



# *Health Care Connect:* TRANSPORTATION STUDY



Transportation  
Access for  
Frontline  
Healthcare  
Workers



**TMACC**

*Transportation Management Association  
of Chester County*



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## HEALTH CARE CONNECT: TRANSPORTATION STUDY

# *Project Introduction*





# Project Introduction

## THE CRITICAL LINK TO RELIABLE COMMUTING SOLUTIONS

It is essential to the healthcare sector and the overall economy and health of a region, for healthcare workers to have consistent and reliable commuting options. National surveys and studies reveal that frontline workers and hospital staff are among the population of people who have limited access to reliable personal transportation to and from work, and incur longer commutes.

The Transportation Management Association of Chester County (TMACC), is proud to partner with the Chester County Economic Development Council (CCEDC), Health Care Connect, and the healthcare industry in Chester County, PA on a study that focused on the transportation needs of frontline healthcare workers. This study recommends alternative solutions to help employers attract and retain employees.

[\*\*VIEW UNIVERSITY OF WASHINGTON SURVEY\*\*](#)

[\*\*What Commute Patterns  
Can Tell Us About the  
Supply of Allied Health  
Workers and Registered  
Nurses\*\*](#)

Our goal at TMACC is to provide solutions for employers on complex commuter issues, and find ways for employers to reduce congestion and improve air quality as employees travel to their work sites. In partnering with Health Care Connect, we provided insight to transportation planning at healthcare facilities, and recommended alternative transportation solutions which enable current and future frontline workers and hospital staff, particularly those that are under-served, to find easily accessible and affordable transportation options.

In assessing the transportation access to healthcare facilities, it may seem applicable to blend patient and professional transportation needs due to a shared location. However, there are different barriers like shift needs, that need to be addressed, which will then produce alternative solutions for staff versus patients. This project scope was focused on the workforce, and we recommend a separate scope of work that outlines patient-specific transportation access.

One significant challenge that occurred during this study period is the disruption of the staffing structures, commuting patterns, transportation networks and services due to COVID-19. Our Transportation Demand Management (TDM) recommendations focused on nationally recognized TDM practices and will provide Health Care Connect and its members, with easy-to-implement strategies which will help to transform each healthcare campus. **TMACC works to create sustainable TDM solutions, not only to enhance the quality of life for existing and future healthcare employees, but for the greater Chester County community as well.**

# Project Introduction



## PROJECT TEAM WELLS & ASSOCIATES (W+A)

For over 25 years, W+A has created and implemented sustainable, cost-effective transportation solutions for commercial, residential, governmental, and institutional developments across the United States.



WELLS + ASSOCIATES

Based in the Washington, DC area in the Eastern US, and in Denver, Colorado, in the Western US, W+A assist developers, businesses, and property owners in securing entitlements, gaining regulatory and community approvals, and designing and implementing multimodal transportation plans to create better, more forward-thinking places and networks. Commuters, property managers, residents, and developers, increasingly see the need for transportation solutions that go beyond the single occupancy vehicle of the 20th century.

**Project Team Lead: Justin Schor**

**Project Manager: Heidi Thorne**

## TRANSPORTATION MANAGEMENT OF ASSOCIATION OF CHESTER COUNTY (TMACC)

The mission of the Transportation Management Association of Chester County (TMACC) is to activate, foster, and facilitate, cooperation between the public and private sectors of Chester County to identify, evaluate, and analyze significant transportation issues, and to recommend solutions that reduce congestion, and improve air quality. TMACC represents the expanding region of Chester County, and continues to advocate for sustainable transportation practices and connectivity. TMACC's membership represents over 40,000 commuters in the Greater Philadelphia region, and includes a range of organizations in engineering, planning, law, consumer goods, finance, hospitality, education, and healthcare. TMACC has extensive experience in facilitating project-oriented stakeholder outreach, discovery, and synthesis.



**Project Team Lead: Tim Phelps**  
**Project Manager: Jonathan Ewald**



# Project Introduction

## PARTICIPATING HEALTHCARE FACILITIES





# Project Introduction

## PARTICIPATING HEALTHCARE FACILITIES cont.





# Project Introduction

## PARTICIPATING HEALTHCARE FACILITIES cont.





# Project Introduction

## WHAT IS TRANSPORTATION DEMAND MANAGEMENT (TDM)?

The Center for Urban Transportation Research (CUTR) at the University of South Florida, is a non-health research center that is an internationally recognized, transportation research, education and technology transfer/training/outreach center. CUTR states, “the most cost-effective way to solve a problem related to transportation is to manage demand. **Transportation Demand Management (TDM)** focuses on helping people change their travel behavior—to meet their travel needs by using different modes, traveling at different times, making fewer trips, or shorter trips, or taking different routes.”



**Understanding the travel behavior and pattern of employees can help employers develop unique travel options that foster workforce recruiting and retention.**

Mobility Labs in Arlington, VA describes it as “... the successful complement to infrastructure. It focuses on understanding how people make their transportation decisions and helping people to use the infrastructure in place for transit, ridesharing, walking, biking, and telework. **TDM, focuses on people first.** At its most basic level, TDM is a program of information, encouragement and incentives provided by local or regional organizations to help people know about and use all of their transportation options to optimize all modes in the system – and to counterbalance the incentives to drive that are so prevalent in subsidies of parking and roads.” The recommendations outlined in this Health Care Connect study are rooted in the best practices of TDM.

## HEALTH CARE CONNECT: TRANSPORTATION STUDY

# *Study Plan*



# Study Plan



## GOALS AND OBJECTIVES

The goal of the Health Care Connect study sought to classify commuting habits, public transit availability, and TDM solutions for the diverse group of employees that make up the healthcare industry in Chester County. **The objective was to help healthcare facilities identify the transportation needs of their current and future employees, providing solutions to support their TDM.** Survey results showed that 94% of the respondents drive alone to work in their personal vehicles. This is similar to other Chester County employee commuting habits.

## METHODOLOGY AND TIMELINE

TMACC partnered with W+A to assist with the survey data collection and analysis. W+A works nationally with developers, high educational institutions, healthcare, and pharmaceutical campuses, to assess and improve workforce commuting patterns and opportunities. Health Care Connect originally vetted the project for the summer of 2020, with the expectation of grant completion June 30, 2021. Due to funding reassessments in Harrisburg, the grant was not released until the end of March 2021, but still maintained a deadline of June 30, 2021. **This significantly compressed the schedule and limited the ability to perform needed educational and marketing outreach for data collection, as well as steering committee discussions.**

## PANDEMIC IMPACT

COVID-19 has presented a series of stress tests across all industries especially within healthcare. Policy and protocols for communities, transportation and healthcare during the study period, were actively evolving based upon Centers for Disease Control (CDC) guidance, and the Pennsylvania Governor's office. Due to the constraints of the grant, and the impact of COVID-19, the survey was conducted while several healthcare facilities were participating in a larger survey of community needs assessment, facing staffing shortages, corporate realignments, or simply **could not make the survey a priority in their current activities.**



# Study Plan



## SURVEY PARTICIPATION

Overall, the summarizing of the survey data provided high level key findings to what was present, and not present. The goal for the surveying was to identify the respondent's role within the healthcare organization, their origin (home zip code), and their destination (employment location), the time of day of travel, and mode of travel.

Due to COVID-19 and the fluctuating healthcare staff environment, a base line of the targeted employees of the study could not be established; only one healthcare facility was able to provide employment numbers. Through personal interviews of key stakeholders, facility demographics, knowledge of available public transit, staffing numbers and vacancies, and types of candidates that fill these positions, was discussed. Other factors that impacted the survey included the timeline necessary and administrative efforts to obtain geographic census data of the employees at various facilities. For purposes of assessing the entire employment population, the survey team relied on publicly available estimates for employment. The benchmarking of a statistically significant response rate, was then calculated based on those estimates.

One of the concerns raised by the client, was accessing the survey via the internet. It is understood that healthcare employees span many departments, and various staffing levels, with many not tied to a computer with external access. Based on previous studies in Chester County, smartphone adoption is near universal amongst all employment levels. Even in households without landlines, cable or internet, smartphone ownership and usage provide the lifeline, entertainment, and work scheduling abilities to all backgrounds. The survey platform utilized, balances out equitable access across all backgrounds.

For data collection and facility participation, the survey deadline was extended four times in the attempt to reach statistically significant data. The survey was available in both Spanish and English, but no Spanish surveys were received.



# Study Plan



## ACCESSIBILITY

The survey platform utilized both a custom URL as well as a QR code. The custom URL is considered the easiest format for distributing to employees via direct email, digital newsletters, and text messages. The QR code, which was prominently displayed on each poster and flyer design, provides the simplest and most reliable way of reaching employees who do not have company emails, as well as on site contractors. It is also uninhibited by language barriers, due to its universal adoption in technology.

Based on click-through data, email was the only way the information was distributed. Despite a fully scripted communication plan, ready to print flyers and posters (which were offered to be printed and delivered), there is no data supporting that the communication plan, pre-scripted, and drafted emails were sent, no participation bumps were recorded on dates that emails were agreed to be sent. There is no data to support that the posters were distributed as the QR codes were not pinged during the duration of the survey. This inhibits the data collection of the populations that we sought the most.

The inclusion of a paper survey may have been beneficial if more time within the grant timeline could have been allotted to allow for education and marketing within each facility, and would have required additional hours to tabulate and include in the survey data.



## HEALTH CARE CONNECT: TRANSPORTATION STUDY

# *Chester County Employee Commute Survey Summary*



# Survey Summary

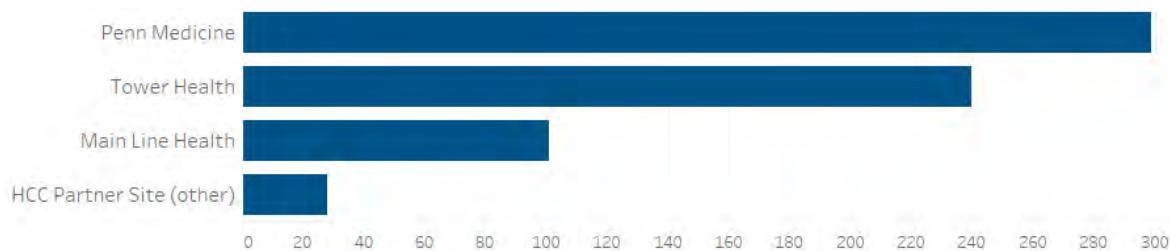


## Employee Commute Survey Summary

Health Care Connect Chester County

June 2021

### Number of Responses by Employer



# Survey Summary



## Insights:

- 94% of survey respondents drive alone to work:
  - If employees who do not drive are the target audience, a follow up commuter survey targeting those employees, will be necessary

Mode	Number of Responses	Percent of Total Responses
Drive Alone	630	94.3%
Worked from Home	12	1.8%
Walk	9	1.3%
Carpool/Vanpool	5	0.9%
Bus (SEPTA, SCOOT, LINK, PART, GVFTMA)	4	0.6%
Taxi/Uber/Lyft	3	0.4%
Other - Write In	3	0.4%
Scooter	1	0.1%

3

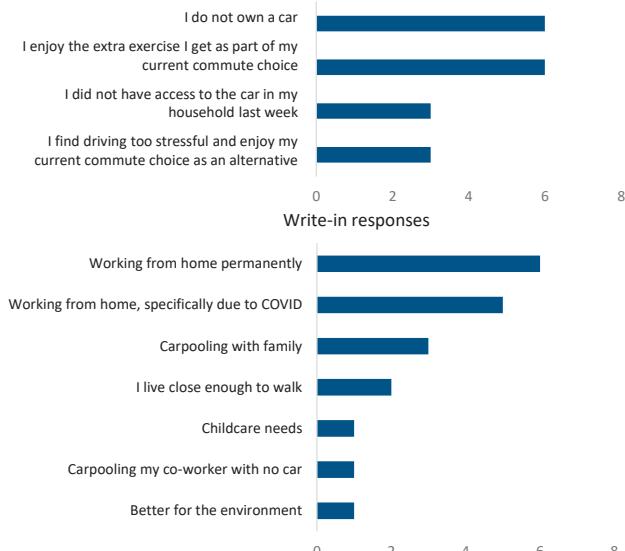
MEETING THE NEEDS OF A MOBILE SOCIETY



## Insights:

- Primary reasons for alternate commutes centered mostly around teleworking and preference for alternate commutes
- Secondary reasons for alternate commutes centered around a lack of access to a car

Primary reasons why people used alternate commutes



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MEETING THE NEEDS OF A MOBILE SOCIETY





# Survey Summary

## Insights:

- Other Options Take Longer:
  - Encouraging HCC employees not to drive alone, would require focusing on travel time being similar to what they experience when driving alone
  - Consider focusing on carpooling
- I work non-traditional hours:
  - Identifying opportunities for them to drive another passenger (carpooling)

**Primary reasons why people drove alone**  
Respondents ranked reasons 1 to 3, with 1 being the most important reason

	1	2	3
Responsibilities outside of work require me to have a car	139	85	62
Other options take longer	136	89	67
Other	122	29	84
I enjoy driving	105	82	55
I work non-traditional hours and transit does not run at that time	33	36	30
Other options are more expensive	30	43	67
My job requires me to report to multiple work locations in a given day	20	11	31
I work non-traditional hours and do not feel safe to walk/bike/scooter at that time	20	27	18
Grand Total	605	402	414

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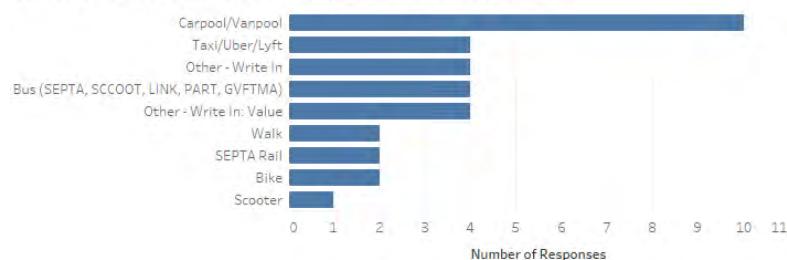
MEETING THE NEEDS OF A MOBILE SOCIETY



## Insights:

- Second Choice If Not Driving:
  - Carpool/vanpool is most popular second commute choice when employees do not drive
  - This reinforces carpools as an opportunity for additional emphasis

For Respondents who primarily drive alone, but sometimes use another mode:  
What modes do you use when you don't drive alone?



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MEETING THE NEEDS OF A MOBILE SOCIETY





# Survey Summary

## Insights:

- I live too far away to walk:
  - The #1 reason employees do not walk is because they live too far away to do so
  - Encouraging more employees to live closer to work could help reduce this
  - There is an opportunity to provide Live Near Your Work incentives and campaigns to increase the number of employees that can walk to work

### Primary reasons why people chose not to walk

Respondents ranked reasons 1 to 3, with 1 being the most important reason

	1	2	3
I live too far away to walk	431	41	50
It takes too long	96	122	62
I do not feel safe walking on busy streets or at night	27	44	53
Other	18	8	25
I need to run personal errands before or after work	16	44	52
I have too much to carry	8	38	42
I have mobility limitations	6	7	2
I do not know where to shower or change my clothes on campus	4	7	13

## Insights:

- There is no bus stop near home:
  - Obtaining and geo-plotting employee home address AND work address, will validate whether transit proximity is a true issue
- It takes too long:
  - Obtaining and geo-plotting employee home address AND work address will validate whether transit proximity is a true issue
- Not aware of these transit routes:
  - Building awareness by focusing on transit marketing campaigns as a strategy

### Primary reasons why people chose not to use public buses

Respondents ranked reasons 1 to 3, with 1 being the most important reason

	1	2	3
There is no bus stop near my home	212	53	60
It takes too long	113	82	62
I am not aware of these transit routes	76	38	52
Other	75	18	42
I need to run personal errands before or after work	59	69	57
It does not align with my work schedule	36	45	39
It is too expensive	12	22	22
I do not know how to use public transit	11	21	9
I must walk from the bus stop to my the building	10	19	14



# Survey Summary

## Insights:

- There is no SEPTA stop near home:**
  - Obtaining and geo-plotting employee home address AND work address will validate whether transit proximity is a true issue
- It takes too long:**
  - Obtaining and geo-plotting employee home address AND work address will validate whether transit proximity is a true issue
- Not aware of these transit routes:**
  - Building awareness by focusing on transit marketing campaigns as a strategy

## Primary reasons why people chose not to use SEPTA

Respondents ranked reasons 1 to 3, with 1 being the most important reason

	1	2	3
There is no SEPTA stop near my home	246	35	47
It takes too long	97	84	52
Other	89	14	43
I am not aware of these routes	61	31	47
I need to run personal errands before or after work	54	79	54
It does not align with my work schedule	34	62	39
It is too expensive	11	27	26
I do not know how to use public transit	9	16	16

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MEETING THE NEEDS OF A MOBILE SOCIETY



## Insights

- I do not own a scooter:**
  - The #1 reason employees do not scooter is because they do not own one
  - There is an opportunity to make scooters and e-scooters available through a scooter library
- I do not know where to store my scooter:**
  - Although not ranked highly, a relatively easy way to make scootering more convenient for all employees is by providing them a place to store the scooter on campus

## Primary reasons why people chose not to use a scooter to commute

Respondents ranked reasons 1 to 3, with 1 being the most important reason

	1	2	3
I do not own a scooter	308	47	34
I live too far away to scooter	216	67	72
Other	26	8	24
I do not feel safe scootering on busy streets or at night	18	45	41
It takes to long	17	75	47
I need to run personal errands before or after work	9	21	22
I have too much to carry	6	29	24
I have mobility limitations	4	1	5
I do not know where to store my scooter on campus	3	18	11
I do not know where to shower or change my clothes on campus	1	1	6

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MEETING THE NEEDS OF A MOBILE SOCIETY





# Survey Summary

## Insights:

- Not aware of coworkers who live near me and have similar schedules with whom to carpool:
  - Make HCC employees aware of coworkers with whom they can carpool using regional or HCC-specific carpool matching systems

## Primary reasons why people chose not to carpool

Respondents ranked reasons 1 to 3, with 1 being the most important reason

	1	2	3
I am not aware of coworkers that live near me with whom I could carpool/vanpool	321	56	30
I am not aware of coworkers with similar schedules with whom to carpool/vanpool	137	187	22
Other	112	15	66
I am not aware of time saving opportunities through carpool/vanpool parking spaces	18	24	65
I am not aware of how to register for a carpool/vanpool parking space	13	16	57

## Insights:

- I live too far away to bike:
  - The #1 reason employees do not bike is because they live too far away to do so
  - Obtaining and geo-plotting employee home address AND work address relative to bike routes, will validate whether biking distance is a true issue for targeted marketing to educate them about their cycling options
  - Encouraging more employees to live closer to work
- I do not own a bike or e-bike:
  - The #2 reason employees do not bike is because they do not own one
  - Make bikes and e-bikes available through a bike library

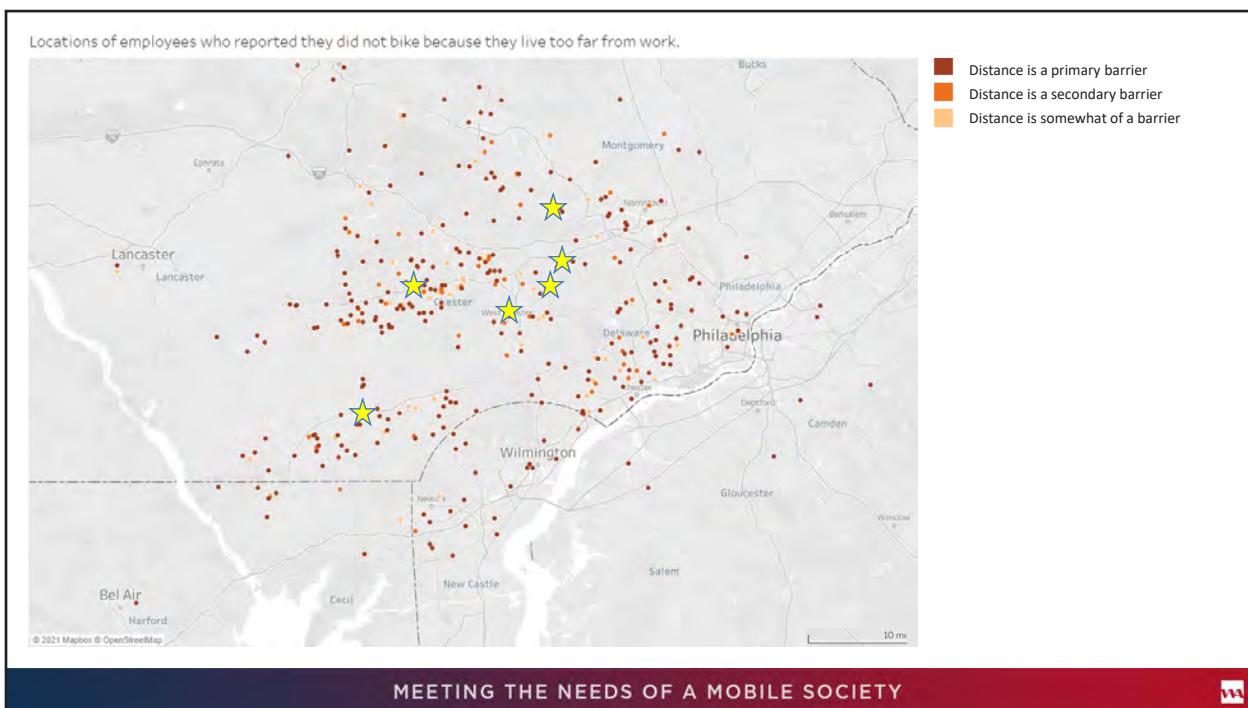
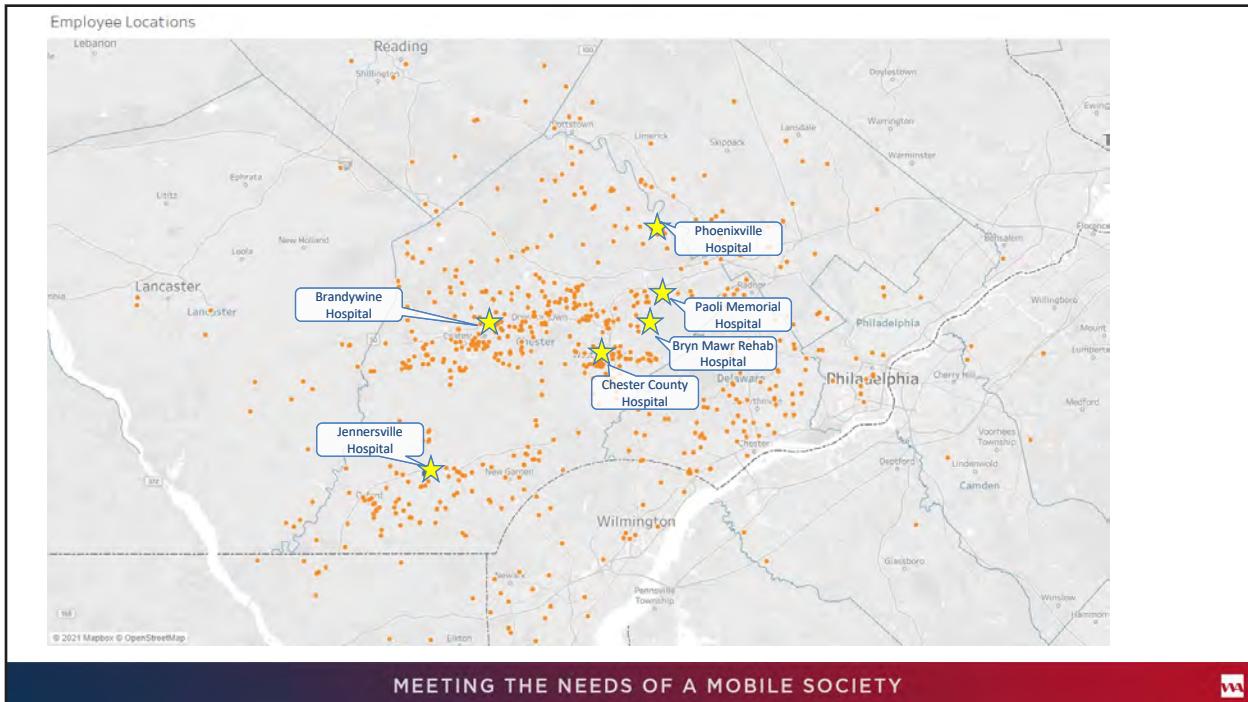
## Primary reasons why people chose not to bike

Respondents ranked reasons 1 to 3, with 1 being the most important reason

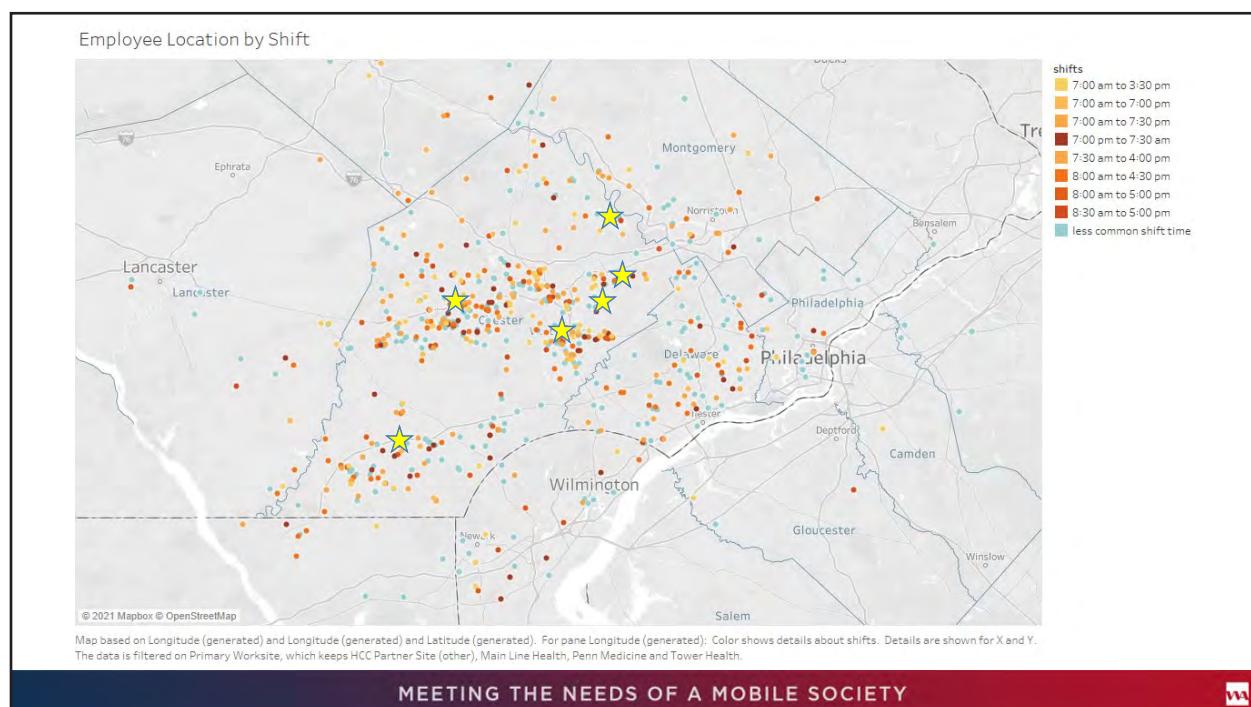
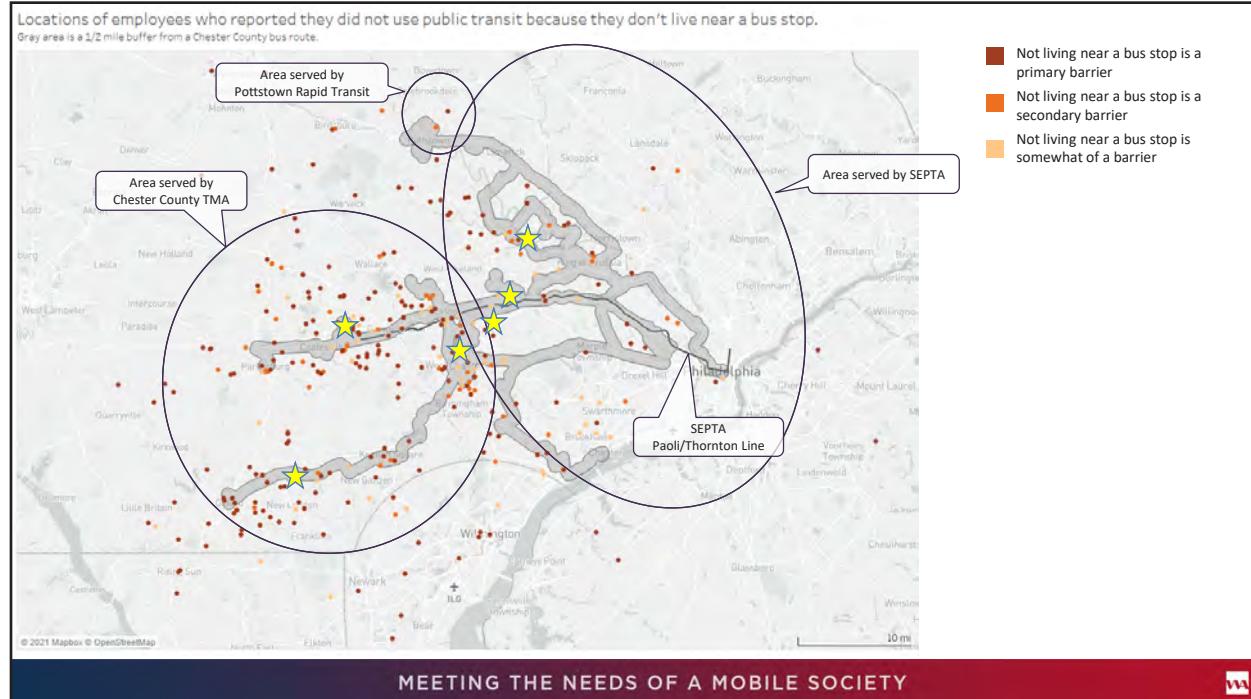
	1	2	3
I live too far away to bike	282	52	54
I do not own a bike or e-bike	128	30	30
It takes to long	78	106	41
I do not feel safe biking on busy streets or at night	49	57	42
Other	29	6	23
I need to run personal errands before or after work	17	19	33
I have too much to carry	10	33	37
I do not know where to store my bike or e-bike on campus	10	17	14
I do not know where to shower or change my clothes on campus	4	11	20
I have mobility limitations	3	4	4



# Survey Summary



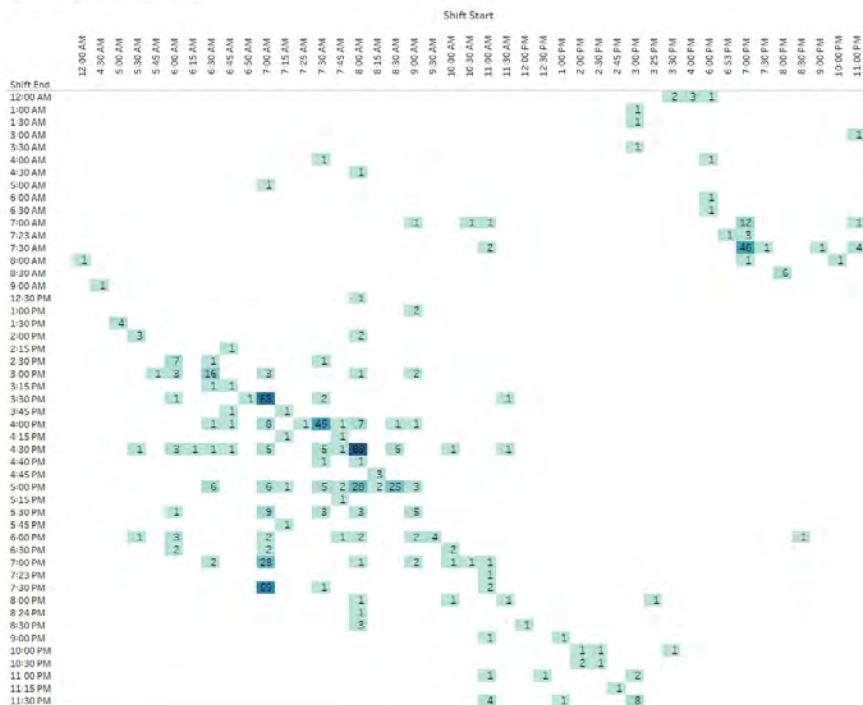
# Survey Summary





# Survey Summary

Shift Start and End Times



MEETING THE NEEDS OF A MOBILE SOCIETY



## Recommendations – Additional Analysis

- **Home location, worksite, and shift time analysis (all employees)**
  - Data should be available in HR databases
  - Obtain and geo-plot employee home address AND work address to inform opportunities to:
    - Enhance transit service
    - Enhance last-mile shuttle connections
    - Match employees to carpool partners
    - Identify employees who could bike/scooter
- **Supplemental Employee Commute Attitudinal Surveys**
  - Utilize above geospatial analysis to identify opportunities for more targeted surveys
  - Use surveys to identify employee attitudes toward new transportation choices that can be created for them
- **Transit time analysis**
  - Gather complete transit datasets (GTFS) from all agencies in the area
  - Analyze where employees at each worksite can get to work on transit in 15, 30, and 45 mins
  - Complete a bus route gap analysis



## Recommendations – Low Cost

- **Carpool**
  - Promote the [PA Carpool](#) carpool-matching tool offered as part of the DVRPC Share-A-Ride (SAR) program
  - If PA Carpool is not responsive enough to the 24-hour a day/7-day a week nature of the HCC partner sites, then consider an HCC-specific carpool-matching system
  - Identify employees who drive alone that could drive another passenger to work
  - Host carpool coffee time, or other networking events
  - Provide free or preferred parking for carpools and vanpools, or other incentives
- **Emergency Ride Home**
  - Promote and supplement the SAR funded emergency ride home (ERH) for employees who do not drive to work
  - Provides peace of mind if they need to work late, or need to get home quickly in case of emergency
  - Partnerships with Lyft or Uber can be set up so that employees can only request a ride leaving from an approved work location
- **New Employee Commute Orientation**
  - Include advice on transit or bike-friendly neighborhoods, when recruiting new employees that may be relocating
- **Transit**
  - Focus on transit marketing campaigns as a strategy to build awareness of routes serving HCC partner sites
  - Add Chester County TMA bus routes to Google Maps, to assist employees in planning their commutes  
[https://support.google.com/transitpartners/contact/agency\\_participate](https://support.google.com/transitpartners/contact/agency_participate)

## Recommendations – Moderate Cost

- **Bike/Scooter**
  - Make scooters and e-scooters available through a scooter library
  - Provide space to store scooters on campus
  - Obtain and geo-plot employee home address AND work address relative to bike routes to validate whether biking distance is a true issue for targeted marketing to educate them about their cycling options
  - Encouraging more employees to live closer to work could help reduce this barrier
- **Live Near Your Work (LNYW) Incentives**
  - The #1 reason employees do not walk is because they live too far away to do so
  - Encourage more employees to live closer to work could help reduce this barrier
  - Provide Live Near Your Work incentives and campaigns to increase the number of employees that can walk to work



# Survey Summary

## SURVEY RESULTS SUMMARY

The trends highlighted in the Health Care Connect survey report are consistent with suburban Philadelphia commuting profiles: 94% of those who completed the survey are a single occupant vehicle (SOV), meaning they drove alone in their own vehicle. This is consistent across industries, shifts, and salary expectations. The participants' catchment area for an employee's trip origin is diverse, and frequently unserved by public transit, with most respondents stating that a public transit route is either not near their house, or would take too long. If further investigation discovers a concentration of employees that could use public transportation, through a modification of an existing route or additional connection, then facilities should discuss with public transit providers if route could be modified in the future.



Among the respondents, there is an apparent interest, or openness, to carpools. Nationally, this interest dramatically increases during times of high fuel costs; the closer to \$4 a gallon, the more open commuters are to "sharing a ride." Working with the individual human resources departments to begin marketing and ride matching, can have a significant impact on parking, employee happiness, and retention. Carpools

need not be every day, and software programs that are available through TMACC are free to utilize, and can match riders based on alternating shifts and locations, with ease. Interest exists among the current employees, which can drive recruitment.

## HEALTH CARE CONNECT: TRANSPORTATION STUDY

# *TDM Strategies & Recommendations*





# Strategies & Recommendations

The healthcare facilities and campuses in Chester County have varied levels of access and needs to public transit, road, and pedestrian infrastructure. Transportation demand management methods provide a toolbox of solutions that can be adapted to a facility's individual goals.

For future site planning or renovations, it is recommended that each healthcare facility, individually or "corporate" designated, should develop a TDM or trip reduction goal for their site, and incorporate it into their annual business plan. By prioritizing a measurable goal and instituting an annual employee commuter survey, facilities and campuses can identify and monitor their transportation needs, and the potential mode shifts, of their current but also future employees. The findings assist facilities in identifying their future infrastructure needs, the development of tools and incentives to recruit employees, retain current employees with transit benefits, and with critical data to engage local, county, and regional transportation planners. These measured outcomes can also be used to calculate and report carbon reduction, as well as air quality, for the selected properties. To establish a facility TDM stakeholder's committee, we encourage participation from departments that focus on facilities use, safety and support services, human resources, external affairs, and marketing.

A misconception many organizations claim, is that they offer free parking or discounted parking to their employees. Any parking that is considered free or discounted should be designated as a benefit. There are direct costs associated to all parking, whether it is snowplowing, repaving and restriping, landscaping, or financing on a parking structure. If someone is riding public transit, walking, biking, or even carpooling out of necessity, they are may not receiving the same benefits as other employees. Healthcare facilities should consider adopting commuter benefits for those who are not in a single occupant vehicle, in order to create parity within the benefit structure. Commuter benefits in today's competitive marketplace, can increase employee loyalty, help attract new talent, and help save monies through pretax dollars and potentially lowering payroll taxes. Companies that have a diverse commuter need, actively promote commuter benefits. Finance and Human Resources should review the facilities tax liability, and cost saving opportunities.

Once a survey is completed and transportation priorities are established, the following bicycle, pedestrian, ride sharing, and public transportation strategies can be applied. These strategies are ingredients to the TDM plan but may not necessarily apply to each campus, as individual existing conditions will need to be considered.



# Strategies & Recommendations

## STRATEGY 1: CONTINUED EMPLOYEE COMMUTER DATA ANALYSIS AND REPORTING

In order for improvements to be achieved for the long term in last mile connections, public transit availability, and other TDM practices, ongoing commuter data analysis is required. It is our recommendation that each facility in Chester County develop an annual review of their employees' commute habits, develop baselines of SOV and public transit use, and implement/revise TDM measures to expand last mile connections. As the health care industry continues to compete for qualified skilled workers, ease of access to the work site and the utilization of commuter benefits, will play an outsized role in the ability to recruit and retain talent.

[Refer to TMACC's Transportation Demand Management Assessment Checklist on page 45.](#)

## STRATEGY 2: MARKETING, COMMUNICATION, AND EDUCATION

TDM is an ongoing effort to encourage behavioral change, and in order to succeed, it must be marketed to recruits, new hires, and existing workforce, throughout the campus, and rewarded when it occurs. A commuter outreach program should be developed and implemented for each site.

**TRANSPORTATION EVENTS:** This strategy consists of hosting or participating in events that bring awareness to employees on the various transportation options that are available on the campus, including tabling events, "brown bag lunches" used in conjunction with employee health fairs, and transportation fairs. These help to highlight the existing and planned commuting options for all employees.

**TRANSPORTATION WEBPAGE:** A dedicated transportation webpage on the healthcare facilities website, can serve as a hub for transportation-related information. This page should contain links to site-specific, real-time travel information, area transit routes, and schedules, rideshare matching systems, and other relevant resources for residents to be informed about their transportation options. It is vital that the transportation page be updated regularly to ensure accurate information is available. [See examples on page 53](#)

## STRATEGY 3: PEDESTRIAN AND BICYCLIST PLANNING AND INFRASTRUCTURE

Sidewalks are the original public transportation, which makes walking the most basic and equitable form of transportation. Having safe pedestrian infrastructure and connectivity in place, ensures that the majority of individuals will be able to successfully navigate in and around the healthcare campus. Bicycles also provide accessibility, and are also an equitable form of transportation. Planning and implementing infrastructure for pedestrians and bicyclists, will enhance the accessibility of the campus.



Chester County Hospital



# Strategies & Recommendations

## **RECOMMENDATION-1: Pedestrian Network Improvements Initial Assessment**

Prioritization and construction of sidewalks, pedestrian crossings, well-functioning intersections with ADA compliant ramps, will enhance pedestrian accessibility and safety between buildings and parking lots on the campus. Detailed information on the quality and extent of existing pedestrian facilities, before dedicating resources to physical improvements, will save time and money. When building projects are in design, this is an opportunity to review the connectivity of the area surrounding the project. When the pedestrian connection occurs within a transit route, it has the potential to be eligible for a PennDOT Multimodal Grant.

## **RECOMMENDATION-2: Pedestrian Signage and Signalization**

Each campus should have appropriate, ADA approved, internal and external pedestrian signage and crossings at intersections, and between all parking areas, to ensure the safe crossing of pedestrians. This is in concurrence with the Federal Highway Administration (FHWA), which recommends pedestrian signage at all intersections, to allow for safer crossings. As well as appropriate curbing, ramps and sidewalks to make all pedestrian trips safe and convenient.

## **RECOMMENDATION-3: Bicycle Network Improvements**

Examination, enhancement and/or construction of on-road bicycle facilities, trails, and paths, in and around the campus, will be critical to encouraging cycling as a means of transportation. As cyclists often travel greater distances than pedestrians do, the project scope will need to include both primary and arterial roadways, including residential areas. A typical urban cyclist will travel up to four miles in a bicycle commute. The initial step is to conduct an inventory of the campus and surrounding arterials on road bicycle network, trails and paths; identify and prioritize improvements; develop an implementation plan; and identify funding sources. This can be done in conjunction with a pedestrian facilities inventory. Future campus expansion and renovation should incorporate plans to connect to and create additional trail connections when possible. Having survey data that include a positive bicycling need would help in facilitating a conversation and potential partnership with the local municipality(ies).

## **RECOMMENDATION-4: Bicycle Amenities**

**BICYCLE PARKING:** Having sufficient and safe bicycle parking is critical to encourage commuter biking, because it complements the existing trail infrastructure. For locations near public transit stops, working with bus and train agencies and their planners to encourage adequate bicycle parking is provided and maintained at regional train stations, enhances the usage of bicycling as a transportation option within the campus. Ensuring there is adequate equipment to safely lock or store bicycles at employer locations, train stations, and local destinations, will allow biking to become a viable mode of transportation. The facilities should be covered, monitored, and highly secure.



Chester County Hospital



# Strategies & Recommendations

## Types of Bicycle Parking:

- Unenclosed Bicycle Racks are the most common type of short-term public bicycle parking, and typically consist of a stationary frame that a bicycle can be held up against, and locked, for a short period of time. Bike racks should be in high visibility locations and are often used as art installations and to encourage a sense of place.
- Enclosed Bicycle Parking Bike Lockers are an enclosed and secure locker or box where an individual bike can be stored for more than several hours. Bike lockers can be one of the safest types of bike storage, with the appropriate locking mechanism, as they provide maximum security for an individual's belongings. Locking mechanisms include traditional keyed, key pad, and mobile phone app based.



Chestnut Street Garage  
– West Chester

**BIKE SHELTERS** come in different shapes and sizes, but are most often an enclosed location where several bikes can be secured for several hours or days. Bike shelters can be indoor facilities within an employer's location or an outdoor structure.

**BIKE SHARE PROGRAM:** A bike share program is a great way to encourage employees and residents to bike within the campus or to local businesses. Conducting a bike share feasibility study, is the first step in developing and implementing this program. Bike shares provide an opportunity to enhance first and last mile connections to and from local train stations, and amenities. Bike shares can prove to be costly over time with maintenance, support, operations, and marketing and educational programming.

## STRATEGY 4: SHARE-A-RIDE, VANPOOL, AND EMPLOYER SHUTTLE SOLUTIONS

**SHARE-A-RIDE AND THE GUARANTEED RIDE HOME:** Share-A-Ride and Guaranteed Ride Home programs are free programs administered by the Delaware Valley Regional Planning Commission (DVRPC). Share-A-Ride provides carpool and vanpooling matching services based on home locations, shifts, and departments.

Establishing a culture that embraces carpooling, helps to alleviate parking congestion, improves air quality, and can aid in employee recruitment and retention.



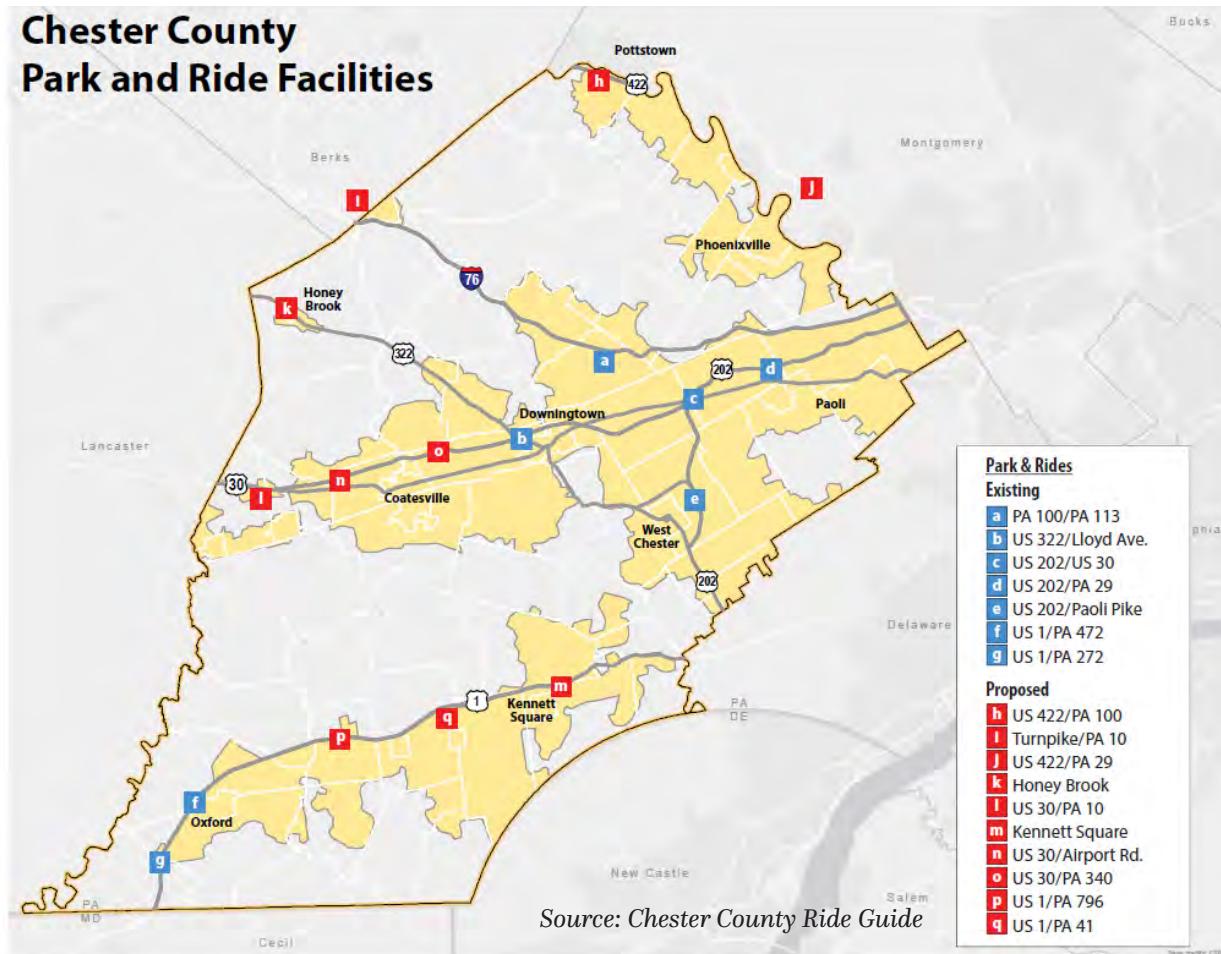
As part of the Share-A-Ride program, all carpoolers are covered by the Guaranteed Ride Home program, which provides commuters who rideshare, take public transit, bicycle, or use other alternative modes, to work with a free ride home, or to another location, in the case of an emergency. Although the need for commuters to use this program is very rare, knowing it is available provides them with the assurance that their needs can be met. The regional standard for the number of Guaranteed Rides Home per person is up to four per calendar year. Working through TMACC, the Share-A-Ride program can be semi-customized for the healthcare campus. More information on this program can be found at [www.dvRPC.org/sar](http://www.dvRPC.org/sar).





# Strategies & Recommendations

**CARPOOL AND VANPOOL MATCHING AND SUPPORTING:** Residents who work near each other can be matched to carpools/vanpools. This strategy consists of maintaining a database of resident's home-work location, and actively seeking to connect residents to each other. These rides can originate at a residence, convenient community location or at one of the Park and Rides within the County. (See exhibit below). Providing premium parking locations for carpool/vanpool vehicles, organically promotes the practice and incentivizes the action. Healthcare facilities naturally have multiple entrances for employees to access the building, allowing for more flexibility of parking locations for the incentivized spots.



Carpooling and Vanpooling does not require that the same people take part every day. Understanding the nature of shift work and different department needs, it is very typical that in a healthcare campus, carpools/vanpools will see a different mix of people taking advantage of the service when it fits their schedule. Throughout the Southeastern Pennsylvania region, Enterprise Rent-A-Car (Enterprise), provides a comprehensive vanpool program that can range from 4 to 12 passengers. The employer may choose to subsidize the seats to provide incentives, but when a vanpool is established, the agreement is between the participants and Enterprise; removing the employer from responsibility and acting as a marketing partner with Enterprise. TMACC can facilitate the introduction, and first meeting.



# Strategies & Recommendations

**SUPPORT CAR SHARING:** Car sharing allows a vehicle to be available for those who do not drive to work and/or need a vehicle. The vehicle can be reserved and used for trips throughout the business day, such as meetings, errands, and during emergencies. Car share provides an effective way to alleviate the stress related to not having a car on site. It is used as a tool to encourage individuals to try an alternative means of transportation. For a healthcare facility, car sharing is also a parking demand management strategy. The healthcare campus should incentivize car sharing, by encouraging designated parking for car share vehicles, and provide an onsite vehicle. During the pandemic, this program was deactivated among many providers based upon cleaning costs. As CDC guidelines change, this opportunity will come back and should be considered an onsite amenity for healthcare locations.

**EMPLOYER SHUTTLE SOLUTIONS:** Where no last mile connectors exist, an employer shuttle can provide the needed connection between bus and rail infrastructure, and the campus. In southeastern Pennsylvania, many large corporations run various types of open- and closed-door employer shuttles. These shuttles can be managed in-house, or outsourced to an operating company. Expenses for employee shuttles vary greatly depending on distances, and time of day services. These shuttle services may be branded and used as “rolling billboards” to promote the hospital within the community. TMACC has worked with several employers to do cost estimates, service planning, and management of shuttle services.



Chester County Hospital

## STRATEGY 5: PUBLIC TRANSIT ENHANCEMENT

Several healthcare campuses are served by SEPTA, or other public transit agencies (*See exhibit on next page*), including Chescobus. Chescobus, which includes the SCCOOT (Oxford to West Chester) and Link (Parkesburg to Brandywine Hospital via Coatesville) bus routes, provide bus service to underserved areas of Chester County. Public transportation is one of the most effective means of transportation, with such added benefits as the reduction of traffic congestion, improved air quality, safe and affordable access to transportation, and in health and social mobility. The marketing of public transportation to employees, can empower public transit agencies to advance equity.



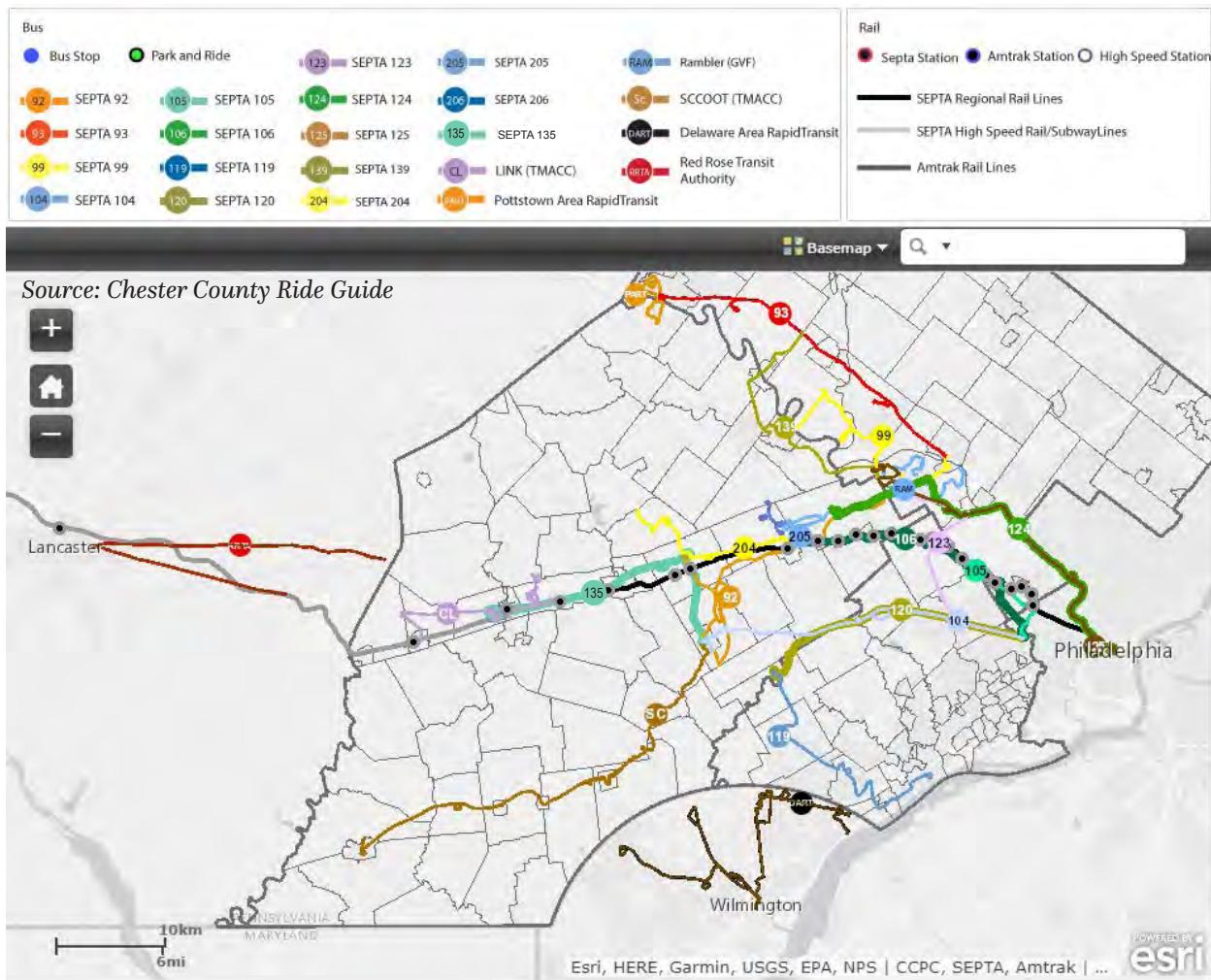
ChescoBus

Each healthcare campus in Chester County has a different level of accessibility to a SEPTA regional rail train station or bus service. For each campus that is within proximity to a route or a rail corridor, such service should be heavily marketed to existing and future employees, as well as incorporated within the recruiting materials. To continue to build ridership among employees, and use this asset, several improvements are recommended to complement the existing services and extend the public transit customer base.



# Strategies & Recommendations

## CHESTER COUNTY PUBLIC TRANSIT ROUTES



### RECOMMENDATION-1:

#### SEPTA Service Enhancement

Collaborate with SEPTA and TMACC to share employee demographic and recruiting information in order to explore opportunities that enhance service and increase ridership. Provide facility information to SEPTA or TMACC when service planning changes are being proposed. Work with TMACC and SEPTA to conduct an analysis of bus routes and rail stations that serve the facility, examine the physical location of the bus stops, shelter availability and type (if any), and demand for additional services. The analysis should evaluate bus schedules, frequency of service, and the expansion of service in the evening and on weekends, to accommodate employees working an irregular schedule.



# Strategies & Recommendations

## RECOMMENDATION-2:

### Shuttle Service to and from SEPTA Regional Rail Stations

When there is no opportunity to expand public transit services, evaluate the potential for providing a shuttle system for employees. A shuttle service to/from the healthcare campus, and to/from a local transit stop, should be explored. Such service will complement the existing SEPTA bus route service, and will provide maximum coverage, and opportunity for employees.



Property owners and/or employers, have taken on the cost of providing a shuttle to their tenants/employees. Such a service is a great amenity to attract and retain their workforce. There are a variety of models for employer-led shuttle systems, such as a single-provider, multiple-provider, and public-private system. These shuttle services can be branded and used as “rolling billboards” to promote the hospital within the community.

## RECOMMENDATION #3

### Pre-Tax Commuter Benefits

Commuter benefits give employees the opportunity through their employer to use tax-free dollars on commuting costs and keep more of what they earn in every paycheck. Companies that offer commuter benefits also save money by reducing payroll taxes. When an employee enrolls in a commuter benefits program, they can pay for their commuting costs with pre-tax money, up to the current IRS tax limit of \$270/month. Because of the various ways employees commute, by car, bus, subways, trains, ferries, and vanpools, there are several ways employees can receive their benefit so that everyone is covered.



# Conclusions

As with the historical movement from personal hospital payment to employer-based healthcare insurance as a workforce recruiting incentive, today's workforce is looking for new ways to cover their work expenses, especially with the use of pre-tax dollars.

Healthcare campuses across the nation continue to adapt and compete to attract new employees, patients, and in some circumstances, residents. It is imperative they do so sustainably, allowing their communities to be resilient to changing markets. Transportation Demand Management (TDM), are strategies that enable, through land uses and means of transportation, a reduction in vehicle dependency, encourage mixed-use development, and create a safe environment for all users.

Through defined TDM goals and initiative, as well as routine employee transportation data collection, these TDM recommendations will provide implementable and substantial strategies that can help transform each healthcare campus. From travel time to benefits, these recommendations can help advance and enhance the quality of life of existing employees, by providing recommendations for infrastructure improvements and policies that will have an impact beyond the campus boundaries. This TDM approach provides a holistic and comprehensive approach to encouraging multimodal transportation in and around each campus, and throughout the county.

## HEALTH CARE CONNECT: TRANSPORTATION STUDY

# *Addendums & Exhibits*





# Addendums & Exhibits

## US BUREAU OF LABOR STATISTICS 2019 CONSUMER EXECUTIVE REPORT

On September 9, 2020 the United States Bureau of Labor Statistics released their 2019 Consumer Expenditure report. Average annual expenditures for all consumer units (1) in 2019 were \$63,036, a 3.0-percent increase from 2018. During the same period, the Consumer Price Index (CPI-U) rose 1.8 percent and average income before taxes increased 5.4 percent. Within the report they noted that the total expenditures, 8 of the 10 largest components of household spending increased during 2019. ([See table A.](#)) The 10.1-percent rise in transportation spending was the largest percentage increase among all major components. Transportation expenditures increased 10.1 percent from 2018 to 2019 to \$10,742. This change was largely driven by vehicle insurance spending. Vehicle insurance spending showed a sizable increase (58.3 percent), in part due to a change in source selection from the Diary Survey to the Interview Survey, which was determined to better measure spending for this item in 2019. Average expenditures for vehicle purchases were up 10.5 percent, and average household expenditures for gasoline, other fuels, and motor oil decreased 0.7 percent over the period.

Table A. Average income and expenditures of all consumer units, 2017-19

Item	2017	2018	2019	Percent change	
				2017-18	2018-19
Number of consumer units (000's)	130,001	131,439	132,242	1.1	0.6
Average income before taxes	\$73,573	\$78,635	\$82,852	6.9	5.4
Average annual expenditures	60,060	61,224	63,036	1.9	3.0
Food	7,729	7,923	8,169	2.5	3.1
Food at home	4,363	4,464	4,643	2.3	4.0
Food away from home	3,365	3,459	3,526	2.8	1.9
Housing	19,884	20,091	20,679	1.0	2.9
Shelter	11,895	11,747	12,190	-1.2	3.8
Owned dwellings	6,947	6,678	6,797	-3.9	1.8
Rented dwellings	4,167	4,249	4,432	2.0	4.3
Apparel and services	1,833	1,866	1,883	1.8	0.9
Transportation	9,576	9,761	10,742	1.9	10.1
Vehicle purchases	4,054	3,975	4,394	-1.9	10.5
Gasoline, other fuels, and motor oil	1,968	2,109	2,094	7.2	-0.7
Healthcare	4,928	4,968	5,193	0.8	4.5
Health insurance	3,414	3,405	3,529	-0.3	3.6
Entertainment	3,203	3,226	3,050	0.7	-4.2
Personal care products and services	762	768	786	0.8	2.3
Education	1,491	1,407	1,443	-5.6	2.6
Cash contributions	1,873	1,888	1,995	0.8	5.7
Personal insurance and pensions	6,771	7,296	7,165	7.8	-1.8
Pensions and Social Security	6,353	6,831	6,645	7.5	-2.7
All other expenditures	2,010	2,030	1,891	1.0	-6.8

Note: Only selected subcategories are shown; as a result the subcategories do not sum to their respective major item category.



# Addendums & Exhibits

**Table B** shows that transportation expenditures are second only to expenditures on housing.

Average annual income before taxes rose 5.4 percent in 2019, after increasing 6.9 percent in 2018. Income increased within each of the five income quintiles, which are based on the weighted distribution of income before taxes among consumer units. For the highest quintile, average income increased 6.7 percent in 2019. For the lowest quintile, the increase (6.6 percent) was nearly identical. The middle quintiles experienced smaller percentage increases (3.2 percent to 4.9 percent). In 2019, the lower income bounds for each quintile were \$22,488 for the second quintile, \$43,432 for the third quintile, \$72,234 for the fourth quintile, and \$120,729 for the highest quintile.

Table B. Shares of average expenditures on selected major components by composition of consumer unit, 2019

Item	All Consumer Units	Married couple only	Married couple with children	Other married couple consumer units	One parent, at least one child under 18	Single person and other consumer units
Housing	32.8	31.0	30.7	33.2	35.7	35.9
Transportation	17.0	16.4	17.9	16.9	17.5	16.7
Food	12.9	12.3	13.3	13.9	14.9	12.8
Personal insurance and pensions	11.4	11.5	13.6	13.6	8.4	9.3
Healthcare	8.2	10.2	7.1	9.1	5.4	8.0
Apparel and services	3.0	2.4	3.3	3.2	4.4	3.0



# Addendums & Exhibits

**Table C** shows the annual percent change in expenditures by income quintile. Overall spending increased in all five quintiles, ranging from 1.3 percent in the second quintile to 8.6 percent in the lowest quintile. Among components of spending, food at home, housing, transportation, and cash contributions increased for all five quintiles. Healthcare expenditures rose in four of five quintiles. Expenditures for food away from home and apparel and services increased in three of five quintiles. Entertainment, personal insurance and pensions, and all other expenditures decreased in four of five quintiles.

<https://www.bls.gov/news.release/cesan.nr0.htm>

Table C. Change in average annual expenditures of major components by income quintile, 2019

Item	Lowest Quintile Second Quintile Third Quintile Fourth Quintile Highest Quintile									
	Over-the-year change		Over-the-year change		Over-the-year change		Over-the-year change		Over-the-year change	
	Dollar change	Percent change	Dollar change	Percent change	Dollar change	Percent change	Dollar change	Percent change	Dollar change	Percent change
Total	2,273	8.6	504	1.3	1,316	2.5	2,042	3.0	2,790	2.3
Food	291	7.1	19	0.3	547	7.9	-273	-2.9	639	4.8
At home	81	3.0	52	1.4	341	8.4	117	2.3	302	4.4
Away from home	210	15.0	-33	-1.5	207	7.2	-390	-9.1	336	5.2
Housing	978	9.3	512	3.6	215	1.2	394	1.8	801	2.3
Apparel and services	69	9.2	-34	-2.7	11	0.7	142	6.8	-109	-3.0
Transportation	863	23.2	399	5.9	1,214	14.1	1,622	14.4	779	4.2
Healthcare	380	15.4	-47	-1.2	57	1.2	170	2.9	550	7.0
Entertainment	-260	-19.0	-338	-15.5	-274	-10.8	-186	-3.0	296	4.5
Cash contributions	16	2.5	48	4.3	1	0.1	318	17.1	152	3.4
Personal insurance and pensions	-97	-13.5	-48	-2.3	-314	-6.3	29	0.3	-251	-1.2
All other expenditures	33	1.6	-7	-0.3	-141	-4.3	-254	-5.9	-67	-0.8



**HEALTH CARE CONNECT  
EMPLOYEE COMMUTE SURVEY  
QUESTIONNAIRE**  
**May 2021**  
**Prepared by Wells & Associates**



**WELLS + ASSOCIATES**

The Health Care Connect survey utilized a responsive web-based survey instrument designed to ask primary and corresponding follow up questions depending on the user input. Respondents utilized the web-based tool to complete their responses to the survey. It presented a professional and compelling approach to the survey questions. We are providing a high-level summary of the survey questions in this document. Due to the complexity of the total number of possible iterations, this is not meant to be a complete review of the survey questions. This is a simplified static version of the survey.

1. Which HCC partner campus do you typically work at?
2. Please enter the name of the site you primarily work at.
3. Do you ever work at any other HCC partner site? YES/ NO
4. Select all the HCC partner sites at which you work and which facility.
  - Coatesville VA
  - Genesis: Facility Location \_\_\_\_\_
  - Lancaster: General Health
  - Main Line Health: Exton – Paoli -- Bryn Mawr Hospital – Bryn Mawr Rehab
  - Penn Medicine: Facility Location \_\_\_\_\_
  - Tower Health: Phoenixville – Jennersville - Brandywine
  - HCC Partner Site (other):
    - Other:
5. My primary role/department is:
6. What time does your typical work shift start and end? Start:  
What time does your typical work shift start and end? End:



# Addendums & Exhibits

7. What time do you typically arrive and depart from work?      Arrive:  
What time do you typically arrive and depart from work?      Depart:
8. What is the PRIMARY means by which you commuted to work last week?
9. Typically, how long does it take you to get from work to your home at the end of the workday?
- Hours:
  - Minutes:
10. Do you ever use any mode of transportation other than driving alone to commute to work?  
Y/N
11. What other forms of transportation did you use when you do NOT drive alone to work?  
(Select all that apply)
- Carpool/Vanpool
  - Bus (SEPTA, SCOOT, LINK, PART, GVFTMA)
  - Shuttle
  - SEPTA Rail
  - Taxi/Uber/Lyft
  - Bike
  - Scooter
  - Walk
  - Other - Write In
12. Why do you choose instead of driving alone?  
(Select all that apply)
- I find driving too stressful and enjoy my current commute choice as an alternative
  - I enjoy the extra exercise I get as part of my current commute choice
  - I enjoy the social interactions I have as part of my current commute choice
  - I do not have a place to park on campus
  - I have one or more physical limitations that prevent me from driving
  - My car was under repair this past week
  - I do not own a car
  - I did not have access to the car in my household last week
  - Other - Write In
13. How would you rate your commute?



# Addendums & Exhibits

14. How could your commute be improved?

(Rank up to 3 options, 1=highest, 3=lowest)

- Reduce the cost
- Reduce the number of stops on my bus route to make travel time shorter
- If my employer would support my commute through transit passes or in my paycheck
- Provide a bus stop closer to my worksite
- Increase bus route frequency during normal business hours
- Increase bus route frequency during weekend, evening and night-time hours
- Improve cleanliness of the bus/train
- Other options are more expensive
- Other

15. Why did you not use transportation options other than driving alone last week to get to work?

(Rank up to 3 options, 1=highest, 3=lowest)

- Other options take longer
- I enjoy driving
- Responsibilities outside of work require me to have a car
- I work non-traditional hours and transit does not run at that time
- I work non-traditional hours and do not feel safe to walk/bike/scooter at that time
- My job requires me to report to multiple work locations in a given day
- Other

16. Why do you not use public bus lines that stop at or near to get to work more frequently?

(Rank up to 3 options, 1=highest, 3=lowest)

- I am not aware of these transit routes
- I do not know how to use public transit
- It is too expensive
- It takes too long
- I must walk from the bus stop to my building
- It does not align with my work schedule
- I need to run personal errands before or after work
- There is no bus stop near my home
- Other



# Addendums & Exhibits

17. Why do you not use SEPTA to get to work more frequently?

(Rank up to 3 options, 1=highest, 3=lowest)

- I do not know how to use public transit
- I am not aware of these routes
- It is too expensive
- It takes too long
- It does not align with my work schedule
- I need to run personal errands before or after work
- There is no SEPTA stop near my home

18. Why do you choose not walk to work more frequently?

(Rank up to 3 options, 1=highest, 3=lowest)

- I have too much to carry
- I do not feel safe walking on busy streets or at night
- I need to run personal errands before or after work
- I have mobility limitations
- I do not know where to shower or change my clothes on campus
- I live too far away to walk
- Other

19. Why do you choose not to scooter to work more frequently?

(Rank up to 3 options, 1=highest, 3=lowest)

- I do not own a scooter
- It takes too long
- I do not know where to store my scooter on campus
- I do not know where to shower or change my clothes on campus
- I have too much to carry
- I do not feel safe scootering on busy streets or at night
- I need to run personal errands before or after work
- I have mobility limitations
- I live too far away to scooter
- Other



# Addendums & Exhibits

20. Why do you choose not to bike to work more frequently?

(Rank up to 3 options, 1=highest, 3=lowest)

- I do not own a bike or e-bike
- It takes too long
- I do not know where to store my bike or e-bike on campus
- I do not know where to shower or change my clothes on campus
- I have too much to carry
- I do not feel safe biking on busy streets or at night
- I need to run personal errands before or after work
- I have mobility limitations
- I live too far away to bike
- Other

21. Why do you choose not to carpool to work with other employees who work?

(Rank up to 3 options, 1=highest, 3=lowest)

- I am not aware of coworkers that live near me with whom I could carpool/vanpool
- I am not aware of coworkers with similar schedules with whom to carpool/vanpool
- I am not aware of time saving opportunities through carpool/vanpool parking spaces
- I am not aware of how to register for a carpool/vanpool parking space
- Other

Additional Comments:



*Transportation Management Association  
of Chester County*

## Transportation Demand Management Assessment Checklist

The Transportation Demand Management (TDM) checklist is the starting point for assessing the current state of transportation options currently available to employees and customers.

Questions regarding TDM program components should be directed to TMACC for additional information and technical assistance. This checklist will help Chester County companies further support enhancements to travel options, air quality, and TDM activities throughout the county.

**TMACC TDM CHECKLIST**



# Addendums & Exhibits

## General Assessment

### Goal

To develop and implement strategies utilizing Transportation Demand Management (TDM) Toolkit Strategies that reduce vehicle trips, and foster the use of transit for commuting, shopping, recreation, and school activities.

**Does your organization utilize strategies or adopted policies that include the following:**

- A. Provide accurate transportation commuting options on company website and HR internal site.  
Yes      No
- B. Promote alternative commuting options through employee communications and hiring events.  
Yes      No
- C. Offer Commuter Benefits to all employees. (Pre-Tax fare options, carpool incentives, Guaranteed Ride Home)  
Yes      No
- D. Conduct an annual employee commuter habit survey to asses current needs, trends and areas to improve service.  
Yes      No

How does your company plan to implement these strategies? Please identify.



# Addendums & Exhibits

## Transit

### Goal

To develop and implement strategies in cooperation with the public transit agencies that reduce vehicle trips, and foster the use of transit for commuting, shopping, recreation, and school activities.

**Does your campus or office facility have design strategies or adopted policies that include the following:**

- E. Provide for the location and connection of bus stops that are convenient, accessible, and safe.

Yes      No

- F. Promote transit use with shelters or benches, are well lit, easy to navigate, have trash receptacles, street trees, or other street furniture.

Yes      No

- G. Include information in the bus shelter regarding services and times.

Yes      No

- H. Provide for directional signage to and from main buildings and other stops.

Yes      No

- I. Include specifications for pavement width, bus pads or pavement structure, length of bus stops, and turning radii that accommodates bus transit.

Yes      No

- J. Accurate and up to date information regarding public transportation options posted on company website.

Yes      No

How does your company plan to implement these strategies? Please identify.



# Addendums & Exhibits

## Pedestrian Facilities

### Goal

To develop and implement design strategies that reduce vehicle trips and foster access for commuting, shopping, recreation, and school activities.

**Does your campus or office facility have strategies or adopted policies that include the following:**

- A. Reasonably direct, convenient, accessible, and safe pedestrian connections to facility buildings and amenities, transit stops, or hubs/parks/open space, and other pedestrian facilities.

Yes                  No

- B. Inventory and plans to construct pedestrian paths needed to fill gaps and missing sidewalk connections.

Yes                  No

- C. Safety elements such as a convenient crossing at arterials, warning strips, and properly graded ramps.

Yes                  No

- D. Amenities such as lighting, street trees, and trash receptacles that promote walking.

Yes                  No

- E. Continuous sidewalks along both sides of all adjacent public streets, through large parking areas, common areas, and to link the buildings with public street.

Yes                  No

How does your company plan to implement these strategies? Please identify.



# Addendums & Exhibits

## Carpools, Vanpools, and Share-A-Ride

### Goal

To develop and implement design strategies that reduce the overall number of vehicle trips, and foster carpool and vanpool use.

**Does your campus or office facility have design strategies or adopted policies that include the following:**

- A. Parking garages or lots that provide preferential parking spaces and/or charges for carpools, vanpools, and/or electric vehicles.

Yes                  No

- B. Information and marketing to support carpool and vanpool matching services, and current information on company website, social media, and printed materials.

Yes                  No

- C. Policies that support carpooling, vanpooling and/or electric vehicles.

Yes                  No

## Share-A-Ride

- A. Company participates in the DVRPC Share-A-Ride carpooling program.

Yes                  No

- B. Promotion of park-and-ride lots located near freeways or major transit hubs, using city outreach methods.

Yes                  No

- C. Company participates in a Guaranteed Ride Home Program.

Yes                  No

How does your company plan to implement these strategies? Please identify.



# Addendums & Exhibits

## Bicycle Facilities

### Goal

To develop and implement design strategies that foster the development of bicycle commuting options that incorporate a wide range of bicycle facilities to reduce vehicle trips and promote bicycle use for commuting, shopping and school activities, and recreation.

**Does your campus or office facility have design strategies or adopted policies that include the following:**

- A. Bicycle lanes, trails and paths that connects company facility to trails, sidewalks and other community options.

Yes                  No

- B. Bicycle facilities that provide access to transit.

Yes                  No

- C. Construction of bicycle facilities needed to connect commuting routes to the company facility.

Yes                  No

- D. Consideration of bicycle safety such as safe crossing of busy arterials, or along bike trails.

Yes                  No

- E. Bicycle storage and bicycle parking.

Yes                  No

- F. Bike sharing programs.

Yes                  No

- G. Onsite shower and change facilities for employees.

Yes                  No

How does your company plan to implement these strategies? Please identify.



# Addendums & Exhibits

## PROJECT Contact Information

### Transportation Management Association of Chester County

7 Great Valley Parkway, Suite 144  
Malvern, PA 19355

610-993-0911

[tmacc.org](http://tmacc.org)

P. Timothy Phelps, Executive Director

[tphelps@tmacc.org](mailto:tphelps@tmacc.org)

Jon Ewald, Project Manager

[jewald@tmacc.org](mailto:jewald@tmacc.org)

### Wells & Associates

1110 Bonifant Street, Suite 210  
Silver Springs, MD 20910  
703-917-6620  
[wellsandassociates.com](http://wellsandassociates.com)

Justin B. Schor, Principal

[jbschor@wellsandassociates.com](mailto:jbschor@wellsandassociates.com)

### Health Care Connect

#### Chester County Economic Development Council

Eagleview Corporate Center  
737 Constitution Drive  
Exton, PA 19341  
610-321-8237  
[healthcareconnect.ccedcpa.com](http://healthcareconnect.ccedcpa.com)

Mary Kay Owen, Health Care Connect Consultant

[mowen@ccedcpa.com](mailto:mowen@ccedcpa.com)



# Addendums & Exhibits

## Transportation Resources

### **Transportation Management Association of Chester County**

Chester County transportation resource: employer services and Chescobus

[www.tmacc.org](http://www.tmacc.org)

### **Chester County Planning Commission**

[www.chescoplanning.org](http://www.chescoplanning.org)

### **Delaware Valley Regional Planning Commission**

Commuter Services: Share-a-Ride, Emergency Ride Home

[www.dvRPC.org/commuterservices](http://www.dvRPC.org/commuterservices)

### **SEPTA**

Regional Transportation Authority (Train and Bus Schedule)

[www.septa.org](http://www.septa.org)

### **Bicycle Coalition of Greater Philadelphia**

Bike Chester County

[www.bicyclecoalition.org](http://www.bicyclecoalition.org)

### **Enterprise**

Vanpool Resource

[www.commuteithenterprise.com](http://www.commuteithenterprise.com)

### **PennDOT: Multimodal Program**

Multimodal Grant

[www.penndot.gov/ProjectAndPrograms/MultimodalProgram](http://www.penndot.gov/ProjectAndPrograms/MultimodalProgram)

### **AMTRAK**

[www.amtrak.com](http://www.amtrak.com)

### **Krapf Transportation**

Shuttle service provider

[www.krapfbus.com/transportation/transit/](http://www.krapfbus.com/transportation/transit/)

### **Association for Commuter Transportation (ACT)**

Commuter Advocacy

[www.actweb.org](http://www.actweb.org)



# Addendums & Exhibits

## EMPLOYER/ COMMUTER Services Websites Examples

### Thomas Jefferson University

Commuter Services Office: [www.jefferson.edu/university/customer\\_service/commuter.html](http://www.jefferson.edu/university/customer_service/commuter.html)

Pre-Tax Pull down

### Stanford Medicine

Commuter Alternatives: [www.stanfordmedicinetransportation.org/Alternatives](http://www.stanfordmedicinetransportation.org/Alternatives)

### Stanford University

New Employee: <https://transportation.stanford.edu/getting-started/commute-options-for-new-employees>

### Fairfax County Commuter Services

Transportation Options/ Commuter Services

[www.fairfaxcounty.gov/transportation/commuter-services](http://www.fairfaxcounty.gov/transportation/commuter-services)

### UCSF- Campus Life Services

Transportation/ Transportation Alternatives Information

[https://campuslifeservices.ucsf.edu/transportation/services/alternative\\_transportation](https://campuslifeservices.ucsf.edu/transportation/services/alternative_transportation)

### University of Washington

Faculty/ Staff: Transportation Services – Information

<https://transportation.uw.edu/faculty-staff>