



## Lextran Service & Fare Equity Analysis Final Report

Prepared for Lextran

August 12, 2015





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# **2015 LEXTRAN TITLE VI TRANSIT SERVICE AND FARE EQUITY ANALYSIS**

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## **INTRODUCTION**

As a recipient of the U.S. Department of Transportation, Federal Transit Administration (FTA) funding (49 USC Section 5307, Urbanized Area Formula Program), the Transit Authority of Lexington-Fayette Urban County Government (Lextran) must comply with Title VI regulations. The Title VI regulation requirements are included in 49 CFR Section 21.9(b) Title VI Regulations and in the Federal Transit Administration (FTA) Circular 4702.1B ("Circular") Title VI Requirements and Guidelines for Federal Transit Administration Recipients. The Circular "provide(s) recipients of FTA financial assistance with guidance and instructions necessary to carry out the U.S. Department of Transportation's (DOT) Title VI regulations and to integrate into their programs and activities considerations expressed in the Department's Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficient (LEP) Persons (70 FR 74087, December 14, 2005)."

Title VI compliance prohibits discrimination in any Federally-assisted program on the basis of race, color, or national origin.

As part of its compliance efforts, Lextran contracted with RLS & Associates, Inc. (RLS) to collect and analyze racial, ethnic, and income data by surveying a sample of Lextran passengers. RLS then compared the results to demographic conditions in the service area and previously conducted Title VI surveys. This report summarizes the results of the recent survey and demographic data analysis efforts completed as part of the Lextran Title VI Transit Service and Fare Equity Analysis. The data contained in this report demonstrates the extent to which members of minority and non-minority groups and low-income individuals may be affected by changes in Lextran transit services and fares.

In addition to passenger surveys, RLS prepared demographic and service profile maps and charts using data from the 2013 American Community Survey (ACS) five-year estimates (2009-2013). This data will assist in determining whether Lextran's service is equally available to minority, low-income, and Limited English Proficient (LEP) populations residing within the Lextran service area.

## **SURVEY INSTRUMENT**

The survey instrument was designed to collect information regarding the race, color, national origin, income, and travel patterns of Lextran riders, and was based on Federal Transit Administration (FTA) recommendations from FTA Circular 4702.1B and the Title VI Service and Fare Equity Analysis Guidelines. Information collected included:

- ◆ Rider demographics including age, race, color, national origin, gender, income range, and zip code;
- ◆ English proficiency of minority riders;
- ◆ Auto availability by non-minority riders;
- ◆ Auto availability by minority riders;


- ◆ Typical number of transfers by non-minority riders;
- ◆ Typical number of transfers by minority riders;
- ◆ Frequency of use by non-minority riders;
- ◆ Frequency of use by minority riders;
- ◆ Purpose of trips by non-minority riders;
- ◆ Purpose of trips by minority riders;
- ◆ Trip originations and destinations of non-minority riders;
- ◆ Trip originations and destinations of minority riders;
- ◆ Peak hour trip travel times of non-minority riders;
- ◆ Peak hour trip travel times of minority riders;
- ◆ Awareness of and satisfaction with Lextran's services by non-minority riders;
- ◆ Awareness of and satisfaction with Lextran's services by minority riders;
- ◆ Total trip cost and method of fare payment by non-minority riders; and
- ◆ Total trip cost and method of fare payment by minority riders.

The surveys were available in several accessible formats. The majority of the surveys were provided in English and printed on card stock paper. Spanish and large print, double-sided English surveys were also provided.

All riders were asked to complete the survey while they were waiting to board, were on the bus, or after alighting the bus. Passengers who had already completed a survey were not asked to complete a second survey.

Respondents were provided with a pencil and a copy of the survey. Surveyors were available to answer questions and/or provide clarification. If a rider was unable to read or understand the information, the surveyor read the questions and wrote the rider's responses accordingly. In some cases the rider replied to all questions verbally, while the surveyor recorded his or her answers. Each surveyor collected completed surveys from riders and turned them in to the RLS supervisor at the end of the survey period. The surveys were organized according to the number received from each stop or route, and were counted at the end of each shift to ensure even distribution throughout the service area. The standard English survey questionnaire is provided as Exhibit 1 and the Spanish formatted survey instrument is provided as Exhibit 2.

## Exhibit 1: English Survey Example



# Passenger Survey

1. What is the route number, Starting Location, and Ending Location name of the bus you will be taking today?  
 Route # \_\_\_\_\_ Starting Location: \_\_\_\_\_  
 Ending Location: \_\_\_\_\_
2. Typically, how often do you ride a Lextran Bus?  
 (a) Monthly (b) Weekly (c) Daily
3. What is your main purpose in using the bus for this trip?  
 (Please select one)  
 (a) Work (b) School/College (c) Doctor/Medical Visit  
 (d) Leisure (e) Social Services (f) Other
4. What time of day did you begin this trip?  
 (a) 5:00- 7:00 AM (b) 7:00- 9:00 AM (c) 9:00- 11:00 AM  
 (d) 11:00-1:00 PM (e) 1:00- 3:00 PM (f) 3:00- 5:00 PM  
 (g) 5:00-7:00 PM (h) 7:00- 9:00 PM (i) 9:00-11:30 PM
5. About how long will your trip take, including getting to the bus stop, waiting for any transfer bus you may use, riding on the bus, and getting from the bus to your final destination? Minutes: \_\_\_\_\_
6. How far did you come to get to the bus stop for this bus?  
 (a) Less than 1 Block (b) 1-2 Blocks (c) 3-4 Blocks  
 (d) 5-6 Blocks (e) More Than 6 Blocks
7. How many separate buses do you have to use to make this one-way trip to where you are going now? (a) 1 Bus (b) 2 Buses (c) 3 or More
8. How will you pay your fare on this bus today?  
 (a) Cash/Single-Ride Pass (b) 30-Day Pass (c) Day Pass  
 (d) Senior/ADA Day Pass (e) Senior/ADA 30-Day Pass (f) 20-Ride Pass  
 (g) Other \_\_\_\_\_
9. How old are you? \_\_\_\_\_ Years old
10. What is the zip code at your home? Zip: \_\_\_\_\_
11. What is your gender? (a) Female (b) Male (c) Transgender
12. How many people live in your household? \_\_\_\_\_
13. What is your household's annual income?  
 (a) less than \$20,000 (b) \$20,000-\$39,999 (c) \$40,000-\$59,999  
 (d) \$60,000-\$79,999 (e) \$80,000-\$99,999 (f) \$100,000-\$124,999  
 (g) \$125,000-\$149,999 (h) More than \$150,000
14. How many automobiles are in your household?  
 (a) 0 (b) 1 (c) 2 (d) 3 or More
15. Do you consider yourself: (If more than one group applies to you, please circle all that apply.)  
 (a) White (b) African American/Black (c) Hispanic  
 (d) Asian (e) Native American Indian (f) Multiple Race  
 (g) Other: \_\_\_\_\_
16. In which country were you born? \_\_\_\_\_
17. Do you speak or understand English?  
 (a) Very Well (b) Not Well (c) Not At All
18. Do you have a disability that:  
 (a) limits your ability to go to and from the bus stop(s)  
 (b) limits your ability to get on or off the bus  
 (c) limits your ability to ride Lextran or navigate the system

	Poor					Excellent				
	1	2	3	4	5					
19. Frequency of service	1	2	3	4	5					
20. Cleanliness of the buses	1	2	3	4	5					
21. Connections between buses	1	2	3	4	5					
22. Safety and security at stops	1	2	3	4	5					
23. Safety and security on bus	1	2	3	4	5					
24. Buses running on time	1	2	3	4	5					
25. Time service ends in evening	1	2	3	4	5					
26. Distance to stop from home	1	2	3	4	5					
27. Shelters at stops	1	2	3	4	5					
28. The price to ride	1	2	3	4	5					
29. Convenience of schedules	1	2	3	4	5					
30. Driving skills of bus operator	1	2	3	4	5					
31. Helpfulness of drivers	1	2	3	4	5					
32. Helpfulness of phone staff	1	2	3	4	5					
33. Bus routes go where needed	1	2	3	4	5					
34. Overall Lextran service	1	2	3	4	5					



## Exhibit 2: Spanish Survey Example



### Encuesta de Pasajeros

1. ¿Qué es el número de la ruta, el origen, y el nombre del destino del autobús que usted va a montar hoy?  
# de Ruta \_\_\_\_\_ Nombre del origen \_\_\_\_\_  
Nombre del destino \_\_\_\_\_
2. Típicamente, ¿con qué frecuencia usted monta un autobús de Lextran?  
(a) Mensual (b) Semanal (c) Diario
3. ¿Qué es su objetivo principal por usar el autobús por este viaje?  
(Por favor elige uno)  
(a) Trabajo (b) Escuela (c) Ir de compras  
(d) Servicio social (e) Visita social (f) Visita médica o al doctor  
(g) Universidad (h) Otro \_\_\_\_\_
4. ¿A qué tiempo del día usted empezó este viaje?  
(a) 5:00- 7:00 de la mañana (b) 7:00- 9:00 de la mañana  
(c) 9:00- 11:00 de la mañana (d) 11:00-1:00 de la tarde  
(e) 1:00- 3:00 de la tarde (f) 3:00- 5:00 de la tarde  
(g) 5:00-7:00 de la tarde (h) 7:00- 9:00 de la noche  
(i) 9:00-11:30 de la noche
5. ¿Cuánto tiempo dura su viaje, incluyendo al llegar a la parada del autobús, esperando por el autobús de transferencia que usted usa, al montar al autobús, y al llegar a su destino final del autobús?  
Minutos: \_\_\_\_\_
6. ¿Qué tan lejos usted viaja para llegar a la parada del autobús por este autobús?  
(a) Menos que 1 Cuadra (b) 1-2 Cuadras (c) 3-4 Cuadras  
(d) 5-6 Cuadras (e) Más que 6 Cuadras
7. ¿Cuántos autobuses separados usted necesita usar para hacer este viaje de una forma al destino a donde usted va ahora?  
(a) 1 Autobús (b) 2 autobuses (c) 3 o más
8. ¿Cómo usted va a pagar la tarifa del autobus hoy?  
(a) Dinero/Pase paseo individual (b) Pase de 30-días (c) Pase del día  
(d) Pase de personas mayores/ADA  
(e) Pase de personas mayores/ADA de 30 días  
(f) Pase de 20 paseos (g) Otro \_\_\_\_\_
9. ¿Cuántos años tiene usted? \_\_\_\_\_ años
10. ¿Qué es el código postal de su casa? Código Postal: \_\_\_\_\_
11. ¿Cuál es su género? (a) Mujer (b) Hombre (c) Transgénero
12. ¿Cuántas personas viven en su hogar? \_\_\_\_\_
13. ¿Qué es el ingreso anual de su familia?  
(a) menos que \$20,000 (b) \$20,000-\$39,999 (c) \$40,000-\$59,999  
(d) \$60,000-\$79,999 (e) \$80,000-\$99,999 (f) \$100,000-\$124,999  
(g) \$125,000-\$149,999 (h) más que \$150,000
14. ¿Cuántos automóviles hay en la casa?  
(a) 0 (b) 1 (c) 2 (d) 3 o Más
15. ¿Usted le considera a si mismo: (Si más que un grupo se aplica a usted, por favor marca todos que aplican)  
(a) Blanco (b) Americano Africano/Moreno (c) Hispanico  
(d) Asiático (e) Indio Americano Nativo (f) Razas Múltiples  
(g) Otro: \_\_\_\_\_
16. ¿En qué país usted fue nacido? \_\_\_\_\_
17. ¿Usted habla o entiende ingles?  
(a) Muy Bien (b) No Bien (c) Para Nada
18. ¿Tiene una discapacidad que:  
(a) Limita su capacidad de ir hacia y desde la parada de autobús (s)  
(b) Limita su capacidad para subir o bajar del autobús  
(c) Limita su capacidad para montar LexTran o navegar por el sistema

¿Cómo usted valora el servicio? Necesita Mejorar Muy Bueno

	1	2	3	4	5
19.Frecuencia de servicio	1	2	3	4	5
20.Limpieza de los autobuses	1	2	3	4	5
21.Conexiones entre autobuses	1	2	3	4	5
22.Protección y seguridad a las paradas	1	2	3	4	5
23.Protección y seguridad en el autobús	1	2	3	4	5
24.Los autobuses corriendo a tiempo	1	2	3	4	5
25.Tiempo de terminar servicios durante la noche	1	2	3	4	5
26.Distancia entre paradas y la casa	1	2	3	4	5
27.Refugios a las paradas	1	2	3	4	5
28.El precio de montar el autobús	1	2	3	4	5
29.Conveniencia de los horarios	1	2	3	4	5
30.Las habilidades de manejar del conductor	1	2	3	4	5
31.Utilidad de los conductores	1	2	3	4	5
32.Utilidad de los empleados del teléfono	1	2	3	4	5
33.Las rutas van donde se necesitan	1	2	3	4	5
34.Servicio total de Lextran	1	2	3	4	5

Surveys were also coded by the bus stop or route where they were collected, and the results were entered into a database for further analysis. The same method was used to calculate the responses on the basis of the respondent's race, income level, zip code of the respondent's home, and the origin and destination of each trip that day.

### LEXTRAN TRANSIT PROFILE

The following sections provide a description of the survey results and findings.

The first section includes a description of the overall characteristics of Lextran riders. This description includes predominant demographic characteristics, trip making, and travel patterns. The information gathered from the survey is compared to the 2013 American Community Survey (ACS) Five-Year Estimates for Fayette County, prepared by the U. S. Census Bureau. Comparisons of survey data with the information found in the census data are a test of the confidence level of the

survey results. The analysis concludes with a comparison of the quality of service by minority and non-minority survey respondents.

Exhibit 3 shows the number of surveys collected by route. Surveys were collected at the Transit Center and on all Lextran fixed routes.

Exhibit 4 is a location map of Lexington, Kentucky. Along with roads, Lextran facilities, and surveyed routes, zip code boundaries were overlaid on the base map to help with data analysis.

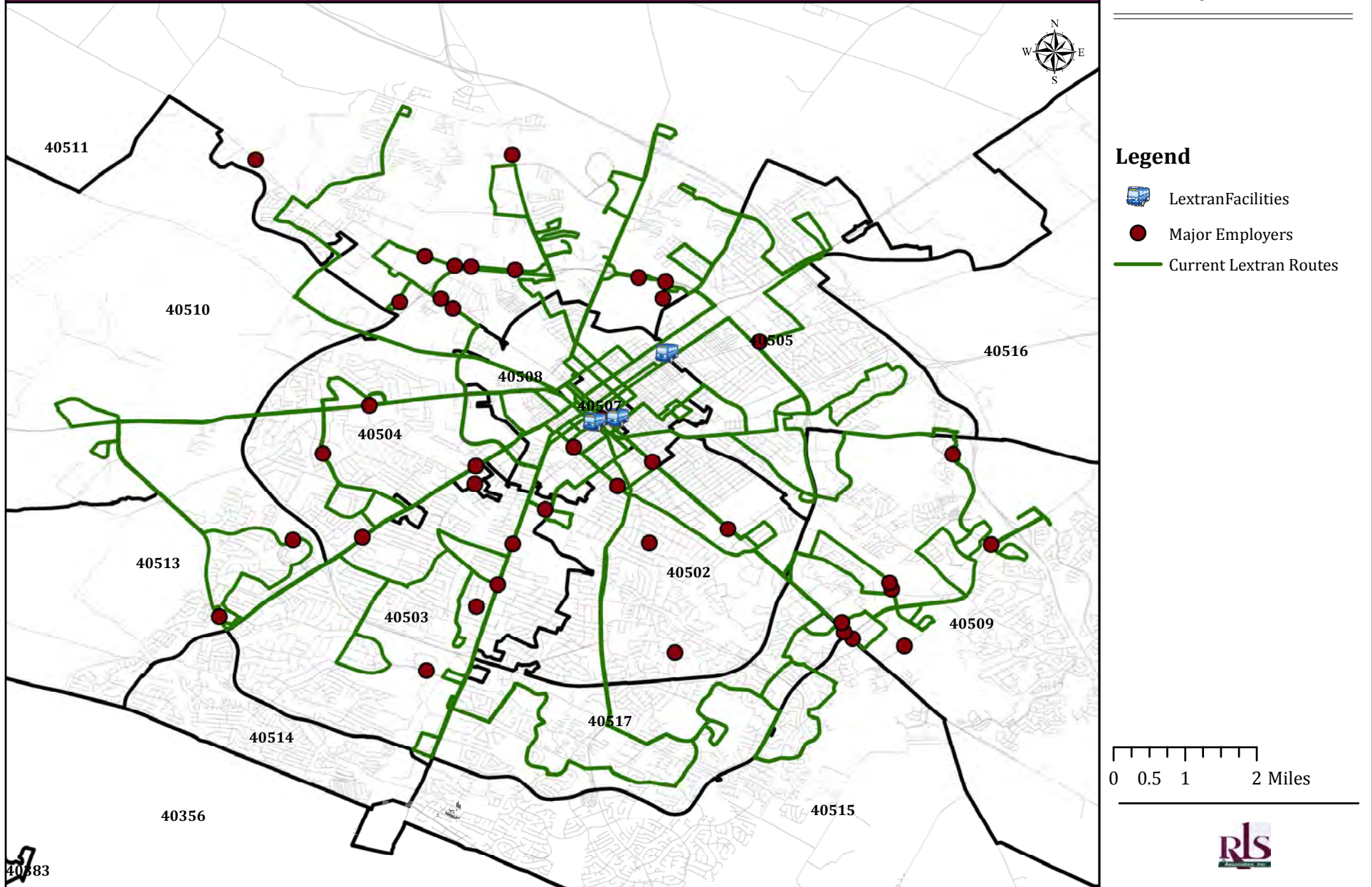
**Exhibit 3: Surveys by Location and Route**

<b>Location/Route</b>	<b>Number of Responses</b>
<b>Route 1</b>	48
<b>Route 2</b>	46
<b>Route 3</b>	158
<b>Route 4</b>	61
<b>Route 5</b>	146
<b>Route 6</b>	50
<b>Route 7</b>	164
<b>Route 8</b>	86
<b>Route 9</b>	161
<b>Route 10</b>	77
<b>Route 11</b>	77
<b>Route 12</b>	67
<b>Route 13</b>	52
<b>Route 14</b>	1
<b>Route 15</b>	4
<b>Route 16</b>	20
<b>Route 17</b>	6
<b>Route 18</b>	18
<b>Route 20</b>	12
<b>Route 21</b>	7
<b>Route 23</b>	9
<b>Route 24</b>	3
<b>Route 25</b>	5
<b>Route 31</b>	8
<b>Unknown</b>	263
<b>Total</b>	1,549

Source: RLS & Associates, Inc. Surveys: June 2015

## Exhibit 4: Location Map

### Lextran Service & Fare Equity Analysis 2015



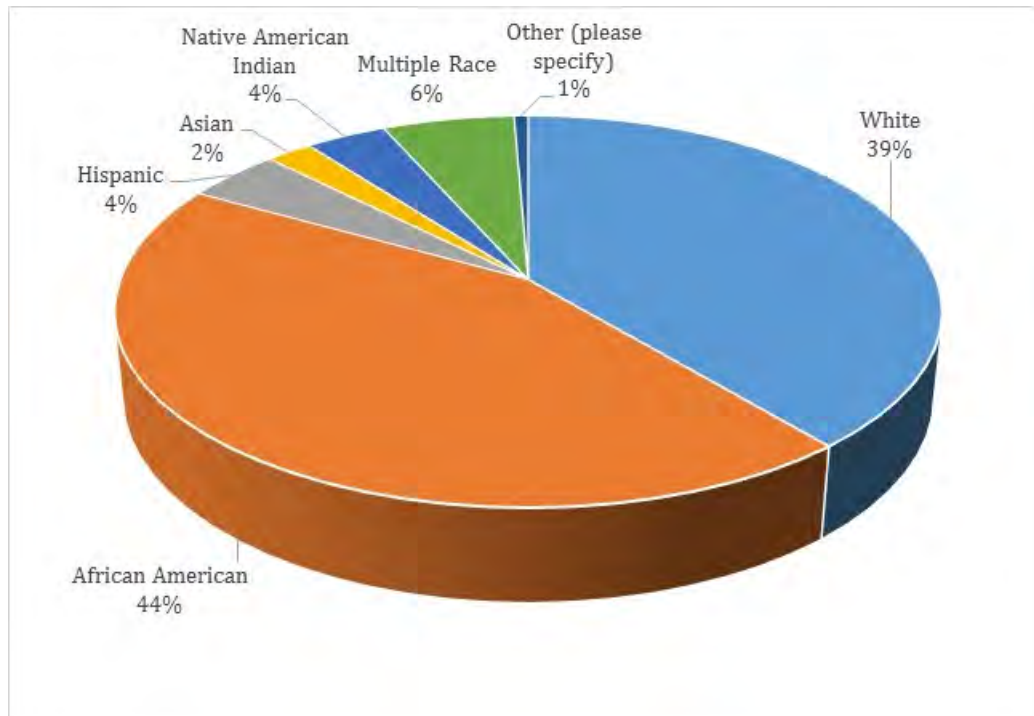


## **Race**

As shown in Exhibit 5, approximately 61 percent of Lextran riders who participated in the survey are minority, and 39 percent are considered to be non-minority. Black or African Americans make up the largest portion of the minority survey respondents, at 44 percent. Multiple races make up the next highest percentage of minority respondents, at 6 percent. These numbers are consistent with the percentages collected in the 2012 passenger survey.

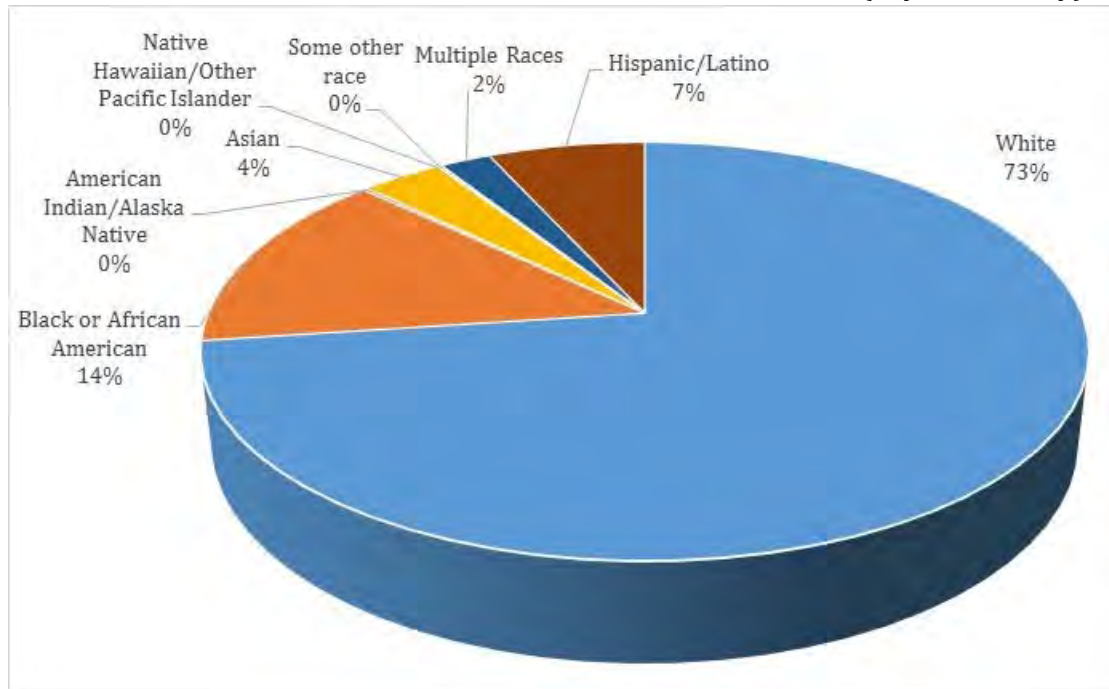
When compared to the population of Fayette County, Lextran's passenger race distribution has notable differences from the survey sample. According to the 2013 ACS Five-Year Estimates, the estimated population of Fayette County is 300,843 persons. The population is 73 percent non-minority and 27 percent minority. Black or African Americans make up the largest portion of the minority population at approximately 14 percent. Hispanics or Latinos make up the next highest percentage of the minority population at almost 7 percent. Exhibit 6 depicts the race distribution of Fayette County.

**Exhibit 5: Race Distribution of Survey Respondents**



Source: RLS & Associates, Inc. Surveys: June 2015

**Exhibit 6: Race Distribution of Lextran's Service Area (Fayette County)**



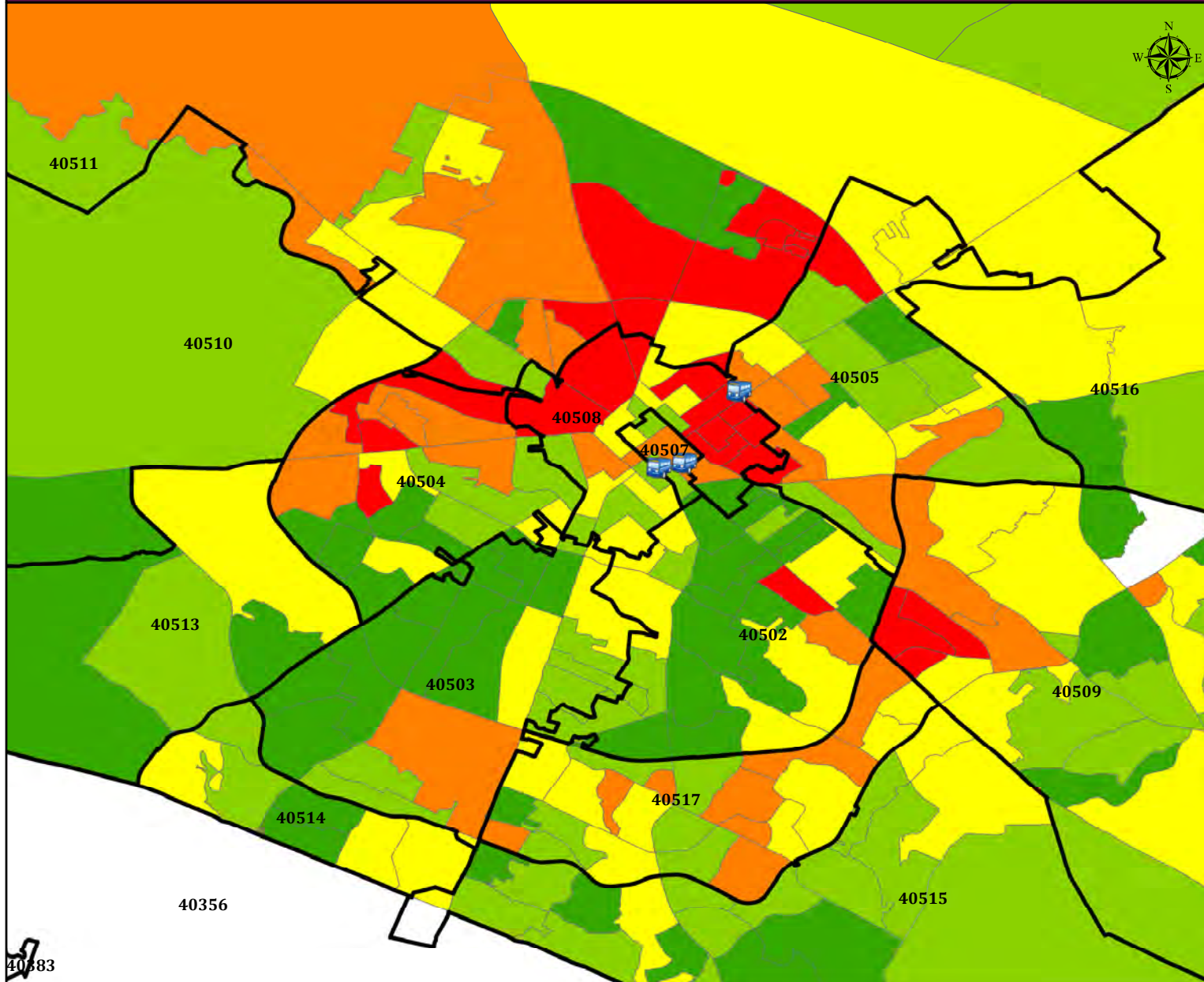
Source: U.S. Census American Community Survey Five-Year Estimates 2013

To provide a second layer of demographic analysis, the entire service area was analyzed at the census block group level to determine population densities by race. Exhibits 7 and 8 illustrate the percent of minority and non-minority individuals in each Fayette County census block group. Zip code boundaries were overlaid on the block groups to help visualize the locations of minority and non-minority populations. As depicted in Exhibit 7, the highest concentration of minority individuals resides in the 40505, 40508, 40509, 40511, and 40512 zip codes. These zip codes are mostly located just to the north and east of the downtown Lexington census block groups. The block groups with the highest percentage of non-minority residents (more than 89.4%) are mostly located in the southern portions of Fayette County, as depicted in Exhibit 8.

Exhibits 9 and 10 illustrate the number of minority and non-minority survey respondents by zip code. This illustrates the distribution of respondents by the predominant race of his or her zip code of residence. The majority of minority survey respondents lived in the same zip codes as those depicted in Exhibit 7, Minority Population. The zip codes with the greatest number of minority respondents were located in the northern section of Fayette County (40504, 40505, 40508, and 40511) and in the 40517 zip code in southern Fayette County. The concentration of non-minority survey respondents were in the 40505 and 40508 zip codes. The concentration of minority and non-minority survey respondents by zip code is very similar to the responses received in the 2012 passenger survey. A slight difference in 2015 as compared to 2012 is that non-minorities are less concentrated in the western zip codes.

## Exhibit 7: Minority Populations by Block group

### Lextran Service & Fare Equity Analysis 2015



#### Legend

 Lextran Facilities

#### Percent Minority Populations

- 0% - 10.4%
- 10.5% - 21.2%
- 21.3% - 35%
- 35.1% - 56.1%
- 56.2% - 95.7%

Source: U.S. Census  
American Community Survey  
5-Year Estimates 2013  
Block groups

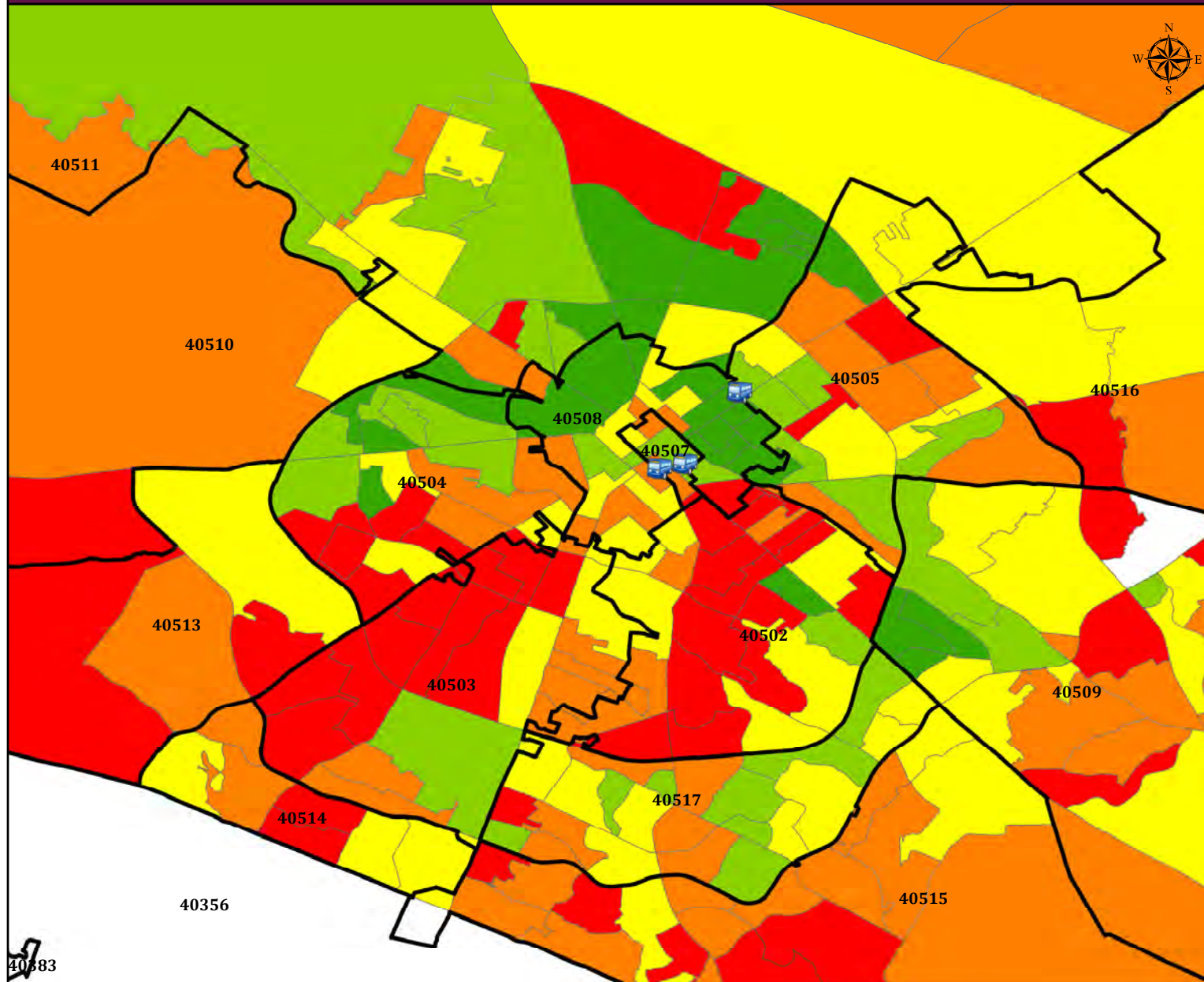
0 0.5 1 2 Miles





## Exhibit 8: Non-minority Populations by Block group






### Lextran Service & Fare Equity Analysis 2015



#### Legend

 Lextran Facilities

#### Percent Non-minority Populations

-  4.3% - 39.6%
-  39.7% - 64.2%
-  64.3% - 78.6%
-  78.7% - 89.3%
-  89.4% - 100%

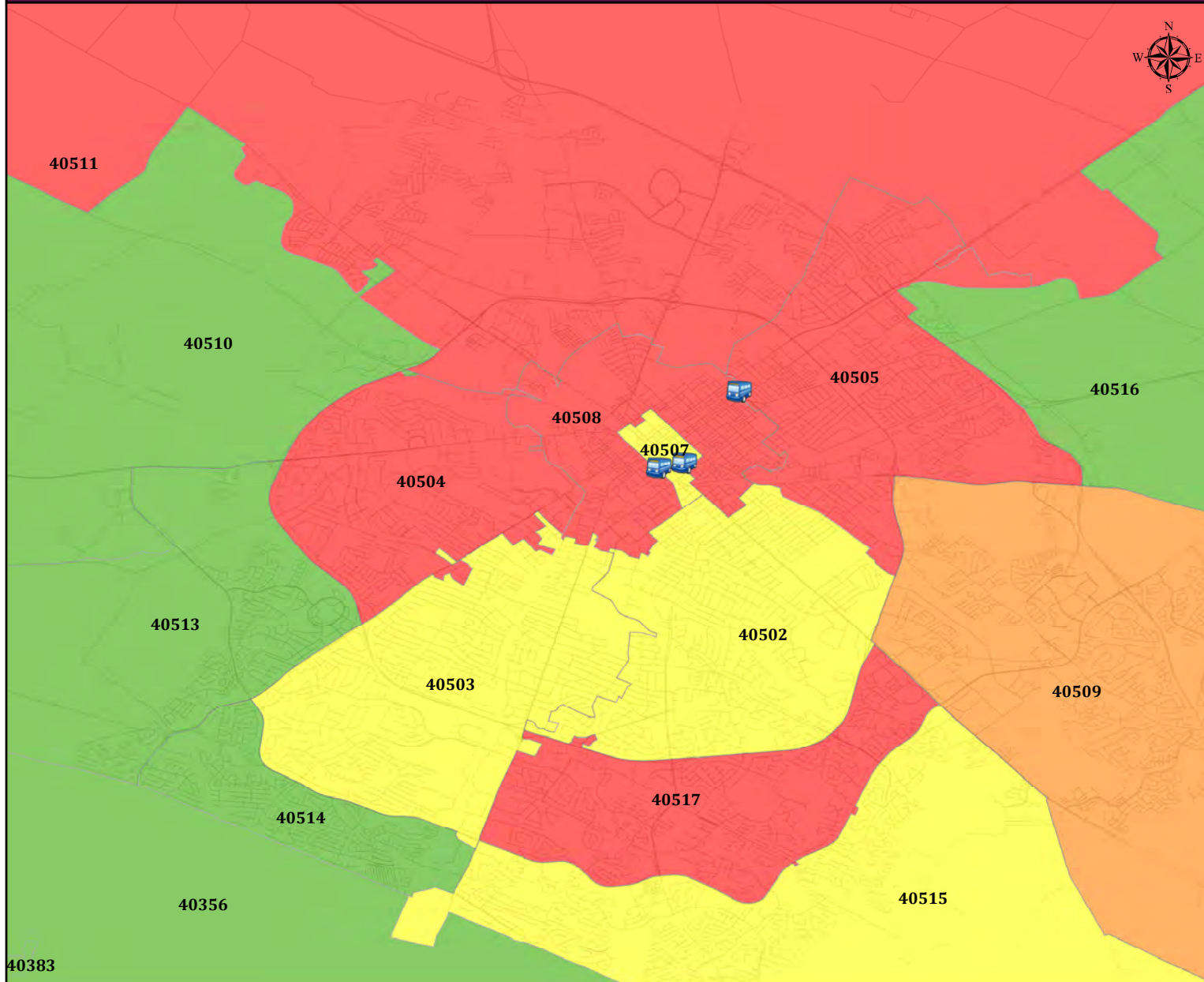
Source: U.S. Census  
American Community Survey  
5-Year Estimates 2013  
Block groups

0 0.5 1 2 Miles



# Exhibit 9: Minority Survey Responses by Zip Code

## Lextran Service & Fare Equity Analysis 2015

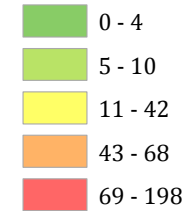


### Legend

 Lextran Facilities

### ZipCodes

#### Minority Responses



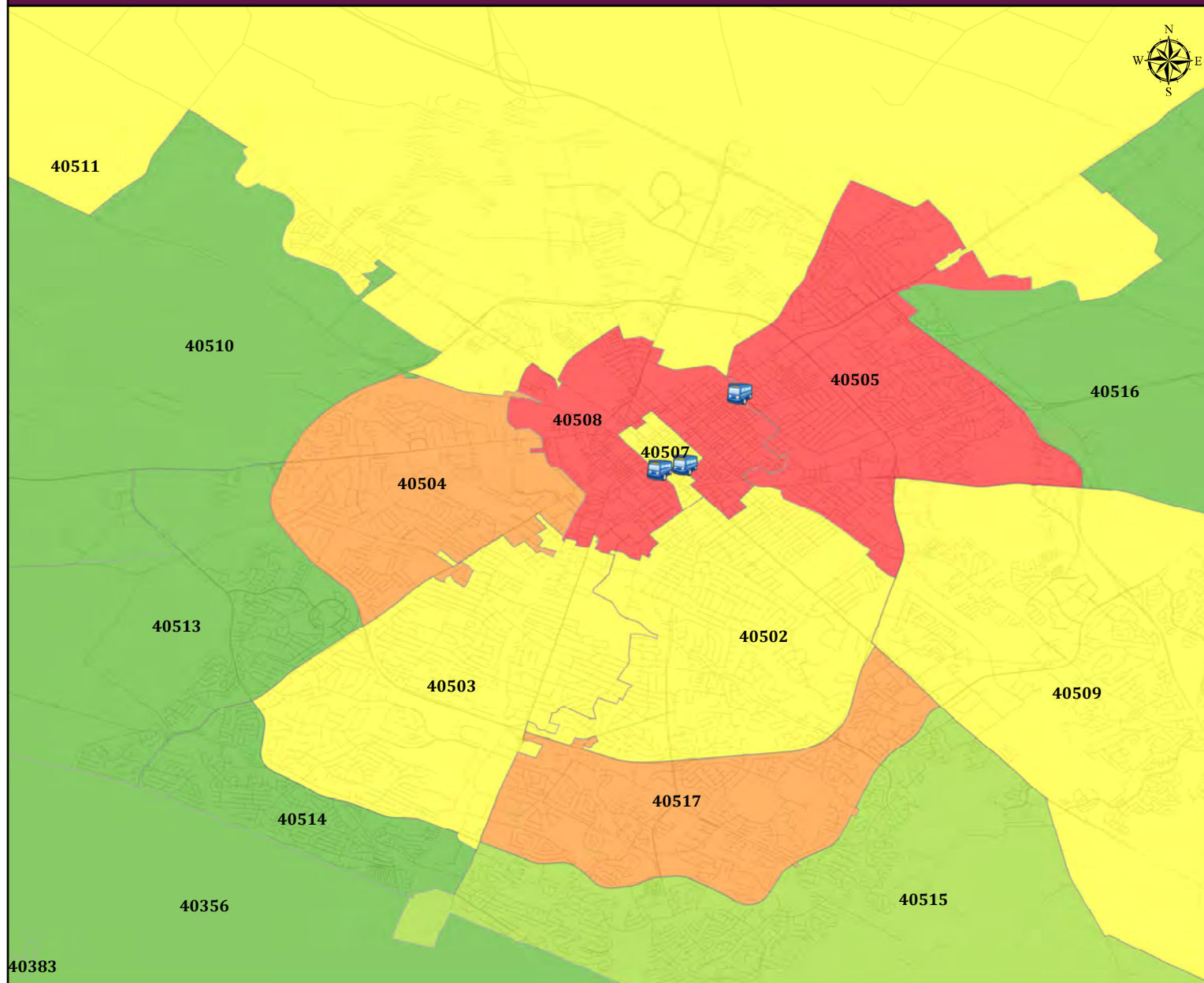
0 0.5 1 2 Miles





# Exhibit 10: Non-Minority Survey Responses by Zip Code

## Lextran Service & Fare Equity Analysis 2015



### Legend



Lextran Facilities

### ZipCodes

#### Non-Minority Responses

- 0 - 4
- 5 - 10
- 11 - 42
- 43 - 68
- 69 - 118

0 0.5 1 2 Miles

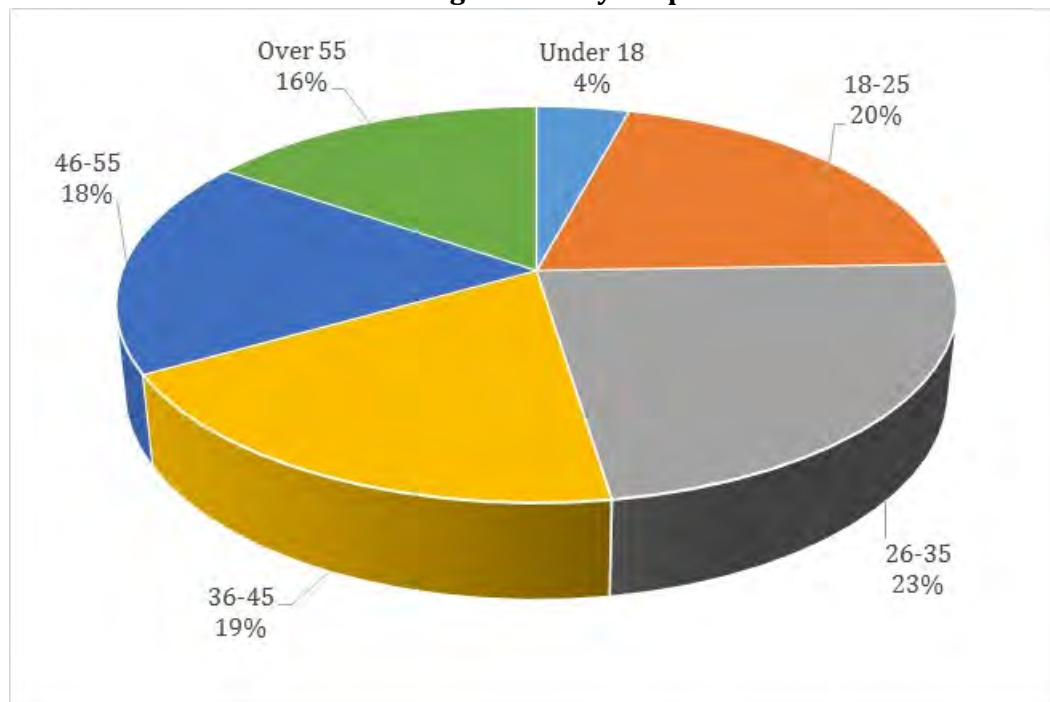


## **Age**

Exhibit 11 depicts the age groups of Lextran riders that were included in the survey sample. Just over 23 percent of passengers reported their age between 26 and 35 years. The second largest age group is the 18 to 25 year olds, who make up just over 20 percent of the total survey respondents. The smallest age group is those riders who reported an age under 18 at the time of the survey; they make up about 4 percent of the total passengers surveyed.

When comparing these results to the survey conducted in 2012, the age groups of Lextran riders are similar. Slightly more survey respondents in 2015 fell into the 26 to 35 age group while slightly fewer fell into the 18 to 25 age group.

**Exhibit 11: Age of Survey Respondents**



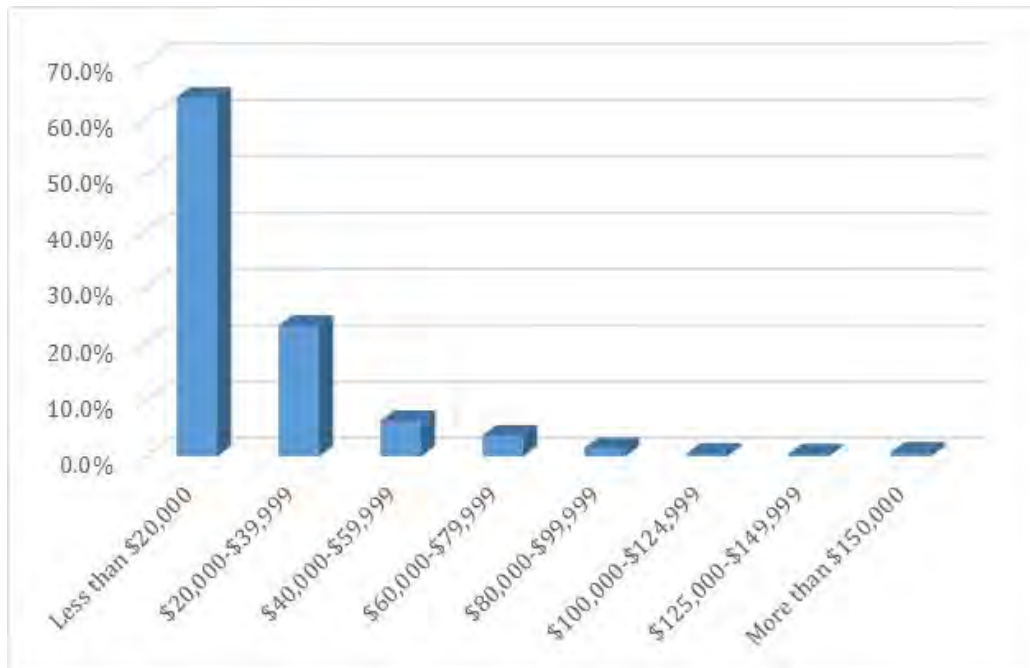
Source: RLS & Associates, Inc. Surveys: June 2015

## **Household Income**

As part of the survey, Lextran riders were asked to provide their range of household income. Household income is the combined total income for all individuals living in a household. The survey responses were compared to the 2013 U.S. Census Bureau American Community Survey (ACS) Five-Year Estimates data for Fayette County. The greatest number of Lextran passengers reported a yearly household income of less than \$20,000. This segment of passengers accounted for 64 percent of the total survey respondents (down 4 percent from the 2012 survey); whereas, the greatest percentage of Fayette County citizens earned a household income of \$15,000 - \$34,999 per year. Just over 3 percent of Lextran passengers reported earning more than \$80,000 per year, compared to 32 percent for the general population reporting they made over \$75,000. The 2012 passenger

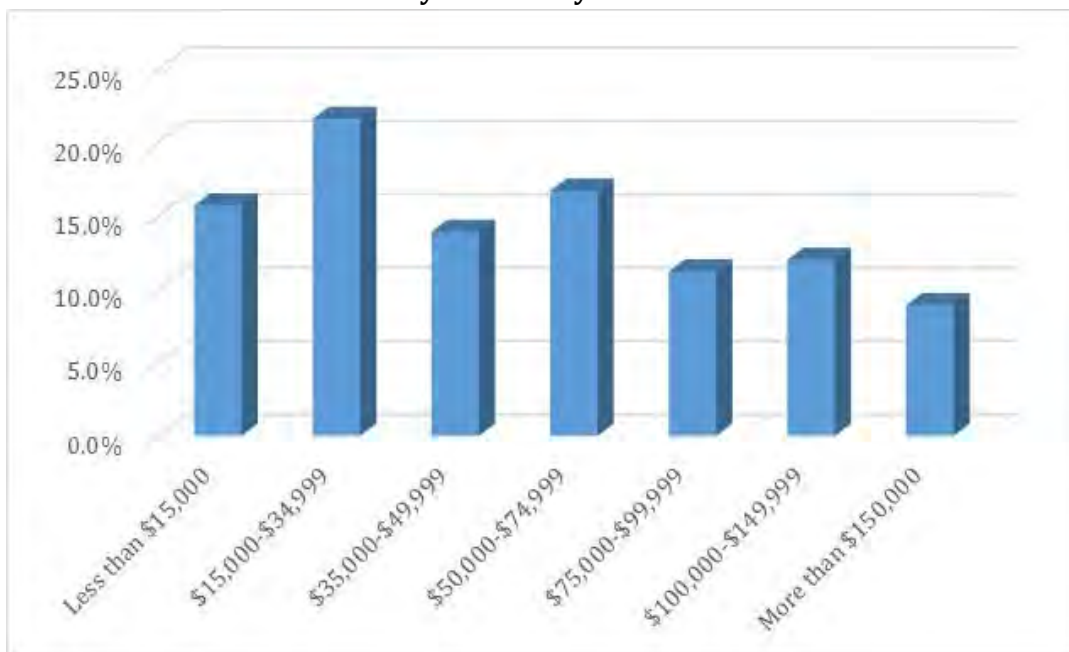
survey also showed similar income breakdowns to the results in the 2015 survey. Exhibits 12 and 13 compare the Lextran survey respondents' annual household income and Fayette County U.S. Census ACS Five-Year Estimates of annual household income.

**Exhibit 12: Lextran Household Income**



Source: RLS & Associates, Inc. Surveys: June 2015

**Exhibit 13: Fayette County Household Income**



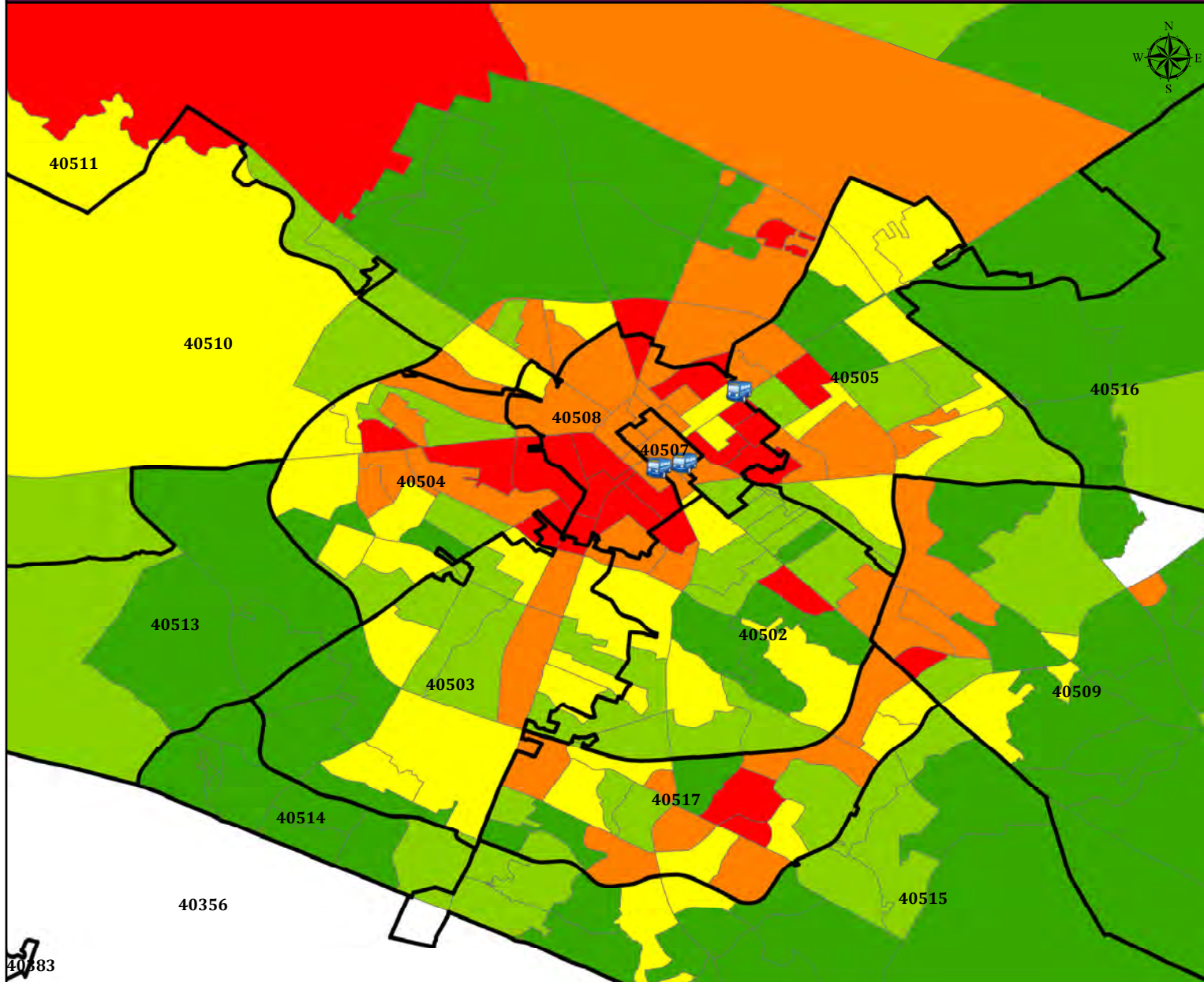
Source: U.S. Census American Community Survey Five-Year Estimates 2013

Exhibit 14 provides a visual representation of where people living below the poverty level are located within the Lextran service area. The area was analyzed using 2013 U.S. Census Bureau ACS Five-Year Estimates data at the census block group level. The census block groups in and around downtown Lexington had the greatest concentration of population below the poverty level as a percentage of total population. High percentages of population below the poverty level also lie in the 40511, 40509, and 40517 zip codes. These areas outside of downtown Lexington are new areas of poverty in Fayette County as compared to the data used in the 2012 Service and Fare Equity Analysis.




## Exhibit 14: Population Below the Poverty Level

### Lextran Service & Fare Equity Analysis 2015



#### Legend

 Lextran Facilities

#### Percent Population Below Poverty

- 0% - 6%
- 6.1% - 14.2%
- 14.3% - 27.3%
- 27.4% - 45.9%
- 46% - 79.6%

Source: U.S. Census  
American Community Survey  
5-Year Estimates 2013  
Block groups

0 0.5 1 2 Miles

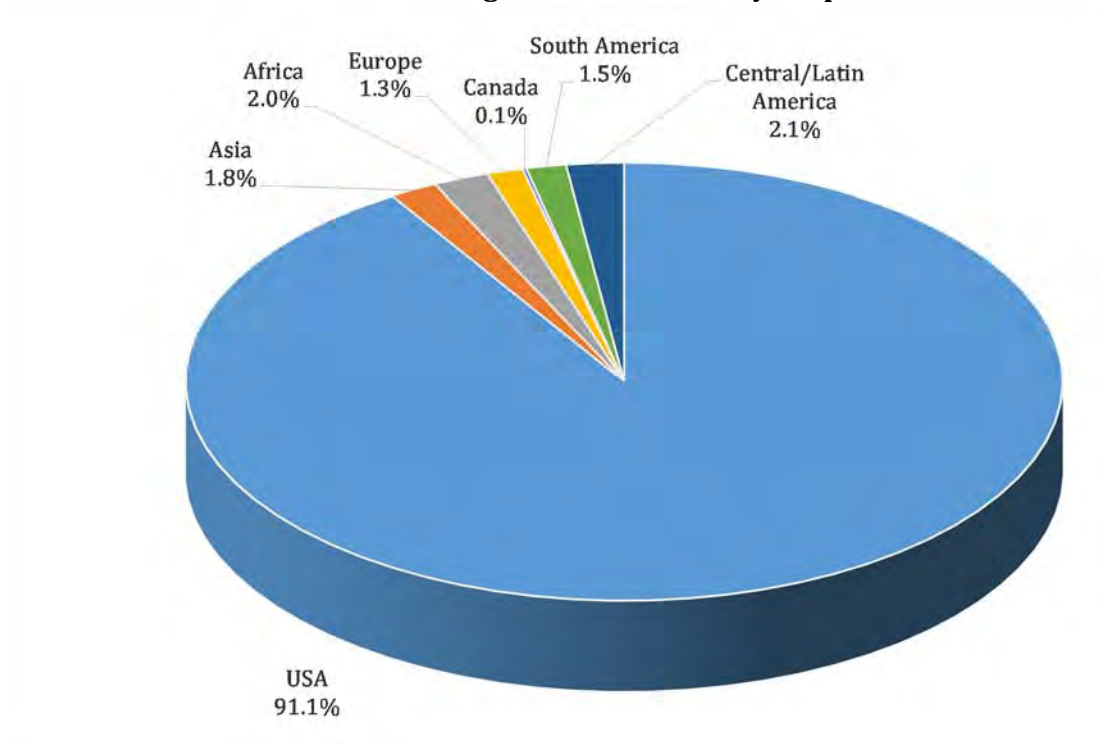




## **National Origin**

Lextran riders were asked to indicate their place of birth to better understand their nation of origin. The majority of the respondents, 91 percent, reported a national origin of the United States. Other responses included a national origin of a country in Asia, Africa, Central/Latin America, Canada, or Europe. The second largest group of respondents indicated their place of birth was in Central/Latin America (2.1 percent). Exhibit 15 depicts the national origin of survey respondents.

**Exhibit 15: National Origin of Lextran Survey Respondents**

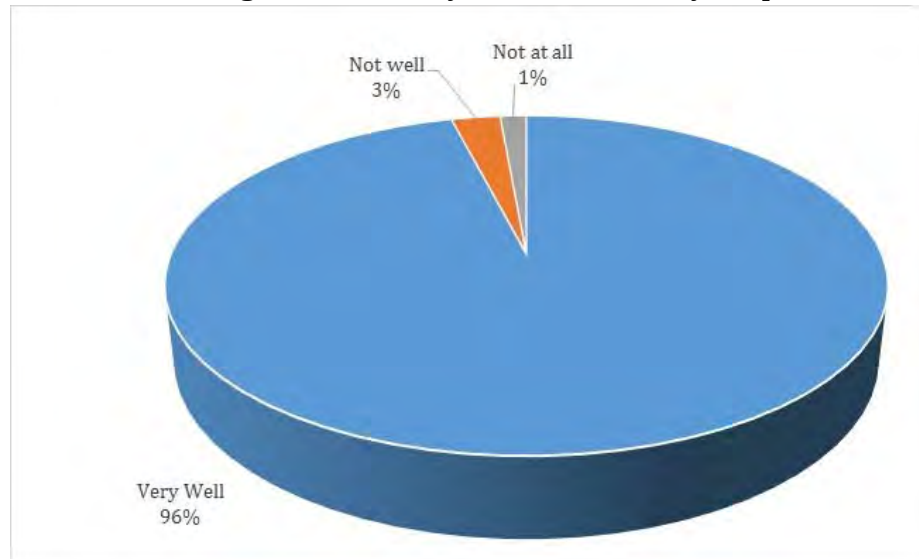


Source: RLS & Associates, Inc. Surveys: June 2015

## **LIMITED ENGLISH PROFICIENCY (LEP)**

Lextran riders were asked to provide information about their English proficiency. Surveyors had copies of the survey in an accessible format for individuals who could not answer in English but could answer in Spanish. Nearly all of the respondents indicated they speak English very well. Four percent of respondents reported speaking English not well or not at all. Exhibit 16 depicts the percentage of LEP passengers.

### Exhibit 16: English Proficiency of Lextran Survey Respondents



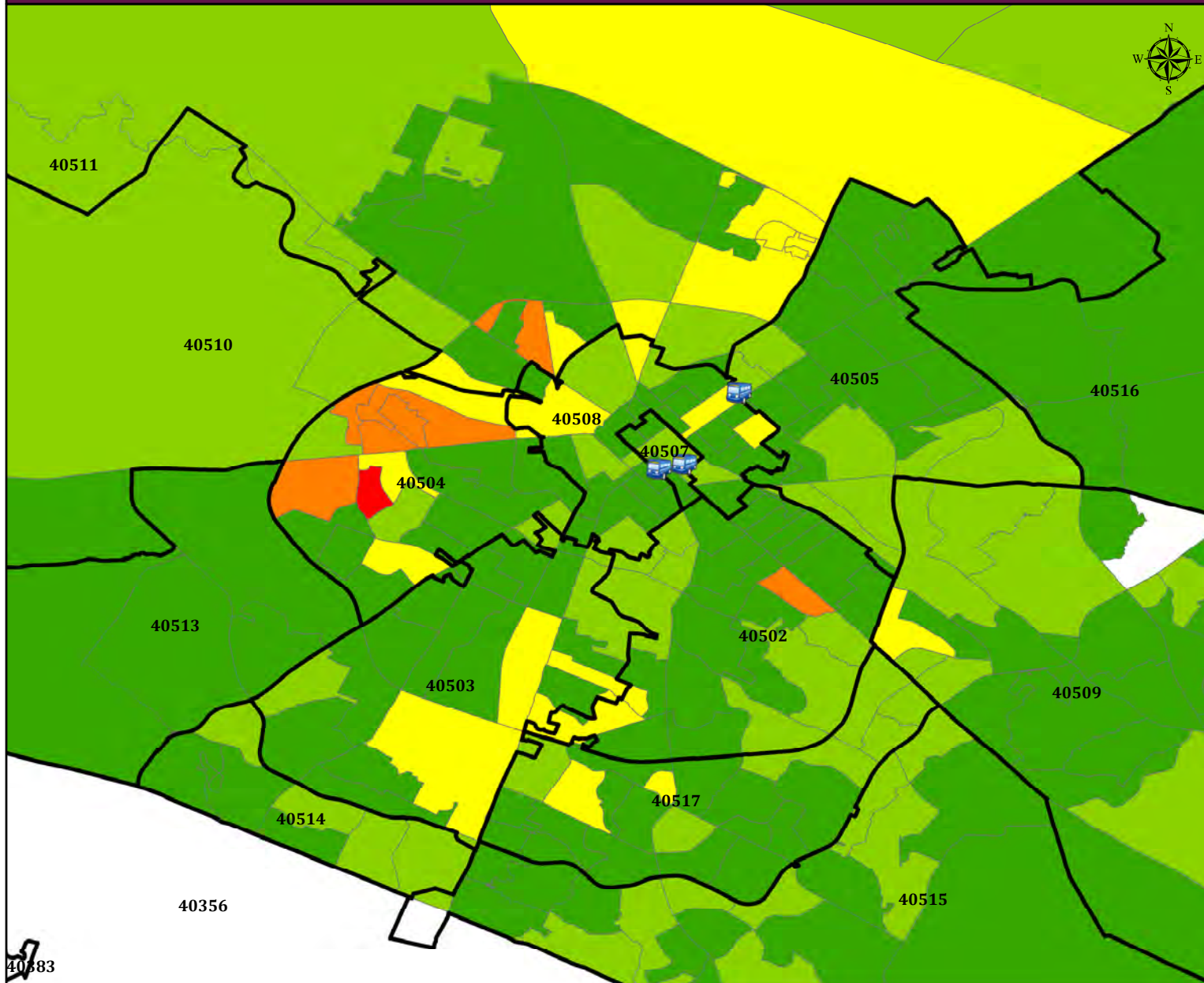
Source: RLS & Associates, Inc. Surveys: June 2015

The entire service area was analyzed at the census block group level to determine the percentage of the population that have Limited English Proficiency (LEP). Exhibit 17 illustrates the percent of LEP residents in each of the census block groups located in the Lextran service area. Zip code boundaries were overlaid on the block groups to help visualize the locations of LEP populations. This information was obtained using the 2013 U.S. Census ACS Five-Year Estimates. According to the data, there is one block group with greater than 28.7 percent of individuals who do not speak English well or at all. All but three of the high (orange) and very high (red) LEP block groups lie outside of the 40504 zip code. Two of the block groups with high percentages of LEP population (15.1 to 28.6 percent) lie in the 40511 zip code that is very close to the others located in the 40504 zip code.

Exhibit 18 illustrates the number of survey respondents who indicated having LEP, by zip code. This exhibit illustrates the distribution of respondents by the ability to speak English and by his or her zip code of residence. The zip code with the greatest number of reported LEP passengers is 40505 which is northeast of downtown Lexington. Other zip codes that reported LEP residents are 40504, 40508, 40509, 40511, 40513, 40514, 40515, and 40517. The responses obtained from the survey coincide with the census data displayed in Exhibit 17. The majority of LEP populations live in the 40504, 40505, and 40508 zip codes.

## Exhibit 17: Limited English Proficiency (LEP) by Block group

### Lextran Service & Fare Equity Analysis 2015



#### Legend



Lextran Facilities

#### Percent LEP Populations

0% - 1.6%

1.7% - 5.6%

5.7% - 15%

15.1% - 28.6%

28.7% - 48.9%

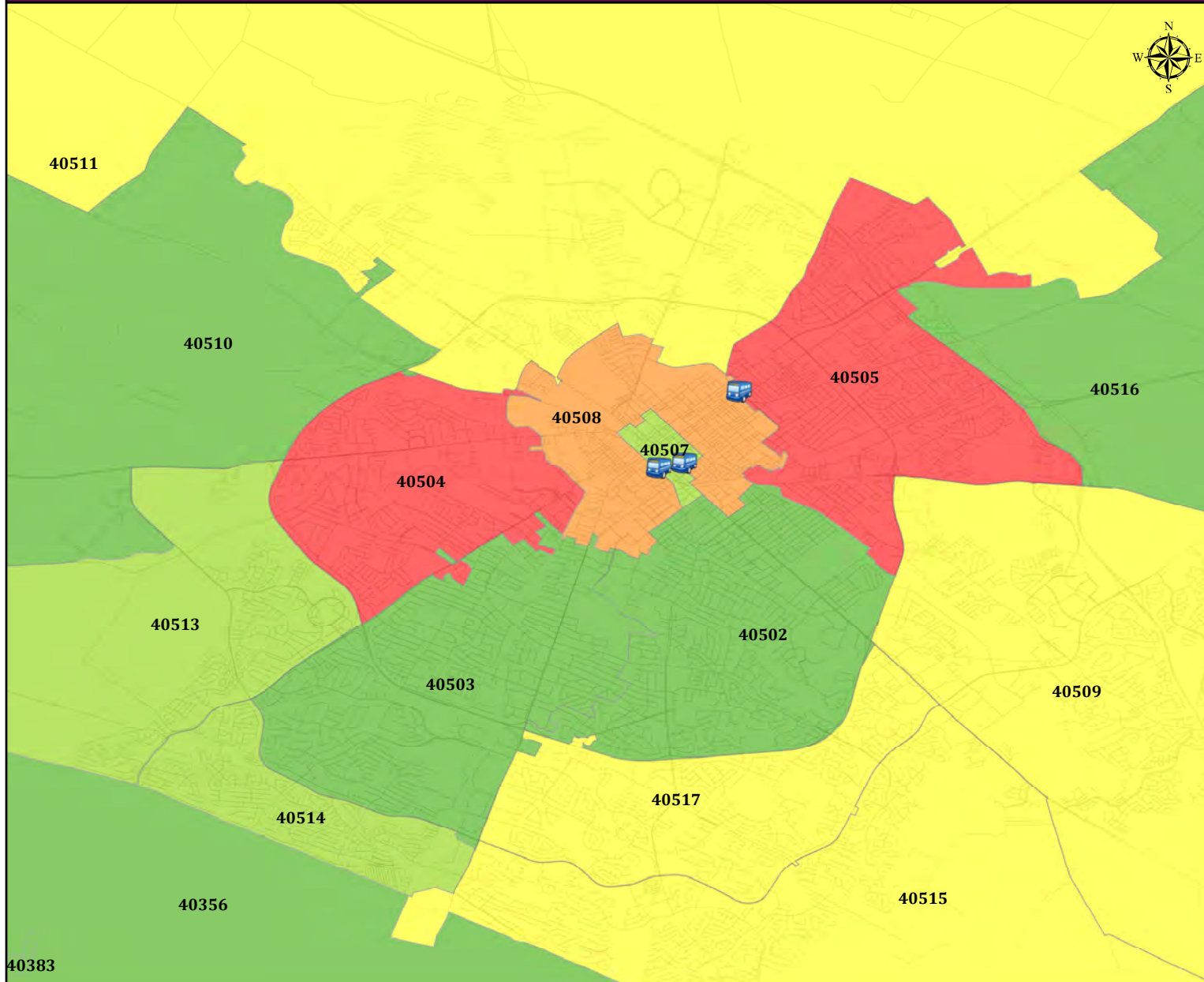
Source: U.S. Census  
American Community Survey  
5-Year Estimates 2013  
Block groups

0 0.5 1 2 Miles



# Exhibit 18: Limited English Proficiency (LEP) Survey Responses by Zip Code

## Lextran Service & Fare Equity Analysis 2015

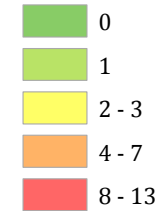


### Legend

 Lextran Facilities

### ZipCodes

#### LEP Responses



0 0.5 1 2 Miles

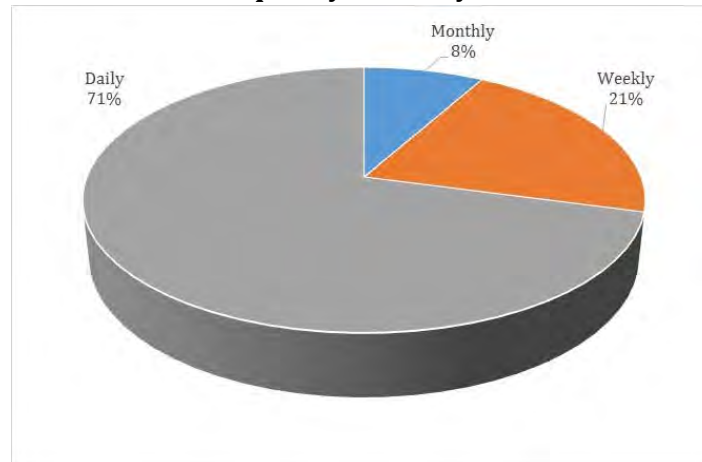




## **Frequency of Use**

Exhibit 19 depicts the frequency of use by Lextran riders. Seventy-one (71) percent of the respondents use Lextran services on a daily basis. Another 21 percent use the service on a weekly basis, and 8 percent of Lextran passengers reported using the service on a monthly basis. Most of the individuals using the services on a daily basis were traveling to or from work (67 percent) and were taking more than one bus (67 percent).

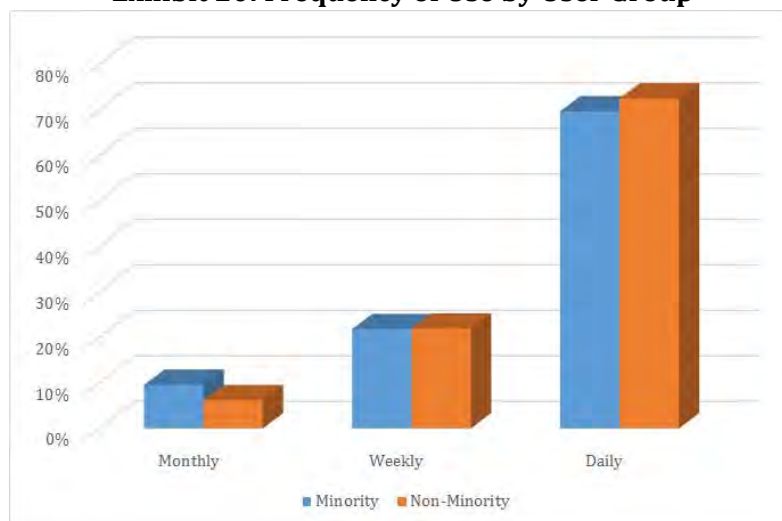
**Exhibit 19: Frequency of Use by Lextran Riders**



Source: RLS & Associates, Inc. Surveys: June 2015

There are more minority individuals who reported using the service on a monthly basis as compared to non-minorities. Likewise, more non-minority individuals use Lextran on a daily basis as compared to minorities. Among the non-minority passengers, 72 percent are daily riders; this is compared to 70 percent of minority passengers. See Exhibit 20 for a depiction of the frequency of use by user group.

**Exhibit 20: Frequency of Use by User Group**



Source: RLS & Associates, Inc. Surveys: June 2015

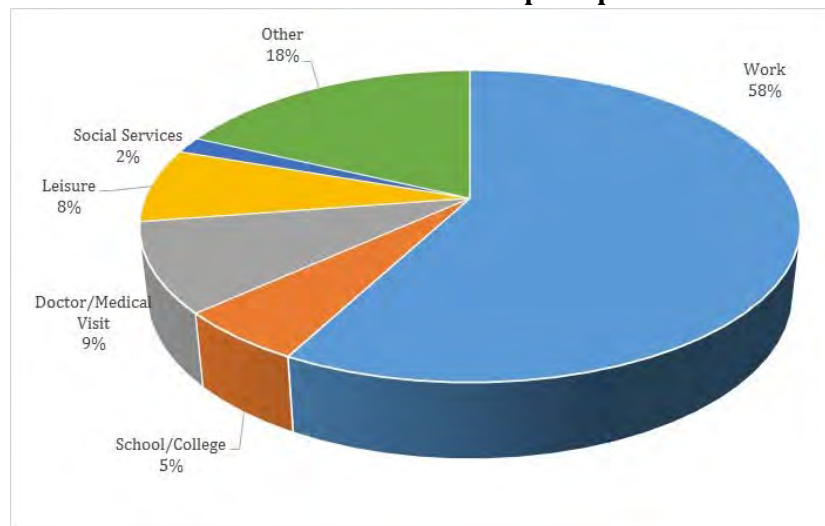


## **Trip Purpose**

Fifty-eight (58) percent of Lextran survey respondents use the bus to travel to or from work; this is the highest reported trip purpose. The second highest trip purposes are other trips at 18 percent. The smallest portion of survey respondents are traveling to or from social services (2 percent). Exhibit 21 depicts the survey responses by trip purpose.

The survey results were then compared to the 2012 passenger survey to show consistency. Fifty-one (51) percent of respondents in 2012 stated they were going to work, while the second highest response rates were other, social visits, and shopping (12 percent each).

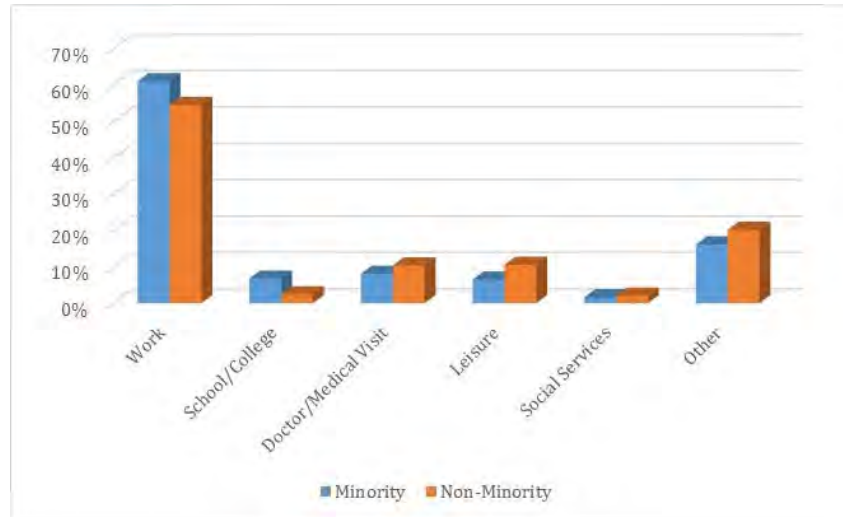
**Exhibit 21: Lextran Trip Purpose**



Source: RLS & Associates, Inc. Surveys: June 2015

In both user groups, work was the most common trip purpose. Minorities were more likely to be going to work as compared to non-minority individuals. Specifically, work was the main trip purpose for 61 percent of the minority respondents and 54 percent for non-minority respondents. Other was the second most popular response for minorities and non-minorities. Twenty (20) percent of non-minorities were using Lextran for trips other than what was specified while 16 percent of minorities were going to places other than specified. Minority survey respondents were more likely to be going to school/college than non-minorities, while non-minorities were more likely to be taking a trip for leisure than minorities. In all other areas, both user groups had similar travel purposes. Survey data by user group and trip purpose is summarized in Exhibit 22.

**Exhibit 22: Trip Purpose by User Group**



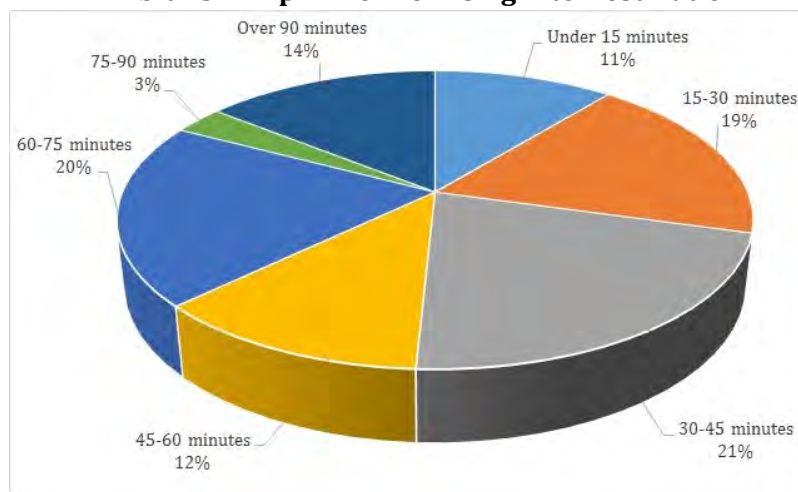
Source: RLS & Associates, Inc. Surveys: June 2015

### **Average Trip Time**

As illustrated in Exhibit 23, the largest percentage (21 percent) of riders surveyed claim an average trip length between 30 and 45 minutes. The second largest percentage of riders (20 percent) indicated that they ride for an average of 60 to 75 minutes each trip. The overall average trip length for Lextran survey respondents was a little over 47 minutes.

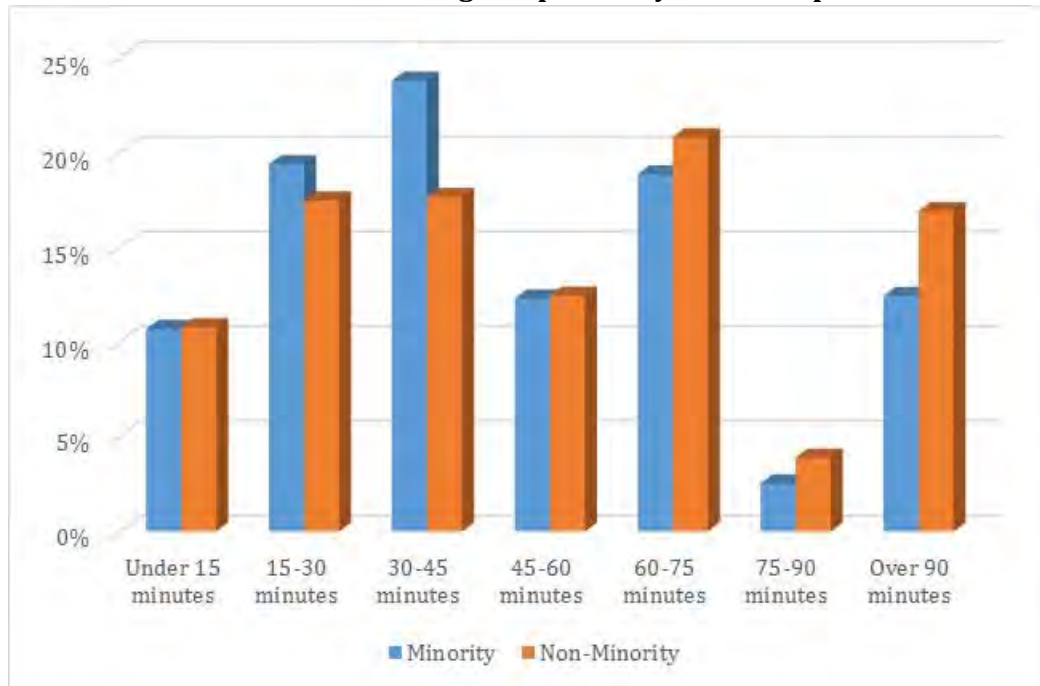
The most significant difference between the two user groups was the riders that claimed their trip took 30 to 45 minutes. Over 23 percent of minority respondents fell into this category, whereas, only about 18 percent of non-minority passengers reported this length of trip. The average trip time for minorities was 45 minutes while it took non-minorities a little over 50 minutes for each trip. Exhibit 24 depicts the average trip time by user group.

**Exhibit 23: Trip Time From Origin to Destination**



Source: RLS & Associates, Inc. Surveys: June 2015

**Exhibit 24: Average Trip Time by User Group**



Source: RLS & Associates, Inc. Surveys: June 2015

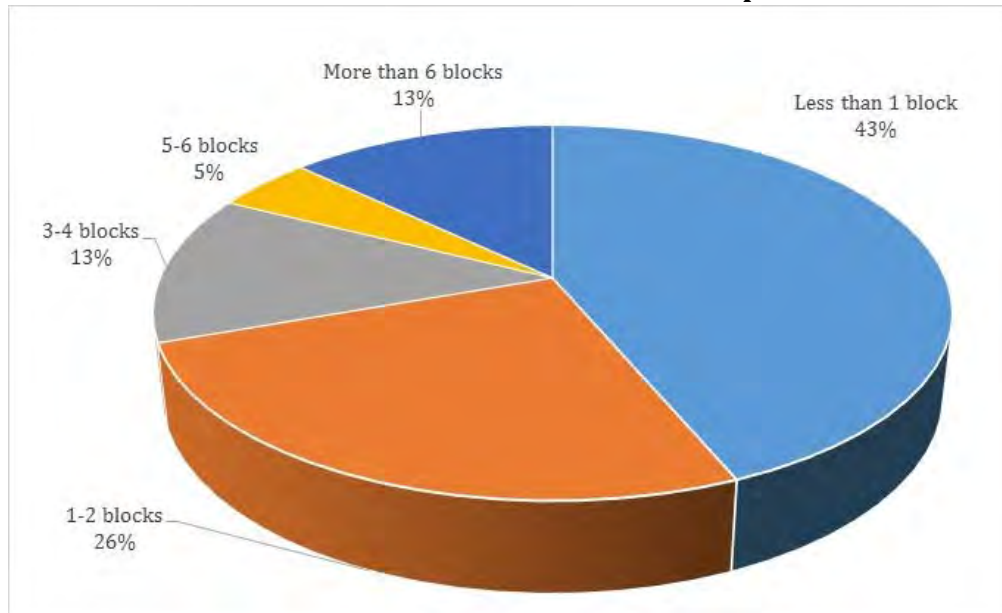
### **Distance to Bus Stop**

Exhibit 25 illustrates the distance to the nearest bus stop for all survey respondents. More than forty-three (43) percent of survey respondents reported traveling less than one block to the nearest Lextran bus stop. Conversely, nearly thirteen (13) percent of riders had to travel more than six blocks to get to the nearest bus stop. The remaining survey respondents reported various distances between one and six blocks.

When compared to the passenger survey conducted in 2012, more passengers are traveling less than one block to their nearest stop (37 percent in 2012), while fewer are traveling one to two blocks (30 percent in 2012). Lextran passengers traveling more than two blocks to their nearest stop has not changed since 2012.

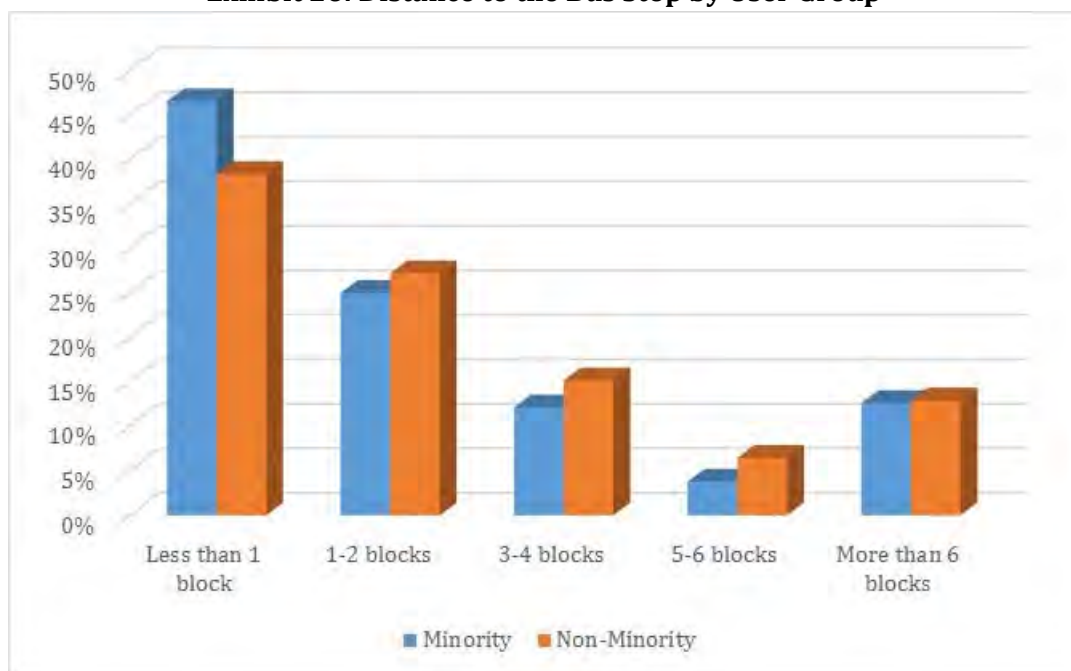
Exhibit 26 depicts the distance to the bus stop by user group. Over seventy-one (71) percent of minority respondents stated they travel a distance of two or fewer blocks to the nearest bus stop. This compares to over sixty-five (65) percent of non-minorities that have to travel a distance of two or fewer blocks.

**Exhibit 25: Overall Distance to Stop**



Source: RLS & Associates, Inc. Surveys: June 2015

**Exhibit 26: Distance to the Bus Stop by User Group**



Source: RLS & Associates, Inc. Surveys: June 2015

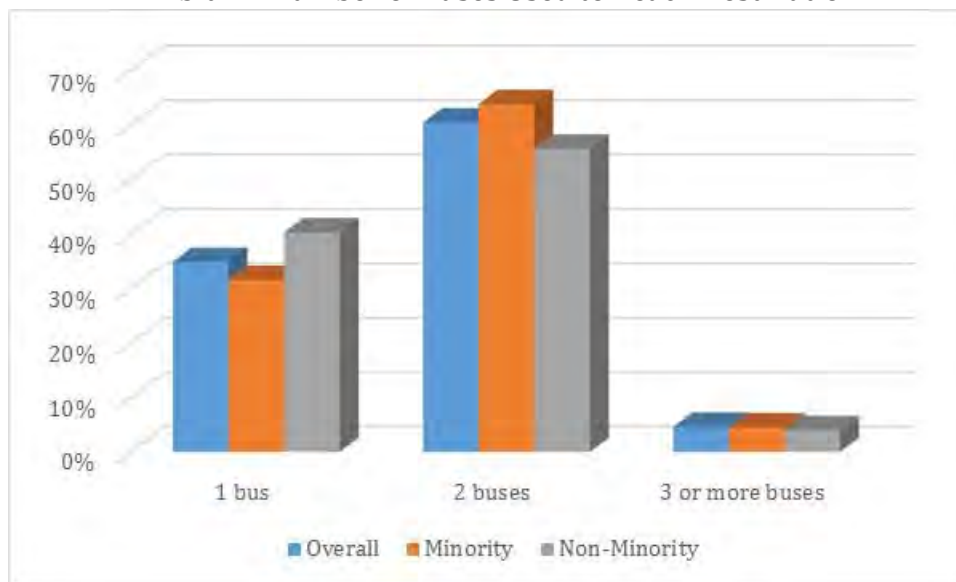
## **Transfers**

The use of more than one bus to reach a passenger's destination means that either a transfer is involved or the passenger has more than one destination. Over sixty-five (65) percent of Lextran riders who participated in the survey use two or more buses to get to their final destination. This means that almost two-thirds of Lextran riders must make at least one transfer. This percentage is down four (4) percent from the 2012 passenger survey. That leaves just under thirty-five (35) percent of passengers who take only one bus to get to their destination.

The number of minority riders that use two buses on their trip constitutes sixty-eight (68) percent of the minority ridership. Nearly five (5) percent of minority riders use three or more buses to reach their destination. Similarly, a little over four (4) percent of non-minority riders use three or more buses.

Most routes connect to the Transit Center where a passenger traveling across town can transfer to the second bus. When comparing the different user groups, there were significant differences in the amount of transfers needed. A significantly higher percentage of non-minority riders (40 percent) stated they could complete most trips using one bus as compared to minority riders (32 percent). This then leads to more minority riders (68 percent) needing to make at least one transfer as compared to non-minority riders (60 percent). The 2012 passenger survey showed 73 percent of minority riders needed to make a transfer while 64 percent of non-minority riders needed to make a transfer. Exhibit 27 depicts the number of buses used to reach the final destination by user group.

**Exhibit 27: Number of Buses Used to Reach Destination**



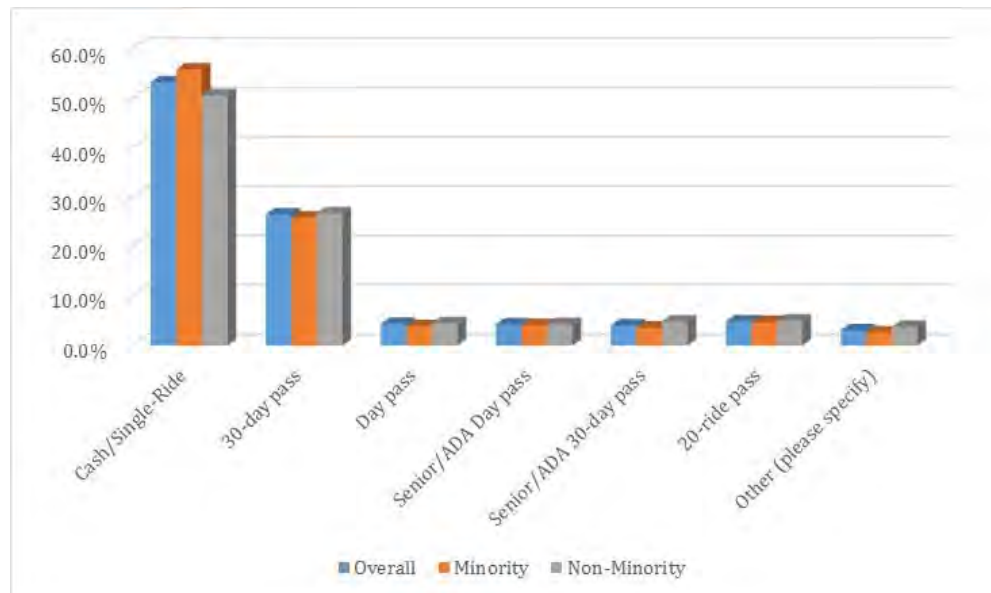
Source: RLS & Associates, Inc. Surveys: June 2015



## **Fare Payment**

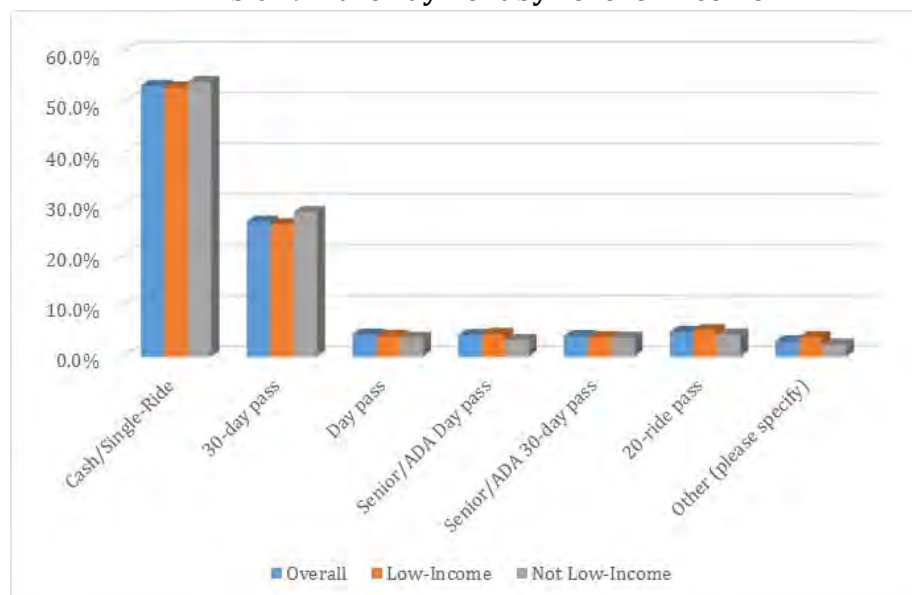
More than half of all Lextran riders pay for the service with cash (54 percent). Both minority and non-minority user groups reported using similar fare mediums. More minority riders reported paying with cash, fifty-six (56) percent, compared to fifty-one (51) percent of non-minority riders. Exhibit 28 depicts the fare medium used. These numbers coincide with the percentages found during the 2012 passenger survey.

**Exhibit 28: Fare Medium Used**



Source: RLS & Associates, Inc. Surveys: June 2015

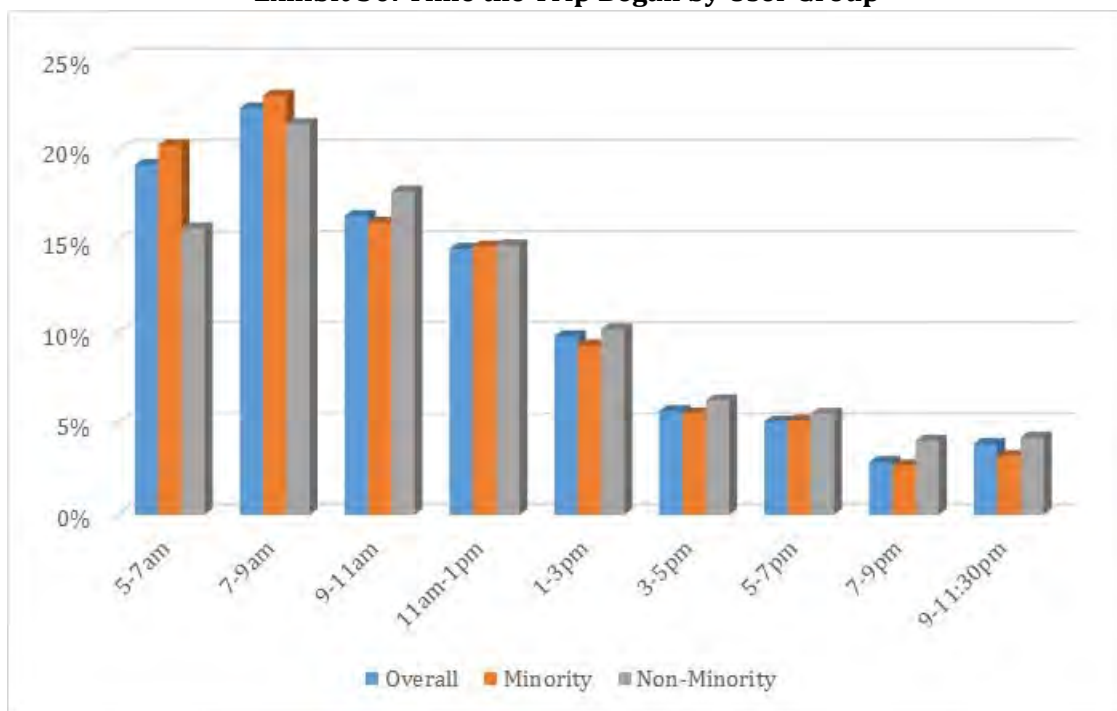
**Exhibit 29: Fare Payment by Level of Income**



## **Time of Trip**

The survey was conducted during peak and non-peak hours and on four different weekdays, one Saturday, and one Sunday. The survey results show that the respondents were more likely to begin their trip between 7:00 a.m. and 9:00 a.m. Results of the survey reveal that the time of travel among minority and non-minority riders, and the overall results, are consistent. The one difference in the time of day respondents started their trip was the 5:00 a.m. to 7:00 a.m. time slot. Nearly twenty (20) percent of minority respondents stated they started their trip between 5:00 a.m. and 7:00 a.m. while only sixteen (16) percent of non-minority respondents started their trip at that time. Non-minorities were slightly more likely to start their trip between 9:00 a.m. and 11:00 a.m. as compared to minorities. Exhibit 30 depicts the time each rider began their bus trip. The graph is divided into non-minority groups, minority groups, and all riders.

**Exhibit 30: Time the Trip Began by User Group**



Source: RLS & Associates, Inc. Surveys: June 2015

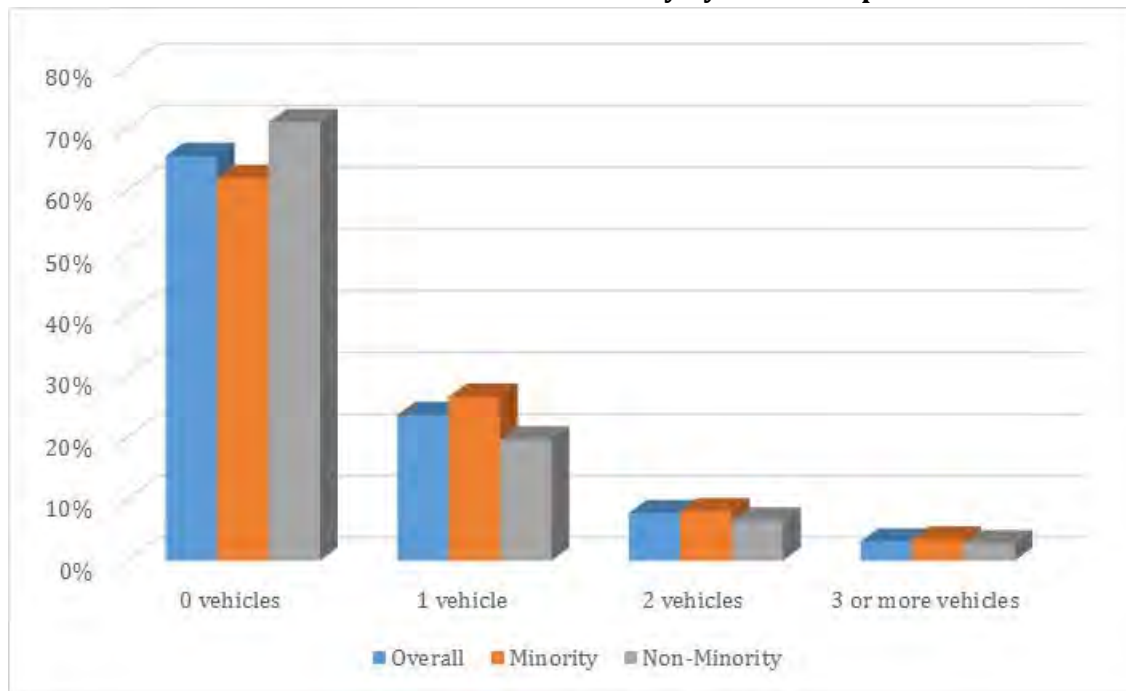
## **Vehicle Availability**

Exhibit 31 depicts the availability of vehicles per household reported by Lextran passengers. The majority of passengers reported having no available vehicles; this category made up sixty-six (66) percent of the total responses. Twenty-four (24) percent reported having one vehicle available per household. Ten (10) percent reported two or more vehicles available. These response rates coincide with the results from the 2012 passenger survey.

Exhibit 31 also depicts the availability of vehicles per household by user group. A significantly higher percentage of non-minorities (71 percent) stated they had zero vehicles available as compared to

minority survey respondents (62 percent). This then leads to minorities having a higher percentage (27 percent) of one vehicle households as compared to non-minority respondents (20 percent).

**Exhibit 31: Vehicle Availability by User Group**

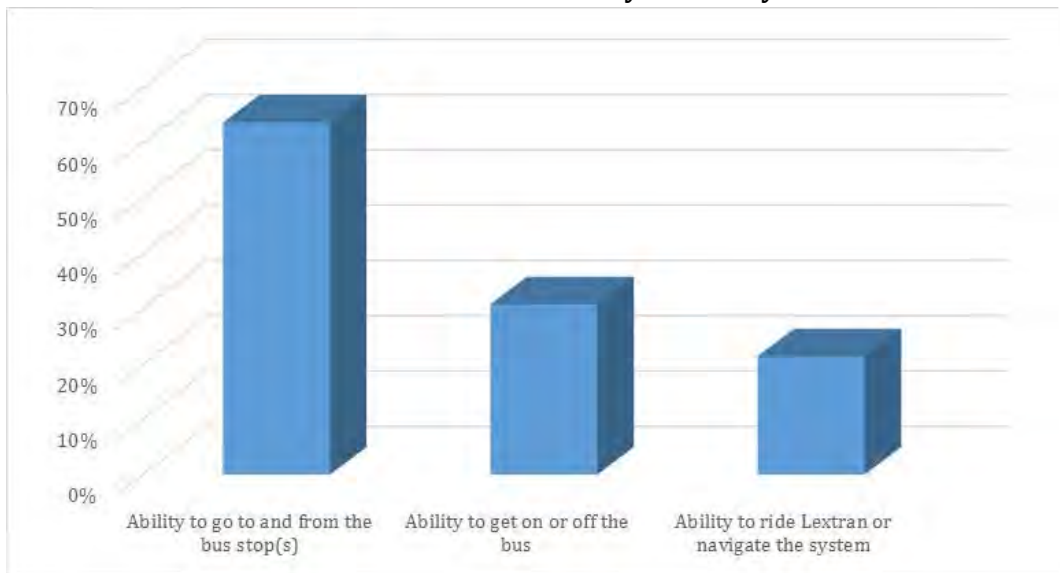


Source: RLS & Associates, Inc. Surveys: June 2015

### **Disability**

Before passengers were asked to rate Lextran services, they were asked if they had a disability that limited their ability to get to and from bus stops, to and from buses, and their overall ability to ride Lextran. Over thirteen (13) percent of all survey respondents stated they had some sort of disability that limited their ability to access Lextran. Of that thirteen (13) percent, sixty-four (64) percent said their disability limited their ability to access bus stops, thirty-one (31) percent said it limited their ability to access the bus, and twenty-one (21) percent said it limited their ability to navigate the system. Exhibit 32 depicts the limitations disabled survey respondents reported.

**Exhibit 32: Limitation by Disability**



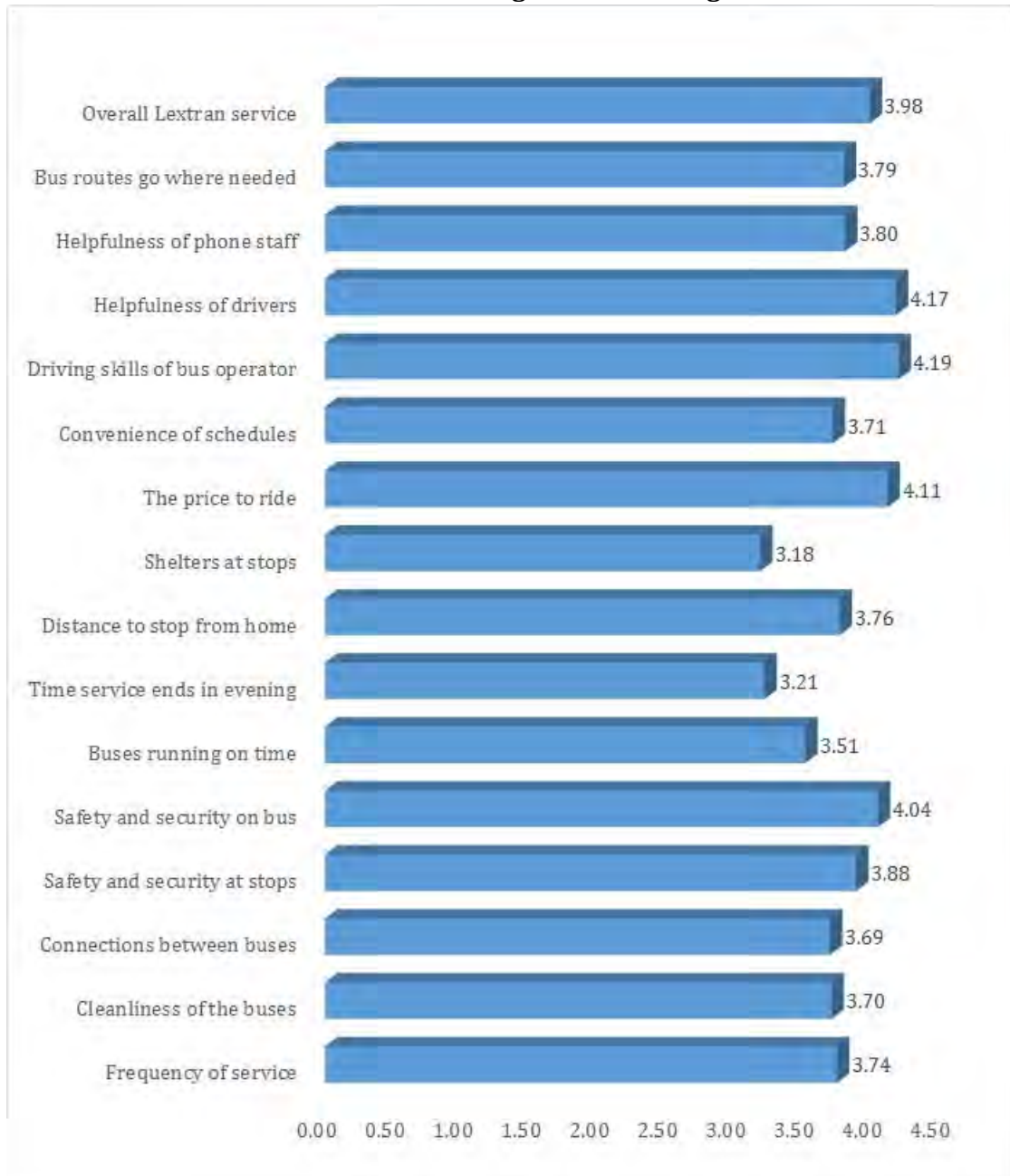
Source: RLS & Associates, Inc. Surveys: June 2015

## **LEXTRAN SERVICE RATINGS**

Passengers were asked to rate sixteen (16) different aspects of Lextran service on a scale of one through five, with five being the highest rating. Average scores were then calculated for each of these service categories. Results of this part of the survey are summarized in Exhibit 33. Overall, passengers were most satisfied with the driving skills of the bus operator. This was the highest average rating at 4.19. This was also the highest rated service in the 2012 passenger survey. The next highest average service rating was helpfulness of the drivers. No areas had average ratings under 3.0. The lowest rated service was shelters at stops with a 3.18 average.



**Exhibit 33: Average Service Rating**



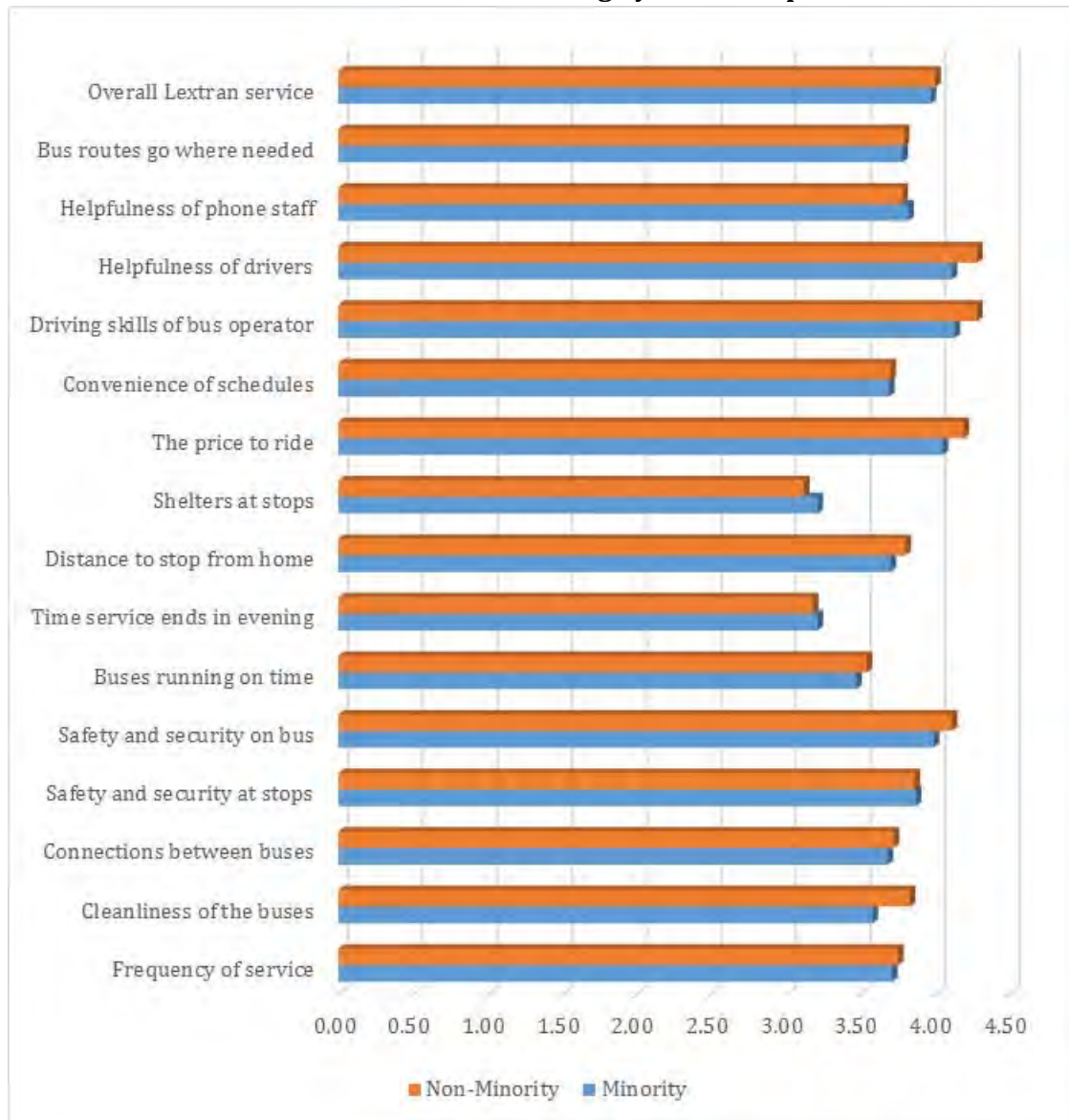
Source: RLS & Associates, Inc. Surveys: June 2015

### **Service Rating By User Group**

Exhibit 34 compares the ratings from the survey responses of each rider group. The orange column represents the non-minority user group and the blue column represents the minority user group. Non-minority riders reported being most satisfied with the “driving skills of the bus operator” and “helpfulness of the drivers.” Minorities ranked “driving skill of the bus operator” as the highest, but ranked “time service ends in the evening” and “shelters at stops” as the lowest out of all categories;

non-minorities ranked only “shelters at stops” as the lowest. In most of the categories, non-minority users ranked the services higher than minorities. Only “safety and security at stops,” “time service ends in the evening,” “shelters at stops,” and “helpfulness of the phone staff” were rated higher by minorities than non-minorities. The service ratings in 2015 were slightly higher across the board compared to 2012, but the services that were rated the highest and lowest were similar.

**Exhibit 34: Service Rating by User Group**



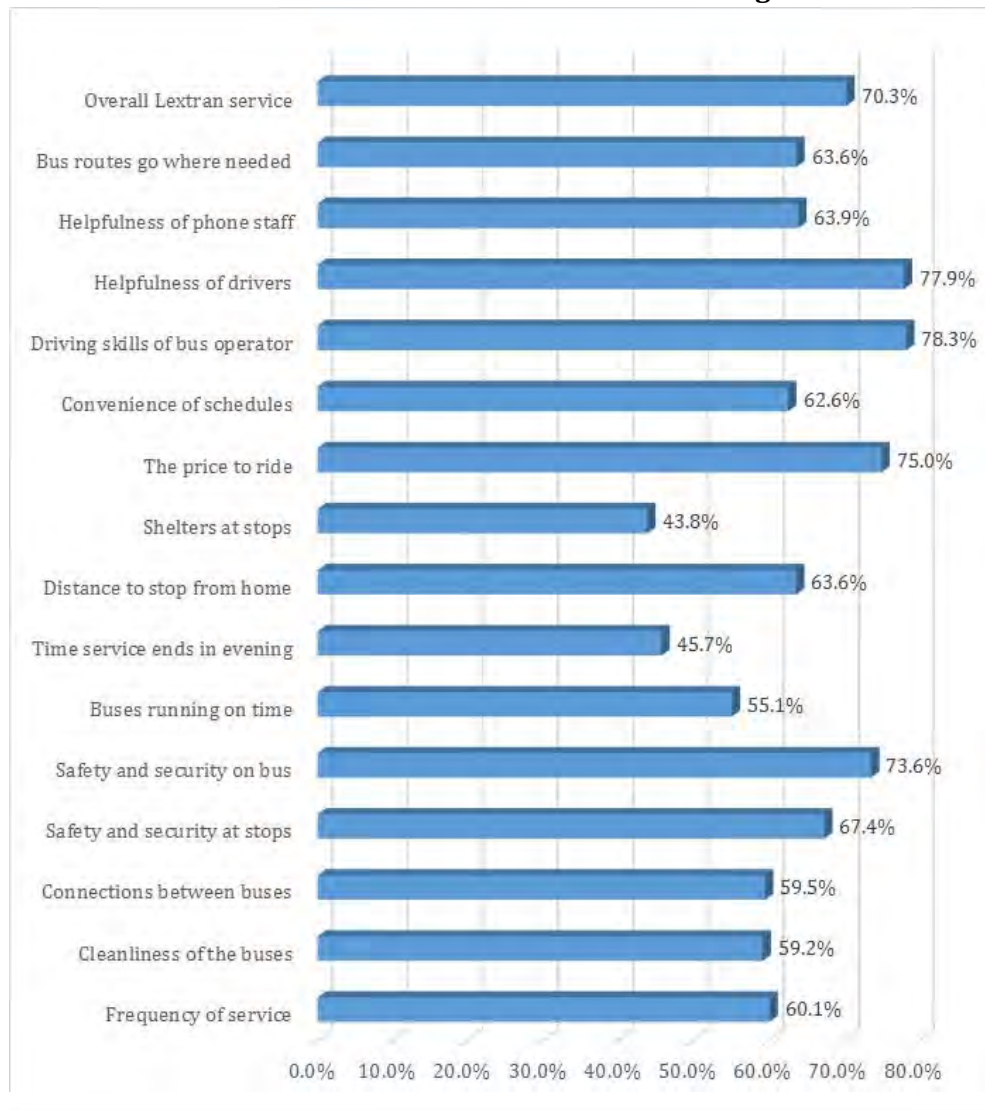
Source: RLS & Associates, Inc. Surveys: June 2015

Exhibit 35 illustrates the percentage of survey respondents who scored a “4” or “5” in each of the service categories. The categories that scored above a good or excellent rating by more than fifty percent of the survey respondents include “overall Lextran service,” “bus routes go where needed,” “helpfulness of phone staff,” “helpfulness of drivers,” “driving skill of bus operators,” “convenience of schedules,” “the price to ride,” “distance to stop from home,” “buses running on time,” “safety and

security on bus,” “safety and security at stops,” “connections between buses,” “cleanliness of the buses,” and “frequency of service.” Of these categories, the greatest number of respondents reported being very satisfied with the “driving skills of the bus operator.” “Shelters at stops,” and “time service ends in evening” all had the lowest percentages of good and excellent ratings.

When compared to the 2012 passenger survey, all of the services were rated slightly higher. “Buses running on time” made the most significant jump going from 48.6 percent in 2012 to 55.1 percent in 2015.

**Exhibit 35: Good to Excellent Service Ratings**



Source: RLS & Associates, Inc. Surveys: June 2015

## CONCLUSIONS

The survey described herein was completed to document the Transit Authority of the Lexington-Fayette Urban County Government's (Lextran) compliance with the requirements of the Title VI Regulations, outlined in FTA Circular 4702.1B. These standards are required for all transportation providers with a population of 200,000 or greater receiving Federal Transit Administration (FTA) funding under 49 U.S.C. 5307 (Urbanized Area Formula Program.)

Lextran contracted with RLS & Associates, Inc. to collect and analyze racial and ethnic data showing the extent to which members of minority groups are beneficiaries of Lextran services. To gather this data, RLS, along with temporary employees hired specifically for this project, conducted a rider survey of Lextran passengers during the week of June 17, 2015 through June 22, 2015 as well as on July 22, 2015, and July 24, 2015. This intercept mode survey was conducted at the Lextran Transit Center and on all fixed routes located throughout the Lextran service area. Careful consideration was given to target minority, non-minority, and low income locations during core service hours (6:00 a.m. to 7:00 p.m.) on both weekdays and weekends. The majority of the surveys were collected from the Transit Center, Route 3, Route 5, Route 7, and Route 9. Because many Lextran riders transfer at the Transit Center, this ensured that riders from the entire service area were questioned and asked to fill out the survey.

Following the conduct of the survey, RLS carefully analyzed the data collected and determined that Lextran offers service to all populations, specifically including minority, non-minority, and low income populations. This service is offered without regard to race, color, or national origin and is, therefore, in compliance with the Title VI and Environmental Justice regulations.

To document these findings, RLS prepared demographic and service profile maps which are included in this report. The maps were prepared using Geographic Information System (GIS) technology. A base map of Lextran's service area is included as Exhibit 3. This map includes, major streets and highways, current bus routes, Lextran facilities, zip codes, and major employers. Exhibits 7 and 8 are demographic maps that shade those census block groups where minority and non-minority individuals reside. Exhibits 9 and 10 depict the distribution of minority and non-minority residents throughout the Lextran service area, as reported in the survey. Exhibit 17 depicts the U.S. Census tracts of Limited English Proficient (LEP) individuals throughout Fayette County. Exhibit 18 depicts the zip codes of LEP survey respondents.

The surveys showed several interesting patterns about travel and transfers. Respondents were asked how many buses they had to take in order to reach their intended destination. Sixty-eight (68) percent of minority riders and sixty (60) percent of non-minority riders stated they needed to make at least one transfer, while forty (40) percent of non-minority respondents and thirty-two (32) percent of minorities stated they take one bus to reach their destination. When indicating how long their trip took from origin to destination, minority and non-minority responses differed. Over forty-one (41) percent of non-minority riders stated that their trip took more than sixty (60) minutes while only thirty-four (34) percent of minority passengers stated their trip took that long. Based on the survey data, minority riders are making more transfers but traveling shorter distances.



The one-auto and zero-auto availability data and comparisons showed an interesting pattern. Twenty-seven (27) percent of minorities and twenty (20) percent of non-minorities stated they had one vehicle available, while seventy-one (71) percent of non-minorities and sixty-two (62) percent of minorities stated they had zero cars available.

RLS distributed the Lextran passenger survey, as depicted in Exhibits 3 and 4, as part of the Title VI and Environmental Justice data collection process. The team collected data on race, color, national origin, income, and travel patterns of Lextran riders. The Exhibits of the report depict the results of the survey and the responses of the passengers. RLS collected data above and beyond the requirements of FTA Circular 4702.1B. This additional information can be used to judge the quality of service as it relates to minority and non-minority individuals.

The “Service Rating By User Group” section of this report deals with the rider’s opinion of the service. This includes questions such as the satisfaction with the system in general, value for fare paid, length and frequency of service, helpfulness of the staff, cleanliness of the buses, convenience, and safety. Both minority and non-minority user groups reported similarities in the service ratings but non-minorities were more likely to rate the services higher than minorities.

In analyzing the results of the survey, it appears that impartial and equitable service is being provided to all user groups and Lextran appears to be in compliance with Title VI of the Civil Rights Act.

## **SERVICE AND FARE EQUITY ANALYSIS OVERVIEW**

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Federal Transit Administration (FTA) recipients in urbanized areas of 200,000 or more in population and that operate fifty (50) or more fixed route vehicles in peak service must conduct a Title VI equity analysis in the course of planning a major service change or any magnitude of a fare change. Equity analyses are required regardless of whether proposed changes would be detrimental or beneficial to riders.

### **LEXTRAN MAJOR SERVICE CHANGE AND FARE CHANGE POLICY**

When considering changes in service and/or fare increases, Lextran will hold public meetings with the intent of gathering the broadest public comments about the proposed changes. Per the Lextran Public Participation Plan, at least two public meetings will be held with at least two weeks advanced notice when a major service change is proposed. This will assure sufficient time exists, before the implementation of proposed service changes, for the Board of Trustees to consider the comments received in its deliberations. According to the Plan, public comments will be solicited when a fare increase (except temporary or promotional changes) and/or a change (adverse or beneficial) that impacts twenty-five (25) percent of the service hours or miles on any route are being considered.

Lextran employs a variety of methods to reach individuals, communities, and the public-at-large in an ongoing effort to circulate Lextran-related information. These tools are used, along with enhanced efforts like community events and Lextran-hosted public meetings, in an effort to engage and solicit feedback when a major service change and/or fare change is proposed. As previously stated, community notification will occur not less than two weeks before the first public meeting.

Lextran may provide information and solicit input in a variety of ways, including the following: Lextran website and social media ([www.lextran.com](http://www.lextran.com), [facebook.com/lextran](https://facebook.com/lextran), and [twitter.com/lextran](https://twitter.com/lextran)), Lextran E-newsletter, interior notifications on all Lextran buses (printed and or digital), digital signage at the Lextran Transit Center, printed information at the Lextran bus shelters, print/electronic/online announcements in the Lexington Herald-Leader and other media outlets, communication with local elected officials, communication with community-based organizations and/or special interest groups, and public meetings.

### **INTRODUCTION**

In accordance with the FTA Title VI requirements outlined in the Federal Transit Administration Circular 4702.1B, RLS has prepared a demographic and service profile analysis pertaining to proposed service modifications that will result in major service changes as defined in Lextran's Title VI Program. The purpose of the analysis is to determine whether these changes will have a disparate impact and/or disproportionate burden on low-income and minority riders. Data used in this analysis was collected in coordination with the implementation of a system wide Title VI Fare and Service Equity Analysis.

The “picture” of the current Lextran service, its rider demographics, and its service area demographics, as reflected in this report is very similar to the “picture” in the 2012 Lextran Title VI report, also prepared by RLS. In addition, many of the service and fare change proposals are similar.

## **EFFECTS OF PROPOSED MAJOR SERVICE CHANGES AND POTENTIAL FARE INCREASES ON MINORITY AND LOW-INCOME POPULATIONS**

### **Proposed Major Service Changes**

The following sections describe the effects of the proposed service changes (as described below) and a potential fare increase on minority and low-income populations.

The concentrations of low income and minority populations provided in the table are based on the following formulas, recommended by the Federal Transit Administration (FTA):

- ◆ Minority proportion in the affected area = 
$$\frac{\text{Minority population in Census block groups along the affected area}}{\text{Total population in the same set of Census block groups.}}$$
- ◆ Low-income proportion in the affected area = 
$$\frac{\text{Low-income population in Census block groups along the affected area}}{\text{Total population in the same set of Census block groups.}}$$

The average concentrations of minority and low-income populations throughout the entire service area were determined as follows:

- ◆ Minority proportion across all tracts = 
$$\frac{\text{Total minority population in the service area}}{\text{Total service area population.}}$$
- ◆ Low-income proportion across all tracts = 
$$\frac{\text{Total low-income population in the service area}}{\text{Total service area population.}}$$
- ◆ Low-income proportion across all tracts = 
$$\frac{\text{Total low-income population in the service area}}{\text{Total service area population}}$$

Lextran has proposed the following route changes:

- ◆ Route 1 - Minor re-routing and the addition of bi-directional Sunday service that meets the major service change threshold.
- ◆ Route 2 - Minor re-routing and the addition of bi-directional Sunday service that meets the major service change threshold.

- ◆ Route 3 - Minor re-routing and the addition of bi-directional Sunday service that meets the major service change threshold.
- ◆ Route 4 - Minor re-routing and the addition of bi-directional Sunday service that meets the major service change threshold.
- ◆ Route 5 - Add one additional bus on Saturday and the addition of bi-directional Sunday service that meets the major service change threshold.
- ◆ Route 6 - Minor re-routing and the addition of bi-directional Sunday service that meets the major service change threshold.
- ◆ *Route 7 - Discontinue service on portions of New Circle Rd. and the addition of bi-directional Sunday service that meets the major service change threshold.*
- ◆ Route 8 - Minor re-routing and the addition of bi-directional Sunday service that meets the major service change threshold.
- ◆ *Route 9 - Discontinue service on portions of Winchester Rd., New Circle Rd., and Liberty Rd. and the addition of bi-directional Sunday service that meets the major service change threshold.*
- ◆ Route 12 - Discontinue service on portions of Leestown Rd. and the addition of bi-directional Sunday service that meets the major service change threshold.
- ◆ Route 13 - Discontinue service on portions of South Broadway and the addition of bi-directional Sunday service that meets the major service change threshold.
- ◆ *Route 16 – Elimination but parts of this route will be replaced with a new medical Southland route.*
- ◆ *Route 17 - Elimination*
- ◆ *Route 20 - Elimination*
- ◆ *Route 21 - Discontinue service on portions of Man O War, Beaumont Centre, Beaumont Centre Circle, Lyon Dr., Ft. Harrods Dr., and Snaffle Rd.*
- ◆ *Route 23 - Elimination*
- ◆ *Route 24 - Elimination*
- ◆ *Route 25 - Elimination*
- ◆ *Route 31 - Elimination*

The italicized proposed service changes on routes 7, 9, 16, 17, 20, 21, 23, 24, 25 and 31 meet Lextran's major service change definition and warrant a Title VI equity analysis. The addition of bi-directional service on Sundays for routes 1 through 13 also meets Lextran's major service change



definition and requires Lextran to follow its public participation plan, but it does not warrant a Title VI equity analysis because there is no adverse effect for riders.

**Major Service Change Equity Analysis for Proposed Changes on Routes 7, 9, 16, 17, 20, 21, 23, 24, 25, and 31:**

Exhibit 36 depicts the routes that will be affected by Lextran service changes. The Lextran routes and ADA service are overlaid on the Census block groups for Fayette County. The Census block groups identify densities of minority and low-income populations in the areas impacted by the proposed major service changes. Block groups highlighted in green are areas of higher than average minority populations while block groups highlighted in red include areas with higher-than-average below poverty level populations. The Census block groups that are brown in color are areas where both higher-than-average minority and below poverty level populations overlap.

As illustrated in Exhibit 36, the most impacted Census block groups have been highlighted in brown. The elimination or major change of service on Routes 7, 9, 16, 17, 20, 21, 23, 24, 25, and 31 will adversely affect the people in the Census block groups that use these routes. Higher-than-average amounts of minorities and low-income populations live in the census block groups affected by the elimination or change of service proposed by Lextran.

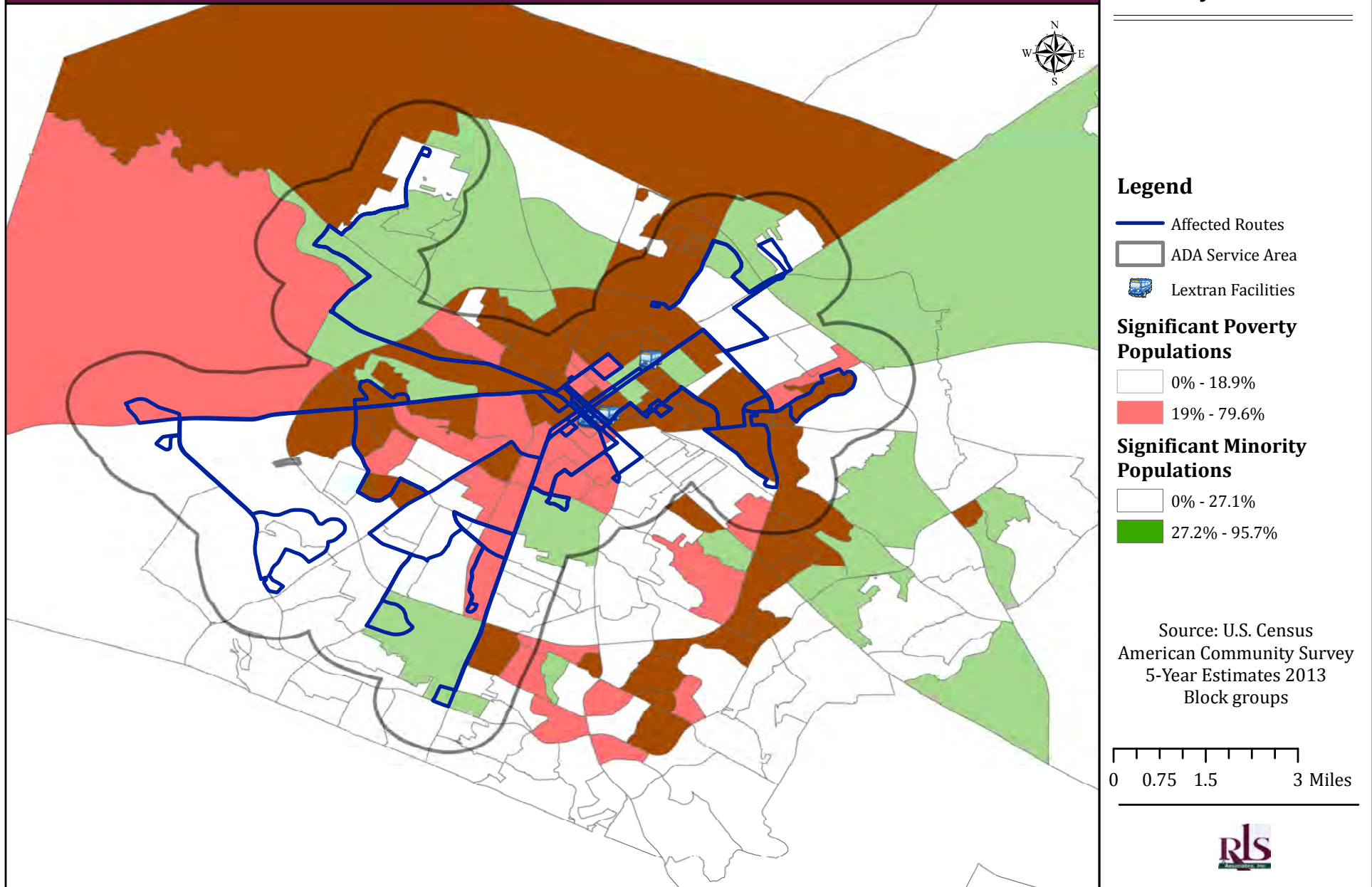
Exhibit 37 details the impacts on the minority and the low-income proportions of the population for census block groups adjacent to the proposed service reductions, based on the 2013 U.S. Census American Community Survey (ACS) data. The analysis does not directly reflect ridership. For all of the proposed service changes except Route 16, the impacted minority and low-income areas have higher concentrations than the Lextran service area overall.

However, the data in Exhibit 38 provides a much more positive picture of the impacts of the proposed service changes. For routes 7, 16, 21, 23, 24, and 25 the actual percent of impacted minority and low-income riders (as opposed to the adjacent minority and low-income census block group populations of Exhibit 36) will be less than or approximately equal to the actual percentage of minority and low-income riders on Lextran system wide. The implication is that all riders using the routes that are proposed to be changed are not necessarily residents of the adjacent census block groups, but some may come from other parts of the Lextran service area.

When taken together, the map in Exhibit 36, and the tables in Exhibits 37 and 38 show that there will be some adverse impact on the surrounding census block group minority and low income populations, and on the minority and low income riders. However, the overall impact does not appear to be disparate to the extent that minority and low income persons will be impacted disproportionately.

# Exhibit 36: Significant Minority & Poverty Populations by Block group

## Lextran Service & Fare Equity Analysis 2015



**Exhibit 37: Impact of Major Service Changes on Population Near the Routes**

Type of Service Change	Minority Proportion of Population		Low-Income Proportion of Population	
	Population of Census Block Groups Near the Route	Population of Entire Service Area	Population of Census Block Groups Near the Route	Population of Entire Service Area
<b>Route 7: Discontinue service on portions of New Circle Rd.</b>	❖ 35.1%	27.1%	❖ 33.4%	18.9%
<b>Route 9: Discontinue service on portions of Winchester Rd., New Circle Rd., and Liberty Rd.</b>	❖ 32.7%	27.1%	❖ 33.7%	18.9%
<b>Route 16: Elimination</b>	19.9%	27.1%	❖ 29.9%	18.9%
<b>Route 17: Elimination</b>	❖ 40.2%	27.1%	❖ 25%	18.9%
<b>Route 20: Elimination</b>	❖ 37.6%	27.1%	❖ 33.8%	18.9%
<b>Route 21: Discontinue service on portions of Man O War, Beaumont Centre, Beaumont Centre Circle, Lyon Dr., Ft. Harrods Dr., and Snaffle Rd.</b>	28.6%	27.1%	❖ 26.8%	18.9%
<b>Route 23: Elimination</b>	23.6%	27.1%	❖ 28.6%	18.9%
<b>Route 24: Elimination</b>	30.1%	27.1%	❖ 37.6%	18.9%
<b>Route 25: Elimination</b>	❖ 33.9%	27.1%	❖ 50.2%	18.9%
<b>Route 31: Elimination</b>	24.7%	27.1%	❖ 26.7%	18.9%

❖ Shows a disparate impact or disproportionate burden, based on the policy for 20% differences.

\* Low income used from the Census reflects percentage of persons below the poverty level.

Source: U.S. Census American Community Survey Five-Year Estimates 2013

**Exhibit 38: Impact of Major Service Changes on Riders on the Routes**

	Minority Proportion of Riders		Low-Income Proportion of Riders	
	Riders on the Route	Riders on the Entire System	Riders on the Route*	Riders on the Entire System
<b>Route 7: Discontinue service on portions of New Circle Rd.</b>	51.8%	55.5%	53.7%	54.1%
<b>Route 9: Discontinue service on portions of Winchester Rd., New Circle Rd., and Liberty Rd.</b>	❖ 67.1	55.5%	59%	54.1%
<b>Route 16: Elimination</b>	65%	55.5%	53.3%	54.1%
<b>Route 17: Elimination</b>	50%	55.5%	❖ 100%	54.1%
<b>Route 20: Elimination</b>	58.3%	55.5%	60%	54.1%
<b>Route 21: Discontinue service on portions of Man O War, Beaumont Centre, Beaumont Centre Circle, Lyon Dr., Ft. Harrods Dr., and Snaffle Rd.</b>	❖ 66.7%	55.5%	50%	54.1%
<b>Route 23: Elimination</b>	44.4%	55.5%	33.3%	54.1%
<b>Route 24: Elimination</b>	33.3%	55.5%	❖ 66.7%	54.1%
<b>Route 25: Elimination</b>	0%	55.5%	❖ 75%	54.1%
<b>Route 31: Elimination</b>	❖ 85.7%	55.5%	50%	54.1%

❖ Shows a disparate impact or disproportionate burden, based on the policy for 20% differences.

\*Low income for riders on the routes was classified as household income below \$20,000 annually.

Source: RLS & Associates, Inc. Surveys: June 2015

### **Proposed Fare Changes**

Lextran is considering increasing fares by either twenty (25) percent or fifty (50) percent across the board (in all fare media) in the next three years. Any fare increase or decrease warrants a Title VI fare equity analysis.

Exhibit 28 (Fare Media Used) shows that minority and non-minority riders used similar fare mediums, and over half of all Lextran riders pay for the service with cash (53 percent). Exhibit 29 (Fare Payment by Level of Income) shows similar data for low income riders.



### **Fare Equity Analysis for Proposed Fare Change:**

In order to conduct a fare equity analysis, it is assumed that all riders and all routes (including Wheels) would be affected.

Exhibit 28 shows that minority and non-minority riders tend to use each fare media in almost the same proportions. This is also the case for low-income and non low-income riders, as shown in Exhibit 29. Increasing the fares by 25% or 50% would have the same relative impacts on the minority and low-income riders. Therefore, there would be no disparate impact or disproportionate burdens on these groups as a result of a fare increase.

As shown in Exhibit 39, Lextran minority riders (55.5%) are almost double that of the minority population (27.1%) of Lextran's overall service area. Further, Lextran low-income riders (54.1%) are almost triple the low-income population (18.9%) of Lextran's overall service area population. Therefore, Lextran riders are much more likely to be minority or low-income, or both, compared to the overall population of Fayette County. Approximately two-thirds of Lextran riders can be considered "transportation disadvantaged." Clearly, Lextran is addressing a compelling and important community mobility need by providing its fixed route and ADA demand response services.

Based on their use of various media, all riders (minority and non-minority, low-income and non-low-income) would be adversely impacted by any across-the-board increase in fares. In addition, a twenty-five (25) percent or fifty (50) percent fare increase would hit the low-income riders (whether minority or non-minority) harder than the non-low-income riders since the twenty-five (25) percent or fifty (50) percent fare increase would represent a larger proportion of their household income compared to non-low-income households.

**Exhibit 39: Impact of Potential Fare Changes on the Riders**

	Minority Proportion of System		Low-Income Proportion of System	
	Riders on the Entire System	Population of the Entire Service Area (Census Data)	Riders on the Entire System*	Population of the Entire Service Area (Census Data)**
<b>Fayette County</b>	55.5%	27.1%	54.1%	18.9%

\*Low-income for riders on the routes was classified as household income below \$20,000 annually.

\*\*Low-income used from the Census data reflects percentage of persons below the poverty level.

Source: RLS & Associates, Inc. Surveys: June 2015;

Source: U.S. Census American Community Survey Five-Year Estimates 2013

### **Potential Actions to Mitigate the Adverse Effects of the Major Service Changes**

There are several feasible service options that could be used to help fill the service gaps and reduce the negative impacts on minority and low-income census tracts and riders, as a result of implementing the proposed changes on Routes 7, 9, 16, 17, 20, 21, 23, 24, 25, and 31. A thorough cost analysis of each strategy should be completed to assess the net savings, if any, each option is able to yield if selected to mitigate any negative impacts that may result from the proposed service changes.

1. Use Lextran's Wheels (ADA paratransit service) to provide service for non-disabled riders to and from the affected areas and during the affected times at the regular fixed route fare. Wheels vehicles could be used to establish coordinated transfer locations with the fixed routes that would facilitate standing reservations for repeated trips and/or reservations for random trips that are scheduled twenty-four (24) hours in advance. Lextran could also consider establishing a guaranteed ride home program for workers that must work late or have a sudden change in their schedules and were not able to use modified Routes 7, 9, and/or 21. This option would not significantly increase the travel time of the rider from current conditions. This option would also significantly reduce any net savings that Lextran would glean by making the proposed service changes and would likely not provide an option that could be used by all affected riders and residents.
2. Contract with local taxi and non-emergency medical transportation companies to fill in the affected areas and times on the four routes, in a manner similar to using Wheels. The riders would pay the regular fixed route Lextran fare, with the difference between the taxi fare/NEMT fare and the Lextran fare to be paid by Lextran. The taxi and NEMT companies would also provide for a guaranteed ride home program for those workers that had to work late or had a sudden change in work hours and could not use modified Routes 7, 9, and/or 21. This option would not significantly increase the travel time of the rider from current conditions. However, this option would significantly reduce any net savings that Lextran would obtain by making the proposed service changes and would likely not provide an option that could be used by all affected riders and residents.
3. Contract with local human services agencies (elderly, low income, disabled, etc.) to fill in the affected areas and times on the four routes, in a manner similar to contracting with the local taxi/NEMT companies. The riders would pay the regular fixed route Lextran fare, with Lextran reimbursing the human service agencies the difference to make up their fully allocated costs. The human service agencies would also provide for a guaranteed ride home program for those workers that had to work late or had a sudden change in work hours and could not use modified Routes 7, 9, and/or 21. This option would not significantly increase the travel time of the rider from current conditions. However, this option would significantly reduce any net savings that Lextran would obtain by making the proposed service changes and would likely not provide an option that could be used by all affected riders and residents.
4. Work with the local rideshare agency program to enroll the affected users on current or new rideshare vehicles. This would be appropriate for regular and repetitive work trips or perhaps

some medical trips. The rider would pay the regular Lextran fixed route fare, and Lextran would make up the difference for any other fees and/or costs that the rideshare program and rideshare groups would incur. This option would not significantly increase the travel time of the rider from current conditions. However, this option would significantly reduce any net savings that Lextran would obtain by making the proposed service changes and would likely not provide an option that could be used by all affected riders and residents.

5. Establish a volunteer reimbursement program, where Lextran would pay the mileage of volunteers who would agree to transport an affected minority or low income rider or resident of the adjacent census tracts. Lextran would allow the affected rider or resident to name one or a few designated volunteers, who would agree to transport the person for an established mileage reimbursement (i.e., \$0.50 per mile) up to a cap (i.e., \$40-\$50 a month). Volunteers can be trusted friends, family, or others who would volunteer to help drive those less fortunate. Volunteers would use their own vehicles and have adequate and appropriate insurance. Lextran would provide additional coverage for a modest cost, register the volunteers, and process the paperwork and payments. Payments would come from Lextran (after receiving appropriate documentation from the affected rider or resident), and Lextran would directly pay the volunteer drivers. This type of program is in effect in other areas and has been approved by FTA. This option would not significantly increase the travel time of the rider from current conditions. However, this option would significantly reduce any net savings that Lextran would obtain by making the proposed service changes, and would likely not provide an option that could be used by all the affected riders and residents.
6. Lextran would work with local agencies dealing with low-income households and establish a program to help the families bring their autos up to safety and dependability standards, and thereby enable the families to use their personal vehicles, especially for work and medical trips. The funding could be in the form of small microloans in the form of a revolving loan program. This type of program is in effect in other areas and has been approved by FTA. This option would not significantly increase the travel time of the rider from current conditions. However, this option would significantly reduce any net savings that Lextran would obtain by making the proposed service changes and would likely not provide an option that could be used by all the affected riders and residents.
7. Some combination of the above options. This combined option would not significantly increase the travel time of the rider from current conditions, but would significantly reduce any net savings that Lextran would obtain by making the proposed service changes. It would likely not provide an option that could be used by all the affected riders and residents.
8. It does not appear that a reroute or realignment of routes other than 7, 9, and/or 21 will cost-effectively and feasibly cover the gaps created by the proposed service changes.
9. Lextran could fully or partially restore the service cuts if additional funding becomes available, either from external sources or by further internal cost-containment efforts.

It is important to note that any change in fixed route services may have an impact on the Wheels ADA service since Wheels is complementary, comparable to, and essentially mirrors the fixed route system.

Service options 1-7 and 9 appear to be appropriate for consideration by Lextran as a means to mitigate the impacts of the proposed service cuts. In addition, those options may be appropriate for Lextran to add to its portfolio of service options to be even more responsive to the community's mobility needs.

### **Potential Actions to Mitigate the Adverse Effects of Fare Increases**

Since the main purpose of a fare increase is to increase system fare revenues, any effort that results in a reduction of the potential increase in revenues is counterproductive. Nonetheless, there are several feasible fare options that could be used to help reduce the financial impacts on minority and low-income census tract residents and riders, as a result of implementing a fare increase, even if it reduces the potential fare revenue increase for the transit system.

1. Along with a general fare increase, implement a fare discount for low income riders. This would, in effect, have a significantly larger fare impact on non-low-income households which are more likely able to accommodate the impacts. This may still result in a fare increase for low-income riders, but may be a less burdensome increase than the system wide overall increase and certainly less than that for non-low-income riders. This would require Lextran to implement a method of identifying and certifying low-income riders and would require additional administrative and operational costs and procedures. This could be done in coordination with human service agencies that already have low-income persons in their client database. It does not appear to be legally or politically appropriate to also consider a fare discount for minority riders.
2. Work with local human services agencies and foundations to attempt to obtain funding to help low-income and minority households to offset the financial impacts of increased transit fares.
3. Examine ways to balance the budget by further reducing system costs, as an alternative to a twenty-five (25) percent or fifty (50) percent increase in fares. Lextran has worked to rationalize its route structure, and is even proposing some service and related cost cuts. Other ways to cut costs are to reduce labor costs and overhead, and continue to fine-tune its services. But, Lextran has been doing that for some time, and little remains to be cut, other than service. If given the choice, however, it can be assumed that minority and low-income riders would choose to continue existing service and be challenged to pay for a twenty-five (25) percent or fifty (50) percent fare increase, instead of struggling to find alternative means of transport to compensate for the loss of service, if additional cuts were made.

Lextran already has in place an extensive and well thought out fare structure with a wide range of pass options. It is not clear that improvements could be made to the overall fare structure and the relative use of each media by minority and low-income riders because the various fare media and amounts appear to be used by minority and non-minority riders in almost equal proportions, and by

low income and non-low income riders in almost equal proportions. This suggests that the fare media and fare system are equally attractive across these population groups. An increase of 25% or 50% of the overall fares does not appear to warrant any changes in the types of fare media offered, only in their costs to the rider, to reflect the overall increases.

One potential idea would be to make it easier to use cell phones to pay for fare media. This is particularly important for low-income households that are increasing their access to cell phones but may not have checking accounts or credit cards.

Since Lextran needs to increase its revenues to balance its budget, in order to maintain stable service, there really is no other option than increasing fares. And, an across the board increase is likely the fairest and most practical approach.

Finally, a fare increase is likely easier to cope with than the kind of significant loss of service that would be needed to generate savings equivalent to a twenty-five (25) or fifty (50) percent fare increase.

Again, as noted above with modifications to the existing fixed routes any fixed route fare increase may also impact Wheels as the ADA comparable and complimentary paratransit system. Therefore, any increase of the fixed route base fare may be accompanied by an increase in the Wheels fare of up to twice that new fixed route base fare.

Fare options 1 and 2 appear to be appropriate for consideration by Lextran as a means to mitigate the impacts of a potential fare increase. In addition, those options may be appropriate for Lextran to add to its portfolio of service options to be even more responsive to the community's mobility needs.



## **REVIEW OF THE LEXTRAN OCTOBER 2013 TITLE VI PROGRAM**

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RLS has reviewed the October 2013 Lextran Title VI program for the completeness and application of policies and standards. Several changes, corrections and additions are recommended and listed below.

1. **Pages 10-15:** In multiple locations, only fare increases are mentioned. These should be changed to fare increases and decreases. There appears to be some confusion between the requirements for public involvement for fare increases and the requirements for Title VI Program/equity analysis requirements for fare increases and decreases. Appendix E (The Disparate Impact and Disproportional Burden Policies) does have the correct interpretation of fare changes.
2. **Pages 54-57:** The service design and performance standards are comprehensive. Lextran may want to consider adding standards for transfers and for route directness.
3. **Pages 58-61 and Appendices B and C:** On-going evaluation and monitoring service is significantly incomplete.
  - The evidence of service monitoring is only shown for three Lextran routes and does not include all the service and design standards. As part of the three year Title VI Program update, a comprehensive and thorough analysis of the system, and its service and amenities, and how those impact minority and low-income populations must be conducted. Lextran has to prove and document, using data, maps, analysis, etc., that it indeed complies with Title VI and Environmental Justice.
  - The last sentence on page 59 is incomplete. In reading the existing wording it appears that the full sentence will be important, but it is currently incomplete.
4. **Page 66:** The +/- 20% range for the disparate impact and disproportionate burden policies seems excessively large, and would allow large and significant impacts to pass through without warranting any equity analyses. Although FTA does not specify a percentage, their examples in the Circulars and other resource materials are more like 2% or 5%, and not 20%. It is not clear that 20% is aligned with the spirit of the regulations and Lextran should consider reducing their 20% range to the FTA's example range of 2%-5%.
5. **Appendix D:** There needs to be an adopted Fare Change Policy just as there is a Major Service Change Policy. Wording about fare changes need to be removed from *The Major Service Change Policy*.