TOWSON UNIVERSITY

Towson Public Life Study

Environmental Science and Studies Senior Seminar Class
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Introduction

Public Life Studies

Events in human history such as the Industrial Revolution and World War II have shaped the current state of urban form. During the Industrial Revolution, cities rapidly expanded due to the increasing number of factory jobs, new industrial and manufacturing technologies, and faster modes of transportation (Gehl and Svarre, 2013). While these new industrial jobs and technologies expanded and broadened the human experience, they also came at a cost – cities became overcrowded and toxic. Pollution from factories and transportation contaminated air and water resources. As a result, the overcrowded urban centers quickly became places where people did not want to live.

As people began leaving the city and moving into suburbs, a dependence upon automobiles became more prevalent; and so a second wave of urban development began in the mid-20th century. In the post-World War II period many Americans moved from urban to suburban communities, and the predominant mode of transportation switched from trains or streetcars to automobiles. Thereafter, during the 1950s and 1960s, American cities were generally built to accommodate automobile traffic and less often to accommodate pedestrian traffic. Cities became places mainly to work and to travel through. Many of the rails and public transportation systems were removed and replaced with large highways. These highways took up vast amounts of land and many towns were destroyed during their construction. As suburban and highway growth took place, there was a general disinvestment in cities.

In order to improve urban settings in America, one needs to learn from the mistakes made in the past, as well as observe present day cities to see what works well and what does not. In the later part of the 20th century, public life studies began to emerge as a way to observe urban settings. The consideration of the human dimension in urban planning has been overlooked in cities all over the world for some time now. Issues including noise, air, and water pollution, increased traffic, lack of space, or even unpleasant spaces push people out and make cities seemingly lifeless and oppressive. At some point, cities stopped being meeting places for urban residents, and along with that came a sense of isolation and lack of communication among urban communities (Gehl and Svarre, 2010). The different methods involved in public life studies seek to rectify the human dimension to urban spaces and reshape cities to be for people once again. Most of the improvements that have occurred thus far are in economically stable developed countries (Gehl, 2010).

According to Jane Wakefield (2014), "...the 21st century is going to be marked by global urbanization," and almost 5 out of 7 people in the world will live in the cities by the middle of this

century. A recent survey conducted in six different US cities revealed that, while walking down the street, 57% of the people prefer to see old buildings, compared to 15% who want to see skyscrapers, and a mere 17% wanted more shiny, iconic buildings (Wakefield, 2014). In a public life study conducted in Brighton England, people were observed walking up and down New Road, so the street was converted to a pedestrian only space, resulting in a 62% increase in the total number of pedestrians. It went from a place that people simply drove through for transit, to a destination spot. These statistics suggest that there is a demand for "people friendly" streets, but the fact that different people want different things out of their city makes it a challenge for architects and city planners to design cities in an effective manner. All around the globe, human beings have sought greener, more sustainable and environmentally friendly cities (Cooper, 2010). Even so, many cities lack consideration for the public life therein as a result of "modernism [turning] the city into a characterless abstraction...and its contemporary amusements are mere distractions" (Rykwert, 2014).

Two prominent leaders in the movement to redefine public spaces are Jan Gehl and Jane Jacobs. Both authors have been instrumental in developing ideas about how cities should be built as public spaces for human use and each of them have published numerous works on their studies. In the 1950s, urban "renewal" was taking place in many American cities and Robert Moses was the leader behind most urban reshaping projects in New York City. Moses is famous for favoring large highway systems over public transportation, and for transitioning blighted areas into renovated spaces, sometimes known as slum clearance (Beauman, 2011). In the 50's and 60's plans surfaced that threatened Jane Jacobs' Greenwich Village neighborhood by proposing a Lower Manhattan Expressway that would run directly through the community. Jane Jacobs led a local campaign to fight Moses and the plan, narrowly winning in the end. The events of this neighborhood battle, in the context of her deep insight into cities as complex systems, are described in her classic 1962 book, *The Death and Life of Great American Cities*.

Jan Gehl, a coauthor of, *How to Study Public Life*, is an architect, professor, and Urban Design Consultant. He introduced the idea of recreational activities versus necessary activities in an urban setting, wherein necessary activities will be carried out by people no matter what, and recreational or optional activities will depend on the design of the public space and what that space has to offer. His work is based upon evaluating public spaces and recording the everyday public life in a setting over time. After making observations, he then makes recommendations for improvements of the spaces in order to bring the human element back to the city. He conducted many of these studies in Copenhagen,

Denmark, which is now highly pedestrian and bicycle friendly (Project for Public Spaces, n.d.). By asking certain questions about a space, facts can be established and necessary changes can be implemented.

Asking “how many” can provide quantitative insight into the success of an improvement that has been made to a city. An example by Jan Gehl and Birgitte Svarre (2013) is a count of how many people are occupying a space before and after an improvement has been made. This difference would be a way of evaluating a project. Quantitative information regarding how many people occupy a space is a key indicator of the success of a public space, where more people represents success and less people indicates failure because people attract people.

“Who” uses a public space is also an important detail to consider. By collecting categorical information about patrons, planners can attempt to accommodate certain groups of people. By asking “where,” city planners gain knowledge as to movement and lingering within a space. This information is vital to assessing where sidewalks and other elements such as benches should be placed (Gehl and Svarre, 2013). For example, if crowds frequently gather at the corner of a busy intersection, then the addition of tables might create a place for people to sit down and converse.

The question of “what” can answer the types of activities that occur in a public space. Gehl and Svarre note that historically, public space use has migrated from being necessary to optional; that is from grocery shopping to casually strolling, for example. Finding out “how long” is a statistic that can assist planners in determining the quality of a space. Gehl and Svarre (2013) state that people often wish to remain longer in places with more aesthetic qualities and pleasures. “How long” is also an important question according to Gehl Architect’s public life study of downtown Seattle, Washington (2009), because the longer the extent of a stay in a public space, the larger the impact on activity level. In other words, longer stays make for a more lively space. The amount of time people spend in a space is an aspect second only to the number of people in the space in terms of importance to an area’s successful public life. “Spaces where a large number of people linger for a long period of time tend to be more successful. Spaces with few people walking slowly or lingering for long periods of time are perceived to be less successful” (Gehl Architects p. 7, 2009).

Studying public life is a seemingly straightforward task. Observers use various methods and simple tools to analyze what is going on in a certain area at a given time. The intention of their studies may be different depending what the end goal is; researchers may be trying to figure out why a space is not being utilized as it was designed, or they could be figuring out how to optimize a space for

pedestrian use. These simple observations have further reaching implications, especially when seriously considered in the design phase of city planning. Streets in Los Angeles will look much different than a street in Copenhagen. A city seen at eye level while walking three miles per hour is much different than a city seen through a car window at 55 miles per hour. When a city is built for automobiles, everything is done on a larger scale. Street signs turn into billboards, five story buildings turn into skyscrapers, and buildings are set farther back from the street to allow for larger roads and parking lots (Gehl and Svarre, 2013). Historically, public life study has not been limited to understanding pedestrian activities, but also the interactions between pedestrians, buildings, traffic, space, and nature. Gehl defines public space as, "streets, alleys, buildings, squares, bollards: everything that can be considered part of the built environment" and further explains that public life is what occurs within these areas (Gehl, 2013).

A better understanding of the intersection of humans, buildings, and the spaces between them, will introduce a pathway to creating more efficient cities and public spaces. James Howard Kunstler (1993) explains that the built environment should be, "…something akin to a living organism composed of different parts that work together to make the whole greater than the sum of its parts–that is, a community." Notable community planner James Rouse, who designed the Columbia townships in Howard County, Maryland, took into account many aspects of public life in order to create a synergistic community that would fit naturally into the landscape, "…preserving the stream valleys, protecting hills and forests, and providing parks and greenbelts" (Stamp, 2014). Rouse's plan involved combining multiple neighboring villages into a larger self-sustaining entity. Rouse eloquently stated that communities should be able to:

> … Keep in focus what architects and developers have let slide from view: the only real justification of any one of these centers is to serve the people in the area: not the merchants, not the architects, not the developers. If we find what works best for people, we will wind up with both good design and high profits (Stamp, 2014).

While Rouse seemingly mocks business, implying that it is the cause of poor architectural and community planning, he touches upon the idea that it is people that form business and those people should choose to build those businesses in an environment which values those who work for them. By giving citizens the opportunity to comfortably use and enjoy the area immediately surrounding their places of business, they may be able to perpetuate the synergistic relationships among each other, their surroundings, and their work. Rouse's work has proved to be successful seeing as Columbia has been placed among the top 10 "Best Places to Live," according to Money Magazine's biennial ranking of small cities (Yeager, 2014).

Gehl would likely have agreed with Rouse's statement. Gehl has stated that, "…it is considerably easier to work with and communicate about form and space, while life is ephemeral and therefore difficult to describe" (Gehl, 2013). Rouse touched upon the fact that a city is comprised of different structures that are constructed mainly for tenants to conduct business within, but the physical city should be created with pedestrians and people in mind. In making this statement, Rouse implied that there are many different principles of design that make for a well-designed city. Of course, there are differing ideas regarding what constitutes good design depending on specific geographic location and cultural preferences, but there are some that are more or less universal. Such ideas include walkability, pleasing aesthetics, ample space, and safety. Each of these elements, when implemented properly, allows for pedestrians to have pleasant experiences within the public domain. This can lead to a positive feedback loop, in other words a reinforcing effect, where citizens continue to utilize and value these successful design elements in future projects.

Towson Background and History

Towson is a community located in Baltimore County, Maryland, and has served as the county seat since February 13, 1854 (Maryland State Archives, 2014). Towson also serves as a center for education, medicine, and retail. The Baltimore metropolitan area is home to twenty colleges and universities, including Towson University, which is the second largest institution in the University System of Maryland (Towson University, 2014). The Downtown area has long been a public space in which students and all other citizens alike can stroll through to enjoy restaurants, shop in multiple boutiques, or catch a movie with friends.

In a little over two decades, Baltimore City's population has decreased by over 113,000; meanwhile, Baltimore County's population has increased by over 130,000 (Fig. 1). Towson's population is estimated at over 55,000 residents, making up approximately 7% of Baltimore County residents and 1% of all Marylanders (U.S. Census Bureau, 2014). From 2000 through 2010, Towson added approximately 335 residents each year for a total of almost 3,500 additional residents (U.S. Census Bureau, 2014). If current trends continue, of the approximately 5,000 new Baltimore County residents each year, Towson can expect 400 new residents or a 6% increase.

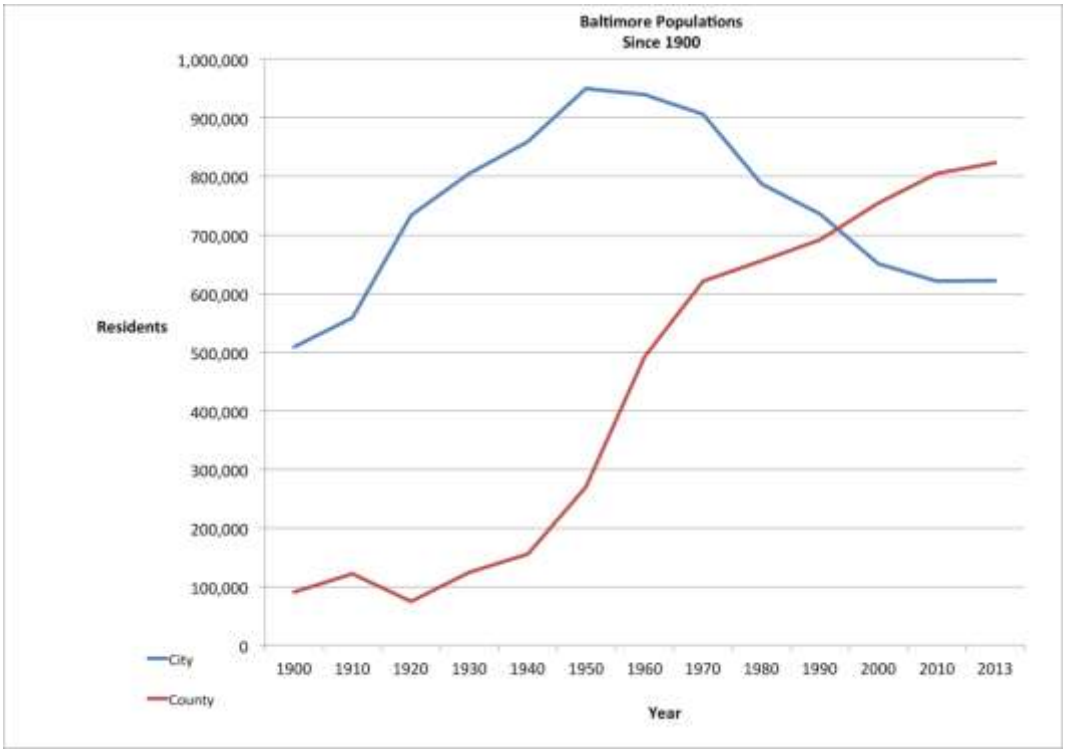


Figure 1 Baltimore County's Population from 1900-2013

Currently, the average commute time to work for Towson residents is 24.4 minutes, which is 4 minutes shorter than the mean Baltimore County commute and over 6 minutes shorter than the average Maryland resident's (U.S. Census Bureau, 2014). Over 60% of Towson residents have a Bachelor's degree or a more advanced degree. From 2008 to 2012, the mean household income for residents was $74,287, a figure that is higher than the state of Maryland's, the United States', and Baltimore County's mean incomes (U.S. Census Bureau, 2014). Adding 300-400 residents to Towson each year will necessitate development that successfully accommodates and sustains quality public life.

In 1954 the city of Towson lost its public rail car to make way for larger roads. Since then, Towson has been built to favor the car, with a bypass for thru-traffic and several large parking garages taking up prime locations. York Road is the main thruway through Towson and is used heavily by motorists. Towson is directly south of I-695, Baltimore's beltway, giving the city further connection to the mass expanses of America's roads. Currently, Towson is more car friendly than people friendly; however, with growing public concern over global climate change and the dangers cars pose to the environment, people are looking for ways to make towns and cities like Towson more pedestrian friendly and more livable. This will increase the population in such cities and eliminate long commutes

for many. The goal is to bring back pedestrian life in communities that are otherwise dependent on the car.

Towson has already invested 700 million dollars in new development that will increase the Downtown density and make the area more attractive to residents, pedestrians, and cyclists (Marks, 2014). The new development will mainly be comprised of housing, with several businesses and new shopping opportunities only blocks apart. The new residential and commercial developments will make Towson a more desirable community. A number of initiatives are currently in place and will continue to move forward within the next few years, including the Towson Circulator, a bike loop and bike parking, and more pedestrian streets (Marks, 2014). These initiatives are in response to the new Towson developmental projects. Among these projects is Towson Square, which opened the summer of 2014, and Towson Row, which will begin construction in 2015.

Towson Square is designed to be a high-performance destination with a four-acre urban setting that includes a 75,000 square foot, 15-screen movie theater with an 850 space parking garage. The pedestrian friendly plaza will have an internal street with a traffic circle; 6 restaurants will line the streets and have bistro-style outdoor dining areas and landscape (Heritage Properties, Inc., 2014). Towson Row is a mixed-use development that will bring ultra-urban appeal to the heart of tree-lined Towson and is designed to be the centerpiece of Towson's major urban renewal project (Towson Row, 2014). Towson Row will be made up of a 200,000 square foot office tower, 100,000 square feet of restaurant and retail space, high rise apartments, student housing, a hotel, parking garage, and a central plaza to bring everything together into a gathering place (Towson Row, 2014). These new projects are going to bring more people into Downtown Towson, which also means more traffic for the residents of Towson. The Towson circulator and bike loop will allow pedestrians and residents to get around without having to rely on cars; cutting down on traffic will make the area safer and more tolerable for pedestrians.

The Baltimore County Department of Planning's (BCDP) Walkable Towson initiative, which took place in the Downtown Towson area between 2007 and 2009, utilized similar public life ideas regarding urban design elements, which played a crucial role in shaping their end product (BCDP, 2009). As those involved with the Walkable Towson initiative noted, "…after World War II, the United States shifted to a new paradigm of suburbanization in which more citizens were expected to drive rather than walk. This resulted in dramatic changes to development patterns and roadway networks" (BCDP, 2009). During the

1950s, Towson's population expanded exponentially and without much regard to the type of community planning which valued walkability.

Purpose of This Project

The environment in which humans live is a key part of their happiness, health, and wellbeing. As the younger generation begins leaving the suburbs and returning to cities, it is imperative to not repeat mistakes in urban planning (Judd and Swanstorm, 2011). Urban development needs to be stable and sustainable so that people can interact with each other and the environment harmoniously. This means cities have to develop in a way that fits a human scale and develop spaces that are conducive to personal human interaction. By studying public life, developers can observe how people interact with their current surroundings, note what spaces people gravitate toward, and how people use the infrastructure. This knowledge then allows them to compare different spaces and create environments more suitable for human life. The study of public life allows communities to move toward developing "Cities for People," where people feel safe, comfortable, and healthy. Cities designed with people in mind will increase in population and bring new economic growth to these communities.

When studying public life, all aspects of human life and public space must be considered. Those studying public life can easily fall into the redundancy of stating obvious facts and lack quantitative data. It is important to not only examine how humans utilize public space but also how the infrastructure and architecture of that space contribute to the quality of human life. Jan Gehl outlines multiple methods to study public life. These methods include keeping a diary, counting, mapping, tracing, tracking, photographing, and test walks. Counting is useful for observing how many people occupy the space. Mapping is useful for plotting where activities occur. Tracing can be used to show where movement occurs over a space. Observing where people are located at specific times throughout the day provides data on how the space is used. These methods elucidate patterns of human behavior such as common pedestrian routes. Photographing is helpful in visually documenting where interactions take place within a public space. For example, photographs of abandoned storefronts demonstrate the aesthetically unpleasing experience a pedestrian experiences in the location. The diary method documents general observations of the public space such as age, attire, and activities of the individuals using the space, as well as the physical condition of the space. Lastly, test walks give the observer the chance to see first-hand the on-goings in an area, what works, and what does not (Gehl and Svarre, 2013).

The goal of Towson University's Senior Environmental Science and Studies Seminar class study is to gain a thorough understanding of how citizens use the space of Downtown Towson, and to continue efforts made by recent planners and organizations in order to make the area the best it can be.

Methods

Overview of Structure and Location for Data Collection

The class conducted research from September through November, observing multiple points within the Downtown area. The locations observed were Allegheny Avenue, Pennsylvania Avenue, Chesapeake Avenue, the courthouse's Patriot Plaza, the York Road traffic circle, and sections of York Road. Allegheny Avenue, Pennsylvania Avenue, Chesapeake Avenue and York Road were divided into two sections for more accurate observation. These locations were studied primarily between 12:00 PM and 2:00 PM throughout the week, mainly on Tuesday and Thursday. This report will analyze in detail ten locations using a variety of methods, each of which are explained further in their respective sections. The objective is to demonstrate not only what works well to facilitate the ease of use and mobility in the Downtown area, but also what hinders people's capability to positively experience Downtown Towson.

Diary Method

The diary method is useful for documenting which spaces are used most often, and which spaces need improvement. Keeping a diary of interactions can help the observer find places on each street where people tend to interact with one another and where they do not. This method is used not just for documenting the surroundings, but also for noticing the quality of life on each street, which will allow the observer to better understand the problems associated with each space. It is beneficial because it allows for the collection of data that is not necessarily categorical. Taking note of specific characteristics, like tree cover, sidewalk width, crosswalks, how inviting a space is in general, and the characteristics of the pedestrians (age group- children or adult, walking speed- rushed or relaxed, dress- formal or casual) will also benefit the observer. A journal noting the date, time, weather on that day, and descriptions of each street as well as the actions of its pedestrians was recorded. After sufficient observations had taken place, the spaces were then compared. This method, paired with the counting method, allowed for a better understanding of the Downtown Towson space.

Counting Method

The counting method is a more straightforward observation technique, but must be done in a uniform fashion. Because pedestrians might be making quick errands, five-minute long brackets were utilized to count them. This tactic helped to avoid counting the same person twice, as would likely occur

in a longer time bracket. Observations regarding these pedestrians were not limited to counting, but also took note of the speed at which people are walking, the direction, and where they walk in relation to the street (sidewalk, crosswalks, etc.). The counting method helps to illustrate how many people are engaging with the public spaces and other pedestrians. This can be useful to determine if spaces are being utilized as they were intended, if the spaces are being utilized in a unique or novel way, and if there are any unconsidered obstacles or challenges in pedestrian pathways. The results of the counting method, when understood in conjunction with the results of other methods, help to determine what could be done to make the area more pedestrian friendly in terms of design principles.

Floor to Area Ratio

Floor to area ratios are an important part of how this project is presented. The New York City Government defines floor to area ratio, abbreviated as FAR, as "the principal bulk regulation controlling the size of buildings. FAR is the ratio of total building floor area to the area of its zoning lot," (Department of City Planning, 2014). To determine a floor to area, one must divide the square footage of a building by the lot size. A FAR score between 3 and 5 is ideal for walkable cities and social urbanism. Anything less than about a 1.0 would lock a community into sprawling, auto dependent cities, in which walking is not a plausible means of transportation. This is because low FAR creates large spaces that are car scaled, rather than people scaled. It is more comfortable to be in an enclosed space, around 3 FAR, than be exposed in a "no man's land" with a very low FAR.

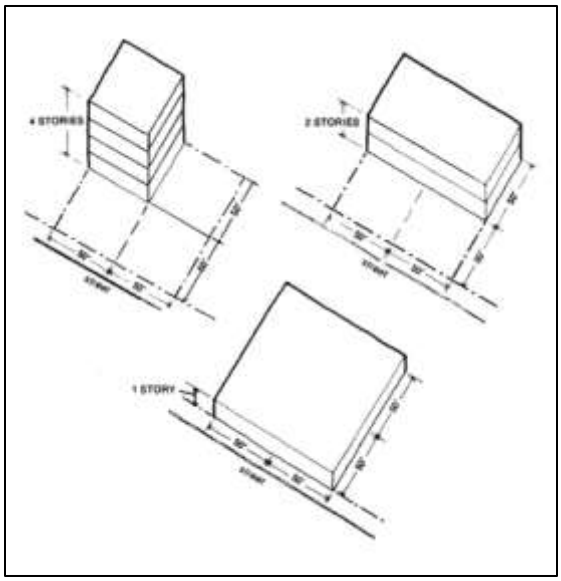


Figure 2. This image depicts three different fictitious buildings that all have the same floor to area ratio, an FAR of 1.0
(Taken from http://www.sonic.net/~apk/FAR /images/far1.gif).

To further this particular public life study, this class will be determining the floor to area ratios of the buildings along Allegheny Avenue, Pennsylvania Avenue, Chesapeake Avenue, Bosley Avenue, and York Road. To do this we must first figure out the parcel size of the land plots, and then the rough square footage of the buildings involved. In order to do this a rough map was sketched showing the relative locations of the buildings present, as well as the estimated heights in stories and any particularly noticeable features and functions. Non-structural components such as parking lots and alleys were also noted. Next, the Baltimore

County neighborhood GIS website was used to determine square footage of the buildings and of the lots. Microsoft Excel was used to calculate the floor to area ratio quickly and accurately. The ranking of the Floor to Area Ratio is based on human scale. If it is too low, then space is wasted.

Ranking	1	2	3	4	5
FAR	0.0 - 0.75	0.76 – 1.5	1.51 – 2.25; ≥10	2.26 – 3.0; 5.1 – 9.9	3.1 – 5.0

Table 1 Ranking of Floor to Area Ration: Poor=1, Fair=2, Satisfactory=3, Good=4, Excellent=5

Facades

The next step in the public life study conducted on Towson was to observe what Jan Gehl calls "active or passive facades". He states that pedestrians have a fairly small window of observation, primarily forward and horizontal. People only observe what is in front of them. In an urban environment, buildings must be designed to captivate passing pedestrians in order to draw business or simply create a quality public space. According to Gehl and his colleagues (2006), the ground floors or entrance facades of buildings are particularly important when evaluating the quality of a public life in an urban setting. He states:

> There is now a considerable confusion in the gap between large and small scales and between 'quick' and 'slow' architecture. Ground floor facades provide an important link between these scales and between buildings and people. For public space and buildings to be treated as a whole, the ground floor facades must have a special and welcoming design. This good, close encounter architecture is vital for good cities.

In *How to Study Public Life*, Gehl and Svarre (2013) create a rubric for grading the facades of urban buildings which allows someone conducting a study to determine if a building face is active, passive, or somewhere in between. A simple observational study was conducted to determine the façade grades of the five streets within this section of Towson.

Table 2: the five façade categories: A-Active = 5, B-Friendly = 4, C-Mixture = 3, D-Boring = 2, and E-Inactive = 1 (Gehl and Svarre, 2013).

The 5 Façade Categories	**A – Active = 5** Small units, many doors (15-20 doors per 100 m/328 feet) Large variation in function No blind and few passive units Lots of character in façade relief Primarily vertical	**B – Friendly = 4** Relatively small units (10-14 doors per 100 m/328 feet) Some variation in function Few blind and passive units Façade relief
C – Mixture = 3 Large and small units (6-10 doors per 100 m/328 feet) Some blind and passive units Modest façade relief Few details	**D – Boring = 2** Large units, few doors (2-5 doors per 100 m/328 feet) Almost no variation, uninteresting units Few or no details	**E – Inactive = 1** Large units, few or no doors (0-2 doors per 100 m/328 feet) No visible variation in function Blind or passive units Uniform facades, no details, nothing

Mapping & Tracing

To map the activity of our 10 locations, we observed each location and recorded activities through the use of symbols on our base maps. Each symbol has a color and represents an activity within our 15 minute observation intervals. Activities were observed and recorded for each location from a central area on the street. Activities are defined as any movement or action that is performed by people in the public. Each map has a key that denotes the meaning of each symbol and color.

Using Google Maps, a pre-planned area was determined, and people's movements were tracked using a drawn line. Each line counts as one individual moving within the space. Thicker lines indicate a greater amount of foot traffic. Tallies were also marked down in order to count the number of individuals moving through the space during 15 minute intervals. Tracing can be a test of cities by observing how people experience them. These movements provide a basic knowledge of patterns.

Walking Speed

To calculate average walking speed for each of the ten designated study positions, it was first necessary to determine a constant distance in which to time pedestrians. Using Google maps we mapped out 100 meter sections of each street location. We chose 100 meters because it gives us the ability to record a wide range of pedestrians while also maintaining a manageable distance for our recorder. On the street, printed Google maps with 100 meters identified in conjunction with land marks were used to accurately mark out 100 meters on each location. The recorder would then find a position on the street where he or she can clearly see both ends of the 100 meters. The recorder would then, using a stop watch, time up to 10 people that walk the full 100 meters. Pedestrians going both ways and on different sides of the street were included. The recording for one location would end after 10

pedestrians have been timed or after 15 minutes had passed. This was performed at 8 of the 10 locations. Patriot Plaza and the traffic circle are not areas that would be conducive to this type of study. We recorded on both Tuesdays and Thursdays from 12:00-2:00 pm. To give each location a final score we compare our mean values to the known average walking speed of people, which is 1.4 m/s.

12 Criteria Method

Public spaces need to be comfortable in order to be inviting. The quality of public space in Downtown Towson was broken down into different categories using the 12 Criteria method as mentioned by Jan Gehl in his book *How to Study Public Life*. Opportunities to see, have fun, and talk and listen are essential to an area's comfort level. Pedestrians need places to move freely, sit, stand, and feel safe and protected from traffic and crime. Small-scale services (aka friendly gestures) also need to be accessible in order for a public space to be useful. Determining whether the space is designed for enjoying positive climate elements involves observing sunny versus shaded space. Designing for positive sense experiences includes aesthetic qualities, landscaping, and animal activity.

Recording whether or not these goals are achieved, and evaluating the degree to which they are met, provide information for determining the degree to which a space is pedestrian-friendly. Distance (e.g., 50m stretches), roads (e.g., York Road and Joppa Road intersection), buildings (e.g., Patriot Plaza), or blocks (e.g., W Pennsylvania Ave between York Road and Washington Avenue), can be used to delimit a public space. In order to evaluate each location scores were assigned to each category. The categories included protection against traffic and accidents, crime and violence, and unpleasant sense-experiences, possibilities for walking, possibilities for standing and sitting, opportunities to see, opportunities to talk and listen, and opportunities for play, exercise, unwinding, and interaction, small-scale services, designing for enjoying positive climate elements, and designing for positive sense experiences. Scores were given on a 1-5 scale, with locations receiving a 1 lacking in public opportunity and locations receiving a 5 providing plenty of public opportunity; the ratings were subjective to the person who was responsible for that particular criteria. The 12 Criteria are as defined in Table 3.

Table 3 Definitions of the 12 Criteria

Protection Against Traffic & Accidents	**Protection Against Crime & Violence**	**Protection Against Unpleasant Sense-Experiences**
• Traffic Accidents • Fear of Traffic • Buffers	• Lived in/Used • Street Life • Social Structure	• Noise • Sun/Rain • Wind
Possibilities for Walking	**Possibilities for Standing**	**Possibilities for Sitting**
• Accessible to Key Areas • Interesting Facades • No Obstacles • Room for Walking • Quality Surfaces	• Attractive & functional ledges • Objects to lean against • Defined spots for standing	• Pleasant views, people watching • Defined zones for sitting • Resting opportunity • Mix of public & café seating
Opportunities to See	**Opportunities to Talk & Listen**	**Opportunities for Play, Exercise, Unwinding, & Interaction**
• Reasonable viewing distances • Unhindered views • Interesting views	• Low noise levels • Public seating conducive to communicating	• Allows for physical activity, play, interaction, and entertainment • Temporary activities (markets, festivals, exhibitions, etc.) • Optional activities (resting, meeting, social interaction) • Opportunities for interaction available both summer & winter
Small-Scale Services	**Designing for enjoying positive climate elements**	**Designing for positive sense experiences**
• Signage • Post Boxes • Notice Boards • Waste Receptacles	• Warmth/Coolness • Sun/Shade	• Aesthetic Qualities • Plants, trees, flowers • Animals

Results and Analysis

Diary and Counting Methods

The observations from the counting and diary methods yielded very similar results at the end of the study. The spaces that had a lower volume of pedestrians during the observation time were spaces that were deemed as less appealing in the recorded diary entries. Allegheny Avenue was observed during the farmers market when the east side of the street was closed to cars and when the farmers market was not in session. During the farmers market the west and east sides of Allegheny had an especially high volume of pedestrians and the space was well used. Other than the Fortis building on the south side of west Allegheny, all of the buildings were considered very appealing, set fairly close to the

street with a fair amount of tree cover. The tables below show the results from the counting method observations at Location 1 on Allegheny. The first table has elevated values because the farmers market was in session for the observation; however the total pedestrian numbers in the second table are quite high as well. Spaces with a higher volume of pedestrians are generally lively and safe, making them places of quality.

Table 4 Allegheny Avenue: Location 1

Time	Street Pedestrians	Sidewalk Pedestrians	Total Pedestrians
12:50-12:55 pm	72	12	**84**
1:00-1:05 pm	80	19	**99**
1:10-1:15 pm	80	18	**98**
1:20-1:25 pm	57	11	**68**
1:30-1:35 pm	47	24	**71**

Table 5 Allegheny Avenue: Location 1

Time	Pedestrians Moving toward Bosley Ave.	Pedestrians Moving toward York Road	Total Pedestrians
12:50-12:55 pm	28	21	**49**
1:00-1:05 pm	31	24	**55**
1:10-1:15 pm	25	22	**47**
1:20-1:25 pm	20	14	**34**
1:30-1:35 pm	13	17	**30**

The following table shows the total pedestrian counts for the second location on Allegheny, across from Trinity Church. This area of Allegheny did not get as much foot traffic, however the pedestrian counts were a bit higher than at other locations. This section of the street housed more places of business and fewer restaurants than Allegheny Location 1, which contributed to the lower numbers.

Table 6: Allegheny Avenue Location 2

Time	Pedestrians moving toward Bosley Avenue	Pedestrians moving toward York Road	Total pedestrians
12:45-12:50 pm	11	21	32
12:50-12:55 pm	7	14	21
12:55-1:00 pm	14	16	30
1:00-1:05 pm	17	8	25
1:05-1:10 pm	13	7	20

Pennsylvania Avenue and Chesapeake Avenue were not as pedestrian friendly as Allegheny Avenue for several reasons. The pedestrian counts on both streets were fairly low, but the weather was not optimal during the Pennsylvania Avenue observation. Several buildings had vacancies along the street which could push pedestrians away from that space. There were few areas of outdoor seating along these two streets other than one restaurant. The counts for Pennsylvania Avenue in front of Charles Village Pub are shown below. Most of the people observed were moving back to the business sector after what was perceived to be a lunch hour. The lower numbers could be due to the overcast and windy weather, but the space did not appear to be conducive to pedestrian activities anyway.

Table 7 Pennsylvania Avenue Location 1

Time	Pedestrians Moving toward Bosley Avenue	Pedestrians Moving toward York Road	Total Pedestrians
12:45-12:50 pm	12	11	23
12:50-12:55 pm	16	8	24
12:55-1:00 pm	25	8	33

Table 8 Pennsylvania Avenue Location 2

Time	Total Pedestrians
1:25-1:30 pm	5
1:35-1:40 pm	7
1:40-1:45 pm	8

Table 8 illustrates some of the lowest counts overall from this study. This observation took place on the west side of Pennsylvania by the Calvary Baptist Church. The overcast and windy conditions had dissipated by this point in the observation; however, that did not help the overall pedestrian volume. The few people that were seen on this side of the street were headed to parked cars along the road, or headed away from this section of road in general. The side of the street across from the church had no real defining characteristics other than

the side of government buildings and sidewalk space. The Church could be a real asset to the street because of its architecture and overall aesthetic pleasantness, but the lack of interest on the other side of the road makes it fade into the background.

Table 9 Chesapeake Location 1

Time	Total Pedestrians
12:30-12:35 pm	24
12:35-12:40 pm	23
12:20-12:25 pm	25
12:25-12:30 pm	29
12:30-12:35 pm	31

Time	Total Pedestrians
1:10-1:15 pm	33
1:15-1:20 pm	35
1:20-1:25 pm	37
1:30-1:35 pm	30
1:35-1:40 pm	28

Table 10 Chesapeake Location 2

The tables above reflect the observations made at both locations on Chesapeake. These numbers are quite similar at both locations, and are also similar to those recorded at Location 1 on Pennsylvania. The vacancies may deter people away from this area, but generally it seemed as though people were walking back to work. Outdoor seating may help attract more pedestrian activity in these spaces.

York Road and the Towson Circle were the worst areas for pedestrians out of all the locations that were observed. These areas were also the most dangerous for people crossing the road because of the high volume of cars and buses moving on the two lane street. There are spaces along York Road that could be used better for pedestrians, like the large empty space underneath the entrance to the Towson Library. This area could be filled with outdoor seating, or a small cafe to attract more people. The table below represents the pedestrians noted at the intersection of York Road and Chesapeake Avenue. The results show a larger volume of people than observed at most of the other locations, however York Road is much larger than most of the other locations, and is used out of convenience for many people. This may be a case where higher numbers of recorded pedestrians do not necessarily mean that a space is well designed. Most people moving at both York Road locations were moving fast and headed to their next errand or activity. Both intersections, and results from observations, show that York Road could definitely benefit from a pedestrian-only space. The car traffic is usually slow, and the din and fumes from the vehicles makes it unpleasant to be on the street at some points.

Table 11 York Road: Location 1 (Intersection at York Road and Chesapeake Avenue)

Time	Total Pedestrians
12:45-12:50 pm	46
12:50-12:55 pm	55
12:55-1:00 pm	51
1:00-1:05 pm	49

Time	Total Pedestrians
1:05-1:10 pm	31
1:10-1:15 pm	40
1:15-1:20 pm	21

Table 12 York Road: Location 2 (Intersection at York Road and Pennsylvania Avenue)

The Towson Circle reflected the most diversity in terms of the ages of people observed at all the locations. This was probably because of the circle's proximity to the Towson Town Center, which attracts more young people during the day. This area was quite unsafe for pedestrians and the crosswalks may serve their purpose better if they were elevated above the road instead of through each entrance to the traffic circle. There was a high volume of people at this location because of the large amount of businesses and restaurants that surround that area.

Table 13 Towson Circle

Time	Total Pedestrians
1:10-1:15 pm	71
1:15-1:20 pm	99
1:20-1:25 pm	80
1:30-1:35 pm	70
1:35-1:40 pm	64

Time	Total Pedestrians
12:50-12:55 pm	21
12:55-1:00 pm	17
1:00-1:05 pm	16
1:05-1:10 pm	15

Table 14 Patriot Plaza

Patriot Plaza is another space that has potential but is underutilized. Since it is like a park, the space is devoted to pedestrians only, and no cars. Much more could be done in the plaza to attract pedestrians, like holding events, including more seating and tables, or even adding a small cafe. This table illustrates the pedestrian count in Patriot Plaza. There were only a few people moving through this space during the time of observation. If there were more to do inside this area, then more people would be attracted to it during a lunch break or if just passing by. The open space is wasted if it is underutilized.

FAR & Facades

Figure 3 depicts the parcel/building IDs which will be used for discussing the results of the floor to area ratio study and the facade grade study.

The following tables describe the findings of the floor to area ratio study and the facade grade study. The tables include the parcel/building ID, the facade grade, the floor area, the floors, the parcel area, and the floor to area ratio. The studied streets include Allegheny Avenue, Pennsylvania Avenue, Chesapeake Avenue, Bosley Avenue, Baltimore Avenue, and York Road. The mailing address of the studied buildings were not taken in to account, for example, there is no table for buildings found on Washington Avenue because they were included on other streets, but the mailing address may be Washington Avenue.

Table 15 Included are the facade grade, the floor area, the floors, the parcel area and the FAR of buildings on Chesapeake Avenue (C#) and Allegheny Avenue (A#).

Parcel/Building	Façade Grade	Floor Area (m^2)	Floors	Parcel Area (m^2)	FAR
North East Side					
C1	C	2235.8	4	10942	0.82
C2	D	993	6	1017	5.86
C3	D	78	2	528	0.3

C4	D	1097	13	1246	11.45
C5	E	5267	6	9910	3.19
South East Side					
C6	B	492	2	454	2.17
C7	B	109	2	114	1.91
C8	A	682	1	707	0.96
C9	A	75	1	75	1
C10	A	411	2	400	2.1
C11	A	53	2	113	0.94
C12	A	831	2	1383	1.2
C13	A	817	1	828	0.99
C14	E	173	2	627	0.55
C15	D	215	1	1201	0.18
C16	E	1700	2	2375	1.43
C17	D	429	2	1191	0.72
C18	D	1910	6	1983	5.78
C19	D	2703	5	3292	4.1
North East Side					
A1	A	419	1	335	1.3
A2	A	520	1	518	1
A3	A	489	4	673	2.91
A4	B	3700	23	36746	2.32
A5	D	2210	4	3430	2.58
A6	C	854	1	7055	0.121
A7	C	315	2	7055	0.089
A8	C	234	3	7055	0.1
A9	E	14573	3	14830	2.95
A10	E	6445	6	23087	1.67
South East Side					

A11	E	433	1	475	0.91
A12	A	265	1	572	0.46
A13	A	493	1	493	1
A14	C	530	3	1145	1.39
A15	D	1184	8	1396	6.79
A16	E	2108	7	2959	4.98
A17	D	212	3	1374	0.46
A18	E	3465	6	3744	5.56

The average FAR for Allegheny Avenue is 2.03 FAR, and the average FAR for Chesapeake Avenue is 2.40.

Table 16 Included are the façade grade, the floor area, the floors, the parcel area, and the FAR of the buildings on York Road (Y#).

Parcel and Building	Façade Grade	Floor Area (m2)	Floors	Parcel Area (m2)	FAR
Y1	D	5585	3	4960	3.38
Y2	C	635	1	940	0.68
Y3	D	340	1	410	0.83
Y4	C	700	2	745	1.88
Y5	C	110	1	150	0.73
Y6	C	40	1	60	0.67
Y7	C	370	2	1320	0.56
Y8	C	315	1	830	0.38
Y9	D	880	2	1315	1.34
Y10	D	115	2	360	0.64
Y11	D	260	2	340	1.53
Y12	D	245	2	260	1.89
Y13	D	290	2	325	1.78
Y14	B	205	2	325	1.26
Y15	D	175	2	175	2.00
Y16	D	680	1	665	1.0

Y17	D	260	2	200	2.60
Y18	D	9480	6	10950	5.19
Y19	D	580	2	580	2.00
Y20	C	545	2	560	1.95
Y21	C	690	2	720	1.92
Y22	C	565	2	600	1.88
Y23	C	235	2	380	1.24
Y24	C	250	2	420	1.19
Y25	C	400	2	470	1.70

Table 17 Included are the façade grade, the floor area, the floors, the parcel area, and the FAR of the buildings on Bosley Avenue (B#).

Parcel and Building	Façade Grade	Floor Area (m2)	Floors	Parcel Area (m2)	FAR
B1	D	5310	7	10000	3.72
B2	E	3355	8	4000	6.71
B3	D	600	5	2150	1.40

The studied portion of Bosley Avenue contained all office buildings, both government and private. The average floor to area ratio in this area was 3.94 FAR, the highest average of any street which was studied. The reason for this is due to the nature of the buildings, which are office buildings. These building types are typically intended to maximize space, often by building upward and covering most of the parcel. The buildings also score low on the facade grade scale, scoring only D's and E's. We can speculate that this is also due to the nature of the buildings.

Table 18 Included are the façade grade, the floor area, the floors, the parcel area, and the FAR of the buildings on Baltimore Avenue (L#).

Parcel/Building	Façade Grade	Floor Area (m2)	Floors	Parcel Area (m2)	FAR
L1	D	630	1	3575	0.18
L2	D	215	2	1400	0.31
L3	D	290	1-2-1	1825	0.21
L4	D	130	2	830	0.31
L5	D	185	2	900	0.41

Baltimore Avenue had the lowest mean floor to area ratio of any of the studied streets, with a mean FAR of 0.28. This number is noticeably lower than any other street. The buildings along Baltimore Avenue are mostly 2 story buildings that do not take up a large portion of the parcel that they sit on. The street is a mix of residential and private buildings, not commercial, which may account for the lower floor to area ratios.

Table 19 Included are the facade grade, the floor area, the floors, the parcel area, and the FAR of the buildings on Pennsylvania Avenue (P#).

Parcel/Building	Façade Grade	Floor Area (m^2)	Floors	Parcel Area (m^2)	FAR
P1	E	5400	6	9740	3.33
P2	open space	0	0	2755	0.00
P3	D	3785	3	14920	0.76
P4	D	1700	11	2025	9.23
P5	open space	0	0	950	0.00
P6	C	85	1	900	0.09
P7	D	140	2	350	0.80
P8	B	415	2	590	1.41
P9	C	650	4	670	3.88
P10	B	2925	10	2925	10.00
P10/B	A	925	3	1200	2.31
P11	D	3500	7	4725	5.19
P12	open space	0	0	425	0.00
P13	A	845	2	3500	0.48
P14	D	900	7	2000	3.15
P15	D	575	4	1300	1.77
P16	E	450	4	1000	1.80
P17	B	215	2	700	0.61
P18	B	250	2	550	0.91
P19	D	300	2	550	1.09
P20	C	285	2	885	0.64
P21	D	625	7	1925	2.27

P22	A	950	1	1400	0.68
P23	C	485	2	1000	0.97
P24	B	585	2	585	2.00
P25	E	570	2	570	2.00

Pennsylvania Avenue is a mix of retail shops, restaurants, religious buildings, and government buildings, as well as three open parcels of land. This mixed use creates a wide range of building types on one short street. As can be seen, the Pennsylvania Avenue's floor to area ratios are ranging from FAR 0.09 to FAR 10.0. The mean floor to area ratio is FAR 2.13 and the median is FAR 1.25. There is also a range in facade grades, from A to E, though only two buildings scored an A and just a handful scored B's.

An easy way to view the facade grades is to give each grade a color and color code a map of the study area. Colors were selected to represent the traditional scale of green being good and red being poor. A key is found in the figure.

Figure 4 This map depicts the facade grades of the buildings within the study site of part of Towson, Maryland.

Once all of the buildings have been graded to determine the quality of their facades, it is important to study how effective the façade can be at drawing pedestrian traffic attention. The next step in the public life study of Towson is to select a variety of buildings with different façade grades and study the passing pedestrians in order to gain an understanding of the true quality of the facades. One

of each type of façade; A-Active, B-Friendly, C-Mixture, D-Boring, and E-Inactive (Gehl, 2013), as well as an open space were observed for a period of time to see how many people did one of three things: stopped and looked, looked while passing, or did not look or interact with the building at all.

Table 20 How many people stopped and looked, looked while walking, or did not look / interact with different types of building facades on Pennsylvania Avenue when observed for 5 minutes on October 14th 2014 around 1pm. The weather was 65°F and sunny.

Parcel	Address	Grade	Stopped and Looked	Looked While Walking	Did not look
P13	401 Bosley	A – Active	3	11	2
P24	400 Washington	B - Friendly	1	4	2
P9	32 Pennsylvania	C - Mixture	2	6	5
P3	120 Pennsylvania	D - Boring	2	16	4
P16	501 York	E - Inactive	1	5	7
P2	17 Pennsylvania	Open Space	9	18	3

Table 21 Observations on Baltimore Avenue from 1:15-1:36 on a Tuesday. It was 68 ºF and sunny.

Parcel	Address	Grade	Stopped and Looked	Looked While Walking	Did not Look
L1	120 W Pennsylvania	D - Boring	0	3	13
L3	504 Baltimore	D - Boring	0	0	13

The results from the observational periods are of interest because they give insight to the interactions between people and their built environment. They raise questions such as: does a building with a good facade grade actually influence people to “interact” with it? How can buildings which do not score well on the facade grade scale be improved? Are there elements that promote interaction that are not included in the rubric?

The observations conducted on October 14th provide some answers to these questions. The top three most interacted with (including both stopping and looking and looking while walking) are #1) P2: an open space, with 27 interactions, #2) P3: a grade D - Boring, with 18 interactions, and #3) P13: a grade A - Active, with 14 interactions. The most interacted with building was not a building at all, but a public space. This can tell us that people are attracted to open spaces, space where they can gather and congregate and interact with each other. The second most interacted with building was P2, a government building which scored a D - Boring. What is it about such a building that draws people in? Most likely it is the open space around the building. This building also has a floor to area ratio of 0.76.

There is more open space than there is building on the parcel, the space surrounding the building is filled with benches, trees, and open pathways, all of which were well used on the pleasant fall day. In an area that does not have much open space and surrounded by buildings that do not promote interaction, the open spaces are the things that pedestrians are drawn to.

Mapping & Tracing

Allegheny Avenue 1

October 18, 2014

Time: 1:34pm-1:48pm

Figure 5 Allegheny Avenue 1 traced map

A lot of movement was observed up and down each side of Allegheny Ave, but not many people crossed the street. About 14 out of the total 57 people who used the space in that 15 minute interval crossed the street (24.6%). Out of those 14 people, only 2 actually used the marked crosswalk.

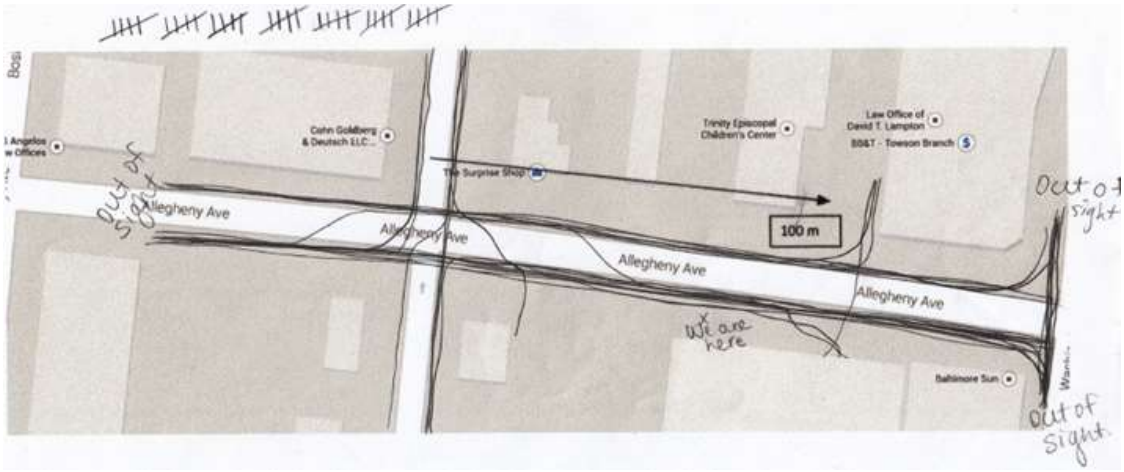
Allegheny Avenue 2

October 28, 2014

Time 1:15pm-1:30pm

There were significantly fewer pedestrians using this portion of Allegheny Ave. 9 out of 35 people crossed the street (25.71%).

Figure 6 Allegheny Avenue 2 traced map



Towson Traffic Circle

October 30, 2014
Time: 12:40pm-12:55 pm

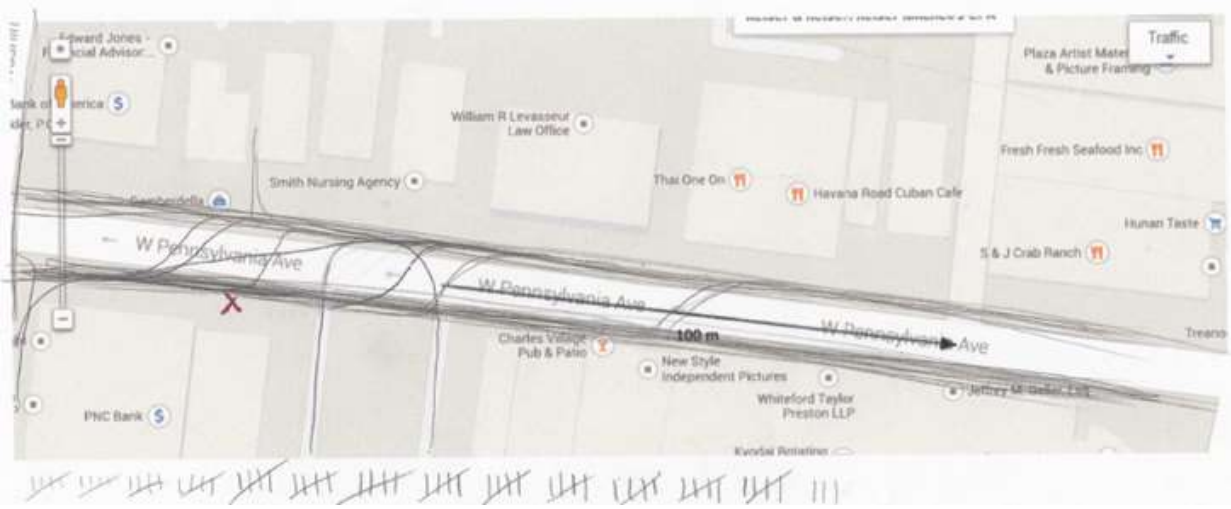
Figure 7 Towson Traffic Circle traced map

There was a high concentration of pedestrians moving about the traffic circle on this date. This is partly because of the farmers market going on. Many people used the crosswalks; however one pedestrian decided to walk through several streets and across the circle itself.

Pennsylvania Avenue 1

October 14, 2014
Time: 12:26pm-12:41pm

Figure 8 Pennsylvania Avenue 1 traced map

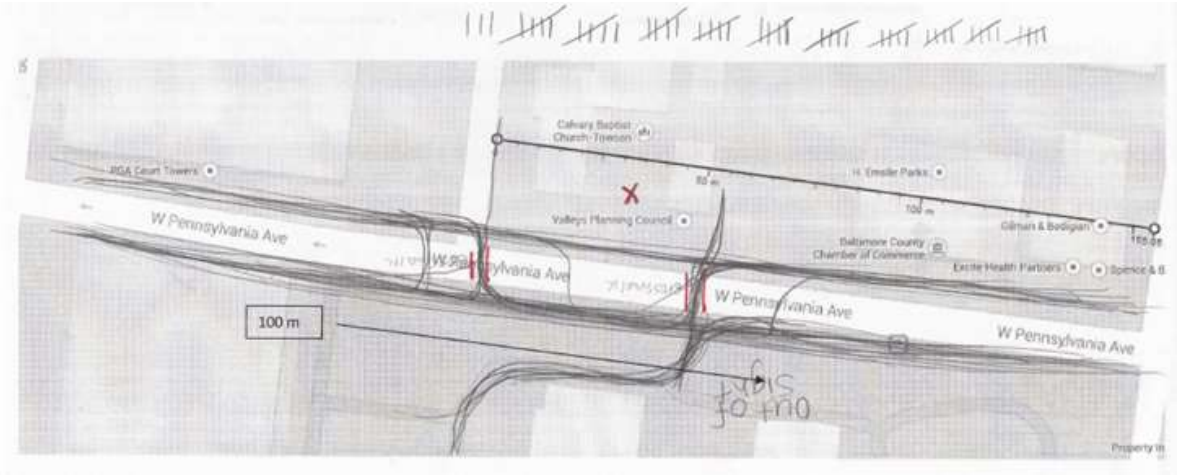


11 out of 68 (16.18%) people crossed the street during this 15 minute interval. The majority of the other pedestrians simply walked up or down the sidewalks on either side of the street.

Pennsylvania Avenue 2

October 14, 2014
Time 12:49 pm- 1:04pm

Figure 9 Pennsylvania Avenue 2 traced map



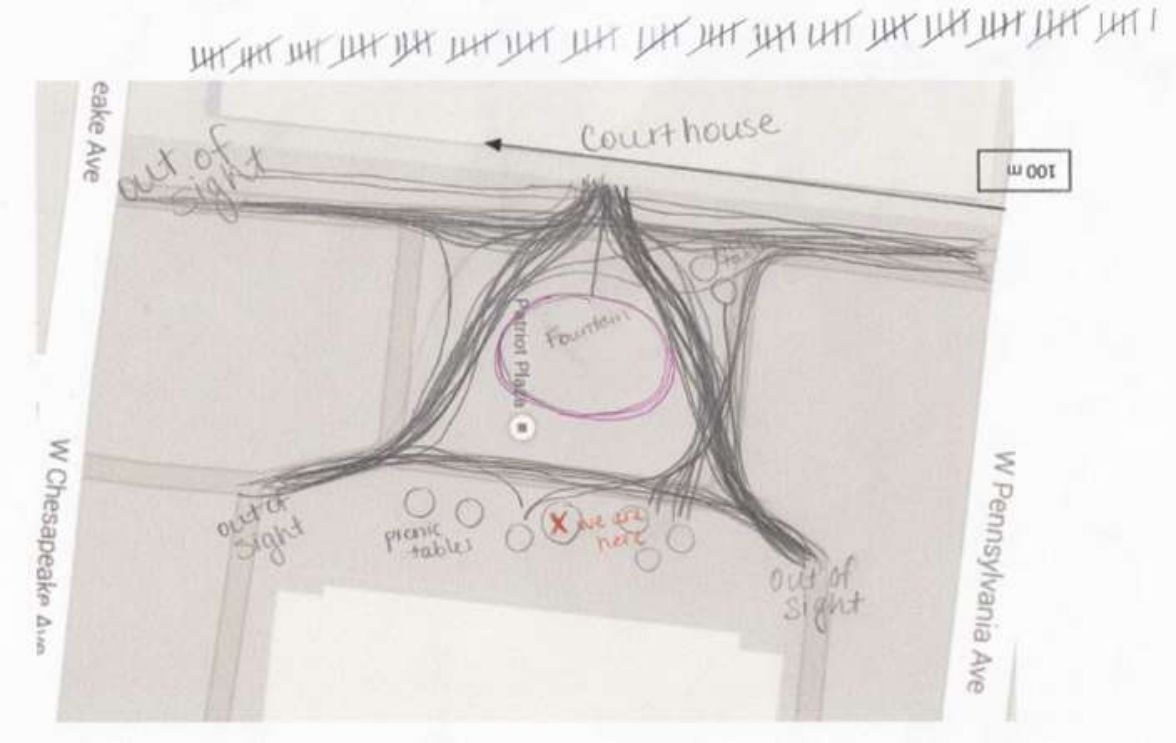
West Pennsylvania Ave had a large number of people use the crosswalks. 20 out of the total 53 pedestrians crossed the street (37.7%) and out of those 20, 13 used a crosswalk. 65% of people who crossed the street made use of the crosswalks.

Patriot Plaza

October 28, 2014

Time: 12:45pm-1:00pm

Figure 10 Patriot Plaza traced map



A large number of pedestrians moved through the Patriot Plaza within the 15 minute interval. There were a total of 96 individuals. There were large numbers of people moving through the area to go in and out of the courthouse. Many people in professional attire used the picnic tables and benches to eat their lunch. Only one individual walked up to the fountain, which was not in operating condition. She sat on the edge for about 30 seconds and then made her way to a picnic table.

York Road 1

October 23, 2014

Time: 12:30pm- 12:45 pm

78 pedestrians were recorded moving through the area. Of the 78 pedestrians, 11 people crossed the street, or about 14%. There was heavy foot traffic on each side of the street.

Figure 11 York Road 1 traced map

York Road 2

October 23, 2014
Time: 12:50pm- 1:05 pm

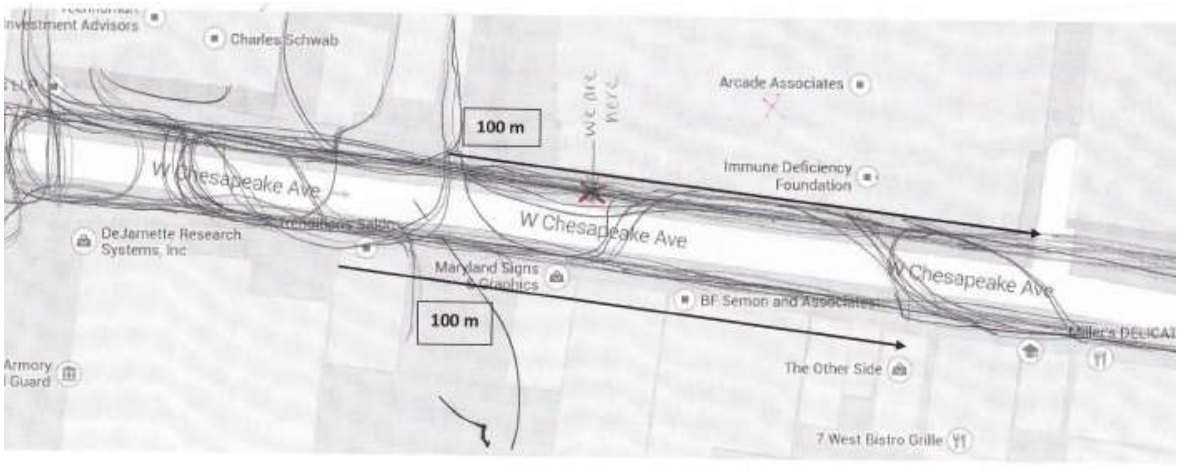
Figure 12 York Road 2 traced map

Ninety-eight pedestrians were observed at this York Road location. Only 20 people crossed the street (20.4%).

Chesapeake Avenue 1

Date: October 9, 2014
Time: 12:30pm- 1:00pm

Figure 13 Chesapeake Avenue 2 traced map

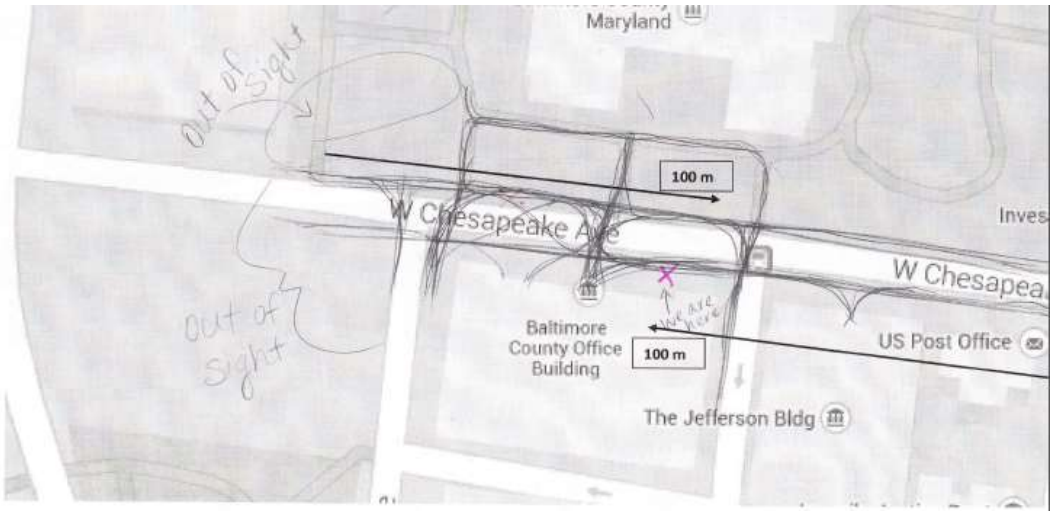


West Chesapeake Ave had a large percentage of the total pedestrians cross the street. Fifty-six out of 97 total pedestrians walked across the street, or about 58%.

Chesapeake Avenue 2

Date: October 9, 2014
Time: 1:10 pm- 1:25 pm

Figure 14 Chesapeake Avenue 2 traced map



On this section of Chesapeake, the crosswalks were heavily used. Of the 42 people that crossed the street, only 12 did not use the crosswalk (about 29%).

Table 22: Ranking criteria for pedestrians crossing the street

Score	1	2	3	4	5
Ranking Criteria	0-20%	21-40%	41-60%	61-80%	81-100%

Table 23: Overall ranking for each street based on pedestrians crossing the street

Street Name	Total Pedestrians	Percentage of Pedestrians Who Crossed the Street	Rank
Allegheny Ave	57	24.60%	2
Allegheny Ave 2	35	25.71%	2
Pennsylvania Ave	68	16.18%	1
Pennsylvania Ave 2	53	37.73%	2
York Rd	78	14%	1
York Rd 2	98	20.40%	2
Chesapeake Ave	97	58.30%	3
Chesapeake Ave 2	56	75.00%	4

A higher ranking may show that a greater number of people felt comfortable enough to cross the street. This can be used as a gauge for how walkable the streets are. When automobile traffic is lighter, people can more freely move about a space.

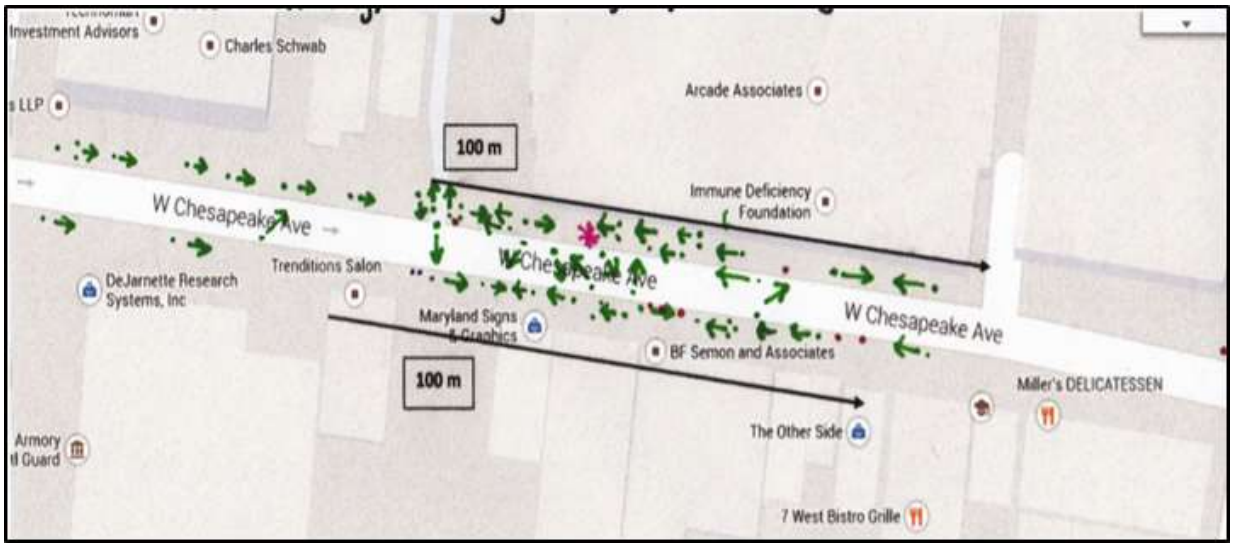


Figure 15 Chesapeake Avenue between Washington Avenue and York Road

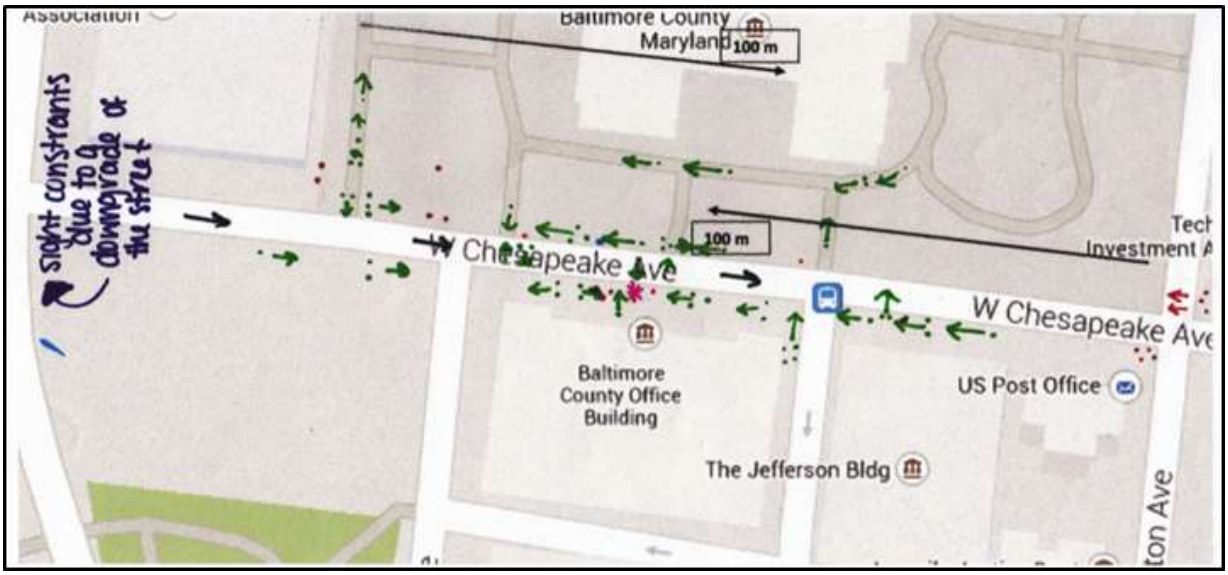


Figure 16 Chesapeake Avenue between Washington Ave. and Bosley Ave.

Chesapeake Avenue

Time: Thursday, October 9, 2014 from 12:30pm-1:00pm

Description: Each dot and arrow represents a person who was on Chesapeake Avenue within the study area of our location. The pink star in the center of the figure represents our location of the study. The green dots and arrow to follow represents a person walking and the direction they were headed. The red dots are people who stood in the same location for a duration of two minutes or longer. We can determine in Figure 15 that people did not use crosswalks and this area is very busy with people walking to and from Washington Avenue and York Road. It seemed as if many of the people were coming from their offices to grab lunch and then head right back to work. We did observe during the lunch break time frame.

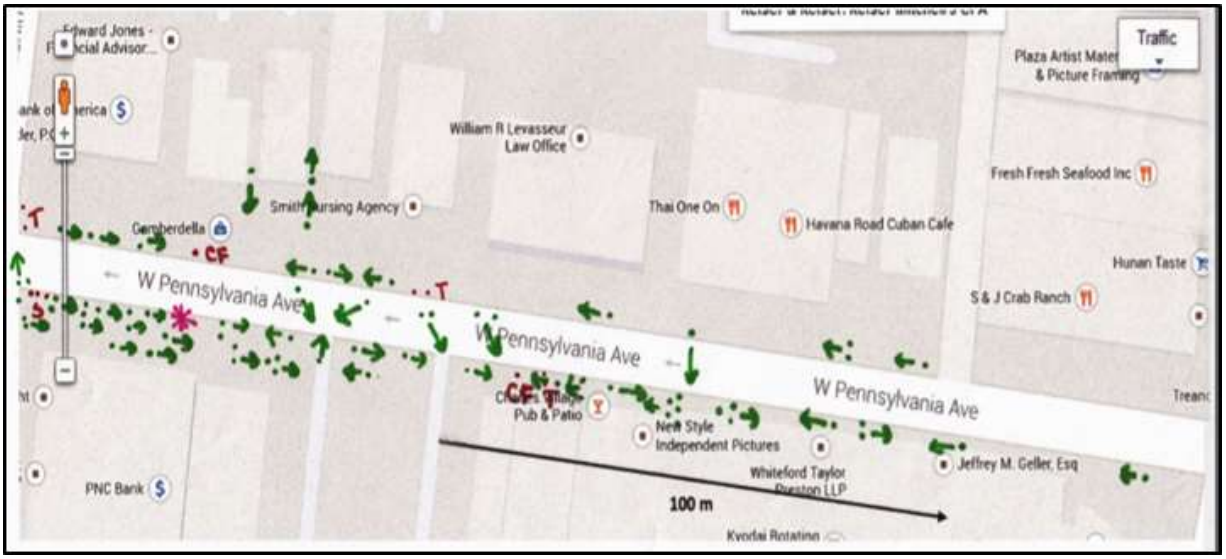


Figure 17 West Pennsylvania Avenue between York Road and Washington Avenue

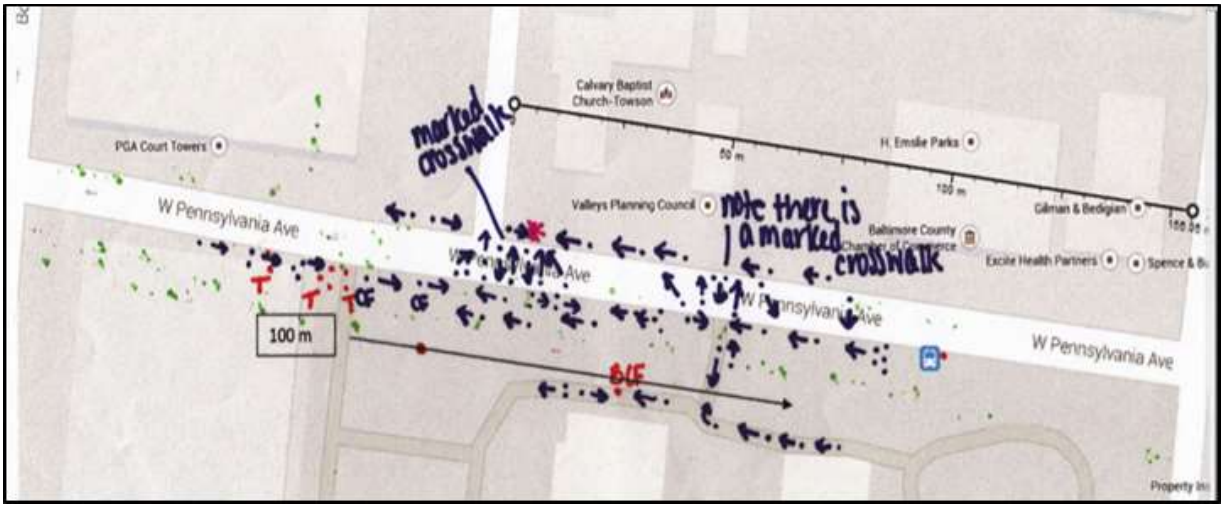


Figure 18 West Pennsylvania Avenue between Washington Ave. and Bosley Ave.

West Pennsylvania Avenue

Time: Tuesday, October 14, 2014 from 12:30pm-1:00pm

Description: The figures above represent a clear illustration of the people observed within the Pennsylvania Avenue area. In Figure 17 the pink star represents our location of study. The green dots with arrows to follow are people who were walking and the direction they were heading. The red dots represent the people who were standing in a location for a time frame longer than two minutes. The CF and T next to the red dot defines those that were on their cell phones (CF) and people who were talking with one another (T) We can see that in Figure 17 more people used the south side of the street to walk on than the northern side of the street. Figure 18 shows the same procedure, but there were more people crossing the street because there were designated crosswalks where the arrows are

crossing. There were more people in this area perhaps because it is more appealing to look at due to the courthouse gardens in the scenery.

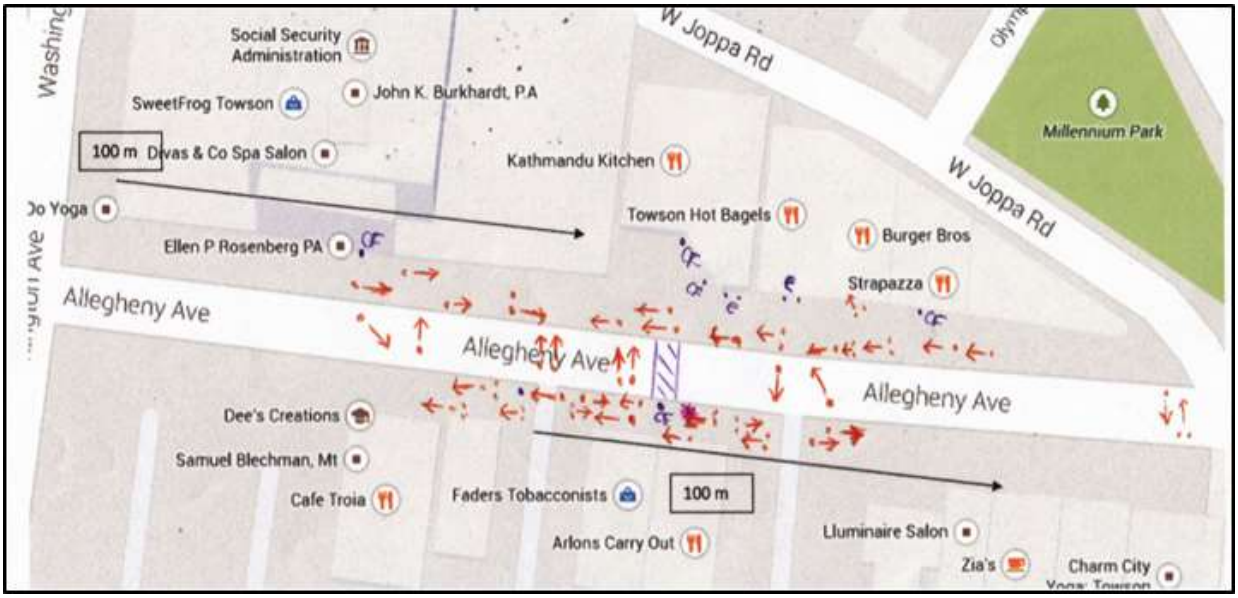


Figure 19 Allegheny Avenue between Traffic Circle and Washington Avenue

Figure 20 Allegheny Avenue between Washington Avenue and Bosley Avenue

Allegheny Avenue

Time: Tuesday, October 28, 2014 from 12:45pm-1:30pm

Description: Allegheny Avenue is known in Towson for the farmers market that is held every Thursday. When it occurs, the street is shut down between the Traffic Circle and Washington Avenue. The observations above were taken on a Tuesday, and pedestrian traffic is much less than on a Thursday when the market is occurring. We can see in Figure 19 that it is more active than in Figure 20, with the orange dots representing people walking and direction, purple dots are where people are standing with the pink star representing the location of the observer. Figure 19 has more people, possibly because the

store fronts on Allegheny are denser than any other street in Towson. The eastern side of Allegheny has less pedestrian traffic because many people do not use the sidewalks while walking there.

Figure 21 York Road between East Chesapeake Avenue and East Pennsylvania Avenue

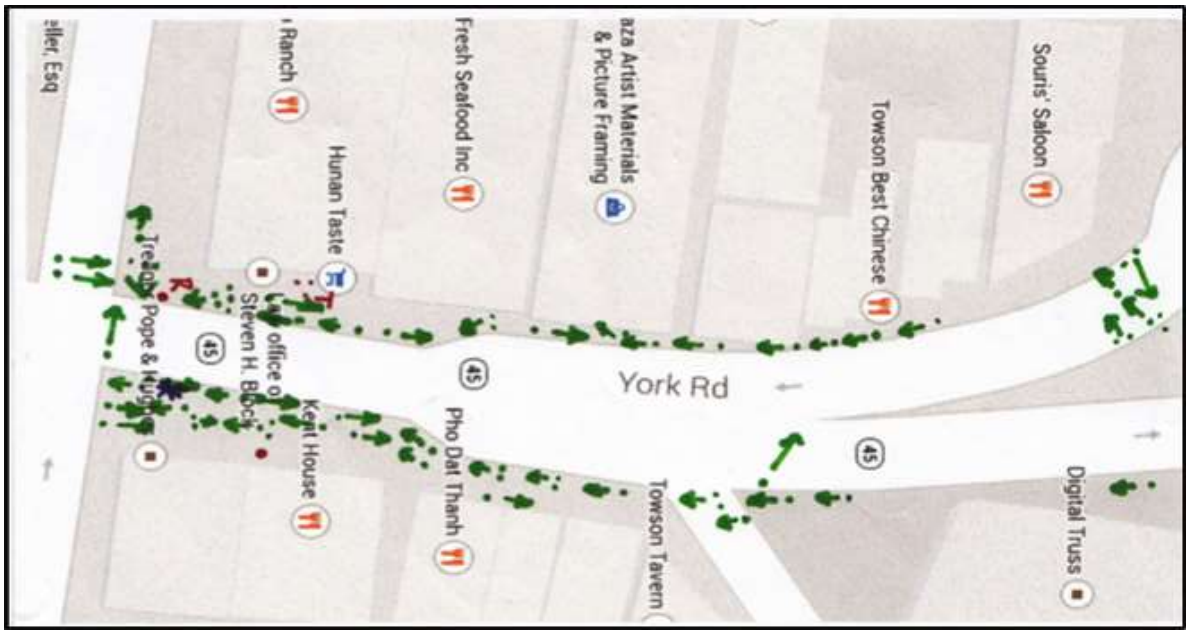


Figure 22 York Road between East Pennsylvania Avenue and the Traffic Circle

York Road

Time: Thursday, October 23, 2014 from 12:30pm-1:00pm

Description: From the figures shown above and the data that has been collected we can see that York Road is one of the busier streets in Towson in regards to pedestrian traffic. The green dots with arrows

are people walking and their direction, with the red dots representing people standing and the purple star with our location of observation. In Figure 21 many pedestrians walked along the side of the street with most of the restaurants, as compared to the other side with less pedestrian traffic and vacant buildings. By the time pedestrians reach the northern side of York Road the traffic becomes more even on both sides of the street from people heading to and from the farmers market on Allegheny or back to their offices off Joppa Road near the circle.

Figure 23 Towson Traffic Circle

Towson Traffic Circle

Time: Thursday, October 30, 2014 from 12:30pm-12:45pm

Description: The Towson traffic circle is not the easiest to figure out, whether you are a pedestrian on the street or a person driving a vehicle. When observing the circle we expected more people to be using it than what we observed. Our location (pink star) was in the middle of the busiest part of the street, perhaps this was because the Farmers Market was taking place on Allegheny Avenue and many people were walking to and from that from all directions of the circle. We also observed people walking up from York Road towards Joppa Road. The traffic circle is not the most suitable for pedestrian traffic, with crosswalks not clearly marked and in locations that people would not necessarily use.

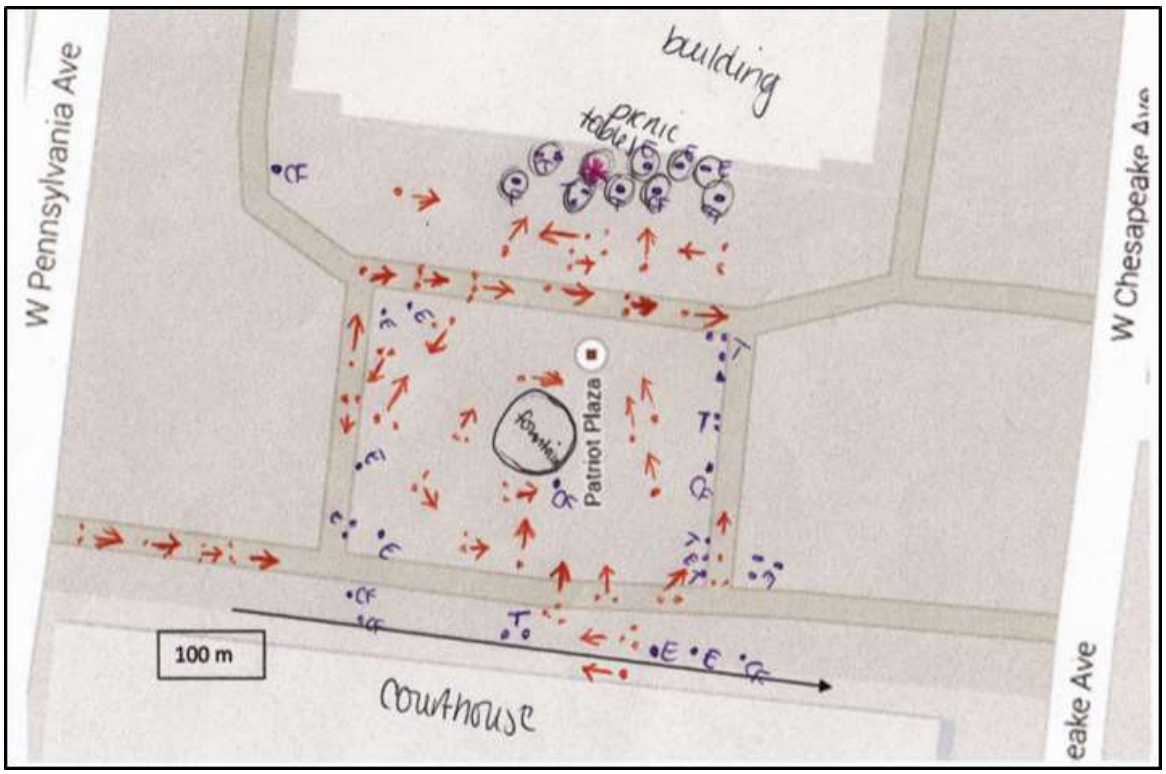


Figure 24 Patriot Plaza, between courthouse buildings

Patriot Plaza

Time: Thursday, October 30, 2014 from 12:45pm-1:00pm

Description: Patriot Plaza is a location that when observed was felt to be a relaxing area for those who take their lunch breaks from work, or people who are visiting the area. Many business people were coming and going in and out of the courthouse, cutting through in order to get to their destinations. Where we were observing (pink star) there were 10 picnic tables under shading which made it nice to observe the area. Although the fountain in the center was not working, many people were sitting around the edges of the area and enjoying the day by eating their lunch or talking on the phone or to a friend. This area could use more seating arrangements near the fountain and around the plaza so people do not need to sit on the walls. The orange dots represent people walking and their direction, purple dots are people standing (eating, E, talking on the phone, CF, or talking to one another, T).

Table 24 The Ranking Criteria for the number of pedestrians walking in the mapped off area versus pedestrians standing in the mapped off area

Score	1	2	3	4	5
Ranking Criteria	0-20%	21-40%	41-60%	61-80%	81-100%

Table 25: Pedestrian walking rankings for the ten locations in the Towson study

Street Name	Total # of Pedestrians	Percentage of Pedestrians Who Walked	Ranking for Walking	Percentage of Pedestrians Who Stood	Ranking for Standing
Chesapeake 1	50	82%	5	18%	1
Chesapeake 2	69	75%	4	24%	2
Pennsylvania 1	72	85%	5	15%	1
Pennsylvania 2	63	86%	5	14%	1
Allegheny 1	64	84%	5	15%	1
Allegheny 2	29	83%	5	17%	1
York Road 1	89	84%	5	16%	1
York Road 2	67	92%	5	7%	1
Traffic Circle	68	100%	5	0%	1
Patriot Plaza	95	59%	3	41%	3

From the observations above we can see the most pedestrians walk along the streets of Towson, possibly going to and from areas. There were very low ranking on the streets that did not have areas to sit and enjoy and those areas got low rankings, whereas the area of Patriot Plaza where there is a significant difference in the ranking of number of people sitting. This area provides more seating and a nicer place to enjoy than on the streets where there is very limited seating available.

The following are general observations taken during 15 to 30 minute increments. Noted are the types of people using the space, the manner in which they are using the space, and the pace and direction of travel.

Chesapeake Avenue 1 and 2

Date: October 9, 2014

Time: 12:30 – 1:00PM

Chesapeake Avenue is a busy street with a great deal of pedestrian traffic. Many people were observed walking through Chesapeake Avenue in order to get Washington Avenue or York Road. Chesapeake Avenue is a dark street, shaded by tall buildings. This street also has many vacant spaces in the buildings; therefore, people walk through the street quickly to get to their destinations. Most of the travelers on this street were dressed in business casual and professional attire. Based on style of dress and direction of travel, it was assumed that many of the pedestrians work in the

professional building on Washington Avenue and use Chesapeake Avenue as a means to reach York Road to get lunch.

Pennsylvania Ave 1 and 2

Date: October 14, 2014

Time: 12:26 – 1:04PM

Pennsylvania Ave. is a calm street, with little vehicle traffic and crosswalks every 50 meters along the street. This has led to people taking their time crossing the street, and encourages the use of crosswalks. On the day of observations an elementary musical band performed in Patriot Plaza (360 feet away). Many pedestrians were observed walking slower in order to listen to the children play before continuing on to their destination. This space had activity from an array of different individuals. Several casually dressed couples (male and female) were observed walking and standing against a fence listening to the music. There were also two families spotted sitting under trees eating, and watching the musical performance. The street also hosted a number of professionally dressed people walking at moderate to fast pace toward professional and county building with lunch and carry out bags.

Allegheny Ave 1

Date: October 18, 2014

Time: 1:34 – 1:48PM

Allegheny is a lively street; there is light vehicle traffic and a strong pedestrian presence. There are several restaurants and cafes along the street with outdoor seating. Many individuals were observed enjoying lunch, sitting at tables and benches along the street. Professionally dressed people in groups were seen socializing at tables and walking with bags toward county and professional building on Washington Ave. The majority of people on this street were dressed in business casual, traveled in groups, and patronized the restaurants along the street. People seemed comfortable crossing the street and lack of vehicle traffic seemed to encourage pedestrians to not use the crosswalks.

York Rd 1 and 2

Date: October 23, 2014

Time: 12:30 – 1:05

York Road is a busy street with a decent amount of businesses, cafes, and restaurants. This street was predominately used by service/retail workers and students. Many people on the street were dressed in casual wear or uniforms. Several individuals with books and backpacks were observed walking north on York Road toward Towson University. Also observed were noticeable groups with two or more people socializing while walking on York Road toward the traffic circle. On this street there was

little jay walking observed. Traffic was so fast and heavy that jay walking was too dangerous. Many used the crosswalk properly and walked quickly or ran across because drivers were often impatient.

Patriot Plaza

Date: October 28, 2014

Time: 12:45- 1:00PM

Patriot Plaza is a large open space in front of a county building. There are plenty of places to sit, people watch, and socialize. This area was predominantly inhabited by working professionals during lunch breaks. Several groups of three or more people were observed conversing and eating lunch together at tables within the plaza. Although the large dry fountain in the center of the plaza served many individuals as a place to sit and rest, it would better serve its aesthetic function if it were in operating condition. There were also sitting areas under several trees on the far right side of the fountain that many used a place to sit, stand, and socialize. Along with ample places to sit and enjoy lunch, this area is located near many eateries. A significant amount of individuals were observed walking across the plaza and into the county building with carryout bags.

Allegheny Ave 2

Date: October 28, 2014

Time: 1:15 – 1:30PM

This part of Allegheny Ave is a quiet street with very light vehicle traffic and no businesses or eateries. About half a dozen people were observed in scrubs standing against buildings, on phones, and sitting on steps under the shade. The building the individuals were standing against happened to be the medical assisting school Fortis Institute. Very few professionally dressed people were observed on this street.

Traffic Circle

Date: October 30, 2014

Time: 12:40-12:55PM

The traffic circle is a very busy area, with a lot of foot and vehicle traffic. On the day of observations Allegheny Avenue, which feeds into the circle, was closed for the weekly farmers market. The presence of the farmers market encouraged heavier foot traffic than normal. The weather on this day was a chilly 58 degrees Fahrenheit with strong winds. This may have been the cause of the moderate to fast walking speed of the pedestrians. Pedestrians on the street were of mixed backgrounds. There were significant numbers of elderly individuals traveling from York Road toward the farmers market and many were carrying bags. More than a dozen individuals in scrubs were observed

walking away from Dulaney and down York Road, possibly from a bus stop and toward Fortis Institute, a medical assisting school. There also were several people in professional dress.

Walking Speeds

Table 26 Walking speeds for the locations in the Towson Study

Walking speed over 100 Meters							
Chesapeake 1 Time (sec)	**Walking speed** V=D/T =(m/s)	**Chesapeake 2** Time (sec)	**Walking speed** V=D/T =(m/s)	**Pennsylvania 1** Time (sec)	**Walking speed** V=D/T =(m/s)	**Pennsylvania 2** Time (sec)	**Walking speed** V=D/T =(m/s)
85	1.18	68	1.47	66	1.52	95	1.05
73	1.37	60	1.67	80	1.25	132	0.76
75	1.33	67	1.49	68	1.47	65	1.54
69	1.45	69	1.45	65	1.54	101	0.99
72	1.39	70	1.43	79	1.27	102	0.98
67	1.49	218	0.46	53	1.89	130	0.77
71	1.41	63	1.59	81	1.23		
211	0.47	84	1.19	73	1.37		
67	1.49	70	1.43	67	1.49		
75	1.33	63	1.59	78	1.28		
Mean	1.29	Mean	1.38	Mean	1.43	Mean	1.01
Allegheny 1 Time (sec)	**Walking speed** V=D/T =(m/s)	**Allegheny 2** Time (sec)	**Walking speed** V=D/T =(m/s)	**York 1** Time (sec)	**Walking speed** V=D/T =(m/s)	**York 2** Time (sec)	**Walking speed** V=D/T =(m/s)
66	1.52	78	1.28	63	1.58	50	2.0
79	1.27	79	1.27	57	1.69	53	1.88
80	1.25	78	1.28	45	2.22	42	2.38
79	1.27	60	1.67	92	1.05	105	0.95
72	1.39	96	1.04	80	1.25	53	1.88
60	1.67	70	1.43	95	1.05	66	1.51
43	2.33	70	1.43	69	1.45	45	2.22
65	1.54	68	1.47	82	1.22	75	1.33
55	1.82			53	1.88	42	2.38
65	1.54					53	1.88
Mean	1.56	Mean	1.36	Mean	1.48	Mean	1.84

Table 27 This shows the rough speeds at which a score is awarded

Walking Speed (m/s)	<1.20	1.30	1.40 (standard average)	1.50	1.60<
Score	**5**	**4**	**3**	**2**	**1**

Table 28 The average scores for each location in the study

Location	Chesapeake 1	Chesapeake 2	Pennsylvania 1	Pennsylvania 2	Allegheny 1	Allegheny 2	York 1	York 2
Score	5	4	3	5	1	4	2	1

12 Criteria Results

Table 29 describes the overall grades of the 12 criteria for the studied areas. The studied streets include Allegheny Avenue, Pennsylvania Avenue, Chesapeake Avenue, Patriot Plaza, the traffic circle, and the corners of Pennsylvania Avenue and York Road and Chesapeake Avenue and York Road. The tables include each of the 12 criteria, the grades of the area studied (five being most pertinent and one being the least), and the comments about each grade.

Allegheny Avenue

Allegheny Avenue provided opportunities to see. The street was open in all directions and offered a clear line of sight for pedestrians. Minimal traffic resulted in little noise pollution, and provided opportunities to talk and listen. In terms of opportunities for play, exercise, unwinding, and interaction, Allegheny Avenue is acceptable. Allegheny Avenue was highly rated in terms of small-scale services thanks to the many shops and their easy accessibility. The farmers market on Thursdays definitely improved the facilities available, but even on the other days of the week the observed section of Allegheny Avenue is well-designed for positive sensory experiences. It provides interesting storefronts, and boasts many aesthetically pleasing plants. The numerous trees, awnings on storefronts, and umbrellas on outdoor tables provided shade but sun was also present, allowing for the enjoyment of both warmth and coolness. Allegheny scored high in all categories for protection against traffic and accidents as well as protection against crime and violence. The road is heavily populated with pedestrians and subsequently has sufficient buffers to protect people from traffic. There really seems to be no fear of traffic, which can be credited to the buffers. Allegheny provided opportunities for walking, sitting, and standing. Due to several cafes and shops along the street, there are plenty of seating arrangements, as well as a mix between public and cafe seating. The sidewalks are large enough for heavy pedestrian traffic with no obstacles in the way but the surface quality of the cement was crackly and uneven in certain areas. Trees, light posts, and buildings provided areas for standing, and some shops had awnings over top which allowed for protection against inclement weather.

Pennsylvania Avenue

Pennsylvania Avenue scored well in terms of opportunities to see. Open lines of sight extended east to west with longer viewing distances on the west end of the street. Large sidewalks accommodate

pedestrians and allow for some physical activity such as running. Limited temporary activities and entertainment reduce the opportunity for interaction in this public space. Pennsylvania Avenue had fewer small-scale services than Allegheny, but still had ample public accommodations. While there were sufficient trees, bushes, and flowers the fact that they were clustered on one end of the street and not the other left something to be desired. Not only did this detract from the section aesthetically, it also caused shaded areas to be lacking and thus did not provide adequate coolness. This location provided good protection from traffic accidents with trees, posts, and parked cars lining the streets to provide a buffer for people walking. It also scored well for protection against crime due to the large amount of people walking and using the sidewalks. There are also government buildings nearby, and some of the government officials were using the sidewalk as well. Pennsylvania Avenue had fewer opportunities than Allegheny Avenue for sitting, walking, and standing, but was still adequate to meet the criteria. The sidewalks are large enough for walking with no interference from obstacles. This location had over six defined zones for sitting including tables outside of shops and benches along the street. There are fewer defined areas to stand with only two functional ledges, but these areas had buildings to stand against along with some pillars in front of the PSA Court Towers.

Chesapeake Avenue

Chesapeake Avenue provides reasonable viewing distances with buildings on both sides that create a well-defined street. Aside from the courtyard and a couple of tables, there is no public seating conducive to communicating. No temporary activities were observed, but courtyard provides large area to exercise, play, and unwind. This area had fewer public amenities and therefore had fewer small scale services along the street. The shade, and thus the amount of warmth and coolness felt, was available in some sections but severely lacking in others. The lack of trees, patches of shrubs that were not very well groomed, construction sites, and numerous vacant buildings along the stretch brought about a low rating in terms of design for positive sense experiences. Chesapeake Avenue provided good protection for pedestrians against traffic accidents due to the larger amount of parked cars, trees and posts. The area is also mostly surrounded with government buildings with a good amount of people, including police and government officials using the sidewalks. This allows for adequate protection from violence and crime. Some awnings and trees along the sidewalk provide sun and rain protection for people walking by. The area does lack protection from the wind and car noise. Chesapeake Ave. has large sidewalks for walking with smooth, even surfaces, but provided minimal opportunity for sitting and standing. There are only three benches throughout the street and no opportunities for people watching

due to its vacancy. Chesapeake Ave. provided no functional ledges for standing, but has buildings to lean against.

Patriot Plaza

The Patriot Plaza, located between West Pennsylvania Avenue and Chesapeake Avenue, is a large open square with a centrally located fountain. The square's main function is to serve as a corridor to and from the Towson Courthouse. All directions provide an unhindered view with interesting sights in most directions. The courthouse, memorial, ledges, fountain (although not on), trees, and flags allow the eye to focus on many different objects at multiple distances. The east side of the square is adjacent to the county building and is aesthetically unappealing. The county building also produces significant noise pollution via air handling units and makes conversation difficult at the east side tables. Benches, ledges, and tables throughout the space provide ample public seating. The large area provides plenty of space for activity and play; however, aside from those entering courthouse, few persons used this public space. This location did not have typical small-scale services, but did have some amenities that were not found in any other observed space, such as cigarette disposal bins. The various memorial listings and fountains were aesthetic qualities that gave this area a high rating. The landscaping was full of various trees, shrubs, flowers, and grass, and there was plentiful shade and sun alike. Patriot Plaza provided the most protection from traffic and crime alike. It is impossible for traffic to enter the plaza and therefore there is not fear of traffic from the people in the plaza. There are constantly people entering and leaving the courthouse, not to mention that some of these people are armed police officers and government officials. The plaza provides ample protection from the sun and rain, with trees along the east side of the plaza and the courthouse's overhang on the west side. The studied area provided the best opportunities for sitting, standing, and walking. The area has large walkways throughout the whole square with smooth, even, and attractive surface quality. There are over 10 tables with seating along with ledges and benches along the pathway. The courthouse is a great area for people watching due to the heavy traffic of people who are coming or going, and eating lunch in this space.

Traffic Circle

The traffic circle provides particularly interesting and unhindered views. A clear line of sight to the Towson Town Center mall and in both directions on Allegheny Avenue creates an open space. The circle is too busy for safe physical activity, but it does provide adequate opportunity to unwind and interact. The traffic circle was lacking in public services, as there were no post boxes or notice boards of any sort. The only signage applied to the traffic. The circle has large volumes of traffic moving through it almost constantly throughout the day. While there are gardens with concrete barriers, trees, and posts

around the circle, there are a few spots where people walking are unprotected. There is a fear of traffic here compared to other spots that we studied. Occasionally, a police officer can be observed sitting in the circle and observing traffic. The number of people and the officers help to provide protection against crime. There is a lot of noise from the traffic that passes through the circle. The area provides little protection from the sun, wind, and rain. The only real sources of protection are the shops. This location ideally is most optimal for standing and walking due to the four crosswalks around the circle, but the heavy traffic detracts from the ability of pedestrians to do so. Instead, most pedestrians are simply using this space to get from point A to point B. There are no functional ledges to lean against, and minimal seating unless you include seating from the restaurants and shops that border the traffic circle.

Corner of Pennsylvania Avenue and York Road

The intersection at Pennsylvania and York Road is busy during the weekday afternoons. Several opportunities to see can be found at this location. For example, an unhindered view south on York Road is particularly appealing. Likewise, the Towson Commons façade is interesting and the historic buildings on York Road display intricate detail and a lot of character. The noise pollution and business of this intersection, along with few ledges and no benches, chairs, or tables prevent this region from providing adequate opportunity for conversation. The absence of temporary activities hinders public interaction. However, large sidewalks do provide space for resting and meeting. The corner of Pennsylvania Avenue and York Road was severely lacking in many aspects. The only signage was applicable to traffic, there were no post boxes, very few store advertisements on the street, no shade due to the fact that there were no trees of any kind, and essentially no aesthetic qualities. This location provides good protection from traffic with sufficient buffers such as trees, posts and parked cars. There is a fear of traffic that is most likely due to the shear amount of traffic on York Road. The corner provides good crime and violence protection due to the large amount of people using the space, traveling in groups, and a few cops that drive by. There are a few trees and awnings that would provide protection from the sun and rain. Again the large amounts of traffic do cause noise issues. It also lacks protection from the wind the only real escape from the noise and wind would be shops or the Towson commons. The intersection has little opportunity for sitting with only two benches in this area. The corner has four crosswalks, smooth surfaces, and large sideways for walking and standing while waiting to cross, but nowhere to stand leisurely. There are plenty of opportunities for people watching, but with no defined seating areas people probably would not hang out there.

Corner of Chesapeake Avenue and York Road

Diverse facades and tree-lined streets provide interesting views at the intersection of Chesapeake Avenue and York Road. The large Towson Library has an attractive build and contrasts nicely with the surrounding buildings. Reasonable viewing distances without any hindrances enable the eye to wander and focus on a variety of images. Heavy traffic and only one bench in the vicinity make this area a difficult place to hold conversation or play/unwind. The corner of Chesapeake Avenue and York Road was even more lacking than Pennsylvania Avenue and York Road. While there was a bit more signage on buildings in addition to traffic signs, newspaper bins and trash on all sides of the street, there was still no recycling, no post boxes, no shade, no trees, no flowers, no bushes, no aesthetic qualities whatsoever. The corner of Chesapeake Avenue and York Road provides good protection from traffic with trees, posts, and parked cars to act as buffers. There does not seem to be a fear of traffic here even though there is a large amount of traffic on York Road. There is also ample protection from crime and violence due to the large number of people in the area. There is consistent traffic noise and no protection from the sun, wind, and rain other than entering the shops. Similar to the corner of Pennsylvania Avenue and York Road, the corner of Chesapeake Avenue and York Road has only two benches for sitting. This location has four crosswalks, which makes for defined zones for standing, but nowhere leisurely. The sidewalks are wide with even surfaces, which allow room to walk, although heavy traffic can be an obstacle.

Analysis

Based on the results, Patriot Plaza was the area that met most of the criteria being studied and averaged the highest score of 3.68 out of 5. The Patriot Plaza and the courtyard east of the county building provide the best opportunities to see, communicate, play, and exercise. These areas are large enough to accommodate public life and provide a variety of positive experiences to create a comfortable environment. Patriot Plaza also provides the best protection from traffic, crime, and unpleasant sense-experiences. This area has the overall best rating for opportunities to walk, sit, or stand. There is plenty of seating with over ten tables, benches, and ledges along the sidewalk. The courthouse itself is a great area for people to stand due to the wide ledges and pillars that border the building. It is also quiet with a heavy flow of people, which allows individuals to unwind, eat lunch, and people watch. Although Allegheny Avenue was the highest rated in terms of small-scale services, design

Studied Locations	Overall Grade
Allegheny Avenue	3.64
Pennsylvania Avenue	3.26
Chesapeake Avenue	2.74
Patriot Plaza	3.68
Traffic Circle	2.95
Corner of Pennsylvania Ave and York Rd	2.48
Corner of Chesapeake Ave and York Rd	2.38

Table 29 Overall grades for each of the studied locations

for climate elements, and design for positive sensory experience, Patriot Plaza did provide beautiful landscaping and aesthetic qualities that give it a high rating.

Table 30 Twelve Criteria results for Allegheny Avenue

Allegheny Avenue		
Protection Against Traffic & Accidents	**Comments**	**Grade**
Traffic Accidents	road closed for farmers market, clear cross walks	5
Fear of Traffic	Portion of road closed to traffic on Thursdays	5
Buffers	Trees, post, parked cars, gates	5
Protection Against Crime & Violence	**Comments**	**Grade**
Lived in/ Used	heavily populated	5
Street Life	Farmers market on Thursday, Shops	5
Social Structure	Farmers selling, cops blocking off street	5
Protection Against Unpleasant Sense-Experiences	**Comments**	**Grade**
Noise	traffic noise	4
Sun/Rain	some trees, awnings, shops	3
Wind	possibly enter shops for protection	2
Possibilities for Walking	**Comments**	**Grade**
Accessible to Key Areas	Access to shops, crosswalk for bookstore and other shops	5
Interesting Facades	Cute shops, farmers market	5
No Obstacles	Trash cans, seats, benches, etc. were along the edges of the street	5
Room for Walking	Sidewalks are 17ft wide, no obstacles in the way	5
Quality Surfaces	Some surfaces were uneven and crackly	3
Possibilities for Standing	**Comments**	**Grade**
Attractive & functional ledges	3 spots with ledges	3
Objects to lean against	Trees, light posts, buildings	4
Defined spots for standing	Many open places for standing, buildings with awnings for bad weather	4
Possibilities for Sitting	**Comments**	**Grade**
Pleasant views, people watching	Interesting storefronts, lots of seats for people watching, crowded area	5
Defined zones for sitting	Over 11 tables with seats , 4 with umbrellas	5
Resting opportunity	Over 6 benches along the street	5
Mix of public & café seating	Cafe seating mixed with benches along the street	5
Opportunities to See	**Comments**	**Grade**
Reasonable viewing distances	Open in all directions	4
Unhindered views	Little to no barriers	4
Interesting views	Varied architecture (scale, design, color), greenery (plants)	3
Opportunities to Talk & Listen	**Comments**	**Grade**
Low noise levels	Moderate traffic results in little noise pollution	3
Public seating conducive to communicating	No chairs, benches, tables; nowhere to sit	1
Opportunities for Play, Exercise, Unwinding, & Interaction	**Comments**	**Grade**
Allows for physical activity, play, interaction, and entertainment	Moderate/low traffic and large sidewalks provide spaciousness for biking, running, etc.	4
Temporary activities (markets, festivals, exhibitions, etc.)	Farmers market provides excellent opportunity for interaction; however, only on Thursdays	4
Optional activities (resting, meeting, social interaction)	Openness for conversing but few places to sit	1
Small-Scale Services	**Comments**	**Grade**

Signage	restaurant ads, parking	5
Post Boxes	corner of Washington Avenue	3
Notice Boards	newspaper bins	5
Waste Receptacles	both waste & recycling easily accessible	5
Designing for enjoying positive climate elements	**Comments**	**Grade**
Warmth/Coolness	sun & shade (awnings, umbrellas, trees)	5
Designing for positive sense experiences	**Comments**	**Grade**
Aesthetic Qualities	interesting storefronts	5
Plants, trees, flowers	trees/flower boxes ≈10 ft., patches of grass, lawns	5
Animals	squirrels, birds	3
Overall Grade	**3.64**	

Table 31 Twelve Criteria results for Pennsylvania Avenue

Pennsylvania Avenue		
Protection Against Traffic & Accidents	**Comments**	**Grade**
Traffic Accidents	buffers, some cross walks with no signs	5
Fear of Traffic	large sidewalks, pedestrians j-walking	5
Buffers	Trees, post, parked cars,	5
Protection Against Crime & Violence	**Comments**	**Grade**
Lived in/ Used	good amount of people walking	5
Street Life	pedestrians walking, shopping	5
Social Structure	Government/ business, people	5
Protection Against Unpleasant Sense-Experiences	**Comments**	**Grade**
Noise	traffic noise	3
Sun/Rain	few trees for sun protection	2
Wind	possible to enter shops	2
Possibilities for Walking	**Comments**	**Grade**
Accessible to Key Areas		5
Interesting Facades	shops, restaurants, beautiful church	4
No Obstacles		5
Room for Walking	wide walkways	5
Quality Surfaces	surfaces change along the street	4
Possibilities for Standing	**Comments**	**Grade**
Attractive & functional ledges	2 ledges along the street	3
Objects to lean against	pillars along the tower, buildings	4
Defined spots for standing	more than 5 defined standing zones	4
Possibilities for Sitting	**Comments**	**Grade**
Pleasant views, people watching	some shops, trees and bushes, less populated than Allegheny	4
Defined zones for sitting	more than 5 defined sitting zones	4
Resting opportunity	Restaurant seating, benches	4
Mix of public & café seating	2 cafes with outside seating	3
Opportunities to See	**Comments**	**Grade**
Reasonable viewing distances	Open lines of sight in both directions, longer viewing distances farther west on Penn.	3
Unhindered views	Can see Washington Ave from CVP; no obstructions west of Washington	4
Interesting views	Multi-use buildings provide variety of facades; trees, bushes, grass; government buildings	5
Opportunities to Talk & Listen	**Comments**	**Grade**
Low noise levels	Minimum traffic results in low traffic noise along street; low	5

	ambient noise levels	
Public seating conducive to communicating	No seating west of Washington; however, some seating on south side of street near government buildings	1
Opportunities for Play, Exercise, Unwinding, & Interaction	**Comments**	**Grade**
Allows for physical activity, play, interaction, and entertainment	Nothing to do except running/walking	1
Temporary activities (markets, festivals, exhibitions, etc.)	Nothing going on either side of Washington	1
Optional activities (resting, meeting, social interaction)	Large sidewalks provide plenty of open space to stop, talk, etc.	5
Small-Scale Services	**Comments**	**Grade**
Signage	parking pay stations, bus stop, restaurants, ATMs	5
Post Boxes	near corner of Washington	2
Notice Boards	newspaper bins	5
Waste Receptacles	no recycling	1
Designing for enjoying positive climate elements	**Comments**	**Grade**
Warmth/Coolness	more trees on north side of street until Washington Avenue	3
Designing for positive sense experiences	**Comments**	**Grade**
Aesthetic Qualities	bushes, grass, trees	5
Plants, trees, flowers	more trees on north side of street until Washington Avenue	3
Animals	birds	2
Overall Grade	**3.26**	

Table 32 Twelve Criteria results for Chesapeake Avenue

Chesapeake Avenue		
Protection Against Traffic & Accidents	**Comments**	**Grade**
Traffic Accidents	Clearly labeled cross walks, buffers	5
Fear of Traffic	Large sidewalks, clear cross walks	5
Buffers	Parked cars, tress, posts	5
Protection Against Crime & Violence	**Comments**	**Grade**
Lived in/ Used	people walking, Government buildings	5
Street Life	people walking, using the stores along east end	5
Social Structure	Mostly business/ government people walking	5
Protection Against Unpleasant Sense-Experiences	**Comments**	**Grade**
Noise	noise from cars	3
Sun/Rain	Some awnings and trees	3
Wind	Could possibly enter shops	2
Possibilities for Walking	**Comments**	**Grade**
Accessible to Key Areas		5
Interesting Facades	Vacant buildings	2
No Obstacles	walkway was wide, nothing blocking the path	5
Room for Walking	wide walkways	5
Quality Surfaces	smooth, even surfaces	4
Possibilities for Standing	**Comments**	**Grade**
Attractive & functional ledges	N/A	2
Objects to lean against	buildings	1
Defined spots for standing	2 benches along the street	2

Possibilities for Sitting	Comments	Grade
Pleasant views, people watching	construction, vacant buildings	1
Defined zones for sitting	2 benches along the street	2
Resting opportunity	2 benches along the street	2
Mix of public & café seating	N/A--no cafes, barely any seating	1
Opportunities to See	**Comments**	**Grade**
Reasonable viewing distances	East/west provides reasonable viewing distances; buildings create sense of space	5
Unhindered views	No hindered views	5
Interesting views	Homogeneous facade north side, east of Washington; courtyard, varied architecture elsewhere are interesting; transparency in business facades provides depth to buildings on south side, east of Washington	4
Opportunities to Talk & Listen	**Comments**	**Grade**
Low noise levels	One way street has moderate/low ambient noise	4
Public seating conducive to communicating	Couple of tables along street, not much else	1
Opportunities for Play, Exercise, Unwinding, & Interaction	**Comments**	**Grade**
Allows for physical activity, play, interaction, and entertainment	West side provides nice courtyard area for activity and interaction; however, little else on street for physical activity/play	3
Temporary activities (markets, festivals, exhibitions, etc.)	Nothing going on even though it is a one way street	1
Optional activities (resting, meeting, social interaction)	Plenty of room to stop, interact, meet; quiet enough to converse	4
Small-Scale Services	**Comments**	**Grade**
Signage	buildings with signs on other street side not evident; parking	3
Post Boxes	post office with boxes in front	4
Notice Boards	newspaper bins	3
Waste Receptacles	no recycling	1
Designing for enjoying positive climate elements	**Comments**	**Grade**
Warmth/Coolness	varied shade due to varied trees on each side	3
Designing for positive sense experiences	**Comments**	**Grade**
Aesthetic Qualities	vacant buildings, construction	1
Plants, trees, flowers	few trees, patches of shrubs not filled very well	2
Animals	birds	1
Overall Grade	**2.74**	

Table 33 Twelve Criteria results for Patriot Plaza

Patriot Plaza		
Protection Against Traffic & Accidents	**Comments**	**Grade**
Traffic Accidents	impossible for traffic to enter the plaza	5
Fear of Traffic	no traffic	5
Buffers	Large hills on either side of the plaza, fencing	5
Protection Against Crime & Violence	**Comments**	**Grade**
Lived in/ Used	Lots of people using the space	5
Street Life	Located between two government buildings	5
Social Structure	Lots of cops, government officials	5
Protection Against Unpleasant Sense-Experiences	**Comments**	**Grade**

Noise	Large noisy a/c vents along east side, noise from traffic	4
Sun/Rain	Trees on one end, over hang from court house	5
Wind	Could possibly go inside the courthouse	2
Possibilities for Walking	**Comments**	**Grade**
Accessible to Key Areas	Entrance is out of the way	3
Interesting Facades	Water fountain in center--never on, Beautiful atmosphere in old courthouse(nice landscaping, water fountain, statues), police and fire department signs	3
No Obstacles		4
Room for Walking	Wide pathways, no obstacles in the way	5
Quality Surfaces	Smooth, even surfaces	5
Possibilities for Standing	**Comments**	**Grade**
Attractive & functional ledges	Ledges all along the pathways, ledges border the courthouse	5
Objects to lean against	Many people lean against courthouse, ledges, pillars	5
Defined spots for standing	Over 5 standing spots	5
Possibilities for Sitting	**Comments**	**Grade**
Pleasant views, people watching	Good area for people watching	5
Defined zones for sitting	More than 10 defined sitting zones	5
Resting opportunity	Ledges and benches along the pathway	5
Mix of public & café seating		1
Opportunities to See	**Comments**	**Grade**
Reasonable viewing distances	Reasonable viewing distance in all directions	5
Unhindered views	Nothing blocking views in any direction; very open space	5
Interesting views	Courthouse, memorial, ledges, fountain (not on), trees, flags; east side of plaza contains trees but has ugly building façade (side of county building)	4
Opportunities to Talk & Listen	**Comments**	**Grade**
Low noise levels	Air handling unit on government building on east side of square is loud and annoying; otherwise area is pretty quiet.	4
Public seating conducive to communicating	Plenty of seating--benches/ledges and tables along perimeter of area	5
Opportunities for Play, Exercise, Unwinding, & Interaction	**Comments**	**Grade**
Allows for physical activity, play, interaction, and entertainment	Large area provides enough space for activity, play, etc.	5
Temporary activities (markets, festivals, exhibitions, etc.)	Nothing going on in square	1
Optional activities (resting, meeting, social interaction)	Room for social interaction; places to rest and meet	5
Small-Scale Services	**Comments**	**Grade**
Signage	trees in memory of, no skateboarding	2
Post Boxes	none	1
Notice Boards	memorial listings	2
Waste Receptacles	no recycling, cigarette collectors	3
Designing for enjoying positive climate elements	**Comments**	**Grade**
Warmth/Coolness	plenty of shade & plenty of sun	4
Designing for positive sense experiences	**Comments**	**Grade**
Aesthetic Qualities	fountains, memorials	5
Plants, trees, flowers	grass, trees, plants	5
Animals	squirrels, birds	3
Overall Grade	**3.68**	

Table 34 Twelve Criteria Results for the Traffic Circle

Traffic Circle		
Protection Against Traffic & Accidents	**Comments**	**Grade**
Traffic Accidents	Large volumes of traffic, clear cross walks	4
Fear of Traffic	lady holding child's hand	4
Buffers	Gardens with concrete barriers, trees, posts	5
Protection Against Crime & Violence	**Comments**	**Grade**
Lived in/ Used	highly populated	5
Street Life	groups of people walking, using shops	5
Social Structure	Cop sitting on circle, mix of different people	5
Protection Against Unpleasant Sense-Experiences	**Comments**	**Grade**
Noise	noise from traffic	3
Sun/Rain	little protection, possibly enter shops	2
Wind	possibly enter shops	2
Possibilities for Walking	**Comments**	**Grade**
Accessible to Key Areas	crosswalks used to get to shops and work	5
Interesting Facades	shops border the circle, close to farmers market	4
No Obstacles	heavy traffic	2
Room for Walking	crosswalks(narrow), wide sidewalks border the circle	3
Quality Surfaces	smooth and even for crosswalks, sidewalks more uneven surfaces	3
Possibilities for Standing	**Comments**	**Grade**
Attractive & functional ledges	N/A	2
Objects to lean against	N/A	2
Defined spots for standing	Most pedestrians stand in the 4 crosswalk areas	5
Possibilities for Sitting	**Comments**	**Grade**
Pleasant views, people watching	loud with heavy traffic, few people	4
Defined zones for sitting	one bench along traffic circle, café seating along Allegheny	3
Resting opportunity	one small ledge used for sitting	3
Mix of public & café seating	café along the circle with 10 seating tables	3
Opportunities to See	**Comments**	**Grade**
Reasonable viewing distances	Clear line of sight to mall and down Allegheny; both directions on York	5
Unhindered views	Relatively open space without any barriers	5
Interesting views	Varied architecture (scale, facades, colors); trees and middle of the circle	5
Opportunities to Talk & Listen	**Comments**	**Grade**
Low noise levels	Lots of noise pollution from traffic circle	1
Public seating conducive to communicating	Tables and benches to sit at	2
Opportunities for Play, Exercise, Unwinding, & Interaction	**Comments**	**Grade**
Allows for physical activity, play, interaction, and entertainment	Circle is too busy for physical activity or play; adequate opportunity to unwind and interact	2
Temporary activities (markets, festivals, exhibitions, etc.)	Only on Allegheny west of circle on Thursday	2
Optional activities (resting, meeting, social interaction)	Plenty of space to rest, meet, talk, sit, etc.	4
Small-Scale Services	**Comments**	**Grade**
Signage	traffic	2
Post Boxes	none	1

Notice Boards	none	1
Waste Receptacles	trash on both ends of crosswalks; no recycling	3
Designing for enjoying positive climate elements	**Comments**	**Grade**
Warmth/Coolness	sun & shade (awnings, umbrellas, trees)	5
Designing for positive sense experiences	**Comments**	**Grade**
Aesthetic Qualities	nice landscape features	5
Plants, trees, flowers	plentiful flowers, trees, bushes	5
Animals	birds	2
Overall Grade	**2.95**	

Table 35 Twelve Criteria results for the corner of Pennsylvania Avenue and York Road

Corner of Pennsylvania Avenue & York Road		
Protection Against Traffic & Accidents	**Comments**	**Grade**
Traffic Accidents	Clear cross walks, barriers	5
Fear of Traffic	some people holds kids hand, others were not	4
Buffers	trees, post around corners	5
Protection Against Crime & Violence	**Comments**	**Grade**
Lived in/ Used	Highly populated area.	5
Street Life	people walking, waiting for bus, using shops	5
Social Structure	cop watching traffic, groups of people	5
Protection Against Unpleasant Sense-Experiences	**Comments**	**Grade**
Noise	noise from traffic	3
Sun/Rain	Some trees and awnings, Towson commons	3
Wind	Towson commons	2
Possibilities for Walking	**Comments**	**Grade**
Accessible to Key Areas		5
Interesting Facades	some restaurants at the corner, Towson Commons	3
No Obstacles	light posts, bus stop area	4
Room for Walking	4 crosswalk areas, wide walkways	4
Quality Surfaces	smooth surfaces	4
Possibilities for Standing	**Comments**	**Grade**
Attractive & functional ledges	1 ledge	2
Objects to lean against	square posts next to Towson commons	2
Defined spots for standing	4 crosswalk areas, nowhere to stand leisurely	4
Possibilities for Sitting	**Comments**	**Grade**
Pleasant views, people watching	Heavy traffic, majority of people walking	2
Defined zones for sitting	2 defined zones	2
Resting opportunity	1 bench, 1 ledge	2
Mix of public & café seating		1
Opportunities to See	**Comments**	**Grade**
Reasonable viewing distances	Can see long distance south, reasonable east, west and north	4
Unhindered views	Few obstructions in every direction	4
Interesting views	Towson Commons facade; south on York provides interesting view; trees and diverse architecture	4
Opportunities to Talk & Listen	**Comments**	**Grade**
Low noise levels	Extremely loud intersection; noise pollution from traffic	1
Public seating conducive to communicating	Few ledges to sit at; no benches, chairs, tables, etc.	1
Opportunities for Play, Exercise, Unwinding, & Interaction	**Comments**	**Grade**
Allows for physical activity, play, interaction,	Busy intersection that does not allow for activity	1

and entertainment		
Temporary activities (markets, festivals, exhibitions, etc.)	None	1
Optional activities (resting, meeting, social interaction)	Large sidewalks provide space for social interaction	3
Small-Scale Services	**Comments**	**Grade**
Signage	traffic	2
Post Boxes	none	1
Notice Boards	store advertisements on street	2
Waste Receptacles	trash on 3/4 sides of street; no recycling	3
Designing for enjoying positive climate elements	**Comments**	**Grade**
Warmth/Coolness	no shade due to lack of tree cover	1
Designing for positive sense experiences	**Comments**	**Grade**
Aesthetic Qualities	none	1
Plants, trees, flowers	very few bushes, no trees	2
Animals	none	1
Overall Grade	**2.48**	

Table 36 Twelve Criteria results for the corner of Chesapeake Avenue and York Road

Corner of Chesapeake Avenue & York Road		
Protection Against Traffic & Accidents	**Comments**	**Grade**
Traffic Accidents	buffers, clear cross walks	5
Fear of Traffic	People j-walking, clear cross walks	5
Buffers	Trees, parked cars, posts	5
Protection Against Crime & Violence	**Comments**	**Grade**
Lived in/ Used	Highly populated with people	5
Street Life	People driving through, shopping, using the bus	5
Social Structure	Cops driving through, lots of open store fronts	5
Protection Against Unpleasant Sense-Experiences	**Comments**	**Grade**
Noise	Lots of traffic noise	3
Sun/Rain	possibly enter shops or library for protection	2
Wind	possibly enter shops or library for protection	2
Possibilities for Walking	**Comments**	**Grade**
Accessible to Key Areas		5
Interesting Facades	Some shops and restaurants, Towson library	2
No Obstacles	bus stop area	3
Room for Walking	wide walkways	3
Quality Surfaces	smooth surfaces	4
Possibilities for Standing	**Comments**	**Grade**
Attractive & functional ledges	no ledges	2
Objects to lean against	light posts at every crosswalk	2
Defined spots for standing	more than 5 defined standing zones	4
Possibilities for Sitting	**Comments**	**Grade**
Pleasant views, people watching	heavy traffic, few sitting areas	2
Defined zones for sitting	2 benches, bus stop area	2
Resting opportunity	2 benches, bus stop area	2
Mix of public & café seating	subway at the corner-no outside seating	1
Opportunities to See	**Comments**	**Grade**
Reasonable viewing distances	Can see far south on York Rd. and reasonably far east and west on Chesapeake	4

Unhindered views	No hindrances	4
Interesting views	Library, York Rd. south, diverse facades, tree-lined streets	5
Opportunities to Talk & Listen	**Comments**	**Grade**
Low noise levels	Heavy traffic--noise pollution	1
Public seating conducive to communicating	Only one bench near library	1
Opportunities for Play, Exercise, Unwinding, & Interaction	**Comments**	**Grade**
Allows for physical activity, play, interaction, and entertainment	Busy intersection is not conducive to play, large sidewalks for interaction though	1
Temporary activities (markets, festivals, exhibitions, etc.)	Too busy for entertainment activities	1
Optional activities (resting, meeting, social interaction)	Enough room for optional activates	2
Small-Scale Services	**Comments**	**Grade**
Signage	traffic, buildings with signs (library scrolling lights sign)	2
Post Boxes	None	1
Notice Boards	newspaper bins	2
Waste Receptacles	trash on all sides of street; no recycling	3
Designing for enjoying positive climate elements	**Comments**	**Grade**
Warmth/Coolness	no shade due to lack of tree cover	1
Designing for positive sense experiences	**Comments**	**Grade**
Aesthetic Qualities	None	1
Plants, trees, flowers	None	1
Animals	None	1
Overall Grade	**2.38**	

Suggestions and Recommendations

Allegheny Avenue

Based on the results, Allegheny Avenue was the best when it comes to small scale services, active store facades, and places to sit. Suggestions for improvement include fixing up the old sidewalks, and possibly closing the street to vehicle traffic more frequently. When the street is closed to vehicle traffic during the farmers market, many pedestrians fill the area, thereby increasing economic stimulation for the businesses on the street. Closing the street to traffic and hosting more events at this location could bring even more activity to Allegheny Avenue and surrounding areas.

Chesapeake Avenue

This area of Towson was lacking in sidewalk seating in some areas, and the vacant buildings gave pedestrians no reason to stay on the street. There was not much car traffic but the parking spots were full most of the time. Based on the tracing data, many people walk through this area and across the street. This is because it is used as a means to get to where they want to go, and not a place where they want to stay and interact. It is not a very inviting space. It needs more interesting store frontages and places to sit. With these additions, people may be more willing to spend time in the area.

Pennsylvania Avenue

This area bustled with mostly businesspeople foot traffic during lunch hours while they were purchasing lunch on the food trucks parked near the courthouse, or chatting with friends while they ate lunch. There were a few places to sit on the sidewalk, mostly in front of the courthouse, and these benches were actively used during lunch periods. Besides the courthouse, which brought foot traffic, the street was otherwise inactive except for non-business people going to one of the banks. More benches need to be available to the public along this street. There were also a few vacancies in the buildings on each end of the street. Certain areas of the street were bare of greenery and trees while others had a decent amount. Perhaps new landscaping could be incorporated to enhance the space.

Patriot Plaza

This area was decent for pedestrians, but it is a space that could be better utilized. There could be more places to sit and eat, or events could be held here which would provide opportunities for people to meet. The space could be a downtown meeting space. Many people used the area to get around or to the courthouse, but very few people stopped in the open space. All tables, benches, and ledges were being used while observations were being made, which shows the potential for people to come here to sit, eat, and converse with one another. There should be more greenery and higher quality benches and tables for people to use, and if the fountain was turned on, the space would have more of a visual appeal. Encouraging a small café to open on the area would be an improvement. Lastly, the county building behind the plaza created a lot of noise from the air conditioning unit. A physical barrier on the west side of the Baltimore County Executive building would prevent noise pollution from the air handling unit and disguise the unpleasant facade facing the Patriot Plaza.

Towson Circle

The circle is not a good space for pedestrians. The crosswalks are difficult for some cars to see, the vehicles move quite fast when merging into the circle, and rarely yield to people standing by the cross walk. For these reasons, people need to be extremely cautious around the circle. This is an issue that should be addressed sooner than later, perhaps by increasing enforcement and by adding more signage alerting vehicle traffic to pedestrians and their right-of-way. There are spaces for pedestrians to sit on the sidewalk outside of restaurants near Allegheny, but the noise and smells from the traffic make sitting outside unpleasant.

York Road

This area of Downtown Towson is not pedestrian friendly at all. There is substantial car traffic on this street and the noise and air pollution from the cars is evident and unpleasant. There are a few places to sit on the sidewalk, but they are hardly utilized. Most pedestrians on York Road were moving fast to get to their next errand, especially as they crossed by the vacant buildings. Close to the circle there are a few restaurants that people were patronizing, and the bars/restaurants/lounges are the main attractions on the street in the evening hours.

Additional Recommendations

Many of the pedestrians observed in each area were adults dressed in work attire, presumably enjoying the downtown area on a lunch break. If there were more available outside seating choices, and more attractive places to sit and eat, more pedestrians might sit for longer to enjoy the space, rather than take their lunch back to the office.

Also, making improvements to existing infrastructure could go a long way in making the city more pedestrian friendly. Adding details to building fronts and more landscaping around the buildings would help, as well as repairing existing sidewalks. Wider sidewalks would also allow for greater pedestrian mobility and activity.

It was observed that there were many vacant buildings along each street. To make the streets more inviting to pedestrians, new stores and cafes, preferably local businesses, could fill in these vacant buildings. In the event that new buildings are going to be built, they should be placed closer to the street in order to create place identity and make the space more inviting to pedestrians. If a parking lot is needed, then it should be around back or in an underground garage. One can also add parallel parking in front of buildings as well as parking in the back of the buildings to act as a buffer in between the pedestrians and the street. It is important to remember that when a person steps out of a car, they then become a pedestrian. With that in mind, areas need to be readily accessible and safe to people, not cars.

With the exception of Allegheny Avenue during the farmers market, the streets in Towson have become a place mainly for cars. The buses have a hard time navigating around the busy streets, making it unsafe. Bicyclists also find the streets difficult to travel on. The streets of Towson should be improved to allow for more public transit. There should be a greater connectivity between residential areas and retail, such as incorporating more mixed use areas. By making Downtown Towson more human centric, small businesses and the local economy will prosper. Towson should aim to be a safe, welcoming

environment with much to offer for everyone who uses the area. In this manner, it might be possible to synergize the downtown public life with the student population at Towson University. This is a natural alliance in terms of access, opportunity, and need for services. As downtown Towson develops into a friendlier place, it will attract new users to achieve a win-win for both the city and the people.

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