# IV. Methodology

This section contains the processes used during the study to gather information and public input and make specific recommendations. The methodology below describes in more detail how the study team:

- gathered existing reports and plans
- conducted a field survey to inventory the Township's roadways
- conducted a resident and business survey
- formed a study steering committee
- held public and Township meetings and interviews with participants
- developed a draft location plan
- recommended specific pedestrian and bicycle routes
- prioritized the routes for implementation and estimated the costs involved

## A. Existing Plans and Reports

The project team initially conducted a desktop study to review relevant planning documents and reports regarding bicycle, pedestrian, open space, greenway, and pedestrian issues at both the local and regional scale. The following reports were reviewed:

- 1994 Upper Merion Township, "Parks and Recreation Master Plan: Upper Merion Township"
- Undated Upper Merion Township, "Open Space and Environmental Resource Protection Plan: Addendum to the 1994 Parks and Recreation Plan"
- 1995 DVRPC, "Bicycle and Pedestrian Mobility Plan"
- 1996 PennDOT, "Statewide Bicycle and Pedestrian Master Plan"
- 1998 Montgomery County, "A Bike Mobility Plan -- Bicycling Roadmap"
- 2000 Montgomery County, "Schuylkill River Greenway Stewardship Study"
- 2002 National Center for Bicycling and Walking, "Increasing Physical Activity Through Community Design"
- 2003 Montgomery County. "Green Fields/Green Towns Program Recommendations"

Global Information System (GIS) data and other Township-wide maps were provided to the project team for use as reference materials and base information.

## B. Field Survey

The consultants conducted a Township-wide field survey, both on bicycle and by foot, to inventory the existing pedestrian and roadway systems. The survey documented existing physical conditions including:

- measuring the width of all connector/through streets
- locating existing pathways/sidewalks
- assessing potential areas for sidewalks/paths
- observing traffic volumes for bike routes/bike lanes

## C. Resident and Business Survey

A Resident and Business Survey was electronically sent by the Township to households and businesses. This survey was designed to determine the needs, issues, and level of public support for the implementation of a Township-wide network. In addition to residents, the survey was sent to business owners to give those employees who do not live in the township a voice in this matter. As an added bonus, business owners who are Township residents may also become important stakeholders. <u>APPENDIX B: Resident and Business Survey Results</u> contains a copy of the Resident and Business Survey and an in-depth compilation of the results. A summary follows:

### Citizen Survey - SUMMARY results compiled (24 samples, +/-19.99 Margin of Error):

- Recreation was the most preferred activity followed by running and jogging and partaking in nature hikes
- 75% say it not easy to walk and bike in the Township
- 71% want access to the Schuylkill River
- 83% will use new connections
- 63% are willing to use their cars less often
- Biking and walking to public transit is also a preferred activity
- Parks, natural resources, and rivers/streams should be increased with trail access

Surveys were made available by Upper Merion Township to the public at study committee meetings and through the Township Park and Recreation Department.

In Upper Merion Township there are 12,150 households; 24 households and businesses participated in the survey. This corresponds to a +/- 19.99% margin of error.

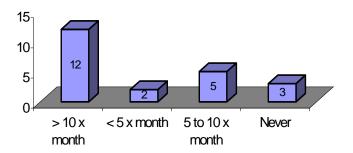
The highlights of results include the following:

Participants for this survey are primarily from households comprised of 2-4 family members. Eight households had two residents; three households had three residents; eight households had four residents; one household had six residents while four households did not respond.

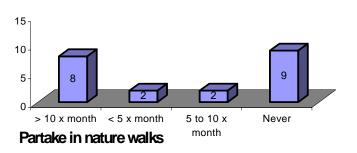
- 1. Recreational bicycling, hiking or walking is presently the most preferable activity to participants in Upper Merion Township, followed by running or jogging and partaking in nature walks. More than 33 percent of participants who prefer recreational bicycling, hiking or walking participate in those activities more than 10 times per month. The least preferable activities include bicycling or walking to school or religious services, horseback riding, and cross country skiing.
- 2. When asked how easy it is to get to places in and around the Township by biking or walking, 24 percent of the participants said it is "easy or somewhat easy" while 75 percent of them thought it is "not easy".

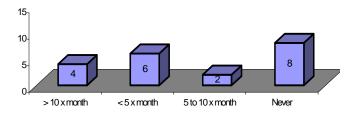
- Gaining access to the trails/paths was the top concern followed by safety/risk of accident
- 54% willing to support capital expenditure to increase recreation and access
- Only one participant had no interest in the study
- Points of interest and routes to travel were identified

### Bike, hike, or walk recreationally



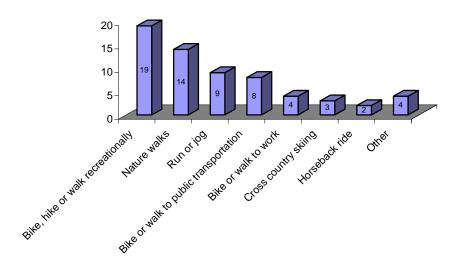
Run or jog





- 3. Many participants (71%) agree that access to the Schuylkill River or its tributaries should be improved. Important types of improvements include the following:
  - Walking/biking paths (5 respondents)
  - Safe accessibility and safe crossings (4)
  - Easier access points and signage (3)
- 4. While 83 percent of the participants are willing to use the new connections if access was improved, 13 percent of them answered they would not be willing to use them. One household did not respond.
- 5. When asked whether they would use their cars less often if pedestrian walking and biking access were improved, 62.5 percent of the participants said they are willing to use cars less often, 8 percent of them answered they will not, and 17 percent were not sure.
- 6. If community connections or links were improved, participants would most prefer "biking, hiking, or walking recreationally", followed by "nature walks". "Running or jogging" and "biking or walking to public transportation" are types of activities they would also like to do.

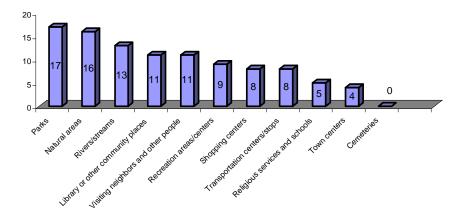
#### **Activities**



Other activities include rollerblading, bike to run errands and no need for improvements etc.

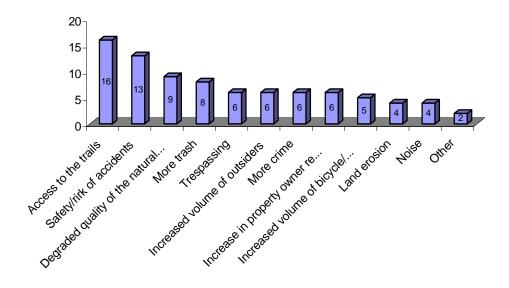
7. "Parks", "natural resources", "libraries or other community places", "rivers and streams" and "visiting neighbors and other people" are the top features or connections to be considered for trail/path systems in Upper Merion Township. Social/commercial places such as "recreation areas", "shopping centers", "transportation centers/stops" are marginally important. "Religious services or schools", "town centers" and "cemeteries" are important for a smaller segment of the participants.

### Features/connections with the most interest



8. When asked what concerns/issues you might have if more pedestrian biking and walking path connections were to be created by Upper Merion Township, the participants regarded "access to the trails or paths" as the major/first concern, followed by "safety/risk of accidents". The other common concerns were "degraded quality of the natural resources", "more trash" etc. In addition, a couple of comments not listed in the question 8 were "increasing number of pets and pet litter" and concerns for "wildlife".

### Concerns/issues



9. 54 percent of the participants are willing to support capital improvements to increase access and recreational opportunities throughout the Township.

- 10. Most participants (58 percent) replied that they have great interest in following the progress of the Upper Merion Township-wide Bike/Pedestrian Path System Study. Only one participant answered that they have no interest in it.
- 11. The important destination points, corridors, and routes within Township that the participants would like to travel are as follows:

#### Points:

- Valley Forge National Historical Park (9)
- Schuvlkill River Trail (5)
- Mall, Grocery Stores, Shopping centers (4)
- King of Prussia Mall (3)
- Transportation centers (2)
- Library (2)
- Township buildings (2)

#### **Routes and Corridors**

- Adams Road
- Allendale Road
- Church Road
- Garrison Way to Lantern Lane
- Henderson Road
- Moore Road
- North and South Gulph Roads
- River Road
- Sentry Lane
- Valley Forge Road
- Warner Road
- Schuylkill River Trail
- Bike paths to Perkiomen and Chester Valley Trail
- Conshohocken
- 12. There were additional comments in common regarding the future of a Township-wide pedestrian linkage are as follows:
  - The path should be wide enough for pedestrians and bikes.
  - The path should be paved.
  - It is a great idea.
  - How will the path-system be maintained?
  - No need for improvements.

### D. Public and Township Meetings

**Public Ideas Workshop:** An Ideas Workshop was held to gather information and input from various interested parties regarding the potential for the Township-wide system. The agenda included a public design charrette and presentation of the public's ideas.

**Design Workshop:** A Design Workshop was held to present initial study findings/recommendations and to allow various interested parties to revaluate route alternatives and implementation priorities.

**Study Steering Committee Meetings:** A Study Committee was formed to review findings and to advise and steer the study process. Meetings were held at strategic intervals when key findings were to be presented, information was needed, or political/process direction was requested. The Township invited members of the Township staff, and both local and regional groups/organizations to attend the committee meetings.

### E. Draft Analysis Plan

Location feasibility for identifying bicycle and pedestrian routes is directly determined by two major factors:

- 1) Physical constructability, including environmental and technical concerns, and
- 2) Public/Landowner acceptance and desires.

A draft plan (see <u>Section 1-G-1: Upper Merion Township Bicycle and Pedestrian Network Draft Analysis Plan)</u> was developed to help analyze the potential physical locations for the bicycle and pedestrian network. The draft plan documents the potential walking and cycling routes through out the Township. Only Township roadways that link to other "connector" streets were analyzed in detail. The routes shown on the map were selected based upon the information gathered from existing plans and reports, the field survey, the Resident and Business Survey, the public ideas workshop Township meetings, and site visits. In general, the public aided in locating paper streets, trails off-of-the-map, and other hidden connections that are or could be used by residents. Public acceptance and desires were critical in developing the recommendations of specific routes in the next level of analysis.

### F. Methods of Recommendation for Specific Routes

Using the Bicycle and Pedestraian Network Draft Master Plan (See <u>APPENDIX A</u>), the design consultants in coordination with the study committee began to select a network of bicycle routes, pedestrian routes and a potential greenway trail. The information and discussions held at the public workshop and data collected from the Resident and Business Survey greatly influenced the selection of the networks. In many cases this was based on how residents currently cycle or walk across the Township. In other cases, residents identified major ped/bike gaps that, if filled in, would open larger opportunities for walking and/or cycling. Other approaches included:

- The analysis of physical topography, traffic volumes, natural and built features, utility corridors, proposed development, and historical features prior to selecting a route. Proximity to and safe access from neighborhoods and town centers was also a critical element in route selection.
- The public expressed a strong desire to link parks, open spaces and recreation facilities together. This was integrated into the design.
- Existing sidewalks, trails and roadways across the Township also helped in identifying specific routes.
   This greatly minimizes the need for construction to open the corridor.
- Ownership of land whether private or public, existing rights-of-way, knowledge of owner acceptance
  of trails/pathways, and many other factors revealed in the survey all played an important role in
  selecting route corridors.

## G. Method of Prioritization of Routes with Estimated Costs and Impacts

The consultants selected three primary networks to study in more detail (see <u>APPENDIX A: Dwg # MAPKEY</u>) and estimated physical construction costs (see PRIORITY drawings in *Section III-C*).

These routes were selected because:

- They are expected to be the easiest projects to implement from the standpoint of both cost and constructability.
- They benefit the residents of Upper Merion and the region by providing safe access to the Schuylkill River, the Schuylkill River Trail, Township parks and trails, by creating a safe walking/jogging route from southern to northern parts of the Township, and by creating a safe bicycling route parallel to high traffic volume roadways.
- They provide a good "cross section" of various conditions from which to estimate cost; these estimates may then be applied to the rest of the network segments that will be contained in the study.

### H. Final Report Discussion

Upon the completion of the July 2005 Draft Report the consultants prepared a summary of the comments and concerns gathered and responded by updating the report to reflect the comments and concerns. For the details of this discussion please see *APPENDIX C: Final Report Discussion*.