# VILLAGE OF GURNEE PEDESTRIAN/BICYCLE TRAIL MASTER PLAN 1994

**Prepared For:** 

# Village of Gurnee, Illinois

**Prepared By:** 

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Adopted March 28, 1994

## PEDESTRIAN/BICYCLE TRAIL MASTER PLAN - 1994 VILLAGE OF GURNEE, ILLINOIS

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Clerk, Norman C. Balliet

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## I. INTRODUCTION

## A. Project Overview and Planning Process

The Pedestrian/Bicycle Trail Master Plan of the Village of Gurnee sets forth a long-term program that will guide future planning, design and implementation of a Village-wide system of trails to be utilized by residents for recreational and non-automotive travel throughout Gurnee. Central to the plan are the linkages created interconnecting various neighborhoods within the Village and further developing the Village Center as a historical core and focal point of community activity. Additionally, the Plan suggests linking the community-oriented trail system and the existing and proposed regional trail systems being developed by other governmental entities.

For clarity purposes, in this Plan the term trail is used to reflect numerous possible configurations of routes designed to accommodate pedestrians and bicyclists. A trail may be of the Class I type indicating an independent right-of-way or easement with a surface width of 8 to 12 feet. Other times a trail may be an existing or proposed sidewalk designated by signage as a component of a bicycle or pedestrian route.

The Trail Master Plan has been developed to be harmonious with other Village Plans such as the 1990 update of the Comprehensive Plan and the 1979 Village Center Plan as well as the Village's short-term (five-year) sidewalk improvement program and the sidewalk improvements committed to by private developers. The Plan also complements the efforts of the Gurnee Park District as outlined in its 1991 Master Plan. Further, regional plans such as the Northeastern Illinois Regional Greenways Plan, the Lake County Forest Preserve District Trail Plan and the Lake County Department of Transportation's initial trail plans have been considered and anticipated in this Plan.

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The Pedestrian/Bicycle Trail Master Plan stems from the community's increasing desire to enjoy enhanced outdoor recreation opportunities and coincides with societal needs of reducing dependance upon the automobile for the purposes of reducing air pollution and traffic congestion. Walking, hiking, and bicycling are recreational activities which can be enjoyed by persons of all ages, in groups and as individuals. Park District surveys indicate these activities to be extremely popular among residents of the Village. Gurnee residents are not alone in having a desire for more walking and bicycling opportunities. Across the nation more cities, towns and villages are adopting trail plans and implementing those plans.

The development of the Master Trail Plan is an outgrowth of the work of the Citizens Advisory Committee, which established the overall linkage principals guiding this Plan. The Citizens Advisory Committee is composed of elected and appointed municipal officials, staff of the Village, Township, Library, Park District and local schools, as well as numerous civic organizations and private citizens representing both the interests of their neighborhoods and the overall Village. Since October there have been a series of meetings between the Citizens Advisory Committee and the consultant as well as numerous meetings between the Village staff and the consultant and between the consultant and staff members from other governmental agencies involved in pedestrian/bicycle trail activities. During these meetings a variety of issues were discussed relating to the scope of the Master Plan - trail relationships to existing natural open spaces such as wetlands and floodplains and man-made open spaces such as parks and re/detention areas, priority routes or linkages through the Village, the nature of the trail system, and future Plan funding mechanisms.

Following review of the proposed Pedestrian/Bicycle Master Trail Plan by the Citizens Advisory Committee, the Village Board of Gurnee will consider and take action on the Plan.

# B. Pedestrian/Bicycle Trail Goals and Standards

## Overall Trail System Goals

- Develop a comprehensive trail system, including both on and off-street routes, that makes bicycle and pedestrian travel a feasible, safe and enjoyable mode of transportation and form of recreation in Gurnee.
- Develop a comprehensive trail system which traverses the community both east - west and north - south and link the local trail system to existing and proposed regional trails.
- Concentrate on completing a Village Center pedestrian/bicycle circulation system that provides access to a scenic river walk and trail system along the Des Plaines River and with other numerous public uses in the Village Center.
- Expand and link the trail system between neighborhoods and to major activity and work centers in addition to local destinations throughout the Village routing pedestrians and bicyclists off major roadways wherever possible.
- Ensure the construction of trails in new development to provide for trail linkages consistent with the adopted Pedestrian/Bicycle Trail Master Plan.

The Village should continue to complete the initially identified essential sidewalk links in those neighborhoods lacking sidewalks.

3

Trail Design Goals

- Establish Class I trails, wherever feasible, for the safety, convenience and enjoyment of users. On the Priority I trail segments, Class I trail development will be a emphasized and other trail types may be utilized on an interim basis until a Class I trail can be developed.
- Encourage implementation of a two-tier (Class IIA) approach to providing circulation for pedestrians and bicyclists along all major roads through and adjacent to the Village and along selected and designated neighborhood streets when a Class I trail cannot be provided.
- Encourage regional agencies to promote enhanced design standards for regional trails passing through the Village.
- Petition IDOT and other applicable agencies to provide parapets and widen vehicle lanes on all bridge decks consistent with the recommended design standards included herein.
- Coordinate local improvements with those of outside agencies to accelerate timing of trails through the Village.

#### Specific Location Goals

- The Village should seek to have traffic lights installed on Grand Avenue east of O'Plaine Road at Greenleaf or First Street to provide for safe pedestrian and bicyclist crossing.
- The Village should proceed with studies for a Blackstone Avenue crossing over the railroad tracks as well as a crossing of the same tracks at some location north of Route 41. Full access railroad crossings are a long-range ultimate goal and pedestrian and bicycle crossings are established as an interim goal.

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Project Implementation

- Applicable Village codes should be amended to provide for enhancement of bicycle and pedestrian circulation and bicycle parking.
- The Village should seek non-Village sources of revenue through grant programs.
- The Village should update this Plan every five years to assure that current issues are addressed and to coordinate the plan with the efforts of other governmental agencies.

## **II. METHODOLOGY**

A comprehensive transportation system is vital for maintaining and expanding Gurnee's economic base. As such, a Comprehensive Transportation Study was completed for the Village in 1986 and that study is presently being updated. The updated Transportation Study is intended to complement and be informed by this Plan. To enhance the overall system, pedestrian and bicycle trails can function as an essential component of this transportation network. As such, pedestrian/bicycle trails must be considered in the planning process for all land use related decisions and in all transportation related projects.

The intent of the proposed trail system is to serve both a utilitarian transportation function and a recreational function. A user study conducted by the Gurnee Park District found that the recreation uses of trails are greatly valued by Village residents. Other studies conducted nationally indicate increasing interest for the utilization of trails as an alternative transportation mode to the automobile. The major difference between the two uses is that the primary objective of the utilitarian trip is to arrive at a specific destination as quickly as possible with few interruptions, while recreational trips are generally more leisurely and less direct.

To provide for a trail system to accomplish both the utilitarian and recreation functions trail alignments were assessed in relation to not only the natural features and social/cultural features of the community but also the areas of opportunities for employment, shopping and services.

### A. Natural Systems

Natural systems are those environmental features which offer attractiveness and interest to a trail system. They also pose challenges to trail engineering in mitigating soils adverse to development while meandering through woodland areas and around wetland and floodplain features. Trails in conjunction with natural systems will generally be developed for recreational purposes.

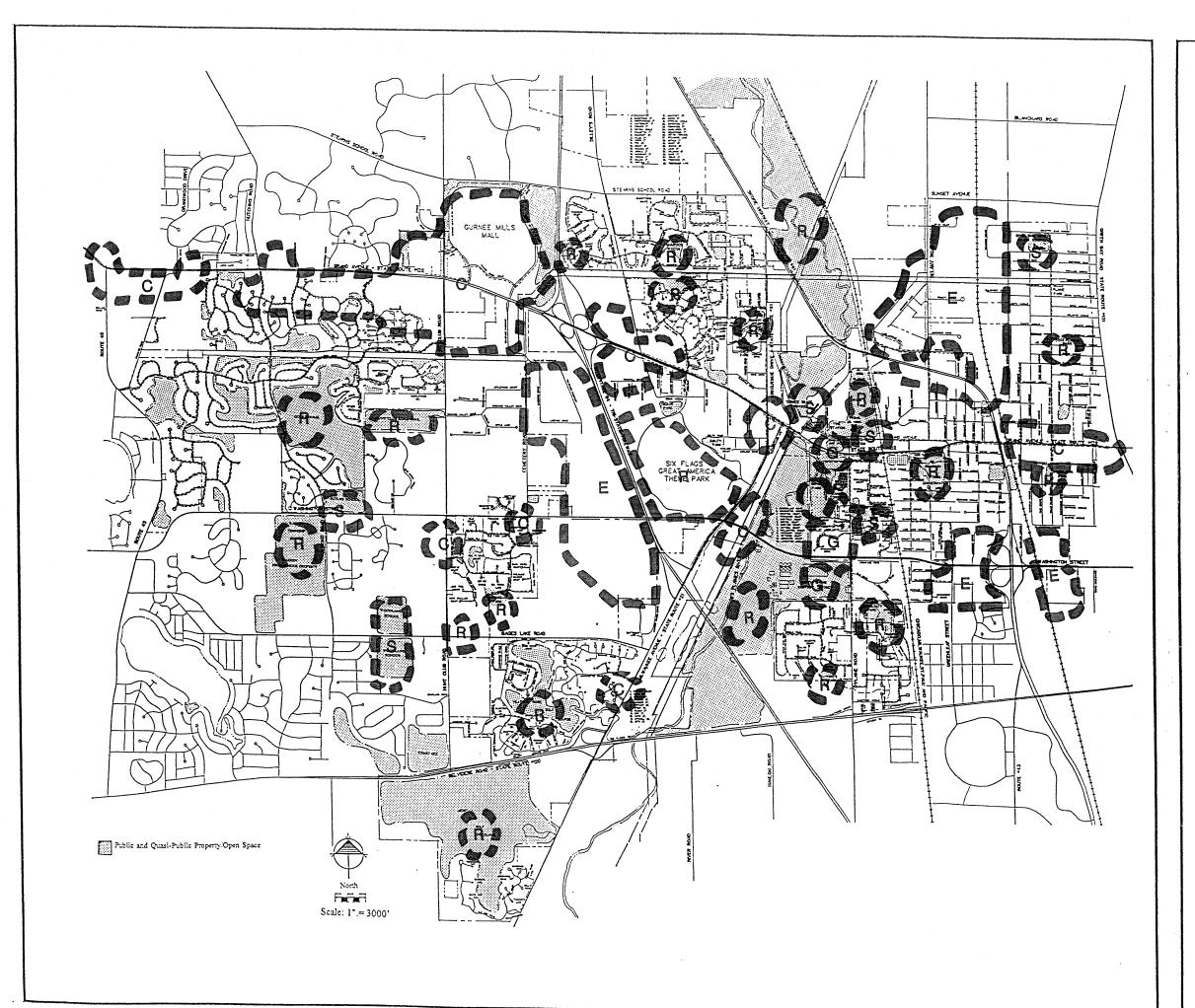
### B. Social and Cultural Systems

Social and cultural systems represent the built environment of a community. The land uses associated with these systems include residential neighborhoods, shopping and other commercial areas such as office parks, and public and quasi-public places such as the Village hall, library, police/fire stations and other similar uses.

The Plan proposes to link these social and cultural features to the Village's neighborhoods and to the regional trail system as well. Major land use patterns and points of interest within the planning area are indicated on Exhibit A which generally locates the employment, shopping, retail/service, commercial, recreational, educational, and governmental destinations of trail users. In developing trail systems, existing land use patterns along with future uses have been considered.

There are typically greater barriers and greater opportunities to providing trails which seek to link social and cultural systems. In Gurnee, barriers to trail linkages include limited access roads such as Highway 41 and Interstate Tollway 94 (Tri-State) and arterials such as Washington Street, Grand Avenue, Belvidere Road, Milwaukee Avenue, and Hunt Club Road, for example. Railroad tracks and roadway bridges create trail corridor barriers as well.

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# Legend

- E Employment Areas
- C Retail/Service Commercial and Shopping
- R Recreational: Includes Commercial, Private, and Public Recreational Opportunities
  - Schools

S

G Municipal, Township, County, and other government facilities

# Community Points of Interest

# Pedestrian/Bike Trail Master Plan Village of Gurnee

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## March 1994

EXHIBIT A

Opportunities for trails exist along public street right-of-ways, along major utility right-of-ways such as Commonwealth Edison's which passes through the planning area and in selected natural feature areas of the community.

# III. TRAIL DESIGN: BIKEWAY TYPES AND DESIGN ELEMENTS

The American Association of State Highway and Transportation Officials (AASHTO) divide bikeway facilities into three classifications as follows:

- ◆Class I. Separate Bikeway Trail.
- •Class II. Widened Lane and Marked for Both Vehicles and Bicycles.
- Class III. Shared Roadway for Vehicles and Bicycles With Sign Controls Only

In developing this Plan it became apparent that refining the above classifications would be required to achieve the goal of developing a Village-wide two tier system for experienced and non-experienced riders as well as pedestrians. Therefore, the recommendation to meet this goals is the designation of another approach as follows:

♦Class IIA.

Hybrid Approach - Bikeway Trail/Shared Roadway and Sidewalk Combination.

The goals and design details of each of these trail types are discussed and shown in the following section.

# <u>Class I Bikeway (Bike Trails)\*</u>

Highest level of trail facility
 Trail distinct and separate from roadway.

Independent right-of-way

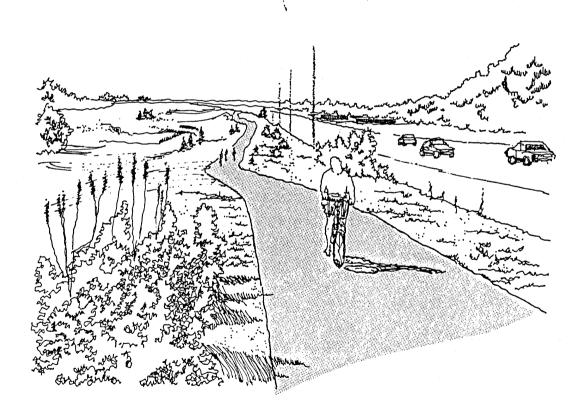
Paved trail width:

Two-way 8-12 feet

One-way 5 feet minimum

- Two foot minimum graded area on either side of paved surface
- Best used along wetlands. through wooded areas, along streams or creeks, and along highways with separate right-of-way from pedestrian traffic and with separation from paved street area.

Exhibit B

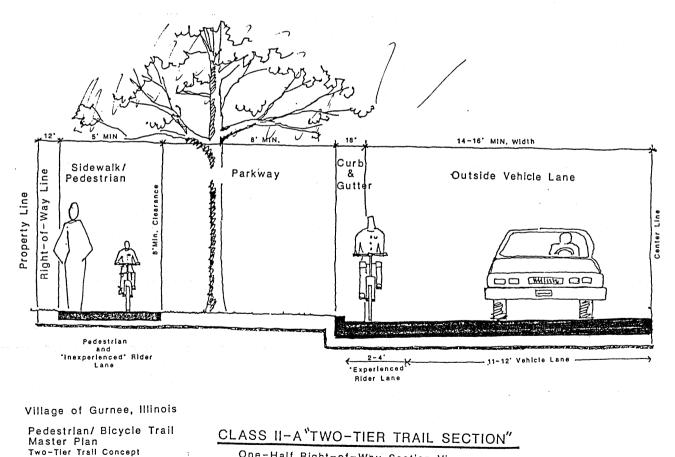


From Guide for the Development of Bicycle Facility (AASHTO).

Class IIA Bikeway Two Tier Experienced/Non Experienced Bicyclist and Pedestrian Concept (Hybrid Approach - Bike Trails/Shared Roadway and Sidewalk Combination)

- Moderate level of trail facility combining shared roadways with separated sidewalks for joint pedestrian and bicycle use.
- Minimum recommended roadway with of 14 16 feet.
  - -If 14 foot roadway, bikeway distinguished by signs only.
  - -If 16 foot roadway, bikeway distinguished by striped lane on roadway with appropriate signage.
- With either roadway configuration, a separate 5 foot wide sidewalk is recommended, in all cases. The sidewalk should be separated from the roadway by a minimum 5 foot wide landscaped strip.

Exhibit C

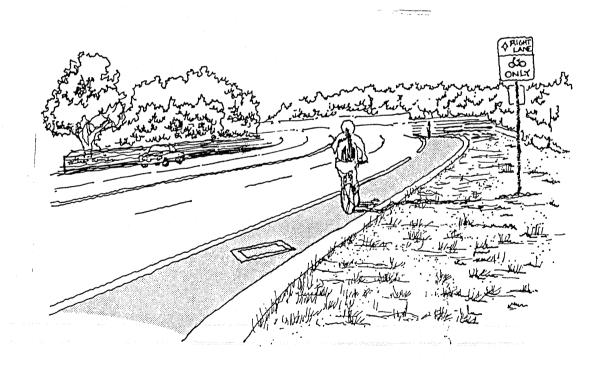


One-Half Right-of-Way Section View

## <u>Class II Bikeway (Bike Lanes)\*</u>

- Striped lane on roadway with appropriate signage
- Four to six foot width lanes
- Where street parking is permitted lane should be located between parking and motor vehicle flow lanes
- Contra-flow lanes are discouraged
- Appropriate lane width depends on parking, road width, vehicle speeds, shoulder width, and traffic volume.

Exhibit D

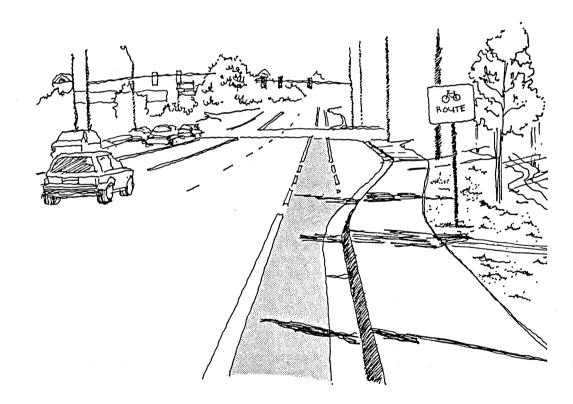


From Guide for the Development of Bicycle Facility (AASHTO).

## Class III Bikeway (Shared Roadway)\*

- Bikeways distinguished by signs only
- Outside lane width 13 -14 feet preferred
- Used in areas of low traffic volume
- Less roadway width needed than Class II Bikeways
- Encouraged for use in already developed areas where citizens and public officials desire appropriate bikeway designation

Exhibit E



\* From Guide for the Development of Bicycle Facility (AASHTO).

### SIGNAGE

An important aspect of bikeway design is signage. Bicycle trail signage should convey a variety of messages to both bicyclist utilizing the trail system and motor vehicles utilizing the adjacent roadway. Signs are necessary to assure the safe interaction between differing modes of transportation and to apprise the differing vehicle types of the potential actions of each other. Through appropriate signage design and placement, safety for all roadway users may be increased.

Two types of signs are generally needed to convey the requisite information. The first category of signage is intended for bicyclists to either identify bikeways, observe specific regulations, direct or guide the bikeway user or warn the rider of something. The other category of signs is provided for motorists to either warn them of cyclists or bikeways and/or post specific regulations.

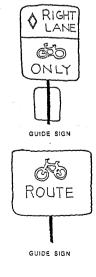
The Manual of Uniform Traffic Control specifies mandatory signage types for use in certain situations. Exhibit F indicates the typical signs which may be used in marking the Village's Bicycle trail system and the intent of these signs.

EXHIBIT F: BICYCLE TRAIL SIGNS, TYPE AND FUNCTION



GUIDE SIGN

## ROADWAY SIGNAGE





### OTHER ELEMENTS

In addition to the Bikeway design standards and signage elements discussed, additional design elements will need to be considered as the trail system is developed. The Village engineer, planners and other design professionals will need to consider pavement marking/striping, intersection design, bridge deck - trail parapet wall construction, overpasses, bicycle parking, and trail amenities in development of specific trail plans.

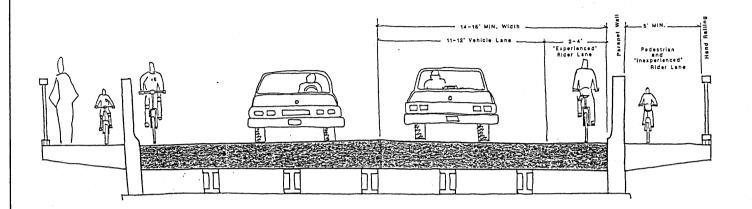
**PAVEMENT MARKINGS:** Pavement markings are used as a visual reinforcement of signage and are more essential to informing the bicyclist than the automotive user since they are more directly visible in the bicyclists line of sight.

INTERSECTIONS: The majority of bicycle/motor vehicle accidents occur at intersections. Two bicycle and motor vehicle movements are particularly difficult. The first is the bicycle rider going straight through an intersection and a right turning motor vehicle. The second major problem is the left turning bicyclist. This will be especially true for busy intersections along the major arterials.

Cross road lane striping is recommended to be 12" painted or other acceptable designs.

BRIDGE DECKS: The ability for bicyclists to pass over motor vehicle bridges safely is extremely limited when the bridge deck is not designed for that purpose. Two bridges critical to the movement of trail users through the Village are located along Stearns School Road and Grand Avenue. The Grand Avenue bridge over the Des Plaines River is one of the crucial corridor linkages, considering its location proximate to the Village Center and other public uses, and the bridge deck requires a parapet wall for separation of the bicycle way from the roadway. Such a parapet wall would result in the increased safety for both bicyclists and pedestrian users of the bridge. The Plan proposes a bridge deck layout for the Illinois Department of Transportation which could more acceptably accommodate motor vehicles, bicyclists and pedestrians (see Exhibit G).

Exhibit G: Recommended Bridge Deck Roadway Configuration



Village of Gurnee, Illinois Pedestrian/ Bicycle Trail Master Plan Two-Tier Trail Concept

BRIDGE SECTION

In the review of the bridge deck section depicted above, the Committee recommended the utilization of such a design for the trail connections along Stearns School Road and Grand Avenue, where they cross the Tri-State Tollway.

OVERPASSES AND UNDERPASSES: Both overpasses and underpasses may be utilized for separating bicycles and pedestrians from surface traffic in locations where high traffic volumes may lead to disruption of the trail system. Both structures are expensive to build and will disrupt local road conditions and create some traffic interruptions. In the Planning area the need for underpasses and overpasses are generally in conjunction with sections crossing the barriers to trail development and planning for linkages requiring such structures and will require special studies at the time of associated roadway improvements.

**BICYCLE PARKING:** The provision of adequate, secure bicycle parking facilities would further encourage the use of bicycles as a mode of transportation. Bicycle use for shopping and work commuting has been shown to increase with the provision of safe parking locations for bikes. Although 8 to 15 bicycles can be parked in the space to park an automobile, many destinations lack sufficient bike parking.

Parking facilities for bicycles are divided into three classes in order of security provided:

◆Class I - High Security bike lockers or covered parking areas with
protection from vandalism and weather;

◆Class II - Medium security parking for both wheels and the frame; and,

◆Class III - Minimum security bike racks or fixed objects for locking a bicycle to.

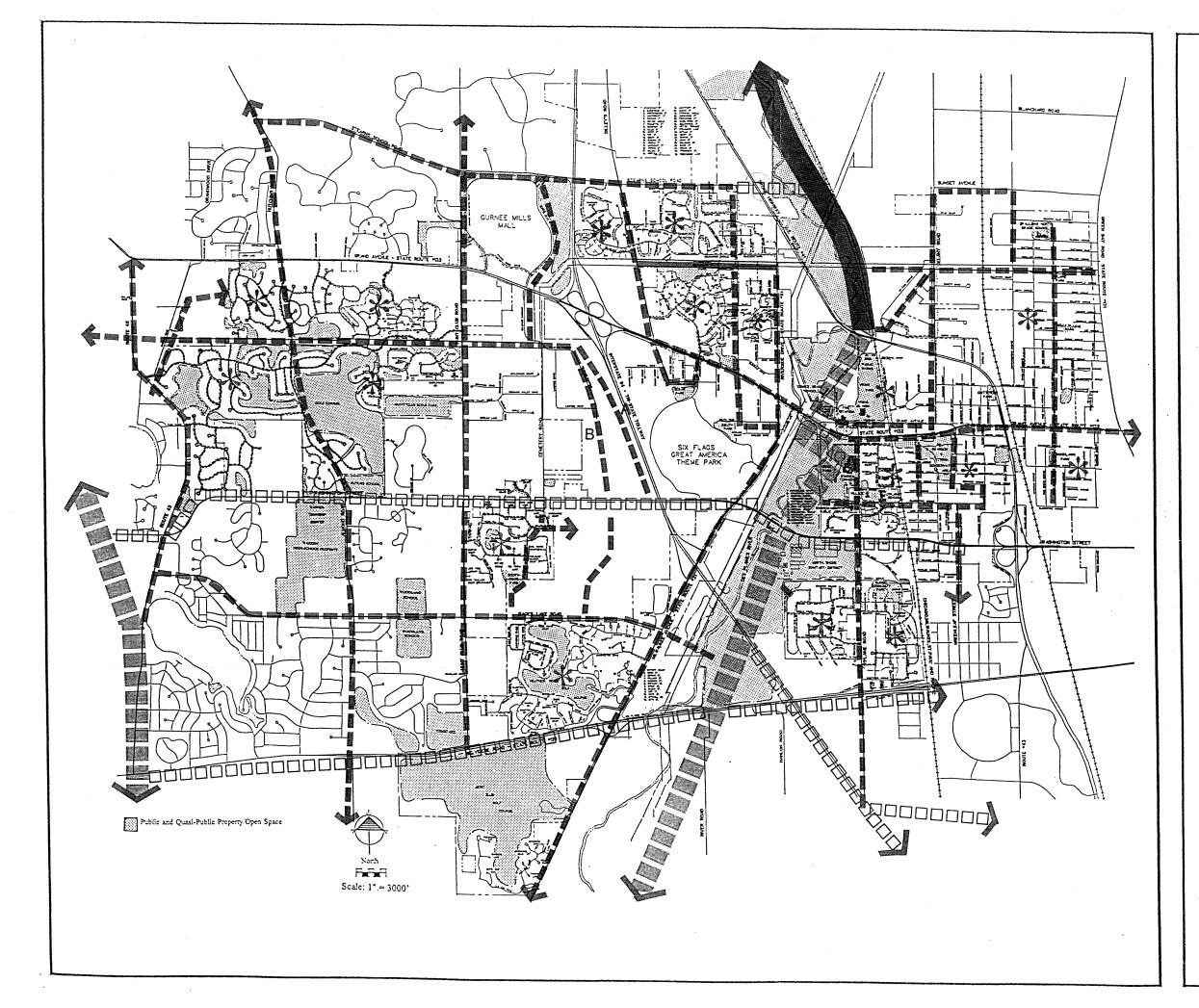
The Village should explore amending local codes to require the provision of bicycle parking facilities in conjunction with non-residential and multiple family development.

# IV. TRAIL SYSTEM CONFIGURATION

The Citizens Advisory Committee discussed numerous configurations for a Village-wide trail system and established a number of priorities irregardless of specific corridor locations. Exhibit H is the Pedestrian/ Bicycle Trail Master Plan Map which shows the configuration of the system routes and the general trail linkages within the Village. Arrows on the trail maps indicate linkage points where the Village anticipates that other governmental agencies may pick-up and further develop the trail segment. The Master Trail Plan is supplemented by a series of maps showing local neighborhood trails on a sub-area basis. Exhibit I is an index map to the six neighborhood sub-areas. Exhibits J - O show the neighborhood trails and linkages to the overall and regional trail system.

**PRIORITY 1:** A major east-west route traversing the planning area along Washington Street and providing linkage to the regional trail corridors on the east and west and to other future north-south trail segments along Almond and Hunt Club Roads

> A major north-south route traversing the planning area. The likely corridor will be the proposed expansion of the existing regional Des Plaines River trail being developed by the County. Assistance in trail development such as the provision by the Village to the Forest Preserve District of trail building machinery and labor may be provided by the Village to hasten the development of this component of the trail system. The Des Plaines River Trail will provide for both regional recreation opportunities as well as providing trail linkages to the Village Center and numerous Village neighborhoods.



# Legend

Regional Trails (L.C.F.P. Dist.)

Existing

Proposed

Other Regional Trails

Proposed

Community/Neighborhood Trails

🔆 See Neighborhood Detail Plan

Existing

Proposed

Note: Class I Trails are recommended wherever feasible.

# OVERALL TRAIL CONCEPT MAP

# Pedestrian/Bike Trail Master Plan Village of Gurnee

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## March 1994

EXHIBIT H

PRIORITY 2:

Trails developed under this priority include additional east - west linkages potentially along Gages Lake, State Route 120 and Grand Avenue and in conjunction with the Commonwealth Edison high tension power lines. North - south linkages may be added along Milwaukee Avenue and in selected corridors to supplement the existing trail system in the Village's central area. These linkages may occur in the south central section of the Village along O'Plaine Road and in the northeast section along Belle Plaine Street linking Woodlawn Park to the Spaulding North Grade School.

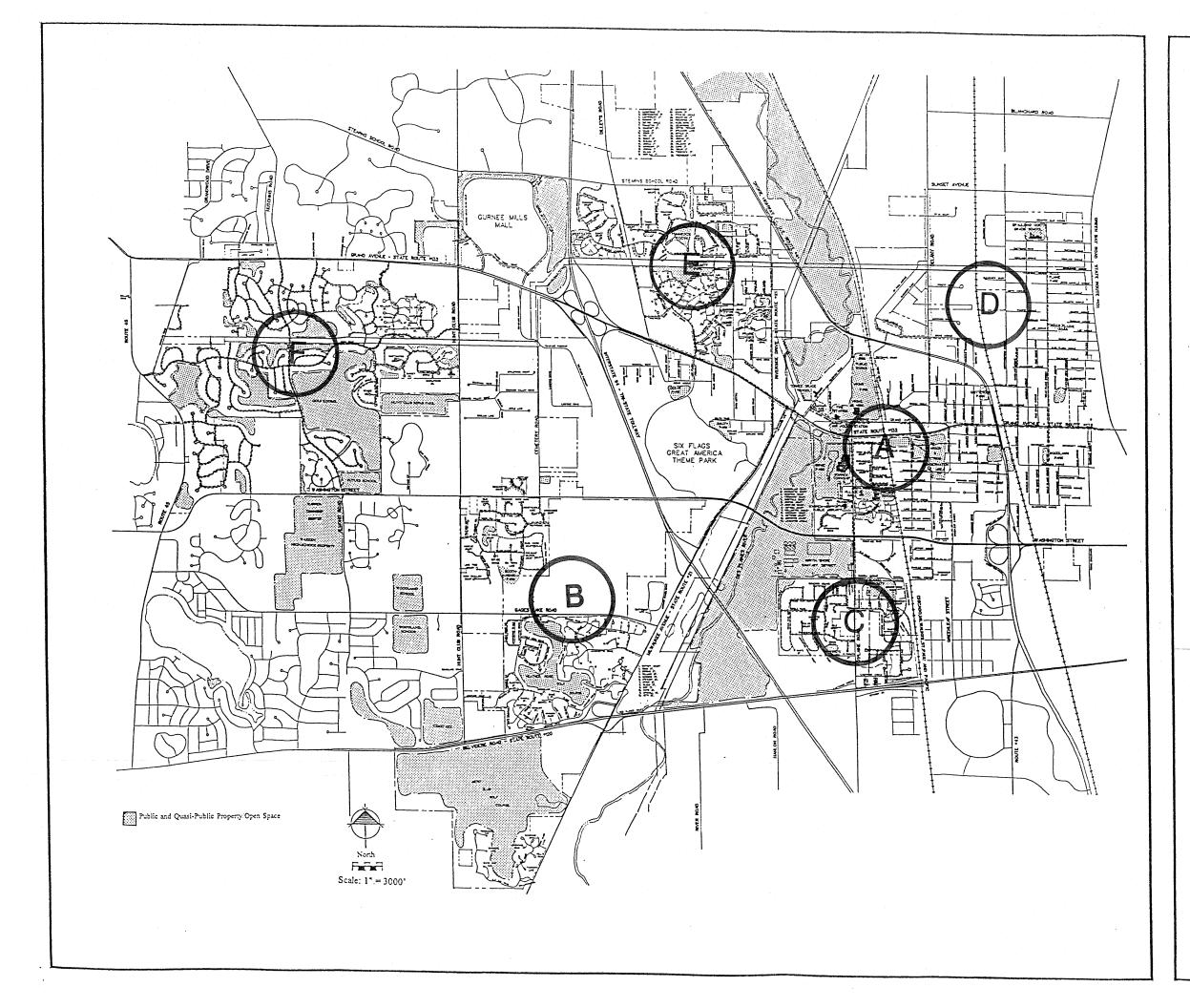
Priority 2 segments should be considered when resources devoted to these linkages can be provided as a supplement to Priority 1 trail building as with the Village's existing funding of sidewalks and trails in neighborhood areas and in the provision of sidewalks by private developers.

The Plan recommends the implementation of Class I trail along all Priority 1 segments, where feasible. If, at present, Class I trails are not feasible, the Village will implement alternative trail types on an interim basis until a Class I system can be achieved.

In addition, the Village should work with all relevant agencies to assure that when road improvement programs are taken on County and State roads that trails are considered and that the design of these trails with the Village's overall trail design guidelines.

#### A. Neighborhood Sub-Areas

Exhibit I shows the division of Gurnee's neighborhoods into planning units for local trail planning. Exhibits J - O are sub-area maps which show the types of trails planned, the neighborhoods and points of interest linked by the planned trail system, and raises discussion trail designers will need to consider when refining local plans.



# Legend

A	Village Center
B	Southwest Subarea
С	South Subarea
D	Northeast Subarea
E	North Central Subarea
	West Subarea

# COMMUNITY SUBAREA MAP

# Pedestrian/Bike Trail Master Plan Village of Gurnee

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# March 1994

EXHIBIT I

#### Village Center Sub-Area

Points of Interest: Village Hall and other municipal buildings including the Warren-Newport Public Library; Warren Township High School, O'Plaine School, and Gurnee Grade School; Swanson & Trigg Conservation Area; Viking and other parks, several restaurants; Des Plaines River, potential rest areas.

Community - Trail

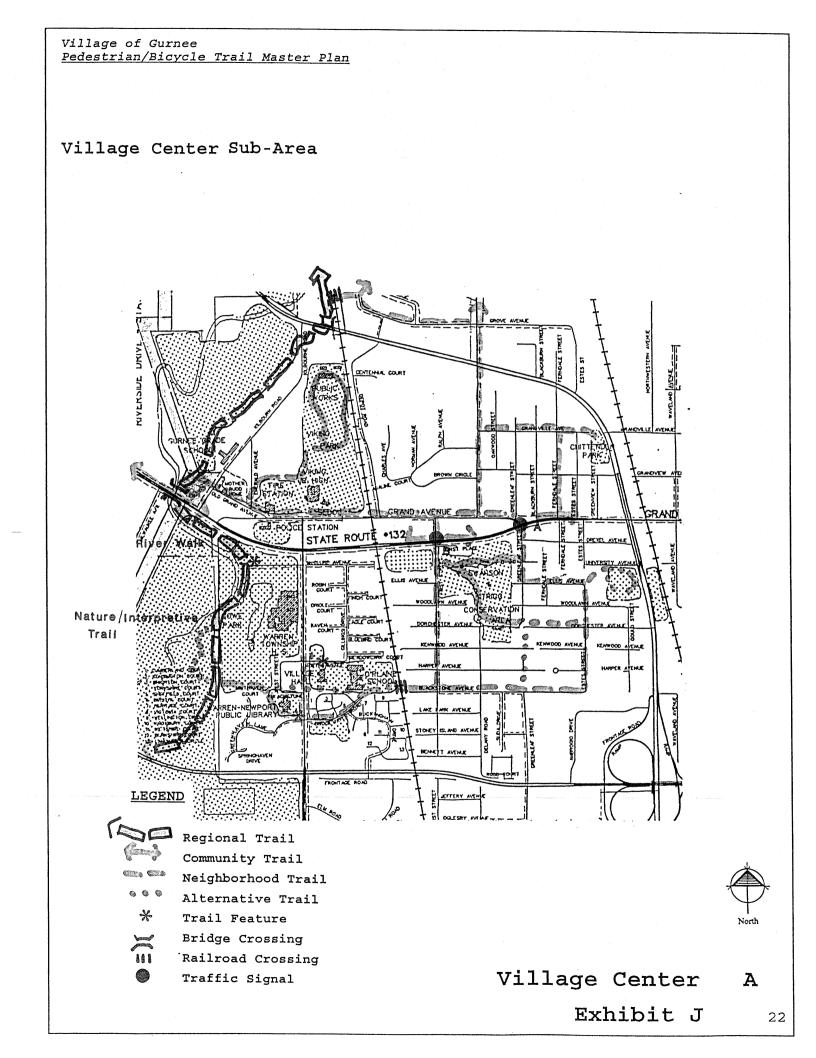
#### Linkages:

Access to regional trail system and river walk along Des Plaines River; access to Viking Park and Trigg Conservation area trails; access to Priority I and II trails along Washington Street; Grand Avenue and Commonwealth Edison rights-of-way.

#### Comments:

Design attention will be required for crossing Grand Avenue bridge, railroad crossings at Old Grand and Blackstone Avenues; additional traffic lights are encouraged at selected locations along Grand Avenue. A nature trail should be developed in the Forest Preserve with rest areas at various points along the trail developed with benches, drinking fountains, trail maps kiosks, bicycles racks and other amenities as needed. This section of trail to be developed in cooperation with the numerous governmental agencies concentrated in the area.

See Village Center Trail Map (next page).



Southwest Sub-Area

Neighborhoods:

Winchester Estates, South Ridge, Heather Ridge, Fairway Ridge, The Highlands of Fairway Ridge, Hickory Haven.

Points of Interest:

South Ridge Park, Heather Ridge Golf Course.

Community - Trail Linkages:

Linkages to Washington Street, Gages Lake Road, Hunt Club Road, Route 21, Route 120.

Trail Type:

B

BEL VIDERE ROAD

Class I where possible in new subdivisions to complement to the Class I trails developed in South Ridge Subdivision and along Gages Lake road by Heather Ridge.

In other areas Class IIA. Neighborhood streets may be striped and trail signage provided as well as sidewalks for pedestrians and inexperienced riders.

> Comments: This area is proposed to be linked to the Washington Street trail where potential right-of-way width problems may need resolution. The potential for a Class I trail along Washington Street

> > through this area can provide the needed link for this area to the overall community including: the Gurnee Village Center Area to

> > the east and the Warren Township Center facilities to the west.

LEGEND

Regional Trail Community Trail Community Trail Community Trail Neighborhood Trail Alternative Trail X Trail Feature Bridge Crossing Railroad Crossing Traffic Signal

Exhibit K

Southwest Area

North

Β

South Sub-Area

Neighborhoods:

Points of

Providence Villages, Country Trails, Vista Del Des Plaines.

Interest: Kings Prese

Community - Trail Linkages: Kings Park, Russell Community Park, Lake County Forest Preserve trail.

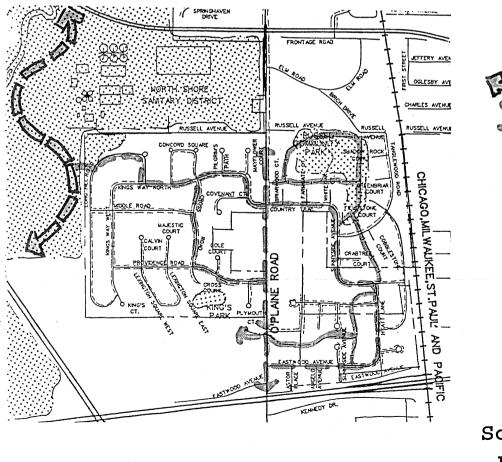
Linkages to O'Plaine Road and Village Center, State Route 120 and Lake County Forest Preserve trail.

Trail Type: Class I where possible in new subdivisions to compliment the Class I trails developed in the country Trails Subdivision.

Class IIA. Neighborhood streets and along O'Plaine Rd. Class I. Linkage to Forest Preserve trail.

Comments:

With the Forest Preserve Planned regional trail to the west, an internal link through Providence Village needs to be explored. This potential link would enhance access for this area to the Village Center along with the proposed Class IIA improvements along O'Plaine Rd.



Regional Trail Community Trail Neighborhood Trail Alternative Trail Trail Feature Bridge Crossing Railroad Crossing Traffic Signal

LEGEND

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111

South Area C Exhibit L

## Northeast Sub-Area

Neighborhoods:

Wedgewood Creek, Woodview, Crescent Meadows.

#### Points of Interest:

Interest: Spaulding School, Belle Plaine Park, Woodlawn Park, Gurnee Industrial Park, Gurnee Center for Commerce and Industry, Delaney Square,

Center, Grand Avenue Commercial Area.

### Community - Trail Linkages:

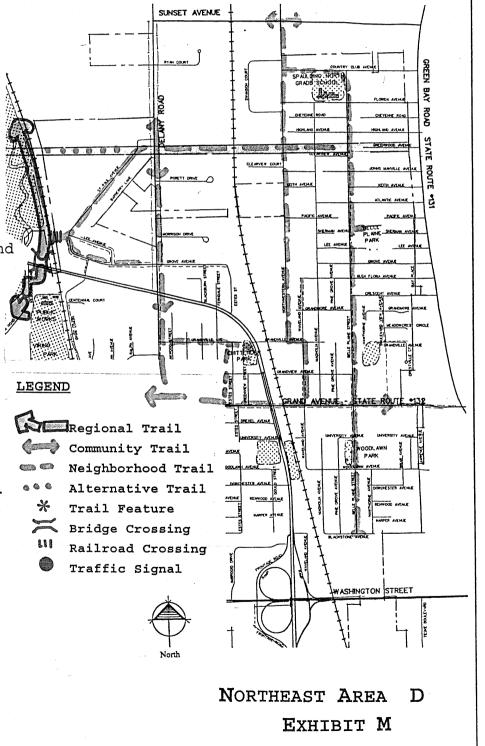
Lake County Forest Preserve, Commonwealth Edison/Grand Avenue and Delaney Road circuits for access to Village Center Area.

### Trail Type:

Class IIA - Grand Avenue and Delaney Roads and neighborhood streets striped, signage and sidewalks for pedestrians and inexperienced riders. Class I - Commonwealth Edison right-of-way.

#### Comments:

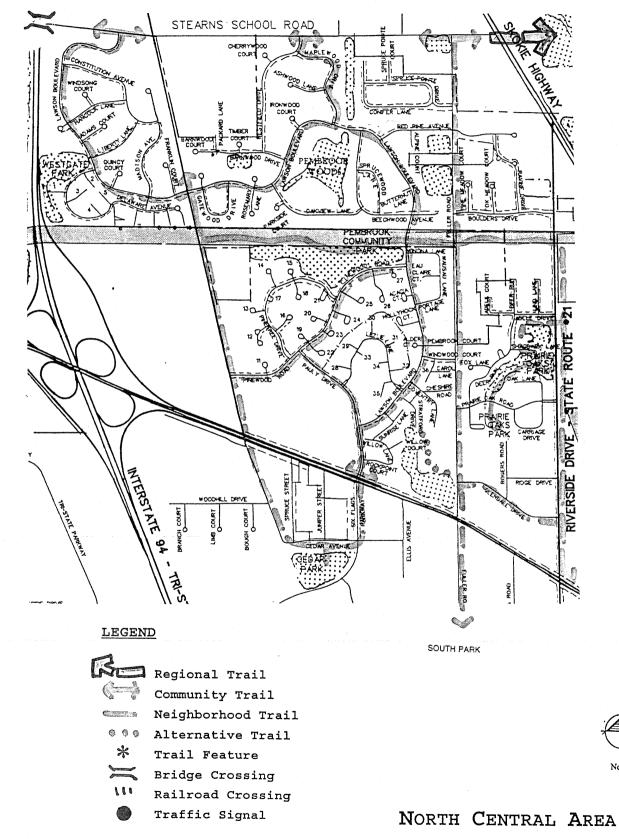
Railroad crossing needed to gain access to Forest Preserve Trail. Easement between St. Paul Avenue and the railroad is needed. An alternative trail alignment may be feasible by following Commonwealth Edison R.O.W. across railroad. Negotiate with Commonwealth Edison for trail easements.



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Village of Gurnee Pedestrian/Bicycle Trail Master Plan North Central Sub-Area Neighborhoods: Westgate, Pembrook, Spruce Point, The Boulders, The Riverside Heights, Pembrook Apartments, Pines, Prairie Oaks Points of Interest: Westgate Park, Pembrook Park, Pembrook Woods, Prairie Oaks Park, South Park, Cedar Park, numerous open space/detention areas, church, shopping and restaurants. Community - Trail Linkages: Stearns School Road, Dilleys Road, Milwaukee Avenue, Fuller Road, Class I Trail in Commonwealth Edison R.O.W. Trail Type: Class IIA - Neighborhood streets. Class I - Commonwealth Edison right-of-way. Comments: The Class I trail along the Commonwealth Edison R.O.W. provides a significant east-west link through this area. Development of several alternative north-south links such as Lawson Boulevard, Fuller Road and others as indicated on back can provide a network for circulation throughout the area, connecting the various points of interests as noted. Also, by providing these numerous alternative links several possible routes will be available for access to Grand Avenue and connections to the Village Center. In certain neighborhood areas where the street rightof-way is typified by a rural cross-section, with no curb and gutter, there may be limitations for the development of the Class IIA trail type with widened roadway surfaces. In these areas trail segments may consist of trail signage, only.

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# North Central Area Sub-Area

H CENTRAL AREA E EXHIBIT N 27

North

West Sub-Area

Neighborhoods:

Interest:

Points of

Stonebrook Townhomes, Stonebrook Estates, Arbor Valley, Aberdare Estates, Ravinia Meadows, Gwaltney Property and others.

Hunt Club Road Park, Ravinia Woods Park, shopping, municipal golf course, future grade School site, Warren Township Center.

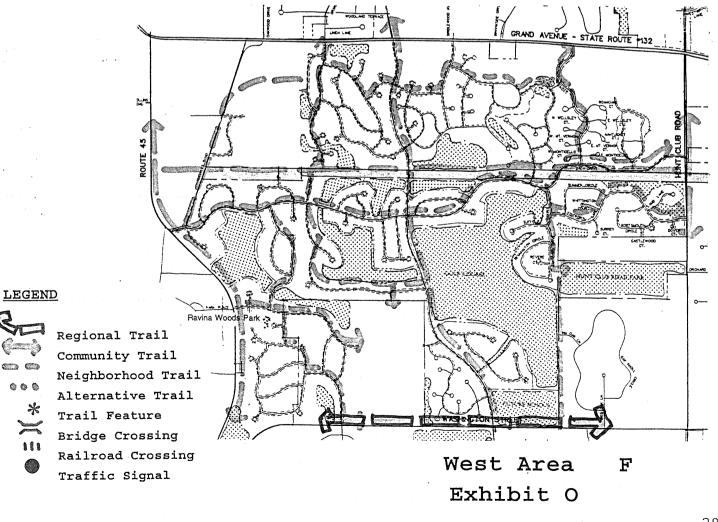
Community - Trail Linkages:

Linkages to Washington Street, Hunt Club Road, Route 45, Grand Avenue, and Commonwealth Edison right-of-way.

Trail Type: Class IIA - Neighborhood streets striped with signage and sidewalks for pedestrians and inexperienced riders. Class I - Commonwealth Edison right-of-way and Washington Street.

Comments:

Developing area review plans - coordinate improvements with development activities whenever possible. Negotiate with Commonwealth Edison for trail easements. Planning and design will need to address wetlands present along these trail segments.



# V. IMPLEMENTATION AND FINANCING

## COORDINATION WITH VILLAGE AND REGIONAL TRANSPORTATION IMPROVEMENTS

As suggested above, Trail improvements may be integrated into the community's transportation improvement program at a significantly reduced cost by coordinating the Trails Plan with local and regional road improvement schedules. For example, when regional arterials in the Gurnee area are scheduled to be resurfaced, it can be improved to include widening and paving the shoulders. Routine maintenance projects and intersection modifications can also be adapted for bicycle needs. Certain roadway improvements can be implemented in conjunction with the signing, striping and or mapping of recommended bike routes or as regular considerations in local transportation improvement programs:

- Widening of a street when resurfacing;
- Widening of the outside lane when restriping;
- Paving of the shoulder for bicycle use;
- Replacement of dangerous (parallel) sewer grates;
- Improvement of railroad crossings;
- Improvement of surface and elimination of irregularities and potholes; and,
- Increasing the regularity of street cleaning where warranted by bicycle use levels.

Implementation of these improvements would allow for more space for bicyclists on the road, increase bicyclist safety and increase the pleasantness of the bicycle trip.

### FINANCING

The Gurnee Pedestrian/Bicycle Trail Plan is designed to maximize the use of non-local funds. Virtually all of the routes identified in areas presently vacant and awaiting private development should be reflected in development plans for those areas.

The Village of Gurnee adds Trails (both neighborhood sidewalk and independent trails) incrementally each year. It accomplishes this task through methods which draw on both public and private resources.

In the past two to three years Village expenditures for the provision of both sidewalks and independent trails has been in the range of \$150,000 to \$160,000, annually. This funding level has translated into the provision of one to two miles of sidewalk and one-half to one mile of trails, annually. The Village should anticipate the need for future expenditures for sidewalks and trails as well as associated site amenities such as benches, bike racks and other structures to be, on average, in the range of at least \$200,000 to \$250,000, annually, in the Village budget. In balancing competing claims for limited funds, the allocation of funding should be based on the priorities established herein. The Plan is designed to provide flexibility to the Village to serve areas most in need and to fill critical trails gaps in developed areas the private sector can not provide. Capitalizing on funding or improvements by other governmental agencies including State and County roadways or possible grant opportunities also must be considered in the flexibility in the Village's annual budget process.

Federal funds, through the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), are available to the State for the funding of bikeways. ISTEA requires that the States spend at least 10 percent of their federal highway funds on non-motorized transportation facilities and earmarks funds specifically for bicycle and pedestrian facilities. ISTEA funds are allocated to the State and administered through the Illinois Department of Transportation (IDOT) and the Illinois Department of Conservation (IDOC).

Applications are reviewed by the Chicago Area Transportation Study (CATS) and by the Northeastern Illinois Planning Commission (NIPC).

Other public funding sources include IDOC's Bikepath Grant Program. The Village may want to consider developing joint grant applications with the Park District, Township and other interested public agencies.

Other creative funding options the Village may explore to increase the effectiveness of sidewalk building funds may include programs where the community allows its residents to participate on a percentage basis for the replacement of the sidewalk along the front of their property. For example, some communities may offer a 50-50 percentage share of sidewalk improvements with Village funds if property owners or neighborhood organizations want to speed up the scheduled improvements for their area.

Finally, the Village shall encourage its numerous civic and other groups, such as residential development Homeowners' Associations, to take an active part and leadership role in non-monetary contributions to the implementation of the Trails Plan. These contributions may take the form of clearing and maintaining trail segments in an "Adopt A Trail" type of program.

### SUMMARY

The Gurnee Pedestrian/Bicycle Trail Master Plan represents the first <u>formal</u> step in an ongoing planning and development process for a comprehensive trail system for the Village and its environs. This report can be used as a basis for Village budgeting purposes and review of private development proposals. Further, the Plan will aid other units of government in coordinating their transportation and related planning efforts with those of Gurnee.

The Village's intent to update the 1986 Comprehensive Transportation Study may also further refine related elements of this plan specifically in areas such as the suggested bridge and railroad crossing improvements and costs. The continued maintenance and beautification efforts for these trails will also require substantial commitments in the future and continued involvement from various governmental agencies as well as the efforts of neighborhood and community groups and concerned citizens. Implementing the program established herein is a challenge worthy of the Advisory Committee, whose enthusiasm, hard work, and guidance has contributed greatly to the development of this Plan.