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Transit Development Plan Update

Executive Summary and Final Report

October 2014

CDM Smith

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Table of Contents

Appendices

List of Tables

List of Figures

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Executive Summary

Introduction

The Red Rose Transit Authority (RRTA) Transit Development Plan provides an evaluation of existing RRTA fixed route services, with the outcome being practical recommendations for maximizing route efficiencies and service in Lancaster County. This Plan provides a thorough analysis of the fixed route service, the strengths and weaknesses of the operations, including those services that are the best performing and those that need attention, and recommendations designed to improve productivity and service efficiency.

This document is an executive summary of the Transit Development Plan Update. The full report is available on the RRTA website: www.redrosetransit.com or by emailing info@redrosetransit.com.

Community Assessment

Demographic factors play an important role in understanding the context of a community and inherent or arising needs. Population characteristics, including demographics indicative of potential transit dependence and seasonal population trends, help identify priority areas for improvements. Employment also plays a crucial role in understanding the needs of a public transportation system. Taken together with ridership statistics, survey data, and other system performance characteristics, these factors serve to further inform and prioritize potential service improvements over the 10-year planning horizon.

Lancaster County is the sixth most populous county in Pennsylvania, with a 2012 population of 526,823. According to the 2010 Decennial U.S. Census,

between 2000 and 2010 Lancaster County grew by over 10.4 percent from 470,658 to 519,445, ranking it 14th in growth rate among Pennsylvania counties. The 2030 projected population for Lancaster County is 613,200.

A review of the demographic data for Lancaster County identified that the highest density of persons who traditionally rely on public transportation (youth, minorities, the elderly and low-income and persons without vehicles) are in the City of Lancaster and several outlying boroughs. Similarly, the areas with the highest population and housing densities are the City of Lancaster and the surrounding suburban townships and several outlying boroughs.

The largest single category of employment in the county is manufacturing at 18 percent of total employment. Following closely is health care and social assistance (16 percent), and retail trade (13 percent). Retail trade combined with accommodations and food services, makes up 20 percent of the employment in the County.

Guiding Principles/Goals/Objectives

The transit vision for RRTA begins with a mission statement, followed by goals and objectives. The mission statement is at the top of the hierarchical structure with the goals and objectives supporting the achievement of the mission.

> ***RRTA Mission Statement**: The Red Rose Transit Authority exists to provide effective public transportation services to the citizens of Lancaster County and to perform these services at the highest standards of safety, courtesy, reliability, and efficiency.*

The Mission Statement and the principles of mobility, fiscal responsibility, land use and economic development and the planning process guided the development of the goals and objectives for the plan. The goals and objectives for the plan include:

- Increase bus ridership and improve service in core bus corridors
- Financially provide a system that is efficient, cost effective and affordable
- Integrate safety and security elements
- Promote outreach to the public by developing community partnerships
- Enhance system accessibility
- Use intelligent transportation systems
- Accommodate bicycle and pedestrian needs

Public Outreach

During the course of this plan, several methods for involving the local community were completed. The study process included an onboard survey and a boarding and alighting survey. In addition, two public meetings were held where citizens were encouraged to comment on transit services in

Lancaster County. Driver meetings were also conducted at two different times to receive input from RRTA operators, dispatch, and supervisors. The RRTA project team also identified a group of local stakeholders which included various types of leaders, citizens, and organizations within the Lancaster area; 13 stakeholders were interviewed during the study. Finally, an online community survey was also administered as part of the TDP Update planning process. Primary feedback from the public outreach process included:

- More frequent service
- Need to have reliable schedules
- Service to jobs
- Service outside the City
- Public supports RRTA
- Existing service is efficient
- Need direct service
- Implement ITS technologies

RRTA Existing Transit Services

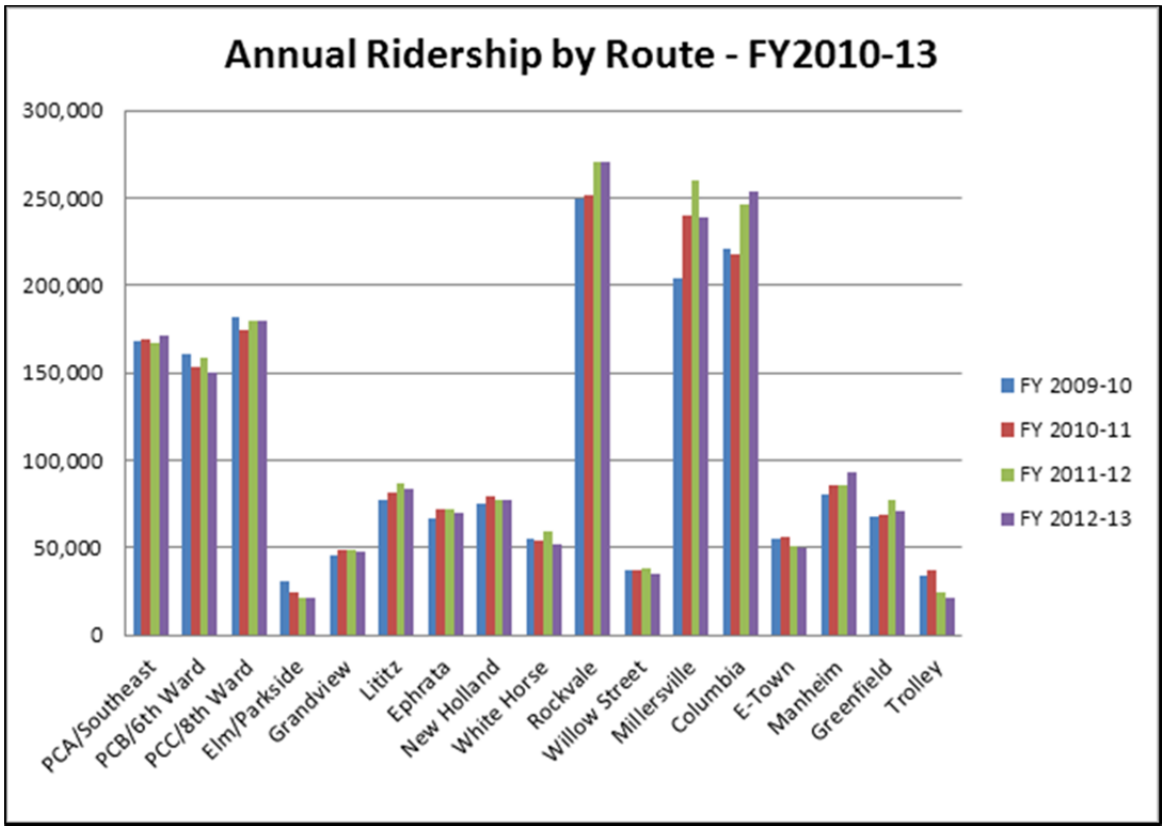
RRTA operates a hub and spoke service from the downtown transit center, Queen Street Station, located at 225 N Queen Street. Nineteen fixed routes operate from approximately 5:00 a.m. to 11:00 p.m., five days a week, with limited Saturday and Sunday service on selected routes. RRTA operates 30-60 minute headways throughout the day, depending upon which route traveled. All RRTA routes operate at least eight round trips per day on weekdays. Certain routes provide evening service during the week and some level of weekend service. RRTA's current policy is for passengers to board the bus at designated bus stop locations in Lancaster City and the boroughs of Columbia and Mountville. There are designated bus stop locations in the other communities, but flag stops are also allowed in safe locations in these other communities.

The City Routes (Routes 1 through 5 plus the Historic Downtown Trolley) provide basic circulation within the city. Three routes also serve the Park City Mall retail center in the northwest corner of the city. In addition, City Routes 1 through 4 are designed with a two leg route structure, purposely routed through downtown Lancaster. This route structure was developed to connect neighborhoods on one side of downtown Lancaster with retail centers and other destinations on the opposite side of the city.

The County Routes (Routes 10 through 19) operate a hub-and-spoke system between downtown Lancaster and various suburban/rural destinations. The metro region route (Route 20) serves the Greenfield Industrial Park. RRTA operates two shuttle routes under contract with Millersville University. The shuttle routes provide public transit service throughout the University, as well as providing service to the Park City Mall.

Ridership for the transit service has remained fairly stable for the past decade with approximately 2.2 million annual trips for all transit services. RRTA fixed routes provided 1.9 million trips in FY2013. The highest ridership routes were 14 Rockvale, 16 Millersville, and 17 Columbia; the lowest ridership routes were 4 Elm/Parkside, 15 Willow St., and the Trolley, as shown on **Figure ES-1**.

Figure ES-1: RRTA Annual Ridership by Route – FY2010-13



The revenue required to operate and support RRTA comes from a mix of funding sources. The 2013 expenditures for RRTA fixed route and shared ride services was $15,874,800. Operating expenses for the fixed route services is approximately $8.6M. The shared ride service budget is approximately $7.4M annually. The farebox return is approximately 28 percent for the fixed route service, which is approximately $2.4M annually.

Onboard Survey Results

The onboard survey conducted includes data to determine origins and destinations, trip purpose, and demographics of RRTA's rider base. The Onboard Surveys were distributed in English and Spanish to RRTA bus riders on Friday, November 8, 2013. A total of 2,141 completed surveys were analyzed, which equaled a response rate of 28 percent. Key survey findings include:

- Roughly 61 percent of riders began their trip at home with 39 percent indicating that they were travelling to work
- The vast majority of riders, 86 percent, walked from their trip origin to where they boarded a bus, and walked from where they deboarded the bus to their final destination.
- Approximately 57 percent of passengers ride the bus five or more days each week, and another 25 percent ride three or four days a week.

- The White population made up 49 percent of the passengers, followed by Black/African American at 21 percent and Hispanic/Latino making up 19 percent of the population.
- Nearly 78 percent of all riders responded living in households earning less than $30,000 annually.
- Almost 88 percent of riders did not have a vehicle available for their trip. Approximately 60 percent of riders reported not have a valid driver license.

Passengers were asked to rate the quality of service provided by RRTA on the 2013 onboard survey, as shown in **Table ES-1**. The response options were poor (1), fair (2), good (3), very good (4), excellent (5). Each category was given a numerical value from one to five, and the average response was then calculated for each attribute. An average score of 3.0 or higher indicates meeting or exceeding service quality perceptions for that particular attribute. Customers ranked all of these attributes as meeting or exceeding service quality perceptions, ranking driver courteousness, safety, and overall service quality as highest measures of service satisfaction. The lowest performing attribute was on-time performance.

Table ES-1: Quality of Service

Customer Satisfaction - Onboard Survey Questions		2013 Average Score
1	On-time Performance	3.35
2	Driver Courtesy	3.91
3	Cleanliness	3.74
4	Safety	3.98
5	Condition of Buses	3.79
6	Value Received for Fare	3.76
7	Ride Guide/Website	3.84
8	Overall Service Quality	3.87
	Overall System Average	**3.78**

Boarding/Alighting Survey

A boarding and alighting survey, also known as on/off counts, was conducted on November 8, 2013, during the same survey time period as the Onboard Survey effort. The boarding and alighting survey effort involved counting all passengers who boarded RRTA transit services on that Friday. The survey data were collected on all trips, all routes for one typical day in Lancaster County; thus a 100 percent count of RRTA routes. Key survey findings include:

- A total of 7,454 passenger boardings were collected by stop throughout the RRTA service area.

- Route 14 had the highest daily passenger boardings of all routes with 1,071 boardings or 14 percent.
- The route with the next highest passenger boardings was Route 17 - Columbia with 943 daily boardings or approximately 13 percent.
- Route 3 - Park City C/8th Ward has third highest boardings with 747 or approximately 10 percent of the total daily boardings.
- Combined, the top three routes accounted for almost 40 percent of total daily boardings.

Service Guidelines and Performance

Service guidelines provide a framework for evaluating both existing and proposed route modifications and additions. Any RRTA network changes must provide a customer-focused, easy to understand, sustainable transit system. Furthermore, the establishment of a service hierarchy, such as differentiating between city and county services, allows RRTA to provide appropriate service levels that maximize the benefits compared to the investment.

RRTA administration began route monitoring over a decade ago which allows management to review route productivity and patterns over a period of time. Low performing RRTA services are considered to be the least productive routes either by passengers per hour, revenues to expense, subsidy per passenger, and subsidy per passenger mile. The lowest performing RRTA routes include both city and county routes, as shown in **Table ES-2** and as summarized below:

- Route 4: Elm St/Parkside (City)
- Route 18: Elizabethtown (County)
- Route 15: Willow Street (County)
- Route 6: Trolley (City)
- Route 13: White Horse (County)
- Route 5: Grandview (City)

Table ES-2: Route Performance Ranking by Performance Criteria

FY 2013 Rank	Route
1	14-Rockvale
2	17-Columbia
3	20-Greenfield
4	16-Millersville
5	3-PCC/8th
6	1-SE/PCA
7	19-Manheim
8 tie	2-PCB/6th Ward
8 tie	10-Lititz

FY 2013 Rank	Route
10	12-New Holland
11	11-Ephrata
12	5-Grandview
13	13-White Horse
14	6-Trolley
15	15-Willow Street
16	18-E-town
17	4-Elm/Parkside

Service Alternatives

The service alternatives aim to improve the efficiency, effectiveness, and performance of the current RRTA transit system. This is to be achieved over a 10-year time frame. The concepts are based on lessons learned from a thorough review of existing Lancaster County market and socio-economic conditions, the performance of RRTA fixed route transit services, together with a stakeholder and community outreach process, which will shape the overall vision for public transit in Lancaster County.

Across the 10-year period, improvements are shown in two phases, short-term and long-term.

Short-term (1-5 years):

- The plan examines options to enhance the ridership levels achieved from existing resources. The short-term plan is consistent with the existing Transportation Improvement Program (TIP).
- The plan provides for upgrading of the existing RRTA network, with more frequent service on key corridors, commuter express services, and some route modifications.
- Increased services are possible during this phase due to elimination of services in two areas due to low ridership.

Long-term (6-10 years):

- This phase of the plan includes many transit service enhancement alternatives. These alternatives were developed from public input, stakeholders, and feedback from RRTA local project staff. The alternatives presented in this long-term phase will require additional funding sources to implement.

The Short-term Phase makes the best use of the existing system resources (service hours, peak fleet, and operating funding) to generate increased ridership through enhanced service levels on key corridors. The core recommendations, shown in **Table ES-3**, are based on providing the most efficient and productive service with available resources and include:

- **Increase Base Revenue Hours by Five Percent:** In Year 1, RRTA will have a five percent increase in revenue hours, which equates to approximately 5,000 annual revenue hours.
- **Eliminate Route 4 – Elm Avenue/Parkside:** By discontinuing Route 4, RRTA will have approximately 2,230 annual revenue hours available for allocation to existing high priority service corridors.
- **Eliminate Downtown Trolley:** The Downtown Trolley has had declining ridership over the past several years. The Trolley is proposed for elimination because it is not meeting the goals of providing a productive and efficient service.
- **Modify Route 15 – Willow Street:** Route 15 – Willow Street productivity is also scoring below RRTA systemwide averages; a route modification which focuses on high activity commercial areas and employment opportunities along Route 15 is proposed.
- **Implement Elizabethtown Express Route:** RRTA proposes an Elizabethtown Express Route that would serve the anticipated employment center west of Elizabethtown.
- **Implement Gap Express Route:** RRTA proposes an express route to the Gap to serve the new employment centers located east on Route 30, past Kinzers.
- **Add Bus to Route 14 Rockvale Square/Paradise:** With the elimination of non-productive services, RRTA proposes operating an additional bus on Route 14. In addition, RRTA will review schedule adjustments in the afternoon/evening to ensure additional coverage to/from Wal-Mart and Rockvale stops between 4:30pm and 6:45pm.
- **Add Bus to Route 17 Columbia:** With the elimination of non-productive services, RRTA proposes adding a bus to Route 17 Columbia all day. An additional bus will assist schedule adherence and also potentially decrease headways.

Table ES-3: Short-term Service Alternatives

	Service Options	Hours/ Day	Days Week	Headway	Trip Time - 1-way	Vehicles	Ridership	Annual Hrs	Annual Cost	Notes
1	Add 5% revenue hours over base years	vary	vary	n/a	n/a	vary	no change	5,000	$432,800	Service will be added to existing routes, as needed to meet existing time schedules and improve ontime performance.
2	Eliminate Route 4 Elm Avenue/Parkside Route	n/a	n/a	n/a	n/a	n/a	(21,350)	-2,230	-$179,980	
3	Eliminate Downtown Trolley	n/a	n/a	n/a	n/a	n/a	(21,200)	-2,565	-$186,000	
4	Modify Route 15 Willow Street	n/a	n/a	45 min	n/a	n/a	Loss of approx. 5K annually from route change; however, estimated increase to approx. 13 pass/hr, which is 4K increase annually.	no change	no change	Ridership estimates based on 2013 surveys & historic ridership trends. Assumes aggressive marketing plan for new service.
5	Implement Elizabethtown Express Route	16	5	30 min	n/a	3 vehicles	range of 41,600 - 124,800	3,120	$270,067	Peak service only - 3 am and pm trips; ridership based upon range of minimum 10 pass/hr to 30 pass/hr. after full implementation.
6	Implement Gap Express Route	16	5	30 min	n/a	3 vehicles	range of 41,600 - 124,800	3,120	$270,067	Peak service only - 3 am and pm trips; ridership based upon range of minimum 10 pass/hr to 30 pass/hr. after full implementation.
7	Add bus to Rt. 14 Rockvale all day.	12	5	25-35 min	n/a	1	slight increase	3,120	$270,067	Ridership may have a slight increase of 1%; however the additional bus is primarily for schedule adherence.
8	Add bus to Rt. 17 Columbia all day.	12	5	25-35 min	n/a	1	slight increase	3,120	$270,067	Ridership may have a slight increase of 1%; however the additional bus is primarily for schedule adherence.

Note: Red print indicates revenues available for other service improvements.

The Long-term Phase assumes new opportunities for investment in transit, shown in **Table ES-4**, should new funding sources become available. Additional funding is critically needed to allow for the most optimal service levels on key corridors and other supporting transit services in the county and urban areas. Funding availability will make it possible for the implementation of more frequent service.

- **Increased Frequency of Service:** Some RRTA routes operate approximately 30-45 minute service during peak hours, while other routes are 60 minutes or more. The increased frequency will decrease the times between trips.
- **North Lancaster Regional Route:** The North Lancaster Regional Route proposes service connecting the northern communities in the County without traveling into the City of Lancaster.
- **Downtown Shuttle Service:** The downtown shuttle or trolley service will be re-introduced to the heart of the City with funding partnerships between downtown businesses and RRTA.
- **Begin Rapid Transit Planning Implementation:** Begin service and capital planning for Rapid Transit Routes targeting the Route 17 Columbia and Route 14 Rockvale.
- **Implement Regional Harrisburg/Lancaster Service:** This option adds a regional route from Lancaster to/from Harrisburg. The route would serve the downtown in both cities.
- **Implement Columbia Local Service:** This service alternative provides Call-A-Ride demand response curb to curb service within Columbia and the immediate surrounding area.
- **Increase Saturday Service:** Recommendations presented in the Short-term Phase focus on RRTA weekday service. This alternative includes an overall increase in revenue service hours for Saturdays.
- **Implement Regional Service to Denver Borough:** This option adds a regional route from Lancaster to/from the Denver area, which will also provide connections to BARTA services.

Table ES-4: Long-term Alternatives

	Service Options	Hours/ Day	Days/ Week	Headway	Trip Time - 1-way	Vehicles	Ridership	Project Farebox Revenue	Annual Hrs	Annual Cost	Notes
1	Rt 1 PCA - PM 30 Min Peak Hour Service	2	5	30 min	n/a	1 additional for peak hr	9,483	$11,664	520	$45,011	pm - need to adjust peak hour times to 30 minutes; add vehicle 430-630p
2	Rt2 PCB - change to 30 min service.	13	5	30 min	n/a	1 additional 6a-7p	52,002	$63,963	3,380	$292,573	add 1 veh to 6a-7p
3	Rt 3 PCC - 30 min service all day	13	5	30 min	n/a	1 additional 6a-7p	63,044	$77,544	3,380	$292,573	add 1 veh to 6a-7p
4	Rt 5/Grandview - 30 min service peak hours	6	5	30 min peak	n/a	1 additional for peak hr	24,712	$30,395	1,560	$135,034	add 1 veh peak hrs; 6a-9a, 3-6p
5	Rt 10/Lititz - 30 min peak hr service; 60 min midday	13.5	5	30 min peak/60 min nonpeak	n/a	1 additional all day for 60 min non-peak/30 min peak	46,493	$57,186	3,510	$303,826	add 1 veh for all day to make 30 min/60 min service; 530a-7p
6	Rt 11/Ephrata - 30 min peak hr service; 60 min midday	13.5	5	30 min peak/60 min nonpeak	n/a	1 additional all day for 60 min non-peak/30 min peak	48,294	$59,402	3,510	$303,826	add 1 veh for all day to make 30 min/60 min service; 530a-7p
7	Rt 12/New Holland - 30 min peak hr service; 60 min midday	12	5	30 min peak/60 min nonpeak	n/a	1 additional all day for 60 min non-peak/30 min peak	42,723	$52,549	3,120	$270,067	add 1 veh for all day to make 30 min/60 min service; 6a-6p
8	Rt 13/White Horse - 60 min service	13	5	60 min	n/a	1 additional 6a-7p	40,137	$49,368	3,380	$292,573	add 1 veh to 6a-7p
9	Rt 14/Rockvale - 15 min daytime	13	5	15 min peak	n/a	1 additional 6a-7p	79,806	$98,161	3,380	$292,573	add 1 veh to 6a-7p
10	Rt 16/Millersville - 15 min peak/30 min offpeak	13	5	15 min peak/30 min offpeak	n/a	1 additional 6a-7p	70,828	$87,118	3,380	$292,573	add 1 veh to 6a-7p
11	Rt 17/Columbia - 15 min daytime	13	5	15 min peak	n/a	1 additional 6a-7p	70,590	$86,826	3,380	$292,573	add 1 veh to 6a-7p
12	Rt 18/Elizabethtown - 60 min service	13	5	60 min	n/a	1 additional 6a-7p	38,774	$47,692	3,380	$292,573	add 1 veh to 6a-7p
13	Rt 19/Manheim - 30 min service	13	5	30 min	n/a	1 additional 6a-7p	52,943	$65,120	3,380	$292,573	add 1 veh to 6a-7p
14	Rt 20/Greenfield - 30 min service	13	5	30 min	n/a	1 additional 6a-7p	85,283	$104,898	3,380	$141,960	add 1 veh to 6a-7p
15	N Lancaster Regional Route	27	6	60 min	75	3 peak/1 midday	56,160	$69,077	8,424	$729,181	4 am trips, 2 midday trips, 5 pm trips; Ridership based upon 8 pass/hr
16	Downtown Shuttle Service	30	5	15 minute	n/a	2 vehicles	93,600	$115,128	7,800	$675,168	15 min headways/2 vehicles; Ridership based upon 12 pass/hr.
17	Rapid Transit Feasibility Study for Columbia and Rockvale routes.	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$200,000	Total study $600K. $200K would be local share.
18	Lancaster/Harrisburg Regional Service	12	5	60 min	60 min	2 peak	37,440	$46,051	3,120	$270,067	2 am trips/2 pm trips; Ridership based upon 12 pass/hr.
19	Columbia Local Service	12	5	Call-A-Ride	n/a	1	15,600	$19,188	3,120	$270,067	Monday - Friday; Ridership based upon 5 passengers per hour.
20	Increase Saturday Service	168	1	various	n/a	14 existing weekday vehicles; no additional vehicles needed	104,832	$128,943	8,736	$756,188	Ridership assumption of 12 passengers per hour.
21	Lancaster/Denver Borough Regional Service	12	5	60 min	60 min	2 peak	37,440	$46,051	3,120	$270,067	2 am trips/2 pm trips; Ridership based upon 12 pass/hr.
	Long-term Summary	**425**				**24 additional vehicles**		**$1,316,326**	**76,960**	**$6,711,045**	

Note: Existing RRTA routes have ridership estimates based upon FY2013-14 average passenger per hour by route.
Note: Farebox Revenue based upon FY2012 average fare per passenger.

Financial Review

RRTA's operating costs increased an average of 4.7 percent per year from FY 2008 to FY 2013 ($8.6M). Key indicators of the operating cost increases included rising costs of labor benefits and the price of fuel. The RRTA operating cost forecasts from FY 2014 to FY 2023 assume there are no service changes from the levels budgeted in 2013. Operating cost estimates for FY 2023 range from $21.3M to $25M.

RRTA's capital spending is highly dependent on capital grants awarded each year and the availability of required local matching funds. It also reflects varying annual needs such as fleet replacement, technology, and facility upgrades. RRTA's capital costs from FY 2008 to FY 2009 were approximately half as much as capital costs from FY 2010 to FY 2012, $6.1M and $12.6M, respectively.

RRTA's total revenues increased an average of 4.6 percent per year from FY 2008 to FY 2013, closely matching the operating cost increases. Most of the revenue sources increased over the time period; however, some sources fluctuated, as a result of changing economic conditions.

RRTA cannot maintain current service levels without a sustained balanced budget. Unless both operating costs and revenues increase by 3 percent per year, operating costs will increase faster than revenues. In order to maintain a balanced budget, RRTA will have to identify new revenue sources or decrease current service levels.

Coordination

RRTA plays an essential role in providing mobility in Lancaster County. Its services help sustain and expand the economy in its service areas, allowing for continued economic growth in a way that is consistent with reduced energy use, environmental protection, and sustainable land use. In order to achieve this, RRTA continues to build relationships with local municipalities, the County, and also works with the non-profit and private sectors to determine transit needs and leverage potential funding. The following steps promote increased coordination with the Lancaster area.

1) Initiate and establish, with the County and the local municipalities, a more formalized working relationship and on-going approach to coordinating with RRTA on planning and implementation processes in order to most effectively and efficiently implement transit planning in the county.

2) Conduct a Park and Ride Study to begin the process for future express routes, keeping in mind the goal of coordinating transit stops/hubs/park & rides with local municipalities.

3) Coordinate with the Chamber, Convention & Visitors Bureau, and Economic Development staff to develop a tourism-based pamphlet, in addition to developing on-line materials that focusing on visitor destinations.

4) RRTA completes an annual marketing plan. One alternative to include in future plans is to increase coordination with RRTA passengers and include a 'Rider Spotlight' in the RRTA Express newsletter, website, Board updates, etc.

5) Consider adding a Mobility Specialist to RRTA staff, with a primary responsibility of assisting RRTA in building local and regional partnerships, continuing educational efforts to all county stakeholders, to residents, and to assist in the marketing of RRTA.

Fare Structure Analysis

The existing base cash fare is $1.70 for adult full fare passengers. Half fares are also available for residents meeting pre-established criteria with Medicaid and for passengers with disabilities. Children five or under ride free with a paying adult. There are additional zone charges for travel outside the City of Lancaster. Discount multi-ride and monthly tickets offer regular, adult riders discounts of approximately 20 percent on RRTA fixed route services. Seniors, riders with a disability, and youth qualify for the reduced fare rate with proper identification. Transfers are paper slips costing $0.05 and are available to customers upon request when boarding the bus and are only valid for one-way trips in same direction of travel made within two hours.

The recommended fare structure was developed to simplify RRTA's fare structure, maintain similar levels of farebox revenue, and account for increases in future operating costs. The following changes are recommended:

- The current zone system will be eliminated and two base fares will be available for riders: city and county
- Transfers will be free, while still requiring a transfer ticket that is valid for two hours;
- Discounted passes will remain available for purchase
- Within the City of Lancaster and for the RRTA City Routes, the base fare per one-way trip is $1.70 for years 1-3, $1.75 in years 4-10
- For all County routes and outside the City limits of Lancaster, one base fare will be used - $2.50 per one-way trip in years 1-3, $2.75 in years 4-10
- Discounted All Day – All Routes, and 31-Day passes will be available for purchase

Cost and Implementation Plan

Operating costs for the short-term and long-term service recommendations were based on the number of revenue hours that the route would operate on an annual basis. The cost per hour, $86.56, was based on the January 2014 RRTA Operating Statement. A conservative approach has been followed throughout the short-range planning analysis. The RRTA projections are consistent with the financial guidance provided for the development of the Transportation Improvement Program in 2014.

The estimated annual operating cost for the short-term service plan for fixed route service is $9.8M; this includes the short-term service alternatives listed on Table 3. The projected operating budgets for FY 2015-2019 were calculated using a FY 2014 constant dollar.

No additional new vehicles are needed to operate the recommended short-term plan. The long-term alternatives increase service hours by approximately 77,000 annual revenue hours. The estimated annual operating cost for the long-term service plan for fixed route service ranges from $12.2M in 2020 to $16.3M in 2024. In order to implement the long-term plan, additional local revenues must be secured and 24 additional new vehicles are needed. In addition to vehicle procurement for expanded services, RRTA will also need to expand bus storage and maintenance facilities at a cost of approximately $10M-$15M, depending upon the size and location of the building.

The short-range financial plan represents RRTA's projections with revenues and expenses remaining stable. For the long-range recommendations to become reality, RRTA must not be restricted by the lack of local funding. RRTA documented within this plan the ongoing efficiencies occurring at the agency. However, to meet the needs identified by the citizens of the County and to boost RRTA to become a viable transportation mode for all residents in Lancaster County, the agency must have additional funding. Responsibility of securing local funds is a partnership ranging from local residents to elected officials.

High quality public transit can provide many benefits to the community. RRTA is a perfect example of an efficient service in the County providing approximately 2M trips each year. For RRTA to move to a higher level of transit efficiency and to implement the transit needs expressed by the citizens in the region, more local funding must become available. Communities with high quality transit tend to have citizens who own fewer vehicles, drive less, and spend less on transportation than they would in more automobile-oriented locations.

1. Introduction

1.1 Importance of Transit Development Plan Updates

The Red Rose Transit Authority (RRTA) retained CDM Smith to update the RRTA Transit Development Plan which provides an evaluation of existing RRTA fixed route services, with the outcome being practical recommendations for maximizing route efficiencies and service in Lancaster County and the surrounding areas. As times and dynamics have changed over the last six years since the adoption of the November 2008 Long Range Public Transportation Plan, RRTA recognizes the importance of reviewing the current RRTA routes and making adjustments to reflect travel patterns of the community. This TDP Update will provide a thorough analysis of the fixed route service and recommendations designed to improve productivity and service efficiency.

Public transit, like any business, can be efficient and effective only if it understands the markets it serves, the needs of its customers, and how well it is doing in matching its products to the markets. Unlike many retail operations, transit does not receive detailed information each time a purchase is made. While a transit operator can determine from farebox records how many people have boarded a bus in a day, those records do not reveal anything about the characteristics of the customer, the specific trip for which the bus was used (e.g. origin, destination, purpose) or the quality of service that was provided. While new technologies are gradually being adopted by the transit industry to better track both customer activity and the services provided (e.g. smart-card based fare collection, Automatic Vehicle Location, Automatic Passenger Counters), these systems are still not in wide use. Developing information about services provided and services used requires special studies to collect and process data.

The data collected and the analyses conducted through transit development plans provide transit agencies with a wealth of objective information for use in business planning, including use of services provided and how those services meet the needs of the customers. Medium-sized transit agencies typically conduct Transit Development Plans approximately every five years, depending upon fluctuation in agency revenues and requests for service. This Plan identifies the strengths and weaknesses of the operations, including those services that are the best performing and those that need attention. This, in turn, helps define actions that the agency can take to improve efficiency and effectiveness.

1.2 Understanding the Data

Once RRTA has data for describing the different market segments, they can begin to assess if available resources are being correctly deployed, or if alternative strategies would result in a more effective service. Transit is, by nature, a conservative industry. Over time, the residents of the community served by transit develop patterns of activity and travel based on the transit service provided. Decisions about where to live, purchase a car, medical facilities, favored shops, etc. may be made based on the transit operations.

People grow to depend on specific services. As markets shift over time, the transit operator may find that services that were once well-used are attracting fewer riders, and that needs are developing in other locations for services. Shifting resources to target the new markets may seem appropriate. However, instituting a change in services will almost always reduce the quality of service for some existing riders, though it improves service in areas where new riders are anticipated. The riders for whom service will change may be quite vocal in their objections, while the hoped for new riders will be silent. Undertaking changes in service patterns must therefore be done with recognition of this reality. Change must be introduced incrementally. When feasible, new services should be introduced and new markets established before older services are reduced or terminated. Change must not be seen as a zero-sum game in which the new markets are served at the expense of old. Nonetheless, transit agencies cannot continue to provide inefficient services. Agencies must be willing to make changes when sound data has been collected and proper studies have been conducted to demonstrate that change is required to maintain the efficiency of the overall transit system.

This Transit Development Plan Update is a process developed in the transit industry to support the business planning function of transit agencies. Regular, periodic updates permit transit agencies to not only understand the current use and performance of their system, but also to understand how the performance and use of the system is changing over time. Where necessary, corrective actions can then be identified and implemented that respond to changing conditions, that work to strengthen poorly performing services, and that target resources to developing markets.

1.3 Report Contents

This report presents a thorough review of RRTA fixed route services. The overall planning process includes the following elements:

- Identification of issues and concerns
- Inventory of existing conditions
- Public participation and outreach
- Service alternatives
- Financial and Service Plan

Two Technical Memoranda were prepared, which are incorporated into this Final Report. At key points during the study process, the public were invited to provide feedback on public transportation needs and future alternatives. The first of those public meetings was held in February 2014 and the second meeting was held in May 2014. The end product of this TDP Update is a realistic transit plan for RRTA services.

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2. Community Assessment

Demographic factors play an important role in understanding the context of a community and inherent or arising needs. Population characteristics, including demographics indicative of potential transit dependence and seasonal population trends, help identify priority areas for improvements. In addition, services tend to be more feasible when population and housing densities are supportive of such investments and can produce substantial ridership gains to offset costs of new or improved services.

Employment also plays a crucial role in understanding the needs of a public transportation system. An understanding of the job market in an area, commuting patterns, and other major destinations help to identify where the greatest needs are for residents and employees who are potential users of the public transportation system. The following sub-sections provide further details on these demographic factors. Taken together with ridership statistics, survey data, and other system performance characteristics, these factors serve to further inform and prioritize potential service improvements over the 10-year planning horizon.

2.1 Study Area Description

Lancaster County is located in south central Pennsylvania and includes the Lancaster Metropolitan Statistical Area (MSA). The County covers 943.81 square miles and has a population density of 546.53 persons per square mile.[1] The County has 60 municipalities of varying size, with the City of Lancaster being the largest and primary urban setting. The county has the predominant land use of agriculture, comprising of 70 percent of the county's land area. Lancaster City and the surrounding municipalities contain the majority of the county's major transit generators including hospitals, shopping centers, and institutions of higher learning.[2] Lancaster City is approximately 35 miles from Harrisburg, the state capital, and 61 miles from Philadelphia, the largest city in Pennsylvania. Lancaster County is traversed by several major traffic corridors, including U.S. Route 30, U.S. Route 222, U.S. Route 322, and PA 283. In addition, Amtrak intercity rail service is available from Lancaster City to destinations along the Keystone and Northeast Corridors, including Harrisburg, Philadelphia, and New York City.

[1] 2011 U.S Census Bureau American Community Survey 5-year Estimate
[2] http://pa-lancastercountyplanning.civicplus.com/DocumentCenter/View/21

2.2 Population Characteristics

Lancaster County is the sixth most populous county in Pennsylvania, with a 2012[3] population of 526,823. According to the 2010 Decennial U.S. Census, between 2000 and 2010 Lancaster County grew by over 10.4 percent from 470,658 to 519,445, ranking it 14th in growth rate among Pennsylvania counties. **Table 2-1** provides details on population change by municipality between 2000 and 2010, as well as population projections from the Lancaster County Planning Commission through the year 2030. **Figure 2-1** displays the study area identified in this table.

In terms of overall total population, there are three major areas within Lancaster County that are expected to continue as the largest communities within the county. These include Lancaster City (12 percent), Manheim Township (7 percent), and East Hempfield Township (5 percent). Combined, these communities constitute approximately 25 percent of the total population in the County. As such, they remain priority areas for transit planning purposes.

Growth factors in recent years also have an important impact on identifying fast growing communities and where needs are arising. Between 2000 and 2010, the area with the largest growth in Lancaster County was in Manheim Township, where the population grew by almost 4,500 people and it is expected to grow by another 2,000 people between 2010 and 2015. Also during that timeframe, Manor Township (3,114), Lancaster City (2,974) and East Lampeter Township (2,868) grew considerably. Lancaster City reversed the decline it experienced between 1990 and 2000 and gained 5.3 percent in population between 2000-2010, reaching a population of 59,322.

	2000	2010	Percent Change
Lancaster County	470,658	519,445	10.4%
Pennsylvania	12,281,054	12,702,379	3.43%

Source: www.censusview.com

2.3 Transit Dependent Population

This section provides information on individuals considered by the transportation profession to be dependent upon public transit. Generally speaking, these population characteristics preclude these individuals from driving, and leave public transit and or ridesharing as the only other realistic means of transportation. The data for this section is derived from the 2011 U.S. Census Bureau American Community Survey 5-Year Estimates (2011 ACS). The density area maps identified on the following pages also represent persons who traditionally rely on public transportation.

- Youth Population
- Minority Population
- Elderly Population
- Vehicle Availability
- Low Income Population

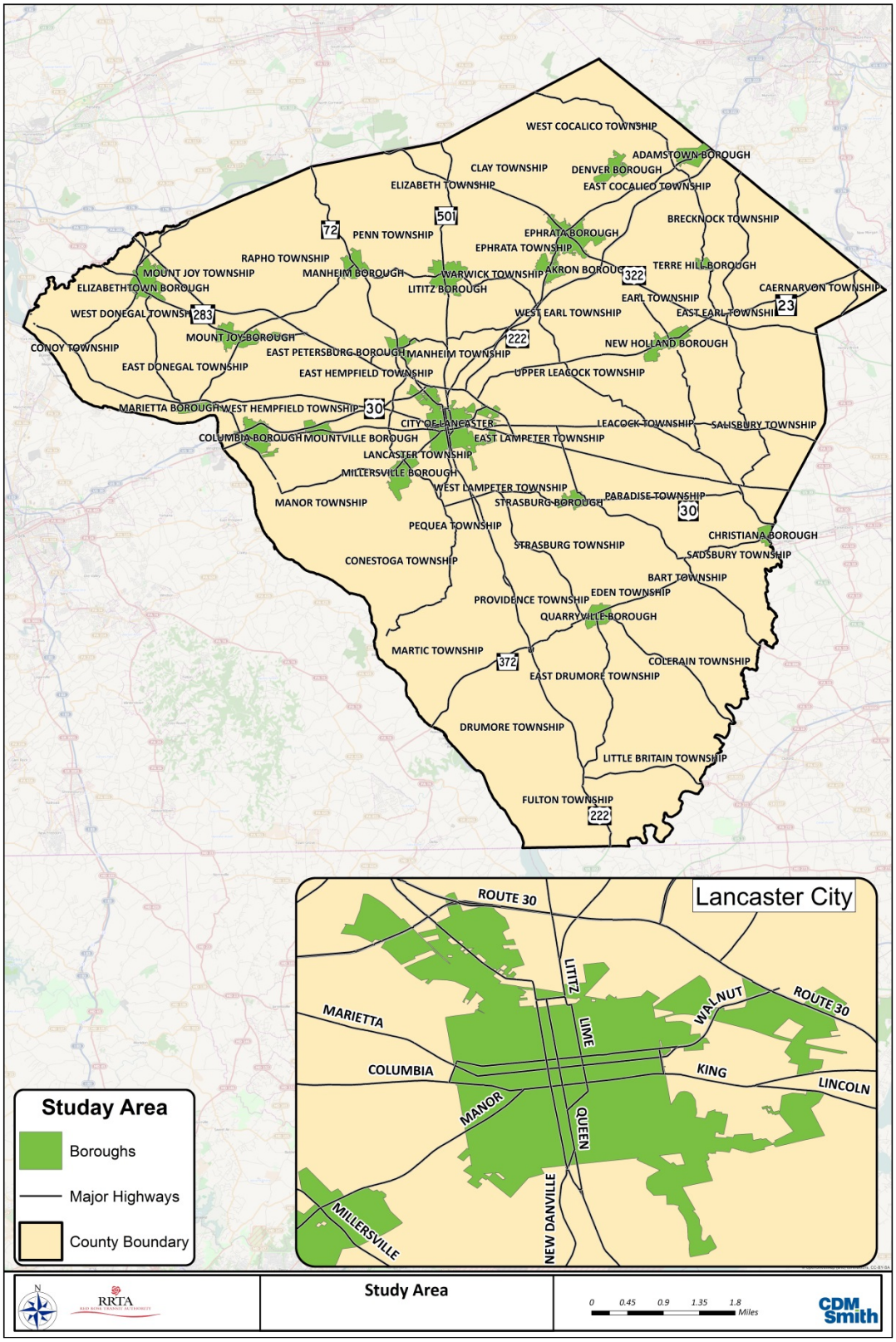
[3] http://www.city-data.com/county/Lancaster_County-PA.html

Table 2-1: Lancaster County Historical Population and Population Projections, 2015-2030

Community	Census		Projections			
Adamstown Borough	1,201	1,772	1,881	1,990	2,089	2,187
Akron Borough	4,046	3,876	3,938	3,999	4,038	4,077
Bart Township	3,003	3,094	3,213	3,332	3,431	3,530
Brecknock Township	6,699	7,199	7,686	8,172	8,619	9,066
Caernarvon Township	4,278	4,748	4,955	5,162	5,337	5,511
Christiana Borough	1,124	1,168	1,185	1,202	1,213	1,223
Clay Township	5,173	6,308	6,685	7,062	7,404	7,746
Colerain Township	3,261	3,635	3,857	4,079	4,281	4,482
Columbia Borough	10,311	10,400	10,451	10,502	10,501	10,500
Conestoga Township	3,749	3,776	3,887	3,997	4,083	4,169
Conoy Township	3,067	3,194	3,329	3,463	3,576	3,689
Denver Borough	3,332	3,861	4,139	4,417	4,678	4,939
Drumore Township	2,243	2,560	2,688	2,816	2,928	3,039
Earl Township	6,183	7,024	7,343	7,661	7,932	8,202
East Cocalico Township	9,954	10,310	10,924	11,538	12,089	12,639
East Donegal Township	5,405	7,755	8,403	9,051	9,663	10,275
East Drumore Township	3,535	3,791	3,974	4,157	4,316	4,474
East Earl Township	5,723	6,507	6,764	7,020	7,233	7,445
East Hempfield Township	21,399	23,522	24,785	26,048	27,159	28,269
East Lampeter Township	13,556	16,424	17,465	18,506	19,448	20,390
East Petersburg Borough	4,450	4,506	4,636	4,766	4,866	4,966
Eden Township	1,856	2,094	2,178	2,261	2,331	2,401
Elizabeth Township	3,833	3,886	4,075	4,263	4,431	4,599
Elizabethtown Borough	11,887	11,545	12,032	12,519	12,930	13,340
Ephrata Borough	13,213	13,394	13,768	14,142	14,429	14,716
Ephrata Township	8,026	9,400	10,087	10,773	11,424	12,075
Fulton Township	2,826	3,074	3,196	3,318	3,419	3,520
Lancaster City	56,348	59,322	60,384	61,445	62,158	62,870
Lancaster Township	13,944	16,149	16,942	17,735	18,421	19,107
Leacock Township	4,878	5,220	5,388	5,556	5,689	5,822
Lititz Borough	9,029	9,369	9,660	9,950	10,179	10,408
Little Britain Township	3,514	4,106	4,426	4,746	5,047	5,347
Manheim Borough	4,784	4,858	4,872	4,885	4,876	4,866
Manheim Township	33,697	38,133	40,114	42,094	43,815	45,535
Manor Township	16,498	19,612	20,890	22,167	23,328	24,489
Marietta Borough	2,689	2,588	2,583	2,577	2,561	2,544
Martic Township	4,990	5,190	5,460	5,729	5,967	6,204
Millersville Borough	7,774	8,168	8,272	8,376	8,435	8,493
Mount Joy Borough	6,765	7,410	7,680	7,949	8,168	8,387
Mount Joy Township	7,944	9,873	10,659	11,445	12,185	12,924
Mountville Borough	2,444	2,802	3,005	3,207	3,396	3,584
New Holland Borough	5,092	5,378	5,583	5,788	5,956	6,124
Paradise Township	4,698	5,131	5,304	5,477	5,615	5,753
Penn Township	7,312	8,789	9,253	9,716	10,121	10,525
Pequea Township	4,358	4,605	4,736	4,866	4,967	5,067
Providence Township	6,651	6,897	7,191	7,485	7,734	7,982
Quarryville Borough	1,994	2,576	2,755	2,933	3,095	3,257
Rapho Township	8,578	10,442	10,962	11,482	11,932	12,381
Sadsbury Township	3,025	3,395	3,592	3,788	3,965	4,141
Salisbury Township	10,012	11,062	11,671	12,280	12,817	13,353
Strasburg Borough	2,800	2,809	2,918	3,026	3,116	3,206
Strasburg Township	4,021	4,182	4,331	4,479	4,600	4,720
Terre Hill Borough	1,237	1,295	1,312	1,328	1,338	1,347
Upper Leacock Township	8,229	8,708	9,054	9,399	9,685	9,971
Warwick Township	15,475	17,783	19,322	20,860	22,357	23,853
West Cocalico Township	6,967	7,280	7,664	8,047	8,381	8,715
West Donegal Township	6,539	8,260	8,820	9,380	9,890	10,399
West Earl Township	6,766	7,868	8,226	8,583	8,887	9,191
West Hempfield Township	15,128	16,153	17,297	18,440	19,530	20,619
West Lampeter Township	13,145	15,209	16,559	17,909	19,232	20,555
Totals	**470,658**	**519,445**	**544,394**	**569,343**	**591,276**	**613,208**

Source: Lancaster County Planning Commission, Population Projections, Decennial 2010 U.S Census.

Figure 2-1: Study Area



2.3.1 Youth Population

Youth population, particularly those under the age of 16, rely upon others and alternative modes such as public transportation to meet their mobility needs. According to 2011 ACS data, the youth population age 18 or less is 128,997. This represents 25.0 percent of the population in Lancaster County. This percentage is somewhat higher than that of the state as a whole at 22.1 percent. The density of this younger population is represented by census block in **Figure 2-2**.

A number of locations within the county are home to transit dependent populations. High density areas for the youth population are located within Lancaster City and the boroughs of Columbia, Elizabethtown, Lititz, Akron, and Ephrata. [Locations in the eastern portion of the County exhibit the highest density of youth population, with populations in excess of 600 people per square mile.] Census blocks with the lowest number of people under 18 years old are primarily located in the rural areas of the county.

Lancaster County 2010 Pop	Number of Persons Under Age 18	% of Population Under Age 18	% of Population Under Age 18 (Pennsylvania)
515,817	128,997	25.0%	22.1%

2.3.2 Elderly Population (Age 65+)

As people age, transportation challenges can increase due to an inability to drive, mobility issues, and other factors. At the same time, transportation needs may become more critical in providing opportunities for meeting essential needs such as medical and shopping trips, as well as overall socialization needs. According to 2011 ACS, persons over 65 years make up 14.1 percent of the total county population. This percentage is slightly lower than the Commonwealth of Pennsylvania as a whole at 15.4 percent. The density of elderly population in Lancaster County is represented by census block in **Figure 2-3**.

The areas in the county with the highest density for the elderly population are similar to the youth population distribution. They are located within Lancaster City, and the boroughs of Columbia, Elizabethtown, Lititz, Akron, and Ephrata.

Lancaster County Population	Number of Persons 65 and Over	% of Population 65 and Over	% of Population 65 and Over (Pennsylvania)
515,817	75,521	14.1%	15.4%

Figure 2-2: Youth Population Density

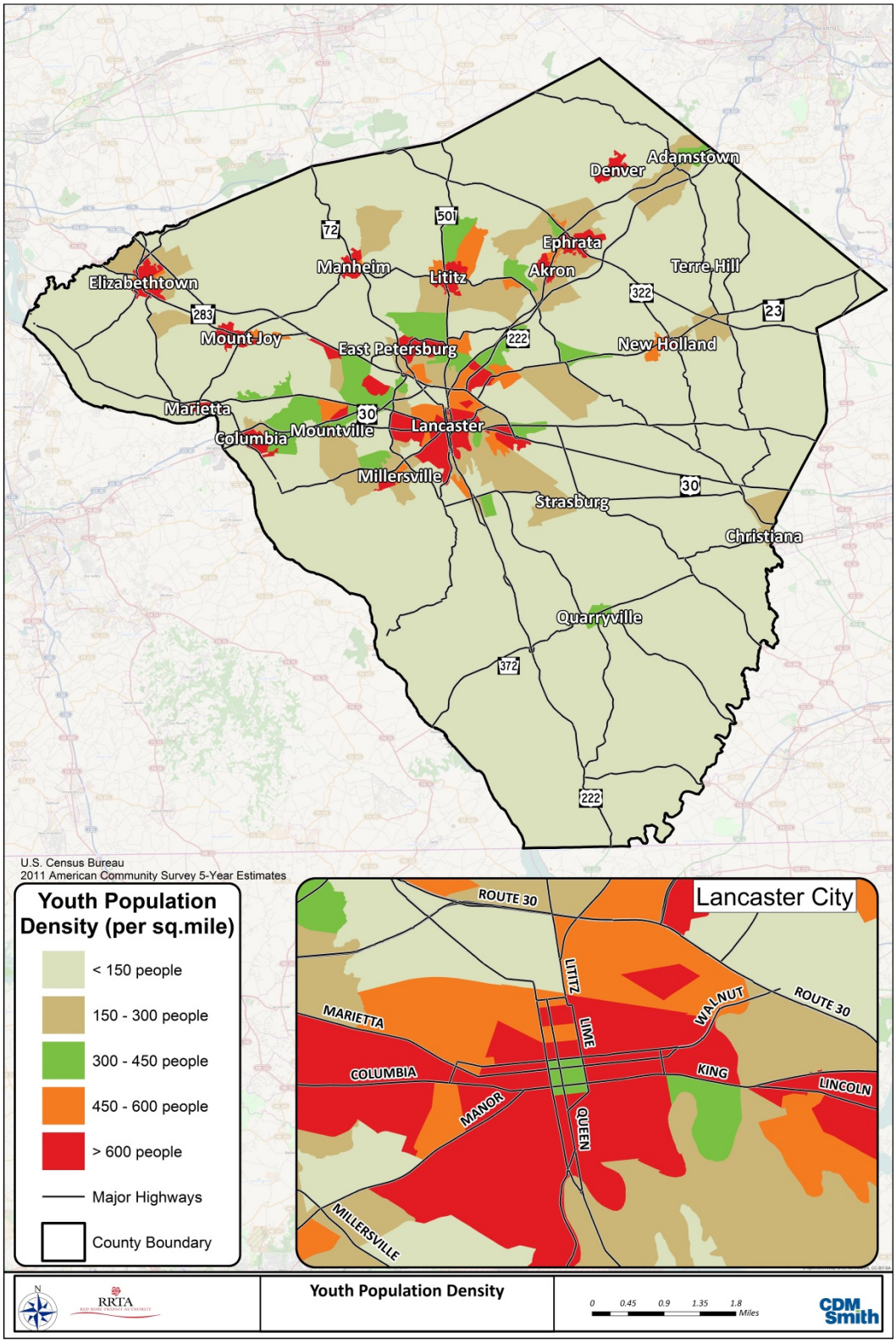
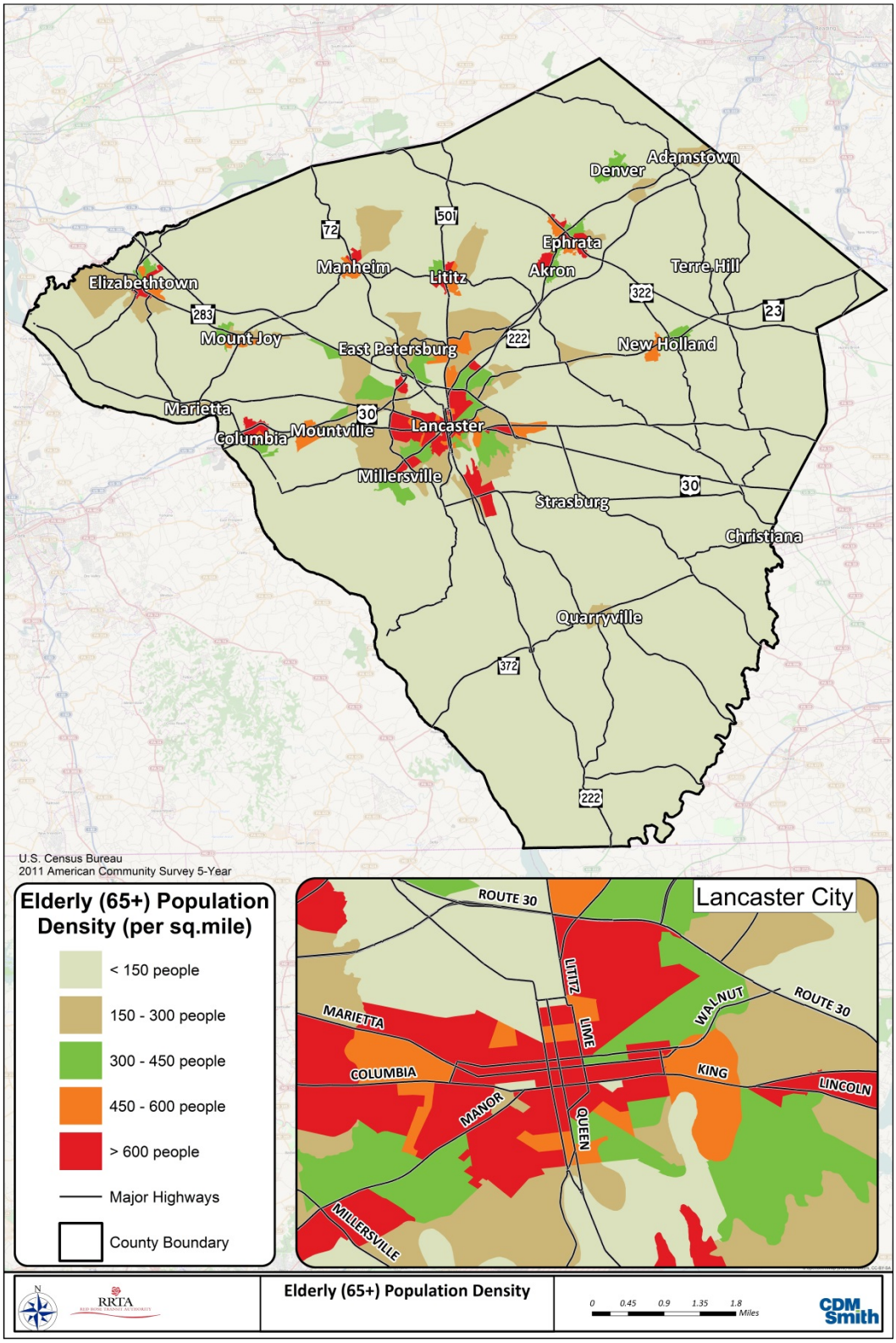


Figure 2-3: Elderly (65+) Population Density



2.3.3 Low-Income Population

Low income populations have special transportation challenges. Low income persons tend to rely heavily on public transit service because many are unable to afford an automobile, cannot afford a second automobile for their household, or choose not to use their limited income for an automobile. The overall median income in Lancaster County, $55,816, is considerably higher than that of the state as a whole at $51,651.

The percentage of population living below the poverty level in Lancaster County is 10.3 percent. Data was collected from the 2011 ACS data by census block to identify concentrated areas of poverty within the county, as shown in **Figure 2-4**. The highest density of poverty population is located in Lancaster City. Other low income areas include portions of New Holland, Ephrata, Columbia, Elizabethtown, and Lititz.

Lancaster County Population	Number of Low Income Persons	% of Low Income Population	% of Low Income Population (PA)
515,817	49,400	9.6%	12.2%

2.3.4 Minority Population

Minority population, in combination with low-income statistics, help to identify areas where people may experience potential disproportionate impacts, more appropriately defined as environmental justice communities. According to 2011 ACS data, minority population (non-white) makes up approximately 9.8 percent of the population within the County. This is lower than the 17.3 percent reported for the state as a whole. The primary location where minority population lives is in Lancaster City, with small concentrations in Ephrata, Columbia, Elizabethtown, and Lititz. The highest percentage of minority population is in the city of Lancaster at 44.8 percent. **Figure 2-5** displays the density of minority population by census block.

Lancaster County Population	Minority Population	% of Minority Population	% of Minority Population (PA)
515,817	50,525	9.8%	17.3%

2.3.5 Zero Vehicle Households

Zero-vehicle households represent another demographic of transit dependency. Households without vehicles are most in need of transit service for basic mobility. 2011 ACS data were used to identify major locations within the County for zero-vehicle households, as shown in **Figure 2-6**. In Lancaster County, the highest density of zero-vehicle households is primarily in Lancaster City. Other areas in the county with high densities of zero-vehicle households include Columbia, Elizabethtown, Akron, Lititz, and Ephrata.

Figure 2-4: Low Income Population Density

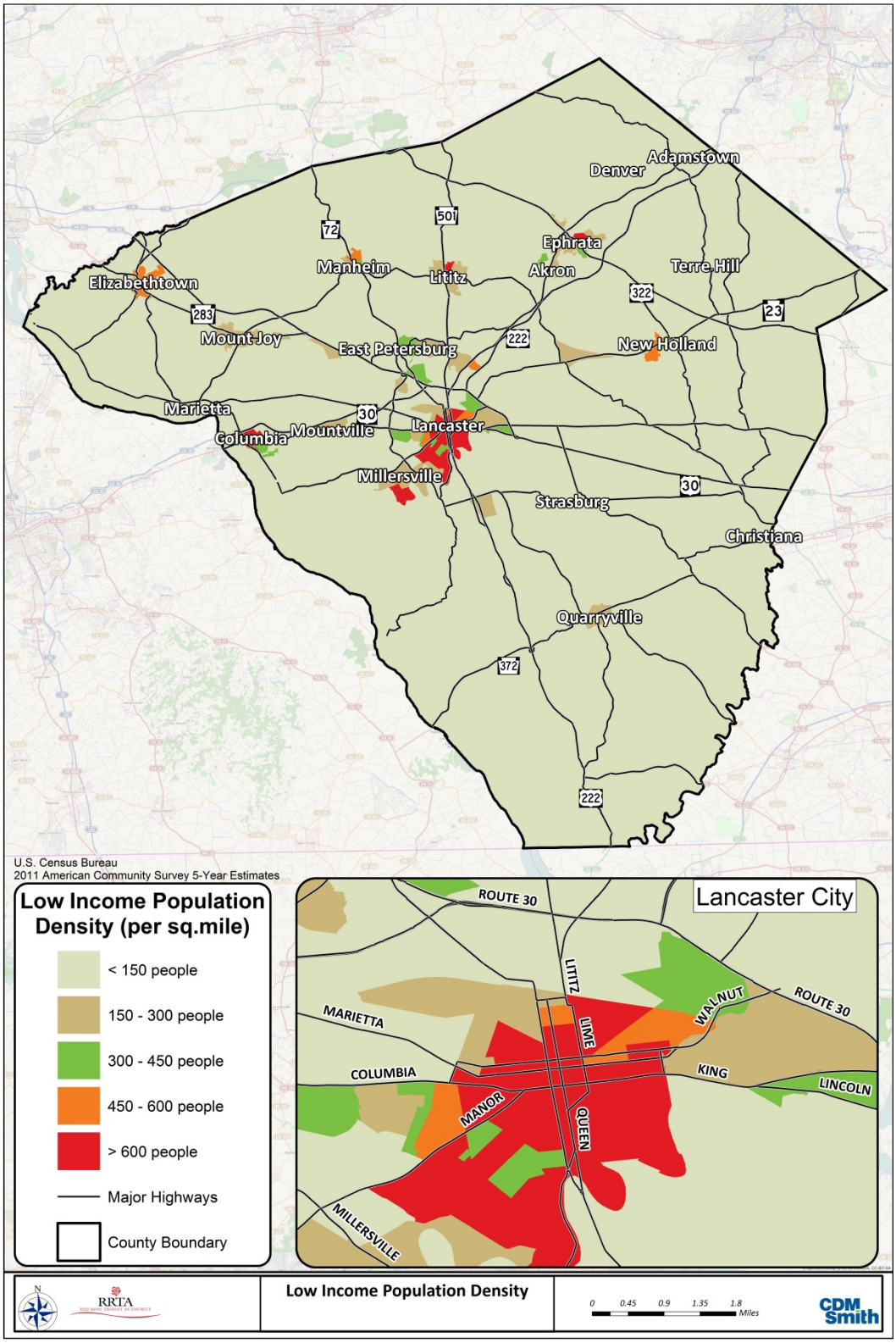


Figure 2-5: Minority Population Density

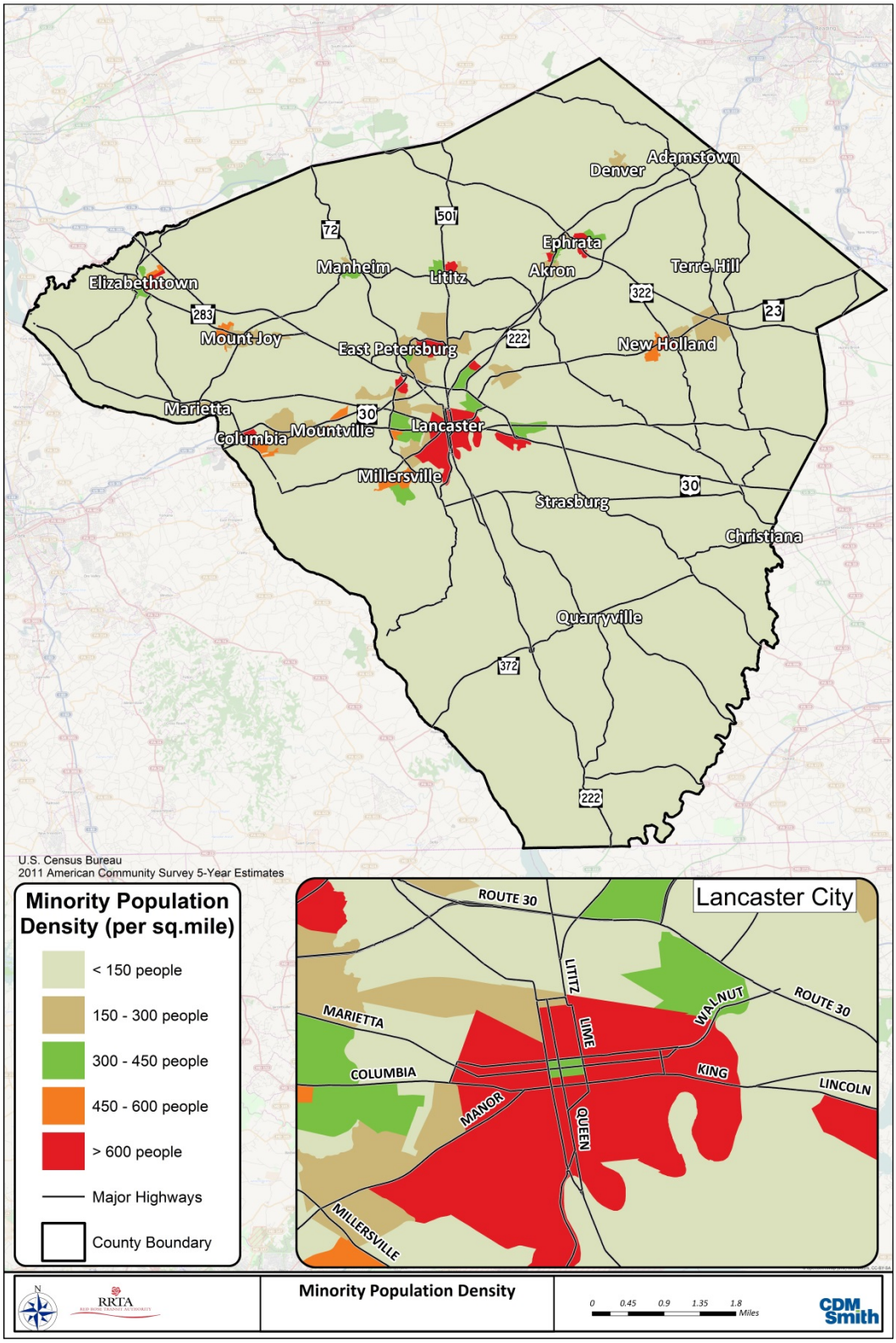
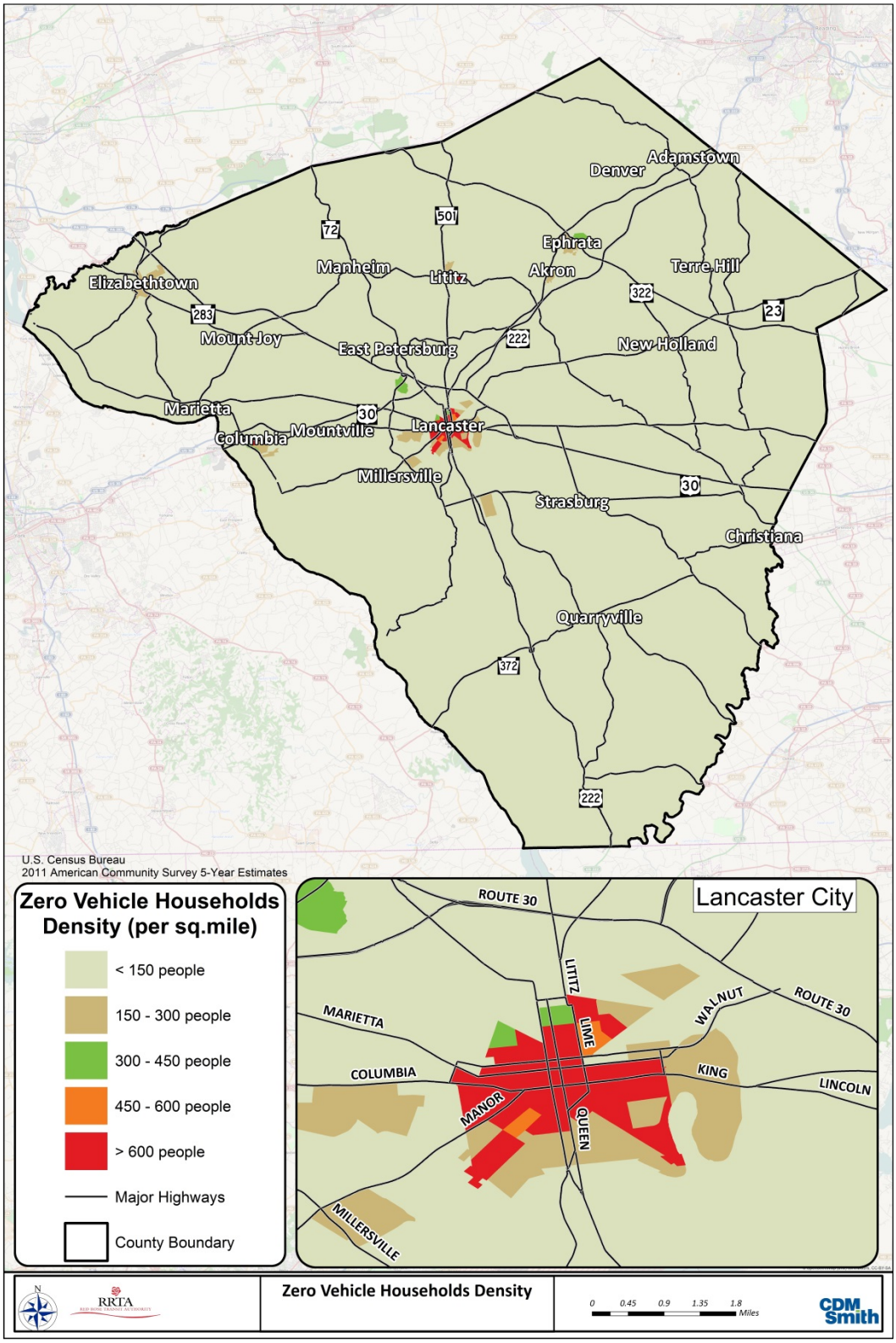


Figure 2-6: Zero-Vehicle Household Density



2.4 Population and Housing Densities

Transportation systems and land use patterns influence each other. Roads, transit, and other transportation elements shape land development, while the distribution and types of land uses affect travel patterns and transportation facilities. A dispersed pattern of low-density development relies almost exclusively on cars as the primary mode for transportation.

Like many planning issues, the link between land use and transportation is extremely complex. Many options have been proposed for strengthening the transportation and land use connection. Incorporating elements of Smart Growth offer a choice of transportation options. Traffic volumes and choices of mode of travel are influenced by the location, density, and mixture of land uses. Land use planning and transportation infrastructure must to work together.

Communities should plan for the future and be aware of how land use plans will affect the levels of traffic, appearance, and points of congestion on highways. Connected sidewalks, attractive walking environments, and pedestrian crosswalks in compact settlements:

- Encourage alternative modes of transportation
- Decrease reliance on existing transportation infrastructure
- In the long-run, save money for the community
- Give residents travel options and improve livability

A change in conventional land use and transportation patterns often requires action by the local government to encourage smart growth developments. Taken together, a package of simple measures can help create communities that are more livable and offer travel choices. Examples of policies include:

- Change zoning codes to allow for mixed-use developments
- Change ordinances and design guidelines to alter setback requirements
- Require developers to implement sidewalks, bus stops, bike paths, street trees, and pedestrian amenities to encourage alternative modes of transportation. Location and installation of bus stops should be coordinated by RRTA with the municipality. Responsibility

for the cost of installation and maintenance, relative to bus shelters, needs to be determined as part of the discussions between RRTA, the Lancaster County Planning Commission, the municipalities and the community as the policy is being developed.

- Change minimum parking requirements to reduce the amount of unused space between two points
- Alter ordinances to change building size, height, and orientation to encourage pedestrian friendly environments
- Implement incentives allowing developers to exceed zoning requirements
- Transportation facilities that cross city and county lines often lack coordinated planning, construction, and maintenance. Cooperative planning partnerships among local jurisdictions can help address problems, and county governments can work with cities to coordinate improvements to major roads.

Population and household densities, expressed in terms of people living and households per square acre within a specified geographic area, is an important measure in planning for transit investments. Fixed route public transit service works best when there is a sufficient concentration of persons desiring to make trips between two given points. Conversely, it is more difficult to connect many disparate points of origin and destination.

Density of land development is one key factor to determine the type of transit used within a community. A report by the Transit Cooperative Research Program, titled *Transit Capacity and Service Quality Manual*, identifies minimum population density thresholds in order for public transportation to adequately serve an area.

- A minimum of three dwelling units per acre or four jobs per acre is cited as a goal to have a "Transit Supportive Area" where hourly bus service is likely to be feasible.
- In addition, the Institute of Traffic Engineers, recommends a minimum of nine (9) residential dwelling units per acre or 3,550 employees per 1,000 square feet of office space (which for this analysis equates to about 24 jobs per acre) for public transit to adequately serve an area.

- Other suggested density information for successful and effective public transportation service follows:[4]

  - For 30-minute bus service, a minimum level of seven dwelling units per acre, or 5,000-6,000 people per square mile, gross density. Floor space should range from 8,000,000 to 20,000,000 square feet.

  - For 10-minute bus service, a minimum level of 15 dwelling units per acre, or 8,000-10,000 people per square mile, gross density. Floor space should range from 20,000,000 to 50,000,000 square feet.

  - For light rail transit (LRT) service, a minimum level of 9-12 dwelling units per acre. Floor space should range from 35,000,000 to 50,000,000 square feet.

  - For commuter rail service, a high-speed infrequent service with station spacing at greater distances suitable for low density, a minimum level of 1-2 dwelling units per acre, or 100,000,000 or more square feet of floor space.

  - Generally Bus Rapid Transit (BRT) service characteristics typically fall between fixed route bus and light rail service. It may be assumed that a BRT density threshold would consist of seven dwelling units per acre and eight employees per acre (the latter in light of the fact that BRT could operate in a lower density environment than LRT).

2.4.1 Population Density

Population density based on 2011 ACS data is shown in **Figure 2-7**. These data indicate the highest densities are prevalent in Lancaster City and the surrounding suburban townships, as well as in Elizabethtown, Columbia, Lititz, and Ephrata.

2.4.2 Housing Density

Housing density was also reviewed based on 2011 ACS data and is shown on **Figure 2-8**. These data indicate that the majority of the county retains low housing densities. However, housing densities indicate a number of locations in the local communities are considered transit supportive areas in that their densities have a minimum of 8,000-10,000 people per square mile.

2.5 Employment Trends

Recent information from the Lancaster Economic Development Company regarding the leading employers in Lancaster County is shown in **Table 2-2**. The Lancaster General Hospital remains the largest employer in Lancaster County. The Hospital has a number of locations throughout the County with the largest number of employees at the Hospital located on North Duke Street in the City of Lancaster and at the health center complex on Old Harrisburg Pike. There are a number of separately-owned retirement communities in Lancaster County with a significant number of employees. The employee information from these retirement communities is reported under the Mutual Assistance Group name. It should be noted when reviewing Table 2-2 that most of the employers listed have multiple locations throughout the County.

[4] A Toolbox for Alleviating Traffic Congestion, ITE, 1989. http://www.itsdocs.fhwa.dot.gov/JPODOCS/REPTS_TE/10803.pdf

Figure 2-7: Population Density

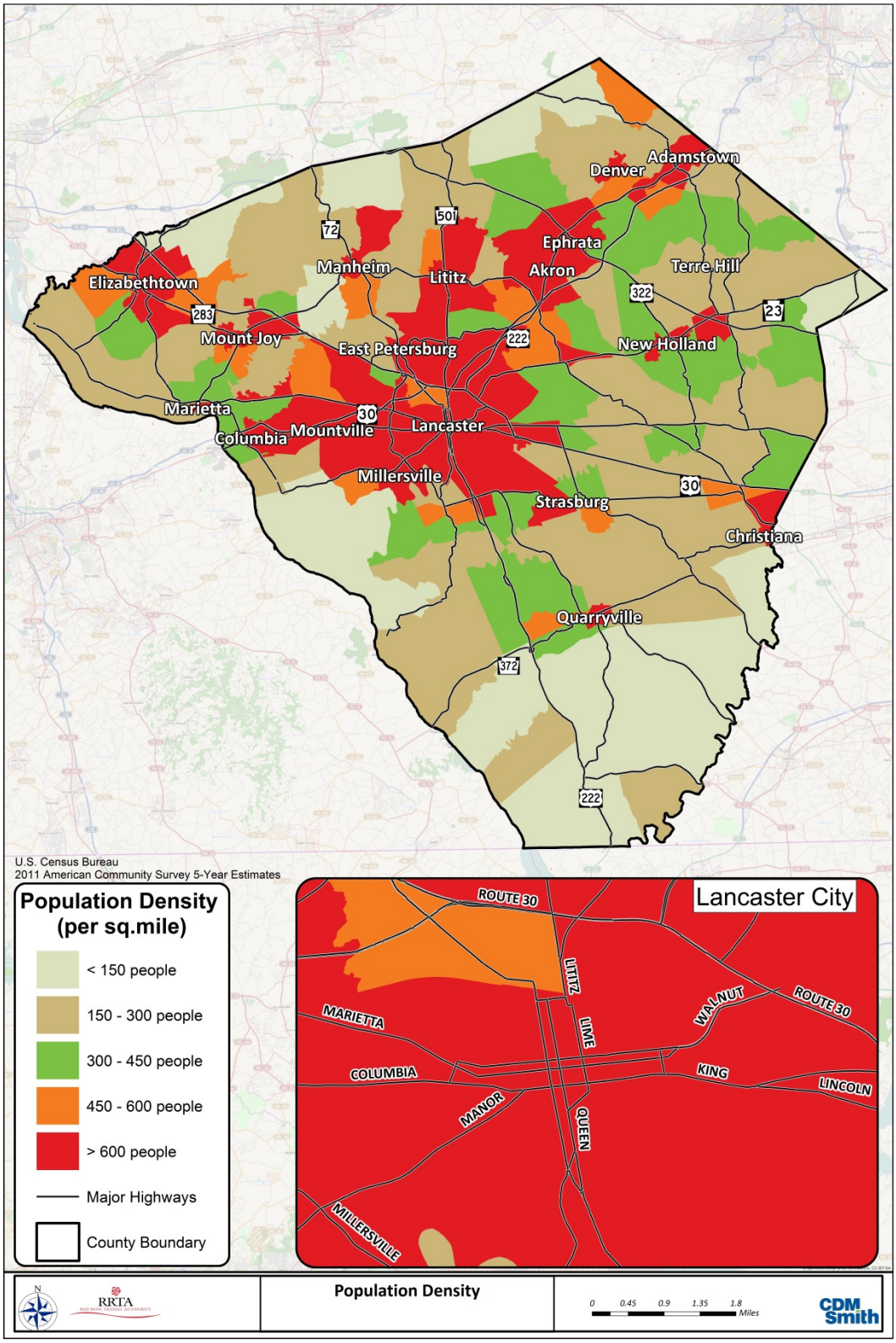


Figure 2-8: Housing Density

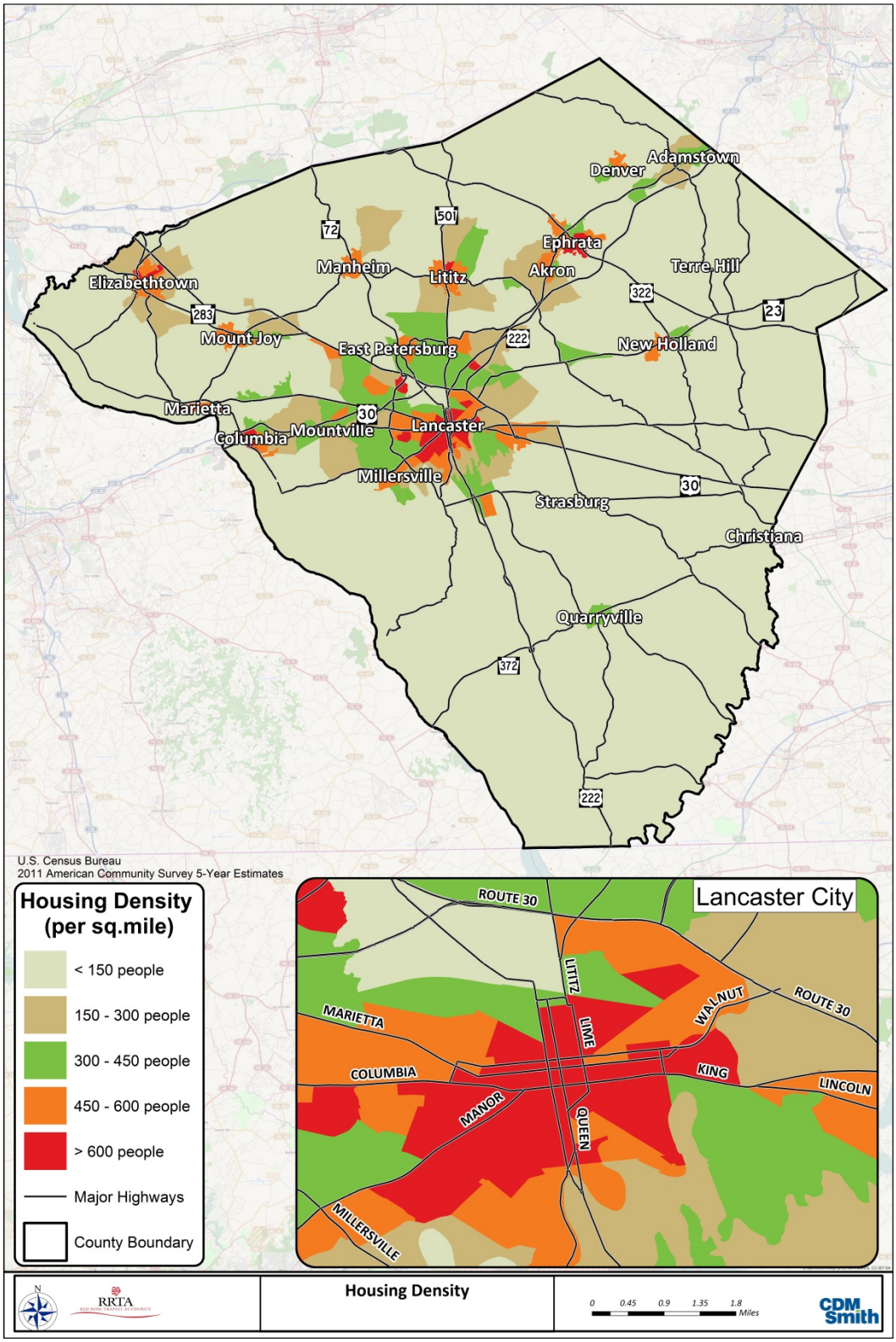


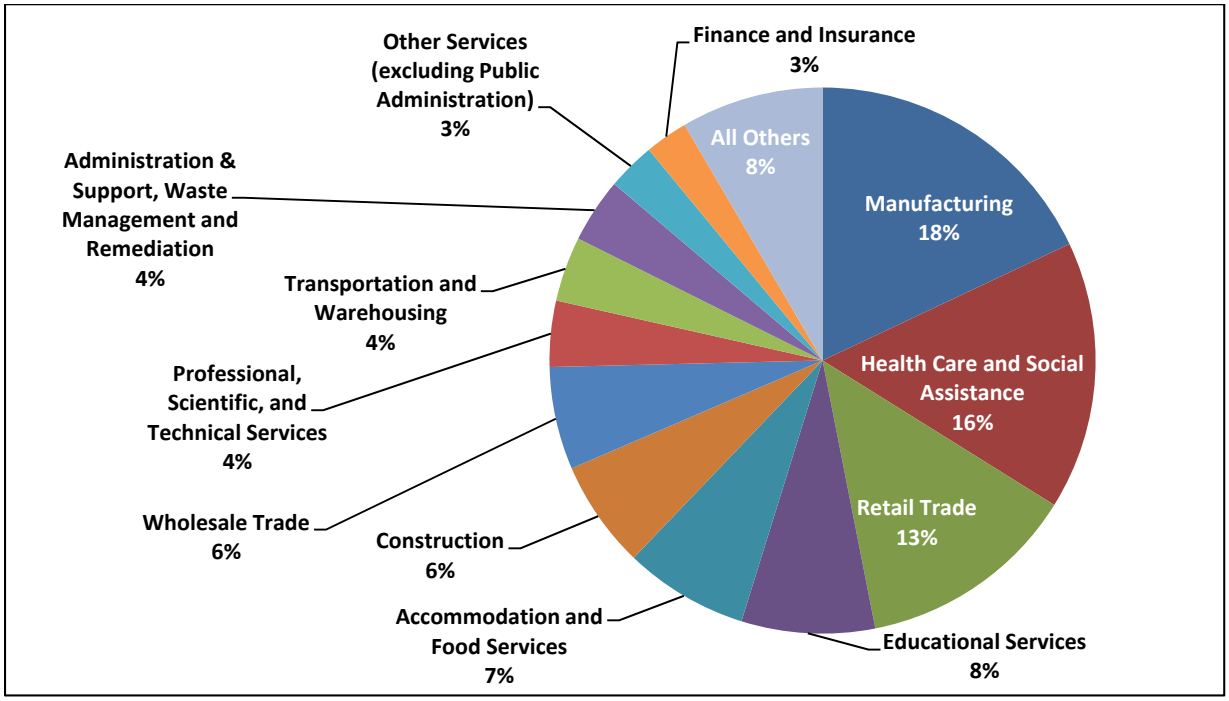
Table 2-2: Top 25 Largest Employers in Lancaster County

Rank	Company	Employees
1	Lancaster General Hospital	7,050
2	Mutual Assistance Group	5,050
3	R. R. Donnelley & Sons Company	3,000
4	Manheim Auto Auction	2,600
5	State Government	2,588
6	County of Lancaster	2,150
7	Susquehanna Bancshares	2,130
8	Masonic Villages	2,000
9	Willow Valley Retirement Community	1,965
10	Ephrata Community Hospital	1,850
11	QVC Network, Inc.	1,800
12	Fulton Financial Corporation	1,770
13	Armstrong World Industries	1,415
14	Turkey Hill Dairies	1,400
15	Dart Container	1,250
16	Tyson Poultry	1,200
17	Giant Food Stores	1,130
18	Weis Markets	919
19	Alumax Mill Products	900
20	Pepperidge Farm	900
21	Anvil International	900
22	Conestoga Wood Specialties	900
23	Hempfield School District	891
24	High Steel Structures	800
25	Wal-Mart Associates	715
26	SKH Management	558
27	K-Mart Corporation	475

Source: Lancaster County Economic Development Co., Data & Demographics, IEDC Data Set, Leading Employers, c. 2013.

U.S. Census longitudinal data reports jobs by sector. As shown in **Figure 2-9** and **Table 2-3**, the largest single category of employment in the county is manufacturing at 18 percent of total employment. Following closely is health care and social assistance (16 percent), and retail trade (13 percent). Retail trade combined with accommodations and food services, makes up 20 percent of the employment in the county. Accommodations and food services are the lowest paying industries in the county and retail services are the fourth lowest paying industry. With low paying jobs making up a considerable percentage of overall employment in the County, public transit may be in higher demand from persons working in these industries.

Figure 2-9: Lancaster County Employment by Sector



Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2011).

Table 2-3: Lancaster County Employment by Sector

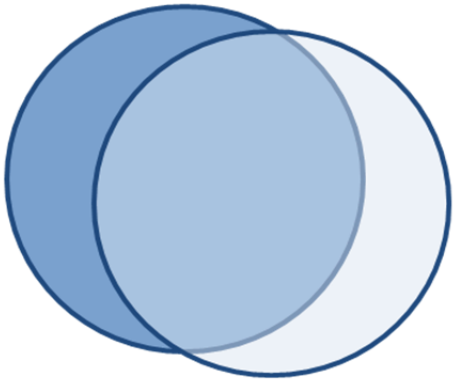
Industry	Lancaster County Average Wage
Accommodations and Food Services	$14,716
Art, Entertainment and Recreation	$19,656
Other Services (non-governmental)	$26,988
Retail Trade	$28,499
Agriculture, Fishing, Forestry, Hunting	$34,112
Health Care and Social Assistance	$39,884
Educational Services	$42,796
Manufacturing	$53,248
Professional, Scientific and Technical Services	$57,408
Finance and Insurance	$77,792

Source: Labor Market Statistics, Quarterly Census of Employment and Wages Program https://paworkstats.geosolinc.com/vosnet/Default.aspx

2.5.1 Inflow/Outflow Patterns

Inflow and outflow employment patterns provide key information on how many employees work and live IN the county versus those that either live or work OUTSIDE of the county. U.S. Census 2010 Longitudinal Employer-Household Dynamics (LEHD) information was used to identify inflow and outflow patterns, as shown in **Figure 2-10**.

Figure 2-10: Inflow and Outflow Employment Patterns



	Count	Share
Employed in the Selection Area	210,209	100.0%
Employed in the Selection Area but Living Outside	60,091	28.6%
Employed and Living in the Selection Area	150,118	71.4%
Living in the Selection Area	222,842	106.0%
Living in the Selection Area but Employed Outside	72,724	32.6%
Living and Employed in the Selection Area	150,118	67.4%

Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2011).

60,091 - Employed in Study Area, Live Outside

72,724 - Live in Study Area, Employed Outside

150,118 Employed and Live in the Study Area

The information derived from the U.S. Census indicates that employment is overwhelmingly made up of employees who both live and work in Lancaster County. Approximately 71 percent of persons are employed and live in Lancaster County.

2.5.2 Worker Origins and Destinations

Understanding where the majority of workers live and work is important to understanding commuting patterns. In a typical public transportation system, work commuting trips tend to make up a significant portion of trip purposes. Therefore, identifying where workers live and work may offer key insights into priority investments that more efficiently meet the transportation needs of these commuters. The 2010 US Census LEHD data provides details on where workers live and work by census tract, and are shown in **Figure 2-11** and **Figure 2-12**. The greatest concentrations of workers tend to live in the northwest portion of the county. The greatest concentration of where workers are employed is located in and around Lancaster City, in the northern portion of the County and along major highway corridors linking Lancaster City with the outlying boroughs.

Figure 2-11: Where Workers Live

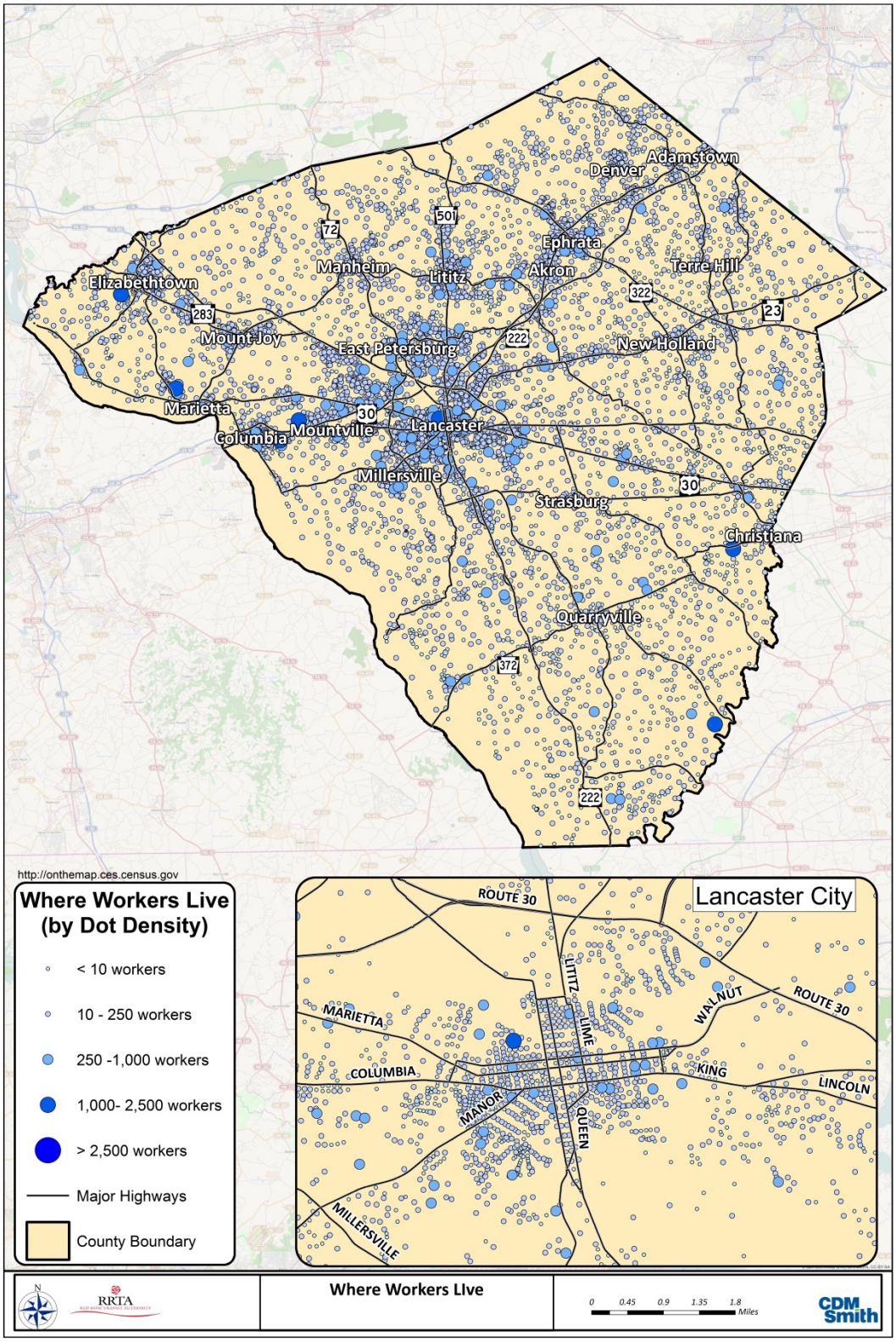
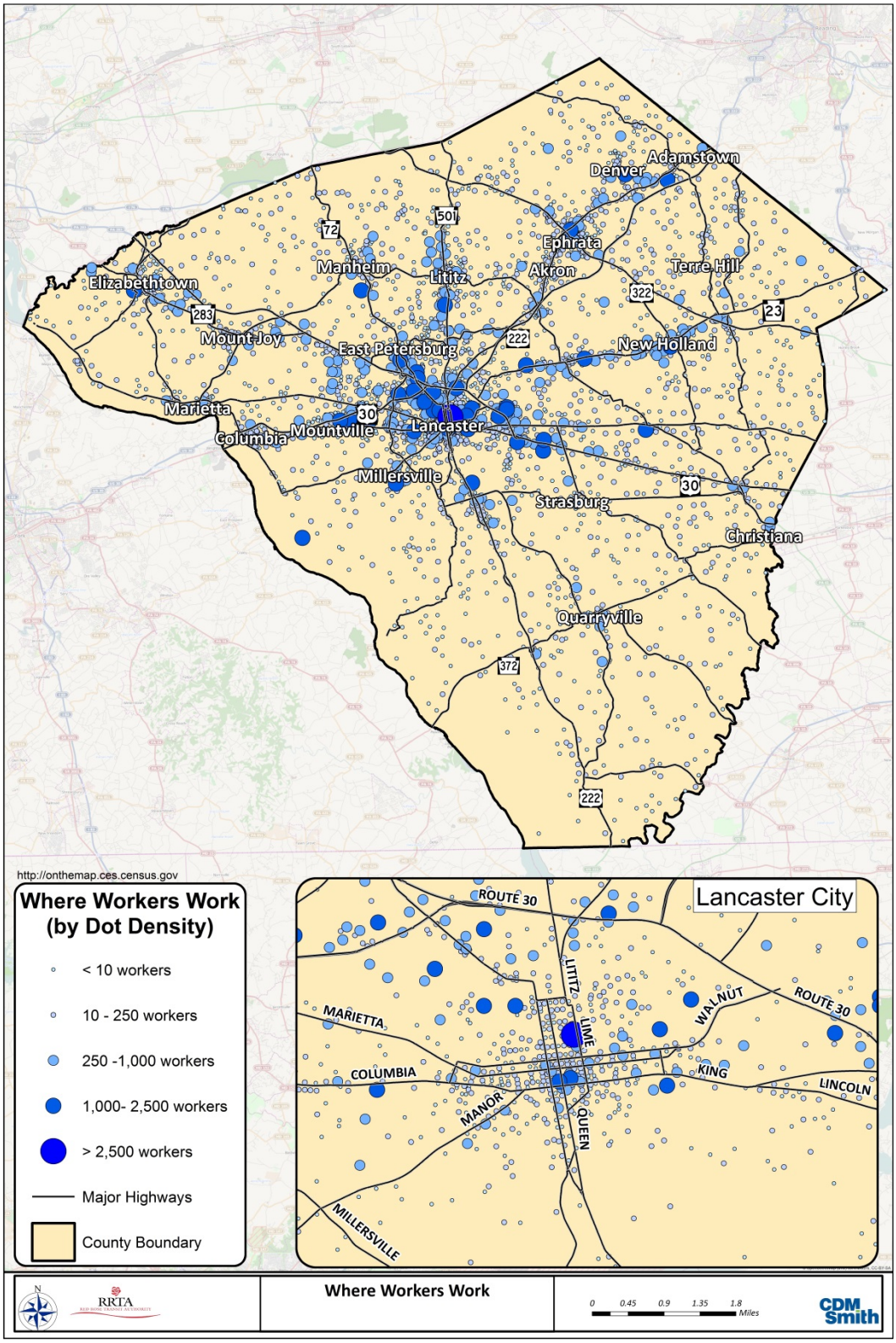


Figure 2-12: Where Workers Work



2.6 Major Destinations

2.6.1 Health Care Generators

Health care providers constitute a large employment sector within Lancaster County. **Table 2-4** identifies the major hospital locations within the study area. In addition, medical parks and site specific health care offices are located throughout the county.

Table 2-4: Lancaster County Hospitals

Hospital Name	Address	City
Ephrata Community Hospital	169 Martin Ave	Ephrata Borough
Heart of Lancaster Regional Medical Center	1500 Highlands Dr.	Warwick Township
Lancaster General Hospital	555 N Duke Street	Lancaster City
Lancaster General Women's and Babies Hospital	690 Good Dr.	East Hempfield Township
Lancaster Regional Medical Center	250 College Ave	Lancaster City
Lancaster General Hospital Health Campus	2100 Old Harrisburg Pike	East Hempfield Township

2.6.2 Hotels, Retail Centers and Tourist Attractions

Hotels, motel, bed & breakfast lodges, retail centers and tourist attractions act as both employment generators in Lancaster County and as major destinations for residents and visitors alike. Many hotels are located along US 30, as well as the areas in and around Lancaster City.

Major retail centers are located around Lancaster City including Park City Shopping Center, Rockvale Outlets, Tanger Factory Outlet Center, East Towne Mall, Manor Shopping Center, Lancaster Shopping Center, Golden Triangle Shopping Center, Red Rose Commons and Hawthorne Plaza. In addition, retail centers are also located in other municipalities in Lancaster County, including Shoppes at Kissel Village near Lititz and Kendig Square in West Lampeter.

Visitors are attracted to Lancaster County due to the Amish residents, outlet shopping, faith-based attractions, and family attractions. Amish attractions are focused in the eastern part of Lancaster County, including the Route 340 corridor between Smoketown and Intercourse and US 30. The outlets were previously listed among the major retail centers. Faith-based attractions include the Sight and Sound Theater north of Strasburg with Dutch Wonderland and the American Music Theater on US 30 attracting families and individuals interested in entertainment.

The focus on the heritage of the area has resulted in attracting visitors to Lancaster City and outlying communities such as Adamstown, Columbia, Ephrata and Lititz. Railroad heritage is concentrated in Strasburg with the Strasburg Railroad and the State Train Museum.

2.6.3 Industrial and Commerce Parks

Table 2-5 provides a summary of the major industrial and commerce parks located within the County.

Table 2-5: Lancaster County Industrial and Commerce Parks

Industrial Business and Commerce Parks by Location	City
Acme Markets	East Cocalico Township
Greenfield Corporate Center	East Lampeter Township
High Real Estate Group LLC	
Burle Business Park	Lancaster City
Central Pennsylvania Transportation	
Earland Industrial Park	East Earl Township
Granite Run Corporate Center	Manheim Township
Rapho Business Park	Rapho Township
Greiner Industries Inc.	Mount Joy Township
Lancaster-Hempfield Industrial Park	East Hempfield Township
Stony Battery Corp Park and QVC	West Hempfield Township
Commerce Park West	East Hempfield Township

2.6.4 Colleges, Universities, and Technology Centers

A number of colleges, universities, and Technology Centers are located within Lancaster County or in neighboring communities. **Table 2-6** shows the names and locations for these educational facilities.

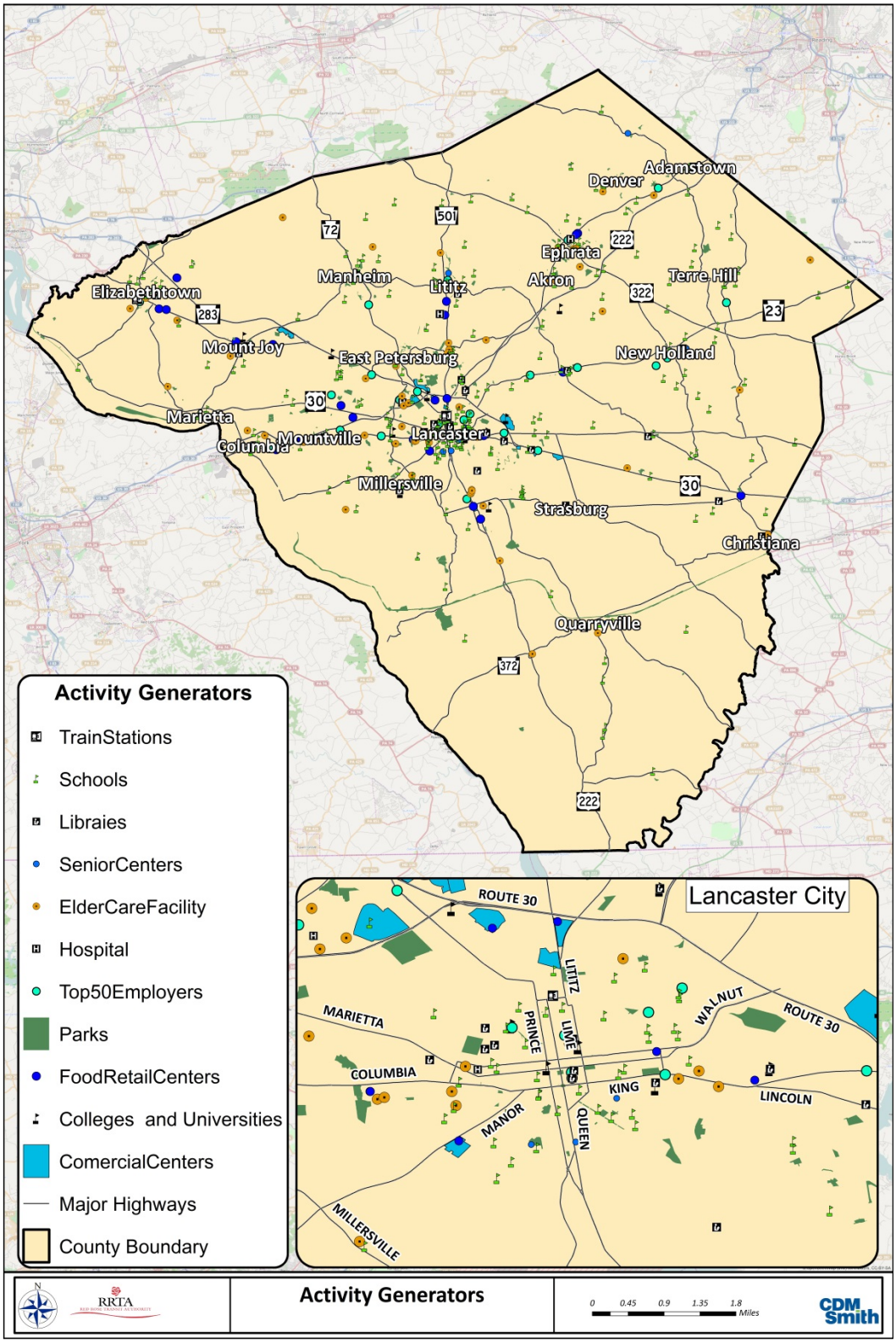
Table 2-6: Lancaster County Colleges, Universities, and Technology Centers

Institution Name	Address	Area
Penn State Lancaster Center	1383 Arcadia Rd	Lancaster City
Eastern Mennonite University - Lancaster	1846 Charter Lane	East Lampeter Township
Elizabethtown College	1 Alpha Dr.	Elizabethtown Borough
Franklin And Marshall College	415 Harrisburg Ave	Lancaster City
HACC - Lancaster Campus	1641 Old Philadelphia Pike	East Lampeter Township
Lancaster Bible College	901 Eden Rd	Manheim Township
Lancaster County Career And Technology Center-Brownstown	231 Snyder Lane	West Earl Township
Lancaster County Career And Technology Center-Mount Joy	432 Old Market Street	Mount Joy Township
Lancaster County Career And Technology Center-Willow Street	1730 Hans Herr Drive	West Lampeter Township
Lancaster County Public Safety Training Center	101 Champ Blvd	East Hempfield Township
Millersville University	21 S George St	Millersville Borough
Stevens State School Of Technology	750 East King Street	Lancaster City
Pa College Of Art And Design	202 N Prince St	Lancaster City
Consolidated School Of Business	2124 Ambassador Dr	East Hempfield Township
Lancaster General School Of Nursing	410 N Lime St	Lancaster City

2.6.5 Other Community Activity Centers

A number of cultural, leisure and environmental activity centers are located within Lancaster County and are additional activity generators in the area. Also, there are a variety of elderly care and senior centers located throughout the County, as shown in **Figure 2-13**.

Figure 2-13: Activity Generators



3. Guiding Principles/Goals/Objectives

In developing this Transit Development Plan Update, it is necessary to recognize the vision, goals and objectives for public transportation, as they will determine the direction to be taken in the plan. Vision, goals, and objectives, along with corresponding performance standards, provide specific direction for the agency. Research indicates that in a recent *Transportation Cooperative Research Program (TCRP) report, B-25 Guidelines for Evaluating, Selecting, and Implementing Suburban Transit Services*, transit agencies and locales that effectively develop goals and objectives, which were continually being measured, had a much better overall system approach to public transportation, than those that did not. This section of the report focuses on the vision and goals to be used in this planning process.

3.1 Transit Mission Statement

The transit vision for RRTA begins with a mission statement, followed by goals and objectives. The mission statement is at the top of the hierarchical structure with the goals and objectives supporting the achievement of the mission. The mission statement establishes the overall direction of an agency and enumerates the most generalized set of actions to be achieved by RRTA. The mission statement follows:

The Red Rose Transit Authority exists to provide effective public transportation services to the citizens of Lancaster County and to perform these services at the highest standards of safety, courtesy, reliability, and efficiency.

3.2 Guiding Principles

In 2008, RRTA completed the *RRTA Long Range Public Transportation Plan*, which included long range goals and objectives developed from adopted Guiding Principles for Lancaster County and input from the RRTA Board and Advisory Committee. These Guiding Principles, shown below, continue to be representative today and were considered as service alternatives were developed for the next 10 years as described in Chapter 9.

3.2.1 Mobility

- Identify future market needs and new market opportunities
- Provide a system that attracts new customers while serving transit dependents
- Provide an integrated transportation system with appropriate level of capacity, accessibility and performance

- Consider opportunities to preserve right-of-way options for future transit use

3.2.2 Fiscal Responsibility

- Provide a system that is efficient, cost-effective and affordable

3.2.3 Land Use and Economic Development

- Promote a region that is transit-oriented and places a priority on transit
- Support transportation and land use planning that helps achieve a better quality of life within Lancaster County. The existing land use and development goals and objectives found in the County and Municipal Comprehensive Plans represent existing adopted reports supporting these goals.
- Provide a system that is compatible with the community it serves and minimizes environmental impacts
- Support Lancaster County's economic development objectives by coordinating improved transit services
- Encourage initiatives to invest at or near transit facilities

3.2.4 Planning Process

- Establish a common vision for transportation that is regionally accepted, and progressively implemented through a comprehensive system plan and periodically revisited

- Develop and enhance coalitions with all organizations that have a vested interest in regional transportation issues. The existing Lancaster County Planning Commission (LCPC) and the Metropolitan Planning Organization (MPO)/ Transportation Technical Advisory Committee (TTAC) are current organizations with an interest in regional transportation issues.
- Develop a system plan that provides a sound basis for subsequent, more detailed planning studies

3.3 Goals and Objectives

Using the above Guiding Principles as a foundation, the following fixed route goals and objectives will be used to guide the Transit Development Plan Update.

Safety and Security
• Integrate safety and security elements into the transit system to reduce risk and enhance emergency procedures
– Employ safety and security conscious planning in all planning studies – Apply safety oriented design to eliminate or reduce safety hazards and to protect major agency assets
• Deter and detect criminal and terrorist activity
– Incorporate physical design features such as access management and surveillance that discourage crime – Employ crime prevention strategies through appropriate design features

Public Outreach
• Develop partnerships
– Strengthen ties with all of the Chambers of Commerce in the County, human service agencies, local municipalities and inter-municipal groups – Develop and enhance coalitions with all organizations that have a vested interest in local and regional transportation issues – Acknowledge the existing land use and development goals and objectives found in the County or Municipal Comprehensive Plans, the Human Services Transportation Plan and the MPO's Long Range Transportation Plan. In addition, RRTA should continue to coordinate with municipal comprehensive plans, such as the Lititz Borough/Warwick Township/Elizabeth Township 2012 Comprehensive Plans, which include goals to develop a sub-regional transit system. Continue to work with employers to create programs/incentives to support employees using mass-transit – Develop partnership with local Boroughs to begin planning for transit hubs

Financial
• Maintain and enhance fiscal responsibility
– Evaluate fare structure annually to determine appropriate revenue levels in accordance with performance measures – Increase local share funding in line with Act 89 requirements – Explore alternative sources of revenues such as advertising, leasing of space, partnerships, etc.
• Provide a transportation system that is efficient, cost effective and affordable
– Maintain staff levels at appropriate levels and wage rates – Insure that labor contract provisions provide for reasonable work rules – Follow purchasing procedures that result in quality products at a reasonable price

Bus Service
• **Increase transit ridership** – Enhance passenger amenities throughout the system including bus stop signs, benches and passenger waiting shelters – Utilize Transportation System Management (TSM) and Intelligent Transportation Systems (ITS) elements to improve transit travel time – Incorporate service information at bus stops and facilities – Develop branding for key services to improve customer recognition – Provide incentives to attract new riders – Promote benefit of transit service usage in terms of energy savings and the environment – Advertise available bus and paratransit services in local media (newspapers, radio and TV) – Convince employers to encourage employee use of transit service
• **Improve Service in Core Bus Corridors** – Reallocate service to strengthen and feed core routes – Monitor and actively seek other funding sources and partnerships for capital improvements in core corridors
• **Strengthen cost-effectiveness of the bus network** – Focus on reallocation of resources where appropriate – Implement innovative, demand-based service where fixed-route bus service is not effective
• **Monitor market conditions and developments** – Conduct surveys of both riders and residents to understand customer needs – Monitor new land developments and implement new services as appropriate
• **Explore regional inter-connectivity with surrounding transit systems** – Evaluate journey to work data to identify need for express services to neighboring employment destinations – Determine service adjustments that would be made to provide improved coordination with Amtrak services

System Accessibility
• **Enhance vehicle and facility accessibility for persons with disabilities and the general public** – Utilize low floor buses with ramps – Ensure that all buses are equipped with proper wheelchair tie down features – Confirm that all drivers are properly trained in wheelchair tie down procedures through annual certification – Ensure that all RRTA facilities are accessible including restrooms – Enhance access to all transit bus stops and facilities
• **Ensure that there is clear and accurate information available in both visual and audio forms for persons with disabilities** – Utilize technology to provide various types of communications to all groups
• **Coordinate RRTA accessible transit services with those operated by other public transit and human service providers**

Transportation System Management (TSM)
• **Strengthen TSM program** – Focus on transit priority projects to enhance transit ridership, operations, safety and security – Work with MPO and other agencies to identify, plan and implement operational and physical transit priority treatments for identified rapid and enhanced bus service corridors – Encourage the establishment of transit priority policies and regulations – Continue to pursue additional funding sources through local, regional, state and federal agencies for all TSM programs, providing local match as appropriate

Intelligent Transportation Systems (ITS)
• **Enhance the transit trip making experience through extensive use of ITS** – Pursue smartcard based technology for fare collection and vehicle log-in – Provide customer with a range of travel information through of a variety of techniques including: ▪ personal communication devices such as a Blackberry cell phone ▪ kiosks ▪ dynamic message systems ▪ public address systems ▪ next stop announcements – Implement trip planning software on web site for customer use – Improve situational awareness of operators to respond and detect incidents – Pursue funding opportunities for ITS deployment

Bicycle/Pedestrian
• **Accommodate bicycle and pedestrian needs into transit system** – Maximize bicycle and pedestrian connectivity to transit facilities, including at bus stops and transit centers – Provide bicycle amenities (such as bike racks) at transit centers and major bus stops commensurate with demand – Maintain a close and “customer friendly” policy for bicyclists by encouraging transit use and insure that all buses are equipped with operating bike racks

Service Planning
• **Ensure that services meets the needs of the County residents** – Conduct an independent review of the transit system services at least every five years and prior to the County's Long Range Plan update – Establish relationships with county and municipal agencies so as to be kept informed of land use changes and new development
• **Investigate the appropriateness of other transportation opportunities** – Determine the need for ridesharing programs such as carpooling and vanpooling that may eventually lead to new transit opportunities – Actively pursue and encourage employers to participate in employee transportation benefit programs
• **Re-evaluate and expand current policy regarding on the street amenities** – Pursue establishing central transit stations at outlying boroughs – Partner/work with local municipalities to change local ordinances regarding locating benches and shelters as well as outdoor advertising – Explore possibility of more park-n-ride facilities associated with express bus service

4. Public Outreach

A key part of any planning process is the public outreach within the community. This chapter presents a review of the public outreach conducted for the RRTA Transit Development Plan (TDP) Update. During the course of this plan, several methods for involving the local community were completed. The study process included an onboard survey and a boarding and alighting survey. In addition, two public meetings were held where citizens were encouraged to comment on transit services in Lancaster County. Driver meetings were also conducted at two different times to receive input from RRTA operators, dispatch, and supervisors. Other opportunities for feedback to the CDM Smith team for the TDP Update included on-site Field Work in October 2013 and during the administration of the onboard survey in November 2013. During the survey effort, CDM Smith staff interacted with riders, RRTA staff, local stakeholders, and the general public. An online community survey was also administered as part of the TDP Update planning process.

CDM Smith worked with the local RRTA staff and the RRTA Board for guidance and direction throughout the project. An initial "Kick-off Meeting" was held in October 2013 with RRTA local staff and Board. The importance of these local stakeholders is pivotal to community outreach and success of future transit service. The CDM Smith team continually emphasizes how future partnerships are critical to RRTA, not only for service options, but for potential additional funding sources. The local stakeholders are also an active outlet for community education and helping residents understand the true costs and benefits of transit.

4.1 Public Meetings

Public participation and involvement are pertinent to the success of any public transportation plan for RRTA. At key milestones throughout the plan, public meetings were held where citizen participation was openly welcome and appreciated.

The first public meeting was held Tuesday, February 18, 2014, following the submittal of the first technical report. The meeting took place from 3:30 p.m. to 7:30 p.m. at the Queen Street Station, on the second floor meeting space. The focus of the meeting was to introduce the TDP Update project to the public and to receive input on what the

community would like to see for transit service improvements over the next 10 years. Two presentations were given at the meeting. Approximately 20 persons attended the meeting, in addition to the RRTA staff and consultant team.

The second public meeting was held on May 22, 2014, from 3:30 p.m. to 7:00 p.m., at Queen Street Station with a similar format as the first meeting. The focus of the second public meeting was to present future alternatives for the community over the next 10 years. Two presentations were given at the meeting. Approximately 20 persons attended the meeting, in addition to the RRTA staff and consultant team.

Appendix A presents the Open House flyers for the February and May meetings. The open houses offer members of the community an opportunity to provide public input regarding transit issues, ask questions about the TDP Update, and also learn about the existing services for RRTA.

4.2 Stakeholders

The RRTA project team identified a group of local stakeholders which included various types of leaders, citizens, and organizations within the Lancaster area. These stakeholders represent private and governmental agencies that may be interested in investigating increased transit in the community. The representatives are key decision makers in the community and represent private business, local government, citizens, and civic and business organizations. Each person was asked the same questions and given the opportunity to provide additional insight or information. The following stakeholder questions were sent to the individuals ahead of time so that they were able to prepare comments.

RRTA Stakeholder Questions	
1.	What are the key issues and challenges facing the long range vision for public transportation in the region and is there more that can/should be done than is already planned? What is your perspective of this view and if it is realistic?
2.	How familiar are you with the existing RRTA transit service? Which services or routes?
3.	Are you familiar with who operates RRTA and how it is currently funded?
4.	What specific projects, services or changes are essential to the success, or failure, of transit in the region's future?
5.	Our study will review the existing routes – do you have any specific comments/thoughts for any of the RRTA fixed routes (current or future)?
6.	Do you believe there is community support and political support for RRTA services? What would you recommend to increase this support both politically and throughout the community?
7.	In your opinion, what two things could we change/enhance to have more people ride RRTA?

CDM Smith began interviews in November 2013 and completed interviews during the February 2014 site visit. CDM Smith interviewed 13 stakeholders; and, the results are summarized below. The interviews were open-ended and provided opportunities for the interviewees to make comments or ask questions. The form of the interview included an introduction to the project and to the CDM Smith Consultant Team. The primary goals of the study were described so that the interviewees could have an understanding of the study objectives and where we are in the study time frame.

Below is a high-level summary of the comments received. More importantly, the information was used to shape alternatives for RRTA service for the next 10 years.

1. **What are the key issues and challenges facing the long range vision for public transportation in the region and is there more that can/should be done than is already planned? What is your perspective of this view and if it is realistic?**

Responses to this question show one primary issue is the perception of RRTA – the bus is for 'those people,' transportation for the poor, and professionals do not use the bus. Funds need to be expanded so that RRTA is able to have more frequent services and make it attractive to choice riders.

RRTA, community organizations, and partner agencies must continue to educate the public about RRTA services. An ongoing marketing campaign must continue to reach out to choice riders in the community and employers to use RRTA and understand it is a viable mode of transportation. Stakeholders also commented on the existing RRTA facilities, equipment, and buses are well-kept through competent management.

2. **How familiar are you with the existing RRTA transit service? Which services or routes?**

The purpose of asking this question is to ascertain the degree of familiarity with the transit service. If many people are not aware of the service, then marketing strategies need to be developed that will enhance the visibility and public knowledge of the transit service. This is especially important for the key person interviews since many of the people interviewed may play a major role in obtaining or approving funds to operate the service. All the respondents knew of RRTA, but half were not familiar with specifics of the transit service.

3. **Are you familiar with who operates RRTA and how it is currently funded?**

All respondents were familiar with the operation of RRTA as an Authority; however, some were unaware of the funding partners. Respondents expressed interest in having additional local match for RRTA services, particularly for new enhanced services. One stakeholder expressed interest in knowing what other Pennsylvania transit agencies receive financially from local and county sources. This question is mainly used to see the level of understanding that key individuals in the community have concerning public transportation.

4. **What specific projects, services or changes are essential to the success, or failure, of transit in the region's future?**

Specific transit projects discussed by stakeholders included the potential for consolidated services with neighboring BARTA service. In addition, service to Quarryville, Ephrata and New Holland were also mentioned. There was also discussion about Lancaster County as a tourist destination and how transit service could promote locations such as the Pennsylvania Dutch Convention & Visitors Center, downtown attractions and hotels. Other tourist attractions include the Convention Center, attractions along Rt. 30 and the Strasburg Community.

5. **Our study will review the existing routes – do you have any specific comments/thoughts for any of the RRTA fixed routes (current or future)?**

The stakeholders had similar responses for this question as Question 4 above. There was additional discussion about working with the elderly community to determine viable services.

6. **Do you believe there is community support and political support for RRTA services? What would you recommend to increase this support both politically and throughout the community?**

Half of the stakeholders believe the community and elected officials support RRTA services. The majority of respondents expressed thoughts regarding transit services linking employers and citizens, which would be highly supported by the community and elected officials. Also, others felt if RRTA could improve frequencies, then support would increase. As mentioned above, attracting the choice rider with faster and more convenient service is a goal for the future.

7. **In your opinion, what two things could we change/enhance to have more people ride RRTA?**

Different ideas were given for RRTA changes, including:

- Continued coordination with BARTA.
- Market the Trolley service connecting with Amtrak downtown. It is currently confusing for customers.
- Change perception of transit that the service is not just for the poor.
- Continue to incorporate alternative modes of transportation.
- Begin marketing and outreach to children through school programs.
- Continue collaboration with employers in the region.

4.3 Discussion Group – Lancaster County Planning Commission

A discussion group is an excellent tool for revealing the attitudes of a specific group of people because of the open-ended nature of group discussions. As part of the TDP public outreach efforts, one discussion group was held to gather general RRTA transit service comments and perceptions, in addition to seeking comments on the interim reports for the TDP Update.

CDM Smith and the local RRTA project team met with the Lancaster County Planning Commission (LCPC) on two occasions, April 3, 2014 and May 22, 2014, at the Lancaster County Planning Commission Offices. The first meeting was a discussion and review of Technical Memorandum 1, which also led to other topics. The LCPC staff is interested in increasing transit use now and in the future. During the meeting, discussion included the real cost of service, the challenges of obtaining additional funding, and that RRTA is not a county or city department. RRTA must have partners to continue incorporating transit into the community. LCPC staff is interested in coordination of bus shelters and are willing to use RRTA materials, such as bus stop standards, the TDP Update, the 2008 study to assist the local communities with planning documents.

The second meeting in May was a follow-up meeting with a review of Technical Memorandum 2, which introduced future RRTA service alternatives for the next 10 years. Additional discussion was held about coordination of transit within the townships and how transit will help meet the transportation needs over the next decade. The LCPC staff reviewed TM2 and comments were incorporated as appropriate. There is interest in the future to have RRTA and LCPC staff host ongoing regular meetings to assist in future planning for the County and for RRTA to continue partnerships for the future.

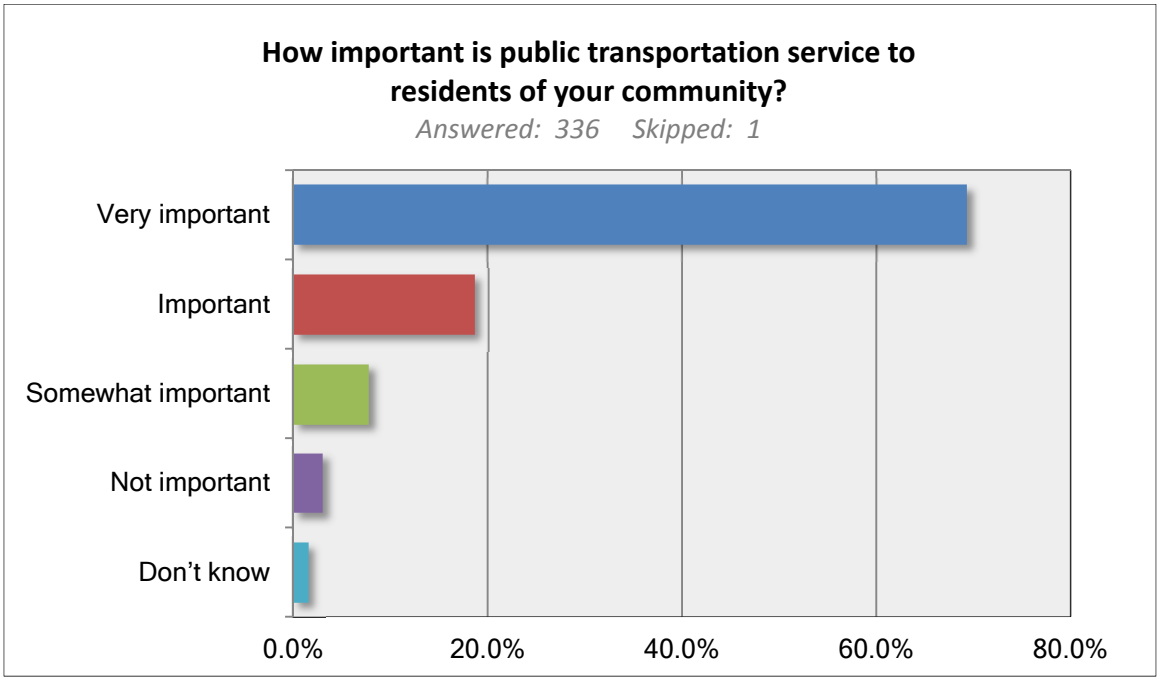
4.4 Online Community Survey

An online survey was completed to gather additional feedback from interested members of the public who may not have been involved at the scheduled public meetings or been able to complete an onboard survey. The survey was available in English and in Spanish through the www.surveymonkey.com program. Non-riders are often the most difficult group for a transit agency to reach, and their feedback is usually a reflection of public perception in the broader community and provides some insight as to what might entice potential new customers to try transit. **Appendix B** shows the survey instrument questions and full results of the survey.

The online survey effort yielded 337 responses for the TDP Update. Most (87 percent) respondents indicated the public transportation is important or very important to residents of the community. **Figure 4-1** illustrates the responses.

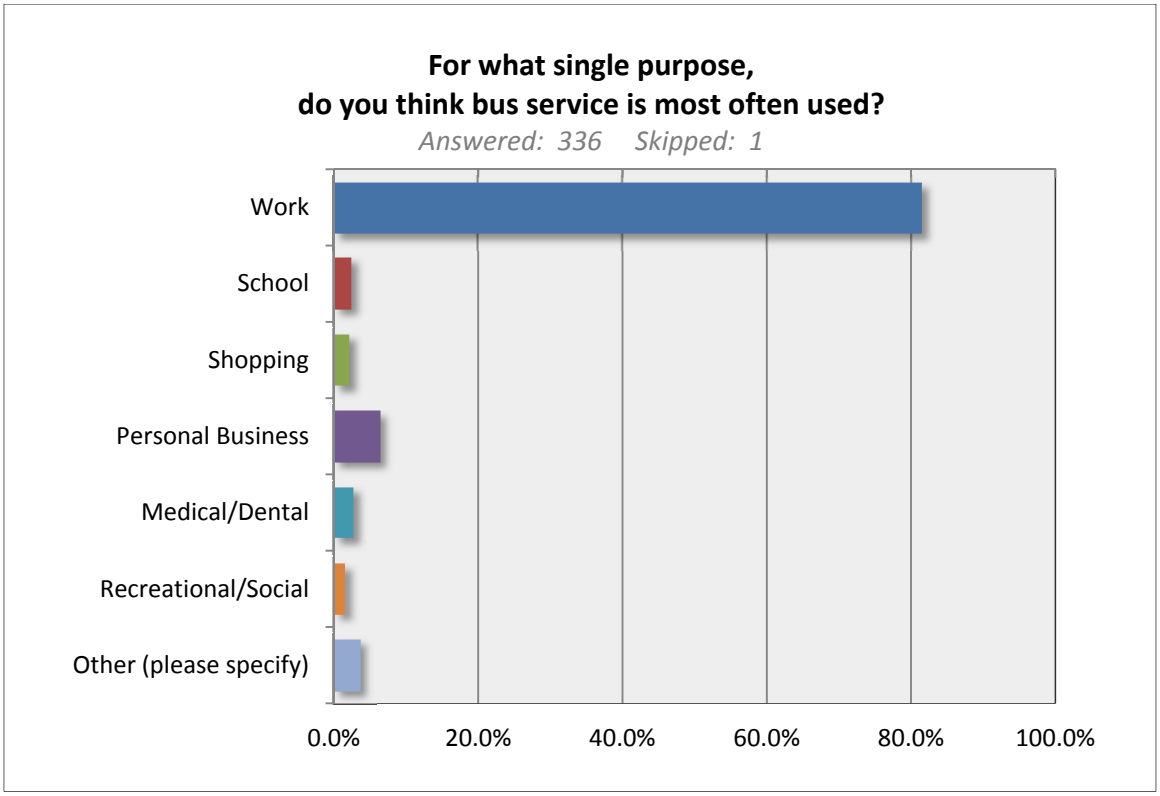
The most common age group completing the survey was from age 41 to 60 with 48 percent, and age 20 to 40 with the second most responses with 34 percent. The gender of the survey respondents was slightly higher for female with 56 percent and male 44 percent. Sixty-five percent indicated they have a vehicle available for most trips and approximately 48 percent of the respondents had a household income of over $45,000 annually.

Figure 4-1: Survey Responses, Importance of Public Transportation



Approximately half (53%) of the survey respondents currently use RRTA. The majority of persons taking the survey believe RRTA is used by most people to get to work, as shown in **Figure 4-2**.

Figure 4-2: Survey Responses, Single Purpose of Bus Service



Questions were included that provided feedback on RRTA services. Participants were also asked what improvements they would like to see for transit service and what might make them ride more often. **Figure 4-3** and **Figure 4-4** show responses to the questions.

4.5 Summary

The information received from the key person interviews, along with other public involvement processes, plays an important role in the development of this TDP Update. These interviews and other public involvement conducted throughout the study assisted RRTA in understanding valuable opinions from its citizens.

Figure 4-3: Survey Responses, Opinion of RRTA

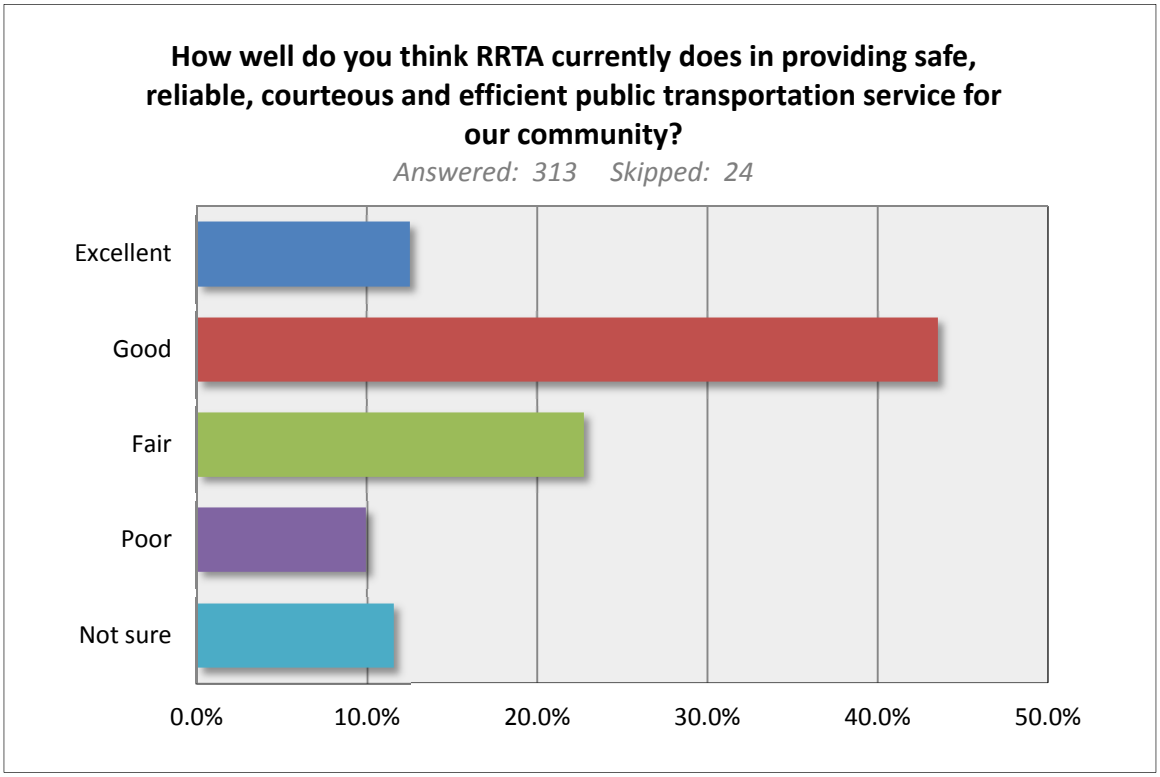
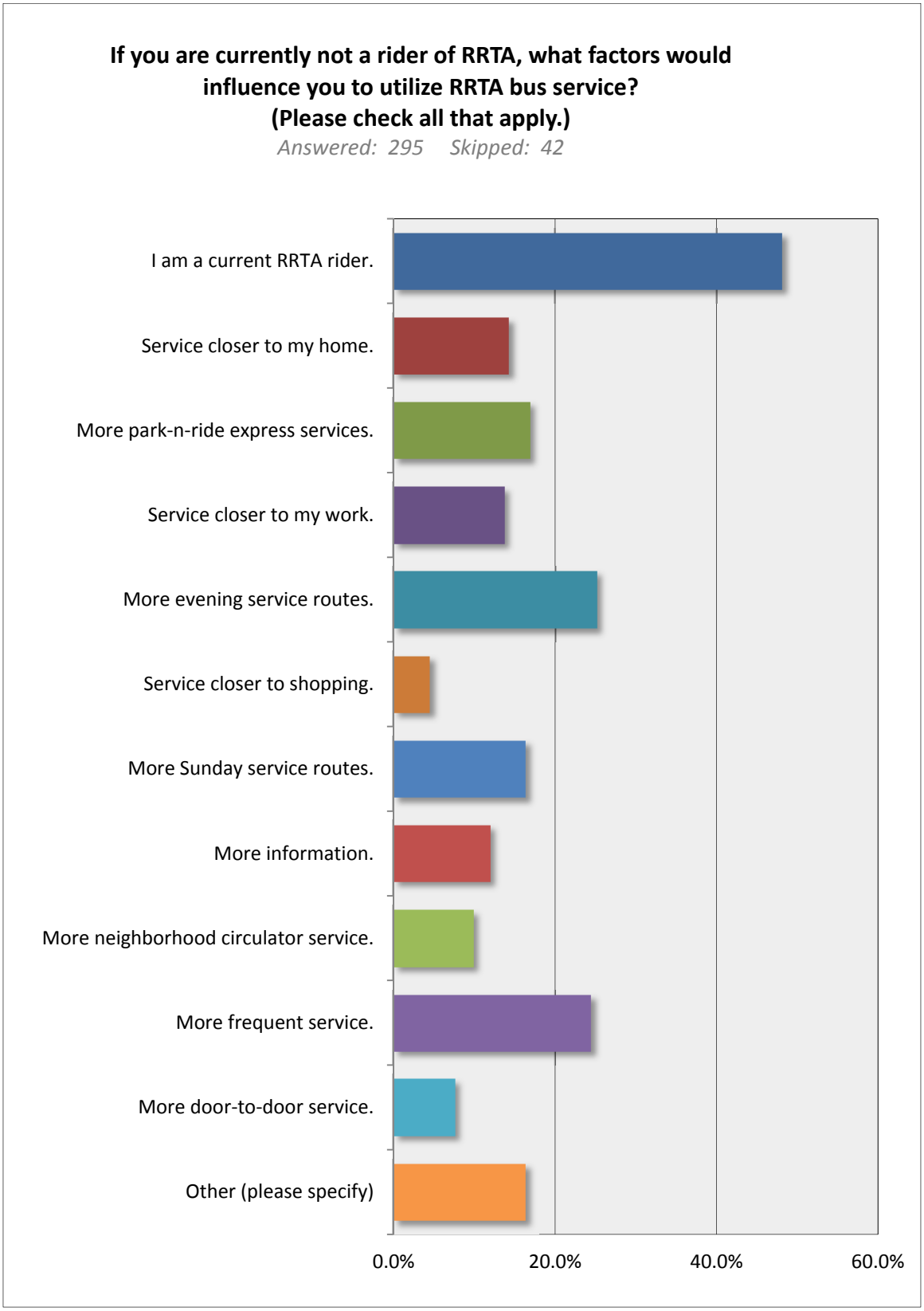


Figure 4-4: Survey Responses, Influential Factors



5. RRTA Existing Transit Services

Section 5 provides an overview of the fixed route transit service. Red Rose Transit Authority (RRTA) was formed in 1973 to ensure the continuation of public transportation services in Lancaster City and County. The Authority was formed by joint action of Lancaster City Council and Lancaster County Board of Commissioners under the "Municipality Authorities Act of 1945." Initially formed as an administrative agency, the Authority became an operating agency on April 1, 1976, when it acquired the fixed-route assets of one private carrier, Conestoga Transportation Company.

The RRTA operations facility, located at 45 Erick Road, Lancaster was constructed in 1979, to maintain a modern bus fleet and to meet ever changing local needs. This facility was recently upgraded and is the home base for RRTA operations, dispatch, and bus storage. In 1992, the Authority consolidated with the Lancaster Integrated Specialized Transportation System (LISTS) under the corporate structure of the Authority. The shared ride service was renamed Red Rose Access. This consolidation modified RRTA's responsibilities to include both fixed route and shared ride services.

In 2005, Queen Street Station was completed as RRTA's downtown transit center. Located at 225 North Queen Street, Lancaster, the transit center was built on the former site of the Lancaster County News Building and the Pacific 4 Theatre.

In September 2009, RRTA began Queen Street Station, Phase II located on the corner of Queen and Chestnut Streets in Downtown Lancaster. Phase II included a 395 (seven levels) parking garage and three bus bays that gave RRTA access to Chestnut Street and 8,500 square feet of leasable space along North Queen Street. The Queen Street Station Parking Garage was also constructed to allow development to occur above the Garage. The revenue from the parking garage is used to fund the operating costs of RRTA’s transportation services.

A review of systemwide and route-by-route ridership and service trends are presented in the following text. Data are presented in a series of tables and graphs within this chapter. This report provides a review of RRTA, who operates 19 fixed routes, Red Rose Access, the county-wide shared ride services operated by two private transportation providers, and the Red Rose Trolley.

5.1 Description of RRTA Fixed Route Services

RRTA operates a hub and spoke service from the downtown transit center, Queen Street Station, located at 225 N Queen Street. Nineteen fixed routes operate from approximately 5:00 a.m. to 11:00 p.m., five days a week, with limited Saturday and Sunday service on selected routes. **Table 5-1** and **Figure 5-1** provide a listing and map of the existing systemwide RRTA fixed routes. **Figure 5-2 and Figure 5-3** also show the city and county routes separately.

Table 5-1: RRTA Fixed Route Services

RRTA Operates Four Types of Fixed Route Service:	
Lancaster City Routes	Route 1 - Park City A/Southeast
	Route 2 – Park City B/6th Ward
	Route 3 – Park City C/8th Ward
	Route 4 – Elm Avenue/Parkside
	Route 5 –Grandview/Rossmere
	Trolley
Lancaster County Routes	Route 10 – Lititz
	Route 11 – Ephrata
	Route 12-New Holland
	Route 13-White Horse
	Route 14-Rockvale Square
	Route 16-Millersville
	Route 15-Willow Street
	Route 17-Columbia
	Route 18-Elizabethtown
	Route 19-Manheim
Circulator/Shuttle Routes	MMU Xpress
	MU Park City Xpress
Metro Region Route	Route 20-Greenfield

Figure 5-1: RRTA System Map

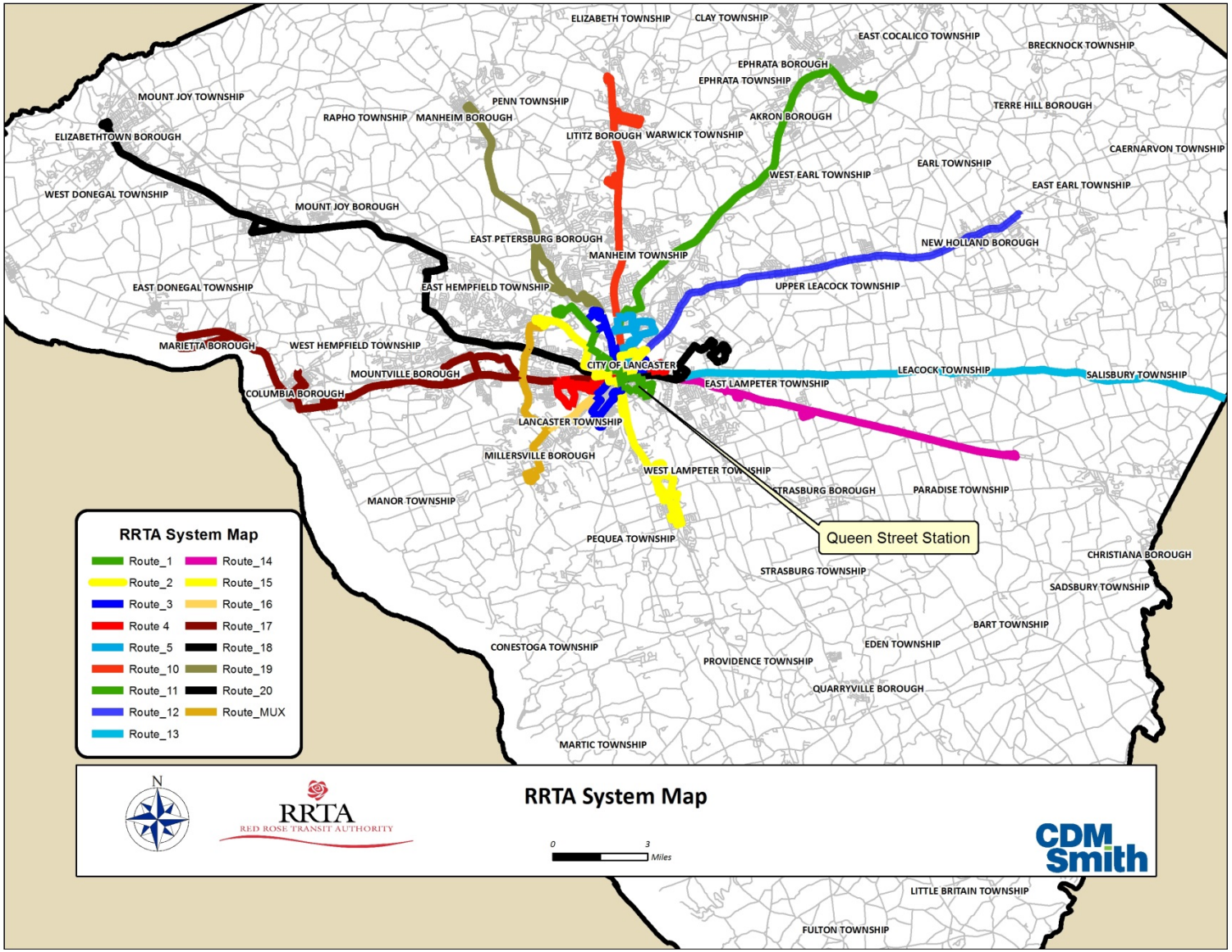


Figure 5-2: RRTA City Routes

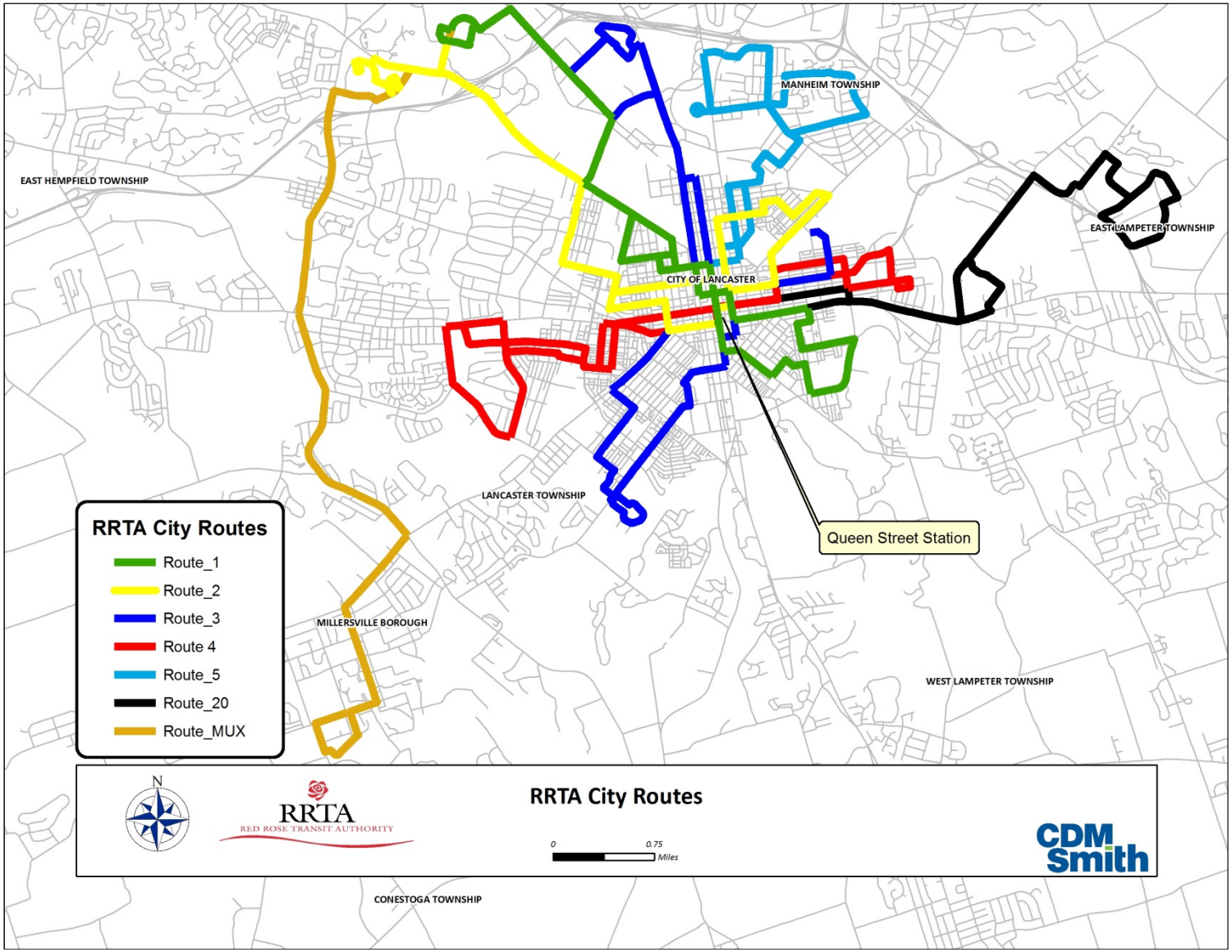
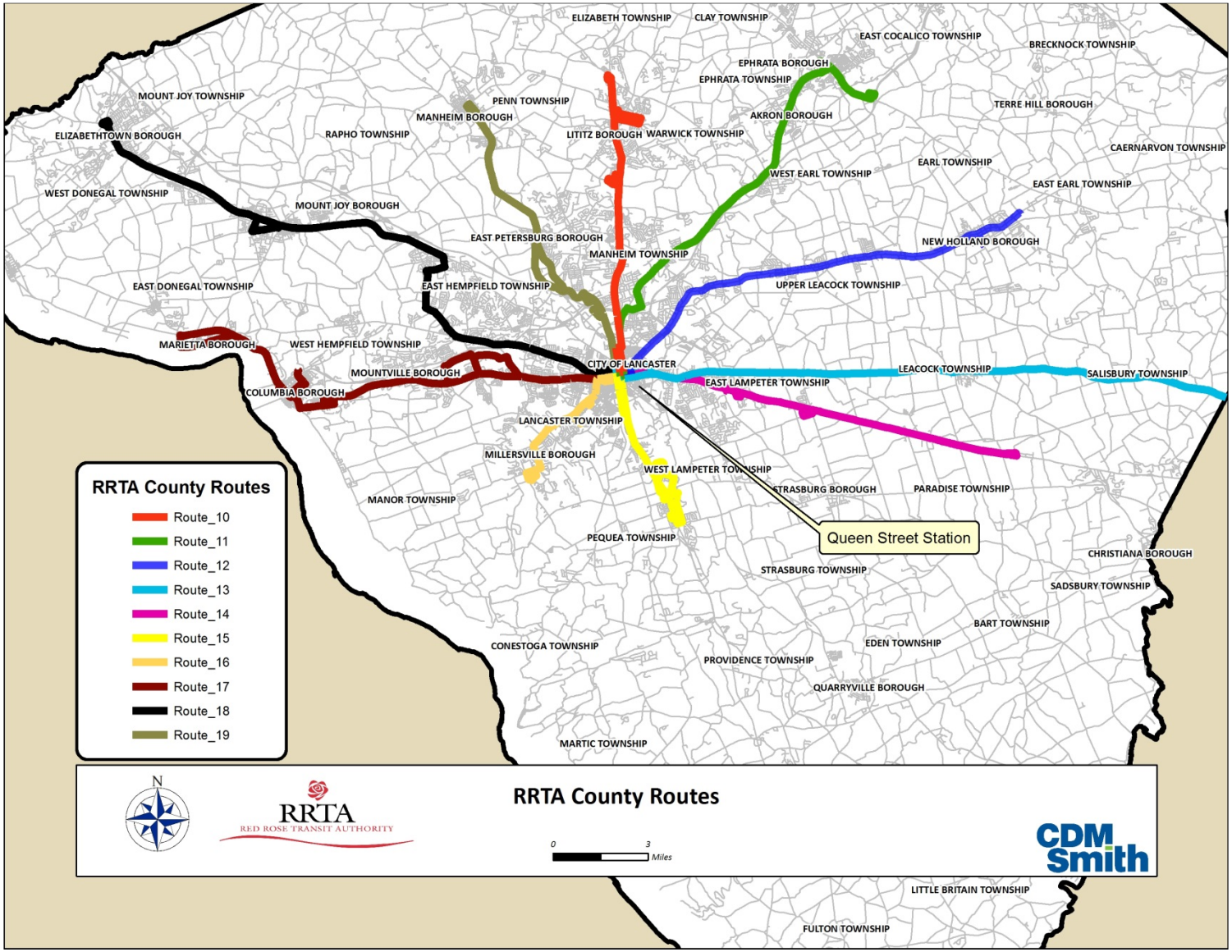


Figure 5-3: RRTA County Routes



RRTA operates 30-60 minute headways throughout the day, depending upon which route traveled. RRTA's current policy is for passengers to board the bus at designated bus stop locations in Lancaster City and the boroughs of Columbia and Mountville. There are designated bus stop locations in the other communities, but flag stops are also allowed in safe locations in these other communities. A limited number of benches and shelters are located around the city and county to provide seating and protection for passengers.

- The City Routes (Routes 1 through 5 plus the Historic Downtown Trolley) provide basic circulation within the city. Three routes also serve the Park City Mall retail center in the northwest corner of the city. In addition, City Routes 1 through 4 are designed with a two leg route structure, purposely routed through downtown Lancaster. This route structure was developed to connect neighborhoods on one side of downtown Lancaster with retail centers and other destinations on the opposite side of the city.

- The County Routes (Routes 10 through 19) operate a hub-and-spoke system between downtown Lancaster and various suburban/rural destinations.

- The metro region route (Route 20) serves the Greenfield Industrial Park.

- Circulator/Shuttle Routes - In August, 2000, RRTA began operating two shuttle routes under contract with Millersville University. The shuttle routes which provide public transit service throughout the University, as well as providing service to the Park City Mall. Millersville University students may access these routes at no charge by showing the bus drivers proper student identification. These routes only operate during the academic school year. The two current circulator/shuttle services (MU Express and MU-Park City Express) meet various travel needs of Millersville University students.

All RRTA routes operate at least eight round trips per day on weekdays. Certain routes provide evening service during the week and some level of weekend service. The following text describes each of the RRTA routes.

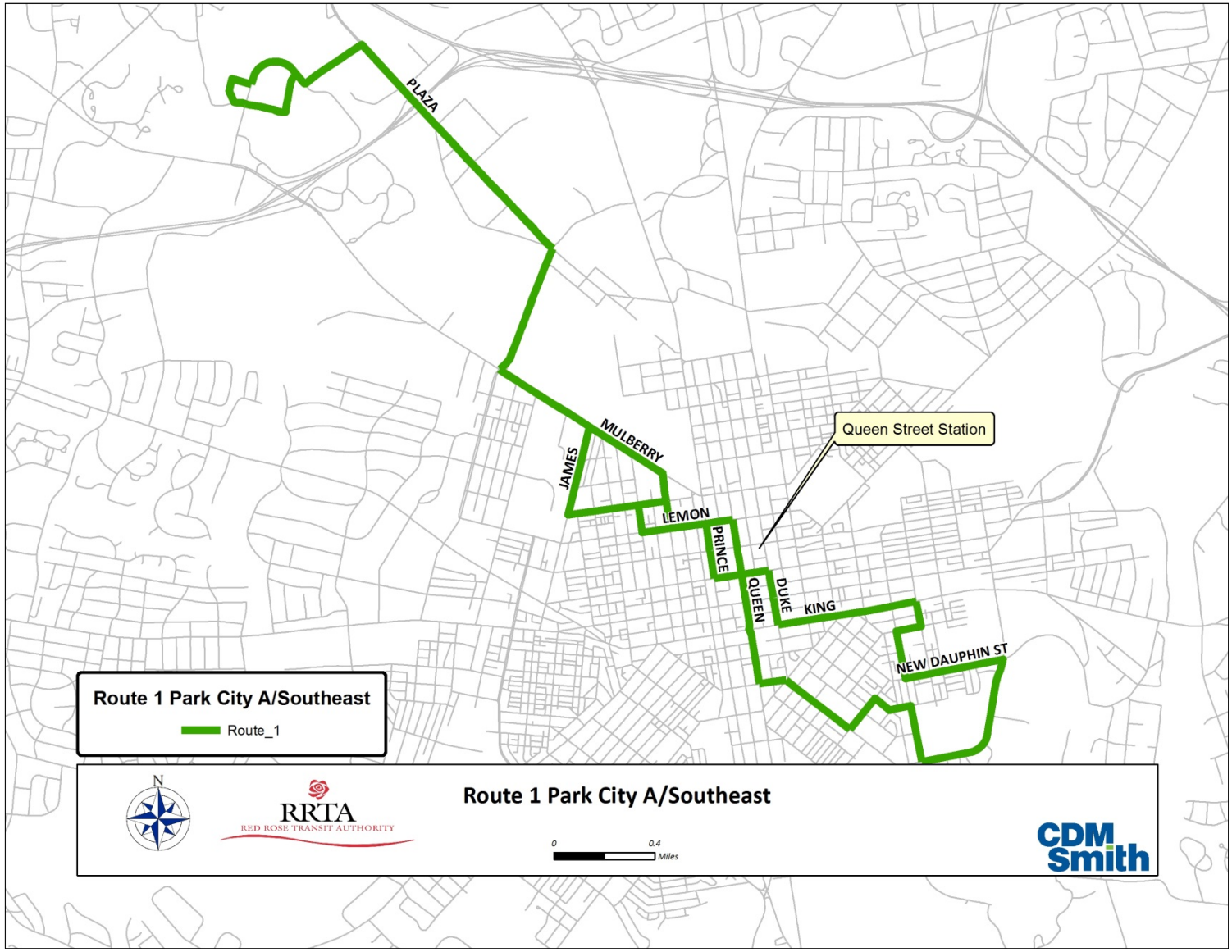
5.1.1 Route 1 – Park City A/Southeast

Route 1 operates two separate legs, the first operates between W. Chestnut & N. Queen Streets and South Ann & Chesapeake Streets in the Southeast, and the second leg operates between the RRTA's Queen Street Station and Park City Kohl's Mall Depot in Park City. (**Figure 5-4**)

All trips travel through QSS; however passengers do not have to transfer buses if traveling from the Southeast part of the city and Park City. The Southeast leg of the route provides service to the RRTA Queen Street Station, Clermont Apartments, Neighborhood Services Center, and the Church Street Towers. The Park City leg provides service to Franklin & Marshall College, Park City Mall, and the Parkview Plaza.

Route 1 operates 26 round-trips on weekdays, 25 round-trips on Saturdays, 8 round-trips on Sundays.

Figure 5-4: Route 1 Park City A/Southeast



5.1.2 Route 2 – Park City B/6th Ward

Route 2 operates two separate legs, the first operates between RRTA's Binn's Park Station and Hamilton & Franklin Streets in the 6th Ward, and the second leg operates between the RRTA's Queen Street Station and Park City Kohl's Mall Depot in Park City. (**Figure 5-5**)

All trips travel through QSS; however passengers do not have to transfer buses if traveling from the 6th Ward and Park City. The 6th Ward service area includes McCaskey High School, Grandview Shopping Center and Lancaster General Hospital. The Park City leg of the route provides service to Lancaster Regional Medical Center, Franklin & Marshall College, Lancaster Post Office, Park City Mall, and the Lancaster General Hospital Health Campus.

Route 2 operates 25 round-trips on weekdays, 23 round-trips on Saturdays, and 8 round-trips on Sundays.

5.1.3 Route 3 - Park City C/8th Ward

Route 3 operates two separate legs, the first operates between RRTA's W. Chestnut Street Station and Wabank & Union Streets in the 8th Ward, and the second leg operates between RRTA's Queen Street Station and the Park City Kohl' s Mall Depot in Park City. (**Figure 5-6**)

All trips travel through QSS; however passengers do not have to transfer buses if traveling from the 8th Ward and Park City. The 8th Ward service area includes Lancaster County Courthouse, Chamber of Commerce, Sterling Place, Hershey Heritage Village, Department of Welfare, and the Umbrella Works. The Park City leg of the route provides service to the Lancaster General Hospital, Amtrak/Greyhound Station, RRTA's office, Park City Mall, and Parkview Plaza.

Route 3 operates 24 round-trips on weekdays, 20 round-trips on Saturdays and 7 round-trips on Sundays.

5.1.4 Route 4 - Elm Avenue /Parkside

Route 4 operates two separate legs; the first operates between East Orange & Parkside Streets (Stevens College Dormitories) and North Queen Street at Bulova Tech. The second leg operates between E. Orange & Christian Street at Bulova Tech. and the Stone Mill Plaza at Elm Avenue. (**Figure 5-7**)

All trips travel through downtown Lancaster; however passengers do not have to transfer buses if traveling from the Stevens College Dormitories and Stone Mill Plaza. The Elm Avenue service area includes Wheatland Jr. High School, Ivy Ridge Apartments and Umbrella Works. The Parkside leg of the route provides service to Bulova Technology, McCaskey East High School and the Stevens College Dormitories.

Route 4 operates nine round-trips on weekdays. No weekend service is provided.

Figure 5-5: Route 2 Park City B/6th Ward

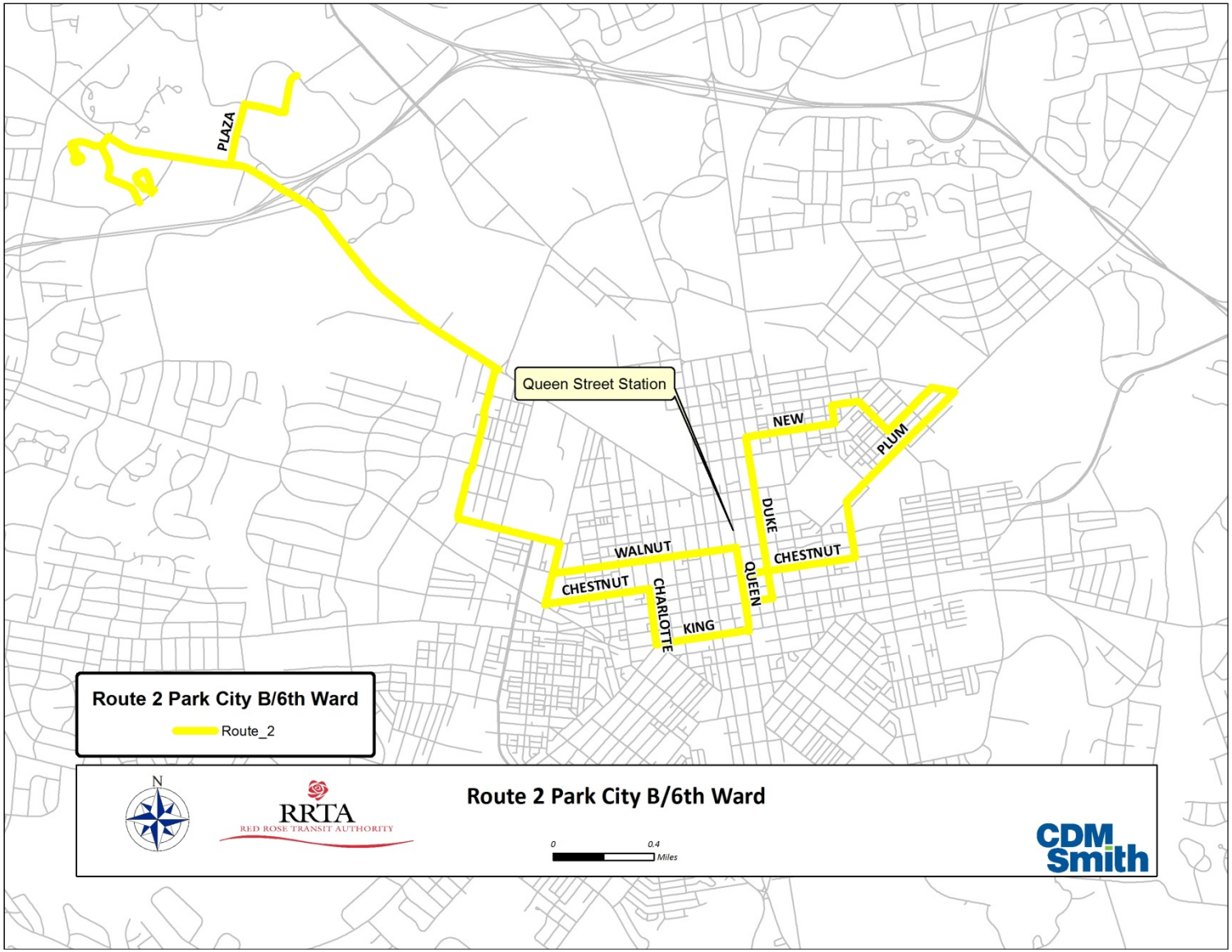


Figure 5-6: Route 3 Park City C/8th Ward

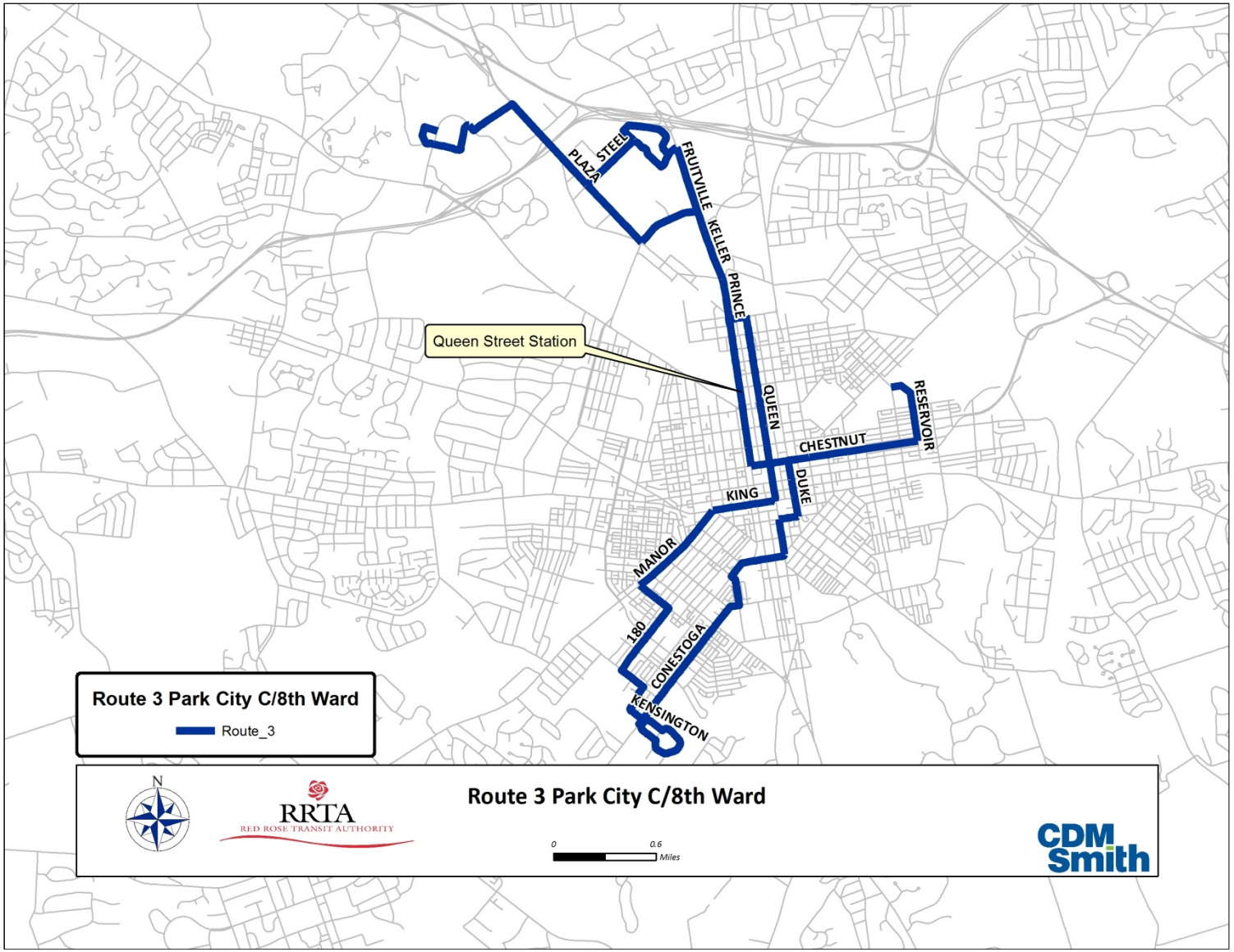
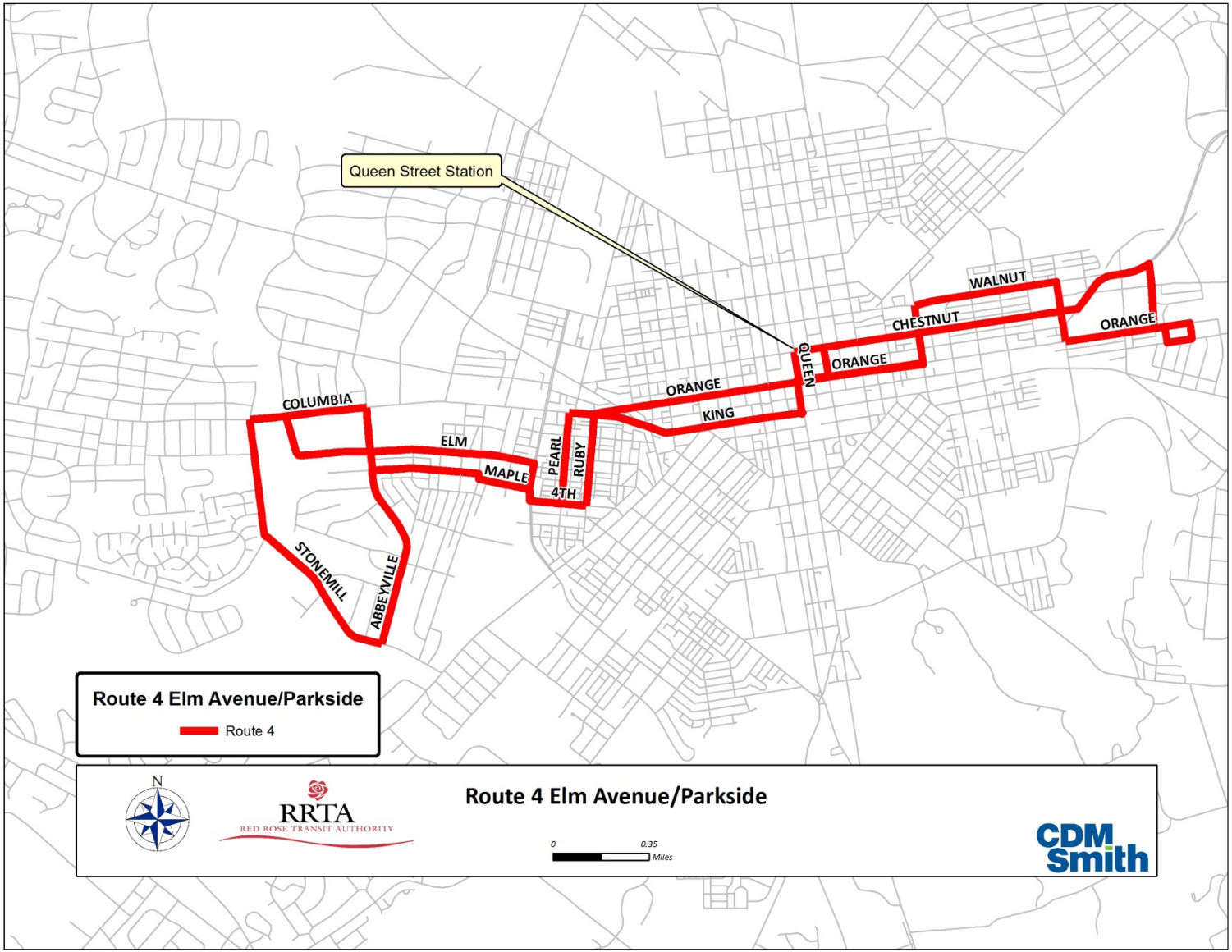


Figure 5-7: Route 4 Elm Avenue/Parkside



5.1.5 Route 5 - Grandview Heights/ Rossmere

Route 5 operates between RRTA's Queen Street Station and the Lancaster Shopping Center. The route also serves Bulova Technology, Lancaster General Hospital, Goodwill Industries, Lancaster County Social Services, Catholic High School, Golden Triangle Shopping Center, Calvary Fellowship Homes and the Lancaster County Courthouse. (**Figure 5-8**)

Route 5 provides 16 round-trips on weekdays. No weekend service is provided.

5.1.6 Historic Downtown Trolley

The Trolley route operates between the Amtrak/Greyhound Station and Penn Square to King and Queen Streets, traveling through RRTA's Queen Street Station. The Historic Downtown Trolley route provides 25 round-trips on weekdays only. The route serves Liberty Place, RRTA Clipper Magazine Stadium Park-n-Ride Lot, Lancaster County Convention Center and the Central Market.

5.1.7 Route 10 - Lititz

Route 10 operates between RRTA's Queen Street Station and Newport and Tollgate Roads north of the Borough of Lititz. Route 10 provides 14 round-trips on weekdays and 8 round-trips on Saturdays. The route also serves City Hall, Lancaster General Hospital, Amtrak/Greyhound Station, Golden Triangle Shopping Center, Lancaster Shopping Center, Overlook Golf Course, Brethren Village, Shoppes of Kissel Hill, Heart of Lancaster Hospital, Lititz Borough Hall and Sauder Eggs.

5.1.8 Route 11 – Ephrata

Route 11 operates between RRTA's Queen Street Station and the Ephrata Wal-Mart. Route 11 provides 11 weekday round-trips, and 5 round-trips on Saturdays. The route also serves Bulova Technology, Lancaster General Hospital, Amtrak/Greyhound Station, Lancaster Shopping Center, Eden Resort, Oregon Dairy, Schaum's Corner, Dutch Lanes, Akron Borough Hall, Akron K-Mart and the Ephrata Borough Hall.

5.1.9 Route 12 - New Holland

Route 12 operates between RRTA's Queen Street Station and Tower Road/Route 23 in New Holland. Route 12 provides 12 round trips on weekdays and 5 round-trips on Saturdays. The route also serves the Grandview Shopping Center, Burle Industries, Lancaster Labs, The Worship Center, Dart, The Jay Group, Tyson Foods, and Yoder's Country Market.

5.1.10 Route 13 - White Horse

Route 13 operates between N. Queen Street at Binn's Park in Lancaster and Old Philadelphia Pike/Cains Road in Cains. Route 13 provides 8 round-trips on weekdays and 3 round-trips on Saturdays to Cains. Route 13 also serves the Conestoga View Nursing Home, PA Department of Health, Bird In Hand Farmers Market, Plain & Fancy, and the Kitchen Kettle.

Figure 5-8: Route 5 Grandview/Rossmere

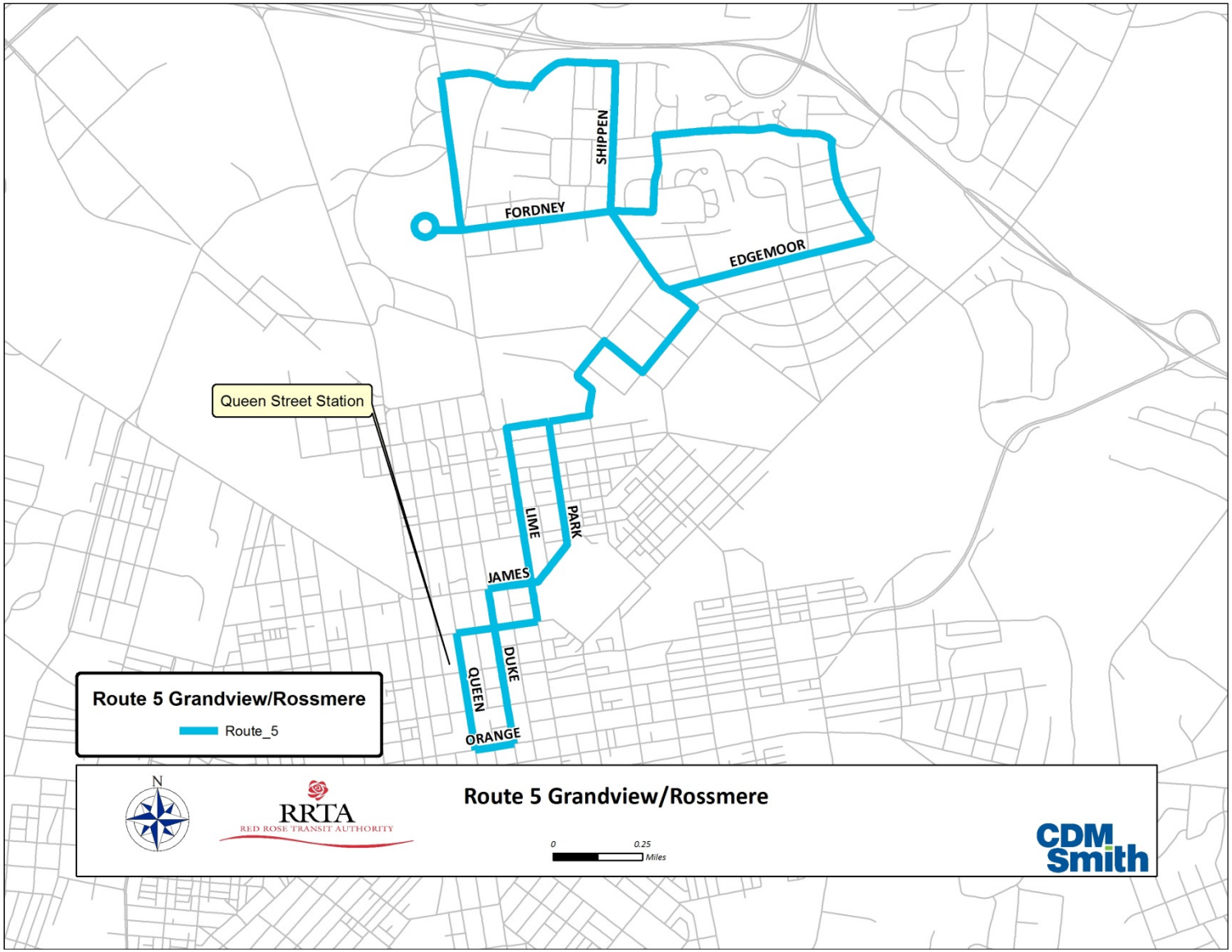


Figure 5-9: RRTA Trolley

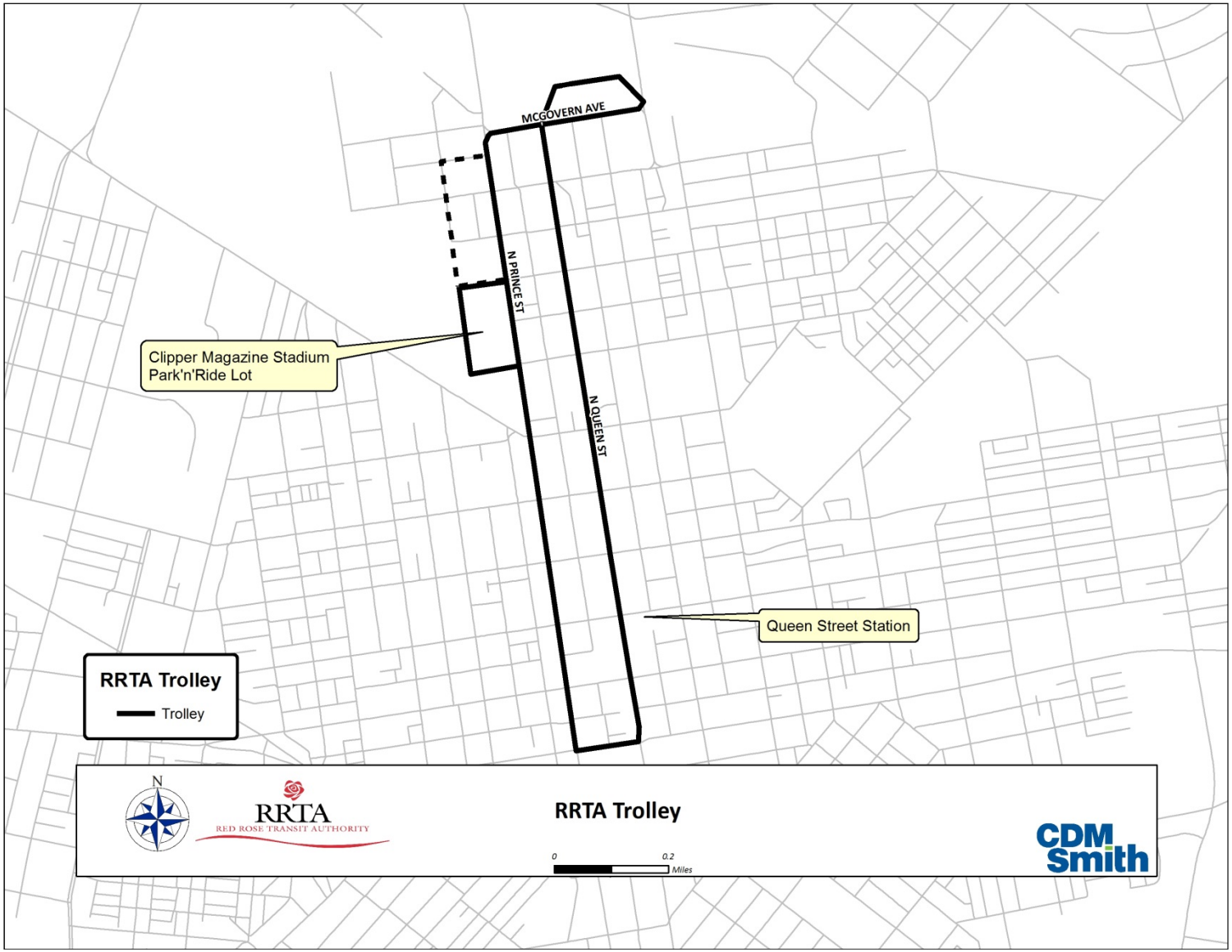


Figure 5-10: Route 10 Lititz

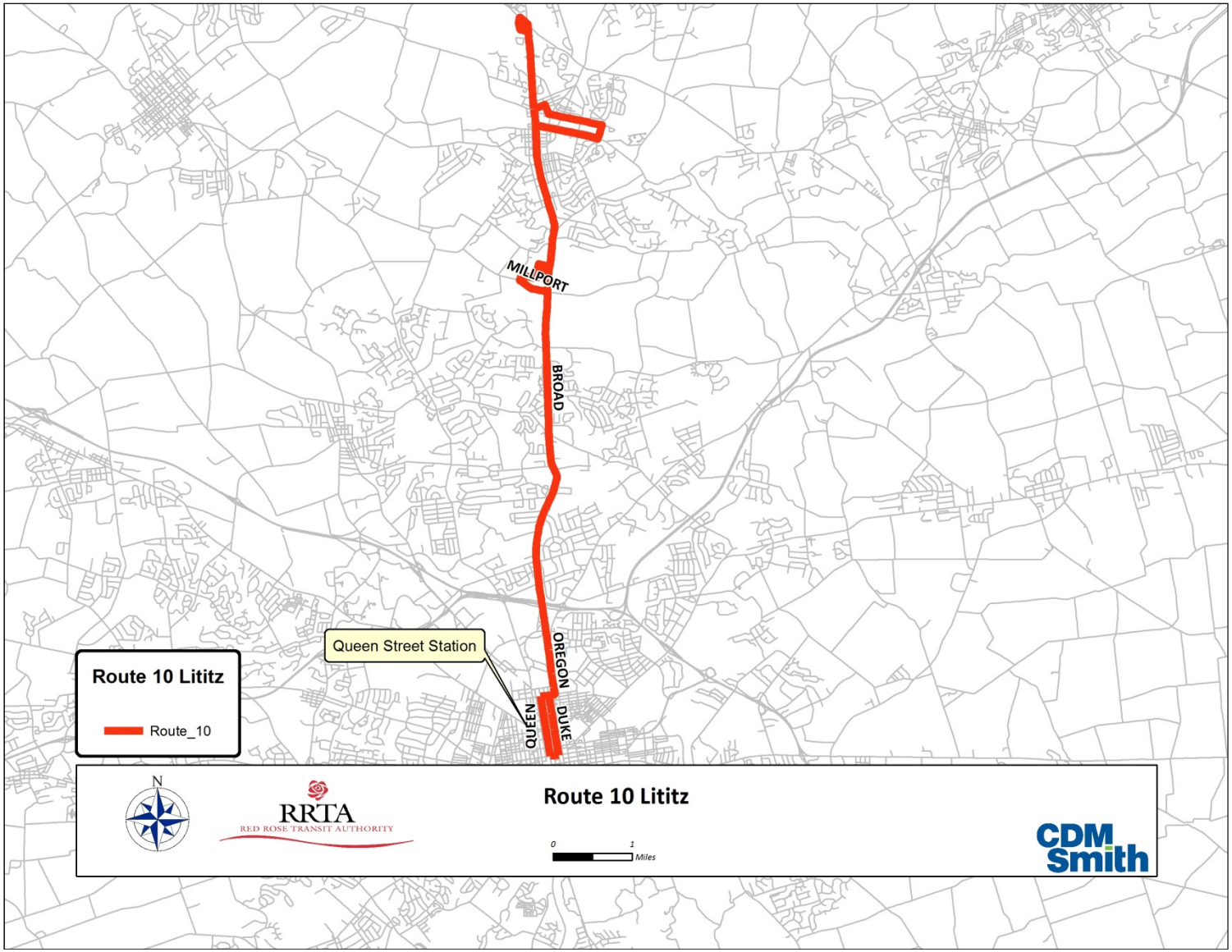


Figure 5-11: Route 11 Ephrata

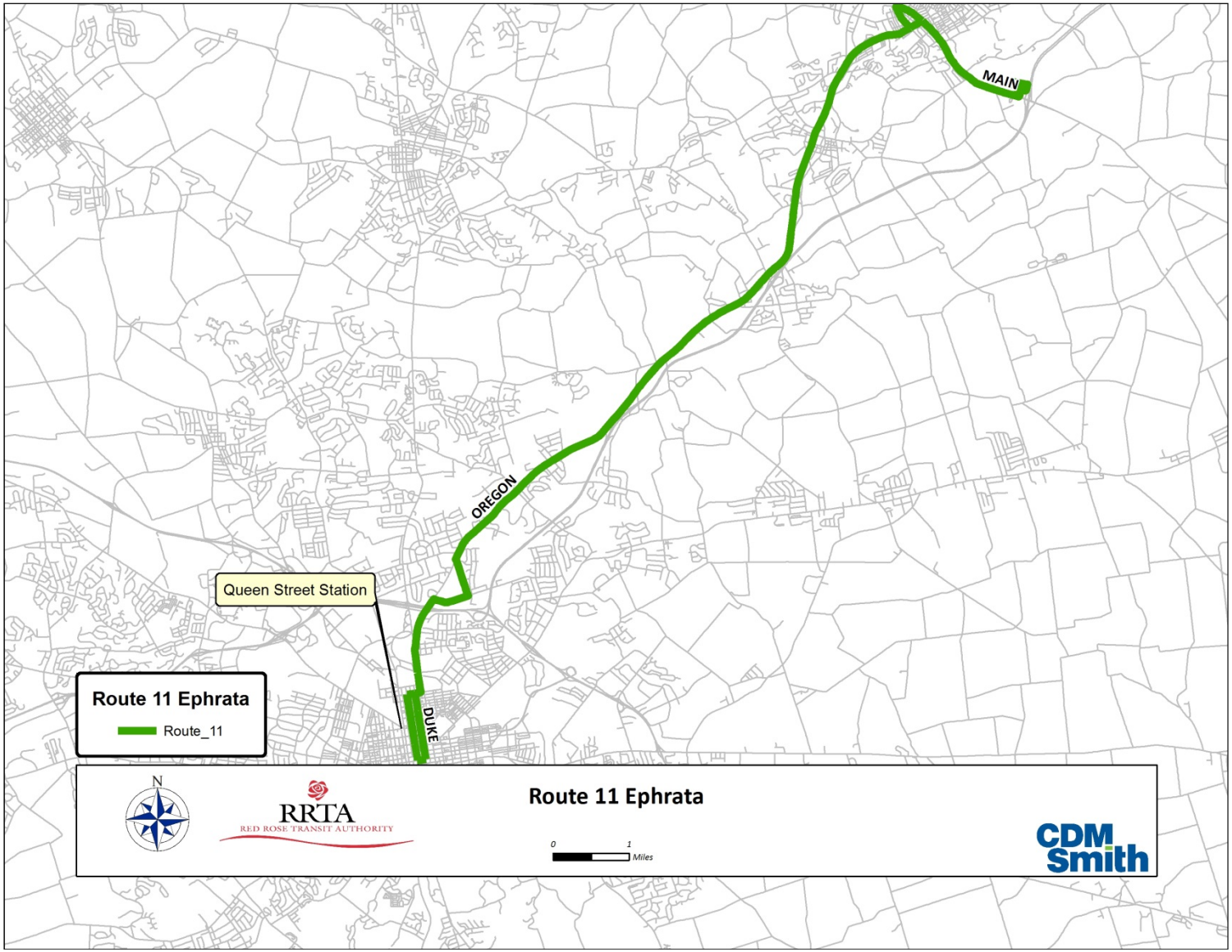


Figure 5-12: Route 12 New Holland

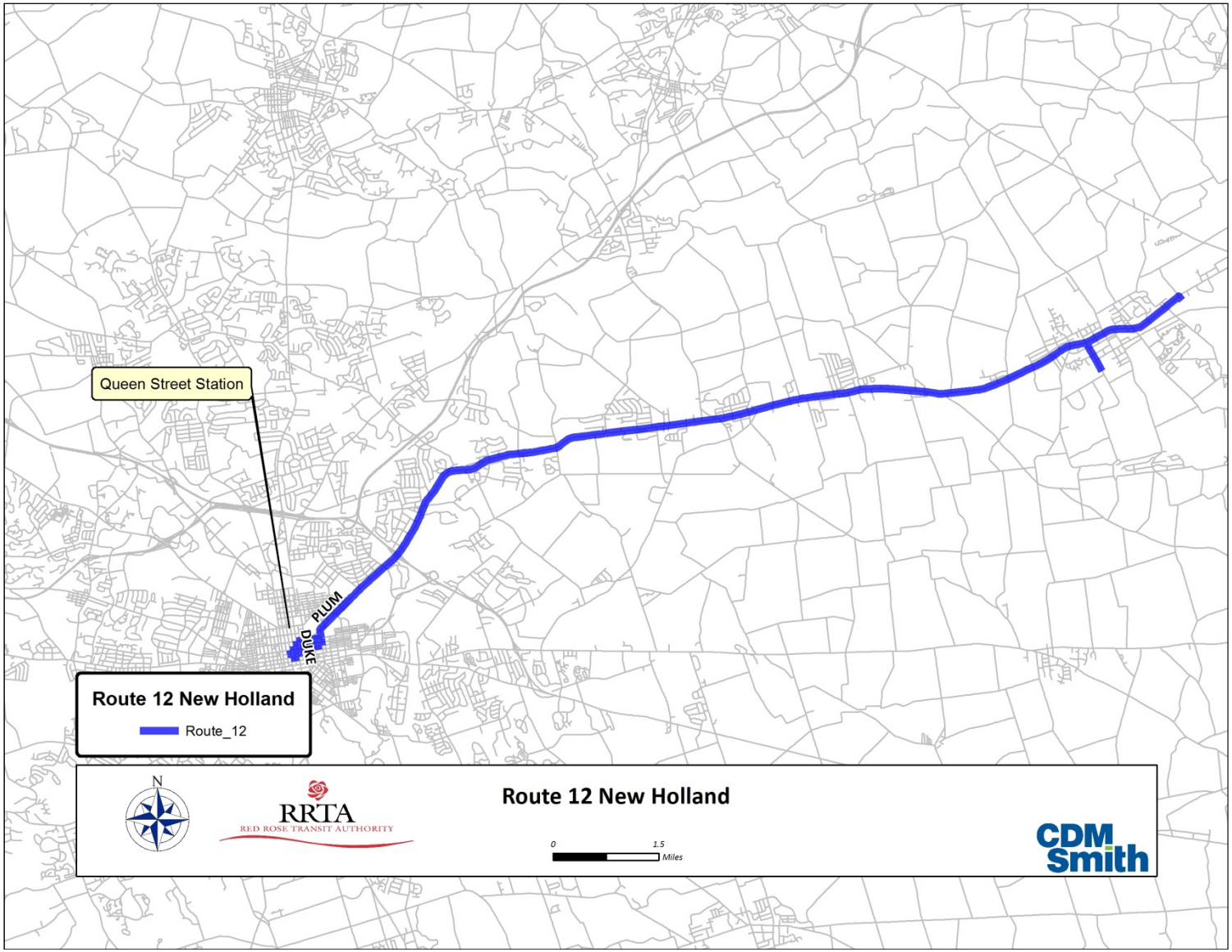
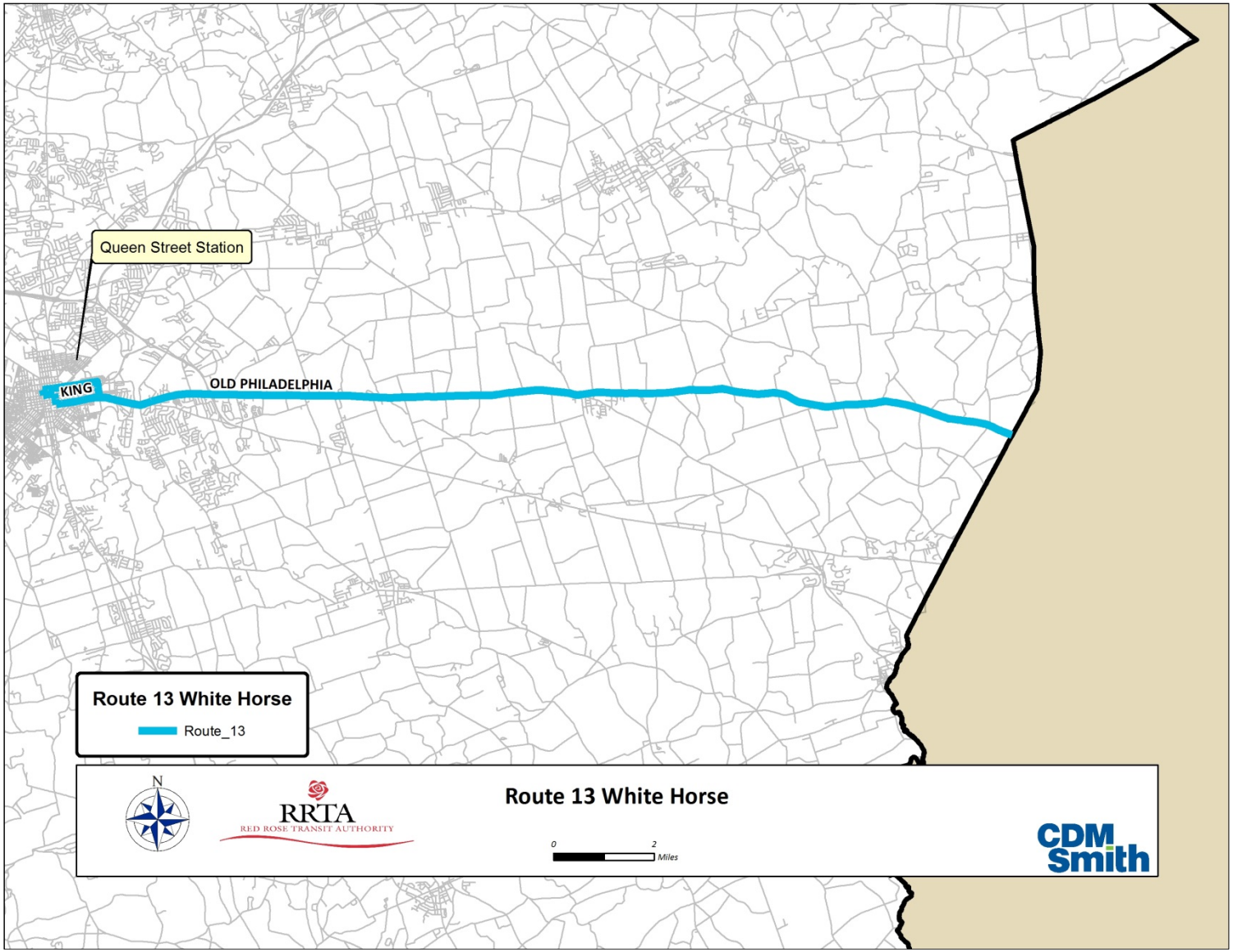


Figure 5-13: Route 13 White Horse



5.1.11 Route 14 - Rockvale/Paradise

Route 14 operates between RRTA's Queen Street Station and Rockvale Square or U.S. Route 30/Slaymaker Hill Road in Kinzers. Route 14 provides 27 round trips on weekdays and Saturdays between Lancaster and Rockvale Square, with 5 trips extending to Leaman Place and Kinzers. In addition, Route 14 operates 13 round-trips between Lancaster and Rockvale Square on Sundays. Route 14 provides service to YMCA, Conestoga View Nursing Home, Wal-Mart, East Towne Centre, Tanger Outlet at Mill Stream, Dutch Wonderland and the Quality Outlet Shopping Center.

5.1.12 Route 15 - Willow Street

Route 15 operates from RRTA's Queen Street Station in Lancaster to the Willow Valley area. Route 15 provides 10 round-trips on weekdays. No Saturday service is provided. The route also serves Willow Valley Lakes Manor, Willow Valley Manor, Willow Valley Square, Willow Valley Inn, Kendig Square, and K-Mart.

5.1.13 Route 16 – Millersville

Route 16 operates between RRTA's Queen Street Station and Hillview Drive/Lee Avenue in Millersville. Route 16 provides 29 roundtrips on weekdays and 14 round-trips on Saturdays. Five round-trips are provided on Sundays. The route also serves the Manor Center/Weis Market, St. Phillip's Catholic Church and Millersville University.

5.1.14 Route 17 – Columbia

Route 17 operates between RRTA's Queen Street Station and 3rd & Linden Streets in Columbia. The route also provides six trips to Marietta Square in Marietta on weekdays and four trips on Saturday. Route 17 provides 22 round-trips on weekdays, 13 round-trips on Saturdays, and 5 trips on Sunday. Route 17 also provides service to the Stone Mill Plaza, Hempfield Industrial Park, K-Mart Park-N-Ride, Columbia Shopping Center, Columbia Borough Hall, and the Village of Rivermore.

5.1.15 Route 18 - Mount Joy/Elizabethtown

Route 18 operates between RRTA's Queen Street Station and the Amtrak Station in Elizabethtown. Route 18 provides eight round-trips on weekdays and two on Saturday traveling to Elizabethtown. Route 18 also serves Lancaster Regional Medical Center, Windsor Court Apartments, Oyster Point Medical Center, QVC, and Mt. Joy Borough Hall.

5.1.16 Route 19 – Manheim

Route 19 operates between RRTA's Queen Street Station and Market Square in Manheim. Route 19 provides 14 round-trips on weekdays, 7 round-trips on Saturdays, and none on Sunday. On weekdays, the first three trips outbound trips of the day and two afternoon outbound trips are diverted onto Commerce Drive. Route 19 also serves Amtrak/Greyhound Station, Red Rose Commons, K-Mart Plaza, Hawthorne Plaza, Foxshire Plaza, Granite Run Industrial Park, and Chelsea Square Shopping Center. Trips that use the Commerce Drive loop also serve Crystal Springs and Arnold Logistics.

Figure 5-14: Route 14 Rockvale Square

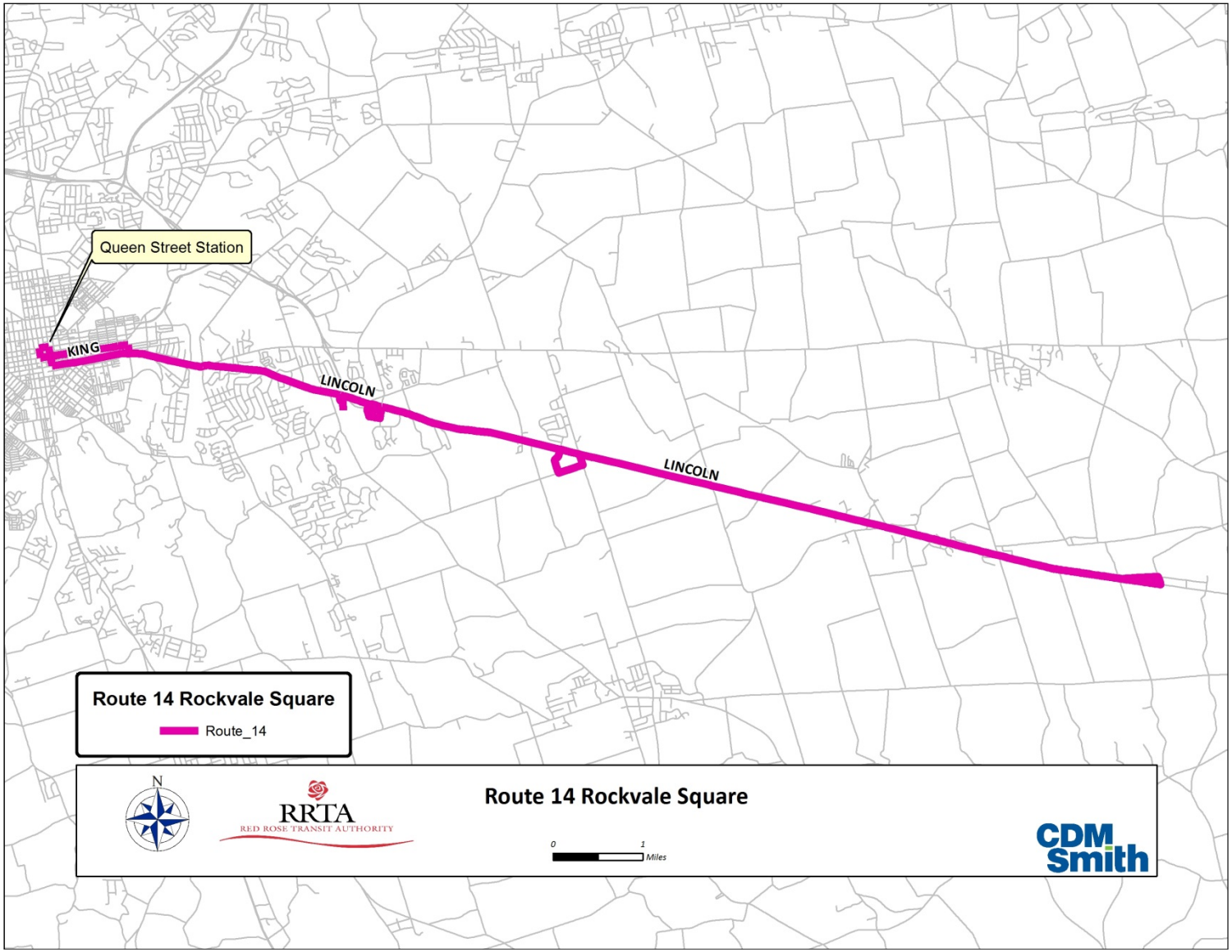


Figure 5-15: Route 15 Willow Street

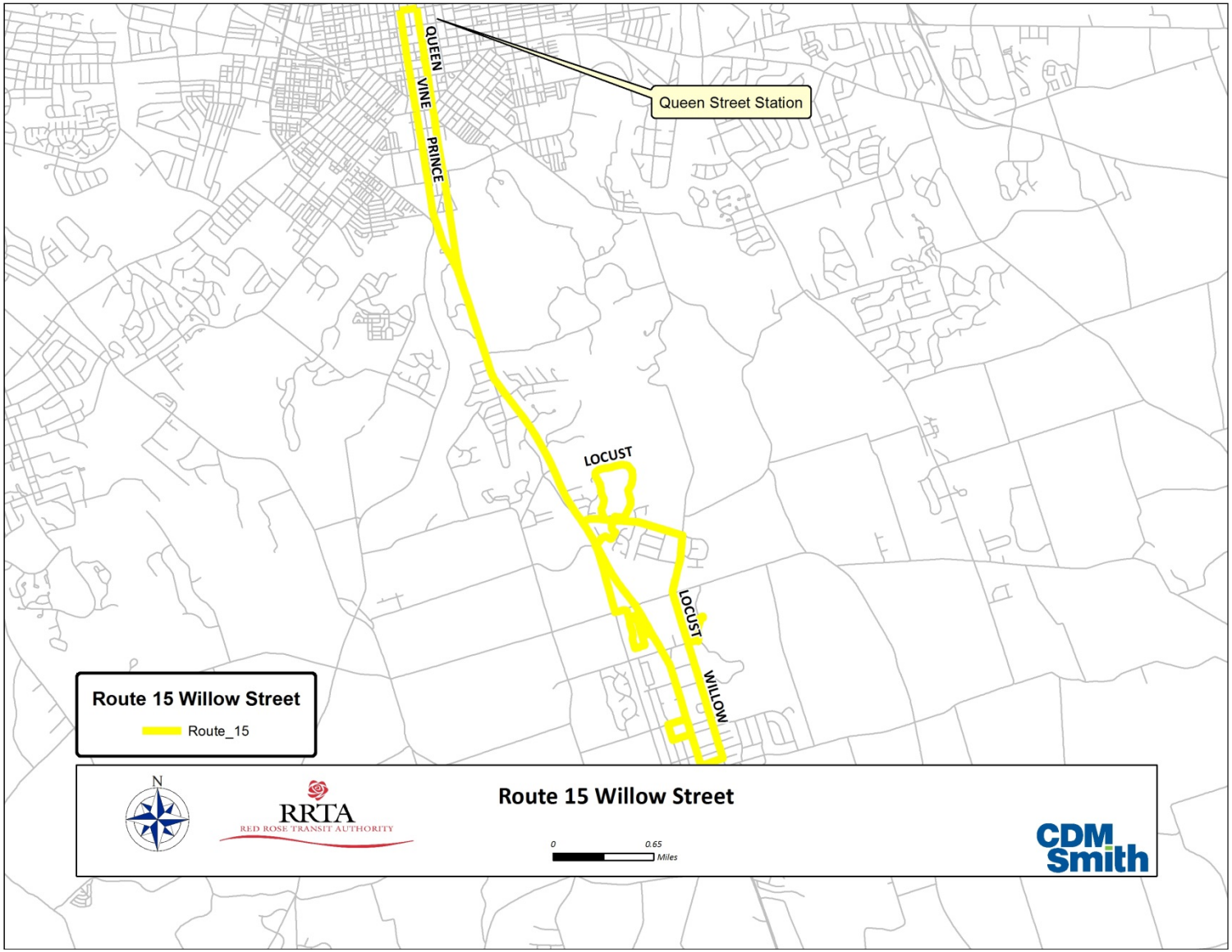


Figure 5-16: Route 16 Millersville

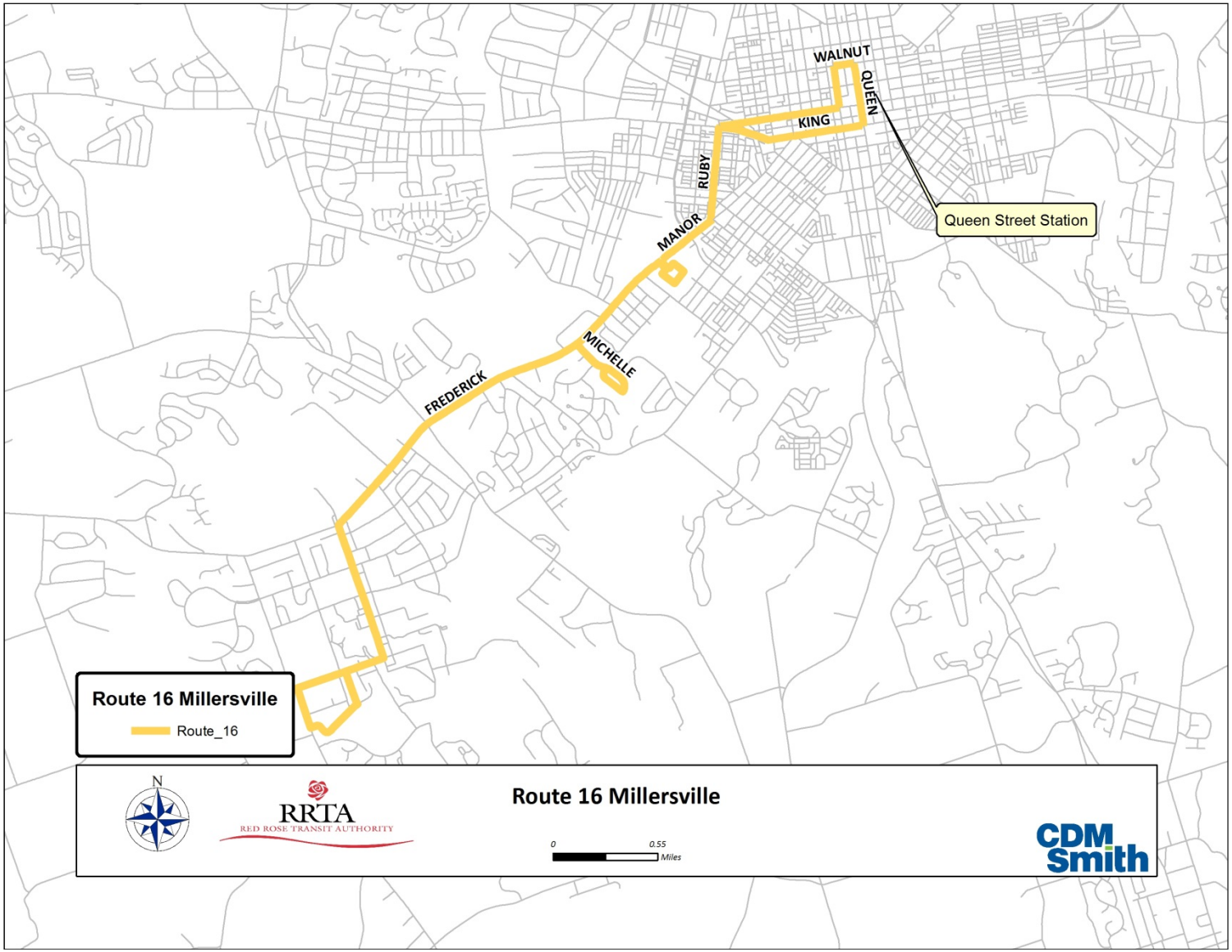


Figure 5-17: Route 17 Columbia

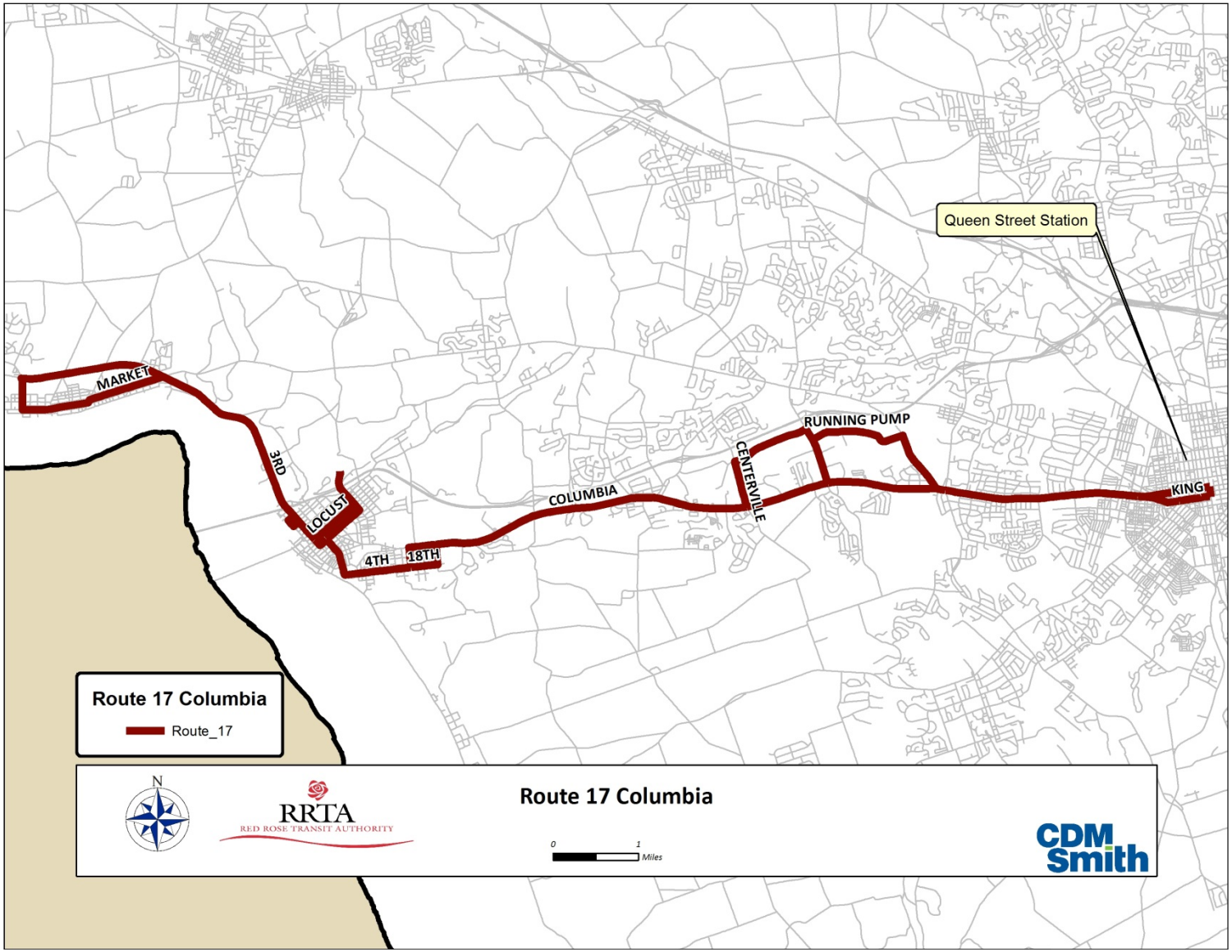


Figure 5-18: Route 18 Elizabethtown

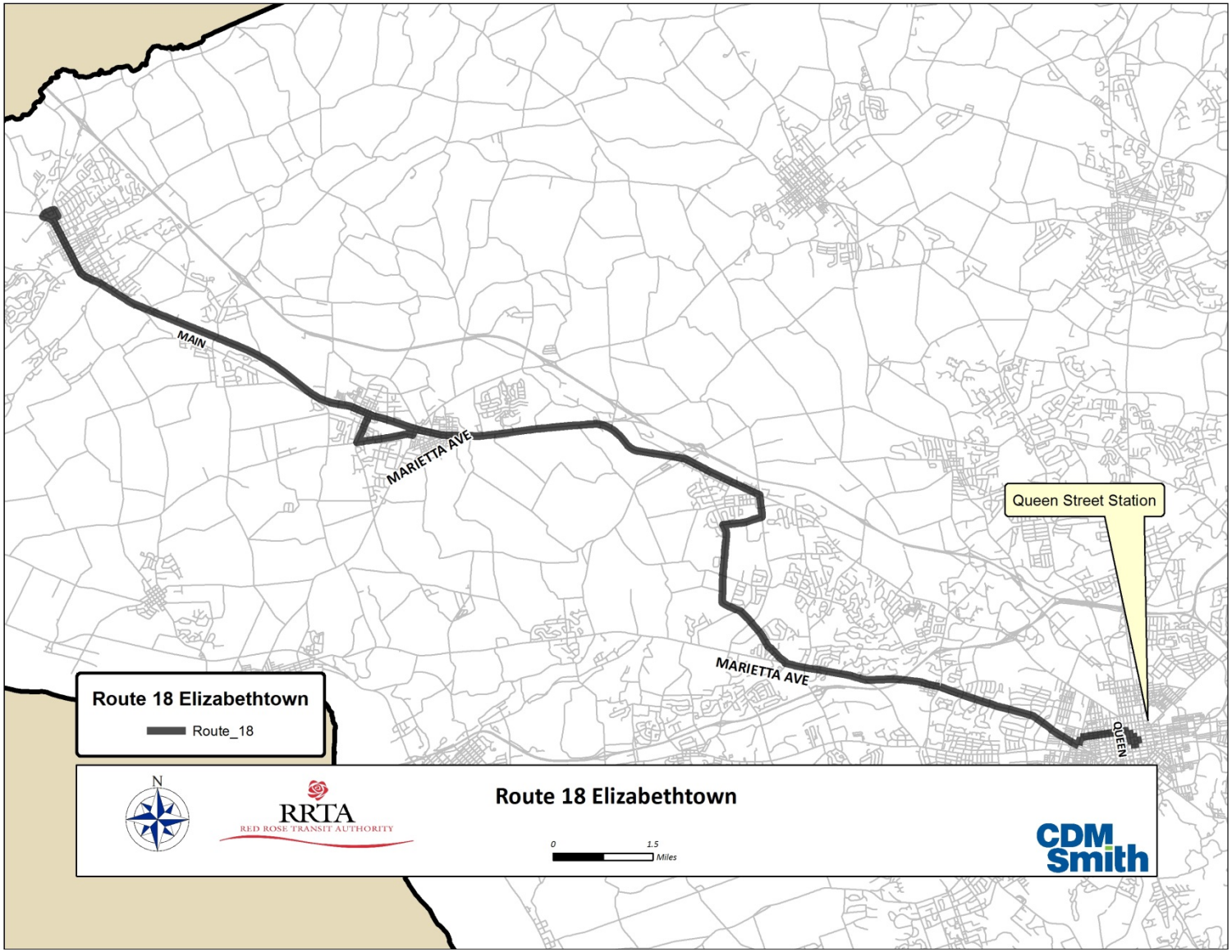
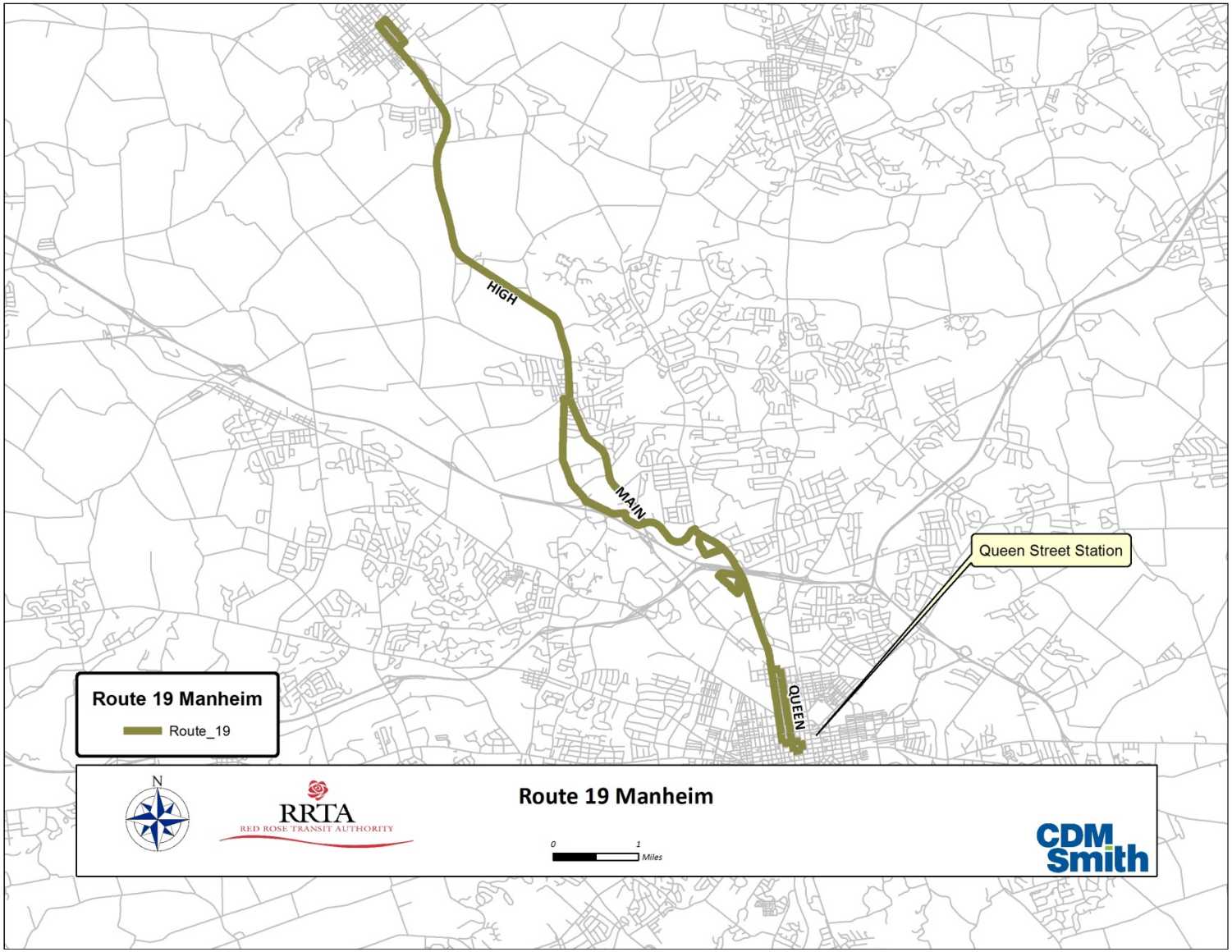


Figure 5-19: Route 19 Manheim



5.1.17 Route 20 – Greenfield

Route 20 operates between RRTA's Queen Street Station and the intersection of William Penn and Jefferson drive at the Greenfield Corporate Center. Route 20 provides 14 round-trips per day on weekdays. No Saturday service is provided. Route 20 serves Stevens College of Technology, Conestoga View Nursing Home, HAAC, Donnelley Printing, Social Security Office and the Greenfield Corporate Center.

5.1.18 MU Park City Express

The MU Park City Express bus operates between the Student Memorial Center (SMC) and the Park City Mall. The MU Park City Express provides nine afternoon and evening round-trips on weekdays and Saturdays, and six round trips on Sundays. The route also serves Regency Square and the LGH Health Campus.

5.1.19 MU Express

The MU Express bus operates as an on-campus shuttle between the Student Memorial Center (SMC) and the intersection of Duke and West Cottage Streets. The MU Express provides 43 round-trips on Mondays through Thursdays, with 18 trips provided on Fridays. The route serves various student facilities throughout the university.

5.2 Span of Service

Table 5-2 indicates the span of service for each of the RRTA bus routes. As the table shows, about half of the RRTA weekday service stops before 7:00 PM.

Table 5-2: RRTA Fixed Route - Span of Service

Route	Weekday		Saturday		Sunday	
	Start	End	Start	End	Start	End
City Routes						
1	6:05a	10:35p	6:50a	10:35p	11:10a	6:40p
2	6:17a	10:35p	7:10a	10:35p	11:05a	6:25p
3	6:00a	10:40p	7:45a	10:40p	10:50a	6:50p
4	6:00a	5:50p	-	-	-	-
5	6:15a	6:05p	-	-	-	-
Trolley	5:20a	7:00p	-	-	-	-
County Routes						
10	5:15a	6:00p	6:45a	6:35p	-	-
11	5:15a	6:50p	7:50a	6:45p	-	-
12	5:10a	6:40p	6:30a	6:35p	-	-
13	5:30a	6:35p	6:30a	5:15p	-	-
14	5:20a	10:15p	5:20a	10:15p	7:20a	6:45p
15	5:50a	6:10p	8:20a	4:20p	-	-
16	5:40a	11:10p	5:40a	11:10p	11:15a	6:20p
17	4:55a	10:05p	6:15a	7:05p	11:00a	6:30p
18	5:05a	7:10p	6:30a	3:10p	-	-
19	5:15a	6:50p	7:45a	6:50p	-	-
Metro Region Routes						
20	5:20a	6:10p	-	-	-	-
Circulator/Shuttles						
MU Park City Xpress	2:05p	10:15p	2:05p	10:15p	1:10p	6:35p
MU Xpress	7:30a	9:50p	-	-	-	-

Figure 5-20: Route 20 Greenfield

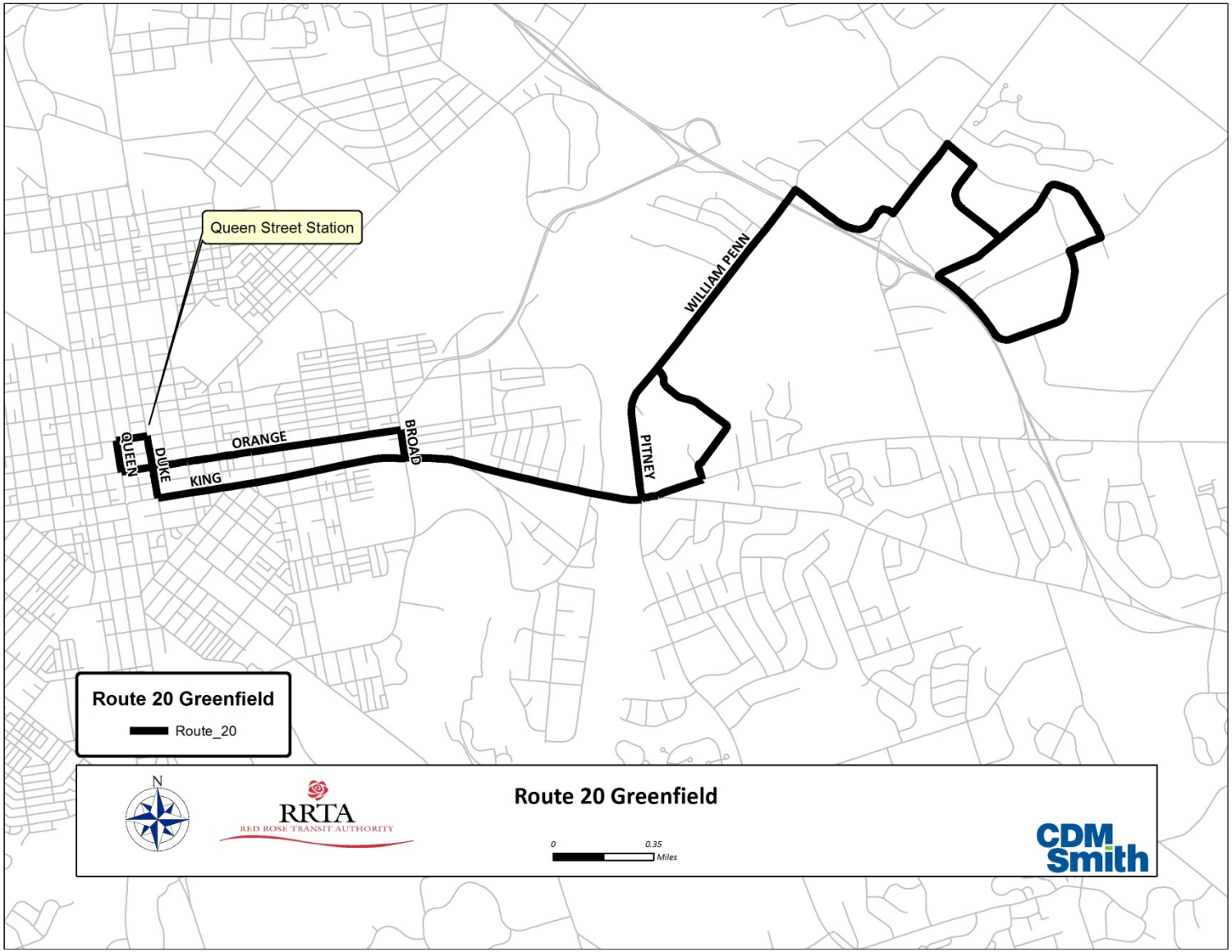
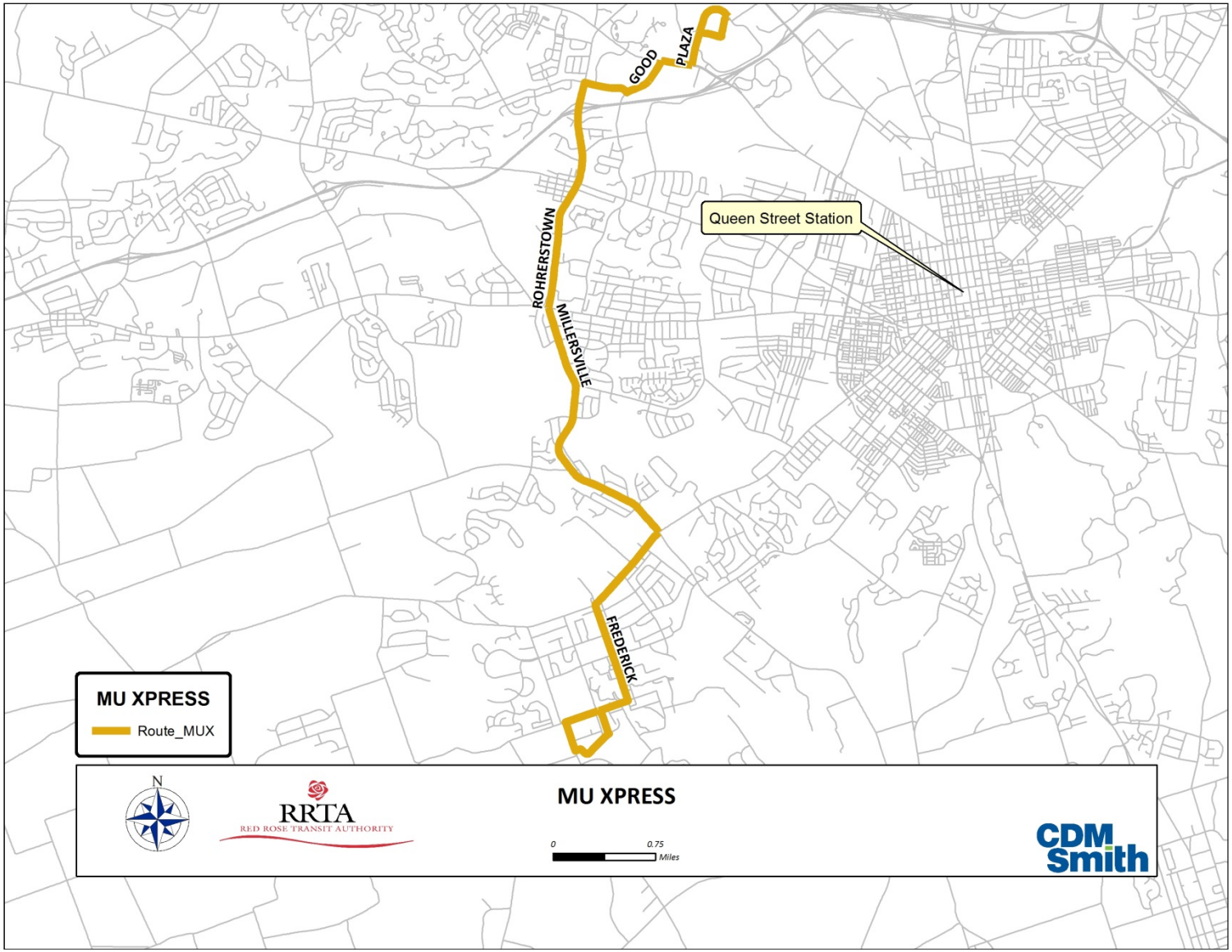


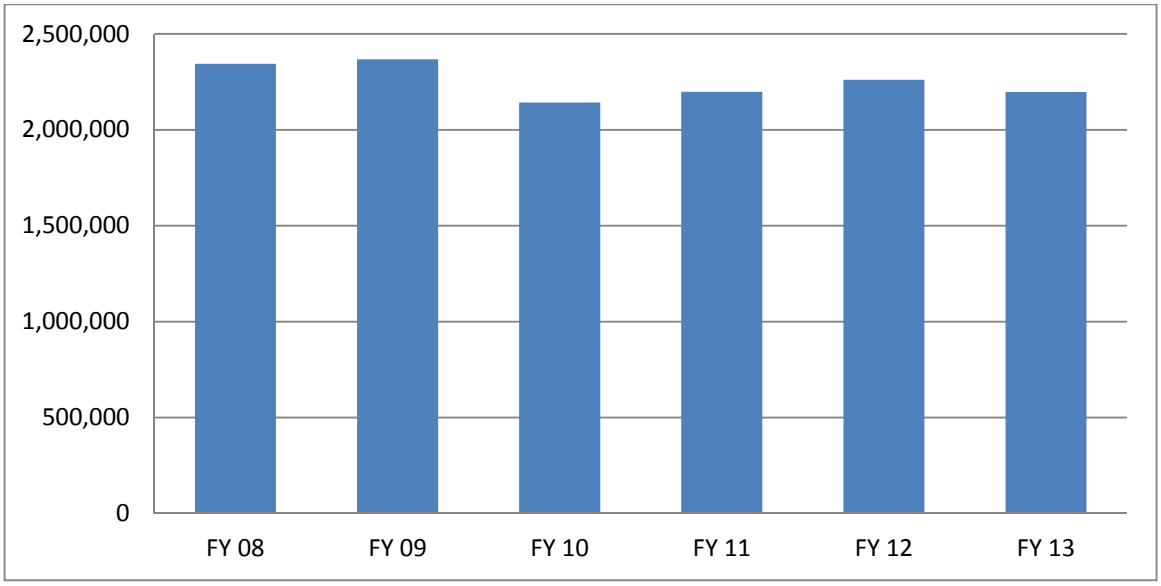
Figure 5-21: MU XPRESS



5.3 Ridership Trends

Figure 5-22 shows ridership trends for the transit service since year 2008. As shown in the figure, ridership has remained fairly stable for the past decade with approximately 2.2 million annual trips for all transit services. RRTA fixed routes provided 1.9 million trips in FY2013. The CDM Smith team anticipates this trend to continue over the next 10 years or until additional revenue sources are received by the agency. As modifications are made to the service and service delivery, ridership will continue improving.

Figure 5-22: RRTA Ridership Trends – Annual One-way Trips

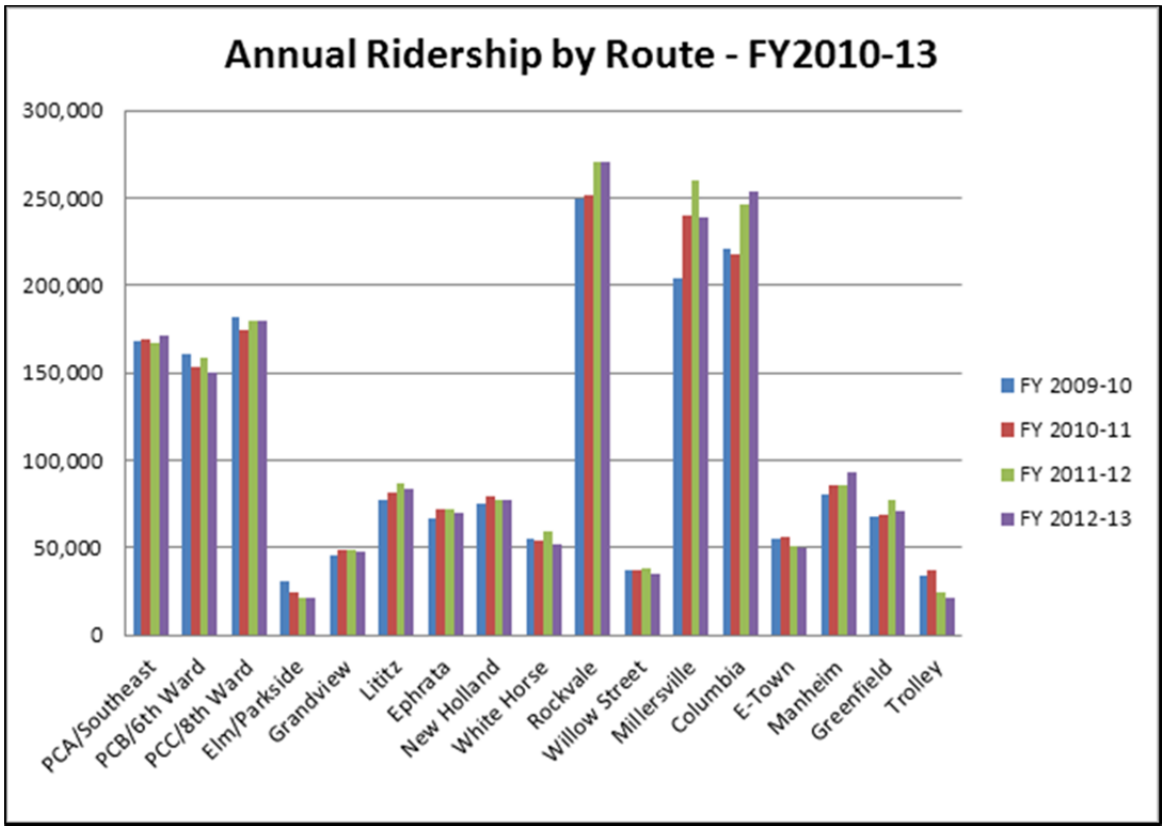


5.3.1 Ridership by Route

FY2010 through 2013 ridership for each RRTA routes is presented in **Figure 5-23**. Route 14-Rockvale has consistently had the most riders with over 250,000 passenger trips each year. In FY2013, Route 14 made up 14 percent of the total fixed route ridership. Route 16-Millersville and Route 17-Columbia carry the second and third highest ridership with approximately 235,000 annual passenger trips for each route. In FY2013, approximately 13 percent of the total ridership was from Route 16 and from 13 percent from Route 17. As shown in the figure, this pattern is similar for 2012 and 2011.

Ridership from FY2012-2013 decreased on most routes, except Route 1-Park City A/Southeast, Route 4-Elm/Parkside, Route 17-Columbia, and Route 19-Manheim.

Figure 5-23: RRTA Annual Ridership by Route – FY2010-13



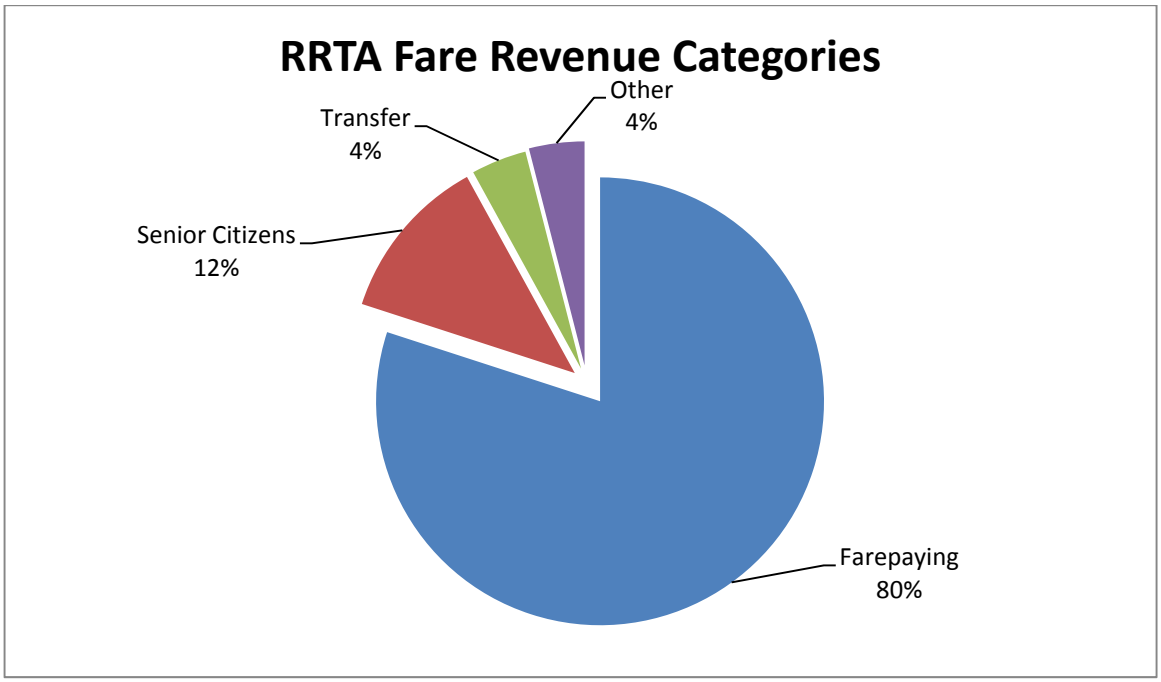
5.3.2 Ridership by Market Segment

RRTA currently tracks the different types of passengers boarding the bus by fare category. The categories are:

- Farepaying
- Elderly
- Transfers
- Other

In 2013, the highest percentage of riders was Farepaying patrons, at approximately 80 percent of the overall transit riders for RRTA. This is followed by senior citizen riders representing approximately 12 percent of the total ridership. Transfers make up approximately four percent. **Figure 5-24** illustrates the percentage of total ridership by the different fare categories.

Figure 5-24: RRTA Fare Revenue Categories



5.4 RRTA Fare Structure

RRTA has a complex fare structure for the fixed route bus service. Fares can differ depending on whether the bus rider uses cash, tickets, or a monthly pass. The fare can also differ depending on whether or not the bus rider is with a certain group, such as an elderly rider or a student.

RRTA's fixed route fare structure is also distance based, which is determined by the number of zone boundaries that are crossed along each route. The service area is broken into four zones, not including the base fare zone within the City of Lancaster of $1.70, with the base fare transfer at $0.05. There is a $0.20 charge for Zone 1, $0.50 for Zone 2, $0.85 for Zone 3, and $1.25 for Zone 4. Therefore, full fare could range from $0.20 to $1.25 above the base fare of $1.70. RRTA also offers an All Day Pass for $3.40 for travel up to and within Zone 2, or All Day All Zone Pass for $5.25.

All RRTA's city routes operate within the base fare zone. Fares are paid when passengers board any of these routes. The fare for Historic Downtown Trolley is also $1.70.

The county routes all cross zones and passenger fares will vary depending on the distance traveled. Fares are paid when passengers depart the bus when traveling from the city of Lancaster. When traveling towards the City of Lancaster on a county route, fares are paid when passengers board the bus.

RRTA's Route 20, the metro region route, operates like a county route in that it crosses a fare zone. Fares are paid in the same manner as county routes. Passengers transferring from one RRTA route to another can purchase a transfer for $0.05 plus zone charges.

Table 5-3 provides a summary of the RRTA fare structure.

Table 5-3: RRTA Fare Structure

Fare Category	Fare			
Cash	$1.70			
Elderly/Disabled	No Charge			
Children Age 5 and Under	No Charge			
Students (K-12)	$1.35 Plus Zone Charge			
Transfers	$0.05 public Zone Charge			
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**
Zone Charge	$0.20	$0.50	$0.85	$1.25
31-Day Pass (Base Zone $35)	$40	$47	$55	$64
10-Trip (Base Zone $12)	$13.50	$15.50	$18.50	$21.50
Trolley	$1.70			
Day Pass	Base up to Zone 2 - $3.40 All Zone All Zone - $5.25			

5.5 RRTA Transit Administration

RRTA is a public corporation established under Pennsylvania state law. In 1973, the Lancaster City and County Joint Transit Authority, was formed to support continuing operations of the Conestoga Transportation Company. In 1976, the authority began operating the fixed route bus system using the name the Red Rose Transit Authority. RRTA is administered by an executive director who reports to a nine member board appointed by the Lancaster County Commissioners.

Management personnel as well as all other transit employees are employed by the Authority. RRTA management staff has the internal capacity to fulfill its planning needs including the design and implementation of bus routes and operational changes, construction projects, the preparation of state and federal grant applications and monitoring compliance with regulatory requirements.

RRTA has a total of 115 employees.[5] Approximately 74 percent are full-time and part-time vehicle operators. The vehicle maintenance function accounts for 12 percent of all employees, while the remainder of RRTA's employees are involved in administrative functions.

5.6 RRTA Vehicle Fleet

RRTA currently has 42 revenue vehicles for the fixed route services, 4 private passenger vehicles, and 3 non-revenue vehicles. RRTA vehicles range in size, model, and year. The majority of fixed route vehicles are 27-34 passenger vehicles. The fixed route service has 33 vehicles operating during the peak hours. The total vehicle inventory for the fixed route is shown in **Table 5-4**.

[5] Oct 2012 NTD Report.

Table 5-4: RRTA Fleet Data, January 1, 2014

VEHICLE NO.	YEAR	MFG.	SERIAL #	MODEL/TITLE	LICENSE NO.	SEATING CAPACITY	VALUE	MILEAGE AS OF 1-1-14
REVENUE VEHICLES								
120	2003	Optima	1Z9B5BSS73W216185	LFB-30	MT38039	27	$323,170	379,217
121	2003	Optima	1Z9B5BSS93W216186	LFB-30	MT38040	27	$323,170	382,688
122	2003	Optima	1Z9B5BSS03W216187	LFB-30	MT38044	27	$323,170	367,708
123	2003	Optima	1Z9B5BSS23W216188	LFB-30	MT38045	27	$323,170	384,378
124	2003	Optima	1Z9B5DTS53W216034	LFB-34	MT30873	31	$373,209	450,858
126	2003	Optima	1Z9B5DTS93W216036	LFB-34	MT38047	31	$373,209	437,267
127	2003	Optima	1Z9B5DTS03W216037	LFB-34	MT38049	31	$373,209	435,908
128	2003	Optima	1Z9B5DTS23W216038	LFB-34	MT38050	31	$373,209	435,635
129	2003	Optima	1Z9B5DTS43W216039	LFB-34	MT38051	31	$373,209	443,917
130	2003	Optima	1Z9B5DTS03W216040	LFB-34	MT38052	31	$373,209	405,662
131	2003	Optima	1Z9B5DTS23W216041	LFB-34	MT30864	31	$373,209	407,674
132	2003	Optima	1Z9B5DTS43W216042	LFB-34	MT30865	31	$373,209	442,066
133	2003	Optima	1Z9B5DTS63W216043	LFB-34	MT30866	31	$373,209	424,304
134	2003	Optima	1Z9B5DTS13W216032	LFB-34	MT30867	31	$373,209	423,579
T44	2005	Optima	1Z9S2HSS45W216322	AH-28	MT39536	27	$285,000	87,747
T45	2003	Optima	1Z9S2HSS03W216279	AH-28	MT38325	27	$284,000	75,886
T46	2003	Optima	1Z9S2HSS73W216280	AH-28	MT38324	27	$284,000	102,785
161	2005	Gillig	15GCB291751112545	C29B096N4	MT39329	34	$373,209	431,750
162	2005	Gillig	15GCB291751112546	C29B096N4	MT39330	34	$373,209	409,477
163	2005	Gillig	15GCB291751112547	C29B096N4	MT39331	34	$373,209	435,662
164	2005	Gillig	15GCB291751112548	C29B096N4	MT39332	34	$373,209	420,458
165	2005	Gillig	15GCB291751112549	C29B096N4	MT39333	34	$373,209	433,630
166	2005	Gillig	15GCB291751112550	C29B096N4	MT39334	34	$373,209	419,610
167	2005	Gillig	15GCB291751112551	C29B096N4	MT39335	34	$373,209	430,081
168	2005	Gillig	15GCB291751112552	C29B096N4	MT39336	34	$373,209	432,014
171	2006	Gillig	15GGE297861091263	G29E102N4	MT40269	28	$323,170	292,797
172	2006	Gillig	15GGE291X61091264	G29E102N4	MT40270	28	$323,170	277,493
173	2007	Gillig	15GGB291271077773	G29B102N4	MT40582	32	$373,209	314,074
174	2007	Gillig	15GGB291471077774	G29B102N4	MT40583	32	$373,209	356,234
175	2007	Gillig	15GGB291671077775	G29B102N4	MT40584	32	$373,209	361,382

VEHICLE NO.	YEAR	MFG.	SERIAL #	MODEL/TITLE	LICENSE NO.	SEATING CAPACITY	VALUE	MILEAGE AS OF 1-1-14
176	2007	Gillig	15GGB291871077776	G29B102N4	MT40585	32	$373,209	350,790
177	2007	Gillig	15GGB291X71077777	G29B102N4	MT40586	32	$373,209	338,736
178	2007	Gillig	15GGB291171077778	G29B102N4	MT40587	32	$373,209	333,681
179	2009	Gillig	15GGB271X91079938	G29B102N4	MT41869	32	$373,209	244,501
180	2009	Gillig	15GGE271391091548	G29B102N4	MT41870	28	$323,170	184,192
181	2009	Gillig	15GGE271591091549	G29B102N4	MT41871	28	$323,170	188,207
182	2010	Gillig	15GGB2716A1176932	G29B102N4	MT43121	28	$373,209	174,600
183	2012	Gillig	15GGD3012C1180795	G30D102N4	MT44180	39	$585,972	89,877
184	2012	Gillig	15GGB3017C1180796	G30B102N4	MT44109	28	$587,000	53,990
185	2013	Gillig	15GGB3019D1181529	G30B102N4	MT44349	32	$599,766	43,415
186	2013	Gillig	15GGB3018D1183949	G30B102N4	MT44930	32	$608,266	8,186
187	2013	Gillig	15GGB3014D1183950	G30B102N4	MT44931	32	$608,266	7,791
PRIVATE PASSENGER VEHICLES:								
Explorer	2007	Ford	1FMEU73E67UB07305	XLT	MG0174D	5	$21,000	48,804
Escape	2008	Ford	1FMCU92Z48KD64600	XLT	MG516D	5	$16,344	51,129
Escape	2010	Ford	1FMCU9C74AKA29310	XLT	MG5362E	5	$16,394	40,950
Escape	2014	Ford	1FMCU9GX4EUA39551	SE	MG7583G	5	$24,406	6,033
NON-REVENUE VEHICLES:								
Truck	2002	GMC	1GTHK24052Z109624	56841207101 RE	28918 MG	3	$29,000	47,580
Wrecker	2005	FORD	1FTYW90U0TVA06736	49214679703RE	28920MG	2	$110,000	468,430
Truck	2006	FORD	1FTSW21596EC74578	F-150	MG0397C	3	$27,000	30,883

5.7 Financial Data

The revenue required to operate and support RRTA comes from a mix of funding sources. The 2013 expenditures for RRTA fixed route and shared ride services was $15,874,800, which is shown in **Table 5-5**. Operating expenses for the fixed route services is approximately $8.6M. The shared ride service budget is approximately $7.4M annually. The farebox return, shown in **Table 5-6**, is approximately 28 percent for the fixed route service, which is approximately $2.4M annually.

Table 5-5: RRTA Expense Trends – FY08-2013

	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13
Operating Revenues	$7,172,523	$8,387,584	$8,527,736	$9,060,355	$9,382,142	$8,891,840
Operating Grants	$5,377,722	$6,135,794	$6,204,636	$6,330,049	$6,347,988	$6,739,472
Total Revenues	$12,550,245	$14,523,377	$14,827,479	$15,390,404	$15,730,130	$15,631,312
Operating Expenses	$12,657,418	$14,126,539	$14,306,445	$15,480,591	$15,715,901	$15,874,800

Table 5-6: 2013 Farebox Return

FY 13	Fixed Route
Operating Expenses	$8,588,354
Fares	$2,371,896

The RRTA FY2014 fixed route itemized annual budget is shown in **Table 5-7**.

5.8 System Performance

Operating effectiveness and financial efficiency of a transit system are two important factors to the success of the overall system. The operating effectiveness is the ability of the transit service to generate ridership. Financial efficiency is the ability of the transit system to provide service and serve residents in a cost-efficient manner. RRTA administration began route monitoring over a decade ago which allows management to review route productivity and patterns over a period of time. **Table 5-8** presents the systemwide and route characteristics for FY2013.

Table 5-7: RRTA Fixed Route Itemized 2014 Annual Budget

		Annual Budget
Revenues		
Operating Revenue		
	Passenger Revenue	$2,906,955
	Queen St Station Garage	$168,000
	Concession	$5,000
	Advertising	$110,000
	Interest Income	$1,600
	Other	$66,610
Operating Grants		
	Federal	$2,250,000
	State	$3,964,559
	County	$280,028
Total Revenue		**$9,752,752**
Expenses		
	Labor	$3,589,819
	Fringe Benefits	$3,158,423
	Services	$226,480
	Materials and Supplies	$1,942,395
	Utilities	$124,280
	Casualty/Liability	$253,720
	Misc	$130,975
Total Expenses		**$9,426,092**

Table 5-8: RRTA Systemwide & Route Characteristics

	Route	Passengers	Hours	Trip Length	Pass/Hr	Rev/Exp	Sub/Pass	Sub/Pmile
1	PCA/Southeast	170,841	9,248	2.87	18.47	35.66%	$2.57	$0.89
2	PCB/6th Wd	149,975	9,418	2.87	15.92	30.60%	$3.21	$1.12
3	PCC/8th Wd	179,404	9,555	2.87	18.78	34.98%	$2.63	$0.92
4	Elm/Park	21,349	2,230	2.87	9.57	19.50%	$6.79	$2.36
5	GVR	47,967	2,973	2.87	16.13	25.98%	$3.71	$1.29
	Trolley	21,205	2,565	2.87	8.27	17.41%	$7.23	$2.52
10	Lititz	83,959	6,056	5.47	13.86	30.31%	$4.43	$0.81
11	Ephrata	69,651	5,020	5.47	13.87	30.40%	$4.88	$0.89
12	New Holland	77,056	5,364	5.47	14.37	29.14%	$4.83	$0.88
13	White Horse	52,387	3,880	5.47	13.50	24.87%	$5.51	$1.01
14	Rockvale	270,217	11,816	5.47	22.87	46.02%	$1.92	$0.35
15	Willow St.	35,554	3,034	5.47	11.72	22.94%	$5.50	$1.01
16	Millersville	238,925	12,265	5.47	19.48	39.93%	$2.51	$0.46
17	Columbia	253,577	11,640	5.47	21.78	47.45%	$2.00	$0.37
18	E-town	49,519	4,607	5.47	10.75	24.33%	$7.08	$1.29
19	Manheim	93,207	5,978	5.47	15.59	30.98%	$3.87	$0.71
20	Greenfield	71,322	3,125	5.47	22.82	35.60%	$2.36	$0.43
	Systemwide	**1,886,115**	**108,774**	**4.34**	**17.34**	**34.45%**	**$3.15**	**$0.73**

The annual boardings, passengers per hour, and annual revenue hours are also shown in Table 5-8. Route 14-Rockvale has the highest ridership and is the most productive route for RRTA with 22.87 passengers per hour. Route 17-Columbia has the second highest ridership and is the third most productive route with 21.78 passengers per hour. The least productive route for the fixed route service is the Trolley with 8.27 passengers per hour.

In addition to passengers per hour, RRTA uses several other performance measures to monitor the fixed route service. These include:

- Cost Recovery – Fare revenues collected by route/operating cost of route.
- Subsidy per Passenger Trip – amount of additional revenue needed beyond the collected fares to fund each passenger trip.
- Subsidy per Passenger Mile - amount of additional revenue needed beyond the collected fares to fund each passenger mile.

Table 5-9 presents the performance of each route using all RRTA criteria. As shown below, the most efficient route using all performance measures is Route 14-Rockvale, followed by Route 17-Columbia, then Route 20-Greenfield. The lowest performing routes are Route-15 Willow St., Route 18-Elizabethtown, and Route 4-Elm/Parkside.

Table 5-9: RRTA Route Performance

FY 2013 Rank	Route
1	14-Rockvale
2	17-Columbia
3	20-Greenfield
4	16-Millersville
5	3-PCC/8th
6	1-SE/PCA
7	19-Manheim
8	2-PCB/6th Ward
8	10-Lititz

FY 2013 Rank	Route
10	12-New Holland
11	11-Ephrata
12	5-Grandview
13	13-White Horse
14	6-Trolley
15	15-Willow Street
16	18-E-town
17	4-Elm/Parkside

5.9 Initial RRTA Observations

The CDM Smith team summarized initial observations from the data analysis, on-site visits, discussion with staff and riders, and field work. The observations include route operations, stops, schedules, vehicles, cost, and performance. These observations were presented to begin discussions regarding realistic system improvements and solutions.

5.9.1 Operations

An initial review and snapshot of RRTA operational data shows the fixed route service operates at 17.3 passengers per hour at a cost of approximately $83.00 per hour. Two routes, Routes 14-Rockvale and Route 17-Columbia, are generally the best performing routes.

Four routes, Route 4-Elm/Parkside, Route 18-Elizabethtown, Route 15-Willow St, and the Trolley have low scores and should continue to be monitored for system adjustments. These lower numbers are reflected in the higher subsidy per passenger trip and lower passenger per hour data. The average fixed route cost per passenger trip for RRTA is approximately $4.80.

The current RRTA service travels to many key destinations throughout the City of Lancaster. As the community continues to grow, traffic congestion will continue to be a challenge for all city and county RRTA routes. Using real-time technology to inform riders is one goal for the future that will be in place by December 2014. Route timings must be monitored each year to ensure posted schedules are accurate.

The Queen Street Station currently has several critical times during the day for major transfers of all routes. During these peak times, RRTA does not schedule an operations supervisor onsite to monitor and/or assist the pullouts, which may or may not assist in ontime departures, transfers, etc. This topic may be explored in the future, as the budget allows.

5.9.2 Bus Stops

Bus stops are a very important aspect of any transit system. Every passenger is a pedestrian either before or after the completion of a trip. Whether the walk is a few hundred feet or a half-mile, appropriate pedestrian access is critical. Future partnerships with the municipalities being served should continue so that planning and engineering staff are aware that improved local sidewalks are a direct effect on transit riders. Recognizing these types of city-wide and county improvements take significant capital resources to implement. RRTA is prepared with ridership data, such as that included in this report, to assist with prioritization of stops and working to identify critical paths currently traveled by transit riders.

The discussion of bus stops also relates to facilities and amenities for passengers throughout the service area. Currently, a few shelters are placed throughout the service area. However, using the boarding and alighting data is the first step in knowing where bus shelters and/or benches should be placed. RRTA is aware that placing bus stop amenities without meeting the requirements of the Americans with Disabilities Act (ADA) is not in the best interest of the agency. As discussed above, partnership with the local municipalities is a proactive approach toward future bus stop improvements.

5.9.3 Overall Image

The overall image for RRTA appears to be a well-appreciated service for Lancaster County. The Queen Street Station is well-kept, as are vehicles, operator appearance, and bus stops.

5.9.3.1 Positive Characteristics

There are certainly many positive aspects of the current RRTA services. These include:

- Routes serve many key destinations in the community.
- Some opportunities may exist with the untapped tourism market.
- Current drivers provide excellent customer service, especially ensuring passengers have assistance with transfers and route information.
- The Queen Street Station is a positive and attractive marketing tool for RRTA.
- RRTA staff have excellent route and cost data for fixed route services, with performance measures in place.

The data presented in this chapter was reviewed by local staff and the RRTA Board to assist in developing future alternatives.

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6. Onboard Survey Results

6.1 Introduction

This chapter provides a discussion of the survey and count efforts, as well as an analysis of data, collected through onboard surveys. Information is provided about passenger demographics, trip characteristics, and perceptions of the quality of service. Understanding these qualities of existing riders are key elements in the assessment of current route strengths, weaknesses and service performance. This survey was conducted on Friday, November 8, 2013. Surveys were also conducted over the following three weeks to complete the 100 percent survey count.

6.2 Survey Methodology

A survey instrument was developed by the CDM Smith team and RRTA local staff. This survey instrument is shown in **Appendix C.**

The onboard survey conducted for this TDP Update includes data to determine origins and destinations, trip purpose, and demographics of RRTA's rider base. Surveyors were on the buses, distributing and collecting surveys. The CDM Smith team contracted with a local employment agency, Kelly Services, to complete the survey distribution and collection, as well as count passengers boarding and alighting at each stop on all RRTA fixed routes. Respondents were asked to complete only a portion of the survey if they indicated they had completed a full survey on a previous trip. This allowed for individual information to be collected on each individual trip without duplicating impertinent information. Duplicating the way someone "feels" about the service would not lend any further statistical analysis and would skew results.

Contracted temporary employees were trained on the appropriate method for distribution of surveys, and a review of survey questions was completed. Training allowed survey workers to understand the purpose of the survey and allowed them to be prepared to field questions regarding the survey instrument. Workers were provided the appropriate materials – i.e., pencils, pens, clipboard, surveys, and count sheets – to complete the survey and counts.

6.3 Survey Response

The Onboard Surveys were distributed in English and Spanish to RRTA bus riders on Friday, November 8, 2013. Every passenger over the age of 12 received a survey. A total of 2,141 completed surveys were analyzed, which equaled a response rate of 28 percent, and exceeded the projected response rate of 20 percent. Of these, approximately eight percent listed Spanish as their primary language, and two percent listed language other than English as their primary language. **Table 6-1** presents the response rates by route and by language for the surveys. The rate is calculated based upon the number of riders boarding the bus compared with those who completed a survey. Overall the City,

County, and other routes had approximately 26 to 28 percent response rate. Route 4: Elm/Parkside (58%), Route 18: Elizabethtown (50%) and the Trolley (71%) had the highest response rates with over 50 percent of the daily ridership. Of the 2,141 surveys, 128 (6%) were completed in Spanish. The greatest numbers of Spanish surveys were completed on Route 14: Rockvale/Paradise.

Table 6-1: Responses by Routes

Route #	Route Name	Ridership	Survey			
			English	Spanish	Total	Response Rate
City Routes						
1	Park City A/Southeast	622	197	17	214	34.4%
2	Park City B/6th Ward	451	117	10	127	28.2%
3	Park City C/8th Ward	659	104	5	109	16.5%
4	Elm/Parkside	73	41	1	42	57.5%
5	Grandview/Ross	214	80	2	82	38.3%
County Routes						
10	Lititz	308	110	5	115	37.3%
11	Ephrata	316	102	19	121	38.3%
12	New Holland	283	95	7	102	36.0%
13	White Horse	193	48	3	51	26.4%
14	Rockvale/Paradise	1,014	264	21	285	28.1%
15	Willow Street	98	31	0	31	31.6%
16	Millersville	1,125	162	6	168	14.9%
17	Columbia	977	183	15	198	20.3%
18	Elizabethtown	237	115	4	119	50.2%
19	Manheim	372	143	11	154	41.4%
20	Greenfield	286	110	1	111	38.8%
Other						
T	Trolley	78	54	1	55	70.5%
MU	MU Campus Shuttle	171	34	0	34	19.9%
MU	MU Park City Xpress	182	23	0	23	12.6%
Total		**7,659**	**2013**	**128**	**2,141**	**28.0%**

6.4 Trip Characteristics

One facet of the survey requested passengers to complete information about the individual trip being made on RRTA. Passengers were asked to provide this information each time they were on the bus, regardless if they had previously completed the survey or not.

6.4.1 Trip Purpose

RRTA riders were asked where they started and ended their trip. Roughly 61 percent of riders began their trip at home [while another 39 percent ended their trip by visiting a friend or relative] with 39 percent indicating that they were travelling to work. This is a lower rate than shown in past studies and reflects the recent economic downturn. The remaining riders began or ended their trip at home, shopping, school, medical/dental, or other destination. **Figure 6-1** and **Figure 6-2** describe these results.

Figure 6-1 Where did you start your trip?

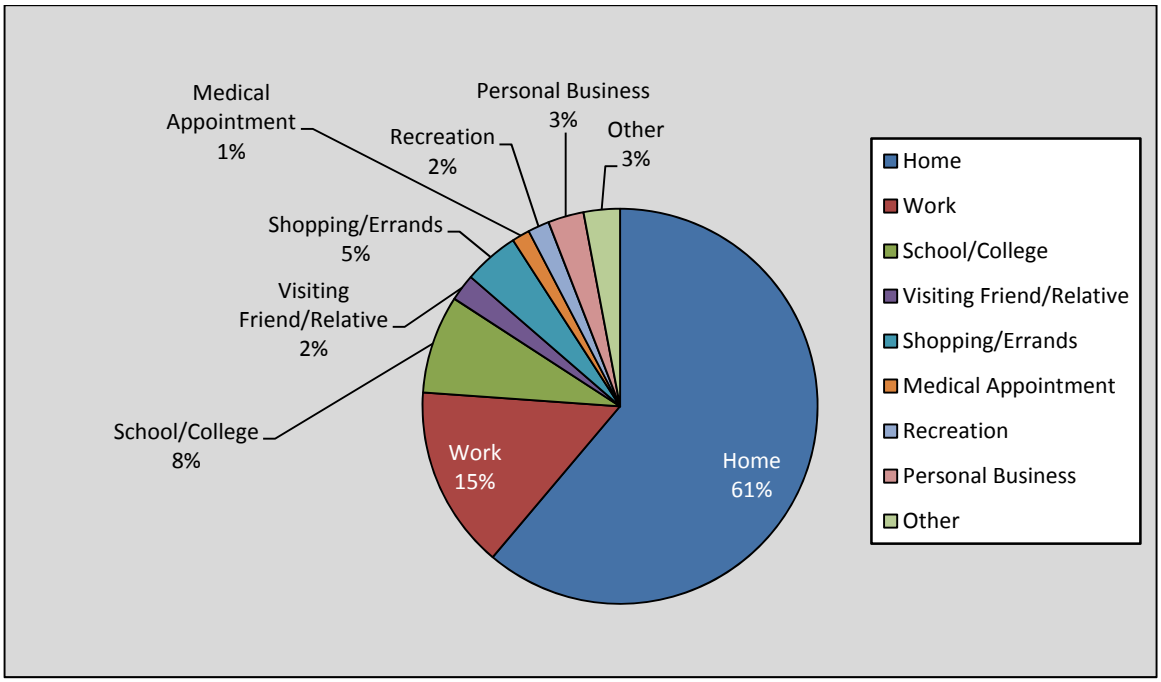
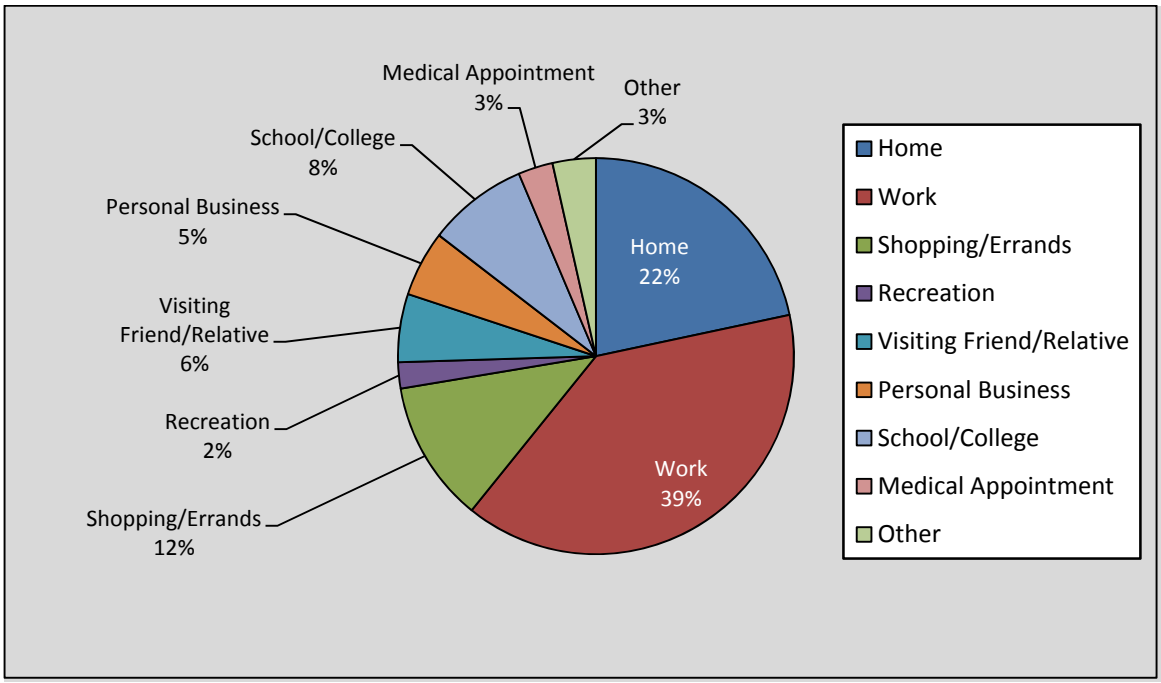


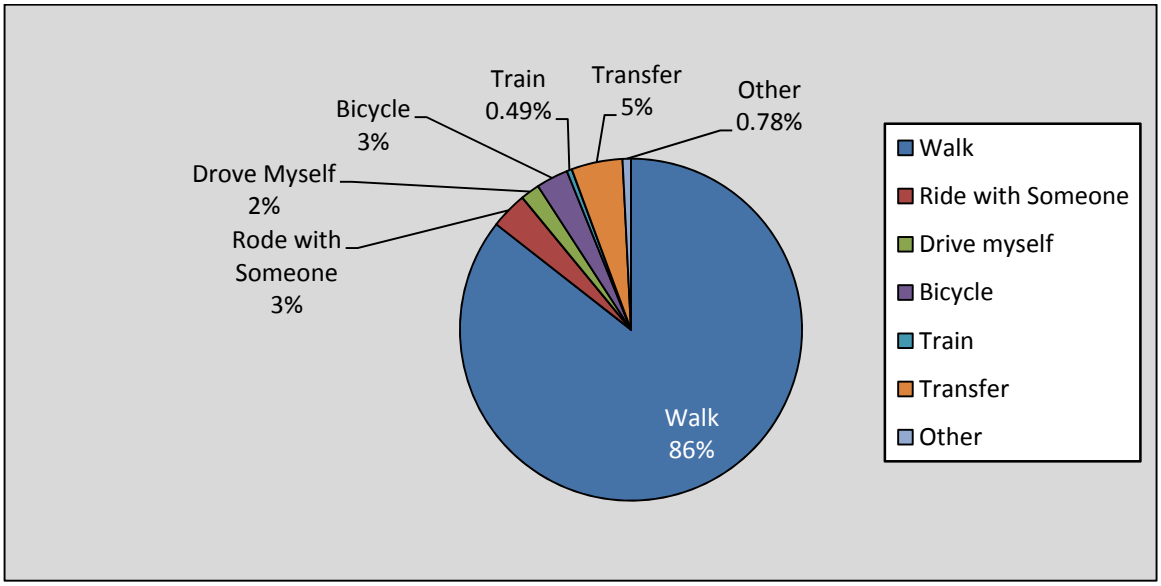
Figure 6-2 Where will you end your trip?



6.4.2 Mode of Access and Egress

RRTA riders were asked how they get to the bus stop. The vast majority of riders (86%) walked from their trip origin to where they boarded a bus, and walked from where they deboarded the bus to their final destination. The next highest response was from those who rode with someone to the bus stop, followed by those using bicycles. **Figure 6-3** displays these results.

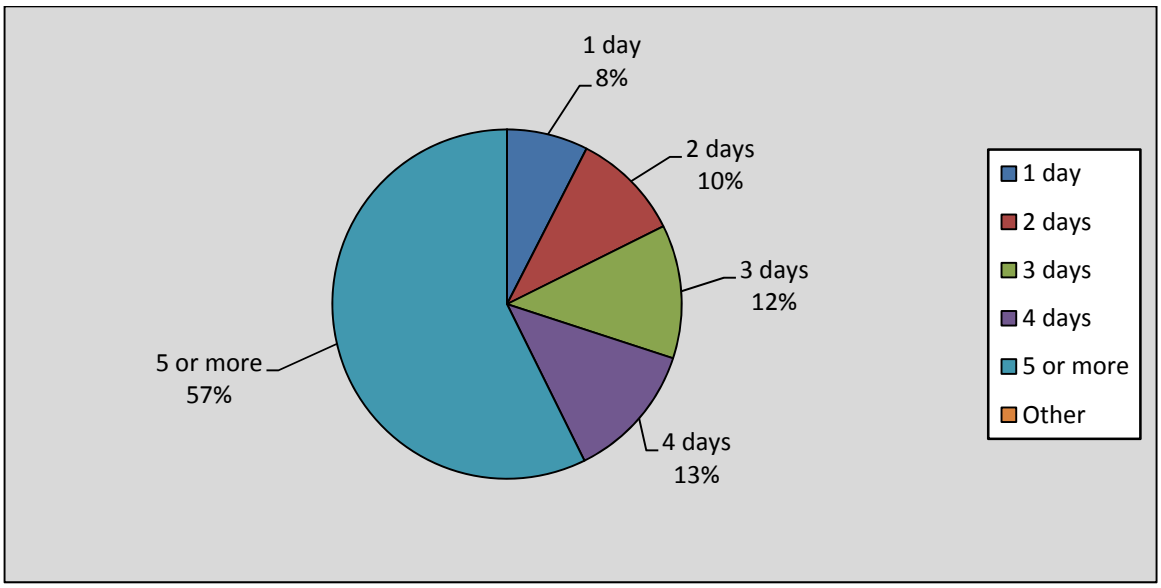
Figure 6-3: How did you get to the bus stop?



6.4.3 Temporal Analysis

Passengers were asked how often they ride the bus during the week. **Figure 6-4** shows that approximately 57 percent of passengers ride the bus 5 or more days each week, and another 25 percent ride 3 or 4 days a week.

Figure 6-4: How often do you ride RRTA?



6.5 Demographic Characteristics

There are a number of questions asked to determine demographic characteristics of transit riders on RRTA. Respondents were asked to complete information on their trip. As previously mentioned, riders who completed the demographic information on previous trips were not included to avoid duplicate responses.

6.5.1 Age and Gender

The most common age range reported was 20–40 (49%), followed by age 41-60 (30%). Of the respondents, 52 percent were female and 48 percent were male. **Figure 6-5** and **Figure 6-6** display these results.

Figure 6-5: What is your age?

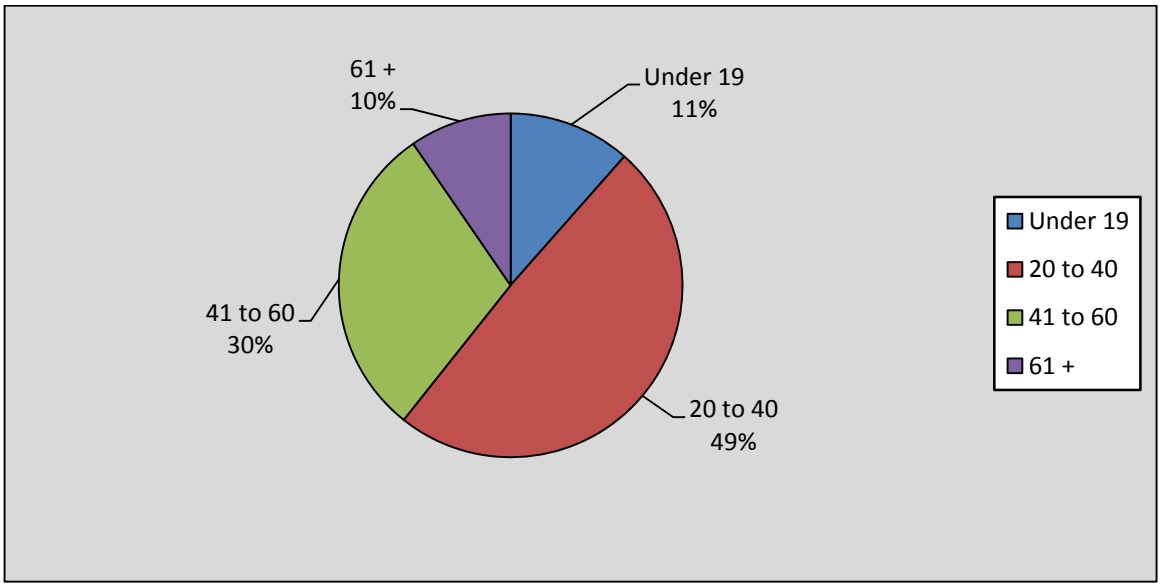
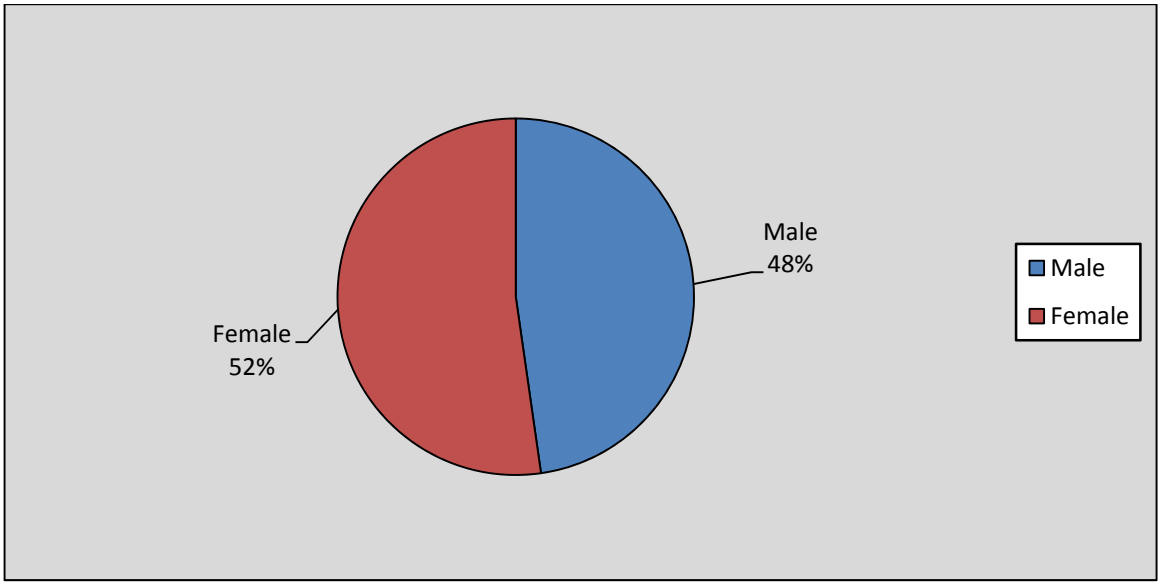


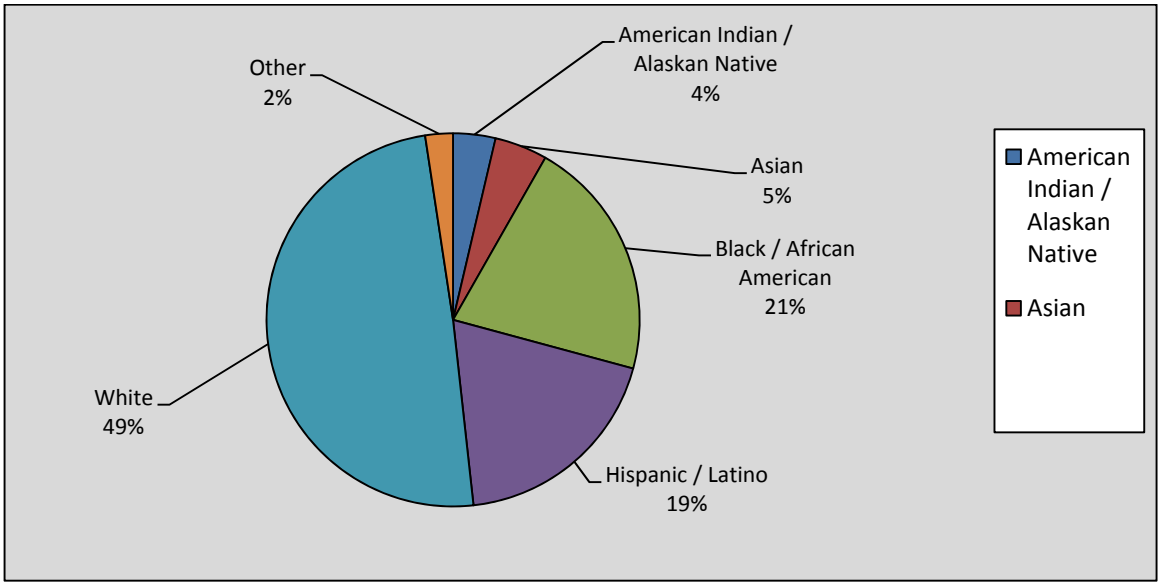
Figure 6-6: What is your gender?



6.5.2 Ethnicity

Ethnicity is shown in **Figure 6-7**. The White population group made up 49 percent of the passengers, followed by Black/African American at 21 percent and Hispanic/Latino making up 19 percent of the population. Additional nationalities were reported being Asian, American Indian/Alaskan Native, and Other.

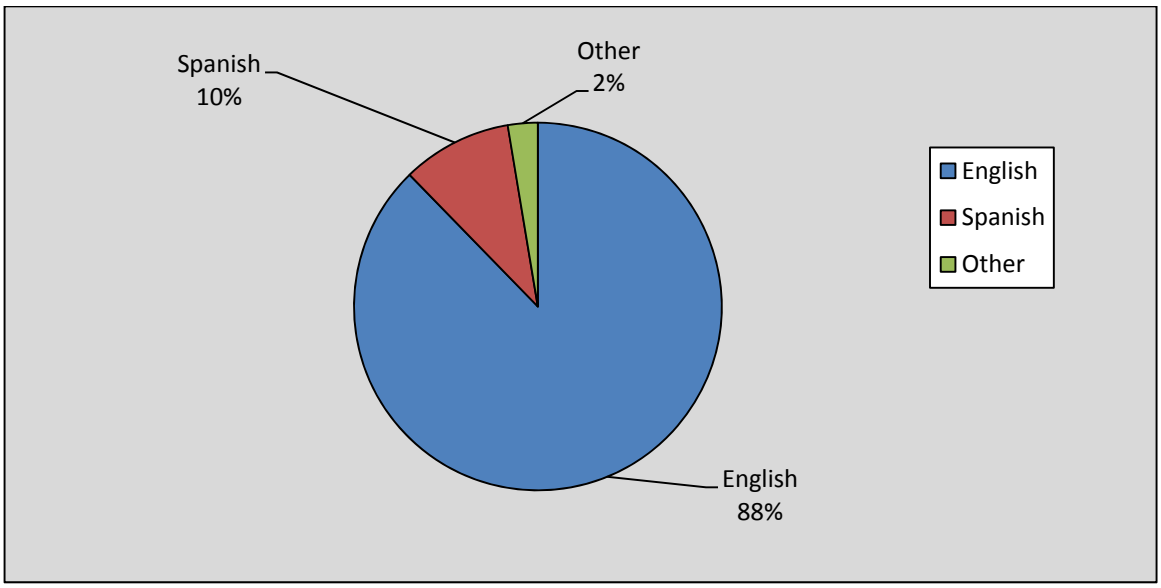
Figure 6-7: Ethnicity



6.5.3 Primary Language Spoken

The primary language spoken in the household is displayed in **Figure 6-8**. English is the primary language spoken in 88 percent of households, followed by Spanish which is spoken in 10 percent of households. Languages other than English and Spanish were reported in two percent of households.

Figure 6-8: Primary Language Spoken



6.5.4 Household Characteristics

Income, vehicle ownership, and having a valid driver's license play an important role in determining transit ridership and transit needs in any city across the United States. On this survey, approximately 78 percent of all riders responded living in households earning less than $30,000 annually. Approximately 88 percent of riders did not have a vehicle available for their trip. Approximately 60 percent of riders reported not have a valid driver license. These data indicate that the vast majority of RRTA riders are transit-dependent. **Figure 6-9**, **Figure 6-10**, and **Figure 6-11** display these results.

Figure 6-9: Vehicle Availability

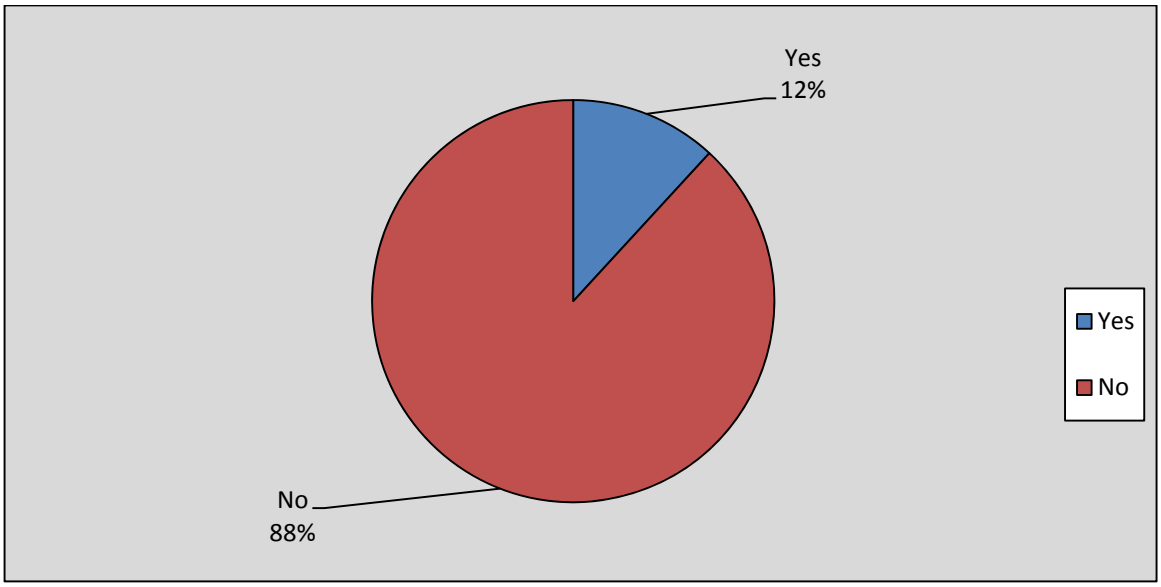


Figure 6-10: Annual Incomes

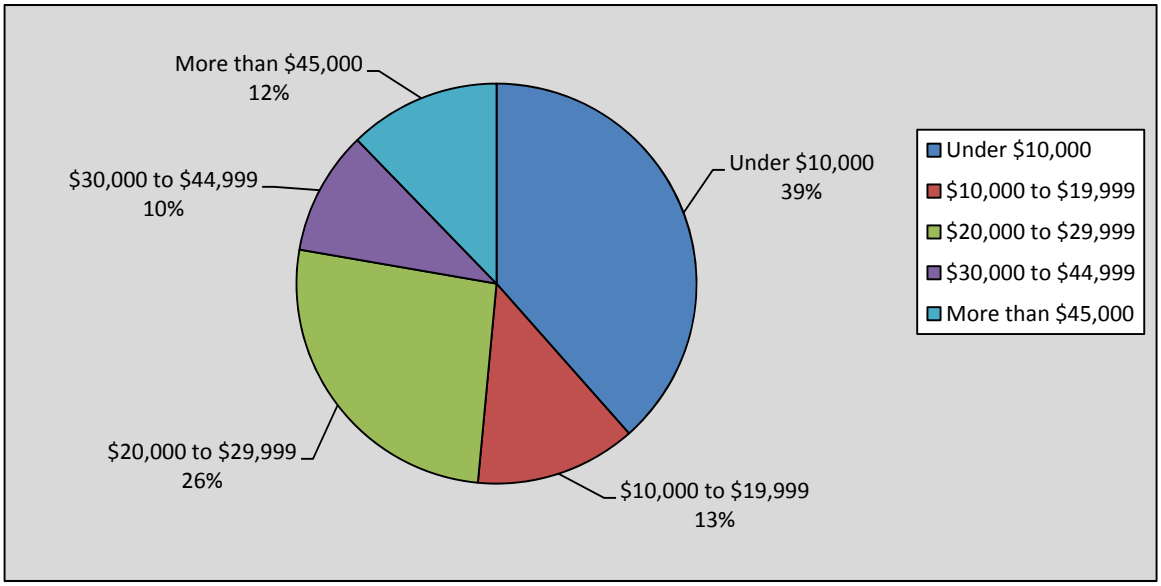
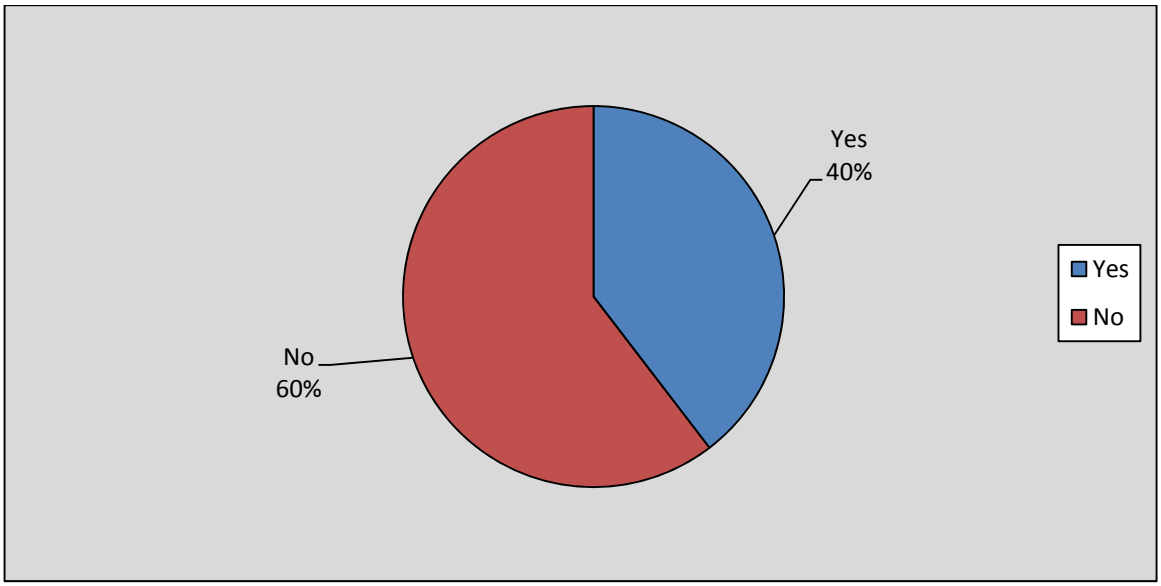
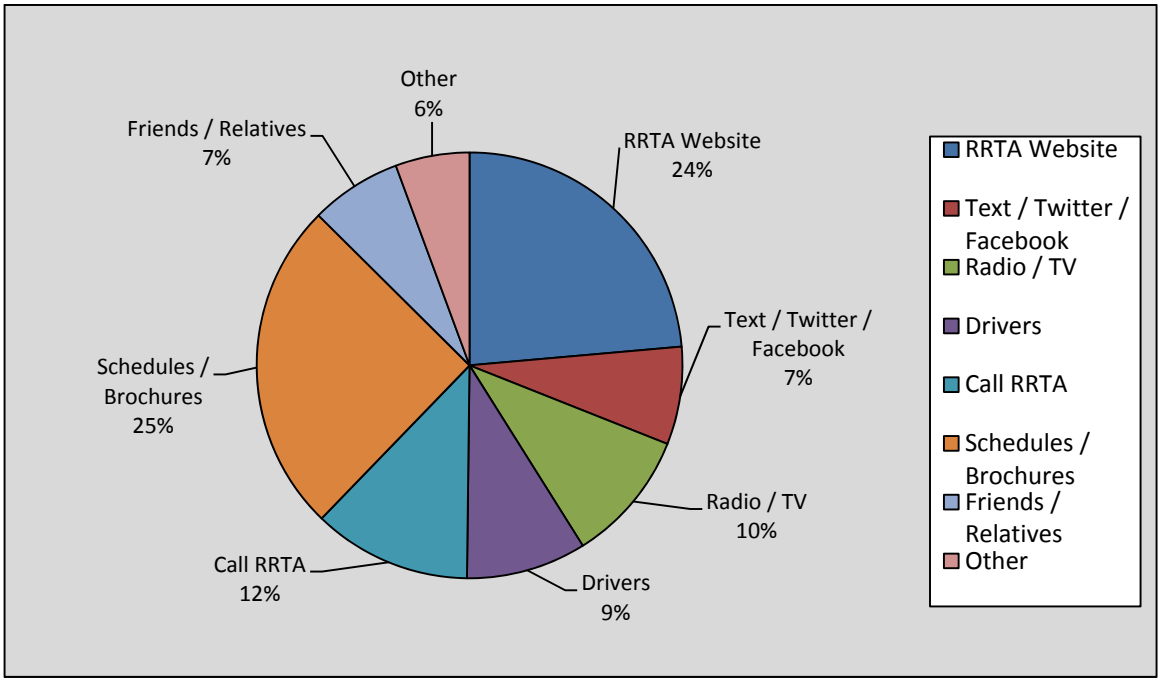


Figure 6-11: Do you have a valid driver license?



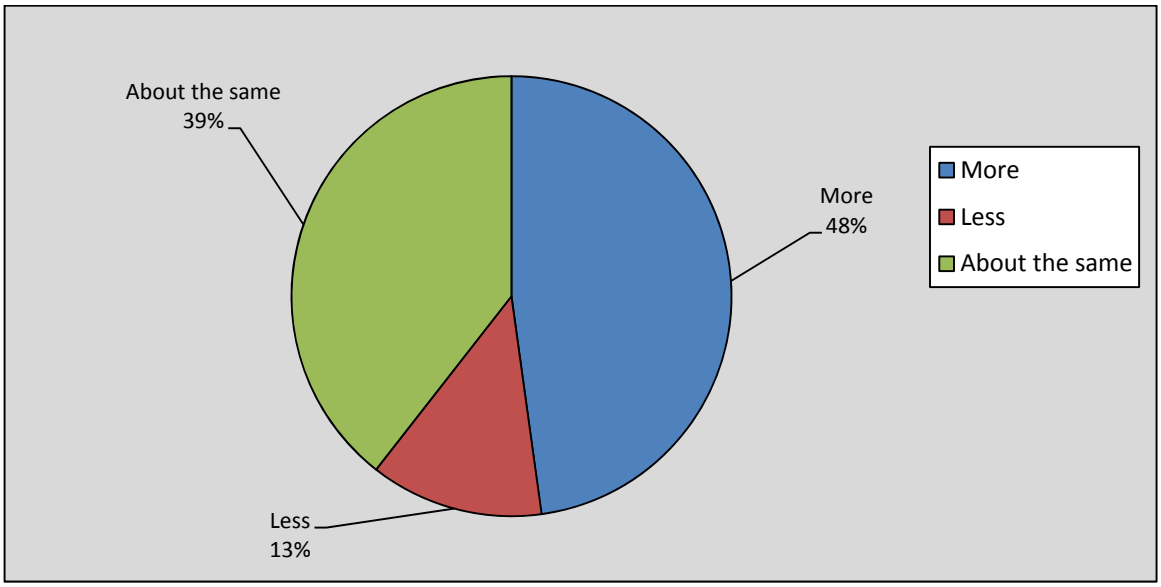
Riders were asked what would be the best source to find information about RRTA. **Figure 6-12** displays these results. One quarter of RRTA riders responded that schedules/brochures were the best source for information, followed by 24 percent of riders listing RRTA website as the best source for information about RRTA.

Figure 6-12: What would be the best source for information about RRTA?



Riders were also asked how often they ride RRTA in comparison to the previous year. Forty-eight percent of riders responded that they ride RRTA more than the previous year, as shown in **Figure 6-13.**

Figure 6-13: Compared to last year, how often do you ride RRTA?



6.6 Service Quality

Passengers were asked to rate the quality of service provided by RRTA on the 2013 onboard survey, as shown in **Table 6-2**. The response options were poor (1), fair (2), good (3), very good (4), excellent (5). Each category was given a numerical value from one to five, and the average response was then calculated for each attribute. An average score of 3.0 or higher indicates meeting or exceeding service quality perceptions for that particular attribute.

Table 6-2: Quality of Service

	Customer Satisfaction - Onboard Survey Questions	2013 Avg Score
1	On-time Performance	3.35
2	Driver Courtesy	3.91
3	Cleanliness	3.74
4	Safety	3.98
5	Condition of Buses	3.79
6	Value Received for Fare	3.76
7	Ride Guide/Website	3.84
8	Overall Service Quality	3.87
	Overall System Average	**3.78**

The service quality information collected for this TDP can be used to compare previous and future customer satisfaction survey responses and establish longitudinal information on service quality perceptions. Customers ranked all of these attributes as meeting or exceeding service quality perceptions, ranking driver courteousness, safety, and overall service quality as highest measures of service satisfaction. The lowest performing attribute was on time performance.

6.7 Origins and Destinations

Travel patterns of riders are an important determining factor in understanding travel characteristics and the type and amount of service an area should receive. This information is important to route level planning across a geographical area. Travel patterns indicate where bus riders start their trip and their final destination. This information helps determine which are directly serving patrons or if patrons are required to transfer a number of times to get to their final destination.

To graphically represent travel patterns, origin-destination travel desire lines were mapped in Geographic Information System (ArcView). A total of 1,319 addresses were fully completed from the onboard survey efforts. These addresses were geocoded for both origin and destinations. It must be noted that some level of error exists when geocoding the addresses bus riders write on the returned surveys to actual mapped locations. For example, many times bus riders may indicate an address or location that cannot correctly be located using the GIS system. The survey data was compiled and organized to correct errors, such as the spelling of St. verses Street. Additionally, patrons may have indicated places such as “home” or “doctor’s office” without an address, which could not be located.

Figure 6-14 through **Figure 6-17** show the maps of survey origins and destinations from the onboard survey. The RRTA fixed routes were overlaid on origin-destination data to determine if the current service provided is serving those patrons that use transit. Figure 6-14 and Figure 6-15 display origins and destinations overlaid on RRTA city routes and Figure 6-16 and Figure 6-17 display the RRTA County routes overlaid on the origins and destinations.

Table 6-3 and **Table 6-4** list the highest travel desire by trip origins and destinations. As shown in the tables Lancaster City CBD, as well as Lancaster City as a whole, has the highest number trip origins and destinations. Following Lancaster City in trip origins are West Earl Township, East Hempfield Township, and Manheim Township.

For destinations, Lancaster City has the highest amount of total trip. East Lampeter Township, Manheim Township, as well as Colombia Borough also displayed high activity trip destinations.

Figure 6-14: Survey Origins Overlaid on RRTA City Routes

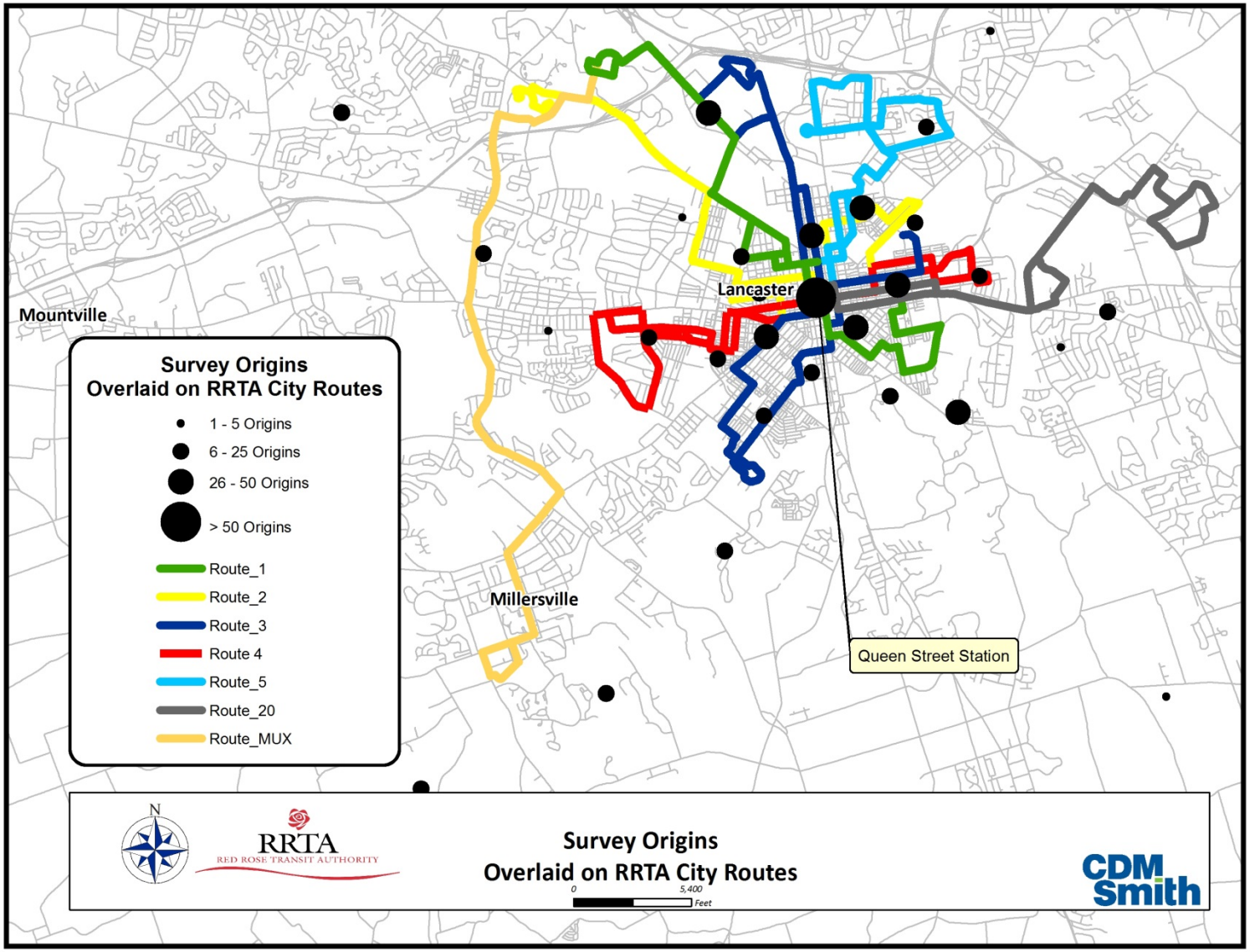


Figure 6-15: Survey Destinations Overlaid on RRTA City Routes

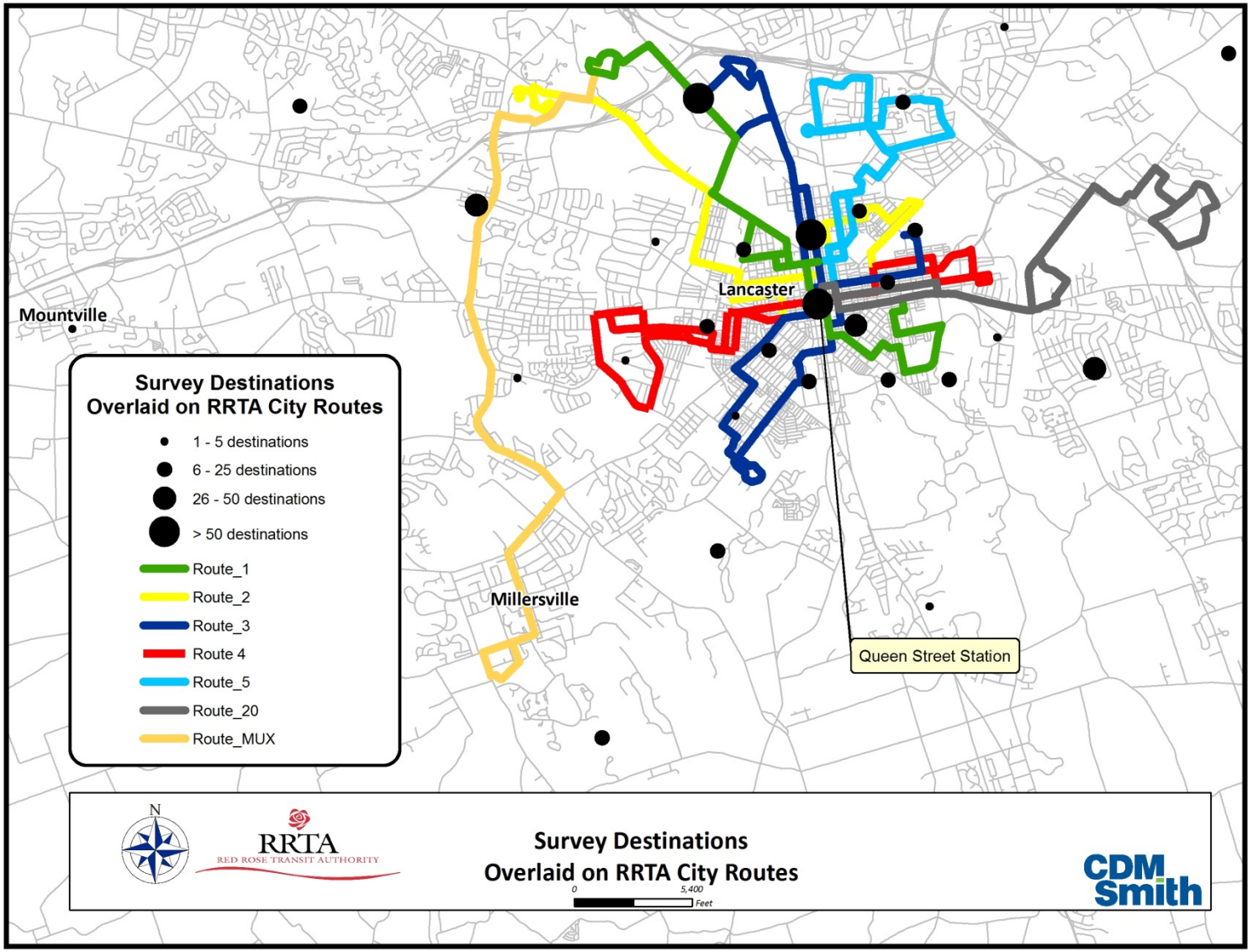


Figure 6-16: Survey Origins Overlaid on RRTA County Routes

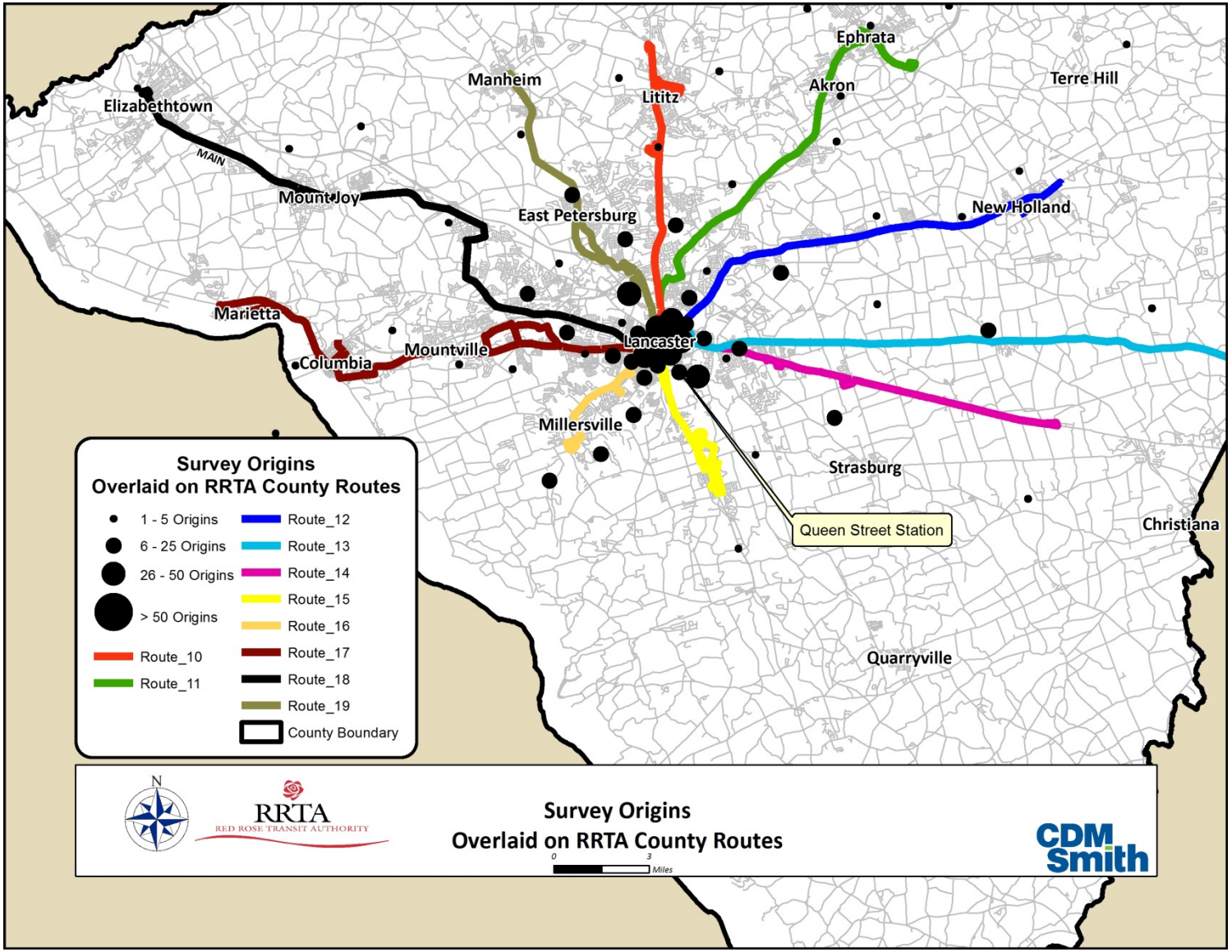


Figure 6-17: Survey Destinations Overlaid on RRTA County Routes

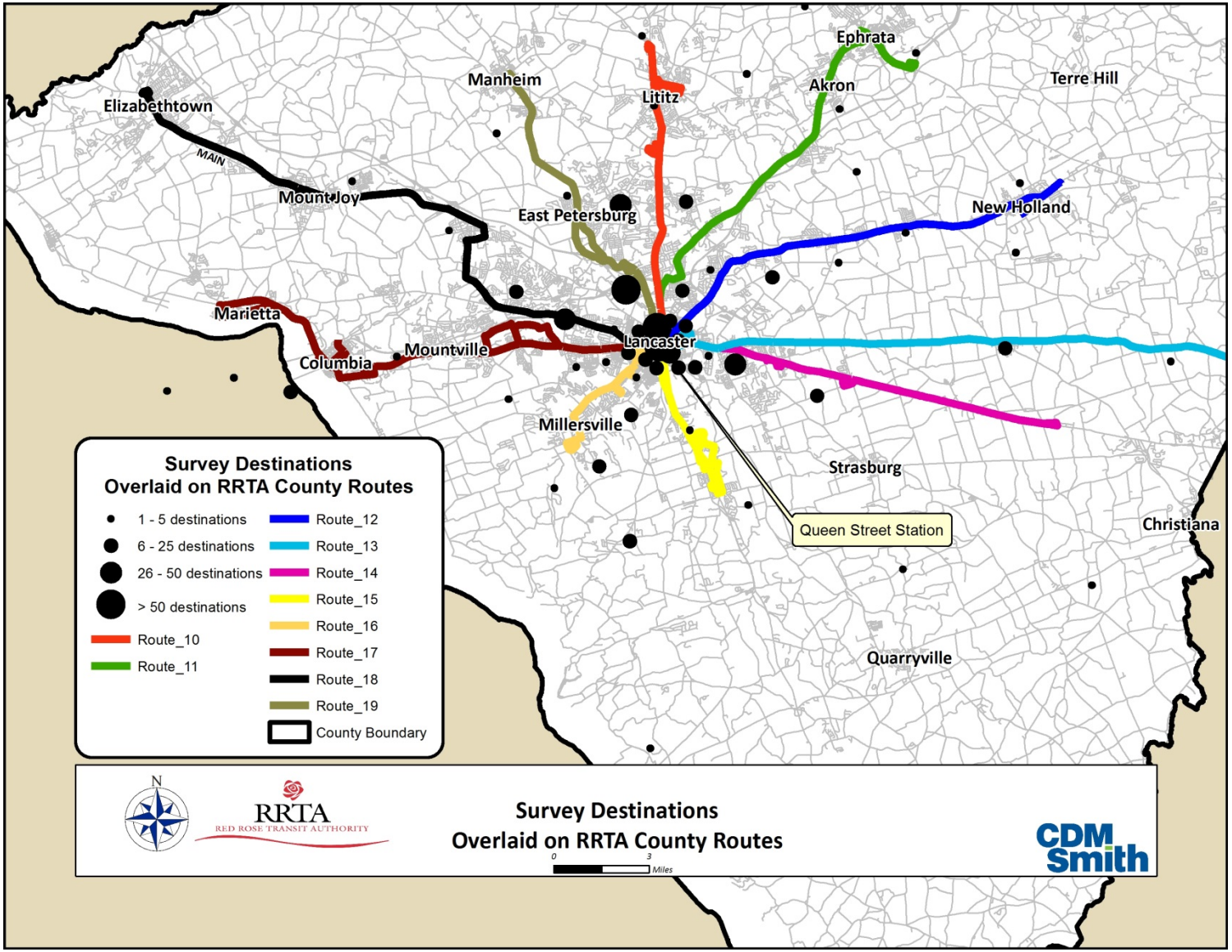


Table 6-3: RRTA Highest Trip Origins

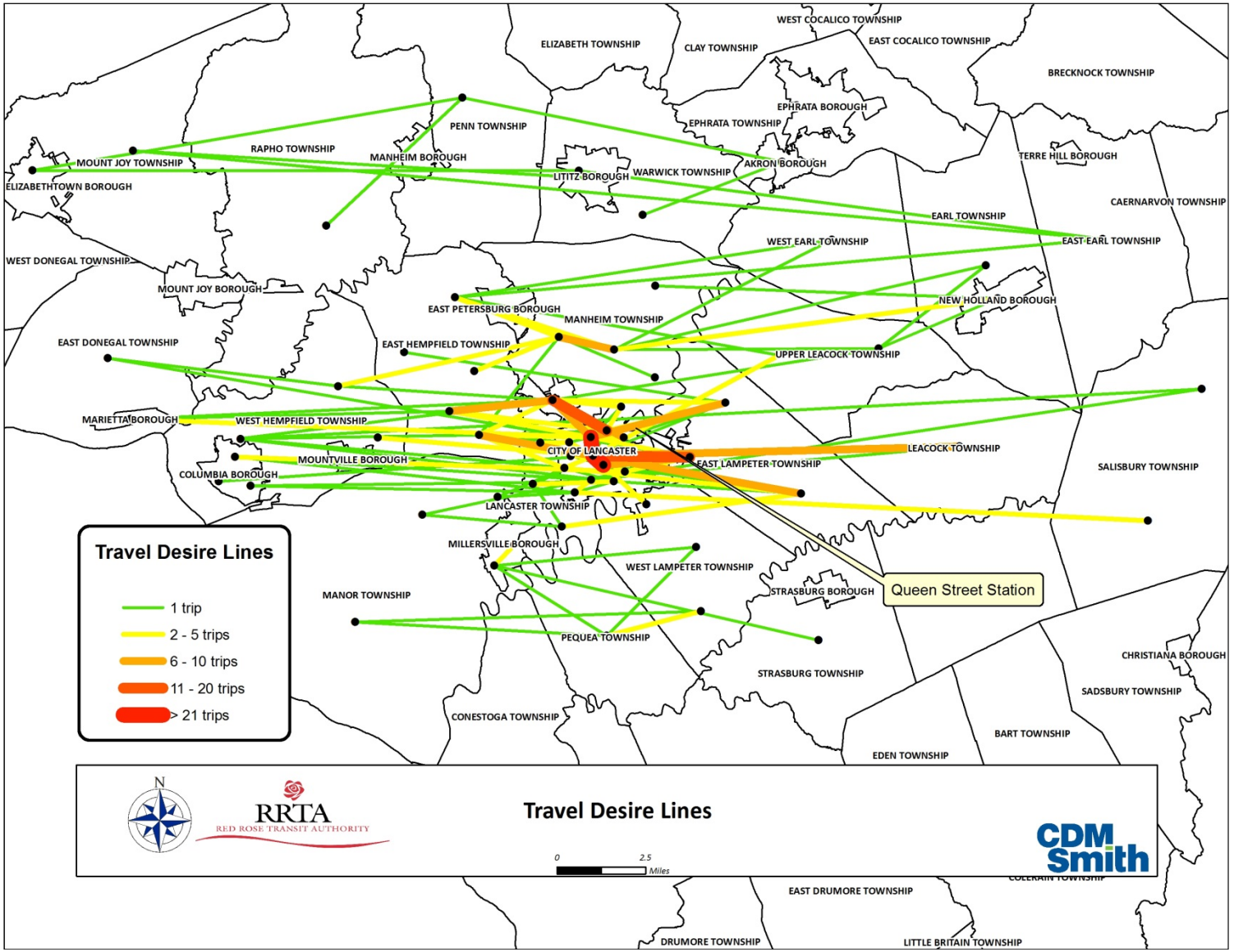
Municipality	Trips
Lancaster City	204
West Earl Township	27
East Hempfield Township	24
Manheim Township	19
West Hempfield Township	9
West Lampeter Township	8
Millersville Borough	6
Lancaster Township	5
East Lampeter Township	3
Warwick Township	3

Table 6-4: RRTA Highest Trip Destinations

Municipality	Trips
Lancaster City	186
East Lampeter Township	37
Manheim Township	32
Columbia Borough	14
Lancaster Township	13
East Hempfield Township	9
Leacock Township	7
Salisbury Township	7
Upper Leacock Township	5

Figure 6-18 graphically illustrates the travel desire lines between zones by connecting trip origins and destinations. The relative widths of travel desire lines indicated the relative amount of travel desire between zones. The zones in the illustration are divided and displayed by municipality. The greatest numbers of travel trips are zone-to-zone trips within Lancaster City. The next highest trip frequency is from East Hempfield Township to Manheim Township. These patterns are similar to what was reported in the 2010 US Census LEHD where the greatest concentrations of residents tend to live in the northwest portion of the county and travel in and around Lancaster City.

Figure 6-18: Travel Desire Lines by Municipality



7. Boarding/Alighting Survey

7.1 Introduction

A boarding and alighting survey, also known as on/off counts, was conducted on November 8, 2013, during the same survey time period as the Onboard Survey effort. The boarding and alighting survey effort involved counting all passengers who boarded RRTA transit services on that Friday. In addition, detailed information was collected regarding bicycle rack use and the boarding and deboarding locations of passengers using wheelchairs. The survey data were collected on all trips, all routes for one typical day in Lancaster County; thus a 100 percent count of RRTA routes. The majority of the counts were collected on November 8, 2013. However, for those trips that were missed, the information was gathered over the following weeks to ensure a 100 percent count was completed. Passenger boarding and alighting patterns are illustrated in the following section.

7.2 Daily Boardings/Alightings by Route

Passenger boardings and alightings were collected for each route and each trip on November 8, 2013. A total of 7,454 passenger boardings were collected by stop throughout the RRTA service area. **Table 7-1** and **Figure 7-1** through **Figure 7-4** illustrate boardings and alightings for all routes that operate daily.

Route 14 had the highest daily passenger boardings of all routes with 1,071 boardings or 14 percent. The route with the next highest passenger boardings was Route 17 - Columbia with 943 daily boardings or approximately 13 percent. Route 3 - Park City C/8th Ward has third highest boardings with 747 or approximately 10 percent of the total daily boardings. Combined, the top three routes accounted for almost 40 percent of total daily boardings.

A total of 54 passengers using wheelchairs boarded the bus, representing less than one percent of all daily boarding activity.

$$\frac{54 \text{ wheelchair boardings}}{7{,}454 \text{ total daily boardings}} \sim 1\%$$

A total of 99 bicycles were loaded on the buses during this time period, indicating that slightly more than one percent of all passengers board with a bike.

$$\frac{99 \text{ bicycle boardings}}{7{,}454 \text{ total daily boardings}} \sim 1\%$$

Table 7-1: Boardings/Alightings by Route

Route		Boardings	% of Total	Alightings	% of Total
1	Park City A/Southeast	611	8%	577	9%
2	Park City B/6th Ward	563	8%	562	8%
3	Park City C/8th Ward	747	10%	638	9%
4	Elm/Parkside	81	1%	73	1%
5	Grandview/Ross	171	2%	149	2%
10	Lititz	350	5%	275	4%
11	Ephrata	295	4%	244	4%
12	New Holland	301	4%	262	4%
13	White Horse	159	2%	146	2%
14	Rockvale/Paradise	1,071	14%	935	14%
15	Willow Street	151	2%	151	2%
16	Millersville	643	9%	593	9%
17	Columbia	943	13%	808	12%
18	Elizabethtown	240	3%	216	3%
19	Manheim	409	5%	403	6%
20	Greenfield	360	5%	353	5%
MU	Trolley	169	2%	166	2%
MUX	MU Campus Shuttle	107	1%	103	2%
T	MU Park City Xpress	83	1%	83	1%
Total		**7,454**		**6,737**	

Figure 7-1: Total Boardings by Route

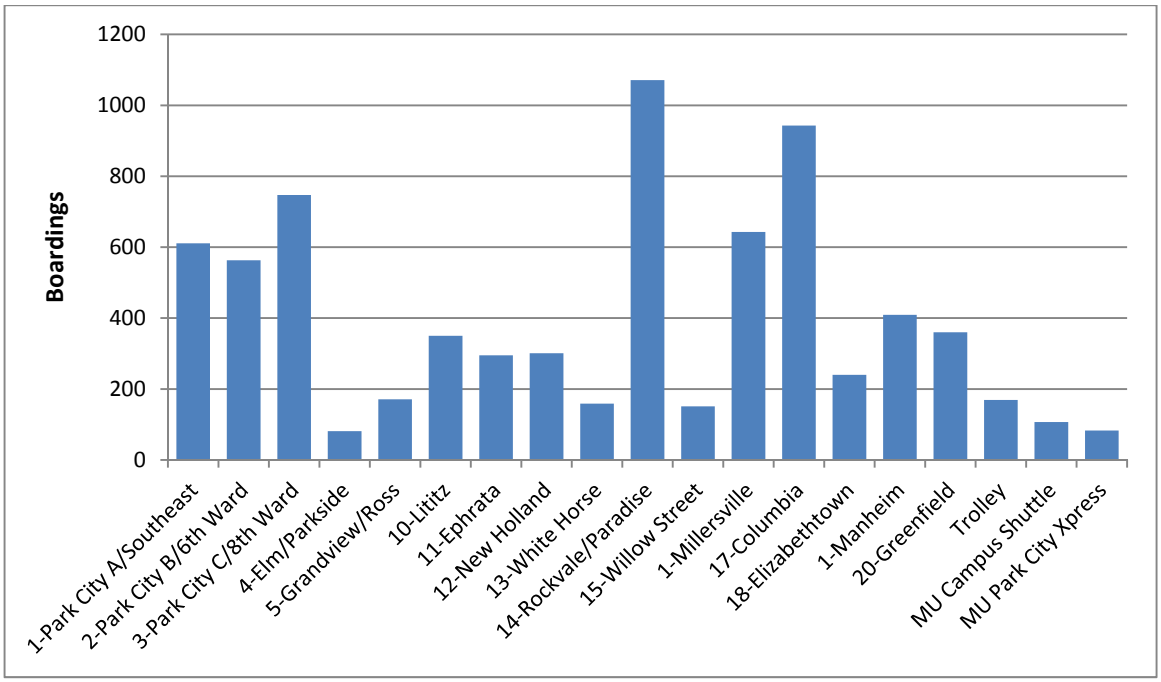


Figure 7-2: Proportion of Boarding by Route

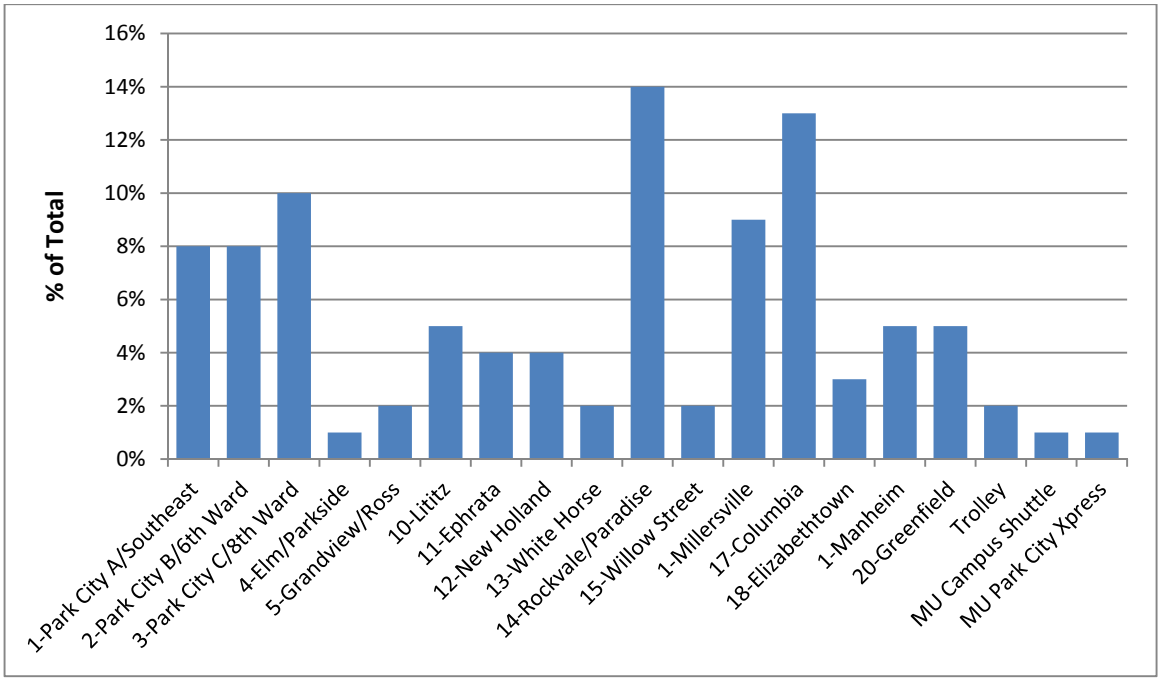


Figure 7-3: Total Alightings by Route

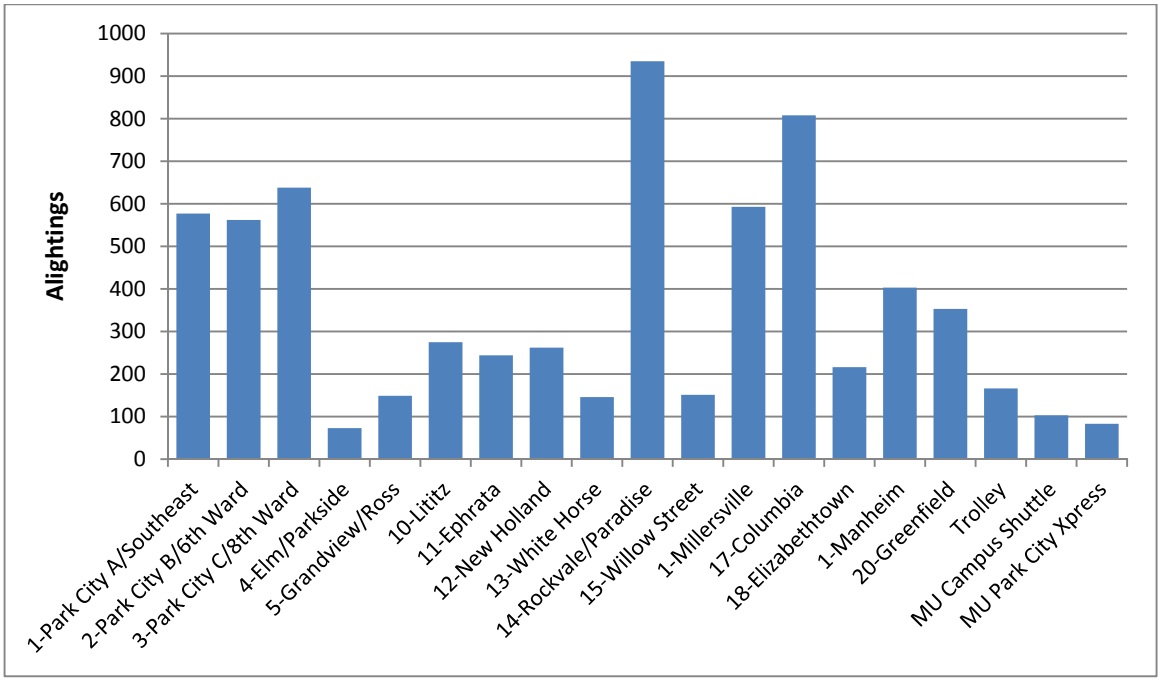
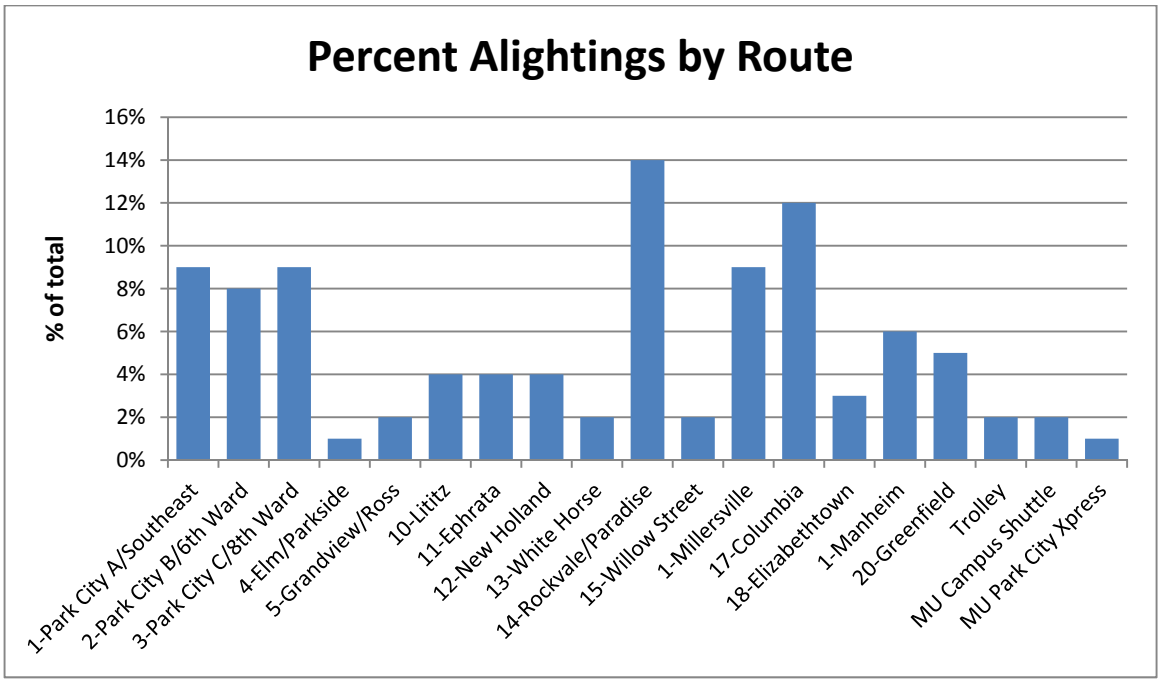


Figure 7-4: Proportion of Alightings by Route



7.3 Temporal Analysis

The systemwide daily boardings for RRTA were analyzed by various times of the day by route. **Table 7-2** shows the proportion of boardings broken down by time period and route. The number of passengers by time period determines the boarding patterns during various times of the day, which helps decide peak load times, peak-hour vehicle allocations, and schedules. The temporal analysis divides the total daily boardings into the following five time periods.

- Before 9:00 a.m.
- Between 9:00 a.m. and 12:00 noon
- Between 12:00 noon and 3:00 p.m.
- Between 3:00 p.m. and 6:00 p.m.
- After 6:00 p.m.

Table 7-2: Proportion of Boardings by Time Period

Time Period	% of Total
Before 9:00 a.m.	25%
9:00 a.m. to 12:00 noon	22%
12:00 p.m. – 3:00 p.m.	21%
3:00 p.m. to 6:00 p.m.	23%
After 6:00 p.m.	8%

Figure 7-5 and **Figure 7-6** illustrate the total daily boardings and proportion of daily boardings for various times of the day. As depicted, the time period before 9:00 a.m. has the highest number of boardings, representing 25 percent of total boarding counts. The time period after 6:00 p.m. has the lowest number of boardings representing only 8 percent of the total boardings, due to limited service after this time.

Figure 7-5: Boardings by Time Period

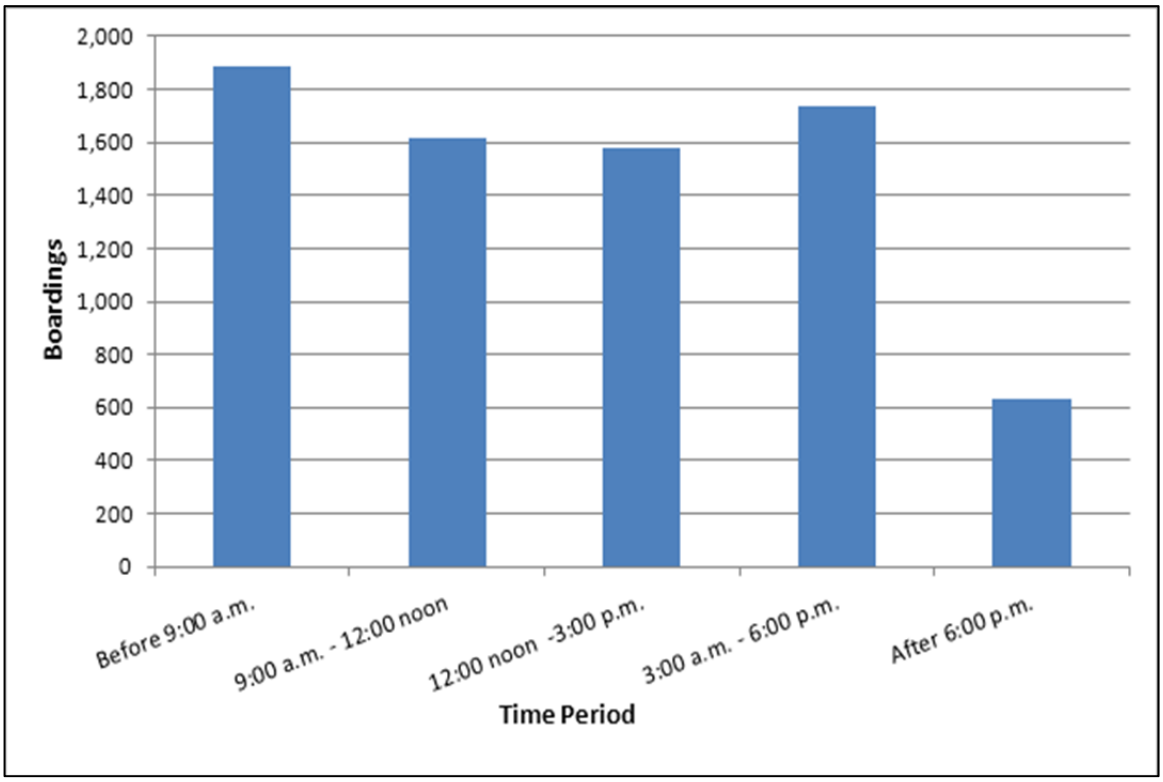


Figure 7-6: Proportion of Boardings by Time Period

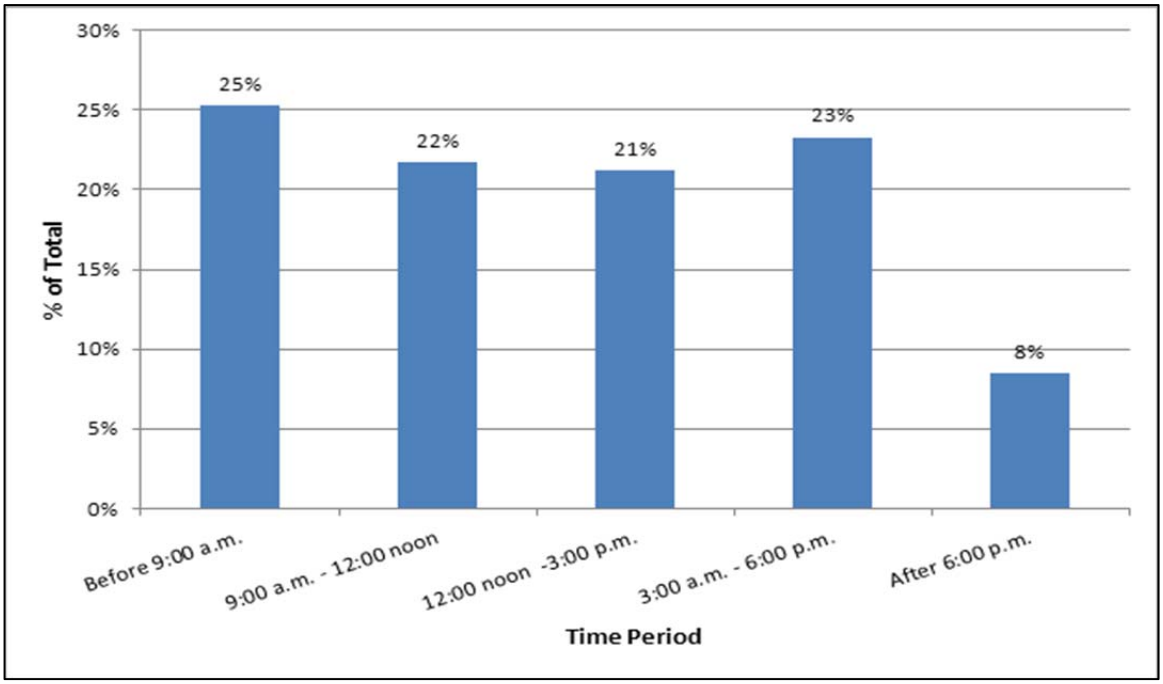


Figure 7-7 through **Figure 7-16** shows the total boardings categorized into the five time periods by route.

7.3.1 Boardings before 9:00 a.m.

Figures 7-7 and 7-8 show boardings before 9:00 a.m. by route. The total before 9:00 a.m. is 1,887, which comprised 25 percent of all boardings. Route 17 – Columbia has the most boardings during this time of the day with 272 boardings. The route with the second highest boardings before 9:00 a.m. is Route 14 – Rockvale/Paradise with 221 boardings.

Figure 7-7: Boardings Before 9:00 a.m.

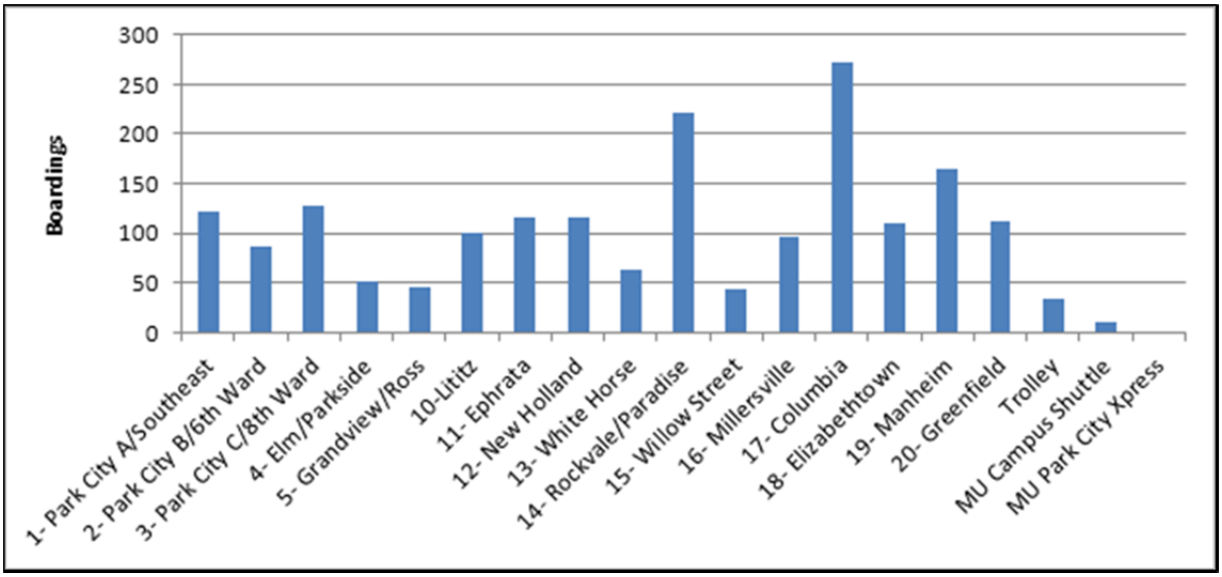
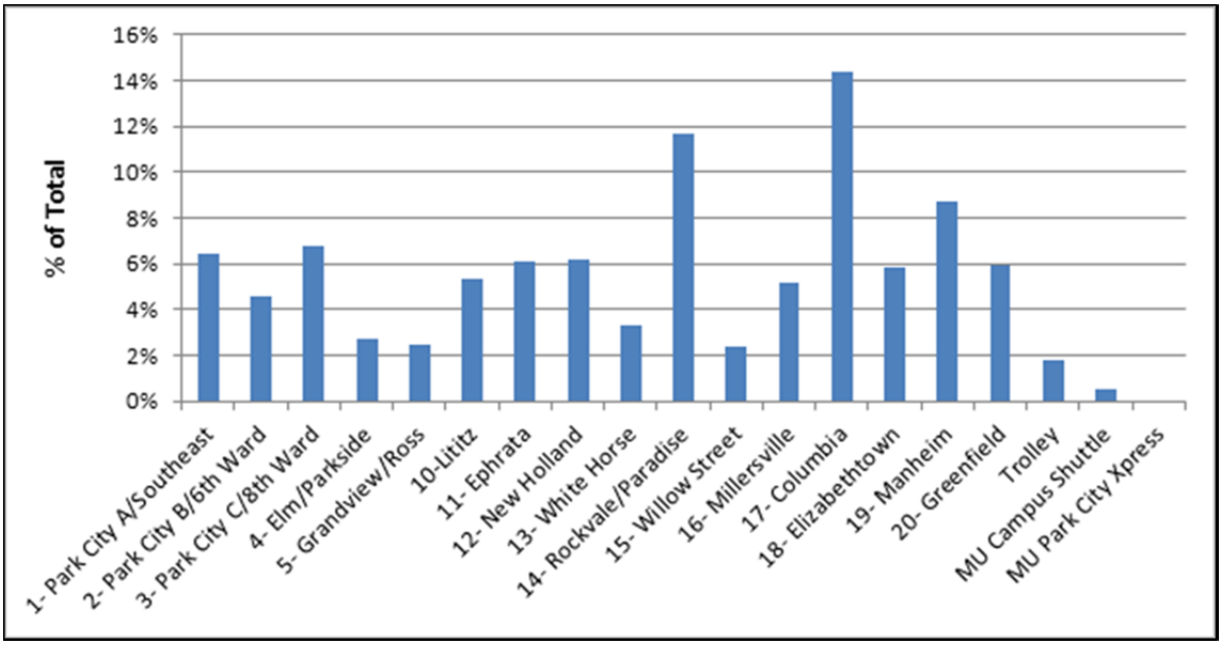


Figure 7-8: Proportion of Boardings Prior to 9:00 a.m.



7.3.2 Boardings Between 9:00 a.m. and 12:00 Noon

Route 16 – Millersville has the highest passenger boardings with 196 passengers which comprises of 12 percent of the total boardings between 9:00 a.m. and 12:00 noon. The route with the second highest boardings during this time period is Route 2- Park City B/6th Ward with 188 boardings. Figures 7-9 and 7-10 shows the total boardings between 9:00 a.m. and 12:00 noon by route.

Figure 7-9: Boardings between 9:00 a.m. and 12:00 Noon

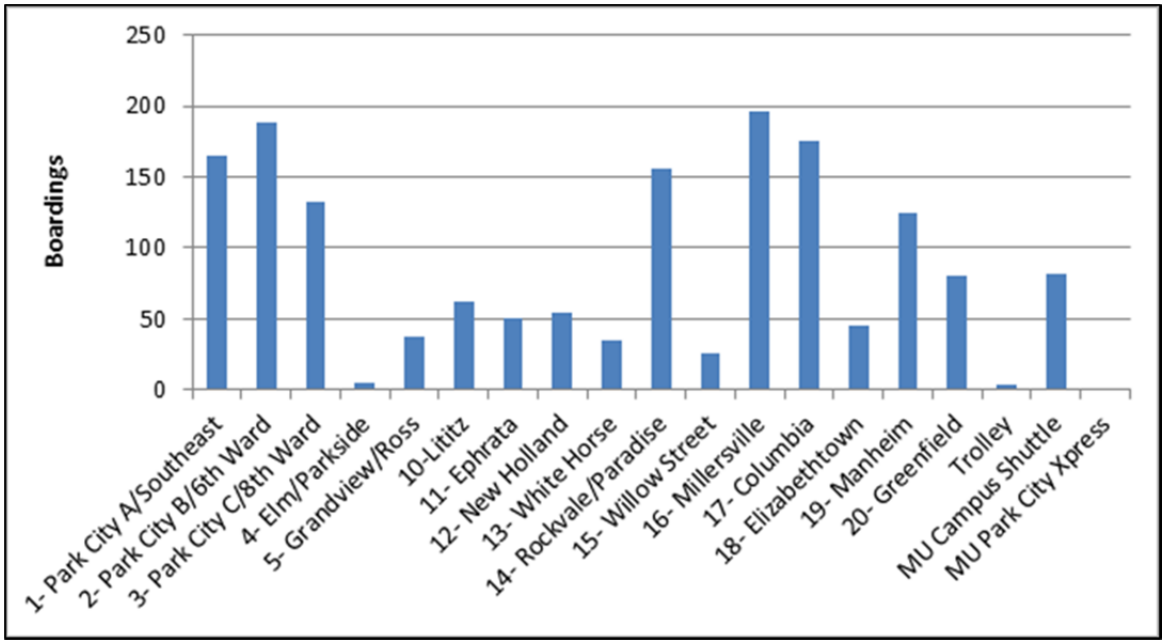
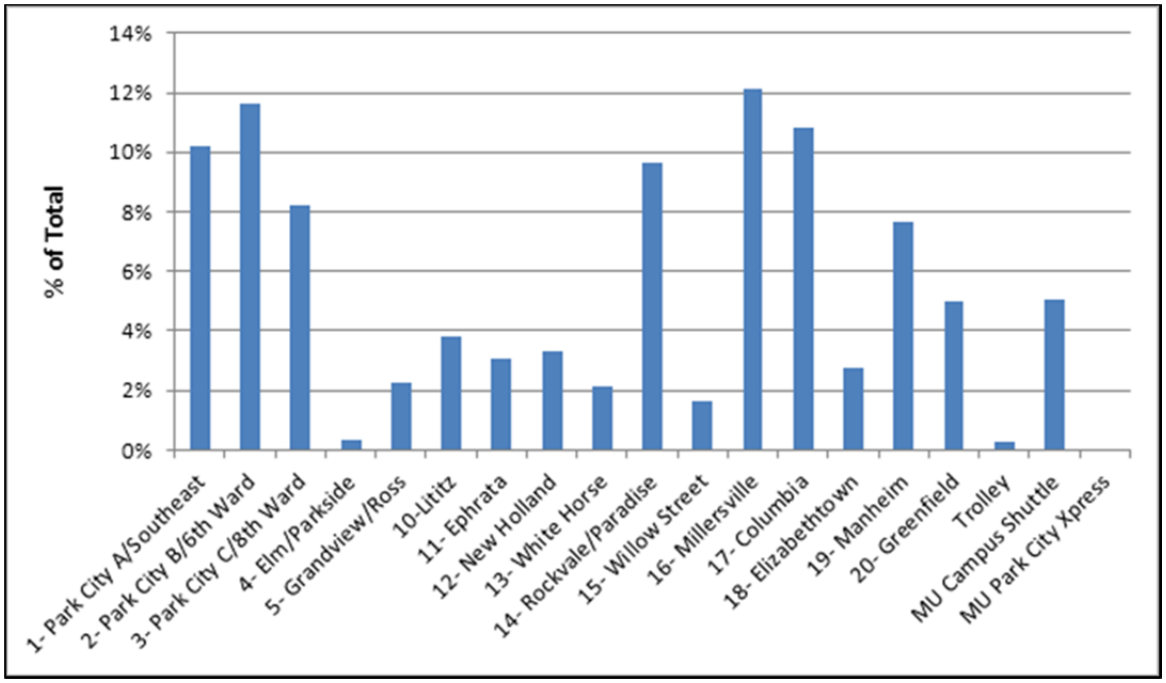


Figure 7-10: Proportion of Boardings between 9:00 a.m. and 12:00 Noon



7.3.3 Boardings Between 12:00 Noon and 3:00 p.m.

Route 14 – Rockvale/Paradise and Route 17 – Columbia have the highest boardings for this time period with 242 and 241 boardings respectively, each comprising 15 percent of the total boardings. Figures 7-11 and 7-12 show the total boardings between 12:00 noon and 3:00 p.m. by route.

Figure 7-11: Boardings between 12:00 Noon and 3:00 p.m.

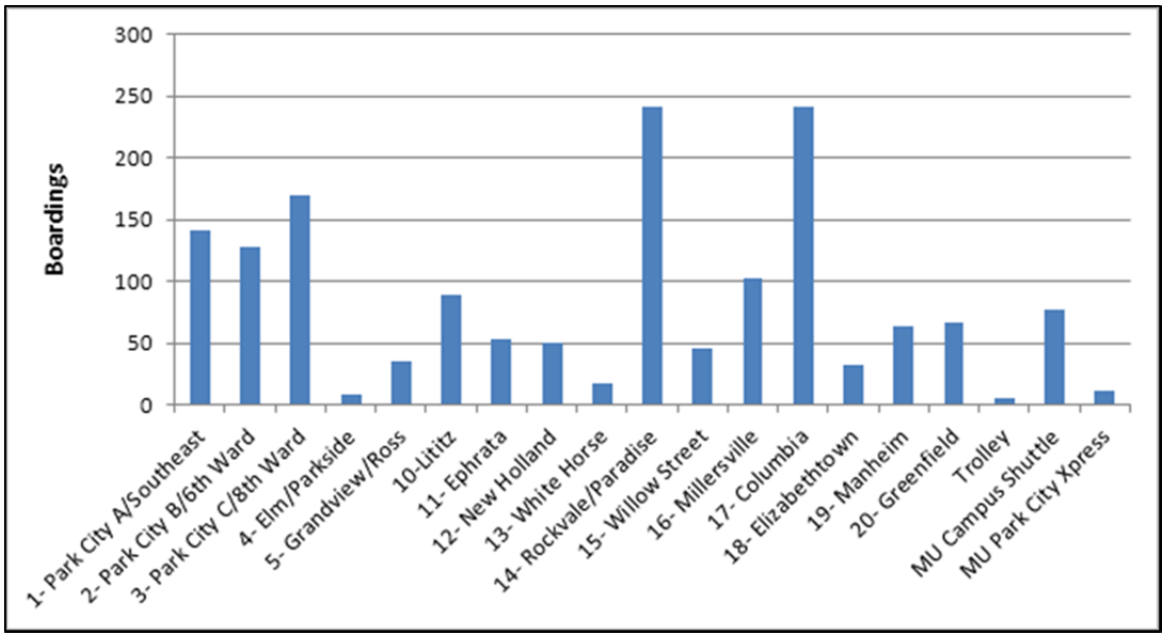
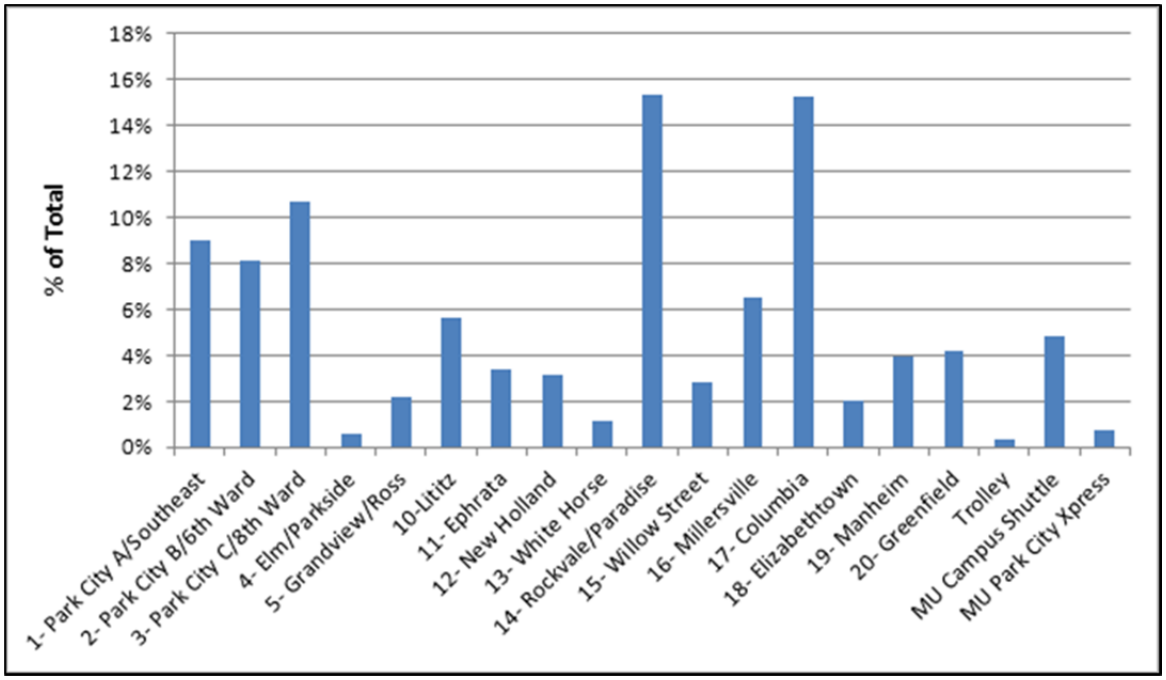


Figure 7-12: Proportion of Boardings between 12:00 Noon and 3:00 p.m.



7.3.4 Boardings between 3:00 p.m. and 6:00 p.m.

Route 14 – Rockvale has the highest boardings for this time period with 317, comprising 18 percent of the total boarding. The route with the second highest boardings was Route 3- Park City C/8th Ward with 219 boardings. Figure 7-13 and Figure 7-14 shows total boardings between 3:00 p.m. and 6:00 p.m. by route.

Figure 7-13: Boardings between 3:00 p.m. and 6:00 p.m.

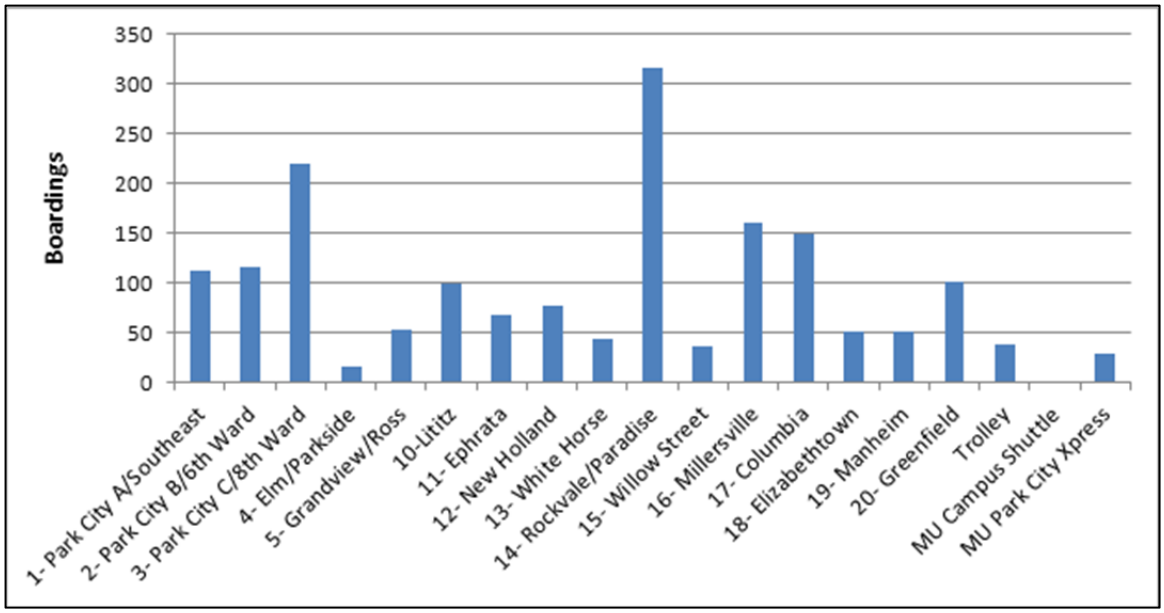
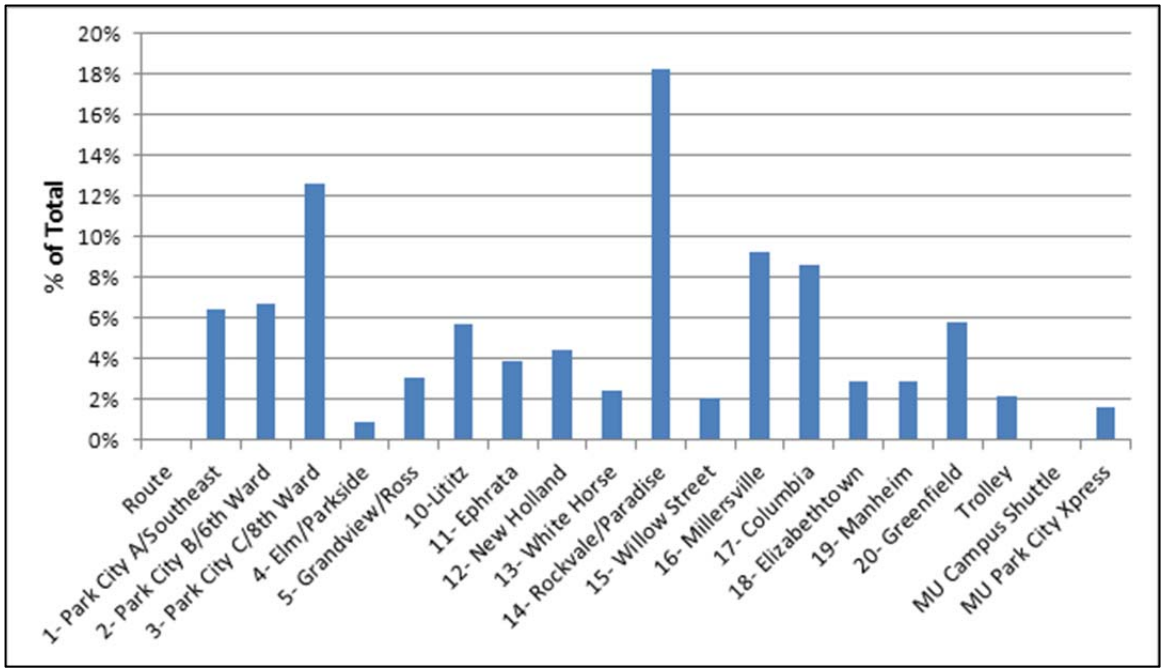


Figure 7-14: Proportion of Boardings between 3:00 p.m. and 6:00 p.m.



7.3.5 Boardings After 6:00 p.m.

Route 14 – Rockvale/Paradise has the highest boardings for this time period with 135, comprising of 21 percent of the total boardings. The route with the second highest boardings is Route 17- Columbia with 106 boardings. Figure 7-15 and Figure 7-16 show boardings after 6:00 p.m. by route.

Figure 7-15: Boardings After 6:00 p.m.

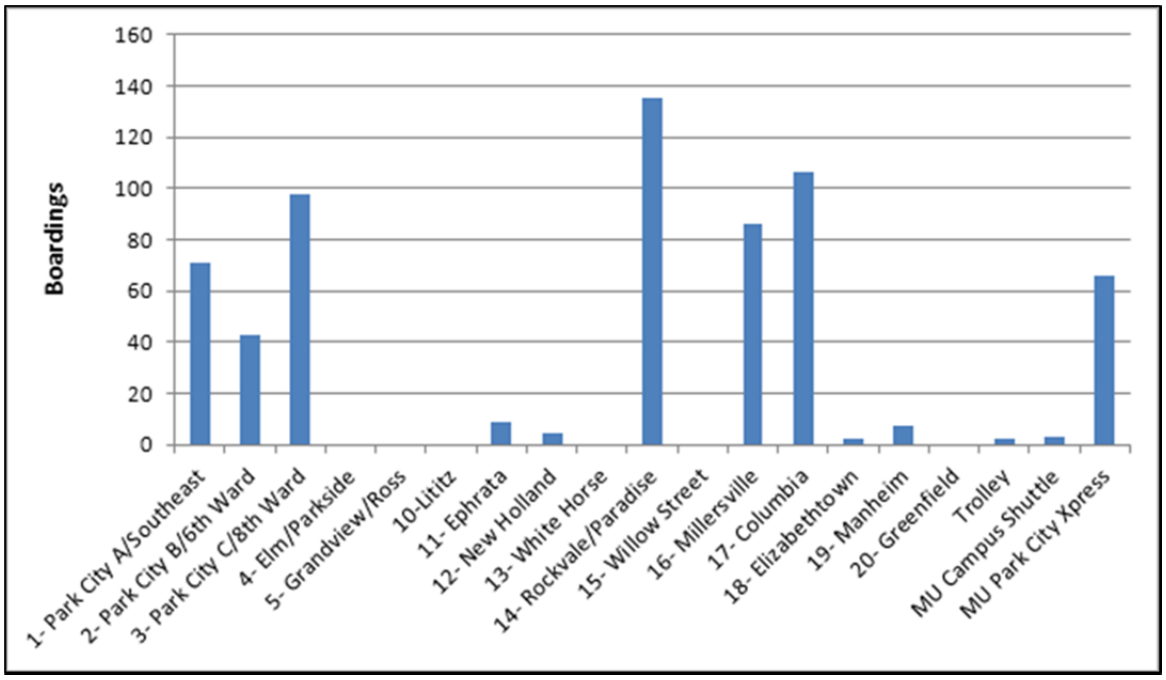
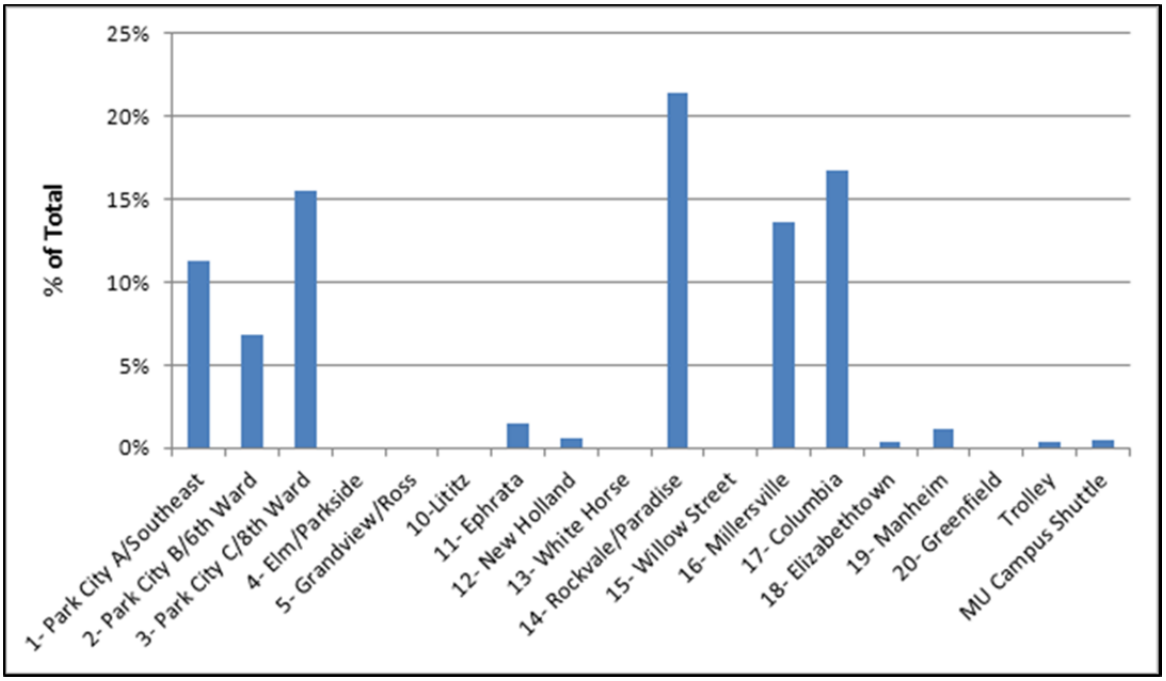


Figure 7-16: Proportion of Boardings After 6:00 p.m.



7.4 Boarding /Alighting Activity

Stops with the highest boarding and alighting activity for RRTA city and county routes are shown in **Figure 7-17** through **Figure 7-20**. . Figure 7-17 and Figure 7-18 present activity for the city routes and Figure 7-19 through Figure 7-20 present the county routes. RRTA bus stops were uniquely coded by route and then by location, which allowed the highest boardings and alightings to be mapped by route and boarding or alighting location.

Figure 7-21 through **Figure 7-54** present boardings and alighting activity by route by stop. Each map shows a scaled dot representing the number of daily passenger boardings and alightings at each bus stop along the route for inbound and outbound trips

7.5 Busiest Bus Stop Locations

As discussed above, the boarding/deboarding survey of the fixed route system was conducted as part of this study's work effort. Stop level ridership (boardings and alightings) recorded for each route was aggregated to develop a system wide assessment of ridership activity by stop. Bus stops play a critical role in the success of a public transit program. Shelters build awareness of the service and can generate advertising revenue. Yet, first and foremost they can provide safety and comfort. Bus stops and shelters also play a vital role in attracting additional ridership. The absence of adequate amenities at bus stops can deter riders from using transit given the relative comfort and convenience offered by a personal vehicle.

Figure 7-17: Systemwide Boardings City Routes

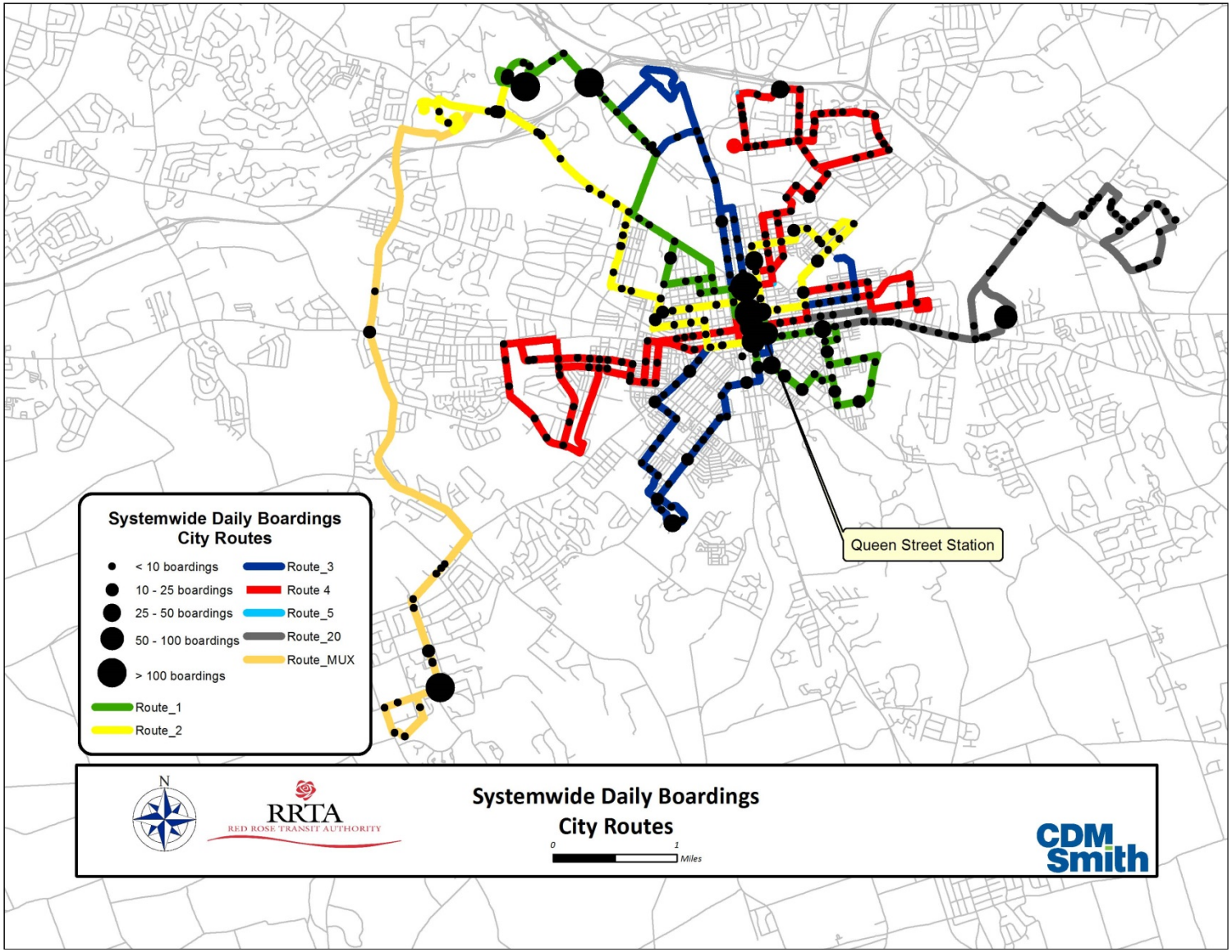


Figure 7-18: Systemwide Alightings City Routes

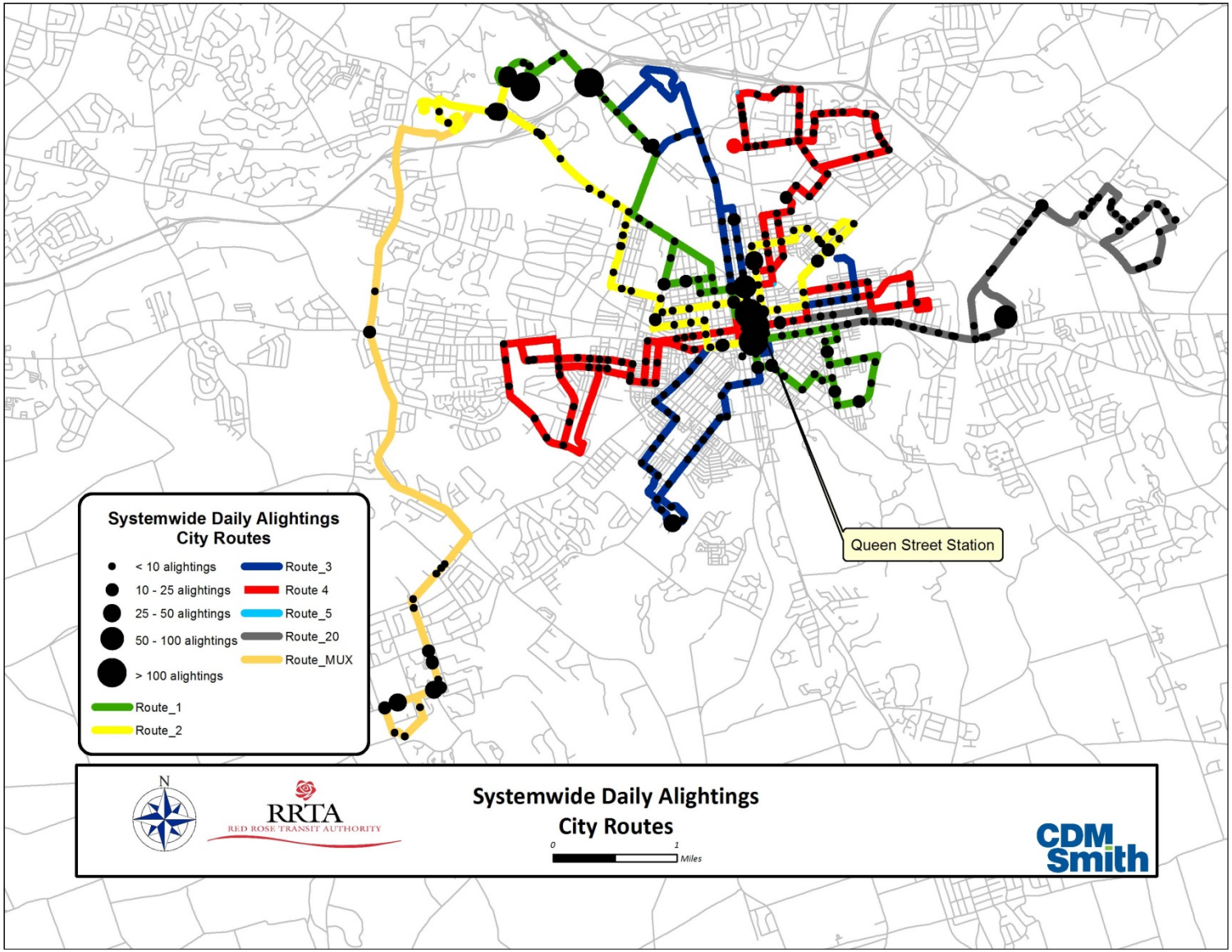


Figure 7-19: Systemwide Boardings County Routes

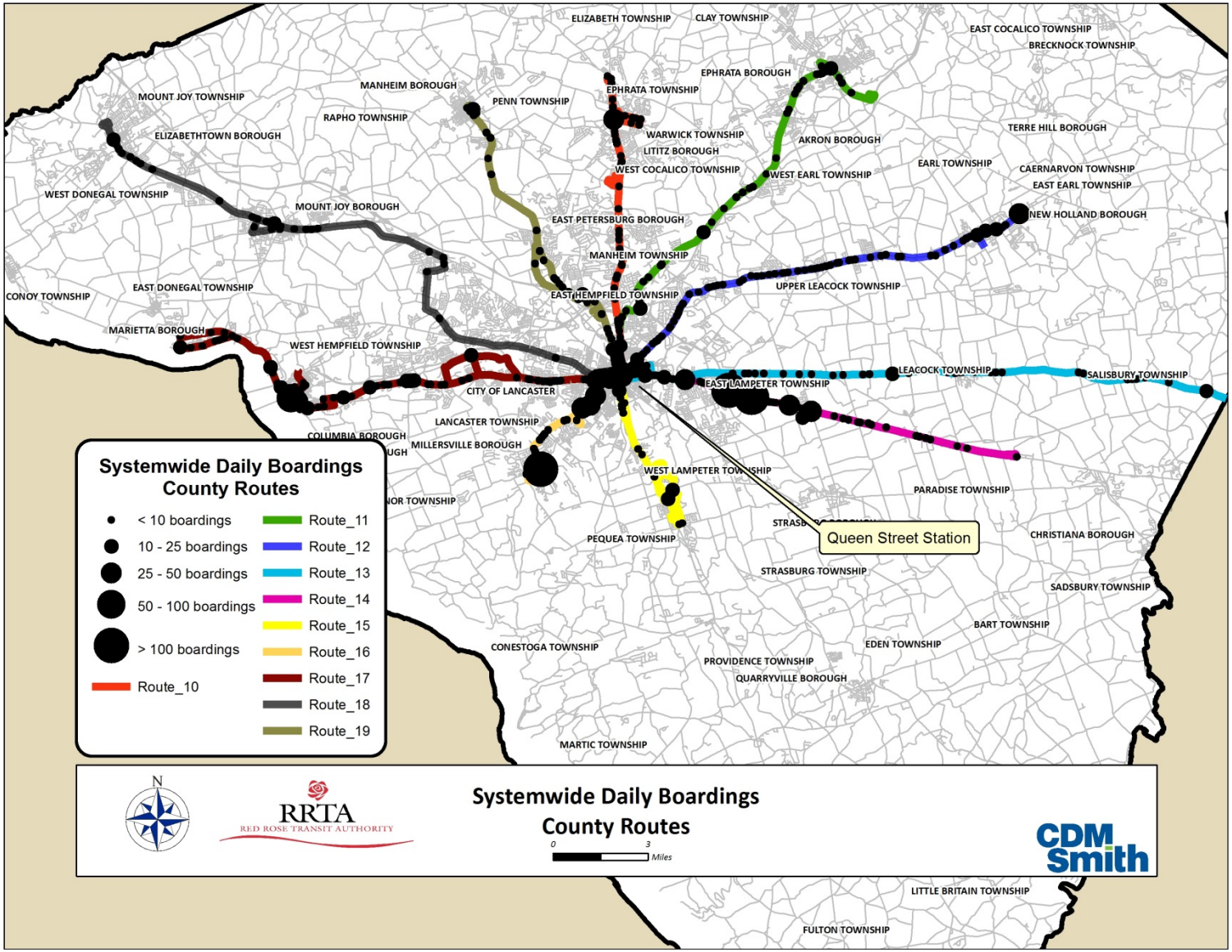


Figure 7-20: Systemwide Alightings County Routes

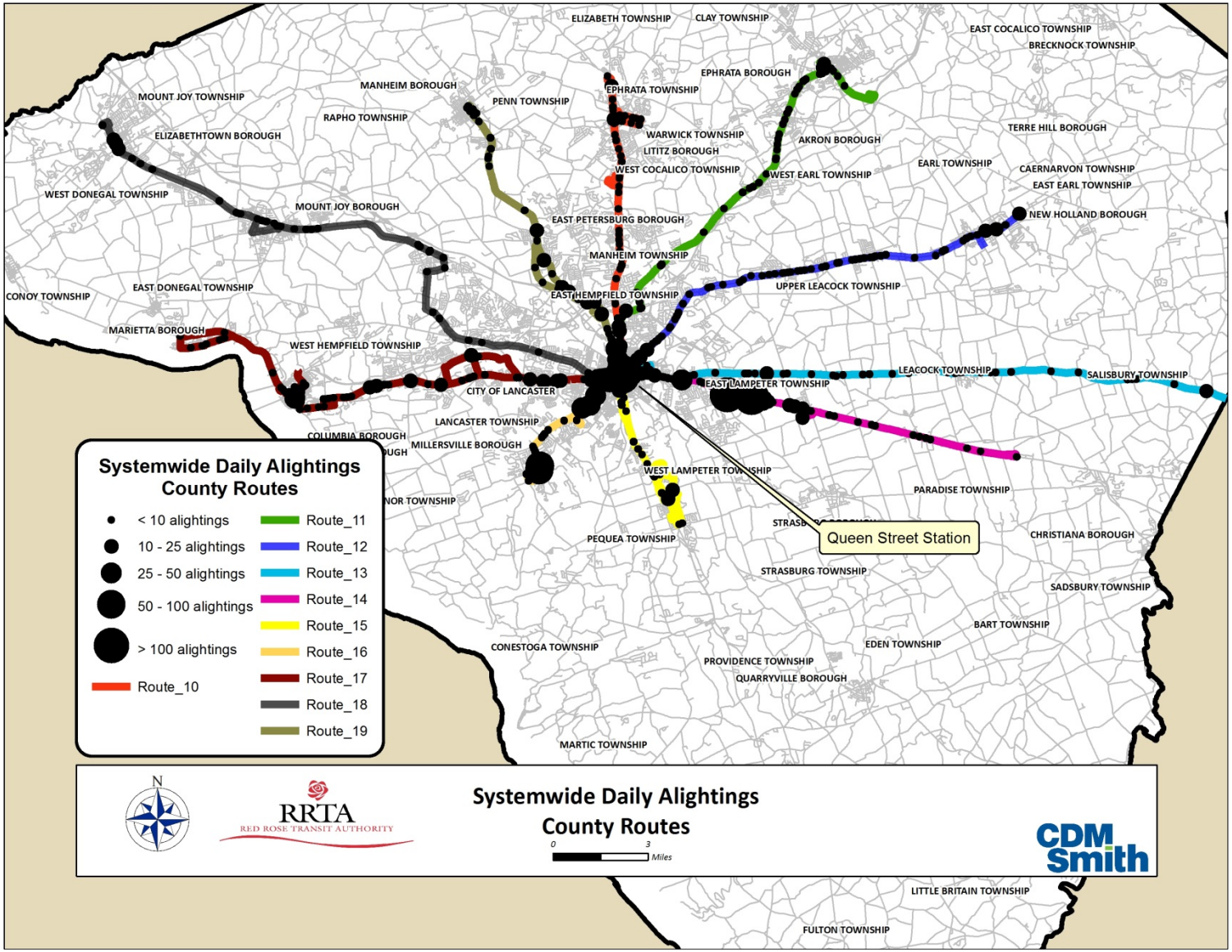


Figure 7-21: Route 1 Park City A/Southeast Boardings

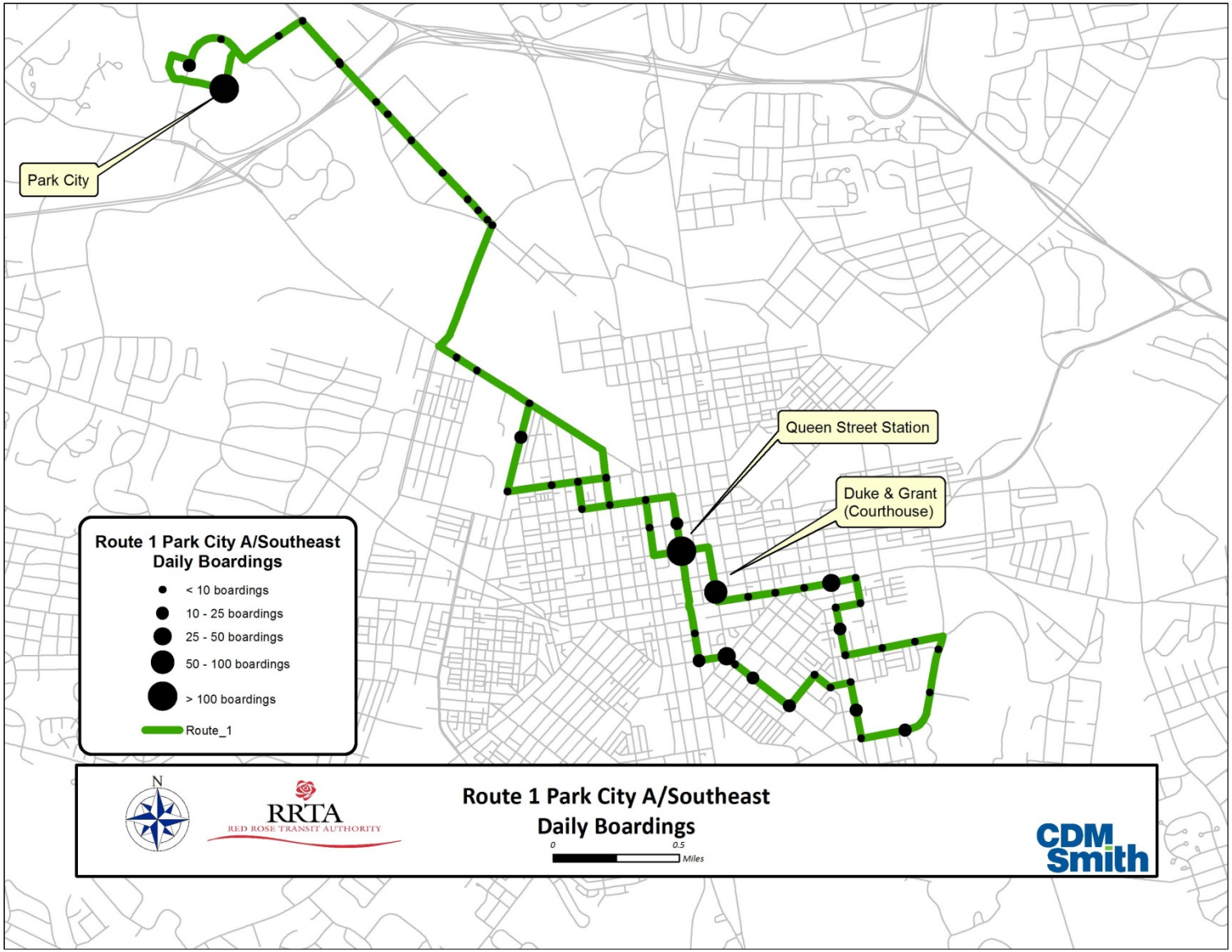


Figure 7-22: Route 1 Park City A/Southeast Alightings

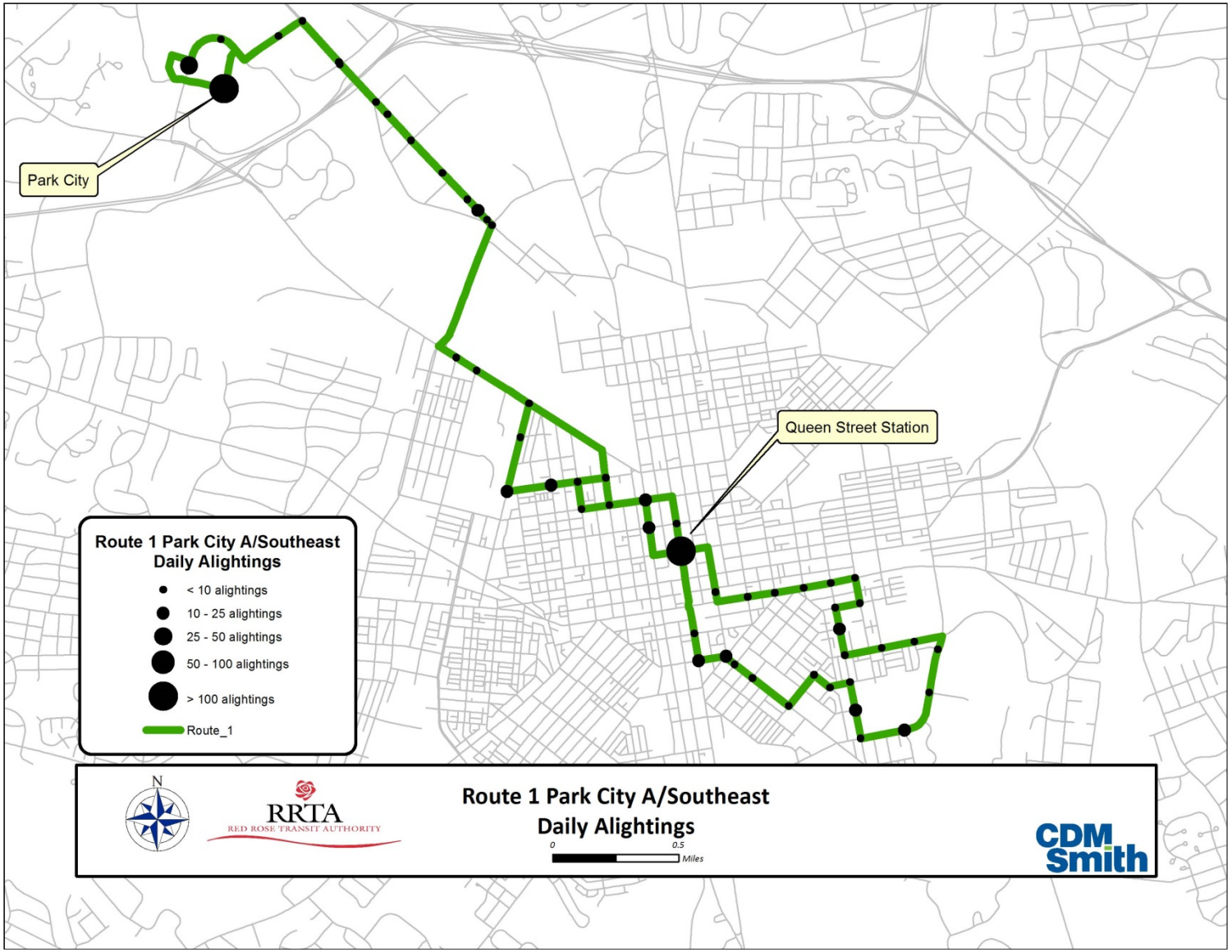


Figure 7-23: Route 2 Park City B/6th Ward Boardings

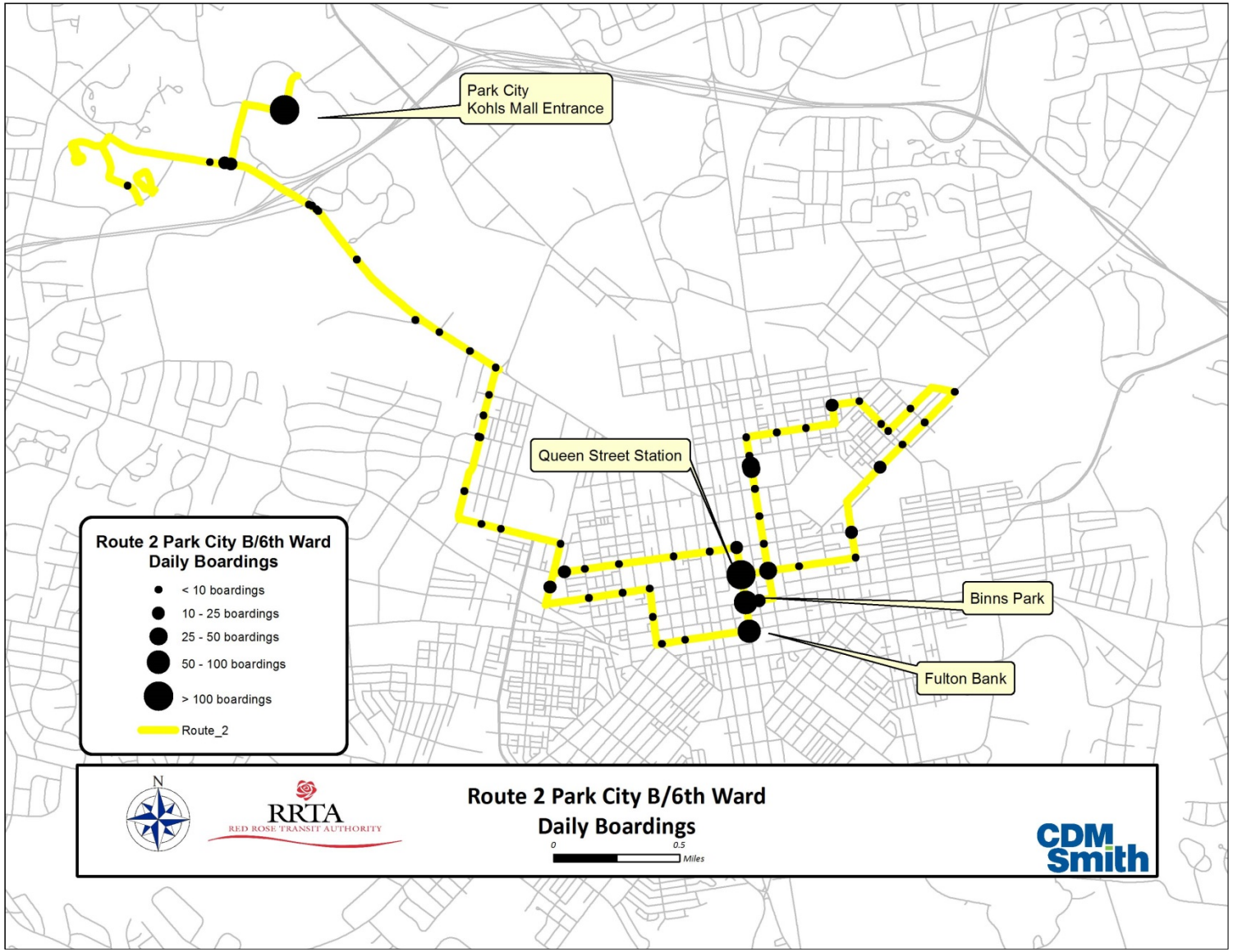


Figure 7-24: Route 2 Park City B/6th Ward Alightings

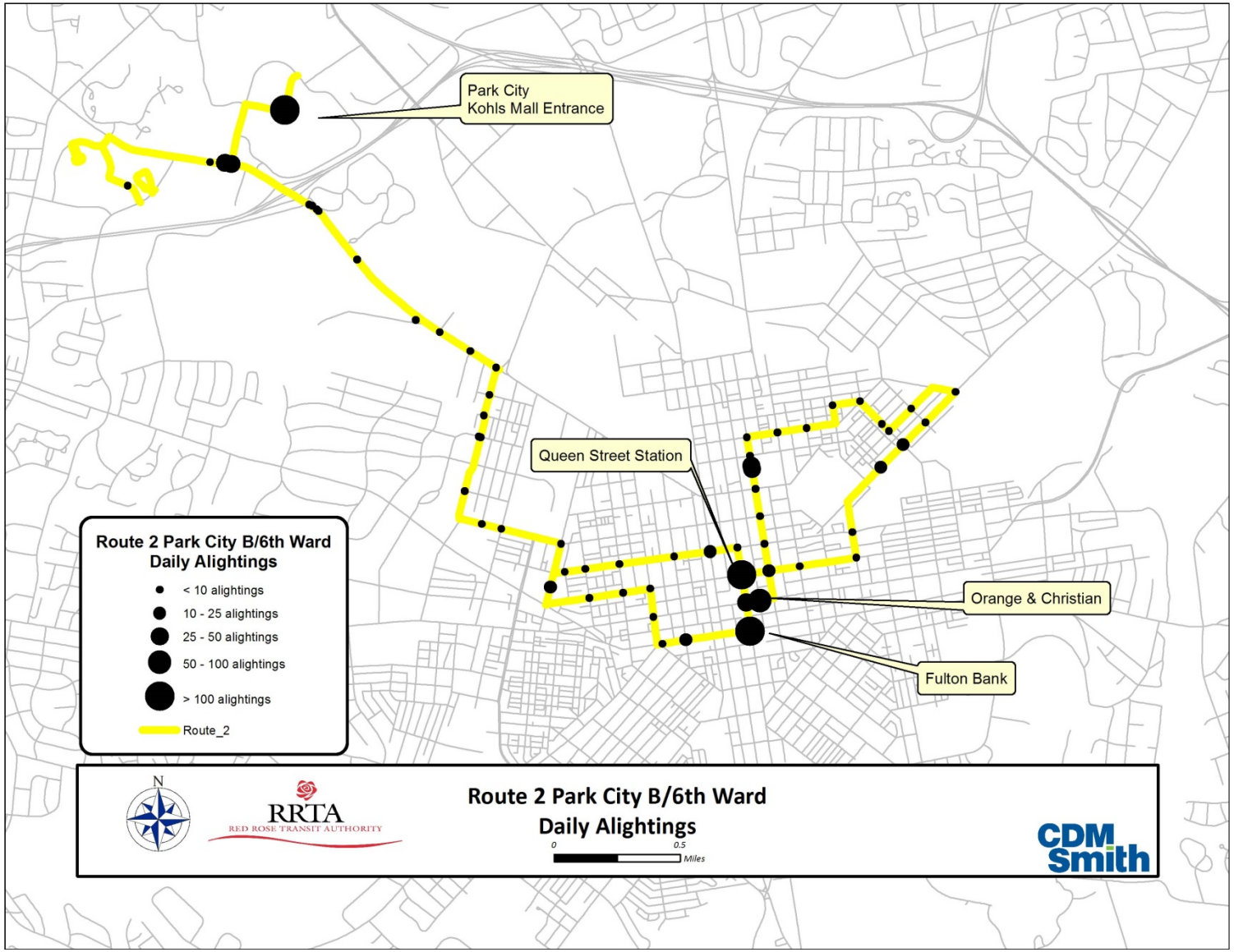


Figure 7-25: Route 3 Park City C/8th Ward Boardings

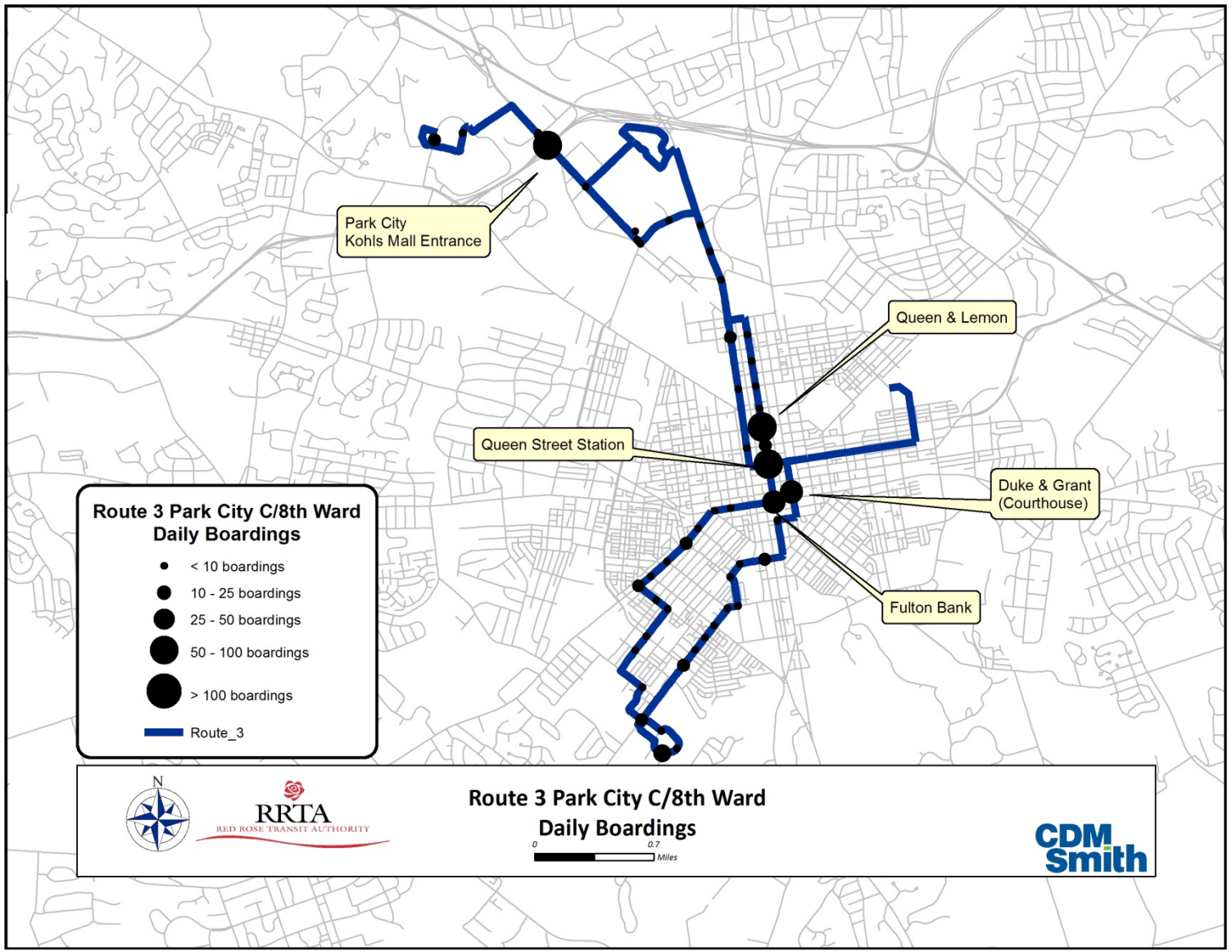


Figure 7-26: Route 3 Park City C/8th Ward Alightings

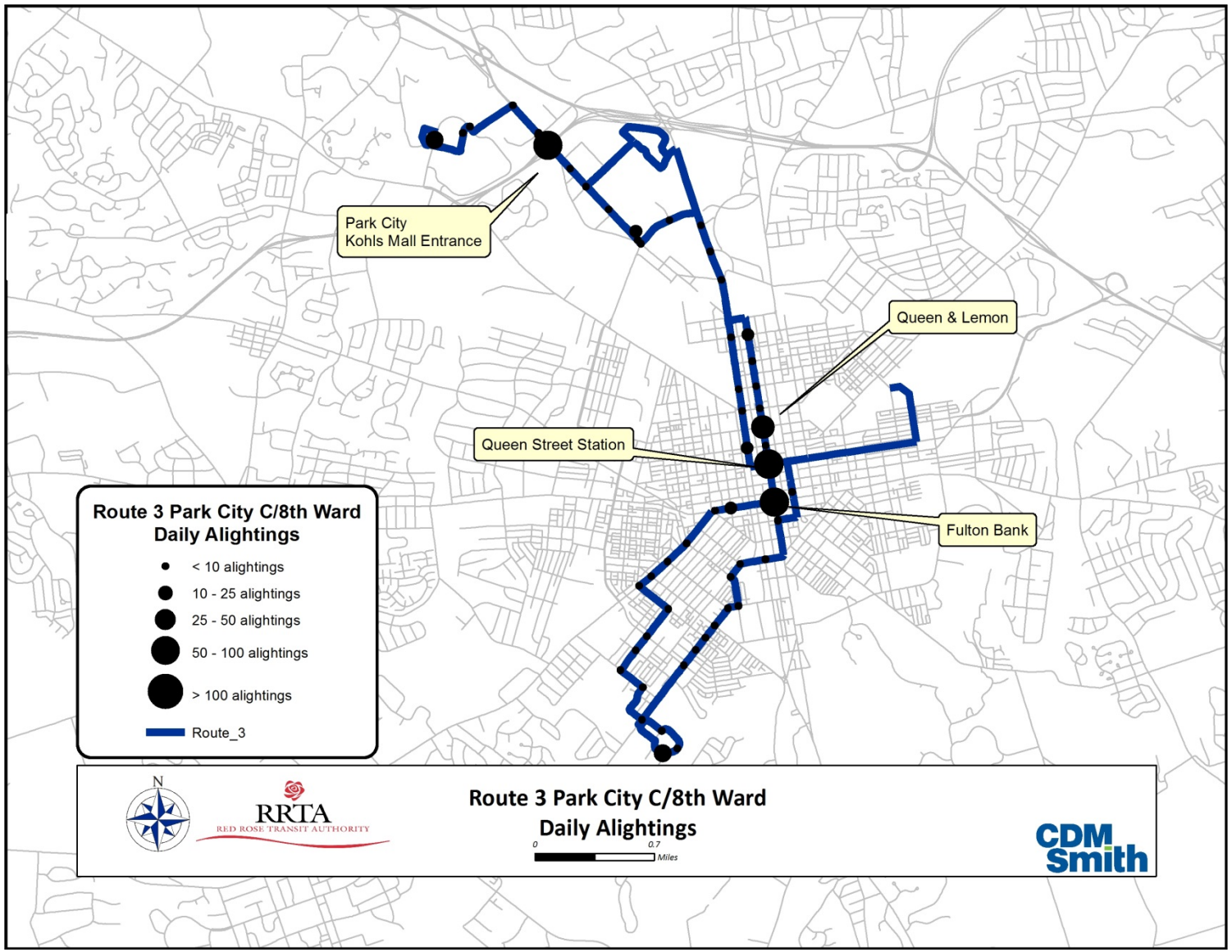


Figure 7-27: Route 4 Elm Avenue/Parkside Boardings

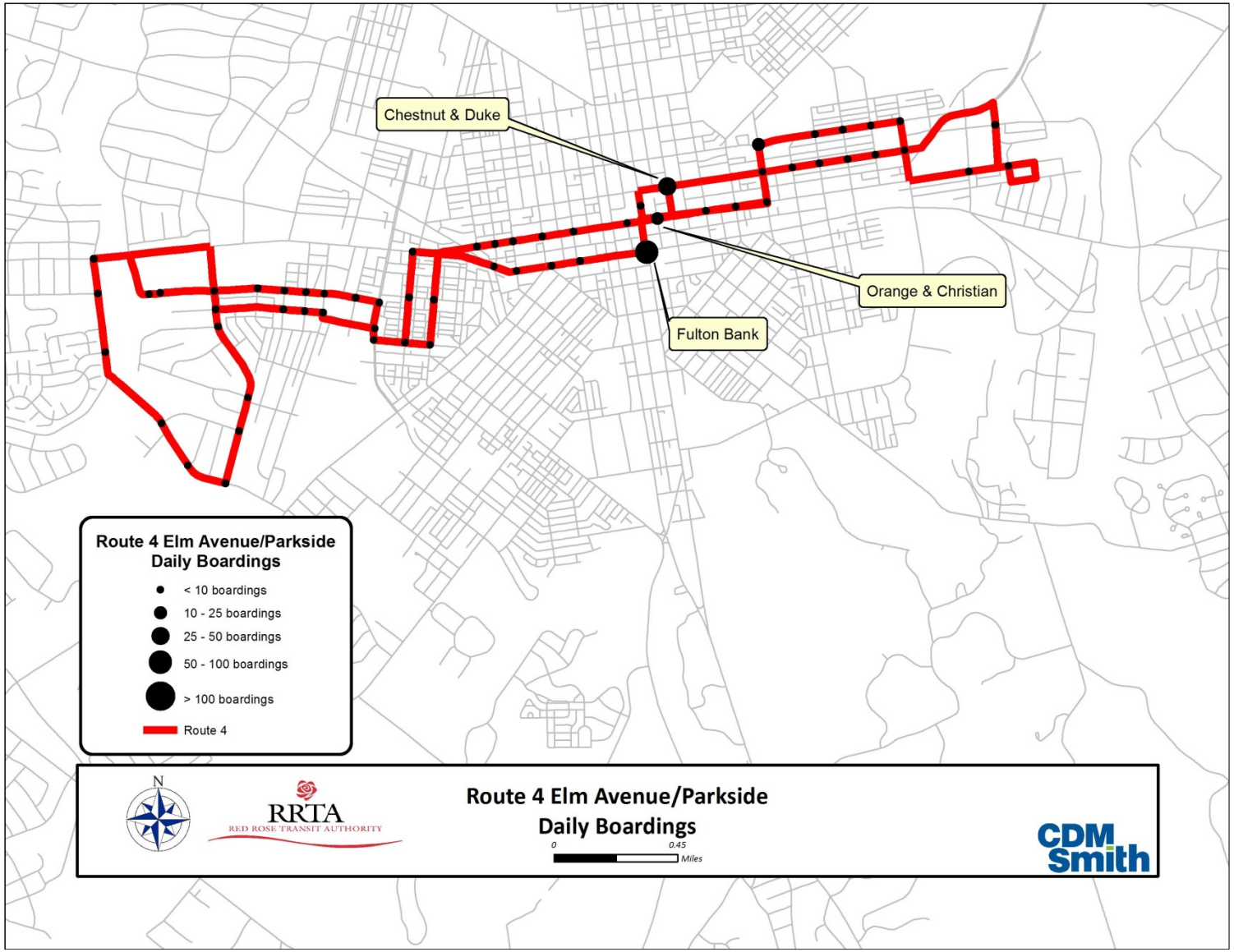


Figure 7-28: Route 4 Elm Avenue/Parkside Alightings

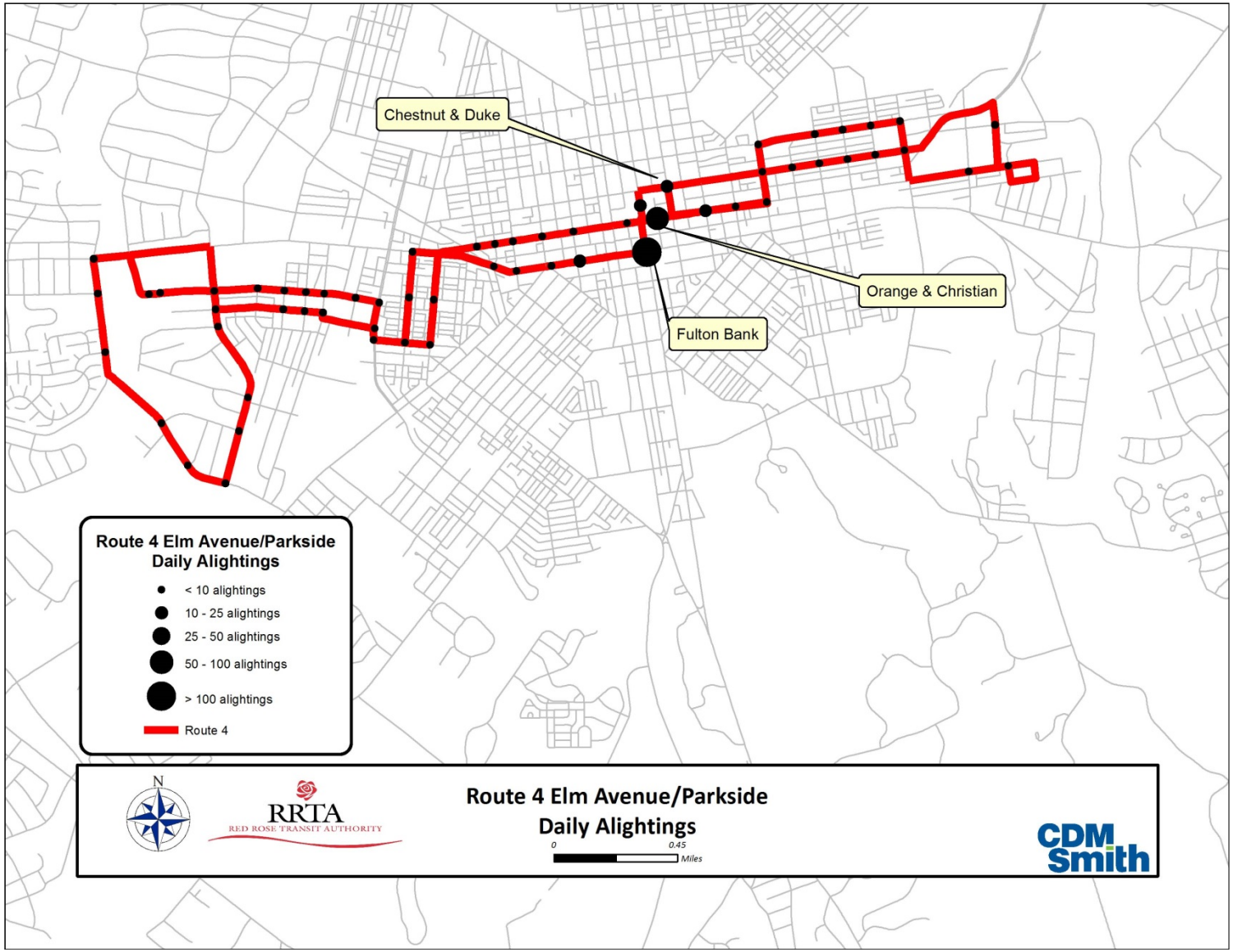


Figure 7-29: Route 5 Grandview Heights/Rossmere Boardings

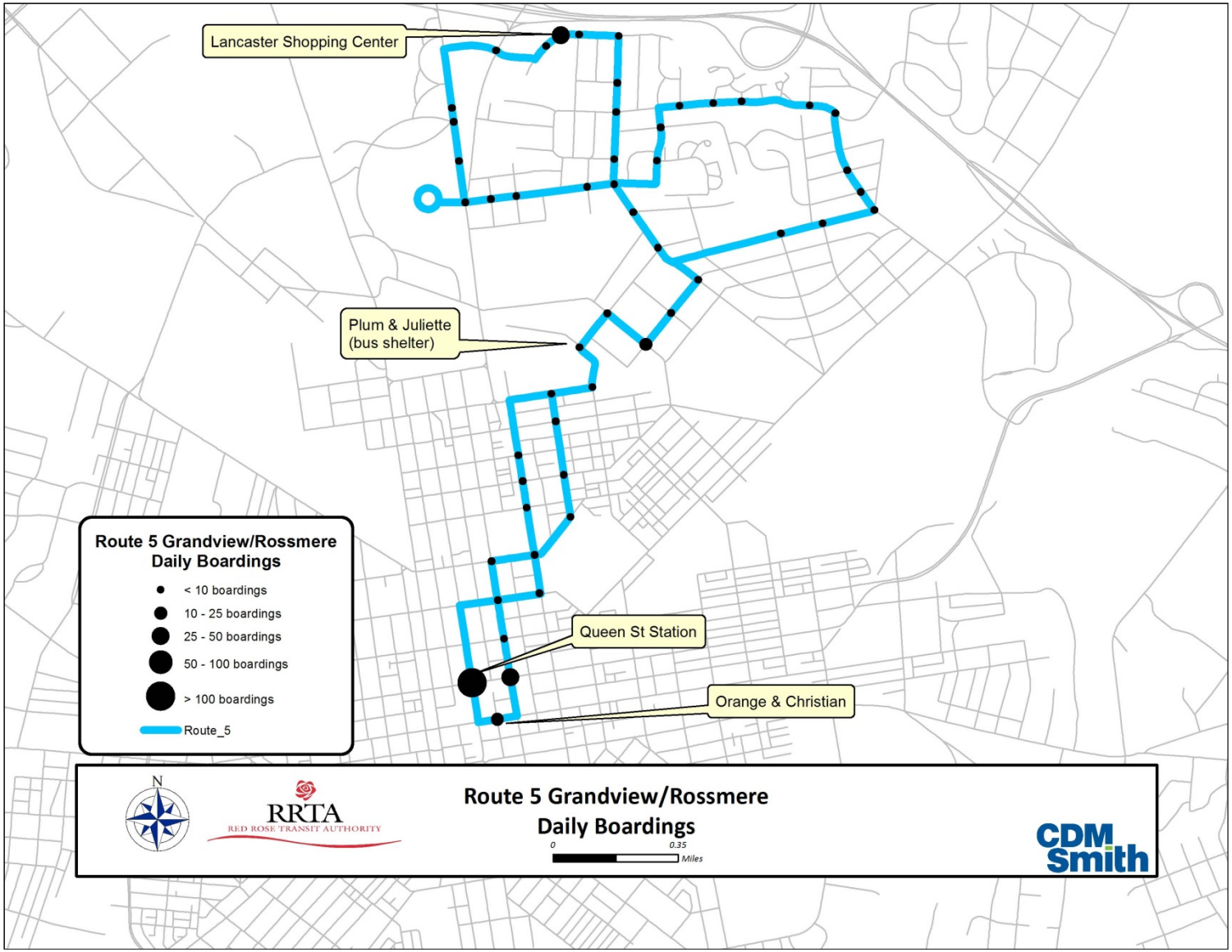


Figure 7-30: Route 5 Grandview Heights/Rossmere Alightings Boardings

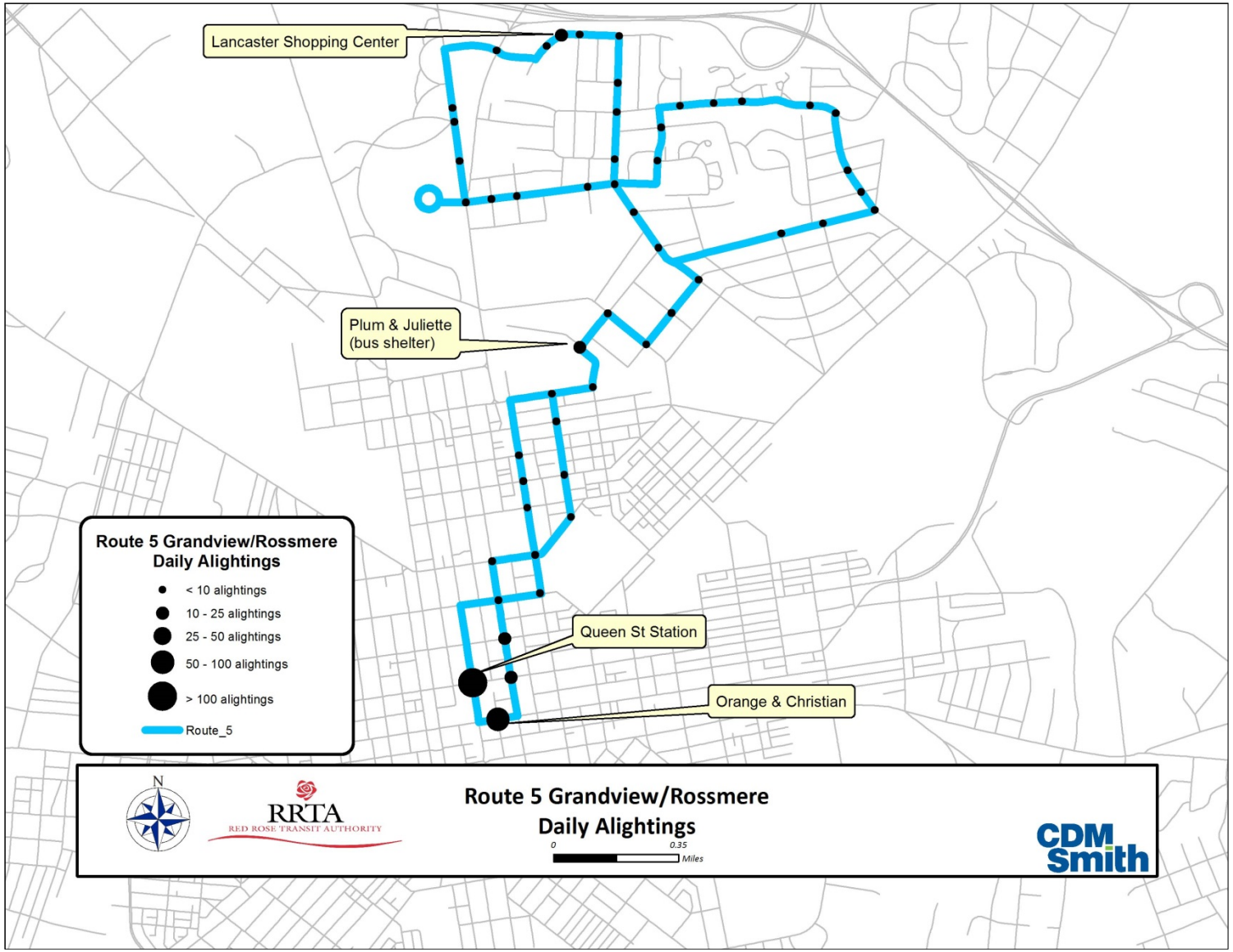


Figure 7-31: Route 10 Lititz Boardings

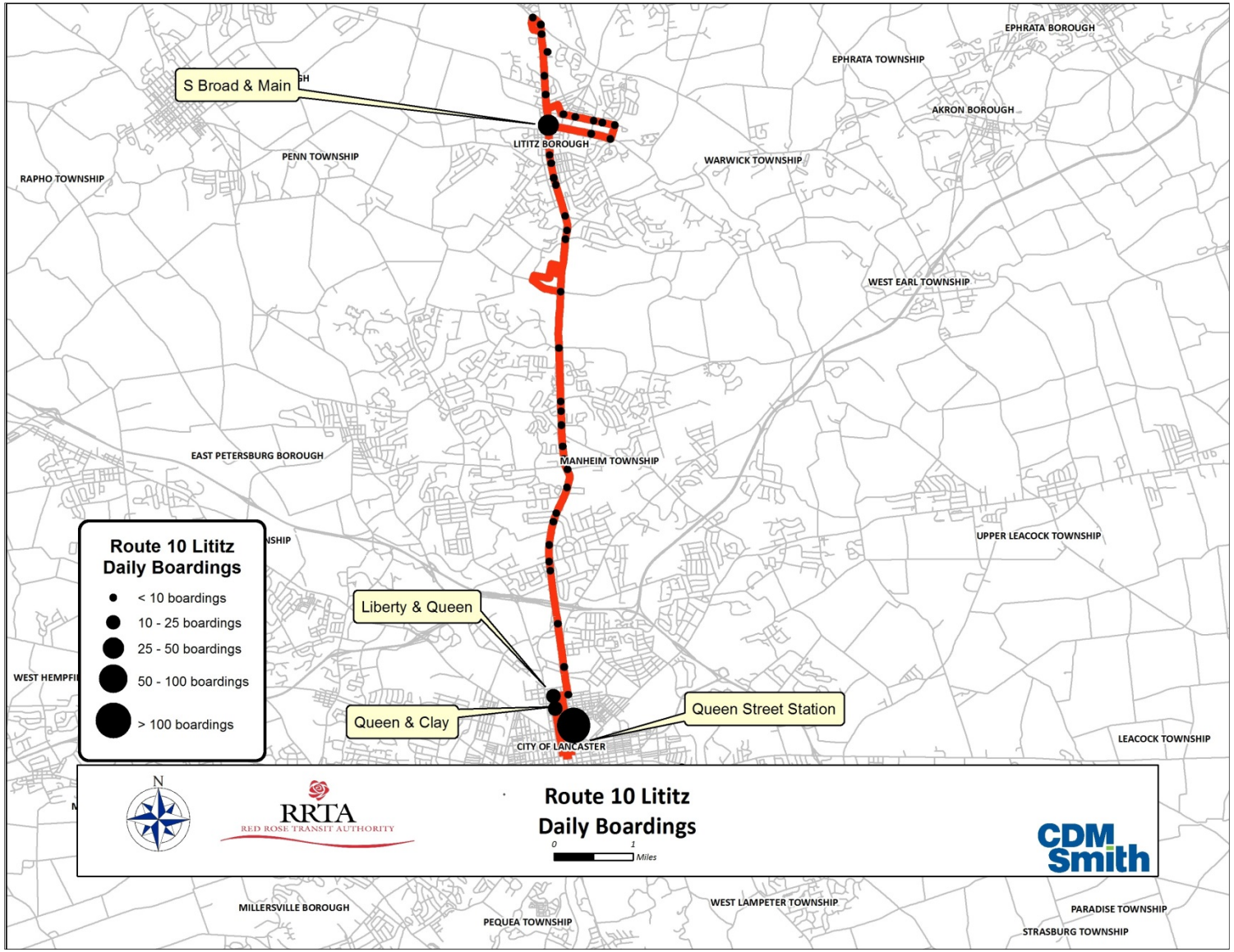


Figure 7-32: Route 10 Lititz Alightings

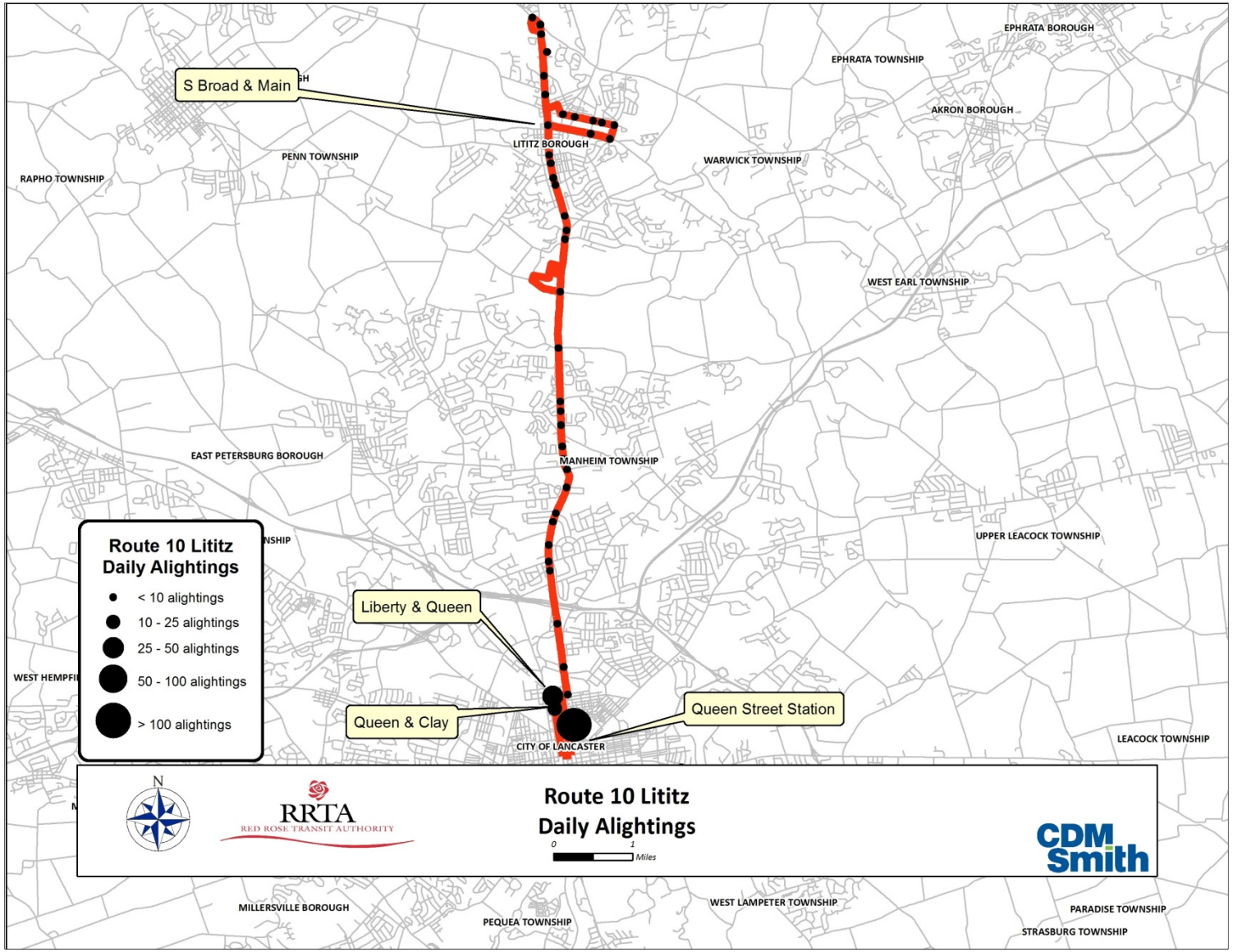


Figure 7-33: Route 11 Ephrata Boardings

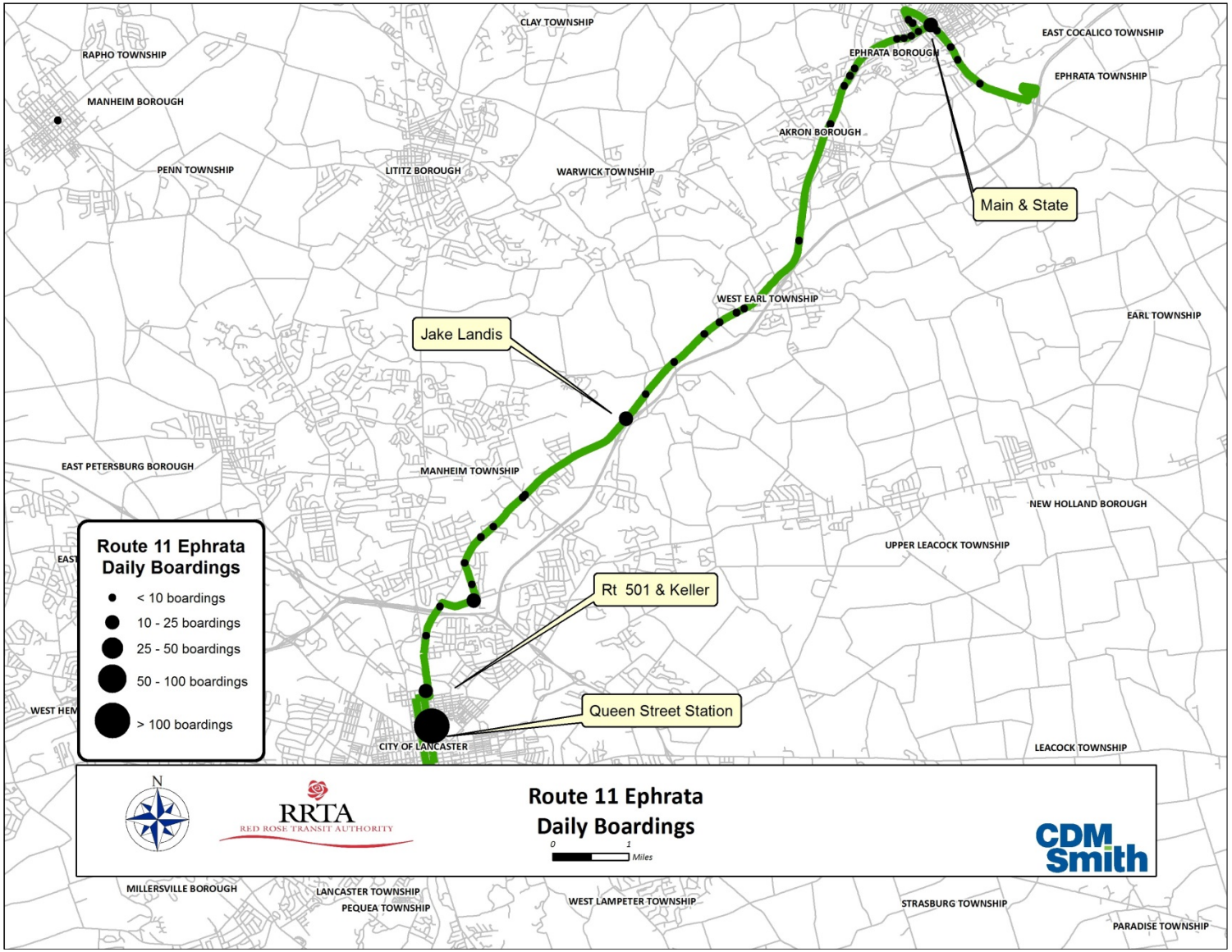


Figure 7-34: Route 11 Ephrata Alightings

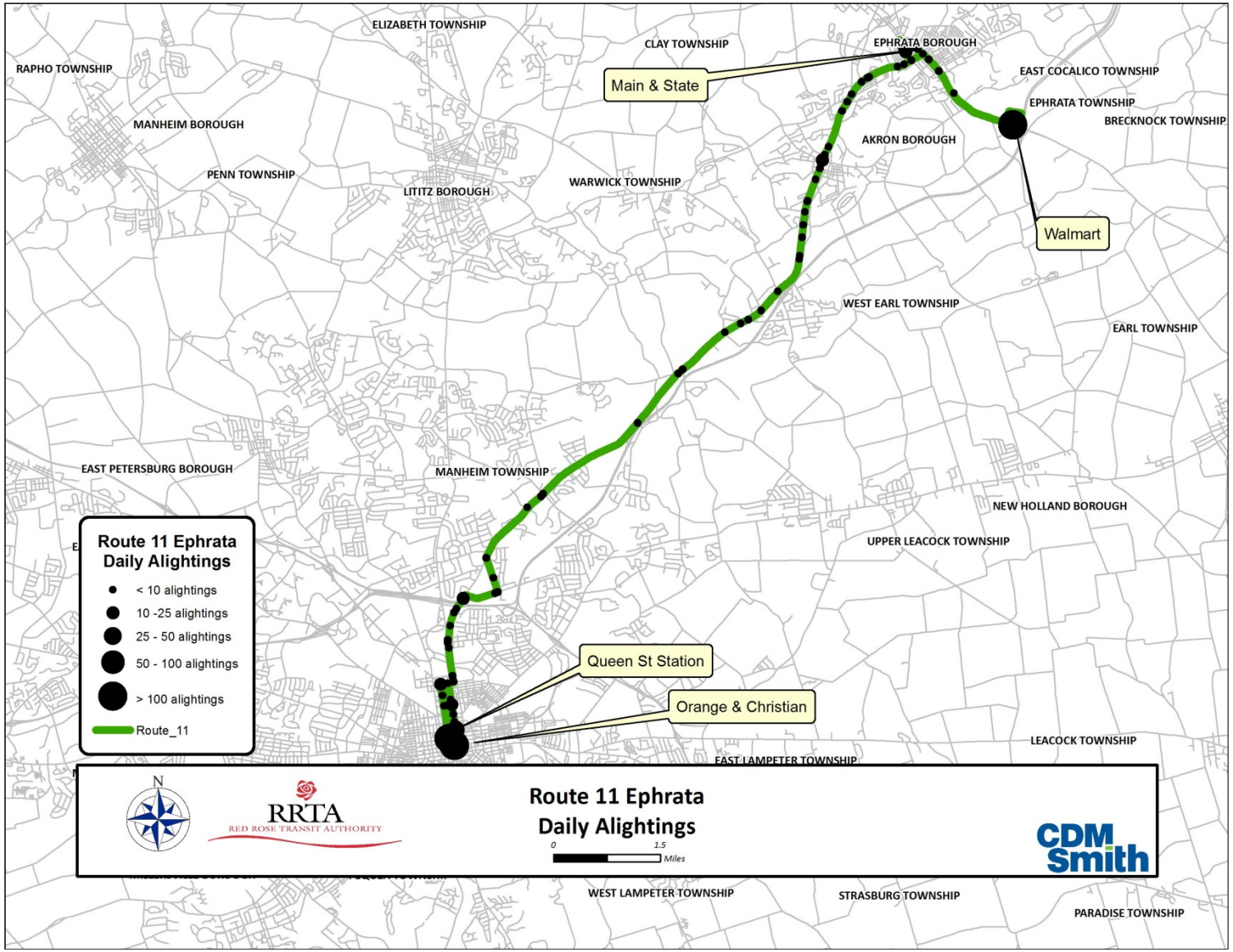


Figure 7-35: Route 12 New Holland Boardings

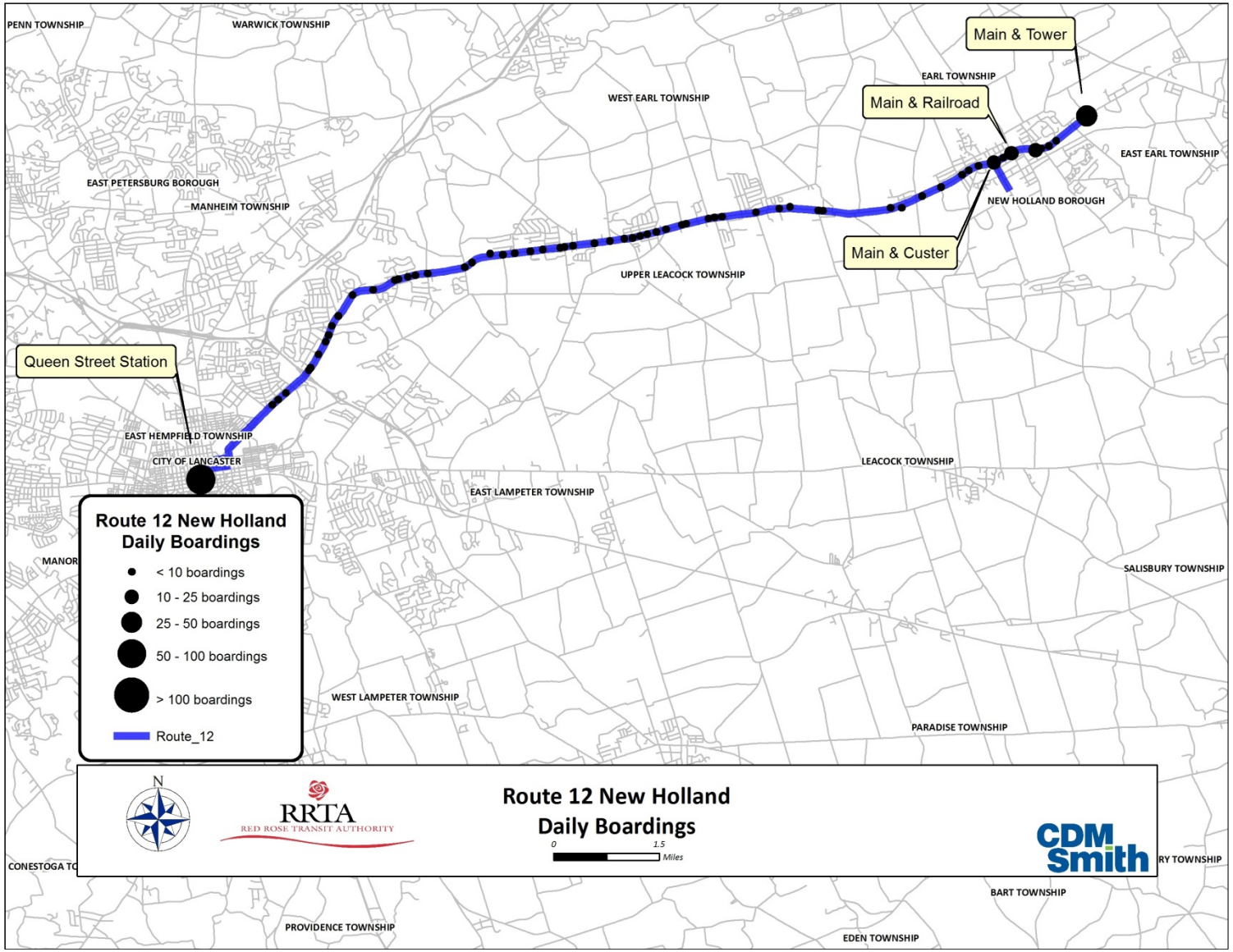


Figure 7-36: Route 12 New Holland Alightings

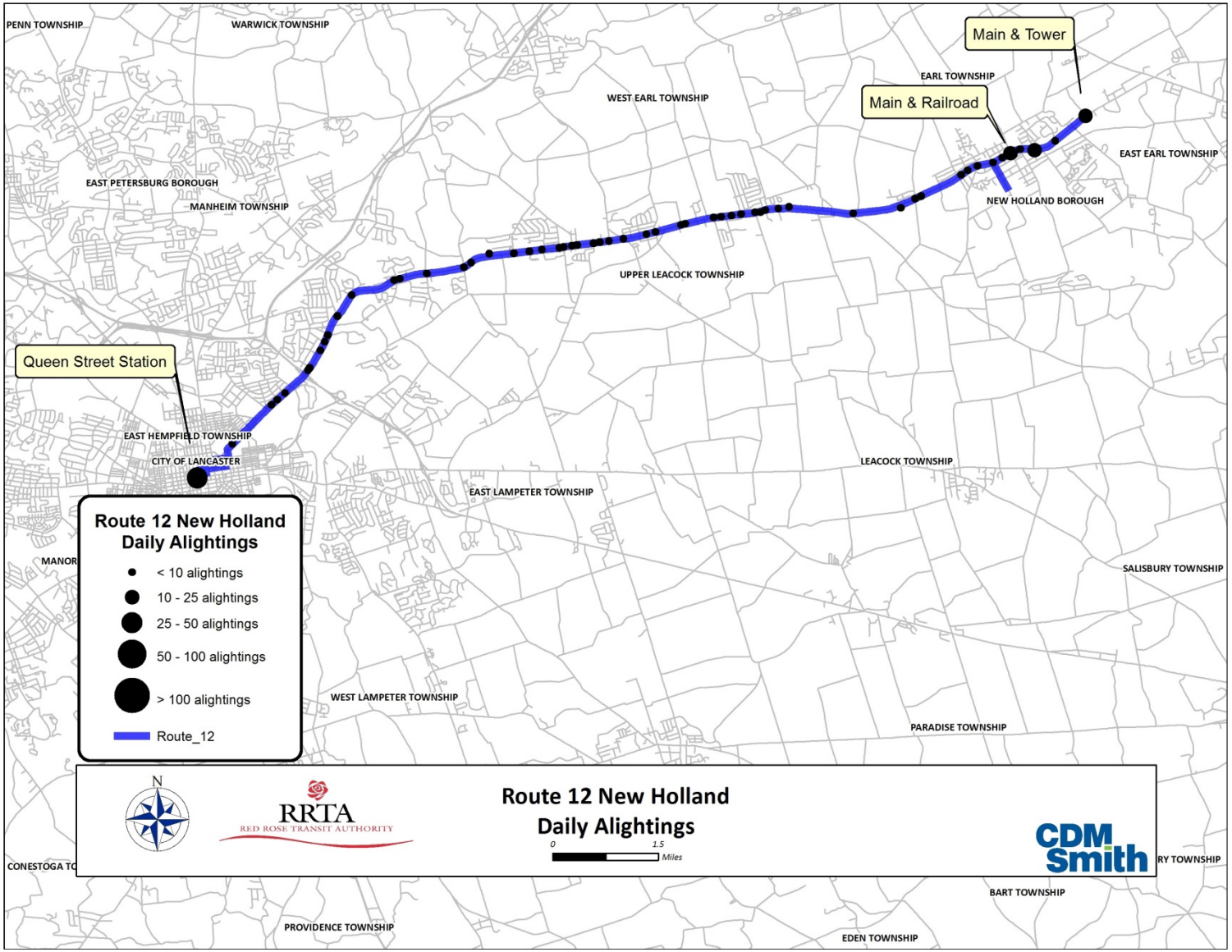


Figure 7-37. Route 13 White Horse Boardings

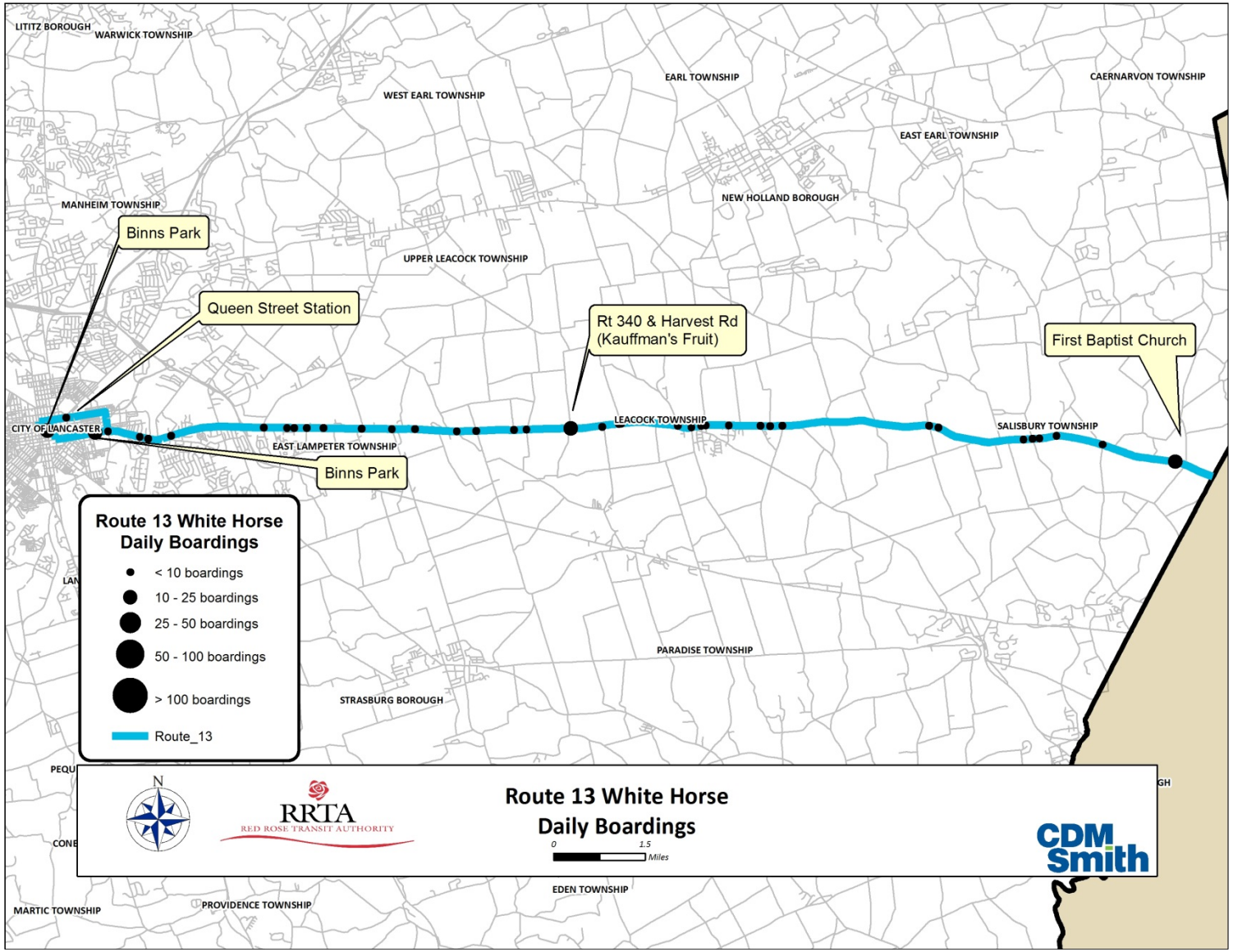


Figure 7-38: Route 13 White Horse Alightings

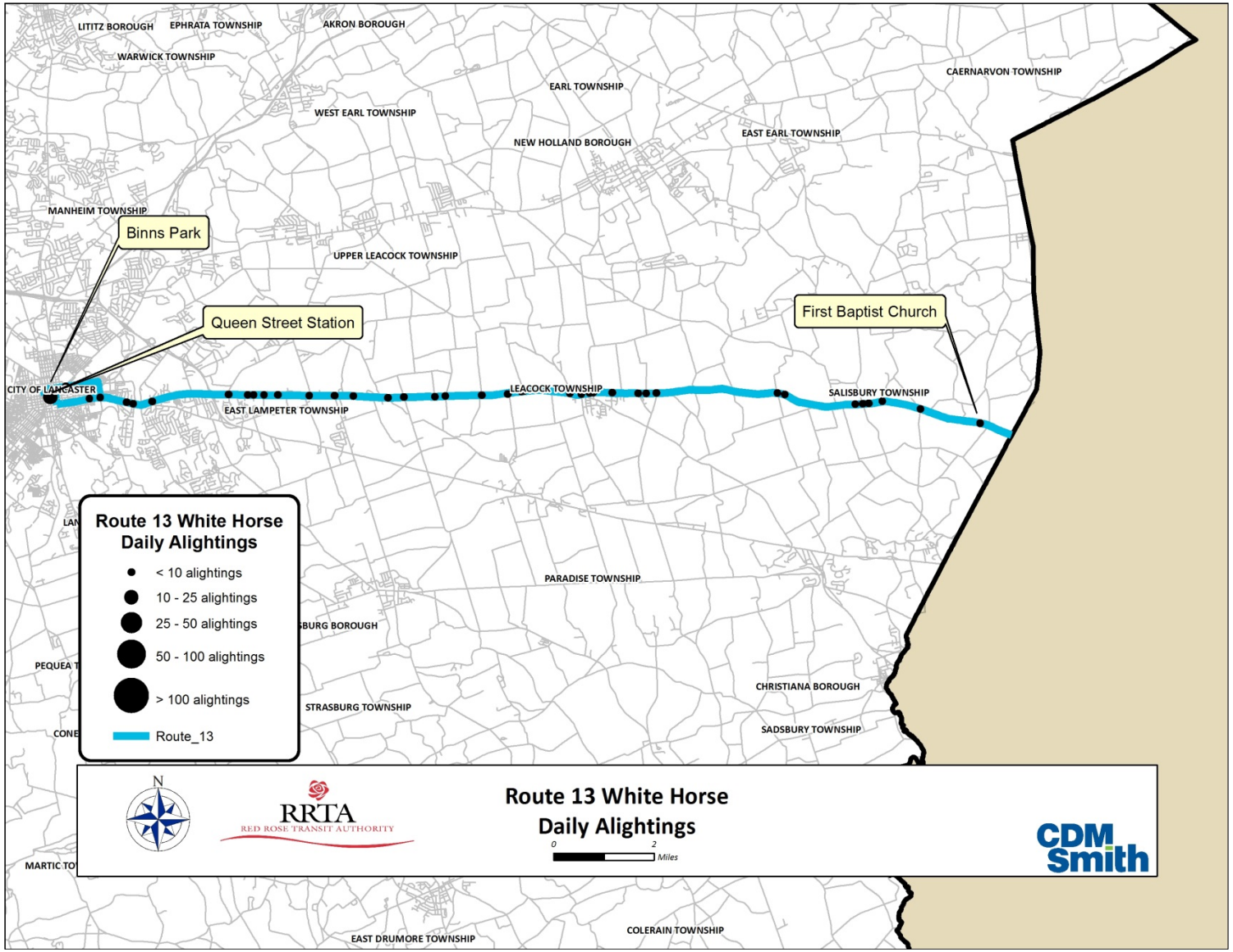


Figure 7-39: Route 14 Rockvale Square Boardings

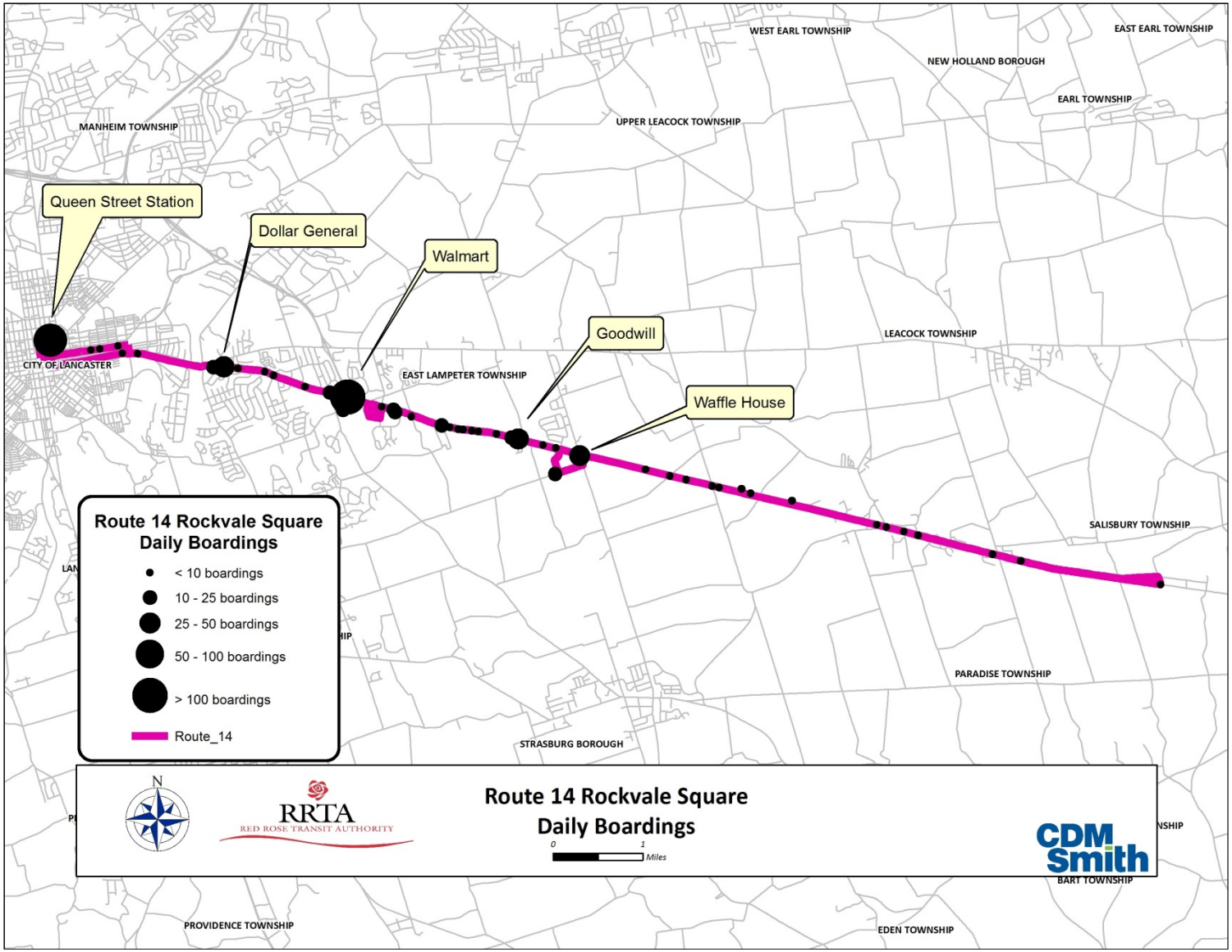


Figure 7-40: Route 14 Rockvale Square Alightings

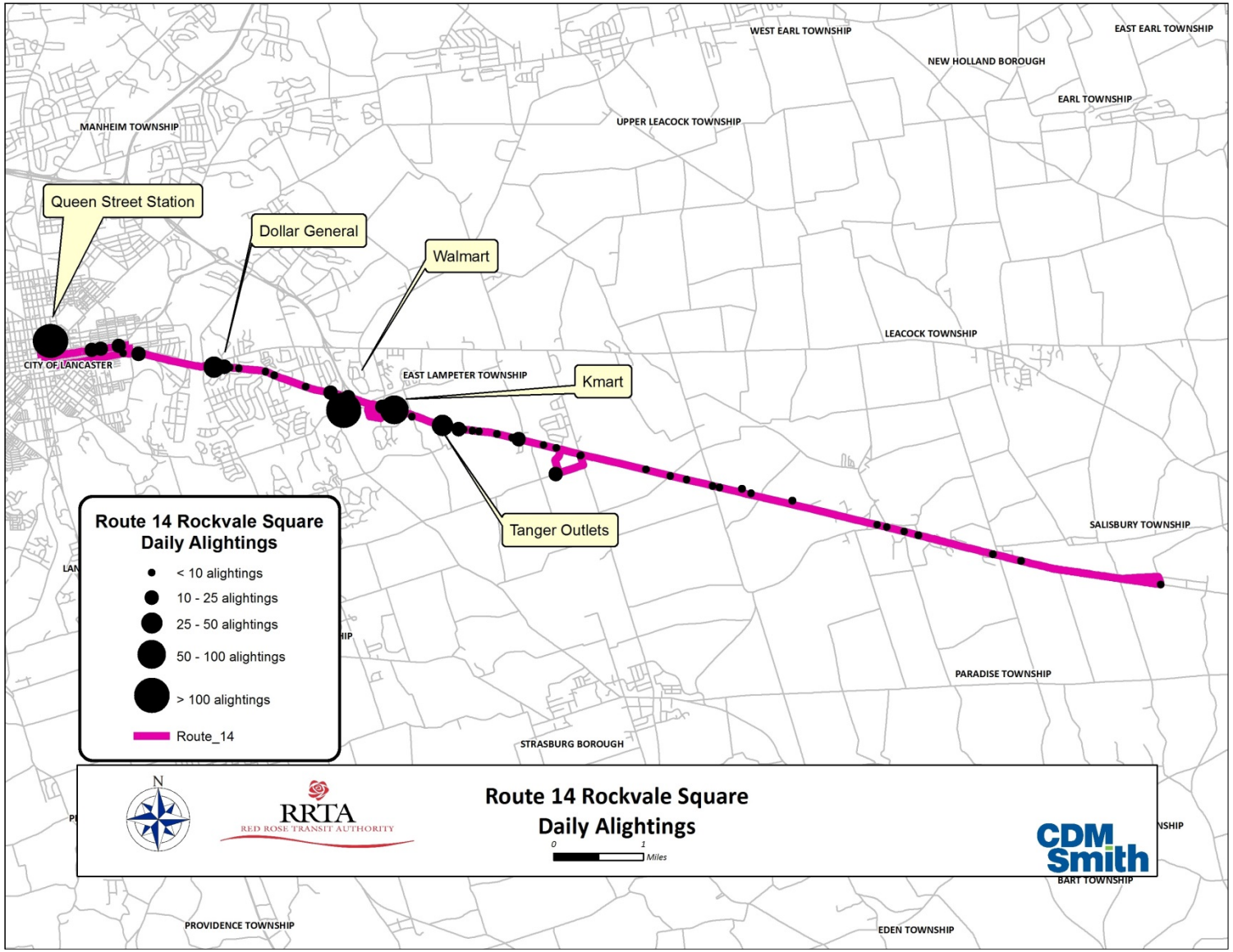


Figure 7-41: Route 15 Willow Street Boardings

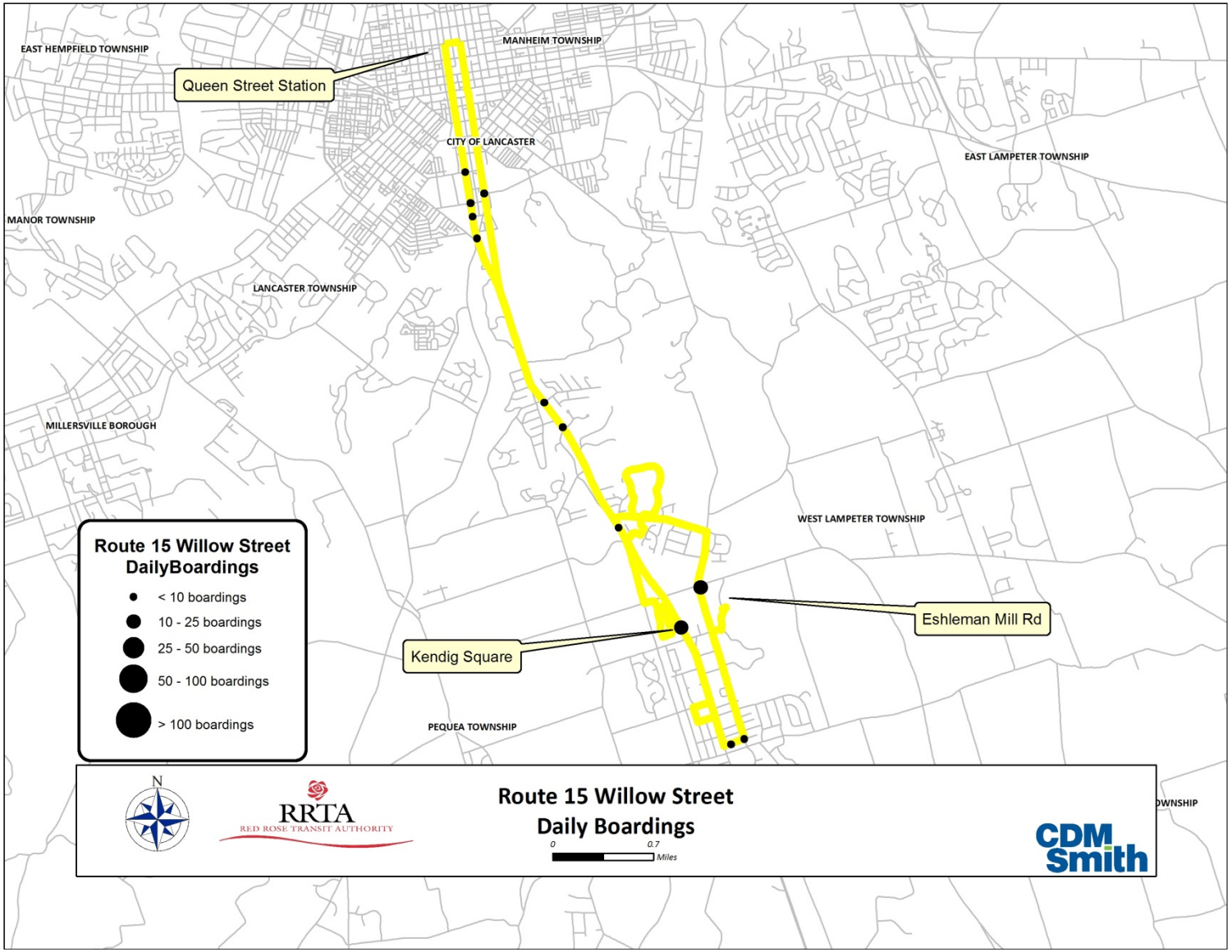


Figure 7-42: Route 15 Willow Street Alightings

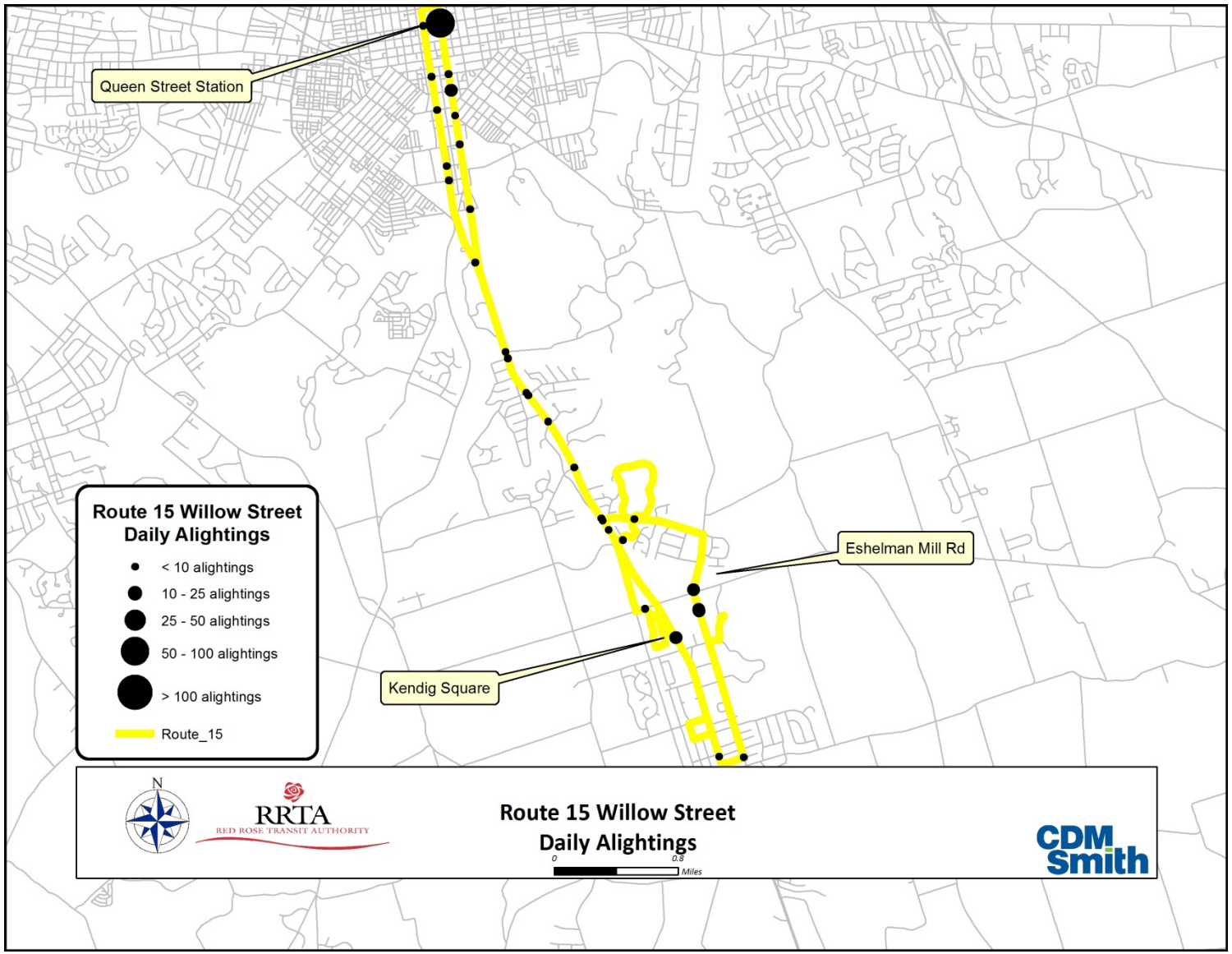


Figure 7-43: Route 16 Millersville Boardings

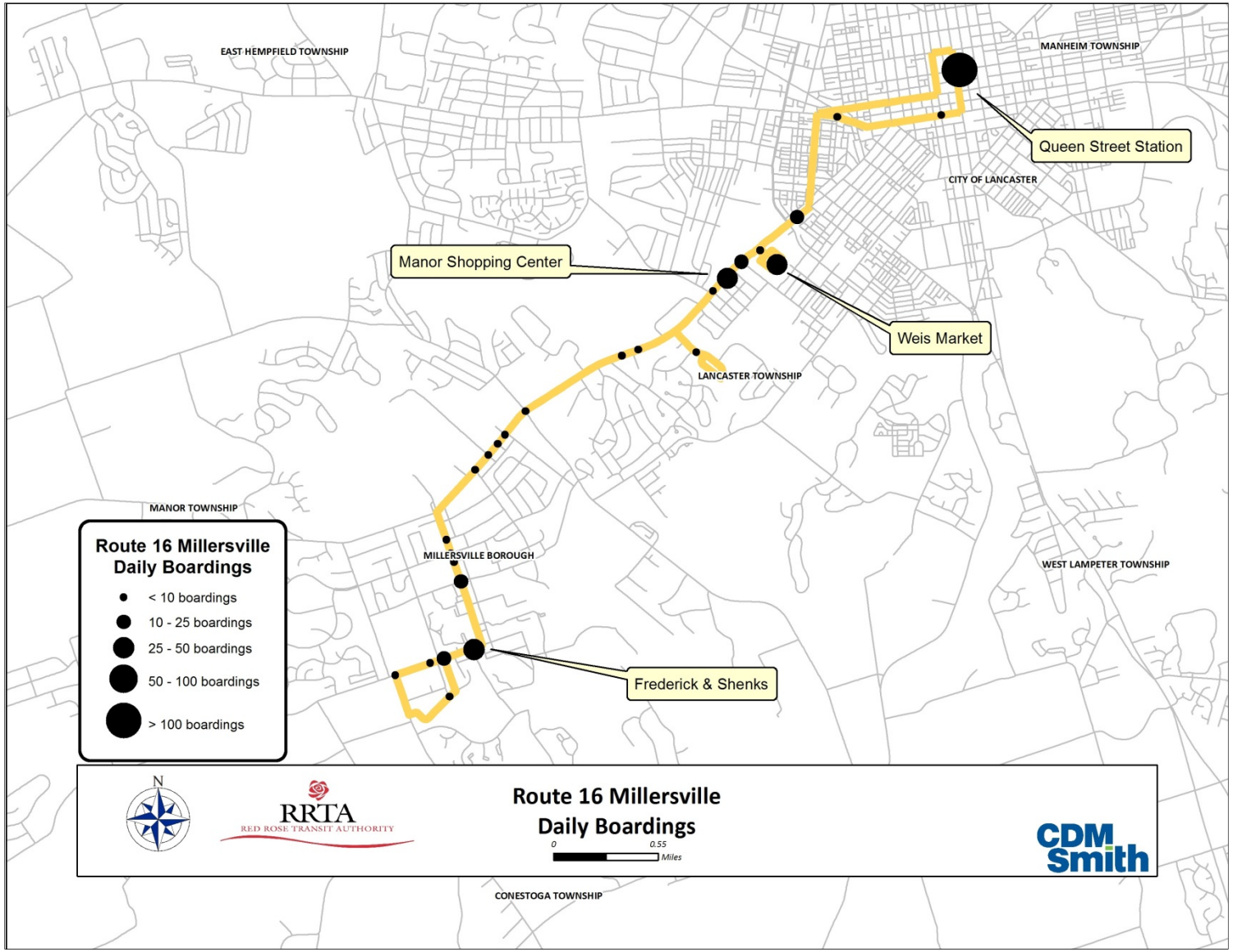


Figure 7-44: Route 16 Millersville Alightings

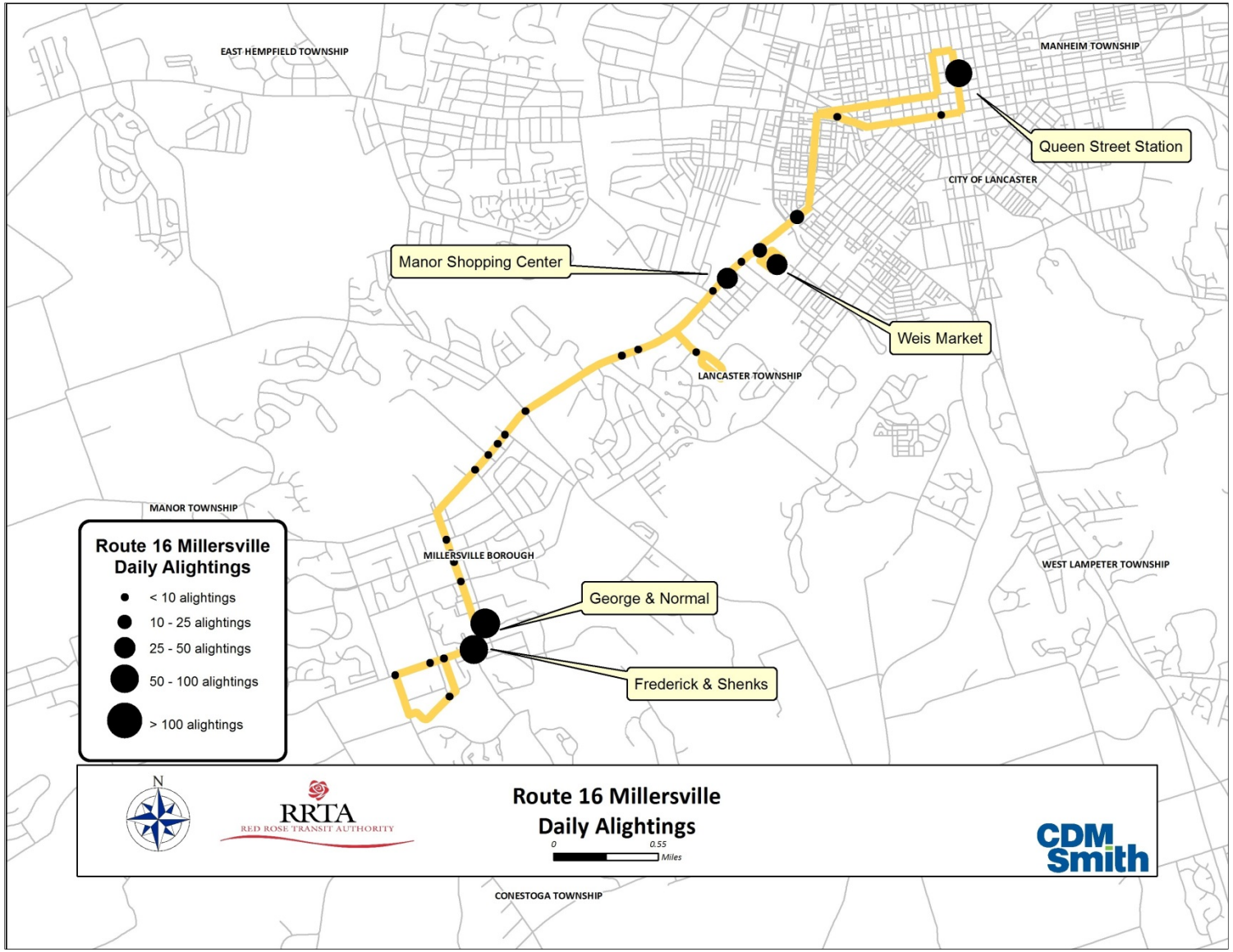


Figure 7-45: Route 17 Columbia Boardings

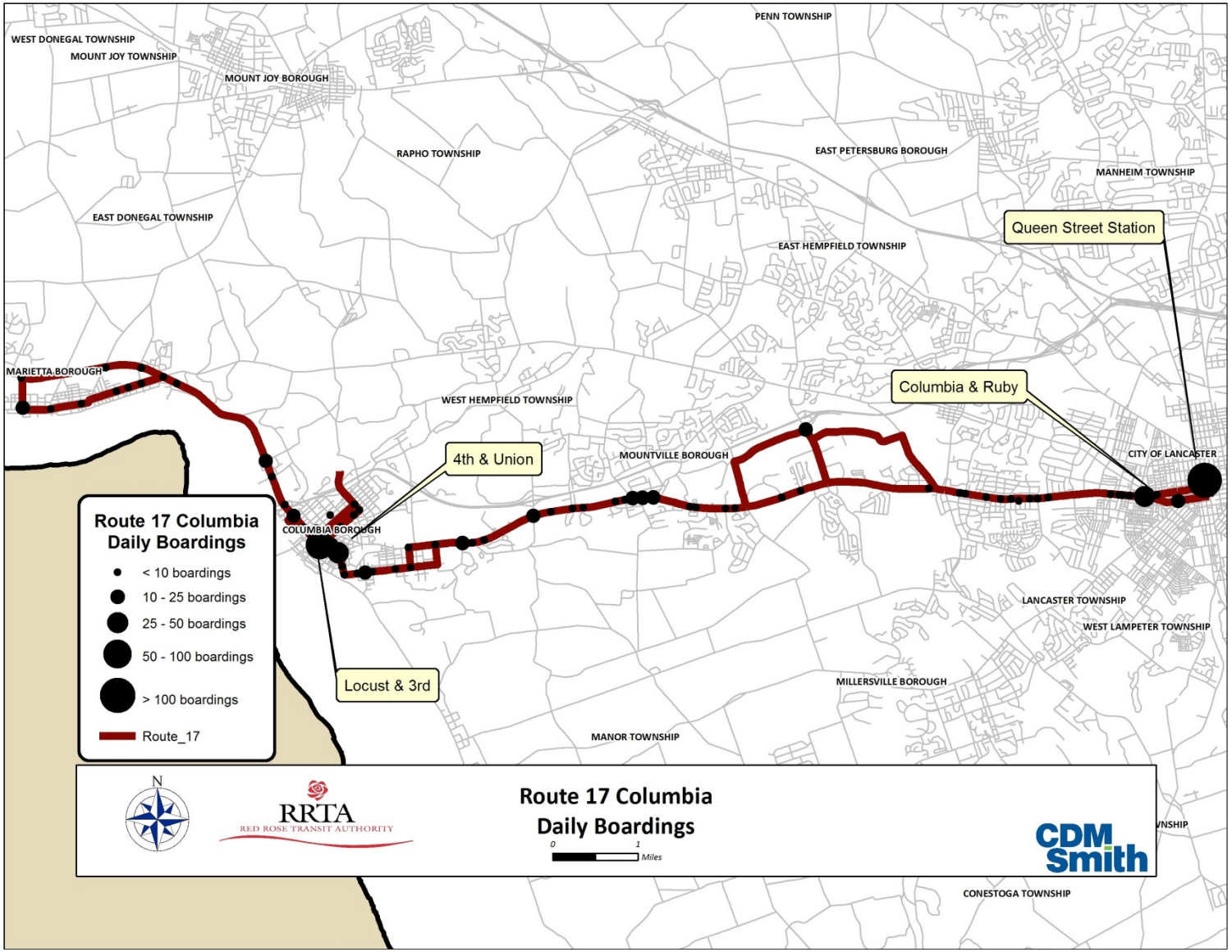


Figure 7-46: Route 17 Columbia Alightings

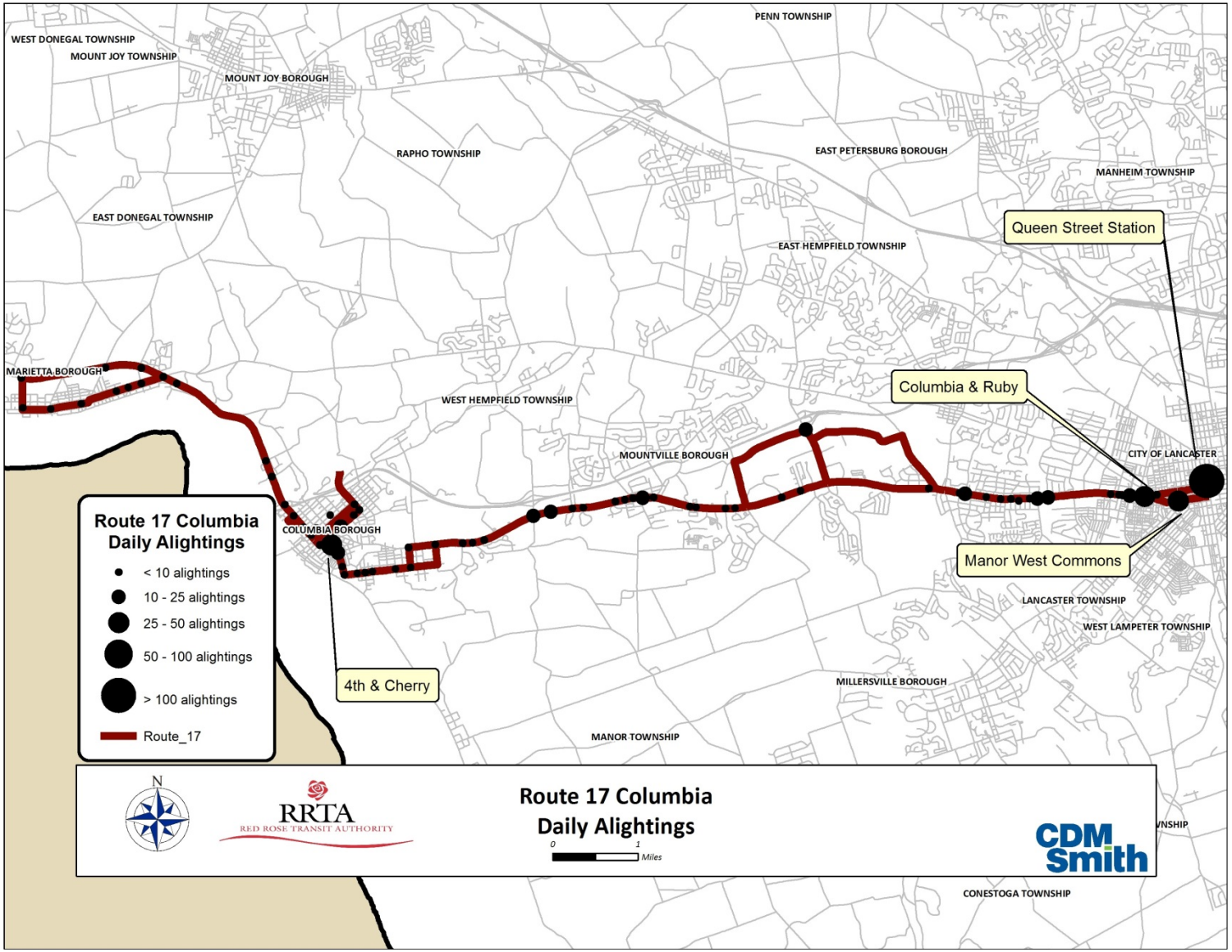


Figure 7-47: Route 18 Elizabethtown Boardings

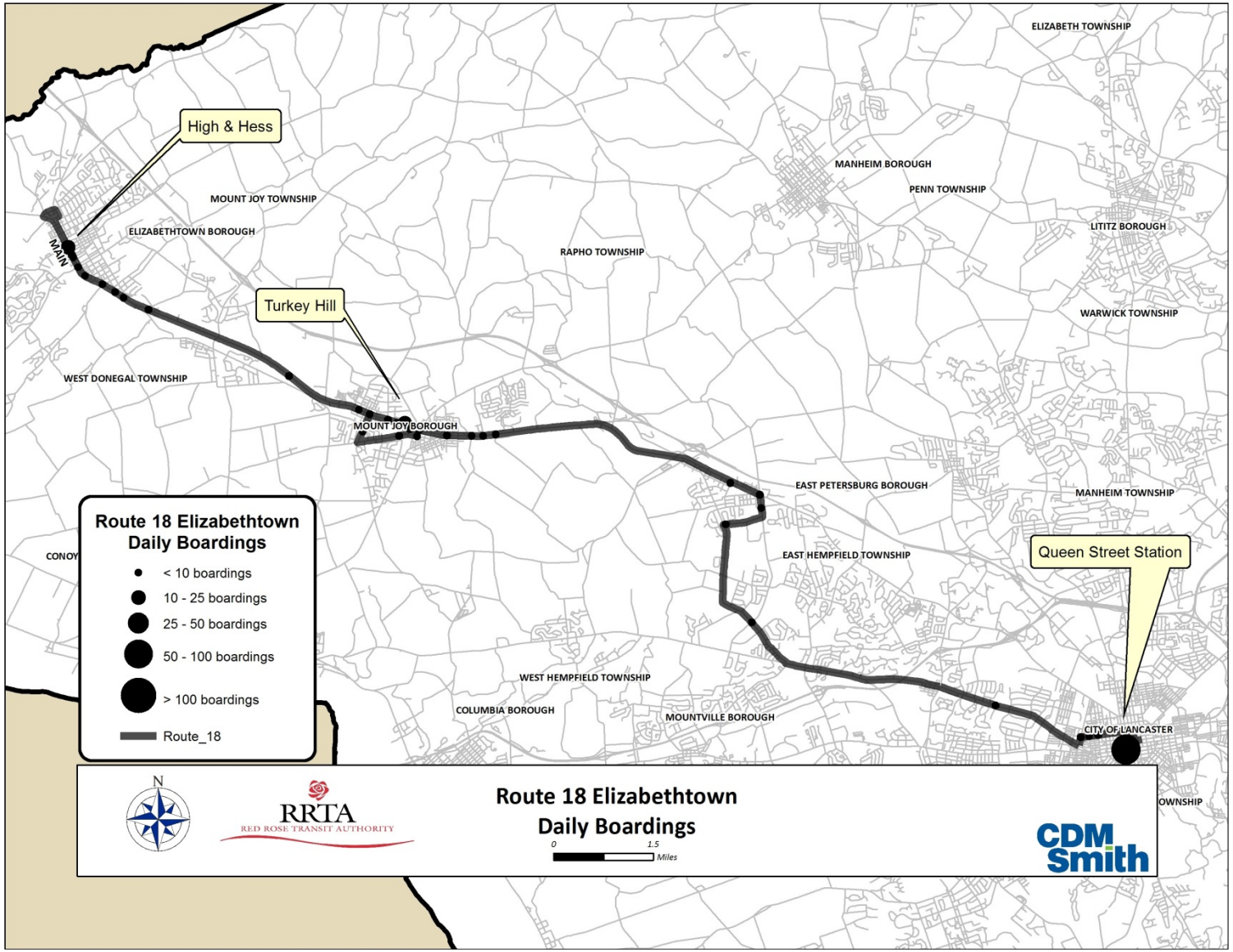


Figure 7-48: Route 18 Elizabethtown Alightings

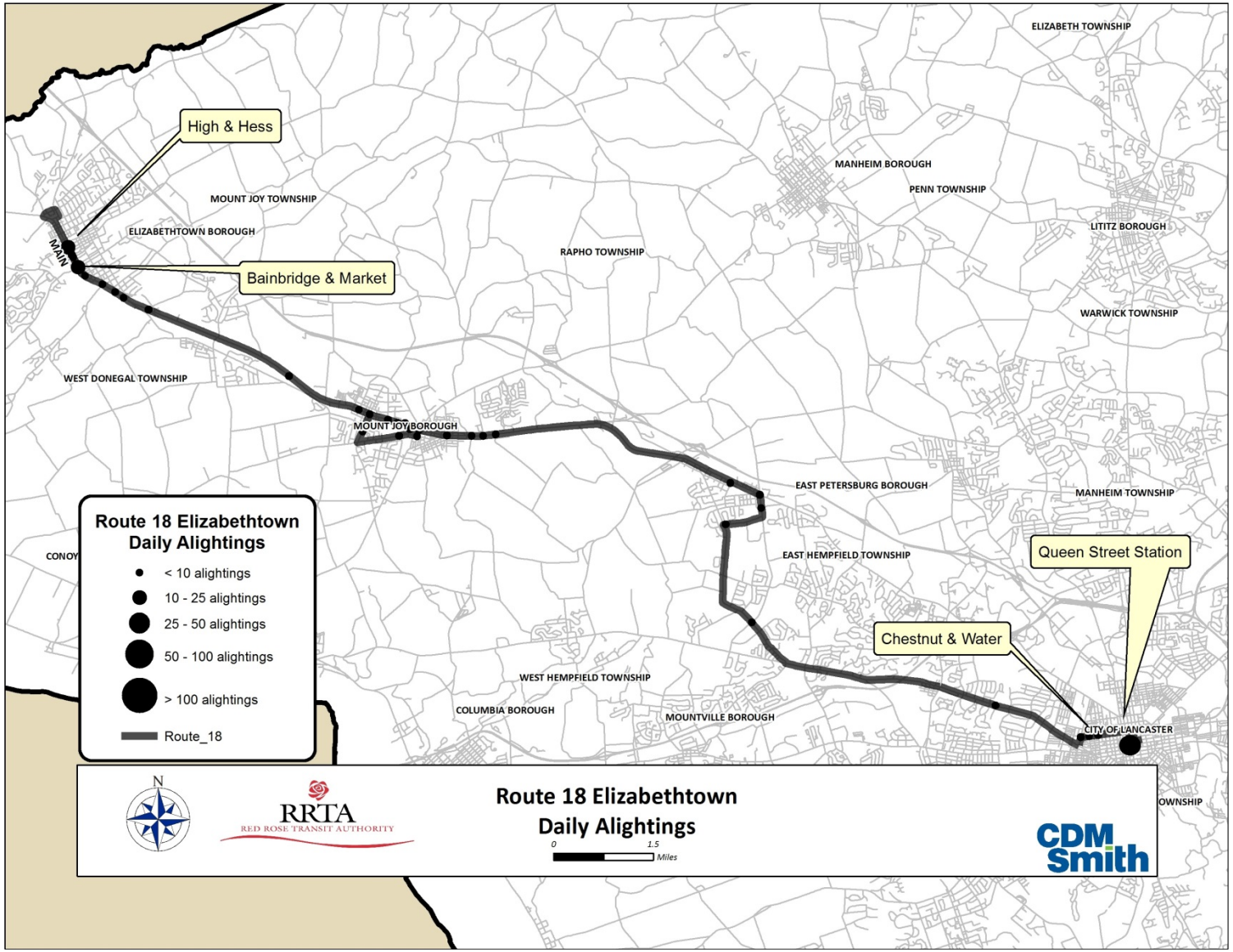


Figure 7-49: Route 19 Manheim Boardings

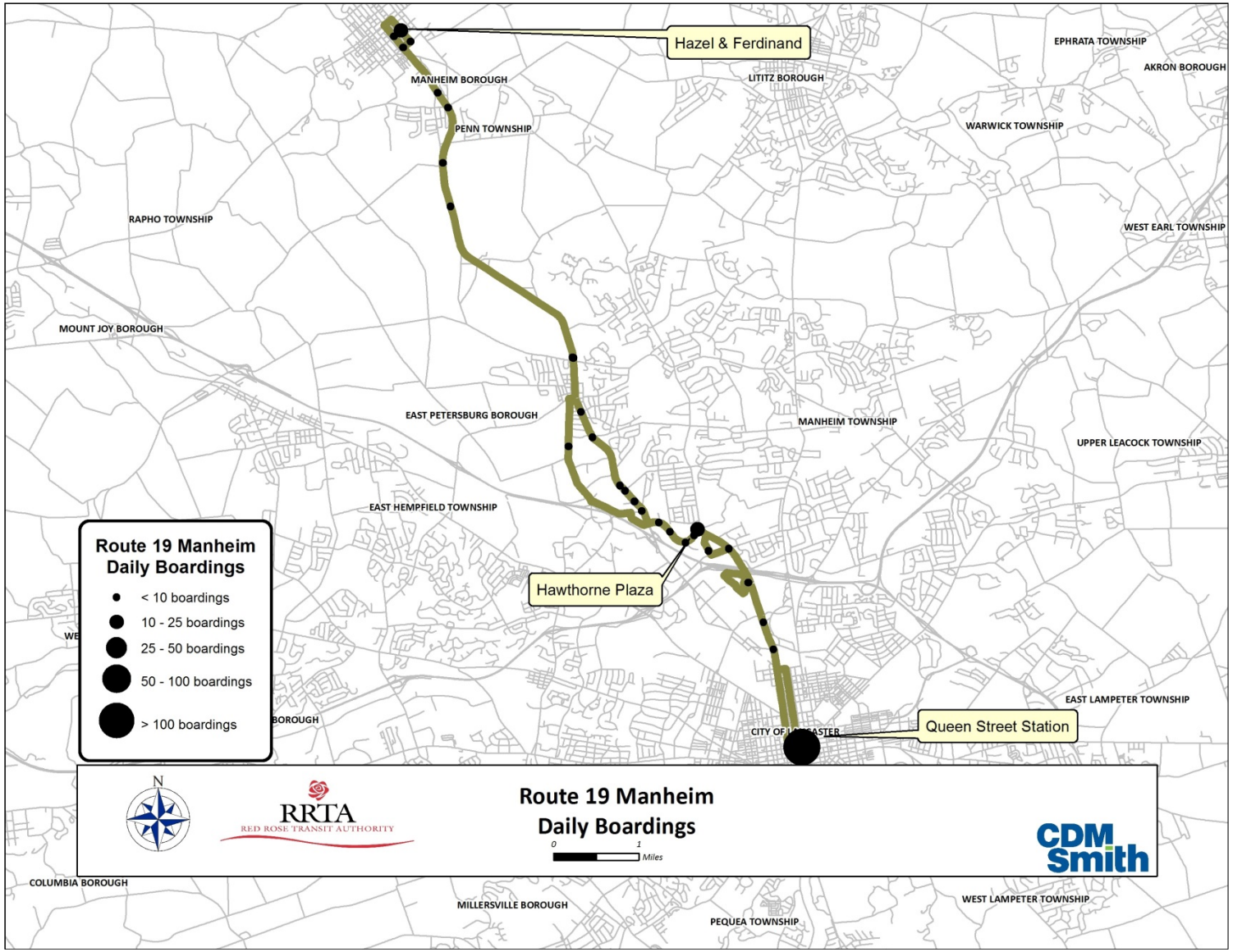


Figure 7-50: Route 19 Manheim Alightings

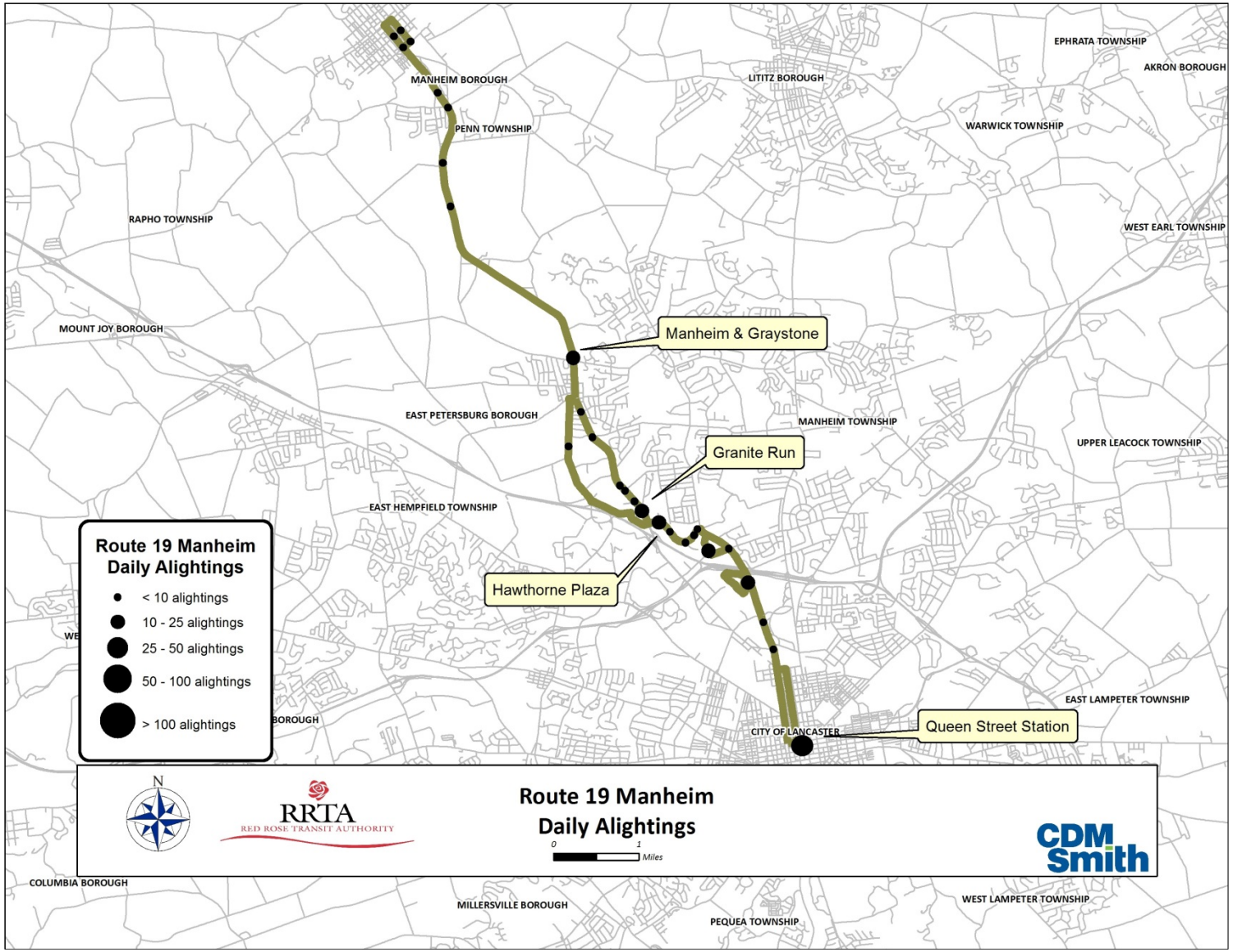


Figure 7-51 Route 20 Greenfield Boardings

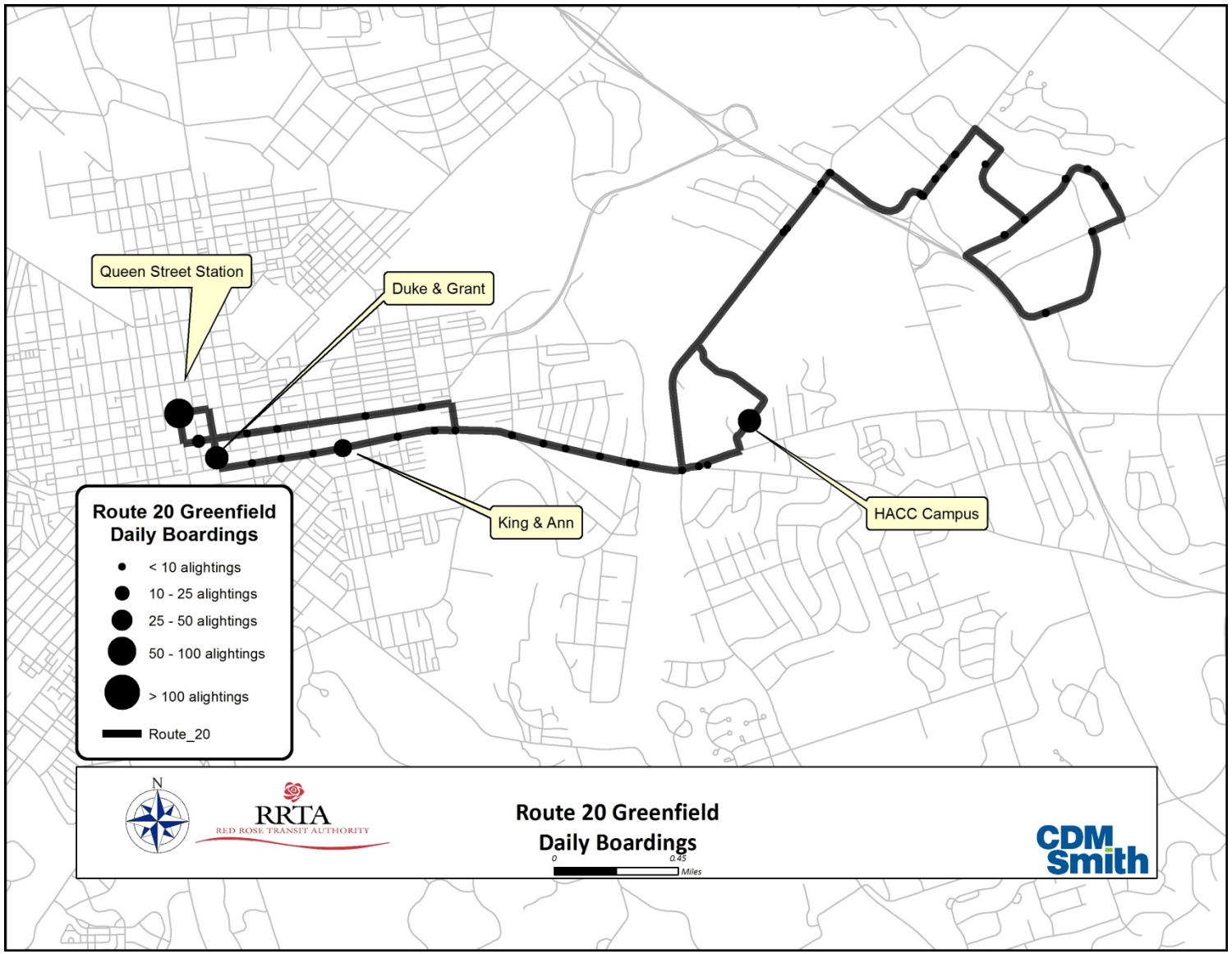


Figure 7-52: Route 20 Greenfield Alightings

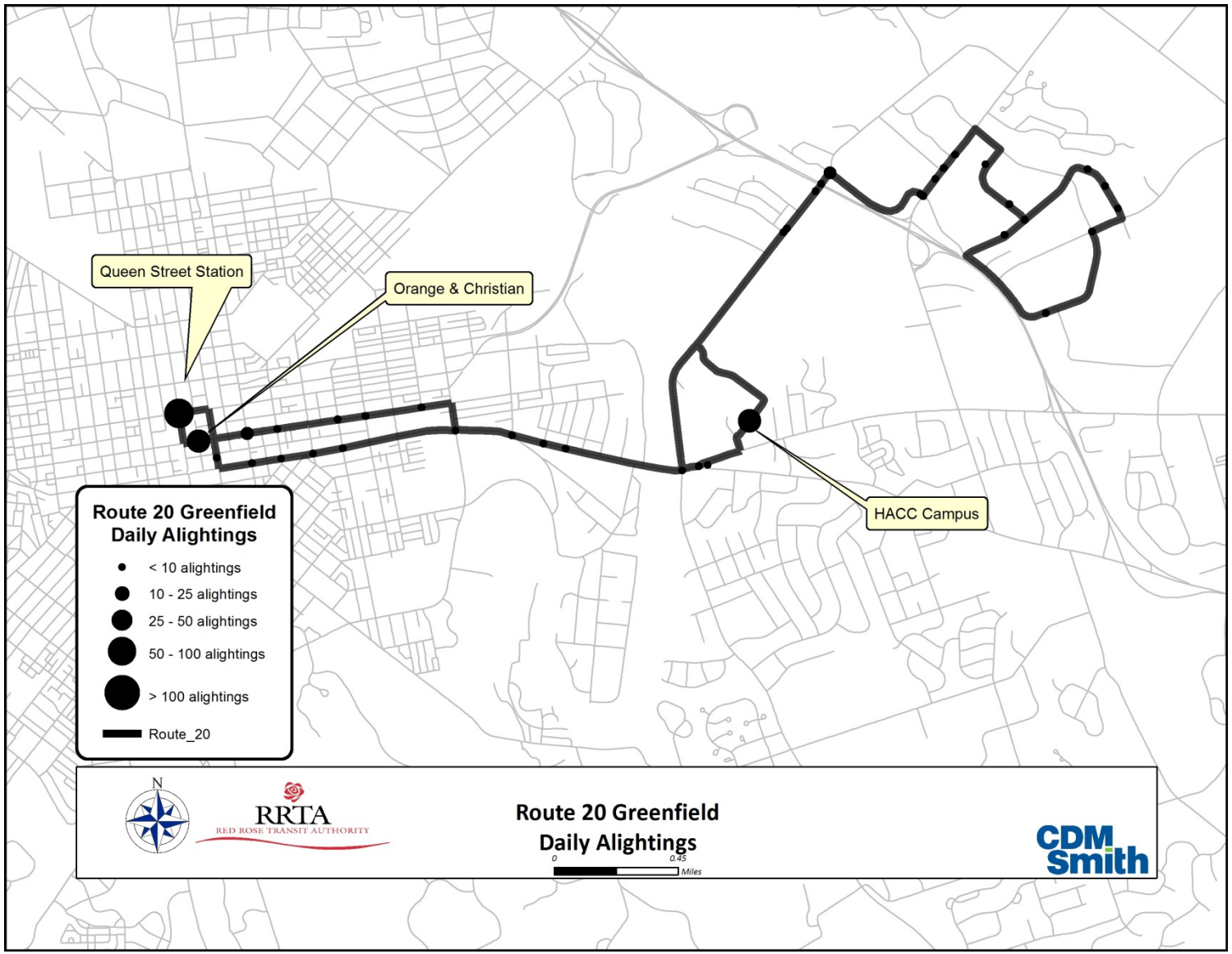


Figure 7-53: MU XPRESS Boardings

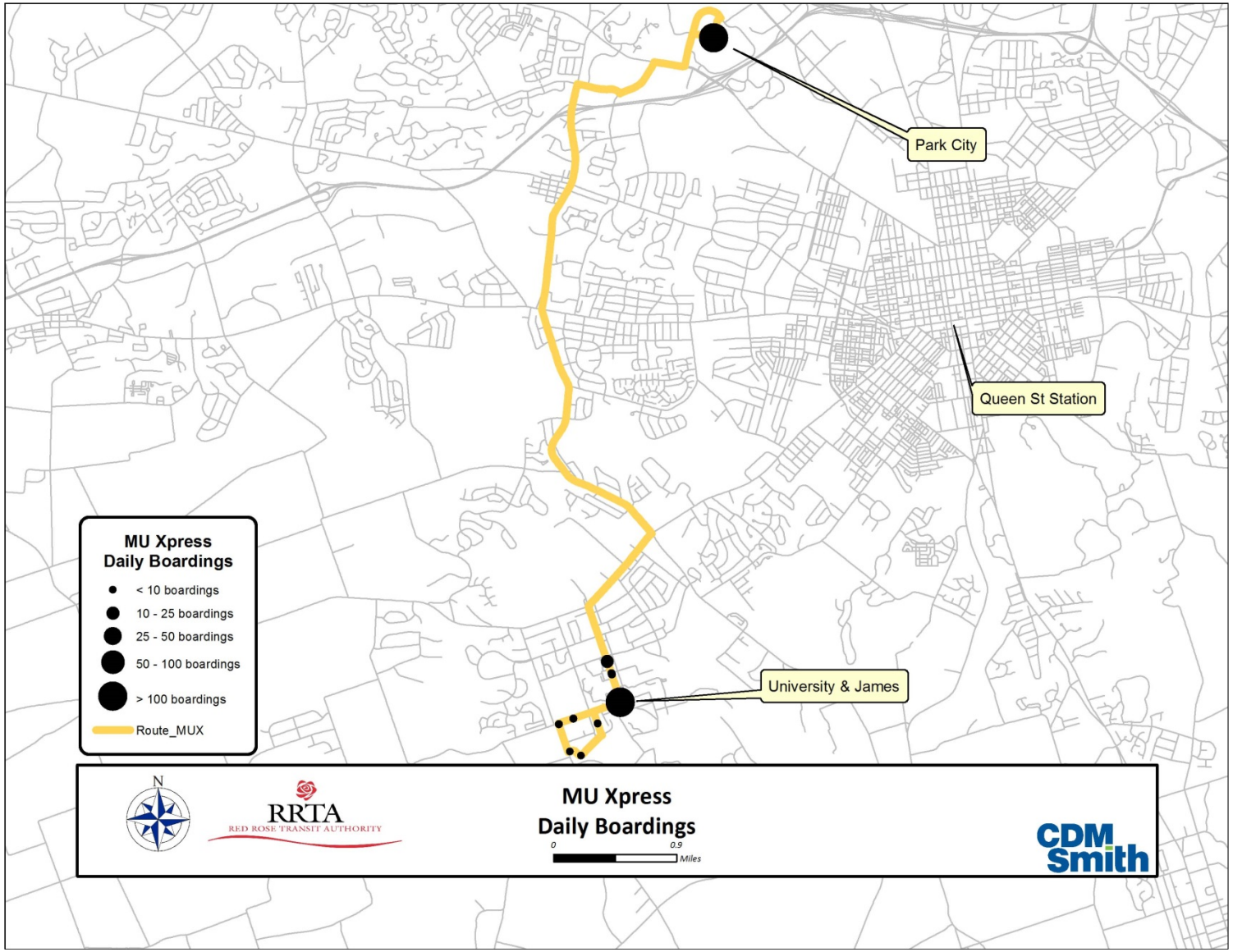
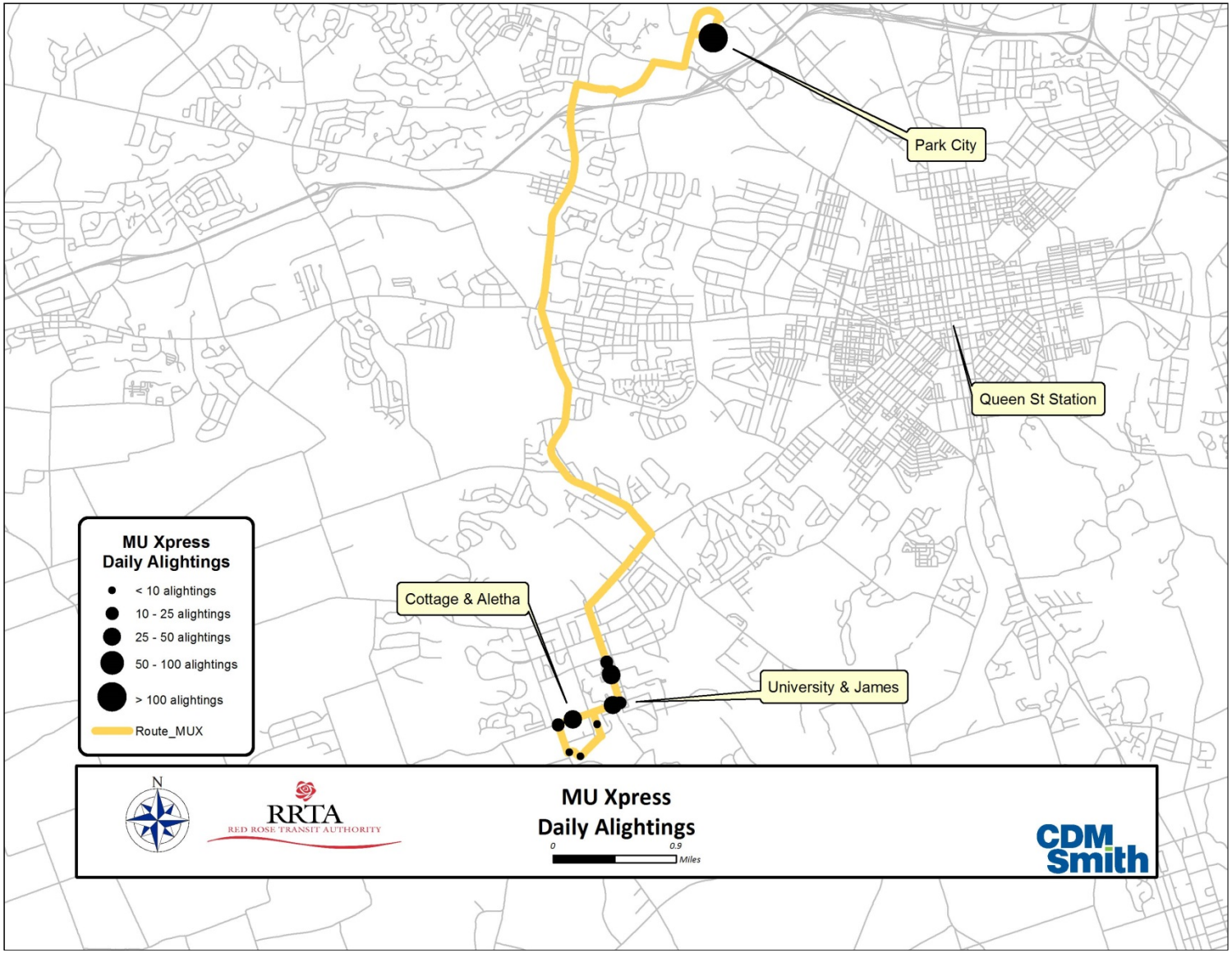


Figure 7-54: MU XPRESS Alightings



Boarding and alighting activity was highest at the Queen Street Station and accounts for 28 percent of total boardings. Other high activity bus stop locations included major shopping, medical, and educational destinations in the area. RRTA has approximately 1,650 designated bus stops in the Lancaster County service area. **Table 7-3** presents the busiest bus stop boarding locations for RRTA fixed route services. These are the key stop locations that should be given highest consideration for passenger amenities (passenger shelters, benches and sidewalk access).

Table 7-3: System Stops with Highest Daily Boardings

	Street Name	Nearest Cross Street	Total Daily Boardings
1	W. Chestnut	Queen St.	1,952
2	Park City	Kohls Mall Entrance	285
3	Millersville University Student Memorial Center (SMC)	Frederick St	199
4	Duke Street	Grant Street	195
5	Queen Street	King – Fulton Bank	180
6	Route 462	Rt. 30	146
7	Rt.30	Across Tanger Outlets	140
8	HACC Campus	At Shelters	85
9	Queen Street	Orange/Binns Park	81
10	King Street	Ann Street	67
11	Walnut Street	Queen Street	64
12	Locust Street	Third Street	60
13	Orange Street	Christian Street	42
14	Columbia Avenue	Ruby Street	38
15	King Street	Lime Street	33
16	Rt.30	Rt.896 Waffle House	30
17	Farnum	Church	30
18	Chestnut Street	Duke Street	30
19	Manor S C	Weis Market	29
20	Lancaster General Hospital	Duke Street	29

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8. Service Guidelines

Service guidelines provide a framework for evaluating both existing and proposed route modifications and additions. Any RRTA network changes must provide a customer-focused, easy to understand, sustainable transit system. Furthermore, the establishment of a service hierarchy, such as differentiating between city and county services, allows RRTA to provide appropriate service levels that maximize the benefits compared to the investment.

Any future RRTA network will be challenged to provide sustainable mobility options within Lancaster County. Currently, most residents use private automobiles to travel throughout the County. There is a growing concern over the environmental impacts of cars; increased public transportation service is one method to reduce the use of private automobiles, while providing benefits to all transit passengers.

In the future, transit, biking, and walking will continue to become prevalent travel modes. The urban core area in the City of Lancaster is the most likely area where sustainable travel may be utilized for all trips, every day. Key characteristics of the core urban area include concentrated residential and employment densities. RRTA should continue to actively work with the various city and county planning departments to continue the development of smart growth initiatives.

8.1 RRTA Service Standards

As part of the 2002 Comprehensive Operational Analysis, RRTA adopted the following transit performance criteria and service standards to assess existing services and assist in the modifications to services:

- Service attributes;
  - Availability;
  - Route Structure; and
  - Service Provision.
- Operational attributes;
  - Speed;
  - Loading;
  - Bus Stop Spacing; and
  - Dependability.

- Passenger comfort and convenience; and
  - Bus Shelters;
  - Bus Stop Signs;
  - Revenue Equipment; and
  - Public Information.

- Fiscal condition.
  - Fare Structure;
  - Farebox Recovery;
  - Productivity;
  - Level of Subsidy; and
  - Evaluation of New Services.

RRTA's performance criteria and service standards are intended to be guidelines to evaluate routes. As such, common sense and reasonable judgment must be used when applying service standards to assess existing transit routes or any proposed service changes or expansions.

8.2 Low Performing Routes

Low performing RRTA services are considered to be the least productive routes either by passengers per hour, revenues to expense, subsidy per passenger, and subsidy per passenger mile. Chapter 5 presented detailed RRTA route information, which is summarized below in **Table 8-1** and **Table 8-2**. RRTA staff has consistently monitored routes for over a decade to ensure maximum efficiency of services.

The lowest performing RRTA routes, as shown in Table 8-1 and Table 8-2, include both city and county routes:

- Route 4: Elm St/Parkside (City)
- Route 18: Elizabethtown (County)
- Route 15: Willow Street (County)
- Route 6: Trolley (City)
- Route 13: White Horse (County)
- Route 5: Grandview (City)

The service standards provide a framework to ensure all RRTA services are successful and enhance the transit network. All routes, new and old, must be monitored on a regular, individual basis to ensure continuous performance. Any proposed service changes should be evaluated six months and one year after implementation.

Table 8-1: Route Performance Analysis, FY 2012-13

Route	Passengers	Expenses	Revenues	Hours	Trip Length	Passengers Per hour			Revenue to Expense			Subsidy per Passenger			Subsidy per Passenger Mile			
						Pass/Hr	% of Avg	Points	Rev/Exp	% of Avg	Points	Sub/ Pass	% to Avg	Points	Sub/ Pmile	% to Avg	Points	Total
1-SE/PCA	170,841	$681,412	$243,005	9,248	2.87	18.47	106.5%	3	35.66%	103.52%	3	$2.57	$1.23	3	$0.89	81.16%	3	12
2-PCB/6th Ward	149,975	$694,038	$212,346	9,418	2.87	15.92	91.8%	3	30.60%	88.81%	3	$3.21	$0.98	3	$1.12	64.84%	2	11
3-PCC/8th	179,404	$726,414	$254,075	9,555	2.87	18.78	108.3%	3	34.98%	101.53%	3	$2.63	$1.20	3	$0.92	79.10%	2	11
4-Elm/Parkside	21,349	$179,980	$35,105	2,230	2.87	9.57	55.2%	1	19.50%	56.62%	1	$6.79	$0.46	1	$2.36	30.69%	1	4
5-Grandview	47,967	$240,559	$62,490	2,973	2.87	16.13	93.0%	3	25.98%	55.58%	1	$3.71	$0.85	3	$1.29	56.10%	1	8
6-Trolley	21,205	$185,536	$32,300	2,565	2.87	8.27	59.6%	1	17.41%	37.25%	1	$7.23	$0.54	1	$2.52	36.03%	1	4
10-Lititz	83,959	$533,246	$161,630	6,056	5.47	13.86	80.0%	3	30.31%	87.98%	3	$4.43	$0.71	2	$0.81	112.10%	3	11
11-Ephrata	69,651	$488,606	$148,516	5,020	5.47	13.87	80.0%	3	30.40%	88.23%	3	$4.88	$0.65	2	$0.89	81.29%	3	11
12-New Holland	77,056	$525,054	$152,983	5,364	5.47	14.37	82.8%	3	29.14%	84.58%	3	$4.83	$0.65	2	$0.88	82.21%	3	11
13-White Horse	52,387	$384,060	$95,510	3,880	5.47	13.50	77.9%	2	24.87%	72.19%	2	$5.51	$0.57	1	$1.01	72.07%	2	7
14-Rockvale	270,217	$959,977	$441,807	11,816	5.47	22.87	131.9%	3	46.02%	133.59%	3	$1.92	$1.64	3	$0.35	207.00%	3	12
15-Willow Street	35,554	$253,775	$58,224	3,034	5.47	11.72	67.6%	2	22.94%	66.60%	2	$5.50	$0.57	1	$1.01	72.17%	2	7
16-Millersville	238,925	$996,705	$398,010	12,265	5.47	19.48	112.3%	3	39.93%	115.91%	3	$2.51	$1.26	3	$0.46	158.41%	3	12
17-Columbia	253,577	$966,072	$458,448	11,640	5.47	21.78	125.6%	3	47.45%	137.75%	3	$2.00	$1.57	3	$0.37	198.29%	3	12
18-E-town	49,519	$463,085	$112,660	4,607	5.47	10.75	62.0%	1	24.33%	70.62%	2	$7.08	$0.45	1	$1.29	56.09%	1	5
19-Manheim	93,207	$522,426	$161,834	5,978	5.47	15.59	89.9%	3	30.98%	89.92%	3	$3.87	$0.81	3	$0.71	102.60%	3	12
20-Greenfield	71,322	$261,103	$92,952	3,125	5.47	22.82	131.6%	3	35.60%	103.34%	3	$2.36	$1.34	3	$0.43	168.36%	3	12

Table 8-2: Route Performance Ranking by Performance Criteria

FY 2013 Rank	Route
1	14-Rockvale
2	17-Columbia
3	20-Greenfield
4	16-Millersville
5	3-PCC/8th
6	1-SE/PCA
7	19-Manheim
8 tie	2-PCB/6th Ward
8 tie	10-Lititz

FY 2013 Rank	Route
10	12-New Holland
11	11-Ephrata
12	5-Grandview
13	13-White Horse
14	6-Trolley
15	15-Willow Street
16	18-E-town
17	4-Elm/Parkside

In addition to the above in-house route and system-wide performance monitoring, the Pennsylvania Department of Transportation (PennDOT) is required by the State Legislature (Act 44) to report four performance indicators annually for all urban and rural transit operators, including RRTA. These include:

- Operating expense per revenue vehicle hour;
- Operating Revenue per vehicle revenue hour;
- Total Boardings per revenue vehicle hour; and
- Operating expense per passenger boarding.

As alternatives were developed and as presented in the following chapter, each of these factors was considered.

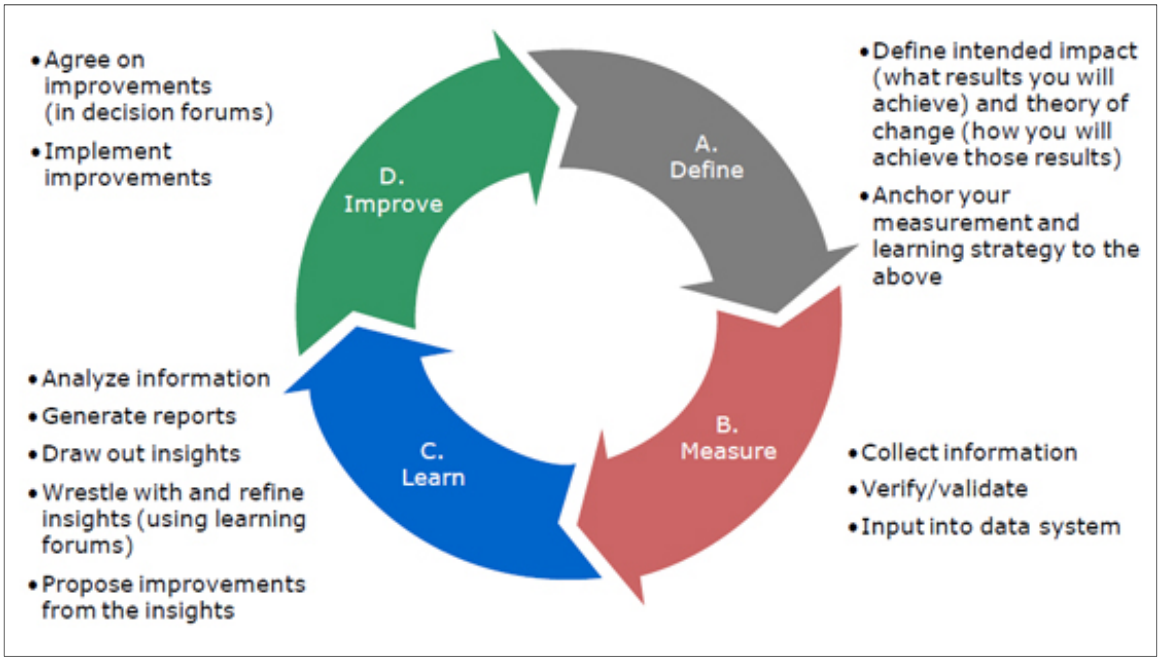
Figure 8-1 illustrates the lifecycle of monitoring performance for all routes in the system. As RRTA staff monitor route performance, each of these steps are followed.

The following actions may be used by RRTA for the purpose of improving route performance:

- **Route Segment Level Analysis** –A segment level analysis may highlight specific areas of a route that significantly reduces the overall performance to below the service standards. If a specific area of a route is identified, targeted modifications may increase productivity for the entire route. If targeted modifications do not increase productivity the entire route should be evaluated for modifications.

- **Change Frequency of Service** – Adjusting frequency and availability of service of low performing routes may help the route appeal to a specific market segment and increase productivity. Some low performing routes may not warrant current service frequencies and elimination of the route should be considered.

Figure 8-1: Performance Measurement Lifecycle



- **Target Marketing** – Marketing techniques help raise public awareness for a route in need of remedial action. Poor ridership may be the result of lack of public knowledge and investing in marketing may reverse the trend. This is especially true for concentrated market groups, such as employment centers, shopping districts, schools, hospitals, agencies, and other major destinations.

- **Rider Outreach –** Onboard surveys and rider interviews are methods for gaining route improvement ideas from passengers who rely on transit service. This information may identify popular destinations, with ridership potential, along or close to an existing route that currently does not have service.

- **Discontinuation –** The final option for dealing with low performing routes is eliminating a section or the entire route. If no other remedial actions increase route productivity, discontinuation may be necessary to preserve resources and provide the community with the most efficient service.

The service concepts detailed in the following chapter were developed to address low performing routes and meet RRTA's service standards.

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9. Alternatives

The service concepts presented within this chapter aim to improve the efficiency, effectiveness, and performance of the current RRTA transit system. This is to be achieved over a 10-year time frame. The concepts are based on lessons learned from a thorough review of existing Lancaster County market and socio-economic conditions, the performance of RRTA fixed route transit services, together with a stakeholder and community outreach process, which will shape the overall vision for public transit in Lancaster County.

One overarching goal for Red Rose Transit Authority is to sustainably grow system ridership, for today's system and in the future. To this end, a 10-year plan has been developed, reflecting different underlying assumptions, especially in relation to operating funding levels.

9.1 Plan Phases

Across the 10-year period, improvements are shown in two phases, short-term and long-term.

- **Short-term (1-5 years):**
  - The plan examines options to enhance the ridership levels achieved from **existing resources**. The short-term plan is consistent with the existing Transportation Improvement Program (TIP).
  - The plan provides for upgrading of the existing RRTA network, with more frequent service on key corridors, commuter express services, and some route modifications.
  - Increased services are possible during this phase due to elimination of services in two areas due to low ridership.
- **Long-term (6-10 years):**
  - This phase of the plan includes many transit service enhancement alternatives. These alternatives were developed from public input, stakeholders, and feedback from RRTA local project staff. The alternatives presented in this long-term phase **will require additional funding sources** to implement.

The **Short-term Phase** makes the best use of the existing system resources (service hours, peak fleet, and operating funding) to generate increased ridership through enhanced service levels on key corridors. The core recommendations are based on providing the most efficient and productive service with available resources. Should additional funding become available in the short-term, alternatives from the long-term phase would be considered for implementation.

The **Long-term Phase** assumes new opportunities for investment in transit should new funding sources become available. Additional funding is critically needed to allow for the most optimal service levels on key corridors and other supporting transit services in the county and urban areas. Funding availability will make it possible for the implementation of more frequent service.

9.2 Long Range Planning

Beyond this 10-year planning study, RRTA will continue to work with the local municipalities and Lancaster County planning staff to pursue opportunities to improve the RRTA transit network. This effort may include new corridor services, including possible new rapid transit service, regional transit connections, and additional rural services.

In all plan phases, given the anticipated additional funding or restructured services, it will be important to continue the monitoring of service to ensure the best return is achieved from all investment in transit services. It is also very important that the proposed service concepts help grow ridership from choice riders and from transit-dependent riders, who dominate ridership today. This is critical for sustaining such investment.

In addition to service improvements, the following key issues will also need to be addressed in order to grow ridership:

Source: lancasteronline.com

- New investment in facilities such as bus shelters, sidewalks, real time and static customer information, and priority for transit vehicles.
- Key corridor transit service expansion to be matched by development efforts supporting higher residential and employment densities.
- Disincentives for car use such as higher cost parking downtown and other key employment centers.

Together these factors can create a strong demand for transit, helping it reach many new choice riders. With RRTA service and facility expansions, comes the associated cost of maintenance and personnel. There are several options, including partnership with local entities, private contractors, or direct service from Authority employees for meeting the additional needs.

9.3 Alternatives Framework and Focus

In order to determine the most appropriate alternatives to enhance the RRTA system and sustainably grow ridership, key findings from market assessment, service evaluation, and community outreach tasks

of this study were first combined into a framework of key issues and goals to be addressed by the plan. The key findings are consistent with the existing RRTA goals and objectives presented earlier in the report. The efficiency of RRTA route alternatives also plays a key role in the final recommendations.

- **Implement More Frequent Services:** Some RRTA routes operate approximately 30-45 minute service during peak hours, while other routes are 60 minutes or more. These headways do not allow for "spontaneous" transit use without someone needing to reference a schedule and avoid long waits. Increased frequencies are needed during peak hours to attract riders who will use RRTA services without planning trips in advance. Frequent headways allow riders to know the next bus will not be more than 5 to 10 minutes away on average, expanding the market to more choice riders.

- **Enhance and Develop Key Travel Corridors:** Data on existing route service performance metrics (productivity), as well as on population density and key employment locations, all point to the strength of existing major arterial corridors, such as Rockvale on Route 30, and Columbia on Route 462. These corridors are strong today and will be stronger with enhanced service levels. Even with enhanced service levels, there are also many opportunities to develop more transit supportive land uses. Increased residential and employment densities along these corridors will help them reach their full ridership potential. Each of these corridors currently produces over 20 passengers per revenue hour, the highest performance levels for the system, and are capable of even higher performance with the right mix of market and service conditions.

- **Focus on circulation/connectivity in the urban area:** Lancaster County has a core urban area with higher population and employment densities most suited to sustaining regular fixed route transit services. RRTA services are already established in this area, especially on key urban arterials, but require enhancement to reach their full ridership potential from both transit-dependent and choice riders. This is especially important for key urban arterial corridor services lacking the frequencies needed to attract significant choice ridership. The first priority for network improvements should be to improve transit service quality on core arterial routes within this urban area, especially in terms of service frequency improvements.

QVC, Inc. Distribution Facility

- **Serve Key Employment Nodes:** Transit routes need to serve the urban area of the city where there are high density residential areas and some employment opportunities, such as the hospital and government offices, as well as other transit supportive conditions such as paid parking. These conditions provide RRTA a good chance of ridership growth. However, there is also a need to better serve other significant outlying employment

areas. While these locations are less transit-oriented, with lower density layouts, free employee and customer parking, and easy access to freeways, there is still an opportunity for transit to increase its mode share for travel to these locations. This is through providing faster and more direct service options, such as new express services. More flexible and cost effective options such as vanpools in partnership with Commuter Services of Southcentral Pennsylvania should also be explored. Another option of business partnerships and future subsidies for transit service should also be discussed. Operational revenues for additional future services will be needed to support expansion. Without partnership between RRTA and local entities and businesses, the agency will be limited to expand service.

- **Higher Operating Speed:** Customers often refer to the need for transit travel times to be competitive with those of private autos. Improvement in service operating speeds is a win-win situation, making service both cheaper to operate and more attractive to riders. The plan should examine new express service options, as well as reducing delay for arterial bus services, such as transit signal priority technology, and intersection enhancements for transit priority (queue jumps, bypass lanes).

- **Address Funding Shortage:** RRTA has extensive route coverage with the city and county routes; however, low frequencies of service (headways) do not meet the needs of the community. The existing conditions reflect long standing operating funding limits. These continue to be a challenge as costs climb while service and ridership levels remain fairly stable. For transit ridership to grow significantly and sustainably as a regional transit system is established, growing funding from a dedicated reliable source is critical. Without it, the long-term phases of this plan will be difficult or unlikely to implement.

- **Improve the Customer Experience:** The plan stresses the importance of providing improved facilities for customers through a range of enhancements to transit facilities and amenities. In particular, the major bus stops and activity centers are priorities for investments in passenger facilities and amenities:
  - Transit shelters at all major stops and hubs
  - New or improved sidewalks to improve access to transit
  - Enhanced transit information at bus stops including new real-time technology
  - Transit signal priority (as well as enhanced traffic signal coordination)
  - New Park and Ride lots
  - Improved downtown transit facilities at the secondary transit stations, such as W. Chestnut St./N. Queen St., near Queen Street Station

STOPwatch Bus Stop Kiosk, Champaign-Urbana, IL.

The secondary stations should have a prominent RRTA sign indicating it as a primary stop. In addition, schedules for all connecting routes should be available at each of the stations.

These enhancements will help raise the profile of transit in Lancaster County and support significant growth in ridership by enhancing the overall transit experience. Many required improvements are not directly under RRTA control, so additional agencies will need to become partners for the successful implementation of the facility and amenity aspects of the plan. The ability to advance such enhancements, such as lighted bus shelters, are under the auspices of municipal ordinances. Therefore, RRTA will continue to build relationships with municipal departments and the Lancaster County Planning Commission to implement improvements and coordinate future facilities and park and ride lots.

- **Sustainable Mobility:** Many stakeholders and residents wisely pointed out that ridership growth is not just dependent on improved transit services, but is also affected by conditions influencing mode choice. These include such sustainable mobility factors as concern for the environment, community walkability, as well as parking availability and cost of gas, and transit priority over other modes.

  To further develop transit ridership, sustainable mobility incentives should be developed in partnership with the Lancaster County Planning Commission and local municipalities to promote a more transit friendly community design, better transit services and priority measures, as well as concern for the environment.

9.4 Short-Term Alternatives

One primary focus of the Short-term phase of the plan is the review of existing routes as discussed in Chapter 5 and making recommendations based on route performance and productivity. RRTA continues to monitor the on-time performance of routes which will improve service reliability. The Short-term phase of this plan is a **cost-neutral plan** and reflects the reallocation of resources from unproductive services to areas where service needs have been identified. A significant portion of the resources have been committed to additional vehicles for Route 14 Rockvale and Route 17 Columbia, as a means to improve service reliability and to decrease headways. Often, keeping routes on schedule at the designated frequencies can involve extra buses during times of congestion. Service reliability is a necessary first step to attracting and keeping all transit riders. Since service levels are still relatively low, systemwide ridership is expected to remain relatively unchanged.

The overriding concept of the Short-term phase is to provide recommendations that can be implemented immediately. To do this, RRTA retains very similar core characteristics to the existing service so that very little driver training or rider education is necessary. **Table 9-1** presents the proposed Service Concepts for the Short-term Phase of this plan. As stated earlier, these improvements are meant to be implemented within the existing RRTA resources.

Table 9-1: Short-term Service Alternatives

	Service Options	Hours/ Day	Days Week	Headway	Trip Time - 1-way	Vehicles	Ridership	Annual Hrs	Annual Cost	Notes
1	Add 5% revenue hours over base years	vary	vary	n/a	n/a	vary	no change	5,000	$432,800	Service will be added to existing routes, as needed to meet existing time schedules and improve ontime performance.
2	Eliminate Route 4 Elm Avenue/Parkside Route	n/a	n/a	n/a	n/a	n/a	(21,350)	-2,230	-$179,980	
3	Eliminate Downtown Trolley	n/a	n/a	n/a	n/a	n/a	(21,200)	-2,565	-$186,000	
4	Modify Route 15 Willow Street	n/a	n/a	45 min	n/a	n/a	Loss of approx. 5K annually from route change; however, estimated increase to approx. 13 pass/hr, which is 4K increase annually.	no change	no change	Ridership estimates based on 2013 surveys & historic ridership trends. Assumes aggressive marketing plan for new service.
5	Implement Elizabethtown Express Route	16	5	30 min	n/a	3 vehicles	range of 41,600 - 124,800	3,120	$270,067	Peak service only - 3 am and pm trips; ridership based upon range of minimum 10 pass/hr to 30 pass/hr. after full implementation.
6	Implement Gap Express Route	16	5	30 min	n/a	3 vehicles	range of 41,600 - 124,800	3,120	$270,067	Peak service only - 3 am and pm trips; ridership based upon range of minimum 10 pass/hr to 30 pass/hr. after full implementation.
7	Add bus to Rt. 14 Rockvale all day.	12	5	25-35 min	n/a	1	slight increase	3,120	$270,067	Ridership may have a slight increase of 1%; however the additional bus is primarily for schedule adherence.
8	Add bus to Rt. 17 Columbia all day.	12	5	25-35 min	n/a	1	slight increase	3,120	$270,067	Ridership may have a slight increase of 1%; however the additional bus is primarily for schedule adherence.

Note: Red print indicates revenues available for other service improvements.

9.4.1 Service Concepts

1. **Increase Base Revenue Hours by Five Percent.**

   In year 1, RRTA will have a five percent increase in revenue hours, which equates to approximately 5,000 annual revenue hours or approximately $430,000. These hours will be allocated to different routes, with particular concentration on adjusting route timings and meeting schedules.

2. **Eliminate Route 4 – Elm Avenue/Parkside Route.**

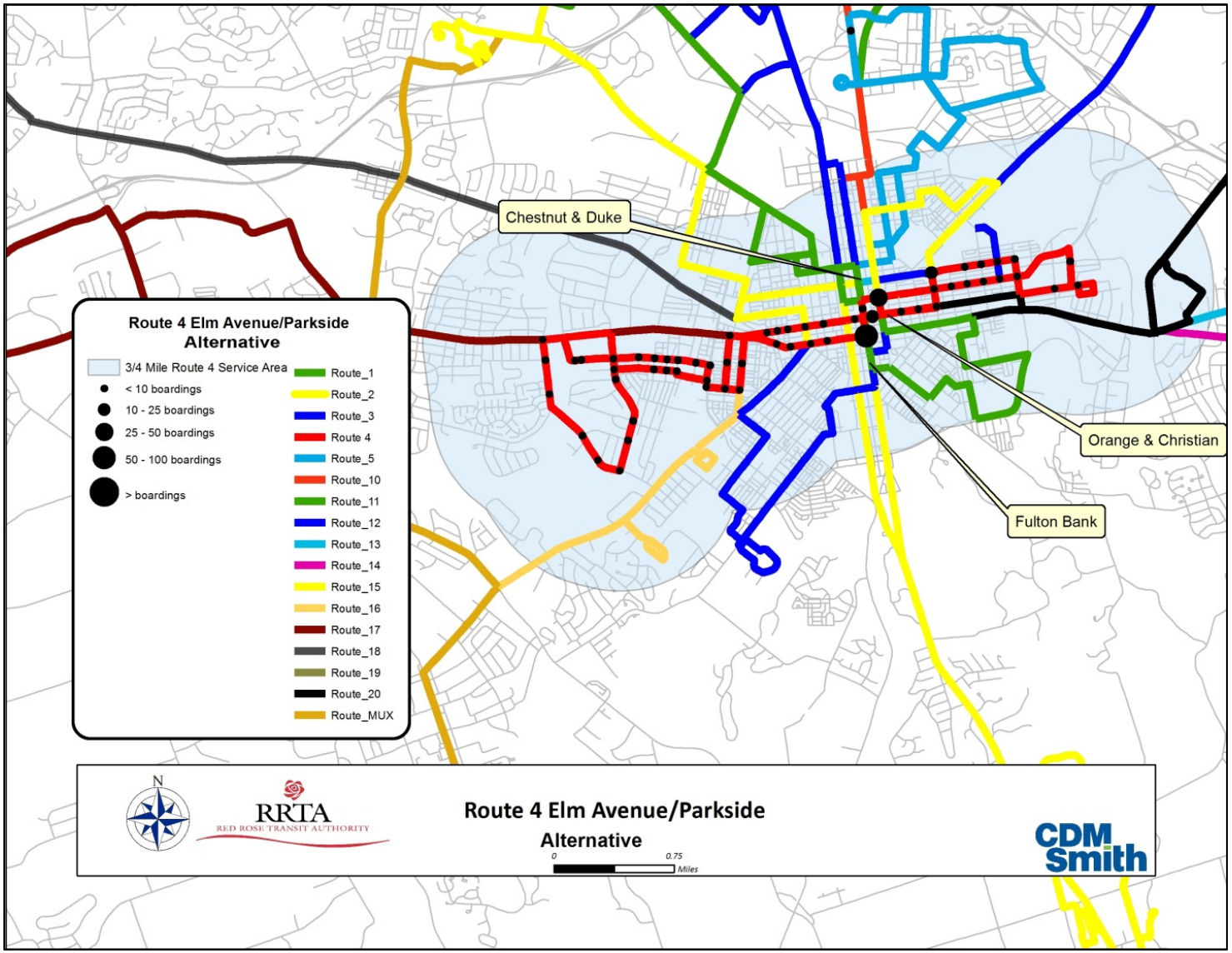
Route 4				
Passenger/ Hour	FY 2010/11	FY 2011/12	FY 2012/13	FY 2013/14
Route 4	8.9	9.36	9.6	8.28
System Average	15.1	16.1	15.8	15.7

Over the past several years, Route 4 – Elm Avenue/Parkside has consistently been a low performing route with few boardings. As shown in the above chart, one metric for gauging route performance is passengers per hour. As a national transit industry 'rule-of-thumb,' when a fixed route has productivity falling below 10 passengers per hour, a transit agency should consider elimination or modification of the route.

The RRTA system average for all routes is approximately 17 passengers per hour. Route 4 is well-below the average, which does not meet the RRTA standards for productivity. Because Route 4 is not meeting the goals of providing a productive and efficient service; this route is nominated for elimination. By discontinuing Route 4, RRTA will have approximately 2,230 annual revenue hours available to allocate on other high priority service corridors. **Figure 9-1** illustrates Route 4 boarding activity and service area.

The existing Route 4 has an annual cost of approximately $180,000, and collects approximately $35,000 in annual revenues. Annual ridership for Route 4 is approximately 21,350 passenger trips. The average systemwide ridership is approximately 111,000 annual passenger boardings.

Figure 9-1: Route 4 Service Area



3. Eliminate Downtown Trolley.

The Downtown Trolley has had declining ridership over the past several years. As shown in the chart below, the passengers per hour, 8.8, for the Downtown Trolley are well-below the systemwide average of 16 passengers per hour.

Downtown Trolley				
Passenger/ Hour	FY 2010/11	FY 2011/12	FY 2012/13	FY 2013/14
Trolley	12.1	9.7	8.3	8.8
System Average	15.1	16.1	15.8	15.7

Because the Downtown Trolley is not meeting the goals of providing a productive and efficient service; this route is nominated for elimination. **Figure 9-2** presents the service area boundary for the route. By discontinuing the Trolley, RRTA will have approximately 2,565 annual revenue hours available to allocate on other high priority service corridors.

The existing Trolley has an annual cost of approximately $186,000, and collects approximately $32,000 in annual revenues. Annual ridership for the Trolley is approximately 21,200 passenger trips.

The existing Downtown Trolley serves the Clipper Magazine Stadium Park and Ride lot. At this time, RRTA assumes the Park and Ride lot will remain open even though the trolley service would be eliminated. The lot provides a less expensive transportation parking option than other downtown garage parking options.

4. Modify Route 15 – Willow Street.

Route 15 – Willow Street productivity is also scoring below RRTA systemwide averages**. Figure 9-3** presents the proposed route modification alternative, which focuses on high activity commercial areas and employment opportunities along Route 15. The modification includes service from downtown Lancaster to Kendig Square/Kmart and would return to downtown. The existing eastern portion of the route along Rees, Peach Bottom, Valley, and Eshleman Mill Roads would not be served. Service for the route would be more frequent with the modification with approximately 45 minute service throughout the day. No change in costs from the existing service is anticipated.

5. Implement Elizabethtown Express Route.

RRTA proposes an Elizabethtown Express Route that would serve the anticipated employment center west of Elizabethtown. Nordstrom is developing an e-commerce and catalog fulfillment facility in Conewago Industrial Park, encompassing 1.14 million square feet. This proposed route will be implemented using the revenue hours made available from the elimination of Route 4 and the Trolley Service.

Figure 9-2: Trolley Service Area

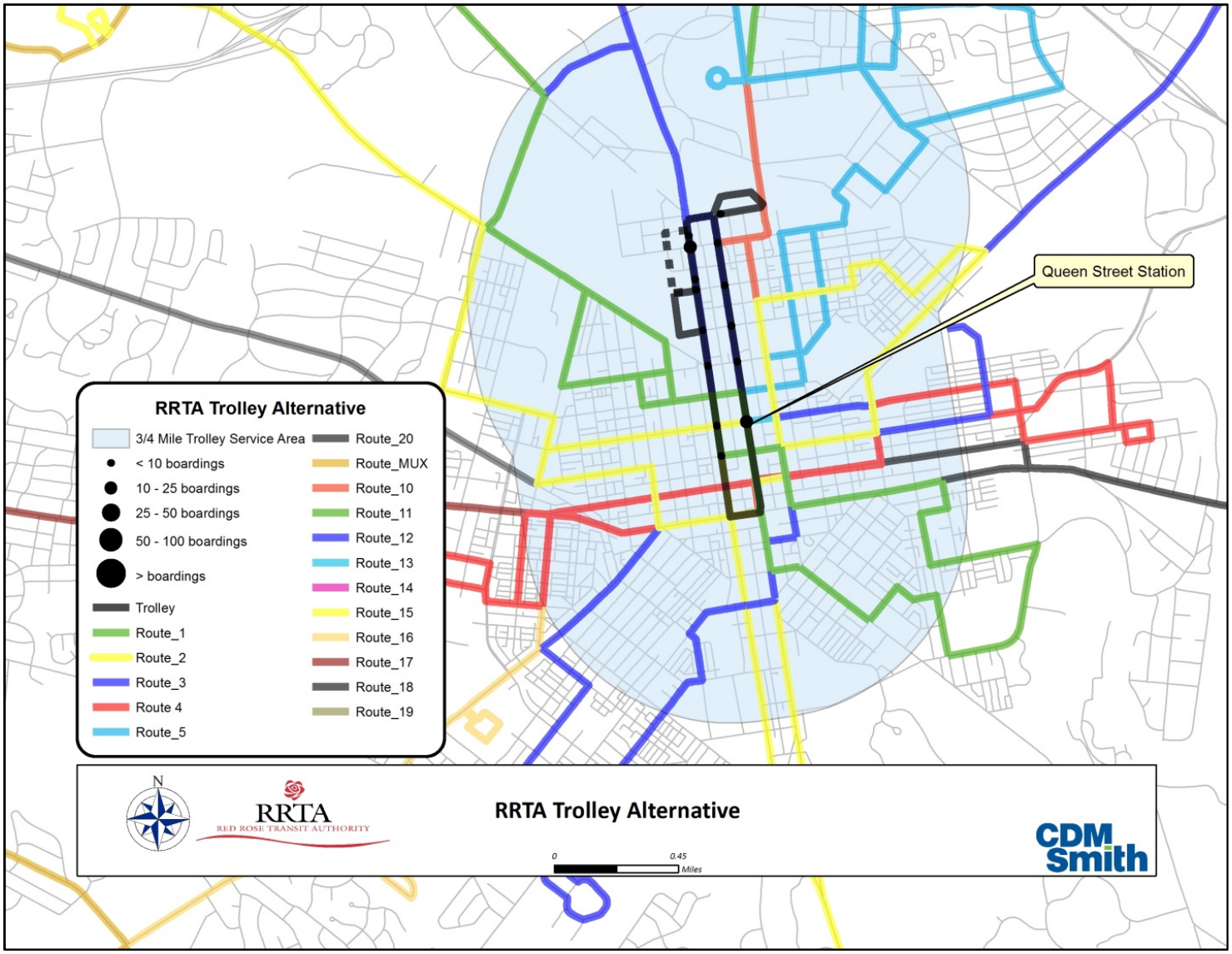
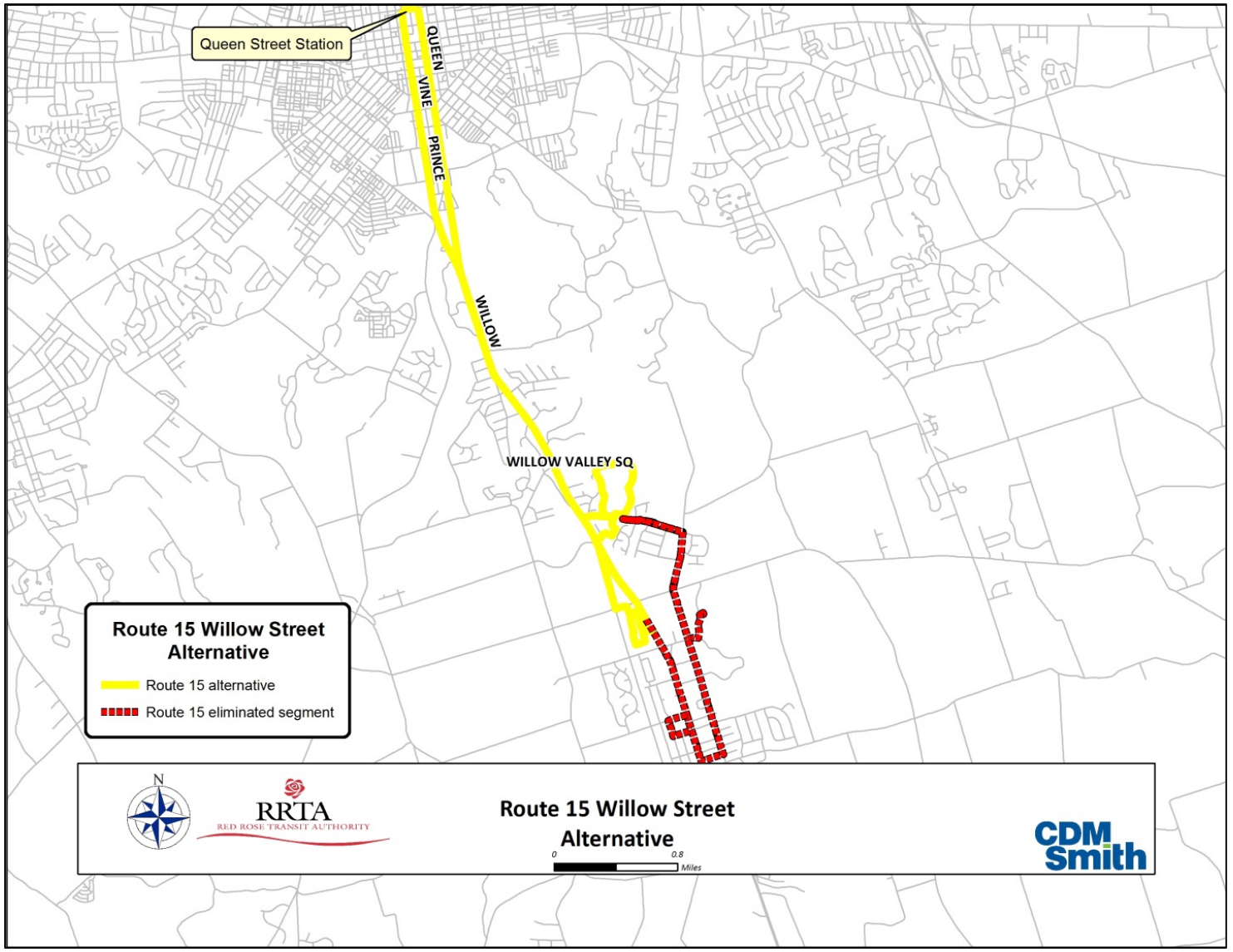


Figure 9-3: Route 15-Willow Street Alternative



The express route will provide 30-minute, direct peak hour service, Monday through Friday, from the Industrial Park to/from the City of Lancaster. The proposed route will travel on Route 283, using exit 743 near the Industrial Park, then travel to/from the city. Limited stops will be implemented in the Industrial Park and downtown. **Figure 9-4** presents the proposed express route service. To assist in the cost of providing the express route, a public-private partnership should be explored. Having a vested interest from the employers being served typically indicates a more successful route, in terms of overall ridership, in the preparation of transit schedules to meet the needs of the employer, and overall participation.

As the Elizabethtown Express Route is developed over the next year, RRTA will coordinate with local municipalities to consider new development occurring at the intersection of Route 283 and Mount Joy Road or Esbenshade Road. If a new park and ride lot were developed in this area, a potential stop in this area would allow Manheim Borough and Mount Joy residents to utilize an express bus into the city. In addition, Mount Joy Road is scheduled for a traffic light at the entrance/exit to Route 283 for ease of traffic movement on and off Route 283. A proposed YMCA to service the entire northeast portion of the county is also proposed within walking distance of the Esbenshade Road/ Route 283 interchange. Future employees and members of the YMCA would have a direct connection to RRTA services if the route provides service to this area. RRTA will continue to work with the major employers and the local communities along the route to determine route alignment and designated stops and schedule times.

6. Implement Gap Express Route.

RRTA proposes an express route to the Gap to serve the new employment centers located east on Route 30, past Kinzers. Urban Outfitters is building a 1.2 million-square-foot, $105 million facility for direct-to-consumer order fulfillment. The building will be across the street from an existing 200,000-square-foot Urban Outfitters center that ships to stores. Similar to the Elizabethtown Express Route, this proposed route will be implemented using the revenue hours made available from the elimination of Route 4 and the Trolley Service due to low productivity. The proposed Gap Express Route, shown in **Figure 9-5**, will provide 30-minute, direct peak hour service, Monday through Friday, along Route 30. This express route is a different service than the existing Route 14 – Rockvale. The route will not have stops between downtown and Rockvale, but will have local service from the Gap to Rockvale. One other option to this proposed route is to have express service with only one or two stops past the Rockvale area. With this option, local residents would access the route at major activity areas, such as Paradise (possibly the former Paradise Elementary school at Belmont Road). As the service is planned over the next year, RRTA will continue to work with employers and communities along the route to determine the best alignment, scheduling, and stop locations.

Similar to the Elizabethtown Express Route, a public-private partnership should be explored to assist in the cost of providing the express route. Having a vested interest from area employers typically indicates a more successful route, in terms of overall ridership, in the preparation of transit schedules to meet the needs of the employer, and overall participation.

Figure 9-4: Proposed Elizabethtown Express Route

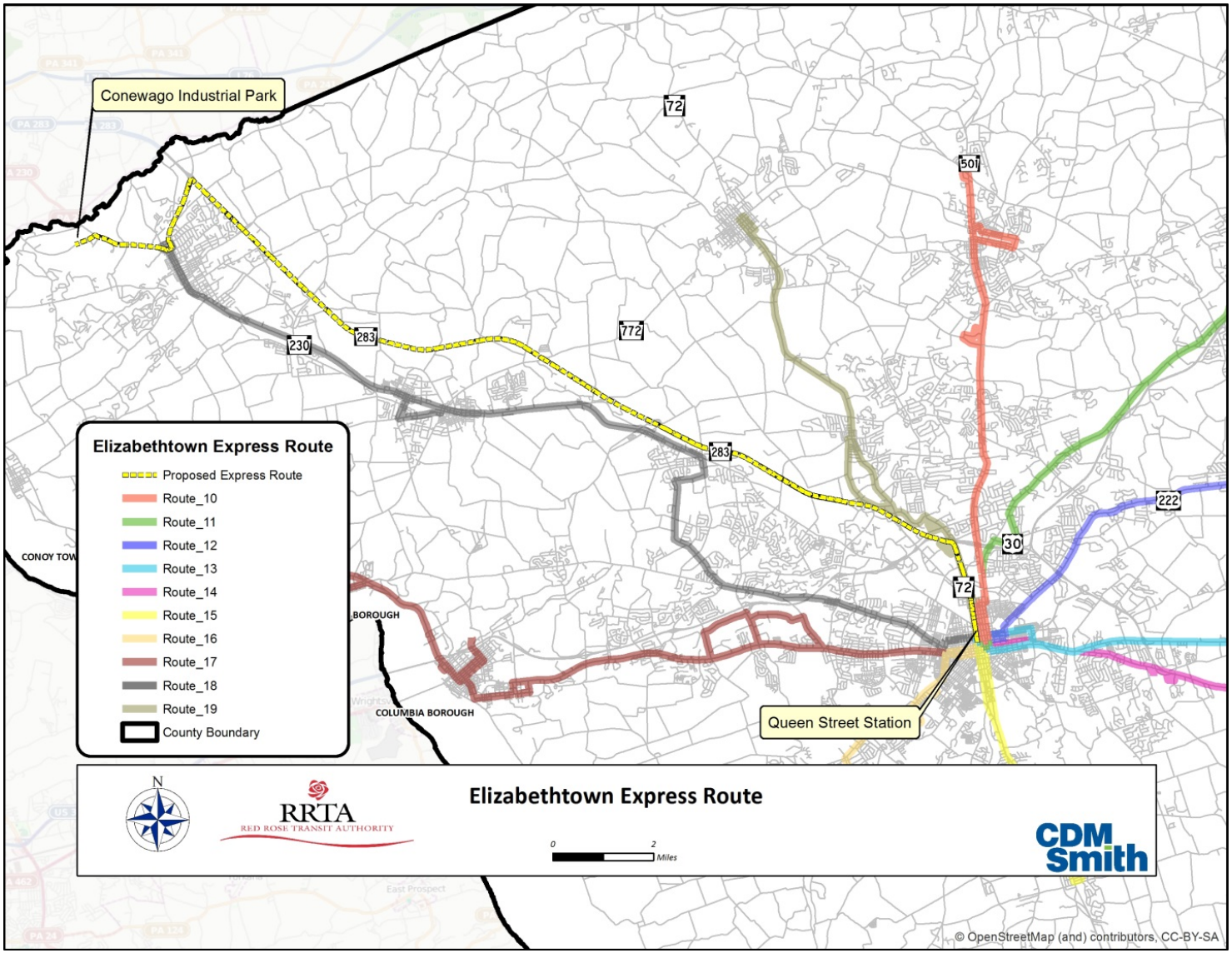
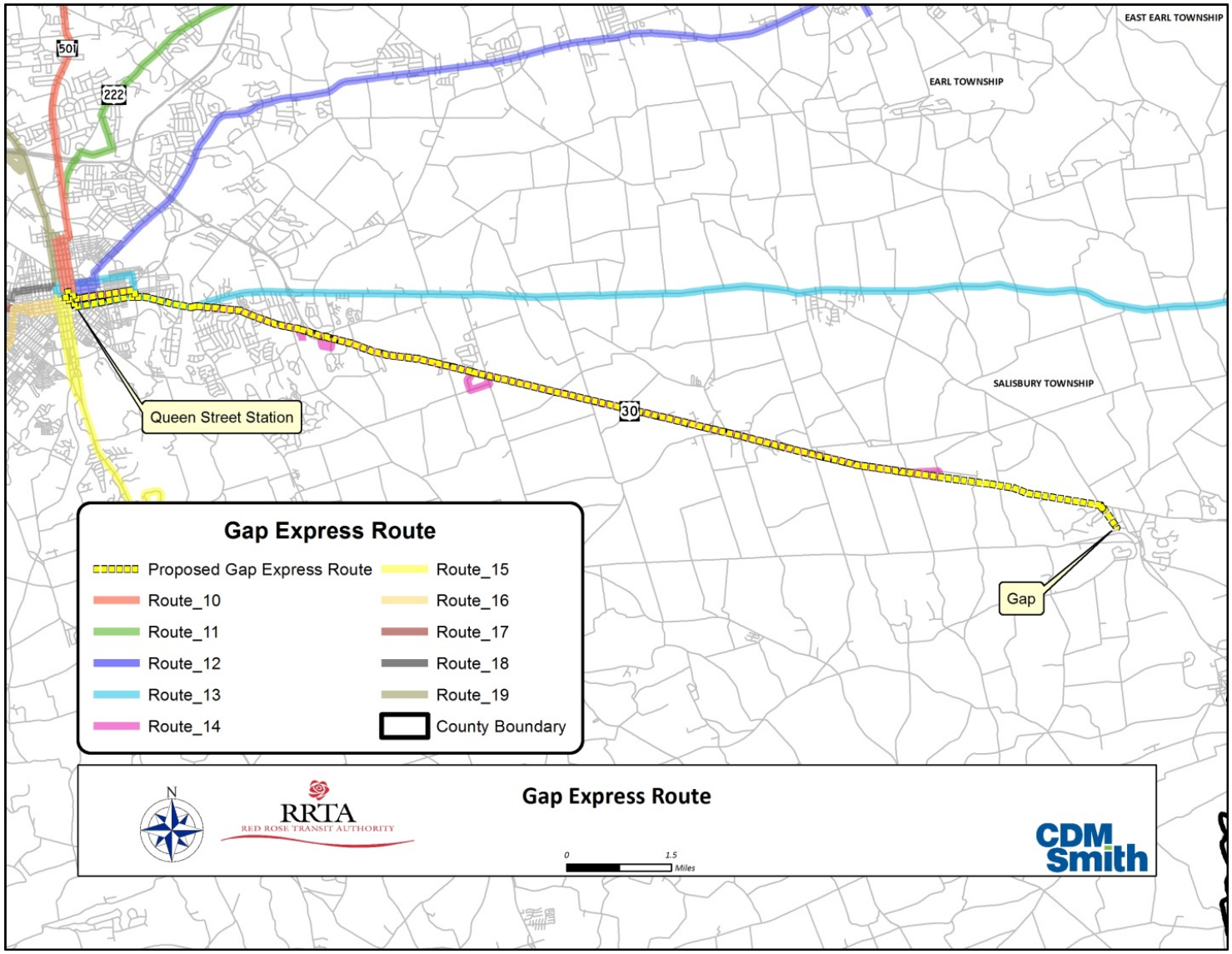


Figure 9-5: Gap Express Route



7. **Add Bus to Route 14 Rockvale Square/Paradise All Day.**

   Because of the elimination of non-productive services, RRTA proposes an additional bus for Route 14. In addition, RRTA will review schedule adjustments in the afternoon/evening to ensure additional coverage to/from Wal-Mart and Rockvale stops between 4:30pm and 6:45pm. The trips should be scheduled to ensure the heavy loading in Rockvale and at Wal-Mart is accommodated. The additional bus will eliminate some of the existing loading issues. One example would be to have the 4:45pm inbound serve Eastowne Mall and the 4:40pm serve Wal-Mart only.

8. **Add Bus to Route 17 Columbia All Day.**

   Because of the elimination of non-productive services, RRTA proposes adding a bus to Route 17 Columbia all day. An additional bus will assist schedule adherence and also potentially decrease headways. Currently, RRTA is collecting and monitoring on-time performance for the route to ensure accurate timing.

Table 9-1 shown previously presents an overall summary of existing cost information and route characteristics for those routes with proposed improvements. With the elimination of Route 4 Elm Avenue/Parkside and the Trolley route, approximately $366,000 is available for other improvements. This amount is in addition to the five percent increase in base revenue hours, which equates to approximately $433,000 annually.

To summarize, assuming all the short-term service concepts are implemented in years 1-5, the cost will be approximately $1M annually. By eliminating the Route 4 and the Downtown Trolley, the offsetting revenues are approximately $800,000, which is a variation of approximately $200,000.

Using the RRTA agency goals and objectives, presented earlier in the report, the Short-term service options were scored with a (+), (-), or neutral effect on goals. This was used as a gauge for support of changes to RRTA. **Table 9-2** illustrates the scoring. The elimination of Route 4 and the Trolley scored in the low range due to the neutral effect on several of the agency goals and objectives. However, in reality, without the elimination of these routes, the other service improvements will be limited due to the constrained funding resources.

RRTA should begin implementation of the changes in Year 2. Year 1 would begin the planning stages for the schedule changes, along with public outreach of the proposed changes, and an implementation plan.

In addition to the review of alternatives with RRTA goals and objectives, **Table 9-3** presents each of the alternatives with an evaluation of a positive or negative impact on the four mandated PennDOT performance measures.

Table 9-2: Short-term Concepts and RRTA Goals and Objectives

	Short-term Service Concepts	Safety/Security		Public Outreach	Financial		Bus Service					System Accessibility			Transp. System Mgmt.	ITS	Bicycle/Pedestrian				Service Planning			Total Score
		Integrate safety/ security elements	Deter/ detect criminal activity	Develop partnerships	Fiscal Responsibility	Efficient/ effective/ affordable	Increase ridership	Improve core corridors	Cost effective	Monitor conditions	Regional connectivity	Enhance accessibility	Accurate information	Coordination	Strengthen TSM Program	ITS trip-making	Accommodate Needs	Maximize connectivity	Provide amenities	Encourage bike/ped use	Meet needs of people	Investigate other modes	Expand street amenities	
1	Add 5% revenue hours over base years	0	0	0	0	+	+	+	+	o	+	+	0	0	0	0	+	+	0	+	+	0	0	0
2	Eliminate Route 4 Elm Avenue/Parkside Route	0	0	0	+	+	0	0	+	0	0	0	0	0	0	0	0	0	0	0	-	0	0	2
3	Eliminate Downtown Trolley	0	0	0	+	+	0	0	+	0	0	0	0	0	0	0	0	0	0	0	-	0	0	2
4	Modify Route 15 Willow Street	0	0	0	+	+	+	+	+	0	0	0	0	0	0	0	0	+	0	0	+	0	0	7
5	Implement Elizabethtown Express Route	0	0	0	+	+	+	+	+	0	+	+	0	+	0	0	+	+	+	+	+	0	+	14
6	Implement Gap Express Route	0	0	0	+	+	+	+	+	0	+	+	0	+	0	0	+	+	+	+	+	0	+	14
7	Add bus to Rt. 14 Rockvale all day.	0	0	0	+	+	+	+	+	0	+	+	0	+	0	0	+	+	0	+	+	0	0	12
8	Add bus to Rt. 17 Columbia all day.	0	0	0	+	+	+	+	+	0	+	+	0	+	0	0	+	+	0	+	+	0	0	12

0 = neutral or no effect on goal = score 0
+ = positive effect on goal = score 1
- = negative effect on goal = score -1

Table 9-3: Short-term Alternatives with PennDOT Performance Measures

	Service Options	PennDOT Performance Measures			
		Operating Cost/Pass	Operating Revenue/ Rev Veh Hr	Operating Cost/Rev Veh Hr	Pass/Rev Veh Hr
1	Add 5% revenue hours over base years	-	0	0	+
2	Eliminate Route 4 Elm Avenue/Parkside Route	+	+	+	+
3	Eliminate Downtown Trolley	+	+	+	+
4	Modify Route 15 Willow Street	+	+	0	+
5	Implement Elizabethtown Express Route	+	+	0	+
6	Implement Gap Express Route	+	+	0	+
7	Add bus to Rt. 14 Rockvale all day.	+	+	+	+
8	Add bus to Rt. 17 Columbia all day.	+	+	+	+

0 = neutral or no effect on performance measures
+ = positive effect on performance measures
- = negative effect on performance measures

9.5 Long-Term Alternatives (6-10 years)

The focus of the Long-term Phase of the plan is improving, enhancing, and upgrading the existing RRTA network, with more frequent service and service area expansion. The Long-term phase of the plan includes an expansion of the current RRTA transit network. The alternatives presented in this section are a "wish-list" of transit alternatives based upon local stakeholder and community feedback. At this time, a specific funding source is not identified, but this plan assumes additional revenues during years 6-10 of the plan. Unlike the Short-term Phase of the plan, the Long-term Phase sees significant expansion of service hours and fleet, requiring a new source of funding.

Also, in the long term, rapid transit along specific corridors will increase levels of service within Lancaster County, including improved travel times. RRTA should begin the planning process to move toward that end. The vision beyond this 10-year plan would include new branded stop facilities and higher capacity fleet, real time passenger information, signal priority, and movement towards smart cards, as well as further increases in service levels. This higher level of service investment and branding further enhances the overall passenger experience.

The long-term alternatives require significant investment of new staff, fleet, and facilities which will need to be coordinated with the availability of funding. The above factors require implementation

be phased in over a number of years. This plan does not outline suggested phasing of each term. This would be more appropriately conducted closer to the implementation years, allowing for further review of population growth and existing service performance to ensure best use is made of funding opportunities. The phased approach also allows for adjustments to earlier implementations based on factors such as ridership response.

Despite the challenges of finding new funding, the reality is each one of the region's "wish list" projects has the potential to be successful in terms of transportation benefits for the region. The key ingredient for success is local leadership with the financial commitment to shepherd a project to service maturity, coupled with supportive land use planning by local governments. In the coming decades, issues such as increased congestion, climate change and rising oil costs will likely continue to make RRTA public transit an increasing priority in Lancaster County. It is fortunate the region has a tremendous transit network already in place, from which even greater benefits through investments in operational improvements and higher levels of service can be realized.

9.5.1 Long-term Service Concepts

9.5.1.1 Increased Frequency of Service

Some RRTA routes operate approximately 30-45 minute service during peak hours, while other routes are 60 minutes or more. These headways do not allow for "spontaneous" transit use without someone needing to reference a schedule and avoid long waits. Increased frequencies are needed during peak hours to attract riders who will use RRTA services without planning trips in advance. These frequent headways allow riders to know the next bus will not be more than 5 to 10 minutes away on average, expanding the market to more choice riders.

To implement more frequent service for RRTA services and meet existing RRTA standards, such as 60 minute headways during the off-peak hours, or 15 to 30-minute service during peak hours, the majority of transit routes would likely need one vehicle added to each route. This cost by route is shown in **Table 9-4.**

RRTA provides approximately 2M trips per year and has not increased annual revenue hours significantly over the past several years. The Authority must provide increased service or local residents will continue to drive the single occupant vehicle. Lower service levels discourage ridership. As service levels increase, so will the latent demand increase for public transit.

An additional challenge for RRTA as new and faster service is implemented is the number of vehicles needed to provide the service and where the vehicles will be stored. The existing facility has a small amount of expansion room for approximately eight more vehicles; however, not enough to accommodate all of the proposed improvements in service. A new facility would be needed to be identified for this long-term phase. The location of the facility should be strategic to ensure efficiencies of service. The approximate cost for the facility would be approximately $10M-$15M, which would include planning, land acquisition, design, and construction.

Table 9-4: Long-term Alternatives

	Service Options	Hours/ Day	Days/ Week	Headway	Trip Time - 1-way	Vehicles	Ridership	Project Farebox Revenue	Annual Hrs	Annual Cost	Notes
1	Rt 1 PCA - PM 30 Min Peak Hour Service	2	5	30 min	n/a	1 additional for peak hr	9,483	$11,664	520	$45,011	pm - need to adjust peak hour times to 30 minutes; add vehicle 430-630p
2	Rt2 PCB - change to 30 min service.	13	5	30 min	n/a	1 additional 6a-7p	52,002	$63,963	3,380	$292,573	add 1 veh to 6a-7p
3	Rt 3 PCC - 30 min service all day	13	5	30 min	n/a	1 additional 6a-7p	63,044	$77,544	3,380	$292,573	add 1 veh to 6a-7p
4	Rt 5/Grandview - 30 min service peak hours	6	5	30 min peak	n/a	1 additional for peak hr	24,712	$30,395	1,560	$135,034	add 1 veh peak hrs; 6a-9a, 3-6p
5	Rt 10/Lititz - 30 min peak hr service; 60 min midday	13.5	5	30 min peak/60 min nonpeak	n/a	1 additional all day for 60 min non-peak/30 min peak	46,493	$57,186	3,510	$303,826	add 1 veh for all day to make 30 min/60 min service; 530a-7p
6	Rt 11/Ephrata - 30 min peak hr service; 60 min midday	13.5	5	30 min peak/60 min nonpeak	n/a	1 additional all day for 60 min non-peak/30 min peak	48,294	$59,402	3,510	$303,826	add 1 veh for all day to make 30 min/60 min service; 530a-7p
7	Rt 12/New Holland - 30 min peak hr service; 60 min midday	12	5	30 min peak/60 min nonpeak	n/a	1 additional all day for 60 min non-peak/30 min peak	42,723	$52,549	3,120	$270,067	add 1 veh for all day to make 30 min/60 min service; 6a-6p
8	Rt 13/White Horse - 60 min service	13	5	60 min	n/a	1 additional 6a-7p	40,137	$49,368	3,380	$292,573	add 1 veh to 6a-7p
9	Rt 14/Rockvale - 15 min daytime	13	5	15 min peak	n/a	1 additional 6a-7p	79,806	$98,161	3,380	$292,573	add 1 veh to 6a-7p
10	Rt 16/Millersville - 15 min peak/30 min offpeak	13	5	15 min peak/30 min offpeak	n/a	1 additional 6a-7p	70,828	$87,118	3,380	$292,573	add 1 veh to 6a-7p
11	Rt 17/Columbia - 15 min daytime	13	5	15 min peak	n/a	1 additional 6a-7p	70,590	$86,826	3,380	$292,573	add 1 veh to 6a-7p
12	Rt 18/Elizabethtown - 60 min service	13	5	60 min	n/a	1 additional 6a-7p	38,774	$47,692	3,380	$292,573	add 1 veh to 6a-7p
13	Rt 19/Manheim - 30 min service	13	5	30 min	n/a	1 additional 6a-7p	52,943	$65,120	3,380	$292,573	add 1 veh to 6a-7p
14	Rt 20/Greenfield - 30 min service	13	5	30 min	n/a	1 additional 6a-7p	85,283	$104,898	3,380	$141,960	add 1 veh to 6a-7p
15	N Lancaster Regional Route	27	6	60 min	75	3 peak/1 midday	56,160	$69,077	8,424	$729,181	4 am trips, 2 midday trips, 5 pm trips; Ridership based upon 8 pass/hr
16	Downtown Shuttle Service	30	5	15 minute	n/a	2 vehicles	93,600	$115,128	7,800	$675,168	15 min headways/2 vehicles; Ridership based upon 12 pass/hr.
17	Rapid Transit Feasibility Study for Columbia and Rockvale routes.	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$200,000	Total study $600K. $200K would be local share.
18	Lancaster/Harrisburg Regional Service	12	5	60 min	60 min	2 peak	37,440	$46,051	3,120	$270,067	2 am trips/2 pm trips; Ridership based upon 12 pass/hr.
19	Columbia Local Service	12	5	Call-A-Ride	n/a	1	15,600	$19,188	3,120	$270,067	Monday - Friday; Ridership based upon 5 passengers per hour.
20	Increase Saturday Service	168	1	various	n/a	14 existing weekday vehicles; no additional vehicles needed	104,832	$128,943	8,736	$756,188	Ridership assumption of 12 passengers per hour.
21	Lancaster/Denver Borough Regional Service	12	5	60 min	60 min	2 peak	37,440	$46,051	3,120	$270,067	2 am trips/2 pm trips; Ridership based upon 12 pass/hr.
	Long-term Summary	**425**				**24 additional vehicles**		**$1,316,326**	**76,960**	**$6,711,045**	

Note: Existing RRTA routes have ridership estimates based upon FY2013-14 average passenger per hour by route.
Note: Farebox Revenue based upon FY2012 average fare per passenger.

9.5.1.2 North Lancaster Regional Route

The North Lancaster Regional Route proposes service to the northern communities in the County without traveling into the City of Lancaster. The proposed route operates six days a week, with four trips in the morning, two mid-day trips, and five trips in the afternoon. One option for this North Lancaster Regional Route is to provide flexible route service, which will meet the ADA requirements for paratransit service along the route. The 60-minute peak headway route travels from Mount Joy to Manheim, Lititz, Ephrata, south to New Holland and to East Earl Township. One example to maximize ridership in the Mount Joy/Manheim area is to travel RT 230 to Esbenshade to RT 772 into Manheim.

Exact alignments of the route will be analyzed closer to the implementation phase, in addition to a local municipality survey for residents within the 10-mile buffer of the route. The survey would seek feedback on details of the service, allow residents the opportunity to provide suggestions, and lastly would begin the initial public marketing steps for the future service. **Figure 9-6** illustrates the proposed North Lancaster Regional Route.

9.5.1.3 Downtown Shuttle Service

The downtown shuttle or trolley service will be re-introduced to the heart of the City with funding partnerships between downtown businesses and RRTA. Prior to implementation, RRTA must have a comprehensive marketing effort with participating businesses and civic leaders to support the service. Map kiosks must be available for all residents and visitors to easily learn of the shuttle and for the shuttle to be a viable mode in downtown Lancaster. The connections and marketing/visibility of the service to the major activity areas in downtown will be key to success of the service. RRTA will consider subsidies from downtown partners to pay for the service. Funding partners may include downtown businesses, improvement districts, employers, etc. The likely branding for the shuttle service vehicles/image should be a spin on the regular RRTA routes, as to easily distinguish the service downtown.

The shuttle service will be available Monday through Friday, and depending upon the funding partner needs, may be available on the weekends during peak activity hours. The estimates for the initial rollout are for Monday through Friday. Service will be available every 15 minutes.

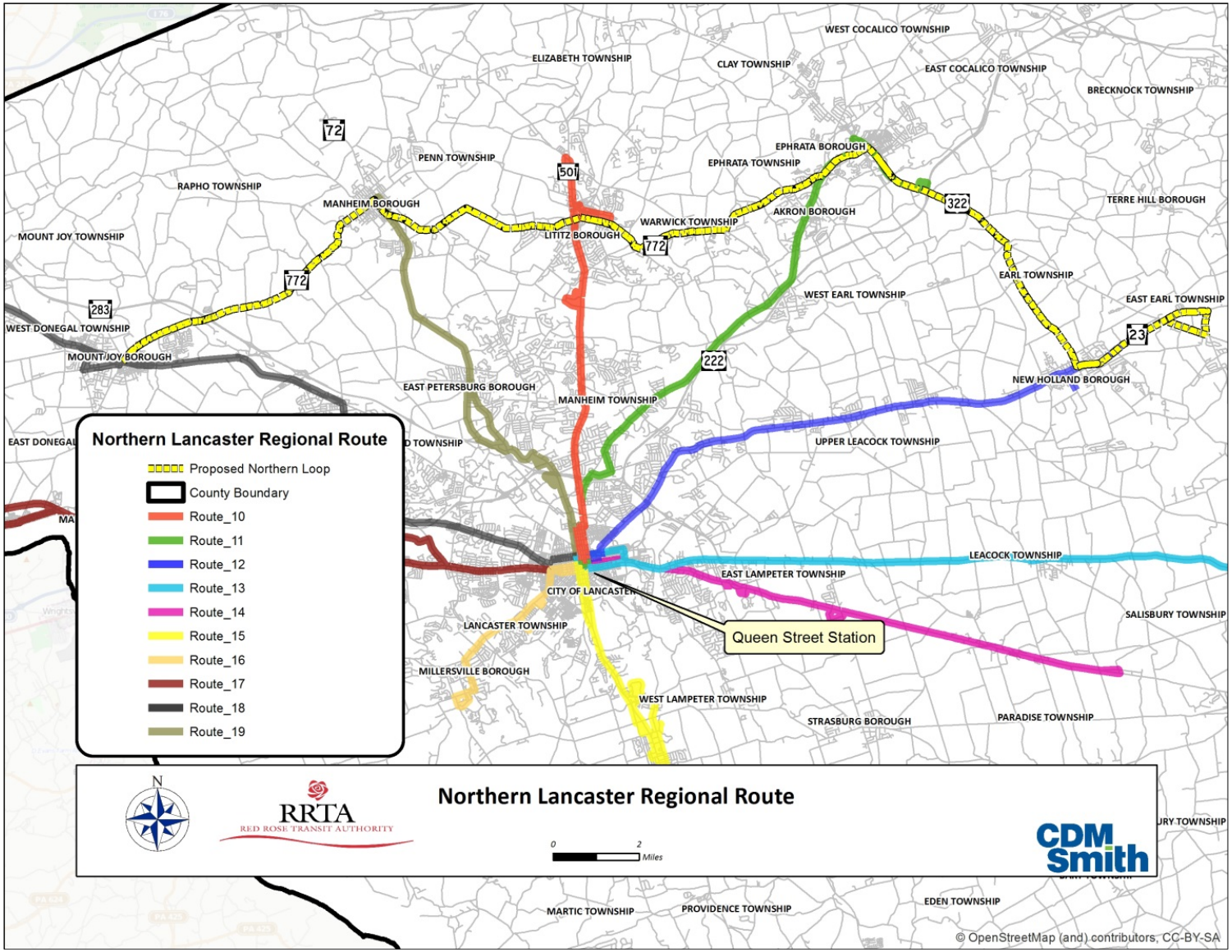
9.5.1.4 Begin Rapid Transit Planning Implementation

Begin service and capital planning for Rapid Transit Routes: Rt. 17 Columbia and Rt. 14 Rockvale. Rapid transit service will have significant impacts to ridership and the image of public transit in Lancaster County. RRTA should initiate the feasibility of rapid transit service for the Rt. 17 and Rt. 14. The study will focus on ridership potential along the routes, types of service, alignments, and cost projections. The approximate cost of the study will be $600,000.

9.5.1.5 Implement Regional Harrisburg/Lancaster Service

This option adds a regional route from Lancaster to/from Harrisburg. The route would serve downtown in both cities. The commuter route service would operate during 60 minute headways during peak hours, twice in the morning and twice in the afternoon. Additional trips during the mid-day may also be needed to accommodate non-commuter bus riders.

Figure 9-6: North Lancaster Regional Route



9.5.1.6 Implement Columbia Local Service.

As the Columbia community continues to grow, ridership around the community will increase. This service alternative provides Call-A-Ride demand response curb to curb service within Columbia and the immediate surrounding area. One bus would be allocated Monday through Friday, allowing residents the opportunity to schedule trips.

Neighboring Harrisburg has a similar program called Capital Area Transit (CAT) Share-A-Ride service available to the general public, seniors, and disabled persons. The program requires one day advance reservations and is available Monday through Saturday. Additional information is available on the CAT website: http://www.cattransit.com/services/share-a-ride/about-share-a-ride/

Another example of Call-A-Ride service is in Toledo, Ohio for the Toledo Area Regional Transit Authority. The service is available in different communities within the region with similar service hours as the fixed routes. Additional details for the Call-A-Ride curb-to-curb service is available on the TARTA website: http://www.tarta.com/rider-services/call-a-ride/ .

9.5.1.7 Increase Saturday Service

Recommendations presented in the Short-term Phase focus on RRTA weekday service. This alternative includes an overall increase in revenue service hours for Saturdays. RRTA will need to conduct weekend route ridecheck information prior to implementing the additional Saturday service to ensure maximum benefits for the community. Currently, RRTA operates 14 routes on Saturdays. This option adds 12 additional revenue service hours for each of those routes, which will allow more frequent service, extension of service hours, or potential new routes. Additional vehicles are not required for this alternative due to the availability of weekday buses.

9.5.1.8 Implement Regional Service to Denver Borough

This option adds a regional route from Lancaster to/from the Denver area, which will also provide connections to BARTA services. The route would serve downtown in both cities. The commuter route service would operate during 60 minute headways during peak hours, twice in the morning and twice in the afternoon. Additional trips during the mid-day may also be needed to accommodate non-commuter bus riders.

9.5.1.9 Summary

The Long-term changes in service hours and vehicle requirements are detailed above. Total service levels are expected to increase due to more frequent city/county routes, an additional regional route, local Columbia service, and increased Saturday service.

Using the RRTA agency goals and objectives, presented earlier in the report, the Long-term service options were scored with a (+), (-), or neutral effect on goals. This was used as a gauge for support of changes to RRTA goals and objectives. **Table 9-5** illustrates the scoring.

Existing RRTA annual service hours are approximately 109,000 annually. The Long-term alternatives increase service hours by approximately 77,000 annual revenue hours. The proposed services will require an additional 24 vehicles. The expanded Saturday services will use existing weekday fleet to accommodate new services. An additional $6.7M will be needed annually for operating the service improvements.

Table 9-5: Long-range Service Concepts and RRTA Goals and Objectives

Short-term Service Concepts		Safety/ Security		Public Outreach	Financial		Bus Service					System Accessibility			Transp. System Mgmt.	ITS	Bicycle/Pedestrian				Service Planning			Total Score
		Integrate safety/ security elements	Deter/ detect criminal activity	Develop partnerships	Fiscal Responsibility	Efficient/ effective/ affordable	Increase ridership	Improve core corridors	Cost effective	Monitor conditions	Regional connectivity	Enhance accessibility	Accurate information	Coordination	Strengthen TSM Program	ITS trip-making	Accommodate Needs	Maximize connectivity	Provide amenities	Encourage bike/ped use	Meet needs of people	Investigate other modes	Expand street amenities	
1	Rt 1 PCA - PM 30 Min Peak Hour Service	0	0	0	0	+	+	+	+	0	+	+	0	0	0	0	+	+	0	+	+	0	0	10
2	Rt2 PCB - change to 30 min service.	0	0	0	0	+	+	+	+	0	+	+	0	0	0	0	+	+	0	+	+	0	0	10
3	Rt 3 PCC - 30 min service all day	0	0	0	0	+	+	+	+	0	+	+	0	0	0	0	+	+	0	+	+	0	0	10
4	Rt 5/Grandview - 30 min service peak hours	0	0	0	0	+	+	+	+	0	0	+	0	0	0	0	+	+	0	+	+	0	0	9
5	Rt 10/Lititz - 30 min peak hr service; 60 min midday	0	0	0	0	+	+	+	+	0	+	+	0	0	0	0	+	+	0	+	+	0	0	10
6	Rt 11/Ephrata - 30 min peak hr service; 60 min midday	0	0	0	0	+	+	+	+	0	+	+	0	0	0	0	+	+	0	+	+	0	0	10
7	Rt 12/New Holland - 30 min peak hr service; 60 min midday	0	0	0	0	+	+	+	+	0	+	+	0	0	0	0	+	+	0	+	+	0	0	10
8	Rt 13/White Horse - 60 min service	0	0	0	0	+	+	+	+	0	+	+	0	0	0	0	+	+	0	+	+	0	0	10
9	Rt 14/Rockvale - 15 min daytime	0	0	0	0	+	+	+	+	0	+	+	0	0	0	0	+	+	0	+	+	0	0	10
10	Rt 16/Millersville - 15 min peak/30 min offpeak	0	0	0	0	+	+	+	+	0	+	+	0	0	0	0	+	+	0	+	+	0	0	10
11	Rt 17/Columbia - 15 min daytime	0	0	0	0	+	+	+	+	0	+	+	0	0	0	0	+	+	0	+	+	0	0	10
12	Rt 18/Elizabethtown - 60 min service	0	0	0	0	+	+	+	+	0	+	+	0	0	0	0	+	+	0	+	+	0	0	10
13	Rt 19/Manheim - 30 min service	0	0	0	0	+	+	+	+	0	+	+	0	0	0	0	+	+	0	+	+	0	0	10
14	Rt 20/Greenfield - 30 min service	0	0	0	0	+	+	+	+	0	+	+	0	0	0	0	+	+	0	+	+	0	0	10

Short-term Service Concepts		Safety/ Security		Public Outreach	Financial		Bus Service					System Accessibility			Transp. System Mgmt.	ITS	Bicycle/Pedestrian				Service Planning			Total Score
		Integrate safety/ security elements	Deter/ detect criminal activity	Develop partnerships	Fiscal Responsibility	Efficient/ effective/ affordable	Increase ridership	Improve core corridors	Cost effective	Monitor conditions	Regional connectivity	Enhance accessibility	Accurate information	Coordination	Strengthen TSM Program	ITS trip-making	Accommodate Needs	Maximize connectivity	Provide amenities	Encourage bike/ped use	Meet needs of people	Investigate other modes	Expand street amenities	
15	N Lancaster Regional Route	0	0	+	0	0	+	0	0	0	+	+	0	+	0	0	+	+	0	+	+	0	0	9
16	Downtown Shuttle Service	0	0	+	+	0	+	+	0	0	0	+	0	+	+	0	+	+	+	+	+	+	+	14
17	Rapid Transit Feasibility Study for Columbia and Rockvale routes.	0	0	+	0	+	+	+	+	0	+	+	0	+	+	+	+	+	+	+	+	+	+	17
18	Lancaster/Harrisburg Regional Service	0	0	+	0	0	+	+	+	0	+	+	0	+	+	0	+	+	0	+	+	0	0	12
19	Columbia Local Service	0	0	+	0	+	+	+	+	0	+	+	0	+	0	0	+	+	0	+	+	0	0	12
20	Increase Saturday Service	0	0	0	0	+	+	+	+	0	+	+	0	0	0	0	+	+	0	+	+	0	0	10
21	Lancaster/Denver Borough Regional Service	0	0	+	0	0	+	+	+	0	+	+	0	+	+	0	+	+	0	+	+	0	0	12

0 = neutral or no effect on goal = score 0
+ = positive effect on goal = score 1
- = negative effect on goal = score -1

Vehicle costs for the new services assume the purchase of alternative fuel vehicles, which have an estimated cost of approximately $635,000 per vehicle.[6] For the 24 new vehicles, the total cost will be approximately $15M. Approximately 80 percent of that funding will likely be eligible for federal and state funding; however, the remaining 20 percent is a required local match of approximately $3M.

In addition to vehicle procurement for expanded services, RRTA will also need to expand bus storage and maintenance facilities. The maximum capacity of the existing facility is 48 vehicles. There is some room for expansion at the existing site for storage for an additional eight buses. However, as shown above, when the above service alternatives are implemented in the future, RRTA will need to expand facilities, which is an estimated cost of approximately $10M-$15M, depending upon the size and location of the building. Approximately 80 percent of that funding will likely be eligible for federal and state funding; the remaining 20 percent is a required local match of approximately $2.8M.

The total **service and capital costs** for the Long-term phase is shown below. Many of the expenses are eligible for federal and state funding programs.

- **$6.7M – Service Operation Expenses**
- $3.4 – Federal /State funds
- $3.3M – Local annual funding
- **$29M – Service Capital Expenses (vehicles/facility only)**
- $23.2 – Federal /State funds
- $5.8M – Local funding

9.6 Beyond 10 years

9.6.1.1 Call-A-Ride Countywide Service

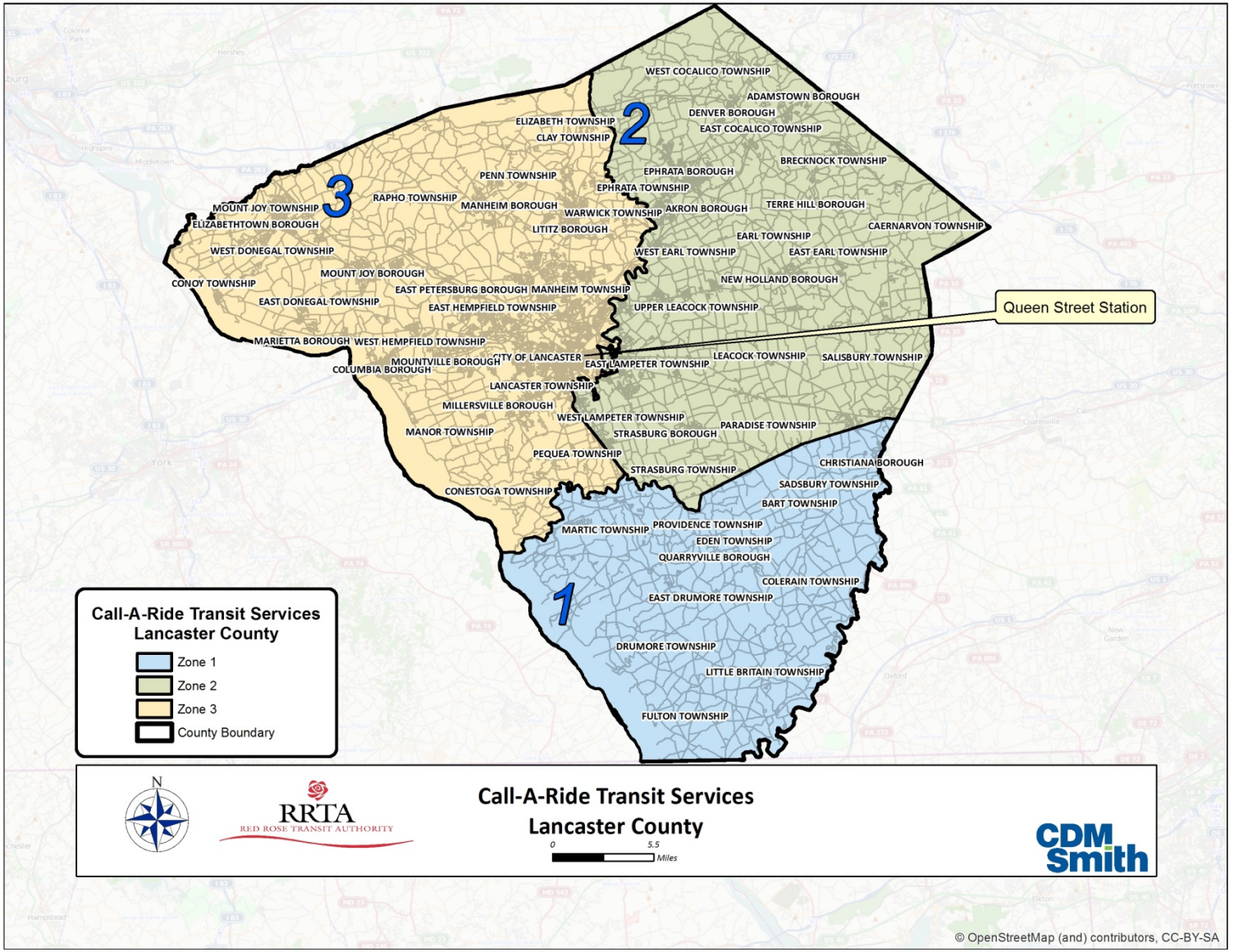
Call-A-Ride service would be available to all of Lancaster County, which is separated into three zones for service. Specific vehicles would be assigned to each zone, as shown in **Figure 9-7**. This service assumes all vehicles will have adequate ITS technologies in place to assist in trip scheduling and monitoring of service. It is also an assumption trips will be coordinated with paratransit services and vehicles assigned in similar areas, as appropriate and feasible for schedules. Service would be available beginning at the same time as fixed route service, until approximately 8:00pm. The fare for the Call-A-Ride service will be determined closer to the date of implementation. A good starting point for the service would be using a fare structure similar to the paratransit service.

9.6.1.2 Rapid Transit Corridors

In the long term, rapid transit along specific corridors will increase levels of service within Lancaster County, including improved travel times. RRTA should begin the planning process to move toward that end. The vision beyond this 10-year plan would include new branded stop facilities and higher capacity fleet, real time passenger information, signal priority, and movement towards smart cards, as well as further increases in service levels. This higher level of service investment and branding further enhances the overall passenger experience.

[6] 2014 cost for buses ordered.

Figure 9-7: Proposed Call-A-Ride Transit Service Zones



9.7 Alternatives Summary

A variety of options have been presented in this chapter. These options include new services, enhancement to the exiting service, and elimination of some elements of the existing service. The options were presented to the community for input to develop priorities. This 10-year Transit Development Plan Update is intended to not only simplify the RRTA transit network with more consistent frequencies, but also provide enhanced service quality and increased service levels to generate higher ridership throughout the area. If funding is made available before the projected implementation schedule in this report, RRTA should take the appropriate steps in providing service changes detailed in all phases of this plan.

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10. Financial Review

Financial stability is a necessity for RRTA. While existing revenues are projected to be stable in the current economic climate, operating costs are likely to rise and outpace revenue. As a result, RRTA will face financial challenges to maintain and/or grow service and meet local needs. This review forecasts RRTA's financial condition from FY 2014 through FY 2023.

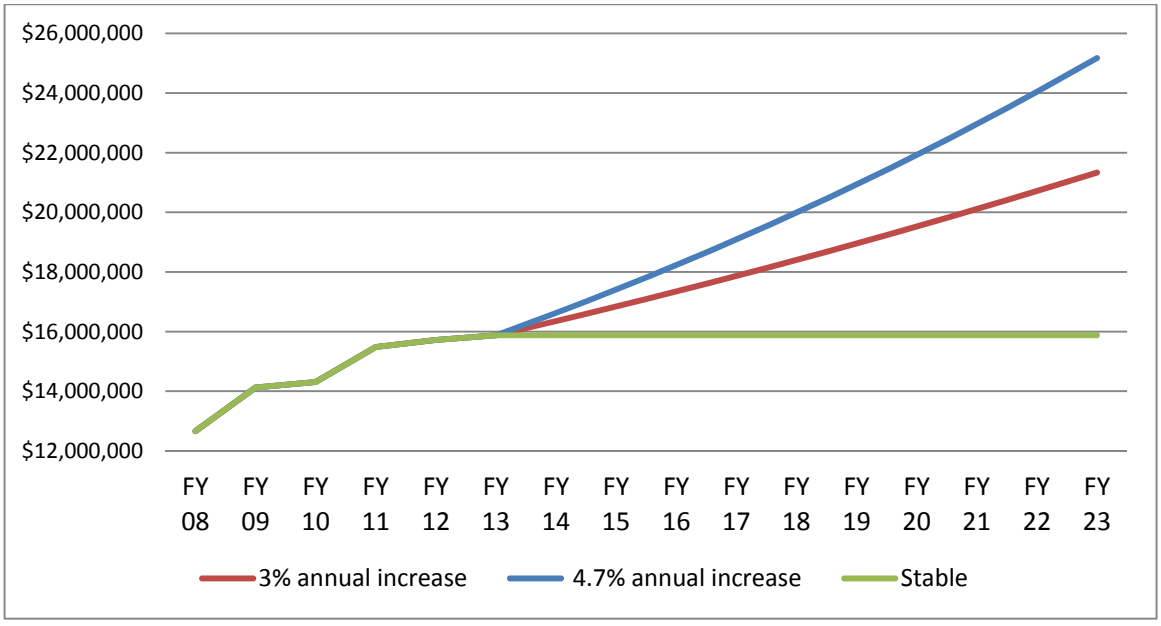
10.1 Operating Costs

RRTA's operating costs increased an average of 4.7 percent per year from FY 2008 to FY 2013. Key indicators of the operating cost increases included rising costs of labor benefits and the price of fuel. Operating costs presented in this section were forecast with two values for annual increases:

1) 3 percent, which reflects typical inflation rates, and
2) 4.7 percent, derived from historic trends.

The RRTA operating cost forecasts from FY 2014 to FY 2023 assume there are no service changes from the levels budgeted in 2013. Operating cost estimates for FY 2023 range from $21.3M to $25M, as shown on **Figure 10-1**.

Figure 10-1: RRTA Historic & Forecasted Operating Costs



10.2 Capital Costs

RRTA's capital spending is highly dependent on capital grants awarded each year and the availability of required local matching funds. It also reflects varying annual needs such as fleet replacement, technology, and facility upgrades. RRTA's capital costs from FY 2008 to FY 2009 were approximately half as much as capital costs from FY 2010 to FY 2012, $6.1M and $12.6M, respectively.

10.3 Revenues

RRTA's revenues are comprised of the following:

- Operating revenues, including passenger fares, advertising revenue, leases and parking garage revenue;
- State funds;
- Federal funds, including urbanized area formula funds, and other federal appropriations; and
- Other sources, such as contracts.

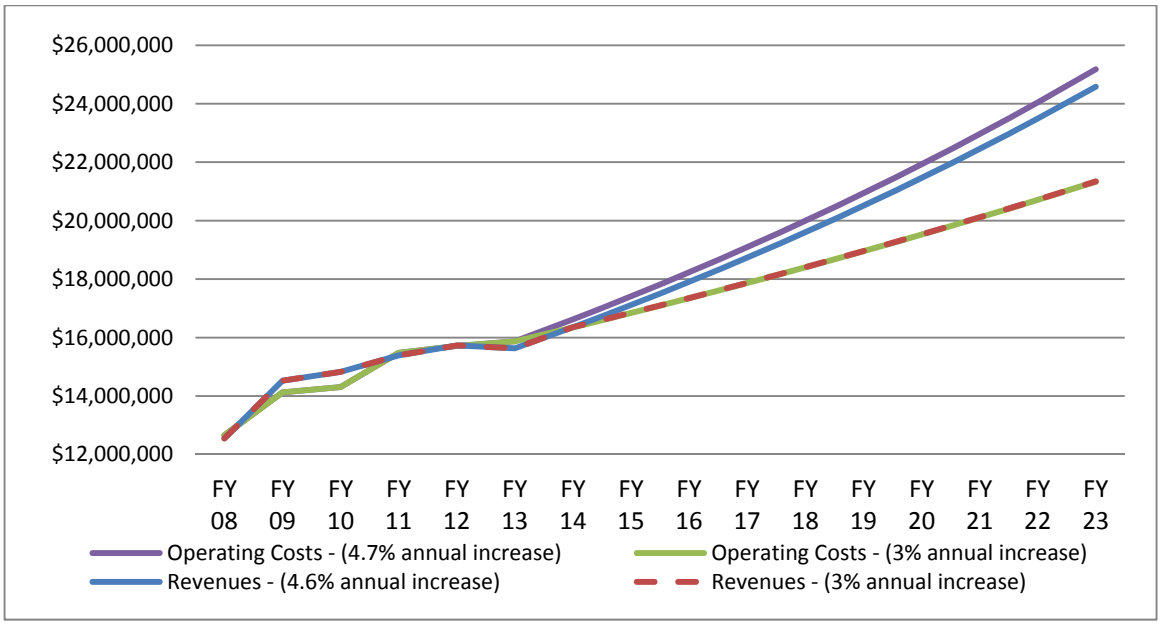
RRTA's total revenues increased an average of 4.6 percent per year from FY 2008 to FY 2013. Most of the revenue sources increased over the time period; however, some sources fluctuated, as a result of changing economic conditions. Total revenues presented in this section were forecast with two values for annual increases:

1) 3 percent, which reflects typical inflation rates, and
2) 4.6 percent, derived from historic trends.

10.4 Overall Funding Implications

RRTA cannot maintain current service levels without a sustained balanced budget. Unless both operating costs and revenues increase by 3 percent per year, operating costs will increase faster than revenues. In order to maintain a balanced budget, RRTA will have to identify new revenue sources or decrease current service levels, as shown on **Figure 10-2**.

Figure 10-2: RRTA Forecasted Operating Costs & Revenues



11. Coordination

RRTA plays an essential role in providing mobility in Lancaster County. Its services help sustain and expand the economy in its service areas, allowing for continued economic growth in a way that is consistent with reduced energy use, environmental protection, and sustainable land use. In order to achieve this, RRTA continues to build relationships with local municipalities, the County, and also works with the non-profit and private sectors to determine transit needs and leverage potential funding.

RRTA currently works with many partners at all levels of government who have common goals of promoting sound land use, transportation, and development decisions. RRTA staff actively participate in many local advisory committees for transportation studies. As one of the larger public transportation providers in Pennsylvania, RRTA serves as a resource to other agencies when questions arise about service options and facility needs.

11.1 Steps for Increased Coordination

The following steps promote increased coordination with the Lancaster area.

6) Initiate and establish, with the County and the local municipalities, a more formalized working relationship and on-going approach to coordinating with RRTA on planning and implementation processes in order to most effectively and efficiently implement transit planning in the county.
   a) In addition, review existing county transportation goals and objectives and incorporate those goals into the RRTA planning process.
   b) Review existing municipal comprehensive plans for goals and objectives relating to RRTA system efficiencies and future market needs and opportunities.
   c) Request RRTA staff involvement in the development of municipal and county transportation goals and objectives when local Comprehensive Plans and Official Maps are updated.
   d) Request RRTA staff involvement in economic development corporations and main street programs.
   e) Assist local municipalities with Transit Element of Local Comprehensive Plans. Provide service standards. Suggest language in local plans to allow for bus shelter advertising to assist in bringing revenues to pay for the maintenance of the bus stop.
   f) Coordinate with local business, municipalities, and the county to incorporate planning for transit facilities into county and local plans, subdivision and land development plans, and official maps.

7) Conduct a Park and Ride Study to begin the process for future express routes, keeping in mind the goal of coordinating transit stops/hubs/park & rides with local municipalities.

8) Coordinate with the Chamber, Convention & Visitors Bureau, and Economic Development staff to develop a tourism-based pamphlet, in addition to developing on-line materials that focusing on visitor destinations. Primary tourism sites are the City of Lancaster, Lititz, Strasburg, and the corridors along PA 896 and US 30 East. Consider initiating a study of service needs and options for providing public transportation to visitors to Lancaster County.

   The following recommendations for transit services for visitors were included in the 2004 *Transportation Mobility Study*, completed as background information for the 2005 *Lancaster County Tourism Plan*.

   - Visitors are often more willing to use transit when on vacation, than when they are at home, and should be encouraged to do so while visiting Lancaster County.
   - RRTA should consider the feasibility of providing some services that are primarily focused on meeting the needs of visitors, such as a shuttle service between Lancaster City and the US 30 tourism corridor.
   - The RRTA website should contain more easily accessible information for visitors. For instance, routes that stop at the Lancaster Amtrak Station and major tourism attractions should be highlighted. A page entitled “Information for Visitors to Lancaster County” would be helpful. RRTA should work with local hotels, lodging and dining facilities to raise awareness of bus services.
   - The most popular routes with visitors are Route 13 and Route 14. Printed information, website information, and signage related to these routes should be geared to visitors, as well as regular riders.
   - A weekend or weekly bus pass should be considered for visitors, perhaps as part of packages that include accommodation.
   - Trolley service was initiated in part as a service for visitors, but has become almost entirely focused on commuters who park at Clipper Stadium. The popularity of this route could be increased by refocusing the route on meeting the needs of visitors, and attracting them as riders.

9) RRTA completes an annual marketing plan. One alternative to include in future plans is to increase coordination with RRTA passengers and include a ‘Rider Spotlight’ to the RRTA Express newsletter, website, Board updates, etc. These types of news articles often provide a personal touch that potential new riders or existing riders may enjoy. This type of continued coordination is encouraged.

10) Consider adding a Mobility Specialist to RRTA staff, with a primary responsibility of assisting RRTA in building local and regional partnerships, continuing educational efforts to all county stakeholders, to residents, and to assist in the marketing of RRTA. Approximately 80 percent of salary may be eligible for Federal/State funds. Estimated salary plus benefits is $60,000.

11.2 Passenger Facility Coordination

Passenger facilities and amenities (shelters, park and ride lots, signs, benches, etc.) help support and encourage ridership for any transit system. One challenge facing RRTA is the issue of maintaining these facilities from a cost and personnel perspective, particularly as more facilities are implemented in the future. The maintenance of the facilities could be addressed through RRTA staff or a third party contractor; however, additional revenue for continuous maintenance is the real challenge.

RRTA should continue to work with municipalities to identify and enlist local community and service groups and employers who express interest to maintain bus shelters and help offset ongoing costs.

As RRTA continues to build its service in the future with express services, coordination with businesses and outlying local municipalities will remain critical for successful services. Park and ride lots will become an integral part of successful express commuter services and regional connectivity. Given the low densities of many of the outlying communities, it is important to have collection points for riders so the bus routes themselves can operate efficiently and directly. RRTA will continue to work with the local municipalities to provide the space and infrastructure for bus stops and park-and-ride locations. RRTA will continue to coordinate with developers, businesses, and municipalities on the installation of appropriate facilities, as development occurs and is identified in local and regional comprehensive plans and ordinances.

RRTA has very good relationships with several private sector businesses, along with educational institutions. RRTA benefits from financial support and increased ridership, while the private partners benefit from access to a broader employee/customer base and reduced parking demands. Whether a private partner pays for specific hours of service or chooses to subsidize the rides of its employees, the result is support for public transportation is diversified. Having broad-based and varied support is critical to public transportation providers as it provides multiple ways to grow and improve both ridership and service levels. Tight county and municipal budgets and constraints on tax-based funding make it imperative that RRTA continue to seek and grow private partnerships in the future.

11.3 Service Coordination

As stated above, RRTA has ongoing coordination with several local organizations for services, such as with Millersville University, and will continue to seek opportunities such as these in the future.

Another such coordination effort is currently underway with the Berks Area Regional Transportation Authority based out of Reading, Pennsylvania. The RRTA Executive Director has been assisting with the management of BARTA since last fall, following the sudden death of a longtime Executive Director. In 2010, a regional study reviewed the benefits of merging the transit agencies throughout a nine-county service area. Both RRTA and BARTA have a history of sharing costs related to expenses, such as bus advertising and bus procurement contracts. BARTA and RRTA have begun a process to merge and form one transit authority to operate the public transportation services in Lancaster County and Berks County.

12. Fare Structure Analysis

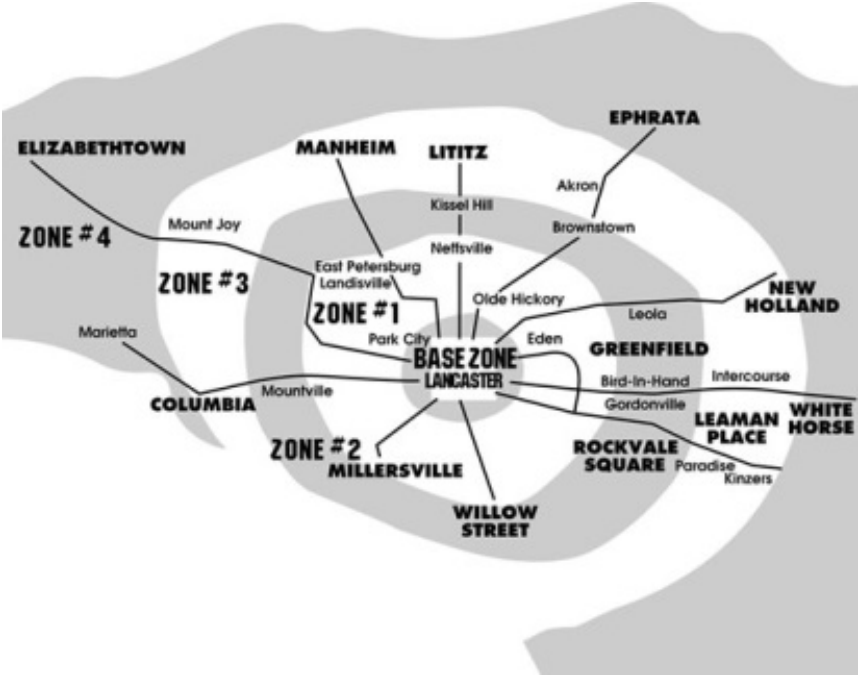
Transit agencies must regularly evaluate their fare structure and consider fare changes. RRTA currently utilizes five different fare zones for the system, which is difficult for both the public and operators to understand and administer. RRTA recognizes issues with the existing fare structure and has considered a different, simpler fare structure that does not decrease revenue and potentially increases ridership. This section of the report also includes a peer comparison of other urban transit systems in Pennsylvania in terms of fare structures.

The purpose of this RRTA fare analysis is to establish a comparable and sustainable fare structure for the fixed route bus service. The analysis estimates future fare and ridership forecasts by evaluating current fares, reviewing the fare structure history, and comparing RRTA's fare structure to other urban transit systems in Pennsylvania.

12.1 Current Fare Structure

RRTA's fareboxes accepts cash payment and passes with magnetic strips. The RRTA fareboxes do not accept Smart Cards. Passes and tickets can be purchased online through the RRTA website or at the Queen Street Station. The base cash fare is $1.70 for adult full fare passengers. Half fares are also available for residents meeting pre-established criteria with Medicaid and for passengers with disabilities. Children five or under ride free with a paying adult. There are additional zone charges for travel outside the City of Lancaster. **Figure 12-1** shows the established RRTA zones.

Figure 12-1: Established RRTA Zones



Discount multi-ride and monthly tickets offer regular, adult riders discounts of approximately 20 percent on RRTA fixed route services. Seniors, riders with a disability, and youth qualify for the reduced fare rate with proper identification. The current RRTA fare structure for the fixed route system is shown in **Table 12-1**.

Table 12-1: RRTA Fare Structure

Fare Category	Fare			
Cash	$1.70			
Elderly/Disabled	No Charge			
Children Age 5 and Under	No Charge			
Students (K-12)	$1.35 Plus Zone Charge			
Transfers	$0.05 Public Zone Charge			
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**
Zone Charge	$0.20	$0.50	$0.85	$1.25
31-Day Pass (Base Zone $35)	$40	$47	$55	$64
10-Trip (Base Zone $12)	$13.50	$15.50	$18.50	$21.50
Trolley	$1.70			
Day Pass	Base (City) up to Zone 2 - $3.40 All Zones- $5.25			

Transfers are paper slips costing $0.05 and are available to customers upon request when boarding the bus. They are only valid for one-way trips in same direction of travel. Transfers are good for two hours. Discount tickets can be purchased online or at Queen Street Station. RRTA currently uses GFI fareboxes which accept cash payments and passes with magnetic strips.

RRTA operates on an exact fare or ticket basis. A single cash fare or valid pass is required for each one-way passenger trip. RRTA does not accept credit cards or provide free rides to passengers who are unable to pay the full fare price at the time of boarding. All vehicles and schedule information notify the public that total fare is required for boarding and to have exact cash fare or ticket when boarding.

12.2 Farebox Revenue

RRTA offers its customers a variety of fare media including cash fares and several types of tickets. The agency collected approximately $2.4 M in farebox revenue in FY 2013 or approximately $200,000 per month. A breakdown of RRTA farebox revenue by revenue type for February 2014 is shown on **Figure 12-2** and in **Table 12-2**. Cash fares represent just over half of the daily farebox revenue. All Day, 10-Ride, and 31-Day passes represent approximately 5, 16, and 24 percent of the farebox revenue, respectively. The remaining 48 percent of riders use a variety of payment options. The highest used payment categories for passes include:

- 31-Day Pass, Zone 1 (17%)
- 31-Day Pass, Base Zone (13%)
- 10-Ride Pass, Zone 1 (13%)
- 31-Day Pass, Zone 3 (11%)

Figure 12-2: February 2014 Farebox Revenue by Revenue Type

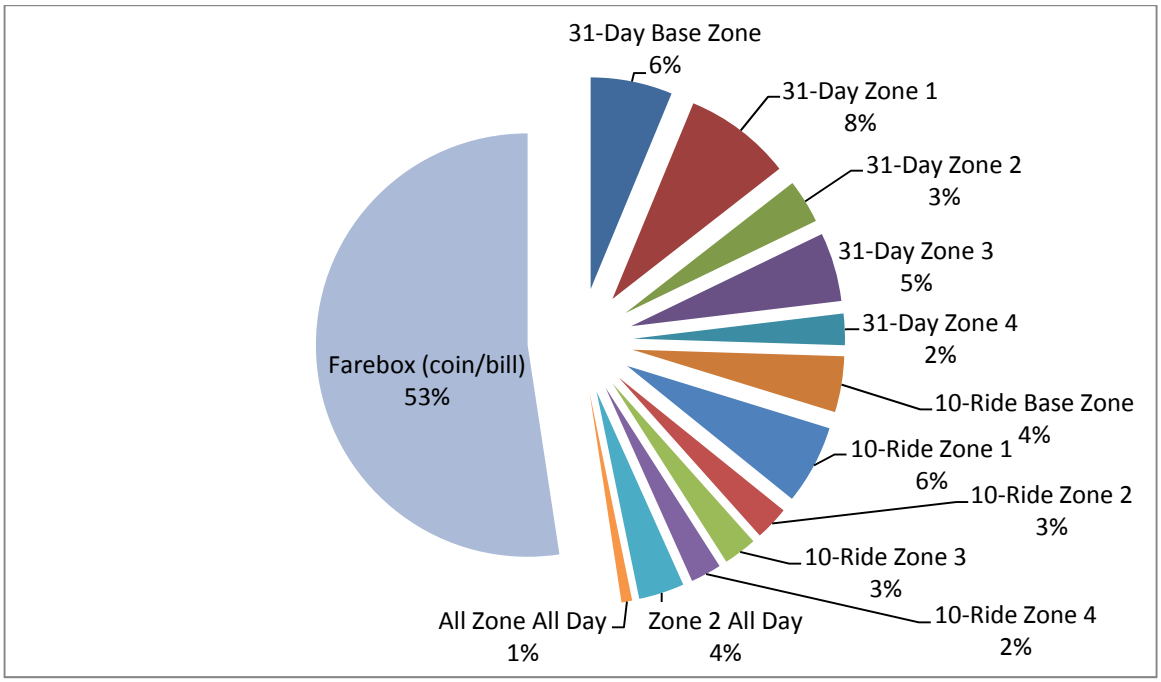


Table 12-2: February 2014 Farebox Revenue Breakdown

Payment Category	Total		Monthly $	% of Total Revenue	% of Ticket Revenue
Farebox (coin/bill)			$85,281	52%	
31-Day Pass Sales					
Base Zone	295		$10,161	6%	13%
Zone 1	341		$13,375	8%	17%
Zone 2	118		$5,488	3%	7%
Zone 3	157		$8,564	5%	11%
Zone 4	62		$3,896	2%	5%
Subtotal 31-Day		*973*	*$41,484*		
10-Ride Pass					
Base Zone	637		$6,948	4%	9%
Zone 1	780		$9,828	6%	13%
Zone 2	292		$4,232	3%	5%
Zone 3	242		$4,153	3%	5%
Zone 4	186		$3,816	2%	5%
Subtotal 10 Ride		*2,137*	*$28,977*		
All Day Pass					
Zone 2 All Day	1,666		$5,664	3%	7%
All Zone All Day	255		$1,339	1%	2%
Subtotal All Day		*1,921*	*$7,003*		
Feb 2014 Total	**5,031**		**$162,745**		

RRTA ridership detailed by fare type and route, from December 2013 to February 2014, is shown in **Table 12-3**.

Table 12-3: Dec. 2013 – Feb. 2014 RRTA Fixed Route Passengers by Farebox Revenue Type

Dec-13	Transfers	MU Students	HACC Students	Disabled	Free	Sr. Citizen	All Day Passes	Monthly Passes	10-Trip Tickets	Full & Student	Total
1- PCA/SE	597			255	597	2,414	1,241	3,286	1,949	3,996	14,335
2-PCB/6th Ward	660			300	294	1,771	1,194	3,028	1,936	3,085	12,268
3-PCC/8th	828			227	480	1,600	1,297	4,123	2,392	4,005	14,952
4-Elm/Parkside	43			18	34	212	34	535	275	259	1,410
5-Grandview	212			52	77	567	274	1,569	507	480	3,738
6-Trolley	116			32	30	342	161	664	258	210	1,813
10-Lititz	296			65	61	510	469	1,633	1,405	1,640	6,079
11-Ephrata	191			208	124	592	383	1,428	897	1,389	5,212
12-New Holland	182			75	81	459	517	1,653	1,075	1,563	5,605
13-White Horse	48			47	88	466	215	468	1,160	957	3,449
14-Rockvale	946			357	464	1,972	3,332	5,381	3,572	6,603	22,627
15-Willow Street	140			48	60	376	227	703	561	672	2,787
16-Millersville	618	7,601		148	295	1,661	752	2,330	1,088	1,942	16,435
17-Columbia	671			432	448	2,270	2,195	4,172	2,858	5,584	18,630
18-E-town	223			51	51	236	401	1,040	815	1,337	4,154
19-Manheim	463			121	126	486	946	1,440	1,610	2,084	7,276
20-Greenfield	225		1,394	52	46	306	384	846	777	1,054	5,084
Total	6,459	7,601	1,394	2,488	3,356	16,240	14,022	34,299	23,135	36,860	145,854
% of Monthly Total	4%	5%	1%	2%	2%	11%	10%	24%	16%	25%	
Jan-14	**Transfers**	**MU Students**	**HACC Students**	**Disabled**	**Free**	**Sr. Citizen**	**All Day Passes**	**Monthly Passes**	**10-Trip Tickets**	**Full & Student**	**Total**
1- PCA/SE	602			204	420	2,025	966	3,020	1,538	3,385	12,160
2-PCB/6th Ward	596			279	269	1,572	972	2,936	1,789	2,689	11,102
3-PCC/8th	778			163	410	1,303	1,140	4,262	2,219	3,528	13,803
4-Elm/Parkside	45			15	25	167	61	656	205	241	1,415
5-Grandview	226			41	85	655	264	1,626	626	539	4,062
6-Trolley	106			13	12	313	101	774	289	202	1,810
10-Lititz	326			69	40	490	444	1,680	1,477	1,762	6,288
11-Ephrata	161			121	101	443	372	1,441	1,043	1,370	5,052
12-New Holland	280			70	95	467	452	1,764	1,381	1,792	6,301
13-White Horse	61			22	45	402	148	598	1,060	804	3,140
14-Rockvale	901		3	252	294	1,678	2,709	4,697	3,307	5,642	19,483
15-Willow Street	194			32	67	324	215	746	617	628	2,823
16-Millersville	670	7,033		137	161	1,687	750	2,905	1,259	2,243	16,845
17-Columbia	686			442	384	1,853	2,240	4,403	2,989	5,590	18,587
18-E-town	252			32	48	182	460	1,103	807	1,476	4,360
19-Manheim	384			97	68	461	788	1,380	1,522	2,034	6,734
20-Greenfield	289		2,407	39	50	275	472	774	747	1,098	6,151
Total	6,557	7,033	2,410	2,028	2,574	14,297	12,554	34,765	22,875	35,023	140,116
% of Monthly Total	5%	5%	2%	1%	2%	10%	9%	25%	16%	25%	
Feb-14	**Transfers**	**MU Students**	**HACC Students**	**Disabled**	**Free**	**Sr. Citizen**	**All Day Passes**	**Monthly Passes**	**10-Trip Tickets**	**Full & Student**	**Total**
1- PCA/SE	522			229	497	1,835	1,106	2,871	1,558	3,814	12,432
2-PCB/6th Ward	528			242	309	1,462	1,060	2,787	1,710	2,956	11,054
3-PCC/8th	691			147	394	1,199	1,114	3,691	1,793	3,563	12,592
4-Elm/Parkside	22			18	11	136	28	433	157	212	1,017
5-Grandview	176			60	42	525	234	1,523	446	498	3,504
6-Trolley	145			10	22	254	87	619	251	165	1,553
10-Lititz	293			58	87	364	457	1,605	1,325	1,527	5,716
11-Ephrata	109			158	78	491	360	1,358	990	1,267	4,811
12-New Holland	240			63	99	420	366	1,365	1,150	1,673	5,376
13-White Horse	37			7	83	318	135	511	975	701	2,767
14-Rockvale	807			350	373	1,592	2,999	4,840	3,250	6,319	20,530
15-Willow Street	162			22	64	278	141	635	514	546	2,362
16-Millersville	572	18,110		136	168	1,560	611	2,374	850	1,652	26,033
17-Columbia	546			424	352	1,635	2,268	3,878	2,647	5,063	16,813
18-E-town	226			22	43	191	323	981	757	1,371	3,914
19-Manheim	349			65	92	387	733	1,424	1,469	1,872	6,391
20-Greenfield	243		3,233	45	74	286	349	857	638	897	6,622
Total	5,668	18,110	3,233	2,056	2,788	12,933	12,371	31,752	20,480	34,096	143,487
% of Monthly Total	4%	13%	2%	1%	2%	9%	9%	22%	14%	24%	

As shown in the table, fare type trends indicate:

- Approximately 25 percent of all fare types are full and student;
- There is a 50-50 split between cash fare and tickets-pass usage for RRTA fixed route services;
- The most popular pre-paid fare instrument is the Monthly pass;
- The 10-Trip Ticket is the second most purchased ticket type; and
- The use of discounted fare media has resulted in an average fare per passenger of $1.23 for fixed route service in 2012.

12.3 RRTA Farebox Recovery

RRTA's farebox recovery, or percent of operating costs covered by ticket sales, has grown from 25 percent to 28 percent from FY 2010 to FY 2012, respectively, as shown in **Table 12-4**. Over the same period, the average fare per passenger has risen from $1.15 to $1.23. The FY 2012 average fare per passenger is approximately 72 percent of the full fare. The difference in full fare and average fare per customer is due to passengers using free, reduced, or discounted multi-day passes.

Table 12-4: RRTA Fixed Route Service Farebox Recovery Data

Year	FY 2010	FY 2011	FY 2012
Revenue Service Hours	109,384	106,982	106,143
Total Ridership	1,811,148	1,852,503	1,924,770
Operating Costs	$8,234,692	$8,455,063	$8,588,354
Farebox Revenue	$2,075,532	$2,175,812	$2,371,896
Farebox Recovery Ratio	25%	26%	28%
Cost/Passenger Trip	$4.55	$4.56	$4.46
Subsidy/Passenger	$3.40	$3.39	$3.23
Average Fare/Passenger	$1.15	$1.17	$1.23

12.4 Peer Agency Comparison

Peer reviews are a useful technique to understand and compare fare levels and structure of similar agencies. The peer agencies used for this comparison include four urban transit systems in Pennsylvania:

- Berks Area Regional Transportation Authority (BARTA), Reading, PA;
- Capital Area Transit (CAT), Harrisburg, PA;
- Lebanon Transit, Lebanon, PA; and
- Rabbittransit, York, PA.

Table 12-5 presents the 2012 agency statistics for fixed route services.

Table 12-5: 2012 Peer Agency Transit Statistics – Fixed Route Services

	BARTA	CAT	Lebanon Transit	Rabbittransit	Peer Avg	RRTA
Service Area (sq miles)	864	137	362	911	**569**	952
Service Population	411,442	414,621	77,086	381,751	**321,225**	420,920
Population Density	476	3,026	213	419	**1,034**	442
Peak Vehicles	44	69	8	36	**39**	33
Operating Costs	$9,772,582	$14,302,903	$2,106,496	$8,787,794	**$8,742,444**	$8,588,354
Fare Revenue	$2,739,067	$3,265,894	$327,923	$1,566,715	**$1,974,900**	$2,371,896
Ridership	3,152,816	2,746,894	277,061	1,619,646	**1,949,104**	1,924,770
Annual Revenue Miles	1,568,263	1,767,247	401,696	1,244,430	**1,245,409**	1,482,271
Annual Revenue Hours	129,999	130,790	26,622	114,820	**100,558**	106,143
Hours/Capita	0.32	0.32	0.35	0.30	**0.32**	0.25
Cost/Hour	$75.17	$109.36	$79.13	$76.54	**$85.05**	$80.91
Cost/Passenger Trip	$3.10	$5.21	$7.60	$5.43	**$5.33**	$4.46
Subsidy per Passenger	$2.23	$4.02	$6.42	$4.46	**$4.28**	$3.23
Farebox Recovery Ratio	28%	23%	16%	18%	**21%**	28%
Passengers/Rev Hour	24.3	21.0	10.4	14.1	**17.4**	18.1

Source: NTD 2012.

12.4.1 Farebox Recovery Comparison

The farebox recovery ratio for RRTA fixed route services was approximately 25 to 28 percent from FY 2009 to FY 2012, as shown in **Table 12-6**. RRTA reported a 28 percent farebox return ratio in 2012, well above the national average of approximately 10-12 percent, and the local peer average of 21 percent.

Table 12-6: Peer Comparison – Farebox Recovery Ratio

	BARTA	CAT	Lebanon Transit	Rabbittransit	**Peer Avg**	RRTA
FY 2009	26%	23%	13%	19%	**20%**	26%
FY 2010	28%	22%	13%	19%	**21%**	25%
FY 2011	28%	22%	12%	18%	**20%**	26%
FY 2012	28%	23%	16%	18%	**21%**	28%

The peer average for the base fare is $1.63, as shown in **Table 12-7**. Capital Area Transit, in Harrisburg, is the only agency with a higher base fare than RRTA.

Table 12-7: Base Fare Comparison

	BARTA	CAT	Lebanon Transit	Rabbittransit	Peer Avg	RRTA
Base Fare	$1.70	$1.75	$1.50	$1.55	$1.63	**$1.70**

12.4.2 Peer Agency Fare Structure

Table 12-8 to **Table 12-11** present the fare structures for the peer agencies.

Table 12-8: Berks Area Regional Transportation Authority (BARTA), Reading, PA Fare Structure

FARE STRUCTURE	
Base Cash Fare	**$1.70**
Student Cash Fare (Grades 1-12 w/ Student ID card)	**$1.20**
Transfers (See below for time limitations)	**$0.25**
Zone Fare (See individual route schedules)	**$0.25**
Medicare Card Holders	**$0.85**
Handicapped Fare (with proper ID)	**$0.85**
Senior Citizens (with proper ID)	**FREE**
Children 5 and under (up to 3, per fare paying adult)	**FREE**
DISCOUNT FARES and PASSES	
Ten Trip Tickets	
Adult Anywhere	**$17.30**
Student Anywhere	**$11.00**
Passes	
One Day	$3.00 (Purchased in Advance)
	$4.00 (Purchased onboard bus)
31 Day Adult Anywhere	$47.00
31 Day Student Anywhere	$29.00
31 Day Park-N-Ride (to/from P-N-R lots only)	$31.00

Table 12-9: Capital Area Transit (CAT), Harrisburg, PA

CAT Fares (Effective October 1, 2010)	
Fare Type	Cost
Base Fare	$1.75
Zone Fare	$0.60
Transfer Fare	$0.25
Market-Walnut-Loop	$0.75
City Island	$0.75
Monthly Pass – Zone 1	$49.00
Monthly Pass – Zone 2	$70.00
Monthly Pass – Zone 3	$87.00
Student Fare (with Student ID card) K-12	$1.25
Student Pass – Zone 1, 2 & 3 (with Student ID card) K-12	$35.00
Ticket – 11 Ride – Zone 1	$16.50
Ticket – 11 Ride – Zone 2	$22.00
Ticket – 11 Ride – Zone 3	$28.00
20 Ride Disabled Ticket	$17.50
Base SET Fare	$3.50

Children five and under free when accompanied by an adult

Table 12-10: Lebanon Transit Fixed Route Fares, Lebanon, PA

The following fares are for the regularly scheduled fixed route, City and County LT buses.	
City Fare	**$1.50**
City 1/2 fare	**75¢**
County Fare	**$2.00**
County 1/2 Fare	**$1.00**
	All Transfers are now 25¢
Student Fare	**$1.00 effective Monday thru Friday August 15 - June 15, Monday - Friday only**
All Day Pass - *available for purchase on bus, at transfer station or LT office.* ***$6.00 (Pass can be used on city and county routes)***	
10 Ride Pass - *available for purchase on bus, at transfer station or LT office.*	
10 Ride City Pass	**$15.00 (Pass can be used on Lebanon City routes)**
10 Ride County Pass	**$20.00 (Pass can be used on city and county routes)**
31 Day Pass - *available for purchase at transfer station or COLT office.*	
31 Day City Pass	**$57.00 (Pass can be used on Lebanon City routes)**
31 Day County Pass	**$76.00 (Pass can be used on city and county routes)**

Table 12-11: Rabbittransit, York, PA

Cash Fares			
Zone 1 - Adult Fare	**$1.55**	**Zone 1** - Reduced Fare	**$0.75**
Zone 2 - Adult Fare	**$2.00**	**Zone 2** - Reduced Fare	**$1.00**
One Ride Hop-n-Go Pass	One Ride		$1.40
	Multiple of 10		$14.00
11-Ride Hop-n-Go Pass	Adult		$15.00
	Student		$10.00
31 Day Hop-n-Go Pass	Adult		$42.00
	Student		$35.00
1 Day Hop-n-Go (All Day Pass)	Adults & Students		$4.50
	Seniors		Free
	Transfers		Free

12.5 Recommended Fare Structure

The recommended fare structure presented below was developed to simplify RRTA's fare structure, maintain similar levels of farebox revenue, and account for increases in future operating costs. The following changes are recommended:

- The current zone system will be eliminated and two base fares will be available for riders: city and county;
- Payment for each trip will be processed when boarding the bus;
- Transfers will be free, while still requiring a transfer ticket that is valid for two hours;
- Discounted passes will remain available for purchase.

- Within the City of Lancaster and for the RRTA City Routes, the base fare per one-way trip is $1.70 for years 1-3, $1.75 in years 4-10;
- For all County routes and outside the City limits of Lancaster, one base fare will be used - $2.50 per one-way trip in years 1-3, $2.75 in years 4-10;
- Discounted passes will be available for purchase; and
  - **All Day Pass – all routes**, city and county: $3.75 in years 1-3; $4.00 for years 4-6; and $4.25 for years 7-10;
    - 10-Ride Ticket will be available for purchase for city and county routes;
    - $12.00 for the City routes for years 1-3, and $14.00 for years 4-10;
    - $18.75 for the County routes for years 1-3; $22.00 for years 4-10;
  - **31-Day Pass** will also be available for purchase for city and county routes;
    - $35.00 for the City routes for years 1-3, and $36.00 for years 4-6; $37.00 for years 7-10; and
    - $50.00 for the County routes for years 1-3; $55.00 for years 4-6; and $60.00 for years 7-10.

Implementation of the recommended fare structure will occur in phases, enabling riders to adjust to gradual price increases, as shown in **Table 12-12**. The above fare structure changes require RRTA to complete an evaluation of Title VI regulations.

As with any change in fare structure, ridership groups will be affected differently, as some will see average fare increases and others decreases. It should be noted the recommended fare structure should be reviewed regularly and modified, as appropriate, to match future changes in ridership, operating costs, and revenues. This is also true for future shuttle operations in the downtown area. As stated previously, a nominal fee will likely be instated. The future partners in the project will decide the appropriate fare during the planning phases.

Table 12-12: Recommended Fare Structure by Phase

	Yr: 1-3 Phase 1	Yr: 4-6 Phase 2	Yr: 7-10 Phase 3
City - Base Fare	$1.70	$1.75	$1.75
County - Base Fare	$2.50	$2.75	$2.75
Transfers	Free	Free	Free
All Day Pass - All routes	$3.75	$4.00	$4.25
10-Ride Ticket - City	$12.00	$14.00	$14.00
10-Ride Ticket - County	$18.75	$22.00	$22.00
31-Day Pass - City	$35.00	$36.00	$37.00
31-Day Pass - County	$50.00	$55.00	$60.00

12.6 Recommended Fare Structure Ridership

Any RRTA fare structure change will impact the way riders will use the system. Bus riders' response to changes in fares and fare structures are expressed in terms of elasticity, which is defined as the

percentage change in the use of a particular transportation service resulting from a one percent (1%) change in an attribute such as price, trip time, or frequency of service.

The following two assumptions were used in developing the fare model for RRTA. These assumptions are based on industry standards are also appropriate for Lancaster County, as well as information gleaned throughout this study.

Key assumptions are:

- Conservative elasticity for RRTA cash fares and passes: -0.1%
- Aggressive elasticity for RRTA cash fares and passes: +0.1%

Both conservative, -0.1%, and aggressive elasticity, +0.1%, is used as a mechanism to capture RRTA ridership response as a result of fare changes. **Table 12-13** presents the future daily ridership projections. Both projections are higher than the national transit industry "rule of thumb" average of -0.3 percent due to reflect the elimination of zone fares, in which some riders will pay more, but some will pay less with the new fare structure.

Table 12-13: Daily Ridership Elasticity Projections

Category	Existing	Yr: 1-3 Phase 1	Yr: 4-6 Phase 2	Yr: 7-10 Phase 3
Daily Ridership Projections: +0.1% Elasticity				
Cash Fares (50%)	3,700	3,700	3,774	3,774
All Day Pass (10%)	740	814	863	915
31-Day Pass (24%)	1,776	1,776	1,812	1,848
10-Ride Ticket (16%)	1,184	1,184	1,373	1,373
Daily Ridership (+0.1%) Projection	7,400	7,474	7,822	7,910
Daily Ridership Projections: -0.1% Elasticity				
Cash Fares (50%)	3,700	3,700	3,626	3,626
All Day Pass (10%)	740	666	626	588
31-Day Pass (24%)	1,776	1,776	1,740	1,706
10-Ride Ticket (16%)	1,184	1,184	995	995
Daily Ridership (-0.1%) Projection	7,400	7,326	6,987	6,915

12.7 Impact on RRTA Fare Revenue

Revenues were calculated by multiplying expected (average) fares and the ridership for individual fare categories. ***The most current ridership numbers for each category were used, with the assumption there would be the same distribution of users with the same distribution of payment types under the new proposals as in the existing case.***

More realistically, both ridership and its distribution among users and fare types are likely to change as price structures are altered. Some users will decide not to travel at all, or will change the way they travel. Others who use a pass to make many trips might make fewer trips if passes are discontinued or fare is increased. Some riders will be more sensitive to price changes than others, depending on demographics such as income or age; rider sensitivity to price also depends on trip purpose; e.g., riders going to work will be less sensitive to price than riders making discretionary trips. **Table 12-14** presents the annual Fare Revenues estimates.

Table 12-14: Annual Fare Revenue Estimates

Category	Yr: 1-3 Phase 1	Yr: 4-6 Phase 2	Yr: 7-10 Phase 3
Cash Fares	$1,183,260	$1,218,750	$1,235,000
All Day Pass	$97,500	$104,000	$110,500
31-Day Pass	$497,250	$532,350	$567,450
10-Ride Ticket	$499,688	$585,000	$585,000
Annual Fare Revenue	$2,277,698	$2,440,100	$2,497,950

- The Cash Fares are based upon existing daily ridership of approximately 7,400, which includes seniors. Approximately 50 percent of the riders pay cash at an average fare of $1.23.
- The All Day Pass assumes the same distribution of users with the same distribution of payment types. Approximately 100 All-Day passes are sold daily at the proposed daily rate.
- The 31-Day Pass assumes the same distribution of users with the same distribution of payment types. Approximately 45 31-Day passes are sold daily at the average proposed rate for the city and county pass.
- The 10-Ride Ticket assumes the same distribution of users with the same distribution of payment types. Approximately 125 10-Ride Tickets are sold daily at the average proposed rate for the city and county pass.

The recommended fare structure presented in this chapter establishes a simple and sustainable fare for the fixed route bus service. The RRTA Board will provide direction for implementation of the proposed fare.

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13. Costs and Implementation Plan

This chapter brings together the recommendations made in previous sections of this TDP Update to develop a 10-year capital and operating plan, along with a schedule for implementing the various improvements to bus service in Lancaster County. The cost and schedule information include previous costs identified in Chapter 9. A proposed schedule for implementation of the recommendations is also presented here to assist RRTA with implementation of these important transit improvements.

The TDP recommendations are grouped into two time periods, as funding availability is unknown beyond five years. By keeping the recommendations in short-term and long-term time periods, it provides RRTA with the flexibility to determine what to implement based on available funding.

The TDP recommendations have been grouped into two timeframes:

- Short-term: years 1-5
- Long-term: years 6-10

13.1 Service Recommendations

Service alternatives for the short-term and long-term timeframe were presented in detail in Chapter 9. The operating costs for service recommendations were based on the number of revenue hours that the route would operate on an annual basis. The cost per hour, $86.56, was based on the January 2014 RRTA Operating Statement. A conservative approach has been followed throughout the short-range planning analysis. The RRTA projections are consistent with the financial guidance provided for the development of the Transportation Improvement Program in 2014.

The **short-term** recommended alternatives include:

1. Add five percent annual revenue hours over the existing base year
2. Eliminate Route 4 Elm Avenue/Parkside Route
3. Eliminate Downtown Trolley
4. Modify Route 15 Willow Street
5. Implement Elizabethtown Express Route
6. Implement Gap Express Route
7. Add bus to Rt. 14 Rockvale all day.
8. Add bus to Rt. 17 Columbia all day.

The estimated annual operating cost for the short-term service plan for fixed route service is $9.8M, as shown in **Table 13-1**. The projected operating budgets discussed in the following pages were calculated using a FY2014 constant dollar. In order to operate the above recommend short-term plan, no additional new vehicles are needed.

Table 13-1: Short-term Service Plan

Operating Expenses	Short-term				
	1	2	3	4	5
	2015	2016	2017	2018	2019
Fixed Route Expenses	**$9,752,852**	**$9,752,852**	**$9,752,852**	**$9,752,852**	**$9,752,852**
Includes:					
5% Revenue Hrs Added	x				
Eliminate Route 4	x				
Eliminate DT Trolley	x				
Modify Route 15 Willow	x				
Implement Etown Express		x			
Implement Gap Express		x			
Add bus - Rt 14 all day	x				
Add bus - Rt 17 all day	x				
Revenues					
Operating Revenue					
Passenger Revenue	$2,906,955	$2,906,955	$2,906,955	$2,906,955	$2,906,955
Queen St Station Garage	$168,000	$168,000	$168,000	$168,000	$168,000
Concession	$5,000	$5,000	$5,000	$5,000	$5,000
Advertising	$110,000	$110,000	$110,000	$110,000	$110,000
Interest Income	$1,600	$1,600	$1,600	$1,600	$1,600
Other	$66,610	$66,610	$66,610	$66,610	$66,610
Operating Grants					
Federal	$2,250,000	$2,250,000	$2,250,000	$2,250,000	$2,250,000
State	$3,964,559	$3,964,559	$3,964,559	$3,964,559	$3,964,559
County	$280,028	$280,028	$280,028	$280,028	$280,028
Total Revenue	**$9,752,752**	**$9,752,752**	**$9,752,752**	**$9,752,752**	**$9,752,752**

Based upon FY014 Constant Dollar.

The **long-term** recommended alternatives include:

1. Rt 1 PCA - PM 30 Min Peak Hour Service
2. Rt2 PCB - change to 30 min service.
3. Rt 3 PCC - 30 min service all day
4. Rt 5/Grandview - 30 min service peak hours
5. Rt 10/Lititz - 30 min peak hr service; 60 min midday
6. Rt 11/Ephrata - 30 min peak hr service; 60 min midday
7. Rt 12/New Holland - 30 min peak hr service; 60 min midday
8. Rt 13/White Horse - 60 min service
9. Rt 14/Rockvale - 15 min daytime
10. Rt 16/Millersville - 15 min peak/30 min offpeak

11. Rt 17/Columbia - 15 min daytime
12. Rt 18/Elizabethtown - 60 min service
13. Rt 19/Manheim - 30 min service
14. Rt 20/Greenfield - 30 min service
15. N Lancaster Regional Route
16. Downtown Shuttle Service
17. Rapid Transit Feasibility Study for Columbia and Rockvale routes.
18. Lancaster/Harrisburg Regional Service
19. Columbia Local Service
20. Increase Saturday Service
21. Lancaster/Denver Borough Regional Service

The estimated annual operating cost for the long-term service plan for fixed route service ranges from $12.2M in 2020 to $16.3M in 2024, as shown in **Table 13-2**. The projected operating budgets discussed in the following pages were calculated using a FY2014 constant dollar. In order to operate the above recommended long-term plan, additional local revenues must be secured and 24 additional new vehicles are needed. Existing RRTA annual service hours are approximately 109,000 annually. The long-term alternatives increase service hours by approximately 77,000 annual revenue hours.

13.2 Capital Recommendations

The operation of the short-term recommended service plan does not require additional new vehicles. However, the long-term plan does require an additional 24 vehicles to provide the fixed route service. **Table 13-3** presents the vehicle requirements for the 10-year plan, including replacement fixed route vehicles. The expanded Saturday services will use existing weekday fleet to accommodate new services.

Vehicle costs for the new services assume the purchase of alternative fuel vehicles, which have an estimated cost of approximately $635,000 per vehicle. For the 24 new vehicles, the total cost will be approximately $15M. Approximately 80 percent of that funding will likely be eligible for federal and state funding; however, the remaining 20 percent is a required local match of approximately $3M.

In addition to vehicle procurement for expanded services, RRTA will also need to expand bus storage and maintenance facilities. The existing facility is at maximum capacity at 48 vehicles. There is some room for expansion at the existing site for storage of an additional eight buses. However, when the above service long-term recommendations are implemented in the future, RRTA will need to expand facilities, which is an estimated cost of approximately $10M-$15M, depending upon the size and location of the building. Approximately 80 percent of that funding will likely be eligible for federal and state funding; however, the remaining 20 percent is a required local match of approximately $2.8M.

RRTA completed a 2008 Plan that included a detailed capital improvement plan to year 2035, which includes capital needs for fixed route and paratransit services, service vehicles, facilities, upgraded technologies, etc. The updated CIP is shown in **Table 13-4**.

Table 13-2: Long-term Service Plan

Operating Expenses		Long-term				
		6	7	8	9	10
		2020	2021	2022	2023	2024
Fixed Route Expenses						
	Continuation of Existing Services	$9,752,852	$9,752,852	$9,752,852	$9,752,852	$9,752,852
1	Rt 1 PCA - PM 30 Min Peak Hour Service	$45,011	$45,011	$45,011	$45,011	$45,011
2	Rt2 PCB - change to 30 min service.	$292,573	$292,573	$292,573	$292,573	$292,573
3	Rt 3 PCC - 30 min service all day	$292,573	$292,573	$292,573	$292,573	$292,573
4	Rt 5/Grandview - 30 min service peak hours	$135,034	$135,034	$135,034	$135,034	$135,034
5	Rt 10/Lititz - 30 min peak hr service; 60 min midday	$303,826	$303,826	$303,826	$303,826	$303,826
6	Rt 11/Ephrata - 30 min peak hr service; 60 min midday	$303,826	$303,826	$303,826	$303,826	$303,826
7	Rt 12/New Holland - 30 min peak hr service; 60 min midday	$270,067	$270,067	$270,067	$270,067	$270,067
8	Rt 13/White Horse - 60 min service	$292,573	$292,573	$292,573	$292,573	$292,573
9	Rt 14/Rockvale - 15 min daytime		$292,573	$292,573	$292,573	$292,573
10	Rt 16/Millersville - 15 min peak/30 min offpeak		$292,573	$292,573	$292,573	$292,573
11	Rt 17/Columbia - 15 min daytime		$292,573	$292,573	$292,573	$292,573
12	Rt 18/Elizabethtown - 60 min service	$292,573	$292,573	$292,573	$292,573	$292,573
13	Rt 19/Manheim - 30 min service		$292,573	$292,573	$292,573	$292,573
14	Rt 20/Greenfield - 30 min service		$141,960	$141,960	$141,960	$141,960
15	N Lancaster Regional Route			$729,181	$729,181	$729,181
16	Downtown Shuttle Service			$675,168	$675,168	$675,168
17	Rapid Transit Feasibility Study for Columbia and Rockvale routes.	$200,000				
18	Lancaster/Harrisburg Regional Service				$270,067	$270,067
19	Columbia Local Service			$270,067	$270,067	$270,067
20	Increase Saturday Service				$756,188	$756,188
21	Lancaster/Denver Borough Regional Service				$270,067	$270,067
	Expenses Total	***$12,180,906***	***$13,293,158***	***$14,967,574***	***$16,263,897***	***$16,263,897***
Revenues						
	Operating Revenue	$3,258,165	$3,258,165	$3,258,165	$3,258,165	$3,258,165
	Operating Grants					
	Federal	$2,250,000	$2,250,000	$2,250,000	$2,250,000	$2,250,000
	State	$3,964,559	$3,964,559	$3,964,559	$3,964,559	$3,964,559
	County	$280,028	$280,028	$280,028	$280,028	$280,028
	Other Local Funding	$2,428,154	$3,540,406	$5,214,822	$6,511,145	$6,511,145
	Revenues Total	***$12,180,906***	***$13,293,158***	***$14,967,574***	***$16,263,897***	***$16,263,897***

Table 13-3: Fleet Plan

Fleet Plan	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	10-yr Total
Replace Vehicle	15	8	0	5	6	3	0	0	3	0	40
New Vehicle	0	0	0	0	0	9	5	6	4	0	24

Table 13-4: Capital Improvement Program

FISCAL YEAR	CAPITAL NEEDS	FEDERAL	STATE	LOCAL	TOTAL
2015	REPLACE 4 -2003 OPUS HYBRID	$1,977,600	$478,579	$15,944	$2,472,000
	REPLACE 9 PARATRANSIT VANS	$526,738	$127,470	$4,247	$658,422
	COMPLETE AVL SYSTEM	$292,339	$70,746	$2,357	$365,424
	QUEEN ST. STATION - PHASE I UPGRADES	$400,000	$96,800	$3,225	$500,000
	REPLACE PORTABLE LIFTS	$80,000	$19,360	$645	$100,000
	COMPUTER HARDWARE/SOFTWARE	$20,000	$4,840	$161	$25,000
	PREVENTIVE MAINTENANCE	$1,391,129	$336,653	$11,216	$1,738,911
	TOTAL	**$4,687,806**	**$1,134,449**	**$37,795**	**$5,859,757**
2016	QUEEN STREET STATION UPGRADES	$600,000	$145,200	$4,838	$750,000
	(Phase I - 10 years old)				
	BEGIN REPLACE 8 - 2005 BUSES-HYBRIDS	$2,036,928	$492,937	$16,423	$2,546,160
	REPLACE 9 PARATRANSIT VANS	$542,540	$131,295	$4,374	$678,175
	REPLACE SERVICE TRUCK (2006)	$24,000	$5,808	$194	$30,000
	SHOP EQUIPMENT	$40,000	$9,680	$323	$50,000
	PREVENTIVE MAINTENANCE	$1,432,862	$346,753	$11,552	$1,791,078
	TOTAL	**$4,676,330**	**$1,131,672**	**$37,703**	**$5,845,413**
2017	BEGIN REPLACE 8 - 2005 BUSES - HYBRIDS	$2,098,036	$507,725	$16,915	$2,622,545
	REPLACE 9 PARATRANSIT BUSES	$558,816	$135,233	$4,505	$698,520
	REPLACE 2-SUPERVISORY VEHICLES (2007)	$48,000	$11,616	$387	$60,000
	COMPUTER HARDWARE/SOFTWARE	$20,000	$4,840	$161	$25,000
	PREVENTIVE MAINTENANCE	$1,475,849	$357,155	$11,899	$1,844,811
	TOTAL	**$4,200,701**	**$1,016,570**	**$33,868**	**$5,250,876**
2018	REPLACE 3 2005 TROLLEY BUSES	$1,620,733	$392,217	$13,067	$2,025,916
	REPLACE 9 PARATRANSIT VANS	$575,580	$139,290	$4,641	$719,475
	REPLACE SUPERVISORY VEHICLE (2008)	$24,000	$5,808	$194	$30,000
	UPGRADES SHARED RIDE SOFTWARE	$160,000	$38,720	$1,290	$200,000
	UPGRADES PARKING GARAGE EQUIP	$160,000	$38,720	$1,290	$200,000
	PREVENTIVE MAINTENANCE	$1,520,124	$367,870	$12,256	$1,900,155
	TOTAL	**$4,060,437**	**$982,626**	**$32,737**	**$5,075,546**
2019	REPLACE 6 - 2007 BUSES - HYBRIDS	$3,338,709	$807,968	$26,918	$4,173,387
	REPLACE 9 - PARATRANSIT VANS	$592,848	$143,469	$4,780	$741,060
	REPLACE TELEPHONE SYSTEM	$60,000	$14,520	$484	$75,000
	COMPUTER HARDWARE/SOFTWARE	$24,000	$5,808	$194	$30,000
	PREVENTIVE MAINTENANCE	$1,565,728	$378,906	$12,624	$1,957,160
	TOTAL	**$5,581,285**	**$1,350,671**	**$44,999**	**$6,976,606**
2020	REPLACE 3 2008 BUSES - HYBRIDS	$1,719,435	$416,103	$13,863	$2,149,294
	REPLACE 9 - PARATRANSIT VANS	$610,633	$147,773	$4,923	$763,292
	PURCHASE 9 NEW HYBRIDS	$4,572,000	$952,500	$190,500	$5,715,000
	FACILITY UPGRADES	$400,000	$96,800	$3,225	$500,000
	QSS-PHASE I UPGRADES	$400,000	$96,800	$3,225	$500,000
	PREVENTIVE MAINTENANCE	$1,612,700	$390,273	$13,002	$2,015,875
	TOTAL	**$9,314,769**	**$2,100,250**	**$228,739**	**$11,643,461**

FISCAL YEAR	CAPITAL NEEDS	FEDERAL	STATE	LOCAL	TOTAL
2021	REPLACE 9 - PARATRANSIT VANS	$628,952	$152,206	$5,071	$786,190
	REPLACE TOW MOTOR	$24,000	$5,808	$194	$30,000
	PURCHASE 5 NEW HYBRIDS	$2,540,000	$529,167	$105,833	$3,175,000
	UPGRADE AVL SYSTEM	$800,000	$193,600	$6,450	$1,000,000
	TDP UPDATE PLAN	$120,000	$29,040	$968	$150,000
	COMPUTER HARDWARE/SOFTWARE	$24,000	$5,808	$194	$30,000
	REPLACE COPIER -2012	$24,000	$5,808	$194	$30,000
	UPGRADE PARKING GARAGE	$400,000	$96,800	$3,225	$500,000
	SHOP EQUIPMENT	$80,000	$19,360	$645	$100,000
	PREVENTIVE MAINTENANCE	$1,661,081	$401,982	$13,392	$2,076,351
	TOTAL	**$6,302,033**	**$1,439,579**	**$136,165**	**$7,877,541**
2022	REPLACE 9 - PARATRANSIT VANS	$647,821	$156,773	$5,223	$809,776
	PURCHASE 6 NEW HYBRIDS	$2,540,000	$529,167	$105,833	$3,175,000
	REPLACE ABOVE GROUND TANKS (1997)	$800,000	$193,600	$6,450	$1,000,000
	REPLACE OFFICE FURNITURE	$40,000	$9,680	$323	$50,000
	PURCHASE (20) BUS SHELTERS	$200,000	$48,400	$1,613	$250,000
	REPLACE COPIER -2014	$24,000	$5,808	$194	$30,000
	REPLACE GARAGE SWEEPER	$40,000	$9,680	$323	$50,000
	PREVENTIVE MAINTENANCE	$1,710,913	$414,041	$13,794	$2,138,641
	TOTAL	**$6,002,734**	**$1,367,148**	**$133,752**	**$7,503,417**
2023	REPLACE 9 - PARATRANSIT VANS	$667,255	$161,476	$5,380	$834,069
	REPLACE 3 2011 BUSES - HYBRIDS	$1,878,873	$454,687	$15,148	$2,348,592
	PURCHASE 4 NEW HYBRIDS	$2,032,000	$423,333	$84,667	$2,540,000
	REPLACE SKID LOADER	$40,000	$9,680	$323	$50,000
	COMPUTER HARDWARE/SOFTWARE	$28,000	$6,776	$226	$35,000
	PREVENTIVE MAINTENANCE	$1,762,240	$426,462	$14,208	$2,202,800
	TOTAL	**$6,408,369**	**$1,482,415**	**$119,951**	**$8,010,461**
2024	REPLACE 9 - PARATRANSIT VANS	$687,273	$166,320	$5,541	$859,091
	REPLACE 2 2012 BUSES BYBRIDS	$1,290,160	$312,219	$10,402	$1,612,700
	REPLACE BUS WASH	$200,000	$48,400	$1,613	$250,000
	REPLACE FAREBOX SYSTEM	$800,000	$193,600	$6,450	$1,000,000
	REPLACE COMMUNICATIONS EQUIP.	$200,000	$48,400	$1,613	$250,000
	PREVENTIVE MAINTENANCE	$1,815,108	$439,256	$14,634	$2,268,885
	TOTAL	**$4,992,541**	**$1,208,195**	**$40,252**	**$6,240,676**
2025	REPLACE 9 - PARATRANSIT VANS	$707,891	$171,310	$5,707	$884,864
	REPLACE 2 2013 BUSES BYBRIDS	$1,328,865	$321,585	$10,714	$1,661,081
	REPLACE BUS VACUUM SYSTEM	$120,000	$29,040	$968	$150,000
	REPLACE 2005 TOW TRUCK	$240,000	$58,080	$1,935	$300,000
	QSS PHASE I UPGRADES	$1,600,000	$387,200	$12,900	$2,000,000
	COMPUTER HARDWARE/SOFTWARE	$32,000	$7,744	$258	$40,000
	REPLACE RADIO SYSTEM	$120,000	$29,040	$968	$150,000
	PREVENTIVE MAINTENANCE	$1,869,561	$452,434	$15,073	$2,336,951
	TOTAL	**$6,018,317**	**$1,456,433**	**$48,523**	**$7,522,896**

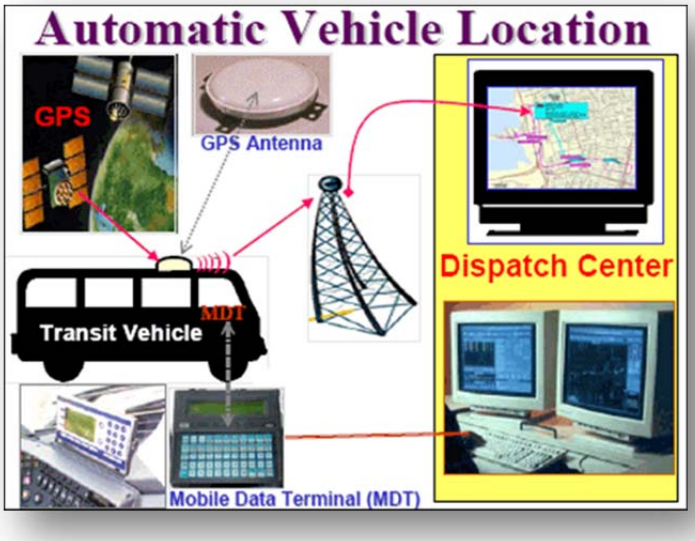
FISCAL YEAR	CAPITAL NEEDS	FEDERAL	STATE	LOCAL	TOTAL
2026	REPLACE 9 - PARATRANSIT VANS	$729,128	$176,449	$5,879	$911,410
	BEGIN REPLACEMENT 14 BUSES - HYBRIDS	$2,737,461	$662,466	$22,071	$3,421,826
	REPLACE SERVICE TRUCK (2016)	$28,000	$6,776	$226	$35,000
	SHOP EQUIPMENT	$80,000	$19,360	$645	$100,000
	PREVENTIVE MAINTENANCE	$1,925,648	$466,007	$15,526	$2,407,060
	TOTAL	**$5,500,237**	**$1,331,057**	**$44,346**	**$6,875,296**
2027	REPLACE 9 - PARATRANSIT VANS	$751,002	$181,742	$6,055	$938,752
	BEGIN REPLACEMENT 14 BUSES - HYBRIDS	$2,819,585	$682,340	$22,733	$3,524,481
	REPLACE 2-SUPERVISORY VEHICLE (2017)	$56,000	$13,552	$452	$70,000
	COMPUTER HARDWARE/SOFTWARE	$32,000	$7,744	$258	$40,000
	PREVENTIVE MAINTENANCE	$2,041,186	$493,967	$16,457	$2,551,483
	TOTAL	**$5,699,773**	**$1,379,345**	**$45,954**	**$7,124,716**
2028	REPLACE 9 - PARATRANSIT VANS	$773,532	$187,195	$6,237	$966,915
	FINISH REPLACEMENT 14 BUSES - HYBRIDS	$4,356,258	$1,054,215	$35,122	$5,445,323
	REPLACE SUPERVISORY VEHICLE (2018)	$24,000	$5,808	$194	$30,000
	REPLACE COPIER 2021	$32,000	$7,744	$258	$40,000
	PREVENTIVE MAINTENANCE	$2,102,422	$508,786	$16,951	$2,628,028
	TOTAL	**$7,288,213**	**$1,763,747**	**$58,761**	**$9,110,266**
2029	REPLACE 9 - PARATRANSIT VANS	$796,738	$192,811	$6,424	$995,922
	REPLACE 8 2017 BUSES HYBRID	$5,982,595	$1,447,788	$48,235	$7,478,244
	REPLACE HIGH LIFT	$24,000	$5,808	$194	$30,000
	TDP UPDATE PLAN	$160,000	$38,720	$1,290	$200,000
	COMPUTER HARDWARE/SOFTWARE	$32,000	$7,744	$258	$40,000
	UPGRADES SOLAR PANELS	$800,000	$193,600	$6,450	$1,000,000
	REPLACE COPIER 2022	$32,000	$7,744	$258	$40,000
	PREVENTIVE MAINTENANCE	$2,165,495	$524,050	$17,459	$2,706,869
	TOTAL	**$9,992,828**	**$2,418,264**	**$80,567**	**$12,491,035**
2030	REPLACE 9 - PARATRANSIT VANS	$820,640	$198,595	$6,616	$1,025,800
	REPLACE 3 2018 BUSES HYBRIDS	$2,310,777	$559,208	$18,631	$2,888,472
	FACILITY UPGRADES	$1,600,000	$387,200	$12,900	$2,000,000
	REPLACE PORTABLE LIFTS	$120,000	$29,040	$968	$150,000
	PREVENTIVE MAINTENANCE	$2,230,460	$539,771	$17,983	$2,788,075
	TOTAL	**$7,081,877**	**$1,713,814**	**$57,098**	**$8,852,347**
2031	REPLACE 9 - PARATRANSIT VANS	$845,259	$204,553	$6,815	$1,056,574
	REPLACE 6 2019 BUSES HYBRIDS	$4,760,201	$1,151,969	$38,379	$5,950,251
	QSS PHASE II - UPGRADES	$800,000	$193,600	$6,450	$1,000,000
	COMPUTER HARDWARE/SOFTWARE	$32,000	$7,744	$258	$40,000
	PREVENTIVE MAINTENANCE	$2,297,374	$555,964	$18,523	$2,871,717
	TOTAL	**$8,734,834**	**$2,113,830**	**$70,425**	**$10,918,542**

FISCAL YEAR	CAPITAL NEEDS	FEDERAL	STATE	LOCAL	TOTAL
2032	REPLACE 9 - PARATRANSIT VANS	$870,617	$210,689	$7,019	$1,088,271
	REPLACE 12 2020 BUSES HYBRIDS	$9,806,014	$2,373,055	$79,061	$12,257,518
	PURCHASE (20) BUS SHELTERS	$240,000	$58,080	$1,935	$300,000
	SHOP EQUIPMENT	$80,000	$19,360	$645	$100,000
	PREVENTIVE MAINTENANCE	$2,366,294	$572,643	$19,078	$2,957,868
	TOTAL	**$13,362,926**	**$3,233,828**	**$107,739**	**$16,703,657**
2033	REPLACE 9 - PARATRANSIT VANS	$896,736	$217,010	$7,230	$1,120,919
	REPLACE 5 2021 BUSES HYBRIDS	$1,402,805	$339,479	$11,310	$1,753,506
	COMPUTER HARDWARE/SOFTWARE	$40,000	$9,680	$323	$50,000
	PREVENTIVE MAINTENANCE	$2,437,283	$589,823	$19,651	$3,046,604
	TOTAL	**$4,776,824**	**$1,155,991**	**$38,513**	**$5,971,029**
2034	REPLACE 9 - PARATRANSIT VANS	$923,638	$223,520	$7,447	$1,154,547
	REPLACE 6 2022 BUSES HYBRIDS	$1,733,867	$419,596	$13,979	$2,167,333
	PREVENTIVE MAINTENANCE	$2,510,402	$607,517	$20,240	$3,138,003
	TOTAL	**$5,167,907**	**$1,250,633**	**$41,666**	**$6,459,883**
2035	REPLACE 9 - PARATRANSIT VANS	$951,347	$230,226	$7,670	$1,189,183
	REPLACE 4 2023 BUSES HYBRIDS	$1,190,589	$288,122	$9,599	$1,488,236
	QSS PHASE I UPGRADES	$800,000	$193,600	$6,450	$1,000,000
	COMPUTER HARDWARE/SOFTWARE	$40,000	$9,680	$323	$50,000
	PREVENTIVE MAINTENANCE	$2,585,714	$625,743	$20,847	$3,232,143
	TOTAL	**$5,567,650**	**$1,347,371**	**$44,889**	**$6,959,562**
	GRAND TOTAL	**$135,418,388**	**$32,771,250**	**$1,091,811**	**$169,272,985**

One high level capital project is currently underway at RRTA, which is the implementation of Automatic Vehicle Location (AVL) throughout the fixed route system. RRTA will use federal funds in the amount of $800,000 for the design, purchase and installation of the AVL system on its 42 fixed route buses. The AVL system includes onboard and office support hardware, software and licensing needed to have a fully functional system that will track and report the locations of the buses.

The AVL system and equipment installed on a bus includes Mobile Data Terminals (MDT's). This equipment will:

- link with and support the operation of the on-board Automated Stop Annunciation (ASA)/route identification system in accordance with the ADA requirements;
- provide bus arrival and departure announcements at Queens Street Station for passengers waiting inside at the Information Center;



- collect and report data on schedule adherence for RRTA; and
- provide real-time information regarding next bus arrival status via a passenger information system component.

The passenger information system component will provide real-time bus information via the Internet and personal communications devices (smart phones) and interface with passenger information signs RRTA is planning to install at Queen Street Station. The schedule adherence component will provide analysis and reporting of key performance measures, including, but not limited to, daily on-time performance of individual routes/vehicles and time point analysis at specific route locations.

The purchase and installation of the AVL system:

- increases the availability and dissemination of bus schedule and location information;
- enhances the customer experience; and
- improves RRTA's overall dispatching, operational efficiency, cost effectiveness and monitoring of operations.

The availability of bus schedule information through the available technology will allow waiting customers to know the status of the bus arrival during all type of travel and weather situations. The customer experience will be enhanced with this information being readily available. The information generated on key performance measures will enhance RRTA's capability to monitor the operation of service and the information will enable RRTA to document the need for schedule adjustments.

In accordance with transit industry standards as established by the Pennsylvania Department of Transportation, the AVL system supplied and installation is expected to have a useful life of four years. A useful life of four years reflects the changing nature of technology that occurs.

13.3 New Financial Resource

The short-range financial plan presented in the previous section represents RRTA's projections with revenues and expenses remaining stable. For the long-range recommendations to become reality, RRTA must not be restricted by the lack of local funding. RRTA documented within this plan the ongoing efficiencies occurring at the agency. However, to meet the needs identified by the citizens of the County and to boost RRTA to become a viable transportation mode for all residents in Lancaster County, the agency must have additional funding. Responsibility of securing local funds is a partnership ranging from local residents to elected officials.

Table 13-5 presents a snapshot of transit agencies in Pennsylvania who receive local funding from their community. As shown in the table, Lancaster County does provide approximately $257,000 annually; however, Lancaster County has the lowest local contribution among the peer counties.

Table 13-5: Local Match Comparison

FY 2012 COUNTY	CURRENT LOCAL MATCH	ACT 44 FUNDING	RATIO
BERKS	$397,831	$6,690,736	6%
CAMBRIA	$573,841	$5,617,749	10%
DAUPHIN/CUMBERLAND	$662,227	$6,179,254	11%
CENTRE	$410,774	$3,253,123	13%
LACKAWANNA	$489,309	$6,101,674	8%
ERIE	$708,388	$6,564,618	11%
LEHIGH/NORTHAMPTON	$680,441	$11,209,543	6%
LUZERNE	$419,259	$4,696,613	9%
YORK	$312,556	$3,847,556	8%
System Avg	**$517,181**	**$6,017,874**	**9%**
LANCASTER	**$256,993**	**$4,406,458**	**6%**

High quality public transit can provide many benefits to the community. RRTA is a perfect example of an efficient service in the County providing approximately 2M trips each year. For RRTA to move to a higher level of transit efficiency and to implement the transit needs expressed by the citizens in the region, more local funding must become available. Communities with high quality transit tend to have citizens who own fewer vehicles, drive less, and spend less on transportation than they would in more automobile-oriented locations.

13.4 Implementation Plan

Table 13-6 presents a time line for implementation steps to be taken for the projects within this 10-year Plan.

Table 13-6: Implementation Timeline

Projects	Short-term					Long-term				
	1	2	3	4	5	6	7	8	9	10
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
5% Revenue Hrs Added	X									
Eliminate Route 4	X									
Eliminate DT Trolley	X									
Modify Route 15 Willow	X									
Implement Etown Express		X								
Implement Gap Express		X								
Add bus - Rt 14 all day	X									
Add bus - Rt 17 all day	X									
Rt 1 PCA - PM 30 Min Peak Hour Service						X				
Rt2 PCB - change to 30 min service.						X				
Rt 3 PCC - 30 min service all day						X				
Rt 5/Grandview - 30 min service peak hours						X				
Rt 10/Lititz - 30 min peak hr service; 60 min midday						X				
Rt 11/Ephrata - 30 min peak hr service; 60 min midday						X				
Rt 12/New Holland - 30 min peak hr service; 60 min midday						X				
Rt 13/White Horse - 60 min service						X				
Rt 14/Rockvale - 15 min daytime							X			
Rt 16/Millersville - 15 min peak/30 min offpeak							X			
Rt 17/Columbia - 15 min daytime							X			
Rt 18/Elizabethtown - 60 min service						X				
Rt 19/Manheim - 30 min service							X			
Rt 20/Greenfield - 30 min service							X			
N Lancaster Regional Route								X		
Downtown Shuttle Service								X		
Rapid Transit Feasibility Study for Columbia and Rockvale routes.						X				
Lancaster/Harrisburg Regional Service									X	
Columbia Local Service								X		
Increase Saturday Service									X	
Lancaster/Denver Borough Regional Service									X	

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APPENDIX A: Open House Meetings

YOU'RE INVITED

Public Open House

Update on RRTA Transit Development Plan

Tuesday, February 18, 2014

3:30 - 7:30 p.m.

The same formal presentation (approx. 30 minutes) will be given at 4 & 5:30 p.m.

2nd Floor of Queen Street Station

225 North Queen Street, Lancaster

Come out and get an update on the progress. Share any suggestions for service improvements.

YOU'RE INVITED

Public Open House

Update on RRTA Transit Development Plan

Thursday, May 22, 2014

3:30 - 7:00 p.m.

The same formal presentation (approx. 30 minutes) will be given at 4 & 5:30 p.m.

2nd Floor of Queen Street Station

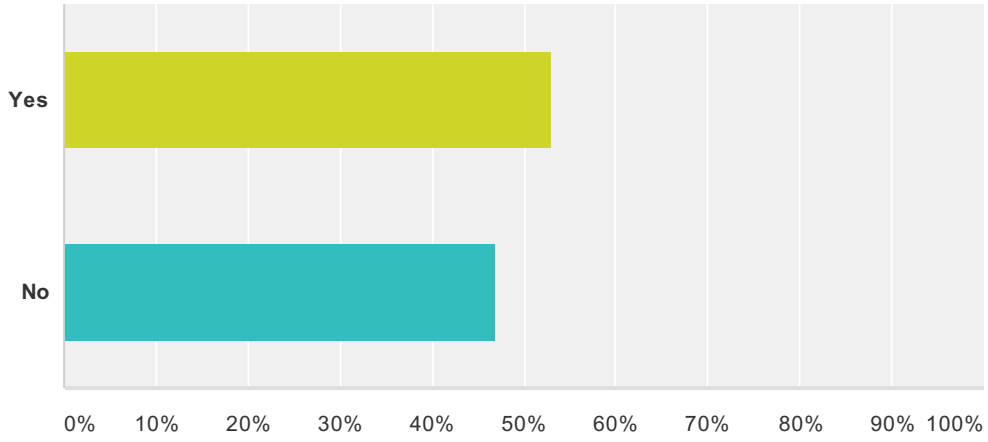
225 North Queen Street, Lancaster

Come out and hear proposed service recommendations and offer any input.

APPENDIX B: RRA Community Survey Results

Q1 Do you currently use RRTA?

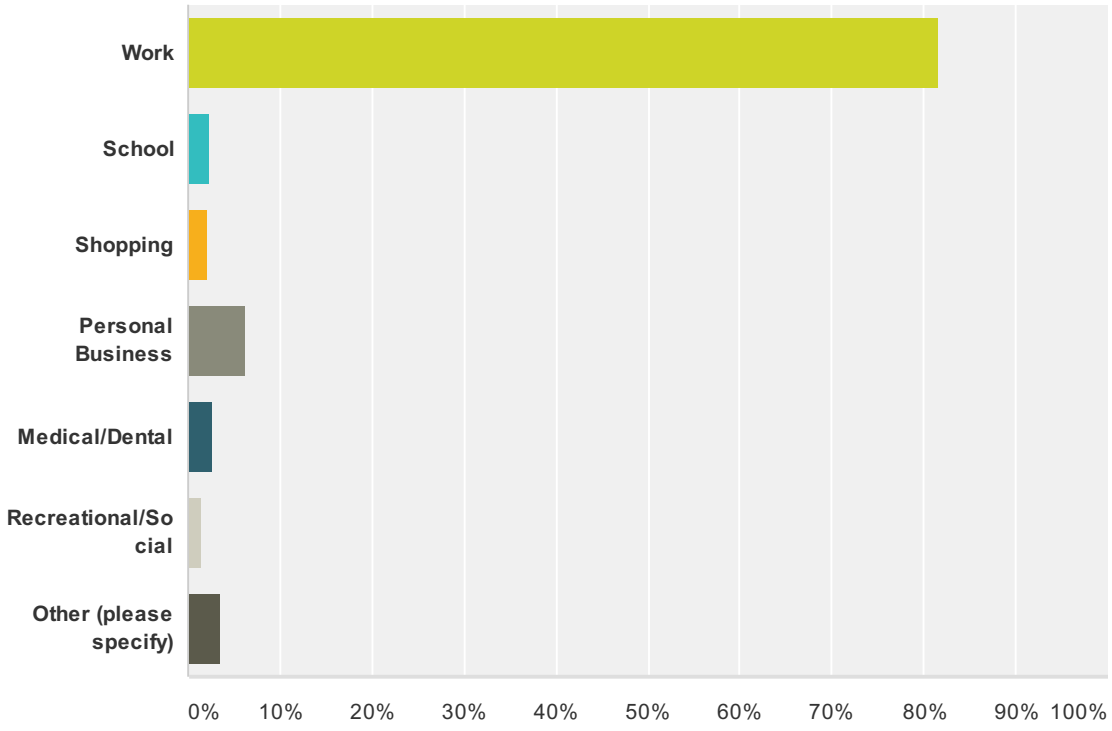
Answered: 332 Skipped: 5



Answer Choices	Responses	
Yes	**53.01%**	176
No	**46.99%**	156
Total		**332**

Q2 For what single purpose, do you think bus service is most often used? (Provide only one answer)

Answered: 336 Skipped: 1



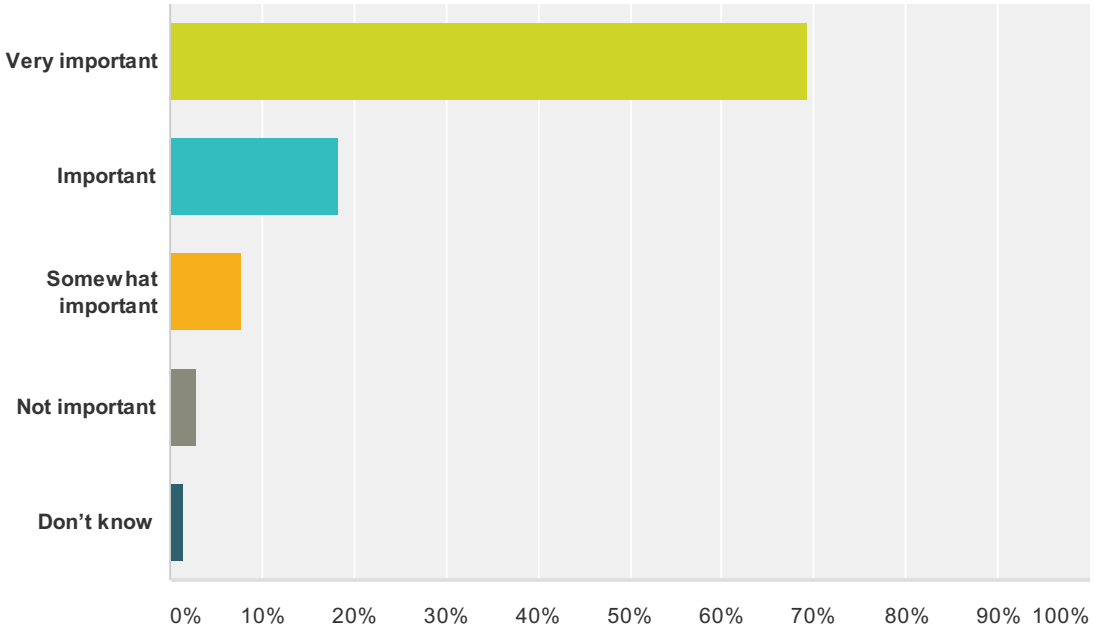
Answer Choices	Responses	
Work	**81.55%**	274
School	**2.38%**	8
Shopping	**2.08%**	7
Personal Business	**6.25%**	21
Medical/Dental	**2.68%**	9
Recreational/Social	**1.49%**	5
Other (please specify)	**3.57%**	12
Total		**336**

#	Other (please specify)	Date
1	My husband uses the service if one of the cars are in the shop. The buses DO NOT RUN where we live.	2/18/2014 8:31 PM
2	no idea	2/18/2014 2:40 PM
3	Work if it connected with Harrisburg's buss system, I ride the not so dependable train now	2/18/2014 2:38 PM
4	Jury duty, business in lancaster, formerly work	2/18/2014 2:36 PM
5	ride amtrak	2/18/2014 2:35 PM

6	all the above	2/18/2014 9:36 AM
7	all the above some ppl dont drive	2/17/2014 12:56 PM
8	Transportation for work, school, shopping and general transportation.	2/14/2014 10:50 AM
9	When no other choice because RRTA bus drivers are very rude	2/13/2014 3:56 AM
10	everything on this list	2/12/2014 8:59 PM
11	necessity shopping/necessity transportation	2/12/2014 7:12 PM
12	i can't answer this intelligently. i know why i use it, but don't interview other riders	2/12/2014 3:49 PM

Q3 How important is public transportation service to residents of your community?

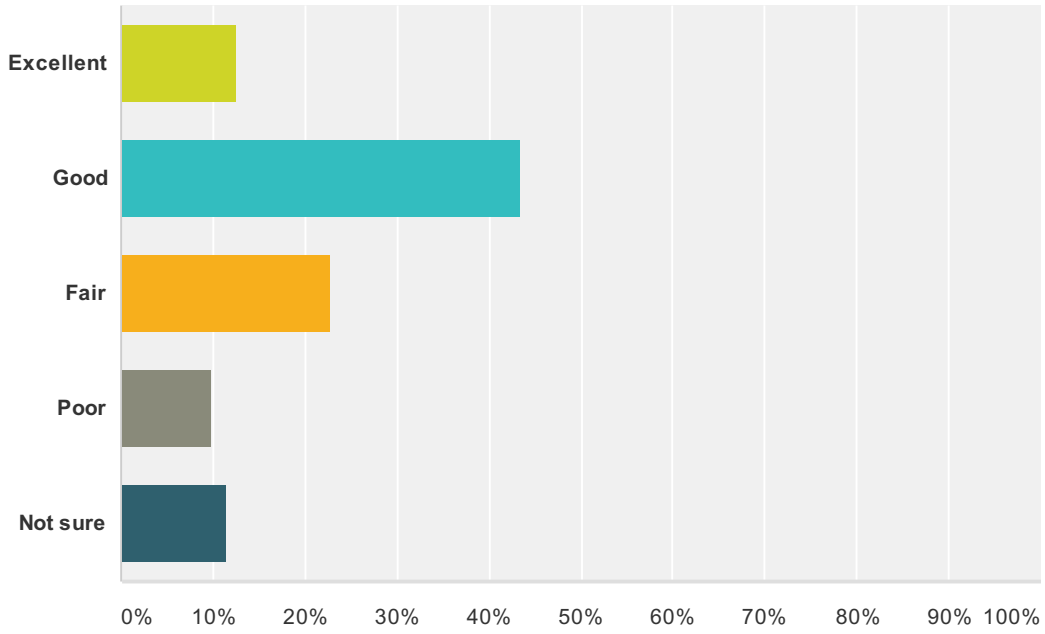
Answered: 336 Skipped: 1



Answer Choices	Responses	
Very important	**69.35%**	233
Important	**18.45%**	62
Somewhat important	**7.74%**	26
Not important	**2.98%**	10
Don't know	**1.49%**	5
Total		**336**

Q4 How well do you think RRTA currently does in providing safe, reliable, courteous and efficient public transportation service for our community?

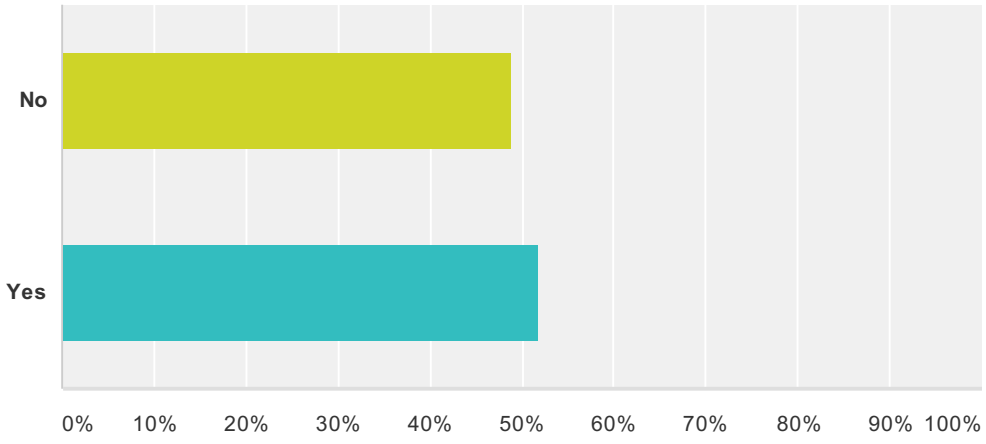
Answered: 313 Skipped: 24



Answer Choices	Responses	
Excellent	**12.46%**	39
Good	**43.45%**	136
Fair	**22.68%**	71
Poor	**9.90%**	31
Not sure	**11.50%**	36
Total		**313**

Q5 Are there areas within Lancaster County that should have transit service, that are not currently served?

Answered: 313 Skipped: 24



Answer Choices	Responses	
No	**48.88%**	153
Yes	**51.76%**	162
Total Respondents: 313		

#	If yes, which areas?	Date
1	rural communities where public transportation does not exist or is limited	3/12/2014 8:17 PM
2	more areas around Elizabethtown	3/2/2014 11:12 PM
3	Lititz; more consitantly	2/28/2014 1:17 PM
4	suburb to suburb routes and Mount Joy - Manheim - Lititz - Brownstown	2/25/2014 4:27 PM
5	Please have service to Reading, even just one early AM would be wonderful. The first daily public transport from Reading to Lancaster is Greyhound and it arrives in Lancaster at noon.	2/23/2014 1:58 PM
6	anywhere where people needs to access nearby	2/23/2014 11:53 AM
7	Strasburg and Intercourse.	2/22/2014 7:01 PM
8	Lancaster to Willow Street on Saturday	2/22/2014 8:46 AM
9	more routes between Ephrata and Amtrak	2/21/2014 4:38 PM
10	Ephrata	2/21/2014 3:07 PM
11	Marietta/Mount Joy	2/21/2014 12:44 PM
12	Probably, but I'm not sure where.	2/21/2014 11:17 AM
13	Quarryville and Buck area	2/21/2014 3:39 AM
14	Not sure. I know when I looked a couple years ago, it was missing.	2/20/2014 10:03 PM
15	at the very least the routs like 18 19 13 and others like them should run longer so people can get to and from work	2/20/2014 2:32 PM
16	Quarryville	2/20/2014 2:03 PM
17	industrial parks	2/20/2014 1:05 PM

18	Lancaster to Quarryville	2/20/2014 12:26 PM
19	Lampeter, Strasburg, Quarryville, Southern County	2/20/2014 10:14 AM
20	please offer later bus times.	2/20/2014 9:57 AM
21	Don't know- This was a required Yes/No resonse	2/20/2014 7:47 AM
22	Brickerville	2/19/2014 9:36 PM
23	Centerville	2/19/2014 5:14 PM
24	Strasburg, Quarryville	2/19/2014 4:54 PM
25	More RRTA bus service between the Amtrak station and various workplaces. Commuter buses that travel Oregon Pike, Fruitville Pike, or Old Philadelphia Pike would help many more people to have more employment options. These areas are underserved. Some people cannot work 2nd or 3rd shift for lack of transportation to these areas after a certain time (6 pm?)	2/19/2014 2:32 PM
26	whole parts of county not receiving service, ie Quarryville	2/19/2014 2:32 PM
27	rhoerstown where the dmv is	2/19/2014 1:26 PM
28	town to town, around Lancaster City	2/19/2014 1:22 PM
29	extending routes, denver area	2/19/2014 12:25 PM
30	Denver, Marietta, Lincoln, and more of Manheim and Lancaster Townships	2/19/2014 12:16 PM
31	Pequea	2/19/2014 11:25 AM
32	QPRC.....LANCASTER TRAIN STATION	2/19/2014 10:44 AM
33	Strasburg and beyond	2/19/2014 10:39 AM
34	quarryville, none in the southern end past willow street	2/19/2014 10:29 AM
35	eastern Lancaster County beyond New Holland	2/19/2014 9:10 AM
36	Second Lock Rd beyond Sterling place	2/19/2014 8:41 AM
37	???	2/19/2014 8:34 AM
38	I don't know	2/19/2014 8:32 AM
39	Gap, Lancaster County Central Park	2/19/2014 8:23 AM
40	don't know	2/19/2014 8:17 AM
41	they should run busses to harrisburg to offset train service	2/19/2014 7:40 AM
42	There should be mass transit service,like from ephrata to new holland,a call a ride would be super	2/19/2014 6:00 AM
43	Between the spokes e.g. Centerville and Roherstown rd	2/19/2014 5:24 AM
44	Ephrata Hospital, area retirement communities	2/19/2014 4:09 AM
45	Quarryville. Strasburg.	2/19/2014 2:40 AM
46	lititz, leola	2/18/2014 11:50 PM
47	New holland to ephrata route	2/18/2014 11:42 PM
48	Anywhere after 10 pm	2/18/2014 9:24 PM
49	Manor Township	2/18/2014 8:32 PM
50	Adamstown	2/18/2014 8:06 PM
51	strasburg, to reading with conjunction with bart	2/18/2014 7:04 PM
52	Manor township-	2/18/2014 6:15 PM
53	penn twp	2/18/2014 5:43 PM
54	All locations to the train station.	2/18/2014 5:36 PM
55	Anything off the main spokes (501, 272, etc)	2/18/2014 5:01 PM

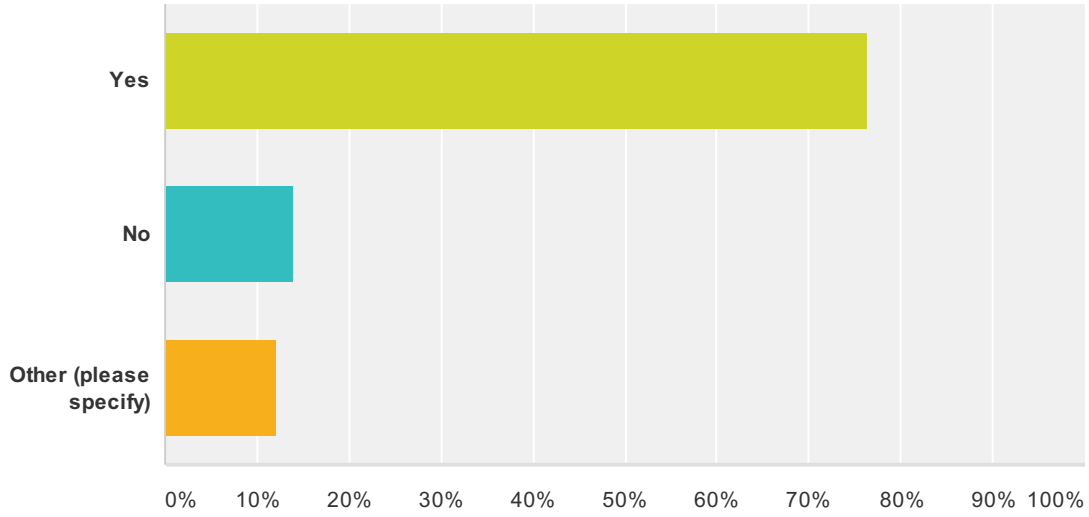
56	Columbia to Harrisburg route	2/18/2014 4:53 PM
57	Rural	2/18/2014 3:45 PM
58	Southern Lancaster County - Buck, Quarryville	2/18/2014 3:18 PM
59	lancaster to Reading or close to barta	2/18/2014 3:15 PM
60	Northern part, such as Ephrata	2/18/2014 3:05 PM
61	Quarryville and/or Strasburg	2/18/2014 3:04 PM
62	but unsure of such areas - just heard ppl talking	2/18/2014 3:04 PM
63	Living in Akron the bus service is too infrequent and does not run late or on weekends making it difficult to use.	2/18/2014 2:57 PM
64	Morgantown	2/18/2014 2:56 PM
65	Lancaster, Elizabethtown bus route to Harrisburg Train /Bus Station	2/18/2014 2:55 PM
66	Manheim to Harrisburg	2/18/2014 2:54 PM
67	Manheim Township- Fruitville Pike near Koser Road	2/18/2014 2:54 PM
68	Quarryville & points further south	2/18/2014 2:51 PM
69	Passenger in mount joy / elizabethtown would ride buses to harrisburg	2/18/2014 2:51 PM
70	Cross lines w/o having to come into the hub for transfer	2/18/2014 2:44 PM
71	Southern Lancaster - Willow Street is the fartherest	2/18/2014 2:44 PM
72	don't know ...	2/18/2014 2:42 PM
73	bus service to Harrisburg	2/18/2014 2:41 PM
74	ELIZABETHTOWN TO HARRISBURG/DAUPHIN CO.	2/18/2014 2:41 PM
75	A link between the Capitol bus system and Red Rose	2/18/2014 2:39 PM
76	All areas should be covered within a few blocks radius. This included urban areas as well as rural and of cours suburban.	2/18/2014 2:39 PM
77	Not sure	2/18/2014 2:38 PM
78	Maytown	2/18/2014 2:37 PM
79	Twin Brook Trailer Park	2/18/2014 2:35 PM
80	Bus service from Lancaster to REading	2/18/2014 2:34 PM
81	Mount Joy to Harrisburg	2/18/2014 2:32 PM
82	rural	2/17/2014 12:19 AM
83	at companies where there is no bus service	2/15/2014 9:59 PM
84	Lancaster County Central Park	2/15/2014 3:29 AM
85	Quarryville	2/14/2014 7:38 PM
86	Penn Township - Mallards Pond Development area	2/14/2014 1:09 PM
87	quarryville	2/14/2014 12:52 PM
88	Every area including rural	2/14/2014 12:41 PM
89	uncertain	2/14/2014 12:20 PM
90	Hours are limited	2/14/2014 12:12 PM
91	not sure	2/14/2014 12:09 PM
92	More routes to outlying communities	2/14/2014 11:47 AM
93	Better links b/t routes w/o having to go to Lancaster first!	2/14/2014 10:54 AM
94	Quarryville, Denver, Adamstown, PA Ren. Faire, connections to surrounding counties	2/14/2014 10:52 AM

95	Strasburg	2/14/2014 9:01 AM
96	Closer to county lines	2/13/2014 10:57 PM
97	reading road side of ephrata	2/13/2014 10:22 PM
98	Enolle low grade trail	2/13/2014 9:41 PM
99	stevens	2/13/2014 9:16 PM
100	evening/night service, especially weekends, to nearby suburbs.	2/13/2014 6:03 PM
101	Quarryville and areas	2/13/2014 5:45 PM
102	Strasburg	2/13/2014 12:29 PM
103	Marietta should have something other than Columbia...it should go to e-town or at least to lancaster city via 23/Marietta AVE.	2/13/2014 11:13 AM
104	unknown	2/13/2014 9:38 AM
105	Good Drive & Marietta Ave	2/13/2014 8:57 AM
106	Our neighborhood (Hawthorne Ridge) has a very limited schedule	2/13/2014 7:57 AM
107	might be nice to have a harrisburg run or at least a bit wider coverage	2/13/2014 7:52 AM
108	Anyone who does not live within a short distance of a major roadway is probably not on the bus line. It's hard though because funding is limited.	2/13/2014 7:33 AM
109	Not aware, but can always use more service.	2/13/2014 7:30 AM
110	Areas covered. Times are the issue.	2/13/2014 5:40 AM
111	More by McCaskey	2/13/2014 12:18 AM
112	There just needs to be more areas within the bus routes. They also need to run later and run on Sundays. It's 2014, people have different schedules. You can't ask people to ditch the pump and then expect them to only want to travel weekdays before 5	2/13/2014 12:01 AM
113	With the expansion of businesses down 741 going towards Willow Valley it would be great to have a more adequate transportation route. Particulary to serve the Mill Creek Manor development in which a wide range of Millersville University students, families, and seniors reside.	2/12/2014 11:25 PM
114	Quarryville	2/12/2014 11:16 PM
115	Pitney Road	2/12/2014 10:33 PM
116	Sterling Place	2/12/2014 9:58 PM
117	Harrisburg Pike between Landisville and Park City	2/12/2014 9:49 PM
118	Ephrata-Denver, PA	2/12/2014 8:49 PM
119	Bowmansville	2/12/2014 8:37 PM
120	denver, new holland	2/12/2014 7:15 PM
121	sterling place later service	2/12/2014 6:29 PM
122	county routes one more run past 5:20	2/12/2014 6:19 PM
123	Bus should run to Gap	2/12/2014 6:06 PM
124	Quarryville!!!	2/12/2014 5:53 PM
125	Strasburg	2/12/2014 4:22 PM
126	Older residents in country areas	2/12/2014 4:19 PM
127	connecting persons seeking entry-level jobs with more potential employers	2/12/2014 3:54 PM
128	Denver/Ephrata	2/12/2014 3:34 PM
129	Routes across existing spokes - US 30 or PA 772	2/12/2014 1:52 PM
130	Interconnect with CAT service	2/12/2014 12:46 PM

131	It would be good to have a faster or more convient way of getting from one end of the city to the other. I would use a tram or something along those lines at least 3 times a week, maybe daily.	2/12/2014 12:33 PM
132	Future major areas of employment (Gap)	2/12/2014 12:08 PM
133	Denver	2/12/2014 10:47 AM
134	penn twp	2/12/2014 10:41 AM
135	GAP, Denver & Adamstown and points further out 272 and points further south than Willow Valley	2/12/2014 10:23 AM
136	Southern End	2/12/2014 10:23 AM
137	Quarryville	2/12/2014 10:20 AM
138	I AM NOT AWARE OF NEEDS IN OTHER AREAS AT THIS TIME	2/12/2014 10:16 AM
139	don't know	2/12/2014 8:50 AM
140	if No service to perhaps Gap, Christiana	2/12/2014 8:15 AM
141	Quarryville-Buck-Strasburg	2/11/2014 8:38 PM
142	not having to go out and back, more of a circle options	2/11/2014 6:01 PM
143	Eden and busy shopping areas	2/11/2014 5:13 PM
144	Areas between the boroughs, e.g., Marietta to Mount Joy to Manheim to Lititz.	2/11/2014 4:45 PM
145	to Shady Maple complex	2/11/2014 4:38 PM

Q6 Do you believe there is community support for RRTA public transit?

Answered: 313 Skipped: 24



Answer Choices	Responses	
Yes	**76.36%**	239
No	**14.06%**	44
Other (please specify)	**12.14%**	38
Total Respondents: 313		

#	Other (please specify)	Date
1	Maybe some places, but not much in Elizabethtown where I live.	2/21/2014 11:17 AM
2	Yes and No. Generally, non-users do not appreciate public transit's importance.	2/20/2014 3:29 PM
3	to a point please see my answer to question 5 a lot of people that i talk to share the same opinion	2/20/2014 2:32 PM
4	Not sure	2/19/2014 3:56 PM
5	I think people wonder why there are not more buses. I've heard people visit from larger cities who say that having a bus only every hour would be a tremendous hardship.	2/19/2014 12:16 PM
6	i hope so....am new to the area (from DE)	2/19/2014 10:44 AM
7	Don't know because they are not in my community.	2/18/2014 8:32 PM
8	unknown	2/18/2014 7:32 PM
9	Don't know - no service where I live	2/18/2014 6:15 PM
10	Not sure	2/18/2014 2:48 PM
11	I think that it would be if it were more accessable. Being from Philadelphia and experiencing SEPTA I find it hard to believe that after 6:00 pm there is no service outside of Lancaster. When I was commutting to Harrisburg for 6 years, 5 of those I would have been able to get in to the train station. the last year there was an attempt to put on an additional Rt 11, However, it was not in line with the Amtrak service thus I still needed to drive.	2/18/2014 2:44 PM
12	I would think it is split just like many other issues today with those who use RRTA/public transit in favor and those who don't less so.	2/18/2014 2:38 PM

13	unknown, I don't know any users of the system	2/18/2014 2:35 PM
14	Not enough	2/18/2014 2:32 PM
15	I'm not sure aboutf there's enough though	2/17/2014 1:00 PM
16	Which community? There is a community of people that uses public transit. We are the kind of people who generally don't carry much political clout. We are unlikely to discover this survey online, especially since it was posted February 11 and is due in a week. This community, who frankly few outsiders think about or would know to advocate for, strongly supports public transit. We need it. Does the larger Lancaster County community support transit? I would ask if they know transit exists. As someone who never owned a car before moving to Lancaster, I was amazed that I didn't even think about the buses I saw or imagine that they might get me to work (they would have, and do). I realize RRTA has made efforts at advertising. The best advertising will be a system that is robust enough and reliable enough that people from all Lancaster Communities can rely on it. (As an aside, I suspect that confusion about how to use the system--where do I stand, how do I flag a bus, when do I pay, where do I get a card, which way do I insert my card, how do I know where to get off, how do I stop the bus, etc.--is a barrier equal to erratic service for most would-be riders. It might be an interesting media campaign to do rather amusing, awkward TV ads in the style of public service announcements answering some of the above questions.)	2/16/2014 11:43 AM
17	There is but I feel there should be more.	2/14/2014 1:41 PM
18	We do believe this. however needs improvement.	2/14/2014 12:41 PM
19	certainly among certain slices of the population	2/14/2014 12:20 PM
20	We are moving to White Horse and will be depending on Route 13 to be a part of our transportation options. We would like to see additional "branch" routes between the "spokes" of outlying areas; e.g. direct links from White Horse/Cains to Ephrata or Litiz.	2/14/2014 10:54 AM
21	Not sure.	2/13/2014 5:45 PM
22	limited support; limited value to residents	2/13/2014 3:42 PM
23	Too much money is coming from federal dollars. This should only use our local money.	2/13/2014 7:50 AM
24	I think the community wants the service there, but I believe that most of the support comes from government funding, advertising, and user fares. Unless I haven't heard about it, I'm not aware of major funding coming from area businesses through donations or sponsorships, although many of their clients probably use the services (like hospitals).	2/13/2014 7:33 AM
25	Little support by local jurisdictions. Transit is viewed as a liability by the business community. Intensive use by low income demographics results in negatives. Transit is viewed by suburban boros as a necessary evil. Many upscale towns would prefer to be like Strasburg sending the transit dependent populations to other areas in the county.	2/13/2014 6:26 AM
26	There is not enough recognition of its importance. Many Lancastrians are very auto-centric.	2/12/2014 11:46 PM
27	Sinking spring in berks county would be a good model to follow....they manage to hit everystore with times for delivery and pickup and dont play favorites	2/12/2014 7:15 PM
28	Not sure	2/12/2014 7:00 PM
29	yes, but not as much as there could be if more people understood how it could connect folks wanting work with companies wanting workers, and if there was more awareness of our bus system as a means many can use to reduce environmental damage. we could conserve much in many ways - tax dollars, fuel burned, car repair, road usage, etc - if more residents took advantage of bus service.	2/12/2014 3:54 PM
30	For public transportation, yes. But RRTA should do more outreach to serve the community. It seems that RRTA is not customer-oriented.	2/12/2014 12:33 PM
31	Unsure	2/12/2014 12:28 PM
32	Yes, but not enough -- there is still a lot of stigma associated with public transit.	2/12/2014 12:08 PM
33	Support is there fro those who need to use RRTA. Those that use cars daily have no respect/concern for bus riders as they stand by the side of a busy road (especially in the winter when bus stops are not cleared & there's no where else to stand) to all but running over riders as they exit the bus by passing the bus on the right. If the community really supported RRTA they would demand and provide shelters to make use of RRTA more attractive to the genral public.	2/12/2014 11:14 AM

34	RRTA needs to be more visible in promoting their services in the communites	2/12/2014 10:50 AM
35	If your buses were maintained better and communication with the riders were improved (where the bus is or if it is running on time), you might. But unfortunately, because buses have problems keeping to a time schedule or are on an irregular schedule, they hurt people and their ability to go to work on time. There is still far too much support for auto traffic in Lancaster county and because of this, less need for the bus.	2/12/2014 10:23 AM
36	Not sure. I suspect that the Quarryville route(s) were dropped because of low usage.	2/12/2014 10:20 AM
37	Unsure as I just stepped into my cuurent position	2/12/2014 8:15 AM
38	I believe there should be more and RRTA should improve their mishaps.	2/11/2014 5:13 PM

Q7 What do you think could be done to attract more riders to transit service in Lancaster and the surrounding communities?

Answered: 295 Skipped: 42

#	Responses	Date
1	Right now all routes go through the city, it would be nice if there was a loop bus connecting some of the outer points without having to go through the city of Lancaster.	3/4/2014 1:10 PM
2	Make sure the bus is on time not an hour or so late	3/4/2014 9:18 AM
3	more buses added to Elizabethtown	3/2/2014 11:13 PM
4	More accurate scheduling	2/28/2014 1:18 PM
5	Better routes - lower prices	2/25/2014 8:14 PM
6	faster, express service such as Lancaster to Mount Joy or E-town or Lancaster to Ephrata. On-time buses. Clean, inviting buses.	2/25/2014 4:30 PM
7	Make a smartphone app	2/25/2014 11:41 AM
8	Better hours to Park city and connecting so that more people could use it for work there.	2/24/2014 10:11 PM
9	Maybe service or connections to other counties.	2/24/2014 12:51 PM
10	...	2/24/2014 9:34 AM
11	More park and rides in convenient locations.	2/23/2014 2:00 PM
12	more schedule extension to 10pm -12am more transit accesses waiting room should be opened till the last buses at queens station wifi access at queens station	2/23/2014 11:55 AM
13	Providing service in areas that have alot of Amish folks.	2/22/2014 7:04 PM
14	Stick to the printed schedule. Make the schedule easier to follow. Simplify the fare structure.	2/22/2014 8:47 AM
15	More routine routes at peak times, rush hours before and after work and school.	2/21/2014 4:39 PM
16	Let folks know what is available.	2/21/2014 3:08 PM
17	Better Train and Bus services	2/21/2014 12:45 PM
18	Express buses from the areas that are far from the city? Bus connection between Elizabethtown and Middletown for those times when Amtrak is not working for some reason...	2/21/2014 11:19 AM
19	Busses running later in the day and week-ends.	2/21/2014 9:32 AM
20	I would like to see more frequent service, and more evening service routes, especially when people are getting out of work. In the morning, I don't have any issues getting a bus to be at work on time, but after work, I have to wait longer to get a bus, and when there are delays, I have to wait even longer, which can be really frustrating.	2/21/2014 8:42 AM
21	better understanding of pricing	2/21/2014 3:40 AM
22	n/a	2/21/2014 1:44 AM
23	Better / more regular service	2/20/2014 10:03 PM
24	Better evening service, please!	2/20/2014 9:21 PM
25	Maybe have no cost service on certain routes for a few county routes, just for a few days - to encourage riders to explore what the county has to offer.	2/20/2014 3:34 PM
26	longer hours and more routs also most people think red rose ACCESS is only for medical needs and dont know that it can also help them get to work i think it would get more use and with more riders comes more money and helps to keep the expens down for the riders	2/20/2014 2:36 PM

27	Simplify the fare structure. There was a promotion a few years ago that allowed people to ride the bus anywhere for 25 cents. The promotion lasted for a month and raised awareness of RRTA service.	2/20/2014 2:05 PM
28	advertisement, go to companies to see what times they need service for their employees	2/20/2014 1:09 PM
29	Lower fares and more service	2/20/2014 12:27 PM
30	Have some evening and late night service from downtown to the suburbs.	2/20/2014 10:15 AM
31	Make the schedules easier to read. Offer later routes on Friday & Saturday nights and market the bus as a solution for transportation for nights out.	2/20/2014 9:58 AM
32	No comment	2/20/2014 7:48 AM
33	Expand routes	2/20/2014 6:28 AM
34	better advertise available services	2/19/2014 10:22 PM
35	phone app showing eta for each bus and stop	2/19/2014 9:45 PM
36	This survey is a good start finding out what peoples needs are and meeting those needs. I live in Lancaster county and work in Lebanon county and have no drivers license and would be willing to pay higher prices if the bus would go county to county. There also ought to be buses that run at night for people so they don't have to drink and drive especially on weekends.	2/19/2014 9:42 PM
37	Keep buses on schedule, keep bathroom open in terminal and make it a safe place to wait for buses.	2/19/2014 8:15 PM
38	special riding days to attract first time riders	2/19/2014 6:40 PM
39	Connections between Harrisburg, York, and Philadelphia	2/19/2014 5:15 PM
40	The schedule being more accurate, some of the services running longer/later in the day, some drivers need better customer service training, some routes need more buses so service time between drop-off & pick-up is closer together.	2/19/2014 4:57 PM
41	Add more buses to Lititz during evening hours Add connecting stop for Lititz to Ephrata buses prior to bus station	2/19/2014 4:25 PM
42	First off a lot of out of towners are working in Lancaster and don't understand your system. When I first came here and read the bus schedule it does not show all the buses. Second your schedule is not consistant. Sometimes every hour sometimes an hour and a half. I can get to work but I can't get back to the Amtrak train station.	2/19/2014 3:58 PM
43	To have one fare for out of city runs	2/19/2014 2:41 PM
44	Offer more services geared towards Commuters, especially from the Amtrak station. Also offer better options that help riders to avoid having to travel downtown just to transfer buses. I know someone who lives on Fruitville Pike and has to ride downtown twice a day just to travel to/from Oregon Pike (a 15-minute drive if done directly). This is discouraging, and many people I know are paying taxis for trips that RRTA could possibly offer.	2/19/2014 2:35 PM
45	Create actual bus stops, with a shelter. And bus stops not on a hill like at the Walmart/Giant on Fruitville Pike across from Chuck E Cheese	2/19/2014 2:33 PM
46	More availability. Having to wait an hour between busses is tough if yo work especially if your schedule doesn't mesh with the bus times	2/19/2014 1:31 PM
47	Public Education....to get people out of their cars.	2/19/2014 1:24 PM
48	Invest in public transit. Advertise that more buses will be running to more parts of the county. When people know they can rely on the service, they will use it. The City is a great example. Because there are buses every 10 minutes, people regularly use the buses.	2/19/2014 12:18 PM
49	Not sure. Coordinate busses with train schedule?	2/19/2014 12:18 PM
50	improve stability in maintaining the schedule & not force drivers to ignore passengers waiting along the course of their routes.	2/19/2014 11:39 AM
51	have drivers communicate with each other when buses are behind schedule especially when one is to get to terminal the same time the next one is to leave when they know daily passengers need the next bus and there is a 2 hour wait if missed	2/19/2014 11:15 AM

52	I only ride the trolley to and from work, so I have no input regarding other RRTA community needs	2/19/2014 11:03 AM
53	written bus routes	2/19/2014 10:45 AM
54	Offer later evening schedules.	2/19/2014 10:45 AM
55	I work at the Downtown Lancaster Visitor Center. A sightseeing, informational (with talking guide or driver) trolley loop would be a wonderful addition for the many visitors who come. Many do not/can not go on the guided Walking Tour. Loss of Heritage Center Museum & Quilt Museum leaves a huge void in downtown attractions. Not everyone wants to visit art galleries!!	2/19/2014 10:43 AM
56	more frequent service	2/19/2014 10:32 AM
57	none	2/19/2014 10:29 AM
58	advertising on tv and radio	2/19/2014 10:20 AM
59	Offer more discounts, especially to those of us long term bus users. I have been buying monthly passes for 3 years now. It would be nice to get a special rate or discounts. There are ways to track your riders through various computer programs.	2/19/2014 9:42 AM
60	Simplify everything as much as possible. I remember when we moved here in 2004 I couldn't figure out the route maps and fares.	2/19/2014 9:40 AM
61	On time	2/19/2014 9:12 AM
62	expansion of service hours	2/19/2014 9:10 AM
63	Simplify rate plans, provide and easier way for people to get to bus stops from locations off the main routes.	2/19/2014 8:53 AM
64	decrease wait times and extra buses during early a.m. so people could use to go to work in city, example hospital and county gov offices	2/19/2014 8:50 AM
65	More Routes better drivers,credit when driver does not show up.	2/19/2014 8:44 AM
66	I don't know	2/19/2014 8:38 AM
67	???	2/19/2014 8:36 AM
68	?	2/19/2014 8:32 AM
69	Run a bus between Ephrata and Lititz about 3 times a day using the buses that make that regular run.	2/19/2014 8:25 AM
70	More frequent trips	2/19/2014 8:24 AM
71	Make information more readily available.	2/19/2014 8:18 AM
72	The buses be on time	2/19/2014 8:11 AM
73	Hire friendlier bus drivers and add additional trips out etown etc	2/19/2014 7:47 AM
74	bus service to Harrisburg this could offset poor train service	2/19/2014 7:40 AM
75	It'll save then money. Call a ride would be the answer. There a lots of folks who pay dirivers and if you can do it for less would be the answer.try call a ride see how it works and advertise it as well.	2/19/2014 6:03 AM
76	More comfortable seats Less crowded More frequent runs	2/19/2014 5:25 AM
77	Clean, comfortable buses. Better noise and language control on buses.	2/19/2014 4:14 AM
78	I truly believe a shuttle or a bus route to historic Strasburg would be very beneficial. Especially with the revitalization of the city, it would be great for tourists that come to the city to have an easy one stop shop if you will..that they could just hop on a specific bus or Trolly to Strasburg.	2/19/2014 2:43 AM
79	Help more people with ssi	2/19/2014 1:33 AM
80	Easier to understand fares. Maybe some later times for routes outside the city during warmer weather. So people can visit the city for things like baseball games and the such without having to leave early.	2/19/2014 1:04 AM
81	It seems that in Lancaster, bus ridership is viewed as something to be used only by "poor" people rather than a preferred method of travel. There is a stigma associated with it. Not like true mass transit in other metropolitan areas.	2/19/2014 12:29 AM

82	If you offer deals on the bus passes more often, maybe people will take the bus more. Also have more buses that run longer at night because people do get out later than the normal buses are running.	2/19/2014 12:10 AM
83	Maybe certain routes for certain groups	2/18/2014 11:59 PM
84	Standard fare prices	2/18/2014 11:55 PM
85	Sunday service	2/18/2014 11:55 PM
86	more service between York and Lancaster	2/18/2014 11:55 PM
87	Not sure	2/18/2014 11:51 PM
88	offer longer schedules, more busses	2/18/2014 11:51 PM
89	An app that shows you where the buses are in real time and eta of each bus stop	2/18/2014 11:44 PM
90	add a cross-pike route so people don't have to travel into the city to get from East Petersburg to Lititz (for example).	2/18/2014 10:14 PM
91	Provide service after 10pm and longer service on Sundays	2/18/2014 9:25 PM
92	Equal coverage	2/18/2014 8:33 PM
93	Provide service to more areas in lancaster county.	2/18/2014 8:11 PM
94	improve the authority's image	2/18/2014 7:34 PM
95	I believe that if most riders would have access to an automobile most would not use the bus.	2/18/2014 7:06 PM
96	Having more shelters at stops would help.	2/18/2014 6:31 PM
97	Offer more service to other areas than Lancaster City and Park City	2/18/2014 6:16 PM
98	Friendlier customer service and more availability for 2nd and third shift workers.	2/18/2014 5:52 PM
99	Coordination with train schedule.	2/18/2014 5:37 PM
100	Hire drivers that are actually on TIME! Have a more accurate time schedule.	2/18/2014 5:05 PM
101	More stops in the rural areas. A covered shelter at each bus stop. A GPS tracker system on each bus that you can see real time where it is. This will avoid having to wait at a bus stop for an hour because of undependable arrival times.	2/18/2014 5:03 PM
102	Provide transportation to Harrisburg similar to York's Rabbit bus service to Harrisburg	2/18/2014 4:55 PM
103	some of the outlying routes could offer more service earlier in the day and later in the day for work and personal	2/18/2014 4:52 PM
104	Not sure	2/18/2014 4:02 PM
105	Provide more buses and times per route. Having the last bus out of town at 5:20 sucks for work.	2/18/2014 3:49 PM
106	Have more routes, and with greater frequency.	2/18/2014 3:47 PM
107	Express service to harrisburg	2/18/2014 3:43 PM
108	provide more reliable, timely service	2/18/2014 3:35 PM
109	Offer regional service to Harrisburg and York	2/18/2014 3:20 PM
110	make it eaiser to get from route to route-say rt 30 to rt 222 or rt340-it all goes in & out not side to side	2/18/2014 3:19 PM
111	Don't know	2/18/2014 3:15 PM
112	have more accessible buses in more suburban areas	2/18/2014 3:10 PM
113	Make it available to more people outside of the city	2/18/2014 3:07 PM
114	Express bus between Lancaster and Harrisburg	2/18/2014 3:05 PM
115	Provide transit service more often. It may help to have smaller busses run more often.	2/18/2014 3:05 PM
116	More advertising	2/18/2014 3:05 PM

117	more park-n-ride express services in rural areas	2/18/2014 3:03 PM
118	I believe the State Employees that currently reside in Lancaster County and work in downtown Harrisburg would be supportive. Currently we either ride Amtrak (poor service) or we pay exorbinate amounts to park downtown. I see buses from York, Lebonan, Carlisle and other surrounding communities providing bus service. I personally work with several individuals who ride the bus from their perspective locations who have high praise for this service.	2/18/2014 2:59 PM
119	Provide service to Harrisburg for commuters.	2/18/2014 2:59 PM
120	More transport and more information about bus routes	2/18/2014 2:58 PM
121	more service on the outer areas of the county	2/18/2014 2:57 PM
122	1. Outreach to businesses letting them know what services you provide in their area, so they can provide that info to their employees. 2. Extended hours and trips. 3. Advertise.	2/18/2014 2:56 PM
123	advertising	2/18/2014 2:56 PM
124	More buses, nights and weekends	2/18/2014 2:56 PM
125	Add some commuter buses for passengers in lancaster county to get to work in harrisburg	2/18/2014 2:52 PM
126	RRTA needs to improve the amenities at the bus stops. Paved concrete pad, bus shelter, bench. At a minimum you need to have a clean dry place for people to stand on waiting for the bus.	2/18/2014 2:51 PM
127	Having more availability to the outlying areas and the sights. If I have to walk more than a mile to get to where I need to be (shopping, entertainment, work) then you are not a service that I need to religh on.	2/18/2014 2:49 PM
128	cleaner buses and friendlier drivers	2/18/2014 2:46 PM
129	Lower multi-ride passes; Expand employer subsidies for employees.	2/18/2014 2:45 PM
130	Lancaster Co. residents who work in Dauphin Co. have very limited options for transportation to work!	2/18/2014 2:43 PM
131	don't know	2/18/2014 2:43 PM
132	not very familar with your services	2/18/2014 2:42 PM
133	You are doing a great job but a link to Harrisburg would be very useful	2/18/2014 2:41 PM
134	Constant service; Work requires a time schedule and buses don't always accomodate those schedules.	2/18/2014 2:41 PM
135	Better coordination of services b/w RRTA and other municipal transit providers AND with Amtrak. For example, a bus or trolley should be waiting at the Lancaster Amtrak station for every train that arrives and not leave until it does arrive unless there is major delay (and note that 15 minutes or so is not a major delay).	2/18/2014 2:40 PM
136	better availability of route maps and schedules, signage at bus stops	2/18/2014 2:40 PM
137	Link transportation Modes. Advertise convenience and promote new ridership by advertising and	2/18/2014 2:39 PM
138	i think many riders are just not sure how to ride the bus. in addition, it is more convenient to drive yourself if you have means of travel..can their be incentives...leave your car at home specials? this would also benefit those that need the services for work, personal errands etc...	2/18/2014 2:38 PM
139	Connect with transportation to Harrisburg from Columbia	2/18/2014 2:38 PM
140	more frequent bus route cycles during the am and pm commuting times.	2/18/2014 2:38 PM
141	Offer a popular direct route. Ex: downtown to park city and that's it. No need to drive around downtown first, all stops are within a ten minute walk. If this route was available I would use it often.	2/18/2014 2:37 PM
142	express travel options on greater distances	2/18/2014 2:37 PM
143	Run more number 10 buses. Also, have a bus that runs to the train station	2/18/2014 2:36 PM
144	Increasing awareness through marketing.	2/18/2014 2:34 PM
145	Not sure	2/18/2014 2:34 PM
146	Offer options for transportation outside of Lancaster City	2/18/2014 2:34 PM

147	Efficient route	2/18/2014 2:34 PM
148	Create longer evening hours (not ending at 5:20pm). Even if it's just on Friday & Saturdays.	2/18/2014 2:34 PM
149	More ease of use. I take the bus to Millersville, but I have to wait a long time between the bus from my neighborhood and the bus to to MU. I often don't have a good place to wait. Also, the times that the bus leaves MU are not accurate based on the schedule.	2/18/2014 2:33 PM
150	N?A	2/18/2014 2:33 PM
151	not sure	2/18/2014 2:33 PM
152	more routes, more stops, more flexibility	2/18/2014 2:32 PM
153	Parking availability	2/18/2014 2:32 PM
154	This is the 21st century... I think RRTA should seek a federal grant to create a monorail connecting several key areas in our community. From the County Park in the south the the Central City [Convention Center & Business District] to the Train Station to the Health Campus on Harrisburg Pike. This will not only provide public transportation to all these vital areas for health, shopping and recreational services but would also generate tourist traffic into our community. Eventually other monorail lines could be extended to our Route 30 attractions to the East, to the airport on the North, and to other areas as the need arises. Get surface traffic off the congested streets of downtown Lancaster save for emergency vehicles.	2/18/2014 10:30 AM
155	Two big things I would suggest are to extend the hours the bus runs and create an easier way to understand where and when the bus stops. A way to plug in my address and it tells me where the closest stop to my house is and when it runs would be very helpful.	2/17/2014 3:31 PM
156	Put it out there more sell it by not actually selling it	2/17/2014 1:04 PM
157	more service on weekends and later in the evening.	2/17/2014 8:47 AM
158	no idea	2/17/2014 8:22 AM
159	More frequent buses to high trafficked areas; media campaign to highlight services and convenience and economy of public transit.	2/17/2014 7:16 AM
160	better schedules	2/17/2014 12:20 AM
161	more advertising	2/16/2014 3:04 PM
162	out of town busses need to run later in the day	2/16/2014 12:38 PM
163	I think key pieces are: - Reliability. My summer schedule works exceptionally well, boarding, with my bike, a bus that leaves punctually from the downtown terminal and then biking home when I choose in the evening. My winter routine is highly frustrating and embarrassing (and only augments transit's negative image) as I wait in the cold for an inbound bus that is always between 5 and 35 minutes late (and sometimes have to rent or borrow a car or bum a ride to get home.) In an ideal world, RRTA would employ GPS technology that could be tracked by mobile devices. I understand research on this is in process (kudos) and also understand that it is very expensive. - Access and ease of use, which includes proximity and frequency of routes as well as intuitive operations (how do I work this?) that I described in the question above. To highlight another example, the whole-bus ads that I'm sure generate needed income make it very difficult for novice riders to find their stop, especially at night. What about half-bus ads, where the right side is uncovered? - User-focused customer service, from the courtesy of tired drivers to admirable efforts like text updates on route delays. - Increasing cost of maintaining a car	2/16/2014 12:16 PM
164	more frequent trips.	2/16/2014 8:22 AM
165	Provide bus service to all companies in Lancaster county	2/15/2014 10:26 PM
166	Don't know	2/15/2014 11:10 AM
167	more frequent times, cleaner fuel buses, more bus shelters	2/15/2014 3:32 AM
168	Access to Reading and extended service for those who need to take two buses to work	2/15/2014 2:56 AM
169	More service to Willow Street (and south of Willow Street)	2/14/2014 7:40 PM
170	More evening routes Service to and from special events	2/14/2014 2:17 PM
171	More routes into residential suburbs	2/14/2014 2:09 PM

172	Not sure.	2/14/2014 1:52 PM
173	Time and route accessibility, improving dependability on the set time schedule.	2/14/2014 1:11 PM
174	First, the busses need to be more reliable (windows able to stay shut, fewer breakdowns). Some sort of "Open House"/Town Meeting in the communities to tout the benefits or taking the bus.	2/14/2014 1:08 PM
175	not sure	2/14/2014 12:52 PM
176	More accesibility and better accomodation of those who have disabilities.	2/14/2014 12:41 PM
177	bgfbfdsb	2/14/2014 12:26 PM
178	see below	2/14/2014 12:22 PM
179	communicating with citizenry about advantages to using public transportation. The county is becoming a traffic-congested metro; we need to show people why public transportation is a better option.	2/14/2014 12:22 PM
180	More bus service on Sunday.	2/14/2014 12:13 PM
181	Better/longer hours, more reliability with timing - buses being on schedule	2/14/2014 12:13 PM
182	Awareness campaigns	2/14/2014 11:51 AM
183	Not sure; again, more convenient links between spokes	2/14/2014 10:58 AM
184	Promote the "free ride home" program from the Central PA transit people. That way, riders know they have a back up plan in case of emergency, unscheduled overtime etc.	2/14/2014 10:56 AM
185	More frequent trips on most routes are needed.	2/14/2014 10:54 AM
186	Use GPS tracking app so riders can see where their bus is and when it'll be arriving at their stop. Hire more courteous drivers. Better treat those in wheelchairs.	2/14/2014 10:19 AM
187	Promote cost saving and convenience of service.	2/14/2014 9:47 AM
188	new partnerships with more businesses?	2/14/2014 9:26 AM
189	Provide more service such as later service and weekend service not currently available on some routes.	2/14/2014 9:03 AM
190	I think it is fine the way it is.	2/14/2014 7:25 AM
191	Better service. better rates and frequent discount offers	2/14/2014 4:59 AM
192	Provide easier access to schedule and route data for smartphones, either with an app or service such as http://maps.google.com/help/maps/mapcontent/transit/participate.html	2/14/2014 12:17 AM
193	Better advertising and extended hours of service on certain routes, especially 17 Columbia.	2/13/2014 11:26 PM
194	I think it would be helpful to have more runs for the more popular routes (i.e. you should not have to 45 minutes for the next bus). It would also be helpful to have longer hours during the evening on the some of the routes. I have the opportunity to work overtime, but the last bus comes around 6:10, so I have to leave at 6. If there were later runs I would be able to work longer.	2/13/2014 11:00 PM
195	more consistent schedule- trips every hour	2/13/2014 10:23 PM
196	More advertisements	2/13/2014 9:41 PM
197	Newer bases and wider location coverages	2/13/2014 9:19 PM
198	More frequent service... Too much time between buses	2/13/2014 6:31 PM
199	Evening/night service on weekends.	2/13/2014 6:03 PM
200	Cheaper fares and cleaner, more modern buses. Some of the buses in operation currently are almost falling apart.	2/13/2014 5:47 PM
201	private financial incentive to support private workforce needs	2/13/2014 3:43 PM
202	Partnerships with local businesses to conduct scavenger hunts, thereby encouraging use of the transit and bringing non-using employees into the buses for a trial period.	2/13/2014 2:00 PM

203	I feel the main reason more people don't use your service is unreliable/scarce scheduling. From my own experience Columbia, Leola, and Millersville rts are consistently running 30+ minutes late. Or sometimes they never come at all...These busses are also extremely over crowded due to scarce scheduling. Ever stand along a busy road for 30+ minutes in the rain only to be picked up in a bus with no seating available, and with stressed out passengers and drivers? It sucks...Do you really expect anyone to choose this service if they were not in a position that forced them to do so? Nobody want to deal with it if they dont have to.	2/13/2014 1:43 PM
204	Monitor the drivers. There are some who get out to smoke, or stop at stores when they are already running late. RRTA is losing riders for this reason	2/13/2014 1:23 PM
205	Improving on-time performance	2/13/2014 12:30 PM
206	Advertisements for RRTA at Offices and yard signs near commonly used roads.	2/13/2014 12:03 PM
207	Do not know...perhaps it is not needed.	2/13/2014 11:19 AM
208	Not that I can think of	2/13/2014 11:18 AM
209	Better routes to places people work	2/13/2014 11:15 AM
210	More seniors moving to the city, promote that and also we NEED covered bus stops in some areas	2/13/2014 9:41 AM
211	Safe sheltered pick-up spots	2/13/2014 8:58 AM
212	More routes, and more frequent stops	2/13/2014 7:58 AM
213	better advertising of mass transit opton	2/13/2014 7:53 AM
214	Wifi for passengers. Safety cameras for crime control	2/13/2014 7:52 AM
215	The county could provide bus lanes to increase efficiency (people I know don't want to ride because the trip takes so much longer than driving). Service could be coordinated between transit providers (RRTA and Amtrak) like in a metropolitan area.	2/13/2014 7:38 AM
216	Increase weekend services.	2/13/2014 7:31 AM
217	later hours for people who work 3-11 and more service on weekends for people who work	2/13/2014 7:05 AM
218	Better connections. I live on route 23 on east end of county and work at F&M. It would add 3 hours to my day if I took the bus, if I didn't miss a tight transfer!	2/13/2014 6:35 AM
219	More convenient service. Resources should be condensed to focus on quality. Current route structure and schedule design emphasizes coverage over intensity. Transit is an urban service. Far too many rural routes. Service intensity is far too infrequent to attract discretionary ridership	2/13/2014 6:30 AM
220	more frequency of buses on the routes	2/13/2014 6:22 AM
221	Advertisement	2/13/2014 5:41 AM
222	Instead of zones created one basic fare.. Lke nyc	2/13/2014 5:32 AM
223	RRTA bus drivers are rude. Courteous? Never. Have a bus lane on roadways allowing buses to pass stopped traffic. If I can get to Lititz faster in the bus because it can pass the stopped traffic on 501, I might take the bus.	2/13/2014 4:07 AM
224	Lower monthly bus pass	2/13/2014 3:12 AM
225	Extended hours into evening and more covered bus syops	2/13/2014 12:28 AM
226	Some busses should Run a lil more late like buss 19 that only runs until 5 and Sunday doesn't work it all ..I wish I will run until 10 pm and have them Sunday until 6	2/13/2014 12:21 AM
227	More times available. No 30 minute rides	2/13/2014 12:18 AM
228	There needs to be bus service on Sundays and it needs to run later until 7 or 8. Also it would be nice if routes next to each other connected I live 5 minutes from lititz but it takes me 3 hrs to get there by bus.	2/13/2014 12:03 AM
229	Nothing	2/12/2014 11:53 PM
230	Sunday transportation Routes that come near my home and not 3 miles to walk to the stop Advertise prices more or packages Better catch line so RRTA is more memorable	2/12/2014 11:27 PM

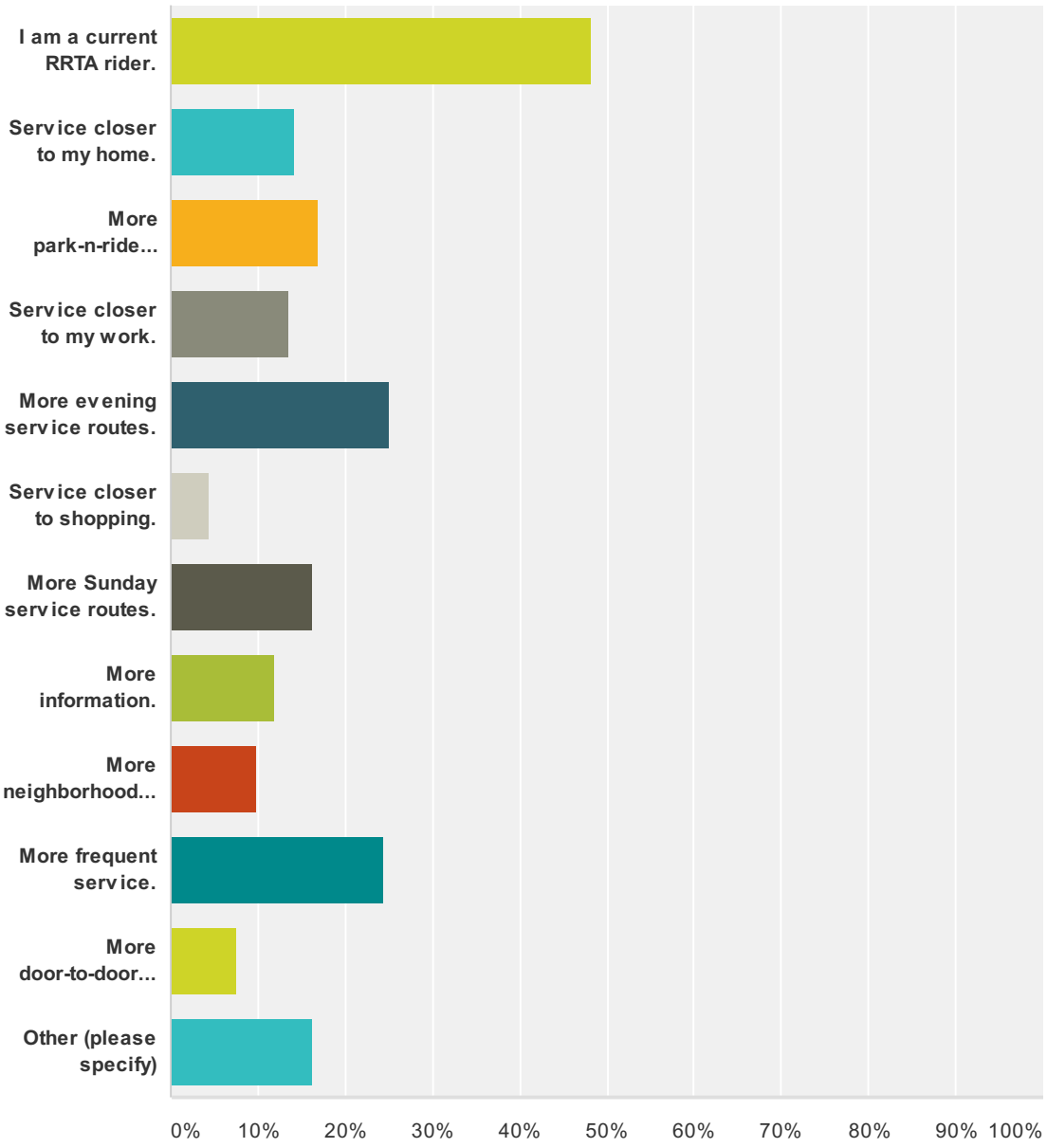
231	Add a connecting service to Dauphin County. Rabbit Transit and Lebanon County Transit currently have connecting service there. It would also be nice to have more buses servicing the Elizabethtown Route. It	2/12/2014 11:24 PM
232	More buses and times that they run	2/12/2014 11:14 PM
233	Smaller vehicles (Eco friendly would be great) making more stops. Maybe tying in with a bike rental company similar to larger cities	2/12/2014 10:36 PM
234	Friendly professional drivers and expand routes &, time.	2/12/2014 9:59 PM
235	Park and Ride lots	2/12/2014 9:50 PM
236	The $.25 sale is what got me hooked. Make all downtown stops dirt cheap and every 10 minutes a bus. People will hop on, see the value and eventually use the bus for more.	2/12/2014 9:27 PM
237	Fixing late buses	2/12/2014 9:21 PM
238	More frequent service.	2/12/2014 9:09 PM
239	do not know	2/12/2014 9:00 PM
240	Construct bus shelters so that people to not have to wait out in the open. Sidewalks in some areas to link house developments with bus stops	2/12/2014 8:52 PM
241	More info available on routes and transfers	2/12/2014 8:51 PM
242	Have buses run more frequently on more routes. Woman I work with gets done at 4:30 PM on Granite Run Dr told me it takes her until 6:00 to get home to Manor St. by bus.	2/12/2014 8:33 PM
243	Having a place to stand under to cover from the cold, rain,snow,sun	2/12/2014 8:06 PM
244	More stops. Clean buses.	2/12/2014 7:59 PM
245	Better communication to riders when there are issues on their route. Not everyone has twitter.	2/12/2014 7:25 PM
246	More stops diff locations.....8am we pick up In Ephrata the head to weis at 810 then redners at 815 then walmart 825 then kmart 835 and head to lancaster....then on way back you go kmart 915...walmart at 925 then redners at 930 and so on....just having specific time at locations. Need to also set up pickup locations at retirement housing locations	2/12/2014 7:24 PM
247	better and more frequent connections to amtrak service	2/12/2014 7:13 PM
248	Later service	2/12/2014 7:11 PM
249	Cleaner busses	2/12/2014 7:00 PM
250	Treat the current customers better. Provide better (later) hours.	2/12/2014 6:41 PM
251	Ads	2/12/2014 6:30 PM
252	Information on how to save on gas	2/12/2014 6:21 PM
253	More lines connecting towns directly instead of having to transfer in center city.	2/12/2014 6:14 PM
254	More trips to train station closer to the time of arriving trains	2/12/2014 6:08 PM
255	More advertising of where current and future bus routes are/will be. More investment in "green" transportation. Hybrids, etc	2/12/2014 5:55 PM
256	On time bus service and drivers with a friendly attitude. That is very hard to find.	2/12/2014 5:50 PM
257	I do not know.	2/12/2014 4:23 PM
258	Advertise the routes & cost	2/12/2014 4:19 PM
259	public relations initiative touting many benefits (see previous answer), perhaps agreements with particular employers to provide bus passes as a benefit or at reduced prices; increased service days and hours as soon as financially feasible - people work on holidays, people work night shifts, people work regular hours on sundays . . .	2/12/2014 3:59 PM
260	Flexible work hours allowed by employers to permit employees to use transit	2/12/2014 3:35 PM
261	Keeping a more consistent Bus times. Depending on who is driving is how close they run on time!	2/12/2014 2:59 PM
262	some free rides so people can tell if they like to get the buses.	2/12/2014 2:49 PM

263	Possibly pointing out how much money they could save by using the bus to commute to work instead of driving.	2/12/2014 2:15 PM
264	More frequent service, more advertising - which should be funded by convincing county and state to give transit a greater portion of available transportation dollars.	2/12/2014 1:55 PM
265	Have more "sample" rides so people could try it out.	2/12/2014 1:44 PM
266	Outreach to younger generations, because it seems that baby-boomers and other suburbanites have a stigma to buses and their riders.	2/12/2014 12:50 PM
267	More shelters and shelters provided with real time information on bus arrivals	2/12/2014 12:47 PM
268	A faster way to get around the city. Tram service of some kind. Make it cool or fun to get into downtown from the outskirts, make it easy and convenient to go to an event at clipper! Make is easier to pay-- with swipe cards, etc.	2/12/2014 12:36 PM
269	Show the cost/convenience benefit of taking the bus over driving. Parking costs as much as a bus ride, so the only real difference is convenience and safety. RRTA buses are nice (I live in Philly, so all things are relative), so I would investigate who the potential audience is and try and cater to their needs (should it appeal to child safety? Family rates? Late night schedules for bar hoppers?)	2/12/2014 12:32 PM
270	Clean and upgraded buses, more locations in Leola, Brownstown, Neffsville to park and ride, more out of the weather huts to wait for the bus, keep the huts clean and Clean and Upgraded Buses!	2/12/2014 12:24 PM
271	- Use GPS on buses so that you can load their location on your phone -- as they do in major cities. - Develop better maps. - Provide service later in the evenings so that people looking to go to bars/restaurants can get there and home. - at all stops, post the # of the bus and future destinations, possibly even a map -- they do this in Rome and it is so much easier to use transit.	2/12/2014 12:11 PM
272	Having more shelters for riders to wait in during bad weather. and better organization for shared ride trip times .	2/12/2014 12:07 PM
273	I think you need to keep better track of the times the drivers are late. When a certain driver was on the bus I take two days a week, he was always 15 - 20 minutes late. I know the weather and the University traffic factors into them being on time or not, but he never was. I come from a family of bus drivers (CTC) and there was a dispatcher in the square keeping track of the drivers and their arrivals/departures. Now it seems no one cares. And when a bus is running really late, or not at all, it would be nice if someone from the office at the bus station would come out and tell you that the bus is late or not coming at all. I get the 5:20 PM bus and it's 6:00 and there's still no bus, it would be nice to know what's going on.	2/12/2014 11:37 AM
274	IF the buses ran ON schedule, more people would use RRTA. RRTA is NOT reliable.	2/12/2014 11:15 AM
275	WAV taxi service like Philly.	2/12/2014 10:57 AM
276	promote your services within the community & business.	2/12/2014 10:55 AM
277	offer promotions, more specials....thinking back to the .25 rides for the month a couple years ago. More courteous drivers.	2/12/2014 10:48 AM
278	Make it free.	2/12/2014 10:45 AM
279	advertisements	2/12/2014 10:29 AM
280	shovel snow from access points along bus routes, GPS for riders to know where the bus is, fix the windows and doors and leaky roofs so the ride is more enjoyable and healthy, more park and ride lot partners, realistic bus schedule for routes (when was the last time you updated the schedules), add SUNDAY service for those who must work Sundays	2/12/2014 10:26 AM
281	Running more often	2/12/2014 10:24 AM
282	Not sure - I suspect that ridership from the Quarryville are will remain low, regardless of changes.	2/12/2014 10:22 AM
283	KEEPING COST AND AVAILABILITY WITHIN A WORKING MAN'S BUDGET.	2/12/2014 10:17 AM
284	public education	2/12/2014 8:52 AM
285	Unsure at this time	2/12/2014 8:16 AM
286	SMALLER BUSES! Improve and create safe bus stop areas.	2/12/2014 6:55 AM
287	no ideas	2/11/2014 9:12 PM

288	more heavily subsidized fares	2/11/2014 6:03 PM
289	circluar connection, more buses	2/11/2014 6:02 PM
290	loyalty rewards?	2/11/2014 5:45 PM
291	Safer stops/pick up areas, better on time pick ups, nicer bus drivers and more evening services.	2/11/2014 5:15 PM
292	Have more borough to borough routes on weekdays and Saturdays, e.g., residents of Mount Joy might enjoy going to Lititz to shop on a Saturday but would want a number of options for the return trip. Add more runs on existing routes between the boroughs and City on Saturdays, e.g., people in the boroughs might enjoy shopping at Lancaster City's Central Market on Saturdays but would want more schedule options for the round trip.	2/11/2014 5:00 PM
293	Publicity of what is available	2/11/2014 4:44 PM
294	extend service	2/11/2014 4:39 PM
295	Do not know	2/11/2014 10:45 AM

Q8 If you are currently not a rider of RRTA, what factors would influence you to utilize RRTA bus service? (Please check all that apply.)

Answered: 295 Skipped: 42



Answer Choices	Responses	
I am a current RRTA rider.	**48.14%**	142
Service closer to my home.	**14.24%**	42
More park-n-ride express services.	**16.95%**	50
Service closer to my work.	**13.56%**	40
More evening service routes.	**25.08%**	74

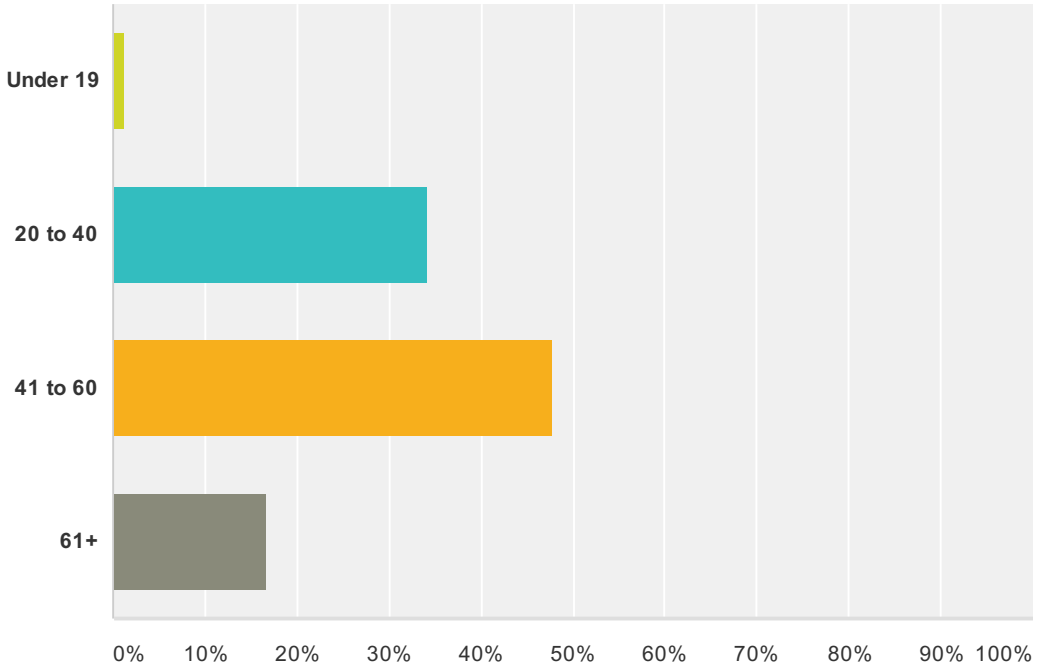
Service closer to shopping.	**4.41%**	13
More Sunday service routes.	**16.27%**	48
More information.	**11.86%**	35
More neighborhood circulator service.	**9.83%**	29
More frequent service.	**24.41%**	72
More door-to-door service.	**7.46%**	22
Other (please specify)	**16.27%**	48
Total Respondents: 295		

#	Other (please specify)	Date
1	Service that is less than of equal to drive time.	2/25/2014 4:30 PM
2	later routes to Park City	2/24/2014 10:11 PM
3	I would like to take the bus from Columbia to Lancaster and get the Amtrak train to Harrisburg. Currently, the timing isn't right and I would have to walk 10 blocks. If there would be a stop by the train station, I would not even have to use my vehicle at all to get to work in Harrisburg.	2/24/2014 12:51 PM
4	Quicker connections in Lancaster	2/20/2014 6:28 AM
5	service earlier; service to train station for 6:30am train	2/19/2014 9:45 PM
6	County to county service	2/19/2014 9:42 PM
7	We have good service to Willow Street and I would use it should the need arise.	2/19/2014 10:43 AM
8	Better route times to accommodate working folks coming in from E-town/Mt. Joy. My husband tried to use the bus to commute, but he wasted a great deal of time on either end of his 7 to 3 shift.	2/19/2014 10:20 AM
9	make routes more desirable for working people to use going to and from work	2/19/2014 8:50 AM
10	A call a ride from Ephrata to new holland would be super.	2/19/2014 6:03 AM
11	Better service to hospitals (Ephrata, in particular) and other facilities with a concentration of folks or family members in compromised physical conditions.	2/19/2014 4:14 AM
12	Easier to understand fares and times.	2/19/2014 1:04 AM
13	better image	2/18/2014 7:34 PM
14	Route to my work in downtown Harrisburg	2/18/2014 4:55 PM
15	early and later rides 4AM and after 6PM up to 9Pm or later.	2/18/2014 3:19 PM
16	Is a Lancaster to Harrisburg I-283 Express Bus with stops at East Pete, Landisville, Mt. Joy and Elizabethtown worth considering	2/18/2014 3:05 PM
17	Weather and road conditions	2/18/2014 3:05 PM
18	You have to take a bus to Lancaster city to catch a bus to another community. This takes too long.	2/18/2014 2:59 PM
19	Improved bus stops, bus shelters, benches, trash receptacles.	2/18/2014 2:51 PM
20	A better cooperation with businesses that will let me know that you are there (e.g. shopp at Peter's on Route 11).	2/18/2014 2:49 PM
21	Transportation to Harrisburg/Dauphin Co.	2/18/2014 2:43 PM
22	waiting for the weather to improve! after the snow's gone I'll be back riding the bus!	2/18/2014 2:43 PM
23	Link with Harrisburg bus system	2/18/2014 2:41 PM
24	More dependable service and linkages with other modes of transpoortation (i.e. Rail Service)	2/18/2014 2:39 PM
25	I commute via train	2/18/2014 2:34 PM

26	need to have bus services to harrisburg	2/18/2014 2:33 PM
27	See the comments in *7	2/18/2014 10:30 AM
28	Easier to use website	2/17/2014 3:31 PM
29	ut would be nice if the bus driver sees you running fir the bus at least stop to pickem up and if the bus is early arriving to the bus stop at least wait till the time is up	2/17/2014 1:04 PM
30	loss of ability to drive	2/17/2014 8:22 AM
31	particular to train station	2/16/2014 8:22 AM
32	none--since i can walk to work, to church and to the store	2/15/2014 10:26 PM
33	Service to special events, i.e. service from evening Barnstormers games, First Fridays, etc.	2/14/2014 2:17 PM
34	special event service, service to surrounding counties like York, Lebanon, and Reading	2/14/2014 12:22 PM
35	Buses being more on time/reliable	2/14/2014 12:13 PM
36	Additional "concentric" routes that would link "spokes" in areas farther out.	2/14/2014 10:58 AM
37	live outside of lancaster county	2/14/2014 9:26 AM
38	None.	2/13/2014 12:03 PM
39	No omne should be standing in the rain waiting for a bus!!	2/13/2014 9:41 AM
40	Better transfer/connection scheduling.	2/13/2014 6:35 AM
41	There is no safe place to walk when I get off the bus outside of the city. Put in bike paths so people have a place to walk	2/13/2014 4:07 AM
42	Safer vibe	2/12/2014 10:36 PM
43	i'm a sometimes rider, particularly in bad weather. also work providing social services including rrta day passes and trying to help folks access employment.	2/12/2014 3:59 PM
44	None, I live in the city and take Amtrak to my job in Harrisburg. I do not need a car or bus for my commute or errands.	2/12/2014 12:50 PM
45	I live in the City, and it would be great if there was an easy way to get from my home to the train station -- particularly for AM commuter trains.	2/12/2014 12:11 PM
46	i am a quad who does not own my owm WAV. I used to use RRTA Access for work and doctor appts. But i had to be on the bus for 2hrs, and plan on a 1.5 hr pickup prior to my needed arrival. This could equal 5 hrs of travel for a 12 mi trip to Lanc. That was too hard on my body as I have no abdominal muscles, pressure sore scarring, and a cathing schedule of every 4-6 hrs. Working with RRTA has been disheartening and humiliating. In my last conversation with Marcella she called me an ACCESS PERSON: permanently disabled and relying on public funds to pay my transp costs.Marcella	2/12/2014 10:57 AM
47	Who answers this question if they are not a bus rider? Who get the surveys?	2/12/2014 10:55 AM
48	I UTILIZE THE TRANSIT SERVICE ON A DAILY BASIS, MORNING AND AFTERNOON, TO/FROM WORK	2/12/2014 10:17 AM

Q9 Age

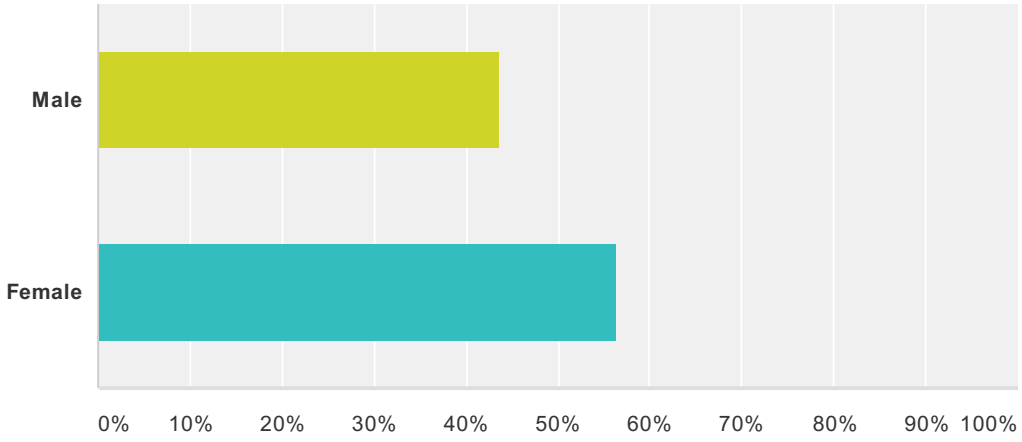
Answered: 295 Skipped: 42



Answer Choices	Responses	
Under 19	**1.36%**	4
20 to 40	**34.24%**	101
41 to 60	**47.80%**	141
61+	**16.61%**	49
Total		**295**

Q10 Gender

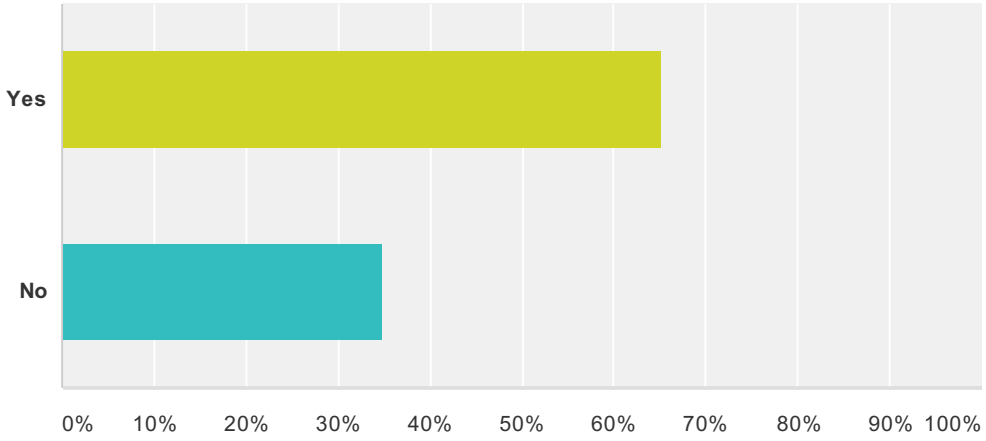
Answered: 295 Skipped: 42



Answer Choices	Responses	
Male	**43.73%**	129
Female	**56.27%**	166
Total		**295**

Q11 Do you have a vehicle available for most local trips?

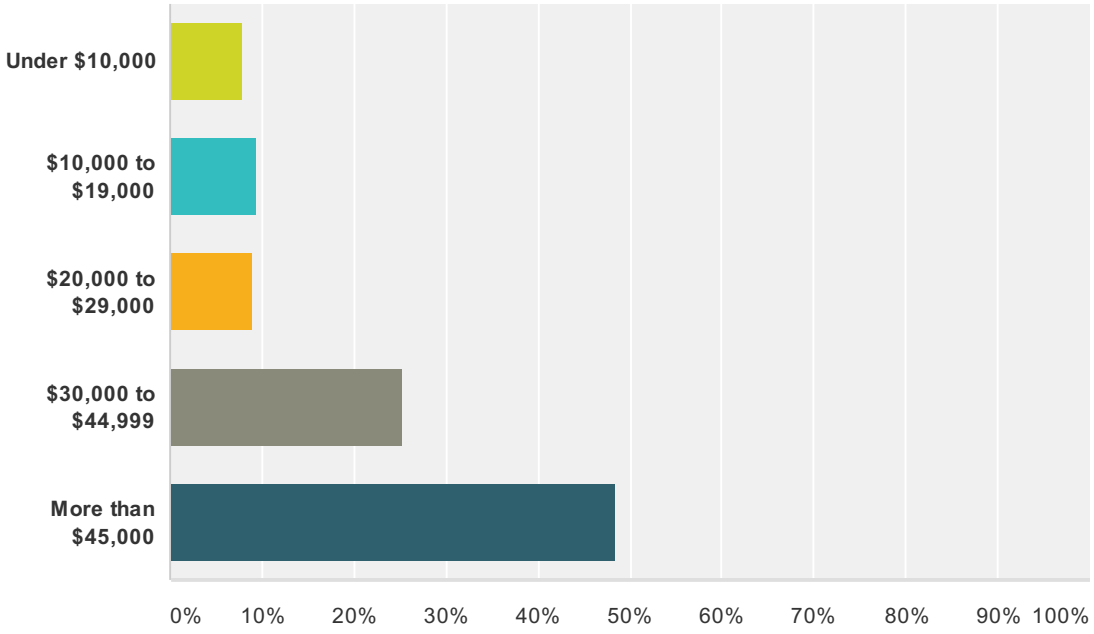
Answered: 295 Skipped: 42



Answer Choices	Responses	
Yes	**65.08%**	192
No	**34.92%**	103
Total		**295**

Q12 What is your total annual (per year) household income (from all members)?

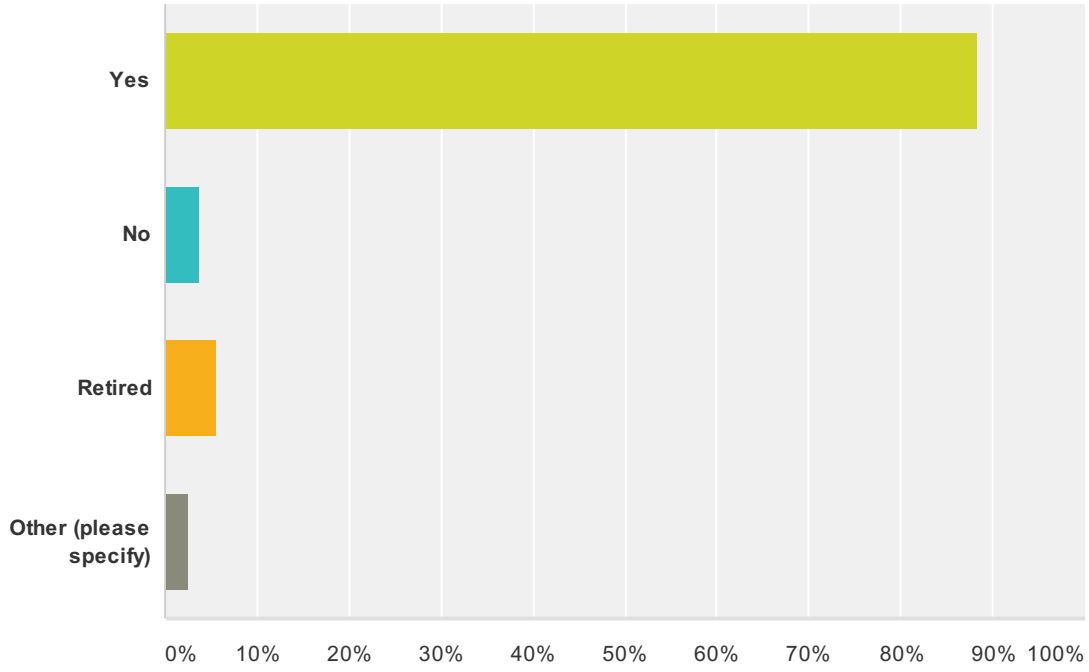
Answered: 289 Skipped: 48



Answer Choices	Responses	
Under $10,000	**7.96%**	23
$10,000 to $19,000	**9.34%**	27
$20,000 to $29,000	**9.00%**	26
$30,000 to $44,999	**25.26%**	73
More than $45,000	**48.44%**	140
Total		**289**

Q13 Are you employed?

Answered: 289 Skipped: 48

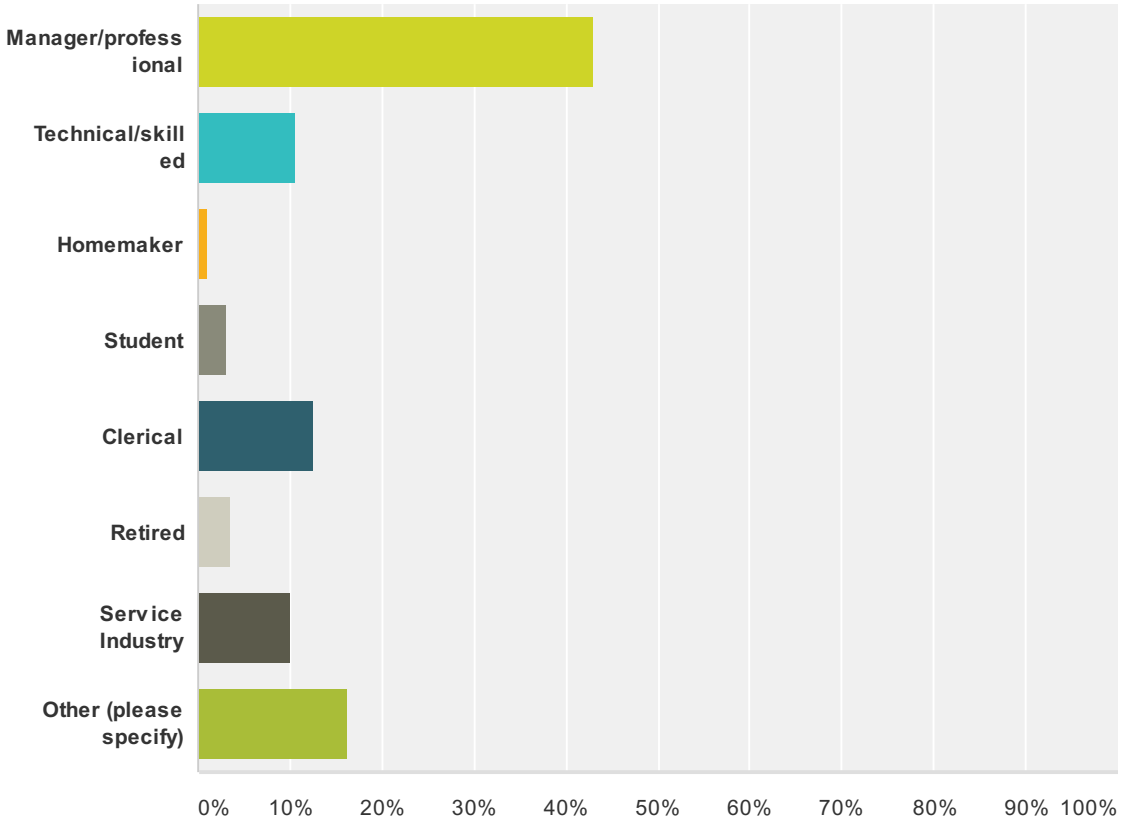


Answer Choices	Responses	
Yes	**88.24%**	255
No	**3.81%**	11
Retired	**5.54%**	16
Other (please specify)	**2.42%**	7
Total		**289**

#	Other (please specify)	Date
1	lawed off and looking the current schedual limits my surch	2/20/2014 2:38 PM
2	Partially through temp service, due to lack of transportation have trouble being sent out on assignments.	2/19/2014 5:00 PM
3	Unemployeed seeking work and limited by public transportation access	2/19/2014 2:34 PM
4	part time and ssi	2/19/2014 1:35 AM
5	Student; employed at University	2/18/2014 2:34 PM
6	self-employed as independent contractor	2/14/2014 12:23 PM
7	I am on LOA due to health and mostly transportation issues.	2/12/2014 12:13 PM

Q14 What is your occupation?

Answered: 289 Skipped: 48



Answer Choices	Responses	
Manager/professional	**42.91%**	124
Technical/skilled	**10.73%**	31
Homemaker	**1.04%**	3
Student	**3.11%**	9
Clerical	**12.46%**	36
Retired	**3.46%**	10
Service Industry	**10.03%**	29
Other (please specify)	**16.26%**	47
Total		**289**

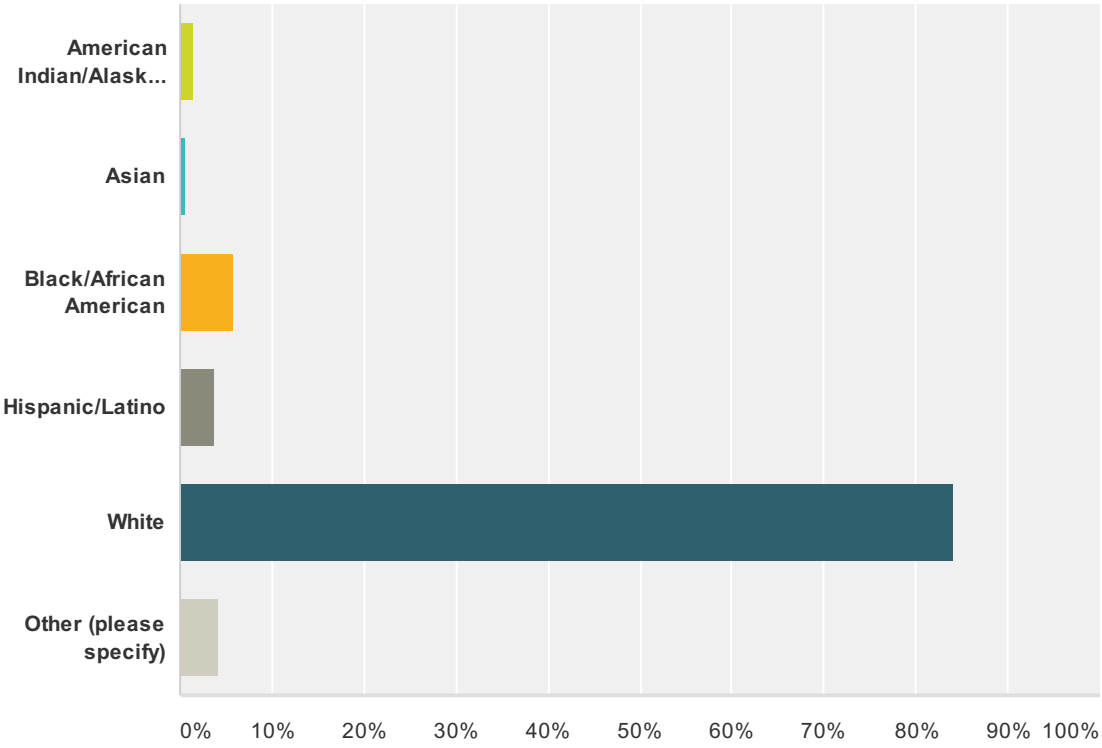
#	Other (please specify)	Date
1	Looking for work	3/4/2014 9:19 AM
2	Medical	3/2/2014 11:14 PM
3	unemployed	2/25/2014 11:42 AM
4	retail	2/23/2014 11:56 AM
5	Asst. Deli Manager	2/22/2014 7:05 PM

6	laborer	2/21/2014 9:33 AM
7	Retail	2/21/2014 1:45 AM
8	Sheltered workshop - assembler	2/20/2014 7:49 AM
9	work at Goodwill	2/19/2014 8:16 PM
10	laborer working toward clerical	2/19/2014 5:00 PM
11	graphic designer	2/19/2014 2:34 PM
12	Goodwill	2/19/2014 11:17 AM
13	courthouse employee	2/19/2014 11:09 AM
14	nurse	2/19/2014 10:46 AM
15	retail at park City	2/19/2014 9:42 AM
16	I'm retired but use the bus. working people should use bus. make it desirable for them	2/19/2014 8:54 AM
17	hospital support	2/19/2014 8:37 AM
18	Forced into retirement,I am on S.S.	2/19/2014 6:04 AM
19	Retired	2/19/2014 5:26 AM
20	clesner	2/19/2014 1:35 AM
21	Retail	2/18/2014 11:56 PM
22	education	2/18/2014 7:07 PM
23	Government	2/18/2014 6:32 PM
24	Teacher in a trade sclool	2/18/2014 3:08 PM
25	Civil Service	2/18/2014 3:00 PM
26	Customer service	2/18/2014 2:48 PM
27	Government	2/18/2014 2:41 PM
28	AAA Contact Center Service Specialist	2/18/2014 10:32 AM
29	cleaning and serving on weekends	2/17/2014 1:06 PM
30	social worker at Water st Mission-homeless shelter	2/15/2014 10:31 PM
31	consulting	2/14/2014 12:23 PM
32	Clergy	2/14/2014 10:59 AM
33	CNA	2/14/2014 7:25 AM
34	Technology Instructor	2/14/2014 12:18 AM
35	sales	2/13/2014 12:04 AM
36	fast food	2/12/2014 11:54 PM
37	owner of cleaning company	2/12/2014 11:27 PM
38	healthcare	2/12/2014 10:12 PM
39	none	2/12/2014 9:01 PM
40	Non profit	2/12/2014 8:00 PM
41	sales associate	2/12/2014 5:50 PM
42	social service, advocacy, community benefit	2/12/2014 4:02 PM
43	Paralegal	2/12/2014 2:15 PM
44	Government	2/12/2014 1:56 PM
45	Retail sales and service at Home Depot.	2/12/2014 12:13 PM

46	retail	2/11/2014 5:46 PM
47	middle management	2/11/2014 4:40 PM

Q15 What is your ethnicity?

Answered: 289 Skipped: 48



Answer Choices	Responses	
American Indian/Alaskan Native	**1.38%**	4
Asian	**0.69%**	2
Black/African American	**5.88%**	17
Hispanic/Latino	**3.81%**	11
White	**84.08%**	243
Other (please specify)	**4.15%**	12
Total		**289**

#	Other (please specify)	Date
1	...	2/28/2014 1:19 PM
2	Mixed	2/20/2014 10:04 PM
3	Mixed ethnicity	2/20/2014 10:17 AM
4	American	2/19/2014 12:18 PM
5	AMERICAN	2/19/2014 11:17 AM
6	You should offer a multicultural or check all that apply	2/18/2014 8:34 PM
7	mixed	2/17/2014 1:06 PM
8	Mixed	2/14/2014 10:55 AM
9	na	2/13/2014 9:19 PM

10	Why does this matter?	2/13/2014 6:31 AM
11	Human	2/13/2014 12:29 AM
12	it is highly inappropriate to require answers to ethnicity and income and my answer to those questions does not reflect the truth.	2/12/2014 4:02 PM

Q16 Please use the space below for additional comments.

Answered: 144 Skipped: 193

#	Responses	Date
1	Elizabethtown needs more trips during the week, on saturdays and add sunday services.	3/2/2014 11:14 PM
2	The way that your busses are scheduled does not allow customers to accurately define when a particular bus should be arriving at a specific location. We would be very much appreciative of having the ability to know when we should arrive at a stop with some degree of accuracy in order to not have to guess. Beyond this simple complaint, I have been otherwise satisfied; however, maintaining the cleanliness of the busses is also a very important matter. It isn't always the physical appearance but the air quality of the bus that is offensive.	2/28/2014 1:27 PM
3	Please coordinate future service with identified growth areas in the county. The spokes from the city route system needs to be overhauled. Work with municipalities and developers to provide safer bus stops and bus shelters.	2/25/2014 4:32 PM
4	The bus service is good, but some of the bus drivers could drive alot better and be alot nicer, there are drivers who are not nice at all, and for people who have smart phones would benefit if they had a rrta app	2/25/2014 11:45 AM
5	More tailored to suit more of Park City and connecting routes so people can stay beyond close	2/24/2014 10:13 PM
6	Please have service to Reading, even just one early AM would be wonderful. The first daily public transport from Reading to Lancaster is Greyhound and it arrives in Lancaster at noon. My actual requirement is to be near the Eden resort in Lancaster (Oregon Pike) at 8:00am. I'm currently in Wyomissing, near Vanity Fair Outlets. Ideally, I would take a BARTA at 6:30am to the downtown Reading hub, get on the RRTA Reading to Lancaster bus at 6:45am, ride to the Lancaster hub until 7:30am, then transfer to the Ephrata bus soon after. Are there any plans to connect the counties?	2/23/2014 2:05 PM
7	my job cut my working hours bec of bus schedule and I couldn't close Starbucks till 930 pm since the last bus to Columbia from downtown is at 840pm	2/23/2014 11:57 AM
8	I have noticed that a few of your drivers are very ignorant towards some of the riders, I always say hello and thank you to the drivers, but they don't acknowledge me or they turn their heads like I am not even there. I work with the public and that is not always a pleasant thing, but a simple hello and thank you is not very much to ask! For the most part though some of the drivers are terrific!	2/22/2014 7:10 PM
9	It is very important for a public bus service to maintain a reliable schedule so connections/transfers can be made to reach your final destination. This is especially important for people going to work.	2/22/2014 8:50 AM
10	For Elizabethtown and Mount Joy area, might be a better use of overall transportation funds to somehow make Amtrak more efficient and affordable between there and Lancaster, and have more convenient connections between bus and rail.	2/21/2014 11:21 AM
11	I am having an issue with the current bus situation. When I get the afternoon bus back to the terminal I have to transfer to another bus. almost daily when I arrive back to the terminal to get my transfer bus, I see it pulling out before the bus I am currently on is parked. This means I must sit another 1 1/2 to 2 hours for the next bus. This is very frustrating, like I do not have anything else to do or other plans after work! This is my only means of transportation and I am VERY frustrated!!!!!!!!	2/21/2014 9:36 AM
12	The only issue that I have with the bus service is the evening shift, when I'm getting out of work. The bus around my office comes at exactly 5pm, but I get out of work at 5pm, so by the time I get to the stop it's 5:05p, so I have to wait an hour for another bus to come. There should be more bus service around rush hour. I take the Grandview Bus. Other than that, I think RRTA does a good job providing bus service to Lancaster County.	2/21/2014 8:49 AM
13	I think the RRTA drivers should have name tags on them, i hardly ever see them with their name tags on.	2/21/2014 1:45 AM
14	Thanks for everything you do!	2/20/2014 9:22 PM

15	I would really like to see the 8:15 AM bus to Willow Street stop at the Kendig Square K Mart first (as it does on the other runs during the day) rather than have to ride it all over Willow Street to get to Kendig Square on the way back.	2/20/2014 2:19 PM
16	maybe set up a late buses to make a circle of out laying areas like go around rt 741 west and south and east of the city to help later customers, with only the need of one bus	2/20/2014 1:13 PM
17	Connections are inconsistent. The Grand View bus arrives at the terminal at 3pm and the E-town bus leaves at 3pm. The E-town bus does not wait. I am left stranded (very often on Fridays) for two hours waiting for the next bus. I ws promised several years go thta this situation would be fixed, but the situation remains the same. It is ridiculous. They have radios and can call ahead. It is usually just a few minutes difference. Sometimes my group home staff must prepare and load all the other clients into a van and come and pick me up. Other times I just have to wait. Pleae do the obvious and let the connection be made each day.	2/20/2014 7:54 AM
18	I am totally dependent on the RRTA bus to get me to and from work at Goodwill. MANY times the 3:00 Elizabethtown bus leaves before the Grandview bus gets to the terminal (it is supposed to arrive at the terminal at 3:00), and I have to wait over 2 hours to get the next bus home. This happens a lot on Fridays. My mother and group home supervisor have talked to RRTA management people MANY times about this. Several years ago my mother was assured that when new schedules came out in 2013 the timing of those two buses would be changed, but it wasn't. One bus is scheduled to arrive at 3:00 and the other is to leave at 3:00, leaving no time allowance for lateness of the first bus. I am handicapped and it is very hard for me to wait alone for 2 hours - it gets dark and I get afraid. I have missed some evening activities because of having to take the late bus home. The bathrooms also are not always open in the terminal and I need to go somewhere else while I am waiting. PLEASE help find a solution to this problem. No one can transport me and I rely on the bus to get me to and from work. My mother helped me write this because I am mentally handicapped.	2/19/2014 8:35 PM
19	none at this time!	2/19/2014 5:00 PM
20	I take the Route 11 Ephrata bus. In the morning it is great. You run it more frequently and then it slows down. It passes my office at 4:45 and 6:30pm approximately. I get off work at 5:15. Why not off the bus every hour at the same time 1:30, 2:30, 3:30, 4:30, 5:30 and 6:30pm. No one says you have to go all night but your schedule is really sloppy. I come from Philly and Septa is top notch.	2/19/2014 4:02 PM
21	I have lost out on several job opportunities because of lack of service. 2. Add safe bus shelters. Have upper management ride the bus routes, and wait at stops to get a comprehension of the situation. 3. Add Sunday morning. We are not heathens. 4. Bus drivers by and large are very friendly and helpful. 5. There are whole parts of the county without access- lost out on some job opportunities. 6. Create an out circular line so (like a wheel) that connects the spokes. All routes lead into city. It takes a long time to come in one route to go out another to get where you are going. 7. Keep the bus station open past 6. At least in the winter. As long as buses are running, it should be open 9pm or 10. 11. Extend evening hours. Everything shuts down at 5:20. Makes attending First Friday a challenge!!!!!	2/19/2014 2:39 PM
22	Please try to find ways to better serve commuters. Park-n-Ride services would also be a good option.	2/19/2014 2:36 PM
23	I have 2 soon to be 3 children in McCaskey. We live 2/10's of a mile too close to be eligible for help with transportation. It would be helpful if you had a free bus @ 7:20/30am and 3:20/30pm for students. I buy them monthly passes but they barely use them except for school and its punishing my budget. I should not have to bypass paying a bill to make sure my children get to school or face prosecution because they can't make it school on foot in time	2/19/2014 1:41 PM
24	I discovered that RRTA shuttles leaving Lancaster Train Station tend to head downtown a few minutes before the eastbound train gets in. Please coordinate trolley/shuttle service between the train station and downtown Lancaster with train arrival times.	2/19/2014 1:27 PM
25	Visitors that arrive on Amtrak need more public transit options to access the Amish area, particularly Strasburg. No Sunday service to Intercourse is a problem as well. Perhaps the call-a-ride option could be considered.	2/19/2014 10:46 AM
26	Lack of parking at train sta. in Lancaster is a problem for us...do you have room for a suitcase?	2/19/2014 10:46 AM
27	How about a partnership with Hershey so that all of us in Lancaster county who work in Hershey could have a ride?	2/19/2014 10:21 AM

28	Some of your drivers are not very nice. They cannot be bothered to even just look at you and make eye contact, let alone say hello when you board the bus. Regardless, I always thank the drivers when I get off.	2/19/2014 9:46 AM
29	PLEASE reduce the size of your buses. I have never seen a full bus, and they cannot negotiate most turns in the city without taking up two lanes, and frequently make vehicles parked at stoplights back up in order to make the turn. Wouldn't smaller buses be more economical AND easier to get around Lancaster City?	2/19/2014 9:42 AM
30	I do not drive at night, so I depend on RRTA for transport to and from work during Nov-Jan, when it gets dark by 5:00. I live along the Rte 11 bus line, but there is no service beyond 5:20pm. If I need to work late or have evening activities in the city, I have to make other arrangements or, most often, curtail my activities. There is a new senior living community along this route, and I'm sure many of the residents of that community would appreciate later bus service to and from Lancaster city.	2/19/2014 9:15 AM
31	It would be great to have bus tracking via the web or an app. Especially in the afternoon when buses are running late.	2/19/2014 9:00 AM
32	I have good bus service but you must attract riders who work in center city, Hospital, offices, govt, central market, etc	2/19/2014 8:56 AM
33	none	2/19/2014 8:39 AM
34	The bus drivers for bus park city c 8th ward are always getting out at each station and leaving late	2/19/2014 8:12 AM
35	People should be able to wait in the transit building while buses are operating even at 5 am hard working people like myseld freeze waiting for the bus and shouldn't have to	2/19/2014 7:49 AM
36	Attempt the call a ride and have cars for one person,or a min-van,etc Try it you'll be surprised what will develop,but be sure to advertise it.like on billboards where the amish will see it and horse and buggy Mennonites,etc. have a call number,etc Advertise it on the bus's first and go from there.	2/19/2014 6:07 AM
37	I use RRTA almost every day. I buy a monthly pass each month. I mainly use Rt 17. It is WAY overcrowded! All it takes is one guy in the wheelchair and no seats left! Please add more frequent runs or bigger more comfortable buses!	2/19/2014 5:31 AM
38	In the space where the adds run inside the buses, there is always open space. I think having a few placards in these areas on each bus featuring the works of local poets would provide riders something to improve their riding experience.Mcdonalds adds are fine, but a few lines of poetry can change a person's day.	2/19/2014 4:18 AM
39	I really feel that you have some untapped potential here for some opportunities that would increase the potential ridership. I know personally...anywhere besides park city and walmart(Lincoln hwy) and of course in the city is fairly inconvenient since the last route changes. I really miss the weekend routes on some routes. As a 9-5 type worker, anywhere besides the places previously mentioned are nearly impossible to enjoy due to time constraints of routes. I know this is no Philly and septa, we just don't have that option here, but if we could spread what resources we do have that would be wonderful. I really think that more people would ride if there was more convienience. I'm not so sure that park city needs to run as often as it does during some times of the day. Don't get me wrong! I love rrta. I always rode when I came into the city as a kid and now as a resident, I ride it as well.	2/19/2014 2:51 AM
40	I do enjoy riding Red Rose and you have Good Drivers	2/19/2014 1:35 AM
41	I live in on the edge of Columbia and have never used the bus system here. Mainly due to the confusing fares/schedules and its impossible to return from the city after an evening at a baseball game or seeing a band play. I understand the later times and lack of ridership at those times make it not very cost effective. But possibly having group trips or something similar to areas outside to the city for events like Barnstormers games would work for everyone.	2/19/2014 1:18 AM
42	I recently retired from a professional position. I used the bus twice daily M-F as well as for recreational reasons on the week end. I appreciate receiving text alerts. I would like to know if it's true that the bus lowering mechanism can get stuck in cold weather. I've had drivers say that is the reason they wouldn't lower it for me. It is extremely difficult for me to get onto the bus otherwise.	2/19/2014 12:36 AM
43	There should be more buses running route 14, so people don't have to wait so long for the bus. Also extend the hours on the route 20 bus.	2/19/2014 12:16 AM

44	I am a student at the Pennsylvania College of Art and Design and my roommates and I live on Abbeyville Road. We don't have cars, so we rely heavily on Route 4. It would be incredibly helpful if it could run more frequently to our area. We'll be using this bus for at least the next 2 years. Also, as of 2/17/14, the bus started taking an alternate route and we were not notified of this change and the streets were clean. I signed up to have e-mails and text messages from RRTA and none, not even the website, says anything about the change.	2/19/2014 12:02 AM
45	Would love to see 15/19 have Sunday service..	2/18/2014 11:57 PM
46	Some of the rrta bus drivers are rude, they dont allow people to sit before they drive off	2/18/2014 11:52 PM
47	I would consider busing from Adamstown to my job in Harrisburg. I spend $340 a month on gas and put 30,000 miles a year on my car.	2/18/2014 8:15 PM
48	buses serve the population that cannot afford cars(the physically and mentally handicapped, the amish, the elderly and those who cannot afford a car and the necessities that go along with a car. Those who choose to ride the bus and own a car as well are a small part of the RRTA ridership who choose to use the bus	2/18/2014 7:10 PM
49	I use the hated ride system for Dr spots because I am disabled ad dont have a car. Arranging trips with RRTA is a chore. They are rude to me and refer to me as an Access person because I depend on public umds. I stopped working because the trips were too difficult. I would like to propose the county use WAV taxis. In the future.	2/18/2014 6:00 PM
50	There are many times that the bus is either late or doesn't show up at ALL! There aren't enough times available for Route 4.	2/18/2014 5:07 PM
51	A way to branch out current restrictive stops in rural areas is to implement sidewalks or bike trails that could be used to extend where the bus doesn't serve.	2/18/2014 5:04 PM
52	I wish there were more buses running on each route out of town. I also wish they ran more frequently, later at night, all day in Saturday and Sunday.	2/18/2014 3:52 PM
53	I used the service extensively when I worked in downtown Lancaster to return home to central Manheim. The bus was routinely 20-30 min. late. You will never get faithful ridership with such inconsistent service.	2/18/2014 3:36 PM
54	I paid $90 a week to get a ride from Lanc. to sinking spring due to DUI. Would have rode the bus if there was one. would still do that if they ran that far. If you need to get from rt30 to say rt222-you have to go all the way in to the city then back out-need a way across those routes.	2/18/2014 3:21 PM
55	I wish RRTA would establish a service to Harrisburg every day. Like York's bussing service does.	2/18/2014 3:16 PM
56	I used to use the bus system but now live in a different location and would need to catch the bus at 6:50am to be at work by 8:30am. That timeframe is unacceptable so I choose to drive into the city.	2/18/2014 3:06 PM
57	The hours that I work change from day to day, making any commuter service difficult	2/18/2014 3:05 PM
58	I currently use the Clipper Stadium Park n Ride and it stops running between 9:53 & 2:13. If for some reason you work a half day, you do not have the service. There were several days where my business was delayed a couple hours in the morning and the start of business was after the Trolley stopped running. I had to pay for parking. This is very discouraging.	2/18/2014 3:04 PM
59	I would love to commute to work by bus, but Lancaster county and Pa are behind the times with regional transit.	2/18/2014 3:04 PM
60	Please consider adding daily commuter bus service to Harrisburg.	2/18/2014 3:01 PM
61	Public transport is good there just isn't enough of it and there is also not enough information about specific journeys. How to get from Akron to Park City, what restaurants are on which route. Why not have First Friday extended service, to bring people into the center of Lancaster on that night.	2/18/2014 3:00 PM
62	As said previously I am originally from Phila. though I have always had a car at my disposal it was rare that it was a requirement. I could remember going to parties or after hours establishments where I would be able to get ona bus, trolley, or train at any hour 24/7. I have been in Lancaster county for 20 years, in 1997, I had a medical issue which curtailed my driving ability. Having to deal with the loss of my freedom to having to rely on Public transportation was hard when you have/had to wait for over 1 hr to get the next bus unless it was after the bewitching hour of 6:00 p.m.	2/18/2014 2:57 PM

63	Would like it if there was a way to use red rose transit for personal service for a fee. I know it is used for the elderly, but if people without access to a car had the opportunity to use it for a sum of money, similar to a taxi, that would be very helpful.	2/18/2014 2:57 PM
64	none	2/18/2014 2:56 PM
65	If you expect people to use the bus, you need to provide more decent bus stops and shelters. It is inconvenient, dangerous and undignified to have to wait at some of the sub-standard bus stops.	2/18/2014 2:53 PM
66	There is a very big interest for riders / passengers in lancaster county who are civil service worker for a bus to harrisburg.	2/18/2014 2:53 PM
67	i believe that it should be looked at that people take these buses to work and rely on them and that they should do a better job of being on time	2/18/2014 2:48 PM
68	Household income should have no bearing on this survey!!	2/18/2014 2:45 PM
69	I've ridden the bus off & on for over 20 years! & apprecipate the opportunity to use this service! Thank you !	2/18/2014 2:45 PM
70	Public Transportation providers should be focusing on elevating the experience of ridership from the concept of basic transportation to a more comprehensive transportation experience where a riders experience is prefrable to riding in a personal vehicle. I have also found that the many people who do not ride public transportation are often surprised at the convenience and comfort afforded in public transportation. Promotions to get first time riders onto the bus or train will pay dividends if implemented properly.	2/18/2014 2:42 PM
71	I do not like to drive and use alternate transportation when possible	2/18/2014 2:42 PM
72	I commute from Lancaster to Harrisburg. RRTA provides no service for me to use. Amtrak is the next option, but they do not arrive in Harrisburg early enough for my shift.	2/18/2014 2:42 PM
73	i use amtrak to travel to my job from lancaster to harrisburg. I have discovered that public transportation is a great thing. I would like to see RRTA gain more ridership.	2/18/2014 2:39 PM
74	Enter the 21st Century... Get off the ground with a non-polluting monorail service that will both serve the transportation needs of our community and also provide a tourist attraction in its own right.	2/18/2014 10:34 AM
75	Please have the drivers try to have more patience because not all of them do and be more courteous towards their customers. Not all are like that but majority rule and it shows but its a good service but there definitely can use some improvement in some areas but other than that oh maybe you could even have on day out of the week where u let customers ride for free or on their birthday just afk for I.D for that I don't know but good luck with your changed due to come	2/17/2014 1:12 PM
76	My job is to help people get jobs. one of the biggest obstacles to getting a job is transportation. Often, people have to turn down jobs because of lack of transportation, either on a weekend or because they are working 2nd or 3rd shift.	2/17/2014 8:49 AM
77	Better connections w AMTRAK...and promote them. Good number if us commute and there is limited trolley service to downtown.	2/17/2014 7:18 AM
78	The bus left early last week, which caused me to lose a ride. (snowy) wish I could have know earlier.	2/16/2014 3:07 PM
79	Keith who drives the number 19 bus first thing in the morning is rude disrespectful and is late all the time making me late for work. I don't understand how the first bus of the day is always late....also Doug who also drives the number 19 bus in the middle of the day is the worst!!! He has the worst attitude of all! whenever he has to stop and pick someone up he curses up a storm....people like me who spend about $150 a month riding the bus shouldn't have to listen to that stuff.	2/16/2014 12:49 PM

80	I'm a critical person. I'm sorry. I'm also committed to public transportation, less because I'm a do-gooder than because it works for me. I like not paying gas and maintenance on a car, or worrying about parking. I like being able to read on my way to work. I like that having to bike home forces me to exercise. I've lived mostly in small towns where everything is bikable/walkable or in larger cities (the smallest being Pittsburgh) where public transit is good enough to get me around. The combination that makes Lancaster possible for me is bicycle, RRTA, Amtrak/Beiber bus and Enterprise Rent-a-car (with their pick-up service). On the balance I'd say that Lancaster is doing a really admirable job for a city its size, and that extends to transit. At the same time, I feel like RRTA is right on the edge of being functional for me. I keep waiting for someone to make an announcement that service is being cut because no one uses it (when I'm pretty convinced that it's a long, hard road, but staying the course and even strategically increasing service, even if running on a deficit, is the only way to inspire increased ridership). (That, and I suspect that as time goes on it will become more and more expensive and annoying to maintain cars, even in a city the size of Lancaster.)	2/16/2014 12:32 PM
81	I appreciate RRTA and the service you do provide through bus service as well as door-to-door service for the disabled. I only hope theses services can continue and that bus service can expand. Thank you!	2/15/2014 10:36 PM
82	Certain buses should have a few more runs to allow people who work better scheduling and to be able to get home	2/15/2014 3:00 AM
83	I would like to ride the bus more but some routes are not run often enough. For example I would like to take the bus to Giant at Jackson Square and to West end Lowes from near my home on W Chestnut but it doesn't run often enough during the day	2/14/2014 2:11 PM
84	To many buses route to Park City. If I take 6th Ward bus that routes to Park City, It takes over an hour to make a trip I could walk in 20 minutes.	2/14/2014 12:17 PM
85	I know that many within Lancaster rely on buses for their main source of transportation. It's important.	2/14/2014 12:15 PM
86	There are lots of new efforts to encourage cycling in Lancaster City/County. RRTA should incorporate those intiatives into their planning to encourage people to use combined public transportation/ cycling to reach destinations.	2/14/2014 11:55 AM
87	I value RRTA and use it to get back-forth to work most days. I wish the schedules could be more realistic even though it says times are only an estimate. For example, there is no way the #17 bus is on time so why not change the schedule to make it reflect reality? This is not a complaint, but sometimes it is difficult to judge the timing especially when waiting at the bus stop in extremely cold weather. I do want to say that all RRTA drivers are very safety-conscious which means there must be a solid safety training program. My employer (County of Lancaster) subsidizes the cost of the monthly pass which makes it cheaper than paying for a monthly parking space in the Prince St Garage. I love not having to fight traffic or worry about weather conditions. Again, I love your professional drivers!	2/14/2014 11:03 AM
88	We are in the process of moving to the area and are looking forward to the convenience of using RRT for trips to shopping areas around Intercourse, Lancaster and Park City (from White Horse).	2/14/2014 11:01 AM
89	I beleive that coordinationg schedules and routes for connecting service with CAT would be helpful so that employees who work at Harrisburg International Ariport have bus transporation as an option. Today, using buses to get to and from the airport is not an option.	2/14/2014 9:28 AM
90	My main route is the 20. You no longer offer Saturday service at all. This makes it very difficult for those of us who work at either of the two hotels or several restaurants to get back and forth to work on weekends. At least you used to offer one morning and one afternoon departure on Saturdays and then that was cut. It makes it hard especially for us older citizens who do not drive.	2/14/2014 9:08 AM
91	There needs to be a earlier 6th ward run prior to 6:30am....due to the fact that the new holland run frequently runs late and .makes difficult to make transfer connection	2/14/2014 5:04 AM
92	I would be happy to help RRTA with setting up better smartphone access. You can contact me at wintermix@me.com	2/14/2014 12:20 AM
93	The 17 Columbia bus needs later runs on Saturday AND Sunday. 5:20pm is NOT late enough for a route as BUSY and FULL as Columbia. I end up taking a taxi home from work at $18 one-way, it is too much! I ride 6 days a week. PLEASE look at later runs on the weekend for Columbia 17. Thank You!	2/13/2014 11:28 PM

94	The Elizabethtown bus needs more service. There are many of us that work in Mount Joy and Elizabethtown and very few runs. For example, the last two buses of the day are more than 2 HOURS apart. The last bus is always at least 20-45 minutes late, causing many of us to miss transferring to other buses. There also needs to be more trips to Columbia later in the day. There should be 2 buses running that route up until the end of the day.	2/13/2014 5:52 PM
95	if buses on busy two lane roads found better spaces to pull off travel lane, would help public anger of buses delaying traffic	2/13/2014 3:45 PM
96	Good luck with continued efforts to attract new ridership!!	2/13/2014 2:01 PM
97	PLEASE RUN AT LEAST ONE MORNING SUNDAY ROUTE ON THE COLUMBIA RT. !!!!!!	2/13/2014 1:44 PM
98	10 years ago, the buses ran on time (except for the occasional accident, etc). No one is going to give up their vehicle if they must wait 20 minutes or longer for the bus. Listen to the riders, we see what the bus drivers are doing, when they are supposed to be driving	2/13/2014 1:29 PM
99	I rode the bus from Manheim to Lancaster for my first job out of college and I would love to be able to ride the bus to work, but my work is way off the bus routes. However, I have two teenage kids who want to have part-times jobs, but I am unable financially to provide them with a car. So they are kind of stuck. There aren't many jobs in Marietta and our bus only goes to Columbia. The jobs they have found are in E-town, Mt. Joy or Centerville and there is no bus service from Marietta to those places even though they are close. Please at least link Marietta with Mt. Joy, so people can at least move through their school district. We don't go to Columbia for anything and that's our only option. Thinking from a business perspective (and I know you are a Lancaster busing service) a bus to Hershey, at least in the summer months, would be a HUGE success. Just a thought.	2/13/2014 11:22 AM
100	Should get out of parking business and use those funds for better more fuel efficient buses; electric, natural gas, etc.	2/13/2014 11:21 AM
101	I will not buy another car in the future, and I will use the bus more frequently for shopping and Dr visits etc. My pet peeve is not having shelters for bus riders	2/13/2014 9:43 AM
102	simply put service could be better. many drivers are just surly for one thing. I also ride rabbittransit and redrose could learn a few things for sure. the drivers are friendly and happy to be there and their buses make change cards for future use instead of just keeping the change and telling the rider ha ha you overpay we reap the benefits. other than that longer availability for some routes and/or sunday service would add to the big picture as well. some shopping centers are unavailable to riders fairly early in the day because the routes near them shutdown earlier than the stores by several hour. at the very least an addition of a single evening run on these routes could allow more people access to and from jobs.	2/13/2014 8:03 AM
103	I work in the city and live just outside of it. I am really interested in riding, but with limited schedules and limited stops it is easier and much faster for me just to walk or run in.	2/13/2014 8:00 AM
104	I live in Rheems and a park and ride location close to the intersection at Cloverleaf Rd and S Market Street (between Mount Joy and Elizabethtown) would. I live about half a mile from the bus line, and the distance is not bad but there are no sidewalks and that is a tough intersection to cross on foot. I am immensely grateful for the services though; I would have no way to get to work or get around without them.	2/13/2014 7:44 AM
105	I live in York County and work in Lancaster, I take the Lititz bus.	2/13/2014 7:32 AM
106	I feel later service hours and more weekend hours would better serve the work force	2/13/2014 7:06 AM
107	I used to take public transportation when I lived in a larger city. Lancaster is not like a big city, so you have to look at how similar cities attract riders.	2/13/2014 6:37 AM
108	I hope there are other outreach activities beyond this survey instrument to genuinely engage the public. The usefulness of this type of survey instrument for service planning is marginal	2/13/2014 6:34 AM
109	Red Rose Access is unreliable but the service is critical for the health of the elderly and disabled. The buses do not stay on schedule.	2/13/2014 6:24 AM
110	Later route times would be nice. I use the 17 to get back and forth to work. It is not very convenient on the weekends.	2/13/2014 5:43 AM
111	I support transit and have been a transportation consultant in a former job, so it's sad when my wife refuses to ride the bus because of the rudeness of the bus drivers. RRTA must be a miserable place to work because your drivers are rude and hate the public.	2/13/2014 4:12 AM

112	The bus is a positive asset to our communities. Keep it coming.	2/13/2014 12:31 AM
113	Just that u guys will pro longer the busses to work a lil more late n that we will have buss 19 working more	2/13/2014 12:23 AM
114	The bus drivers need to be more courteous. I've had a few they've been rude to me.	2/12/2014 11:17 PM
115	My staff uses the bus but they have a long walk from Bridgeport Weis area up to Dart Container. In ice it is not safe so an occasional run up Pitney rd with stops at Dart Container/Hacc and then Costco/Lowes on to Greenfield would have to serve a lot of people. Personally I would use a shuttle service in the evening to go to restaurants from Hamilton Park to downtown if it was safe, clean and reliable.	2/12/2014 10:46 PM
116	Please add longer hours and Sunday service to Ephrata & Lititz bus. Thank you	2/12/2014 10:13 PM
117	Would love to see all day, 10 day and monthly base ride passes for sale at Park City and Amtrak.	2/12/2014 9:31 PM
118	Smaller buses might be more economical. Those huge buses seem to only have 3-4 people in them at any time during the trip.	2/12/2014 8:54 PM
119	Better access for those in wheelchairs. I've seen stops not clear to them & drivers unable to lower ramp for them to get on.	2/12/2014 8:01 PM
120	Set pickups with big apartment buildings.....like the old doneckers building....if you get in with the older people who cant drive or wont use are set as long as use stop at multiple locations	2/12/2014 7:27 PM
121	Please develop an iOS app that can be used to track buses in real time. There is nothing worse than waiting outside in the cold or rain (or both) for a bus that you already missed (because it was early) or is running excessively late, and you have no idea which side of the problem you are on.	2/12/2014 7:15 PM
122	service from amtrak downtown and to york would be welcome	2/12/2014 7:15 PM
123	Great website; good service at Queen St station	2/12/2014 6:33 PM
124	I have been a customer for over a year and have seen some rude bus drivers treating customers as if they were a nuisance and annoyed with questions they were asked. I've seen driver deliberately drive past people waiting at the bus stop waving them down to stop. I think that is rude and inconsiderate. Alot of people depend on the bus to get to work and many if my fellow riders have been having to call into work late because a driver drove past them at a stop even when they were waived down to show the person needed picked up. I hope this problem can be resolved.	2/12/2014 5:56 PM
125	Please consult the riders before you change any of the routes.	2/12/2014 4:24 PM
126	i am very interested in improving ridership of our mass transit system in Lancaster county. i hope my answer to the ethnicity question was read & acknowledged - i only checked boxes there and income in order to be able to have my other answers counted. those questions should be voluntary and i find them to be inappropriate and . . . stereotyping.	2/12/2014 4:07 PM
127	hope that you leave the buses the way they are because i need the bus to get to work and home thank you	2/12/2014 2:52 PM
128	Overall RRTA is great. The drivers are generally polite and drive safely. The biggest problem are the frequent delays. I usually have to take an earlier bus to the transit center and wait almost an hour for my transfer because the later bus is so inconsistent I never know if I will make my transfer or not. If these delays could be reduced, it would make the service much more reliable.	2/12/2014 2:19 PM
129	Continue to hammer state and county leaders to allocate more money for transit. Instead of "improving" intersections, use the money for transit!	2/12/2014 1:57 PM
130	I think the public transit is essential. I think that Lancaster has the potential to be a model for public transit in small cities. I absolutely hate driving- that is one of the reasons I live in the city. It'd be so great if I could take a faster tram from one side of the city to the other. I live and work near Lime & King, but go to the YMCA and frequent the Northwest End. On crappy days, I'd love to get from work to Lemon Street Market or to Giant on a faster tram or a more convenient (faster, easier to pay, "cooler") bus. If the buses ran late at night, I'd be able to go from an event/restaurant across town to home with no fear!	2/12/2014 12:42 PM
131	Lancaster is a fantastic city and deserves to have a clean, convenient, and widely used public transit system. I think it's great you're conducting this survey, so keep up the great work!	2/12/2014 12:34 PM

132	The buses now leak rain water on the riders, the windows do not shut or can not be opened, the cold air leaks in around the back doors, there is always trash laying around, the out dated signs are always falling off the ceiling holders.	2/12/2014 12:28 PM
133	I'm really glad to have this service available. I take the shared ride part because of visual problems and the only problem I notice is that a good amount of the time my ride is late picking me up to go home and .or has so many people to get that it's late when t get home. I fimd myself in the bus for over an hour.	2/12/2014 12:21 PM
134	Please feel free to contact me via matthoward1982@yahoo.com	2/12/2014 12:13 PM
135	Thanks for doing a survey to get community input!	2/12/2014 12:12 PM
136	The main reason I don't use the bus more is that it's always late and I need to keep to a schedule.	2/12/2014 11:18 AM
137	The bus drivers should be trained and understand the booklet that is give to your customers. some of the driver should be more courteous to the bus riders.	2/12/2014 10:59 AM
138	THERE IS ONE MAJOR DISAPPOINTMENT THAT I SHOULD ADDRESS - MAINTENANCE OF THE VEHICLES. WINDOWS ON MANY NEED REPAIRED OR REPLACED AS THEY DO NOT CLOSE PROPERLY, OR IF THEY ARE CLOSED, THEY ARE UNABLE TO OPEN AT ALL! THE INTERIOR ROOF AREA ALONG THE ROOF LIGHTS ON ONE OR TWO VEHICLES LEAK WHEN IT RAINS OR IF SNOW MELTS FROM TOP OF THE BUS. IN ADDITION, OVER THE YEARS IT HAS BEEN REPORTED THAT THE KNEELER DOES NOT WORK PROPERLY AND THE BUS HAS LEFT PASSENGERS STRANDED AT DIFFERENT LOCATIONS A FEW TIMES. DON'T GIVE ME THE EXCUSE THAT IT'S BECAUSE OF THE EXTREMELY COLD TEMPS, AS THIS HAS OCCURRED IN THE WARMER WEATHER MONTHS AS WELL. A FEW VEHICLES DO NOT HAVE HEAT IN WINTER WHEN NEEDED AS WELL AS AIR CONDITIONING IN THE SUMMER - THIS IS A HEALTH HAZZARD TO YOUR PASSENGERS, ESPECIALLY THE ELDERLY OR INDIVIDUALS WITH MEDICAL CONDITIONS. WHAT WOULD HAPPEN TO RRTA IF THE PUC INVESTIGATORS WOULD PRESENT THEMSELVES FOR A SURPRISE VISIT IF NOTIFIED OF THESE ISSUES? BUT THE BIGGEST DISAPPOINTMENT IS YOUR LACK OF PROVIDING SERVICE TO THOSE INDIVIDUALS WHO ARE LEFT WAITING ENDLESSLLY IN FRIGED TEMPERATURES/ WEATHER CONDITIONS WHEN THEIR NORMAL BUS IS LATE, EXTREMELY LATE THAT IS. WHEN CALLS ARE MADE TO CHECK ON ARRIVAL TIME, WE ARE TOLD A FEW MINUTES, OR 20 MINUTES WHICH IN THE PAST HAS ENDED UP BEING AN HOUR LATE OR LONGER, NOT MINUTES AS PASSENGERS WERE INFORMED. THE LYING IS NOT VERY MUCH APPRECIATED, AND THOSE OF YOU WHO ARE SITTING ON YOUR BUTTS IN A NICE COZY WARM ENVIRONMENT JUST DON'T GIVE A DAMN ABOUT THOSE OF US WAITING FOR A BUS THAT SHOULD HAVE BEEN ON TIME - FOR EXAMPLE 5:20 P.M. LEAVING THE STATION. BEING PREPARED FOR ISSUES SUCH AS THE ABOVE SHOULD BE A PRIORITY AND ANOTHER BUS SHOULD IMMEDIATELY BE PROVIDED FOR YOUR PASSENGERS. NEED I SAY MORE? I COULD, BUT WHAT GOOD WOULD IT DO? LYING DOESN'T COST YOU MONEY, AS YOUR FULLY ARE AWARE THE PASSENGERS MUST PAY THE FARE IF THE BUS PICKS THEM UP ON TIME OR NOT! SHAPE UP PEOPLE; IT'S TIME FOR A WAKE UP CALL!	2/12/2014 10:50 AM
139	I would like a fix wheel trolley to service neighborhoods in the city.	2/12/2014 10:48 AM
140	let us know at the bus station if our bus is going to be late at 5;20PM.	2/12/2014 10:31 AM
141	Have the managers ride under cover on the buses to see themselves what happens on the routes and to listen to the passengers to see what is wrong.	2/12/2014 10:28 AM
142	If you want to invite more riders, you have to make bus riding more attactive. The buses have been OVERSIZED for the past 40 years. They can't navigate safely and efficiently in older towns..	2/12/2014 7:00 AM
143	The bus route that I depend on for my ride home is Route No. 4. There are always other people on the 5:20 p.m. bus leaving from W. Orange and N. Market Streets, although the numbers are small. Would it be more energy efficient for RRTA to use vans the size of Red Rose Access vehicles for the runs that are essential for riders but rarely carrying more than 12 people?	2/11/2014 5:05 PM
144	Need an express service in some areas	2/11/2014 4:45 PM

APPENDIX C: Onboard Survey

RRTA
RED ROSE TRANSIT AUTHORITY
RED ROSE TRANSIT • RED ROSE TROLLEY • RED ROSE ACCESS

Onboard Survey 2013

Dear Rider:

Please take a few minutes to complete this survey during your bus ride today. Your answers will be used to help us improve services.

Thank you!
-Red Rose Transit Authority Survey Team

All the survey questions are about this ONE-WAY trip you are making now!

1. Where did you come from before you got on this bus? ***(check only one)***

☐ Home ☐ Visiting Friend/Relative ☐ Recreation
☐ Work ☐ Shopping/Errands ☐ Personal Business
☐ School/College ☐ Medical Appointment *(doctor/dentist/therapist)*
☐ Other *(please specify)* _____

2. What is the nearest intersection to that place?
(Street/Cross Street, for example: 6th and Maple)

3. How did you get to the bus stop? ***(check only one)***

☐ Walk ☐ Ride with someone
☐ Drove myself ☐ Bicycle ☐ Train
☐ Transfer from another bus *(specify route)* _____
☐ Other *(please specify)* _____

4. Where was that bus stop located?
(Street/Cross Street, for example: 6th and Maple)

_____

5. Where are you going on this trip? ***(check only one)***

☐ Home ☐ Work ☐ Shopping/Errands
☐ Recreation ☐ Visiting Friend/Relative ☐ Personal Business
☐ School/College ☐ Medical Appointment (*doctor, dentist, therapist)*
☐ Other *(please specify)* _____

6. What is the nearest intersection to that place?
(Street/Cross Street, for example: 6th and Maple)

_____

7. Where will you get off the bus?
(Street/Cross Street, for example: 6th and Maple)

_____

8. How will you get from the bus stop to your destination?
(check all that apply)

☐ Walk ☐ Ride with someone
☐ Drove myself ☐ Bicycle ☐ Train
☐ Transfer from another bus *(specify route)* _____
☐ Other *(please specify)* _____

9. Did you have a car available to make this trip?

☐ Yes ☐ No

10. Have you filled out this survey earlier today?

☐ Yes ☐ No

If YES, please stop here, if NO, please continue and complete survey.

11. What is the primary language spoken in your home?

☐ English ☐ Spanish ☐ Other _____

12. Do you have a valid driver's license?

☐ Yes ☐ No

13. What is your gender?

☐ Female ☐ Male

14. What is your age?

☐ Under 19 ☐ 20 to 40 ☐ 41 to 60 ☐ 61+

15. What is your ethnicity?

☐ American Indian / Alaskan Native ☐ Asian
☐ Black / African American ☐ Hispanic / Latino
☐ White
☐ Other *(please specify)* _____

16. What is your total annual (per year) household income ***(from all members)?***

☐ Under $10,000 ☐ $10,000 to $19,000
☐ $20,000 to $29,000 ☐ $30,000 to $44,999
☐ More than $45,000

17. On average how many days per week do you use the bus?

☐ 1 day ☐ 2 days ☐ 3 days ☐ 4 days
☐ 5 or more ☐ Other _____

18. Compared to last year, are you riding

☐ More ☐ Less ☐ About the same

19. What would be the best source of information about RRTA?

☐ RRTA website ☐ Text / Twitter / Facebook
☐ Radio / TV ☐ Drivers
☐ Call RRTA ☐ Schedules / Brochures
☐ Friends / Relatives ☐ Other _____

20. How do you rate your current RRTA bus services?

	Excellent	Very Good	Good	Fair	Poor
On-time Performance	☐	☐	☐	☐	☐
Driver Courtesy	☐	☐	☐	☐	☐
Cleanliness	☐	☐	☐	☐	☐
Safety	☐	☐	☐	☐	☐
Condition of Buses	☐	☐	☐	☐	☐
Value Received for Fare	☐	☐	☐	☐	☐
RideGuide / Website	☐	☐	☐	☐	☐
Overall Service Quality	☐	☐	☐	☐	☐

21. What is the single most important improvement you would suggest for RRTA service?

_____

_____

THANK YOU!

RRTA
RED ROSE TRANSIT AUTHORITY
RED ROSE TRANSIT • RED ROSE TROLLEY • RED ROSE ACCESS

Encuesta a Bordo 2013

Estimados pasajeros:

Por favor, tome unos minutos de su tiempo para completar esta encuesta durante su viaje en el autobús en el día de hoy. Sus respuestas se utilizarán para mejorar los servicios.

¡Gracias!
-Red Rose Transit Authority Survey Team

Todas las preguntas de este cuestionario son acerca del viaje que está haciendo ahora.

1. ¿De dónde usted vino antes de abordar el autobús? ***(Marque solamente una respuesta)***

☐ De la Casa ☐ De visitar un amigo/familiar ☐ De paseo
☐ Del trabajo ☐ De compras/Diligencias ☐ De un asunto personal
☐ De la Escuela/Universidad ☐ De una cita médica *(doctor/dentista/terapista)*
☐ Otro *(por favor sea específico)* _____

2. ¿Cuál es la intersección más cercana al lugar que marco en la pregunta No. uno? ***(Calle/avenida, por ejemplo: Seis y Maple)***

3. ¿Como usted llego a la parada del autobús? ***(Marque solamente una respuesta)***

☐ Caminando ☐ Alguien me trajo
☐ Manejando ☐ Bicicleta ☐ Tren
☐ Transferido de otro autobús *(especifique la ruta)* _____
☐ Otro *(por favor sea específico)* _____

4. ¿Dónde está localizada la parada del autobús? ***(Calle/avenida, por ejemplo: Seis y Maple)***

_____

5. ¿Hacia dónde se dirige en este viaje? ***(Marque solamente una respuesta)***

☐ A mi casa ☐ Al trabajo ☐ De compras/ Diligencias
☐ De paseo ☐ A visitar un amigo/familiar ☐ A un asunto personal
☐ A la escuela/universidad ☐ A una cita médica *(doctor/dentista/terapista)*
☐ Otro *(por favor sea específico)* _____

6. ¿Cuál es la intercesión más cercana al lugar que marco en la pregunta No. cinco? ***(Calle/avenida, por ejemplo: Seis y Maple)***

_____

7. ¿Dónde piensa bajarse del autobús? ***(Calle/avenida, por ejemplo: Seis y Maple)***

_____

8. ¿Cómo llegará de la parada de autobús a su destino final? ***(Marque solamente una respuesta)***

☐ Caminando ☐ Alguien me va a recoger
☐ Manejando ☐ En bicicleta ☐ En tren
☐ Transfiriéndome a otro autobús *(especifique la ruta)* _____
☐ Otro *(por favor sea específico)* _____

9. ¿Usted tiene un vehiculo disponible para continuar su viaje?

☐ Si ☐ No

10. ¿Ha llenado esta encuesta anteriormente en el día de hoy?

☐ Si ☐ No

Si su respuesta es SI, por favor, pare de llenar la encuesta. Si su repuesta es NO, por favor continúe con la encuesta.

11. ¿Cuál es el idioma principal que se habla en su hogar?

☐ Ingles ☐ Espanol ☐ Otro _____

12. ¿Usted tiene una licencia de conducir válida?

☐ Si ☐ No

13. ¿Cuál es su género?

☐ Femenino ☐ Masculino

14. ¿Cuál es su edad?

☐ Menos de 19 años ☐ 20 a 40 años ☐ 41 a 60 año ☐ más de 61 años

15. ¿Cuál es su etnicidad?

☐ Indio Americano/Nativo de Alaska ☐ Asiático
☐ Raza Negra/Afro Americano ☐ Hispano/Latino
☐ Raza Blanca/Anglosajón
☐ Otro *(por favor sea específico)* _____

16. ¿Cuál es el salario anual (por año) en su hogar ***(incluyendo todos los miembros)*****?**

☐ Menos de $10,000 ☐ 10,000 a $19,999
☐ $20,000 to $29,000 ☐ $30,000 to $44,999
☐ Más de $45,000

17. ¿Aproximadamente cuantas veces en <u>la semana</u> usted viaja en el autobús?

☐ 1 día ☐ 2 días ☐ 3 dias ☐ 4 dias
☐ 5 días o más ☐ Otro _____

18. ¿Comparado al año pasado, ¿Cómo está viajando?

☐ Mas ☐ Menos ☐ Lo mismo

19. ¿Cuál sería la mejor fuente para obtener información sobre el servicio de transporte RRTA?

☐ Página de Web RRTA ☐ Texto/Twitter/Facebook
☐ Radio / TV ☐ Drivers
☐ Llamando por teléfono a la RRTA ☐ Horarios/Folletos
☐ Amistades/Familiares ☐ Otro _____

20. ¿Como usted califica los servicios actuales de transporte de RRTA?

	Excelente	Muy Bueno	Bueno	Regular	Pobre
Rendimiento a tiempo	☐	☐	☐	☐	☐
Cortesía del conductor	☐	☐	☐	☐	☐
Limpieza	☐	☐	☐	☐	☐
Seguridad	☐	☐	☐	☐	☐
Condición del Autobús	☐	☐	☐	☐	☐
Valor recibido por el viaje	☐	☐	☐	☐	☐
Panfletos de la ruta/ Página electrónica	☐	☐	☐	☐	☐
Calidad del servicio completo	☐	☐	☐	☐	☐

21. ¿Cuál es la mejora más importante que sugeriría para los servicios de RRTA?

_____

_____

GRACIAS!

CDM Smith

cdmsmith.com