

I. Introduction

A. PC3 background

The Presidents' Climate Commitment Committee (PC3) was established upon the signing of the American College & University Presidents' Climate Commitment (ACUPCC) by President Gitenstein in the Spring of 2007. This agreement calls for the development of a comprehensive plan to achieve climate neutrality for our campus. It gives tangible actions that we will initiate in order to reduce greenhouse gas (GHG) emissions. PC3 consists of faculty, staff, administrators, and students who are interested in working to reduce TCNJ's GHG emissions through a series of actions that all members of the college community can participate in.

As part of TCNJ's 2009 Climate Action Plan, the greenhouse gas emissions and their sources were measured. The results demonstrated that 20% of greenhouse gas emissions come from commuting, in particular driving to and from campus. The second-largest source of emissions (natural gas and fuel oil consumption for electricity, steam, and heat production is the first at 69%), commuting-related greenhouse gas emissions have been a target of PC3 efforts. These efforts include carpooling promotion and bike and transit promotion, in addition to educational campaigns around the costs and effects of driving single-occupancy vehicles to and from campus.

B. Goals of Survey

To understand how to address the 20% of GHGs that come from commuting, PC3 surveyed the campus community about their commuting habits, interests, and concerns. Developed in cooperation with the Greater Mercer Transit Management Association (www.gmtma.org), the survey was intended to establish a baseline measure for how people commute to and from campus, what their reasons are for choosing their commuting mode, what other modes of transit they would be willing or interested in taking, and what enticements or improvements would be necessary to get them to switch transit modes. Accordingly, the survey inquired into existing transit mode use and into interest in new and improved transit options, including increased bus service (both NJTransit and Loop Bus), shuttle service to rail stations (Trenton Transit Center and West Trenton SEPTA), and improved biking amenities.

C. Survey background

The survey was distributed on February 6, 2014 and respondents had until February 27, 2014, to complete the survey. The survey was hosted on Qualtrics, and was distributed to the TCNJ campus community through the college's email system, with the support of Mosen Auryan and Marie Tuscano from Center for Institutional Effectiveness and David Muha from College Advancement.

The survey was sent to 1,212 staff members, 1,170 faculty members (full-time, part-time, and adjunct), and 15,079 students. The student number is considerably higher than the current enrollment at the college, which is approximately 7,270 including undergraduate and graduate students. As reported by the IT department, any student who takes at least one class is entered into the email system and remains in the email

	Total Respondents	Total Distribution	Percentage of Total
Student	1291	7,270*	17.76%*
Staff	255	1212	21.04%
Faculty	217	1170	18.55%
Total	1763	9652	18.27%

Table 1: Survey response rates among students, staff, and faculty. Student distribution and response rate was calculated using approximate currently enrolled student numbers, rather than all students in the email database.

system for several years. Unless a student graduates, he or she will remain on the TCNJ email roster indefinitely, and there is no way for non-active students to be excluded. This accounts for the nearly two-to-one ratio of current students to student survey recipients.

255 staff members responded, approximately 21% of staff, and 217 faculty members responded, approximately 18.5% of faculty.

1,291 students responded, with 820 on-campus students and 460 off-campus students responding; this represents nearly 18% of the currently enrolled student body. Within the student respondents, we achieved a relatively representative distribution of students across all four years: each undergraduate class year made up between 23% and 24% of respondents, and graduate students comprised 5% of total student respondents, reflecting the student population on campus.

Class year	Respondents	Percentage of Respondents from each class
First-year student	313	24%
Sophomore	295	23%
Junior	298	23%
Senior	313	24%
Graduate student	64	5%
Total	1,283	100%

Table 2: Distribution of student respondents across class years. Total student respondent numbers differ based on questions answered on the survey.

Overall, we received 1,763 responses out of a total pool of 9,652 recipients, which accounts for just over 18% of the entire campus community.

II. General Commuting Patterns

A. Transit mode by group

In order to understand existing commuting and travel patterns, the survey asked respondents to designate what their regular mode of transit is on each workday. The results are aggregated in the table below, combining responses for each day.

The most significant findings from this include:

- 70% of students, 87% of staff, and 79% of faculty drive to campus alone; an average of 77% percent of the campus community commutes to campus in a car by themselves
- 10% of students, 2% of staff, and 3% of faculty walk to campus; just over 6% of the entire campus community walks to campus
- 7% of students, 5% of staff, and 3% of faculty carpool to campus; just under 5.5% of the entire campus community carpools to campus
- Just over 2.5% of students, and less than 1% of staff and faculty, bike to campus
- Just under 2.5% of students, and just under 2% of staff and faculty, are dropped off on campus
- Less than 1% of the campus community takes the bus to campus
- Roughly 1.5% of the campus community takes NJTransit or SEPTA trains to get to campus

	Car (drove alone)	Carpool	Bus	Train	River Line	Walk	Bike	Drop off	Off-campus	Other	Total
Students	70.22%	6.52%	0.74%	1.58%	0.00%	10.16%	2.60%	2.46%	4.80%	0.96%	100.00%
Staff	87.00%	5.42%	0.88%	0.48%	0.40%	2.30%	0.96%	1.98%	0.40%	0.08%	100.00%
Faculty	78.78%	2.96%	0.86%	2.98%	0.00%	3.12%	0.86%	1.62%	6.64%	2.12%	100.00%
Total	77.20%	5.44%	0.80%	1.54%	0.10%	6.28%	1.74%	2.12%	3.78%	0.92%	100.00%

Table 3: Percentages of respondents commuting to/from campus on each mode of transit

B. Commute distance by group

To understand from where campus community members are commuting, staff, faculty, and off-campus students were asked to estimate their one-way commute distance to campus from their home. Significant findings from this include:

- More than 40% of off-campus students live less than 2 miles from campus, and 47% of off-campus students live less than 5 miles from campus
- More than 25% of students live more than 20 miles from campus
- Nearly 48% of faculty, and more than 25% of staff, live more than 20 miles from campus

One way, how many miles do you commute to campus?								Total
	Less than 1 mile	1-1.9 miles	2-2.9 miles	3-4.9 miles	5-9.9 miles	10-19.9 miles	More than 20 miles	
Student	31.2%	18.9%	4.7%	2.7%	2.7%	5.8%	25.2%	445
Staff	4.8%	6.9%	4.0%	10.9%	11.7%	27.8%	33.9%	248
Faculty	4.7%	6.1%	1.4%	8.0%	8.5%	23.9%	47.4%	213
Total	17.8%	12.6%	3.8%	6.2%	8.1%	18.9%	32.8%	906

Significant relationships that emerge when cross-tabulating the distance campus community members live from campus with their transit mode include:

- Among campus community members who live less than one mile from campus, nearly 53% drive to campus alone; among those who live less between one and two miles from campus, nearly 74 % commute alone. These represent significant populations who live within walking and biking distance to and from campus.
- Among campus community members who live more than 20 miles from campus, more than 15% utilize transit modes other than single occupancy vehicles to get to campus; more than 20% do this when including telecommuters.

	Car (drove alone)	Carpool	Vanpool	Bus	Train	River Line	Walk	Bike	Drop off	Off-campus	Other	Total
Less than 1 mile	52.94%	8.16%	0.00%	0.00%	0.00%	0.00%	26.47%	4.55%	3.61%	3.48%	0.80%	100%
1-1.9 miles	73.66%	10.11%	0.00%	0.00%	0.00%	0.00%	4.20%	4.77%	4.01%	3.24%	0.00%	100%
2-2.9 miles	77.85%	2.53%	0.00%	0.63%	0.00%	0.00%	8.23%	2.53%	3.16%	3.16%	1.90%	100%
3-4.9 miles	88.76%	3.10%	0.00%	1.55%	0.00%	0.00%	0.78%	1.16%	2.33%	1.16%	1.16%	100%
5-9.9 miles	91.32%	1.93%	0.00%	1.61%	0.00%	0.00%	0.00%	0.00%	1.61%	2.89%	0.64%	100%
10-19.9 miles	91.29%	2.45%	0.00%	0.27%	0.00%	0.00%	0.41%	0.27%	1.77%	2.59%	0.95%	100%
20+ miles	79.04%	5.49%	0.00%	1.69%	5.07%	0.42%	0.68%	0.00%	0.59%	5.75%	1.27%	100%

C. Arrival/departure times

TCNJ's commuters largely follow standard rush hour commuting patterns, although with a wider spread of main commuting hours due to the varied start times of classes, allowing students and faculty more flexibility with their arrivals and departures. The aggregated arrival times of campus community members are listed in the table below.

Notable findings from the arrival table include:

- 67% of campus community members arrive on campus between 7am and 10:30am, with the largest group (18%) arriving between 8:00am and 8:29am
- Fridays have the fewest commuters to campus, representing less than 18% of weekly trips to campus. Monday through Thursday have similar commuters each day.
- Given the less flexible scheduling of their workdays, more than 50% of staff arrive on campus between 8am and 9am. Student and faculty arrivals are more spread out.

Arrivals	Monday	Tuesday	Wednesday	Thursday	Friday	Total
Before 6am	0.86	1.22	0.93	1.17	1.38	1.10
6:30-6:59am	1.43	1.22	1.24	1.60	1.56	1.41
6:00-6:29am	0.00	0.00	0.00	0.00	1.73	0.31
7:00-7:29am	4.73	4.73	4.80	4.81	1.90	4.26
7:30-7:59am	11.75	11.43	11.76	12.10	2.08	10.05
8:00-8:29am	23.35	21.19	20.12	23.76	2.25	18.63
8:30-8:59am	11.17	12.35	15.94	11.37	2.42	10.85
9:00-9:29am	9.31	8.54	8.98	8.89	2.60	7.81
9:30-9:59am	10.74	11.74	7.12	10.20	2.77	8.70
10:00-10:30am	9.17	8.38	8.98	7.29	2.94	7.48
10:30-10:59am	0.43	0.76	1.70	0.58	3.11	1.26
11:00-11:29am	2.01	1.83	2.32	1.75	3.29	2.21
After 11:30am	15.04	16.62	16.10	16.47	3.46	13.82

Departures largely parallel arrivals on campus, with departures more spread out than arrivals across staff, faculty and students, particularly given evening classes. Notable findings from the departure table include:

- 60% of campus community members depart campus between 3:30pm and 6:30pm, with the largest group (18%) departing between 4:30pm and 5pm.
- 55% of staff depart between 4:30pm and 5:30pm; 68% between 4pm and 5:30pm.

Departures	Monday	Tuesday	Wednesday	Thursday	Friday	Total
Before 2:30pm	6.16	6.58	7.44	5.99	11.65	7.43
2:30-2:59pm	2.72	3.52	2.02	2.77	4.87	3.13
3:00-3:29pm	3.15	3.98	2.64	3.36	5.22	3.62
3:30-3:59pm	8.02	6.89	6.05	8.91	9.39	7.83
4:00-4:29pm	8.74	9.49	11.01	10.51	11.48	10.20
4:30-4:59pm	17.62	17.00	18.76	17.08	21.57	18.30
5:00-5:29pm	10.74	11.03	11.63	11.39	10.43	11.06
5:30-5:59pm	9.89	6.74	6.51	9.93	8.52	8.35
6:00-6:29pm	4.73	4.90	4.96	4.38	4.87	4.76
6:30-6:59pm	21.78	22.21	22.48	19.85	10.26	19.56
After 7pm	6.45	7.66	6.51	5.84	1.74	5.74

III. Parking

There are currently 3,631 parking spots contained across 18 designated parking lots at TCNJ. Of these parking lots, 2,810 are designated for students and 821 for faculty. There are 9 surface lots and 9 lots that are parts of garages. Considering that about 75% of student commuters, more than 90% of staff commuters, and about 80% of faculty commuters enter campus either in a car by themselves, or in a carpool, parking spots are becoming increasingly limited. 50% of students report difficulty finding a parking spot once or twice a month, and about 20% report having trouble finding a spot 3 out of 5 days a week. 85% of faculty respondents reported having difficulty finding a parking spot, and 40% reported having trouble finding a spot 3 out of 5 days a week. About one fourth of all staff respondents reported difficulty finding a parking spot every day of a five-day workweek.

IV. Automobile Use

As a suburban campus, TCNJ's campus is designed around providing convenient automobile access to and from campus. There currently exists a substantial amount of surface parking, and large parking structures further encourage the use of cars to and from the campus. Based on survey results, 70% of students,

	Car (drove alone)	Carpool
Students	70.22%	6.52%
Staff	87.00%	5.42%
Faculty	78.78%	2.96%
Total	77.20%	5.44%

87% of staff, and 79% of faculty drive to campus alone; an average of 77% percent of the campus community commutes to campus in a car by themselves. However, TCNJ and PC3 have committed to encouraging and developing alternatives to single-occupancy vehicle travel, specifically encouraging carpooling and, starting in Fall 2015, the availability of on-campus hourly rental cars.

This survey suggests that a majority of students commuting to and from campus will do so by car. As mentioned above, 77% of the campus community drives themselves to TCNJ. Because of their irregular work hours at The College, faculty and staff cited the convenience and flexibility of having their own car as a prime motivator for driving alone. A significant percent of faculty and staff who drove themselves answered that they would be encouraged to try a different commuting strategy if they were guaranteed a ride home in case of an emergency, if a financial incentive existed promoting an alternative form of transportation, or if a shuttle from the Trenton Transit Center to TCNJ existed.

Similar to TCNJ's faculty and staff, off-campus students reported convenience and flexibility afforded by driving themselves to campus due to irregular class schedules were the most important reasons for driving themselves. Other major concerns for off-campus students were the need for a car to run errands before or after class, irregular work schedules away from campus, and increasingly greater commute times. A need for a guaranteed ride home in case of an emergency was echoed as the main way to encourage drivers to consider alternative commuting strategies in the off-campus student population as well as preferential parking for, and personalized help in forming, carpools/vanpools. See the tables below for detailed response information.

Approximately one-third of all faculty, staff, and off-campus students refrain from using their car during lunchtime, and about 30% use their car sporadically for lunch about once or twice a month. About 15% of respondents used their car to leave campus for lunch three to five days a week. Almost two thirds of faculty, staff, and off-campus students responded negatively when asked if they would be interested in having a car-sharing program available on campus that would rent a car by the hour or day.

The population of on-campus students answered claimed the need to travel home as their primary reason for keeping a car on campus, followed by off-campus shopping and dining as secondary and tertiary motives, respectively. Students reported car usage as usually 2-3 times a week, and primarily during both the school week and the weekend. A majority of on-campus students responded positively to being interested in having a car available on campus that would be available for rental by the hour or day.

Reasons cited for single-occupancy commuting to/from campus				
Answer	Faculty/Staff Response	%	Student Response	%
Convenience	285	72%	295	83%
Flexibility	279	70%	256	72%
Irregular work/class schedule	177	45%	179	50%
Commute Time	172	43%	151	43%
Need my car for personal errands before or after work/class	166	42%	178	50%
Need my car to get to work before or after class	--	--	154	43%
Public transportation not convenient to my home	166	42%	123	35%
Use my car at lunchtime	77	19%	77	19%
Use my car for work related travel during the day	76	19%	--	--
Need my car to pick up/drop off kids before or after work	75	19%	12	3%
Can't find someone to carpool/vanpool with	64	16%	77	2%
Difficult to get from Trenton Transit Center to campus	58	15%	18	5%
Difficult to get from West Trenton SEPTA station to campus	47	12%	7	2%
Inflexible work schedule	47	12%	--	--
Do not like public transportation	39	10%	74	21%
Other. Please specify:	32	8%	18	5%
Cost of public transportation	19	5%	48	14%
Cost of parking at train station	16	4%	9	3%
Lack of parking at train station	7	2%	4	1%

Improvements and Incentives which would most encourage commuting in a way other than driving alone				
Answer	Faculty/Staff Response	%	Student Response	%
A guaranteed ride home in case of an emergency	131	40%	175	57%
A financial incentive for using an alternative form of transportation	130	40%	--	--
Shuttle from Trenton Transit Center to campus	71	22%	40	13%
Shuttle from West Trenton SEPTA Rail Station to campus	64	20%	11	4%
A financial subsidy for giving up parking privileges	63	19%	--	--
An employer-provided car for work purposes during work hours	62	19%	--	--
Other. Please specify:	53	16%	27	9%
Transportation during lunch for personal errands	50	15%	--	--
Shuttle from Hamilton Rail Station to campus	44	13%	35	11%
Personalized help forming a carpool or vanpool	44	13%	73	24%
A more flexible work schedule to meet carpools, vanpools, and transit	42	13%	--	--
Preferential parking for carpools and vanpools	40	12%	113	37%
Secure bike parking on campus	33	10%	86	28%
Personalized help finding convenient transit options	28	9%	46	15%
Personalized help in mapping out a safe cycling route	15	5%	18	6%
Assistance in finding others to cycle and/or walk with	12	4%	15	5%

5% of respondents were registered iCarpool members. About half of all respondents have not heard of the program, and approximately one-third of all respondents have heard of, but are not interested in, joining the carpool program.

Have you heard of TCNJ's carpool program?		
Answer	Response	%
Yes, and I am registered in the site	42	5%
Yes, but I am not interested	307	34%
Yes, I would consider it but have never looked into it	160	18%
No, I have not heard of it	398	44%
Total	907	100%

V. Existing Mass Transit

There are currently two bus routes that stop on or near TCNJ's campus: NJTransit routes 601 and 602. In addition, there are three commuter rail stations within ten miles, one of which also hosts long-distance Amtrak trains. The stations are Trenton Transit Center (4.8 miles; Amtrak, NJTransit to New York, SEPTA to Philadelphia); Hamilton (8.9 miles; NJTransit to New York); West Trenton (3.5 miles; SEPTA to Philadelphia).

601 stops by the soon-to-be-open CampusTown development on the west edge of campus and has regular service between campus, downtown Trenton, Trenton Transit Center, and beyond to Hamilton. 601 has roughly hourly service from campus between 5:15am and 11:00pm, with 22 Trenton-bound departures; 601 arrives roughly hourly between 6:18am and 10:51pm, with 21 arrivals from Trenton. 602 stops on Route 31/Pennington Road during rush hours with 15 weekday inbound and outbound departures. Ridership data is unavailable for these routes. However, based on on-campus survey results, less than 1% of the campus community take the bus to campus.

Only one of the commuter rail stations, Trenton Transit Center, is connected to campus via NJTransit bus 601. This route, while direct, generally takes at least 40 minutes to travel what is a 15 minute drive otherwise. There is no connection from campus to the other commuter rail stations. Taxis from all stations are available for approximately \$35 each way. Based on survey results, roughly 1.5% of the campus community takes NJTransit or SEPTA trains to get to campus. No data is available for how they get to campus.

Are you familiar with the existing bus service between TCNJ's campus and Trenton Transit Center on NJTransit route 601?		
Answer	Response	%
Yes, and I take it regularly	15	2%
Yes, and I have taken it occasionally	124	16%
Yes, but I have never taken it	213	27%
No, and I did not know it existed	156	20%
No, and I do not want to take it	180	23%
Yes, but I do not want to take it	108	14%
Total	796	100%

VI. Loop Bus

There is a student affairs-funded “Loop Bus,” which is underutilized largely due to its schedule and slow service. Less than 5% of students use the bus weekly, and 44% use it at least once a month. 46% of survey respondents said the Loop Bus did not adequately meet their needs. When asked for recommendations to improve the Loop Bus service, 72% suggested increased frequency, 62% recommended service more days of the week, 56% recommended faster service, and 17% recommended more or different destinations. There is clearly interest in more adequate shuttle service for students.

VII. Shuttle

There are three commuter and long-distance rail stations within 10 miles of TCNJ's campus, none of which have transit connections, other than the NJ Transit route 601 bus discussed above. The three stations are Trenton Transit Center (4.8 miles; Amtrak, NJTransit to New York, SEPTA to Philadelphia); Hamilton (8.9 miles; NJTransit to New York); and West Trenton (3.5 miles; SEPTA to Philadelphia). Respondents were not asked about Hamilton due to the proximity of Trenton and West Trenton and the great number of services (bus, light rail, rail) at Trenton Transit.

Based on the 2014 survey, 35% of off campus respondents (including faculty and staff), and 74% of on campus respondents said they would use a shuttle to Trenton Transit Center at least once a month. 15% and 20% of off and on campus respondents, respectively, would use the service at least once a week.

If there were regular shuttle service between TCNJ's campus and Trenton Transit Center, how often do you estimate you would use the shuttle?				
Answer	Faculty, Staff, Off-campus student Response	%	On-campus Student Response	%
5 days a week	20	3%	9	1%
4 days a week	14	2%	6	1%
3 days a week	32	4%	18	2%
2 days a week	38	5%	58	8%
1 day a week	15	2%	66	9%
Once or twice a month	156	20%	418	54%
Never	504	65%	198	26%
Total	779	100%	773	100%

25% of off campus respondents (including faculty and staff), and 74% of on campus respondents said they would use a shuttle to Trenton Transit Center at least once a month. 11% and 8% of off and on campus respondents, respectively, would use the service at least once a week.

If there were regular shuttle service between TCNJ's campus and West Trenton SEPTA station, how often do you estimate you would use the shuttle?				
Answer	Faculty, Staff, Off-campus student Response	%	On-campus Student Response	%
5 days a week	16	2%	5	1%
4 days a week	13	2%	4	1%
3 days a week	23	3%	7	1%
2 days a week	19	2%	19	2%
1 day a week	13	2%	29	4%
Once or twice a month	108	14%	322	42%
Never	577	75%	387	50%
Total	769	100%	773	100%

Answer	Faculty, Staff, Off-campus student Response	%	On-campus Student Response	%
Yes, it would have made coming to TCNJ more attractive to me	171	22%	337	44%
No, it would not have affected my decision	435	56%	252	33%
I don't know if it would have affected my decision	173	22%	184	24%
Total	779	100%	773	100%

A.

B. Fare (17, 48)

Answer	Faculty, Staff, Off-campus student Response	%	On-campus Student Response	%
Yes	130	17%	263	34%
No	119	15%	142	18%
Not sure	145	19%	249	32%
Do not plan on using train	387	50%	119	15%
Total	781	100%	773	100%

C.

VIII. Biking

Including the significant health benefits of daily exercise, biking to, from, and around campus provides a faster, cleaner, and more sustainable mode of transportation than driving. Given that 50.1% of students, 11.7% of staff, and 10.8% of

Given that you commute from relatively close to campus, would you consider biking to campus?

Answer	Response	%
Yes, I'd consider biking to campus	163	39%
No, I do not want to bike to campus	98	24%
No, I am unable to bike to campus	88	21%
I do bike to campus	65	16%
Total	414	100%

faculty live within convenient biking distance from campus, (0.1-1.9 miles) only 2.6% of students, 0.96% of staff, and 0.86% of faculty actually bike to campus. Of those who responded as daily

commuters to TCNJ, 16% reported biking to campus daily, and 39% reported a definite interest in biking.

When asked what the top three actions could be taken to encourage biking on campus, respondents reported, in descending order, that a) weather-protected bike parking on campus, b) safer routes to campus, and c) secure bike storage on campus would increase biking at TCNJ.

Please choose the top 3 improvements that would encourage you to bike to campus.

Answer	Response	%
Weather-protected bike parking on campus	169	42%
Safer routes to campus	161	40%
Secure bike storage on campus (bike lockers)	157	39%
A financial incentive to bike instead of park on campus	140	35%
Clearly marked routes to and from campus	123	30%
Cannot/do not want to bike to campus	89	22%
A convenient place to shower/change on campus	82	20%
Clearly marked routes on campus	72	18%
Other. Please specify: (see below)	42	10%
A convenient bike repair facility on/near campus	30	7%

Safer/clearly marked routes to and from TCNJ, and convenient places to shower after biking were also provided as incentives to bike more frequently to campus.

Taking into account the survey results, the next steps to be taken to improve the frequency and safety of biking in and around TCNJ include two critical issues: improving the quality and quantity of bike racks on campus, and improving/expanding/mapping the current infrastructure for bikers at TCNJ. Existing bike racks do not provide an efficient use of the space where they are placed, due mostly to the inability of access to both sides of the rack (e.g. shrubs or lack of paving blocking one side of a bike rack). TCNJ bike racks also do not provide adequate cover from inclement weather and do not offer enough security to allow bikers to feel safe enough to keep their bikes on campus.

TCNJ's two formal entrances are via Pennington Road and Green Lane. Neither entrance offers safe or convenient access for bikers. Metzger Drive continues to be incompletely connected with sidewalks, posing a threat not only to bikers, but also to joggers and pedestrians forced to either walk on the grass, or on the street towards oncoming traffic. In order to meet these concerns, the two main entrances could be modified to allow bikers' access to TCNJ, or separate biking/pedestrian paths could be laid out in order to ensure safe transit for non-automotive transportation. Lastly, off-campus bikers are deterred from biking due to the stigma of biking to campus on unmarked major roads. Information dissemination concerning alternative biking routes in Ewing Township to TCNJ, as well as marked bike paths created around off-campus student residents, is underway and will hopefully generate greater rates of biking to, from, and on campus.

IX. Walking

On campus, most community members walk between destinations. TCNJ's campus is sufficiently compact that most building-to-building movement can be achieved in less than 15 minutes.

Walking to campus from off-campus is less common among campus community members than it could be. Based on the 2014 survey, 10% of students, 2.3% of staff, and 3% of faculty walk to and from campus. Given that 50% of students live less than 2 miles from campus (approximately 11% of staff and faculty live less than 2 miles from campus), this population represents an easily reached

group that could significantly reduce the amount of greenhouse gases produced through short commutes from the neighborhoods surrounding campus.

Infrastructure connecting the surrounding neighborhoods with campus represent a significant limitation on encouraging walking to and from campus. Only three paved pedestrian access points exist (Lynwood Drive [pedestrian and bikes only]; Pennington Road entrance; Green Lane entrance) and entrances are designed with automobile movement as a priority.