

Chapter 1

Introduction



The Woodlands Township Pedestrian and Bicycle Master Plan



1.0 Introduction to The Pedestrian and Bicycle Master Plan

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The Woodlands Township's Pedestrian and Bicycle Master Plan defines an overall comprehensive vision for walking and biking within the community, and identifies the steps to achieve the vision. This Plan acknowledges the importance of planning for pedestrians and cyclists for the sake of mobility, recreation, safety, health, livability, economic development, and other benefits.

In this section, an overview of The Woodlands Township Pedestrian and Bicycle Master Plan is given, including the purpose of the Plan including examples of potential benefits, and a general introduction of how the Plan came to fruition. An overview of the entire Plan document is also given in this chapter.

1.1 Purpose of the Plan

The Woodlands Township is famous for its trails and pathways, and continues to attract residents and businesses due to these unique amenities. However, The Woodlands has never had an official master plan that comprehensively addresses the existing pedestrian and bicycle facilities and infrastructure to accommodate the evolving needs of the recreational and utilitarian users of these pathways and roadways. With the growth this community has experienced and continues to experience, it has become necessary to address specific pedestrian and bicycle issues in order to ensure safe access and more direct and convenient connections to destinations for people walking, running, and biking throughout the Township.

The purpose of The Woodlands Township Pedestrian and Bicycle Master Plan is to provide an overall comprehensive look at the existing pedestrian and



FOOT NOTE



The cost of operating a car for one year is approximately \$5,170. The cost of operating a bicycle for a year is only \$120.



bicycle network, identify gaps in the existing network, and identify potential interconnected on- and off-street walking and biking recommendations between destinations that are safe and comfortable for all users. Additionally, the Plan identifies funding opportunities which will allow the recommended projects to come to fruition over time, and discusses the importance of coordination among local, county, and regional officials to support implementation. Project recommendations will include design guidelines that are consistent with national standards as well as recommendations for programs that can help support safe walking and biking within the community. This Plan will provide the tools for The Woodlands Township to ensure safe access for people walking and biking for generations to come.

There are numerous community benefits to having a well-connected on-street and off-street pedestrian and bicycle realm including the following three areas: Active Transportation, Economic Impacts, and Health Impacts. The Plan supports these benefits and makes this community even better.

1.1.1 Active Transportation

As interest in active transportation rises and the desire for improved facilities for running, walking, and biking increases, a greater focus has been placed on creating a safe and comfortable complete network system. Not only are pedestrian and bicycle facilities necessary segments of a transportation network, but they also provide health and environmental benefits to the public. All users, regardless of age, skill level, or disability, should have access to a well-connected transportation network that they feel safe and comfortable using.



Figure 1.1 Existing Pathway System

1.1.2 Economic Impacts

Pedestrian and bicycle facilities have been creating economic benefits at an increasing rate over the past decade by raising home values and increasing spending at local businesses. Bicycle tourism and the bicycle industry create jobs, economic activity, and cost savings. In dense business districts, bicycle parking provides more units to park in a smaller space, which means easier access to shops and restaurants. Walkability is becoming an increasingly popular amenity for homeowners. There is evidence that as Walk Score ratings increase, home values also increase. Walk Score is an online tool that shows how walkable an address or area is based on a methodology that takes into account nearby businesses, block lengths, intersections, etc.



1.1.3 Health Impacts

Regular physical activity results in a multitude of health benefits, such as reduced risk of heart disease, stroke, diabetes, and many more. By reducing risk of health issues, healthcare costs are lower. According to the National Household Travel Survey, 28% of trips are one mile or less. Accomplishing these trips by walking or biking will result in not only health benefits, but also additional environmental benefits. Furthermore, by creating a safe and comfortable pedestrian and bicycle network, an alternative travel mode is provided for the aging population to maintain an independent and active lifestyle.



Figure 1.2 Runners take advantage of existing pathway system

Woodlands will be able to provide more outdoor walking, running, and biking opportunities that more clearly link residents to key destinations.

1.2 Plan Background

The Woodlands Township is rich in recreational amenities. By creating a master plan, the existing amenities, along with some improvements, will be used to their fullest potential for generations to come. The Woodlands Township Board of Directors approved the selection of a consultant in July 2015 and planning efforts began in October 2015. In 2013, the Board partially funded the South County Mobility Study, but learned in April 2014 that this would not include a master bicycle plan for The Woodlands, which prompted the Board to pursue a Pedestrian and Bicycle Master Plan.

1.2.1 History

The Woodlands Pedestrian and Bicycle Master Plan is the first of its kind for the Township. The original design of the existing pathways within The Woodlands was designed and developed by The Woodlands Development Company, providing interconnected pathways meandering throughout the trees connecting each of the nine Township villages. Over time, The Woodlands Development Company has continued to expand and implement new pathways as new development occurs, and has now transferred ownership of the pathways to The Woodlands Township proper. The Woodlands has a strong history with the provision of parks, trails and other recreational amenities. With the development of this Plan, The

1.2.2 Who Benefits From This Plan?

One of the most important aspects of the development of The Woodlands Township Pedestrian and Bicycle Master Plan is to ensure that users of all ages, skill levels, and abilities feel safe and comfortable using the pathway network. Therefore, the Plan involves several types of pedestrian and bicycle facilities in order to provide amenities for various types of users. **Table 1.1** generally explains the various types of bicyclists that could be out there, illustrating that the recommendations in such a master plan should not be a “one-size fits all” solution. The same can be said for varying comfort levels of walkers, runners, people pushing children in strollers, the disabled, dog-walkers, and more.



Table 1.1 Types of Bicyclists

Casual/Less Confident Riders	Experienced/Confident Riders
Prefer shared use paths, bike boulevards, or bike lanes along low -volume, low -speed streets.	Most are comfortable riding with vehicles on streets and are able to negotiate streets like a motor vehicle, including using the full width of a narrow travel lane when appropriate and using left - turn lanes.
May have difficulty gauging traffic and may be unfamiliar with rules of the road as they pertain to bicyclists. May walk bike across intersections.	While comfortable on most streets, some prefer on -street bike lanes, paved shoulders or shared -use paths when available.
May use less direct route to avoid arterials with heavy traffic volumes.	Prefer a more direct route.
If no on-street facility is available, may ride on sidewalks.	Avoid riding on sidewalks. Ride with the flow of traffic on streets.
May ride at speeds around 8 to 12 mph.	May ride at a speed up to 20 mph on flat ground, up to 45 mph on steep descents.
Cycle shorter distances: 2 to 5 miles is a typical trip distance.	May cycle longer distances.

Source: AASHTO Bike Guide, 2012

The overall recommendations for the pedestrian and bicycle network includes an extension of existing pathways, the development of wider shared use paths, and inclusion of on-street biking recommendations that may consist of a multitude of designs or formats. By providing an assortment of options, there will be a safe and comfortable facility suitable for all users, making this plan beneficial for all residents and businesses within The Woodlands.

1.3 Conclusion

The Woodlands residents appreciate the walking and biking opportunities that currently exist within the community. With this Plan, however, new locations and opportunities for people to walk, run, or bike to and from destinations will enhance the existing network over time. This is the first pedestrian and bicycle specific plan for The Woodlands and will provide The Township with a blueprint to pursue projects over the next five years and beyond.