Executive Report May 2006

2005 – 2006

Analysis of Transit & Non-Transit Users

Getting Around in Downtown Pittsburgh

A Research Project of the PITTSBURGH DOWNTOWN PARTNERSHIP

I. INTRODUCTION

In June 2005, the Pittsburgh Downtown Partnership (PDP) retained the consulting firm, Tripp Umbach & Associates (TUA), to complete a comprehensive study of Downtown Pittsburgh transit and non-transit users. The goal of the research was to interview a cross section of the estimated 200,000 people who either live in Downtown Pittsburgh or who visit Downtown Pittsburgh daily for employment, business meetings, special events, shopping, and education. For the purposes of this study, ***Downtown Pittsburgh is defined as including the Golden Triangle, North Shore, Station Square, Convention Center/Near Strip District, and Uptown***.

Tripp Umbach developed a detailed survey with input from the PDP and distributed the survey to six Downtown Pittsburgh market segments:

- People who work in Downtown Pittsburgh;
- People who attend Downtown Pittsburgh events, including tourists and conventioneers;
- People who travel into Downtown Pittsburgh to participate in business-related activities;
- Downtown Pittsburgh shoppers;
- Students at Downtown Pittsburgh colleges, universities, and trade schools;
- Downtown Pittsburgh residents in the 15219 and 15222 zip codes.

Tripp Umbach collected a total of 2,236 surveys from an appropriate sample within each market segment. The collected data is presented in graphs or tables that are identified as answered either by all respondents or by each market segment.

To determine the appropriate sample per market segment, TUA estimated the daily Downtown population to be approximately 200,000 people. Based on this estimate, Tripp Umbach collected surveys from the six market segments as shown in Table 1.

Table 1: Total Surveys Completed by Six Downtown Pittsburgh Market Segments

Downtown Market Segment	Est. Number of People Per Day in Downtown	Min. Number of Surveys to be Completed	Total Surveys Completed
Employees	140,000	550	750
Visitors to Special Events	25,000	400	415
Business Visitors	15,000	350	356
Shoppers	10,000	300	315
Students	5,000	200	200
Residents	5,000	200	200
Total	200,000	2,000	2,236

II. PROJECT OBJECTIVES

From existing transit users, the PDP was interested in learning the following:

- For what purpose(s) do existing transit users need to travel within the Downtown Pittsburgh area?
- Do existing transit users also use public transit to get around Downtown Pittsburgh once they are here?
- Are existing transit users aware of the Downtown ‘free fare’ transit zone and, if so, do they fully understand it and/or use it?
- Do existing transit users believe there are gaps to Downtown public transit and, if so, what are they?
- How could Downtown public transit services be improved?
- In their view, how would existing transit users rate the readability/understandability of Pittsburgh’s overall transit system?

From non-transit riders (both visitors and non-visitors alike), the consultant was asked to assess the following:

- What kind of transportation is being used by non-transit users to get into and out of Downtown Pittsburgh?
- For what purpose(s) do non-transit users need to travel within the Downtown Pittsburgh area?
- Are non-transit users aware of the different public transit options available for getting around Downtown Pittsburgh?
- Are non-transit users aware of the Downtown ‘free fare’ transit zone and, if so, do they fully understand it and/or use it?
- Do non-transit users believe there are gaps to Downtown public transit and, if so, what are they?
- How could Downtown public transit services be improved?
- In their view, how would non-transit users rate the readability/understandability of Pittsburgh’s overall transit system?

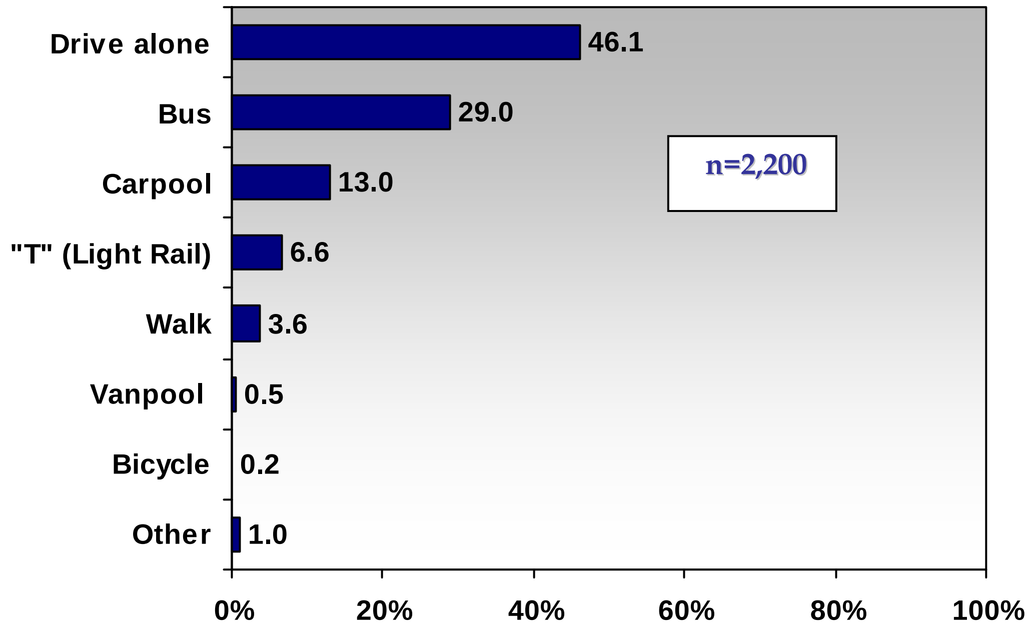
It was anticipated that the process of surveying transit and non-transit users would require an array of approaches. Whereas some of the data gathering was achieved through the utilization of paper and on-line surveys, a majority of the surveying process, especially for new and occasional Downtown visitors, required the use of intercept surveys.

III. TRAVEL MODES AND DOWNTOWN PITTSBURGH DESTINATIONS

Mode of Travel To and From Downtown Pittsburgh

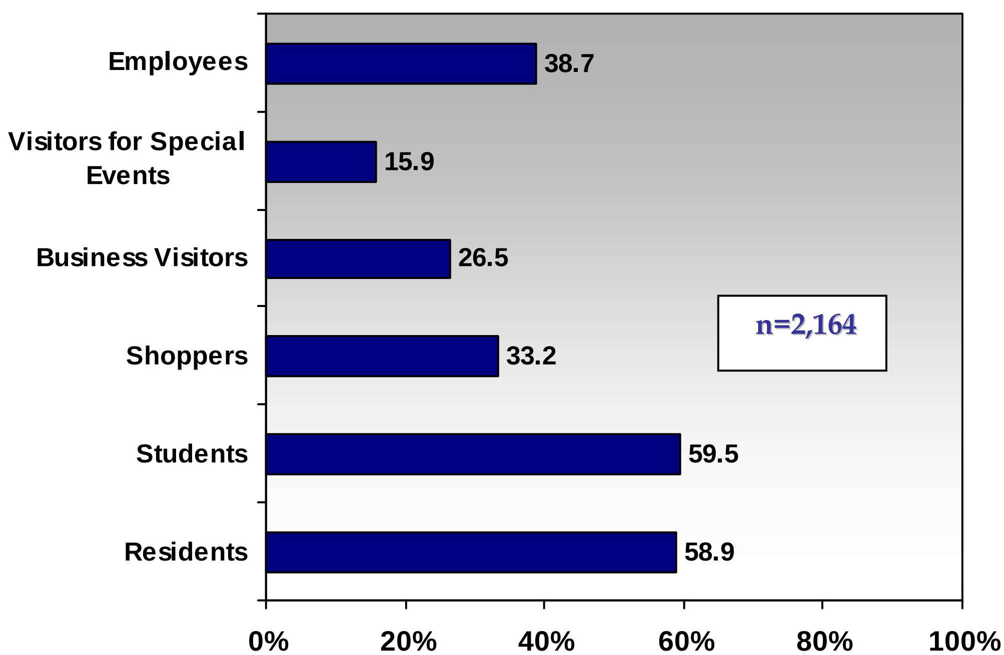
While the main purpose of the study was to evaluate movement within Downtown Pittsburgh once a person has arrived there, the survey asked what mode of transportation respondents typically use to travel to and from Downtown Pittsburgh. As depicted in Graph 1, most respondents indicated that they commute to Downtown Pittsburgh by driving in a car, whether alone or in a carpool.

Graph 1: Mode of Travel To and From Downtown Pittsburgh for All Respondents



The next largest category is transit users: 35.6% of the respondents reported that they use public transit, either taking the bus (29%) or the 'T' (6.6%). Graph 2 below shows the *transit use* breakdown by the six different market segments.

Graph 2: Analysis by Market Segment of Respondents Who Use Public Transit to Travel *To And From* Downtown Pittsburgh

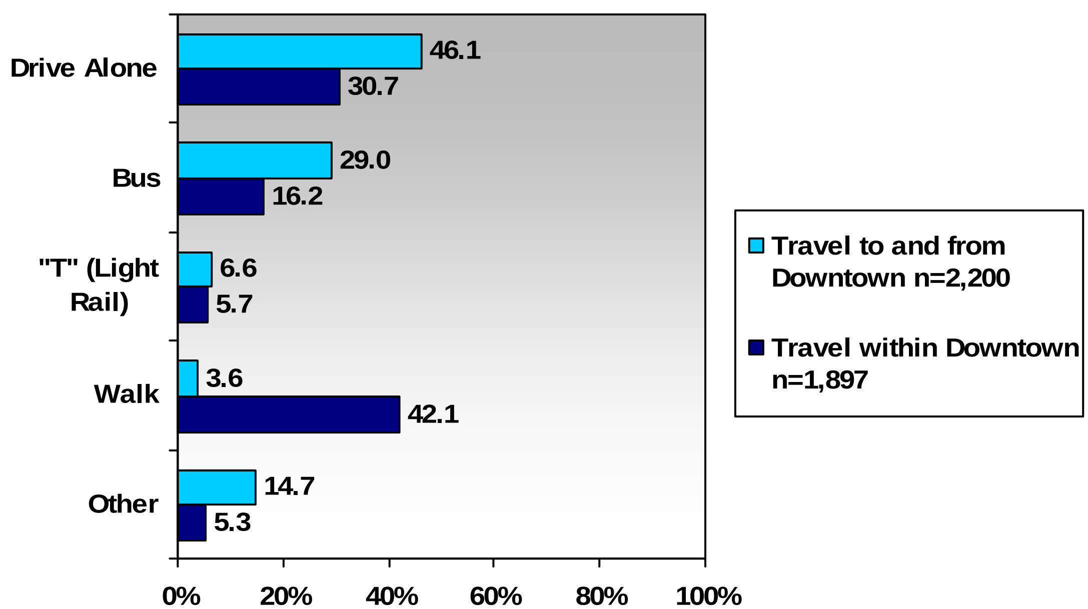


As can be seen in Graph 2 on the previous page, students, Downtown residents, and employees are the most likely to use public transportation when traveling to and from Downtown.

Mode of Travel Within Downtown Pittsburgh

The main purpose of this study was to evaluate modes of travel for people who have already arrived or have begun their day in Downtown Pittsburgh. As shown in Graph 3, the modes of travel within the Downtown Pittsburgh area are, for the most part, significantly different than those used to travel to and from Downtown Pittsburgh.

Graph 3: Comparison of Travel Modes between All Respondents Traveling *To And From* Downtown Pittsburgh and Those Traveling *Within* Downtown Pittsburgh

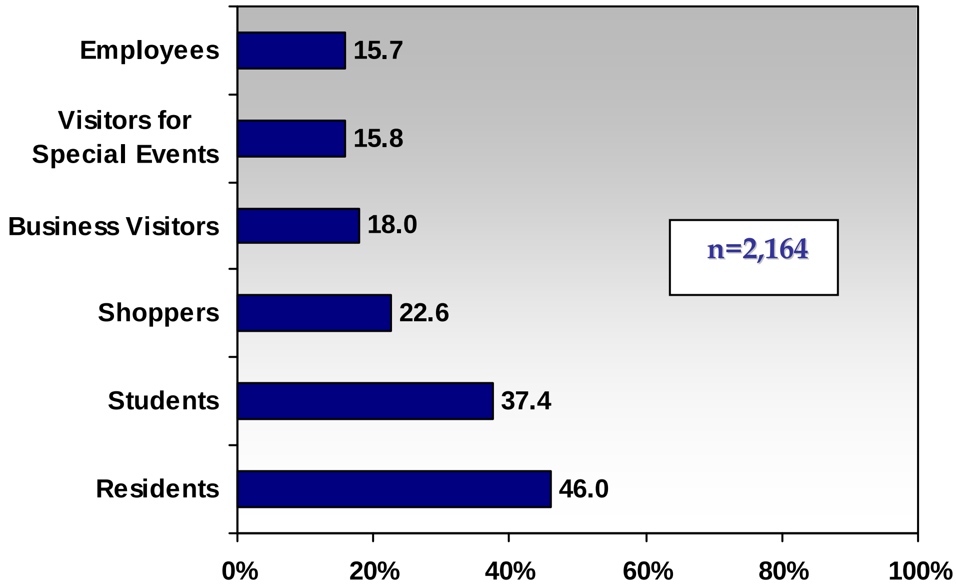


Perhaps surprisingly, more respondents choose to "Drive Alone" than use public transit when traveling from place to place within Downtown Pittsburgh. With nearly one-third of all trips within the Downtown core being completed by driving alone, there is significant opportunity to encourage the use of public transit services for getting around Downtown. Walking to additional destinations within Downtown Pittsburgh is clearly the number one preferred transportation option. Further analysis of the data indicated that Downtown employees are the most likely segment to walk to additional destinations, with 58.3% making that choice, while visitors to special events are the least likely to do so, with only 23.8% choosing to walk.

On the following page, Graph 4 illustrates that Downtown residents and students are more likely than other segments to continue to use public transportation once they are in Downtown and need to travel within the Downtown Pittsburgh area to other destinations.

Although Downtown employees are the third most likely market segment to use public transportation when traveling to and from Downtown Pittsburgh, on the following page, Graph 4 indicates they are least likely to use public transportation to travel within Downtown once they have arrived at their workplace.

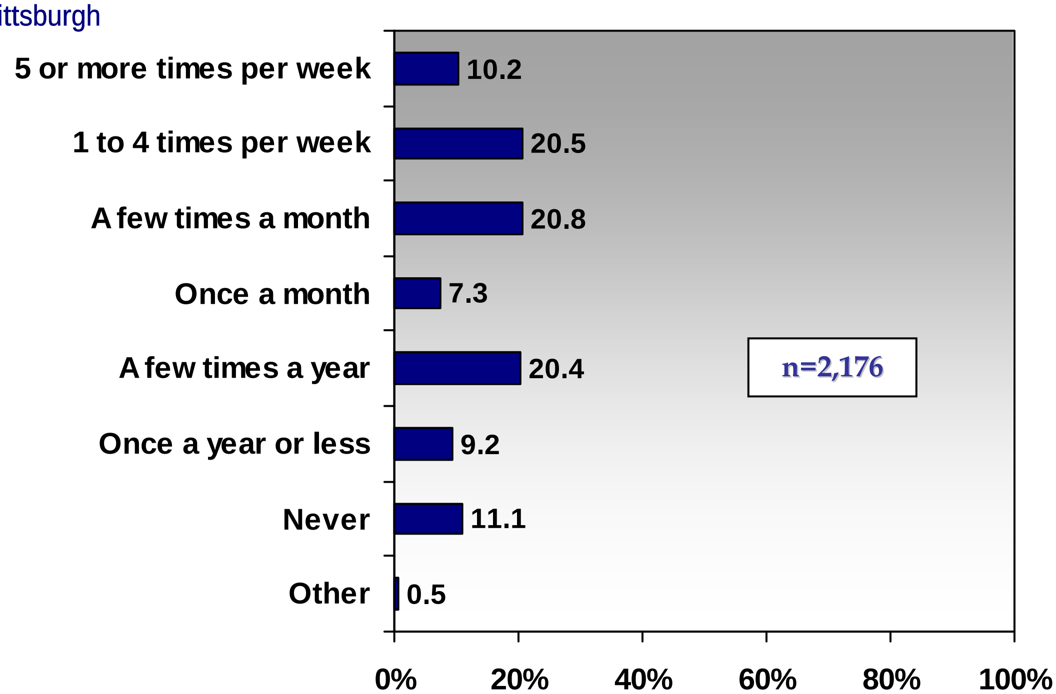
Graph 4: Analysis by Market Segment of Respondents Who Use Public Transit When in Downtown Pittsburgh



Travel to Other Downtown Pittsburgh Destinations

Graph 5 shows that travel to additional destinations within Downtown Pittsburgh is fairly limited for all respondents, with less than one-third of all respondents indicating that they travel to other destinations within Downtown Pittsburgh 'more than once a week'.

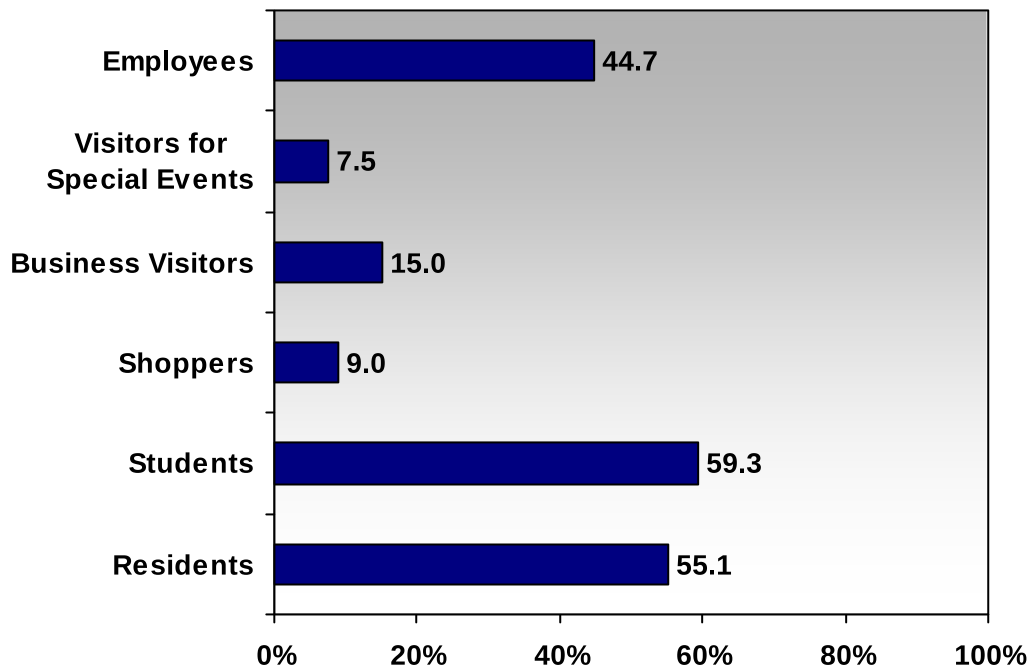
Graph 5: Frequency of Travel by All Respondents to Other Destinations Within Downtown Pittsburgh



This apparent limited travel between Downtown Pittsburgh destinations provides an opportunity to promote greater mobility within the Downtown core, thereby enhancing the vitality of the Downtown neighborhood.

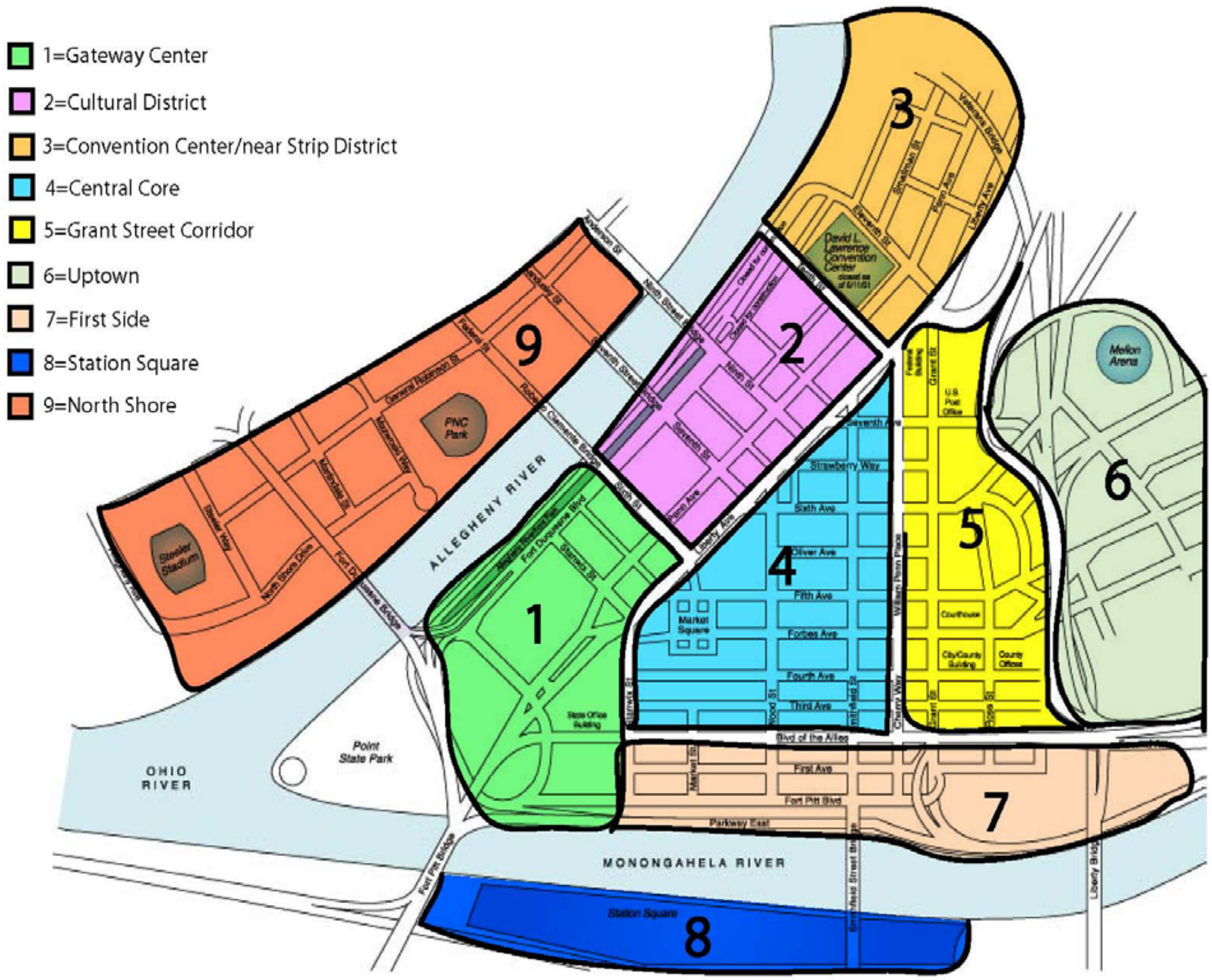
Segmentation analysis, as shown in Graph 6, indicates that Downtown students and residents are most likely to travel to additional destinations within Downtown Pittsburgh 'one or more times a week'. Visitors to special events and shoppers are the least likely market segments to travel frequently to additional Downtown destinations.

Graph 6: Travel by Market Segment to Other Downtown Pittsburgh Destinations 'One or More Times a Week'



Important Travel Destinations within Downtown Pittsburgh

Tripp Umbach developed a map that divided Downtown Pittsburgh into nine distinct neighborhoods. This map, which is displayed on the following page, was provided to those people completing the survey. The respondents were then asked to identify their starting Downtown neighborhood location, as well as what Downtown Pittsburgh 'neighborhoods' they typically travel to during their visits.



Using data obtained from the survey and also from the outcomes of the Pittsburgh Downtown Partnership's 2004 *Downtown Circulation Assessment & Improvement Project*, Tripp Umbach analyzed both existing Downtown public transit routes and the number one destination priorities given by respondents. The focus of this particular analysis effort was to determine potential gaps in Downtown Pittsburgh's public transit services. In instances where the percentage of respondents who "Drive alone to other Downtown destinations" was greater than 30%, the TUA data analysts concluded there is possibly a public transit gap. Clearly, filling the gaps in Downtown public transportation, as highlighted in Table 2 on page 9, could play an important role in reducing automobile traffic and congestion.

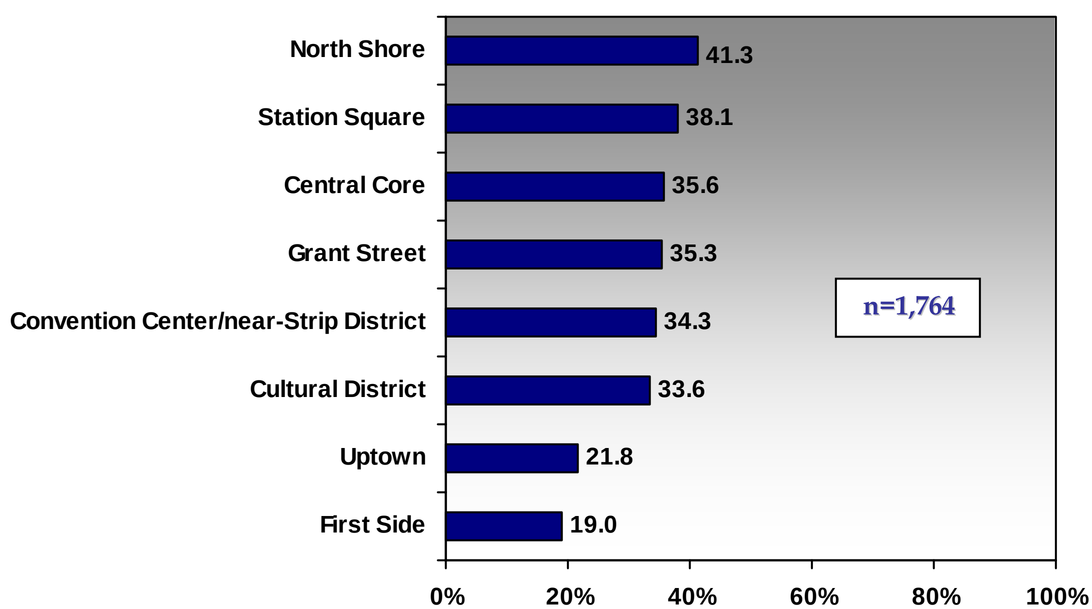
Table 2: Potential Gaps in Downtown Public Transit

Starting Point	Ending Point	Percentage Who "Drive Alone"	Gaps in Downtown Public Transit
Gateway Center	Central Core	21%	
Cultural District	Station Square	30%	*
Convention Center / Near Strip District	Grant Street	42%	*
Central Core	Grant Street	20%	
Grant Street	Central Core	24%	
Uptown	Grant Street	25%	
First Side	Central Core	11%	
Station Square	Convention Center / Near Strip District	44%	*
North Shore	Station Square	40%	*

Source: PDP Downtown Circulation Assessment & Improvement Project - 2004

To determine what destinations are important to users of Downtown Pittsburgh, the survey data was further analyzed to identify those neighborhoods that respondents considered the most important to access. Based on percentages, at the top of the list are the North Shore and Station Square. By contrast, First Side and Uptown are the least important neighborhood destinations.

Graph 7: Most Important Destinations for <u>All Respondents</u> Traveling Within Downtown Pittsburgh



Below, Table 3 lists the Downtown destinations that respondents are most interested in traveling to from their principal Downtown Pittsburgh starting points. This table also reveals the importance of convenient and reliable transit options between the Golden Triangle and North Shore. As identified earlier in Table 1, the top two market segments in terms of the highest estimated number of daily Downtown patrons are employees and visitors to special events. Table 3 illustrates that slightly over one third of downtown employees travel to a Golden Triangle destination from a North Shore starting point. On the other hand, nearly 25% of all visitors to special events typically start in the Cultural District neighborhood and travel to a North Shore destination (23.5%). This high degree of travel between the Golden Triangle and North Shore (and vice versa) could possibly present new transit ridership opportunities.

Table 3: Principal Starting and Travel Destination Points by Market Segment Within Downtown Pittsburgh

Market Segment	Downtown Pittsburgh Starting Point and Percentages	Top Travel Destination Once in Downtown Pittsburgh
Downtown Employees	North Shore (33.3%)	Grant Street (17.5%)
Downtown Visitors for Events	Cultural District (24.8%)	North Shore (23.5%)
Downtown Business Visitors	Gateway Center (15.5%)	Grant Street (22.3%)
Downtown Shoppers	Central Core (50%)	Gateway Center (29.5%)
Downtown Students	First Side (27%)	Station Square (29.2%)
Downtown Residents	Uptown (34.4%)	Central Core (45%)

IV. PERCEIVED BARRIERS TO USE AND PERCEPTIONS OF PUBLIC TRANSIT

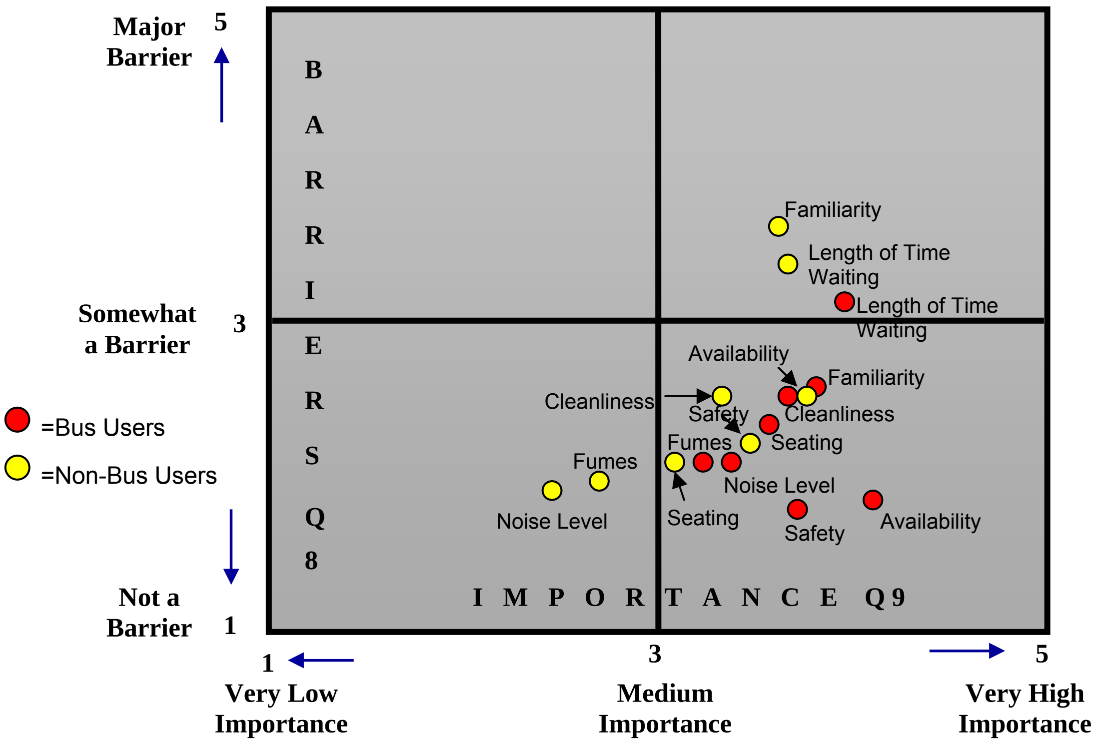
To identify barriers to using public transit while in Downtown Pittsburgh, participants were asked to rate potential barriers to using the Downtown bus or 'T' service on a scale of 1 to 5, where 1=Not a Barrier and 5=Major Barrier. Respondents were also asked to rate the importance of various attributes related to the Downtown bus or 'T' service. The results of these two survey questions for *bus users* and *non- bus users* are presented in Matrix 1.

The stated criteria on which the following analysis was based is as follows:

- Availability of Downtown buses and the 'T'
- Cleanliness of Downtown buses and the 'T'
- Noise level of buses and the 'T'
- Safety of Downtown buses and the 'T'
- Seating availability of Downtown buses and the 'T'
- Length of time you spend waiting for Downtown buses and the 'T'
- Your familiarity with routes of Downtown buses and the 'T'
- Smell of bus fumes (Barrier only)
- Absence of bus fumes (Importance only)

Transit Barriers and Priorities for Bus and Non-Bus Users

Matrix 1: Perceived Barriers and Their Relative Importance to Downtown Bus Users and Non-Bus Users



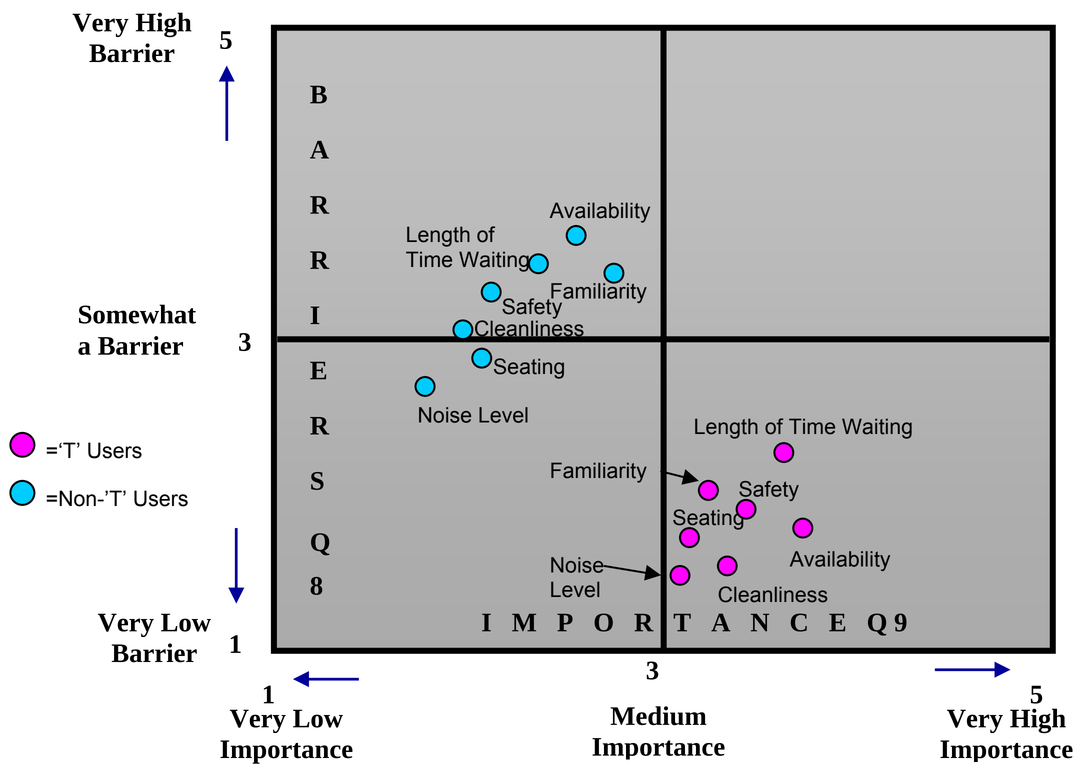
As shown in Matrix 1 on the previous page, bus users and non-bus users share similar feelings that the *length of time waiting for Downtown buses* is both somewhat of a barrier and important. While considered a key barrier for non-bus users, *familiarity of routes* is much less a barrier for existing bus users. However, *familiarity of routes* is viewed as important by both groups. Generally, bus users and non-bus users agree that *noise levels*, *smell of bus fumes*, and *seating availability* are not critical barriers to transit service. From an importance perspective, however, these criteria are relatively important issues, especially among bus users. *Noise level* was rated by non-bus users as only a minimal barrier and having a fairly low priority. In retrospect, this result may be due to the interpretation of the survey question; it is now assumed by the TUA surveyors that survey respondents were rating noise levels <u>on the bus</u> rather than the intended meaning, which was aimed at understanding people's perceptions regarding the noise caused by diesel buses on the Downtown streets.

Also in Matrix 1, it can be noted that, although *bus safety* is a priority in terms of importance to the two respondent groups, it is not perceived, for the most part, as much of a barrier to bus users. On the other hand, *bus safety* was identified by non-bus users as both important and to some extent a barrier to transit use.

Transit Barriers and Priorities by 'T' and Non-'T' Users

The results of two survey questions related to transit barriers and the importance of various attributes for 'T' users and non-'T' users are presented in Matrix 2 below.

Matrix 2: Perceived Barriers and Their Relative Importance to Downtown 'T' and Non-'T' Users

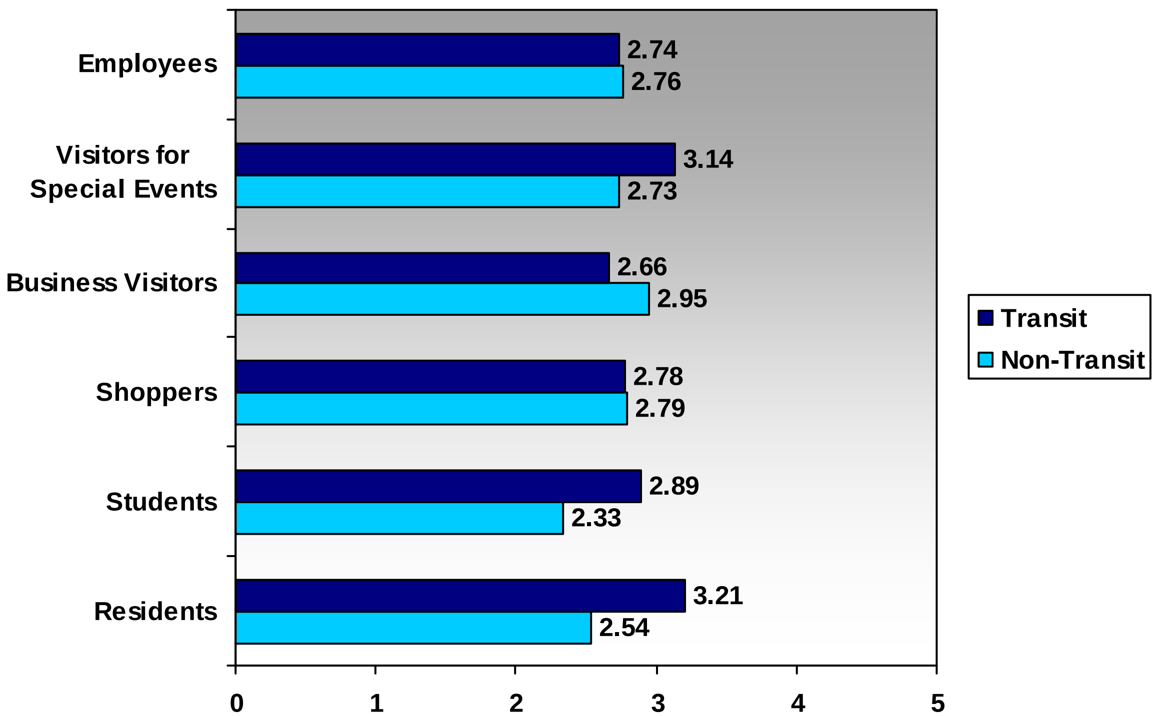


As shown in Matrix 2, regular 'T' users do not believe any of the stated transit-related criteria are major barriers. They do, however, view these criteria as playing an important role in their decision to utilize Port Authority's light rail transit ('T') system. Not surprisingly, 'T' users identified *length of time waiting* as being important, as well as the highest rated barrier to LRT use. In contrast, non-'T' users rated all but *seating availability* and *noise level* between 'somewhat of a barrier' and a 'major barrier'. In the case of non-'T' users, *availability of the 'T'* was identified as slightly more of a barrier than *length of time waiting*. *Familiarity of routes*, *safety*, and *cleanliness* are also considered by non-'T' users as potential barriers to the use of the 'T'. In every instance, however, none of the criteria received a "medium" or "very high" importance rating by those who currently do not ride the 'T'.

Perceptions Of Public Transit Within Downtown

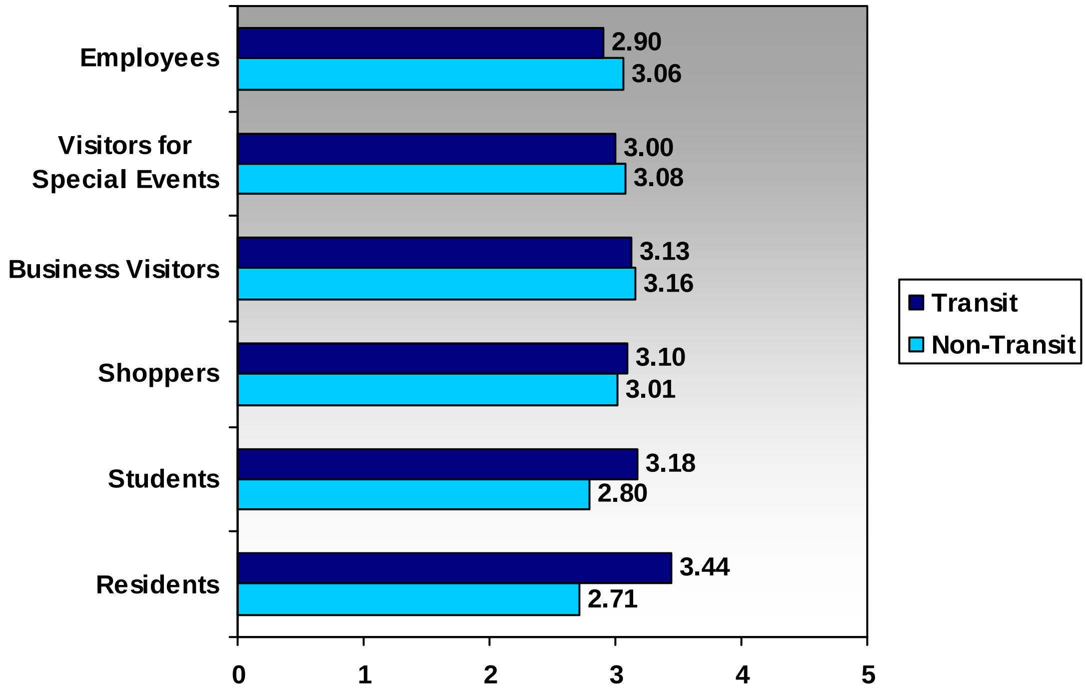
An important objective of the study was to evaluate various perceptions of public transportation within Downtown Pittsburgh. For example, Graph 8 shows that non-transit users, for the most part, have lower levels of understanding where different bus routes go within the Downtown Pittsburgh area. Also of note, but not surprising, are the differences in bus routing awareness among transit users who are Downtown residents and those who are business visitors. It is clear from the data presented below that transit users who spend more time in Downtown Pittsburgh, such as residents and students, have a greater understanding of bus routes than infrequent visitors, such as business visitors. The exception is employees, who are among the most frequent users of Downtown Pittsburgh, but who have a relatively low understanding of Downtown bus routing.

Graph 8: Ratings by Market Segment on the Ease of Understanding Where Different Bus Routes Go Within Downtown Pittsburgh (where: 1=Strongly Disagree and 5=Strongly Agree)



As depicted in Graph 9 on the following page, Downtown residents and students seem to have the greatest understanding of Port Authority's numbering system for both buses and the 'T'. What is somewhat surprising, however, is the fact that Downtown employees who indicated they use public transit also admitted to only a minimal grasp of the transit numbering system. This result can possibly be explained by the assumption that most Downtown employees' knowledge of transit routing numbers may be limited to only those routes used to get them to and from the workplace.

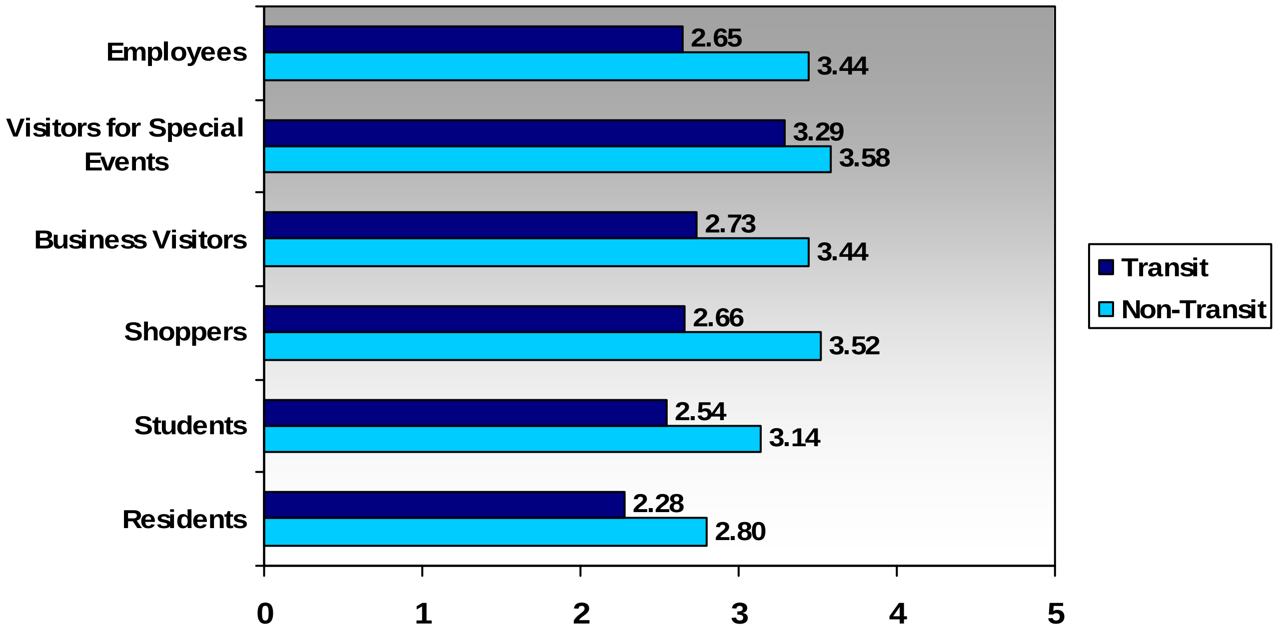
Graph 9: Ratings by Market Segment on the Ease of Understanding Port Authority's Numbering System for Buses and the 'T' (where: 1=Strongly Disagree and 5=Strongly Agree)



The next graph (Graph 10), which is displayed on the following page, addresses the survey question related to people being unsure as to where buses are going and, subsequently, making the decision to forego transit use. Understandably, transit-experienced Downtown residents are the least afraid to get on a bus despite the possibility of not fully comprehending its route. On the other hand, visitors to special events who identified themselves as transit riders are clearly apprehensive about getting on a bus when they are uncertain of its travel route.

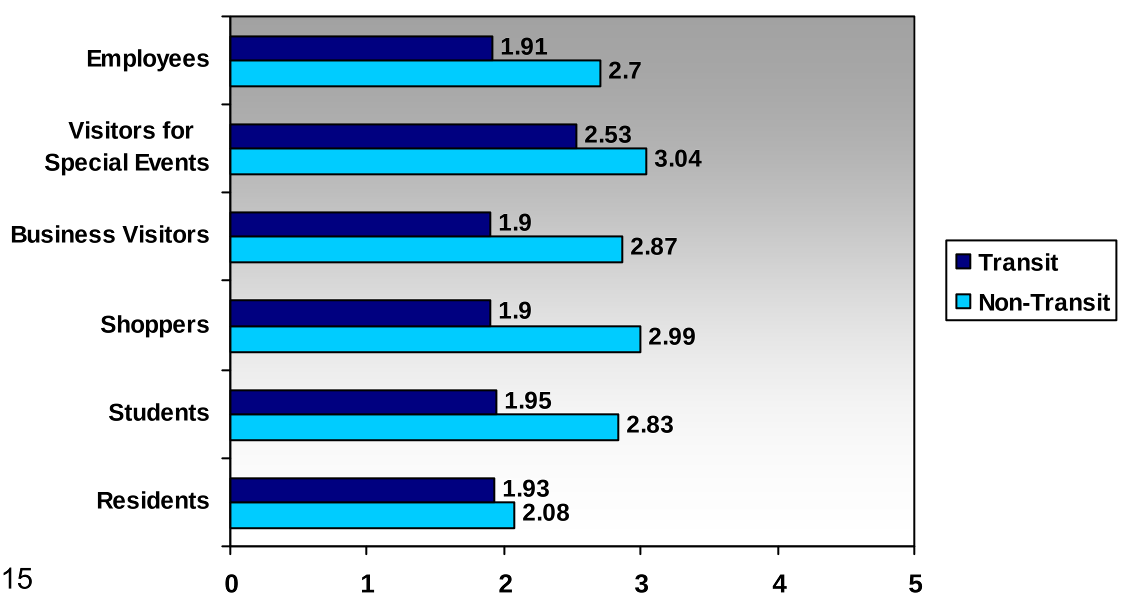
In contrast, among the non-transit users, Downtown residents expressed the least concern (with the only rating below '3') about taking the bus without knowing its exact routing.

Graph 10: Ratings by Market Segment on the Fear of Getting on a Bus Because They Are Unsure of Its Destination (where: 1=Strongly Disagree and 5=Strongly Agree)



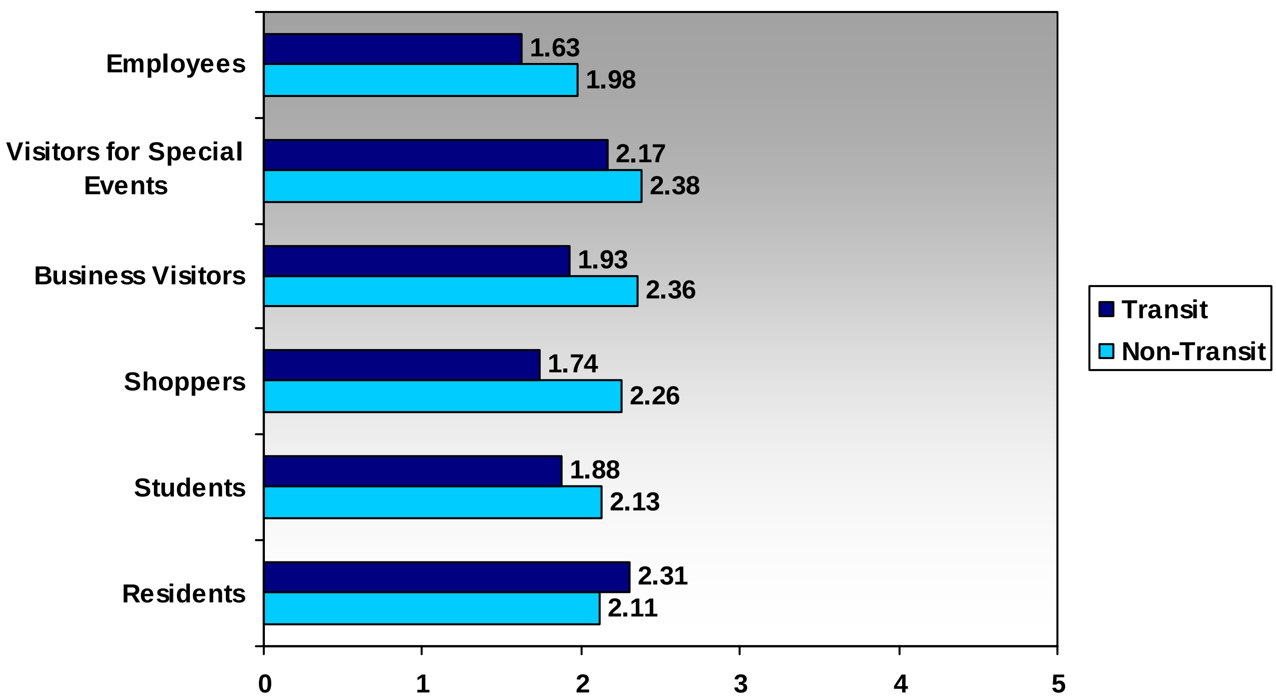
When survey respondents were asked about being afraid to get on a bus because they did not quite understand how to use the transit system (i.e. when and how much to pay, etc.), the responses of both transit and non-transit users in all six market segments indicated a level of fear at '3' or below on a scale of 1 to 5 (Graph 11). These responses give the impression that Downtown transit is, for most people, not particularly intimidating. However, the fact that, in some market segments, the number either slightly exceeded '3' or was approaching the mid-fear level of '3' is an indication that not knowing exactly how the system works may play a role in people's decision to not use transit.

Graph 11: Ratings by Market Segment on the Fear of Getting on a Bus Because They Don't Understand How to Use the Transit System (where: 1=Strongly Disagree and 5=Strongly Agree)



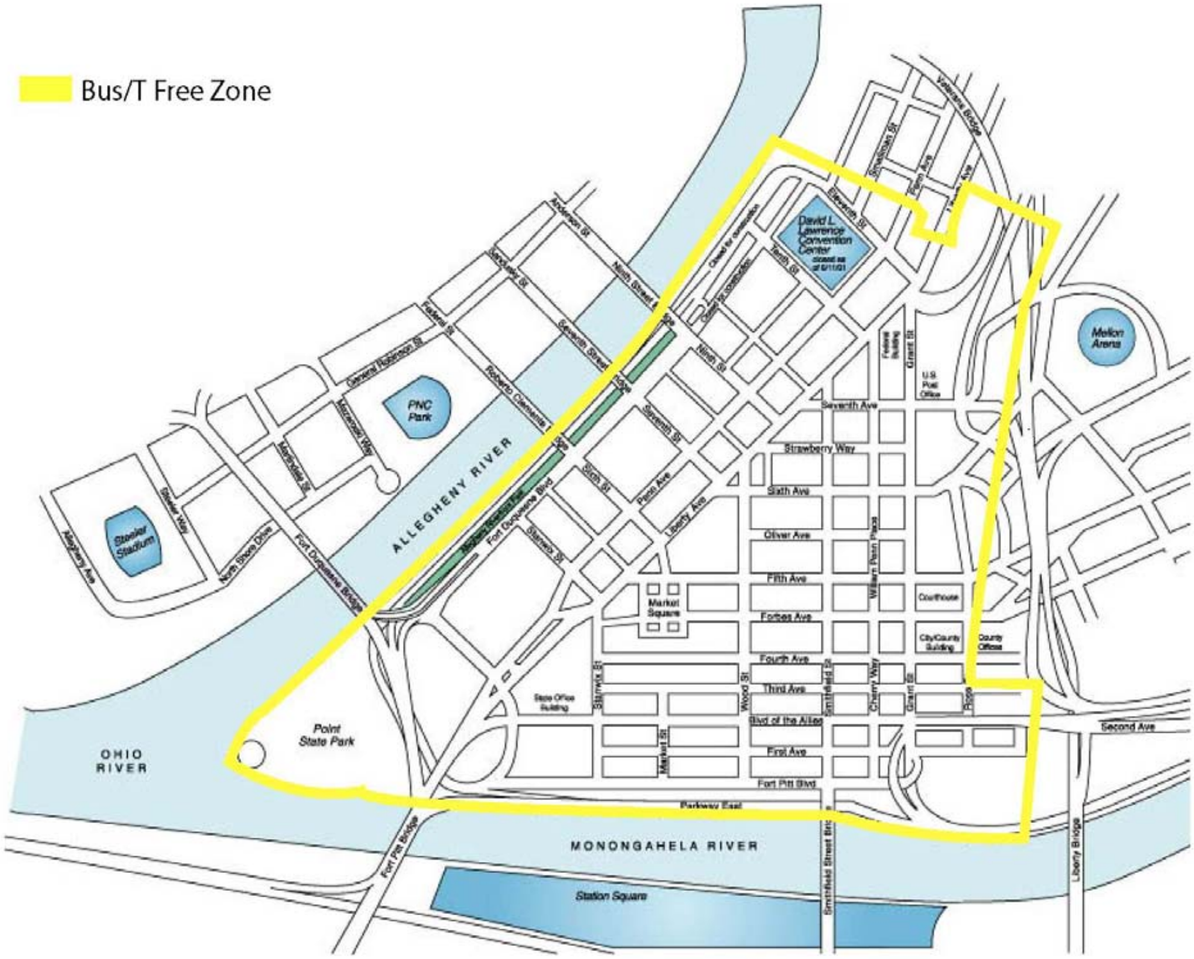
While the perception that public transit is for people of a lower socio-economic status may be prevalent in other U.S. urban markets, Graph 12 graphically shows that Downtown Pittsburgh respondents perceive public transportation as being an appropriate means of travel for all socio-economic classes. In response to the statement, “I think public transit is for people who can’t afford a car”, both transit and non-transit users in all six market segments overwhelmingly disagreed. Based on the data, Downtown employees feel most strongly about this. It is interesting to point out that these current results confirm what was learned from the PDP’s **2003 Employee Transportation Needs Assessment** – *Pittsburghers from a wide range of different income levels view public transit as an acceptable transportation option and, therefore, utilize it as a reasonable means of travel.*

Graph 12: Ratings by Market Segment on the Perception that Public Transit Is for People Who Can’t Afford a Car (where: 1=Strongly Disagree and 5=Strongly Agree)



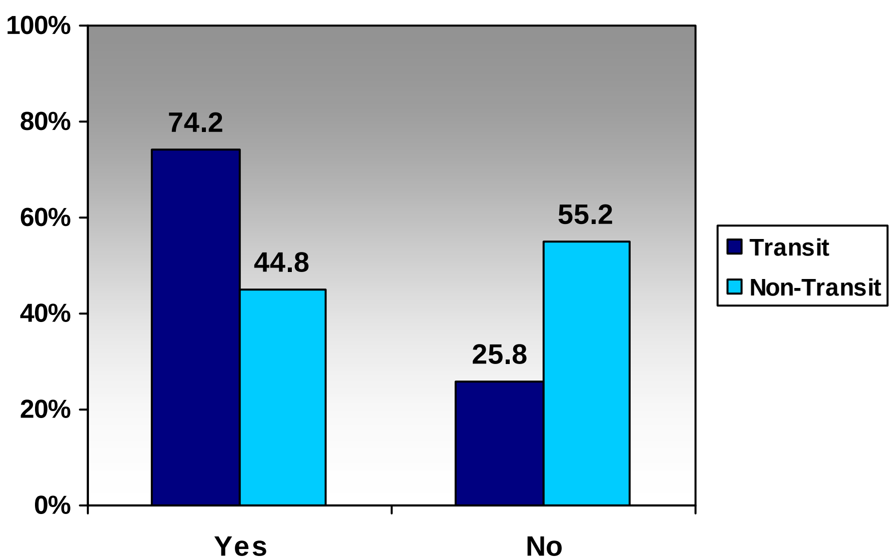
V. AWARENESS OF THE DOWNTOWN ‘FREE FARE’ TRANSIT ZONE

An important component of the Transit / Non-Transit User Survey was the focus placed on the ‘free fare’ transit zone and the Downtown public’s knowledge of its boundaries and other programmatic characteristics. PDP staff wanted to test their assumption that only a limited number of people in Downtown Pittsburgh fully understand the parameters of the zone. Therefore, Tripp Umbach included a variety of questions about the ‘free fare’ transit zone on the survey, which allowed the research team to quantify respondents’ levels of awareness, understanding, and use of the free Downtown service. The following map outlines the boundaries of the current ‘free fare’ transit zone in Downtown Pittsburgh.



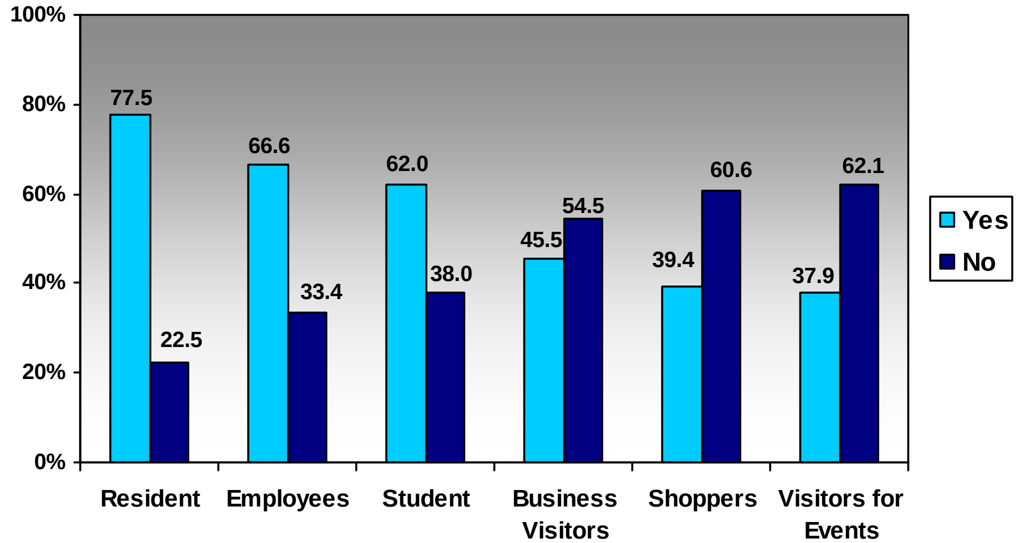
As shown in Graph 13 below, more than half of all non-transit users in Downtown Pittsburgh are unaware of the 'free fare' transit zone. Surprisingly, more than one in four (or over 25%) current transit users are also <u>not aware</u> of the 'free fare' transit zone.

Graph 13: Awareness by <u>All Respondents</u> of the Downtown 'Free Fare' Transit Zone



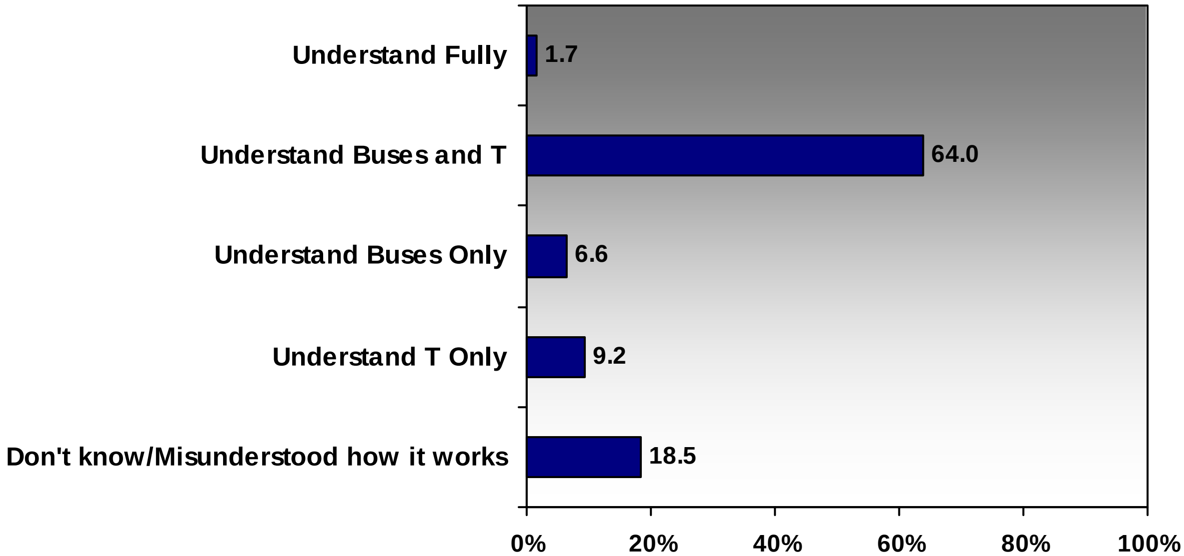
When determining the level of awareness by market segment, Graph 14 below shows that Downtown residents are most aware of the ‘free fare’ transit zone with 77.5% reporting knowledge of the free transit service, while visitors to special events are the least aware, with only 37.9% reporting knowledge of it. Not too surprisingly, employees have the second highest level of awareness of the ‘free fare’ transit zone among all six Downtown market segments.

Graph 14: Awareness by Market Segment of the ‘Free Fare’ Transit Zone



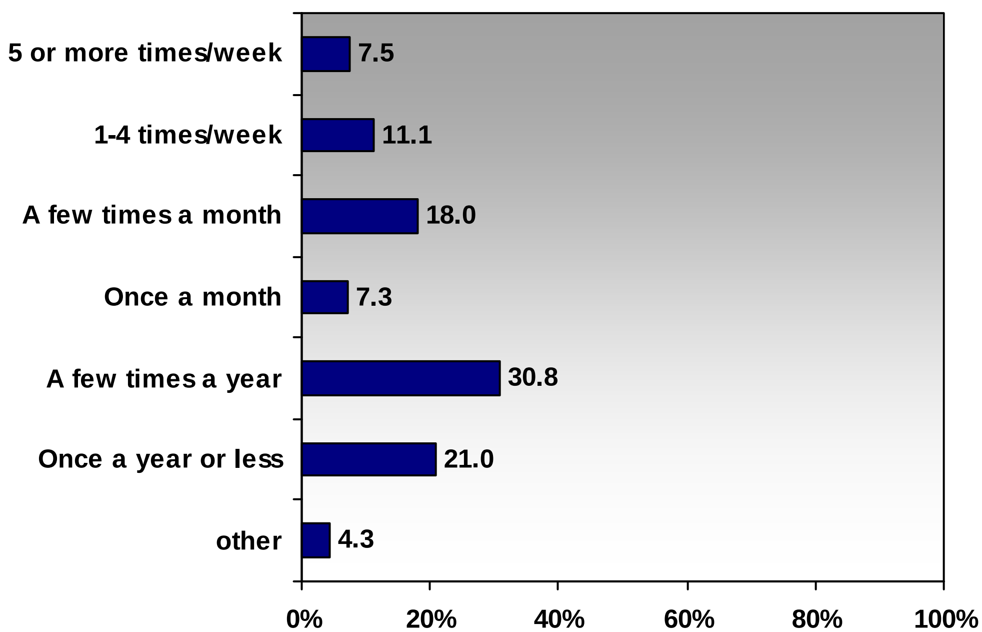
While awareness of the zone is fairly high, there is a limited understanding of the specifics of its use. As depicted in the next graph (Graph 15), only 1.7% of all respondents are aware that the ‘free fare’ transit zone includes both Downtown bus and ‘T’ service and that there are time restrictions for buses, but not for the ‘T’.
In response to the survey’s open-ended question about how the ‘free fare’ transit zone works, 64% of the respondents correctly indicated, however, that both bus and ‘T’ are included in the free service. In contrast, 18.5% of all respondents either had no idea about the zone or clearly misunderstood its programmatic parameters. Key areas of misunderstanding included: “assuming that the zone encompasses the entire City of Pittsburgh” and “believing that the zone extends to Station Square”.

Graph 15: Level of Understanding by <u>All Respondents</u> of the Programmatic Parameters of the 'Free Fare' Transit Zone



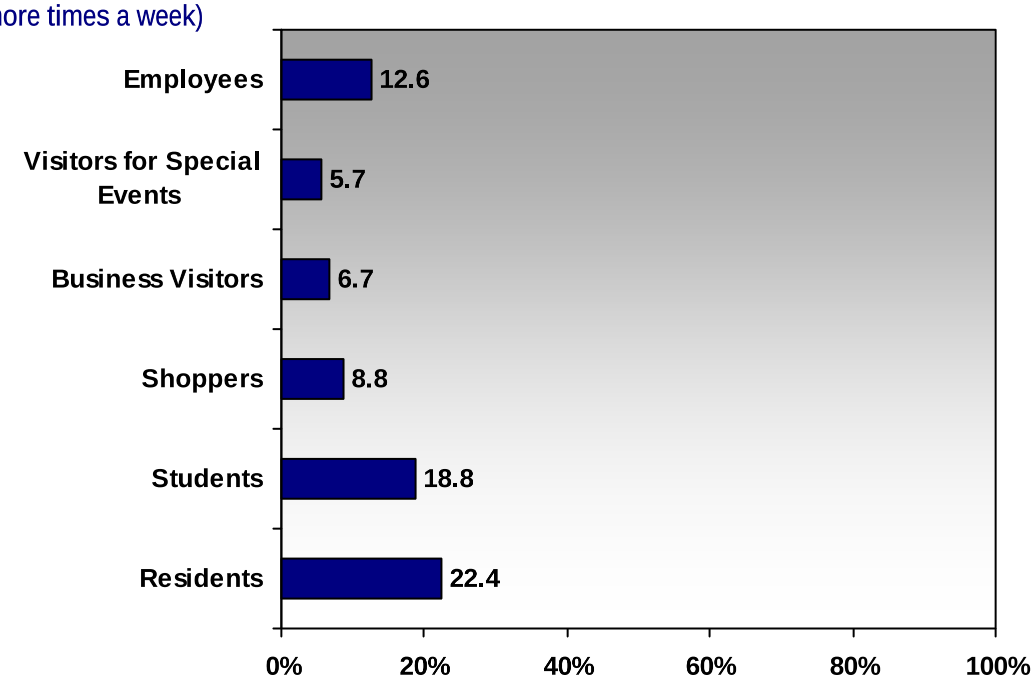
Below, Graph 16 shows data for only respondents who have used the 'free fare' transit zone at least once. It is important to note that, while the service is free, less than 20% of the people who have ever taken advantage of the 'free fare' zone report using it as frequently as 'one or more times a week'. On the other hand, more than half of all reported users said they use it 'a few times a year or less'.

Graph 16: Frequency of Use by <u>All Respondents</u> Who Have Used the 'Free Fare' Transit Zone



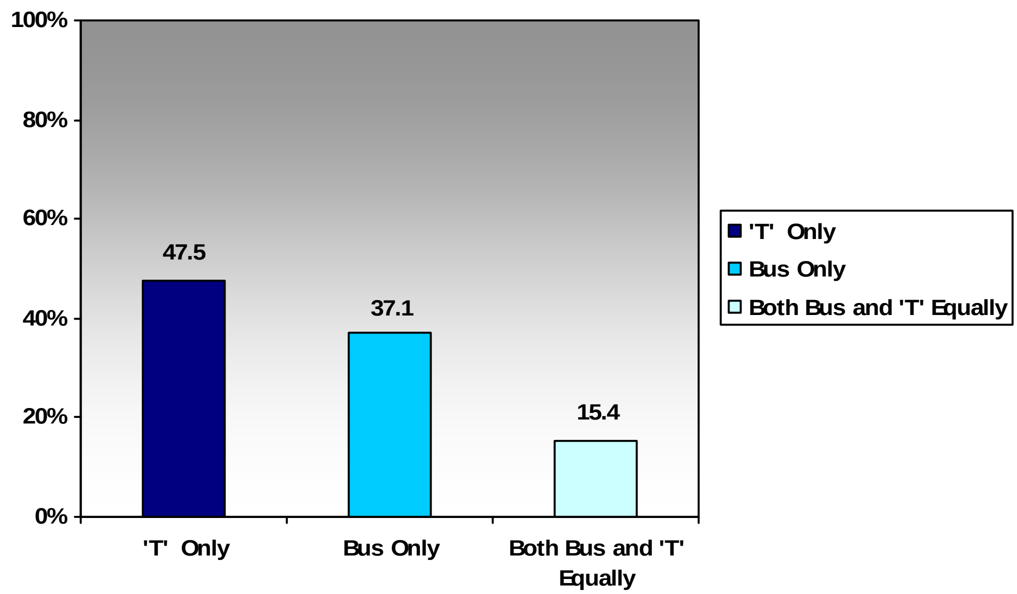
In looking at the market segment breakdown in Graph 17 of frequent 'free fare' transit zone users (those who reported using it one or more times a week), 22.4% are residents and 18.8% are students. Not unexpectedly, visitors to special events are the least likely group to be frequent users of the zone, coming in at only 5.7%. It is important to note, however, that even though employees are the single largest market segment included in the study, only 12.6% reported use of the free service one or more times a week.

Graph 17: Frequent 'Free Fare' Transit Zone Use by Market Segment (where: 'Frequent' is one or more times a week)



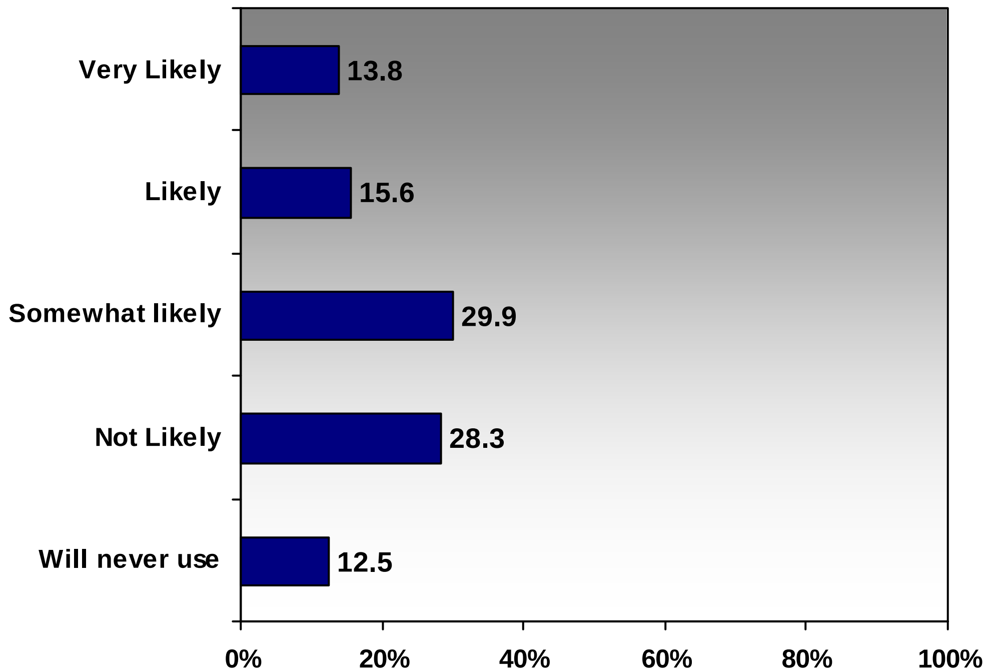
As shown in Graph 18, out of those respondents who indicated they take advantage of the 'free fare' transit zone, a higher percentage of users said their travel mode preference is the 'T'. Relatively few 'free fare' transit zone users, in fact, reported that they use both the bus and 'T' equally.

Graph 18: Travel Mode Preference ('T', Bus, or Both) of All Respondents Who Use the 'Free Fare' Transit Zone



To those respondents who had never heard of the ‘free fare’ transit zone, the surveyors briefly described the zone, its boundaries, and programmatic parameters. The respondents were then asked how likely it was that they would take advantage of this free service now that it had been described to them. Based on the responses (and as displayed in Graph 19), only 29.4% of those who were previously unaware of the service indicated they would be “likely” or “very likely” to use it. On the other hand, 40.8% responded they would “not likely use it” or would “never use it”.

Graph 19: Likelihood of ‘Free Fare’ Transit Zone Use by All ‘Unaware’ Respondents After Learning About It



Further analysis indicates that Downtown residents are most likely to consider using the ‘free fare’ transit zone after becoming aware of it, with 33.3% indicating that they would be “Very Likely” to use the zone. Again, Downtown employees are the least likely to be motivated to use the ‘free fare’ transit zone after it has been explained to them, with only 7.7% indicating that they would be “very likely” to use the zone.

For respondents who recently learned of the ‘free fare’ transit zone and expressed an interest in using it, a large percentage (55.6%) was interested in using both the bus and ‘T’ equally. For respondents who were unaware of the “free fare” zone and are now interested in using it, slightly more are interested in using the bus only (24.4%) versus the ‘T’ only (19.9%).

VI. WAYS DOWNTOWN PITTSBURGH TRANSIT CAN BE IMPROVED

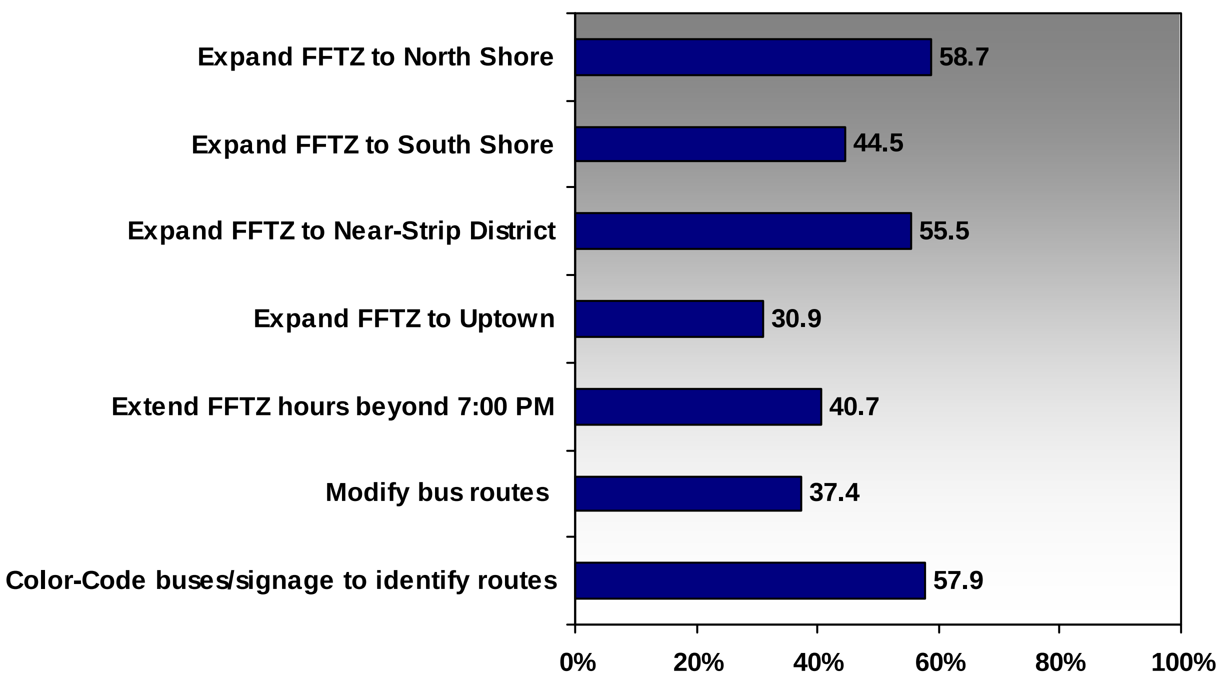
Participants were given the opportunity to indicate what improvements they would make to the Downtown Pittsburgh bus and ‘T’ service, based on a set list of responses provided on the survey. The survey respondent was instructed to ‘check all that apply’.

Most, but not all of the response options, relate to the ‘free fare’ transit zone. The answer options were as follows:

- Expand the ‘free fare’ transit zone to the North Shore
- Expand the ‘free fare’ transit zone to the South Shore
- Expand the ‘free fare’ transit zone to the Near-Strip District
- Expand the ‘free fare’ transit zone to Uptown
- Extend the ‘free fare’ transit zone bus hours beyond 7:00 p.m.
- Modify the bus routes to provide better Downtown circulation
- Color-code buses and bus stop signage to identify routes within Downtown Pittsburgh

The data, as reported in Graph 20, includes the multiple responses from this particular survey question. After analyzing the responses, the improvement checked by the greatest percentage (58.7%) of respondents is “Expanding the ‘free fare’ transit zone to the North Shore”. Not far behind (at 57.9%) was the suggested improvement, “Color-code buses and bus stop signage to identify routes within Downtown Pittsburgh”.

Graph 20: Suggested Improvements by All Respondents for Downtown Pittsburgh Bus and ‘T’ Services



Taking a closer look at the market segment breakdown in terms of suggested transit improvements, Table 4 shows the number one improvement proposed by each of the six market segments. Reiterating that, in this study, Downtown Pittsburgh is defined as including the Golden Triangle, North Shore, Station Square, Convention Center/Near Strip District and Uptown, it can be seen that employees and students agree that “Expanding the ‘free fare’ transit zone to the North Shore” would improve overall Downtown transit. This is not too surprising, especially given the fact that employees, residents, and students are the largest users of transit among the six market segments. By the same token, visitors to special events, business visitors, and shoppers are the survey respondents who typically only utilize public transit occasionally. The number one improvement identified by these three market segments is “Color-code buses and bus stop signage to identify routes within Downtown Pittsburgh”.

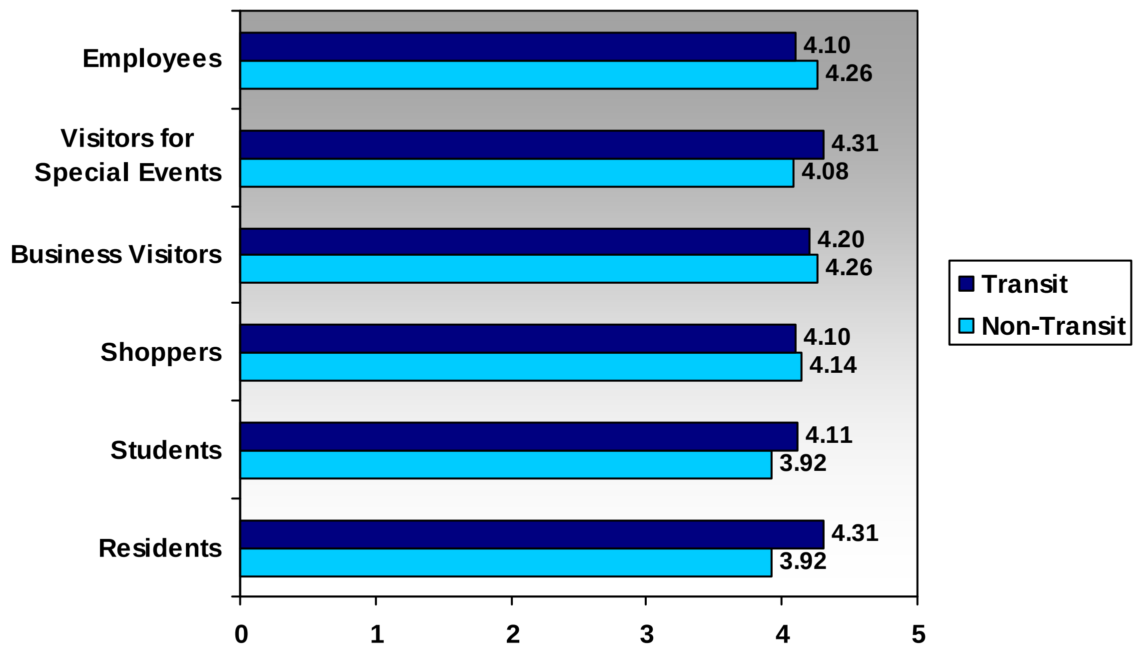
Table 4: Suggested Improvements by Market Segment for Downtown Pittsburgh Bus and ‘T’ Services

Segment	Top Improvement
Employees	Expand FFTZ to North Shore
Visitors to Special Events	Color-code buses and bus stop signage to identify routes within Downtown Pittsburgh
Business Visitors	Color-code buses and bus stop signage to identify routes within Downtown Pittsburgh
Shoppers	Color-code buses and bus stop signage to identify routes within Downtown Pittsburgh
Students	Expand FFTZ to North Shore
Residents	Expand FFTZ to Uptown

Given that the Downtown residents surveyed encompassed those living in zip codes 15219 and 15222, it is likely that a number of returned paper surveys came from people residing in Uptown and the Lower Hill District and not specifically in Downtown proper. This assumption may account for the top transit improvement cited by residents as being “Expand the ‘free fare’ transit zone to Uptown’.

After the study participants identified their preferred Downtown Pittsburgh transit improvements, they were asked if they would support an expanded ‘free fare’ transit zone throughout Downtown Pittsburgh. The responses are shown on the following page in Graph 21. Not surprisingly, all six market segments - *transit and non-transit users alike* - strongly support an expansion of this free service.

Graph 21: Support by Market Segment for Expanding the 'Free Fare' Transit Zone Throughout Downtown Pittsburgh (where: 1 = Strongly Disagree and 5 = Strongly Agree)



VII. TRANSIT / NON-TRANSIT USER SURVEY CONCLUSIONS AND RECOMMENDATIONS

Travel Modes and Downtown Pittsburgh Destinations

- The highest percentage of all respondents – 46.1% - "drive(s) alone" into and out of Downtown. The second highest percentage – 35.6% - identified public transit as their mode of travel into and out of Downtown. However, when the data from specific market segments are examined, overwhelming majorities of students (59.5%) and residents (58.9%) of Downtown choose public transit as their mode of transport into and out of Downtown. The third largest market segment with a comparatively high public transit use of 38.6% is Downtown employees.[1] These three market segments also have high percentages of members who report coming into Downtown Pittsburgh 5 or more times a week: employees (93.9%); students (69%); and residents (43.9%).

→ *Students, residents, and employees represent a significant marketing opportunity for increasing public transit use.*

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1 This percentage of public transit use for employees is significantly lower than that documented in the PDP's **2003 Employee Transportation Needs Assessment**, which identified 48% of Downtown employees as using public transit One explanation for this difference is that the 2003 survey used controls to ensure that surveys were received from each of the nine Downtown neighborhoods and from each sector of the Downtown economy. The **2006 Transit/Non-Transit User Survey** did not use any of those controls. Instead, businesses were contacted and asked to share the 2006 survey with their employees who then chose whether or not to respond.

▪Once Downtown, walking is the number one mode of travel within Downtown Pittsburgh for all respondents. This is a reasonable choice given the small size of Pittsburgh's Downtown. However, the second mode of travel within Downtown chosen by respondents is driving their own car rather than using public transit. This choice is a concern, particularly since Port Authority operates its 'free fare' transit zone in Downtown and both bus and "T" service are free within specified boundaries.

→ *Marketing of the 'free fare' transit zone can promote the use of public transit as a quick and efficient way to get around Downtown Pittsburgh.*

▪While some market segments, such as students (37.4%) and downtown residents (46%), have high rates of public transit use when traveling within the Downtown area, employees are the least likely to use public transit when traveling within Downtown Pittsburgh. Only 15.7% report using public transit within Downtown even though over 69% of employees report traveling to another destination in Downtown a few times a month or more.

→ *With the high number of Downtown employees in Downtown daily and the frequency with which they travel within Downtown, there is clearly a great opportunity to increase transit participation among this market segment.*

▪The North Shore is the most desired destination within Greater Downtown Pittsburgh for all respondents, followed in declining order by Station Square, the Central Core, Grant Street, Convention Center/Near Strip District, Cultural District, Gateway Center, Uptown, and First Side. When examined by market segment, employees and business visitors select the North Shore as their top desired destination, possibly because of the cheaper parking available there. Shoppers, students, and visitors for events select Station Square for their top choice, again possibly because of the availability of cheaper parking as well as the entertainment and shopping venues located there.

→ *At the present time, the top two desired destinations within Downtown Pittsburgh - the North Shore and Station Square – are outside the boundaries of the 'free fare' transit zone. One solution that would accommodate the needs of Downtown Pittsburgh patrons is to expand the 'free fare' transit zone to include both the North Shore and Station Square.*

▪The answers to the question, "how do you typically get to these other destinations", reveal the difficulty of using existing public transit bus routes to get to some of the desired destinations. Respondents said they "drive alone" to get from the Convention Center/Near Strip District to Grant Street (42%); from the North Shore to Station Square (47%); and from Station Square to the Convention Center/Near Strip District (50%).

→ *Modify existing bus routes to incorporate point-to-point desired destinations within Downtown Pittsburgh.*

Perceived Barriers to Use and Perceptions of Public Transit

▪For non-bus users, "lack of familiarity with Downtown bus routes" is the greatest barrier to choosing public transit. Attention to making bus routes more easily understood by the public is needed if transit ridership is to increase. For example, visitors to special events represent a special category of Downtown user who visit Downtown infrequently but, when they do, it is in numbers that can have a disproportional impact on traffic flow if they enter Downtown during the morning or evening weekday rush hour. They are also the group who use public transit the least and are most likely to use their own car when traveling to additional Downtown destinations. And they are especially put off by the existing Downtown bus routing and numbering systems.

→ *Create a series of clear, simple color-coded transit corridors to make existing Downtown bus routes easily comprehensible. Use brochures, Downtown transit maps, and color-coded bus stop signs to convey information to such target audiences as downtown employees, visitors, shoppers, students and residents.*

▪By contrast, of the three market segments with high public transit use (students, residents, and employees) two segments – *students and residents* - regard "length of time waiting for the bus" as their biggest barrier to use and employees regard "lack of familiarity with Downtown bus routes' as their biggest barrier. In terms of importance, employees rate "bus and 'T' availability" and "length of time waiting for a bus" as most important. Students rate "length of time waiting for the bus and 'T' "as most important; and residents rate "bus availability" and "'T" noise level as most important.

→ *The issues of "availability" of service and "length of time waiting" for either the bus or the 'T' speak to frequency of public transit service. In terms of Port Authority's present system of operations, there is a high frequency of service during the two workday rush hours and reduced service in non-rush hours and on the weekends. For those who use public transit within Downtown, frequency of service on both the bus and "T" is of great importance. In fact, Port Authority's largest market segment – Downtown employees - who only use public transit to get into and out of Downtown, perceive "lack of familiarity with Downtown bus routes" as their biggest barrier to public transit use but "availability of bus and 'T'" service" as their most important issue. One solution is to implement a Downtown circulator that provides greater frequency of service during the week in non-rush hours.*

▪While public transit in other U.S. urban markets is often perceived as the transportation option only for people of lower socio-economic status, Pittsburghers overwhelmingly reject that characterization of Pittsburgh's public transit ridership and see it as an appropriate means of travel for people of all socio-economic classes. In fact, the higher the frequency of coming into Downtown by a particular market segment, the higher the percentage of respondents who disagreed with the statement "I think public transit is for people who can't afford a car."

→ *In Pittsburgh, the lack of negative stigma attached to public transit use provides transit companies with a marketing opportunity to increase* *ridership by focusing on the positive benefits of public transit without having to counteract damaging stereotypes.*

Awareness of the Downtown 'Free Fare' Transit Zone

- Downtown employees are the market segment most likely to be aware of the 'free fare' transit zone, while at the same time being the least likely to use it. Employees are also the least likely to be motivated to use the 'free fare' transit zone after it has been explained to them – with only 7.7% indicating that they would be "very likely" to use the zone.

  → *Since the majority of the daily Downtown population is made up of employees, outreach to employers and their employees is a key strategy to increase the use of public transit in Greater Downtown Pittsburgh.*

- Overall usage of the 'free fare' transit zone is low, with only 1 in 5 respondents using the free zone at least weekly. For example, only 12.6% of all employees, the single largest market segment with over 93% coming into Downtown 5 or more times a week, use the 'free fare' transit zone at least once per week.

  → *Pro-actively direct information about use of the 'free fare' transit zone to employers and their employees, including both transit and non-transit users since nearly half of all employees use transit to travel to and from Downtown Pittsburgh.*

  → *Develop and execute a marketing program to promote the use of the 'free fare' transit zone for Downtown circulation. In addition, promote information on how the existing 'free fare' transit zone operates, since less than 2% of people who travel within Downtown Pittsburgh fully understand the programmatic elements*.

- Port Authority's bus routing system efficiently delivers and distributes riders to Downtown Pittsburgh and then efficiently picks them up and takes them out of Downtown on a daily basis. However, based on the minimal use of the 'free fare' transit zone within Downtown, the Downtown transit system does not offer efficient service for point- to-point circulation within the Golden Triangle and the Greater Downtown area.

  → *Develop a more comprehensive Downtown circulation system using the existing bus routes as a base and make the necessary route adjustments to provide efficient and effective point-to-point circulation within the Golden Triangle and throughout the Greater Downtown area.*

Ways Downtown Pittsburgh Transit Can Be Improved

- When asked what improvements to public transit service within Downtown Pittsburgh they would like, respondents chose the following as their top three improvements: Expand the 'free fare' transit zone to North Shore (58.7%); Color-code buses and signage to identify routes (57.9%); Expand the 'free fare' transit zone to the Near Strip District (55.5%). When examined by market segment, however, it becomes clear that those who use public transit regularly have different needs from those who use it occasionally. Employees, students, and residents – all segments with a high percentage of public transit use – have as their top improvement the expansion of the 'free fare' transit zone to another neighborhood. Those who come into Downtown infrequently – business visitors, shoppers, and visitors to special events – all chose "color-code buses/signage to identify routes" as their top improvement.

  → *Port Authority personnel have often stated that their routing and signage system is easy to understand once an individual uses it regularly. However, the majority of Downtown users, even those in market segments with high public transit use, do not regularly use public transit either to get into/out of Downtown or to get around Downtown. To increase ridership, the goal should be to make the existing public transit system as transparent and accessible as possible to the public. A first step in accomplishing that goal is to color-code buses and signage to make their routes easily identifiable to any potential user.*

VIII. IN SUMMARY

Port Authority's current routing system is a hub and spoke system with Downtown Pittsburgh as the hub. Based on this transit routing design, the vast majority of Port Authority bus routes come into Downtown, loop through the central core, and then go out of Downtown along the same route in which they arrived. Downtown Pittsburgh is also the primary destination point for Port Authority's light rail or 'T' system, with four LRT stations located throughout Downtown.

For the City of Pittsburgh and its surrounding Allegheny County suburbs, Port Authority plays a major role in getting people into and out of Downtown Pittsburgh. The questions posed by the Transit / Non-Transit User Survey were seeking answers regarding the travel options and preferences of Downtown employees, tourists, conventioneers, business visitors, shoppers, students, and residents once they are in Downtown.

The purpose of this Executive Report was to provide a comprehensive summary of how Downtown Pittsburgh patrons perceive and use Port Authority's transit system for the purposes of getting around Downtown, which was defined to include the Golden Triangle, North Shore, Station Square, Convention Center/Near Strip District, and Uptown.

The Transit / Non-Transit User Survey results discussed in this report were based, for the most part, on responses from all respondents. In several cases, however, the responses from individual market segments were also presented as a means of highlighting similarities and dissimilarities of perception and need by the six identified categories of Downtown patrons. Due to the extensiveness of the market segment data collected, it was not possible to include these segmented results in their entirety in the Executive Report. This information is available in presentation form and will be used by the PDP and others to show comparisons regarding transit-related perceptions and needs by the distinct surveyed groups.

As Downtown Pittsburgh continues to evolve into "one of America's great urban centers", the completion of the PDP's Transit / Non-Transit User Survey presents an unprecedented opportunity for the City of Pittsburgh, Allegheny County, Port Authority, and others to consider the most up-to-date perspectives of the Downtown public regarding current transit options for getting around Downtown. And, based on these perspectives, there is yet another opportunity to design and implement carefully planned transit system changes by Port Authority that are aimed at enhancing its day-to-day transit operations and overall ridership.