

SIDEWALKS IN FORT MYERS

Toward a Community-Oriented Construction Policy



Prepared by
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for the
City of Fort Myers
July 2007

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In early 2007, the City of Fort Myers accepted a policy on the construction of sidewalks on its public streets during roadway reconstruction projects.

It is the recommendation of this report that Fort Myers should provide sidewalks on both sides of its streets. The main priority is in adding these facilities on streets that constitute the effective street network, or that part of the City's street system where each street segment connects two or more streets (in other words, the full street network leaving out dead-end streets, culs-de-sac and loop streets; see Figure 1 for a map illustrating the effective network in the City). In the long term, though, Fort Myers should strive to provide sidewalk coverage on all streets to complement its existing network (see Figure 2), recognizing that all trips begin and end on foot, regardless of their primary mode. The purpose of this report is to outline the importance of such a network of complete streets. It is recognized that the City of Fort Myers's current policy on sidewalks, as accepted by the City Council, adds sidewalks on at least one side of the street through infrastructure funds; another objective of this report is to identify sources of funding that can supplement the City's funds in order to make the construction of sidewalks on both sides of the street a tenable goal.

Background: The Importance of Planning for Pedestrians

There are many reasons to plan for non-motorized transportation. Walking, cycling, jogging and skating are increasingly popular for transportation and recreation. Safe and convenient non-motorized travel provides many benefits: reduced traffic congestion; user savings, especially on parking and fuel consumption; reduced public expenditure for construction and maintenance of roads and parking facilities; economic development; and a better environment. Sidewalks are the most basic element of a non-motorized transportation system in that they support the most basic form of transportation: walking.

Simply put, the presence of sidewalks makes greater pedestrian mobility possible. The ultimate goal of transportation is to provide access to goods, services and activities. In general, the more



Walking is the most basic form of transportation and often a preferable method for short trips. Giving pedestrians sidewalks to use for their trips increases their mobility and safety.

transportation options available, the better the access. Non-motorized modes are important transportation choices and, in urban areas, walking and cycling are often the fastest and most efficient way to perform short trips. A built environment that is hostile to non-motorized transportation reduces everybody's travel choices and eliminates (or at least greatly degrades) the primary choice for members of the community without automobiles. The result of this "automobile dependency" is increased traffic congestion, higher road and parking facility costs, increased consumer costs, and greater environmental degradation. Adequate pedestrian and cycling conditions are essential to guarantee everybody a minimal level of mobility ("basic mobility"). As stated in the American Association of State Highway and Transportation Officials Policy on Geometric Design of Highways and Streets (commonly referred to as the AASHTO 'Green Book'),

Pedestrians are a part of every roadway environment, and attention must be paid to their presence in rural as well as urban areas...Because of the demands of vehicular traffic in congested urban areas, it is often extremely difficult to make adequate provisions for pedestrians. Yet this must be done, because pedestrians are the lifeblood of our urban areas, especially in the downtown and other retail areas. In general, the most successful shopping sections are those that provide the most comfort and pleasure for pedestrians.

Non-motorized travel can contribute to the local economy by supporting tourism and quality development. Pedestrian-friendly conditions improve the commercial and cultural vibrancy of communities. Increased pedestrian traffic helps create a safer and more pleasant environment. Once visitors arrive in a community they often explore it by walking, cycling and skating. A good walking environment can enhance visitors' experience. Some trail networks are destination tourist attractions, bringing hundreds or thousands of visitors, and thousands or millions of dollars annually to a community.



A lack of sidewalks can place pedestrians directly in or adjacent to vehicle travel lanes, leaving them at greater risk of conflict with vehicles.

Safety

The safe passage of pedestrians should be the highest responsibility of the city. While providing sidewalks on one side of the street is an improvement over not having any sidewalk, the City should not advocate a long-term solution that requires pedestrians to cross streets mid-block to reach their destinations. Even with extended trips that follow sidewalks as long as they can, any trip end that is on a side of the street lacking sidewalks will require pedestrians either to cross the street without the protection of a designated crosswalk or to walk along that side of the street lacking a sidewalk, thus compromising the pedestrian's safety.

Safety is a particular concern in the vicinity of schools. Where in 1970 over 50 percent of schoolchildren nationwide walked or bicycled to school, today only around 15 percent do. Indeed, according to the Florida Department of Transportation's 1992 Home-to-School Transportation Study, only one out of six children in Florida walk or bike to school. The rest are transported

by bus or by private motor vehicle, often creating severe traffic congestion at school sites and unsafe conditions for the children who do walk or bicycle to school.

This has not only impaired independence among school-age children, as these children are dependent on their parents or guardians for transport, but it has also led to a widespread health concern in that school-children being transported to school by car or bus lack the exercise benefits that walking and riding bicycles affords.

Public Health

The connection between the form of American cities and towns and its public health concerns has been receiving increasing attention in recent years, namely as heart disease, obesity and diabetes reach record levels. Recent studies have postulated that Americans' expenditures on healthcare—currently accounting for approximately 15 percent of household budgets—could be mitigated by more active lifestyles.

By providing sidewalks on both sides of City streets, Fort Myers would be making a stronger commitment to fostering a healthier lifestyle and encouraging walking as a means of transport.

Community cohesion

The degree to which members of the community know and understand each other is related to the quality of the public realm, or the shared spaces that tie cities and their different components together. Transportation planning decisions in the last fifty years have not favored this important element of community life. The lack of pedestrian mobility deters residents from using the resources of their neighborhoods and immediate environments and predetermines a mode choice that favors automobiles.

While some members of the community may value individual privacy over interconnectedness with their neighbors, the lack of sidewalks in neighborhoods and the subsequent difficulty in making short trips through the neighborhood impedes the basic social function of neighborhoods— residents who live near one another sharing space and maintaining relationships.

Demographic Need

Regardless of decisions to walk for recreational or social purposes In Fort Myers, according to Census data, nearly 18 percent of households do not own cars and are consequently more dependent on a strong pedestrian realm to help satisfy their transportation needs. In the case of these households, the City is providing not just a recreational amenity but a safe system of transportation infrastructure to satisfy the principal means of mobility. While the greatest concentrations of households without cars are in eastern Fort Myers near Palm Beach Boulevard and Martin Luther King Boulevard, significant concentrations are in other parts of the city as well, pointing to a need to provide for walking- and transit-dependent households throughout the City (see Figure 3 for a diagram of no-car household distribution throughout the city).

SUGGESTED POLICY FOR SIDEWALK CONSTRUCTION IN FORT MYERS

The City has already defined a policy that it has accepted calling for the construction of sidewalks on at least one side of the roadway, where feasible. As the previous background information states, this provision is made in the name of providing pedestrian mobility within the confines of limited resources. Whenever possible, the City should construct sidewalks on both sides of any street, whether in reconstruction projects or in special sidewalk additions.

The following definitions qualify this policy with criteria that allow residents to choose whether or not sidewalks will be constructed in their neighborhoods, though it should be emphasized that it is incumbent on residents and not the City to demonstrate compliance with the conditions required to make this choice.

This policy includes provisions for the addition of sidewalks in existing development and their provision in new development to undergo review and City approval.

Existing development: construction of sidewalks on effective network streets

Sidewalks, where they do not exist already, will ultimately be constructed on both sides of any existing street segment that is part of the 'effective network,' or that connects to two (2) or more streets (see Figure 1) when resources and right-of-way are available. The City will prioritize this construction over any streets that do not contribute to the effective network ('non-network streets'). Within this general policy, the following three priorities will be used to determine an order of construction:

First priority: All streets within a half-mile (0.5-mile) distance of schools or parks, as measured by walking distance along public rights of way.

Second priority: All collector and arterial streets and any local streets between a half-mile and a mile distance from schools or parks.

Third priority: All other effective network streets.

The conditions listed below provide guidance for opting out of this program and require residents to initiate any efforts to do so.

Opting out of construction on existing streets

Residents of an existing street segment may petition not to have sidewalk constructed on one or both sides of their street and are obligated to provide proof to the City of each of the following conditions:

1. At least ninety (90) percent of all property owners with addresses on the street segment must see and sign the petition confirming that they have seen it (not necessarily signing in favor of it). The city will verify all property owners on the street with Lee County Property Appraiser records current at the time the petition is presented to the city and confirm that at least ninety (90) percent of these owners have confirmed seeing the petition. At least sixty (60) percent of all property owners with addresses on the street segment must sign the petition in favor of opting out.

2. The street must be classified as a local roadway and not an arterial or collector roadway.
3. The traffic volume as measured by average daily trips (ADT) must be under 800 trips per day and the 85th percentile speed recorded on the street must be no greater than 25 miles per hour (see Figure 4 for more details on suitable street typologies). These measures will be verified by the City's most recent available data (if available). If count and traffic speed data are not available, the City must measure these indicators for the street segment in question.
4. The street segment must not be within a distance of two miles (2 miles), as measured by walking distance along public rights-of-way, from any school facility.
5. The street segment must not be within a distance of one half-mile (0.5 miles), as measured by walking distance along public rights-of-way, from any City park facility.

Petitions that are accepted by the City shall be valid for ten (10) years from their date of acceptance, after which time the street segment in question will be reconsidered for sidewalk construction. Residents may repeat the opt-out process if desired at that time.

Low-priority sidewalk construction on existing streets and 'opting in'

The City's priority, as mentioned previously, will be the construction of sidewalks on effective network streets as a means of enhancing connectivity and a balanced transportation system in Fort Myers. Any culs-de-sac, dead-end streets, loops, and other streets that are not considered to be part of the 'effective network' will not be considered with high priority for sidewalk construction. Residents of such streets do have an option to 'opt in,' or request consideration for a higher prioritization of their street for sidewalk construction. To do so, residents must provide proof to the City that their street meets the following condition:

1. At least ninety (90) percent of all property owners with addresses on the street segment must see and sign the petition confirming that they have seen it (not necessarily signing in favor of it). The city will verify all property owners on the street with Lee County Property Appraiser records current at the time the petition is presented to the city and confirm that at least ninety (90) percent of these owners have confirmed seeing the petition. At least sixty (60) percent of all property owners with addresses on the street segment must sign the petition in favor of 'opting in,' or requesting the sidewalk.

By petitioning to opt into sidewalk construction, residents of the street segment in question are not guaranteed that the construction project on their street will be prioritized above network streets. Their street will be prioritized ahead of non-network streets that have not specifically petitioned to opt into the sidewalk program and in the third priority level of the three main priorities for effective network street sidewalks listed above. If the street is within a two-mile distance of a school or a half-mile distance of a park, it will be prioritized in the first priority level once the city has accepted street residents' petition to opt into the program.

ALTERNATIVE FUNDING SOURCES

Presently it is the City's policy to commit infrastructure funds for street reconstruction to include sidewalks on one side of the street. In the interest of maximizing efficiency and reducing overall project costs, the second side of the street should have its sidewalk constructed at the same time. However, the City's current practice is to use infrastructure funds to construct sidewalks on only a single side of the street. While this report recommends that the City pursue a policy of constructing sidewalks on both sides of its streets, the City must determine the degree to which the allocation of infrastructure funds for street reconstruction projects favors sidewalks. If funding is currently structured in a way that would add sidewalk resources at the expense of another crucial element of the street construction project, at an overall impact to the City's project and project budget, at a minimum the construction of sidewalk on the one side of the street as normally programmed does demonstrate the city's commitment to building sidewalks but recognizes its limited resources. Alternative funding sources may be available to assist the city in programming projects to allow both sides of the street to be constructed with sidewalk at the time of the reconstruction project's execution.

Safe Routes to School

The Safe Routes to School Program (SRTS) of the SAFETEA-LU federal transportation act provides federal aid funds (administered through state departments of transportation) for infrastructure and public efforts to increase walking and bicycling among elementary and middle school students (grades K through 8). The Florida Department of Transportation coordinates its program through its seven districts and has been allocated nearly \$29 million of funding through FY 2009.

Safe Routes to School funds are not permitted to supplant existing funding sources (for example, but they may supplement existing sources. In the case of this recommended sidewalk policy, SRTS funds could be used to complement the City's infrastructure program and build a sidewalk on the second side of the street. SRTS funds are only eligible for improvements within two miles of school facilities, but the density of schools within the City of Fort Myers ensures that nearly all of the City's streets are eligible for this funding. Figure 5 demonstrates the coverage of the city streets within a two-mile walk distance of only four schools within the city limits (Dunbar High School, Allen Park Elementary School, Royal Palm Exceptional School and Lee Middle School), showing that the walk areas of even these schools cover most network streets within the city limits.

Surface Transportation Program

This is one of the larger funding sources of SAFETEA-LU, funded at almost \$35 billion through FY 2009. Surface Transportation Funds can be used for any project, and they are not limited to the federal-aid highway system. Projects include bicycle transportation (such as on-street lanes), pedestrian walkways and safety improvements.

Congestion Management and Air Quality

The Congestion Management and Air Quality Program (CMAQ) is designed to help communities with air

quality problems develop less polluting transportation alternatives, such as bicycling and walking. CMAQ has existed in previous federal transportation legislation, though in SAFETEA-LU its funding has been increased (along with stricter standards for defining air quality goals and attainment, meaning that more metropolitan areas now compete for the funds). CMAQ funds are eligible for a wide range of transportation projects, and sidewalks and other pedestrian facilities are among the most common types of projects that request funding.

CONCLUSIONS

Generally, the City of Fort Myers has adopted transportation policies aimed at balancing its transportation system. Walking is the fundamental form of transportation and is the common link to all other modes that such a transportation system seeks to enhance. By committing to sidewalks on both sides of City streets, Fort Myers would acknowledge the importance of pedestrian transportation concerns and would continue to invest its resources in ways that benefit the community, promote a healthy population and enhance it as a place to live.

References

American Association of State Highway and Transportation Officials, *Policy on Geometric Design of Highways and Streets*, 1994. The AASHTO 'Green Book' is the national standard on roadway design in the United States and is used by state and local governments.

Centers for Disease Control and Prevention, *Physical Activity and Health: A Report of the Surgeon General* (<http://www.cdc.gov/nccdphp/sgr/contents.htm>), 1996. The Surgeon General's report points to physical inactivity as responsible for a number of emerging health crises, particularly with obesity and diabetes.

City of Madison, Wisconsin. *Pedestrian Transportation Plan* (<http://www.ci.madison.wi.us/trafficEngineering/programsPlanTransportation.cfm>), 2003. Madison is consistently recognized as one of the most bicycle- and pedestrian-friendly communities in the United States. Chapter 3 of its Pedestrian Transportation Plan, 'Thinking Like a Pedestrian,' casts the on-the-ground implications of pedestrian policy in terms of the actual walking experience and lays a foundation for how the rest of the plan can address issues and deficiencies in walking.

Evans-Cowley, Jennifer. *Sidewalk Planning and Policies in Small Cities*. *Journal of Urban Planning and Development*, Volume 132, Issue 2 (2006), pp. 71-75. This study surveys small municipalities in Central Ohio for their programs in planning for an funding safe, complete sidewalk networks.

Florida Traffic and Bicycle Safety Education Program, *Safe Ways to School Tool Kit* (http://www.dcp.ufl.edu/centers/trafficsafetyed/html_safe-ways.html), Florida Department of Transportation Safety Office. The Traffic and Bicycle Safety Education Program helps to educate local governments on safety programs, particularly with respect to schools, and helps them better prepare for receiving Safe Routes to School funding to further the addition of pedestrian facilities.

Jackson, Richard, MD. *Creating a Healthy Environment: The Impact of the Built Environment on Public Health*. Centers for Disease Control and Prevention, 2005. Dr. Jackson's study provides a broad overview of the potential health impacts of land-use choices and makes direct references to auto-dependent built environments where people generally do not walk. Gen-

erally, Dr. Jackson's findings have shown that most Americans do not take the minimum 30 minutes of daily physical activity as recommended by the United States Surgeon General.

Litman, Todd Alexander. *The Economic Value of Walkability*. Victoria Transport Policy Institute, 2004. This paper uses standard economic evaluation methods to investigate the value of walking (the activity) and walkability (the quality of walking conditions, including safety, comfort and convenience). Current transportation planning practices tend to undercount and under-value walking. More comprehensive analysis techniques, described in this paper, are likely to justify increased investment and support for walking.

Untermann, Richard K. *Accommodating the pedestrian: Adapting towns and neighborhoods for walking and bicycling*, Van Nostrand Reinhold, New York, 1984. One of the foundations of research and thinking in pedestrian-friendly roadway design.



City of Fort Myers
Public Works Department
2200 Second Street
Fort Myers, Florida 33902

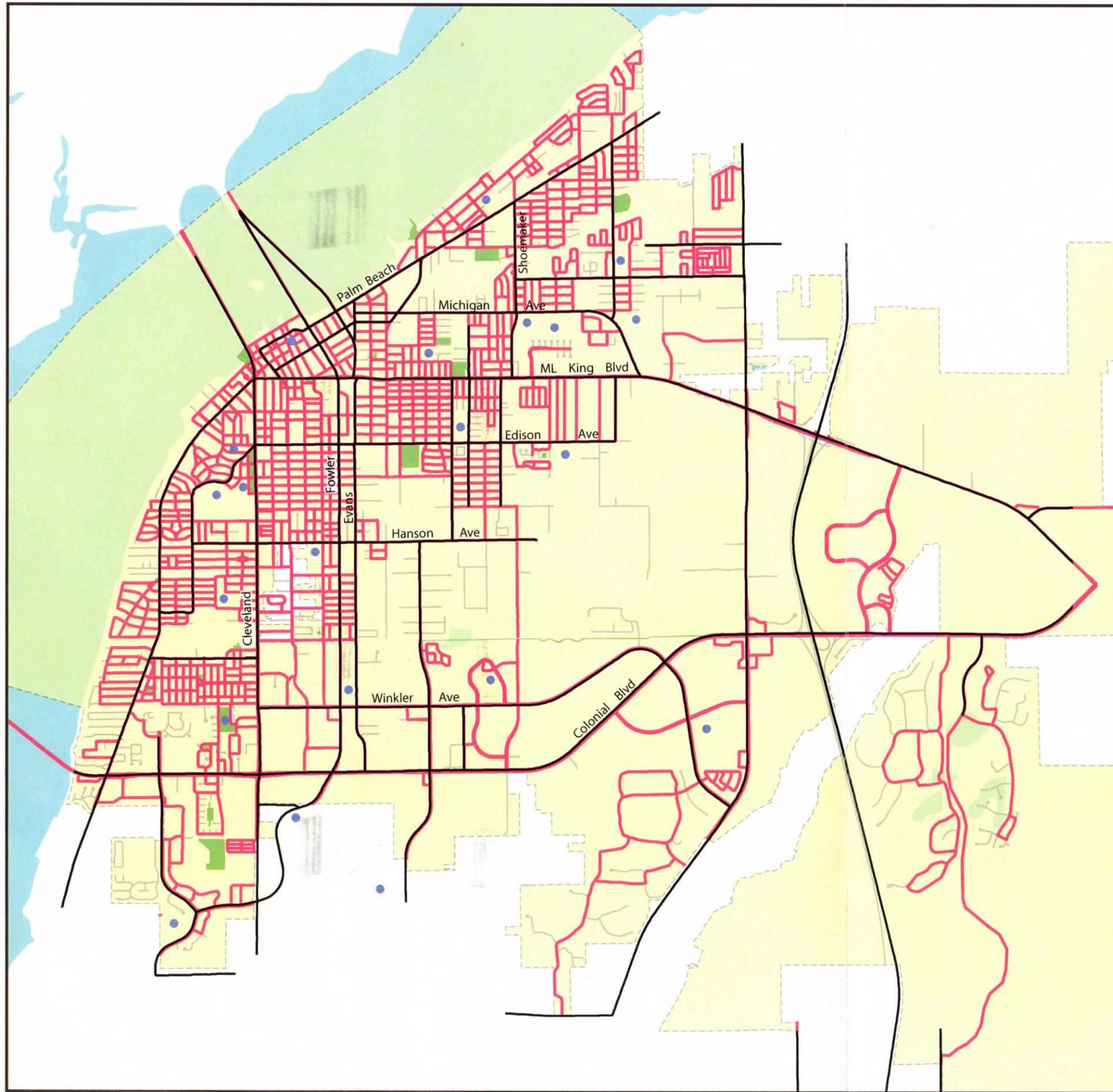
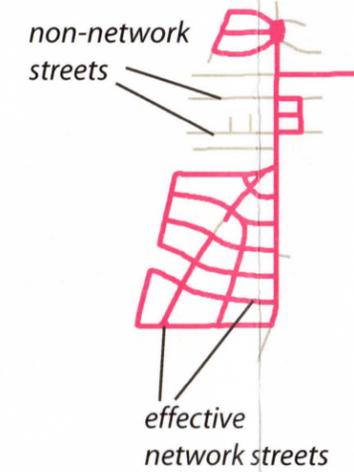


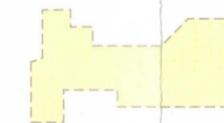
FIGURE 1

CITY OF FORT MYERS

EFFECTIVE STREET NETWORK



The City's effective network is made up of streets connecting to two or more streets. Effective network streets are shown in red lines over the non-network streets shown in grey (which are primarily dead-end streets, culs-de-sac, loops, and other non-connecting streets).



Fort Myers City Limits



Water



Schools



Parks

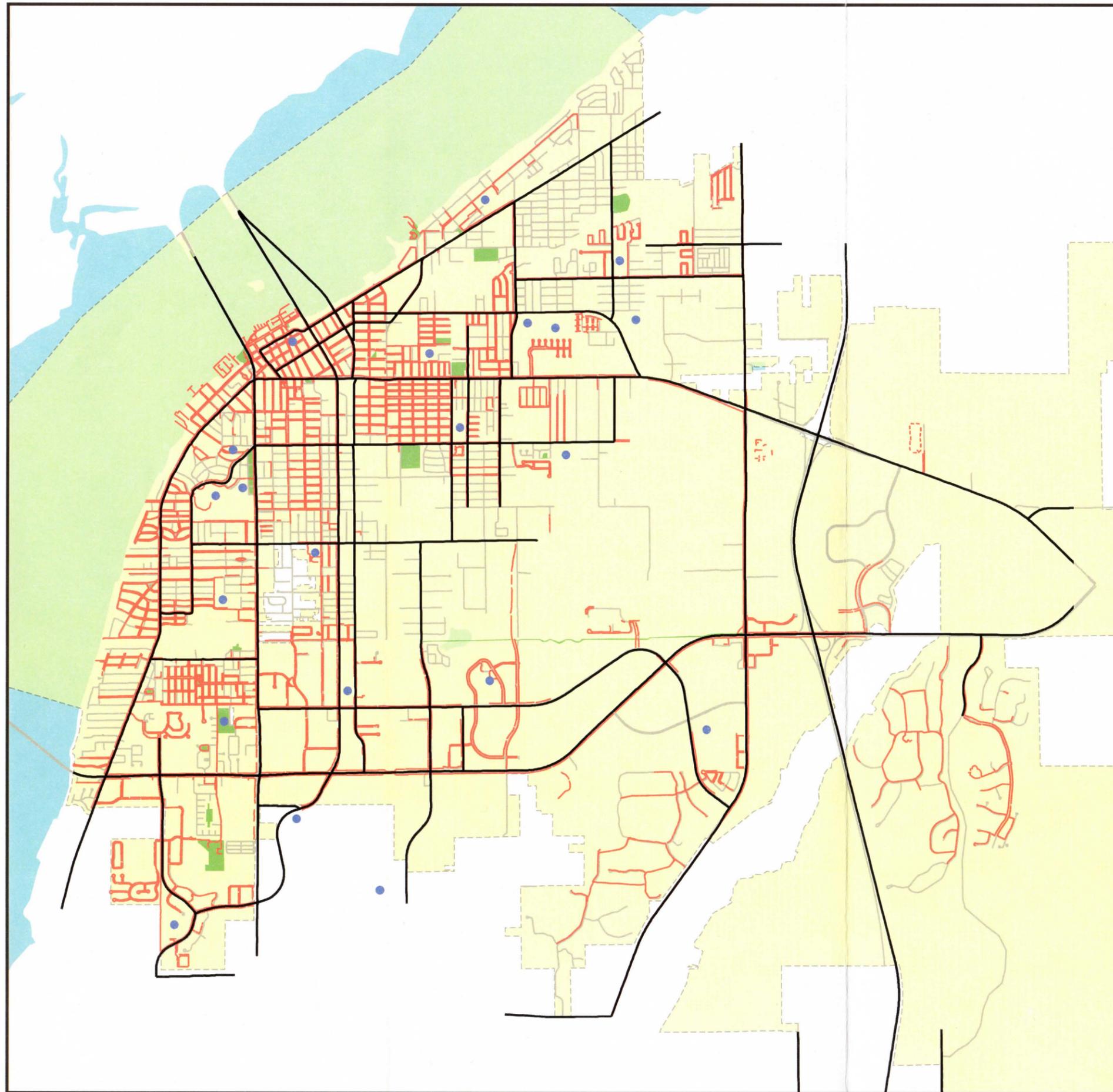
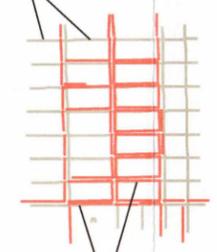


FIGURE 2

CITY OF FORT MYERS

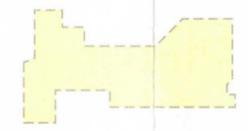
EXISTING SIDEWALK INVENTORY

streets without sidewalks

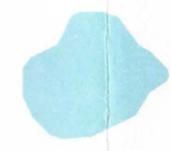


City streets are shown relative to the City's sidewalk network (as of July 2006).

streets with sidewalks



Fort Myers City Limits



Water

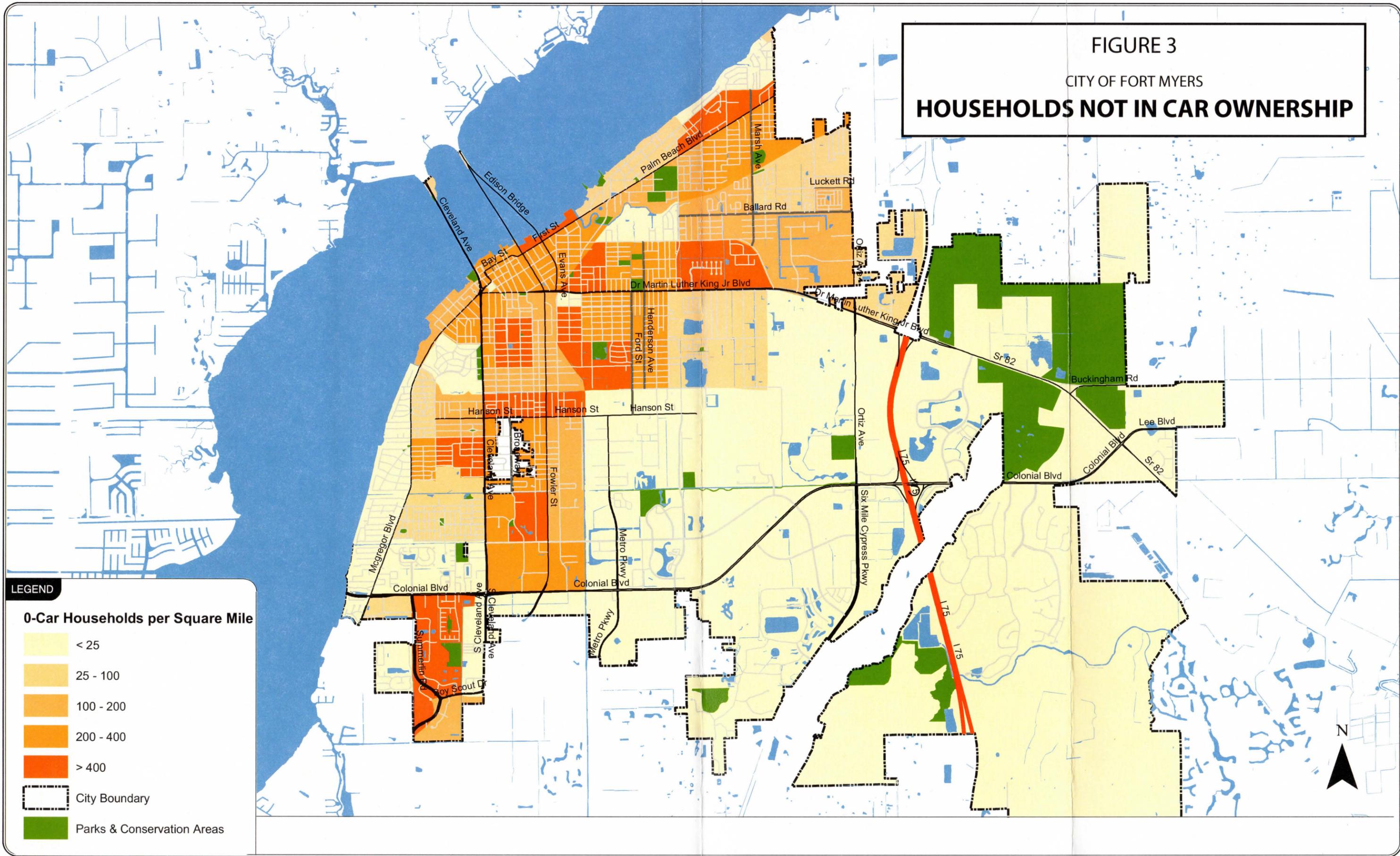


Schools



Parks

FIGURE 3
 CITY OF FORT MYERS
HOUSEHOLDS NOT IN CAR OWNERSHIP



LEGEND

0-Car Households per Square Mile

- < 25
- 25 - 100
- 100 - 200
- 200 - 400
- > 400
- City Boundary
- Parks & Conservation Areas



Street Types -- Typical Design Parameters

Range of Speed
Miles per Hour

10 15 20 25 30 35 30 40 45

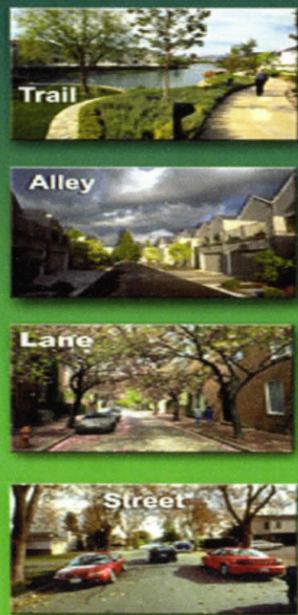
Noise Level

Low Moderate Disturbing

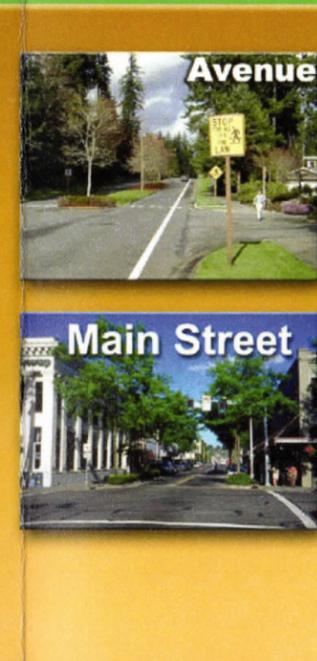
Traffic Volume
Vehicles per Day

50 300 900 2000 8,000 15,000 10,000 40,000

Category One Local Connectors



Category Two Transitional Access



Category Three Regional Access



FIGURE 4

STREET TYPES

In his work with Walkable Communities and Glattig Jackson, Dan Burden has defined street types that can be linked to quantifiable criteria such as vehicle travel speed and daily traffic volumes.

The lowest speeds and volumes are found on what are identified here as trails, alleys and lanes, with the highest category of these local connectors (termed as streets) usually experiencing volumes above 500 vehicle trips per day. As these volumes increase, pedestrian safety becomes a greater concern, especially when the street is a part of a connected network where vehicles and pedestrians both use it.

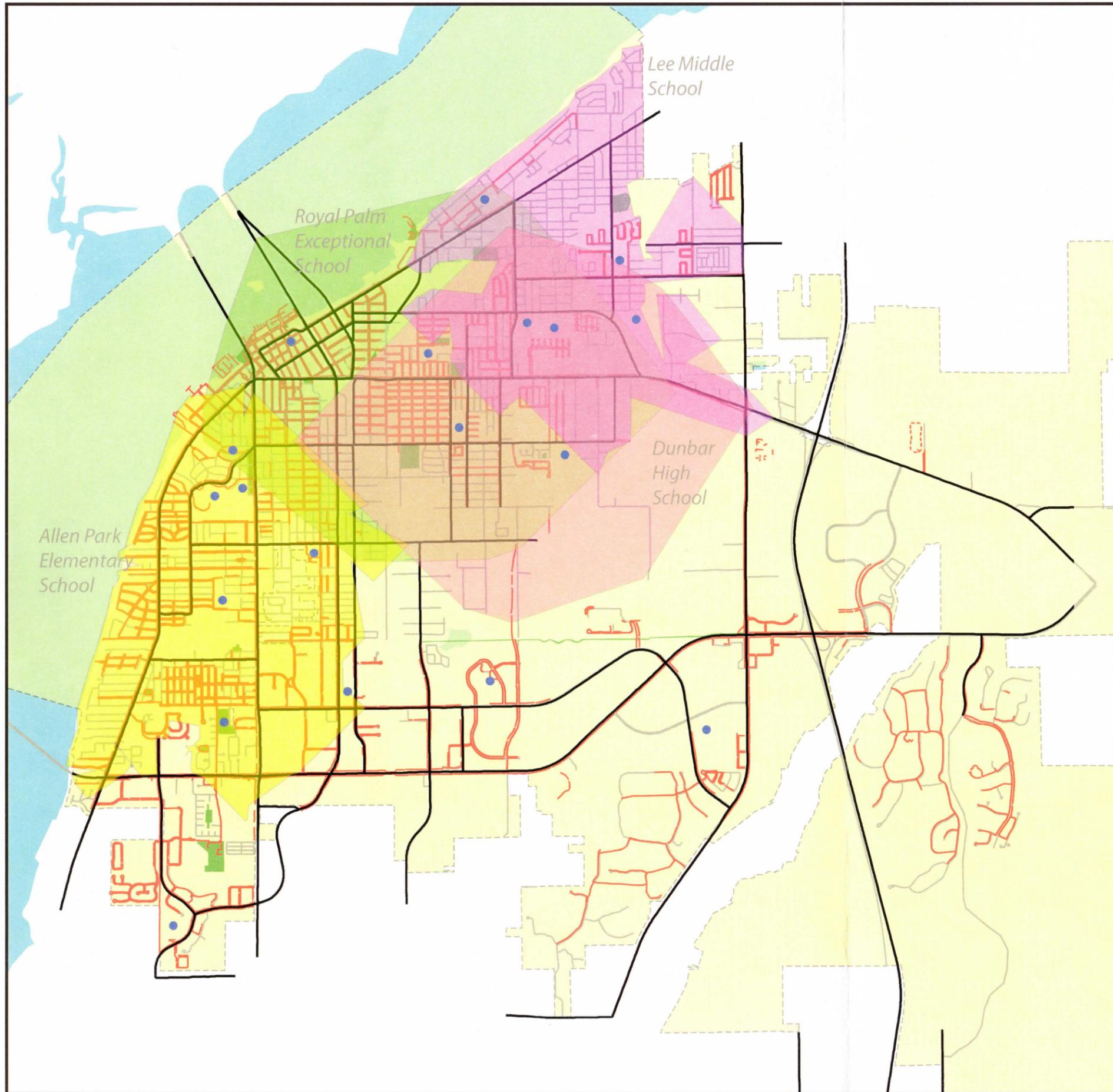
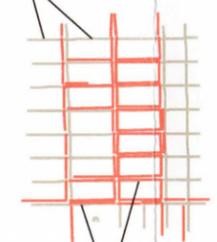


FIGURE 5

CITY OF FORT MYERS

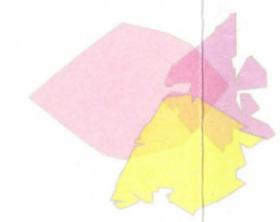
2-MILE SCHOOL WALK AREAS

streets without sidewalks



City streets are shown relative to the City's sidewalk network (as of July 2006).

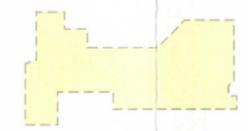
streets with sidewalks



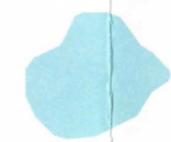
2-Mile Walk Areas (with associated school) along City street network

The diagram here illustrates only four school areas and the two-mile walk area from the campus of each. These four already cover most of the city: with the addition of other schools throughout the city, the street network for which sidewalks would be provided would cover nearly all of the Fort Myers jurisdictional limits.

Fort Myers City Limits



Water



Schools (14 in City Limits)



Parks

