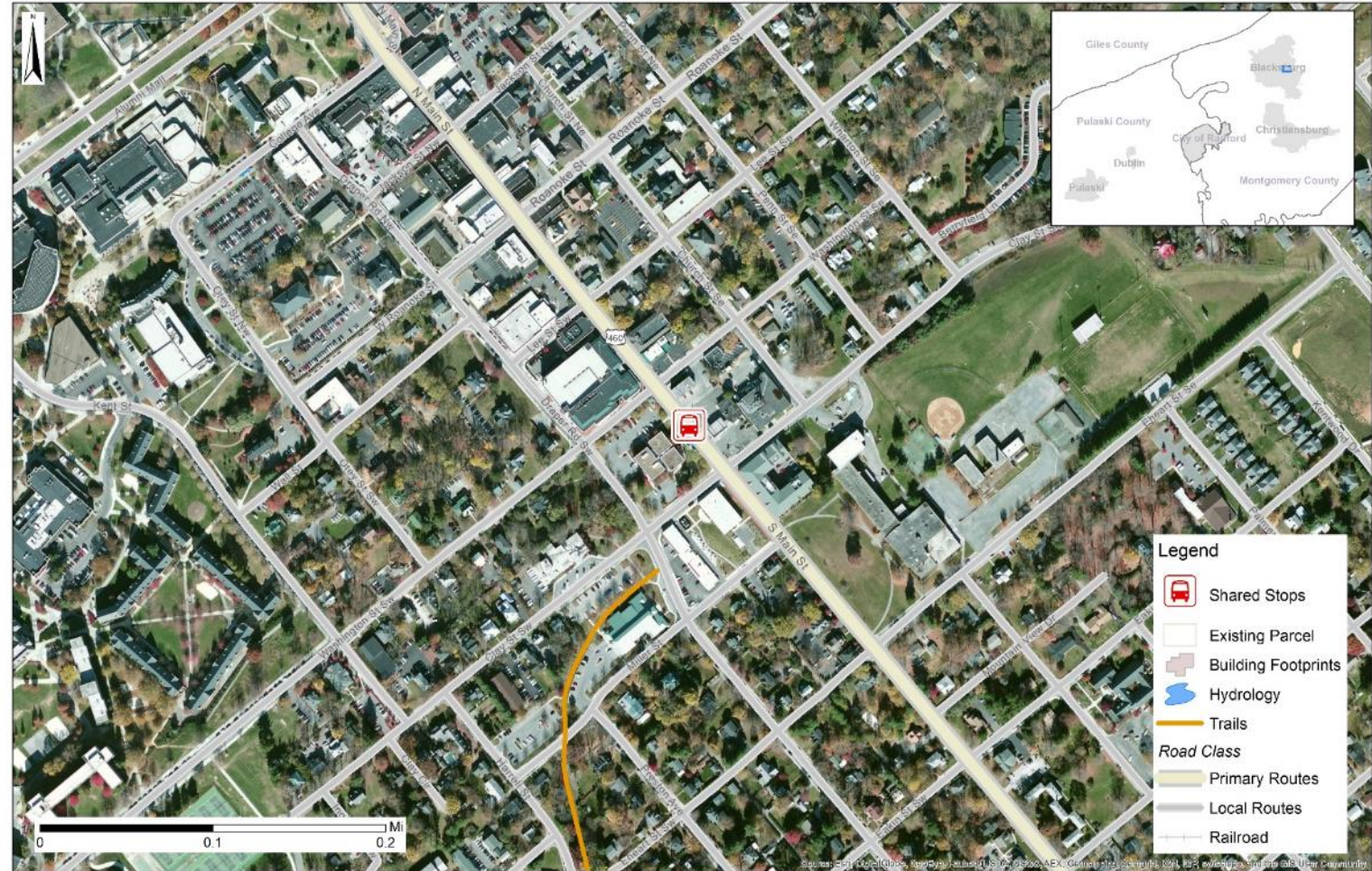
Blacksburg Municipal Building

Overlapping Transit Authorities:

- BT, RT, and The Smart Way

Overlapping Schedules:

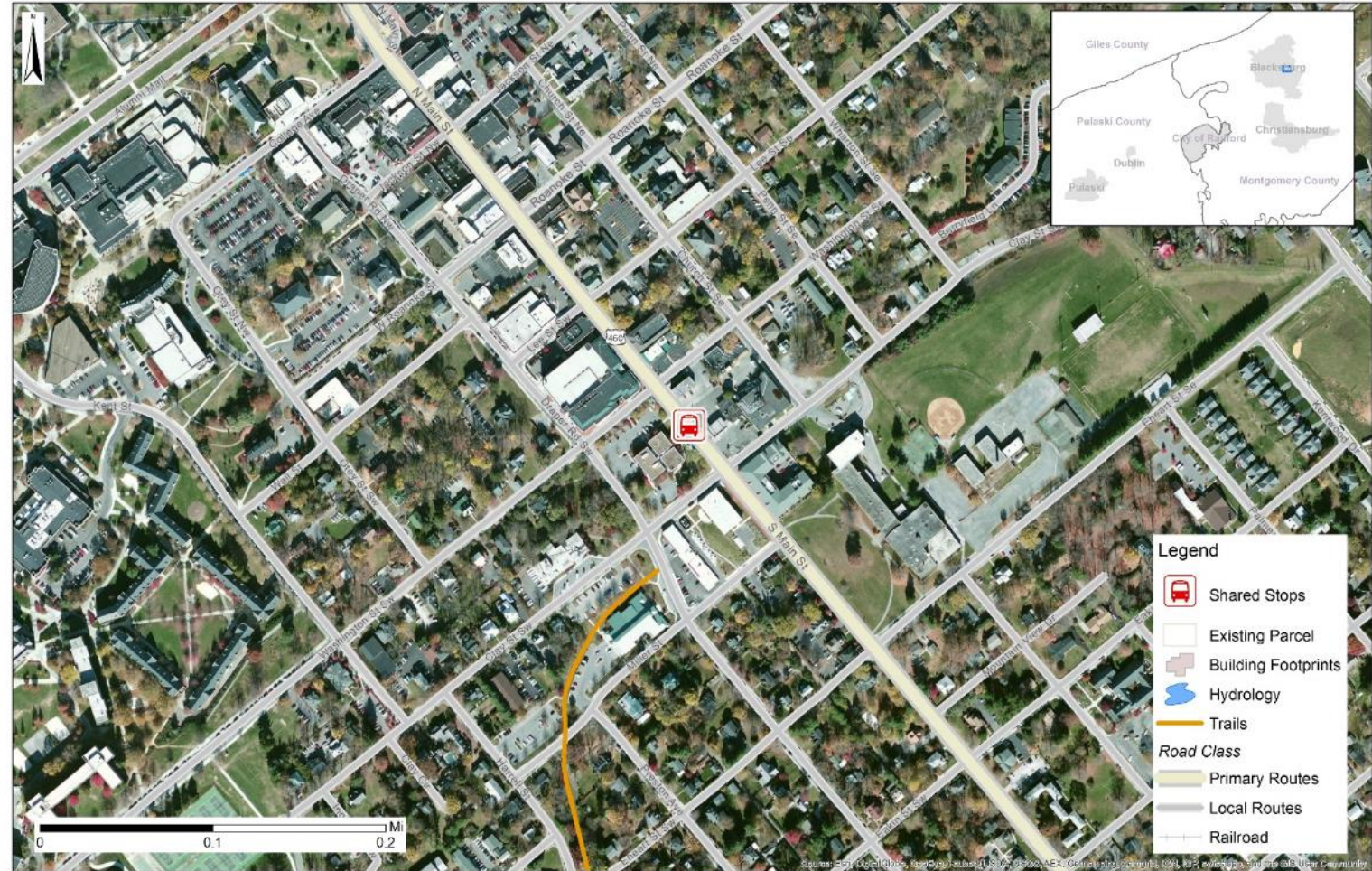
- BT, RT, & The Smart Way
 - M-F: starts 3:00-4:00 PM hour, ends at 8:00-9:00 PM (BT & TSW, RT)
 - Sat: starts 11:00-12:00 PM hour (BT, TSM, RT), ends during the 8:00-9:00 PM hour (BT & TSW, RT)
- The Smart Way & BT
 - M-F: starts 7:00-9:00 AM hour, ends during the 9:00-10:00 PM hour (BT&TSM)



Blacksburg Municipal Building

Overlapping Schedules (continued):

- BT & RT
 - Friday: starts 3:00-4:00 PM hour, ends during the 1:00-2:00 AM hour.
 - Saturday: starts 11:00-12:00 PM hour, ends during the 1:00-2:00 AM hour
- The Smart Way & RT
 - Saturday: starts 11:00-12:00 PM hour, ends during the 8:00-9:00 PM hour



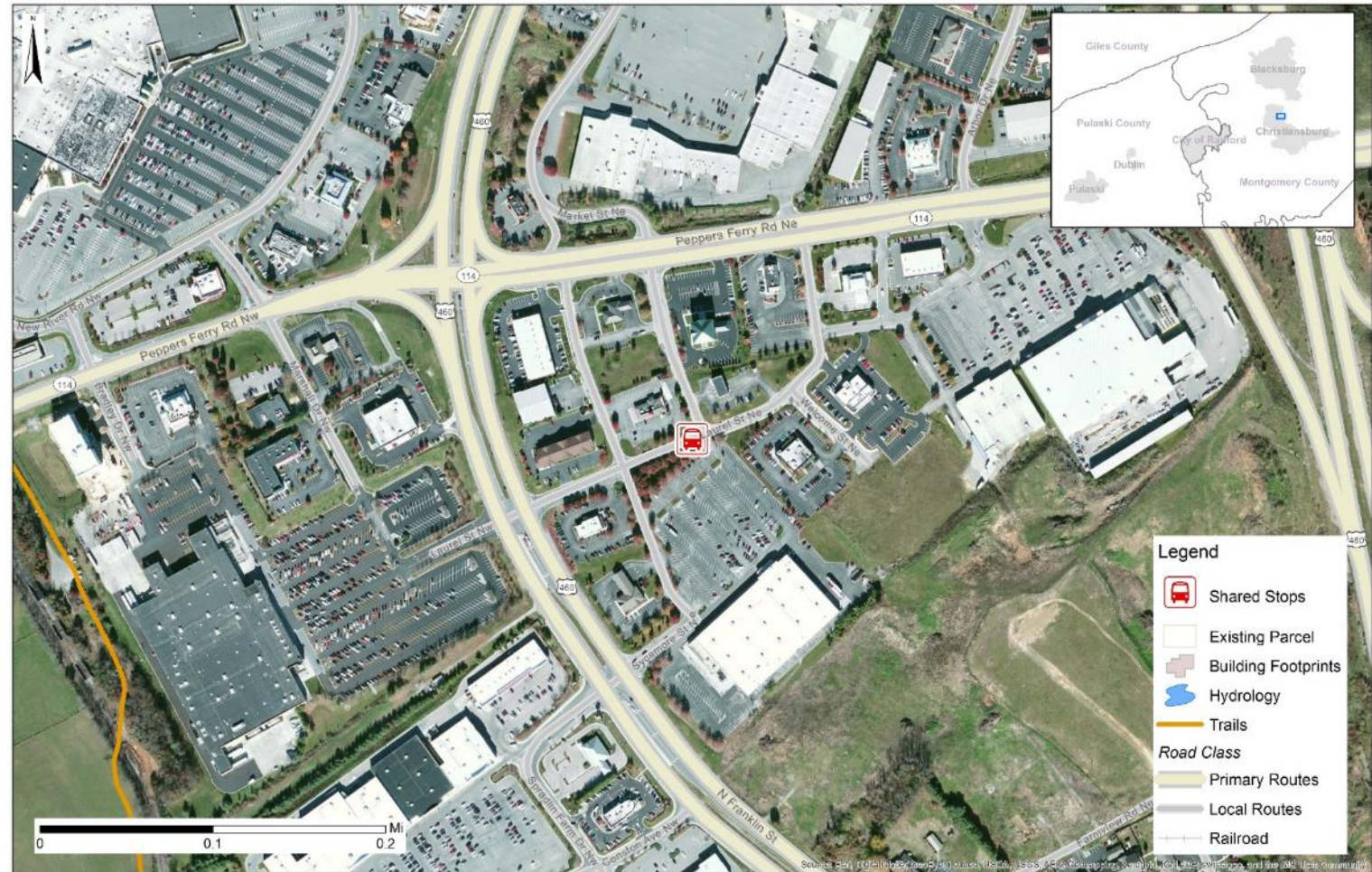
Kmart/ Laurel and Sycamore

Overlapping Transit Authorities:

- The Smart Way & BT

Overlapping Schedules:

- M-Th: starts 7:00-8:00 AM hour, ends during the 5:00-6:00 PM hour
- Friday: starts 7:00-8:00 AM hour, ends during the 9:00-10:00 PM hour
- Saturday: starts 10:00-11:00 AM hour, ends during the 9:00-10:00 hour



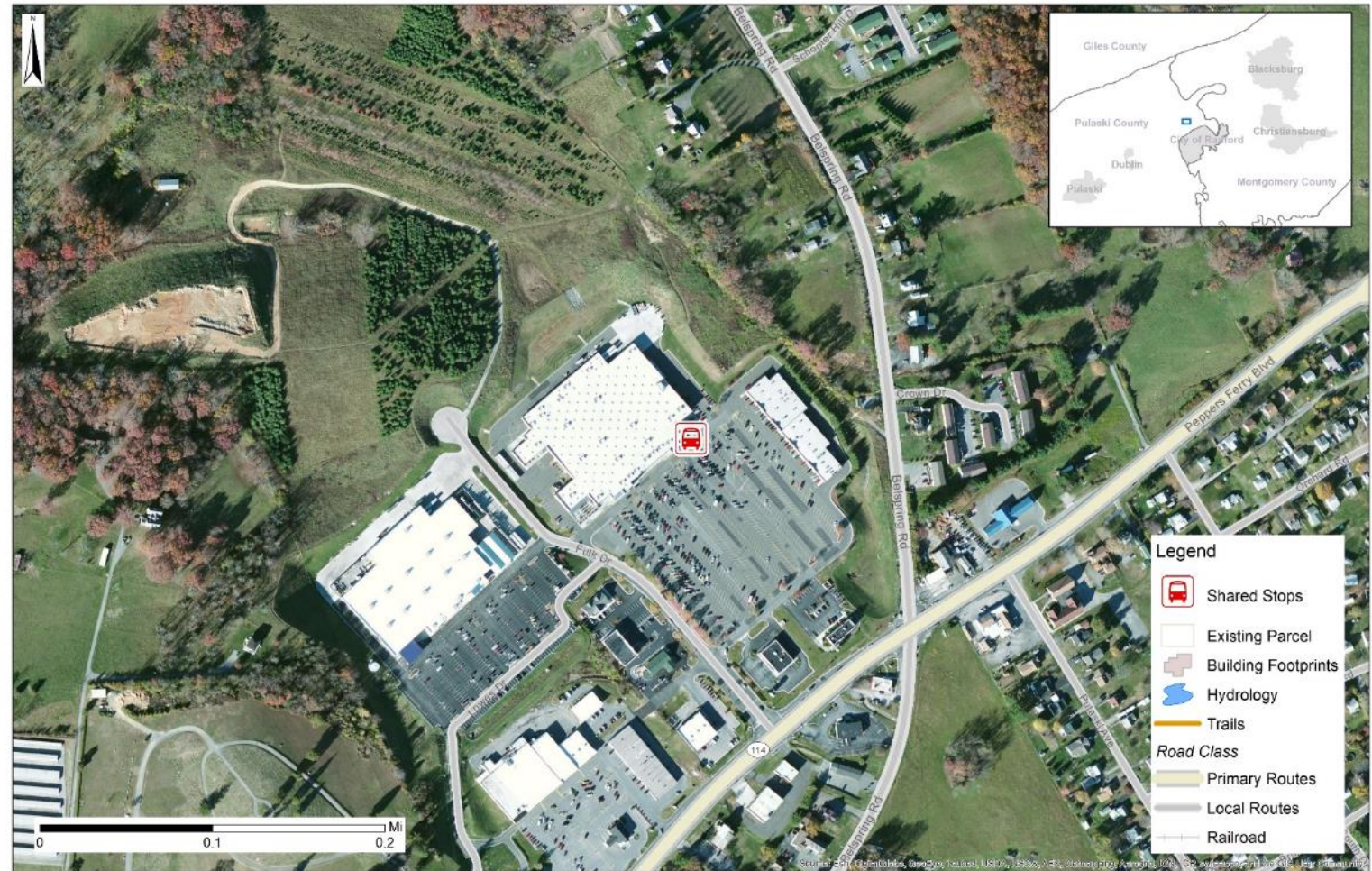
Walmart Fairlawn

Overlapping Transit Authorities:

- PAT & RT

Overlapping Schedules:

- M-F: starts 8:00-9:00 AM hour, ends during the 4:00-5:00 PM hour



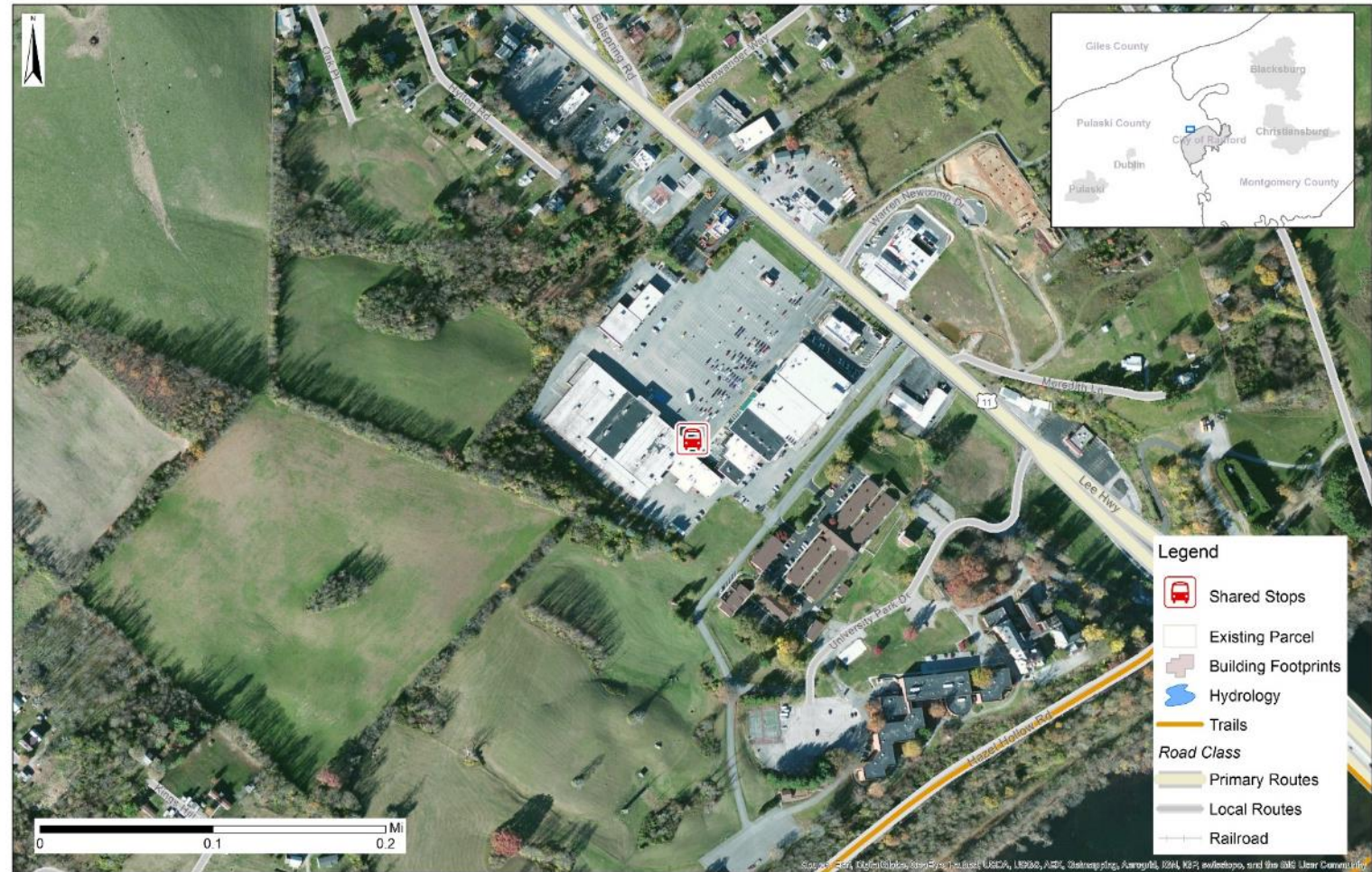
Kroger Fairlawn

Overlapping Transit Authorities:

- PAT and RT

Overlapping Schedules:

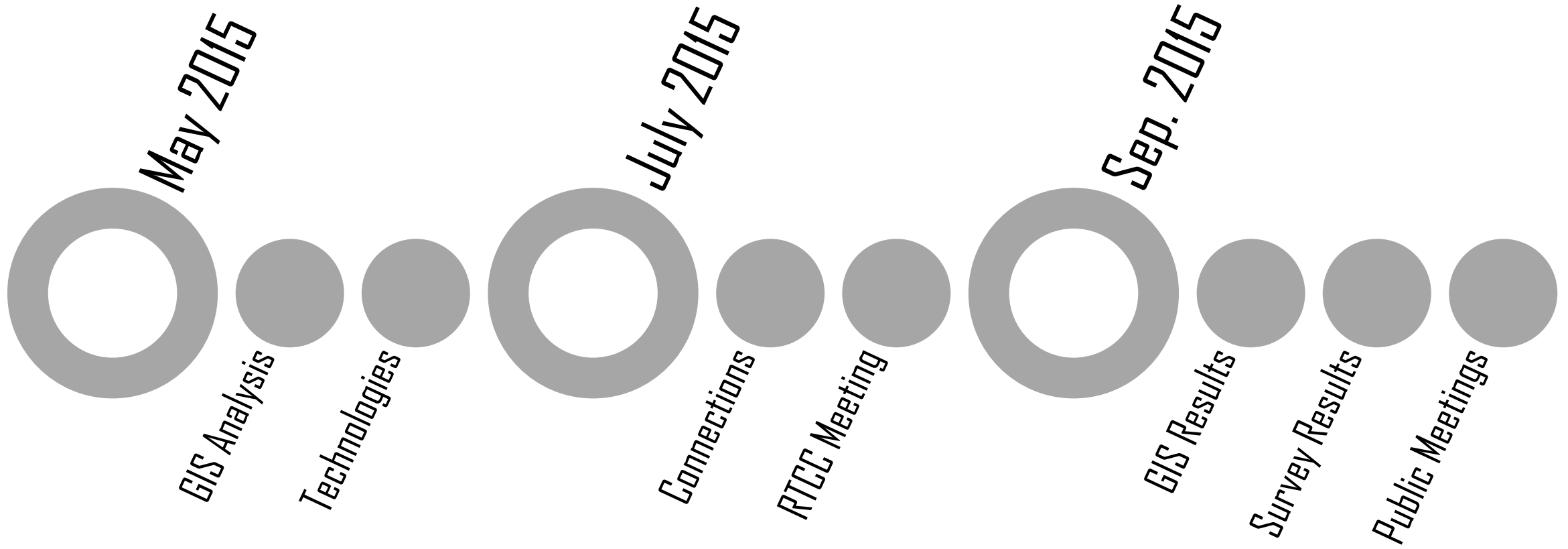
- M-F: starts 8:00-9:00 AM hour (RT, PAT if going to Radford; PAT, RT if going to Walmart), ends during the 4:00-5:00 PM hour (RT, PAT if going to Radford; PAT, RT if going to Walmart)



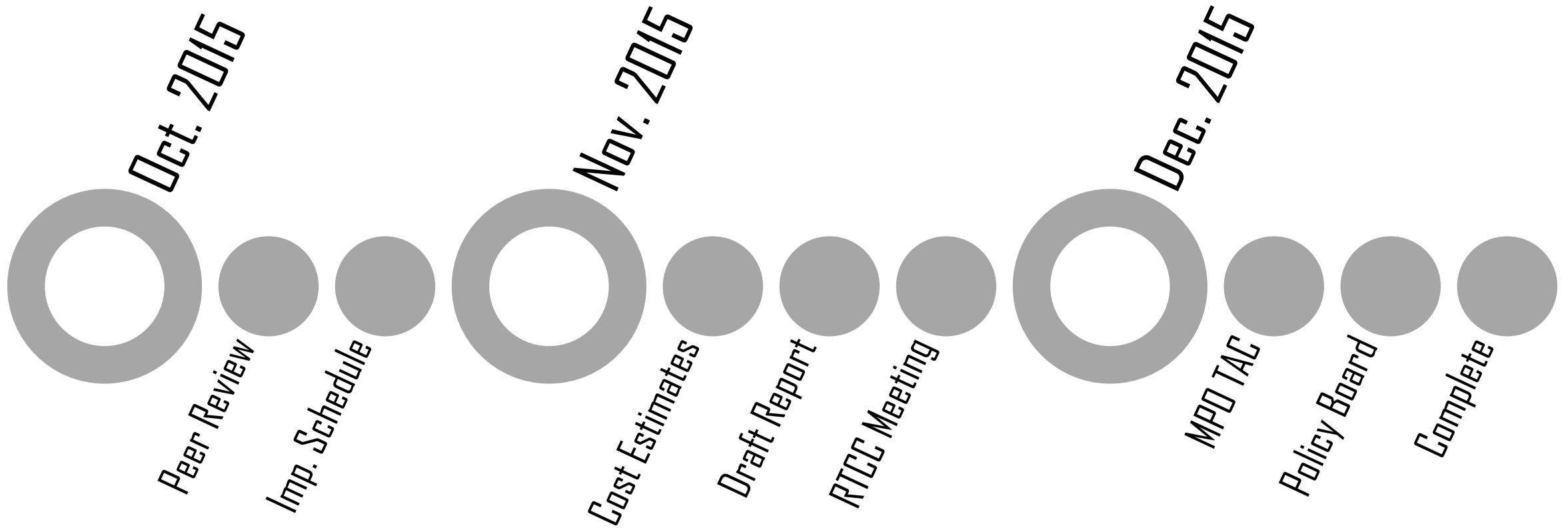
NEXT STEPS

- Project website:
<http://www.nrvpdc.org/regionaltransitstudy/>
- July (short-term):
 - Evaluate private sector connections (taxi, Hooptie Ride, etc.)
 - Existing connections and methods between services from the user perspective.
 - Survey local employers to identify service limitations

PROJECT OUTLINE



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WORKING GROUP MEETING SCHEDULE

