



TOWN OF CHAPEL HILL NORTH CAROLINA

Meeting Date: 03-24-2014
AGENDA #7

MEMORANDUM

TO: Roger L. Stancil, Town Manager

FROM: J.B. Culpepper, Planning Director
David Bonk, Long Range and Transportation Planning Manager
Len Cone, Transportation Demand Management Coordinator
Alyssa James, Transportation Planning Intern

SUBJECT: Report: 2013 – 2014 Transportation Management Plan (TMP) Biennial Survey Results

DATE: March 24, 2014

Recommended Council Action

- That the Council receive the 2013 - 2014 Transportation Management Program (TMP) Mobility Survey Report.

Context with Key Issues

- The Planning Department's Transportation Management Program (TMP) distributed a three-part 2013 – 2014 TMP Mobility survey: the Business Survey, the Employee Survey, and the Town of Chapel Hill Employee Survey.
- This memorandum summarizes the results of the 2013 - 2014 TMP Mobility Survey, including information on the travel behavior of those working in Chapel Hill.
- Through the Town's Transportation Demand Management program, which includes the TMP program, the Town partners with local businesses and agencies in efforts to promote alternative transportation through community outreach, encouraging alternative commute modes of transportation other than single occupancy vehicles.

Background

- The TMP program, initiated in 1991, requests the development of a Transportation Management Plan (TMP) as a stipulation for Special Use Permits issued by the Town. The provisions of each plan request employers and employees at the sites to complete biennial surveys travel behavior.
- As part of the TMP, the Town offers an annual training to site coordinators, where other site coordinators speak about best practices for employees' daily commute to and from work. Further promotions include the fare free transit system, and park and ride lots.

Attachments

- Attachment 1 - Business TMP Mobility Travel Survey Results 2013 - 2014
- Attachment 2 - Town Employee TMP Mobility Survey Results
- Attachment 3 - UNC vs. Town Employee TMP Mobility Survey Results
- Attachment 4 - Copy of Chapel Hill TMP Mobility Survey

Chapel Hill

2013 - 2014 Employee Travel Mobility Survey Results¹

Introduction and Description

The Town of Chapel Hill Transportation Management Plan (TMP) is intended to reduce the use of single-occupancy vehicles and encourage travel by alternative modes of transportation. Each TMP requires the identification of a transportation coordinator at each site, annual transportation reports, and a biennial travel survey. It applies to employers in Chapel Hill's zoning jurisdiction who are located in developments which have been approved as a Special Use Permit or received a variance from parking requirements. In addition, the Town of Chapel Hill government participates in the TMP program.

A travel behavior survey is required of each business and all employees at TMP sites. It asks questions about place of residence, commuting time and distance, transit use, and reasons which may motivate people to change their commuting behavior. The results of this survey are used to profile commuters and businesses in Chapel Hill in order to determine how best to serve their needs. The TMP Coordinator at each site receives paper surveys or a link to the online survey to streamline the process as well as receiving the results of the survey specific to those travel behaviors of those they represent at their site.

For 2013-2014, surveys were sent to 107 sites (the Town government, counted as one TMP site-- one employer) encompassing approximately 178 employers and 4,912 employees (reported)¹. Of the surveys distributed, 70 business surveys and 2,740 employee surveys were returned. The employee response rate was 56.1%, a significant increase from the 2011 survey response rate (See Table 1). This increase can most likely be attributed to the persistence of the Transportation Demand Management Program in getting at least a 50% participation rate from TMP businesses. In addition, paper surveys were supplied to a portion of the TMP sites, which helped increase the response rate from 2011. However, getting paper surveys and Spanish language surveys to more businesses would likely have increased the response rate.

Table 1: TMP employee response rate 2001-2013

TMP Profile	2001	2003	2005	2007	2009	2011	2013
# Sites Surveyed	36	61	74	92	105	109	107
# Employers	115	266	292	360	372	393	358
# Employees (reported)	4000	5500	7962	8539	6053	6837	4912
# Surveys returned	2385	2581	3966	3979	2514	2462	2740
Response Rate	59.6%	46.9%	49.8%	46.6%	41.5%	36.0%	56.1%

This document provides an overview of town-wide TMP employee commuting behavior reported in the 2013 Employee Survey. It discusses changes in the characteristics of TMP employees and their commuting patterns over time from 1999 to 2013. Though some data is available from the years 1994, 1995, and 1996, data is available for more than 1,000 respondents only, from 1999 to the present.

¹ Not all businesses surveyed sent back a Business Survey with employee numbers.

Therefore, only those years were used for historical comparison. The growth of the TMP survey, as more sites are included and others close, means that results from year to year are not directly comparable. It is also important to note that every question was not answered by all employees, and therefore the number of respondents may vary between tables.

Place of Residence

In 2013, 80.2% of employees at TMP sites commuted to work from 15 major towns in 6 counties. Table 2 illustrates the most popular (a minimum of 20 employees commuting from that location) residential locations of TMP employees. However, around 50% of those were commuting from either Chapel Hill or Durham. In addition, 35.1% of employees commuted from within Orange County (down from 37.5% in 2011, 48% in 2005, 44% in 2007 and 40% in 2009). Along a similar trend there was a 5% decrease in commuters from Chapel Hill from about 28% in 2011 and 2009.

Table 2: Place of residence with more than 20 TMP employees, 2013

Place of Residence with more than 20 TMP Employees 2013			
Town	County	Number of Employees	Percent of Employees
Chapel Hill	Orange	621	22.7%
Durham	Durham	601	21.9%
Raleigh	Wake	204	7.4%
Cary	Wake	98	3.6%
Carrboro	Orange	167	6.1%
Hillsborough	Orange	117	4.3%
Siler City	Chatham	36	1.3%
Pittsboro	Chatham	82	3.0%
Apex	Wake	36	1.3%
Burlington	Alamance	73	2.7%
Morrisville	Wake	23	0.8%
Graham	Alamance	63	2.3%
Holly Springs	Wake	31	1.1%
Efland	Orange	24	0.9%
Wake Forest	Franklin	21	0.8%

The majority of TMP employees commute from municipalities outside of Chapel Hill. The number of employees living in Orange County and working in Chapel Hill decreased by 2.2%. Percentages for Alamance County and Durham County saw an increase since 2011. However, Chatham and Wake Counties experienced decreases (See Table 3).

Table 3: TMP employee locations of residence by percent, 2007-2013

TMP Employee Locations of Residence by Percent, 2007- 2013							
Residence	Employees by Percent (%)				Percent Difference (%)		
	2007	2009	2011	2013	2007-2009	2009-2011	2011-2013
Orange County	44	33.1	37.3	35.1	-10.9	4.2	-2.2
Durham County	23.7	25.6	25.0	26.1	1.9	-0.6	1.1
Alamance County	6.5	9.0	5.8	9.7	2.5	-3.2	3.9
Chatham County	7.3	7.1	7.0	7.0	-0.2	-0.1	0.0
Wake County	13.7	18.9	19.2	17	5.2	0.3	-2.2
Other	4.8	6.1	5.7	5.1	1.3	-0.4	-0.6
Number of Respondents	3891	2454	2118	2441	--	--	--

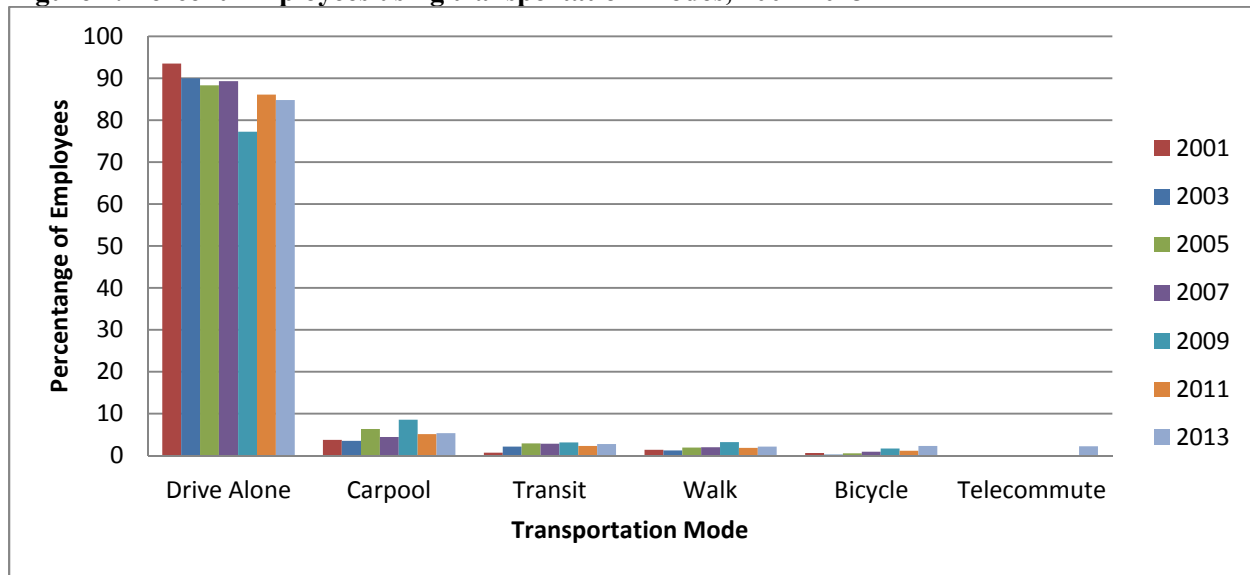
Travel Mode

Survey results indicate that 84.8% of TMP employees travel to work in a single-occupancy vehicle. While driving alone is the dominant choice for participating TMP employees, its percentage share has decreased since 2001, corresponding with an increase in all of the listed alternative modes. In 2009, the largest increase in carpooling occurred, with 4% increase from 2007 to 2009. In the long term, transit use has increased over 2% from 2001 to 2013, with increased TMP employee transit ridership each survey year. In addition, 2009 was the first year in which telecommute was included in the results. Since then, however, telecommuting has decreased. As Blue Cross Blue Shield was the main contributor of telecommuters in Chapel Hill in 2009 and 2011, the phasing out of the Chapel Hill location has caused a significant decline in that mode choice. Otherwise, driving alone has decreased and all other modes increased from 2011 (See Table 4; Figure 1).

Table 4: TMP Employee Commute Modes by Percent, 2001-2013

TMP Employee Commute Modes by Percent, 2001-2013													
Mode Choice	Employees by Percent (%)							Percent Difference (%)					
	2001	2003	2005	2007	2009	2011	2013	2001-2003	2003-2005	2005-2007	2007-2009	2009-2011	2011-2013
Drive Alone	93.5	90	88.3	89.3	77.2	86.1	84.8	-3.5	-1.7	1	-12.1	8.9	-1.3
Carpool	3.7	3.5	6.3	4.4	8.5	5.1	5.3	-0.2	2.8	-1.9	4.1	-3.4	0.2
Transit	0.7	2.1	2.9	2.8	3.1	2.3	2.7	1.4	0.8	-0.1	0.3	-0.8	0.4
Walk	1.4	1.2	1.9	2.0	3.2	1.8	2.1	-0.2	0.7	0.1	1.2	-1.4	1.0
Bicycle	0.6	0.2	0.5	0.9	1.7	1.1	2.3	-0.4	0.3	0.4	0.8	-0.6	1.0
Telecommute	--	--	--	--	5.0	3.6	2.2	--	--	--	--	-1.4	-1.4
Number of Respondents	2329	2581	3748	3895	2766	2307	2436						

Figure 1: Percent Employees using transportation Modes, 2001-2013



Commute Distance & Time²

In 2013, there was a small increase in the percentage of TMP employees who traveled less than 5 miles. However, there was a decrease in the percentage of respondents who live between 5-10 miles, and a general increase in employees further away from their place of work. Over 22% of TMP employees commuted more than 20 miles, one way, to Chapel Hill. This percentage is much lower than responses from the 2001, when 38.1% of employees commuted more than 20 miles (See Table 5; Figure 2).

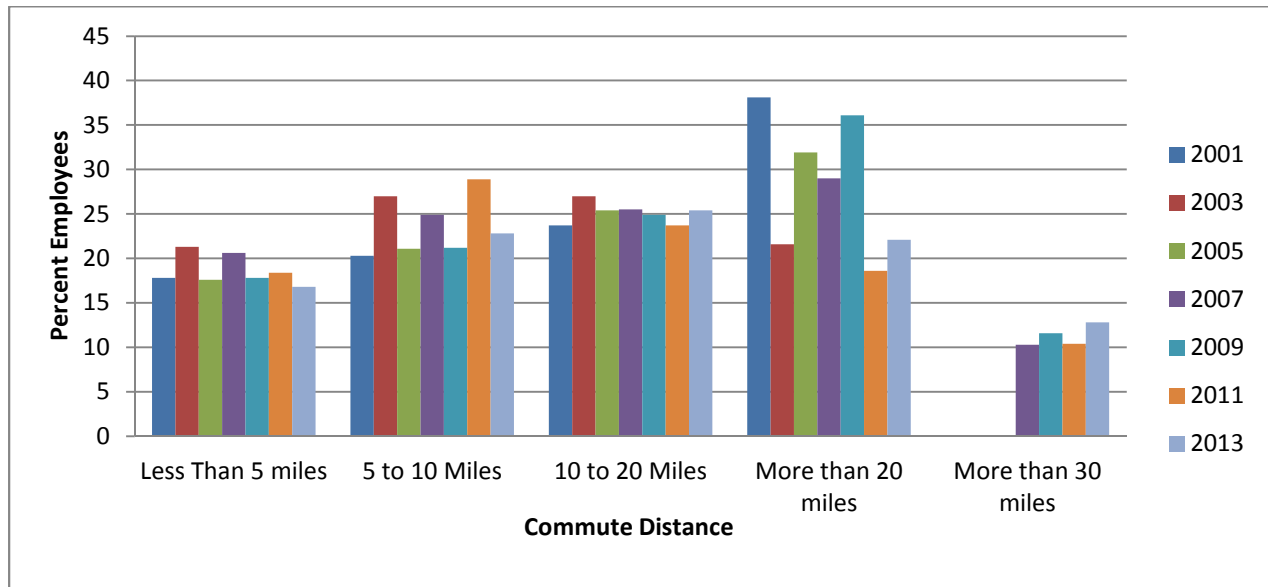
Table 5: TMP Employee Commute Distances one way, 2001-2013

	TMP Employee Commute Distances One Way, 2001-2013									
	Employees by Percent (%)							Percent Difference (%)		
	2001	2003	2005	2007	2009	2011	2013	2005-2009	2009-2011	2011-2013
Less Than 5 miles	17.8	21.3	17.6	20.6	17.8	18.4	16.8	0.2	0.6	1.6
5 to 10 Miles	20.3	27	21.1	24.9	21.2	28.9	22.8	0.1	7.7	-6.1
10 to 20 Miles	23.7	27	25.4	25.5	24.9	23.7	25.4	-0.5	-1.2	1.7
More than 20 miles	38.1	21.6	31.9	29	36.1	18.6	22.1	4.2	-17.5	3.5
More than 30 miles	--	--	--	10.3	11.6	10.4	12.8	--	-1.2	2.4
Number of Respondents	2381	2581	3748	3840	2318	2187	2429	--	--	--

*2007 & 2009 percentages add up to more than 100% because the “more than 20 miles” category includes both “20-30 miles” and “more than 30 miles” in order to provide a comparison to 2001-2005 data.

² Note that all commute distances and times are self-reported by TMP employees.

Figure 2: TMP Employee Commute Distances, 2001-2013



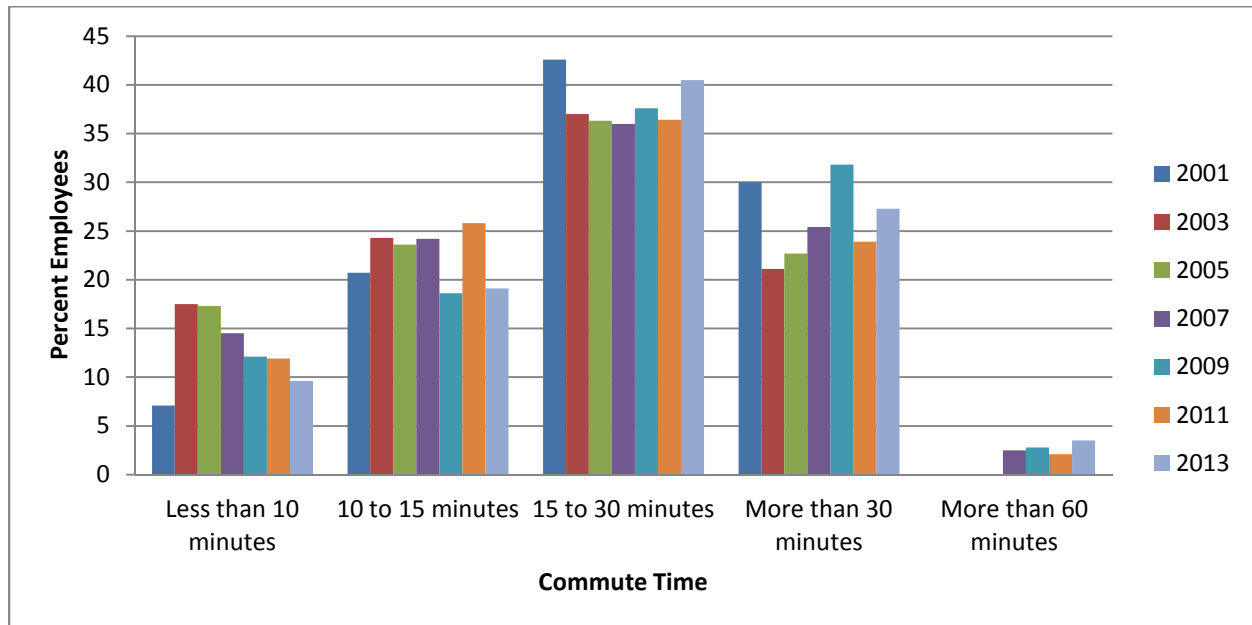
TMP employees in 2011 were most likely to travel 15 to 30 minutes to work, with about one-fourth traveling for more than 30 minutes and about 20% traveling between 10 to 15 minutes. The 2013 commute data suggests that employees are experiencing significantly longer commute times, with commute times of less than 15 minutes decreasing while commutes of more than 30 minutes have increased compared to 2011 commutes. This corresponds to the distance to work data, which illustrated an increase in the number of employees traveling more than 20 miles to get to work (See Table 6; Figure 3).

Table 6: TMP Employee Commute Times, 2001-2013

TMP Employee Commute Times, 2001-2013											
	Employees by Percent (%)							Percent Difference (%)			
	2001	2003	2005	2007	2009	2011	2013	2005-2007	2007-2009	2009-2011	2011-2013
Less than 10 minutes	7.1	17.5	17.3	14.5	12.1	11.9	9.6	-2.8	-2.4	-0.2	-2.3
10 to 15 minutes	20.7	24.3	23.6	24.2	18.6	25.8	19.1	0.6	-5.6	7.2	-6.7
15 to 30 minutes	42.6	37	36.3	36	37.6	36.4	40.5	-0.3	1.6	-1.2	4.1
More than 30 minutes	30	21.1	22.7	25.4	31.8	23.9	27.3	2.7	6.4	-7.9	4.6
More than 60 minutes	--	--	--	2.5	2.8	2.1	3.5	--	0.3	-0.7	1.4
Number of Respondents	2381	2581	3748	3880	2414	2187	2453				

*2007 & 2009 percentages add up to more than 100% because the “more than 30 minutes” category includes both “30-60 minutes” and “more than 60 minutes” in order to provide a comparison to 2001-2005 data.

Figure 3: TMP Employee Commute Times, 2001-2013



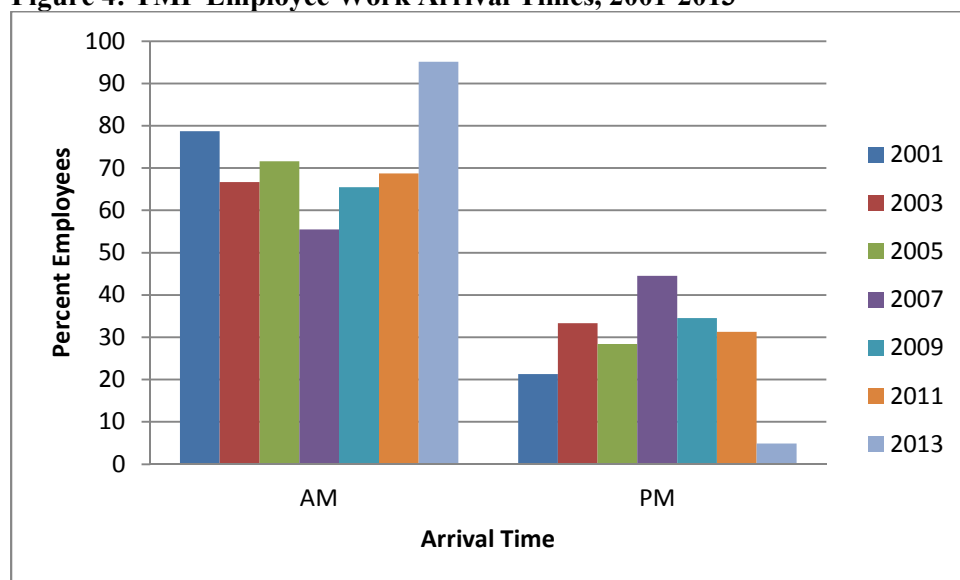
Commute Time of Day

The results indicate that most TMP employees continue to maintain traditional work days, with approximately 95% arriving to work in the morning (See Table 7). These results were much higher than any other survey year. Associated with the significant increase in AM –commuters is the decline in PM-commuters down from 31.3% in 2011 to 4.9% (See Figure 4).

Table 7: TMP Employee Work Arrival Times, 2001-2013

TMP Employee Work Arrival Times, 2001-2013											
Arrival Time	Employees by Percent (%)							Percent Difference (%)			
	2001	2003	2005	2007	2009	2011	2013	2005-2007	2005-2009	2005-2011	2005-2013
AM	78.7	66.7	71.6	55.5	65.5	68.7	95.1	-16.1	-6.1	-2.9	23.5
PM	21.3	33.3	28.4	44.5	34.5	31.3	4.9	-16.1	-6.1	-2.9	23.5
Number of Respondents	2326	2183	2402	3510	2369	1296	2475	--	--	--	--

Figure 4: TMP Employee Work Arrival Times, 2001-2013



Commuter Behavior Changes

A better understanding of commuter behavior can help TMP employers and the Town of Chapel Hill devise strategies to encourage the increased use of alternative transportation. This includes analyzing not only what incentives exist that could alter TMP employee commuter habits, but also understanding the motivations behind single-occupancy work trips. By encouraging TMP employees to take alternative transportation, the Town of Chapel Hill can help to reduce the reliance on single-occupancy vehicle work trips. Such efforts could reduce annual vehicle-miles-traveled, which could ease congestion on the roadway network as well as serve the Town's stated goal of reducing greenhouse gas emissions. Determining what incentives could change individuals commuting behavior is vital in implementing future efforts by the Town of Chapel Hill to reduce single-occupancy vehicle work trips (See Table 9). An encouraging sign is an apparent attitudinal shift among TMP employees. For example, 16.9% of TMP employees indicated that they would not consider changing their commuting habits at this time. This represents a decrease of 10% from 2011, and an overall decrease from 2007 (28.3%) and 2005 (44.1%), which suggests employees are becoming more willing to consider alternatives in their commuting habits. These results likely reflect nationwide trends associated with higher gas prices and the impacts of the current recession on individuals commuting behavior.

Many TMP employees reported that they would be willing to change their commuting behavior (See Table 9). Results indicated that 27.1% would change their commuting habits if they could save money, which a decrease from 36.8% found in the 2011 TMP survey. Although some transit and vanpooling commuting services within the Triangle may have costs associated with them, these figures may indicate that commuters within Chapel Hill may still be unaware that Chapel Hill Transit is fare free. Respondents also indicated a preference for increased transit access as a motivator in changing their commuting behavior. This included improving the frequency and convenience of transit service (17.5%) and having access to regional rail/train service (9.4%). Other motivators dealt primarily with issues of increased

convenience. For example, the opportunity to work at home (18.5%), the opportunity to work a reduced work week (15.2%), and saving time more generally (20.5%).

Another important element of consideration involves the reasons behind an individuals' decision to complete single-occupancy vehicle work trips (See Table 10). Results from the survey indicate that single-occupancy work trips are highly motivated by matters of convenience. For example, the highest percentages of responses were clustered around a desire to have a vehicle accessible during work hours for personal and business uses (31%), in case of an emergency (34.3%), and the presence of irregular work schedules (22.3%). TMP employees also appear to view alternative transportation as an inaccessible and unviable commuting alternative. For example, 16.1% of respondents feel as though carpooling, vanpooling, or taking the bus simply takes too much coordination. Furthermore, a high percentage of respondents indicated bus services were not within a reasonable distance of their home or work site (26.9%), felt as though the bus trip took too long as compared to driving (30.4%), and did not have access to regional rail/train service (14.5%).

Table 9: Why Employees would change their current commuting habits, 2013

Would Consider Changing Their Commuting Habits	Number of Employees	Percentage
Could save money	742	27.1%
Had help setting up/learning about a vanpool	83	3.0%
Had preferred or reserved carpool parking	71	2.6%
Had a ride home in an emergency	393	14.3%
Had information about transit	107	3.9%
Had information about carpooling	95	3.5%
Found transit service more convenient/frequent	480	17.5%
Could save time	561	20.5%
Did not have daily parental responsibilities that required the use of my car	329	12.0%
Had the opportunity to work at home (telecommute)	508	18.5%
Had more frequent bus service to my worksite	197	7.2%
Could work a reduced work week (i.e. 4 days @ 10 hours per day)	417	15.2%
Had flexibility to arrange your work hours to accommodate carpool, vanpool, or bus	158	5.8%
Had access to regional rail/train service	257	9.4%
More bicycle lanes or paths	205	7.5%
Secure parking for bicycles	85	3.1%
Park-and-ride lots near my home	190	6.9%
Access to restaurants, shops, and services during lunch breaks	221	8.1%
Had showers/lockers available at my workplace	117	4.3%
Could find a carpool group	139	5.1%
Financial incentive (allowance/subsidy) for using transit	309	11.3%
Financial incentive (allowance/subsidy) for using carpool/vanpool	237	8.6%
Had access to a shared vehicle/shuttle at work for errands	198	7.2%
Faster bus service to my worksite	273	10.0%
Zipcar service access	99	3.6%
Could maintain a more flexible work schedule (i.e. arrive at work before 7:30 am or after 9:00 am)	194	7.1%
I would not consider any alternatives to my commuting habits now	463	16.9%

* Employees could select multiple options; percentages are out of total respondents, not total responses

Table 10: Reasons for driving alone, 2013

Reasons for driving alone to work all or most days	Number of Employees	Percent of Employees*
I don't drive alone to work most days.	128	4.7%
Bus services are not available within reasonable distance to my home or workplace.	737	26.9%
Carpooling, vanpooling, or taking the bus requires too much coordination.	442	16.1%
The bus trip takes too long compared to driving.	634	23.1%
There is no rail service currently available.	396	14.5%
I live very close to my workplace.	288	10.5%
My job does not support telecommuting.	398	14.5%
I've never considered anything other than driving.	404	14.7%
The bus travels by my home or workplace too infrequently.	186	6.8%
I need a vehicle during work hours for personal errands, childcare/family responsibilities, or business reasons.	815	29.7%
I need a vehicle for personal errands or childcare/family responsibilities on the way to/from work.	850	31.0%
I want my vehicle in case of an emergency.	940	34.3%
I do not have others with whom to carpool or vanpool.	613	22.4%
My work schedule is irregular.	612	22.3%
Roads are unsafe for bicycle commuting.	291	10.6%
I do not feel safe using the bus, carpool, or vanpool.	67	2.4%

* Employees could select multiple options; percentages are out of total respondents, not total responses

The next Chapel Hill Transportation Management Program Mobility Survey will be conducted in September of 2015. The Town collaborates with the Regional Go Triangle program which conducts surveys in opposite years as the Town. Regional questions are incorporated as part of the Town's survey and results are shared for an overview of the Triangle area.

2013 2014 Town of Chapel Hill Employee Mobility Results¹

The Town of Chapel Hill participates in the Transportation Management Plan Program, and subsequently, all Town employees are asked to complete the biennial travel survey that is required of the other TMP sites. The Town had a response rate of over 52.1%, with 365 of the 700 Town employees completing the 2013 survey.

Place of Residence

In 2013, Town employees commuted to work from 30 different towns in 9 counties. This represents a decrease from 2009, in which employees commuted from 33 different towns in 10 counties. The majority, 58%, of Town employees commute from locations outside of Chapel Hill and Orange County (Table 1). The percentage of employees commuting from within Orange County experienced the greatest decline since 2011. Alamance County has experience the most growth of Town employees with a 3.5% increase over the past two years. Wake County experienced a 2.7% increase in Town employees between 2011 and 2013, and has steadily increased since 2007. Similarly, there is an apparent decline of Town employees living in Orange County; this decline can be seen since 2005.

Table 1: Town employee county of residence, 2005-2013

Town Employee County of Residence 2005-2013										
County	Percent of Town Employees (%)					Percent Difference (%)				2011-2013
	2005	2007	2009	2011	2013	2005-2007	2005-2009	2007-2009	2007-2011	
Orange	46.6	45.5	44	41.9	37.1	-1.1	-2.6	-1.5	-2.1	-4.8
Durham	17.4	19.5	17.6	24	21.7	2.1	0.2	-1.9	6.4	-2.3
Alamance	12.1	14.9	17.4	12.8	16.3	2.8	5.3	2.5	-4.6	3.5
Chatham	11.8	10.9	10.4	8.8	8.0	-0.9	-1.4	-0.5	-1.6	-0.8
Wake	7.2	6.1	6.2	8.2	10.9	-1.1	-1.0	0.1	2.0	2.7
Granville	0.7	1	1.4	0.9	1.1	0.3	0.7	0.4	-0.5	0.2
Guilford	2	0.4	1.1	1.2	2.0	-1.6	-0.9	0.7	0.1	0.8
Caswell	0.7	0.4	--	--	--	-0.3	--	--	--	--
Person	0.7	0.4	1.1	1.2	1.1	-0.3	0.4	0.7	0.1	-0.1
Johnston	0.3	0.4	0.3	--	0.3	0.1	0.0	-0.1	--	--
Lee	0.7	0.2	--	0.3	0.3	-0.5	--	--	--	0
Randolph	--	0.2	--	--	0.3	--	--	--	--	--

¹ Data for this report was collected by March 3, 2013.

Travel Mode

According to the 2013 survey, 86.3% of Town of Chapel Hill employees drive their personal vehicles to work daily (Table 2). This percentage also represents over a 3.5% decrease from 2011 results. The percentage of Town employees commuting by alternative modes is relatively low, right around 10%. Also, there was a decline in alternative modes since 2011. The decline of alternative mode usage suggests that additional programs and more active encouragement should be considered to increase the use of alternative forms of commuting.

Table 2: Town employee travel mode, 2005-2013

Town Employee Travel Mode 2005-2013										
Mode	Percent of Town Employees (%)*					Percent Difference (%)				
	2005	2007	2009	2011	2013	2005-2007	2005-2009	2007-2009	2009-2011	2011-2013
Drive Alone	91.6	92.4	91.6	90.0	86.3	0.8	0	-0.8	-1.6	-3.7
Carpool	4.5	4	8.7	10.3	5.2	-0.5	4.2	4.7	1.6	-5.1
Bicycle	1	2	2	3.4	1.3	1	1	0	1.4	-2.1
Motorcycle/Moped	--	--	2.3	3.1	0.6	--	--	--	0.8	-2.5
Walk	1	2	3.5	5.0	1.9	1	2.5	1.5	1.5	-3.1
Transit^	1.9	1	2	3.4	1.1	-0.9	0.1	1	1.4	-2.3
Telecommute/Telework	--	--	0.6	0.9	0.6	--	--	--	0.3	-0.3
Vanpool	0	0	0	0.6	0	0	0	0	0.6	-0.6

*Employees could select multiple options; percentages are out of total responses, not total employees.

^Transit includes both park-and-ride and other transit.

Commute Distance and Time

The majority of Town employees are commuting from distant locations, with over 65% commuting more than 10 miles to work and over 35% commuting more than 20 miles in 2013 (Table 3). This is an increase from 61% of Town employees traveling more than 10 miles and 32% commuting over 20 miles from 2011 survey results. Correspondingly, it is also taking Town employees more time to get to work, with over 70% commuting for more than 15 minutes and over 30% commuting over 30 minutes (Table 4). Compare this with town-wide employee survey data, where 60% commuting more than 10 miles to work and over 35% commuting more than 20 miles in 2013. Town-wide, it also takes employees less time to get to work, with over 65% commuting for more than 15 minutes and around 24% commuting over 30 minutes.

The 2013 survey shows a significant decrease in “5-10 miles”, which indicates that more Town employees are living further away from their place of work (see Table 3). There was a reported increase in travel times – 7.2% increase in over 30 minute commutes since 2011.

Table 3: Town employee distance to work, 2005-2013

	Town Employee Distance Traveled to Work 2005-2013									
Distance to Work	Percent of Town Employees (%)					Percent Difference (%)				
	2005	2007	2009	2011	2013	2005-2007	2005-2009	2007-2009	2009-2011	2011-2013
<5 miles	14.5	15.4	14.1	16.1	16.2	0.9	-0.4	-1.3	2.0	0.1
5-10 miles	20.3	20.5	17.7	23.0	16.2	0.2	-2.6	-2.8	5.3	-6.8
10-20 miles	29.7	29.6	29.6	28.9	31.1	-0.1	-0.1	0.0	-0.7	2.2
>20 miles	35.5	34.5	38.5	32	36.5	-1.0	3.0	4.0	-6.5	4.5

Table 4: Town employee time to work, 2005-2013

	Town Employee Time to Work 2005-2013									
Time to Work (minutes)	Percent of Town Employees (%)					Percent Difference (%)				
	2005	2007	2009	2011	2013	2005-2007	2005-2009	2007-2009	2009-2011	2011-2013
<10 minutes	10	9	10.2	8.6	8.6	-1	0.2	1.2	-1.6	0
10-15 minutes	19.6	22.6	15.4	23.8	17.4	3	-4.2	-7.2	8.4	-6.4
15-30 minutes	48.6	42.7	44.6	43.8	43.1	-5.9	-4	1.9	-0.8	-0.7
>30 minutes	21.8	25.7	29.8	23.7	30.9	3.9	8	4.1	-6.1	7.2

Table 5: Comparison of town employee to town-wide employee data, 2013

Comparison of Town Employee to Town-Wide Employee Data 2013			
Percent of Town Employees (%)			
	Town Employee Percentage	Town-wide Employee Percentage	Percent Difference
Commute more than 10 miles	67.5%	60.3%	7.2%
Commute more than 20 miles	36.5%	34.9%	1.6%
Commute more than 15 minutes	74%	67.8%	6.2%
Commute more than 30 minutes	31%	23.9%	6.1%

Behavioral Change

In an attempt to discover how to encourage alternative commutes, Town employees were asked what would induce them to change their commuting habits (Table 6). The largest number, 117 employees (39%), said that they would consider changing their commuting habits if they could save money. The

second most popular response was that commuting changes would change if employees had the opportunity to work a reduced work week or telecommute (26% and 27%); an option that is growing more popular as advancements in telecommunications become more accessible to both offices and homes. Other barriers to changing commuting habits appear to be the convenience and frequency of transit (23% of respondents) as well as the need for faster bus service to their worksite (10.1%). Additionally, 22% of respondents would change their commuting habits if employees had a ride home in an emergency (such as the service that Triangle Transit provides for transit users). Although 21% answered that they would not change their commuting habits, the majority of the answers indicate a general willingness by Town employees to use alternative modes if those modes are made more cost effective or convenient than driving alone.

Table 6: Reasons reported for considering commuting change, 2013

Reasons Reported for Considering Commuting Change, 2013		
Reason employee would change commuting habits	Number of Employees	Percent of Employees
Could save money	117	39
Had the opportunity to work at home (telecommute)	81	27
Could work a reduced work week (i.e. 4 days @ 10 hours per day)	78	26
Had a ride home in an emergency	66	22
Found transit service more convenient/frequent	69	23
Could save time	73	24.1
Financial incentive for using transit (allowance/subsidy)	39	13
Park-and-ride lots near my home	24	8
Financial incentive for using carpool/vanpool (allowance/subsidy)	37	12.3
Did not have daily parental responsibilities that required the use of my car	49	16.2
Had access to regional rail/train service	42	14
Could maintain a more flexible work schedule	36	12
Had more frequent bus service to your worksite	31	10.1
Faster bus service to your worksite	26	8.6
Other	33	11
I would not consider any alternatives to my commuting habits now	62	21

The next Chapel Hill Transportation Management Program Mobility Survey will be conducted in September of 2015. The Town collaborates with the Regional Go Triangle program which conducts surveys in opposite years as the Town. Regional questions are incorporated as part of the Town's survey and results are shared for an overview of the Triangle area.

Comparison to UNC Commuting Survey Results¹

Data from the 2013 travel behavior survey for UNC employees can be compared to 2013 TMP data to further explore commuting patterns. The top residential locations for UNC employees are generally similar to TMP employees, although the distribution is slightly different. A higher percentage of UNC employees reside in Carrboro, and Chatham County, while a slightly higher percentage of TMP employees live in Chapel Hill as well as Durham and Wake Counties.

Table 10: Residential Locations for TMP and UNC Employees

Residential Locations for TMP and UNC Employees, 2013				
Town	County	Employees by Percent (%)		Difference
		TMP	UNC	
Durham	Durham	21.9	21.7	-0.2
Chapel Hill	Orange	22.7	29.7	7
Raleigh	Wake	7.4	5.0	-2.4
Cary	Wake	3.6	2.9	-0.7
Carrboro	Orange	6.1	9.6	3.5
Hillsborough	Orange	4.3	4.0	-0.3
Pittsboro	Chatham	3.0	3.8	0.8
Apex	Wake	1.3	2.0	0.7
Graham	Alamance	2.3	3.7	1.4
Burlington	Alamance	2.7	1.4	1.3

TMP employees are less likely to live within 5 miles of their work than UNC employees. Both UNC and TMP employees have a similar ratio of living between 5-10 miles away from their place of employment. TMP employees are more likely to live more than 10 and 20 miles from their work.

Table 11: Distance to Work for TMP and UNC Employees

Distance to Work for TMP and UNC Employees, 2013			
Distance to Work	Employees by Percent (%)		Difference
	TMP	UNC	
< 5 miles	16.8	31.4	14.6
5-10 miles	22.8	24.7	1.9
10-20 miles	25.4	14.2	-11.2
>20 miles	34.9	29.7	-5.2

Mode choice for TMP employees and UNC employees is very different. Only 65.6% of UNC employees drive alone, compared to 84.8% of TMP employees. UNC employees are much more likely to ride the bus or bike to work. This can be attributed to the limited parking available on the UNC campus, and the

¹ Data for this report was collected by January 25, 2013.

extensive transportation demand management (TDM) programs conducted by the university to overcome this shortage. Inversely, UNC employees have a lower percentage of carpool/vanpool riders than TMP employees (6.1% to 7.3%).

Table 12: Mode Choice for TMP and UNC Employees 2013

Mode Choice for TMP and UNC Employees 2013			
Mode	Employees by Percent (%)		Difference
	TMP	UNC	
Drive Alone	84.8	65.6	-19.2
Carpool/Vanpool	5.3	5.3	0
Telecommute	2.2	7.2	5
Walk	2.1	3.4	1.3
Bus	2.7	17.9	15.2
Bicycle	2.3	5.2	2.9