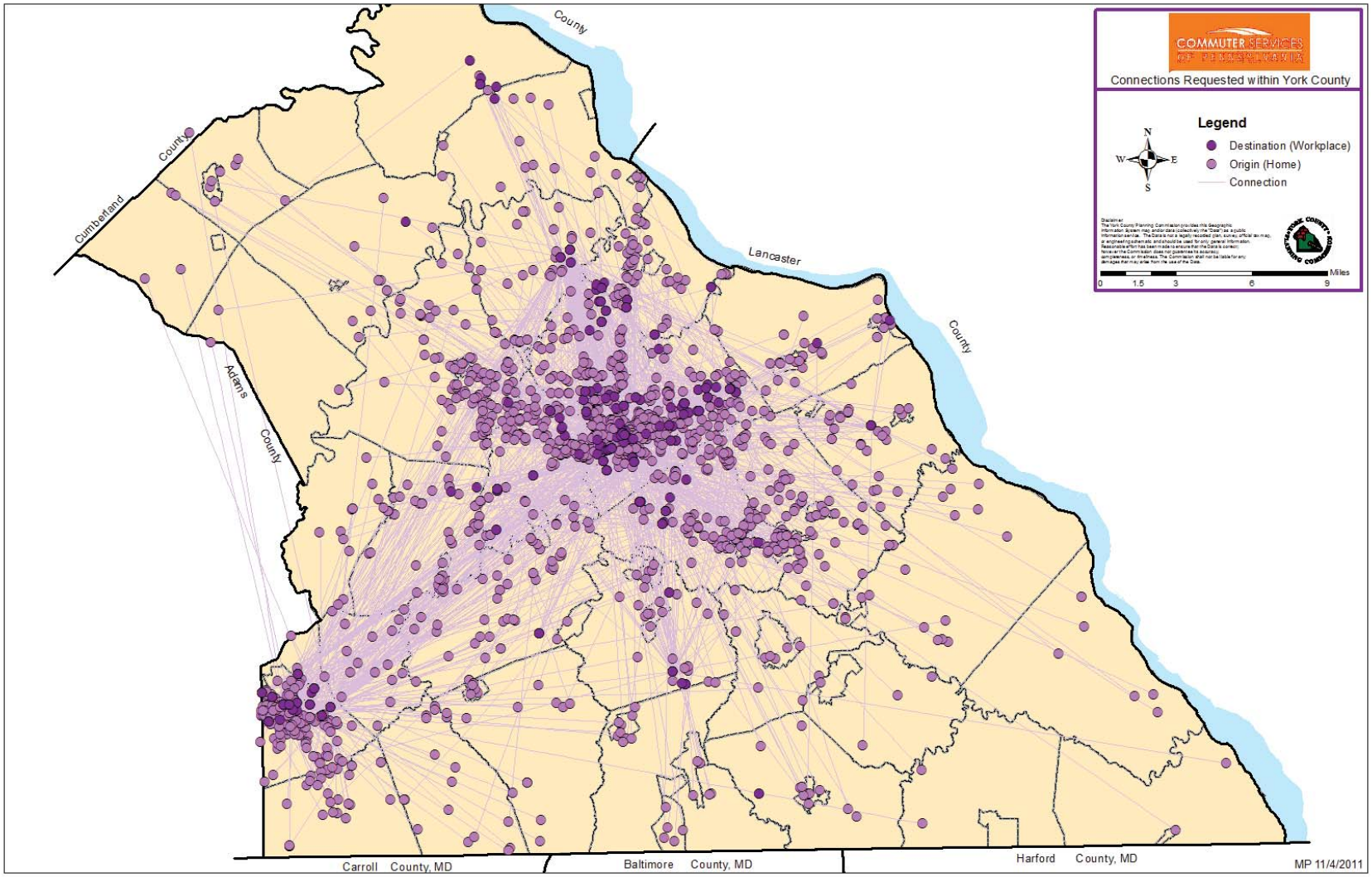
Map 3-1 Connections Requested within York County



rabbittransit Fixed Route Study

As part of the Plan, the *rabbittransit* Fixed Route Study was completed in November 2011. The study is a survey conducted among non-transit riders who live within the fixed route service area. A random sample of 501 residents in the municipalities and census tracts with fixed routes were surveyed by telephone, resulting in margin of error of +/- 4.4% at the 95% confidence level. A similar but not identical survey was conducted in 2003 and where possible, survey results can be compared.

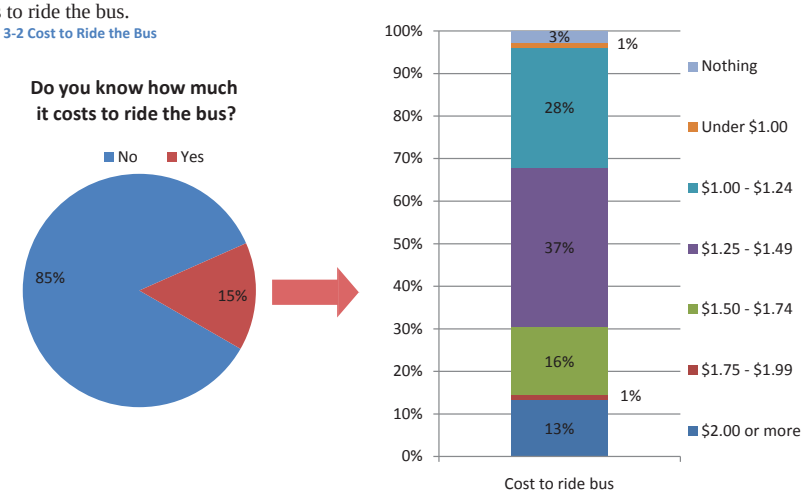
The Plan looks at five of the seven topics of investigation:

- Awareness of public transportation in the county
- Awareness of *rabbittransit*
- Means of awareness
- Reasons do not ride *rabbittransit*
- Factors that would encourage ridership

York County residents who have access to fixed route services but do not use it are aware that *rabbittransit* provides public transportation in York County. When asked if they were aware of public transportation services in their area, 90.6% of these respondents said that they were, and 81.5% of these respondents specifically named *rabbittransit*. The level of awareness has increased from 2003's 59.9%. The percentage of these respondents specifically naming *rabbittransit* in 2003 was about the same at 79.3%. The response "Saw buses" as the means of their awareness was also about the same in 2011 (77.6%) and 2003 (77.8%).

Only 75 of the 501 respondents said that they knew the cost to ride the bus. The figures below, Figure 3-2 Cost to Ride the Bus, shows this breakdown along with the amount that the 75 respondents thought that it costs to ride the bus.

Figure 3-2 Cost to Ride the Bus



The next sections of the survey investigate the why not of why the respondents do not ride the bus and the various factors that might influence them to try to bus.

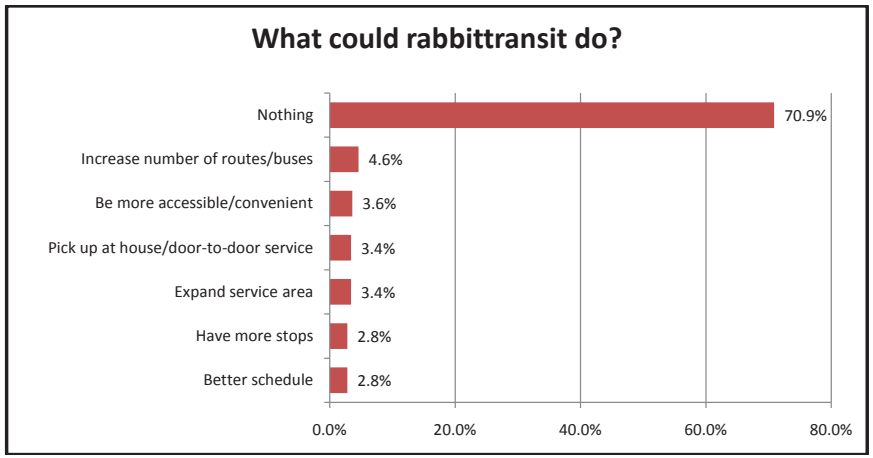
When the respondents were asked why they did not ride the bus, most (82.4%) said that they prefer to drive a car. Others (15.4%) claimed inconvenience as their reason, and 9.0% reported that they did not want to wait for the bus. Those respondents who claimed inconvenience were asked what made it inconvenient. The most common answers were:

- Does not go to needed location (25.3%)
- Bus stop not convenient/too far away (20.3%)
- Does not fit my schedule (15.2%)
- Takes too long (10.1%)
- Have to wait (8.9%)
- Would not work with job (7.6%)
- Too old/disabled (5.1%)

Interestingly, 43.3% of the respondents did not know where the closest bus stop is to their home. Of the 56.7% who did know where the closest bus stop was, over half of them reported it to be within a five minute walk from their house.

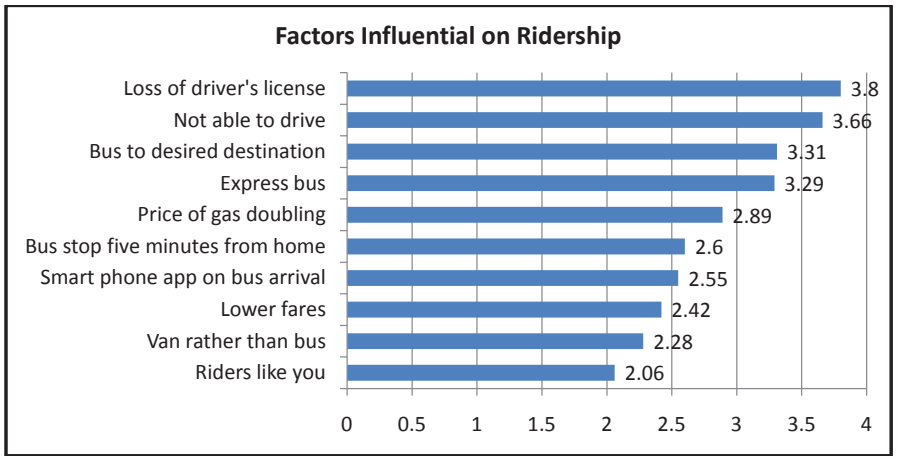
With the above information, the question of "What could *rabbittransit* do to increasing their likelihood of riding the bus?" was put to the respondents. Figure 3-3 below shows that 70.9% of them said that there was nothing that *rabbittransit* could do.

Figure 3-3 What could *rabbittransit* do?



Finally, the respondents were to rate a series of factors on the amount of influence that each factor would have in encouraging them to ride the bus. The rating scale was 1 = no influence to 5 = great influence. As shown below in Figure 3-4 Factors Influential on Ridership, loss of driver's license and not able to drive were the two top factors that would influence the respondents to ride the bus. This is not surprising from a group that overwhelmingly prefers to drive their car. The three factors with the least amount of influence for this group were, in order, lower fares, van rather than bus, and riders like you.

Figure 3-4 Factors Influential on Ridership



Suitability Analysis

For this section of the chapter, refer to the map on the next page, Map 3-2 Unmet Need Suitability Analysis. The Suitability Analysis map uses several factors to portray areas in York County that would attract transit riders, as well as point to areas with proposed residential development that indicate existing and potential transit demand.
The total of both the number of attractions and the amount of proposed residential development in an area, which is referred to here as "suitability", is shown by the varying shades from tan or F (least suitable for transit service) to dark brown or A (most suitable for transit service).

The map also shows the network of major roadways in York County. The roads reflect the degree of suitability in the area surrounding the road through a color scale with red or F being the least suitable and green or A being the most suitable. The fixed route service area is also shown on the map. The roads are not shown in those areas.

Suitability Factors

On the Suitability Analysis map, the factors used in determining the suitability are shown in the three small maps on the right side. These factors are:

- Retail Centers of over 40,000 square feet
- Health Services facilities
- Employers with over 100 employees
- Employers with over 250 employees
- Recently proposed (2007-2010) Subdivisions with 5 or more proposed dwelling units per acre
- Recently proposed (2007-20100 Subdivisions with more than 25 proposed dwelling units

The locations of these factors are shown on these three small maps. Each of these factors was overlaid on the map and the number of these locations in any certain area is indicated by the tan-to-brown color scale.

It is easy to see that *rabbittransit*'s fixed route service area covers the vast majority of the darkest brown or A-rated areas and much of the area that is one shade lighter or B-rated areas. Thus, as this map points out the areas in York County that are most suitable for transit service and *rabbittransit*'s fixed route service covers a great portion of this suitable area, *rabbittransit* serves York County very well in those areas most suited to transit service.

Transit Demand

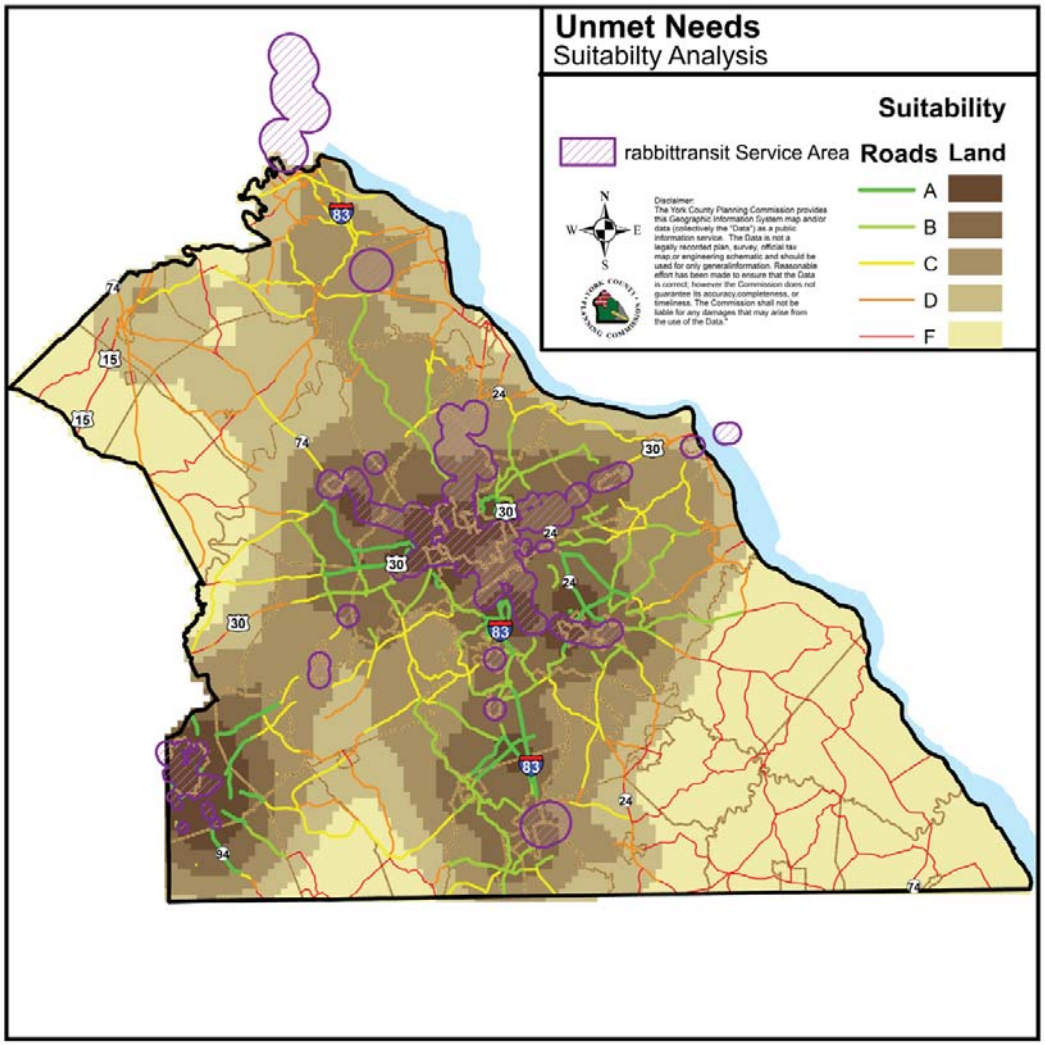
There are several small areas where the roads and the land indicate transit suitability shown on the map. These areas should be noted and monitored for future development. There is an area, however, that clearly points to existing suitability along a corridor – where both the road and the land are A-rated. This area follows SR 24 from East York south to Red Lion and connects the Core Route 1B (new) and the Radial Route 15. This corridor will be examined further in Chapter 4 Route Modifications.

Summary

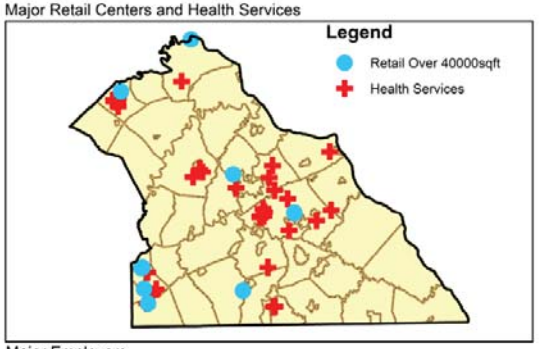
Through the various sections in this chapter, the Plan shows that *rabbittransit* fixed route service is available to over half of York County's population and significant numbers of target populations. Many of the commuters looking for transportation alternatives to driving along could and perhaps have transit options. Of the non-transit riders living within the fixed route service area, there is nothing *rabbittransit* could do to encourage them to ride transit and short of not being able to drive, they are not likely to do so. And lastly, fixed route service is available in those areas shown by a variety of factors to be most suitable for transit service. There are no areas of high transit suitability where transit service is not available on some scale.

Given existing resources, *rabbittransit* is meeting the highest transit demands of York County.

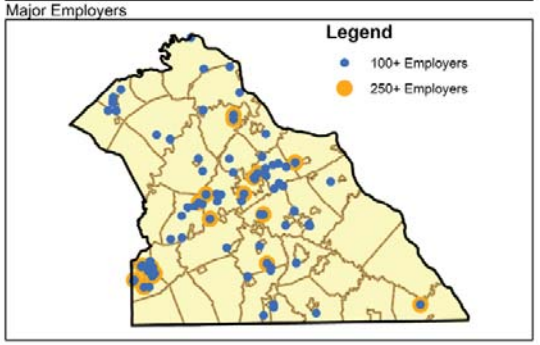
Map 3-2 Unmet Needs Suitability Analysis



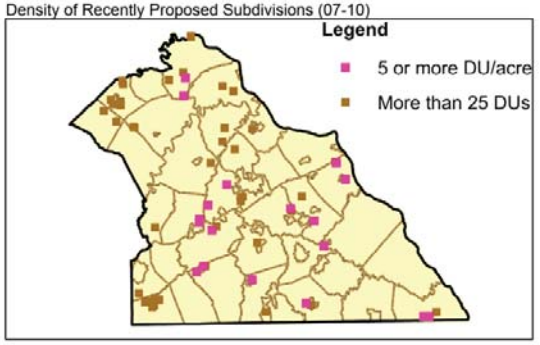
Major Retail Centers and Health Services



Major Employers



Density of Recently Proposed Subdivisions (07-10)



Chapter 4 - Route Modifications

Using the data from the individual route evaluations and input from the surveys, focus groups and observations, opportunities exist to improve the effectiveness of individual routes which would impact the entire *rabbittransit* system. There are also opportunities to reallocate existing resources toward the same end. In this chapter, these opportunities will be presented along with alternatives for their implementation. The majority of modifications suggested are for the fixed routes and these mainly for the Other Core and Radial Routes; however, there are a few paratransit-focused modifications. Additionally, there are varied opportunities that are not route-specific, and these are discussed later in Chapter 5 Other Recommendations.

Given the current economy and probable future funding scenarios, it would be negligent to introduce the topic of route modifications without any financial considerations. While it would be nice to be able to plan for new routes and increased frequency of existing routes, an expansion scenario would be just a dream with no basis in today's reality. A best case scenario would be that current funding levels remain the same, allowing system efficiencies and reallocation of resources to make a way for better transit service. A worst case scenario would be that funding levels are reduced by 50% or more, forcing extreme service cuts so that only the Route 1 and a skeleton of Other Core routes remain intact with virtually no weekend service. Tomorrow's reality most likely falls somewhere in between.

Route Structure

During the development of the Plan, there was a good deal of discussion on the topic of optimal route structure. In general, the *rabbittransit* system is hub-oriented. The vast majority of riders start their trip, ends their trip, or passes through the Transfer Center during their trip. From the data in Chapter 2, the Transfer Center is the number one bus stop in the system. The buses converge and depart the Transfer Center at pulse times, allowing for riders to make connections to other routes. There are Radial Routes that connect to Core routes at outlying locations: Route 12, Route 13, and Route 14. The individual routes are circular in shape, generally speaking. Is this the best structure? Would linear routes be better? Should all the Radial routes connect at a point outside the Transfer Center? Should all the Radial routes come to the Transfer Center? Would Route 1's arrival at the Transfer Center before or after the pulse time make connections more efficient? These are all very good questions. The optimal route structure for *rabbittransit* that best serves York County is a combination of linear and circular routes.

Given development patterns in York County, a completely linear route structure along a main road would leave a large number of significant employment and retail centers unserved by transit and would require riders to walk considerable distances to reach their destination or, more likely, find transportation alternatives, reducing ridership. The turnaround point for linear routes can also be problematic. Linear routing, however, is often efficient time-wise and can therefore, have fast route times and high frequency.

A completely circular route structure, which is close to the current one, is more able to reach those significant locations not located along a main road but in doing so, have longer route times and probably less frequency. Circular routes also do not have turnaround points. They can, however, be inefficient if their routes travel through areas with little or no transit-interest. Over time, circular routes tend to stray off track from the original route when attempts are made to accommodate those "close by" through route deviations. These deviations add more time to these routes and are often only run at certain times of day, creating confusing scheduling. All of these factors may lead to reduced ridership on these routes.

Schedule Adherence

Being on time is a key part of any successful transit system. For *rabbittransit*, a bus not running on time is the major complaint of both fixed route and paratransit riders. Prior to having the AVL system, there was no way for *rabbittransit* to actually measure and know if the buses were running on time. The AVL data provides the opportunity to not only track time-related performance, but also to benchmark and improve it.

After the initial difficulties with the route times, schedule and timepoint locations were identified and adjusted, there was significant improvement in performance, especially on specific routes. But these were just the initial issues. Problems still exist in that the schedule times and the actual drive time required to move from one point to another do not match for all stops on all routes. Accurate route schedules are imperative for measuring and improving on-time performance. Once the schedules are in place, on-time performance reporting should be included in a regular performance evaluation to allow for timely recognition of outstanding performance and investigation of poor performance. As this performance measurement tool develops, benchmarks for individual routes and individual operators should be developed.

Frequency

Another item high on the rider request list is more service on existing routes. Having to wait 30 minutes, 60 minutes, or more, has as much influence on ridership decisions as on-time performance. In Table 2-5 Route Skeleton Characteristics, only six routes run on a half-hour frequency, compared to 14 hourly routes and ten routes that are varied or more than hourly. (These numbers count the 1B and 1C as the new 1B at a half-hour frequency.)

For the Core routes, half of them (six) have a half-hour headway, just under half (five) have an hour headway, and one is varied. Especially during the peak hours, both AM and PM, it advisable to have consistent frequency within the service type group.

For the Radial routes, various factors come into play and the schedules can be confusing. Route 12 and Route 14 have an hourly frequency, but Route 12 does not run during mid-day. Deviations run Route 13, producing a variety of route times. The distance covered by Route 15 dictates a 90-minute frequency. Route 16 runs four times a day and Route 17 runs three times. With this minimal number of runs, there is no frequency to speak of.

Fixed Route Modifications

In this section, individual route modifications will be presented, along with implementation alternatives and resource reallocation options.

Route 1

The Route 1A is the top performing route in the *rabbittransit* system. If anything, the mid-day service could be increased to a half-hour frequency. However when the new Memorial Hospital is built near the West Manchester Mall, this route will have to be reconfigured, and the increased frequency may be necessary at that time.

The *new* 1B has not been in service long enough at this point to have the data to suggest improvements. This route should be monitored using the study performance measures during the next year.

Route 2, Route 3, and Route 6

Because these routes are interconnected in both the north and south, they need to be discussed together.

Overall, the 2A, 3A, and 6A perform well. Focus group input suggested that the HACC campus bus stop in the evening should be moved to the 3A. This move would make the 2A route consistent throughout the operating day and give the route a few more minutes on its run. The 2A offers an important connection to Route 14 to Manchester and has poor on-time performance. Also, both the 2A and the 6A could be reconfigured to more linear routes with the 2A traveling north from the Transfer Center on George Street and straight back and the 6A traveling Beaver/Pershing.

The 2B, 3B and 6B are the worst performers in the Core service type group. All three routes primarily serve the York Hospital with the 2B and 3B stopping there at the same time. The ridership on these routes individually is low, and on the western part of 3B is almost nonexistent. This segment of the 3B should be eliminated. These three routes need to be reconfigured. The York Hospital is best served by keeping the half-hour frequency, either by one direct route straight south from the Transfer Center on George Street or by alternating routes that also serve other points in the area. Edgar Square is another important service point in this area, along with the Penn State York campus that is not currently served. Map 4-1 offers four alternative routes for this area, offering both looping and linear route options.

Route 4

Route 4A is a "good but not great" performer. While this route could be slightly altered to straighten the route when Memorial Hospital relocates, this route will lose a large part of its ridership and will have to be reconfigured.

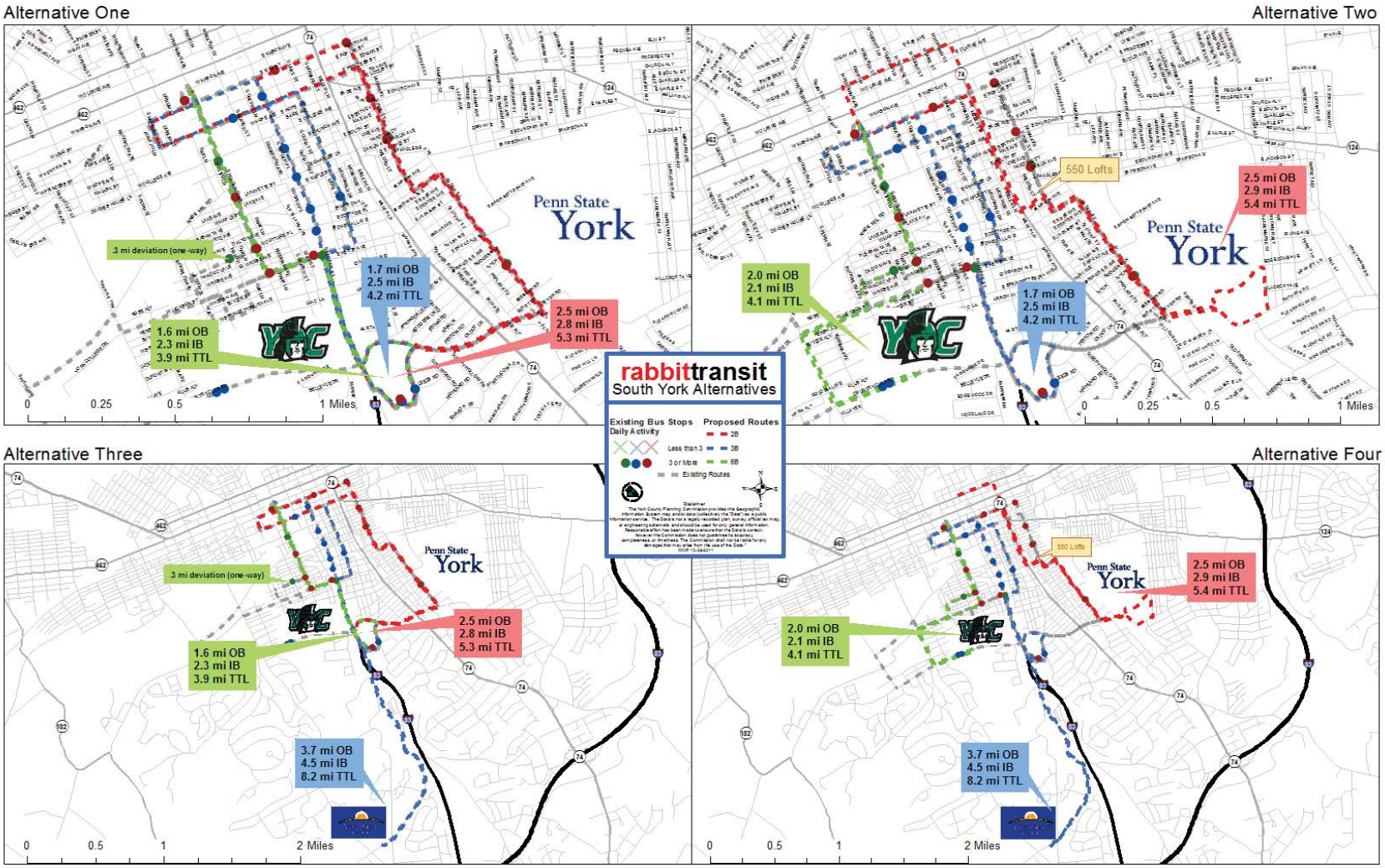
The Route 4B is also a solid performer. Orthopaedic and Spine Specialists, the number one most requested location for additional service, lies to the southeast of the end of this route. In order to add service to this location, either the 4B or the 15 would need to be reconfigured, or both routes reconfigured and coordinated. Several alternatives for this reconfiguration are proposed under Route 15 later in this section.

Route 5

The 5A is the best performer of this service type group and it works.

The 5B is a "good but not great" performer with a lot of extra time in the middle of the route and challenges turning around. While there are many attractors in East York that are nearby and would be good service additions, this route runs through the worst area of congestion in York County. The travel time needed to add additional stops to this route exceeds the time available to this route. In addition, there are several major road construction projects scheduled for the next few years along the eastern segment of this route: I-83 Exit 18 Reconfiguration; East Prospect Road Widening; and the Longstown Intersection (SR0124 and SR0024) Improvement. While these improvement projects will likely add significant delay to the route in the near future, the projected congestion relief will make peak time travel through this area faster. When the road improvement projects are completed, this route should be examined for reconfiguration.

Map 4-1 Alternatives for South York



Route 12 and Route 13

While Route 12 and Route 13 travel in different directions, they are very similar. Both the Route 12 to Columbia and Route 13 to Dover connect to one of the Route 1's at an outlying point: the 12 at the York Mall and the 13 at the West Manchester Mall. As the on-time performance data indicates, these connections are problematic as they are often late leaving these points. Also, over time both routes have been modified to accommodate various service requests, rendering them ineffective as a commuter option during peak times. The riders from these "route deviations," however, are the majority of the current ridership for both of these routes. They each could be made more efficient by changing the deviations to a paratransit "feeder" route, using a paratransit vehicle to collect the riders along the deviation portions of the current route to connect with the fixed route vehicle at a bus stop location.

Both routes also have a mid-day gap in service. The potential ridership for this time of day is unclear; however, requests for additional afternoon service frequently appear in fixed route rider surveys.

Route 14

As mentioned in the Route Evaluation section of Chapter 2, all three Route 14's are confusing. These routes began as a commuter route to the industrial parks in Emigsville and were adjusted over time to accommodate various service requests. Like Route 12 and Route 13, Route 14 does not travel to the Transfer but meets Route 2A at Manchester Crossing in north York. There are a significant number of commuter transfers between Route 14 and Route 2 to and from the Transfer Center.

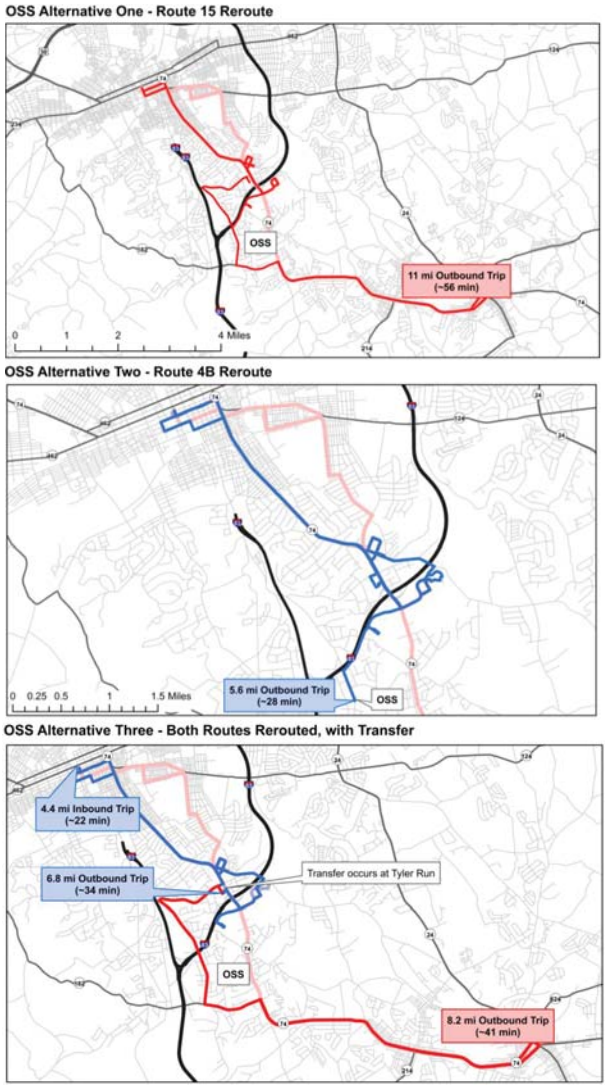
Despite the current economic downturn, Commuter Services of Pennsylvania confirms that there are a number of new commercial locations in the industrial parks in the Route 14 service area. The companies in this area also run on a variety of traditional and non-traditional shift times. Even with the limited amount of information available, the reconfiguration of Route 14 has the most potential of any option currently available for *rabbittransit* for increasing ridership. In order to provide reconfiguration alternatives, however, more information about potential service points and critical times in the Emigsville/Manchester area is needed. The recommendation for Route 14 is that an independent study be conducted in coordination with Commuter Services of Pennsylvania to measure the demand for transit in this service area, and the best ways to meet that demand.

Route 15

The 15 is the best performer of all the Radial routes. However, as mentioned in the Route 4B section, this route could be modified to provide service to OSS on Powder Mill Road. Currently, both routes originate at the Transfer Center, and there is an overlap in service to the Queensgate and South York Plaza shopping centers on South Queen Street. Several alternatives have been developed and are shown on Map 4-2.

An alternate Route 15 routing could be to cross over South Queen Street when leaving the South York Plaza onto St. Charles Way to Powder Mill Road to Leader Heights Road then back to Route 74 to continue south to Red Lion and the same in reverse for the inbound trip. An alternate Route 4B routing could be to continue on Springwood Road when leaving Queensgate to the South York Plaza, cross over South Queen Street onto St. Charles Way to Powder Mill Road. On the inbound trip, the 4B could leave OSS on Powder Mill Road back to St. Charles Way, then go north on South Queen Street to the South York Value Center, then back to the Transfer Center. A third option could be to modify the 4B as above, but stopping at St. Charles Way, while modifying the 15 as above, but ending the route at the South York Value Center to connect to the 4B, instead of continuing all the way to the Transfer Center.

Map 4-2 Alternatives for Reaching OSS



Route 16

Overall, Route 16 does not perform very well. As mentioned in the route evaluation in Chapter 2, the first and last runs were cut from this route in 2004 and this impacted the route's ridership. The best improvement for the 16 would be to reinstate these runs.

Route 17

Route 17 has the worst performance in the *rabbittransit* system and should be eliminated. The savings realized in not running to Shrewsbury could be better utilized elsewhere in the system; however, with only three runs per day, the savings would be minimal.

The Hanover Routes

From a transit perspective, there are several factors that have recently impacted the Hanover area, the most important of which is the merger forming the York Adams Transportation Authority. Independent of this event, the Plan would include route modification recommendations to add stops at two new retail centers and to find a vendor in Hanover for *rabbittransit* passes. However, the merger presents a unique opportunity take a look at the Hanover community area as a whole. The Hanover community area includes McSherrystown in Adams County. The transit demand for the entire area should be investigated and new routes planned to provide the best transit service options possible. This effort would require an independent study.

The Express Routes

Route 83 or the *rabbitt*EXPRESS to Harrisburg is one of *rabbittransit*'s best performers.

Route 85 or the *rabbitt*EXPRESS to Maryland is a work in progress. Not enough time has passed since re-orienting the destination to Towson, instead of the Hunt Valley/Timonium area, to understand fully the results of that decision. However, should separate funding for commuter express service not be available in the future, this route should be at the top of the list for elimination consideration due to its high cost. The substantial savings realized could be utilized elsewhere in the system.

Paratransit Modifications

As stated in Chapter 2, the fluctuating nature of the demand-responsive paratransit service makes the entire issue of system efficiencies a difficult one. Certainly, any efficiencies lie in the planning and scheduling of individual paratransit trips that vary from day to day.

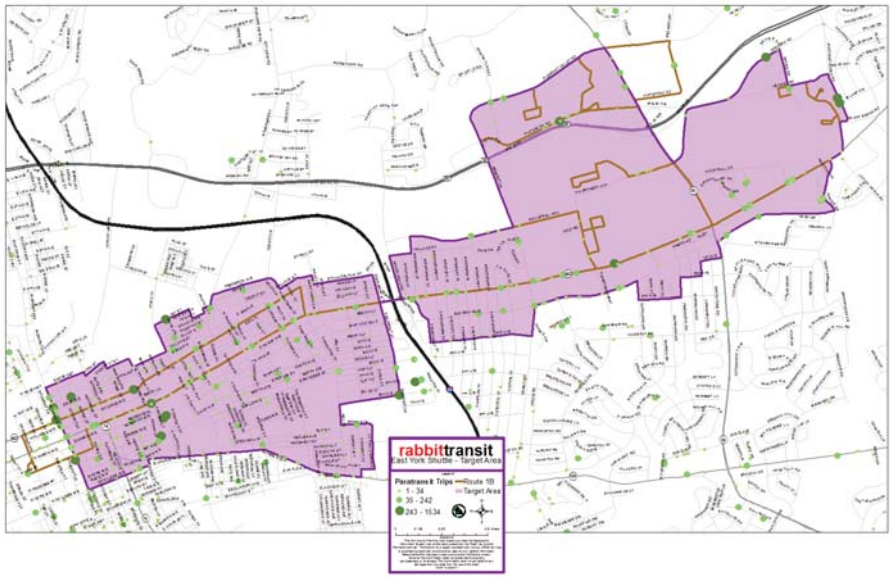
In the development of the Plan, research into paratransit practices across the nation uncovered a few options such as paratransit auxiliary service that supports the fixed route system and paratransit feeder systems that collect and deliver paratransit riders to and from specific fixed routes. These paratransit support systems operate mainly in areas with concentrated populations of paratransit riders or large urban areas. York County simply does not have the population or concentrated locations of paratransit riders to make these options viable.

East York Shuttle

However, after reviewing the evaluation data from Chapter 2 and considering how to apply the paratransit support system idea in York County, the following recommendation can be made. Map 2-10 on Page 50 shows 1,868 paratransit trips that occurred during the study period in the shadow of the 1B/C. The large majority of these trips of these paratransit trips are to and from area retail centers. *rabbittransit* could offer a paratransit vehicle scheduled two or three times each week to service this area. When paratransit riders call to schedule a trip with its origin and destination within this area, customer service could offer this paratransit "shuttle" service. In being able to schedule several riders per trip in a specific area and realize cost efficiencies from avoiding having several vehicles with fewer riders in the same area, *rabbittransit* could offer this shuttle at a reduced fare. The potential service area for this "East York Shuttle" is shown on Map 4-3 East York Paratransit Shuttle. With a dedicated paratransit vehicle and a regular schedule, paratransit riders would be able to arrange their schedules to take advantage of the reduced fare shuttle while still getting paratransit services.

The shadow of the 1B/C has the largest number of paratransit trips of all the fixed route shadow areas and thus, the most likely to be successful. With the successful implementation of this service, other fixed route shadow areas, such as the 2B/3B/6B shadow, the 4A shadow and the 4B shadow, should be evaluated for similar shuttle service.

Map 4-3 East York Paratransit Shuttle



Shrewsbury Circulator

The elimination of Route 17 would leave the southern part of York County with no fixed route transit service. In examining the development in the New Freedom-Shrewsbury-Stewartstown area, specifically retail centers, medical facilities, and senior facilities, the opportunity exists for paratransit shuttle service similar to the East York shuttle. Map 4-4 shows the locations of potential paratransit trip locations in these areas and outlines route alternatives. *rabbittransit* could work with community leaders to develop target service areas, measure demand and optimal schedule times. Again, more efficient scheduling would lead to a reduced fare for the paratransit rider.

Map 4-4 Alternatives for Shrewsbury Circulator

Reallocation of Existing Resources

So far, the Plan recommendations have been aimed at improving poorly performing exiting routes and reconfiguring groups of routes to provide better service and attract potential riders. While increasing the performance and efficiency of these routes should result in savings throughout the system, the amount of these savings is unclear.

The only route recommended for elimination with current funding is Route 17, but as stated earlier, with only three runs per day, the savings would be minimal. There are several viable options for using these savings throughout the *rabbittransit* system
:

- Return the first and last run service to Route 16
- Increase the frequency of the Other Core routes so that all Core routes operate at the same half-hour frequency
- Add mid-day service to Route 12 and/or Route 13

Additional Service

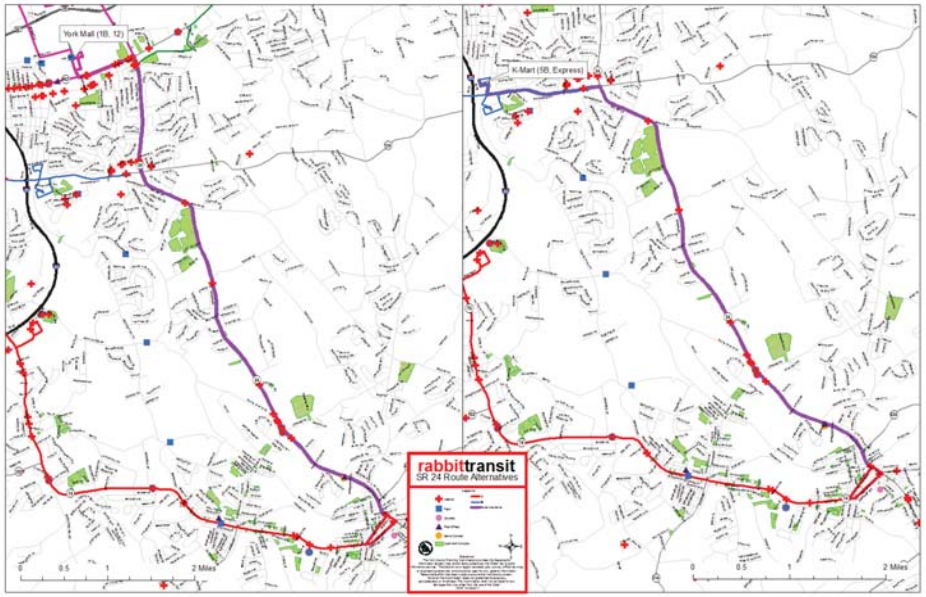
While the current environment does not suggest that an increase in transit funding is likely to happen any time soon, it is important to consider system expansion to be ready for any opportunity that should arise.

Cape Horn Road

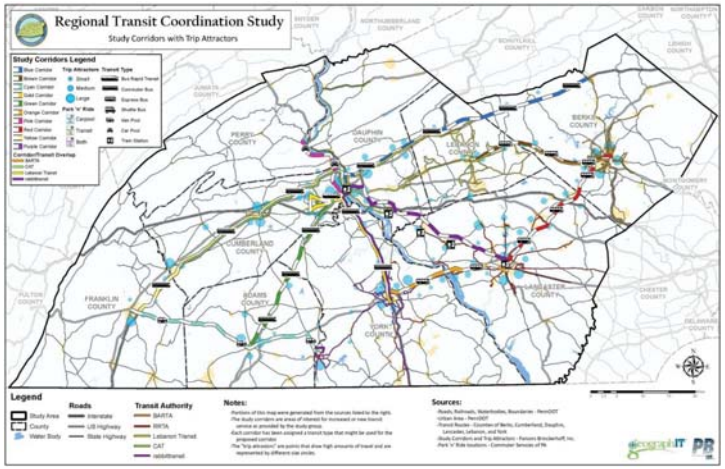
The examination of unmet needs in Chapter 3 shows that *rabbittransit* is doing a great job meeting the transit needs of York County with its current route system. However, identifying the locations of major York County employers, large retail centers, health services locations, and proposed residential development points to the East York area and south along the Cape Horn Road (SR 24) corridor as an area with many attractors for transit service. Currently, the East York area is served by the new 1B and the 5B, which both run east-west.

Route 15 collects much of its ridership from the southern end of the East York area (Dallastown and Red Lion) and takes them to York City on South Queen Street (SR 74). Approximately 6% of Route 15's passengers then transfers to Route 1 and 2% to Route 5. Currently, there is no north-south transit service in this area. Transit demand in this area is confirmed in the Fixed Route Rider survey; service along Cape Horn Road is among the top three requests for additional service. Map 4-5 shows two alternatives for such a route. The maps also show facility locations and high-density residential areas along the route. Both options originate in Red Lion and travel outbound north on Cape Horn Road (SR 24). The destination for Alternative One is the York Mall where it would connect with the new 1B and Route 12. The destination for Alternative Two is Kmart where it would connect with the 5B and the *rabbitt*EXPRESS to Harrisburg

Map 4-5 Cape Horn Road Alternatives



Commuter Express Service



The Regional Transit Coordination Study looks at current inter-county commuter patterns throughout nine counties in south central Pennsylvania. Coordinated through the Board of Directors of Commuter Services, the study was completed in September 2011 and identified ten target corridors in the nine-county area where coordinated efforts beyond traditional transit agency boundaries could offer transit service as a viable commuter option. The *rabbitt*EXPRESS to Harrisburg route was mentioned in the study as a successful example of this type of service. The *rabbitt*EXPRESS to Maryland however was not included because its destination is outside of Pennsylvania.

Of the ten target corridors named in the study, four of them would serve the York-Adams Transportation Authority area's out-of-county bound commuters. The newest *rabbitt*EXPRESS route, the 15N, which travels from Gettysburg to Harrisburg on Route 15, is listed in the study as the Green route. The other three target routes are listed below:

- The Orange Route would provide commuter express service between York and Lancaster traveling along Route 30
- The Gold Route would connect York with Cumberland County and would follow the existing *rabbittransit* Route 83 along I-83 but would be destined for points on the West Shore
- The Cyan Route would travel part of the way on Route 30 to the west of York, providing commuter express service between Gettysburg and York, through Hanover

In addition to naming these target corridors, the study advocates for transportation funding legislation that provides separate transit funding for these commuter service routes. Should additional demonstration funding be available or the separate commuter service funding be realized, *rabbittransit* should continue to be ready to seize the opportunity.

Chapter 5 – Other Recommendations

In this final chapter of the Plan, recommendations outside of route modifications will be presented. These recommendations stem from a variety of sources, observations, comments, and suggestions collected during the development of the Plan, and all are aimed at the Plan's goal. Some of these recommendations are easily and immediately actionable, while others are challenging, long-term policy-oriented tasks. The last section of this chapter will present suggestions in data collection, performance measures, and possible directions for investigation for future *rabbittransit* transit development plans.

Route Names

During the initial data collection efforts and dashboard map development, the A and B directional designations were very confusing for the YCPC staff members, as it must be for new transit riders. A more common designation of N for north, S for south, E for east, W for west would be more easily understood and give the new transit rider instant information. The 1A would be the 1W; it goes west. The 1B would be the 1E; it goes east. The 2A would be the 2N; it goes north. And so on.

Street Trees

A list of overgrown street trees was compiled during the operator focus group meetings. These trees cause delays when branches get stuck in the doors. Operators must pull up to a bus stop away from the curb to avoid overhanging branches, making the boarding passengers have to steps down onto the street before stepping up onto the bus. This boarding can be problematic for parents with small children and strollers and passengers with walkers, canes or general mobility issues. While it seems a small thing, these trees can cause accumulated delay in passenger boarding.

With this list of trees and locations, the YCPC staff will send out letters to the managers of the appropriate municipalities. This issue presents an opportunity for *rabbittransit* and transit-served municipalities to work together to improve service for transit-riding residents.

Fares and Fare Collection

As mentioned in the Observations section of Chapter 2, the collection of the $1.40 adult cash fare is problematic and causes a significant amount of delay in passenger boarding. This observation was confirmed during the operator focus group meetings. The operators made numerous suggestions to solve this problem. Among the popular suggestions were the use of fare tokens or having an exact change only policy. There was general consensus that raising the fare to $1.50 for Zone 1 and $2.00 for Zone 2 would greatly help in speeding up the boarding process just in the combination of paper money and coin that would be used to pay the fare. On routes with a large percentage of cash-paying passengers, the impact would be immediate. While being sensitive to the income level of many transit riders, a fare increase is certainly a weighty decision. However, the increased efficiency and time savings is worth the consideration. Discounted fares available with multi-trip passes could remain at current levels, incentivizing riders to purchase passes to avoid the fare increase. Riders paying fares with passes take less time to pay their fares than do cash-paying riders.

The student discounted fare was also a frequent topic of discussion for the focus groups. Operators are required to discern whether a boarding passenger is indeed a student or at least of eligible age. Apparently, there is a considerable amount of attempted fraud, and operators must decide whether or not to allow a boarding passenger to ride at the discounted fare or not. A popular suggestion is to have the discounted fare available with the purchase of a student pass. Otherwise, the riders would pay the full cash fare. The student discount pass should be a different color from other passes. Photo ID bus passes for other discount types were also a popular suggestion. While a discounted student pass would not eliminate all of the attempts to ride at a cheaper fare, there was general agreement that it would help.

Wheelchairs

There is no data to support the notion that the number of wheelchair riders on fixed routes is increasing; however, as the number of wheelchairs in the general population is increasing, this is a reasonable assumption. Wheelchair-bound passengers are problematic for fixed routes because of the time required to get them on the bus and secure them. Transit operators receive training in the proper procedures for doing this. However, many operators noted that in addition to their increasing number, the makes and models of wheelchair equipment can be challenging to load and secure on the buses. Periodic training reviews with a variety of types of wheelchairs, especially the large scooter types, would be welcome by a large number of operators. A peer group best-practices discussion session would also be helpful.

AVL System Training and Updates

Rabbittransit has now been using the AVL interface system for more than a year. The implementation of this system was a drastic change for most of the operators. Having mastered the basics of the system, the majority of operators voiced a desire for refresher training and even advanced training on the system. There is some confusion concerning the communication process for accessing dispatch in a timely manner, specifically in a potential emergency. Refresher training on this process would be beneficial.

Bus Stop/Walk Network

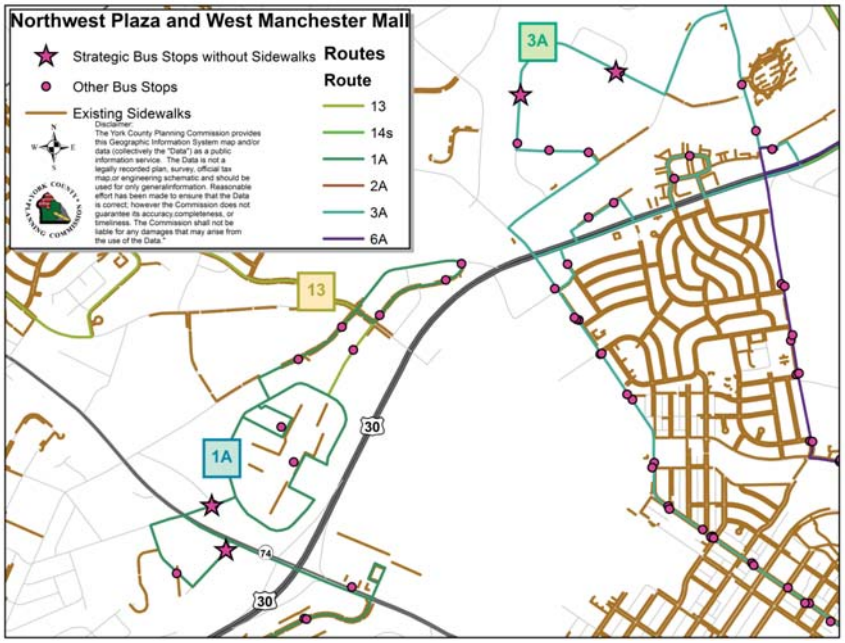
The *rabbittransit* fixed route system has an incredible number of bus stop locations indicated along the roadways with small logo signs. From the dashboard maps, the study period data shows that there are bus stop locations that are rarely, if ever, used. The small logo signs project a very low and often unnoticeable street presence. Some 43% of the Fixed Route Study survey respondents - all of whom live within the fixed route service area – did not know where the closest bus stop is to their home.

During the Plan development, development team members were presented with a series of maps showing the range of passenger boarding and alighting activity during the study period from those bus stops with no boarding or alighting activity during the study period to those bus stops with high amount of activity. It was recommended that *rabbittransit* consider the bus stop network more strategically, eliminating those stops with no and very little activity and consolidating those stops with mid-range levels of activity that are located within two blocks of each other.

Along with a more strategic bus stop network, the logo signs should be replaced with larger signs that provide route name and destination information for more significant presence on the street level. Larger signs are within the zoning ordinances of the municipalities along the Core routes and would not require any special permission. Bus shelter placement is also recommended, again in strategic locations. Where

possible, bus shelters could have display boards to alert riders of the projected bus arrival time at the bus stop.
Hand-in-hand with an increased street presence with larger informational signs and more bus shelters, the walk network to and from the bus stops should be considered. Map 5-1 shows a section of the fixed route system. The bus stop locations are indicated on the map, along with the areas with and without sidewalks.

Map 5-1 Sidewalks vs. No Sidewalks at Bus Stop Locations



Through the Transportation Enhancement program or Community Development/Block Grant programs and in coordination with local municipalities, independent projects to install sidewalks for safer pedestrian access to bus stop locations might be funded.

Land Use Planning and Policies

Transit demand and land use planning was a topic of discussion during the Plan development both among the YCPC staff members and with the *rabbittransit* development team. Most often the topic stemmed from fixed route service requests and paratransit trips to medical facilities located just off the beaten path that strain the resources of *rabbittransit.* Transit-oriented development considerations for both fixed route and paratransit service are often not a factor for private sector developers or municipal staff and officials.

Raising their awareness for transit considerations is probably going to be a long and arduous task; however, there are planning areas where this is possible:

- Municipal Comprehensive Plan
  - Future Land Use
  - Transportation Element

- Subdivision and Land Development Ordinance
  - Traffic Impact Study Requirements
  - Sidewalk Requirements
  - General Site Design Requirements

PennDOT Construction Project Opportunities

rabbittransit has a great reputation for forward thinking and the ability to seize non-traditional opportunities. One such opportunity that remains unexplored for transit agencies throughout Pennsylvania is in construction travel demand management. There is a role for both *rabbittransit* and Commuter Services together to play in planning for and executing the maintenance and protection of traffic are during PennDOT construction projects. New riders could be attracted to try transit as an alternative to enduring long delays through construction areas and be introduced to the Emergency Ride Home program available through Commuter Services.

Considerations for Future Transit Development Plans

This Plan set out to examine the efficiency of resource allocation within the *rabbittransit* system, make recommendations for improvement, and provide sufficient data and analysis for *rabbittransit* to make the best decisions possible in a variety of future funding scenarios. While future transit development plans may set their focus in any number of directions, it is critical that appropriate, specific data be available. Below is a list of topics and data that will be important to future efforts.

- Evaluation and expansion of performance measures
  - Individual route average speed data
  - Actual individual route expense data
  - Individual route crash data by crash type
  - Bus capacity or ridership levels between stops
- Inclusion of funding formulas in order to measure impacts of various recommendation scenarios
- Fixed route wheelchair passenger ridership data by individual route, day, and time of day
- Evaluation and expansion of suitability analysis factors

Transit Development Plan
Appendices

Appendix I – Consolidated Transit Driver Focus Group Comments

STREET TREES

- Problem street trees:
  - E. Market Street and Village Green
  - E. Princess: Newberry to Hartley
  - Penn and Princess
  - Philadelphia and Pine
  - King St and Pine
  - At Boscov's at the Galleria – after turning in, at the end facing Texas Roadhouse.
  - Bushes at Edgar Square at the shelter should be cut back.
- Street trees that are big problems for the buses:
  - On Duke Street and Jackson by Crispus Attucks
  - Philadelphia and Roosevelt
  - Market Street at Mt Zion Rd (NW corner).
- Problematic street trees were named. See "Problem Street Trees.doc" for a list.
  - Sherman and Philly
  - Rathton and Queen Sts
  - Princess Street: Newberry to Hartley
- Street tree problems:
  - Duke St near Crispus Attucks
  - Jackson and Manor (on the 6B)
  - King and Pine Sts
  - Jackson Street – the whole thing
- Problem street trees (Hanover):
  - McKinley and Broadway (at/near the school)
  - Turning left into the hospital onto Allegheny (on Allegheny)
  - There's a hedge near there, with fence: bad sight distance
- More problem street trees:
  - In Hanover, McKinley and Broadway
  - At the Y in the road at the cable house, coming westbound on princess at the Y with college avenue. (?)
- Problem street trees: Broad and Prospect. Also discussed cars parking at the bus stops.
- Street trees on Jackson are a problem… both sides.
- Problem street trees: Roosevelt @ Linden and Madison, Newberry @ Jackson
- Discussed problem street trees – really just about all of them. Named Phila and Sherman Sts, Roosevelt and Phila on Phila @ the bus stop, and @ Jim and Nena's where is that stop exactly? Confusing with the sign.
- Problem street trees: Broad and Prospect. Also discussed cars parking at the bus stops.

ROUTE IMPROVEMENTS AND SCHEDULE REQUESTS

- Suggestion: some riders would like Saturday service from Red Lion (the 15) to Morning Star Market (the 16).
- Suggestion: add a stop in West York between Hawthorne and Cedar (before the light) – inbound on W. King Street (the 5A).
- Discussion about the 2A and the tight schedule, the HACC stop. Suggested that the 3A could do the HACC stop better than the 2A.
- Discussion about 2B, 3B, 6B: HVCU @ kings mill stop – there is no one but there are people at Jackson St.
- Suggestion: move the time in front of YCP to the back of YCP – can't make Jackson from there in 5 minutes (the 3B).
- Discussion about the York Hospital:
  - Frustration that the 2B and 3B often show up there at the same time. All the riders get on the first bus that gets there. Often that first bus ends up being late leaving because of loading riders and the second bus gets no riders.
  - Comment that employees get off their shifts at the hr and ½-hr and that's when the buses show up there – should be 15 and 45 for pickup.
- Comment – no service on Haines Rd between Kmart and Market St and the Kmart bus has time. (the 5B).
- Comments on the need for circular places on routes like the 3A and the North Mall – problem with the property manager who hates the buses (?).
- Comments about traveling Rodney Road is a waste of time – no riders and can't cut through the Giant anymore. Also, there's a service gap East-West across Route 30.
- Brief discussion about "Plan B" at Christmas shopping season.
- Suggestion: move the Broad Street bus shelter. The 4A should come in Princess St instead
- Add a stop: Market Street and Pine Street: moms and seniors going to the Y.
- If changing the 1B – Galleria, should not go through the Galleria twice as it's a problem getting out. Also there's a problem @ Donnelly, need to turn around but can get in the way. Very few passengers there also.
- Suggestion that the 1A, when leaving the TC, should turn L on Pershing then L on Phila, instead of going down King, L on Beaver then L on Phila. However, if/when tweaking the 1A, need to look at 2A and 6A: The White Rose (Beaver and Phila) is informal transfer point for 1A, 2A, and 6A.
- Group consensus that the 3B – poor performance.
- Group consensus that Delco works much better now. Suggestion: move the stop from the Beauty Supply to the stop sign so that the bus can enter shopping center, stop at the stop sign, turn L and then L again and exit shopping center. Would be much easier. (need to check this on aerial or map, not sure exactly what was meant).
- Suggestion: eliminate or move the stop at Harrison and Phila St. - Unsafe because oncoming drivers don't see the bus until on top of it.
- Suggestion: move the stops on Roosevelt for the 3A.
- Comment and suggestion that the 3A should do the stop at HACC, not the 2A. No one gets on the 2A there, only the 3A.
- On the 12: still getting people taking the 12:05 to Columbia and then have to wait until 4pm for the next bus back to York. Discussion about gaps in service for the 12, 13 and the 15 where there is no service.

- Comments: need service on Haines Road (KMart to mall), and on Cape Horn Rd (Rt 24). On the 12: on Eastern Blvd (Seminole Rd and Locust?)
- Suggestion – would add stop in Wrightsville at the Sunoco Station, 6th @ Marcello's and the Turkey Hill. And in Hellam at the Italian restaurant where the post office used to be (taste of Sicily).
- Hanover: The 22 doesn't have a lot of time. Discussion about the disparity in time between the 21 and the 22. Suggested redoing routes so that buses travel in opposing circles (equal) and have equal time on both routes that lap on the hour so that riders can remember the schedule.
- Hanover: Suggestion to add the Walmart (south) and the new Target (north) - Hanover.
- In Hanover, add a stop at the library on outbound (east side). Wheelchairs are getting on there inbound (west side). Would be easier on the east side (outbound).
- Discussed consolidating the 1B & 1C – great idea! Discussed the timepoint at the Home Depot – don't like sitting on Market Street – suggested doing away with this timepoint altogether and allowing drivers to use the time to go to the York Mall – they would benefit from extra time to load wheelchairs. This is a very likely place to have wheelchairs.
- Suggested on the 3B: York College to Richland to Grantley to Jackson to George – have 5 minutes and it actually takes 6 minutes to drive this through with all greens and no riders.
- Comment about driving The 2 and when there's a ballgame.
- Suggestion that the 4A should go down Princess Street, instead of straight down Phila.
- Group consensus about 2B, 6B, and 3B – poor performance. The 3B should go down Grantley to Princess and the 2B should go down Duke St instead of Pershing. And on the 4B, no one gets on at Tyler Run. There was some discussion about going around the circle at the Price Rite and how no one gets on at the stop on Pauline Drive behind the Giant at the senior place.
- Bus: stop sign at Ketterman (?)
- Discussion about the combination of Routes 1B and 1C. Also, questions about a memo when the expiration dates on change cards started.
- On 5B, has riders that work for Heritage or live at Coventry apts and coming from Rt24 at Wisehaven.
- Discussion about changes to the 5B:
  - About the passengers that are losing service
  - About service stopping to Stauffers
  - About the recovery houses along Prospect who take the 5B to the 2 to the 14 to get to work – don't have a car.
  - The stops at Norway, Mt Rose & Prospect; the beer distributor's near Chambers Rd on 124 and it's hard to pull out (look at closest parallel road); at 300 block @ E. College @ Pine Street – consider stop is unsafe and could be moved down to where the curb is.
  - Could make changes to the schedule outbound and then keep the inbound route as it is – down Prospect to the TC to keep the current riders. There are the 2 and the 6 that travel through the same area already (as the proposed changes to the 5B).
- Discussion: auxiliary bus for Thanksgiving to Christmas season for the mall buses and the 1st week of the month. Driver could even call in to where the wheelchair people are.
- Suggestion: on the 1B, would like to eliminate going to the Galleria twice.
- Discussed Route 1 connections with other routes: 11-130: that's when the 1A is late sometimes. 615-845am – morning peak, then pretty easy from 845 to 10am, then is very busy 1115-130 again.
- Discussed the number of stops: one suggestion is to not have to stop at median along Philadelphia: suggested between Ridge and State Sts, move stop close to or at State St after the median.
- Request to replace bus stop signs: King-Belvidere – been missing forever; Market & Queen Sts.
- Comment that at Williams Road (1B) – students – there is no shelter there.
- The 4A (Memorial Hospital) – should just go down Princess, not Phila.
- Comment about do not want a stop at the Ketterman building – there was some confusion as there is no sign here and hasn't been for a long time but drivers were debating whether or not there is a stop there.
- Comment – on the 2A,The Crossroads & Penna Ave – are coming across 5 lanes of traffic!! Ahh!
- Comment on the RR Xing at N. George St, north of the bridge, and at RRXing at Princess – bushes everywhere, can't see until the last minute.
- Suggestion: on the 14, get rid of the N. George St/ Church St stop and add stops on Church Rd. No one gets on/off at N. Geo/ Church but people are getting off and walking down Church St: from Strine's down Church.
- On the 14: check out the cul-de-sac past Starbucks. The new Ollie's warehouse is out on Espresso Drive, down from Starbucks. The cul-de-sac is a good place to turn around.
- Comment about when driving the 14, always waiting for the 2!! And it's hard to pull out from Graham Packaging, especially when school's in.
- Discussion that on the 1C at Stonybrook Manor the turn radius is too tight. Everyone goes over the curb. And on the 3A at the Lutheran Home, if someone's parked at the entrance, bus can't turn around. Truck took out the entrance canopy.
- Suggestion: need to add a stop at Pine Street outbound.
- Suggestion: on the 3B which leaves the hospital to Richland, etc. Suggested leave hospital and follow route to Jackson but then should make a Left on Pershing and head straight to the TC. And the 2 – Right at Jackson at the light to Duke and to the TC. The 3 doesn't make it to the TC on time. Do have some riders at Colonial Manor and Heritage Valley Credit Union.
- Her one comment is that when existing The Crossroads on Pennsylvania Avenue, cant get out, especially when HACC's in.
- Suggestion that the Route 1's arrive at the TC 2 minutes before the other buses and leave 2 minutes after the other buses: this would catch most of the transfers to/from other buses.
- Discussion: the 22 in Hanover – going around the Hanover square twice really holds you up. Suggested moving the bus stop to the other side of the street – would be better. Also discussed lack of stop facility in Hanover since can't use the McAllister Hotel bathroom. And discussed bus shelter for the Mall.
- Comment: at the stop on Pennsylvania Avenue just south of the Rutters at Route 30, cant see the people because of the trees. On the 1B/C, the stop at Tremont – move the stop to the other side of the intersection (after Sherman, b4 Albemarle) – would be better.
- Suggestion: a stop at the ES3 warehouse.
- Noted that at the hospital on Aug. 3rd there were 3 helicopters – no buses can move when someone's coming/going via helicopter.
- Discussed the number of bus stops: agreed that he would like to see less stops. Suggested getting rid of the stop between Queen and Duke Sts and then ½ block at Duke St. get rid of the first one. Usually picks up at Duke St. Also, Harrison and Phila – suggested moving this one to the next street. Agrees that the stop in the center of the median area on Phila is hard. Got a mirror clipped there by dump truck who was too close but going around. Suggested keeping the following: Broad St, Pine St, Duke St, and Beaver but the stop at king and Beaver: get rid of that one.
- Discussed the King St bike lane – doesn't like it because afraid when he pulls over, can't see a bicyclist and will hit him.
- At Jim and Nena's where is that stop exactly? Confusing with the sign.

- Discussion about the 2A and the tight schedule, the HACC stop. Suggested that the 3A could do the HACC stop better than the 2A.
- Drivers suggested the removal/replacement of the following stops:
  - Get rid of stop at Eberts lane. Have stops at Lehman and Albemarle (on Phila St).
  - The old Giant at Loucks Road: no sign left there but people still asking to be dropped off there.
  - The sign at King and Belvidere is down: don't replace it. No one uses it.
  - Queen and Market
- Discussion about changes to Route 5B and changes/ deletion of stops along Prospect. Riders upset. The leg from the TC to PSU-York is tight; PSU-York to Greenspring is okay. Talked about upcoming transportation projects along Mt Rose from Exit 18 to Longstown intersection.
- Discussion about problems with people parking at bus stops – lack of accessible stops. On the 4A, police are parking at the bus stops to do paperwork.
-

TIMEPOINT RELOCATION AND OTHER TIME-SCHEDULE ADHERENCE CONCERNS

- Discussion about the 2A and the tight schedule, the HACC stop. Suggested that the 3A could do the HACC stop better than the 2A.
- Suggestion: the timepoint (for the 5B) in West York at the RR tracks should be moved back to Frito Lay.
- Comment that stopping for the timepoint before Home Depot is not safe to sit on Market Street blocking a travel lane.
- The timepoint at Prospect St in Hellam is a bit off (the 12).
- More discussion about timepoints on the 12: would like them to be reset; are places where they have to leave early to get to the next one on time; the 6:50 stop in Hellam should be at 6:45 – here have too much time.
- The 13: most are seniors. Route times could use some reallocation for timepoints.
- The timepoints on the 14 should be adjusted. And discussion about the 2B and 3B both getting to the hospital at the same time.
- Comment – The 14 – the one at night, going to Key Plastics – that is impossible to do on time.

TRANSFERS

- Comment regarding people getting onto the bus on Market Street inbound (on 1A) to get to the West Manchester Mall. (same situation inbound on Philadelphia with destination of York Mall or Galleria). Knowing or recognizing this as a transfer. Some people just stay on the bus. But sometimes the bus is not going there until after another run. Is this a transfer? Is this another bus ride?
- Comment regarding the purple and yellow stops at the West Manchester Mall: the 1A & Dover bus routes and transfers. Do transfers only count as transfers at the purple entrance? What if rider goes through the Mall to the yellow? But what if rider gets off, then goes shopping and comes out of the Mall at the other entrance? Transfer vs. new ride.
- Discussed some confusion about purple/yellow door transfer policy and frustration with people who won't walk between Phila and Market Streets for rides going in opposite direction.
- General discussion of dashboards prompted discussion of radial routes that wait on the 1's: the 13 waits on the 1A and the 12 waits on the 1 B/C.
- Discussed the timepoint at the Home Depot (Mill Street on Market) – get rid of that, don't like sitting in the lane on Market street and could use the extra time to get wheelchairs loaded at the York Mall stop. Coming out of the Yorktowne Center and Pleasant Acres – are on time from there so no point in that timepoint.
- Suggestion: the 4A should go down Princess Street instead of down Phila where the 1-B/C goes. Move the bust stop to Princess from Broad.
- Commented on being on-time and making connections policies that conflict. Doesn't like to wait too long for transfers from other buses that are late because waiting makes the people already on the bus late – unfair.

WHEELCHAIRS

- Discussion about wheelchairs – very time consuming. Would be better if wheelchairs not going to work would ride during non-peak periods. Suggestion for a separate wheelchair bus to follow behind regular bus during peak ridership times – auxiliary service. Also, discussion about difficulty with the manual hooks on the floor – hard to get to. Some wheelchairs/scooters are big and can barely get to where you need to be to secure them and they're hard to reach on the floor.
- Wheelchairs are a problem – can take 5 minutes each time (boarding and alighting).
- Number of wheelchair riders is increasing: 4 to 5 wheelchairs/scooters per day is considered normal for Route 1 drivers but can be as high as 8-10/day. The loading and unloading of these chairs can cause delays: 4-5 minutes per chair at both loading and unloading. A possible solution is to have a "tailing" bus that accommodates these passengers and allows the main bus to continue at the normal schedule. West Palm Beach, Florida may have a similar system.
- Drivers appreciate the automatic/electronically tightening straps for wheelchair restraints because they are easier to use, safer and do not cause such dramatic delays. Rabbittransit staff acknowledged their ease of use but must balance this against the increased price to install and repair. Comments about the manual hookups on the floor take up a good deal of room and are a problem to reach. Difficult maneuvering chairs into the spaces to line them up – especially the large chairs and scooters. Discussion about paratransit auxiliary service – mentioned W. Palm Beach as example.
- General discussion of wheelchairs: when electric wheelchair batteries die, how to secure different types of wheelchairs and scooters, vehicle capacity and policy when two chairs are already on the bus, and various ways to deal with various equipment situations.
- Discussion about the 22 and tight schedule. The two wheelchair ladies who go shopping around the town and loading and unloading them and keeping on schedule. Also, wheelchair equipment discussion: when they sweep the bus out, the dirt gets into the cracks where the equipment attaches in the floor. Can't get the equipment in if there's dirt, pebbles, etc. already in there. Also discussed auxiliary van concept. Lancaster cited as doing this.
- Discussion about the new scooters and large wheelchairs and securing them, issues with people who can't drive their chair, etc.
- Discussion about "commuter express" buses, refusing bicycles or wheelchairs, difficulties with wheelchairs, and ramps vs. lifts on buses.
- Discussed wheelchairs – just something to deal with, like cars parking at the bus stop locations.
- Discussed on the 2, 6, 3b and 4a – any wheelchairs on these routes make them late. Suggested updated wheelchair training to include modern scooters, would like better training on large wheelchairs and scooters.
- Comment – the 313 bus, the ramp is too narrow for a lot of wheelchairs.

- Discussed wheelchairs and any way to deal with these better.
- Discussion about dirt in the wheelchair inserts in the floor – makes it hard to get the equipment in place.

COMMUNICATIONS

- Discussion of radio for communication. Being able to talk to each other and dispatch gives passengers the best service. Acknowledged that this can cause headaches for dispatch.
- Comments about some drivers not using the AVL system and not pushing the transfer buttons, not using the system correctly for transfers. Would like to be able to enter multiple transfers at one time and not have to keep scrolling through the screen for each one – takes too long.
- Discussion about communication between buses for making connections, entering information ('texting') on time-tight schedules isn't safe. Sometimes having problems entering the transfer data. System says "transfer not valid" and there's a lot of scrolling on the AVL required. Suggested going back to the "3-minute" wait policy that caught most of the transfers to/from late buses. That worked really, really well. Further discussion about getting people to work on time and people losing their jobs because rabbittransit runs late and they're late to work because of the bus.
- Group discussion about not being able to communicate with each other, with connecting buses and connections are critical for transfers. Would prefer open radio so that they can communicate with connecting buses, find out where they are, etc.
- Discussion about the AVL doesn't work in Hanover and the lack of radio communication hampers coordination – both with each other and with the 16. Are using hand signals and cell phones but since they have to pull over and move out of the driver's seat, they don't use cell phones very much.
- Discussion about lack of communication, request radios back.
- Discussion of communication and connecting transfers with other buses.
- Discussed communication – drivers like the quiet without the radio but during crunch time, the radio would really help communication – there are a lot of variables to take into account.
- Discussion of communication – would like to be able to use in an emergency – should be faster instead of queuing for a call back from dispatch.

FARE COLLECTION AND BOARDING

- Comment about problems discerning whether people are sitting around or whether they want the bus sometimes.
- Comment that with the riders that use Monthly Passes, their transfers show up as additional trips.
- Discussion: simplify fare payment to $1.50 to eliminate $.10 change card. Drivers were very much in favor of this.
- Suggestion about audible announcements as bus approaches or doors open: Have your fare money ready. Fold up the strollers. General "How to ride the bus" announcements. Need both English and Spanish.
- Comments on problems with student and child fares. Student I.D.'s don't have ages on them and some passengers lie about the age of the children to ride for free.
- Change cards are a major issue. Riders are sometimes saving 10 or more $0.10 change cards and using them to pay for a fare. This can cause serious delays. A change kiosk was suggested as a possible solution; riders could redeem their multiple small change cards for one card with larger denominations (>= the price of a fare). Also suggested Exact Change Only.
- Again a fare increase to $1.50 was supported for simplification and speed at the farebox.
- Group consensus that $1.50 fare would help speed up paying with cash.
- Group concurred that Zone 2 fare to $2.00 instead of $1.90 would be more efficient.
- Group consensus that the $1.50 fare instead of $1.40 would be more efficient.
- Discussion about fares and time consumption – people not being ready, getting their money out, etc. Concurrence on $1.50 fare and student fares.
- Question about getting new fareboxes – these don't work sometimes. Comments about zone-to-zone transfers and people who are cheating.
- Suggestion: want laminated destination signs for when the destination sign isn't working. Would save a lot of headaches and could be put on the clipboard. Also, should have bilingual announcements for riders: Have your fare ready, Fold up your strollers, and Extinguish your cigarettes.
- Discussion/Comment: can't do anything about the people – strollers, lots of grocery bags, etc. but $1.50 fare would help speed things up, or exact change only.
- Discussed fares to $1.50, student fares, zone-to-zone transfers and reduced fare card forgeries. Suggestion: get rid of the white tickets.
- Discussed the time it takes to collect fares: suggested coins only would speed things up. The dollar bills are a problem and change cards are a problem (problem – time consuming).
- Discussed that the reduced fare cards are just plain paper. Should have plastic cards maybe with pictures on them like id cards. Would reduce fraud.
- Discussed the fare collection: the dollar bills are the problem. Talked about a token system and student fares. Liked the $1.50 fare idea and student fares by passes only.
- Discussed changing fare to $1.50, eliminating the student fare on the bus – thought that with pass only option would speed up boarding a lot. Suggested not accepting pennies. Let riders pay with pennies at the TC only.
- Discussed fare collection – concurred with $1.50 and pricing student passes at purchase point; concurred with clearing tracks for the wheel chair hookups.
- Discussion about number of bags or is there a limit on the number of bags, carts, shopping carts that someone can take on the bus; and baby strollers. Suggestion to have signs on the buses that they need to be folded up.
- Discussion about fares and time consumption – people not being ready, getting their money out, etc. Concurrence on $1.50 fare and student fares.

OTHER

- Comment on the problem of people parking their cars in front of bus stops and bus shelters and that the police even do this but don't enforce anything. Can people park in front of bus shelters? Very hard to deal with wheelchairs and walkers when cars are in the way and often no curb cuts convenient.
- Comment about new traffic signal Grantley & Jackson and sidewalk bump outs.
- Comments on difficulties pulling out at Rt. 30 - 11th Ave and Rt. 30 – Pennsylvania Ave
- Discussion about the new light on Jackson at Grantley and the sidewalk bump outs.
- Discussion of bus "stalkers" – riders who ride around on the bus for hours - use a monthly pass or are seniors.

- Discussion of Spanish translation on buses is inaccurate – misspellings, wrong word/phrase choice: bad translations on signs and pamphlets. Also suggested better outreach to the Hispanic community by rabbittransit.
- Suggestion for additional training on AVL – a "refresher" course or like a users group for how different drivers get things done speedily but done.
- Suggested updating the paddle book as part of this study. Driver showed all the changes and corrections to the routes in the paddle book. Asked question about RR Donnelly stop? Only ever picks up or delivers 2 workers there but route stops there all the time???
- Discussed seniors who ride around on the bus all day.
- Comment that the music at the Transfer Center is too loud.
- Suggestion: refresher training on AVL and transfers; need to reiterate policies.

Appendix II – Paratransit and Customer Service Focus Group Notes

- Customer service has no way of knowing whether a location is within ¾ mi of a FR
- The shuttle to Giant Supermarket operates on Tuesdays, Thursdays and Saturdays
- The advertising for paratransit may be giving people the wrong impression; may seem too accommodating; may overall be too loudly advertised
- A system is needed that allows riders to more easily know what time the bus is coming
- Shelters must be within a distance from the paratransit "stop" that is reasonable for paratransit riders to walk
- The AVL system silences dispatchers
    - An alert is needed to tell drivers they are on hold
- The real-time sign at the Transfer Center needs to be fixed and moved so it faces the customer service representative
- The audio associated with the real-time sign at the TC takes too long
- Drivers and dispatchers would like better updates about road construction (from PennDOT/utilities)
- Dispatchers would like a more reliable contact for railroad crossing issues (York Rail)
- The Rodney Rd stop could be moved to Route 13 (Dover) because of the riders that use it
- On Sundays, the West Manchester Mall closes at 9 – Rt 1A's time does not match up well
- The 16 could begin earlier from Hanover and take riders to Delco Plaza, as it did ~2006/07
- "Radio" and "Information" should be on separate channels

rabbittransit Fixed Route Study

Polk-Lepson Research Group
York, Pennsylvania

November 2011

Fixed Route Study — Introduction

Project Purpose…

- Public input for Transportation Development Plan

Research Objectives…

Topics investigated in this research were:

- Awareness of public transportation in the county
- Awareness of rabbittransit
- Means of becoming aware of rabbittransit
- Image of the rabbittransit
- Knowledge of rabbittransit's services
- Reasons do not ride rabbittransit
- Factors that would encourage ridership.

Fixed Route Study — Research Design

Sample…

- Random sample of 501 residents in the municipalities and census tracts with fixed routes
- Maximum margin of error of +/- 4.4% at the 95% level of confidence

Data Collection…

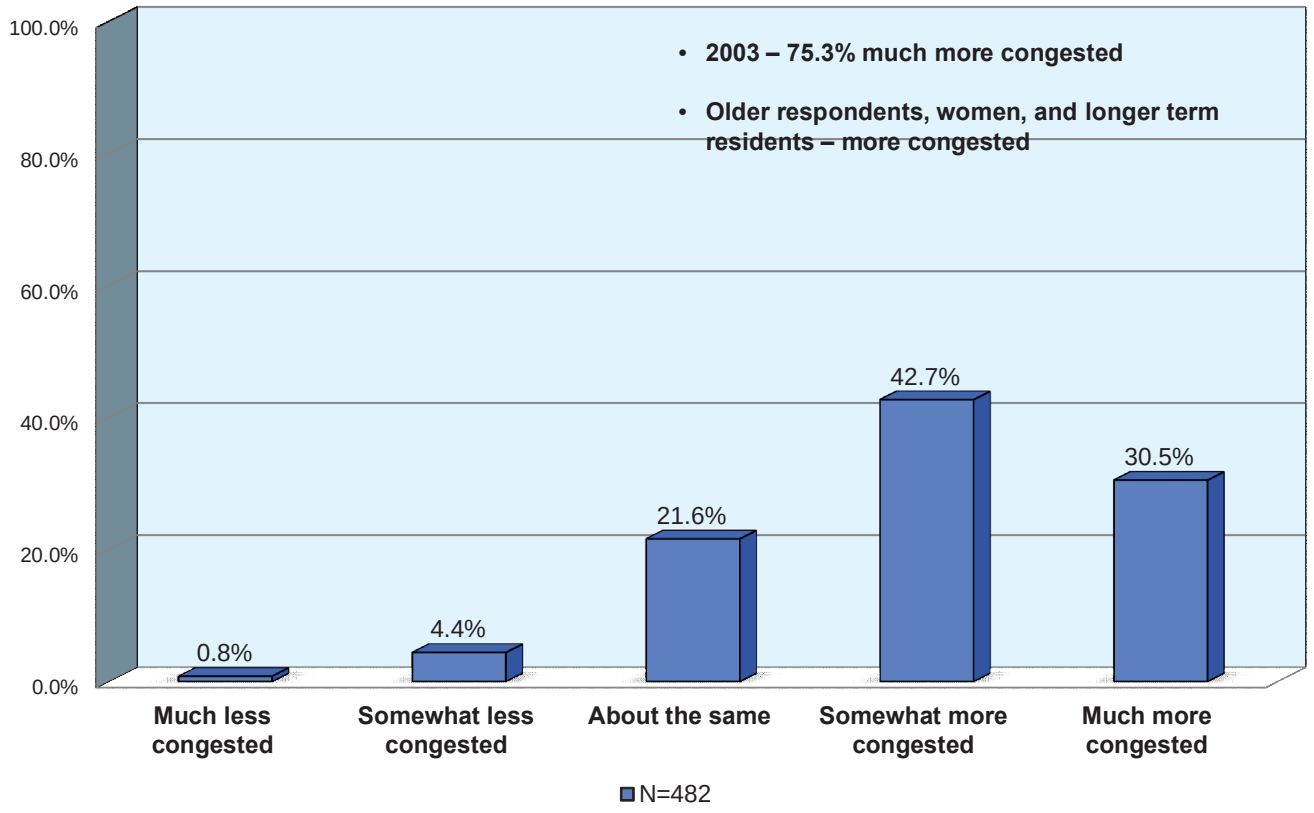
- Telephone interviews

Data Analysis…

- Data was analyzed by the total sample and respondent segments
- Statistical tests were performed to identify any statistically significant differences between respondent segments
- Findings are compared to a 2003 study conducted for rabbittransit.

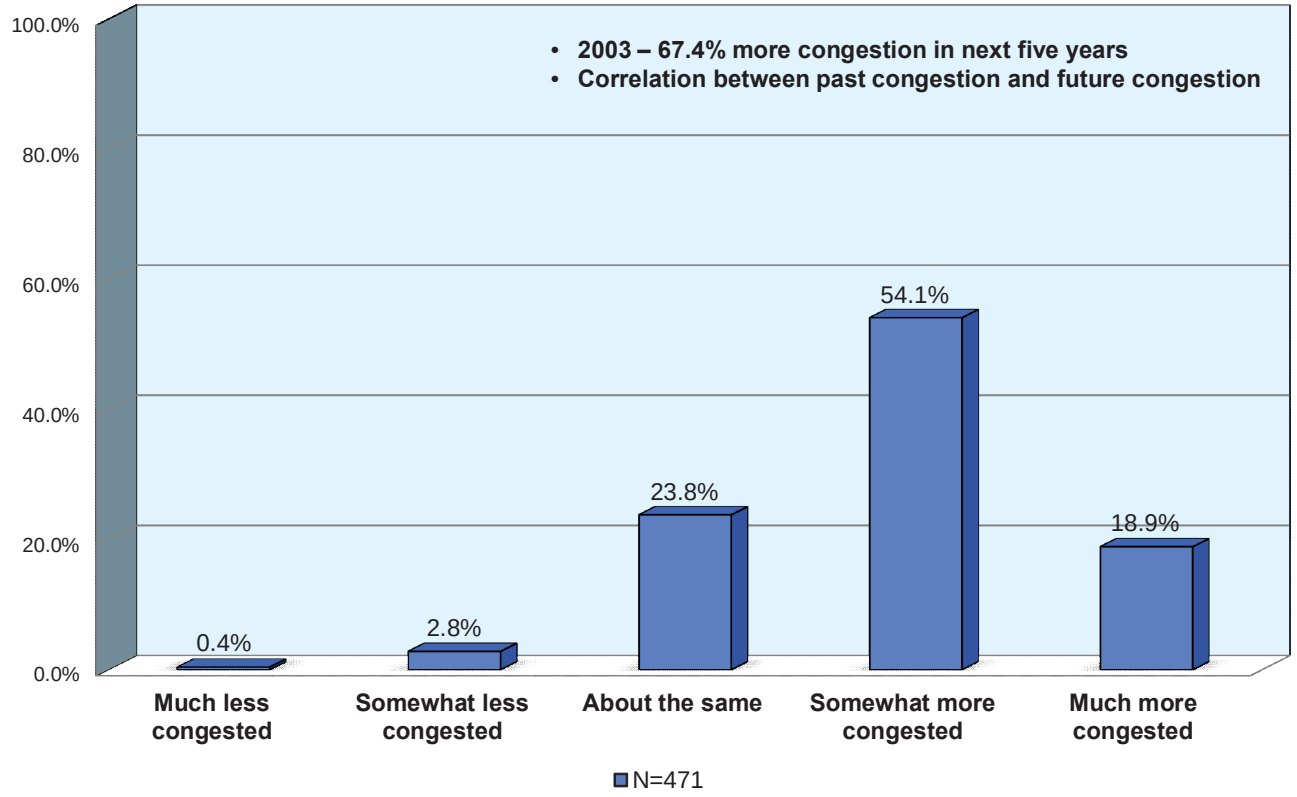
Fixed Route Study — Detailed Findings

Traffic In York County Over Past Five Years



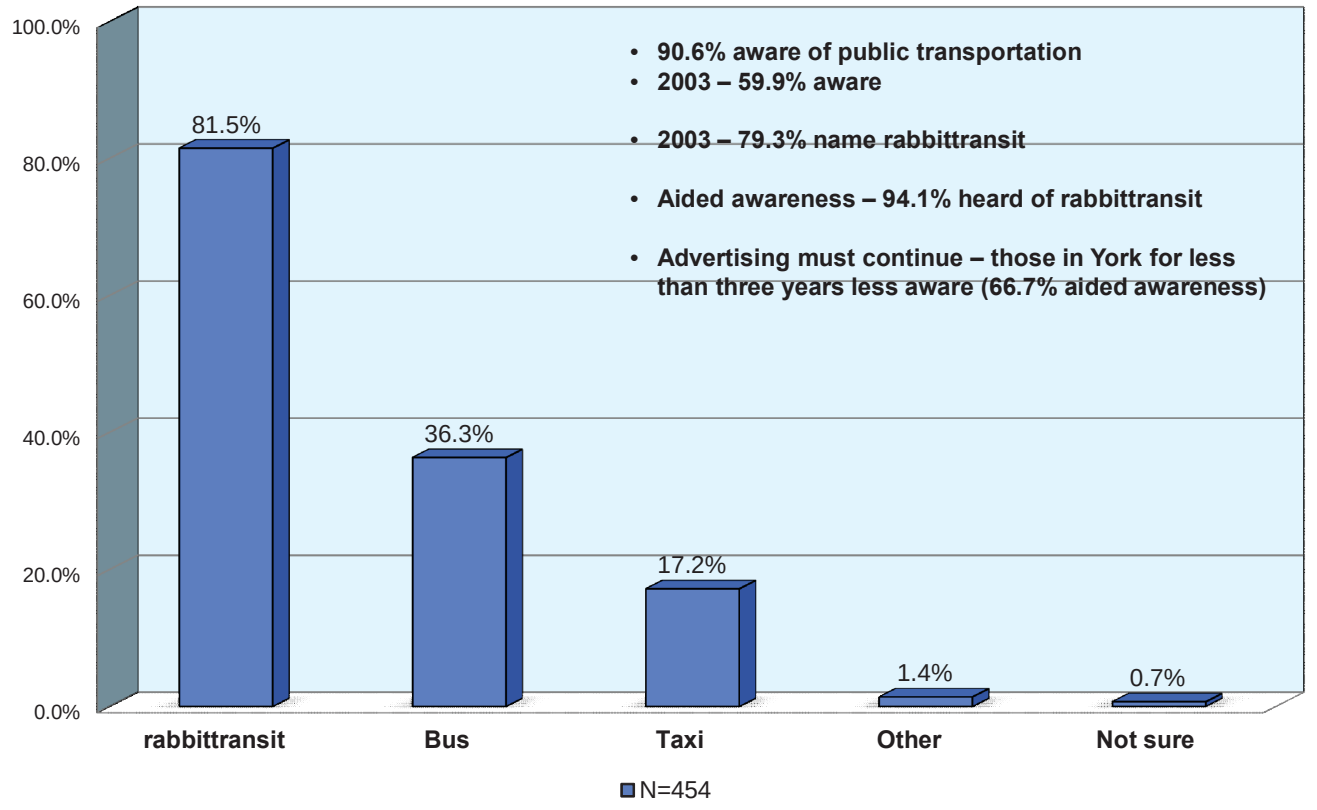
Fixed Route Study — Detailed Findings

Traffic In York County During Next Five Years



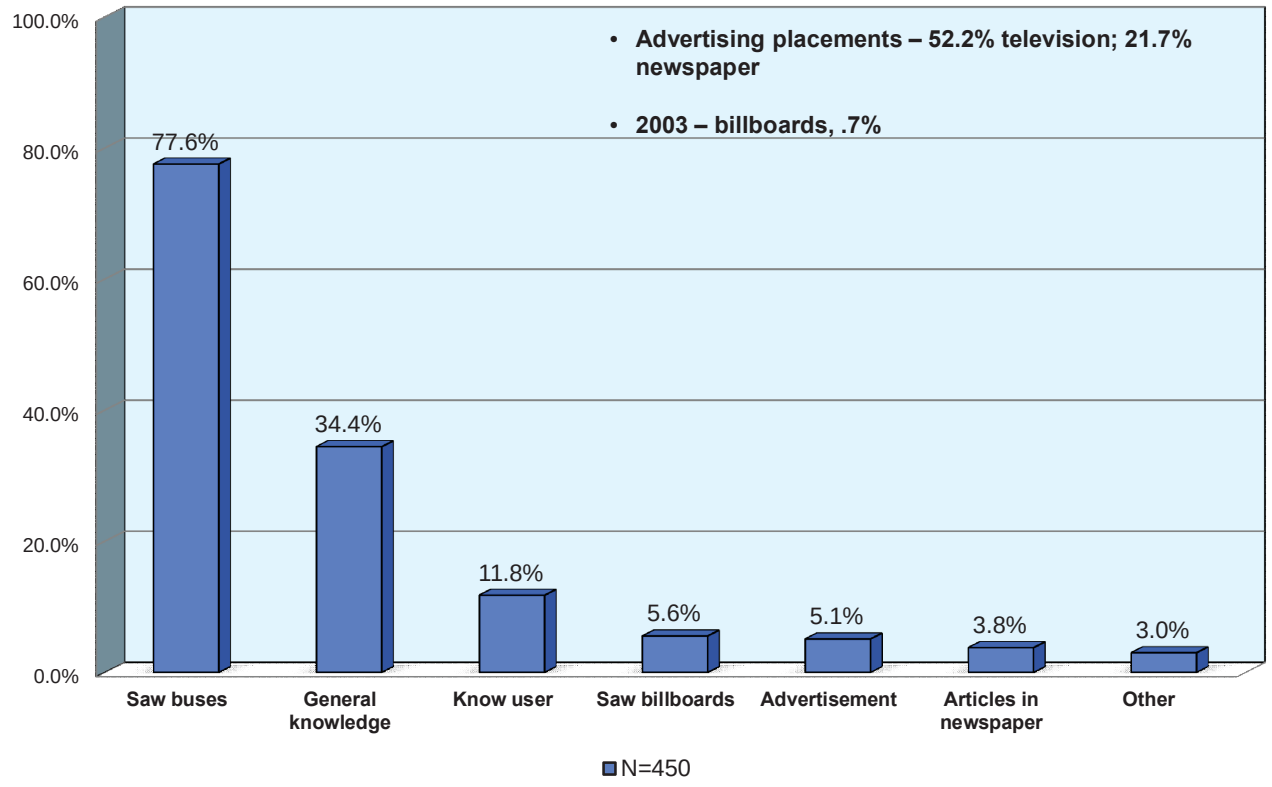
Fixed Route Study — Detailed Findings

Public Transportation In Area



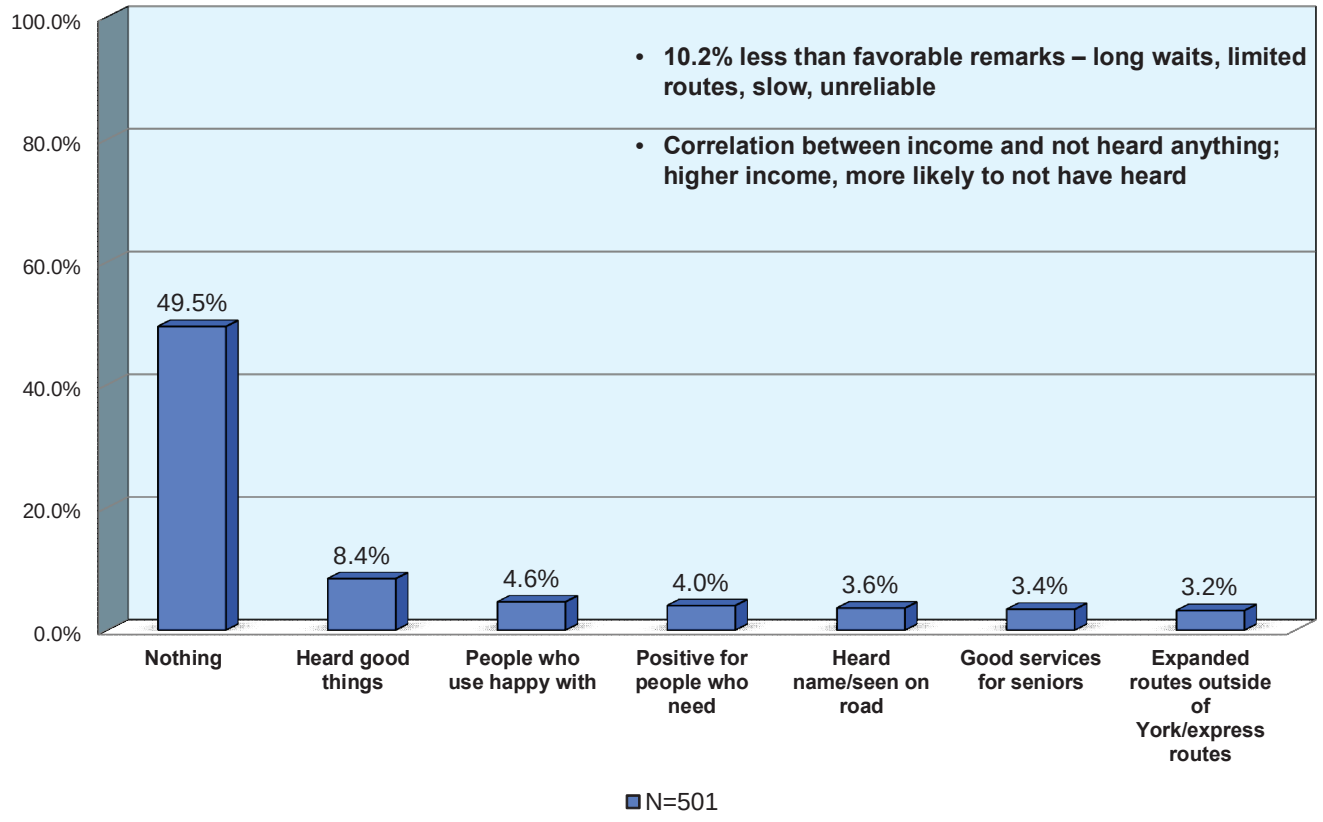
Fixed Route Study — Detailed Findings

Means Of Awareness



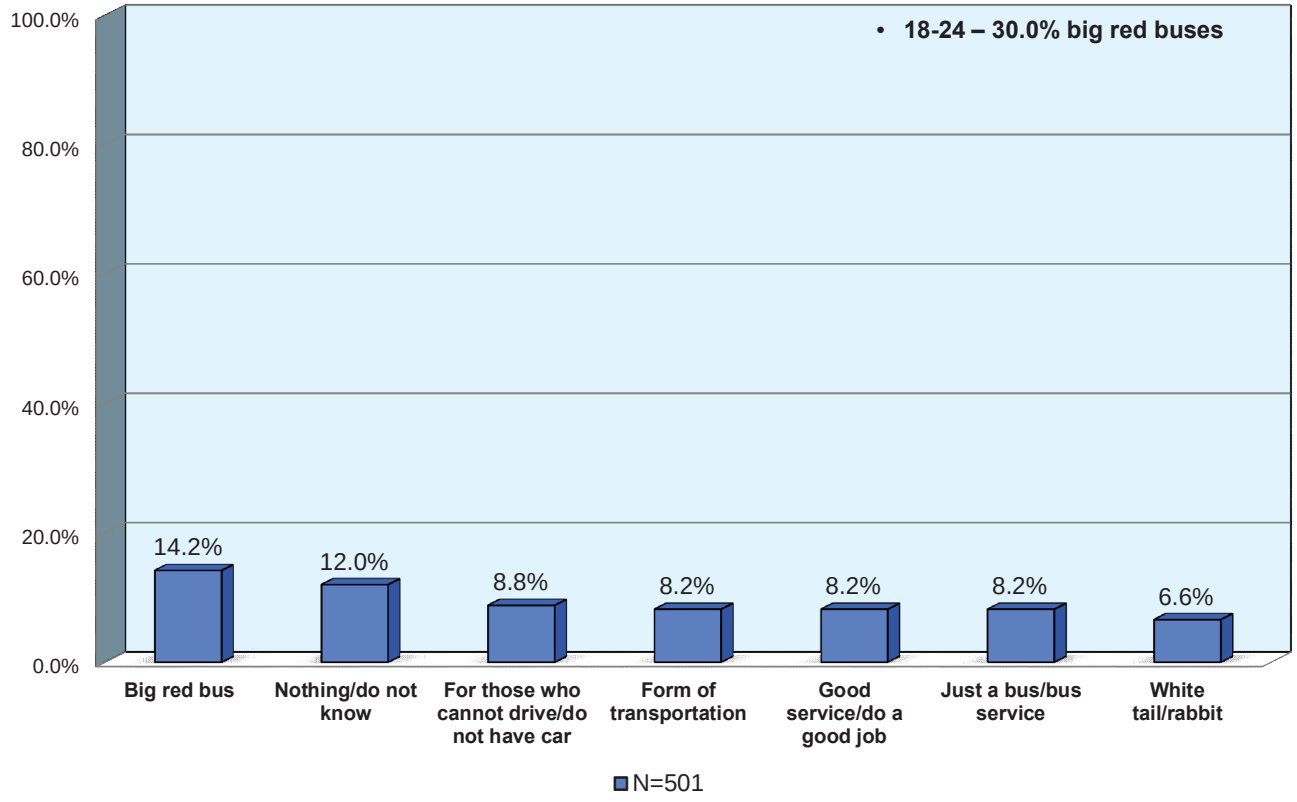
Fixed Route Study — Detailed Findings

What Heard About rabbittransit



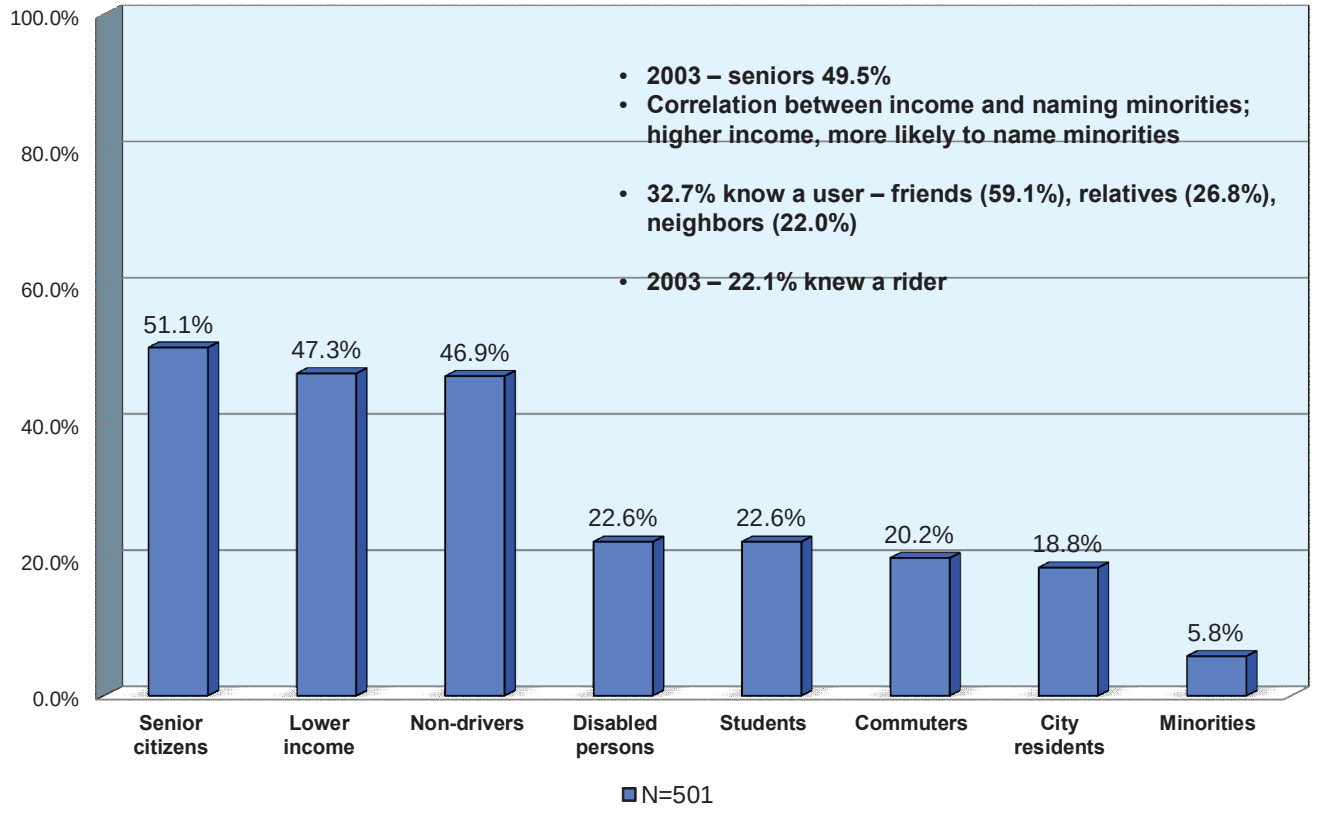
Fixed Route Study — Detailed Findings

Image Of rabbittransit



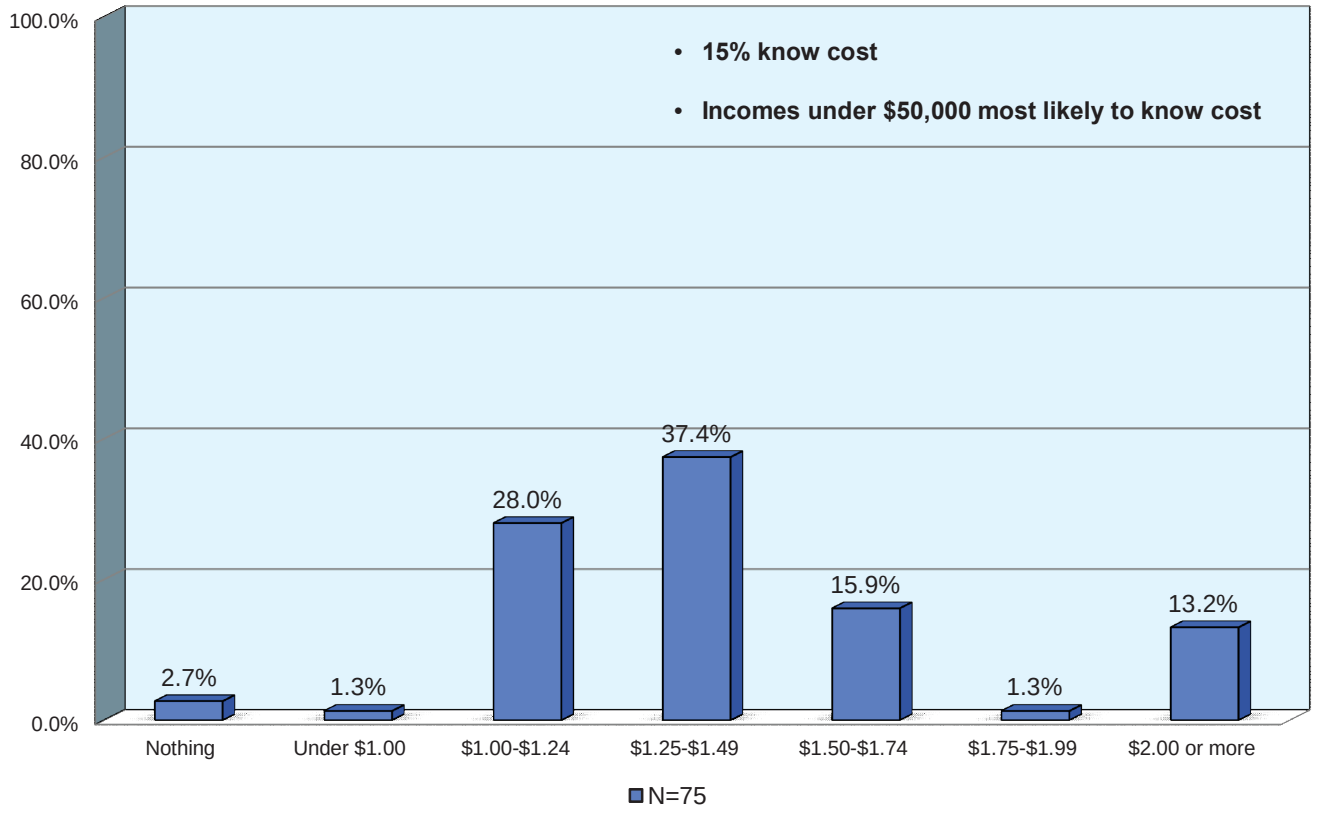
Fixed Route Study — Detailed Findings

Users Of rabbittransit



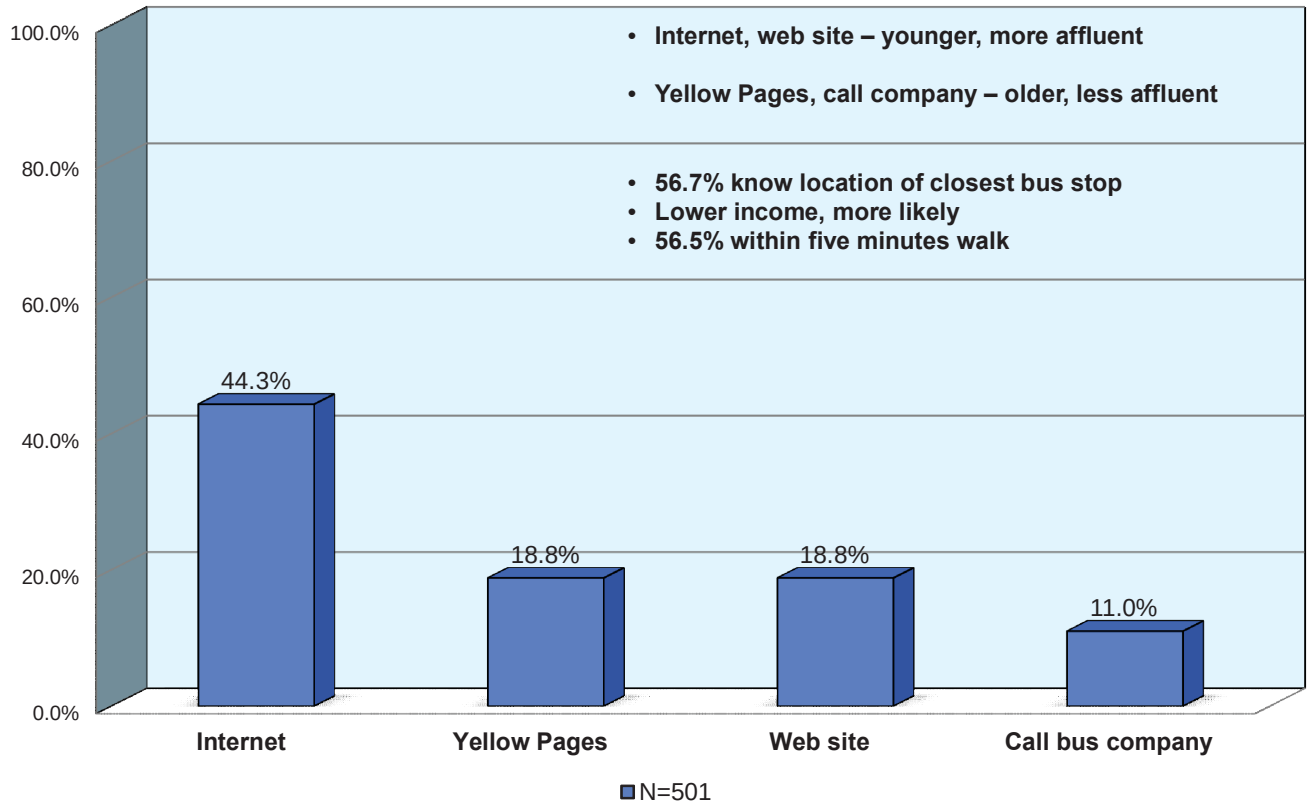
Fixed Route Study — Detailed Findings

Cost To Ride In Greater York



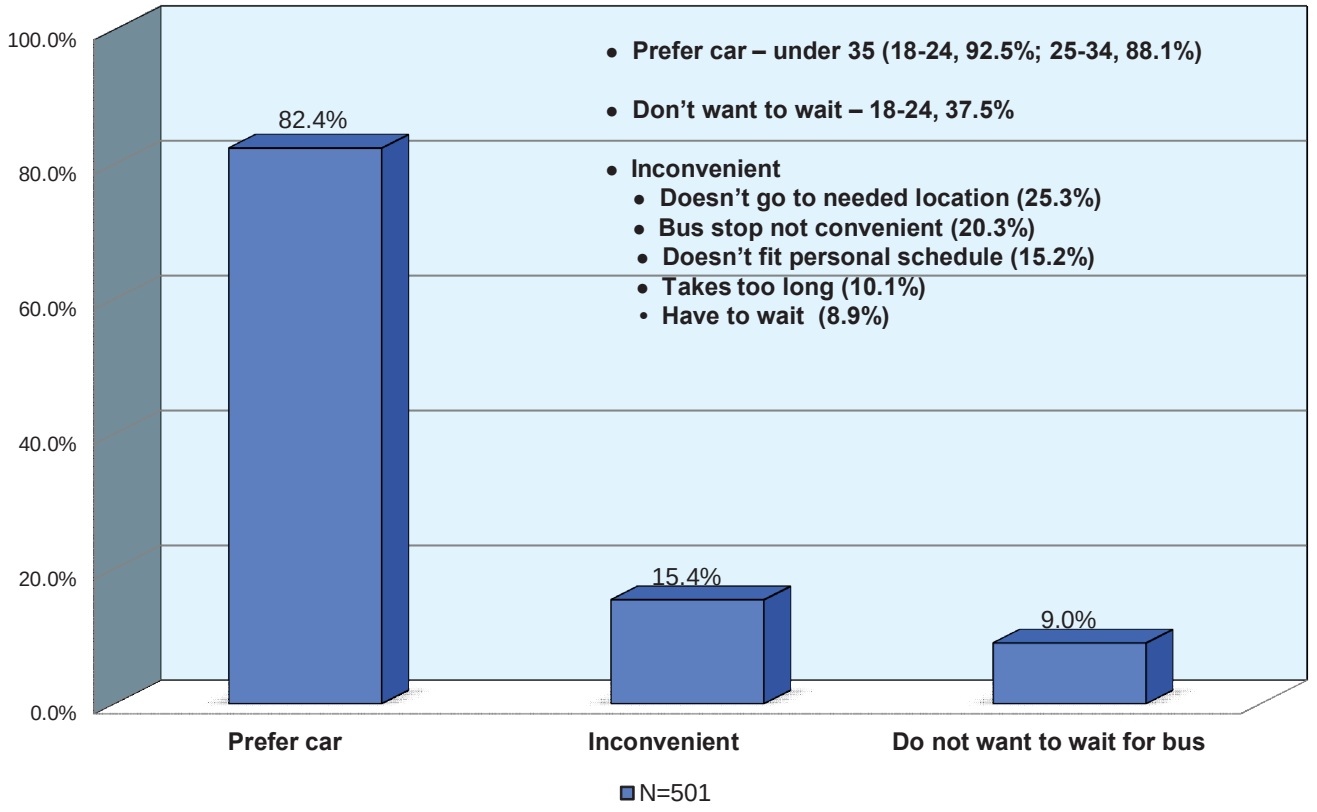
Fixed Route Study — Detailed Findings

Sources For rabbittransit Information



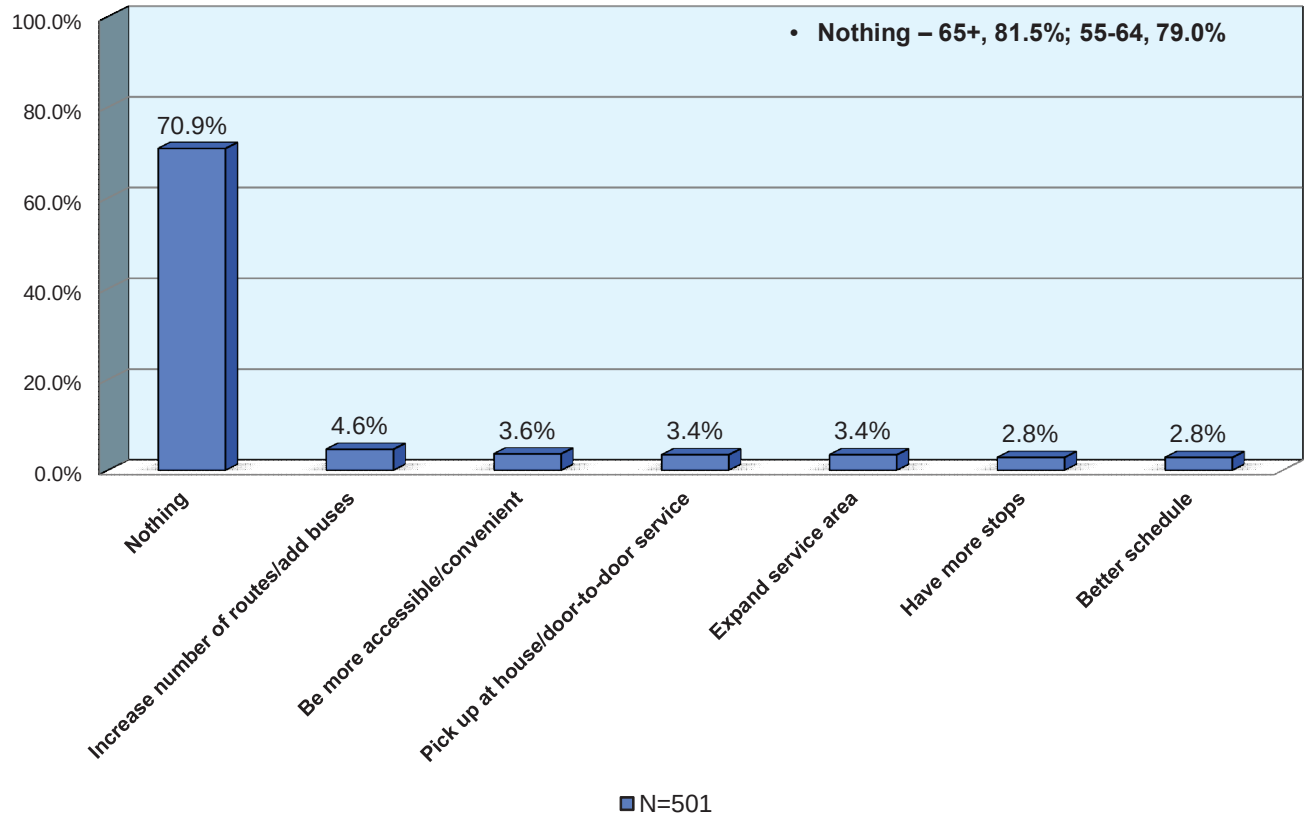
Fixed Route Study — Detailed Findings

Reasons Do Not Ride



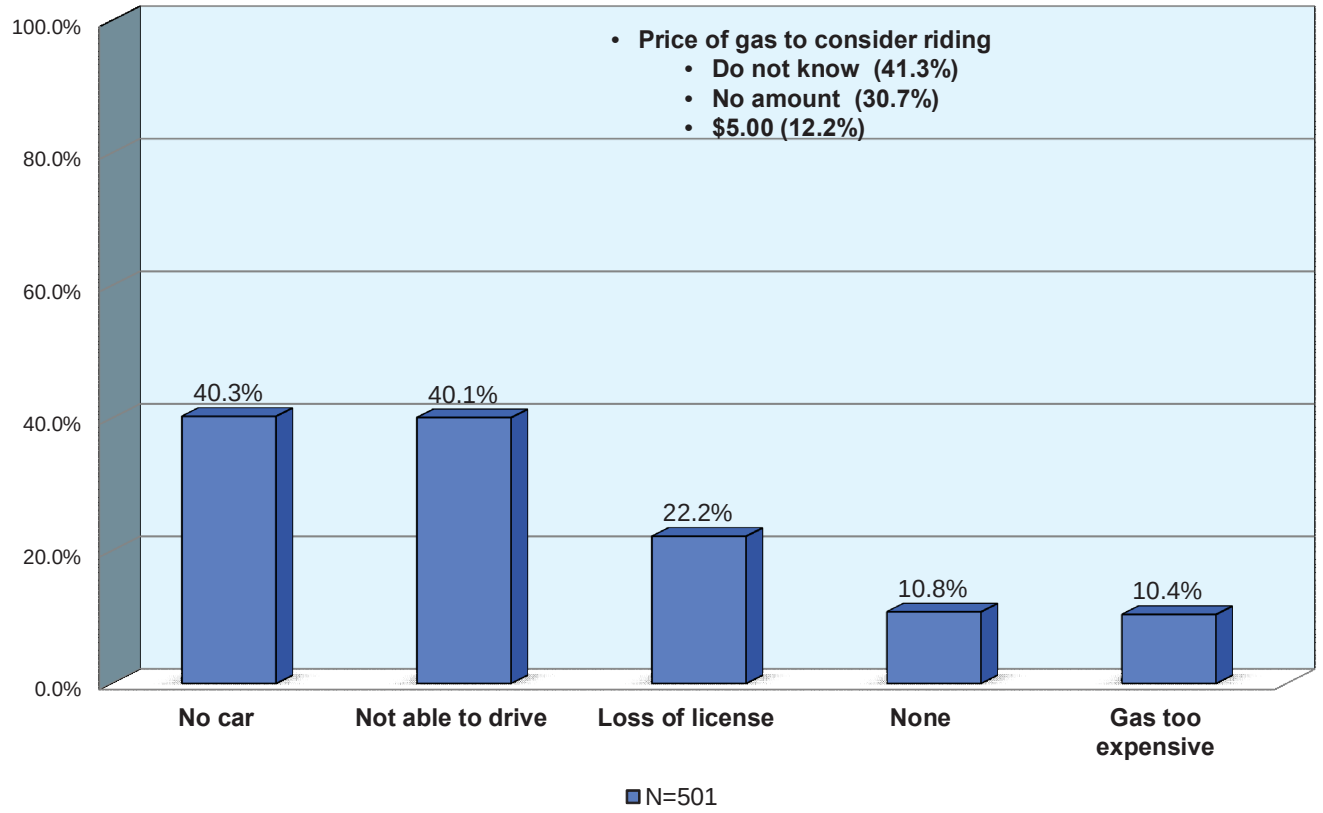
Fixed Route Study — Detailed Findings

Factors That Would Encourage Ridership



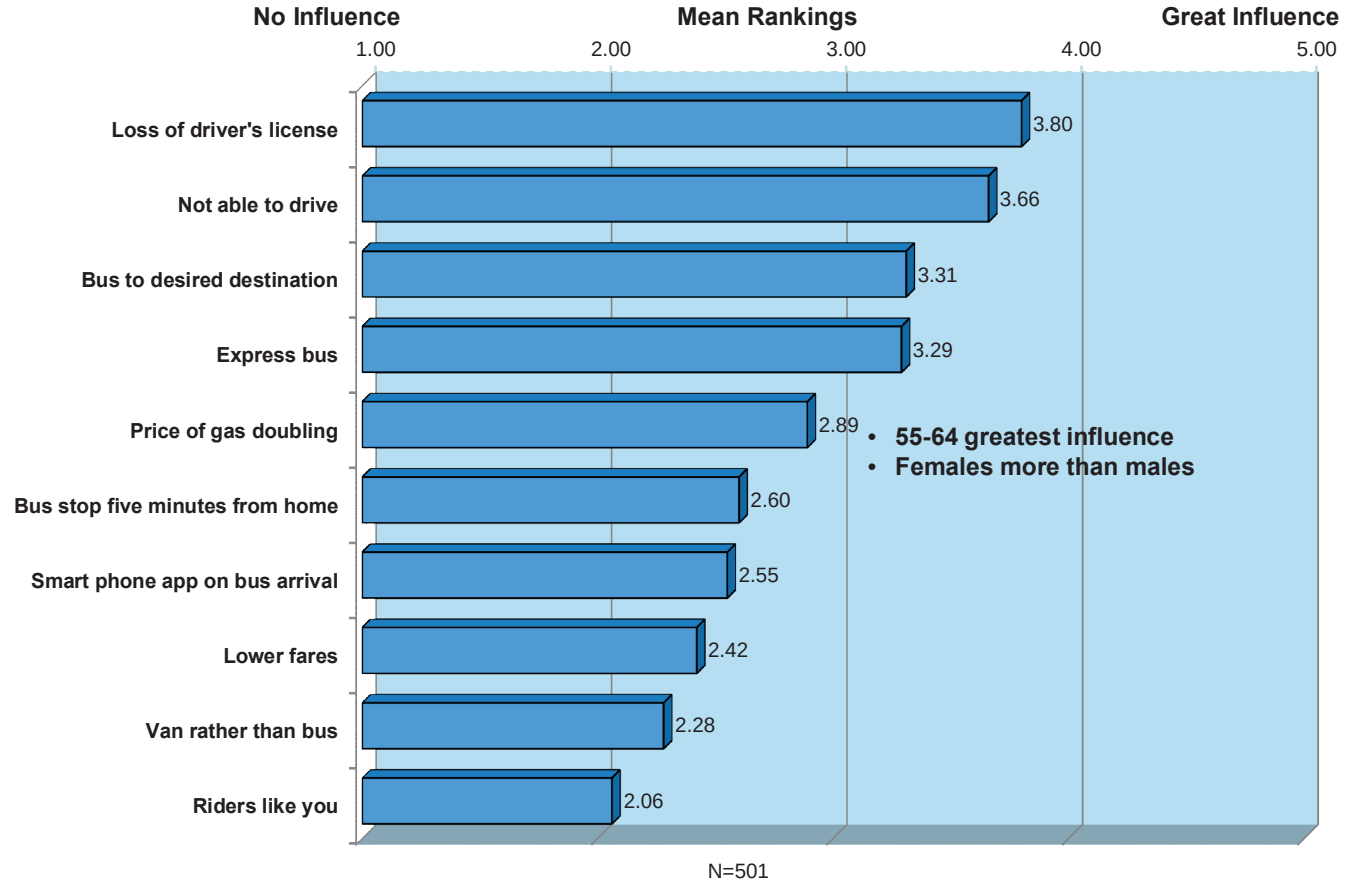
Fixed Route Study — Detailed Findings

Circumstances Leading To Ridership



Fixed Route Study — Detailed Findings

Factors Influence On Ridership



Fixed Route Study — Profile

Gender…	• Female	54.9%
	• Male	45.1%
		N=501
Age…	• 18-24	8.0%
	• 25-34	16.8%
	• 35-44	19.8%
	• 45-54	21.0%
	• 55-64	16.2%
	• 65+	18.4%
		N=501
Years In Area…	• Less than 3	5.8%
	• 3 to 10	21.0%
	• Over 10	73.3%
		N=501
Employed Outside Home…	• Yes	61.9%
	• No	38.1%
		N=501
If Employed, Carpool…	• Yes	10.3%
	• No	89.7%
		N=310

Fixed Route Study — Profile

Marital Status…	• Married/domestic partner	56.4%
	• Single	33.9%
	• Widow/widower	9.7%
		N=498
Household Income…	• Under $25,000	25.0%
	• $25,000-$49,999	29.9%
	• $50,000-$74,999	21.2%
	• $75,000-$99,999	12.6%
	• $100,000 and over	11.3%
		N=364

Fixed Route Study — Major Findings

Conclusions…

- Challenge is preference for car
- No connection between congested roads and ridership
- Limited knowledge of fares and routes
- Use of Internet and social media
- Desire for bus service to be taxi service
- Green movement not associated with ridership
- Gas prices will need to increase dramatically in a short time period
- Public service image is not bad
- Must be visible with a favorable image to take advantage of opportunities