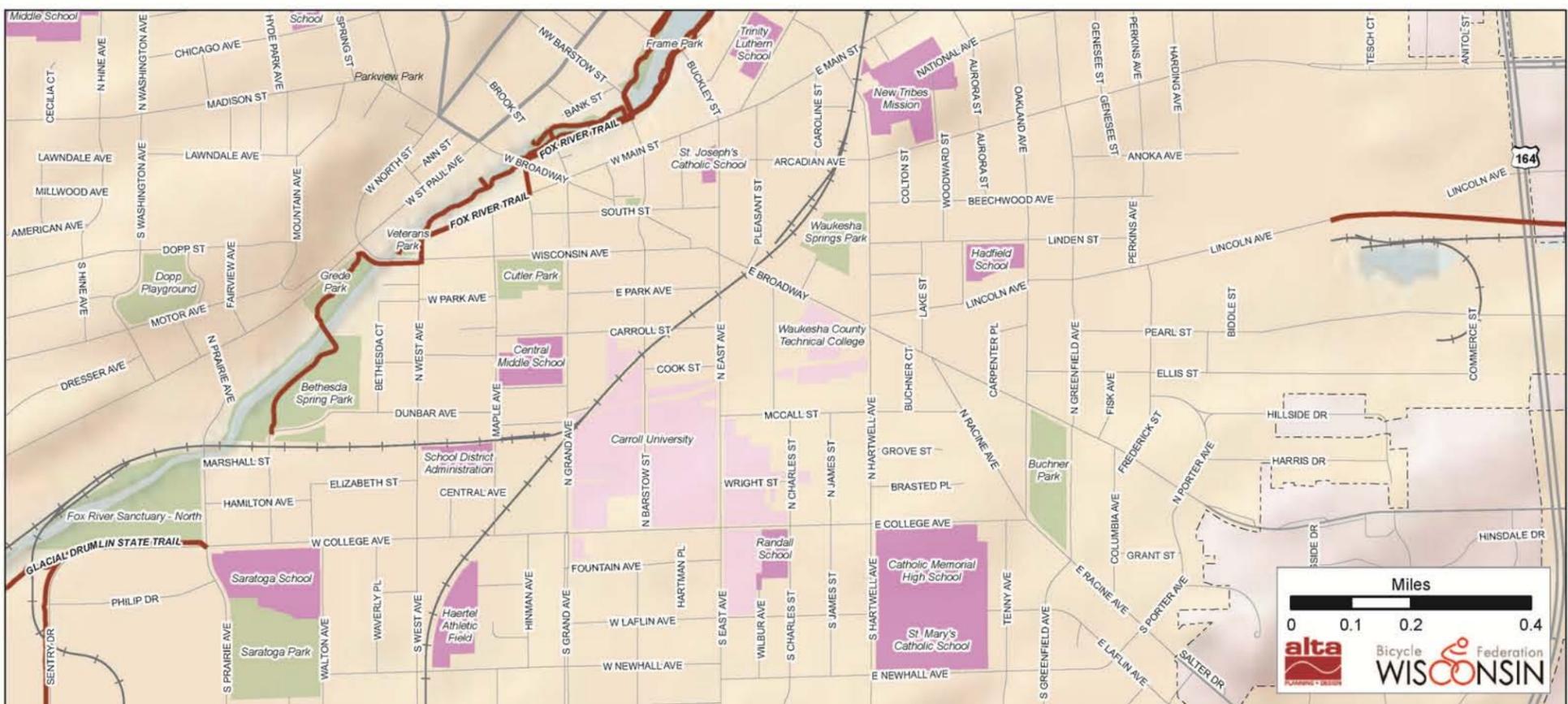


Figure 2-1: Existing Bikeway Facilities



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## 3 User Types, Demand and Benefits Analysis

The needs and preferences of bicyclists vary depending on a bicyclist’s skill level and the type of trip the individual wishes to take. This plan aims to provide more comfortable and direct bicycling routes for existing cyclists and to encourage other residents and visitors to ride for transportation and/or recreation; addressing the concerns of casual and inexperienced riders as well as more experienced riders and for all trip purposes, will encourage more people in Waukesha to bike for more trips in their daily lives.

### 3.1 Needs and Types of Bicyclists

#### 3.1.1 Casual and Experienced Bicyclists

Casual bicyclists typically include youth, adults and seniors who ride a few times per month or less. Child bicyclists, seniors and adults new to bicycling may prefer shared use paths, while bicyclists with more experience may prefer on-street facilities like bike lanes. Bicyclists who ride for recreational purposes may prefer scenic, winding, shared use paths whereas bicyclists who ride to work or for errands may prefer more direct on-street bicycle facilities. Table 3-1 summarizes the needs of casual and experienced bicyclists.

Table 3-1: Needs of Casual and Experienced Bicyclists

Casual Riders	Experienced Riders
Prefer off-street shared use paths or bike lanes along low-volume, low-speed streets	Prefer on-street or bicycle-only facilities as opposed to shared use paths
May have difficulty gauging traffic and may be unfamiliar with the rules of the road. May walk bicycle across intersections	Comfortable riding with vehicles on streets; negotiate streets like a motor vehicle, including “taking the lane” and using left-turn pockets
May use a less direct route to avoid arterials with heavy traffic volumes	May prefer a more direct route
May ride on sidewalks and ride the wrong way on streets to avoid a difficult crossing or to access a destination on a particular side of the street.	Avoid riding on sidewalks or on shared use paths; ride with the flow of traffic on streets
May ride at speeds slightly faster than walking	Ride at speeds up to 20 mph on flat ground, up to 40 mph on steep descents
Bicycle for shorter distances: up to two miles	May bicycle longer distances, commuting 5 to 10 miles and recreational rides of 60 to 100 miles

### 3.2 Bicycle Trip Types

Bicyclists may ride for recreational or utilitarian trips. Recreational trips can range from a short family outing to a local park to a long distance group ride or something in between. Commuter bicyclists make daily utilitarian trips going to and from work or school, shopping or other errands are also considered utilitarian trips. Some utilitarian bicyclists ride a bicycle by choice, while others do not have an alternative transportation due to economic, medical or licensing reasons.

### 3.3 Predicting Walking and Bicycling Demand

Estimations of daily walking and bicycling trips made in Waukesha places quantitative values on these two modes, information that can demonstrate the need for more bicycle and pedestrian facilities and programs.

The US Census collects data regarding the mode choice people use to get to work. While this provides a sense of walking and bicycling demand, it does not account for all bicycle and pedestrian trips made. For instance, the US Census does not collect information regarding the number of walking and bicycling trips people make for recreation, exercise and utilitarian purposes.

Appendix F presents a model that attempts to account for walking and bicycling trips not included in the US Census. Such trips include those to school, transit and for utilitarian purposes. The model estimates 16,000 walking trips and 800 bicycle trips are made each day in Waukesha. These trips, a portion of which are assumed to replace automobile trips, result in nearly 1.5 million pounds of estimated greenhouse gas savings per year.

In 2035, the Waukesha Comprehensive Plan estimates nearly 79,000 residents in Waukesha. This increase in population is likely to result in increased numbers of trips among all modes. An estimated 1,076 bicycle trips and 20,388 walking trips are likely to occur every day and approximately 3.3 million pounds of greenhouse gases will be avoided from these trips per year.