STEPPING FORWARD>

for safety & vitality

June 2018

OAKMONT BOROUGH'S 2018 PEDESTRIAN PLAN

the Phase One component of the Borough's active transportation planning & living streets initiatives

Borough of Oakmont

Allegheny County, Pennsylvania

STEPPING FORWARD>

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OAKMONT BOROUGH'S
2018 PEDESTRIAN PLAN

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Section 1 Introduction and Purpose

> Introduction

This Plan serves to guide the development, enhancement, and maintenance of pedestrian facilities throughout Oakmont Borough and to recommend policies, programs, and messaging to support and promote the experience of walking. The purpose of this Pedestrian Plan is to provide a blueprint for the Borough to achieve its vision of an inviting, safe, and connected pedestrian network that enhances quality of life for all community members and visitors. The initiatives found in this Plan are presented as an initial framework toward improving the experience of pedestrians throughout the community.

Building upon the Borough's comprehensive strategies to create a connected, multimodal transportation network, the Pedestrian Plan also builds upon the regional and national awareness of the importance of pedestrian safety and wellness through walking. No matter which mode of transportation one uses, at some point during a trip, ***every person is a pedestrian***.

The development of the Pedestrian Plan is a testament to the Borough's focus and commitment to these issues. This and other efforts have a great potential to positively influence the Borough's vibrancy, safety, equity, and quality of life.

> Aspirations and Goals

The Borough of Oakmont envisions an inviting and safe walking environment that raises "livability" through safety, accommodates the transportation needs of Borough residents of all ages and abilities, and encourages outlets for healthier lifestyles.

The goals described in the table below present this vision:

Table 1 – Pedestrian Plan Goals

PEDESTRIAN PLAN GOALS	
Safety	Improve pedestrian safety to minimize potential conflicts between vehicular and non-vehicular traffic.
Access	Increase and improve pedestrian access to community destinations across the Borough of Oakmont for people of all ages and abilities.
Connectivity	Continue to develop a connected pedestrian network that fosters an enjoyable walking experience.

> Planning Process

This document builds upon the ideas and recommendations of the Borough's Comprehensive Plan and was developed over a 6-month period of Winter 2017 to Spring 2018. Major focus areas of this Pedestrian Plan were guided by the Borough's desire to understand the characteristics of its existing pedestrian network and residents' perspectives. As part of this work, the community is establishing a baseline Plan to work toward implementing solutions and opportunities that reinforce pedestrian safety as well as create positive experiences for walking throughout the community.

The process to develop this Pedestrian Plan included outreach far and wide using both electronic media and old-fashioned, highly-effective "word of mouth" among the Borough's many community groups. These components encouraged residents to express their current perceptions and areas of interest and concern to the Borough. In a notable showing, more than 350 residents shared their ideas on opportunities for experiencing safe travel through their community.

The input gathered throughout the planning process complemented broad analysis of existing conditions to develop the recommendations and improvements detailed in this Plan.

Section 2 Walking in Oakmont Today

This section presents data on existing conditions that formed the basis for drawing conclusions about the current challenges to pedestrian travel in Oakmont Borough. These challenges are addressed through policy and program recommendations in Section 3 and project recommendations in Section 4.

The existing conditions include:

- *Land Use and Travel Patterns*
- *Destinations and Demand*
- *Pedestrian Network*

> Land Use and Pedestrian Travel Patterns

With single-family residential neighborhoods and a regionally significant small-town business district, Oakmont's physical layout and development continues to uphold its long-established, built environment, with distinctive tree-lined streets in a grid pattern and a significant network of long-established sidewalks.

While this network is extensive, there are gaps in some sections and much of the network has not seen improvements since the Americans with Disabilities Act of 1990 was passed into law.

> Destinations and Demand

- *Destinations*

There are several destinations throughout the Borough that attract people by foot. These include the school campuses, the main shopping district along Allegheny River Boulevard and Allegheny Avenue, and the Borough's riverfront park.

- *Pedestrian Demand*

Identifying pedestrian demand and activity patterns helps the Borough better understand where pedestrian activity is most likely to occur. Analyzing pedestrian demand based on field observations allows the Borough to focus improvements in areas that will have the greatest impact and benefit the most number of people.

Potential demand—or locations where pedestrians can be expected—may be based on factors such as the location of employment and population centers (densities); land uses including open space, trail, sidewalk, and crosswalk network connectivity; proximity to transit, schools and other activity centers; and demographics.

Oakmont is home to a number of interesting and popular local and regional destinations, including retail, restaurant, and civic hubs, and pedestrian activity is expected to be highest in these areas.

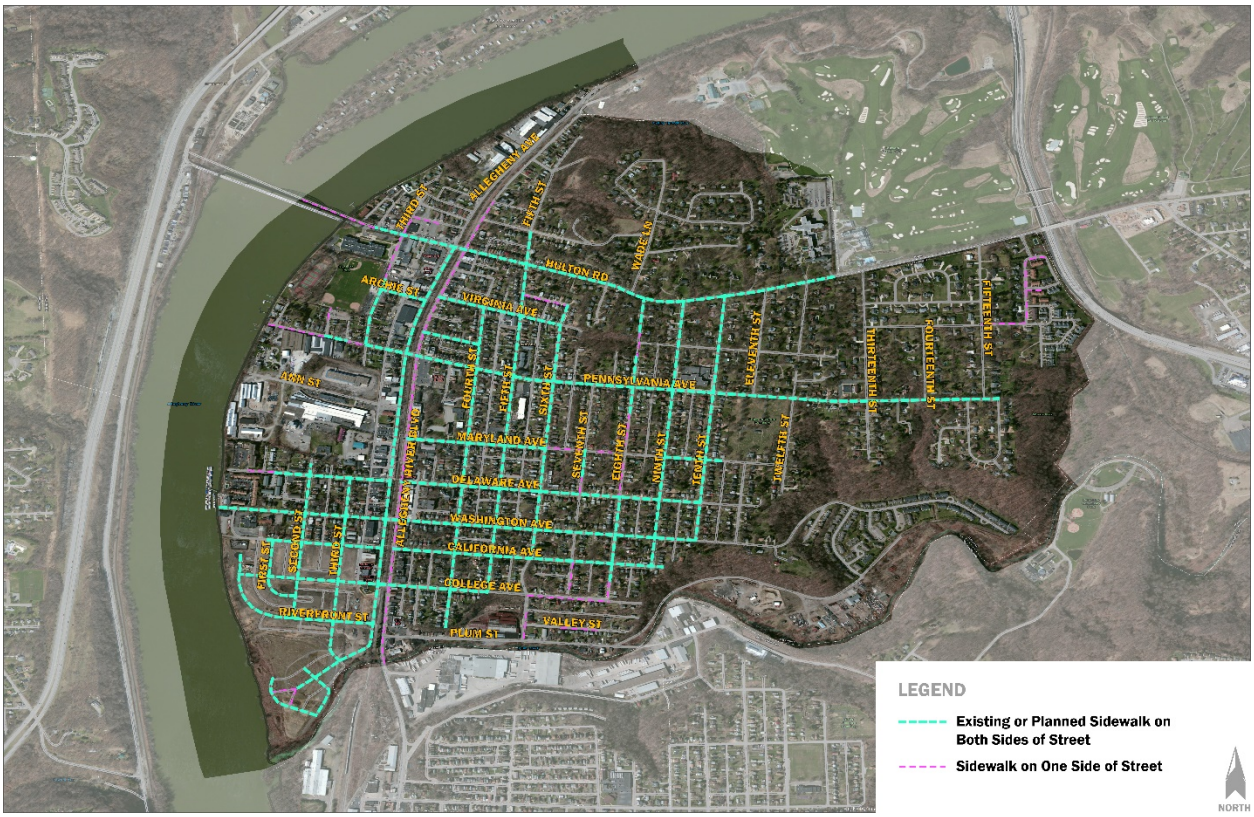
> Pedestrian Network

A well-connected pedestrian network is a vital component to livable communities, which thrive on multimodal travel options for all residents, regardless of age, background, or ability. Well-designed streets accommodate walking through a variety of treatments which enhance the safety, convenience, and mobility of pedestrians. The following are several key elements for a safe, connected, attractive and comfortable pedestrian network: sidewalks, crossings, traffic calming, and off- street facilities.

- *Sidewalks*

Sidewalks provide a dedicated space with the primary purpose of accommodating pedestrian travel. Sidewalks are the most essential piece of pedestrian infrastructure, and the coverage is excellent; quality is fair to good in Oakmont.

Map 1 – Existing Sidewalk Network in Oakmont



- *Crossings*

Crossing intersections and roadways often present conflicts and stressful environments for pedestrians. Marked crosswalks, and other treatments such as advance yield lines and median crossing islands, help motorists anticipate the presence of pedestrians. These treatments also provide increased legitimacy and comfort to people crossing streets.

In Oakmont, pedestrians are accommodated at intersections through various treatments such as marked crosswalks, pedestrian signal heads and push buttons (at signalized intersections), curb ramps and

median islands. While crossing is legal at all intersections whether or not it is marked (unless signed to prohibit crossings), marked crosswalks help make drivers aware of the likelihood of pedestrians crossing. Crosswalks are marked on all legs of most major intersections in the Borough.

In an FHWA study that evaluated marked crosswalks and unmarked crossings, the authors emphasized the importance of identifying appropriate solutions to improve safety and access, not only through the use of marked crosswalks; therefore, Oakmont should consider a variety of treatments in addition to marked crosswalks to facilitate safe and comfortable street crossings.

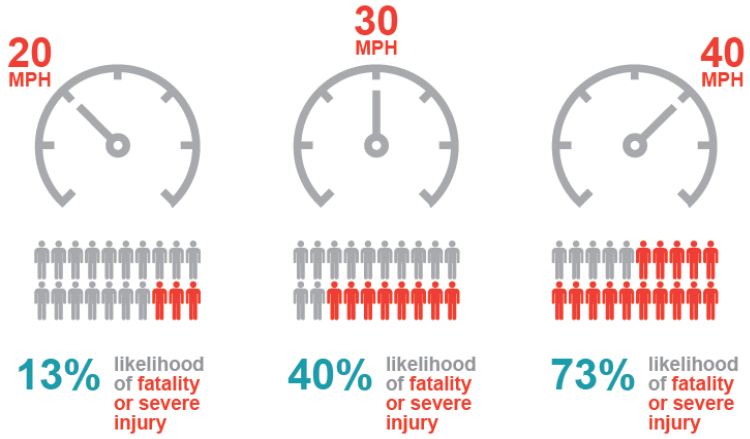
- *Traffic Management*

Traffic management strategies, such as slowing vehicle speeds and volumes, are key to creating a safer pedestrian environment. Roadway treatments such as installing speed humps/tables and traffic circles can help in slowing traffic speed. Other design elements such as truck aprons, pinch points, and curb extensions can extend the sidewalk and reduce the amount of time pedestrians are in crosswalks.

The Borough had a Neighborhood Traffic Management Program that installed traffic calming treatments to improve neighborhood livability based on collected data regarding traffic speeds and volumes. Approved traffic calming treatments included speed humps, traffic bars, traffic circles, chokers, and diverters. Slow traffic speeds also make for a more comfortable walking environment and also give drivers more time to react to a potential conflict with another road user, and slower speeds can mitigate the severity of a crash, especially between an automobile and a pedestrian.

> Traffic Speeds

Preventing and mitigating the severity of pedestrian crashes is a key goal of the Pedestrian Plan. While many parts of Oakmont are highly walkable and provide a safe and comfortable walking environment, even locations with sidewalks and crossing treatments can experience high vehicular speeds that prove dangerous to pedestrians.



Source: Tefft, B. C. Impact speed and a pedestrian's risk of severe injury or death. Accident Analysis & Prevention. 50. 2013.

Traffic speed directly impacts the chances of surviving a crash. While this is true for all modes of transportation, pedestrians are especially vulnerable and have a high chance of being seriously injured or killed when speeds reach moderate levels. A pedestrian involved in a crash with a vehicle traveling 25 mph has a 30 percent chance of suffering a serious injury or being killed, while at 40 mph the risk is 80 percent. Higher speeds also increase the likelihood of a crash as stopping distances are greater at higher speed. As a result, speed reduction is a critical strategy for reducing pedestrian injuries. No known pedestrian fatalities in Oakmont exist based on available public safety data., although the concern of residents is clearly present.

Section 3 Policy and Program Recommendations

Oakmont has made significant investments in making its streets friendlier to pedestrians. This section identifies a series of focused policies, programs, and practices to further promote pedestrian safety and access. These recommendations were developed based on a review and evaluation of the Borough's current operations and compared with national best practices.

This section includes recommendations on the following topics:

- *Infrastructure and Operations*
- *Evaluation and Planning*
- *Project Implementation*
- *Education and Enforcement*

> Pursuing Action

- *Forming a Committee*

The preliminary recommendation for the Borough to pursue is the ***establishment of a committee*** to oversee the course of the community's pedestrian (and potentially bicycle) related initiatives.

Creating a committee to oversee pedestrian planning initiatives involves first identifying members to serve on that committee. The following guidelines should be followed to select committee members:

- ***Identify at least eight (8)—and up to ten (10) representatives—who can be identified as stakeholders****, defined as "individuals who have an interest in and may be affected by actions recommended in the Oakmont Pedestrian Plan"*
- *Select individuals who:*
  - *Live and work in the community; preferably both*
  - *Are able to represent the group as well as their individual interests*

- *Who have expressed interest in this planning process*
- *Represent multiple viewpoints, opinions, and interests*

- *The committee should aim to consist of:*
  - *At least one (1) Recreation Board member, one (1) member of Council, one (1) member of the Planning Commission, and one (1) Borough staff member*
  - *At least two (2) individuals with physical challenges (e.g., walking with cane, wheelchair-bound, blindness, etc.) that affect their ability to walk within the public realm*
  - *At least four (4) Borough residents and/or business owners*

Once committee members have been identified, **hold at least two (2) pre-planning meetings with the stakeholders** (more than two, if not all of the stakeholders have been identified). The purpose of these pre-planning meetings is to understand the planning process and to determine potential roles in the committee. Discussion about procedures which will guide the activities and function of the committee should take place during this pre-planning meetings.

Vote on up to two (2) individuals from the committee to serve as chairpersons. The chairperson's role is to serve as the primary liaison between the committee and Council and to coordinate correspondence to the other committee members.

Meetings should take place at least quarterly, with additional meetings called upon as necessary.

- *Next Steps and Actions*

Once the committee is established, other "big picture" efforts may be envisioned for the coming years. These include the following:

- *Evaluate the preparation and adoption of a modified Complete Streets policy; move forward accordingly*
- *Evaluate the preparation and adoption of the Borough's Living Streets Design Manual; move forward with construction standards and implementation as applicable*
- *Prioritize capital improvement projects related to the pedestrian realm such as improvements to sidewalks, crosswalks, and lighting; move forward accordingly*

These efforts lend to more potential detailed actions, outlined in the following three tables (2, 3, and 4).

Table 2 – Potential Priority Ideas for Future Consideration Based on May and June 2018 Council and Public Feedback

CATEGORY	TOPIC	IDEA	TIME
Infrastructure and Operations	Street Design	• Better traffic design by the school to decrease traffic speeds	long-term
		• Focus on the design/redesign of crosswalks at the major intersections that connect Allegheny River Boulevard and Allegheny Avenue, to enhance pedestrian safety	mid-term
	Neighborhood Traffic Management	• More bump outs near the high school – esp. on Hulton Road	long-term
		• More flashers on Hulton Road by the school	mid-term
		• Safety improvements for school traffic crossing Hulton Road via Eighth Street and Wade Lane (fast vehicular traffic, incl. truck traffic, not slowing down, despite crossing guard / school zone)	mid-term
		• Better signage to make drivers aware of the elementary/junior high school on Tenth Street	short-term
		• New signage (some signs are not up to date) example: flashers of "No Texting and Driving"	mid-term
		• Investigate traffic calming strategies and implement a pilot project to measure the strategies' effectiveness; identify the most problematic areas as a starting point	mid-term
		• Install yellow/white reflective pylons at all crosswalks extending from the crosswalk through the parking lanes on both sides, to promote safe crossing and make pedestrians more readily visible	mid-term
		• Install pedestrian crossing signs with arrows at all crosswalks, to promote safe crossing and make pedestrians more readily visible	short-term
Education and Enforcement	Safety Education	• Incorporate both driver and pedestrian awareness ("heads up"/ "LOOK") campaigns	short-term
	Enforcement	• Step up enforcement of pedestrian laws for car commuters	short-term
Project Implementation	Funding	• Sidewalk and crosswalk repairs for main walk routes of travel, such as Allegheny Avenue and Hulton Road	mid-term
		• Fix roads to provide better travel conditions for all travel modes	long-term
	Collaboration/ Coordination	• Work with Oakmont Boulevard Project to enhance Arboretum Trail walkway between the boulevards – cracked in many spots (looks as if due to tree roots)	long-term
		• Create a brochure, or potentially a mobile app, that would act as a guide for pedestrians to use as a map for their walks, to include historical information as well as other interesting facts and places, restaurants, and businesses (the Chamber of Commerce may have some interest in participating); these brochures could be procured at various locations along the business corridor, as has been done in other communities	mid-term
		• Bike routes for families and children – collaborative effort with the Parks and Recreation Board	long-term
Other	Other Topic Areas	• Riverwalk that goes from Oakmont to Verona (bridge across Plum Creek)	long-term
		• More access to Riverview Walk	long-term
		• Design, name, and designate signage with markers for various trails or loops throughout Oakmont	mid-term
		• Tunnel underneath Hulton Bridge to get across as development continues across Hulton Road from the new Oakmont Bakery site (maybe a parking lot for parent pick-up)	long-term
		• Parking lot available for those who travel to Oakmont to walk/dine/shop	long-term
		• A public travel/transit system within borough limits that could be used by residents to provide safety to the population (golf carts? trolley?)	long-term

Table 3 – Other Potential Ideas Based on Past Experience and Similar Community Context

CATEGORY	TOPIC	IDEA	TIME
Infrastructure and Operations	Street Design	• Develop and adopt a modified Complete Streets Design Manual	mid-term
		• Ensure that design standards/design speeds in pedestrian areas do not contribute to a routine need for traffic calming	long-term
		• Adopt a Complete Streets internal process checklist for project development, design, review and approval, and operations and maintenance	mid-term
	Neighborhood Traffic Management	• Formalize the Borough's traffic calming practices	short-term
		• Develop the Borough's traffic calming toolbox	short-term
		• Reinforce 15 mpg school zones and other slow zones near parks, community facilities, or senior housing	short-term
	Accessibility	• Establish an accessible design checklist for design projects	short-term
		• Conduct ADA trainings for Borough staff	long-term
		• Encourage representation of people with disabilities in pedestrian-related projects and programs – universal and equitable access	long-term
Evaluation and Planning	Pedestrian Volume	• Adopt a Borough policy to include pedestrian and bicycle counts as a routine element of motor vehicle counts	mid-term
		• Conduct annual pedestrian volume counts along the Borough's high traffic corridors	long-term
		• Collect pedestrian volume data before and after installation of new pedestrian facilities	short-term
		• Conduct pedestrian volume counts at specific pedestrian crosswalk locations to determine where Pedestrian Hybrid Beacons (HAWK signals) and other traffic control devices are warranted	mid-term
		• Conduct pedestrian counts for the detailed planning and evaluation of the Borough's trail system	short-term
	Pedestrian Safety	• Evaluate annual pedestrian safety outcomes	long-term
Education and Enforcement	Safety Education	• Continue to promote walking to school through the Safe Routes to School program model	short-term
	Enforcement	• Implement sustained enforcement efforts and involve the media	short-term
Project Implementation	Funding	• Continue to fund high-priority sidewalk repair and gap and crosswalk marking projects through the Capital Improvement Program (CIP)	mid-term
		• Develop a line item in the CIP for implementation of the Pedestrian Plan	mid-term
		• Ensure that pedestrian improvements, including improved pavement markings, are included in other street projects, such as resurfacing, bridge replacement, or lane reconfiguration	long-term
		• Explore the possibility of obtaining Highway Safety Improvement Program (HSIP) funds	short-term
		• Secure a funding source to be used for broader pedestrian safety education efforts that could target traffic safety education and awareness	short-term
	Collaboration/ Coordination	• Continue to collaborate with related agencies (transportation, health, schools, emergency services) throughout the County	long-term

Table 4 – Preliminary Location-Specific Infrastructural Ideas
(See also Appendices D and E)

LOCATION	IDEA
Allegheny River Boulevard and Pennsylvania Avenue	• Curb extensions (bulb-outs)
	• Eliminate northbound dedicated right-turn lane
	• Raised intersection with color/material-contrasting crosswalks
Hulton Road from Hulton Bridge to Allegheny Avenue	• Raised crosswalks along Hulton Road and Second Street Extension and Third Street
	• Additional HAWK signal at Second Street Extension
	• Upgrade of HAWK crosswalk at Third Street to overhead signals
	• Raised intersection with color/material-contrasting crosswalks at intersection of Hulton Road and Allegheny Avenue

> Evaluation and Planning

Collection and analysis of pedestrian-related data helps governments prioritize resources, make more informed decisions, establish need when submitting grant applications, and evaluate trends and outcomes. Prior to collecting new data, it is important to have a clear sense for how the data will be used and managed. Ideally, data collection and analysis would be closely tied to established goals and policies and would help Oakmont monitor progress implementing the Pedestrian Plan.

- *Pedestrian Volume Data Collection*

  Oakmont does not routinely collect pedestrian volume data. Collection of pedestrian volume data can help the Borough prioritize investments over time or demonstrate the impact of infrastructure investments such as new sidewalks.

  A variety of count methods can be used; generally, automated methods that collect continuous count data over a period of a week or more are preferred to ensure reliable estimates. Short-duration counts can be extrapolated to annual averages using expansion factors that account for daily and seasonal fluctuations in pedestrian activity.

  This process is discussed in NCHRP Report 797 and the Federal Highway Administration (FHWA) Traffic Monitoring Guide (see "Resources" section below).

- *Recommendations*
  - ***Collect pedestrian volumes as part of every traffic count**, both for private development transportation impact studies and Borough-led data collection.*
  - ***Conduct annual pedestrian volume counts along the Borough's high-traffic corridors**. As mentioned above, pedestrian intersection (or midblock) volume data would help the Borough understand the relative safety of different intersections. This would provide insight into the likely benefit of making infrastructure improvements. For example, an intersection with a high number of pedestrian crashes and low pedestrian volumes indicates a likely design problem whereas an intersection with a similar number of crashes and high pedestrian volume may not have obvious design deficiencies.*
  - ***Collect pedestrian volume data before and after installation of new pedestrian facilities**. Data collected before and after installation of pedestrian facilities, such as sidewalks and crossing treatments, can demonstrate the impact of infrastructure investments, which may lead to greater support for future investment.*
  - ***Conduct pedestrian volume counts at existing pedestrian crosswalk locations to determine where warrants for Pedestrian Hybrid Beacons (HAWK signals) or other traffic control devices may be met**. HAWK signals have been proven to be one of the most effective pedestrian crossing treatments for multilane roads. However, they are subject to warrant criteria.. Some existing midblock crossing locations may meet those warrants and be suitable candidates for implementation of HAWK signals.*
  - ***Evaluate pedestrian safety outcomes.** As projects stemming from this Pedestrian Plan are implemented, the Borough should evaluate the pedestrian safety outcomes, particularly projects that respond to a safety concern. Since pedestrian crashes are rare in many locations, field observations could be used to determine the safety impact. For example, the Borough could evaluate yielding behavior before and after the addition of enhanced crossing treatments to an existing crosswalk. Over time, such information could help the Borough select and prioritize which treatments to use based on their effectiveness in Oakmont.*
  - ***Conduct Walk Audits.** Audits provide an interactive opportunity to receive feedback from key stakeholders about the study area and discuss potential solutions and their feasibility. They can be led by Borough staff, advocacy groups such as Walk Bike Oakmont, neighborhood groups, or consultants.*

- *Resources*
  - *NCHRP Report 797. Guidebook on Pedestrian and Bicycle Volume Data Collection. 2014. http://www.trb.org/Publications/Blurbs/171973.aspx*
  - *FHWA. Traffic Monitoring Guide. 2016. https://www.fhwa.dot.gov/policyinformation/tmguide/*

- *Best Practice Examples*
  - *City of Fort Collins. Traffic Safety Report, 2015. http://www.fcgov.com/traffic/pdf/traffic-safety-summary-2016.pdf?1476201877*
  - *Massachusetts Department of Transportation. Borough of New Bedford, Coggeshall Street Road Safety Audit. https://www.massdot.state.ma*
  - *FHWA. Road Safety Audit Guidelines, 2006. https://safety.fhwa.dot.gov/rsa/guidelines/*
  - *FHWA. Pedestrian Road Safety Audit Guidelines and Prompt Lists, 2007. http://www.pedbikeinfo.org/pdf/PlanDesign_Tools_Audits_PedRSA.pdf*

> Education and Enforcement

- *Safety Education*

  Oakmont can work with the Riverview School District to enhance school programming on walking. A wide variety of materials and resources are made available, including safety tips for all modes of travel, walking and bicycling maps, drop-off instructions for individual schools, and other education and encouragement ideas.

- *Recommendations*

  - ***Continue to promote walking and bicycling to school through the Safe Routes to School program.***
  - ***Consider developing and implementing a targeted safety campaign.*** *Oakmont may explore the possibility of obtaining funding to conduct a broad safety campaign, targeting all modes and user groups, such as drivers.*

Section 4 Implementation Strategy

Implementation of the recommendations included in this Plan will require funding from multiple sources and coordination with various agencies. To facilitate this, this section presents a method of prioritizing pedestrian improvement projects, construction cost estimates for the proposed improvements, a brief overview of funding strategies and sources, and implementation strategies.

> Routine Accommodation

Pedestrian projects can be developed either as stand-alone projects or as part of other projects through routine accommodation (e.g. including a crosswalk as part of a repaving project). Routine accommodation should be the first prioritization strategy for pedestrian projects; pedestrian facilities should routinely be included with all public and private projects, from roadway resurfacing to redevelopment.

> Project Prioritization

The Borough will in coming years continue to receive requests for implementation of pedestrian infrastructure projects, and staff will also want to continue moving forward with making Oakmont a more walkable Borough. Consideration for establishing prioritization criteria should be assessed. In the future, these criteria should also be used to score project requests as they are received from residents.

One possible distinction to use in future planning is whether a project affects curb lines and drainage or not. Projects that do not impact curb lines (signage, striping, traffic control, some traffic calming) should be scored and added in their prioritized order to a project list funded by a CIP line item dedicated to on-going pedestrian infrastructure improvement. These lower cost projects can be implemented on an on-going basis.

Projects that do impact curb lines should be scored and considered for addition to the CIP as stand-alone items or bundled by neighborhood (sidewalk construction) or corridor (curb radii changes). Projects scoring in the top tier should be considered for inclusion in the next two-year funding cycle. Those projects scoring lower should be added to a list and considered as funding is available. The requested projects list should be updated as requests are received, and the list should be re-scored every two years with updated crash data potentially defining new high-crash corridors.

> Cost Estimate Assumptions

Pedestrian projects are typically implemented in one of two ways: as part of a larger roadway project, or as a standalone effort. The former is often more efficient, as costs for materials and labor can achieve economies of scale when folded into a larger project. Pedestrian facilities are typically a relatively small portion of a roadway project, whether it is a restriping, resurfacing or reconstruction project. While planned and programmed street improvements can help guide the implementation schedule for this plan, the Borough of Oakmont should also consider prioritizing improvements on streets where pedestrian projects are recommended.

A list of unit costs was developed based on recent projects and cost estimates in different metro areas. These unit costs provided the basis for total cost estimates for each recommended priority project. While they reflect typical costs, unit costs do not consider project-specific factors such as intensive grading, landscaping, or other location-specific factors that may increase actual costs. The following table provides a unit cost summary for the construction of pedestrian and traffic calming facilities in Oakmont.

Table 5: Summary of Typical Unit Costs for Construction of Pedestrian and Traffic Calming Facilities (2016-2017)

Installation of curb ramps	$5,000	per ramp
Repair of sidewalks	$75 to $150	per square yard (SY assuming 4' depth
Marking of a new crosswalk (the cost will vary based on the width of the crossing)	$16.00	per linear foot (LF) of 24" thermoplastic lines
Upgrade/re-striping of an existing marked crosswalk	$16.00 per LF of 24" thermoplastic lines plus $24 per SF of pavement to remove any previous markings	
Update of existing hand pedestrian signals to include countdown timers	$600	per signal head
Painting of a stop bar at stop-controlled approaches to crosswalks	$16.00	per LF of 24-inch thermoplastic lines
Installation of pedestrian warning sign	$450	per sign (includes new post)
Marking a shoulder area for a walking path	$16.00	per LF of 24" thermoplastic lines
Installation of stop sign	$400	per sign (includes the new post)

> Funding Sources

Several federal funding sources are available for pedestrian and bicycle-only projects, or for the inclusion of these facilities in other projects. Funding is primarily available through the Federal Highway Administration and the Federal Transit Administration via the Fixing America's Surface Transportation (FAST) Act, which was signed in 2015 and supports funding until 2020, and in previous transportation funding bills. The Department of Health and Human Services and the Department of Housing and Urban Development also provide funding support.

- *FHWA's Bicycle and Pedestrian Program*

  The Federal Highway Administration maintains a data table to assist communities in understanding which Federal funding programs could be used for bicycle and pedestrian projects. Specific program requirements must be met and eligibility is determined on a case-by-case basis. For example, transit funds must be used to provide access to transit, and Congestion Mitigation and Air Quality Improvement (CMAQ) funds must benefit air quality in eligible areas. More detailed information can be found in the link below:

  - *FHWA's Bicycle and Pedestrian Program.* https://www.fhwa.dot.gov/environment/bicycle_pedestrian/funding/

- *Transportation Investment Generating Economic Recovery (TIGER) Grant*

  TIGER grants fund a broad array of road, rail, transit, and bicycle and pedestrian projects. The program focuses on capital projects that generate economic development and improve access to reliable, safe,

and affordable transportation, especially for disadvantaged communities. The grant funds projects that have gone through preliminary design stages and prioritizes projects with broad stakeholder support. Applicants are required to demonstrate that project benefits outweigh the costs. Projects in urban areas must request at least $10 million (with a 20% match).

- *Tiger Discretionary Grants. https://www.transportation.gov/BUILDgrants*

- *National Priority Safety Programs*

  Section 405 grants provide funding on a competitive basis to states to improve highway safety in a number of areas including impaired driving, occupant protection, distracted driving, and more. States are eligible to apply if they have met certain qualifications that pertain to each subgrant. Under this section, Nonmotorized Safety grants are eligible to states where pedestrian and bicyclist fatalities exceed 15 percent of the state's total annual crash fatalities. The funds may be used for law enforcement training, enforcement campaigns, and public education to improve pedestrian safety.

  - *Section 405 National Priority Safety Programs. http://www.ghsa.org/about/federal-grant-programs/405*

- *Community Services Block Grant Program (CSBG)*

  The Community Services Block Grant provides funds to alleviate the causes and conditions of poverty in communities; transportation projects are eligible for funding. Administered by the Department of Health and Human Services, funding is allocated to states who pass the funding along to local communities. Funded projects have included: commercial district streetscape improvements; sidewalk improvements; safe routes to school; and neighborhood-based bicycling and walking facilities that improve local transportation options or help revitalize neighborhoods.

  - *Community Services Block Grant Program. https://www.acf.hhs.gov/ocs/programs/csbg*

- *Sustainable Communities Regional Planning Grants and the Partnership for Sustainable Communities*

  This grant program, administered by the Department of Housing and Urban Development (HUD), supports locally-led collaborative efforts that bring together diverse interests to determine how best to target housing, economic and workforce development, and infrastructure investments to create more jobs and regional economic activity.

  The program places a priority on investing in partnerships, including nontraditional partnerships (e.g., arts and culture, recreation, public health, food systems, regional planning agencies and public education entities). The program focuses on six livable principles, the first of which is "Providing more transportation choices: Develop safe, reliable and economical transportation choices to decrease household transportation costs, reduce our nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions and promote public health." The program is a key initiative of the Partnership for Sustainable Communities, in which HUD works with the U.S. Department of Transportation (DOT) and the U.S. Environmental Protection Agency (EPA) to coordinate and leverage programs and investments.

  - *Partnership for Sustainable Communities – Partnership Grants, Assistance & Programs. https://www.sustainablecommunities.gov/partnership-resources*
  - *Sustainable Communities Initiative. https://portal.hud.gov/hudportal/HUD?src=/hudprograms/sci*

> Federal Plans and Policies

- *US DOT Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations (2010)*

  On March 15, 2010, the United States Department of Transportation announced a policy statement, included below, with a list of recommended actions.

  "The DOT policy is to incorporate safe and convenient walking and bicycling facilities into transportation projects. Every transportation agency, including DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. Because of the numerous individual and community benefits that walking and bicycling provide — including health, safety, environmental, transportation, and quality of life — transportation agencies are encouraged to go beyond minimum standards to provide safe and convenient facilities for these modes."

  Recommended actions to support the policy statement include considering walking and biking equal to other modes, ensuring that there are transportation choices for people of all ages and abilities, going beyond minimum design standards, collecting data on walking and biking trips, and several other actions that make it easier for people to walk and bike.

- *FHWA Achieving Multimodal Networks: Applying Design Flexibility and Reducing Conflicts*

  FHWA Achieving Multimodal Networks: Applying Design Flexibility and Reducing Conflicts
  This publication highlights ways that designers can apply design flexibility found in current national design guidance to reduce multimodal conflicts and achieve "connected networks so that walking and bicycling are safe, comfortable, and attractive options for people of all ages and abilities."

- *NRPA Safe Routes to Parks*

  The National Recreation and Park Association (NRPA) is campaign for Safe Routes to Parks to improve access to Parks through walking, biking, or transit. The Safe Routes to Parks is intended to provide local governments with critical evidence and best practice-based guidance on Safe Routes to Parks best practices that are backed by research and supported by national organizations. This framework is intended to be used as a guide that will engage leaders and community members in an ongoing process to ensure that community policies and practices support safe and equitable access to parks.

Appendix A Health Benefits of Walking

Many studies have been conducted that confirm the numerous benefits walking offers to people of all ages and abilities. Specifically, walking is an excellent aid in preventing and reducing chronic diseases such as obesity, cardiovascular disease (CVD), type 2 diabetes, osteoporosis, depression, breast cancer, Alzheimer's, and dementia. According to the article The Importance of Walking to Public Health by I-Min Lee and David M. Buchner:

> *"The prevalence of cognitive impairment increases dramatically with age in adults over age 65, with moderate to severe dementia affecting over 30% of adults aged 85+. Research now suggests that physical activity during middle age and older reduces risk of cognitive decline with age. In one cohort study, walking that corresponded approximately to the amount required to meet CDC/ACSM recommendation was associated with a 34% reduction in risk of cognitive impairment."*

Walking offers a moderate-intensity physical activity that majority of individuals can partake in each day. However, the results are dramatic and present significant increases in the prevention of chronic diseases. According to the American Heart Association, walking at least 30 minutes every day:

- *reduces the risk of coronary heart disease and stroke*
- *improves blood pressure, blood sugar levels, and blood lipid profile*
- *maintains body weight and lower the risk of obesity*
- *enhances mental well-being*
- *reduces the risk of osteoporosis*
- *reduces the risk of breast and colon cancer*
- *reduces the risk of non-insulin dependent type 2 diabetes*

Further, a study entitled Exercise and Physical Activity in the Prevention and Treatment of Atherosclerotic Cardiovascular Disease which was endorsed by the American College of Sports Medicine, identifies that:

> *"Walking, the most popular activity and the standard example of a moderate-intensity activity, is a low-risk activity. One study reported that increasing the duration of walking did not result in any increase in injury risk. In some situations, regular physical activity actually reduces injury risk, as indicated by a recent consensus statement that physical activity is recommended to reduce the risk of fall injuries in older adults."*

People are able to work towards preventing and reducing chronic diseases without the threat of physical injury that comes with vigorous activity and high-intensity activities. Harvard Medical School published the article, Walking: Your steps to health in 2009. The article discusses a meta-analysis (a statistical procedure for combining data from multiple studies) conducted by two scientists from the University College London. Their meta-analysis provided studies from seven countries on three different continents. Their summary was the following:

- *Among 10,269 male graduates of Harvard College, walking at least nine miles a week was linked to a*

22% lower death rate.

- *Among 44,452 male health professionals, walking at least 30 minutes a day was linked to an 18% lower risk of coronary artery disease.*
- *Among 72,488 female nurses, walking at least three hours a week was linked to a 35% lower risk of heart attack and cardiac death and a 34% lower risk of stroke.*

The 2015 Allegheny County Health Assessment conducted by the Allegheny County Health Department, stated that CVD is the leading cause of death in both men and women and that the rates of CVD outcomes in Allegheny County are higher than those of PA and the U.S. as a whole. According to the assessment, "In 2010, 5% of residents had been diagnosed with a heart attack, as opposed to the 4.7% of all PA residents, and 4.1% among the nation as a whole." Of those diagnosed with CVD-related outcomes, there were no findings to support differences found in CVD-related outcomes due to household income, race, gender, or education. When broken down further into specific communities throughout Allegheny County that are at risk of increased CVD-related outcomes, Oakmont Borough scored fairly-high. Oakmont was right in line with communities like McKeesport and Duquesne which are not as pedestrian oriented as Oakmont. Communities such as Sewickley scored significantly higher than Oakmont.

These findings go hand in hand with the 2018 Walk Score rating given to Oakmont. A Walk Score measures the walkability of a community based on the distance to nearby destinations and pedestrian friendliness. A 61 out of 100 was given to Oakmont. Specifically, Oakmont's score was based upon the following categories: dining & drinking, groceries, shopping, errands, parks, schools, and culture & entertainment. The categories with the lowest rating were groceries and parks, while the category with the highest rating was culture & entertainment. When compared to higher scoring community such as Sewickley, Oakmont did worse by roughly 20 points. Sewickley received an 83 out of 100 and scored very high in all of the categories determining a Walk Score. In order for Oakmont to raise its score, necessary measures can be pursued to provide residents with a pedestrian system that can help them improve their overall health and vitality.

One such way for Oakmont to increase pedestrian activity throughout the community is through spreading awareness. The figure on the previous page provides a guide on how to inform all necessary groups of involvement. Steps such as these are essential guidelines that help shape the overall walkability of the community. Also, this helps shape the idea that pedestrians are not the only ones responsible for a community's walkability. Infrastructure design/maintenance and vehicle operators play a huge role.