



# Commuter Services Study

*An Examination of the Interest in and Need  
for Commuter Services in and around the City  
of Lynchburg, Virginia*

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## Table of Contents

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<b>Executive Summary</b> .....	<b>1</b>
<b>Purpose</b> .....	<b>3</b>
<b>Subjects for Study</b> .....	<b>3</b>
<b>Survey Conditions</b> .....	<b>4</b>
<b>Data-Collection Method</b> .....	<b>5</b>
<b>Analysis</b> .....	<b>5</b>
<b>Reducing the error in the survey responses</b> .....	<b>6</b>
<b>Observations/Survey Responses</b> .....	<b>7</b>
Employer Survey: .....	7
Employee Survey: .....	17
Additional Observations .....	29
<b>Conclusions</b> .....	<b>30</b>
<b>Appendix</b> .....	<b>34</b>

## **Index of Tables**

---

Table 1: Number of Respondents Interested in Telecommuting by Residence Location.....	31
Table 2: City of Lynchburg Employee Zip Codes, and Frequency, 2007 .....	35
Table 3: Most Likely Route Taken to Get From Origin Zip Code to Destination Zip Code 24501 .....	37
Table 4: Most Likely Route Taken to Get From Origin Zip Code to Destination Zip Code 24502 .....	38
Table 5: Most Likely Route Taken to Get From Origin Zip Code to Destination Zip Code 24503 .....	38
Table 6: Most Likely Route Taken to Get From Origin Zip Code to Destination Zip Code 24504 .....	39

## ***Executive Summary***

This study was performed by the Region 2000 Local Government Council (LGC) to glean information about the need and interest of employers, residents and workers in the Lynchburg area in commuter services such as telecommuting, rideshare matching, and/or flexible work schedules. This study was also performed to identify what commuter services, if any, are available in the Lynchburg area. This Commuter Services study enabled Region 2000 Local Government Council to identify commute corridors and pinpoint the best locations for grouping commuter trips with facilities such as park-and-ride lots or possibly telecommute centers.

Two surveys were developed and distributed for this study. The first survey went to employers in the Central Virginia Planning District that have 100 or more employees. The second survey was sent to approximately 800 City of Lynchburg employees. Thirty-four employer surveys were returned (31%) and 176 employee surveys were returned (22%).

The employer survey responses showed:

1. Some employers offer their employees commuter services, though most do not;
2. Most employers do not have public transportation to their worksite;
3. Most employers provide free parking at or near their worksite for their employees;
4. Half of the employer respondents were not interested in providing their employees with commuter services;
5. A majority of the respondents believe their employees either do not need help with or are not interested in commute alternatives; and
6. None of the employers knew of an organization in the area that provides commuter services.

The employee survey responses showed:

1. Most employees live in either Lynchburg or Campbell County;
2. Most participants find their commute problems minimal;
3. A majority of the respondents do not have public transit from their home to their worksite;
4. More participants changed their commute habits because of traffic than changed their commute habits because of higher gas prices or parking availability;
5. Most employees drive alone to work;
6. A majority of the respondents have a commute that is between fifteen and thirty minutes one-way;
7. A majority of respondents live between five and ten miles from their worksite;
8. Most participants responded that their employer does not offer any commuter services, although others said their employer offers a flexible work schedule, information on commute alternatives, telecommuting, teleconferencing and other services;
9. Eighty-five participants would be interested in telecommuting, flexible work schedules, access to free ride matching services and information at work about commute alternatives.

Most employees do not have public transportation from their home to their worksite. Eighty-two percent of employees live five miles or more from their worksite. These facts mean that most employees have only one way to travel from home to work, by driving their car.

With the rural nature of the counties surrounding the City of Lynchburg, public transit would be an inefficient way to expand commuter choices. The programs in which the most participants were interested, telecommuting, flexible work schedules, access to free ride matching services and information at work about commute alternatives, would expand commuter choices most efficiently. The lack of commute options available for this area demonstrates a need for a program that can expand transportation options.

The City of Lynchburg was the largest employer (over 1,000 employees) who responded to the employer survey with interest in providing commuter services. They responded that they are somewhat interested in starting a commuter program for their employees. Eighty-five employee participants expressed an interest in some sort of commuter service program. The interest of both a major employer and a number of employees establishes an interest in the creation of a commuter services program.

The City of Lynchburg provided the Council with a list of employee zip codes. After mapping the locations of the communities in which the zip codes are located, the roadways most likely used to get to the City of Lynchburg (commute corridors) were identified. These commute corridors are Route 29 both north and south of the City, Route 460 both east and west of the City, Route 501 both north and south of the City, and Route 221 west of the City.

At a glance, considering the flow of the City of Lynchburg Employees from home into the City, park and ride lots may best be located at or near locations such as the Town of Amherst, the Town of Appomattox, Rustburg, Altavista, and the City of Bedford. These communities are funnel points; points at which commuters, coming from many different origins, meet up and travel along the same road to reach their shared destination. Park and ride lots developed along the commute corridors could provide meeting points for participants in a ride-matching program.

Overall, this study shows that there is a disconnect between employee residences and employee worksites. It shows that apart from public transit and a few commuter services offered by employers, there are no commuter programs widely available to those who work in this area. It shows that many of the routes taken to get from home to work are not unique. Lastly, this study shows that there is an in a variety of commuter services.

**Purpose**

This study was performed by the Region 2000 Local Government Council (LGC) to identify what commuter services, if any, are available in the Lynchburg area. This study was also performed to glean information about the need and interest of employers, residents and workers in the Lynchburg area in commuter services such as telecommuting, rideshare matching, and/or flexible work schedules. This Commuter Services study enabled Region 2000 Local Government Council to identify commute corridors and pinpoint the best locations for grouping commuter trips with facilities such as park-and-ride lots or possibly telecommute centers.

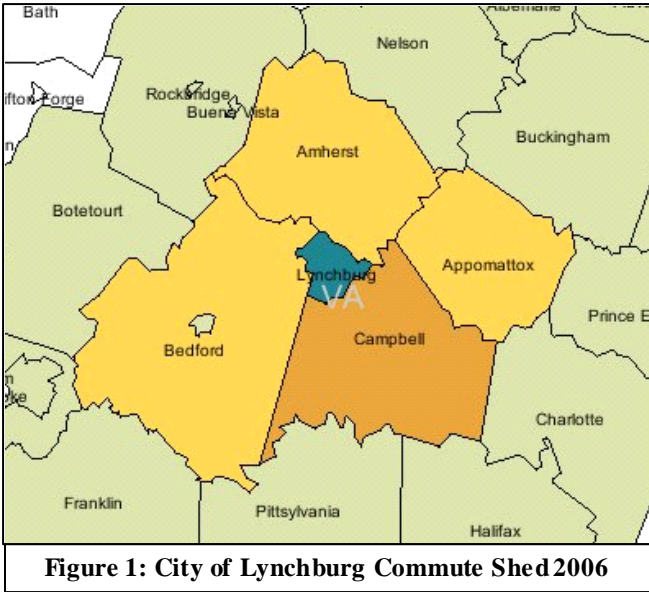
**Subjects for Study**

The population examined for this study, consists of:

- 1. Organizations located within the Lynchburg primary commute shed who have 100 or more employees;
- 2. The employees of the City of Lynchburg.

A commute is “a home-to-work or work-to-home trip” (Alameda County, California). A commute shed is “the area from which people do or might commute from their homes to a specific work place destination, given specific assumptions about maximum travel time or distance” (California Planning Roundtable). Because the area from which workers are traveling is so expansive, the commute shed has been broken down into two categories: the primary commute shed and the secondary commute shed.

According to the 2000 Census, the primary commute shed for the City of Lynchburg includes: Amherst County, Appomattox County, Bedford City (located in Bedford County), Bedford County, and Campbell County. These municipalities are designated as the commute shed because they represent connected segments of population to and from which the City of Lynchburg (workforce) flows (See figure 1). The localities in orange have between 1000 and 10,000 residents commuting into the City of Lynchburg on a regular basis.



**Figure 1: City of Lynchburg Commute Shed 2006**

Campbell County, in dark orange has over 10,001 residents commuting into the City of Lynchburg on a regular basis. The blue area is the City of Lynchburg itself. The localities in light green have between 6 and 999 residents commuting into the City of Lynchburg on a regular basis.

Information about employers in the Lynchburg primary commute shed has been gathered from Region 2000 LGC staff's knowledge of the major employers in the area and from the Virginia Employment Commission's Website (<http://velma.virtuallmi.com>). These employers are the first set of subjects in this study. The employees of the City of Lynchburg are the second set of subjects in this study.

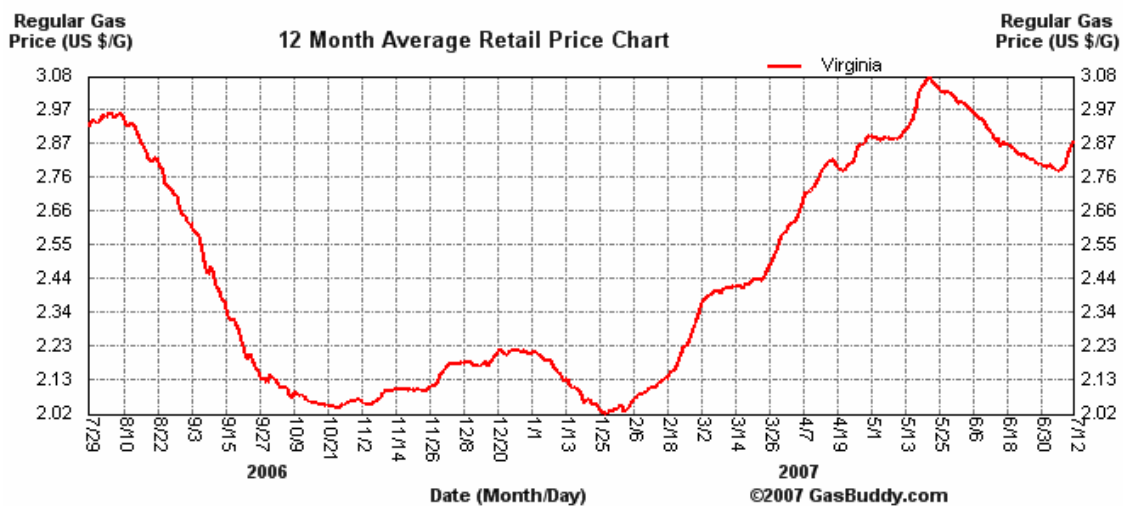
The City of Lynchburg was the only employer given the employee survey for several reasons. The City was the largest employer respondent (with approximately 800 employees) willing to circulate the employee survey. The City responded in the employer survey that they would be somewhat interested in starting a commuter services program.

Five hundred of the employee surveys could be administered electronically (another 300 were provided to the City in paper format) through the Commuter Services Website ([www.commuteR2K.org](http://www.commuteR2K.org)) and through an electronic form emailed to them by their Human Resources Department. The ability to administer the survey electronically significantly reduced the overall cost and time of sending out the survey and getting it back. Lastly, of the nine employers who were willing to distribute the survey to their employees the City of Lynchburg is the most likely candidate for a start-up commuter services program due to their size, the centralized locations of their worksites and their already established working relationship with Region 2000 Local Government Council.

## Survey Conditions

These surveys took place between December 2006, and June 2007. Both survey groups had a little over two weeks to fill the surveys out and return them. During the survey, gas prices were high; over \$3.00 per gallon for regular grade at the end of May 2007. The unemployment rate was erratic for the primary commute shed. December 2006 had a 3% unemployment rate; it had increased to 3.7% by February 2007, and lowered once again to 3.2% by April.

Figure 2: 12 Month Average Retail Gasoline Price in Virginia, 2006 – 2007



Source: [www.viriniagasprices.com](http://www.viriniagasprices.com)



## **Data-Collection Method**

The data collection methods for this study were two surveys. These surveys measured people's knowledge of and desire for commuter services. They were used as tools through which Region 2000 gathered information about commuter services offered by the Lynchburg Metropolitan Planning Area employers. These surveys also provided information

A hard copy of the employer survey (see Employer Survey at the end of this document) was sent to organizations that have 100 or more employees; 109 organizations. Participants could send the survey back by way of the self-addressed stamped envelope included in the survey envelope, they could fax it to our offices, drop it off by hand or fill the survey out online at [www.commuteR2K.org](http://www.commuteR2K.org).

The City of Lynchburg was given the second portion of the study, the employee survey to distribute to their employees. Three hundred hard copies of the survey were given to the Human Resources Department to be given to those employees with no access to email. An electronic survey form as well as the website location was emailed to the Human Resources Department Director to be distributed to those employees with access to email, or the web.

The paper surveys were returned to the Human Resources Department, and then picked up by Region 2000 Staff. The survey participant emailed the electronic forms back to Region 2000 staff as an attachment. The surveys filled out online were automatically sent to a staff email account.

## **Analysis**

Once the surveys were returned to Region 2000, the answers were entered into Microsoft Excel. Frequency tables, which show how many times a given answer occurs, for each question are provided in order to show the distribution of answers. Some questions were cross referenced in order to get a better picture of the participants' wants and needs.

The questions will also be compared to various questions on the alternate survey. For example, question number five on the employer survey (how difficult are the commuting problems faced by your employees?) will be compared to question number two (how difficult are your commute problems?) on the employee survey to gauge how much employers know about the commute problems their employees face.

The Employer Survey has a response rate of 31%; 34 of 110 surveys were returned. The margin of error for the employer survey is  $\pm 14\%$  at a 95% confidence level. The employee survey has a response rate of 22%; 176 of 800 surveys were returned. The margin of error for the employee survey is  $\pm 6\%$  at a 95% confidence level.

From this survey, Region 2000 expects to find:

1. Most employees live in Lynchburg or Campbell County.
2. Most employees use their car to get to and from work.

3. Most of the employees who use their cars to get to work drive alone.
4. Most commutes are more than 20 minutes long.
5. Public transit is available at most worksites.
6. Most organizations provide free parking to their employees.
7. No organizations offer commuter services to their employees.
8. Employees will be most interested in flextime, access to ride matching services and preferential parking for carpools and vanpools.

### ***Reducing the error in the survey responses***

On the employee surveys, eight employee respondents provided the P.O. Box zip codes for their workplace instead of their worksite zip code (zip codes 24505 and 24506). Since there is no way of determining where these work locations actually are, these responses were discarded. Thirty-five employee responses to question nine on the employee survey, (How do you normally get to work?) were discarded due to a coding error on the website; all answers to this question on these surveys were recorded as number one, “I drive alone.”

The answer to question one (Where do you live?) was changed on one employee survey response sheet because the zip code given is located in Bedford County, not Bedford City. The first answer in question twelve of the employee survey (How many employees are at your worksite?) read “less than 1000” when it should have read “less than 100”. This question was asked so that a general idea of the workforce size in that location could be gleaned. It is not used in any of the conclusions, and has no real impact on the overall study.

# Observations/Survey Responses

## Employer Survey:

*Question 1: How many employees are at your worksite?*

Code	Response Item	Frequency	Percent
1	Less than 100	2	6%
2	100-249	14	41%
3	250-499	11	32%
4	500-999	3	9%
5	1,000 or more	4	12%
NA	No answer	0	0%
	<b>Total</b>	34	100%

Most respondents (14) have between 100 and 249 employees at their worksite. The second largest number of employees at a worksite has between 250 and 499 employees at their worksite (11). The third largest group (4) has 1,000 or more, next is the group with between 500 and 999 (3), and last is the group with less than 100 (2). The last group, with less than 100 employees, was sent the survey because of incorrect information posted on the VELMA website.

*Question 2: In what Type of Business is your organization engaged?*

Code	Response Item	Frequency	Percent
1	Retail	3	9%
2	Service	3	9%
3	Finance, Insurance, Real Estate	1	3%
4	Manufacturing	12	35%
5	Government, Institutional	9	26%
6	Other	6	18%
NA	No answer	0	0%
	<b>Total</b>	34	100%

Most respondents are involved in manufacturing (12). The next largest group of respondents is involved in government or institutional work (9). Six respondents are involved in work other than the options given. The retail and service industries had three respondents each, and one employer is involved in Finance, Insurance and/or Real Estate.

***Question 3: Do you have public transportation to your worksite?***

<b>Code</b>	<b>Response Item</b>	<b>Frequency</b>	<b>Percent</b>
1	Yes	13	38%
2	No	21	62%
3	I don't know	0	0%
NA	No answer	0	0%
	<b>Total</b>	34	100%

Most employers responded that they do not have public transportation to their worksite (21).

***Question 4: How would you rate public transportation?***

<b>Code</b>	<b>Response Item</b>	<b>Frequency</b>	<b>Percent*</b>
1	Good	5	16%
2	Fair	7	22%
3	Poor	2	6%
4	Don't know / have never used it	18	56%
NA	No answer**	2	6%
	<b>TOTAL NUMBER OF RESPONCES</b>	32	100%

Most of the employer respondents have no opinion about or have never used public transportation (18).

***Question 5: How difficult are the commuting problems faced by your employees?***

<b>Code</b>	<b>Response Item</b>	<b>Frequency</b>	<b>Percent*</b>
1	Minimal	20	59%
2	Moderate	9	26%
3	Severe	0	0%
4	Don't know	5	15%
NA	No answer**	0	0%
	<b>TOTAL NUMBER OF RESPONCES</b>	34	100%

Most employers believe the commuting problems faced by their employees are minimal (20), while the next largest group believes the commuting problems faced by their employees are moderate (9) and 5 employers said they do not know how severe their employees commute problems are. No employer responded with severe.

**Question 6: What is the Zip Code for your worksite?**

Response Item	Frequency	Percent
24501	7	19%
24502	3	8%
24504	4	11%
24506	1	3%
24517	5	14%
24522	2	5%
24523	5	14%
24526	1	3%
24551	4	11%
24571	1	3%
24572	1	3%
24588	2	5%
24556	1	3%
NA	0	0%
<b>Total*</b>	37	100%

\*2 respondents had more than 1 worksite zip code  
 \*\*Zip codes with a frequency of 0 have been omitted from this table

The top five worksite zip codes of the respondents are: 24501 with 19% of the respondents' worksites, 24517 and 24523 zip codes that have 14% each of the respondents' worksites, and 24504 and 24551 that both have 11% of the respondents' worksites.

**Question 7: Is there free parking at or near your worksite for your employees?**

Code	Response Item	Frequency	Percent*
1	Yes	32	97%
2	No	0	0%
3	Some	1	3%
NA	No answer**	1	3%
	<b>TOTAL NUMBER OF RESPONCES</b>	33	100%

\* Percent taken from total respondents who chose and option (33)  
 \*\*Percent taken from total surveys submitted (34)

Ninety-four percent of the respondents said there is free parking at or near the worksite for their employees (32). No employer reported that there is no parking at or near the worksite for employees.

**Question 8: Who pays for employee parking at your worksite?**

Code	Response Item	Frequency	Percent*
1	Employees	0	0%
2	Employer	14	64%
3	Shared arrangement	0	0%
4	Landlord	1	5%
5	Other	7	32%
NA	No answer**	12	35%
	<b>TOTAL NUMBER OF RESPONCES</b>	22	100%

\* Percent taken from total respondents who chose and option (22)

\*\*Percent taken from total surveys submitted (34)

Fourteen Employers responded that they pay for the parking at the worksite; twelve surveys had no answer for this question.

**Question 9: How interested would you be in providing commuter assistance to your employees if professional technical assistance was available at no charge to help get you started?"**

Code	Response Item	Frequency	Percent*
1	Very Interested	3	9%
2	Somewhat Interested	4	12%
3	Not interested	17	52%
4	Don't know	9	27%
NA	No answer**	1	3%
	<b>TOTAL NUMBER OF RESPONCES</b>	33	100%

\* Percent taken from total respondents who chose and option (33)

\*\*Percent taken from total surveys submitted (34)

Seventeen employers said they would not be interested in providing commuter assistance to their employees if professional assistance was available to them at no charge to get them started. Nine responded that they did not know if they would be interested, four said they are somewhat interested and three are very interested.

Half of the employers surveyed are not interested in offering their employees commute services. The other half are interested to some degree or do not know if they are interested in providing commute services to their employees.

**Question 10: Does your organization offer any commuting services to your employees?**

Code	Response Item	Frequency	Percent
1	Yes	5	15%
2	No	29	85%
3	Used to, but not any more	0	0%
NA	No answer	0	0%
	<b>Total</b>	34	100%

Twenty-nine employers said they do not offer any commuting services to their employees and five say they do offer assistance.

*Question 10a: Which of the following types of commuter assistance does your company offer to employees? (more than one option may be chosen)*

Code	Response Item	Frequency	Percent*
1	Provide flexible work hours / days	5	83%
2	Provide commuter alternatives information	0	0%
3	Provide teleconferencing at work	2	33%
4	Provide telecommuting option	2	33%
5	Provide guaranteed ride home	0	0%
6	Provide financial incentives (subsidies)	0	0%
7	Provide proximate commuting option	0	0%
8	Sell transit tickets or passes	0	0%
9	Provide live near your work option	0	0%
10	Operate shuttle service	0	0%
11	Market use of carpools or vanpools	0	0%
12	Provide preferential parking	0	0%
13	Offer ride matching service	0	0%
14	Provide other commuting assistance	1	17%
0	No answer**	28	82%
	<b>TOTAL NUMBER OF RESPONCES</b>	6	100%

\* Percent taken from total respondents who chose and option (6)

\*\*Percent taken from total surveys submitted (34)

Only companies who offer commute services to their employees were asked to answer this question.

5 companies say they provide flexible work hours or days. 2 companies provide teleconferencing at work, and 2 say they provide a telecommuting option for their employees.

One company who responded that they do not provide any commuting services to their employees responded that they provide flexible work hours or days. Three of the companies who say they offer commute services to their employees responded with 1 service, two of the employers who offer commute services offer two different services and one employer responded that they offer three commute services.

**Table 10a.2: Employers Who Offer a Commute Service  
by What Service is Offered**

<b>Commute Service</b>	<b>Employers who offer commute services</b>					
	<b>3</b>	<b>4</b>	<b>19</b>	<b>24</b>	<b>27</b>	<b>30</b>
Provide flexible work hours / days	X	X	X	X		X
Provide teleconferencing at work	X		X			
Provide telecommuting option	X	X				
Provide other commuting assistance (pre-tax salary deductions to cover certain commuting costs)					X	



**Question 10b: Why doesn't your organization offer commuter assistance?  
(more than one option may be chosen)**

Employers who do not offer commute services were asked to answer this question.

<b>Code</b>	<b>Response Item</b>	<b>Frequency</b>	<b>Percent*</b>
1	Employees are not interested	7	25%
2	Don't know	4	14%
3	Employees don't need help	10	36%
4	Not our responsibility	4	14%
5	Too expensive	1	4%
6	Lack of transit near our worksite	4	14%
7	Decreases worker schedule flexibility	0	0%
8	Labor issues	0	0%
9	Takes too much time	0	0%
10	Concern for liability	0	0%
11	Little influence on travel behavior	4	14%
12	Other reasons	1	4%
NA	No answer**	6	18%
	<b>TOTAL NUMBER OF RESPONSES</b>	28	100%

\* Percent taken from total respondents who chose and option (28)

\*\*Percent taken from total surveys submitted (34)

Ten employers said they do not offer commute assistance to their employees because they do not believe their employees need the help. Seven Employers say their employees are not interested in commute assistance. Four employers do not offer commute assistance because they believe it has little influence on travel behavior.

Another four employers say they do not offer commuter services because there is no transit service near their worksite. Four employers say it is not their responsibility to offer commute services to their employees. Four more employers say they do not know why they do not offer commute services to their employees. One employer says they do not offer commute services to their employees because it is too expensive and one employer says there are other reasons they do not offer commute services to their employees.

*Question 11: The federal government currently allows employers to set up pre-tax salary deductions to cover certain commuting costs for vanpools, transit fares, and parking fees. Would your organization consider this type of program?"*

<b>Code</b>	<b>Response Item</b>	<b>Frequency</b>	<b>Percent</b>
1	Yes	2	6%
2	No	17	50%
3	Maybe	6	18%
4	Currently Offer	1	3%
5	Don't know about this program	4	12%
6	Need more information	4	12%
NA	No answer	0	0%
	<b>Total</b>	34	100%

Seventeen employers said they would not be interested in providing this type of service to their employees. Six employers say they might be interested in providing this service, four say they do not know about this program, another four say they need more information. Two employers say they would be interested in offering this program to their employees and one employer is already offering this service to their employees.

**Question 12: Which of the following types of programs might your organization find beneficial to your employees? (more than one option may be chosen)**

Code	Response Item	Frequency	Percent*
1	Commuter alternative information	4	22%
2	Emergency / crisis transportation plan	12	67%
3	Information on traffic conditions	5	28%
4	Guaranteed ride home program	3	17%
5	Specific transportation improvements	7	39%
6	Access to ride matching services	1	6%
7	Information on air quality conditions	0	0%
8	Worksite commuter options events	0	0%
9	Easier worksite transit pass/ticket sales	0	0%
10	Improved worksite bicycle facilities	0	0%
11	Help setting up preferential parking	0	0%
12	Help setting up shuttle service	0	0%
13	Help setting up live near your work or proximate commute programs	0	0%
14	Help setting up telecommuting program	0	0%
15	Help setting up flextime work program	0	0%
16	Other alternate commuting service	1	6%
NA	No answer**	16	47%
	<b>TOTAL NUMBER OF RESPONCES</b>	18	100%

\* Percent taken from total respondents who chose and option (18)

\*\*Percent taken from total surveys submitted (34)

Twelve Employers believe an emergency or crisis transportation plan would be useful to their employees. Seven believe that specific transportation improvements would be beneficial to their employees. Five believe that information on traffic conditions would be beneficial, and three believed a guaranteed ride home program would be beneficial to their employees.

Sixteen employers did not answer this question. This could mean that a) they did not want to answer this question, b) they do not know what services might benefit their employees, or c) they do not think their employees would benefit from any of these programs.

**Question 13: Are you aware of any organization in your area that helps commuters find carpools, vanpools, or use transit, or helps employers address commuting issues?**

Code	Response Item	Frequency	Percent
1	Yes	0	0%
2	No	34	100%
NA	No answer	0	0%
	<b>Total</b>	34	100%

None of the employers are aware of any organization in the area that helps commuters find carpools, vanpools or use transit etc.

**Question 14: Would you be willing to distribute an employee commuter survey to your employees?**

Code	Response Item	Frequency	Percent*
1	Yes	9	28%
2	No	23	72%
NA	No answer**	2	6%
	<b>TOTAL NUMBER OF RESPONCES</b>	32	100%

\* Percent taken from total respondents who chose and option (32)

\*\*Percent taken from total surveys submitted (34)

Twenty-three employers said they would not be willing to distribute an employee survey to their employees and nine said they would be willing. Unfortunately two of the companies who said they would be interested in distributing the survey did not include a name or address by which they could be reached.

## Employee Survey:

### *Question 1: Where do you live?*

Code	Response Option	Frequency	Percent
1	Altavista	2	1.1%
2	Amherst County	16	9.1%
3	Town of Amherst	2	1.1%
4	Appomattox County	9	5.1%
5	Town of Appomattox	1	0.6%
6	Bedford City	3	1.7%
7	Bedford County	25	14.2%
8	Brookneal	1	0.6%
9	Campbell County	38	21.6%
10	Lynchburg	69	39.2%
11	Other	10	5.7%
NA	NA	0	0.0%
	TOTAL	176	100.0%

While the largest grouping of Lynchburg employees lives inside the City (39.2%) most of the employees live in various locations outside of the City (60.8%). The second largest group of City employees is located in Campbell County (21.6%), third is Bedford County (14.2%).

The respondents who chose “other” as their place of residence live in: Charlotte County (two respondents live here), Franklin County, Hurt, Nelson County, Orange County, Pamplin City, Pittsylvania County (two respondents live here) and Roanoke City.

### *Question 2: How difficult are your commute problems?*

Code	Response Option	Frequency	Percent*
1	Minimal	138	78.9%
2	Moderate	33	18.9%
3	Severe	4	2.3%
4	I don't know	0	0.0%
NA	NA**	1	0.6%
TOTAL NUMBER OF RESPONSES		175	100.0%

\*Percent taken from total number of responses to this question (175)

\*\*Percent taken from total number of surveys returned (176)

Seventy-eight percent of the respondents say their commute problems are minimal, 18.8% say they are moderate and four respondents say their commute problems are severe.

**Question 3: Do you have public transportation from your home to your worksite?**

<b>Code</b>	<b>Response Option</b>	<b>Frequency</b>	<b>Percent*</b>
1	Yes	41	23.6%
2	No	128	73.6%
3	I don't know	5	2.9%
NA	NA**	2	1.1%
TOTAL NUMBER OF RESPONSES		174	100.0%

\*Percent taken from total number of responses to this question (174)

\*\*Percent taken from total number of surveys returned (176)

Seventy-three percent of the respondents say there is not public transportation from their home to work, 23.6% say that there is.

There is a serious lack of commute alternatives from the respondent's home to their worksite.

**Question 4: What is the zip code for where you live?**

<b>Response Option</b>	<b>Frequency</b>	<b>Percent*</b>
22701	1	0.6%
22938	1	0.6%
23958	1	0.6%
23959	2	1.1%
24019	1	0.6%
24101	1	0.6%
24501	17	9.8%
24502	37	21.3%
24503	29	16.7%
24504	6	3.4%
24517	2	1.1%
24521	8	4.6%
24522	5	2.9%
24523	6	3.4%
24528	2	1.1%
24530	1	0.6%
24538	6	3.4%
24540	1	0.6%
24550	2	1.1%
24551	14	8.0%
24554	2	1.1%
24556	5	2.9%
24563	1	0.6%
24571	1	0.6%
24572	7	4.0%
24574	3	1.7%
24588	8	4.6%
24593	4	2.3%
NA**	2	1.1%
<b>TOTAL NUMBER OF RESPONSES</b>	<b>174</b>	<b>100.0%</b>

\*Percent taken from total number of responses to this question (174)

\*\*Percent taken from total number of surveys returned (176)

The largest group of respondents lives in zip code 24502 (37). 24503 is the zip code for the next largest group of respondents (29). The third largest group has 24501 for a home zip code (17) and the fourth largest group has 24551 as their home zip code (14).

Only eight respondents have unique home zip codes, that is zip codes that no other respondent shares.

**Question 5: Have you changed your commute because of traffic?**

Code	Response Option	Frequency	Percent*
1	No	107	61.8%
2	Yes, I leave for work earlier	25	14.5%
3	Yes, I take a different route	35	20.2%
4	Yes, I use commute options	3	1.7%
5	Yes, I made other changes	3	1.7%
NA	NA**	3	1.7%
TOTAL NUMBER OF RESPONSES		173	100.0%

\*Percent taken from total number of responses to this question (173)

\*\*Percent taken from total number of surveys returned (176)

Sixty-one percent of the respondents have not changed their commute because of traffic, 20.2% take a different route, 14.5% leave for work earlier, 1.7% use commute options and 1.7% has made other changes to their commute because of traffic.

**Question 6: Have you changed your commute because of higher gas prices?**

Code	Response Option	Frequency	Percent*
1	No	127	72.6%
2	Yes, I now drive a smaller car	13	7.4%
3	Yes, I now keep my car in better shape	9	5.1%
4	Yes, I now use Commute options	4	2.3%
5	Yes, I have made changes other than those listed	22	12.6%
NA	NA**	1	0.6%
TOTAL NUMBER OF RESPONSES		175	100.0%

\*Percent taken from total number of responses to this question (175)

\*\*Percent taken from total number of surveys returned (176)

Seventy-six respondents say they have not changed their commute because of higher gas prices. Twelve percent say they have made changes to their commute other than those listed because of higher gas prices. Seven percent say they now drive a smaller car because of higher gas prices.



Five percent say they now keep their car in better shape, and 2.3% say they now use commute options because of higher gas prices.

**Question 7: Does Parking availability and cost affect your commute?**

Code	Response Option	Frequency	Percent
1	No	161	92.5%
2	Yes, I now use commute options	4	2.3%
3	Yes, I made other changes	9	5.2%
NA	NA	2	1.1%
TOTAL NUMBER OF RESPONSES		174	100.0%

\*Percent taken from total number of responses to this question (174)

\*\*Percent taken from total number of surveys returned (176)

One hundred sixty-one respondents said parking availability and cost do not affect their commute. Nine respondents say that they have made changes to their commute other than the ones listed in this question because of parking availability and cost, and four respondents say they now use commute options because of parking availability and cost.

**Question 8: In what type of business is your employer engaged?**

Code	Response Option	Frequency	Percent*
1	Retail	0	0.0%
2	Service	10	5.7%
3	Finance, Insurance, Real Estate	0	0.0%
4	Manufacturing	0	0.0%
5	Government, Institutional	161	92.5%
6	Other	3	1.7%
NA	NA**	2	1.1%
TOTAL NUMBER OF RESPONSES		174	100.0%

\*Percent taken from total number of responses to this question (174)

\*\*Percent taken from total number of surveys returned (176)

The employee survey was distributed among City of Lynchburg employees, yet ten respondents said their employer is engaged in the service industry, three said their employer was engaged in a business not listed; One hundred sixty-one respondents said their employer is engaged in government or intuitional business. This Varity in responses could have to do with the area of government employment in which the respondents work.

**Question 9: How do you normally get to work?**

Code	Response Option	Frequency	Percent*
1	I drive alone	126	91.3%
2	I carpool/vanpool	6	4.3%
3	I use public transit	0	0.0%
4	I walk	2	1.4%
5	I bicycle	0	0.0%
6	I telecommute	1	0.7%
7	Other	3	2.2%
NA	NA**	3	2.1%
TOTAL NUMBER OF RESPONSES		138	100.0%

\*A portion of these responses were thrown out due to a coding error on the website

\*Percent taken from total number of responses to this question (138)

\*\*Percent taken from total number of surveys returned (176)

Ninety-one percent of those who responded to this question say they drive to work alone. 4.3% say they carpool or vanpool to work. 2.1% say they use means other than those listed to get to work. 1.4% say they walk, and .7% say they normally telecommute to work.

**Question 10: What is your commute time to work one way?**

Code	Response Option (in minutes)	Frequency	Percent*
1	Under 15	51	29.3%
2	between 15 & 30	84	48.3%
3	between 30 & 45	26	14.9%
4	between 45 & 60	9	5.2%
5	Over 60	4	2.3%
NA	NA**	2	1.1%
TOTAL NUMBER OF RESPONSES		174	100.0%

\*Percent taken from total number of responses to this question (174)

\*\*Percent taken from total number of surveys returned (176)

Forty-eight percent of the respondents say it taken them between 15 and 30 minutes to get from work to home. 29% says it takes them less than 15 minutes to get to work, 14.9% says it takes them between 30 and 45 minutes to get from home to work, 5.2% say it takes them between 45 and 60 minutes to get to work, and 1.1% say it takes them over 60 minutes to get from home to work.

**Question 11: What is your commute distance to work one way?**

Code	Response Option	Frequency	Percent*
1	Under 5 miles	24	13.8%
2	5-10	54	31.0%
3	10-15	33	19.0%
4	15-20	25	14.4%
5	Over 20	38	21.8%
NA	NA**	2	1.1%
TOTAL NUMBER OF RESPONSES		174	100.0%

\*Percent taken from total number of responses to this question (174)

\*\*Percent taken from total number of surveys returned (176)

Thirty-one percent of respondents say their commute distance to work (one way) is between 5 and 10 miles; 21.8% say that their commute distance is over 20 miles, 19% say their commute distance is between 10 and 15 miles, 14.4% say their commute is between 15 and 20 miles, and 13.8% say they live less than 5 miles from where they work.

**Question 12: What is the number of employees at your worksite?**

Code	Response Option	Frequency	Percent*
1	Less than 1000	66	38.2%
2	between 100 & 249	59	34.1%
3	between 250 & 499	11	6.4%
4	between 500 & 999	5	2.9%
5	1,000 or more	11	6.4%
6	I don't know	21	12.1%
NA	NA**	3	1.7%
TOTAL NUMBER OF RESPONSES		173	100.0%

\*Percent taken from total number of responses to this question (173)

\*\*Percent taken from total number of surveys returned (176)

**Question 13: Where do you work?**

<b>Code</b>	<b>Response Option</b>	<b>Frequency</b>	<b>Percent</b>
1	Altavista	0	0.0%
2	Amherst County	0	0.0%
3	Town of Amherst	0	0.0%
4	Appomattox County	0	0.0%
5	Town of Appomattox	0	0.0%
6	Bedford City	0	0.0%
7	Bedford County	0	0.0%
8	Brookneal	0	0.0%
9	Campbell County	3	1.7%
10	Lynchburg	173	98.3%
11	Other	0	0.0%
NA	NA	0	0.0%
	<b>TOTAL</b>	<b>176</b>	<b>100.0%</b>

Ninety-eight percent of the respondents say they work in the City of Lynchburg and 1.7% says they work in Campbell County.

**Question 14: Does your employer offer any of the following services?**

<b>Code</b>	<b>Response Option</b>	<b>Frequency</b>	<b>Percent*</b>
1	Information on commute alternatives	5	3.7%
2	Incentives (subsidies) for use of alternate commute options	0	0.0%
3	Ride matching service, or access to outside ride-matching service	0	0.0%
4	Shuttle service to distant transit stops or parking lots	1	0.7%
5	Sells transit tickets or passes at work site	0	0.0%
6	Preferential parking for carpools and vanpools	1	0.7%
7	Flexible work schedule (flextime or compressed work week)	28	20.7%
8	Telecommuting part time or full time	3	2.2%
9	Helps employees transfer to branches nearer where they live	1	0.7%
10	Helps employees move closer to work	0	0.0%
11	Teleconferencing to minimize employee travel during work day	2	1.5%
12	Guaranteed ride home service	0	0.0%
13	My employer does not offer any of these services	99	73.3%
14	My employer offers other services not listed here ( <i>please answer question 15a</i> )	8	5.9%
NA	NA**	41	23.3%
<b>TOTAL NUMBER OF RESPONSES</b>		<b>135</b>	<b>100.0%</b>

\*Percent taken from total number of responses to this question (135)

\*\*Percent taken from total number of surveys returned (176)

Ninety-nine respondents say their employer does not offer any commute services. Twenty-eight say their employer offers flexible work schedule (flextime or compressed workweek); Eight say their employer offers services other than those listed, five say their employer offers information about commute alternatives, three say their employer allows telecommuting either full or part-time, two say that their employer has a teleconferencing to minimize employee travel during the workday; 1 says.....

The City of Lynchburg, in the employer survey, responded that they do offer the pretax deduction for certain commuting costs for carpools and vanpools, however only two employees report their employer offering this service.

**Question 15: What other services does your employer offer?**

- A couple of designated parking garages; with asthma, it is difficult to use those areas due to walking distance, weather, etc.
- Some Telecommuting
- Inclement weather pickup in extreme situations
- Flex Spending for Parking/Transit
- Flexible spending accounts for transit expenses
- parking
- Free parking downtown
- Commuter Parking Decals
- Free Parking is offered, but it is several blocks away from the office. Flexible schedule and Telecommuting are only offered to a few people. For many positions it isn't feasible.
- Take Home Vehicle.

**Question 16: What is the zip code for where you work?**

<b>Response Option</b>	<b>Frequency</b>	<b>Percent*</b>
24501	48	30.2%
24502	9	5.7%
24503	5	3.1%
24504	97	61.0%
NA**	9	5.4%
<b>TOTAL NUMBER OF RESPONSES</b>	<b>159</b>	<b>100.0%</b>

\*8 Responses to this question were thrown out because the zip code given was that of a P.O. Box instead of a physical location

\*Percent taken from total number of responses to this question (159)

\*\*Percent taken from total number of surveys returned (176)

Sixty-one percent of respondents work in the 24504 zip code; 30.2% say they work in the 24501 zip code; 5.7% say they work in the 24502 zip code, and 3.1% say they work in the 24503 zip code.

**Question 17: The federal government currently allows employers to set up pre-tax salary deductions to cover certain commuting costs for vanpools, transit fares, and parking fees? Would you be interested in this program?**

Code	Response Option	Frequency	Percent*
1	Yes	48	28.6%
2	No	75	44.6%
3	I Don't Know	45	26.8%
NA	NA**	8	4.5%
TOTAL NUMBER OF RESPONSES		168	100.0%

\*Percent taken from total number of responses to this question (168)

\*\*Percent taken from total number of surveys returned (176)

Forty-four percent of respondents say they would not be interested in the Federal Program that allows employers set up pre-tax salary deductions to cover certain commuting costs for vanpools, transit fares and parking fees. 28.6% said they would be interested, and 26.8% said they were not sure if they would be interested or not.

**Question 18: Would you be interested in any of the following services?**

<b>Code</b>	<b>Response Option</b>	<b>Frequency</b>	<b>Percent*</b>
1	Information at work about commute alternatives?	21	25.0%
2	Access to free ride-matching services?	22	26.2%
3	Employee shuttle to distant transit stops or parking lots?	15	17.9%
4	Transit tickets or passes sold at work site?	5	6.0%
5	Preferential parking for carpools and vanpools?	12	14.3%
6	Flexible work schedule?	32	38.1%
7	Allowing employees to work at branches closer to home, or live closer to work?	10	11.9%
8	Telecommuting part time or full time?	33	39.3%
9	Guaranteed ride home service?	12	14.3%
10	Improved bicycle racks or lockers at work?	13	15.5%
11	Specific transportation improvements made near your work site?	18	21.4%
NA	NA**	92	52.3%
TOTAL RESPONDANTS WHO CHOSE A SERVICE		84	100.0%

\* Percent taken from total respondents who chose a service (84)

\*\*NA percent taken from total number of surveys returned (176)

Thirty-three people said they would be interested in Telecommuting part or full-time. Thirty-two respondents said they would be interested in a flexible work schedule. Twenty-two respondents said they would be interested in access to a free ride matching service. Eighteen respondents said they would be interested in specific transportation improvements near their work. Fifteen respondents said they would be interested in employee shuttles to transit distant stops or parking lots.

Thirteen respondents said they would be interested in improved bicycle racks or lockers near their work; twelve said they would be interested in a guaranteed ride home service. Another twelve respondents said they would be interested in preferential parking for carpools or vanpools. Ten said they would be interested in working at branches closer to home, or living closer to work and five respondents said they would be interested in transit tickets or passes sold at their worksite.

The number of people who did not respond to this question is large enough to mention. Ninety-two people (52.3% of returned surveys) did choose any of the services. This could mean a) they



did not want to answer this question, b) they are not interested in any of these services, c) they would need more information about all of these services to make a choice, or d) some other unknown reason.

**Question 19: Are you aware of sources of alternate commute information other than your employer?**

Code	Response Option	Frequency	Percent*
1	Yes	15	9.0%
2	No	152	91.0%
NA	NA**	9	5.1%
TOTAL NUMBER OF RESPONSES		167	100.0%

\*Percent taken from total number of responses to this question (167)

\*\*Percent taken from total number of surveys returned (176)

Ninety-one percent of respondents are not aware of sources of alternate commute information other than their employer. Nine percent of respondents are aware of other sources of alternate commute information. Their responses are listed in question 20.

**Question 20: What sources provide services that help employees address commuting issues?**

- GLTC (4 people gave this response)
- Internet
- Jaunt
- Taxi
- 211
- WSET
- Street closings in the am

**Additional Observations**

The City of Lynchburg provided a list of zip codes for their employees (see Table 2 in the Appendix). The top four zip codes given for the employee survey are the same as the top four zip codes on the City’s list. There are twenty-four unique zip codes, zip codes from which only one person commutes; six of these unique zip codes appear on the employee survey.

## **Conclusions**

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Eighty-five percent of employer participants say they do not offer any commuter assistance to their employees. The City of Lynchburg reported that they provide pre-tax salary deductions to cover certain commuting costs for vanpools, transit fares and parking fees. Very few of the City of Lynchburg employees responded that their employer offers this service.

Twenty percent of the employees said that their employer offers a flexible work schedule. Since the City does not say they offer this service, there is a possibility that different departments within the City, such as Fire and EMS, Schools, Public Works, Economic Development, Juvenile Services, etc., have the autonomy to offer commuter services to their employees. This may be the reason some of the employees responded that they have some commuter services while others reported that they do not.

The answers from both surveys show that there is a lack of public transportation between major employers and their employees. Seventy-three point six percent of the respondents say that there is no public transportation from their home to their worksite, and sixty-two percent of employers surveyed said there is no public transportation to their worksite. This eliminates the possibility of using public transit as a commute alternative for a large number of workers.

Eighty-five percent of the employees surveyed responded that they live more than five miles from work. The distance of five or more miles is not reasonable for someone to walk to and from work every day. Bicycling is a feasible form of transportation for longer distances; however, it is illegal to ride bicycles on Route 460 and Route 29. Bicycles are also an unsafe form of transportation on many of the smaller rural roads that wind through the mountains and farmlands.

This eliminates both walking and bicycling from the list of ways an employee can get to work. If the employee must be at the worksite in order to do their job, driving a vehicle and carpooling/vanpooling appear to be the only real commute options available. The lack of transportation alternatives for employees demonstrates a need for commuter services in the Central Virginia area.

The City of Lynchburg was the largest employer who responded to the employer survey. They said they are somewhat interested in starting a commuter program for their employees. Eighty-five of the employee participants expressed an interest in some sort of commuter service program. The interest of both employer and a number of employees demonstrates an interest in the creation of a commuter services program.

The programs that the employees showed the most interest in are telecommuting part or full time (39.3%), flexible work schedule (38.1%), access to free ride matching services (26.2%) and information about commute alternatives at work (25%). The employers who responded to this question believe that an emergency/crisis transportation plan would be most beneficial to their employees (67%), followed by specific transportation improvements (39%).

None of the employers said that they believe neither a telecommuting program nor a flextime work program would be beneficial to their employees. While the flextime and telecommuting options will not be appropriate for all employees, it may be a possibility for some. For example, if the employee is a cashier who must be available to take payments from customers during a specific time of day, telecommuting will not be a viable option. If an employee spends 95% of their time doing solitary work, telecommuting may be an option.

If those who chose telecommuting are the ones for whom telecommuting would be feasible, then these thirty-three people could be used as a pilot group for the area. The presence of broadband internet access is a necessity for telecommuters; there are parts of Appomattox County that do not have this service. This fact may serve to limit the number of potential telecommuters living in neighboring Appomattox County.

**Table 1: Number of Respondents Interested in Telecommuting by Residence Location**

Residence Location	Respondents interested in Telecommuting
Amherst County	6
Appomattox County	2
Bedford City	1
Bedford County	5
Campbell County	5
Lynchburg	12
Other	2
Total	33

Thirty-two people said they would be interested in flexible work schedule. The ability to have a flexible schedule once again depends on the type of work that is being performed. For employees who work on a production line, a flexible schedule would be impractical. Flextime may be useful for businesses to have an office, such as billing, open outside normal work hours so that customers do not have to take time off work to speak to a representative in person. By using this commuter service, employers could reach a greater portion of the population without expending much effort.

Twenty-two people were interested in access to free ride matching services. Eleven of these respondents share the same home and work zip codes with at least one other person. This is not a very good number for a ride-matching program. This program, unlike the other commuter service programs, is dependent on the participation of large numbers of people. The more people participating, the greater the chance is that another person will share the same or a similar commute.

More people may be interested in participating in this program if they hear good reviews from coworkers or if they see how many people are making a commute similar to theirs. Out of the 176 respondents, there are only seventeen unique home to work zip codes (see Table XX in Appendix A). Of these seventeen unique routes, thirteen pass through zip codes where others traveling to the same destination zip code could join trips.

For example, there is one respondent who lives in zip code 23958 (Pamplin City). The most likely route this commuter takes to get to the destination zip code of 24501 is Route 460 W. The Town of Appomattox is the first population center the commuter will hit. There are two commuters coming from zip code 24522 (Town of Appomattox) and traveling to 24501.

The next potential combined trip location along Route 460 W is Concord (24538). There are four people traveling from zip code 24538 to zip code 24501. So although the commuter located

in Pamplin City may be the only respondent with the 23958 zip code, there are six other commuters who will be joining together on Route 460 W to go to zip code 24501; Our Pamplin City resident has six people with whom he or she can carpool or vanpool. Table 2 shows the origin zip codes of the respondents, the destination zip codes of the respondent and the most likely route taken to get from one to the other.

A list of employee zip codes, provided by the City of Lynchburg, shows that 1,231 of the 1,255 employees share a home zip code with another City employee. The 24 that have unique home zip codes all pass through the commute paths of other coworkers. Initially, the ride-matching program may need to target employees who share a commute path similar to the interested employees commute path in order to build the matching base. Since no Lynchburg employee has a completely unique commute (see figure 1 in the Appendix) there is a greater chance of finding another willing participant.

Twenty-one people expressed interest in information at work about commute alternatives. This option could involve educating the employees about the locations of other employees and contact information, locations of park and ride lots or train station locations, what is involved with a flexible work schedule or information about telecommuting. There are pamphlets detailing the routes of the Greater Lynchburg Transit Company at the City administration building available to anyone who needs or wants them although 73.6% of the respondents say that they do not have public transportation from home to their worksite.

The major routes most likely used by the employees to get to their worksite are Route 29, Route 460, Route 221 and Route 501. Using the table provided by the City of Lynchburg and mapping the most likely route taken to get into the City, there are potentially 180 employees using Route 29 traveling south. There are possibly one hundred thirty-five employees traveling east on Route 221.

There are potentially 103 employees using Route 460 traveling west. Eighty-four employees may potentially be using Route 501 traveling north. Sixty-five employees may be traveling north on Route 29, and there may be thirty-five employees traveling east on Route 460, and nine employees traveling south on Route 501.

At a glance, considering the flow of the City of Lynchburg Employees from home into the City, park and ride lots may best be located at or near locations such as the Town of Amherst, the Town of Appomattox, Rustburg, Altavista, and the City of Bedford. These communities are funnel points; points at which commuters, coming from many different origins, meet up and travel along the same road to reach their shared destination. Park and ride lots developed along the commute corridors would provide meeting points for participants in a ride-matching program. Forest and Madison Heights are also the resident locations of a large number of commuters; however, because of their close proximity to the City of Lynchburg park and ride lots in these areas may be under used.

The Lynchburg area, with more than 119,000 people in the metropolitan statistical area workforce<sup>1</sup>, is in need of a commuter services program. There appears to be an interest among employees and a few employers to participate in such a program. It would be beneficial to begin a commuter services program with a small population in order to work out all of the glitches that arise in the beginning of any program. The City of Lynchburg has a working relationship with Region 2000 Local Government Council and because of this, the City of Lynchburg employees would be an excellent starter population for a new program.

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<sup>1</sup> This figure comes from the Virginia Employment Commission. It is the estimation of the 2006 Lynchburg Metropolitan Statistical Area workforce. <http://velma.virtuallmi.com>, 2007.

# ***Appendix***

**Table 2: City of Lynchburg Employee Zip Codes, and Frequency, 2007**

Zip Code	Frequency	Percent of the total number City of Lynchburg Employees with this zip code	Location
24517	10	0.8%	ALTAVISA
24521	43	3.4%	AMHERST
24522	41	3.3%	APPOMATTOX
22922	1	0.1%	ARRINGTON
24523	19	1.5%	BEDFORD
24526	2	0.2%	BIG ISLAND
24064	1	0.1%	BLUE RIDGE
24528	6	0.5%	BROOKNEAL
24066	1	0.1%	BUCHANAN
23921	2	0.2%	BUCKINGHAM
24416	1	0.1%	BUENA VISTA
24530	1	0.1%	CALLANDS
22903	1	0.1%	CHARLOTTESVILLE
24536	4	0.3%	COLEMAN FALLS
24538	45	3.6%	CONCORD
24426	1	0.1%	COVINGTON
22701	1	0.1%	CULPEPPER
24540	1	0.1%	DANVILLE
24550	41	3.3%	EVINGTON
22938	1	0.1%	FABER
24551	120	9.6%	FOREST
24553	7	0.6%	GLADSTONE
24554	19	1.5%	GLADYS
24555	1	0.1%	GLASGOW
24556	15	1.2%	GOODE
24095	1	0.1%	GOODVIEW
23942	1	0.1%	GREEN BAY
24557	3	0.2%	GRETNA
24558	1	0.1%	HALIFAX
24101	1	0.1%	HARDY
24104	7	0.6%	HUDDLESTON
24563	5	0.4%	HURT
24571	4	0.3%	LYNCH STATION
24501	145	11.6%	LYNCHBURG
24502	289	23.0%	LYNCHBURG
24503	154	12.3%	LYNCHBURG
24504	57	4.5%	LYNCHBURG
24572	100	8.0%	MADISON HEIGHTS
24574	21	1.7%	MONROE
23958	2	0.2%	PAMPLIN
23959	5	0.4%	PHENIX
23960	1	0.1%	PROSPECT

Source: City of Lynchburg 2007

**Table 2: City of Lynchburg Employee Zip Codes, and Frequency, 2007**

Zip Code	Frequency	Percent of the total number City of Lynchburg Employees with this zip code	Location
23963	1	0.1%	RED HOUSE
23966	1	0.1%	RICE
24014	1	0.1%	ROANOKE
24017	1	0.1%	ROANOKE
24019	1	0.1%	ROANOKE
22967	2	0.2%	ROSELAND
24588	53	4.2%	RUSTBURG
24590	1	0.1%	SCOTTSVILLE
24593	10	0.8%	SPOUT SPRINGS
24598	1	0.1%	SPOUT SPRINGS
24174	1	0.1%	THAXTON
<b>Total</b>	<b>1,255</b>	<b>100.0%</b>	



**Table 3: Most Likely Route Taken to Get From Origin Zip Code to Destination Zip Code 24501**

Work Zip code	Home Zip Code	Number of people with these zip codes	Distance in Miles (approximate)	Time in hours (approximate)	Route most likely to take			Pass through			
24501	22938	1	50	0.59	29 S Bypass			Town of Amherst	Madison Heights		
24501	23958	1	35	0.50	460 W			Town of Appomattox	Spout Spring	Concord	
24501	23959	2	39	0.56	727 N	615 NW	501 N	Rustburg			
24501	24101	1	54	1.15	122 N	460 E		Moneta	City of Bedford		
24501	24501	5									
24501	24502	10	5	0.08	460 E			City of Lynchburg			
24501	24503	8	13	0.30	501 A	29 S		City of Lynchburg			
24501	24504	3	5	0.07	460 W			City of Lynchburg			
24501	24522	2	24	0.38	460 W			Town of Appomattox	Spout Spring	Concord	
24501	24523	2	27	0.37	460 E			City of Bedford			
24501	24538	4	14	0.21	460 W			Concord			
24501	24550	1	19	0.28	24 E	29 N	460 E	Evington	Yellow Branch		
24501	24556	2	20	0.32	221 E			Goode	Forest		
24501	24588	5	10	0.17	501 N			Rustburg			

\*Approximate route time and distance as well as most likely route taken comes from locating the zip codes in Google Maps, 2007.

**Table 4: Most Likely Route Taken to Get From Origin Zip Code to Destination Zip Code 24502**

Work Zip code	Home Zip Code	Number of people with the same zip codes	Distance in Miles (approximate)	Time in hours (approximate)	Route most likely to take					Pass through		
24502	24502	3										
24502	24521	2	29	0.40	60 S	29 S				Monroe	Town of Amherst	Madison Heights
24502	24528	1	36	0.58	40 W	501 N				Gladys	Brookneal	Rustburg
24502	24538	1	19	0.30	460 W					Concord		
24502	24556	1	14	0.25	221 E	Thomas Jefferson Rd	Waterlick Rd	460 B S	460 E	Goode	Forest	

\*Approximate route time and distance as well as most likely route taken comes from locating the zip codes in Google Maps, 2007.

**Table 5: Most Likely Route Taken to Get From Origin Zip Code to Destination Zip Code 24503**

Work Zip code	Home Zip Code	Number of people with the same zip codes	Distance in Miles (approximate)	Time in hours (approximate)	Route most likely to take					Pass through	
24503	24502	2	13.5	0.24	501 N					City of Lynchburg	
24503	24551	2	15.3	0.27	221 E	501 N				Forest	
24503	24556	1	20.8	0.34	221 E	Cifax Road / Old Cifax Rd		Coffee Rd	501N	Goode	Forest

\*Approximate route time and distance as well as most likely route taken comes from locating the zip codes in Google Maps, 2007.

**Table 6: Most Likely Route Taken to Get From Origin Zip Code to Destination Zip Code 24504**

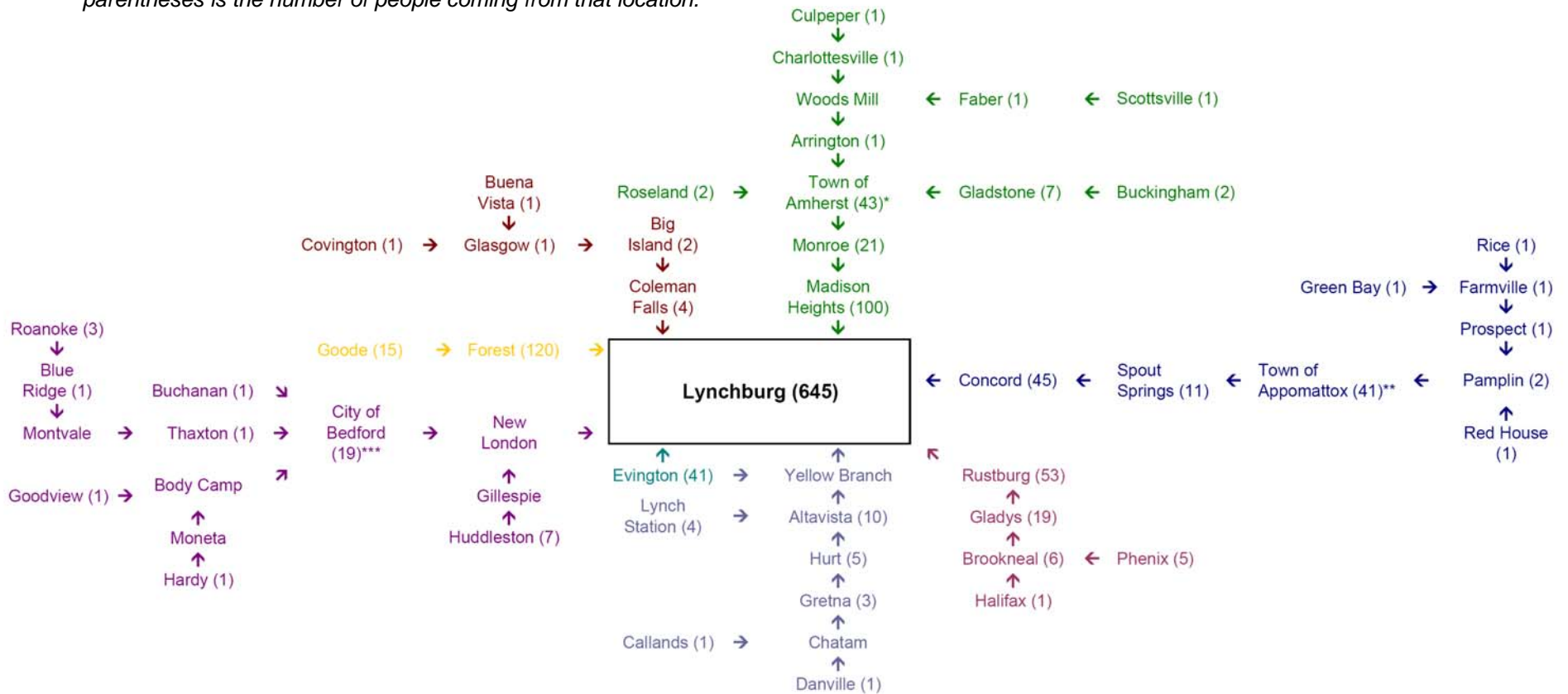
Work Zip code	Home Zip Code	Number of people with these zip codes	Distance in Miles (approximate)	Time in hours (approximate)	Route most likely to take					Pass through			
24504	22701	1	110	2.16	29 S Bypass	460 E				Charlottesville	Faber	Town of Amherst	
24504	24501	10	5	0.07	460 E					City of Lynchburg			
24504	24502	21	10	0.15	460 E					City of Lynchburg			
24504	24503	14	13	0.32	501 A E	460 E				City of Lynchburg			
24504	24504	2						City of Lynchburg					
24504	24517	2	23	0.33	29 N	460 E				Yellow Branch			
24504	24521	5	21	0.27	60 E	29 S	460 E			Town of Amherst			
24504	24522	3	20	0.32	460 W					Town of Appomattox	Spout Spring	Concord	
24504	24523	3	27	0.36	460 E					City of Bedford			
24504	24528	1	36	0.51	40 W	Sugar Hill Road	Red House Road	646 N	460 W	Concord			
24504	24530	1	61	1.22	57 E	29 N	460 E				Gretna	Altavista	Yellow Branch
24504	24538	1	10	0.18	460 W					Concord			
24504	24540	1	65	1.27	29 N	460 E				Hurt	Altavista	Yellow Branch	
24504	24550	1	20	0.28	24 E	29 N	460 E			Yellow Branch			
24504	24551	10	15	0.24	221 E	126 E	501 S	Candlers Mt.	460 E	Forest			
24504	24554	2	23	0.34	501 N	460 E				Rustburg			
24504	24556	1	21	0.32	221 E	126 E	Candlers Mt.	460 E		Forest			
24504	24563	1	31	0.48	29 B N	29 N	460 E			Altavista	Yellow Branch		

**Table 6: Most Likely Route Taken to Get From Origin Zip Code to Destination Zip Code 24504**

Work Zip code	Home Zip Code	Number of people with these zip codes	Distance in Miles (approximate)	Time in hours (approximate)	Route most likely to take			Pass through	
24504	24571	1	32	0.45	43 E	29 N	460 E	Altavista	Yellow Branch
24504	24572	7	10	0.15	29 S	460 E		Madison Heights	
24504	24574	3	26	0.42	130 S	29 S	460 E	Monroe	
24504	24588	3	12	0.19	501 N	460 E		Rustburg	
24504	24593	3	13	0.23	460 W			Concord	

### Figure 1: Basic Commuter Traffic Flow Pattern

This figure represents the home locations of City of Lynchburg Employees and the areas they have to go through to get to Lynchburg. The number in parentheses is the number of people coming from that location.



Color	Most likely Route taken
Green	29 South
Navy Blue	460 West
Plumb	501 North
Slate Blue	29 North
Teal	Route 682
or	29 North
Purple	460 East
Gold	221 East
Red	501 South

\*or Amherst County  
 \*\*or Appomattox County  
 \*\*\*or Bedford County