IMPACT FEE STUDY

CITY OF FRANKLIN
MILWAUKEE COUNTY, WISCONSIN

APRIL/2002

As Adopted by the Common Council on May 7, 2002

RUEKERT/MIELKE
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TABLE OF CONTENTS

EXECUTIVE SUMMARY

One of the most important functions of local government is to provide for the public facilities, such as roads, sanitary sewerage systems and parks, needed to serve land development. Along with this function comes the responsibility to finance these public facilities in a manner that is fiscally sound, equitable and affordable to residents and taxpayers. The City of Franklin is one of the most rapidly growing communities in Southeastern Wisconsin and as such must provide the public facilities needed to serve not only its current developed land but also large areas of anticipated future development. Public officials of the City of Franklin recognize the need to recover the costs of providing public facilities and infrastructure needed to serve new land development through the imposition of impact fees collected at the time of development. In 1995, the City adopted impact fees to be imposed on residential development for parks, playgrounds and other recreational facilities, fire protection facilities, law enforcement facilities, emergency medical facilities, and libraries. In 2001, the City formed a new Impact Fee Task Force to review the City's existing impact fees and recommend revisions to the amounts and types of fees collected, based on revised population and development projections and revised capital facilities plans. The City retained Ruekert-Mielke, Inc. in February 2002 to conduct the public facilities needs assessment and impact fee study. The purpose of the study was to determine the appropriateness, under Wisconsin Statutes section 66.0617, of impact fees as a source of funds for library, park and recreation, law enforcement, fire protection and emergency medical, storm sewerage, water supply, sanitary sewerage, and transportation facilities anticipated for the City of Franklin. This report summarizes the findings and recommendations of the study, fulfills the "public facilities needs assessment" procedural requirement of Wisconsin Statutes s. 66.0617, and may serve as a basis for the City to amend its ordinance establishing impact fees.

The study employed a three-step process. First, inventories were prepared of existing demographic and land use conditions and of all existing City-owned public facilities, including the identification of any existing deficiencies in those facilities. Next, forecasts of future demographic and land use conditions were prepared and future demands for public facilities were determined based on forecast future conditions and factors affecting the use of public services. The City's public infrastructure systems were then evaluated under both current and future levels of demand to determine the improvements needed to remedy existing deficiencies and those needed to provide sufficient capacity for future demand created by new development. The cost of future improvements needed through the year 2020 was estimated. Existing planning documents were carefully reviewed and considered in order that the recommended impact fees would be consistent with the adopted land use and facility plans of the City. Wisconsin Statutes specify that impact fees may only be used to pay for the proportionate share of public facilities needed to serve new development, as compared to existing uses. Therefore, based upon the forecasts described above, a determination was made as to the share of the cost of each of the recommended improvements that could be recovered through impact fees. The total amount to be recovered through impact fees was then allocated to the different types of land development in proportion to the anticipated demand for public facilities generated by each classification of land use. The amount of the fee per unit of development for each type of public facility was computed based on the forecast number of new units of development during the planning period. A schedule of impact fees was recommended for each classification of land development, and

conclusions were drawn with respect to the impact of the recommended fees on the affordability of residential housing.

The review of the existing City of Franklin planning documents and reports revealed that the City has conducted extensive and detailed planning efforts, particularly during the last decade. The City has made several amendments to the Comprehensive Master Plan in recent years. As part of the conduct of the impact fee study, the total inventory of planned land use was updated. The various planning documents completed for the City use several different population projections or forecasts for the year 2020. A single, consistent population forecast for the year 2020 was developed for the impact fee study. Based on past population growth trends, the remaining inventory of land to be developed for residential uses in the City, and current restrictions to growth outside of the City's adopted sanitary sewer service area (depicted on Map 1), a 2020 population forecast of 41,000 was used in the conduct of this study. The remaining inventory of land planned for nonresidential uses is forecast to accommodate the development of approximately 6.8 million square feet of commercial building space, 27.2 million square feet of industrial building space, and 9.2 million square feet of institutional building space by 2020.

Based upon the forecast conditions described above and the inventory of existing public facilities, the following findings and recommendations were made with respect to the City's public facilities.

Library Facilities—The new Franklin Public Library under construction will provide approximately 40,000 square feet of total space, at a cost of approximately $5.8 million. Approximately 27,700 square feet of this facility is needed to provide the desired level of service to existing City residents, while the remaining 12,300 square feet of space will provide space to accommodate increasing demands for service created by new residential development. The proportionate share of the cost for facility space related to serving future development is approximately $1.8 million. It is recommended that the City impose a library facilities impact fee on residential development, according to the schedule shown in the table below, to recover the share of capital costs related to providing facilities to serve future development. The needs assessment projected that no additional library facilities will be needed prior to 2020.

Park and Recreation Facilities—The Draft Comprehensive Outdoor Recreation Plan recommended approximately $17.8 million of parkland acquisition and park and recreation facilities improvements to provide for the current and future recreational needs of Franklin residents through the year 2020. The recommended improvements included the development of a Community Recreation Center on a 6.3 acre site, the acquisition and/or development of 99 acres of additional active neighborhood parks and 33 acres of mini parks, and numerous improvements to existing City parks and nature areas. It was determined that approximately $8.5 million of the capital costs were for the proportionate share of the recommended facilities needed to serve future development. In order to recover this amount from the new development that the new facilities are intended to serve, it is recommended that the City adopt a park and recreation facilities impact fee to be imposed on residential development according to the schedule shown in the table below. A complete summary of the park and recreation facilities recommended through 2020 is shown in Table 29 of the report.

Police and Municipal Court Facilities—In December 2001, the City completed construction of a new 62,800 square foot facility to house the Police Department and the Municipal Court. The approximate cost of this facility, including land acquisition costs, was $10.95 million. Based on the recommended current and future staffing levels and the desired amount of space per employee, approximately 45,200 square feet of the new facility is needed to serve existing development in the City, while approximately 17,600 square feet of space can be attributed to the need to serve future new development. Therefore, the proportionate share of the capital costs related to the need to serve new development is 28 percent of the total, or approximately $3.1 million. Since the demand for police protection and law enforcement is created by all types of land development, it is recommended that the City adopt a police and municipal court facilities impact fee for all types of land development. The recommended schedule of police and municipal court facilities impact fees is shown in the table below. It is anticipated that the recently completed police station will provide adequate space for Police Department and Municipal Court operations through the year 2020; therefore no additional facilities were recommended.

Fire and Rescue Facilities—The City of Franklin completed a new Fire Station No. 2 in the southeast corner of the City in March 2002, and abandoned an existing unmanned station in the northwest corner of the City. In addition, consistent with the Fire Protection Plan completed in 2001, it is recommended that Fire Station No. 3 be relocated approximately ½ mile further north and expanded, and that the City build a new, manned, fire station in the northwest corner to improve response times to that area. The total estimated cost of these facilities is $4.05 million dollars. Based on current and future recommended staffing levels and apparatus needs and the associated facility space needs, it was determined that approximately 39.7 percent of the recommended new facility space will be needed to serve future new development. Therefore, approximately $1.61 million of the cost is attributable to the need to serve new development. It is recommended that the City impose fire and rescue facilities impact fees on all new development, since all types of land development create the need for expanded fire and rescue facilities. The recommended schedule of fire and rescue facilities impact fees is shown in the table below. The capital facilities plan for fire and rescue facilities is shown in Table 56 of this report.

Storm Water Management Facilities—The City of Franklin Storm Water Management Plan Update—2002 recommends that the City require new development to install storm water management facilities to handle all runoff from new development. Therefore, since there will be no new public facilities installed, it is recommended that City not impose an impact fee for storm water management facilities at this time.

Water Facilities—The Water System Study completed for the City in 2000 recommended four phases of water system improvements needed prior to 2020 to provide adequate water supply for both current and future development. Improvements needed through 2020 included additional elevated storage tanks, expanded booster pump station capacity and additional water transmission mains. The total cost of improvements is estimated at $13.85 million. Based upon current and future water demand, the proportionate share of the capital costs for facilities needed to serve future development is approximately $10.71 million. During the planning period, the average daily demand for water is projected to increase by the equivalent of 11,538 new residential connections. The increase in demand will be created by a combination of new

buildings constructed, existing buildings currently on private wells that connect to the system, and existing buildings already served by the system that have a change in use that results in increased demand for water. It is recommended that the City impose a water impact fee in the amount of $929 per residential equivalent connection (REC) on all new building construction, and amend section 207-22 of the Municipal Code to collect water connection fees in the same amount from all existing buildings that connect to the water system, or to existing connections that have a change in use that results in increased water demand. The detailed capital facilities plan for water system improvements is shown in Table 77 of this report.

Sanitary Sewer Facilities—The City is currently constructing two sanitary sewer extensions, along West Ryan Road and along West Drexel Avenue, at a total cost of approximately $1.69 million. Approximately 94 percent of the existing population of the City is currently provided with public sanitary sewer service, and there are currently no plans for future sewer service extensions. It has been the policy of the City to extend sewer service only upon the request of the residents and businesses of an area, and to recover the cost of service through a combination of special assessments and connection fees. Because the planned sewer extensions are to serve limited unsewered areas and will be financed using connection fees, special assessments, or TIF funding, it is recommended that no sanitary sewer facilities impact fee be imposed at this time.

Transportation Facilities—A needs assessment was conducted as part of this study to recommend any improvements that will be needed to expand the capacity of arterial streets owned by the City of Franklin. Based on this needs assessment it was recommended that the City reconstruct two half-mile segments of Drexel Avenue (as shown on Map 7) from two lanes to four lanes, at an estimated cost of $3.5 million. Since the City's network of arterial streets has no existing capacity deficiencies, the entire cost of the reconstruction may be recovered through impact fees. In addition, the City will contribute to the cost of reconstructing 76th Street and West College Avenue a portion of which is attributable to the need to serve new development. However, these costs were determined not to be eligible for recovery through impact fees, since Counties are not allowed to use impact fees for transportation facilities under Wisconsin Statutes 66.0617. It is recommended that the City impose a transportation facilities impact fee on all new development, since all types of development generate vehicle traffic and the associated need for expanded street capacity. The recommended schedule of impact fees, is shown in the table below. The capital facilities plan for transportation facilities is shown in Table 85 of this report.

A summary of the recommended schedule of impact fees is shown in the table below. The service area for library, park and recreation, police and municipal court, fire and rescue, and transportation facilities is the entire City, and impact fees for those facilities should be imposed on new development anywhere within the City. The service area for the water system facilities impact fee is the water service area, and water impact fees should be imposed only on new buildings that connect to the City water system. The recommended impact fees will increase the amount of annual income needed to finance a new home in Franklin by approximately 3.0 percent for the purchaser of a $125,000 home and by approximately 1.5 percent for the purchaser of a $250,000 home. Therefore, the impact fees will not have a significant impact on the affordability of housing in the City of Franklin.

It is recommended that the City increase the fees by 5 percent per year to account for increased construction costs for projects scheduled for future years and for the interest costs associated with borrowing funds to pay for major projects. The revenues from each impact fee should be kept in a segregated account, and the revenues, and all interest earnings on the fund balance, must be used only to pay for the capital costs of the public facilities for which the fees were imposed. A projection of future impact fees revenues, shown in Table 90 of this report, indicates that recommended impact fees will generate sufficient revenues to pay for the proportionate share of capital costs for facilities needed to serve future development through the year 2020.

Public Facilities Needs Assessment
Summary of Recommended Impact Fees

	Single-Family Residential (per d.u.)		Two-Family Residential (per d.u.)		Multi-Family Residential (per d.u.)		Commercial (per SF)		Industrial (per SF)		Institutional (per SF)	
	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
Library	$38	$465	$38	$465	$38	$310	$0	$0	$0	$0.000	$0	$0.000
Park and Recreation	$340	$2,219	$340	$2,219	$340	$1,480	$0	$0	$0	$0.000	$0	$0.000
Police and Municipal Court	$248	$38	$248	$38	$248	$26	$0	$0.088	$0	$0.019	$0	$0.153
Fire and Rescue	$399	$115	$399	$58	$399	$29	$0	$0.041	$0	$0.012	$0	$0.036
Water System [1]	$800	$929	$800	$929	[1]	[2]	[1]	[2]	[1]	[2]	[1]	[2]
Transportation Facilities [3]	$0	$58	$0	$58	$0	$40	$0	$0.166	$0	$0.042	$0	$0.236
Total [4]	$1,825	$3,824	$1,825	$3,767	$1,025	$1,885	$0	$0.294	$0	$0.074	$0	$0.425

1) The City currently charges a water connection fee in the amount of $800 per single-family residential unit and $800 per unit for the first unit of multi-family housing, plus $400 per unit for every additional unit. The water connection fee for nonresidential uses is $1,600 per connection for the first 1 inch of water main connection diameter, and $480 for every 1/4 inch of diameter over 1 inch. This fee is charged to any new connection to the system, including connections by previously existing buildings.
2) Amount of fee depends on estimated amount of water use--one fee of $929 for every 169 gallons of expected average daily water demand.
3) Assumes that City contributes 10 percent of the cost of the 76th Street reconstruction.
4) Total for commercial, industrial and institutional excludes water impact fee.

Public Facilities Needs Assessment
Summary of Alternate Recommended Impact Fees

	Single-Family Residential (per d.u.)		Two-Family Residential (per d.u.)		Multi-Family Residential (per d.u.)		Commercial (per SF)		Industrial (per SF)		Institutional (per SF)	
	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
Library	$38	$465	$38	$465	$38	$310	$0	$0	$0	$0.000	$0	$0.000
Park and Recreation	$340	$2,219	$340	$2,219	$340	$1,480	$0	$0	$0	$0.000	$0	$0.000
Police and Municipal Court	$248	$38	$248	$38	$248	$26	$0	$0.088	$0	$0.019	$0	$0.153
Fire and Rescue	$399	$115	$399	$58	$399	$29	$0	$0.041	$0	$0.012	$0	$0.036
Water System [1]	$800	$929	$800	$929	[1]	[2]	[1]	[2]	[1]	[2]	[1]	[2]
Transportation Facilities [3]	$0	$74	$0	$74	$0	$52	$0	$0.211	$0	$0.054	$0	$0.300
Total [4]	$1,825	$3,840	$1,825	$3,783	$1,025	$1,896	$0	$0.340	$0	$0.085	$0	$0.490

1) The City currently charges a water connection fee in the amount of $800 per single-family residential unit and $800 per unit for the first unit of multi-family housing, plus $400 per unit for every additional unit. The water connection fee for nonresidential uses is $1,600 per connection for the first 1 inch of water main connection diameter, and $480 for every 1/4 inch of diameter over 1 inch. This fee is charged to any new connection to the system, including connections by previously existing buildings.
2) Amount of fee depends on estimated amount of water use--one fee of $929 for every 169 gallons of expected average daily water demand.
3) Assumes that City contributes 30 percent of the cost of the 76th Street reconstruction.
4) Total for commercial, industrial and institutional excludes water impact fee.

CHAPTER ONE:
INTRODUCTION

INTRODUCTION

One of the important functions of local government is to provide for the planning, design, construction and maintenance of public facilities, such as roads, sanitary sewerage systems, and parks, needed to serve land development. Along with this function comes the responsibility to finance these public facilities in a manner that is fiscally sound, equitable and affordable to residents and taxpayers, and within the statutory authority granted to local municipalities. The question of how to finance public improvements is of particular importance in areas that are developing rapidly. Sound planning practice requires that sufficient public facilities be in place before new development is allowed to occur. In other words, there must be sufficient capacity in the wastewater treatment facility, enough supply and storage capacity in the water distribution system, and enough traffic lanes in major arterial streets to handle the increased demand that new development will place on these systems. Thus, these facilities are typically designed with excess capacity to accommodate anticipated development, and the associated increases in demand, for the next ten to twenty years.

Since the future residents and property owners who will use the excess capacity are not part of the community during the construction of such public facilities, existing residents and property owners may bear more than a proportionate share of the cost of facilities needed for new development. In order to distribute costs more fairly and make new development "pay its own way", municipalities have long imposed a variety of fees on new development. In 1994, Wisconsin Statutes 66.55 (now 66.0617) was created to give local municipalities the authority to recover the costs of providing both on-site and off-site public infrastructure needed to serve new land development through the collection of impact fees at the time of development.

IMPETUS AND AUTHORITY FOR STUDY

The City of Franklin is one of the most rapidly growing communities in Southeastern Wisconsin and as such must provide the public facilities needed to serve not only its current developed land but also large areas of anticipated future development. Public officials of the City of Franklin recognize the need for impact fees to mitigate the financial impacts on current residents and taxpayers of public facilities needed to support future development.

In 1994, the City formed the Impact Fee Task Force, comprised of one alderman and five citizen members. The Task Force was to review the 1993 Wisconsin Act 305, authorizing impact fees, evaluate its application to Franklin, assess the appropriate amount that could be charged for impact fees in light of anticipated development in the City, and report its findings and recommendations to the Mayor and the Common Council. After several months of work in 1994 and 1995, the Task Force issued a recommendation that the City adopt impact fees from residential development for parks, playgrounds and other recreational facilities; fire protection facilities; law enforcement facilities; emergency medical facilities; and libraries; and from all types of new development for water supply and distribution facilities. The Task Force further recommended that the City continue the use of special assessments and connection fees to fund the oversizing of sewerage system facilities, and that there were no transportation, storm

sewerage, or solid waste and recycling facilities planned for which impact fees would be appropriate. In April 1995, the City adopted Ordinance No. 95-1341 establishing impact fees for park, playground and other recreational facilities; fire protection facilities; law enforcement facilities; emergency medical facilities; and library facilities. The City also collects connection fees for water supply and distribution facilities and sanitary sewerage facilities.

In 2001, the City formed a new Impact Fee Task Force comprised of seven citizen members. The Task Force was created to review the City's existing impact fees and recommend revisions to the amounts and types of fees to be collected, based on revised population and development projections. The study was to be conducted by a qualified consultant under the direction of the Task Force. Following publication of a Request for Proposals and interviews with several consulting firms, the Task Force, in October 2001 recommended that the City engage the firm of Ruekert/Mielke to conduct the desired study. In November 2001, the City retained Ruekert/Mielke to conduct the initial phase of the study, preliminary information gathering and inventory, and prepare a final proposal and a cost not-to-exceed to complete the entire study. This initial phase of the study was completed in December 2001, and in February 2002, the City retained the firm to complete the remainder of the study. The basic purpose of the study was to determine the appropriateness, under current Wisconsin Statutes, of impact fees as a source of funds for library, park and recreation, law enforcement, fire protection and emergency medical, transportation, storm sewerage, water supply and distribution, and sanitary sewerage facilities anticipated for the City of Franklin. In addition, this report fulfills the "public facilities needs assessment" procedural requirement dictated by Wisconsin Statutes and may serve as a basis for the City to amend its ordinance establishing impact fees.

AUTHORITY TO IMPOSE IMPACT FEES UNDER WISCONSIN STATUTES

1993 Wisconsin Act 305 created Section 66.55 (now 66.0617) of the Wisconsin Statutes, which provides the authority for cities, villages, towns, and counties to impose impact fees on certain developers for recovering public facility capital costs. The statute specifies the type of facilities for which impact fees may be imposed and prescribes certain procedural requirements for impact fee ordinances enacted by a political subdivision.

The statute allows for the use of impact fees in a wide variety of public facilities projects. Impact fees may be imposed on persons creating land development where development is defined as the construction or modification of improvements to real property that creates additional residential dwelling units within a political subdivision or that results in nonresidential uses that create the need for new, expanded or improved public facilities within a political subdivision. Public facilities are defined as highways, traffic control facilities, sewage facilities, storm water facilities, water facilities, parks and recreation facilities, solid waste and recycling facilities, fire protection facilities, law enforcement facilities, emergency medical facilities, and libraries. The statute stipulates that public facilities do not include facilities owned by a school district. Capital costs are defined as the costs to construct, expand or improve public facilities and may include land, legal, engineering and design costs.

Prior to enacting or amending an ordinance that imposes impact fees, a political subdivision must comply with the following procedural requirements:

1. Prepare a needs assessment for the public facilities for which it is anticipated that impact fees may be imposed. The public facilities needs assessment shall include the following:

   - An inventory of existing public facilities, including an identification of existing deficiencies in the quantity or quality of those public facilities, for which it is anticipated that an impact fee may be imposed.

   - An identification of new public facilities, or improvements and expansions of existing public facilities that will be required because of new land development. This identification shall be based upon an explicitly identified level of service and standards.

   - A detailed estimate of the capital costs of providing the new public facilities or improvements and expansions previously mentioned, including an estimate of the effect of imposing impact fees on the availability of affordable housing within the political subdivision.

2. The political subdivision must hold a public hearing prior to enacting or amending an impact fee ordinance. The public facilities needs assessment must be available for public review at least twenty days before the hearing date.

Impact fees imposed under the legislation may not be used to correct existing public facility deficiencies. Impact fees must bear a rational relationship to the need for new, expanded or improved public facilities and the fee may not exceed the proportionate share of capital costs required to serve new development as compared to existing uses. The impact fee must be reduced to compensate for other capital costs imposed by the municipality on land development to provide or pay for public facilities. Impact fees that are collected but are not used within a reasonable period of time after collection to pay the capital costs for which they are imposed, shall be refunded to the current owner of the property upon which the impact fee was imposed. Wisconsin Statutes 66.0617 imposes additional standards and requirements upon the imposition of impact fees, not all of which need be summarized here, but which may be relevant in particular situations.

PLANNING AREA

The planning area for this study consists of all of the area within the corporate limits of the City of Franklin, and has an area of about 34 square miles.

STUDY PROCESS

The study process was intended to be consistent with local plans for land use, and library, park and recreation, law enforcement, fire protection, emergency medical, transportation system, storm sewerage system, water supply and distribution system, and sanitary sewerage system plans, and to follow the guidelines for the public facilities needs assessment required by statute in order to impose impact fees. The study developed, and this report makes, recommendations for the amendment of the City's impact fee ordinance. The study employed a three step process: conduct of pertinent inventories; conduct of required analyses and preparation of forecasts; and formulation of conclusions and recommendations.

Inventory

Preparation of an inventory of public facilities was the first step in the study process. No intelligent forecasts of demand for public facilities or determination of the amount and types of facilities needed to serve current and future development can be made without definitive knowledge of existing conditions in the areas concerned. The authorizing impact fee statute requires that the public facilities needs assessment contain an inventory of existing public facilities, including the identification of any existing deficiencies in those facilities. It further requires that impact fees be reduced to compensate for other capital costs imposed by the municipality on land development to provide or pay for public facilities. The development of sound impact fees requires the collection of data on the geographic settings—including the demographic conditions and existing land use patterns—within the study area; the existing public infrastructure systems; the existing land use plans; and the existing system of fees and charges imposed on development to pay for public infrastructure. For the planning effort concerned, the inventory process involved the collation of pertinent data from the City and the Southeastern Wisconsin Regional Planning Commission (SEWRPC); the conduct of personal interviews with City staff; and, as necessary, the conduct of original field investigations.

Analyses and Forecasts

Inventories provide factual information about past and present conditions, but analyses and forecasts are necessary to define probable future conditions, particularly land use conditions and attendant demands for public services. Future demands for public services were determined for interlocking forecasts of population and economic activity levels, land use development patterns, and factors affecting the use of public infrastructure facilities. The City's public infrastructure systems were then evaluated under both current and future levels of demand to determine the improvements needed to remedy existing deficiencies and those needed to provide sufficient capacity for future demand, and the cost of the recommended improvements was estimated. The planning period for this study extended to the year 2020.

The City of Franklin periodically updates its facility plans for public improvements and therefore has several facility plans completed within the last five years. These facility plans, as well as earlier facility plans which have not been updated recently, were reviewed as the primary sources for forecasts of future demands for public services. However, all of these plans were completed prior to the release of the results of the 2000 census and the 2000 existing land use data compiled by the SEWRPC, and were based on population and development estimates that were significantly lower than the actual level of growth that took place in Franklin during the 1990s. The forecast demands contained in these plans, as well as the recommended public improvements, were evaluated against forecasts of population and economic activity levels based on the 2000 census and 2000 existing land use patterns. For those plans that did not contain an analysis of existing deficiencies in the public infrastructure system, a determination was made as to the amount of capacity in the recommended facilities that was necessary to remedy any existing deficiencies. For those facilities for which the City has not undertaken facility planning, preliminary forecasts of demand were determined and used to evaluate the existing and future deficiencies in the system and recommend improvements.

Formulation of Conclusions and Recommendations

Conclusions and recommendations regarding the amount and type of impact fees that would be appropriate for the City of Franklin under state statute must be based on the proportionate share of costs for public improvements needed to serve new development. The aforementioned analyses forecast the anticipated population and land development, the attendant increase in demand for public infrastructure, and the recommended improvements to remedy existing deficiencies and provide capacity for future growth. Based on these forecasts, a determination was made as to the share of the cost of these improvements that could be recovered through impact fees. This cost was reduced by the amount of previously collected impact fees, and the anticipated collection of other fees and special assessments from new development to pay for the public improvements concerned.

The total amount to be recovered through impact fees was then allocated to the different types of land development in proportion to the anticipated demand for public improvements generated by each classification of land use. The amount of the fee per unit of development for each type of public facility was computed based on the forecast number of units of development during the planning period. A schedule of impact fees for public facilities was recommended for each classification of land development and conclusions were drawn with respect to the impact of the recommended fees on the affordability of residential housing.

Study Organization and Public Participation

The study was guided by the Impact Fee Task Force. The Task Force was comprised of the following individuals: Mr. Bob Swendrowski, Chairman, Mr. Mike Clavette, Mr. Fred Knueppel, Mr. Gary LaPorta, Mr. Steve Olson, Mr. Mike Sadowski, Ms. Linda Wandtke.

Task Force guidance was provided through two meetings at which the Task Force reviewed a draft of the report, revised it as necessary, and approved it for recommendation to the Committee of the Whole of the City of Franklin. The review provided was meticulous, conducted on a page by page basis, and was intended to assure the accuracy of the study findings and practicability of the recommendations. The report was further reviewed by the Committee of the Whole, and additional revisions were made to add water main oversizing costs and the City share of the cost of certain road reconstruction projects planned by Milwaukee County. The report was then recommended to the Common Council for public hearing.

In order to implement the recommendations of this report and amend the City impact fee ordinance, Wisconsin Statutes s.66.0617 requires that the City hold a public hearing on the proposed ordinance, and that the public facilities needs assessment be made available for public review twenty days prior to the hearing.

DESCRIPTION OF FOLLOWING CHAPTERS

The remainder of this report is organized into twelve chapters as follows:

Chapter Two: Framework Plans

This chapter describes the relevant local land use and facility plans with which the public facilities needs assessment must be consistent.

Chapter Three: Description of Existing and Forecast Conditions

This chapter describes the existing and forecast demographic characteristics and land use patterns of the study area.

Chapter Four: Library Facilities Needs Assessment

This chapter constitutes the public facilities needs assessment for library facilities, and contains an inventory of existing library facilities, an identification of existing deficiencies in library facilities, capital improvement plan for a recommended facilities needed to remedy existing and future deficiencies, and recommendations related to an impact fee for library facilities.

Chapter Five: Park and Recreation Facilities Needs Assessment

This chapter constitutes the public facilities needs assessment for park and recreation facilities, and contains an inventory of existing park and recreation facilities, an identification of existing deficiencies in park and recreation facilities, a capital improvement plan for recommended facilities needed to remedy existing and future deficiencies, and recommendations related to an impact fee for park and recreation facilities.

Chapter Six: Police & Municipal Court Facilities Needs Assessment

This chapter constitutes the public facilities needs assessment for law enforcement facilities, and contains an inventory of existing law enforcement facilities, an identification of existing deficiencies in law enforcement facilities, a capital improvement plan for recommended facilities needed to remedy existing and future deficiencies, and recommendations related to an impact fee for law enforcement facilities.

Chapter Seven: Fire Protection and Emergency Medical Facilities Needs Assessment

This chapter constitutes the public facilities needs assessment for fire protection and emergency medical facilities, and contains an inventory of existing fire protection and emergency medical facilities, an identification of existing deficiencies in fire protection and emergency medical facilities, a capital improvement plan for recommended facilities needed to remedy existing and future deficiencies, and recommendations related to an impact fee for fire protection and emergency medical facilities.

Chapter Eight: Storm and Surface Water Facilities Needs Assessment

This chapter constitutes the public facilities needs assessment for storm and surface water facilities, and contains an inventory of existing storm and surface water facilities, an identification of existing deficiencies in storm and surface water facilities, a capital improvement plan for recommended facilities needed to remedy existing and future deficiencies, and recommendations related to an impact fee for storm and surface water facilities.

Chapter Nine: Water Facilities Needs Assessment

This chapter constitutes the public facilities needs assessment for water supply and distribution facilities, and contains an inventory of existing water supply and distribution facilities, an identification of existing deficiencies in water supply and distribution facilities, a capital improvement plan for recommended facilities needed to remedy existing and future deficiencies, and recommendations related to an impact fee for water supply and distribution facilities.

Chapter Ten: Sanitary Sewer Facilities Needs Assessment

This chapter constitutes the public facilities needs assessment for sanitary sewer facilities, and contains an inventory of existing sanitary sewer facilities, an identification of existing deficiencies in sanitary sewer facilities, a capital improvement plan for recommended facilities needed to remedy existing and future deficiencies, and recommendations related to an impact fee for sanitary sewer facilities.

Chapter Eleven: Transportation Facilities Needs Assessment

This chapter constitutes the public facilities needs assessment for transportation facilities, and contains an inventory of existing transportation facilities, which includes streets and roads, an identification of existing deficiencies in transportation facilities, a capital improvement plan for recommended facilities needed to remedy existing and future deficiencies, and recommendations related to an impact fee for transportation facilities.

Chapter Twelve: Recommended Impact Fees

This chapter summarizes the findings and recommendations of the study, including a schedule of recommended impact fees for each of the facilities for which an impact fee was recommended and an assessment of the impact on the affordability of housing in the City of Franklin of the proposed impact fees for residential land uses. It also contains a capital improvement plan for the City summarizing the detailed capital improvement plans developed for each type of public infrastructure in the preceding chapters.

Chapter Thirteen: Implementation Program

This chapter describes a proposed program to implement the recommendations of the report, including the statutory requirements to adopt an ordinance establishing impact fees, the recommended method of collection of impact fees, and a recommended policy for financial management of impact fee accounts.

CHAPTER TWO:
FRAMEWORK PLANS

The development of sound and legally defensible impact fees has as its basis the standards that a municipality uses for the level of services to be offered and the documented planning efforts for public facilities conducted by the municipality. Therefore, public facilities needs assessment and impact fee studies should be conducted so as to be consistent with the adopted land use and facility plans of the municipality. The framework plans relevant to this study include the adopted Regional Water Quality Management Plan; the Comprehensive Master Plan of the City of Franklin; the Franklin First Development Plan; the Library Facility Planning Report; the Comprehensive Outdoor Recreation Plan; the Franklin Police and Court Facility Needs Assessment; the Comprehensive Fire Protection Plan; the Storm Water Management Plan; the Water System Facilities Plan; and the Sanitary Sewer Facilities Plan. These plans were carefully considered in the conduct of the public facilities needs assessment and impact fee study.

ADOPTED REGIONAL WATER QUALITY MANAGEMENT PLAN

The regional water quality management planning efforts of relevance to the City of Franklin are set forth in two key documents. The Southeastern Wisconsin Regional Planning Commission (SEWRPC), as the official comprehensive planning agency for the seven county Southeastern Wisconsin Region, including Milwaukee County, acting pursuant to Section 208 of the Federal Clean Water Act, in 1979 adopted an area wide water quality management plan for the Region. The Federal Clean Water Act, and related State administrative rules, require that sanitary sewer service area, system and facility plans be consistent with the adopted area wide water quality management plan. The Wisconsin Department of Natural Resources requires that each proposed public sanitary sewer extension must be consistent with the approved area wide water quality management plan and sewer service areas. The findings and recommendations of the regional water quality management plan were initially documented in SEWRPC Planning Report No. 30, "A Regional Water Quality Management Plan for Southeastern Wisconsin – 2000"; June 1979.

The adopted area wide plan was subsequently refined and detailed in the 2000 sanitary sewer service area plan for the City of Franklin. The findings and recommendations of that report are set forth in SEWRPC Community Assistance Planning Report No. 176, "Sanitary Sewer Service Area for the City of Franklin"; October, 1990. The report recommended that about 21.4 square miles of the study area, or 62 percent of the total 34.7 square miles within the City of Franklin, receive centralized public sanitary sewer service, with flows being conveyed to the Metropolitan Milwaukee Sewerage District for treatment. It was envisioned that sanitary sewer service would not be extended to the south and southwest portions of the City within the planning period of the report. The report estimated that, by the year 2000, 96 percent of the resident population of the City of Franklin would be provided with centralized public sanitary sewer service. The City of Franklin sewer service area is depicted on Map 1.

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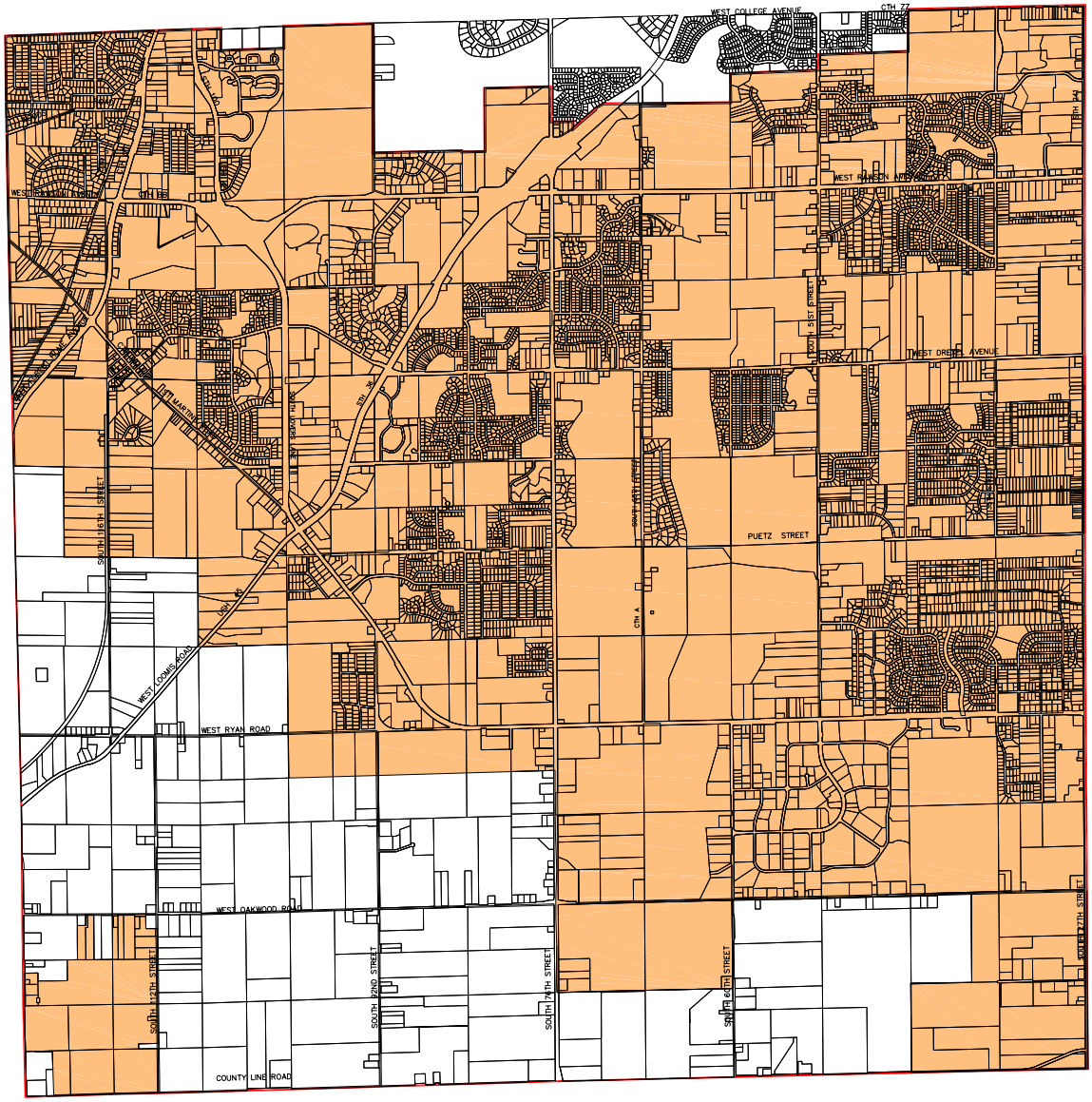
MAP 1

ADOPTED SANITARY SEWER SERVICE AREA

CITY OF FRANKLIN
MILWAUKEE COUNTY, WISCONSIN



LEGEND

MUNICIPAL BOUNDARY

SANITARY SEWER SERVICE AREA BOUNDARY

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SCALE IN FEET

City of Franklin

SOURCE: SEWRPC

Apr 24, 2002 10:11am Layout1
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COMPREHENSIVE MASTER PLAN

In 1992, Lane Kendig, Inc. prepared, and the City of Franklin adopted, a Comprehensive Master Plan for the physical development of the City, in accordance with Wisconsin Statutes ss. 62.23. Prior to the adoption of this plan, the City had, since the 1960's, prepared fourteen detailed neighborhood plans with the assistance of SEWRPC. However, the plan adopted in 1992 represented the first comprehensive city-wide plan. In keeping with the tradition of detailed neighborhood planning, the comprehensive plan contained detailed land use plans for twelve neighborhoods, fourteen planning districts and seven planning areas. To the extent possible, these neighborhoods planned to be centered around a neighborhood park and/or elementary school. The plan contained an inventory of existing land use and zoning conditions, population, households and employment levels and the natural resource base. It also evaluated the existing community character of each of the neighborhoods, planning districts and planning areas, in terms of the intensity and type of development. Forecast population, households and employment levels were developed for 2010, referred to as Phase I, and for ultimate buildout of the City. The plan contained recommended development standards for each classification of land use and for the location and amounts of certain public facilities. These standards included density standards for residential land uses, minimum site areas for industrial development, standards for the recommended number of acres of park land per 1,000 residents, design standards for each classification of street or highway, service area radii for parks, fire stations, and schools, and standards for the provision of library services. Based on these standards and the forecast population, households and employment levels, the plan developed detailed neighborhood plans that recommended the amount, type and location of land uses to accommodate the anticipated need for each type of land use.

Specific forecasts and recommendations relevant to this impact fee study included the following. The plan forecast an ultimate resident population of approximately 51,200, residing in 18,300 dwelling units. The Park and Open Space element of the plan recommended the acquisition and development of neighborhood parks for nine of the City's twelve neighborhoods and for one of the City's planning areas. It further recommended that the City impose land dedication requirements, fees-in-lieu of dedication and impact fees on new development to help fund the acquisition of park and open space sites, rather than relying on Milwaukee County to purchase and develop parkland, as it had in the past. Pertinent recommendations relative to sanitary sewer, water supply and storm sewers systems included the adoption of system plans undertaken by the City or in progress at the time of the Comprehensive Plan preparation. The plan also recommended significant expansion to, or replacement of, several then existing City buildings. The plan contained specific estimates of future expansion needs for the City Hall, Police Station, Fire Station No. 1, Public Works facilities, and the Public Library. It further recommended the construction of a community center facility for indoor recreational programs and activities. In addition to expanding Fire Station No. 1, the plan recommended the abandonment of Fire Station No. 2 and Fire Station No. 4 and their replacement with new satellite fire stations in the northwest and southeast quadrants of the City to attain better response times in those developing areas.

Amendments to this plan were completed in 2001 by Meehan & Company, Inc., for three specific areas shown on Map 2, referred to as Area 2, Area 3 and Area 4. The planned land uses for Area 2 were re-examined after the area was identified in the Franklin First Development Plan as a potential area for a secondary business park. The impetus for the amendment for Areas 3 and 4 was the realignment and improvement of W. Loomis Road (STH 36) from a two-lane highway to a divided four-lane highway, which required that the planned land use for these areas be re-examined to ensure compatibility between the planned land use and the anticipated level of traffic through the area. The amendments are documented in reports entitled "Comprehensive Master Plan Amendment for Area 2", "Comprehensive Master Plan Amendment for Area 3", and "Comprehensive Master Plan Amendment for Area 4". The areas covered by these plan amendments do not correspond to the neighborhood boundaries outlined in the original Comprehensive Master Plan. The amendment reports contain planned land use maps, but do not tabulate the land areas planned for each category of land use, as was done in the original plan.

FRANKLIN FIRST DEVELOPMENT PLAN—SITE PLANNING, PRELIMINARY ENGINEERING, FEASIBILITY ANALYSIS AND FINANCIAL ANALYSIS

In 2000, the City contracted with R.A. Smith & Associates and a team of sub-consultants to prepare a study and report of specific recommendations for the development of key areas in non-residential development. Five key areas were selected for further study as to the potential for retail and business park development from among twelve areas initially evaluated by the Franklin First report completed in March 2000. The primary goal of the Franklin First plan was to develop strategies to increase the non-residential percentage of the City's tax base. This plan also serves as part of the process of updating the City's comprehensive master plan, which is now carried out on an ongoing, incremental basis through the preparation of several development plans and facility plans, rather than one comprehensive document. The plan contained data as to the size, current ownership, zoning and land uses of the sites, made recommendations regarding future use, zoning, and conceptual development plans for each site, developed preliminary recommendations regarding onsite and offsite sewer, water, storm water, street construction and street lighting improvements for each site, forecast the anticipated increase in valuation that would be realized under the conceptual development plan, evaluated the acquisition and relocation costs associated with each site, and prepared preliminary financial analysis related to public financial assistance.

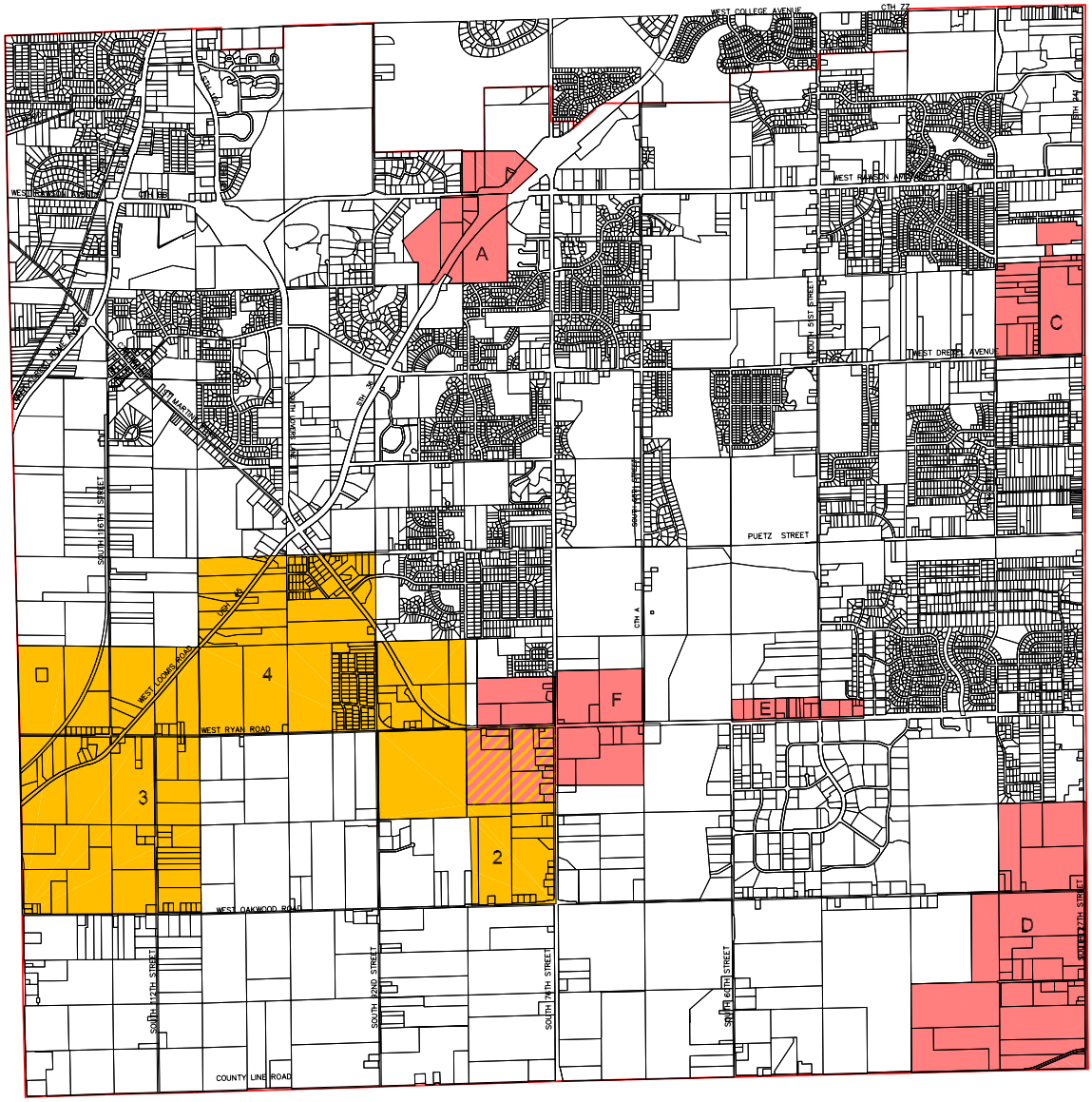
The plan contained several recommendations relevant to the conduct of this impact fee study. The plan recommended three areas of high priority for commercial and business park development, shown as areas A, C, and D on Map 2. The highest priority site was determined to be site D, in the vicinity of South 27th Street and County Line Road. It was recommended that the City acquire part of this site and develop it for a primary business park, similar to the existing Franklin Business Park, and that the City use Tax Incremental Financing (TIF) to finance the acquisition and development costs, including offsite infrastructure costs. Site C, located on South 27th Street between West Minnesota Avenue and West Drexel Avenue, was recommended for development as a secondary business park site, with TIF financing for the infrastructure improvements for Phase I and Phase II of the development. Site A was recommended for development of community retail land uses without financial assistance from the City. Sites E and F were determined to be of lower priority at this time due to market conditions and the lower visibility and accessibility of these sites.

RM811PB

MAP 2

COMPREHENSIVE MASTER PLAN AMENDMENT AREAS

CITY OF FRANKLIN
MILWAUKEE COUNTY, WISCONSIN



LEGEND

MUNICIPAL BOUNDARY

FRANKLIN FIRST DEVELOPMENT PLAN

COMPREHENSIVE MASTER PLAN AMENDMENT AREAS

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SCALE IN FEET

City of Franklin

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SOURCE: R. A. SMITH & ASSOCIATES AND MEEHAN AND COMPANY, INC

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LIBRARY FACILITY PLANNING REPORT

The City of Franklin hired Library Planning Associates in 1999 to prepare a facilities planning report for the Franklin Public Library. The study and the resultant report, "Facilities Action Plan for the New Millennium: An Assessment of Library Service Goals and Space Needs for the Franklin Public Library", found that the then existing library facilities and services were inadequate for the existing population of the City as well as the anticipated future population. Based on the City's forecast of a 2020 population of 41,000, and standards for collection size published by the Wisconsin Department of Public Instruction, the report recommended a new facility of approximately 42,000 square feet to serve the City through the year 2020, at an estimated cost of $5,800,000. The City is constructing a new 40,000 square foot library facility at a cost of approximately $5.8 million to be completed in 2002.

COMPREHENSIVE OUTDOOR RECREATION PLAN

The City adopted its first "Comprehensive Outdoor Recreation Plan" (CORP), prepared by Landscape Architects, Inc., in 1994. In 2000, the City selected Meehan & Company, Inc. to prepare an update to the CORP incorporating revised population forecasts through the year 2020 and relevant changes to regional, county and school district plans for park, recreational, open space and environmental lands. As of the date of this impact study report, the CORP is pending approval by the Plan Commission and the Common Council. The CORP was intended to be generally consistent with the City's adopted Comprehensive Master Plan, but to take the recommendations of that plan to a greater level of detail and specificity. The Plan projected the City's resident population for 2020, developed objectives, principles and standards for park and recreation facilities and natural resource protection, inventoried the existing outdoor park and recreational facilities in the City of Franklin, both public and private, evaluated the existing and projected future need for outdoor park and recreational facilities, evaluated the need for a community center to provide for public indoor recreational activities, and recommended a facility plan for outdoor park and recreation facilities and a community recreation center.

The Plan forecasts a resident population of 50,250 in the City by 2020, and evaluated the need for park and recreation facilities based on the standards for acres of parkland per thousand residents and service radii recommended in the Comprehensive Master Plan. Based upon these standards, the plan found a need for additional land for neighborhood and mini parks by the year 2020. The service radii standards, when applied to the existing parks, indicated that the extreme northwest and southeast corners of the City were not served by a community park, and that significant portions of the south and southwest portions of the City were not served by a neighborhood or mini park.

The Plan recommended improvements for the Lions Legend Park, a community level park owned by the City, and improvements to two existing neighborhood level parks, four mini parks, and five special parks. As described above, the Comprehensive Master Plan recommended a neighborhood park and/or elementary school in each neighborhood. Consistent with this recommendation, and with the projected need for additional parkland, the CORP recommended the acquisition and development of new neighborhood parks in the Forest Hills, Hillcrest, St. Martins, and Woodview neighborhoods and the acquisition and development of eight new mini parks in neighborhoods where there is insufficient land available for a neighborhood park. The

Plan further recommended improvements to certain special parks that preserve unique natural resources.

CITY OF FRANKLIN POLICE AND COURT FACILITIES NEEDS ASSESSMENT

In 1997, the City of Franklin, by resolution, formed the Police Facility Needs Assessment Committee, comprised of nine members, including two representatives of the Police Department, a contractor, the Assistant District Attorney, a former Deputy Sheriff, a member of the City Finance Committee, a business owner and a member of the City Plan Commission. A Police and Court Facilities Needs Assessment was conducted in 1998 by Fischer, Fischer, Theiss, Inc. and Phillips Swager Associates under the direction of the Committee to determine the facilities needs of the Police Department and the Municipal Court through the year 2020 and recommend a building program. The resulting report recommended that the City construct a new centralized police station and municipal court facility of approximately 57,000 square feet on a new site, at an estimated cost of $8.2 million. The needs assessment used a forecast 2020 resident population of 41,000 as the basis for these recommendations.

COMPREHENSIVE FIRE PROTECTION PLAN FOR THE CITY OF FRANKLIN

In January 2001, the Common Council directed City Fire Department staff to prepare a comprehensive fire protection plan for the City to assist the Council with decisions relative to proposed new fire protection facilities. The study and the resulting report, completed in 2001, evaluated the City's fire prevention, fire suppression, emergency medical service and support service operations, as well as existing mutual aid arrangements with the Villages of Hales Corners and Greendale. The report contained a description of existing fire department resources, including personnel and levels of training, apparatus, facilities, and mutual aid arrangements. Fire and rescue operations were evaluated relative to multiple standards, including State of Wisconsin criteria for fire inspection, fire loss rates, National Fire Protection Association (NFPA) standards for staffing and response times, and Occupational Safety and Health Administration mandates for fire operations. The report recommended that the City construct a new satellite fire station in the southeast area of the City as soon as possible to replace the existing Fire Station No. 2, and purchase land for a future station in the vicinity of 51st Street and Rawson Avenue to replace the existing Fire Station No. 3. It was recommended that the City provide improved response times to the northwest corner of the City through mutual aid arrangements with the Village of Hales Corners. This is somewhat different than the Comprehensive Master Plan, which recommended new stations in the northwest and southeast quadrants of the City.

STORM WATER MANAGEMENT PLAN

In 1993, a comprehensive storm water management plan was completed for the City of Franklin by Bonestroo, Rosene, Anderlik & Associates, Inc. This plan analyzed storm water management on a regional basis throughout the City, and recommended a system of storm sewerage facilities and storm water management practices to be undertaken by the City. Since 1993, the City has managed storm water through site-specific assessments of storm water management needs and by requiring developers to install the necessary facilities.

In 2002, Bonestroo, Rosene, Anderlik & Associates, Inc. completed the "City of Franklin Storm Water Management Plan Update – 2002", which is currently pending adoption by the Common Council. This plan recommended that the City continue to follow its practice of requiring developers to install storm water management facilities for each particular site. The plan included an inventory of all engineered storm water facilities throughout the City, and modeled the pollutant loadings in runoff from each of the City's 15 watersheds. Rather than recommending a system of improvements to be constructed by the City, the plan update recommended criteria for storm water quantity and quality management standards to be applied to new development.

WATER SYSTEM FACILITIES PLAN

The initial Comprehensive System Plan for Lake Michigan Water Supply for the City of Franklin was completed in 1992 and was subsequently updated in 1994. This report recommended a plan of water system improvements needed to meet the projected water demands of the City of Franklin through 2020 using treated Lake Michigan water supplied by the Oak Creek Water and Sewer Utility. The Franklin Water Utility became a wholesale water customer of the Oak Creek Water and Sewer Utility in 1996. In response to significant increases in water demand, the City of Franklin retained Kaempfer and Associates, Inc. to perform a new water system study to recommend water system improvements needed through 2020 and to supply ultimate buildout of the City. This study and the report were completed and adopted in 2000.

The water system study report, entitled "Water System Study: Project Report", contained an inventory of existing conditions in the study area, the City's existing water supply system, and past and present water use. Future residential and nonresidential development and the associated water demand were forecast for 2020 and ultimate buildout conditions. The adequacy of the City's existing water system was evaluated with respect to its capacity to supply the future water demand, and a plan of needed water system improvements was recommended. The report recommended several projects to remedy existing deficiencies in the system, as well as four future phases of projects needed to provide capacity for anticipated future increases in demand.

SANITARY SEWER FACILITIES PLAN

The initial Sanitary Sewer Master Plan for the City of Franklin was completed in 1967, and was subsequently revised in 1971 and updated in 1991. In 1996, J.C. Zimmerman Engineering Corp. completed, and the City subsequently adopted, a new Sanitary Sewer Master Plan for the City. Sewage from the City is conveyed to the Metropolitan Milwaukee Sewerage District (MMSD) system for treatment and disposal. The MMSD manages growth throughout its service area by limiting the amount of average daily sewage flows from each drainage basin to an amount determined by the planned land use conditions for that basin. The primary purpose of the 1996 report was to develop new daily base sewage flows for each of the drainage basins within the City based upon the forecast population and land use conditions from the City of Franklin Comprehensive Master Plan completed in 1992. The report documented the remaining allowable amount of flow for each basin, the planned land use conditions for each basin, and the base flows for 2010 that were developed for the planned land use conditions. It also provided a preliminary plan for sewer main extensions to serve unsewered portions of the City.

CONCLUSIONS

The review of the aforementioned planning documents and reports demonstrates that the City of Franklin has conducted extensive and detailed planning efforts, particularly during the last decade. The City continues to update the comprehensive master plan and carries out detailed facility planning for all of its major infrastructure systems, with the exception of transportation facilities. The recent amendments to the Comprehensive Master Plan have broken with the traditional neighborhood-based approach to planning in the City and have instead defined planning areas based on areas suitable for a particular type of development, or areas surrounding particular transportation nodes. As these plans have been completed, the total inventory of planned land uses for the City has not been updated to reflect the changes in planned land use. Therefore, for the conduct of the impact fee study it was necessary to inventory the changes in planned land use contained in the plan amendments and update the total inventory of planned land use.

The various planning documents completed for the City use several different population projections or forecasts. Most of the facility plans were based on a forecast 2020 population of 41,000, developed by the City Planning Department. However, the Comprehensive Master Plan forecasts a 2010 population of 28,500 to 32,800, and an ultimate buildout population of 51,200. The plan does not specify when the ultimate buildout population expects to be reached. The draft Comprehensive Outdoor Recreation Plan forecasts a 2020 population of 50,250. For purposes of determining appropriate impact fees, it was therefore necessary to develop a single consistent population projection for the year 2020.

CHAPTER THREE:
EXISTING AND FORECAST CONDITIONS

INTRODUCTION

Any study related to the provision and financing of municipal facilities for a given geographic area requires knowledge of the existing setting and forecasts of future conditions. The conditions relevant to an impact fee study include primarily the existing and planned land use and development patterns and the existing and forecast demographic characteristics of the resident population of the planning area. Knowledge of these conditions assist in determining the existing and future demand for public facilities, the adequacy of the municipality's existing facilities, and the cost of providing facilities for current and future development.

AVAILABLE MAPPING

Milwaukee County, working through the Southeastern Wisconsin Regional Planning Commission (SEWRPC), has completed horizontal and vertical control survey networks within the City of Franklin. These networks include the location, monumentation and placement on the Wisconsin State Plane Coordinate System, North American Datum of 1927, of all U.S. Public Land Survey system section and one-quarter section corners throughout the planning area, and the establishment of reference bench marks and elevations referred to the National Geodetic Vertical Datum of 1929. These two control survey networks provided the basis for the preparation of all mapping used in the public facilities needs assessment and impact fee study.

Milwaukee County, working through the SEWRPC, has completed one inch equals 100 feet and one inch equals 200 feet scale, 2 foot contour interval topographic maps of the City of Franklin. These maps are based upon the aforementioned control survey networks and meet national mapping accuracy standards. Milwaukee County, working through the SEWRPC, has also completed one inch equals 200 feet scale cadastral maps of the City of Franklin. The maps are current with respect to the location and configuration of all real property boundary lines shown through January 1, 2000. The maps are based upon the aforementioned horizontal control survey network and upon ground features provided by the planimetric data shown on the aforementioned topographic maps. The cadastral maps are available in digital and hard copy format. For use in the impact fee study, the available large scale maps were assembled into a seamless digital cadastral map of the planning area. The large scale topographic and cadastral maps can be precisely overlaid for analytical and data display purposes.

The topographic and cadastral base mapping was supplemented by available large scale aerial orthophotography available in computer manipulatable, digital form from the SEWRPC. This orthophotography was prepared at a scale of one inch equals 400 feet, was produced from aerial photography taken in the spring of 2000 and meets national mapping accuracy standards.

EXISTING LAND USE

The Southeastern Wisconsin Regional Planning Commission maintains an existing land use inventory by U.S. Public Land Survey system one-quarter section. The resulting data can be readily assembled for specific municipalities and for special purpose planning or study areas. The Commission land use data were collected for use in the impact fee study. The existing, year

2000 land use pattern within the study area is graphically shown on Map 3. Table 1 presents the related land use information in quantitative form. The existing land uses were aggregated in a format that was as consistent as possible with the planned land use information contained in the City of Franklin Comprehensive Master Plan, so as to allow for meaningful comparisons.

Table 1 indicates that about 44 percent of the City of Franklin was in urban uses in 2000. Residential uses comprised about 73 percent of the urban uses, while agricultural and other open spaces comprised about 95 percent of the rural uses. Low density residential development dominated the residential uses, making up about two-thirds of all residential land uses.

EXISTING DEMOGRAPHIC CONDITIONS

As shown in Table 2, the City of Franklin in 2000 had a resident population of 29,494, residing in 10,602 households with an average of 2.78 persons per household. The resident population increased by 19,488 persons since 1960, a 195 percent increase over the forty-year period. The number of persons added per decade has increased with each decade, and the percentage change in population per decade has remained at or above 30 percent for the last three decades. The City of Franklin has grown rapidly, while the overall population of Milwaukee County declined over the same time period, and continues to be among the fastest growing communities in southeastern Wisconsin. This can be largely attributed to the fact that Franklin has one of the largest remaining inventories of undeveloped land in the Milwaukee metropolitan area.

During the same time period, the average number of persons per household declined considerably, from an average of 3.75 persons per household in 1960, to 2.78 persons per household in 2000. Both the increase in population and the decrease in persons per household contributed to the 297 percent increase in the number of households, from 2,668 in 1960 to 10,602 in 2000.

PLANNED LAND USE

Planned land use conditions for the City of Franklin were assembled from the Comprehensive Master Plan, and the adopted updates to the Plan contained in the Franklin First Development Plan and the Amendments for Areas 2, 3, and 4. The data presented are for the ultimate buildout conditions, and are set forth in Table 1. The planned land use conditions in the planning area under full buildout conditions are expected to be reached by 2020 in the area of the City included in the sewer service area, and sometime after 2020 for the area not currently included in the sewer service area.

Table 1 indicates that the amount of land in urban uses within the City of Franklin may be expected to increase from about 9,551 acres in 2000, to about 18,552 acres at full buildout, or about a 94 percent increase. Conversion of rural land uses to residential land uses is expected to account for about 2,883 acres of the increase in urban land uses, while increases in commercial and industrial land uses are expected to comprise about 2,532 acres of the increase.

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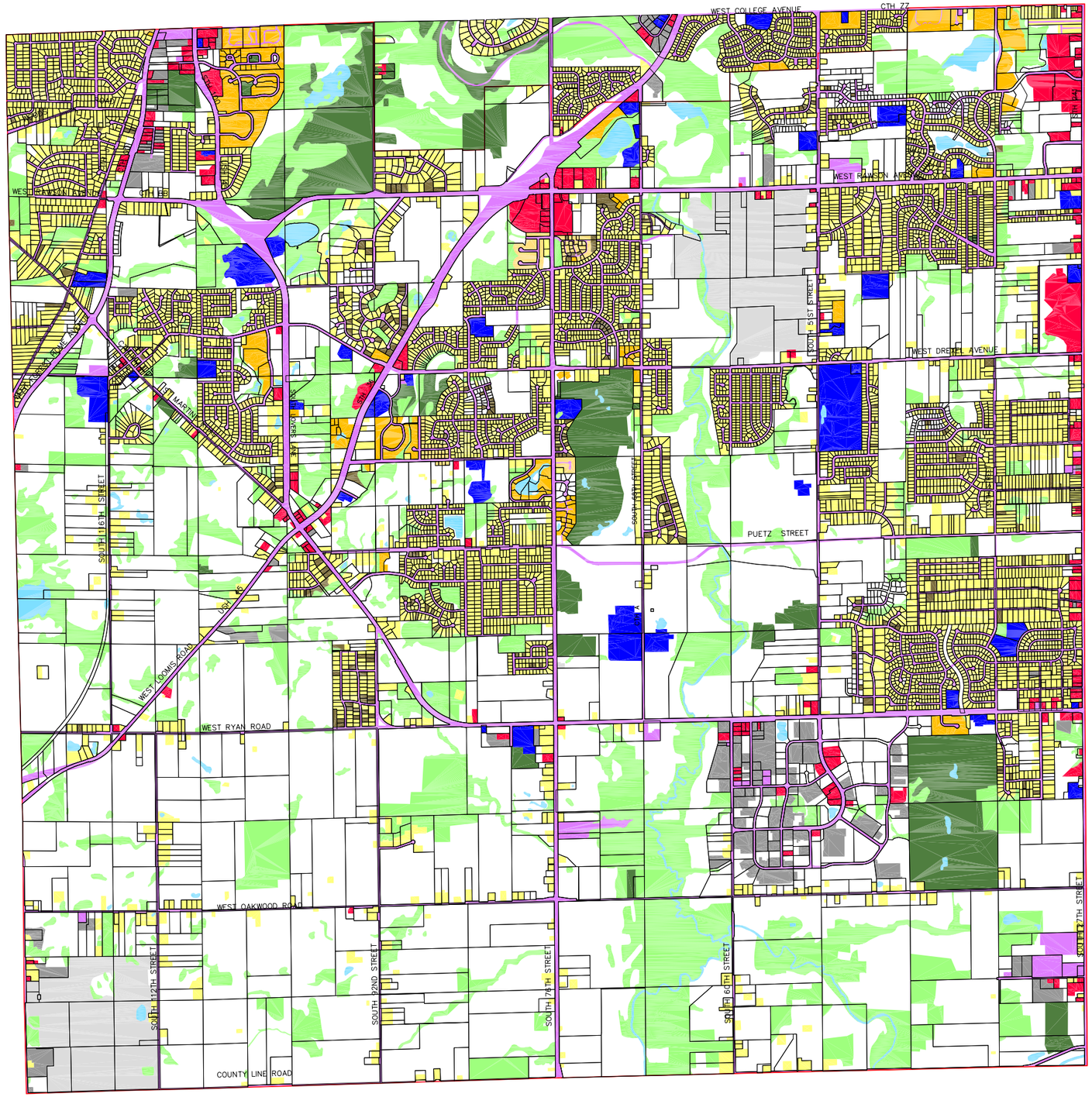

City of Franklin

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MAP 3

EXISTING LAND USE: 2000

CITY OF FRANKLIN
MILWAUKEE COUNTY, WISCONSIN

LEGEND

- MUNICAPAL BOUNDARY
- SINGLE FAMILY RESIDENTIAL
- TWO - FAMILY RESIDENTIAL
- MULTI - FAMILY RESIDENTIAL
- RESIDENTIAL LAND UNDER CONSTRUCTION
- COMMERCIAL
- INDUSTRIAL
- EXTRACTIVE AND LANDFILL
- GOVERNMENT AND INSTITUTIONAL
- TRANSPORTATION, COMMUNICATION, AND UTILITIES
- RECREATIONAL
- AGRICULTURE AND OTHER OPEN LANDS
- ENVIRONMENTAL CORRIDOR AND OTHER ENVIRONMENTALLY SENSITIVE LANDS
- SURFACE WATER

SOURCE: SEWRPC

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Table 1
Existing and Planned Land Use: 2000 and 2020
City of Franklin, Milwaukee County, Wisconsin

Land Use Category	Existing Land Use: 2000 [1]			Planned Land Use: Ultimate [2]			Difference	
	Acres	Percent of Category	Percent of Total	Acres	Percent of Category	Percent of Total	Acres	Percent of Category
Urban								
Low Density Residential [3]	4,242	44.4	19.4	4,784	25.8	21.9	543	6.0
Medium Density Residential [4]	2,157	22.6	9.9	4,128	22.3	18.9	1,971	21.9
Two-Family Residential	81	0.8	0.4	225	1.2	1.0	144	1.6
Multi-Family Residential	468	4.9	2.1	693	3.7	3.2	226	2.5
Commercial [5]	609	6.4	2.8	1,409	7.6	6.4	800	8.9
Industrial [6]	476	5.0	2.2	2,209	11.9	10.1	1,733	19.2
Governmental and Institutional [7]	575	6.0	2.6	1,273	6.9	5.8	697	7.7
Recreational	943	9.9	4.3	3,832	20.7	17.5	2,889	32.1
Subtotal	9,551	100.0	43.7	18,552	100.0	84.9	9,002	100.0
Non Urban								
Agricultural and Other Open Space	11,665	94.8	53.4	2,813	85.3	12.9	-8,852	98.3
Extractive and Landfill	635	5.2	2.9	485	14.7	2.2	-150	1.7
Subtotal	12,300	100.0	56.3	3,298	100.0	15.1	-9,002	100.0
Total	21,851		100.0	21,851		100.00	0	

1) Source: Southeastern Wisconsin Regional Planning Commission.
2) Source: *City of Franklin Comprehensive Master Plan* , Lane Kendig, Inc., 1992; *Franklin First Development Plan* , R.A. Smith and Associates, 2001; *Comprehensive Master Plan Amendment for Area 2* , Meehan & Company, Inc., 2001; *Comprehensive Master Plan Amendment for Area 3* , Meehan & Company, Inc., 2001; and *Comprehensive Master Plan Amendment for Area 4* , Meehan & Company, Inc., 2001.
3) Includes R-1, R-2, R-3 and R-3E residential districts.
4) Includes R-4, R-5, R-6 and Village Residence residential districts.
5) Includes Business, City Civic Center, and Planned Development Districts.
6) Includes Industrial and Business Park Districts.
7) Includes Institutional District.

Table 2
Existing Population and Households: 1960 to 2000
City of Franklin, Milwaukee County, Wisconsin

	Resident Population			Resident Households			
	Population	Change	Percent Change	Households	Change	Percent Change	Persons per Household
1960	10,006			2,668			3.75
1970	12,247	2,241	22.4	2,941	273	10.2	4.16
1980	16,871	4,624	37.8	5,550	2,609	88.7	3.04
1990	21,855	4,984	29.5	7,434	1,884	33.9	2.94
2000	29,494	7,639	35.0	10,602	3,168	42.6	2.78

Source: U.S. Bureau of Census

The conversion of 2,884 acres to residential land uses, in the distribution shown in Table 1, would allow for the addition of approximately 4,853 to 6,805 additional dwelling units, as shown in Table 3. If the number of persons per household continues to decrease at the same rate as the decrease from 1990 to 2000, it would decrease to 2.49 persons per household by 2020. Thus, the additional dwelling units would house approximately 12,089 to 16,952 additional persons. These are approximate figures only, and are based on the average density of housing units per acre for each of the broad categories of residential land uses, rather than detailed applications of City of Franklin development standards to remaining developable land planned for residential use.

The conversion of 800 acres of land to commercial uses, 1,733 acres of land to industrial uses, and 697 acres of land to government and institutional uses would result in approximately 43.2 million to 70.5 million square feet of new building space, as shown in Table 4.

FORECAST DEMOGRAPHIC CONDITIONS

Forecasting future population for a small geographic area is a difficult exercise since the population of a particular area depends on a myriad of factors, most of which are outside the control of the local municipality. Conditions in the larger region of which the smaller area is a part, including overall economic activity levels, availability of land for development, changing social trends, and decisions regarding the extension of public services, all contribute to the overall population level and the distribution of population throughout the region. Population forecasts are generally generated based upon extensions of historic population trends into the future, tempered by judgements regarding the many conditions in the surrounding environment that may affect future population growth. Several projections and forecasts of the resident population of the City of Franklin for the year 2020 were prepared as part of the City's comprehensive planning process and the regional planning process. These projections and forecasts were reviewed as part of this impact fee study.

The Southeastern Wisconsin Regional Planning Commission (SEWRPC), as part of the planning process for A Regional Land Use Plan for Southeastern Wisconsin: 2020, prepared population forecasts for the City of Franklin. Alternative population forecasts were prepared for each geographic area in the region, with each forecast based upon a different set of assumptions regarding overall population growth rates in the region and the anticipated distribution of land development throughout the region. The population forecasts prepared for the City of Franklin for the year 2020 included a high-growth decentralized scenario and a high-growth centralized scenario. The forecast resident population of the City of Franklin for 2020 is 33,800 under the high-growth decentralized scenario and 58,200 under the high-growth centralized scenario.

The City of Franklin Planning Department prepared a population projection for 2020 based upon analyses of historic building permit data and annual increases in the population estimate prepared by the Wisconsin Department of Administration during the 1990's. These past trends were projected into the future and modified based upon the remaining inventory of land available for residential development, to forecast a year 2020 resident population of 41,000. This figure was based on anticipated growth of 800 persons per year from 2000 through 2010 and 400 persons per year thereafter.

Table 3
Forecast Incremental Residential Dwelling Units: 2000 to 2020
City of Franklin, Milwaukee County, Wisconsin

Land Use Category	Forecast Development (Acres) [1]	Max. Gross Density [2]		Number of Dwelling Units	
		Low End	High End	Low End	High End
Low Density Residential [3]	434	0.44	1.40	191	608
Medium Density Residential [4]	1,518	2.10	2.90	3,187	4,402
Two-Family Residential	111	4.00	4.00	443	443
Multi-Family Residential	169	6.10	8.00	1,032	1,353
Total Dwelling Units				4,853	6,805
Total Increase in Resident Population				12,089	16,952

1) Excluding area for transportation right-of-way.
2) Source: City of Franklin Unified Development Ordinance. Maximum number of dwelling units per gross acre.
3) Includes R-1, R-2, R-3 and R-3E residential districts.
4) Includes R-4, R-5, R-6 and Village Residence residential districts.

Table 4
Forecast Incremental Commercial, Industrial and Institutional Building Floor Area: 2000 to 2020
City of Franklin, Milwaukee County, Wisconsin

Land Use Category	Forecast Development (Acres) [1]	Gross Floor Area Ratio [2]		Forecast Incremental Building Floor Area (SF)		
		Low End	High End	Low End	High End	Average
Commercial [3]	600	0.26	0.38	6,791,113	9,925,473	8,358,293
Industrial [4]	1,386	0.45	0.85	27,169,940	51,320,998	39,245,469
Government and Institutional [5]	558	0.38	0.38	9,233,814	9,233,814	9,233,814
Total				43,194,867	70,480,285	56,837,576

1) Excluding area for transportation right-of-way.
2) Source: City of Franklin Unified Development Ordinance. Maximum ratio of building area to gross lot area.
3) Includes Business City Civic Center, and Planned Development Districts.
4) Includes Industrial and Business Park Districts.
5) Includes Institutional District.

A third population projection was prepared by Meehan and Company, Inc. in the conduct of the 2000 update to the Comprehensive Outdoor Recreation Plan (CORP). This population forecast utilized a trend analysis of the population of the City from 1960 through 1990 as recorded by the U.S. Bureau of the Census. Projecting the exponential population growth pattern of the City from 1960 through 1990 into the future, the study projected a 2020 resident population of 48,349.

All of the aforementioned projections and forecasts were prepared prior to the release of the 2000 census, which indicated a significantly higher population for the City of Franklin than what had been estimated for 2000 by the Wisconsin Department of Administration. As previously described, the resident population of the City has been increasing at faster pace each decade, a pattern which is best fit by an exponential trend line. This was the method employed by the CORP, albeit using the 1990 census population rather than the 2000 census population. Applying the exponential trend line analysis to the census population data for 1960 through 2000 yields a projected 2020 population of 50,244, as depicted in Figure 1 and Table 5.

This projected population was then compared to the amount of remaining land available for residential development within the City of Franklin. The approximate population that can be accommodated by the amount of land remaining for residential uses in the City is 46,446 persons, assuming the development of all lands at the higher end of the range of densities, and 41,583 persons assuming the development of all lands at the lower end of the range of possible densities. The general trend of development and requests for rezoning in the City has been toward lower density development. Therefore, it should be assumed that future residential development in each category of residential land use would be at densities at the low end of the range. Furthermore, these figures represent the population that can be accommodated at full buildout of all remaining available land. However, some of the land available for residential development is located outside of the current sewer service area and may not have sewer service available prior to 2020. For these reasons, a 2020 population forecast of 41,000 persons within the City of Franklin was used for purposes of this public facilities needs assessment and impact fee study. The forecast population and number of households are shown in Figure 2 and Table 6.

CONCLUSIONS

The City of Franklin has grown rapidly in both resident population and the amount of land developed in urban uses during the last four decades, and is likely to continue to do so in the next twenty years. Based upon the existing land use conditions, and the planned land use conditions contained in the City Comprehensive Master Plan and its updates and amendments, approximately 2,884 acres of land will be converted to residential use, 800 acres will be converted to commercial use and 1,733 acres will be converted to industrial use by 2020. It is anticipated that this development will be accompanied by an increase in the population to approximately 41,000 persons, residing in approximately 16,459 households. These forecast future land use conditions and population served as the basis for evaluating the public facilities of the City of Franklin, determining the proportionate share of the cost of new facilities needed to serve future development, allocating that cost to each of the categories of land use, and recommending a schedule of impact fees.

Figure 1
Existing and Forecast Population and Households Using Exponential Trendline Analysis: 1960 to 2020
City of Franklin, Milwaukee County, Wisconsin

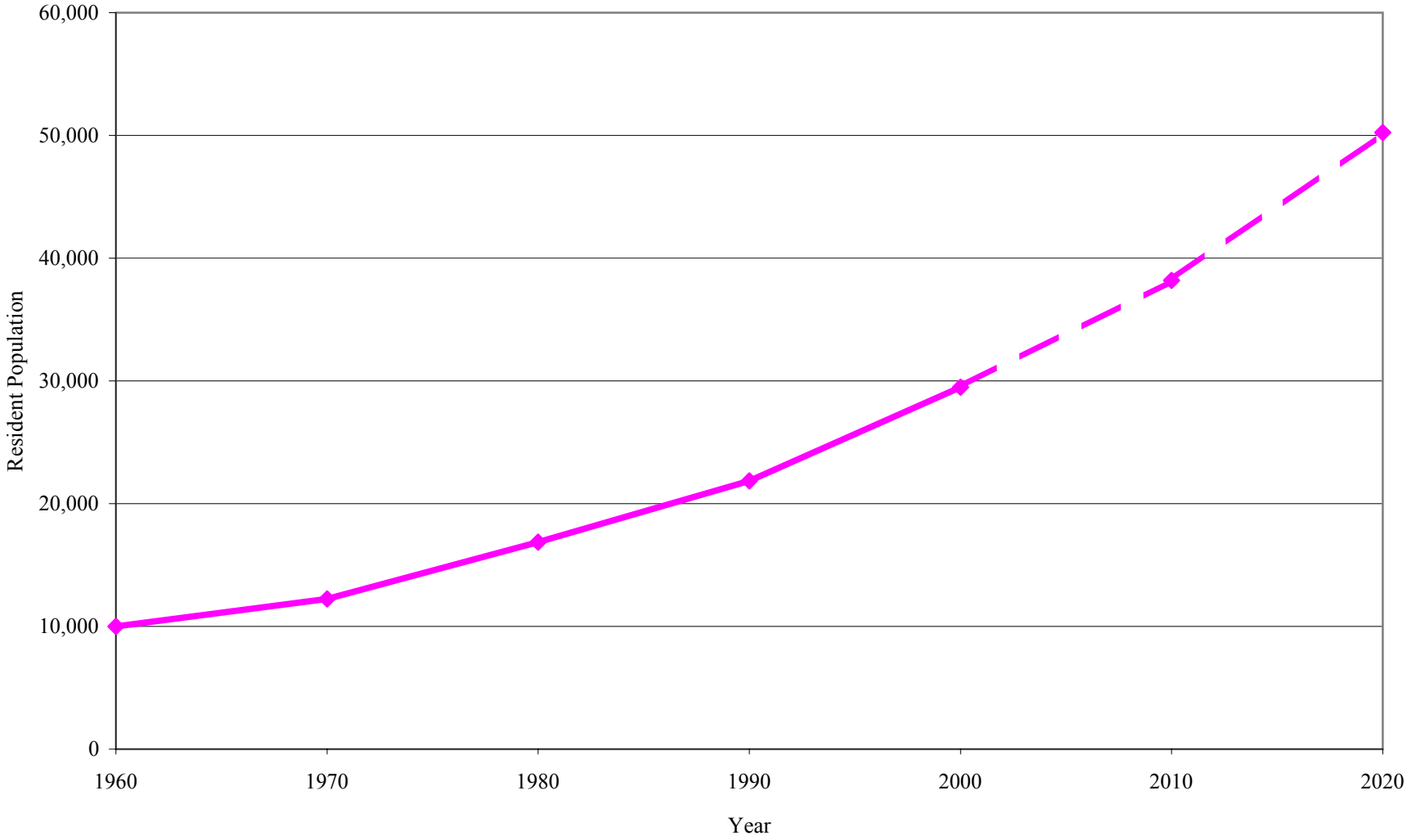


Table 5

Existing and Forecast Population and Households Using Exponential Trendline Analysis:
1960 to 2020
City of Franklin, Milwaukee County, Wisconsin

	Resident Population			Resident Households			
	Population	Change	Percent Change	Households	Change	Percent Change	Persons per Household
1960	10,006			2,668			3.75
1970	12,247	2,241	22.4	2,941	273	10.2	4.16
1980	16,871	4,624	37.8	5,550	2,609	88.7	3.04
1990	21,855	4,984	29.5	7,434	1,884	34.0	2.94
2000	29,494	7,639	35.0	10,602	3,168	42.6	2.78
2010	38,198	8,704	29.5	14,510	3,908	36.9	2.63
2020	50,244	12,046	31.5	20,170	5,659	39.0	2.49

Figure 2
Existing and Forecast Population Based Upon Forecast Land Use Conditions: 1960 to 2020
City of Franklin, Milwaukee County, Wisconsin

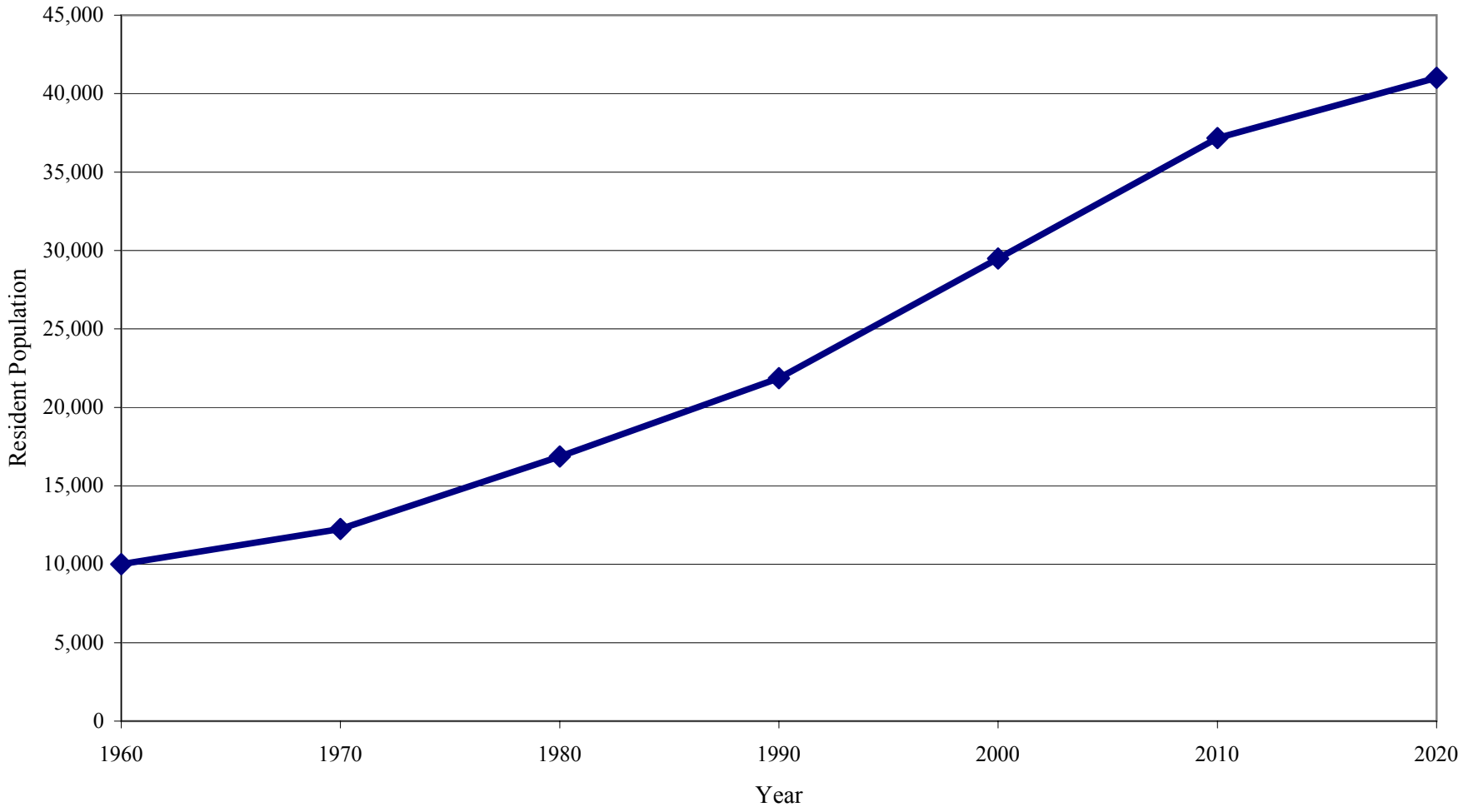


Table 6

Existing and Forecast Population and Households Based Upon Forecast Land Use Conditions:
1960 to 2020
City of Franklin, Milwaukee County, Wisconsin

	Resident Population			Resident Households			
	Population	Change	Change	Households	Change	Change	Household
1960	10,006			2,668			3.75
1970	12,247	2,241	22.4	2,941	273	10.2	4.16
1980	16,871	4,624	37.8	5,550	2,609	88.7	3.04
1990	21,855	4,984	29.5	7,434	1,884	34.0	2.94
2000	29,494	7,639	35.0	10,602	3,168	42.6	2.78
2010	37,165	7,671	26.0	14,118	3,516	33.2	2.63
2020	41,000	3,835	10.3	16,459	2,341	16.6	2.49

CHAPTER FOUR:
LIBRARY FACILITIES NEEDS ASSESSMENT

INVENTORY OF EXISTING FACILITIES

The City of Franklin is currently served by the Franklin Public Library, an approximately 5,700 square foot facility, located adjacent to the City Hall at 9229 West Loomis Road. The current library houses approximately 54,000 books, 181 periodical titles (excluding back issues), 2,900 audio materials, 3,500 video materials, and 13 public access computer workstations. Additionally, the library includes reader seating space, staff workspace and meeting room facilities.

Substantial population growth in the City of Franklin, and associated increases in library circulation, created a need to expand the existing facilities in order to offer an adequate level of library service. Thus, in 1999 the Common Council established the Library Building Committee, which worked with library staff and the firm of Library Planning Associates, Inc. to plan for construction of a larger facility. That facility was subsequently designed by Eppstein & Uhen and construction of the new library is expected to be completed in 2002.

IDENTIFICATION OF EXISTING DEFICIENCIES AND FUTURE NEEDS

The service level standards used by this report to evaluate the City's library facilities are the library planning standards developed by the Wisconsin Department of Public Instruction (DPI), Division for Libraries and Community Learning. The DPI has developed standards for both collection size and facility space needs.

The Division publishes the *Wisconsin Public Library Standards,* a summary of public library report data. The record analyzes selected public library annual report data according to the population served, and calculates benchmark service level measures for different population ranges. The DPI library service level standards are useful to assess the adequacy of staff size, collection size, and operating hours for a library to serve its current and future service area population. The standards are developed for four service levels—Basic, Moderate, Enhanced and Excellent—and are expressed in terms of units provided per capita. Based upon the level of service a library wishes to provide, the selected standard may be applied to the population served by the library to determine the appropriate collection size.

The DPI has developed two sets of quantitative library service level standards that can be used depending on the geographic area served: municipal population standards and service area population standards. The municipal population standards should be used when circulation records indicate that local residents are the main users of the library. The service area standards should be used when circulation records indicate that a large portion of the circulation is to users from surrounding communities.

Public Library Space Needs: A Planning Outline, also published by the DPI, provides guidelines for determining facility space needs. The guidelines consist of standards for facility space per unit of collection holdings, such as books and audio materials, as well as recommended space standards for employee work stations, meeting rooms, conference rooms, reader seats, public computer terminals and other general use space.

The Franklin Public Library is a member of the Milwaukee County Federated Library System. As a member of a federated library system, the Library offers free service to residents of other communities in Milwaukee County, and residents of Franklin enjoy free use of other member public libraries in Milwaukee County. The majority of the Franklin Public Library circulation in 2000 was to residents of the City of Franklin, as shown in Table 7. However, about 10 percent of the circulation were to residents of other Milwaukee County communities. The Milwaukee Central Library and residents of Greendale were the next largest users of the Franklin Public Library, each representing approximately 3 percent of total circulation in 2000. Since most of the 2000 circulation was to residents the City of Franklin, the facilities needs assessment for the Franklin Public Library used the DPI standards for the library's municipal population.

In order to determine the appropriate amount to impose as an impact fee for library facilities, it is first necessary to define the level of service that should be provided. The selected level of service can then be applied to the current and future resident population of the City of Franklin to identify existing deficiencies in the facilities provided, and recommend the new facilities needed to accommodate future development and the associated increases in demand for library services. The 2000 resident population of the City of Franklin was 29,494. This population is forecast to increase to 41,000 by 2020, an increase of 11,506 persons.

The *Facilities Action Plan for the New Millennium*, prepared by Library Planning Associates, Inc. applied the Basic level of service standard for an entire library service area to a forecast 2020 municipal population of 41,000 to determine the recommended collection size. Based on the standards for municipal population, however, the collection size that was recommended by the facilities plan would not provide the Basic level of service. Table 8 shows, the recommended holdings for the Franklin library for 2020, and the level of service that would be provided assuming a 2020 population of 41,000. For comparison purposes, the table also shows the benchmark standards developed by the DPI for volumes, periodicals, audio and video recordings, and reader seats per thousand population.

For purposes of determining the existing deficiency in library facilities, the design standards shown in Table 8 were used to determine the recommended collection size to provide the same level of service to the 2000 municipal population. Applying the design standards to the 2000 resident population of the City of Franklin yielded the recommended 2000 holdings listed in Table 9. As shown in the table, the Franklin Public Library's actual holdings in 2000 did not meet the design service level standard for all categories of holdings. The library had significantly fewer than the recommended number of books, approximately the recommended number of periodicals and audio recordings, and slightly more than the recommended number of video recordings.

The amount of facility space needed to provide the design service level for the 2000 population was determined based upon the recommended holdings and the facility space planning guidelines contained in *Public Library Space Needs: A Planning Outline*. Table 10 shows the types of space needed for library materials and programs, and the recommended square feet of space for each category. This facility space needs analysis was prepared with the assumption that the library facility would provide the minimum recommended amount of space for each of the library activities. The amount of collection space needed was sized to house the higher of either

Table 7
Library Facility Needs Assessment
Franklin Public Library Circulation: 2000

Community / Area	Checkouts [1]	Percentage Share of Circulation
Franklin Public Library	231,268	90.10
Milwaukee Central	7,300	2.84
Brown Deer	25	0.01
North Shore	135	0.05
South Milwaukee	198	0.08
Greenfield	2,583	1.01
Greendale	7,015	2.73
West Milwaukee	67	0.03
Oak Creek	3,854	1.50
Wauwatosa	320	0.12
West Allis	1,250	0.49
St. Francis	195	0.08
Cudahy	474	0.18
Shorewood	91	0.04
Whitefish Bay	9	0.00
Hales Corners	1,870	0.73
Other	21	0.01
Total	256,675	100.00

1.) Source: Milwaukee County Federated Library System.

Table 8
Library Facility Needs Assessment
Recommended Holdings and Service Level Standards for Design Year 2020

Library Collection Materials	Recommended 2020 Holdings [1]	Design Standards (Units per Capita) [2]	Holdings Standards for Municipal Population (Units per Capita) [3]			
			Basic	Moderate	Enhanced	Excellent
Volumes	113,570	2.77	3.20	3.70	4.10	5.30
Periodical Titles	310	0.0076	0.0080	0.0090	0.0102	0.0131
Audio Recordings	4,384	0.107	0.120	0.150	0.220	0.290
Video Recordings	2,952	0.072	0.090	0.120	0.140	0.180
Reader Seats	144	0.0035	0.0030	0.0030	0.0030	0.0030

1.) Collection size recommended in *Facilities Action Plan for the new millennium* , Library Planning Associates, Inc. Based on forecast 2020 service area population of 41,000.
2.) Service level that would be provided by recommended holdings, assuming a 2020 municipal population of 41,000.
3.) Source: *Wisconsin Public Library Standards, Third Edition,* 2000. These standards are based on public library annual report data gathered from libraries serving communities of similar size. Standards shown are for a municipal population of 25,000 to 49,999.

Table 9
Library Facility Needs Assessment
Recommended Holdings and Actual Holdings: 2000

Library Collection Materials	Recommended 2000 Holdings [1]	Actual 2000 Holdings [2]
Volumes	81,698	54,038
Periodical Titles	223	181
Audio Recordings	3,154	2,861
Video Recordings	2,124	3,493
Reader Seats	104	---

1.) Based on design standards computed in Table 8.
2.) Source: Franklin Public Library Annual Report, 2000.

Table 10
Library Facility Needs Assessment
Recommended Facility Space to Serve Municipal Population: 2000

	Total Units [1]	Required Space (SF) [2]
Collection Space		
Books (10 volumes per sq. ft.)	81,698	8,170
Periodicals (display--1 sq. ft. per title)	223	223
Periodicals (back issues--.5 sq. ft. per title)	100	150
Audio and Video (10 items per sq. ft.)	6,354	635
Public Use Computer Workstations (50 sq. ft. per unit)	13	650
Subtotal Collection Space		9,828
General Space		
Reader Seating (30 sq. ft. per seat)	104	3,108
Staff Work Space (125 sq. ft. / workstation)	26	3,250
Meeting Room Space (Meeting/Program Room--10 sq. ft. per seat)	100	1,000
Meeting Room Space (Meeting/Program Room--10 sq. ft. per seat)	20	200
Meeting Room Space (Storytime Room--20 sq. ft. per seat)	20	400
Conference Room (30 sq. ft. per seat)	8	240
Subtotal General Space		8,198
Special Use (12.5% of Gross Area)		3,467
Nonassignable Space (22.5% of Gross Area)		6,240
Total Gross Area Required		27,732
Less: Existing Space		5,700
Total Space Deficiency		22,032

1.) Total units represent the higher of the actual 2000 library holdings or the recommended 2000 holdings from Table 9.
2.) Space needs based on guidelines in *Public Library Space Needs: A Planning Outline,* Wisconsin Department of Public Instruction, 1998 and *Facilities Action Plan for the new millennium* , Library Planning Associates, 1999.

the actual 2000 library holdings or the 2000 recommended holdings. The amount of staff workspace and meeting room space was determined from the recommendations in the facilities plan, scaled back to the 2000 City population. The recommended facility space includes special use space allotted for services or furnishings not accounted for in other space allocations, including index tables, newspaper racks or pamphlet files. Non-assignable space is space not used directly for library services, such as furnace rooms, storage rooms, vestibules, corridors, and rest rooms. As shown in Table 10 the total gross area required to serve the 2000 area population would be approximately 27,732 square feet. The existing library is approximately 5,700 square feet, so there is a deficiency of approximately 22,032 square feet in the existing Franklin Public Library facility. It must be noted that this deficiency was calculated using a design service level standard for collection size that would not be sufficient to provide the Basic level of service as defined by the DPI. However, the design service level standards used represent the level of service that will be provided by the library in 2020 if the City reaches the forecast population of 41,000 by 2020.

The facilities plan recommended that the City build an approximately 42,700 square foot library facility to serve the forecast 2020 City population. The planning guidelines for the amount of space needed for each library function are shown in Table 11. Based upon these recommendations, the City designed a new 40,000 square foot library facility. Construction of the new library will be completed in 2002.

The total cost of the new facility in terms of 2002 dollars is estimated to be approximately $5,800,000. This cost includes only capital costs, where capital costs are defined by Wisconsin Statutes 66.0617 as the costs to construct, expand or improve public facilities, including land, legal, engineering and design costs. Table 12 shows the detailed cost estimate and the cost per square foot of approximately $145.

RECOMMENDED LIBRARY EXPANSION IMPACT FEE

The new Franklin Public Library facility currently under construction was needed both to remedy existing deficiencies in library facilities, and to provide for increases in the demand for library services that will result from future population growth. It is therefore appropriate to impose impact fees upon development in order to pay for the share of library expansion costs that are attributable to new residential development and the associated population growth. The amount recovered through impact fees should only include the proportionate share of the cost attributable to demand created by new residential development within the City, and should exclude the share of cost related to remedying existing deficiencies in library facilities.

The total amount of library capital costs that may be collected through the imposition of a library facilities impact fee and the amount per capita are calculated in Table 13. The new library will provide approximately 40,000 square feet of total space. Of this total, approximately 27,732 square feet is needed to the serve the current population of the City, while the remaining 12,268 square feet will provide space to accommodate increasing future demands. Based on the cost per square foot to construct the new library, the total share of the cost attributable to demands for library service due to new development is $1,781,537. The population of the City is expected to increase by 11,506 persons by 2020, so the cost to provide library facilities to accommodate future growth is $154.84 per capita.

Table 11
Library Facility Needs Assessment
Recommended Facility Space to Serve Municipal Population: 2020

	Total Units	Required Space (SF) [1]
Collection Space		
Books (10 volumes per sq. ft.)	113,570	11,357
Periodicals (display--1 sq. ft. per title)	310	310
Periodicals (back issues--.5 sq. ft. per title)	279	419
Audio and Video (10 items per sq. ft.)	7,336	734
Public Computer Workstations (50 sq. ft. per unit)	60	3,000
Subtotal Collection Space		15,819
General Space		
Reader Seating (30 sq. ft. per seat) (2.87 seats per 1,000 pop)	144	4,320
Staff Work Space (125 sq. ft. / workstation)	39	4,875
Meeting Room Space (Meeting/Program Room--10 sq. ft. per seat)	150	1,500
Meeting Room Space (Meeting/Program Room--10 sq. ft. per seat)	30	300
Meeting Room Space (Storytime Room--20 sq. ft. per seat)	30	600
Conference Room (30 sq. ft. per seat)	12	360
Subtotal General Space		11,955
Special Use (12.5% of Gross Area)		5,341
Nonassignable Space (22.5% of Gross Area)		9,614
Total Gross Area Needed		42,729

1.) Source: *Facilities Action Plan for the new millennium: Franklin Public Library* , Library Planning Associates, Inc, November 1999.

Table 12
Library Facility Needs Assessment
Estimated Library Building Costs

Description	Total Cost
Foundations	$131,611
Excavation and Sitework	$558,233
Relocation	$40,000
Building Structure	$1,177,150
Interior Construction	$796,043
Roofing	$279,401
HVAC/Plumbing	$732,215
Electrical	$490,156
Telecommunications	$126,905
Subtotal	$4,331,714
GCOH&P (10%)	$165,000
Contingency (10%)	$400,000
Subtotal Building and Site	$565,000
Architecture / Engineering (8%)	$337,000
Legal Fees	$10,000
Furnishings, Furniture and Equipment	$550,090
Testing	$15,000
Total	$5,808,804
Total Square Feet (1)	40,000
Cost per Square Foot	$145.22

Source: Grunau Associates
1.) Actual building space constructed in 2001.

Table 13
Library Facility Needs Assessment
Proportionate Share of Library Facility Costs Attributable to Future Development

Allocation of Facility Costs	
Total Facility Space of New Library (S.F.)	40,000
Less: Facility Space Needed to Serve 2000 Population (S.F.)	27,732
Additional Facility Space Needed to Serve Future Growth: 2020 (S.F.)	12,268
Estimated Cost Per Square Foot	$145.22
Growth Share of Total Cost [(1)]	$1,781,537
Total Municipal Area Population Growth, 2000-2020	11,506
Cost per Capita	$154.84

Since the need for library space is directly and primarily related to increases in the resident population of the City, the library impact fee should only be imposed on residential development. Commercial and industrial development may have an impact on library usage, however this impact is likely to be insignificant. In order to determine the recommended library impact fee per residential dwelling unit, the per capita cost of new library facilities to serve future development was converted to a cost per dwelling unit, as shown in Table 14.

It is recommended that the City of Franklin impose a library impact fee in the amount of $465 per single family residence to pay for the cost of library facilities attributable to the need to serve anticipated future residential development.

CAPITAL FACILITIES PLAN

The new library facility currently under construction is expected to be adequate to serve the City through 2020. Therefore, no additional library facilities are recommended at this time. However, the City should continue to monitor trends in library usage, as changes in population growth rates, technology, and facilities provided by other municipalities could impact the use of the Franklin Public Library.

Table 14
Library Facility Needs Assessment
Recommended Schedule of Library Facility Impact Fees

Type of Residential Dwelling Unit	Fee / Unit
Single-Family or Two-Family Dwelling Unit [1]	$465
Multi-Family Dwelling Unit [2]	$310

1.) Assumes 3 persons per household, average.
2.) Assumes 2 persons per household, average.

CHAPTER FIVE:
PARK AND RECREATION NEEDS ASSESSMENT

INTRODUCTION

The City of Franklin maintains a system of public parks to provide for the outdoor recreation needs of its residents. An extensive system of County parks, nature areas and elementary school playgrounds within City limits are also available to City residents. Prior to the early 1990's, it was the policy of Milwaukee County to purchase, develop and maintain community parks throughout Milwaukee County, so the City of Franklin did not own any large community-wide parks. However, when Milwaukee County began to reduce its funding for the purchase and development of new community parks, the City of Franklin began planning for the provision of community parks with local funding. The 1992 Comprehensive Master Plan recommended that the City purchase land for several parks to provide for future recreational needs, and that impact fees be imposed to defray the share of costs related to the need to serve future development. In 1995, the City imposed an impact fee for park and recreation facilities.

In 2000, a draft Comprehensive Outdoor Recreation Plan (CORP) was completed for the City by Meehan and Associates, Inc. The CORP is pending adoption by the Common Council as of the date of this impact fee report. The plan contained an inventory of all public park and recreation facilities in the City, including facilities owned by Milwaukee County and the school districts serving the City of Franklin. It evaluated the adequacy of the existing park system to serve the forecast 2020 population of the City and recommended a capital improvement program to purchase and develop new facilities that will be needed in the future. That plan was reviewed in the conduct of this impact fee study and served as a source of data for the following analyses.

INVENTORY OF EXISTING FACILITIES

The first step in determining the need for an impact fee is developing an inventory of existing facilities. An assessment must then be made as to the adequacy of the existing facilities to serve the existing population, relative to a defined service level standard. This report uses service level standards established in the Comprehensive Outdoor Recreation Plan, which were generally based on standards published by the National Recreation and Park Association (NRPA) in "Recreation, Park and Open Space Standards and Guidelines", 1983, and "Park, Recreation, Open Space and Greenway Guidelines", 1995. The NRPA publications set forth guidelines in the form of minimum acres of community level recreation land, neighborhood level recreation land, and mini recreation areas that should be provided per 1,000 urban residents. The City of Franklin is served by regional and special use parks as well, however, the NRPA does not have published standards for the recommended minimum provision of regional and special use parks. The definition of each type of park is as follows.

Community Level Public Outdoor Recreation Land—Community level public outdoor recreation land is an outdoor recreation site serving several neighborhoods. Community level parks may contain active recreational facilities including, but not limited to, baseball, softball, tennis, basketball, playground, playfield, picnicking, swimming, trails, shelter houses, toilets, natural areas, bandstands, and winter sports facilities. These parks typically serve the area within a 2-mile radius and contain from twenty-five (25) to ninety-nine (99) acres. Community level

recreation land may be provided at park sites, or may be associated with junior high or high school facilities.

Neighborhood Level Public Outdoor Recreation Land—Neighborhood level public outdoor recreation land is an outdoor recreation site serving a single neighborhood, or the area within one-half to one mile of the recreation site. Neighborhood recreation areas typically provide more active recreation facilities and less open space and natural resource oriented areas than community level outdoor recreation sites. Typical facilities may include, but are not limited to, baseball, softball, tennis, basketball, playground, playfield, picnicking, ice skating area, recreational trails, walkways, benches, and playlots for young children. Neighborhood level recreation areas may be provided in park sites or associated with elementary schools, and are usually from five (5) to twenty-five (25) acres in area.

Mini Level Public Outdoor Recreation Land—Mini park public outdoor recreation lands—playlots or totlots—are small playground areas typically found in high density urban areas. They are typically less than five (5) acres in size and serve a radius of 1/8 mile.

Specialized Recreation Areas—Specialized recreation areas, as defined in the Comprehensive Outdoor Recreation Plan for the City of Franklin, are areas with limited recreational value that have a limited potential user base, or are currently undeveloped for recreational purposes. Such areas include conservancy areas, floodplains, woodlands, historic sites, and wetlands.

An assessment of the adequacy of park and recreation facilities to serve a geographic area should take into account all public park and recreation facilities available to residents. This includes parks owned by other governmental entities such as the State, County and local school districts. Although the City is not responsible for such facilities and cannot impose impact fees for the cost of such facilities, county parks and school playgrounds provide recreational opportunities that supplement the City's park system. Therefore, all parks within the City were considered in the assessment of the existing system of public park and recreational facilities to serve the 2000 resident population of the City.

Table 15 contains an inventory of all existing public outdoor park and recreation land within the planning area, and indicates the total area of each park, the type of park, and the entity that owns the park. As shown in Table 15, there are approximately 3,716 total acres of park and recreation lands within the City of Franklin, including Milwaukee County parks and school recreation facilities. Park and recreation facilities are comprised of 3,001 acres of regional recreation land, 441 acres of community level recreation land, 82 acres of neighborhood recreation land, 27 acres of mini level recreation land, and 165 acres of specialized recreation land.

Many of the aforementioned park and recreation sites provide facilities for active recreational pursuits; however some are undeveloped or simply provide passive natural areas. Table 16 contains an inventory of the recreational facilities provided at each of the community, neighborhood, mini, and special use parks in Franklin. As shown in the table, all of the community level parks and school sites have active recreational facilities, with the exception of Franklin Park and Grobschmidt Park. Likewise, most of the neighborhood level parks and school sites have active recreational facilities, except for the Pleasant View Neighborhood Park and the Jack E. Workman Neighborhood Park. These sites have been reserved for park sites, but

Table 15
Park and Recreation Facilities Needs Assessment
Inventory of Existing Park and Recreation Sites

Site Name	Land Area (acres)	Type of Park	Ownership
Root River Parkway (incl. Anderson Lake)	2111.0	Regional	Milwaukee County
Whitnall Park	388.0	Regional	Milwaukee County
Oakwood Park and Golf Course	278.3	Regional	Milwaukee County
Milwaukee County Sports Complex	132.0	Regional	Milwaukee County
Crystal Ridge	92.0	Regional	Milwaukee County
Subtotal Regional Parks	3001.3		
Franklin Park	164.6	Community	Milwaukee County
Grobschmidt Park	143.0	Community	Milwaukee County
Froemming Park	16.3	Community	Milwaukee County
Franklin High School	76.9	Community	Franklin Public School District
Forest Park Middle School Education Center	40.0	Community	Franklin Public School District
Lion's Legend Park	38.0	Community	City of Franklin
Subtotal Community Parks	440.8		
St. Martins (Robinwood) Neighborhood Park	19.2	Neighborhood	Milwaukee County
Southwood Glen Neighborhood Park (County Park Site #59)	8.9	Neighborhood	Milwaukee County
Pleasant View Elementary School	15.0	Neighborhood	Franklin Public School District
Ben Franklin Elementary School	12.3	Neighborhood	Franklin Public School District
Country Dale Elementary School	9.3	Neighborhood	Franklin Public School District
Southwood Glen Elementary School	8.9	Neighborhood	Franklin Public School District
Robinwood Elementary School	8.6	Neighborhood	Franklin Public School District
Quarry View Park	6.5	Neighborhood	Payne & Dolan
Pleasant View Neighborhood Park	15.0	Neighborhood	City of Franklin
Jack E. Workman Neighborhood Park	12.5	Neighborhood	City of Franklin
Subtotal Neighborhood Parks	82.1		
County Park Site #64	5.5	Mini-Park	Milwaukee County
Ollie Pederson Field	9.4	Mini-Park	City of Franklin
Cascade Creek Park	9.0	Mini-Park	City of Franklin
Friendship Park	1.6	Mini-Park	City of Franklin
Glenn Meadows Park	1.0	Mini-Park	City of Franklin
Subtotal Mini Parks	26.5		
Rainbow Airport Park	56.0	Special Use	Milwaukee County
Franklin Little League Complex	25.7	Special Use	Milwaukee County
Franklin Woods Nature Center	40.0	Special Use	City of Franklin
Meadowlands Park	15.0	Special Use	City of Franklin
Ernie Lake Park	14.0	Special Use	City of Franklin
Mission Hills Neighborhood Wetlands	14.0	Special Use	City of Franklin
Market Square	0.5	Special Use	City of Franklin
Subtotal Special Use Parks	165.2		
Total Park and Recreation Land within the City of Franklin	3,715.9		

Source: "Comprehensive Outdoor Recreation Plan: 2020", City of Franklin, Milwaukee County, Wisconsin, Meehan & Company, Inc., February 2002.

Table 16
Park and Recreation Facilities Needs Assessment
Inventory of Community, Neighborhood and Mini Parks and Existing Park Facilities

Park	Baseball / Softball Field	Basketball Courts	Bicycle Racks	Concession Stand	Indoor Gymnasium	Passive Nature Areas	Picnic Area	Playfield	Playground/Totlot	Restrooms	Lodge/Pavilion/Shelter	Softball Field	Soccer Fields	Tennis Court	Track	Trails	Volleyball Court	Offstreet Parking
Community Parks																		
Franklin Park						X												
Grobschmidt Park						X										X		
Froemming Park	X		X			X	X		X	X	X	X		X		X	X	X
Franklin High School	X		X	X	X	X		X				X	X		X			X
Forest Park Middle School Edu. Center	X	X	X		X			X					X					X
Lion's Legend Park			X	X		X	X		X	X	X	X		X		X	X	X
Special Use Community Parks																		
Rainbow Airport Park																		
Franklin Woods Nature Center						X					X					X		X
Franklin Little League Complex	X			X				X										X
Neighborhood Parks																		
St. Martin's Neighborhood Park	X	X				X	X		X	X	X	X					X	
County Site #59	X						X	X	X			X					X	X
Pleasant View Elementary School		X	X		X			X	X				X		X			X
Ben Franklin Elementary School		X	X		X	X		X	X									X
Country Dale Elementary School	X	X	X		X				X			X	X					X
Southwood Glen Elementary Park		X	X		X	X	X	X	X									X
Robinwood Elementary School					X	X	X	X	X									X
Quarry View Park	X						X	X	X			X						X
Pleasant View Neighborhood Park						X												X
Jack E Workman Neighborhood Park						X												
Mini Parks																		
County Park Site #64						X		X								X		
Ollie Pederson Field	X			X														X
Cascade Creek Park								X										
Friendship Park	X	X						X	X			X						
Glenn Meadows Park		X						X	X									
Other Special Use Parks																		
Meadowlands Park						X										X		
Ernie Lake Park (unofficial name)						X												
Mission Hills Neighborhood Wetlands						X												
Market Square											X							
Total																		

Source: "Comprehensive Outdoor Recreation Plan: 2020", City of Franklin, Milwaukee County, Wisconsin, Meehan & Company, Inc., February 2002.

have not yet been developed. The Cascade Creek Park is the only mini park without active recreational facilities. The special use parks, however, are primarily undeveloped or developed as passive natural areas. The Franklin Woods Nature Center has an open-air pavilion, off-street parking and trails, and the Franklin Little League Complex has baseball diamonds and a concession stand. No other special use parks have been developed for active recreational uses.

The aforementioned service level standards published by the NRPA establish guidelines for the minimum amount of community level, neighborhood level, and mini level park and recreation land that should be provided per 1,000 residents. The minimum standards for each type of land are as shown in Table 17. The NRPA offers guidelines for the amount of community level recreation land provided at park sites and additional guidelines for the amount provided at middle school and high school sites. The amount of community level recreation land offered at park sites includes community-level special use parks. Similarly, separate guidelines are offered for the amount of neighborhood level recreation land provided at park sites and the amount provided at elementary school sites.

For purposes of assessing the adequacy of the existing park and recreation facilities to serve the existing City of Franklin population, only the amount of land provided in community, neighborhood and mini level park sites was considered. Although school playgrounds and facilities provide recreational opportunities for City residents, these types of facilities are provided by the school districts and are not included in the NRPA standards for community and neighborhood level recreation lands in park sites. Therefore, they were not considered in the analysis of existing deficiencies in the City park and recreation facilities. The existing park and recreation sites considered available to meet the needs of the existing population included only those parks that are currently developed for active recreational use or, if intended for passive recreational use, provide off-street parking and trails for access to the park's natural areas.

Table 18 lists the parks that were considered available to meet the service level standards published by the NRPA and those used in the development of the City of Franklin CORP. Excluding undeveloped parks and school sites, and including developed community level special parks, the City of Franklin has approximately 120.0 acres of existing developed community level parks. Similarly, excluding undeveloped parks and school sites, the City is served by approximately 34.6 acres of neighborhood parks and 17.5 acres of mini parks.

As previously described, the Comprehensive Outdoor Recreation Plan used the standards published by the NRPA in the development of the recommended park and recreation facilities improvement plan. However, the NRPA standards are intended as guidelines for the minimum amount of recreational land to be provided, and should not be applied to every community without careful consideration of the specific characteristics and demand for recreational opportunities of the community concerned. Two factors of particular importance related to the provision of park and recreation facilities in the City of Franklin guided the recommendations for park and recreation improvements presented in the CORP. First, it is the stated objective of the City of Franklin Comprehensive Master Plan that each neighborhood delineated in the plan have its own neighborhood park and/or school, wherever possible. Second, in many cases, the amount of remaining land available in contiguous sites in certain neighborhoods is not sufficient for the development of a park large enough to be considered a neighborhood park. For these and other reasons explained in greater detail in the CORP, the recommended system of park and

Table 17
Park and Recreation Facilities Needs Assessment
National Recreation and Park Association Public Outdoor Recreation Facilities Minimum Standards

Facility Category	Minimum Development Standard (Gross Acres / 1000 Residents)
Regional & Multi-Community	No Standard
Community (in park sites)	2.2
Community (in middle school or high school sites)	0.9
Neighborhood (in park sites)	1.7
Neighborhood (in elementary school sites)	1.6
Mini Parks (in park sites)	1.0

Source: "Comprehensive Outdoor Recreation Plan: 2020", City of Franklin, Milwaukee County, Wisconsin, Meehan & Company, Inc., February 2002.

Table 18
Park and Recreation Facilities Needs Assessment
Inventory of Existing Developed Park and Recreation Facilities in Park Sites

Park Name	Ownership	2000 Total Acreage
Community Parks (Including Special Parks)		
Froemming Park	Milwaukee County	16.3
Lion's Legend Park	City of Franklin	38.0
Franklin Woods Nature Center	City of Franklin	40.0
Franklin Little League Complex	City of Franklin	25.7
Total Acreage		120.0
Neighborhood Parks (in Park Sites)		
St. Martins Neighborhood Park	Milwaukee County	19.2
County Site #59	Milwaukee County	8.9
Quarry View Park	City of Franklin	6.5
Total Acreage		34.6
Mini Parks (in Park Sites)		
County Park Site #64	Milwaukee County	5.5
Ollie Pederson Field	City of Franklin	9.4
Friendship Park	City of Franklin	1.6
Glenn Meadows Park	City of Franklin	1.0
Total Acreage		17.5

Source: "Comprehensive Outdoor Recreation Plan: 2020", City of Franklin, Milwaukee County, Wisconsin, Meehan & Company, Inc., February 2002.

recreational facilities needed to serve the City through the year 2020 is not intended to provide exactly the amount of land recommended by the NRPA standards. Therefore, in order to assess the adequacy of the existing park system to serve the existing population, it was necessary to first compute the design service level standards that will be provided by the planned system of park and recreation facilities.

The computation of the design service level standards is shown in Tables 19 and 20. Table 19 shows the existing acres of developed community, neighborhood and mini parks, and the planned future additions to the City park system. Approximately 36.5 acres will be added by developing existing, undeveloped, parks. Another 101.8 acres will be added through the acquisition and development of new park sites. In total, the planned park system will provide approximately 126.3 acres of community level parks, 133.6 acres of neighborhood parks, and 50.5 acres of mini parks. As shown in Table 20, these quantities amount to 3.1 acres of community park per 1,000 residents, 3.3 acres of neighborhood park per 1,000 residents, and 1.2 acre of mini park per 1,000 residents.

These design standards were then applied to the 2000 population of the City to determine the adequacy of the existing park system relative to the planned service level standard. As depicted in Table 21, the City would need to provide 90.8 acres of community level parks, 96.1 acres of neighborhood parks, and 36.3 acres of mini parks to offer the same service level to existing residents. According to these standards, there is a current excess of 29.2 acres of community level recreation land, a deficiency of 61.5 acres in the amount of neighborhood level recreation land, and a deficiency of 18.8 acres in the amount of mini level recreation land.

The Comprehensive Outdoor Recreation Plan also documented the need for additional public indoor recreation facilities to serve the City of Franklin. Although the City is served by certain indoor recreational facilities available at school buildings, there is currently no City of Franklin public Community Center. Based on typical planning guidelines, the CORP recommended the construction of one community center facility to serve the City through the year 2020, to include space for kitchen and concessions, public gatherings and presentations, community meeting rooms, gymnasiums and exercise rooms, restrooms and showers, and arts and crafts areas. Based on the anticipated 2020 population, the design service level standard is approximately one community center per 50,000 residents. Therefore the City has an existing deficiency of approximately one-half of one community center.

RECOMMENDED IMPROVEMENTS

The Comprehensive Outdoor Recreation Plan recommended a program of acquisitions and improvements to the recreation lands owned by the City of Franklin in order to provide adequate recreation opportunities to current and future residents. The recommended improvements include improvements to upgrade existing facilities or improve accessibility; improvements to expand the capacity for recreational activities at existing developed parks; development of undeveloped park sites already owned by the City; the acquisition and development of new park sites; and the acquisition of land and construction of a community center to provided indoor recreation opportunities.

Table 19
Park and Recreation Facilities Needs Assessment
Summary of Existing and Planned Park and Recreation Facilities

Park Type	Existing Developed Park Sites (Acres)	Existing Undeveloped Parks to be Developed (Acres)	Recommended Park Site Acquisitions (Acres)	Total Recommended 2020 Park Sites (Acres)
Community (including Special Parks)	120.0	0.0	6.3	126.2
Neighborhood (in Park Sites) [1]	34.6	27.5	71.5	133.6
Mini-Park (in Park Sites) [2]	17.5	9.0	24.0	50.5
Total	172.0	36.5	101.8	310.3

1) Includes development of Pleasant View and Jack E. Workman Neighborhood Parks.
2) Includes development of Cascade Creek Park.

Table 20
Park and Recreation Facilities Needs Assessment
Design Service Level Standards: 2020

Park Type	Recommended 2020 Acres [1]	Design Standard (Acres per 1,000 Residents) [2]	NRPA Standard (Acres per 1,000 Residents) [3]
Community (including Special Parks)	126.2	3.1	2.2
Neighborhood (in Park Sites)	133.6	3.3	1.7
Mini-Park (in Park Sites)	50.5	1.2	1.0
Total	310.3	7.6	4.9

1.) Recommended 2020 acreage needed is based on existing developed active park and recreation facilities, plus additional facilities recommended in the Comprehensive Outdoor Recreation Plan.
2.) Service level provided by the recommended acres, assuming a 2020 population of 41,000.
3.) Guidelines for minimum park acres per thousand residents published by the National Recreation and Park Association.

Table 21
Park and Recreation Facilities Needs Assessment
Analysis of Existing Park and Recreation Facilities Deficiencies

Park Type	2000 Existing Developed Park Sites (Acres) [1]	2000 Needed Park Sites (Acres) [2]	2000 Excess/(Deficiency)
Community (including Special Parks)	120.0	90.8	29.2
Neighborhood (in Park Sites)	34.6	96.1	(61.5)
Mini-Park (in Park Sites)	17.5	36.3	(18.8)
Total	172.0	223.2	(51.2)

1.) Existing developed active park and recreation facilities, from Table 18.
2.) Based on design standard from Table 20, applied to the 2000 Franklin population.

Table 22 shows the planned improvements and the associated cost estimates for park sites currently owned by the City, and includes improvements to both developed and undeveloped parks. To briefly summarize the recommendations, the plan shows expanded capacity at the Lion's Legend community park; development of the undeveloped Pleasant View and Jack E. Workman neighborhood parks; landscaping of all four of the City's mini parks and the addition of parking and ice-skating areas at the Cascade Creek mini park; the addition of park benches, trails and signage at several of the special use parks; and the addition of an enclosed pavilion with restrooms at the Franklin Woods Nature Center. The total estimated cost of all improvements to existing park sites, including legal, engineering and design costs, is $3,603,850.

Table 23 shows the planned acquisitions of additional park sites, and the associated estimated costs. The plan recommended the acquisition of a 6.3 acre site for the construction of a community center. As depicted in the table, the plan further recommended that the City acquire 71.5 acres of neighborhood park land in four sites, 24.0 acres of mini park land in eight sites, and 45.3 acres of special use parks in three sites. The recommended site for the Pleasant View Special Park is already owned by the City of Franklin, so there would be no cost to acquire it, but the site is not currently designated as a park site. The total estimated cost for land acquisitions is $523,181.

The recommended improvements and the associated estimated costs to develop these sites as parks are shown in Table 24. The total development cost of the proposed community center is $7,588,548, representing the largest share of the costs. The plan recommends the same improvements for each of the eight mini parks, at an estimated cost of $206,140 per park. The total cost to develop eight mini parks would be approximately $1,649,120. The total cost for all of the recommended improvements to future park site acquisitions is estimated at $13,684,143.

The total estimated cost of all recommended land acquisitions and planned improvements is $17,811,174.

ALLOCATION OF COSTS

The planned improvements to the system of park and recreation facilities offered by the City of Franklin will serve the recreational needs of both current and future residents through 2020. A portion of the improvements will be needed to provide additional parks and expanded recreational facilities to serve increases in demand that will be created by future residential development and population increases. It would therefore be appropriate to recover a portion of the costs of such facilities by imposing an impact fee on the new development creating the need for the facilities. Before a fee may be imposed, it is necessary to determine the proportionate share of the costs attributable to future development, and the share of cost for improvements needed to remedy existing deficiencies.

The comparison of the existing facilities to the amount of facilities that would be needed to provide the planned design service level revealed that the City has existing deficiencies in the amounts of neighborhood level and mini level recreation land in developed park sites. Therefore, a portion of the cost of acquisition and development of new neighborhood and mini parks must be attributed to current residents, and only a portion can be attributed to future development. Table 25 shows the computation of the percentage of costs attributable to

Table 22
Park and Recreation Facilities Needs Assessment
Recommended Improvements and Cost Summary: Existing City-Owned Parklands

Parkland and Facility Needs	Park Type	Total Acreage	Development Cost
Lion's Legend Park	Community	38.0	
* Detailed landscape plan			$3,700
* Asphalt paved off-street parking lot			$234,000
* 2nd One-story pavilion with restrooms & Concessions. (4,700 SF)			$455,900
* 20 ft. bandstand with adjoining audience area			$37,900
* New unlighted tennis court, and expand the three existing three tennis courts.			$36,500
* New softball diamond with backstop and bleachers			$46,000
* One unlighted soccer field with goals			$30,000
* Two (2) bicycle racks			$2,000
* Install additional park signage			$25,000
* Develop totlot			$41,500
* Install park benches, picnic tables, grills			$25,000
* Install additional landscape plant materials			$25,000
* Sanitary sewer extension (500 linear feet)			$21,000
* Public water extension (500 linear feet)			$22,000
* Electric extension (500 linear feet)			$2,100
Subtotal Costs			$1,007,600
Legal, Engineering and Design (10%)			$100,760
Total Development Costs			$1,108,360
Pleasant View Neighborhood Park	Neighborhood	15.0	
* Detailed landscape plan			$3,700
* Four (4) basketball goals			$23,000
* Baseball diamond with backstop and lighting			$51,500
* Playfield			$59,700
* Playground/Totlot			$41,500
* Three (3) tennis courts			$109,500
* One sand volleyball court			$5,000
* Ice-skating area			$0
* One-story 2,400 SF enclosed pavilion with restroom facilities			$232,800
* Picnic / passive recreation area			$24,000
* Install additional landscape plant materials			$30,000
* Install park benches, picnic tables, grills			$20,000
* Asphalt paved off-street parking lot			$181,700
* Installation of all park signage			$25,000
* Walking / education trail (4,535 feet)			$102,265
* Outdoor fitness station			$5,000
* Installation of 950 lineal feet of collector street			$143,935
* Sanity sewer extension (230 linear feet)			$9,700
* Public water extension (230 linear feet)			$10,100
* Electric extension (230 linear feet)			$1,000
Subtotal Costs			$1,079,400
Legal, Engineering and Design (10%)			$107,940
Total Development Costs			$1,187,340

Table 22 (cont.)
Park and Recreation Facilities Needs Assessment
Recommended Improvements and Cost Summary: Existing City-Owned Parklands

Parkland and Facility Needs	Park Type	Total Acreage	Development Cost
Jack E. Workman Neighborhood Park	Neighborhood	12.5	
* Detailed landscape plan			$3,700
* Two (2) basketball goals			$11,500
* One (1) unlighted tennis court			$36,500
* One (1) sand volleyball court			$5,000
* One (1) softball diamond with backstop and bleachers			$46,000
* Playfield			$59,700
* Playground/Totlot			$41,500
* Ice-skating area			$0
* Passive / picnic area			$24,000
* Install additional landscape plant materials			$20,000
* Install park benches, picnic tables, grills			$20,000
* Install additional park signage			$25,000
* Provide walking / education trail			$30,500
* Provide outdoor fitness stations			$4,000
Total Development Costs			$327,400
Ollie Pederson Field (Youth League Ball Diamond)	Mini-Park	9.4	
* Detailed Landscape Plan			$3,700
* Install additional landscape plant materials			$15,000
* Provided paved off-street parking lot			$308,000
Total Development Costs			$326,700
Cascade Creek Park	Mini-Park	9.0	
* Ice-skating area without fencing			$0
* Provide paved, 8-space off-street parking			$18,000
* Install all park signage			$2,500
* Provide walking / education trail			$32,700
Total Development Costs			$53,200
Friendship Park	Mini-Park	1.6	
* Detailed landscape plan			$3,700
* Install landscape and plant materials adjacent to abutting residential properties			$7,000
Total Development Costs			$10,700
Glenn Meadows Park	Mini-Park	1.0	
* Detailed landscape plan			$3,700
* Install landscape and plant materials adjacent to abutting residential properties			$7,000
Total Development Costs			$10,700

Table 22 (cont.)
Park and Recreation Facilities Needs Assessment
Recommended Improvements and Cost Summary: Existing City-Owned Parklands

Parkland and Facility Needs	Park Type	Total Acreage	Development Cost
Franklin Woods Nature Center	Special	40.0	
* One-story, 4,000 SF enclosed park pavilion with restroom facilities			$388,000
* Provided additional park benches			$10,000
* Provide lighting for the off-street parking			$25,000
* Install all park signage			$2,000
* Sanitary sewer extension (370 linear feet)			$15,600
* Public water extension (370 linear feet)			$16,300
* Electric line extension (370 linear feet)			$1,600
Subtotal Costs			$458,500
Legal, Engineering and Design (10%)			$45,850
Total Development Costs			$504,350
Meadowlands Park	Special	15.0	
* Provide permanently anchored park benches			$5,000
* Install all park signage			$2,000
* Expand internal walkway / education trail			$18,000
Total Development Costs			$25,000
Ernie Lake Park	Special	14.0	
* Provide permanently anchored park benches			$3,000
* Install all park signage			$2,500
* Provide outdoor fitness stations			$13,550
* Provide walking / education trail			$3,000
Total Development Costs			$22,050
Mission Hills Neighborhood Wetlands	Special	14.0	
* Provide permanently anchored park benches			$3,000
* Install all park signage			$2,500
* Potentially provide a walkway education trail			$22,550
Total Development Costs			$28,050
Market Square	Special	0.5	
* Linkage of the park to the Milw. Co. recreation corridor and trail			$0
Total Development Costs			$0
Total - All Improvements to Existing City Parks			$3,603,850

Source: "Comprehensive Outdoor Recreation Plan: 2020", City of Franklin, Milwaukee County, Wisconsin, Meehan & Company, Inc., February 2002.

Table 23
Park and Recreation Facilities Needs Assessment
Recommended Land Acquisitions and Cost Summary: Planned City Parks

Planned Land Acquisition	Total Parksite Acreage	Acquisition Cost
Community Recreation Center Park	6.3	$52,875
Neighborhood Parks		
Forest Hills Neighborhood Park	12.0	$152,052
Hillcrest Neighborhood Park	19.8	$53,012
St. Martins Neighborhood Park	19.8	$12,281
Woodview Neighborhood Park	19.8	$10,714
Subtotal Neighborhood Parks	71.5	$228,059
Mini Parks		
Mini-Park #1	3.0	$48,189
Mini-Park #2	3.0	$1,224
Mini-Park #3	3.0	$19,203
Mini-Park #4	3.0	$27,618
Mini-Park #5	3.0	$20,517
Mini-Park #6	3.0	$8,214
Mini-Park #7	3.0	$103,272
Mini-Park #8	3.0	$942
Subtotal Mini Parks	24.0	$229,179
Special Parks		
Pleasant View Special Park [1]	5.7	$0
Fitzsimmons Road Woods Special Park	21.0	$8,568
Hunting Park Special Park	18.6	$4,500
Subtotal Special Use Parks	45.3	$13,068
Total	140.8	$523,181

1.) Site is owned by the City of Franklin, although not currently used as a park.
Source: "Comprehensive Outdoor Recreation Plan: 2020", City of Franklin, Milwaukee County, Wisconsin, Meehan & Company, Inc., February 2002.

Table 24
Park and Recreation Facilities Needs Assessment
Planned Facilities and Facility Development Cost Summary: Planned City Parks

Parkland and Facility Needs	Park Type	Total Acreage	Development Cost
Community Recreation Center	Community	6.3	
* Construction of Recreation Center Building			$6,983,300
* Boundary survey			$3,000
* Detailed site development plan			$5,000
* Off-street parking			$369,600
* Open space and picnic area			$48,000
* Landscaping			$40,000
* Park benches			$10,000
* Park signage			$25,000
* Internal walkway/trail system			$22,550
* Sanitary sewer lateral extension			$12,600
* Water supply extension			$13,200
* Electric line extension			$1,275
Subtotal Costs			$7,533,525
Legal, Engineering and Design (10% of site development)			$55,023
Total Development Costs			$7,588,548
Forest Hills Neighborhood Park	Neighborhood	12.0	
* Boundary Survey			$3,000
* Detailed landscape plan			$3,700
* Softball diamond			$46,000
* Playground/Totlot			$41,500
* Three (3) Tennis courts			$109,500
* Ice Skating Area			$0
* 2,400 sq. ft. Pavilion			$232,800
* Passive area with picnic tables			$24,000
* Provide lighted off-street parking			$181,700
* Walkway/trail system			$33,825
* Install additional park signage			$25,000
* Install park benches, picnic tables, grills			$26,000
* Install additional landscape plant materials			$30,000
* Sanitary sewer extension (500 linear feet)			$21,000
* Public water extension (500 linear feet)			$22,000
* Electric extension (500 linear feet)			$2,125
Subtotal Costs			$802,150
Legal, Engineering and Design (10%)			$80,215
Total Development Costs			$882,365

Table 24 (cont.)
Park and Recreation Facilities Needs Assessment
Planned Facilities and Facility Development Cost Summary: Planned City Parks

Parkland and Facility Needs	Park Type	Total Acreage	Development Cost
Hillcrest Neighborhood Park	Neighborhood	19.8	
* Boundary Survey			$3,000
* Detailed landscape plan			$3,700
* Asphalt paved off-street parking lot			$181,700
* One-story pavilion with restrooms			$232,800
* Basketball goals (6)			$34,500
* Baseball diamond			$51,500
* Softball diamond (2)			$92,000
* Playfield with grading and landscaping			$59,700
* Develop playground/totlot			$41,500
* Tennis courts (3)			$109,500
* Ice-skating area			$0
* Walking/education trail			$38,350
* Outdoor fitness stations			$5,000
* Install additional park signage			$25,000
* Install park benches, picnic tables, grills			$26,000
* Install additional landscape plant materials			$30,000
* Passive area			$24,000
* Sanitary sewer extension (600 linear feet)			$25,200
* Public water extension (600 linear feet)			$26,400
* Electric extension (600 linear feet)			$2,550
Subtotal Costs			$1,012,400
Legal, Engineering and Design (10%)			$101,240
Total Development Costs			$1,113,640
St. Martin's Neighborhood Park	Neighborhood	19.8	
* Boundary Survey			$3,000
* Detailed landscape plan			$3,700
* Six (6) basketball goals			$34,500
* Baseball diamond with backstop and lighting			$51,500
* Playfield			$59,700
* Playground/Totlot			$41,500
* Three (3) tennis courts			$109,500
* Two (2) softball diamonds			$92,000
* Ice-skating area			$0
* One-story 2,400 SF enclosed pavilion with restroom facilities.			$232,800
* Picnic / passive recreation area			$24,000
* Install additional landscape plant materials			$30,000
* Install park benches, picnic tables, grills			$26,000
* Asphalt paved off-street parking lot			$181,700
* Installation of all park signage			$25,000
* Walking / education trail (1,330 feet)			$29,300
* Outdoor fitness station			$5,000
* Sanity sewer extension (230 linear feet)			$29,400
* Public water extension (230 linear feet)			$30,800
* Electric extension (230 linear feet)			$3,000
Subtotal Costs			$1,012,400
Legal, Engineering and Design (10%)			$101,240
Total Development Costs			$1,113,640

Table 24 (cont.)
Park and Recreation Facilities Needs Assessment
Planned Facilities and Facility Development Cost Summary: Planned City Parks

Parkland and Facility Needs	Park Type	Total Acreage	Development Cost
Woodview Neighborhood Park	Neighborhood	19.8	
* Boundary survey			$3,000
* Detailed site plan			$3,700
* Six (6) basketball goals			$34,500
* Baseball diamond with no lighting			$51,500
* Two (2) softball diamonds			$92,000
* Playfield			$59,700
* Playground/totlot			$41,500
* Three (3) Tennis courts			$109,500
* ice-skating area			$0
* One-story 2,400 story pavilion with restroom			$232,800
* Passive picnic area			$24,000
* Install all landscape plant materials			$30,000
* Install park benches, picnic tables, grills			$26,000
* Off-street paved parking			$181,700
* Install all park signage			$25,000
* Walking/education trail			$24,800
* Provide outdoor fitness stations			$5,000
* Sanitary sewer extension (500 linear feet)			$21,000
* Public water extension 500 linear feet)			$22,000
* Electric extension (500 linear feet)			$2,100
Subtotal Costs			$989,800
Legal, Engineering and Design (10%)			$98,980
Total Development Costs			$1,088,780
Mini-Park Sites [(1)]	Mini-Parks	24.0	
* Boundary survey			$3,000
* Detailed landscape plan			$3,700
* Playfield/ice-skating area			$59,700
* Playground/totlot			$41,500
* Open air pavilion/gazebo			$16,000
* Install landscape plant materials			$10,000
* Install park benches, picnic tables, grills			$5,500
* Provide lighted off-street parking			$28,000
* Install all park signage			$8,000
* Walking/education trails			$9,000
* Outdoor fitness stations			$3,000
Subtotal Costs			$187,400
Legal, Engineering and Design (10%)			$18,740
Total Development Costs per Park			$206,140
Total Development Costs for Eight (8) Mini-Parks			$1,649,120

1.) These facilities are to be added to all planned mini-park sites.

Table 24 (cont.)
Park and Recreation Facilities Needs Assessment
Planned Facilities and Facility Development Cost Summary: Planned City Parks

Parkland and Facility Needs	Park Type	Total Acreage	Development Cost
Fitzsimmons Road Woods Special Parks	Special	21.0	
* Boundary survey			$3,000
* Detailed landscape plan			$3,700
* Walking/education trail			$27,100
* Provide additional park benches			$5,000
* Provide lighted off-street parking			$28,000
* Install all park signage			$15,000
* Outdoor fitness stations			$3,000
Subtotal Costs			$84,800
Legal, Engineering and Design (10%)			$8,480
Total Development Costs			$93,280
Pleasant View Special Park	Special	5.7	
* Boundary survey			$3,000
* Detailed landscape plan			$3,700
* Provide lighted off-street parking			$28,000
* Install park benches, picnic tables, grills			$4,000
* Outdoor fitness stations			$2,000
* Install all park signage			$15,000
* Expand internal walkway / education trail			$15,800
Subtotal Costs			$71,500
Legal, Engineering and Design (10%)			$7,150
Total Development Costs			$78,650
Hunting Special Park	Special	18.6	
* Boundary survey			$3,000
* Detailed landscape plan			$3,700
* Install all park signage			$15,000
* Provide lighted off-street parking			$28,000
* Install park benches, picnic tables, grills			$4,000
* Provide outdoor fitness stations			$2,000
* Provide walking / education trail			$13,500
Subtotal Costs			$69,200
Legal, Engineering and Design (10%)			$6,920
Total Development Costs			$76,120
Total - All Improvements to Planned City Parks			$13,684,143

Source: "Comprehensive Outdoor Recreation Plan: 2020", City of Franklin, Milwaukee County, Wisconsin, Meehan & Company, Inc., February 2002.

remedying existing deficiencies and the percentage attributable to serving future development. The CORP recommended that the City develop an additional 99.0 acres of neighborhood parks, of which 61.5 acres, or 62 percent, is needed to remedy the existing deficiency, and 37.5 acres, or 38 percent, is needed to serve future development. Similarly, the plan recommended that the City develop an additional 33 acres of mini parks, of which 57 percent is needed to remedy the existing deficiency and 43 is needed to serve future development.

Table 26 shows a summary of the acquisition and development costs for all planned improvements, and the allocation of costs to the share needed to remedy existing deficiencies versus the share needed to provide expanded capacity to serve future development. Half of the cost of the Community Center was allocated to future development, as the City is currently deficient by one-half of a center under the design service level standards. The entire cost of the improvements to Lion's Legend Park and the Franklin Woods Nature Center were allocated to future development since there is currently an excess of community level recreation land. All of the costs for the acquisition and development of new neighborhood parks were allocated according to the percentage of neighborhood park acres needed to provide for existing deficiencies versus future growth needs. The improvements to Ollie Pederson Field, Friendship Park and Glenn Meadows Park consisted of landscaping costs. As these improvements will not expand the capacity of the City's mini parks to serve future development, these costs were allocated to existing deficiencies. The remainder of the improvements to mini parks was allocated according to the percentages determined in Table 25. The costs to acquire and improve other special use parks were allocated to existing deficiencies, as there is no service level standard that recommends or requires that the City develop additional special use parks as its population increases. In total, $8.5 million of the cost, or 48 percent, is attributable to park and recreation land and facilities needed to serve anticipated future residential development and the associated population in the City of Franklin.

RECOMMENDED IMPACT FEE SCHEDULE

As determined by the previous analyses, approximately $8,512,495 of the planned acquisitions of park and recreation land and improvements to existing and planned parks can be attributed to the need to serve future development. Therefore, this portion of the cost of such facilities may be charged to development through the imposition of park and recreation facilities impact fees under Wisconsin Statutes 66.0617. In order to determine the appropriate amount of the fee, this amount must be allocated to the anticipated future development in the City. Although other types of land uses may have an incidental impact on the need for park and recreation facilities, the primary users of such facilities will be the residents of the City of Franklin. It is therefore appropriate to allocate the future growth share of costs entirely to new residential development.

As shown in Table 27, the resident population of the City is anticipated to increase by 11,506 by 2020. Thus, the cost of providing additional park and recreation facilities to serve future growth is $740 per capita. Using typical occupancy factors, this cost per capital was converted into a cost per dwelling unit, as shown in Table 28. The recommended impact fee per single family residence for park and recreation facilities is $2,219.

Table 25
Park and Recreation Facilities Needs Assessment
Allocation of Additional Neighborhood and Mini Park Acreage to Existing Deficiencies and Future Development

	Neighborhood Parks		Mini Parks	
	Planned Acquisition / Development (Acres)	Percent of Total	Planned Acquisition / Development (Acres)	Percent of Total
Existing Deficiency	61.5	62	18.8	57
Area Needed for Future Development	37.5	38	14.2	43
Total Planned Acquisitions / Development	99.0	100	33.0	100

Table 26
Park and Recreation Facilities Needs Assessment
Acquisition and Development Cost Summary: Existing and Planned City Parks

	Acquisition Cost			Development Cost			Total Cost		
Park Site	Total Cost	Deficency Share	Growth Share	Total Cost	Deficency Share	Growth Share	Total Cost	Deficency Share	Growth Share
Community Parks									
Community Recreation Center	$52,875	$26,438	$26,438	$7,588,548	$3,794,274	$3,794,274	$7,641,423	$3,820,712	$3,820,712
Lion's Legend Park	$0	$0	$0	$1,108,360	$0	$1,108,360	$1,108,360	$0	$1,108,360
Neighborhood Parks									
Pleasant View Neighborhood Park	$0	$0	$0	$1,187,340	$737,701	$449,639	$1,187,340	$737,701	$449,639
Jack E. Workman Neighborhood Park	$0	$0	$0	$327,400	$203,415	$123,985	$327,400	$203,415	$123,985
Forest Hills Neighborhood Park	$152,052	$94,471	$57,581	$882,365	$548,218	$334,147	$1,034,417	$642,689	$391,728
Hillcrest Neighborhood Park	$53,012	$32,937	$20,075	$1,113,640	$691,911	$421,729	$1,166,652	$724,847	$441,805
St. Martin's Neighborhood Park	$12,281	$7,630	$4,651	$1,113,640	$691,911	$421,729	$1,125,921	$699,541	$426,380
Woodview Neighborhood Park	$10,714	$6,657	$4,057	$1,088,780	$676,465	$412,315	$1,099,494	$683,122	$416,372
Mini Parks									
Ollie Pederson Field	$0	$0	$0	$326,700	$326,700	$0	$326,700	$326,700	$0
Cascade Creek Park	$0	$0	$0	$53,200	$30,362	$22,838	$53,200	$30,362	$22,838
Friendship Park	$0	$0	$0	$10,700	$10,700	$0	$10,700	$10,700	$0
Glenn Meadows Park	$0	$0	$0	$10,700	$10,700	$0	$10,700	$10,700	$0
Mini-Park #1	$48,189	$27,502	$20,687	$206,140	$117,647	$88,493	$254,329	$145,149	$109,180
Mini-Park #2	$1,224	$699	$525	$206,140	$117,647	$88,493	$207,364	$118,346	$89,018
Mini-Park #3	$19,203	$10,959	$8,244	$206,140	$117,647	$88,493	$225,343	$128,607	$96,736
Mini-Park #4	$27,618	$15,762	$11,856	$206,140	$117,647	$88,493	$233,758	$133,409	$100,349
Mini-Park #5	$20,517	$11,709	$8,808	$206,140	$117,647	$88,493	$226,657	$129,357	$97,300
Mini-Park #6	$8,214	$4,688	$3,526	$206,140	$117,647	$88,493	$214,354	$122,335	$92,019
Mini-Park #7	$103,272	$58,939	$44,333	$206,140	$117,647	$88,493	$309,412	$176,586	$132,826
Mini-Park #8	$942	$538	$404	$206,140	$117,647	$88,493	$207,082	$118,185	$88,897
Special Parks									
Franklin Woods Nature Center	$0	$0	$0	$504,350	$0	$504,350	$504,350	$0	$504,350
Meadowlands Park	$0	$0	$0	$25,000	$25,000	$0	$25,000	$25,000	$0
Ernie Lake Park	$0	$0	$0	$22,050	$22,050	$0	$22,050	$22,050	$0
Mission Hills Neighborhood Wetlands	$0	$0	$0	$28,050	$28,050	$0	$28,050	$28,050	$0
Pleasant View Special Park	$0	$0	$0	$78,650	$78,650	$0	$78,650	$78,650	$0
Fitzsimmons Road Woods Special Park	$8,568	$8,568	$0	$93,280	$93,280	$0	$101,848	$101,848	$0
Hunting Park Special Park	$4,500	$4,500	$0	$76,120	$76,120	$0	$80,620	$80,620	$0
Total	$523,181	$311,996	$211,185	$17,287,993	$8,986,684	$8,301,309	$17,811,174	$9,298,679	$8,512,495

Table 27
Park and Recreation Facilities Needs Assessment
Capital Costs of Park and Recreation Facilities per Capita to Serve Future Residential Development: 2020

Allocation of Facility Costs	
Future Residential Development Share of Park Acquisition and Development Cost	$8,512,495
Projected Population Increase through 2020	11,506
Cost of Acquisition and Development of City-Owned Park Facilities per Capita	$740

Table 28
Park and Recreation Facilities Needs Assessment
Recommended Park and Recreation Facilities Impact Fee Schedule

Type of Residential Dwelling Unit	Fee / Unit
Single-Family or Two-Family Dwelling Unit (1)	$2,219
Multi-Family Dwelling Unit (2)	$1,480

1.) Assumes 3 persons per unit, average.
2.) Assumes 2 person per unit, average.

CAPITAL FACILITIES PLAN

The draft Comprehensive Outdoor Recreation Plan assigned a priority level, ranging from one to three, to each of the recommended land acquisitions or park and recreation facilities improvements. A priority level of one was assigned to projects that it was recommended the City accomplish within 1-2 years; a priority level of two was assigned to projects recommended for completion within 2-5 years; and a priority level of three was assigned to those projects that were recommended for completion after five years. The CORP has not been adopted by the City to date, and even after adoption the projects could be undertaken in a different order depending on circumstances such as the availability of land for purchase and the level of funding available each year. However, the priority levels assigned in the CORP were used to develop a preliminary capital facilities plan for park and recreation land acquisition and facilities development.

The proposed capital facilities plan and the amount eligible for payment from impact fees for each year are shown in Table 29. The projects were distributed so as to keep the amount of the cost per year as similar as possible from year to year. Projects with a priority level of one were assigned to 2003 and 2004. Projects with a priority level of two were assigned to 2005 through 2007, with the exception of the community recreation center, which was assigned to 2008 due to the substantial cost of this project. Projects with a priority level of three were assigned to the years 2009 through 2015. Projects needed to provide neighborhood or mini parks to neighborhoods that are partially developed were given higher priority than projects to serve primarily undeveloped neighborhoods, or projects to develop special use parks. All costs shown are expressed in terms of current dollars.

CONCLUSIONS AND RECOMMENDATIONS

The Draft Comprehensive Outdoor Recreation Plan of the City of Franklin recommends approximately $17.8 million of parkland acquisition and park and recreation facilities improvements to provide for the current and future recreation needs of the City through 2020. As determined by the previous analyses, approximately $8.5 million of the planned projects can be attributed to the need to serve future development. Therefore, this portion of the cost of such facilities may be charged to development through the imposition of park and recreation facilities impact fees under Wisconsin Statutes 66.0617. It is recommended that the City adopt a park and recreation facilities impact fee in the amount of $2,219 per single family residence.

Table 29
Park and Recreation Facilities Needs Assessment
Preliminary Capital Improvement Plan

Improvement / Land Acquisition	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Fitzsimmons Road Woods Special Park - Acquisition	$8,568												
Forest Hills Neighborhood Park - Acquisition	$152,052												
Hillcrest Neighborhood Park - Acquisition	$53,012												
Hunting Park Special Park - Acquisition	$4,500												
Mini-Park #1 - Acquisition	$48,189												
Mini-Park #2 - Acquisition	$1,224												
Mini-Park #3 - Acquisition	$19,203												
Mini-Park #4 - Acquisition	$27,618												
Mini-Park #5 - Acquisition	$20,517												
Mini-Park #6 - Acquisition	$8,214												
Mini-Park #7 - Acquisition	$103,272												
Mini-Park #8 - Acquisition	$942												
Woodview Neighborhood Park - Acquisition	$10,714												
Jack E. Workman Neighborhood Park - Development	$327,400												
Ernie Lake Park - Development	$22,050												
Pleasant View Neighborhood Park - Development		$1,187,340											
Lion's Legend Park - Development			$1,108,360										
Cascade Creek Park - Development			$53,200										
Friendship Park - Development			$10,700										
Glen Meadows Park - Development			$10,700										
Meadowlands Park - Development			$25,000										
Mission Hills Neighborhood Wetlands - Development			$28,050										
Community Recreation Center - Acquisition				$52,875									
Forest Hills Neighborhood Park - Development				$882,365									
Woodview Neighborhood Park - Development					$1,088,780								
Community Recreation Center - Development						$7,588,548							
Mini-Park #1 - Development							$206,140						
Mini-Park #6 - Development							$206,140						
Mini-Park #2 - Development								$206,140					
Mini-Park #5 - Development								$206,140					
Mini-Park #4 - Development									$206,140				
Mini-Park #8 - Development									$206,140				
Mini-Park #3 - Development										$206,140			
Mini-Park #7 - Development										$206,140			
Ollie Pederson Field - Development											$326,700		
St. Martin's Neighborhood Park - Acquisition											$12,281		
St. Martin's Neighborhood Park - Development												$1,113,640	
Fitzsimmons Road Woods Special Park - Development													$93,280
Franklin Woods Nature Center - Development													$504,350
Hillcrest Neighborhood Park - Development													$1,113,640
Hunting Park Special Park - Development													$76,120
Pleasant View Special Park - Development													$78,650
Total [1]	$807,475	$1,187,340	$1,236,010	$935,240	$1,088,780	$7,588,548	$412,280	$412,280	$412,280	$412,280	$338,981	$1,113,640	$1,866,040
Impact Fee Share of Costs	$304,082	$449,639	$1,131,198	$360,584	$412,315	$3,794,274	$176,986	$176,986	$176,986	$176,986	$4,651	$421,729	$926,079
Net to be Financed Other Sources	$503,393	$737,701	$104,812	$574,656	$676,465	$3,794,274	$235,294	$235,294	$235,294	$235,294	$334,330	$691,911	$939,961

Note:
1. All costs in terms of constant 2002 dollars.

CHAPTER SIX:
POLICE AND MUNICIPAL COURT FACILITIES NEEDS ASSESSMENT

INTRODUCTION

Police protection and law enforcement for the City of Franklin are provided by the Franklin Police Department and the City of Franklin Municipal Court. The Department provides twenty-four hour patrol throughout the City, emergency dispatch for police, fire and rescue services, investigative services, and booking and temporary holding of arrestees. The Municipal Court hears all cases related to violations of municipal ordinances and traffic regulations. The Police Department and Municipal Court occupied the facility located within the Franklin City Hall, at 9229 W. Loomis Road, from 1981 through December 2001. During the time period from 1981 through 1998, the staff of the Police Department and Municipal Court nearly doubled, from 34.5 in 1981 to 64.5 in 1998. During the same time period, the population of the City of Franklin increased from approximately 16,900 in 1980, to 29,500 in 2000, and the calls for service more than doubled, from approximately 29,400 in 1981 to 60,400 in 1998. As a result of these increasing activity levels, the previous facility became outdated and overcrowded to provide the desired level of police protection service for the City. In 1997 the City formed the Police Facility Needs Action Committee (PFNAC) to plan for new Police Department and Municipal Court facilities. The PFNAC met throughout 1998, 1999 and 2000 and hired Fischer-Fischer-Theis, Inc. and Phillips Swager Associates to prepare a Facility Needs Assessment report. This report was completed in September 1998, and recommended the construction of a 57,000 square foot facility on a new site. On the basis of the recommendations contained in the Needs Assessment, the City decided to proceed with the design and construction of a new Police Department and Municipal Court facility. Zimmerman Design Group was hired to design the new facility, which was substantially completed in December 2001.

INVENTORY OF EXISTING FACILITIES

Wisconsin Statutes 66.0617 requires that a public facilities needs assessment include an inventory of existing facilities, including an identification of any existing deficiencies in such facilities. As previously mentioned, the Police Department and Municipal Court, until December 2001, occupied a facility located at the Franklin City Hall. Since the purpose of this needs assessment is to determine the share of the cost of the new police station that may be recovered through impact fees, the existing deficiencies in facilities, which were remedied by the new building, will be determined by assessing the previous building. The previous police station facilities were the extent of police and municipal court facilities provided by the City of Franklin. The Police Department also staffs a small satellite station located at the Wal-Mart at 27th Street and College Avenue. However, this facility was provided by Wal-Mart as part of a special arrangement with the City to provide a high level of police presence and protection in this high-traffic retail area. The types and amounts of space at the previous main police station facility are shown in Table 30.

In an interview, the Police Chief indicated that the previous facility lacked space for the majority of Department activities. The front office area and the communications center were combined in the same space, which did not provide sufficient space for either of these functions. Since there were not enough offices, some offices were shared, and closets and interview rooms were being

Table 30
Police and Municipal Court Facilities Needs Assessment
Existing Police Department Facilities and Facility Space: 2000

Existing Area	Existing Facility Space (SF)
Patrol	3,090
Investigative/Detective Office	1,554
Evidence Processing	0
Property and Evidence	676
Records	871
Communications	568
Police Administration	1,145
Public Lobby	866
Training Division	0
Crime Prevention	769
Prisoner Holding	1,080
Building Support	675
Firearms Training Area	1,650
Parking Garage	5,208
Vehicle Building	0
Municipal Court	1,991
Total	20,143

Source: City of Franklin Police and Court Facility Plan, 1998

used for offices. This situation made it difficult to conduct interviews and other confidential matters handled by the Department. All of the storage areas were insufficient, including records storage, evidence storage and vehicle and equipment storage. The Department was using locker rooms, meeting rooms and the Department of Public Works garage for storage, and was keeping the majority of its squad cars outdoors all year round. The Department had no evidence processing lab, which is an important area for a department that conducts its own investigations. There was also no area designated specifically for training, which was a significant deficiency for a Department that is required to provide significant training each year for each of its approximately 50 sworn officers. Finally, the Department did not have a vehicle processing area or a vehicle sallyport for transporting those arrested or detained for questioning from squad cars to the booking area. The only entrance to the station was shared with the Public Library, which was an unsatisfactory arrangement due to the nature of the clientele for each of these services.

In order to determine the proportionate share of the cost of the new facility that should be borne by new development, it was first necessary to quantify and exclude the share that was needed to remedy prior existing deficiencies. This needs assessment determined the proportionate shares of facility space for current needs and future needs based on the service level provided by the new facility, expressed in terms of square feet of facility space per employee. Table 31 shows the recommended number of full-time equivalent staff employed by the Police Department and Municipal Court in 2000 and 2020 based on the staffing level standards that were used in the 1998 Facility Needs Assessment to determine future facility space needs. Table 32 shows the amount of facility space provided by the new facility for each of the Police Department and Municipal Court functions. In total, the new facility has approximately 62,800 square feet of space, or 575 square feet per full-time equivalent employee once the Department reaches the recommended 2020 staffing level.

If the design service level standard is applied to the recommended 2000 staffing level of 78.5 full-time equivalent employees, as shown in Table 33, the amount of space needed to provide a similar level of service is 45,155. Thus, with only 20,143 square feet, the previous facility had a deficiency of 25,012 square feet when compared to the service level that will be provided by the new facility.

RECOMMENDED FACILITIES

In order to provide sufficient space for the activities of the Police Department and the Municipal Court through the year 2020, the City of Franklin planned, designed and constructed a new 62,800 square foot facility located at 9455 W. Loomis Road. The new facility houses the types and amounts of facility space detailed in Table 32, and will allow the Department and Municipal Court to expand the total staffing level to approximately 109 full-time equivalent employees. When the Department reaches the recommended 2020 staffing level, the facility will provide 575 square feet of space per employee. As shown in Table 34, this is considerably above the average amount of space used by other area police departments. However, the City of Franklin Police Department and Municipal Court perform a wider range of activities and utilize a wider range of facilities than most other suburban law enforcement agencies, including dispatch service, an in-house firing range, a booking area and holding cells, and a local municipal court. It is expected that the new facility will be adequate to house all Department activities through the year 2020 without the need for expansion or the construction of satellite stations prior to that time.

Table 31
Police and Municipal Court Facilities Needs Assessment
Recommended Staffing Levels: 2000 and 2020

Position	Full-time Equivalent Employees: 2000	Full-time Equivalent Employees: 2020 (1)
Chief	1.0	1.0
Lieutenant	3.0	5.0
Sergeant	6.0	10.0
Corporal	1.0	1.7
Juvenile Officer	1.0	1.7
PSLO	1.0	1.7
Detective	4.0	6.6
Patrol Officers	41.0	53.1
Clerks/Dispatchers/Court Clerk	20.5	28.5
Total	78.5	109.1
Population	29,494	41,000
Officers/1,000	1.97	1.97
Total Employees/1,000	2.66	2.66

1.) Recommended staffing levels based on the number of officers per 1,000 residents planned for in the City of Franklin Police Facility Needs Assessment.

Table 32

Police and Municipal Court Facilities Needs Assessment

New Police Department Facilities and Facility Design Standards

Planned Area	Planned Facility Space (SF)
Armory/Ammunition	134
Bathroom	547
Booking	728
Breakroom	500
Briefing	946
Case Room	248
Cell/Holding	598
Court Services	3,835
Dispatch	1,510
Electrical/Mechanical	1,490
Equipment	92
Evidence	2,788
Firing Range	3,643
Fitness Room	966
Garage	19,775
Impound	1,030
Interrogation/Investigation	2,148
Locker - Men's	1,281
Locker - Women's	689
Office - Administrative	1,338
Office - Inspector	219
Office - Lieutenant	817
Office - Sergeant	633
Office - FTO	184
Prevention	826
Property	414
Receiving	248
Storage	4,417
Training/DAAT	860
Vehicle	2,800
Waiting Areas	870
Workroom	486
Unassigned	5,706
Total	62,762
Total Employees	109
Total Square Feet per Employee	575

Source: City of Franklin Police and Court Facility Design Plans

Table 33
Police and Municipal Court Facilities Needs Assessment
Facility Deficiency Analysis

1.) Apply Design Standard to Existing Staffing Level	
Current Total FTE Employees	78.5
Design Standard (SF/FTE Employee)	575
Current Required Space (SF)	45,155
2.) Calculate Space Deficiency	
Current Required Space (SF)	45,155
Less: Existing Space (SF)	20,143
Existing Deficiency in Police Department Facility Space (SF)	25,012

Table 34
Police and Municipal Court Facilities Needs Assessment
Summary Survey of Other Municipal Police Department Facilities: 1999

Municipality	1999 Estimated Population [1]	Square Feet of Approximate Facility Space [2]	Full-Time Equivalent Personnel [2]	Square Feet of Facility Per Employee [3]
Town of Caledonia	22,654	8,836	32	276
Town of Mount Pleasant	22,248	10,477	34	308
Town of Oconomowoc	7,811	1,900	13	146
Town of Summit	4,516	1,160	8	145
City of Brookfield	37,255	28,000	82	341
City of Delafield	6,374	3,000	13	231
Average	16,810	8,896	30	241

1.) 1999 Department of Administration Population Estimates.
2.) Source: Survey of Local Southeastern Wisconsin Police Departments, 1999
3.) Office of Justice Assistance, 1999

The estimated capital cost to construct the new facility is $9,752,590, or $155.39 per square foot, as summarized in Table 35. The cost of land acquisition was $1,198,405, for a total cost of $10,950,995 to provide a new police station. Wisconsin Statutes specify that capital costs to be recovered through impact fees may include legal, engineering and architecture costs.

ALLOCATION OF COSTS

As determined by the previous analyses, the new, expanded, police and municipal court facility is needed in part to accommodate future expansion of the City of Franklin Police Department and Municipal Court operations. This expansion of police and municipal court services will be needed in order to continue to offer an adequate level of service as new development occurs in the City. Therefore, a portion of the cost of these facilities may be charged to new development through the imposition of a police facilities impact fee.

Wisconsin Statutes state that a municipality may only charge new development for the proportionate share of the new or expanded facilities required to serve new development. It was previously determined that approximately 45,155 square feet of the new facility is required to serve existing development in the which represents 72 percent of the new facility, as shown in Table 36. The remaining 17,607 square feet, or 28 percent, is the portion of the facility needed to accommodate future expansion to serve future development. Thus, of the $10,950,995 cost of the new facility, 72 percent, or $7,878,792 can be attributed to the need to serve existing development, and 28 percent, or $3,072,203 can be attributed to the need to serve future development.

In order to impose an impact fee, the total amount to be collected must be allocated to different types of development, and the appropriate amount of the fee for each type of development must be computed. All types of development, both residential and nonresidential, create a need for police protection and law enforcement. Therefore, the cost of police facilities attributable to new development should be allocated to both residential and nonresidential development. The share of the cost that should be paid for by each specific development may be calculated in a number of different ways. Ideally, each development should pay for police facilities in proportion to the number of calls for service that it will generate. The number of calls for service may be expected to be generally in proportion to the amount of traffic that is generated by a particular type of development. The Institute of Transportation Engineers has developed guidelines for the number of vehicle trips per day that will be generated by particular types of development, published in the "Institute of Transportation Engineers, 6th Edition, Trip Generation Manual." The amount of traffic expected to be generated by a particular development, as a share of the total, may then be used to allocate a share of the cost of police facilities to that particular development. These measures will not allocate the cost of police facilities in exact proportion to the number of police calls for service. The number of calls for service cannot be known for certain in advance, since the amount of traffic generated may vary from that predicted by the Trip Generation Manual guidelines, and calls for service may vary due to other factors not related to the volume of traffic generated. However, impact fees need only be distributed generally in proportion to expected use of the facilities; therefore the use of trip generation predictors is sufficiently precise for purposes of determining the appropriate amounts for impact fees.

Table 35
Police and Municipal Court Facilities Needs Assessment
Estimated Planned Facility Costs

Item	Cost
Building Design and Construction	$8,278,590
Special Equipment	$509,000
Contingency	$400,000
Furniture / Equipment	$315,000
Miscellaneous	$250,000
Material Purchases	$0
Building Cost	$9,752,590
Land Cost	$1,198,405
Total Cost	$10,950,995

Source: City of Franklin Police and Court Facility Plan Document

Table 36
Police and Municipal Court Facilities Needs Assessment
Allocation of Planned Facility Space to Existing Deficiency and Future Growth Needs

Description	Facility Space (SF)	Percent of Facility Space	Share of Cost
Total Design Space	62,762	100.0%	$10,950,995
Current Required Space	45,155	71.9%	$7,878,792
Facility Space Needed for Future Growth	17,607	28.1%	$3,072,203

As shown in Table 1, it is forecast that 2,884 acres of land will be converted to residential use by 2020, 1,733 acres will be converted to industrial uses, 800 acres will be converted to commercial uses and 697 acres will be converted to institutional uses as shown in Table 3. This land area will accommodate approximately 3,378 new single-family residential units, 443 new two-family residential units, and 1,032 new multi-family residential units as shown in Table 37. The land area converted to industrial uses will accommodate approximately 27,169,000 square feet of building space, while the land converted to commercial uses will accommodate approximately 6,791,000 square feet of building space, and the land converted to institutional uses will accommodate approximately 9,234,000 square feet of building space. Using the trip generation guidelines published by the Institute of Transportation Engineers, the number of vehicle trips that may be expected to be generated by each type of development are shown in Table 37. The share of cost for police and municipal court facilities attributable to the need to serve future development were allocated to each type of development in proportion to the number of vehicle trips generated. Table 37 also shows this allocation.

The share of costs allocated to residential development were divided by the expected number of new units to be developed through 2020 to determine the appropriate amount to be charged per unit, as shown in Table 38. Similarly, the amounts allocated to industrial, commercial and institutional uses were divided by the approximate square footage of each type of development expected through the year 2020 to determine the appropriate amount of the fee per square foot of building space. As set forth in the table, it is recommended that the City impose police and municipal court facilities impact fees in the amounts of $38 per single family residence, $38 per two-family residence, $26 per multi-family residence, $0.088 per square foot of commercial building space, $0.019 per square foot of industrial building space, and $0.153 per square foot of institutional building space.

CAPITAL FACILITIES PLAN

As previously stated, the new Police Station and Municipal Court facility is expected to have sufficient space to accommodate anticipated expansions of Department activities through 2020. Therefore, there are no other new facilities or expansions to the existing facility anticipated prior to 2020. The Department may seek arrangements with other businesses to provide small satellite stations, similar to the one located at the Wal-Mart at 27th Street and College Avenue. However, such facilities would be provided by the business, and the City would not be responsible for any of the capital costs of such facilities.

The need for police facilities should continue to be monitored in the future to respond to any significant changes in the patterns of development and population growth, or to changes in the manner in which services are provided. For example, if the City of Franklin were to develop cooperative service agreements or consolidate police protection services with an adjacent municipality, the facility space needs, and therefore the need for impact fees, could be different than the recommendations presented in this report.

Table 37
Police and Municipal Court Facilities Needs Assessment
Allocation of Police and Municipal Court Facilities Costs to New Development by Land Use Category

	Incremental Development	Trips Generated per Unit per Day	Total Incremental Vehicle Trips per Day	Percent of Total Vehicle Trips per Day	Allocated Share of Future Growth Costs
Residential					
Single-family dwelling units	3,378	9.57	32,331	4.2	$128,421
Two-family dwelling units	443	9.57	4,239	0.5	$16,838
Multi-family dwelling units	1,032	6.63	6,840	0.9	$27,169
Commercial (SF)	6,791,113	0.02717	184,515	23.9	$732,905
Industrial (SF)	27,169,940	0.00696	189,103	24.4	$751,129
Institutional (SF)	9,233,814	0.03860	356,425	46.1	$1,415,742
Total			773,453	100.0	$3,072,203

Table 38
Police and Municipal Court Facilities Needs Assessment
Computation of Recommended Impact Fees by Land Use Category

	Allocated Share of Future Growth Costs	Incremental Future Development	Units	Recommended Fee per Unit
Residential				
Single-family dwelling units	$128,421	3,378	d.u.	$38
Two-family dwelling units	$16,838	443	d.u.	$38
Multi-family dwelling units	$27,169	1,032	d.u.	$26
Commercial	$732,905	8,358,293	s.f.	$0.088
Industrial	$751,129	39,245,469	s.f.	$0.019
Institutional	$1,415,742	9,233,814	s.f.	$0.153
Total	$3,072,203			

RECOMMENDATIONS

It has been determined that the new Police Station and Municipal Court facility, in addition to remedying existing deficiencies in police and municipal court facilities, will provide sufficient space to accommodate future expansions of the Department through 2020. Of the total of 62,800 square feet of space at the new facility, approximately 28 percent, or 17,607 square feet, will be needed to serve demands for police protection created by new development. Therefore, approximately 28 percent or $3.1 million could be collected from new development through the imposition of impact fees.

Based upon the proportionate share of the demand for police services to be generated by each category of development, it is recommended that the City of Franklin implement impact fees for police and municipal court facilities according to the schedule shown in Table 38.

CHAPTER SEVEN:
FIRE AND RESCUE SERVICES NEEDS ASSESSMENT

INTRODUCTION

The City of Franklin Fire Department provides emergency services to the entire City of Franklin. The Department is a full-time, career, Fire Department that performs the functions of fire suppression, fire inspection, fire and injury prevention training, mitigation of hazardous materials incidents, water rescue, basic and advanced life support emergency medical services, emergency medical transport, and all of the associated support services. The Franklin Fire Department has mutual aid arrangements with the Greenfield, Greendale and Hales Corners Fire Departments whereby each Department supplies additional fire suppression vehicles and personnel to another Department when needed for response a large incident or multiple simultaneous incidents. The Franklin Fire Department also works cooperatively with the Greendale, Greenfield, and Hales Corners Fire Departments to staff the Zone D Hazmat Team to respond to hazardous materials incidents and the Zone D Confined Space Team to respond to confined space rescue incidents in any of the participating municipalities.

The large service area covered by the Fire Department and the growing amount of developed land in the City have made it increasingly difficult for the Fire Department to maintain an adequate response time to fire suppression and emergency medical incidents. In 2001, the Common Council requested that the Fire Department prepare a Comprehensive Fire Protection Plan for the City, including recommendations for the future organization, staffing level, programs and services, equipment needs and facility space needs of the Department. The Plan also considered partial or total consolidation with the Hales Corners and Greendale Fire Departments. The report recommended staffing increases, a new fire station in the southeast quadrant of the City to replace the existing, unmanned Station No. 2, consideration of building a joint fire station in the northwest quadrant with Hales Corners, and consideration of a new Fire Station No. 3 relocated approximately ½ mile to the north of the existing site.

In response to the recommendations of the Plan, the City designed a new Fire Station No. 2, which was completed in February 2002. No decisions have yet been made regarding a joint fire station with Hales Corners or a new Fire Station No. 3.

INVENTORY OF EXISTING FACILITIES

Wisconsin Statutes s. 66.0617 requires that a public facilities needs assessment conducted for the purpose of imposing impact fees contain an inventory of all existing facilities and an identification of any existing deficiencies in those facilities. The inventory is used to determine the proportionate share of capital costs for facilities required to serve new development as compared to existing development. Since the intent of this needs assessment is to determine the share of the costs of the recently completed and planned new fire stations that is appropriate for recovery through impact fees, the inventory of existing facilities will describe the facilities used by the Department prior the construction of Fire Station No. 2.

The Franklin Fire Department operates from three fire stations (shown in blue and black on Map 4). Fire Station No. 1 is the main fire station, located at 8901 W. Drexel Avenue. Fire Station No. 1 has been staffed since 1990, and currently houses the administrative offices of the Fire Department and a minimum of six on-duty fire suppression and emergency medical services personnel per day. The original Fire Station No. 2 is located at 11615 W. Rawson Avenue. This station was unmanned and was used to store equipment and apparatus. Fire Station No. 3 is located at 4755 W. Drexel Avenue. This station became staffed in 1994 and prior to the construction of the new Fire Station No. 2 had a minimum of three on-duty fire suppression and emergency medical services personnel per day.

As shown in Table 39 Fire Station No. 1 has a total of 8,029 square feet of space, consisting of 3,050 square feet for apparatus storage, space for hanging and drying hoses, storage, maintenance, dormitory and living areas, an assembly area, a public lobby, administrative offices, and a small dispatch station. The original Fire Station No. 2 had a total of 3,800 square feet, as shown in Table 40. Facility space at Station No. 2 consisted of 2,427 square feet for apparatus storage, a general assembly room, a kitchen, lockers, showers and restrooms, a small dispatch station and an office. Fire Station No. 3 has a total of 3,685 square feet, as shown in Table 41, of which 2,318 square feet is designated for apparatus storage and the remainder includes a small storage area, a small bunkroom and living area, and an office.

The adequacy of fire station facilities can be assessed in several ways, including the age and obsolescence of the building and equipment, the location and resulting response times, and the amount of space provided for personnel and equipment. The need to replace a building that is old and obsolete is not created by new development in a community, and the associated capital costs would not be eligible for recovery through impact fees. However, new development may create the need to relocate a station, expand an existing station, or build a new station to house additional apparatus and personnel. Therefore, this impact fee study considers the adequacy of the existing Franklin fire stations—prior to the construction of the new Fire Station No. 2—in terms of the locations and response times, and the amount of space needed to house the recommended number of personnel and apparatus.

Response Times

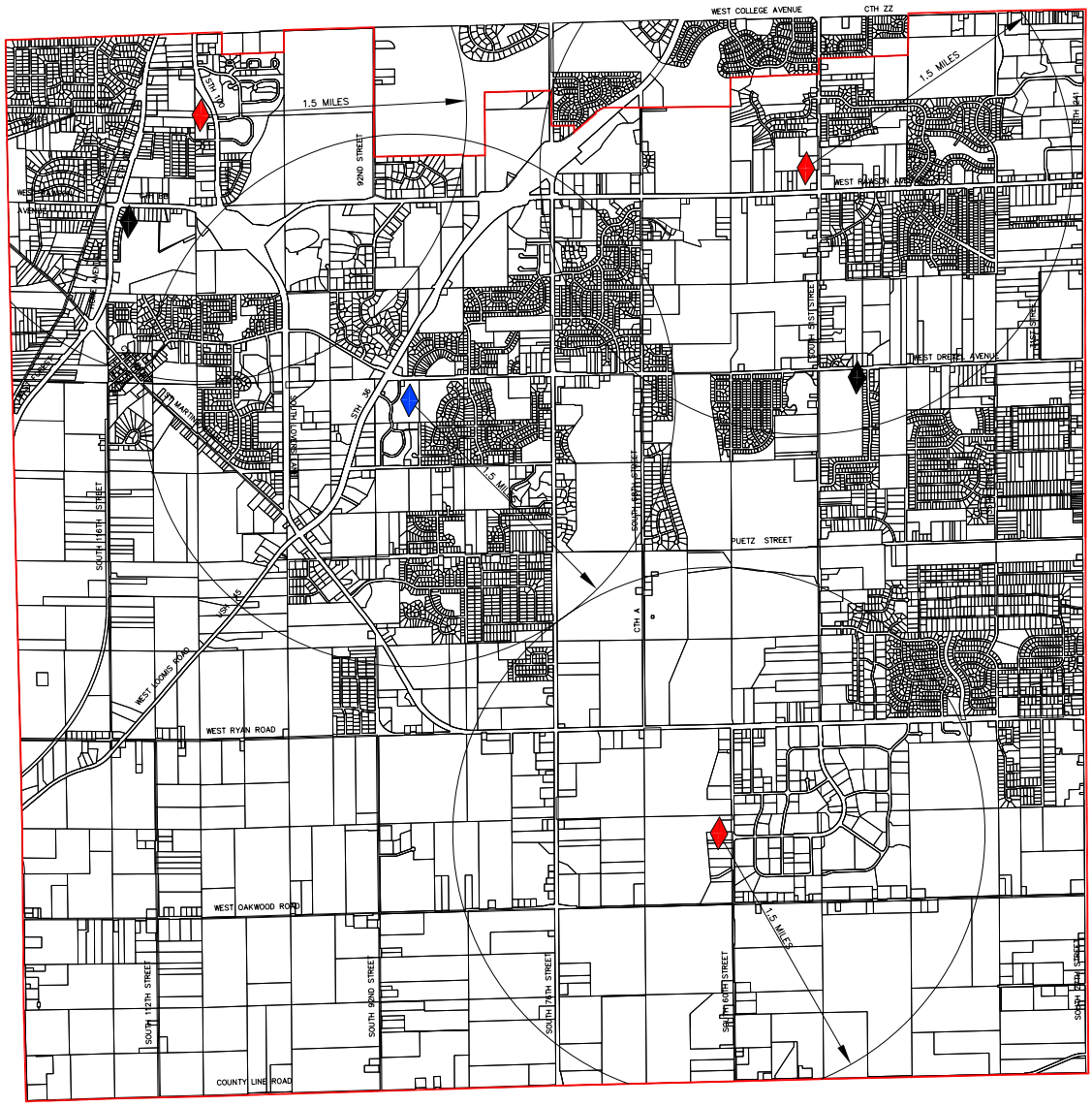
Prior to the construction of the new Fire Station No. 2, the Franklin Fire Department provided first response from Station No. 1, located in the north-central part of the City and Station No. 3, located in the northeast quadrant of the City. Under the mutual aid arrangements, first response to the extreme northwest and northeast corners of the City are provided by the Hales Corners and Greendale Fire Departments, respectively. The average response time was approximately one to two minutes for dispatch time, and six to seven minutes from dispatch to arrival on the scene for fire incidents, or a total of seven to nine minutes from receipt of the call to arrival. The response time is critical to the outcome of medical emergency patients, the survival rate of occupants in a structure fire, and the amount of structure damage in fire incidents. In accordance with National Fire Protection Association standards, the Department has adopted a goal of having the first engine company arrive at the scene within six minutes of receipt of the call ninety percent of the time.

RM811PB

MAP 4

EXISTING AND PLANNED FIRE STATIONS

CITY OF FRANKLIN
MILWAUKEE COUNTY, WISCONSIN



LEGEND

- EXISTING STATION TO BE PHASED OUT
- EXISTING STATION TO BE RETAINED AND EXPANDED OR IMPROVED
- PLANNED NEW STATION
- OPTIMUM SERVICE RADII

City of Franklin

N
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S

0 1250 2500 5000
SCALE IN FEET

Apr 24, 2002 10:25am
G:\Land\5892033\dwg\z-map-07.dwg Layout1
IMAGES: G:\Land\5892033\dwg\Franklin.tif; G:\SHT\RMGrphic.jpg;
XREFS: G:\Land\5892033\dwg\BASEMAP.dwg

SOURCE: CITY OF FRANKLIN

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Table 39
Fire Facilities Needs Assessment
Fire Station No. 1 Existing Facility Space

Building Area	Square Feet (SF)
Apparatus Storage Room	3,050
Hose Tower	100
Shop	187
Storage	44
Storage	87
MAN	21
Darkroom	63
Bathroom Men	80
Bathroom Women	28
Showers	58
Lockers	164
Dormitory	468
Kitchen	135
General Assembly Total	1,146
Lobby	130
Entry (2)	58
Chief's Office	225
Offices (3)	476
Dispatch Station	162
Mechanical Room	123
Unassigned	1,225
Total	8,029

Table 40
Fire and Rescue Facilities Needs Assessment
Prior Fire Station No. 2 Facility Space

Building Area	Square Feet (SF)
Apparatus Storage Room	2,427
Assembly Room	449
Kitchen	60
Bathroom Women	25
Bathroom Men	70
Showers	36
Locker Room	106
Dispatch Station	150
Office	121
Mechanical / Storage	85
Unassigned	270
Total	3,800

Table 41
Fire and Rescue Facilities Needs Assessment
Fire Station No. 3 Existing Facility Space

Building Area	Square Feet (SF)
Apparatus Storage Room	2,318
Storage	62
Shower	31
Bunk Room	185
Bathroom	64
Day Room	446
Kitchen	93
Office	238
Unassigned	248
Total	3,685

Under the prior locations and staffing of the fire stations, Stations No. 1 and No. 3 each had to cover a first-response area of approximately 17 square miles, making a six-minute total response time very difficult. The most difficult areas to reach were the southwest and southeast quadrants of the City, and the extreme northeast and northwest corners. The southwest quadrant is very rural and has relatively few calls for service. The southeast quadrant, however, has experienced increasing levels of development in recent years and is likely to continue developing, which will lead to increasing numbers of calls for fire and rescue service. The Comprehensive Fire Protection Plan recommended, therefore, that the City build and staff an additional station in the southeast quadrant of the City and abandon the existing, unmanned, Fire Station No. 2. In order to better serve the northeast corner, as well as replace an aging facility, it was recommended that the City consider building a new Fire Station No. 3 in the vicinity of 51st Street and Rawson Avenue. The Plan further recommended that the City consider building a joint staffed fire station with Hales Corners in the northwest corner of the City or in Hales Corners to improve response times to that area. Since there has not been substantial progress toward planning a joint fire station with Hales Corners, this facilities needs assessment considered the facility needs and costs that would be associated with the City constructing and staffing its own fire station in the northwest corner.

Facility Space

Another criterion by which to assess the adequacy of fire and rescue facilities and identify any existing deficiencies is by the amount of space provided for personnel, equipment and Department functions. The types and amounts of facility space needed for fire and rescue facilities may vary from one community to another depending on such factors as the organizational structure of the fire department, the use of career as compared to volunteer personnel, the types of training exercises conducted on-site, the use of the facility for community meetings, the need for any specialized equipment, and the preferred configuration of the building. However, certain functions and equipment are common to most fire and rescue departments, and there are general guidelines for the recommended amount of space necessary for each function. Most fire stations require space for storage of fire suppression and emergency medical services apparatus, storage of equipment and supplies, a shop area for maintenance of vehicles and equipment, meeting and training rooms, kitchen, dining and social areas, dormitory area or sleeping rooms, public restrooms, restrooms, showers and lockers for on-duty personnel, office area for completing and filing reports, and office storage. The International Association of Fire Chiefs Foundation publishes "Fire Station Planning, Design and Construction", which provides general recommendations as to the minimum amount of space required for each of these functions. The guidelines are general in nature and intended to assist in developing an initial space needs assessment. The ultimate design and configuration of a fire station would be prepared by an architect to meet the specific needs of the community. However, these guidelines are of assistance in determining the amount of any space deficiencies in existing facilities.

One major consideration in determining the amount of space needed is the number of personnel that will be located at each station. Table 42 shows the total number of full-time equivalent personnel employed by the Franklin Fire Department in 2001 by position. As shown in the table, in 2001 the Department employed a total of approximately 41 full-time equivalent employees. The 37 career fire suppression and emergency medical services personnel include the Fire Chief, the Fire Inspector, the Battalion Chief for Emergency Medical Services, the Battalion Chief for

Table 42
Fire and Rescue Facilities Needs Assessment
Actual and Projected Staffing Levels: 2001 and 2020

Position	Full-Time Equivalent Employees: 2001	Recommended Full-Time Equivalent Employees: 2001	Recommended Full-Time Equivalent Employees: 2020
Fire Chief	1.0	1.0	1.0
Fire Inspector	1.0	1.0	1.5
Battalion Chief - EMS	1.0	1.0	1.0
Battalion Chief - Fire Training	1.0	1.0	1.0
Battalion Chief - Shifts	3.0	3.0	3.0
Fire Lieutenants	6.0	6.0	6.0
Firefighters / EMS [1]	24.0	30.0	48.0
Paid-on-Call Firefighters [2]	3.0	0.0	0.0
Subtotal Firefighters	40.0	43.0	61.5
Clerk Typist	1.0	1.0	2.0
Total	41.0	44.0	63.5
Population	29,494	29,494	41,000
Firefighters per 1,000 Residents	1.36	1.5	1.5

1.) Recommended 2001 staffing increased by six firefighters/EMTs to increase minimum staffing to 10 firefighters per shift, and also to meet the department's goal of 1.5 firefighters per 1,000 residents.
2.) In 2001 the department was staffed with 14 paid-on-call firefighters.

Fire Training, three Battalion Chiefs for shifts, six Fire Lieutenants, and twenty-four Firefighters / Emergency Medical personnel. The Department also relies on approximately 14 paid-on-call volunteers to fill in for vacations, holidays and sick leave and to serve as backup for large incidents, and one Clerk Typist. This level of staffing was equal to approximately 1.36 fire and rescue personnel per 1,000 residents, less than the national average of 1.5 personnel per 1,000 residents. The stated goal of the Department, according to the Fire Protection Plan, is to maintain a staffing level equal to 1.5 fire and rescue personnel per 1,000 residents. The Plan recommended that this goal be achieved by either hiring three additional firefighters, or one per shift, and continuing to rely on volunteer staff to fill in for time off, or by hiring six additional firefighters and making less use of volunteer firefighters. Table 42 shows the total recommended full-time staff for 2001.

Due to time off for vacations, holidays and sick leave, the Department must assign approximately 1.3 employees for every one on-duty employee in order to maintain the desired minimum level of staffing. Table 43 shows the actual level of staffing per station that was provided prior to the construction of the new Fire Station No. 2, and the level of staffing per station that was recommended for each station—including the new Station No. 2—in the Comprehensive Fire Protection Plan. In addition to not being located in the optimum area for providing adequate response times, the prior existing Station No. 2 was intended to be an unmanned station and lacked office space and space for sleeping and living areas for on-duty personnel.

A second major consideration for a fire station facility needs assessment is the amount of space needed to house apparatus such as fire engines and ambulances. The fire station planning guide provides general guidelines for the amount of space needed for each type of vehicle, including space for the vehicle itself, plus front, rear and side clearances. The exact amount of space needed depends on the exact configuration of the apparatus garage bays. However, the guidelines provide a tool for assessing the approximate amounts of any deficiencies in apparatus storage space. Table 44 shows the apparatus assigned to each station in 2001 and the approximate amount of space needed for each piece of apparatus and for the station in total. It also shows the desired assignment of each piece of apparatus with the new, staffed, Station No. 2 in the southeast quadrant of the City. As shown in the table, in 2001 the Department owned 14 vehicles and pieces of apparatus requiring a total of approximately 8,260 square feet of space. The Department purchased an aerial platform in 2001, for a current total of 15 pieces of apparatus requiring approximately 9,170 square feet of storage space.

In order to maintain the recommended staffing level of 1.5 full-time fire and rescue personnel per thousand residents, the Franklin Fire Department will need to increase its staff in the future. Table 42 shows the projected future staffing levels compared to the 2001 staffing levels. As shown in the table, if the 2020 population of the City is 41,000 persons, the Department would need approximately 61.5 full-time equivalent fire and rescue personnel and 63.5 total full-time employees.

A staff of 61.5 full-time equivalent firefighters and emergency medical services personnel would allow the Department to have approximately fifteen firefighters on duty each day, or an increase of five per day compared to current staffing levels. Table 45 shows the minimum number of on-duty personnel at each station in 2001 and a proposed level of staffing for each station in 2020.

Table 43
Fire and Rescue Facilities Needs Assessment
Minimum On-Duty Fire Suppression and EMS Personnel per Station: 2001

Location	Actual On-Duty Firefighters per Shift: 2001	Recommended On-duty Firefighters per Shift: 2001
Fire Station No. 1	6	6
Fire Station No. 2	0	2
Fire Station No. 3	3	2
Total Suppression and EMS Personnel per Shift	9	10

Table 44
Fire and Rescue Facilities Needs Assessment
Actual and Recommended Location of Apparatus and Required Space Needs: 2001

Apparatus	Approximate Space Required per Unit [1]	Actual Assignments: 2001		Recommended Assignments: 2001	
		No. of Units	Total Required Space	No. of Units	Total Required Space
Station No. 1					
Engine	770	2	1540	1	770
Tanker	770	1	770	0	0
Aerial Platform	910	0	0	1	910
BLS Ambulance	490	2	980	1	490
Paramedic Unit	490	1	490	1	490
Command Car	490	1	490	1	490
Rescue Unit	490	1	490	1	490
Subtotal		8	4760	6	3640
Station No. 2					
Engine	770	1	770	2	1540
BLS Ambulance	490	0	0	2	980
Hazmat Trailer	490	1	490	1	490
Tanker	770	0	0	1	770
Subtotal		2	1260	6	3780
Station No. 3					
Engine	770	1	770	1	770
BLS Ambulance	490	2	980	1	490
Brush Truck	490	1	490	1	490
Subtotal		4	2240	3	1750
Total		14	8260	15	9170

1) May vary depending on the configuration of the apparatus bays.

Table 45
Fire and Rescue Facilities Needs Assessment
Minimum On-Duty Fire Suppression and EMS Personnel per Station: 2001 and 2020

Location	Recommended On-duty Firefighters per Shift: 2001	Recommended On-duty Firefighters per Shift: 2020	Change: 2001 - 2020
Fire Station No. 1	6	4	-2
Fire Station No. 2	2	5	3
Fire Station No. 3	2	4	2
Fire Station No. 4	N/A	2	2
Total Suppression and EMS Personnel per Shift	10	15	5

Fire Station No. 1 is at its maximum staffing level with six on-duty personnel, the new Fire Station No. 2 is designed to accommodate five on-duty personnel, and the existing Fire Station No. 3 can comfortably accommodate two, or at most three, on-duty personnel per day. A relocated, expanded Fire Station No. 3 could be designed to accommodate four on-duty personnel. A fourth station in the Northwest corner would allow the Department to move two on-duty personnel from Fire Station No. 1.

In addition to the anticipated increases in staffing, the increasing population and amount of developed land in the City will require additional apparatus or increased use of existing apparatus. Since a single piece of fire apparatus serves a relatively large population, apparatus cannot be added incrementally with small increases in population. Therefore, apparatus purchased to serve an existing need may also be sufficient for expanded service needs for an extended period of time into the future. Table 46 shows the apparatus currently assigned to Stations 2 and 3, and the associated space requirements, and the projected additional apparatus at Stations 2, 3 and 4 that will be needed due to future development and population increases. The new Station No. 2 currently stores six pieces of apparatus. However, with only two on-duty personnel, only one engine and one ambulance are currently in active use. The other engine and ambulance are reserve units for future use or for when another piece of apparatus is out of service for maintenance. If the City hires enough firefighters in the future to staff Station No. 3 with a minimum of four on-duty personnel per day, that station could be equipped with one additional engine and one additional ambulance. A new Station No. 4 in the northwest corner would need to be equipped with one engine and one ambulance.

RECOMMENDED IMPROVEMENTS

As previously described, the City planned, designed and constructed a new fire station in the southeast quadrant of the City and abandoned the existing Fire Station No. 2. The types and amounts of facility space provided by the new Fire Station No. 2 are summarized in Table 47. As shown in the table, Fire Station No. 2 has approximately 8,186 square feet of facility space, making it the largest of the three Franklin Fire Stations. The space at Station No. 2 consists of 3,365 square feet of space for apparatus storage, 924 square feet for other storage, 1,864 square feet of space for living and assembly areas, 264 square feet of office space, and 1,768 square feet of general and unassigned areas, such as mechanical space, walls, and corridors. The new Fire Station No. 2 provides adequate storage space for the six pieces of apparatus assigned to it, including four pieces for current use and two pieces for reserve use. It is designed to accommodate up to five on-duty personnel per day, or three more than the current staffing level.

The total estimated capital cost of Station No. 2 is $1,443,700, as shown in Table 48, or approximately $176 per square foot. As defined by Wisconsin Statutes s. 66.0617, capital costs include legal, engineering and architecture costs in addition to construction costs.

The Fire Protection Plan also recommended the construction of a new, expanded Fire Station No. 3 in the vicinity of 51st Street and Rawson Avenue, and the previous analyses demonstrated that a larger station would probably be needed prior to 2020. The City does not have specific plans for a new station at this time. However, for purposes of determining a fire facilities impact fee for all anticipated facilities, a preliminary space needs assessment for a new Fire Station No. 3 was performed as part of this impact fee study.

Table 46
Fire and Rescue Facilities Needs Assessment
Fire Stations No. 2, 3 and 4 Apparatus and Required Space Needs: 2001 and 2020

Apparatus	Approximate Space Required per Unit [1]	Vehicles Needed for Current Use: 2001		Required for Future Expansion: 2020	
		No. of Units	Total Required Space	No. of Units	Total Required Space
Station No. 2					
Engine	770	1	770	1	770
BLS Ambulance	490	1	490	1	490
Hazmat Trailer	490	1	490		
Tanker	770	1	770		
Total		4	2520	2	1260
Station No. 3					
Engine	770	1	770	1	770
BLS Ambulance	490	1	490	1	490
Brush Truck	490	1	490		0
Total		3	1750	2	1260
Station No. 4					
Engine	770	0	0	1	770
BLS Ambulance	490	0	0	1	490
Total		0	0	2	1260

1) May vary depending on the configuration of the apparatus bays.

Table 47
Fire Facilities Needs Assessment
New Fire Station No. 2 Facility Space

Building Area	Total Square Feet (SF)
Apparatus Storage Room	3,365
Maintenance Storage	310
EMS Storage	64
Storage	234
Turnout Gear	110
SCBA Filling	61
SCBA Workroom	77
EMS Clean Room	68
Laundry	76
Shower/Restroom	79
Shower/Restroom	89
Restrooms	58
Officers Quarters	139
Sleeping Area	394
Dayroom	390
Dining Room	156
Kitchen	169
Exercise/Fitness Room	315
Offices (2)	264
Generator Room	167
Mechanical / Storage	668
Unassigned	933
Total	8,186

Table 48
Fire and Rescue Facilities Needs Assessment
Estimated Fire Station No. 2 Capital Costs

Description	Cost
Building Construction	$1,269,900
Furnishing, Fixtures and Equipment	$51,000
Design and Development	$122,800
Total Estimated Cost	$1,443,700
Square Feet of Planned Facility	8,186
Estimated Cost per Square Foot	$176.37

Source: City of Franklin Finance Department, December 31, 2001

The facility space needs assessment was prepared based on the projected staffing and apparatus to be located at a relocated Fire Station No. 3, and on the general space needs guidelines contained in “Fire Station Planning, Design and Construction.” This assessment was intended to indicate the approximate size and cost of future Fire Station No. 3 facilities for purposes of determining the appropriate amount to collect through the imposition of a fire and rescue facilities impact fee. Table 49 shows the types and amounts of facility space that would be needed to provide sufficient space for four on-duty personnel and the apparatus listed in the table. In total, approximately 7,230 square feet of space would be needed to provide for Department expansion of staffing and apparatus through 2020. This estimate provides a guideline for purposes of imposing an impact fee. The actual design of the new fire station would be prepared by the City’s architect, and the exact size and configuration of the station would be determined through the design process, incorporating specific priorities and practices of the Department and the City at that time. The City may build a station that is large enough to accommodate growth beyond 2020; however, the planning period for this study is through the year 2020.

Using the cost per square foot of the new Fire Station No. 2 as an average cost to construct fire stations to City standards, a new Fire Station No. 3 of 7,230 square feet would cost approximately $1,275,000, in 2002 dollars. The City would also need to acquire approximately 5 acres in the vicinity land of 51st Street and Rawson Avenue, at an estimated cost of $375,000.

A fourth fire station in the northwest corner was also recommended by the Fire Protection Plan. Although the Plan recommended a joint station with the Village of Hales Corners, no progress has been made in discussions with the Village regarding a joint station. Therefore, this needs assessment considered the facility space that would be required for a station constructed and staffed by the City of Franklin alone.

The facility space needs assessment was prepared based on the projected staffing and apparatus to be located at a new Fire Station No. 4, and on the general space guidelines contained in "Fire Station Planning, Design and Construction." Table 50 show the types and amounts of facility space that would be needed to provide sufficient space for two on-duty personnel, one engine, and one ambulance. In total, approximately 4,170 square feet of space would be needed. This estimate provides a guideline for purposes of imposing an impact fee. The actual design of the station would be prepared by the City's architect, and the exact size and configuration of the station would be determined through the design process.

Using the cost per square feet of the new Fire Station No. 2 as an average cost to construct fire stations to City standards, a new Fire Station No. 4 would cost approximately $735,400, in 2002 dollars. The City would also need to acquire approximately 3 acres of land along STH 100 north of West Rawson Avenue, at an approximate cost of $225,000.

Map 4 shows the locations of planned new fire stations in red.

Table 49
Fire and Rescue Facilities Needs Assessment
Planned Fire Station No. 3 Facility Space

	Total Units: 2020	Space per Unit	Total Space
Station Officer	1		
Other On-Duty Personnel	3		
Vehicles			
Engine	2	770	1,540
BLS Ambulance	2	490	980
Brush Truck	1	490	490
Shop	1	200	200
EMS Clean Room	1	80	80
Shop Storage	1	300	300
EMS Storage	1	300	300
Kitchen	4	40	160
Dining Room	4	40	160
Dormitory	3	75	225
Dayroom	1	400	400
Officers Quarters	1	200	200
Mens Toilet/Shower	1	220	220
Womens Toilet/Shower	1	220	220
Lockers	4	10	40
Public Restrooms	2	36	72
Exercise Room	1	300	300
Laundry	1	80	80
Offices (2)	2	120	240
Office Storage	1	80	80
Unassigned (15%)			943
Total			7,230
Cost per Square Foot			$176.37
Subtotal Building Cost			$1,275,167
Land Cost			$375,000
Total Cost			$1,650,167

Table 50
Fire and Rescue Facilities Needs Assessment
Planned Fire Station No. 4 Facility Space

	Total Units: 2020	Space per Unit	Total Space
Station Officer	1		
Other On-Duty Personnel	1		
Vehicles			
Engine	1	770	770
BLS Ambulance	1	490	490
Shop	1	200	200
EMS Clean Room	1	80	80
Shop Storage	1	300	300
EMS Storage	1	300	300
Kitchen	2	40	80
Dining Room	2	40	80
Dormitory	2	75	150
Dayroom	1	400	400
Mens Toilet/Shower	1	220	220
Womens Toilet/Shower	1	220	220
Lockers	2	10	20
Public Restrooms	1	36	36
Laundry	1	80	80
Office	1	120	120
Office Storage	1	80	80
Unassigned (15%)			544
Total			4,170
Cost per Square Foot			$176.37
Subtotal Building Cost			$735,447
Land Cost			$225,000
Total Cost			$960,447

ALLOCATION OF COSTS

As determined by the previous analyses, the recommended fire station improvements are needed in part to accommodate future increases in calls for service generated by new development. This expansion of fire station facility space will be needed in order to continue to offer an adequate level of service as new development occurs in the City. Therefore, a portion of the cost of these facilities may be charged to new development through the imposition of a fire and rescue facilities impact fee.

Wisconsin Statutes state that a municipality may only charge new development for the proportionate share of the new or expanded facilities required to serve new development. Therefore, the costs of fire station improvements must be divided into the proportionate share attributable to the need to serve existing development and the share attributable to the need to provide excess capacity to accommodate future development. This allocation was determined based upon the facility space needed to serve existing development in the City relative to the amount of facility space that will be needed to serve the City in 2020.

Table 51 shows the allocation of space in Fire Station No. 2 to space needed for apparatus and staff needed to serve existing development and space needed to accommodate apparatus and staff to serve future development. The four pieces of apparatus required for current operations require approximately 2,520 square feet of storage space, or about 75 percent of the total apparatus storage space at Station No. 2. The remaining 845 square feet, or twenty-five percent, houses the reserve apparatus. The storage areas, living and assembly space and offices were allocated based on the current number of on-duty personnel compared to the capacity of the station. The current staffing level of two on-duty personnel represents forty percent of the station capacity of five on-duty personnel. Therefore, forty percent of the space of the storage areas, living and assembly space, and offices was allocated to existing operational needs and sixty percent was allocated to future needs. The general and unassigned areas were allocated according to the weighted average percentage of the other costs allocated to existing and future needs. Overall, a total of 4,773 square feet, or 58 percent, was allocated to existing needs, and 3,413, or 42 percent, was allocated to future needs.

A similar allocation was performed for the estimated space needs for a future Fire Station No. 3 as shown in Table 52. The space for apparatus storage was allocated according to the amount of space needed to house the apparatus located at the existing Fire Station No. 3, and the additional space that would be needed to house the projected additional apparatus that would be needed by 2020. Approximately 1,750 square feet of space, or 58 percent of the total, is needed to store the three pieces of apparatus currently located at Station No. 3, and an additional 1,260, or 42 percent, would be needed to store one additional engine and one additional ambulance. The shop areas used for vehicle maintenance were allocated according to the same percentage. Similarly, the current staffing level of two on-duty personnel represents fifty percent of the projected 2020 staffing level of four on-duty personnel for Station No. 3. Therefore, half of all the space for storage, living and assembly areas, and offices was allocated to existing needs and half were allocated to future needs. Like Station No. 2, the general and unassigned areas were allocated according to the weighted average percentage of the rest of the spaces. In total, 3,579 square feet, or approximately 49.5 percent, was allocated to existing needs, and 3,651 square feet, or 50.5 percent, was allocated to future needs.

Table 51
Fire and Rescue Facilities Needs Assessment
Allocation of Fire Station No. 2 Facility Space to Current and Future Needs

Type of Facility Space	Total Area	Area Allocated to Existing Needs (SF)	Percent Allocated	Area Allocated to Future Needs (SF)	Percent Allocated
Apparatus Storage	3,365	2,520	74.9	845	25.1
Other Storage	924	370	40.0	554	60.0
Living / Assembly Area	1,864	746	40.0	1,118	60.0
Offices	264	106	40.0	159	60.0
General and Unassigned	1,768	1,031	58.3	737	41.7
Total	8,186	4,773	58.3	3,413	41.7

Table 52
Fire and Rescue Facilities Needs Assessment
Allocation of Fire Station No. 3 Facility Space to Current and Future Needs

Type of Facility Space	Total Area	Area Allocated to Existing Needs (SF)	Percent Allocated	Area Allocated to Future Needs (SF)	Percent Allocated
Apparatus Storage	3,010	1,750	58.1	1,260	41.9
Shop	280	163	58.1	117	41.9
Storage	600	240	40.0	360	60.0
Living / Assembly Area	2,077	831	40.0	1,246	60.0
Offices	320	128	40.0	192	60.0
General and Unassigned	943	467	49.5	476	50.5
Total	7,230	3,579	49.5	3,651	50.5

Since Fire Station No. 4 will be needed primarily to improve response times to an area of the City that has a substantial amount of existing development this facility was allocated on the basis of land uses within its service area. Map 4 shows the optimum service radii for each of the proposed stations, and the area within that radii. Within the area to be served by Station No. 4, there are approximately 1,300 existing single family dwelling units. The existing open areas planned for single-family residential uses could accommodate approximately 290 additional dwelling units. Therefore, future new residential dwelling units will account for 18 percent of the total of 1,590 units that this area can accommodate. Therefore 18 percent of the facility space can be attributed to the need to serve new development.

Table 53 shows the amount of capital for each of these facilities that is attributable to the need to serve future development. The costs for each facility were allocated to future development in proportion to the percentage share of facility space allocated to future development . In total the amount of capital costs attributable to the need to serve future development is approximately $1,608,200, in 2002 dollars.

RECOMMENDED IMPACT FEE SCHEDULE

In order to impose an impact fee, the total amount to be collected must be allocated to different types of development, and the appropriate amount of the fee for each type of development must be computed. All types of development, both residential and nonresidential, create a need for fire and rescue services. Therefore, the cost of fire and rescue facilities attributable to new development should be allocated to both residential and nonresidential development. The share of the cost that should be paid for by each specific development may be calculated in a number of different ways. Ideally, each development should pay for fire and rescue facilities in proportion to the need for service that it will generate. Although the majority of the calls for service are for emergency medical services, fire suppression equipment demands the largest amount of facility space. Since a major benefit of fire suppression services is the protection of property and the reduction in damages during fire incidents, property values offer a reasonable method by which to distribute the costs for fire protection facilities. This method may not distribute facilities costs in exact proportion to the amount of facility space needs created by each specific development. However, impact fees need only be distributed generally in proportion to expected use of the facilities; therefore the use of property values is sufficiently precise for purposes of determining the appropriate amounts for impact fees.

Table 54 shows the projected incremental increase in the number of residential units and square feet of commercial, industrial and institutional buildings through 2020, and the estimated value of improvements per dwelling unit or per square foot of building space. The cost of fire station facilities attributable to the need to serve new development was allocated to each type of land use according to the percentage share of the value of improvements to be generated by each land use category. Approximately 28 percent of the total cost were allocated to residential development, while 21 percent was allocated to commercial development, 30 percent to industrial development, and 21 percent to institutional development.

The total amount allocated to each land use type was then divided by the projected increase in development to determine the appropriate impact fee per unit of development. As shown in Table 55, it is recommended that the City impose impact fees in the amount of $115 per single-

Table 53
Fire and Rescue Facilities Needs Assessment
Allocation of Capital Costs for Fire Stations No. 2, No. 3 and No. 4

	Total Cost	Percent Allocated to Future Growth	Cost Allocated to Future Growth
Station No. 2	$1,443,700	41.7	$601,920
Station No. 3	$1,650,167	50.5	$833,354
Station No. 4	$960,447	18.0	$172,881
Total Allocated Cost	$4,054,315	39.7	$1,608,155

Table 54
Fire and Rescue Facilities Needs Assessment
Allocation of Fire Facilities Costs to New Development by Land Use Category

	Incremental Development	Value per Unit	Total Incremental Value of Improvements	Percent of Total Incremental Value	Allocated Share of Future Growth Costs
Residential					
Single-family dwelling units	3,378	$160,000	$540,542,464	24.2	$389,189
Two-family dwelling units	443	$80,000	$35,432,320	1.6	$25,511
Multi-family dwelling units	1,032	$40,000	$41,266,500	1.8	$29,712
Commercial (SF)	6,791,113	$70	$475,377,903	21.3	$342,270
Industrial (SF)	27,169,940	$25	$679,248,504	30.4	$489,057
Institutional (SF)	9,233,814	$50	$461,690,698	20.7	$332,416
Total			$2,233,558,389	100.0	$1,608,155

Table 55
Fire Facilities Needs Assessment
Computation of Recommended Impact Fees by Land Use Category

	Allocated Share of Future Growth Costs	Incremental Future Development	Units	Recommended Fee per Unit
Residential				
Single-family dwelling units	$389,189	3,378	d.u.	$115.00
Two-family dwelling units	$25,511	443	d.u.	$58.00
Multi-family dwelling units	$29,712	1,032	d.u.	$29.00
Commercial	$342,270	8,358,293	s.f.	$0.041
Industrial	$489,057	39,245,469	s.f.	$0.012
Institutional	$332,416	9,233,814	s.f.	$0.036
Total	$1,608,155	56,842,429		

family dwelling unit, $58 per two-family dwelling unit, and $29 per multi-family dwelling unit. The recommended fire and rescue facilities impact fees for nonresidential development are $0.041 per square foot of commercial development, $0.012 per square foot of industrial development, and $0.036 per square foot of institutional development.

CAPITAL FACILITIES PLAN

As previously described, the new Fire Station No. 2 was recently completed and is currently occupied by the Fire Department. If no progress can be made regarding a joint fire station in the northwest corner within the next few years, the City should begin planning for a new station to address response times to that area. Based on the forecast population growth by 2010, the Fire Department would need to increase its staff by three on-duty firefighters per day by that time. This level of staffing would bring each of the existing stations to its capacity. Therefore, the City should plan to acquire land and begin planning for a new Fire Station No. 3 to be constructed by about 2010. A preliminary capital facilities plan for new fire station facilities is set forth in Table 56.

The need for fire and rescue facilities should continue to be monitored in the future to respond to any significant changes in the patterns of development and population growth, or to changes in the manner in which services are provided. For example, if the City of Franklin were to develop cooperative service agreements or consolidate fire and rescue services with Hales Corners or Greendale, the facility space needs, and therefore the need for impact fees, could be different than the recommendations presented in this report.

RECOMMENDATIONS

It has been determined that the new Fire Station No. 2, the proposed future relocated Fire Station No. 3, and the proposed Fire Station No. 4 in the northwest corner, in addition to remedying existing deficiencies in fire and rescue services facilities, would provide sufficient space to accommodate future expansions of the Department through 2020. Of the total space at the new and proposed facilities, approximately 39.7 percent, will be needed to serve demands for fire and rescue services created by new development. Therefore, approximately 39.7 percent or $1,608,200 million could be collected from new development through the imposition of impact fees.

Based upon the proportionate share of the demand for fire and rescue services to be generated by each category of development, it is recommended that impact fees be imposed on new development in the amounts shown in Table 55.

Table 56
Fire Facilities Needs Assessment
Capital Facilities Plan

Project	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Fire Station No. 2	$1,443,700									
Fire Station No. 3					$375,000					$1,275,167
Fire Station No. 4						$960,447				
Total [1]	$1,443,700	$0	$0	$0	$375,000	$960,447	$0	$0	$0	$1,275,167
Impact Fee Share	$601,920				$189,379	$172,881				$643,974
Net to be Financed	$841,780	$0	$0	$0	$185,621	$787,567	$0	$0	$0	$631,193

Note:
1. All costs in terms of constant 2002 dollars.

CHAPTER EIGHT:
STORM WATER MANAGEMENT FACILITIES NEEDS ASSESSMENT

INTRODUCTION

In 1993, a comprehensive storm water management plan was completed for the City of Franklin by Bonestroo, Rosene, Anderlik & Associates, Inc. This plan analyzed storm water management on a regional basis throughout the City, and recommended a system of storm sewerage facilities and storm water management practices to be undertaken by the City. However, since 1993, the City has managed storm water through site-specific assessments of storm water management needs and by requiring developers to install the necessary facilities.

In 2002, Bonestroo, Rosene, Anderlik & Associates, Inc. completed the "City of Franklin Storm Water Management Plan Update – 2002". This plan recommended that the City continue to follow its practice of requiring developers to install storm water management facilities for each particular site. The plan included an inventory of all engineered storm water facilities throughout the City, and modeled the pollutant loadings in storm water runoff from each of the City's fifteen watersheds to determine the types of water quality management efforts that were needed. Rather than recommending a system of improvements to be constructed by the City, the plan update recommended criteria to be applied to new development to determine the facilities and practices needed to manage storm water quality and quantity from each site.

CONCLUSIONS AND RECOMMENDATIONS

Wisconsin Statutes stipulate that impact fees may only be used to pay for the proportionate share of the capital cost of public facilities required to serve new development as compared to existing uses. The recommended practice of requiring developers to install all storm water management facilities needed to handle runoff from new development means that no new public storm water facilities will be required to serve new development. Any storm water facilities that the City replaces or repairs would be considered facilities required to serve existing uses. Therefore, there are no anticipated storm water facilities capital costs that would be eligible for recovery through impact fees under Wisconsin Statutes 66.0617. It is recommended that the City of Franklin not impose an impact fee for storm water management facilities at this time. If the City changes its policy regarding the responsibility for storm water management facilities in the future, then it may become appropriate to charge impact fees.

CHAPTER NINE:
WATER FACILITIES NEEDS ASSESSMENT

INTRODUCTION

The Franklin Water Utility operates and maintains municipal water supply and distribution system that serves approximately 69 percent of the population of the City. The primary source of supply for the Utility is treated Lake Michigan water purchased from the Oak Creek Water and Sewer Utility. The initial Comprehensive System Plan for Lake Michigan Water Supply for the City of Franklin was completed in 1992 and was subsequently updated in 1994. This report recommended a plan of water system improvements needed to meet the projected water demands of the City of Franklin through 2020 using treated Lake Michigan water supplied by the Oak Creek Water and Sewer Utility. The Franklin Water Utility became a wholesale water customer of the Oak Creek Water and Sewer Utility in 1996. A portion of the City of Franklin is supplied directly by the Oak Creek Utility as retail customers.

In response to significant increases in water demand, the City of Franklin retained Kaempfer and Associates, Inc. to perform a new water system study to recommend water system improvements needed through 2020 and to supply ultimate buildout of the City. This study and the report were completed in May 2000. The water system study report, entitled "Water System Study: Project Report", contained an inventory of existing conditions in the study area, the City's existing water supply system, and past and present water use. Future residential and nonresidential development and the associated water demand were forecast for 2020 and ultimate buildout conditions. The adequacy of the City's existing water system was evaluated with respect to its capacity to supply the future water demand, and a plan of needed water system improvements was recommended. The report recommended several projects to remedy existing deficiencies in the system, as well as four future phases of projects needed to provide capacity for anticipated future increases in demand. The City is currently in the process of constructing the Phase I improvements to its water system, which are expected to be completed in 2002.

This impact fee study relied on the Water System Study as a source of data for the analyses used to determine the proportionate share of water system capital costs required to serve new development as compared to existing uses. Although the Water System Study analyzed the system and recommended needed improvements to provide adequate water supply for the ultimate buildout conditions, this impact fee study only considered water system improvements needed to meet demand through the year 2020. The authorizing impact fee statute stipulates that impact fees that are collected but not used for the facility for which they were collected within a reasonable period of time must be refunded to the current owner of the property. As it is uncertain when the water service area will reach full buildout conditions, it was determined that this needs assessment should include only those improvements expected to be needed within the next twenty years.

INVENTORY OF EXISTING FACILITIES

This inventory of existing facilities describes water system facilities as they existed as of the date of the Water System Study.

Pressure Zones

The City of Franklin is divided into three pressure zones, the East Pressure Zone, the West Pressure Zone and the Intermediate Pressure Zone. The Intermediate Pressure Zone, located centrally in the City, serves the Parkview North and Parkview South subdivisions. The East Pressure Zone serves the area east of the Root River and a small portion of the City on 68th Street west of the Root River. The West Pressure Zone serves the area west of the Root River.

Wells

As previously described, the primary source of supply for the Franklin Water Utility is water purchased from the Oak Creek Water and Sewer Utility. However, the Utility still maintains several active wells that serve as a supplementary source of supply for emergency conditions. Table 57 shows the inventory of active wells and the supply capacity of each well. As of the date of the Water Supply Study, Well Stations No. 1 and 9 supplied water to the East Pressure Zone. Well Stations No. 5, 7, 8, 10, and 11 supplied water to the West Pressure Zone.

Booster Pump Stations

Water supply under normal conditions is provided to the City of Franklin from the Oak Creek Water and Sewer Utility through three booster pump stations. An inventory of booster pump stations serving the City, and the pump capacity of each, is shown in Table 58. The Rawson Avenue Booster Pump Station and the Ryan Road Booster Pump Station supply water to the upper pressure zone of Oak Creek and the East Pressure Zone of Franklin. The Rawson Avenue Booster Pump Station has a capacity of approximately 7.8 million gallons per day (MGD), while the Ryan Road Booster Pump Station has a capacity of approximately 9.1 MGD. The Drexel Avenue Booster Pump Station supplies water from the East Pressure Zone to the West Pressure Zone and has a capacity of approximately 3.0 MGD.

Storage

Water system storage is provided by ground storage reservoirs located at four of the wells and by one elevated storage tank. Table 59 shows the inventory of the existing storage facilities as of the date of the Water System Study. The reservoir located at Well Station No. 1 provides storage for the East Pressure Zone. The reservoirs located at Well Stations No. 7, 8, 10, and 11, as well as the Elevated Storage Tank, supply storage volume for the West Pressure Zone. In total, the Utility has approximately 1.268 million gallons of water system storage volume.

Distribution System

The water distribution system serving the City of Franklin includes both distribution main owned by the Franklin Water Utility, and distribution main owned by the Oak Creek Water and Sewer Utility in the portions of the City served as retail customers of Oak Creek. As shown in the inventory of the distribution system in Table 60, the City is served by approximately 546,600 feet of water distribution main, the majority of which is owned by the City of Franklin. Most of the water main is eight or twelve inches in diameter.

Table 57
Water Facilities Needs Assessment
Inventory of Existing Water Supply Facilities

Facility	Well Pump Capacity (gpm)	Booster Pump Capacity (gpm)
Active Wells		
No. 1 [(1)]	200	700
		700
		700
No. 5	1200	--
No. 7	700	300
		600
		900
No. 8	1000	500
		500
		500
No. 9	600	--
No. 9a	20	--
No. 10	490	600
		600
		600
No. 11	200	550

Source: *Water System Study Report*, Kaempfer & Associates, May 1999

Table 58
Water Facilities Needs Assessment
Inventory of Existing Booster Pump Stations

Facility	Booster Pump Capacity (gpm)	Total Pump Station Capacity (MGD)
Rawson Avenue	1,800	
	1,800	
	900	
	900	7.776
Ryan Road	1,575	
	1,575	
	1,575	
	1,575	6.804
Drexel Avenue	1,400	
	700	3.024
Total Capacity (MGD)	13,800	19.872

Source: *Water System Study Report*, Kaempfer & Associates, May 1999

Table 59
Water Facilities Needs Assessment
Inventory of Existing Storage Facilities

Facility	Storage Volume (MG)
Well No. 1 Reservoir	0.250
Well No. 7 Reservoir	0.166
Well No. 8 Reservoir	0.080
Well No. 10 Reservoir	0.157
Well No. 11 Reservoir	0.115
Elevated Storage Tank	0.500
Total (MGD)	1.268

Source: *Water System Study Report* , Kaempfer & Associates, May 1999

Table 60
Water Facilities Needs Assessment
Inventory of Existing Distribution System: 1998

Diameter (inches)	*City of Franklin*		*Oak Creek Retail Service Area*		*Total*	
	Length (ft)	Percent of Total	Length (ft)	Percent of Total	Length (ft)	Percent of Total
4	190	0.05	2,689	1.99	2,879	0.53
6	33,039	8.03	16,095	11.93	49,134	8.99
8	195,696	47.54	62,917	46.63	258,613	47.31
12	109,106	26.50	38,992	28.90	148,098	27.10
16	64,900	15.77	14,225	10.54	79,125	14.48
20	8,730	2.12			8,730	1.60
Total	411,661	100.00	134,918	100.00	546,579	100.00

Source: *Water System Study Report*, Kaempfer & Associates, May 1999

Table 61
Water Facilities Needs Assessment
Existing and Projected Average Daily Water Use and Demand:
2000 through 2020

Year	Population [1]	Average Daily Water Use (MG)				Unaccounted [4]	Total Water Used
		General Use [2]	Industrial Use	MCHC[3]	Total Use		
2000	20,000	1.600	0.100	0.100	1.800	0.450	2.250
2010	30,000	2.400	0.225	0.125	2.750	0.688	3.438
2020	40,000	3.200	0.400	0.150	3.750	0.938	4.688

Source: *Water System Study Report*, Kaempfer & Associates, May 1999

1) Projected population in the water service area.
2) Includes residential, commercial and public use.
3) Milwaukee County House of Corrections.
4) Estimated to be 20 percent of total demand.

IDENTIFICATION OF EXISTING DEFICIENCIES

Wisconsin Statutes section 66.0617 requires that a public facilities needs assessment identify any existing deficiencies in the system of public infrastructure, in order that the capital costs to remedy such deficiencies may be excluded from the amount to be recovered through impact fees. The 2000 Water System Study Project Report did identify some existing deficiencies in the Franklin Water System.

Current and Future Water Demand

In order to quantify the existing deficiencies, it was first necessary to quantify the existing demand for water supply services. Approximately 69 percent of the City was served with public municipal water in 1998. The estimated population of the water service area was 20,000 in 2000, and is projected to increase to 30,000 by 2010, 40,000 by the year 2020, and 50,000 by the time the City is completely built out.

There are three measurements of water demand for which a water supply and distribution system must be designed. Average day demand is the total amount of annual water demand, divided by 365 days, and represents the typical volume of water that the system has to supply during any given 24-hour period. Maximum day demand is the maximum amount of water demanded over a 24-hour period during any given period of time. Maximum day demand typically occurs during the summer, when customers use more water for watering lawns, washing cars and other similar activities. Peak hour demand is the maximum amount of water demanded over a one-hour period during any given period of time, expressed in terms of the number of gallons per day that would be demanded if the peak hour demand lasted for 24 hours.

The Water System Study used historical water usage data from 1989 to 1998 to develop water use and demand assumptions for purposes of recommending a system of improvements to the water system. Table 61 shows the computation of the average day water demand for the years 2000, 2010 and 2020. The General Use category includes water used by the resident population, and by commercial and institutional customers. Based on historical water consumption data, it was determined that water use by these three classes of customers is generally proportionate to the resident population, and that total water use by these customer classes averages approximately 80 gallons per day per person. Based on the anticipated future development of industrial land in the City, the Water System Study projected significant increases in industrial water demand, from 100,000 gallons per day in 2000, to 225,000 per day in 2010 and 400,000 gallons per day in 2020. Likewise, the Study projected increases in water use by the Milwaukee County House of Corrections, to 125,000 gallons per day by 2010, and 150,000 gallons per day by 2020. Unaccounted for water is water that is pumped, but is not sold to a customer. It may be unaccounted due to inaccurate meters, water leaks, water used to flush water mains, or other miscellaneous uses. The Franklin Water Utility has historically had about 15 percent of its water unaccounted for, on average. For future projections of water demand, it was assumed that 20 percent of the water produced would be unaccounted for. As shown in the Table, total average day water demand is projected to be 2.25 million gallons per day (MGD) in 2000, 3.438 MGD in 2010 and 4.688 MGD in 2020.

Water consumption records were also analyzed to determine the typical ratio of maximum day demand to average day demand. Over the time period from 1989 to 1998, the maximum day demand was, on average, approximately 2.4 times the average day demand. In order to provide a conservatively high projection of future water demand, the Water System Study assumed that future maximum day demand would be 2.5 times the amount of average day demand. Similarly, peak hour demand was assumed to 4.75 times the amount of average day demand, based on historical water consumption records. As shown in Table 62, maximum day demand was projected to be 5.625 MGD in 2000, increasing to 8.594 MGD in 2010, and to 11.719 MGD by 2020. Peak hour demand was assumed to be 10.688 MGD in 2000, increasing to 16.328 MGD in 2010 and 22.268 MGD in 2020.

Existing Deficiencies

The Water System Study developed criteria for each component of the water system to assess the adequacy of the existing system and the need for system improvements to meet the projected average day, maximum day and peak hour water demands.

The Study examined the current layout of the pressure zones and the maximum and minimum water pressures provided throughout each pressure zone. The desirable water pressure ranges from a minimum of 45 pounds per square inch (psi) to a maximum of 85 psi, and is governed by the elevation of the water reservoir or storage tank relative to the elevation of the area served. In order to provide desirable water pressures throughout a pressure zone, the elevation of the area served should not vary by more than 90 feet. Based on the existing water pressures supplied by the system, and the elevations of the areas served, the Study proposed two alternative plans for water system improvements—one that would have kept the existing pressure zone boundaries, and one that would move the boundary between the East and West pressure zones two miles further west. These plans were referred to as Alternative A and Alternative B, respectively. Plan B was selected as the recommended alternative because it would provide the most desirable range of water pressures over the entire City, provide a more reliable system with a lower probability of simultaneous failure of system components, and would have lower costs than Alternative A. This recommended change in the boundaries of the pressure zones has two important implications for this impact fee study. First, since this change was recommended in order to provide better service for existing Water Utility customers, any facilities needed to implement the change in pressure zones were considered necessary to remedy existing deficiencies. Second, the proportionate share of facilities needed to meet future demand as compared to existing demand were analyzed separately for the East and West Pressure Zones as defined under Alternative B. One of the basic criteria for design of the system was the desired combination of supply capacity and storage capacity. It was determined that the most economical combination of production capacity and storage volume would be production capacity sufficient to supply the maximum day demand, plus storage volume sufficient to supply demands in excess of maximum day demand. Since the Water Utility uses its wells only for supply in case of emergency, the production capacity of the system under normal conditions is the capacity of the booster pump stations. Therefore, the booster pump stations need to have sufficient capacity to pump the maximum day demand in order to meet the criterion described above. Table 63 shows the maximum day demand for 2000 through 2020 for each pressure zone

Table 62
Water Facilities Needs Assessment
Existing and Projected Average Daily, Maximum Daily, and
Peak Hour Water Demand: 2000 through 2020

Year	Population [1]	Average Day Demand (MGD)	Maximum Day Demand (MGD)	Peak Hour Demand (MGD)
2000	20,000	2.250	5.625	10.688
2010	30,000	3.438	8.594	16.328
2020	40,000	4.688	11.719	22.268

Source: *Water System Study Report*, Kaempfer & Associates, May 2000

Table 63
Water Facilities Needs Assessment
Existing and Future Booster Pump Capacity Requirements

	East Pressure Zone			West Pressure Zone		
Year	Production Capacity Needed (MGD)	Existing Capacity (MGD) [1]	Excess/ (Deficiency) (MGD)	Production Capacity Needed (MGD)	Existing Capacity (MGD) [2]	Excess/ (Deficiency) (MGD)
2000	4.220	14.580	10.360	1.405	3.024	1.619
2010	6.447	14.580	8.133	2.147	3.024	0.877
2020	8.815	14.580	5.765	2.935	3.024	0.089

1) Capacity supplied by the Ryan Road and Rawson Road Booster Pump Stations.
2) Capacity supplied by the Drexel Avenue Booster Pump Station.

Table 64
City of Franklin Water Impact Fee Study
Existing and Future Water Storage Requirements

	East Pressure Zone				West Pressure Zone			
Year	Equalizing Volume (MG) (1)	Total Volume Needed (MG) (2)	Existing Storage (MG) (3)	Excess/ (Deficiency) (MG)	Equalizing Volume (MG) (1)	Total Volume Needed (MG) (2)	Existing Storage (MG) (4)	Excess/ (Deficiency) (MG)
2000	1.055	1.583	0.330	(1.253)	0.351	0.527	0.938	0.411
2010	1.612	2.418	0.330	(2.088)	0.537	0.805	0.938	0.133
2020	2.204	3.305	0.330	(2.975)	0.734	1.101	0.938	(0.163)

Source: *Water System Study Report*, Kaempfer & Associates, May 1999
1) Equal to 25 percent of the maximum day demand.
2) Equal to 150 percent of the equalizing storage volume.
3) Supplied by the ground storage reservoirs at Well No. 1 and Well No. 8.
4) Supplied by the ground storage reservoirs at Well No. 7, Well No. 10, Well No. 11 and the Elevated Storage Tank.

under Alternative B, the amount of booster pump capacity available in the existing system, and the projected excess or deficiency in capacity. As demonstrated in the table, the water system has sufficient booster pump capacity to supply the maximum day water demand through 2020.

The amount of storage volume necessary in the distribution system is determined by the amount of water needed to provide equalizing storage necessary to meet peak hourly demands; provide fire storage to meet fire flow requirements; provide operating storage for control of pumps; and provide emergency storage for system failures. The volume of equalizing storage needed is dependent on the characteristics of water demand on the system under consideration. The volume of water demanded throughout the day varies each hour—the volume of equalizing storage represents the total volume of water that would be needed to meet varying hourly demands over the course of a day if supply to the system were at a constant rate equivalent to the average daily consumption on the maximum day. Based on historical consumption records, it was determined that the amount of equalizing storage volume needed for the Franklin Water Utility is approximately 25 percent of the maximum day demand. The total volume of storage needed, including storage for fire flow demands, operating storage and emergency storage, was determined in the Water System Study, to be 150 percent of the equalizing storage volume. Water storage is supplied by the ground reservoirs located at several of the active wells and by the elevated storage tank. Table 64 shows the amount of storage needed for 2000 through 2020 for the East and West pressure zones, as defined under Alternative B; the amount of current available storage; and the projected excess or deficiency in storage capacity. As shown in the table, there is an existing deficiency of approximately 1.25 MG of storage capacity in the East Pressure Zone, and an excess of approximately 0.41 MG of storage capacity in the West Pressure Zone.

The design criteria used to evaluate the system of water transmission and distribution mains were that the mains be sized to carry the peak hourly demand or the average demand on the maximum day plus the projected fire flow demand, whichever is greater. The capacity of the system was evaluated, and improvements were recommended, using a computer model of the existing system that was tested against the anticipated water demands in 2000, 2010 and 2020. The determination of the location and size of the needed improvements were based on the water demand projections shown in Table 62 and additional criteria for the size and configuration of water mains to serve particular types of land development. These criteria included the following: the entire distribution system should be looped, wherever possible; industrial areas should be served with 16-inch or 12-inch diameter primary distribution mains spaced 1,200 feet apart; commercial areas should be served with 12-inch primary distribution mains space 1,200 feet apart; and residential areas should be served with a grid of 12-inch diameter primary distribution mains on 2,400-foot centers and 8-inch diameter mains on 1,200-foot centers. Based on the computer modeling of the existing system, the Water System Study report recommended a number of water main improvements needed to implement the change in the pressure zone boundary, to complete transmission loops in areas serving existing water utility customers and increase the capacity of water mains to serve existing customers. Since these improvements were needed to serve existing customers, they were considered existing deficiencies for purposes of determining the appropriate amount of a water facilities impact fee.

DESCRIPTION OF RECOMMENDED FACILITIES AND COSTS

As previously noted, the Water System Study proposed two alternative plans for water system improvements. The recommended alternative, and the alternative selected for implementation by the City of Franklin, was Alternative B, which included moving the boundary of the East Pressure Zone approximately two miles to the west. The Water System Study recommended a number of improvements to the system in order to meet current and future water demands through ultimate buildout conditions. These improvements were recommended to implement the pressure zone boundary change to provide better service; to provide additional water mains; to supply current and future water demand; to increase water storage volume for current and future needs; and to increase booster pump station capacity. Although the Study analyzed water demand and facilities needs through ultimate buildout conditions, this impact fee study considered only those improvements needed to meet water demand through the year 2020.

All of the water system improvements recommended in the Study are depicted on Map 5. The description, estimated cost and anticipated year of construction of each of the recommended improvements through 2019 is shown in Table 65. The first phase of improvements, recommended for completion in 2000, includes the construction of a 2.0 MG elevated storage tank in the vicinity of the southeast corner of the intersection of West Puetz Road and South 76th Street and the construction of several segments of transmission main. Segment T-1B would be constructed to complete the transmission loop to the proposed elevated storage tanks at South 76th Street. Segment T-2B would be constructed to complete the transmission loop from South 51st Street to South 68th Street. Segments T-3B and T-4B would be constructed to complete the transmission loop from Golden Lake Way to the proposed elevated storage tanks. Segments T-5B, T-6B, T-7B and T-8B would be constructed to eliminate dead-end mains created by the shifting of the pressure zone boundary and provide looping of transmission mains needed to supply the proposed elevated storage tank on Puetz Road. Segment T-9B would be constructed to connect the transmission main on St. Martins Road to the Drexel Avenue Elevated Storage Tank. The Phase I improvements constitute the total improvements that would be needed to remedy all existing deficiencies in the water system and provide some excess storage capacity to accommodate future development.

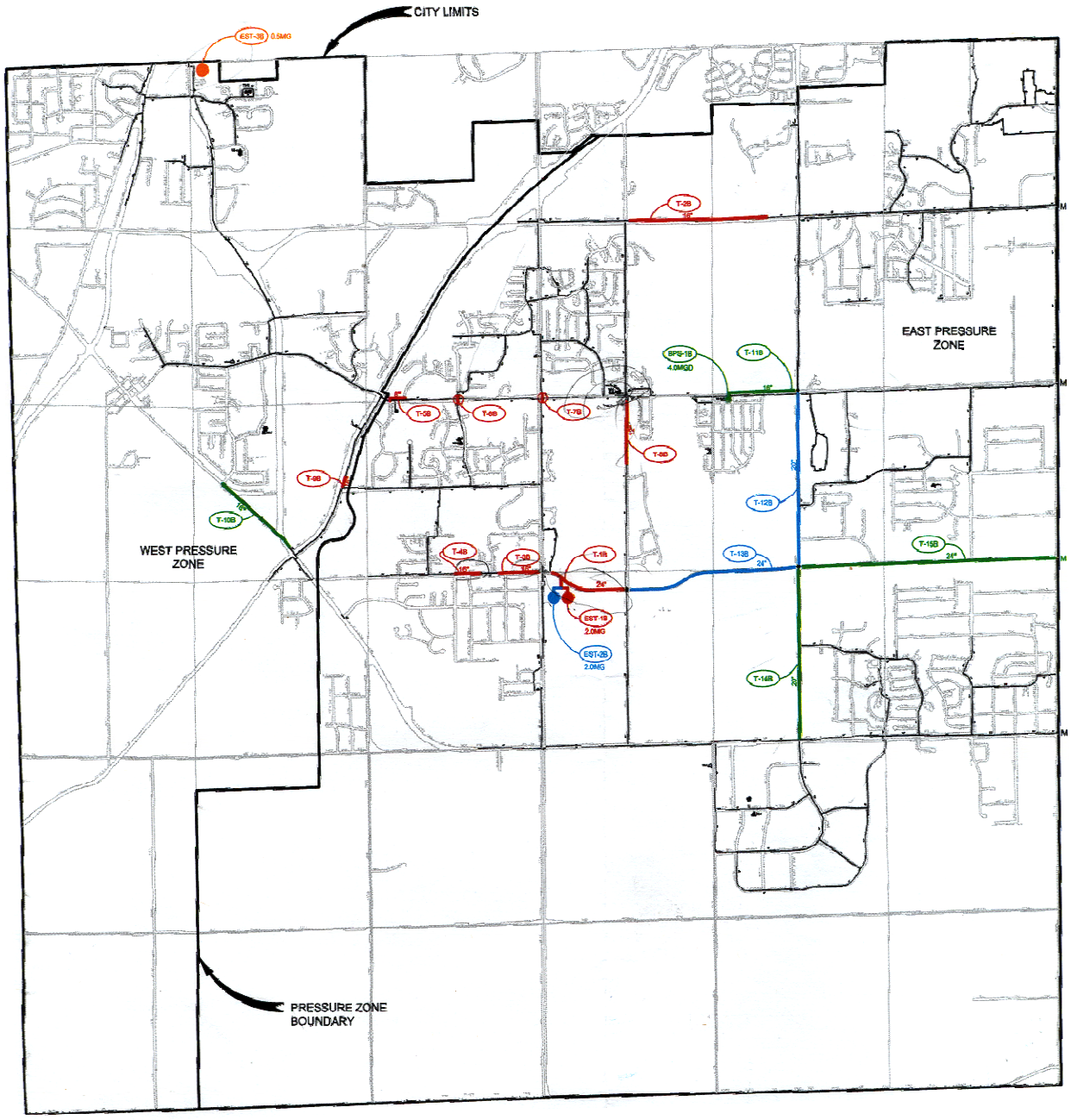
In addition to the transmission mains recommended in the Water System Study, the City also reimburses developers for a portion of the cost of developer installed water mains that are oversized to accommodate future development. The City requires all developers to extend water main to and through their development. The developer installs the water main and, if the water main is greater than 8 inches in diameter, the City reimburses the developer for the difference in cost between the actual water main installed and the cost of an equivalent length of 8-inch diameter water main. Several such projects have been completed recently or are planned for the near future. The amounts that the City is already under contract for, the estimated amounts that the City will contract for recently completed projects, and the estimated future City responsibility through 2020 are shown in Table 65. Although the exact amount of future oversize costs are not known at this time, recent trends indicate that they can be conservatively projected at an average of $100,000 per year.

RM811PB

MAP 5

RECOMMENDED WATER SYSTEM IMPROVEMENTS

CITY OF FRANKLIN
MILWAUKEE COUNTY, WISCONSIN



LEGEND

- STAGE 1 2000-2001
- STAGE 2 2009-2010
- STAGE 3 2015
- STAGE 4 2019-2021
- 12" WATER MAIN
- 16" WATER MAIN
- 20" WATER MAIN
- BOOSTER PUMP STATION
- ELEVATED STORAGE TANK
- GROUND STORAGE RESERVOIR WITH BOOSTER PUMP STATION
- VALVE STATION
- WELL STATION
- ABANDONED WELL STATION
- M METER STATION

N W E S

0 1250 2500 5000
SCALE IN FEET

City of Franklin

SOURCE: KAEMPFER ASSOCIATES, INC.

Ruekert·Mielke
engineering solutions for a working world

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Table 65
Water Facilities Needs Assessment
Recommended Water Facility Improvements

Item	Description	Cost [2]	Year
Phase I			
EST-1B	2.00 MG Elevated Storage Tank	$2,499,186	2000
T-1B [1]	2500' -24"Diameter W. Puetz Road	$388,670	2000
T-2B [1]	4200' -16"Diameter W. Rawson Road	$317,200	2000
T-3B	1200' -16"Diameter W. Puetz Road	$124,631	2000
T-4B	800' -16"Diameter W. Puetz Road	$436,366	2000
T-5B	800' -16"Diameter W. Drexel Road	$38,503	2000
T-6B	100' -16"Diameter W. Drexel Road	$10,395	2000
T-7B	100' -16"Diameter W. Drexel Road	$10,395	2000
T-8B	2000' -12"Diameter S. 68th Road	$161,224	2000
T-9B	800' -16"Diameter W. Loomis Road	$83,158	2000
Additional - Not in Water Study	5300' - 12" Diameter W. Drexel Road	$397,573	2002
Water Main Oversize Costs			
Group II Communication Bldg.		$14,976	2000
Kaitlin Woods		$24,267	2000
Loomis at Forest Hill		$38,652	2000
Victory Creek		$11,864	2001
S. 68th / Drexel		$3,014	2001
Barbian Estates		$11,964	2001
Franklin Square		$130,815	2001
Autumn Park		$25,518	2001
Imperial Heights West		$265,800	2002
W-B Company		$292,301	2002
Future Oversizing Costs [3]		$1,800,000	2003-2020
Phase II			
EST-2B	2.00 MG Elevated Storage Tank	$2,499,186	2009
T-12B	5200' -20"Diameter S. 51st Street	$694,112	2009
T-13B	5200' -24"Diameter W. Puetz Road	$785,968	2009
Phase III			
EST-3B	.50 MG Elevated Storage Tank	$882,066	2014
Phase IV			
T-14B	5200' -20"Diameter S. 51st Street	$694,112	2019
T-15B	8000' -24"Diameter W. Puetz Road	$1,209,181	2019
Total		$13,851,096	2020

Source: *Water System Study Report*, Kaempfer & Associates, May 2000

1) Actual estimate of costs as of January 30, 2002.
2) All costs expressed in 2002 dollars.
3) Estimated at $100,000 per year based on historical data supplied by the City Engineer.

The second phase of improvements, recommended for completion in 2009, includes the construction of a second 2.0 MG elevated storage tank in the vicinity of the southeast corner of the intersection of West Puetz Road and South 76th Street, and two more segments of transmission main. Segments T-12B and T-13B would be constructed to provide a transmission main from the elevated storage tanks on West Puetz Road to the Drexel Avenue Booster Pump Station.

The third phase of improvements, recommended to be completed in 2014, includes the construction of a 0.50 MG elevated storage tank in the vicinity of the southeast corner of West College Avenue and South Lovers Lane Road. This tank will provide the additional storage volume needed in the West Pressure Zone to meet 2020 and ultimate water demands.

The fourth phase of improvements, recommended for completion in 2019, includes the construction of two additional segments of transmission main. Segment T-14B would be constructed to complete the transmission loop from West Puetz Road to West Ryan Road to serve the industrial park south of West Ryan Road. Segment T-15B would be constructed to provide a transmission main from the proposed meter station to the 20-inch diameter transmission main on South 51st Street that serves the Drexel Avenue Booster Pump Station and the 24-inch diameter transmission main on West Puetz Road that serves the East Pressure Zone elevated storage tanks.

In total, the estimated cost of recommended improvements to the water system through the year 2020 is $13,851,096. The improvements would be staged in response to actual demands in the water system, the schedule shown in Table 65 is the anticipated timing of the need for the projects. The City is currently constructing the Phase I improvements, which are expected to be completed in 2002.

ALLOCATION OF COSTS

As determined by the previous analyses, the recommended water system improvements are needed in part to accommodate future increases in water demand. This expansion of water system capacity will be needed in order to continue to offer an adequate level of service as new development occurs in the City. Therefore, a portion of the cost of these facilities may be charged to new development through the imposition of a water facilities impact fee.

Wisconsin Statutes state that a municipality may only charge new development for the proportionate share of the new or expanded facilities required to serve new development. Therefore, the costs of water system improvements must be divided into the proportionate share attributable to the need to serve existing customers and the share attributable to the need to provide excess capacity to accommodate future development. This allocation was determined based upon the deficiencies identified in the existing system relative to its capacity to serve existing development.

As described in the preceding sections, the City of Franklin water system has three primary deficiencies. First, the system does not provide water pressure within the desirable range of 45 psi to 85 psi with the existing, as of the date of the Water System Study, pressure zone boundaries. Water utility customers would be better served by moving the boundary between the

East Pressure Zone and the West Pressure Zone two miles to the west. There are also several locations where transmission mains are not looped as recommended by sound water system design practice. The Study recommended several transmission main segments that would be needed to implement the pressure zone boundary changes or complete transmission loops. Finally, there is an overall shortage of storage volume to meet peak hour demands plus fire flow, operating control and emergency operating storage. With the recommended change in the pressure zone boundaries there would be a deficiency in the amount of water storage available to serve the East Pressure Zone and slight excess in the amount of storage available to serve the West Pressure Zone.

As previously described, the transmission main segments recommended for Phase I are needed either to implement the change in the pressure zone boundary in order to provide acceptable water pressures to existing customers, or to complete transmission loops to provide for improved system performance. Therefore, as shown in Table 67 the entire cost of all of these proposed projects should be considered attributable to existing deficiencies and should not be allocated to future growth costs.

The allocation of recommended additional storage volume is shown in Table 66. The existing deficiency in storage volume to serve the East Pressure Zone is 1.25 MG, as computed in Table 64. The Study recommends the construction of a 2.0 MG elevated storage tank as part of the Phase I improvements. Of this additional 2.0 MG of storage capacity, 1.25 MG, or 62.7 percent, is needed to remedy the existing deficiency, and the remaining 0.75 MG, or 37.4 percent, is excess storage capacity required to accommodate future development. Therefore, 62.7 percent, or $1,565,740, of the costs of this facility should be allocated to existing deficiencies and the remaining 37.4, or $933,446, should be allocated to the future growth share of costs, as shown in Table 67.

Upon completion of the Phase I projects, the water system will be adequate to serve existing customers and no additional improvements are anticipated to be required until 2009. Therefore, all additional improvements recommended for future phases were considered entirely attributable to the need to serve future development. As shown in Table 67, the entire cost of the improvements for Phases II, III, and IV were allocated to future growth costs. The oversizing of water mains is intended solely to provide excess capacity for anticipated future growth. Therefore, the entire cost of these improvements was allocated to future growth.

In total, of the $13,851,096 of improvements recommended for Phase I through Phase IV, $3,136,281, or 23 percent, was allocated to the need to remedy existing deficiencies, and $10,714,815, or 77 percent, was allocated to the need to accommodate future development.

RECOMMENDED IMPACT FEE SCHEDULE

As determined by the previous analyses, approximately $10,714,815 of the planned water system improvements can be attributed to the need to serve future development. Therefore, this portion of the cost of such facilities may be charged to development through the imposition of water facilities impact fees under Wisconsin Statutes 66.0617. In order to determine the appropriate amount of the fee, the total amount to be recovered must be allocated to the anticipated future development in the City.

Table 66
Water Facilities Needs Assessment
Allocation of Phase I Elevated Storage Capacity

	Storage Volume (MG)	Percent of Total
Existing Deficiency	1.253	62.7%
Capacity for Future Growth	0.747	37.4%
Total Additional Capacity	2.000	100.0%

Table 67
Water Facilities Needs Assessment
Allocation of Costs for Deficiency and Future Growth

Item	Description	Costs	Deficiency Share	Future Growth
Phase I				
EST-1B	2.00 MG Elevated Storage Tank	$2,499,186	$1,565,740	$933,446
T-1B	2500' -24"Diameter W. Puetz Road	$388,670	$388,670	$0
T-2B	4200' -16"Diameter W. Rawson Road	$317,200	$317,200	$0
T-3B	1200' -16"Diameter W. Puetz Road	$124,631	$124,631	$0
T-4B	800' -16"Diameter W. Puetz Road	$436,366	$436,366	$0
T-5B	800' -16"Diameter W. Drexel Road	$38,503	$38,503	$0
T-6B	100' -16"Diameter W. Drexel Road	$10,395	$10,395	$0
T-7B	100' -16"Diameter W. Drexel Road	$10,395	$10,395	$0
T-8B	2000' -12"Diameter S. 68th Road	$161,224	$161,224	$0
T-9B	800' -16"Diameter W. Loomis Road	$83,158	$83,158	$0
Additional Project	5300' - 12" Diameter W. Drexel Road	$397,573	$0	$397,573
Water Main Oversizes				
Group II Comm. Bldg.		$14,976	$0	$14,976
Kaitlin Woods		$24,267	$0	$24,267
Loomis at Forest Hill		$38,652	$0	$38,652
Victory Creek		$11,864	$0	$11,864
S. 68th / Drexel		$3,014	$0	$3,014
Barbian Estates		$11,964	$0	$11,964
Franklin Square		$130,815	$0	$130,815
Autumn Park		$25,518	$0	$25,518
Imperial Heights West		$265,800	$0	$265,800
W-B Company		$292,301	$0	$292,301
Future Oversizing [3]		$1,800,000	$0	$1,800,000
Phase II				
EST-2B	2.00 MG Elevated Storage Tank	$2,499,186	$0	$2,499,186
T-12B	5200' -20"Diameter S. 51st Street	$694,112	$0	$694,112
T-13B	5200' -24"Diameter W. Puetz Road	$785,968	$0	$785,968
Phase III				
EST-3B	2.00 MG Elevated Storage Tank	$882,066	$0	$882,066
Phase IV				
T-14B	5200' -20"Diameter S. 51st Street	$694,112	$0	$694,112
T-15B	8000' -24"Diameter W. Puetz Road	$1,209,181	$0	$1,209,181
Total		$13,851,096	$3,136,281	$10,714,815

The impact fees charged to each particular development should bear as close a relationship as possible to the need for new public facilities created by that development. In the case of water system facilities, the impact fee should be related to the expected amount of water demand that will be created by a particular development. This impact fee study considered two alternative methods for distributing the total amount of impact fees to be collected among different classes of water system users. The first alternative considered a fee based on the average demand for water of each new customer, expressed in terms of the number of residential equivalent connections (RECs). A residential equivalent connection is defined as the amount of water used during a given period by the average single-family residence. The second alternative considered a fee based on the meter size of each new connection to the system. The method of computing the proposed schedule of water facilities impact fees under each of these alternatives is described below.

Residential Equivalent Connections

A water impact fee defined in terms of an amount per REC divides up the future growth share of the costs on the basis of each new customer's share of the future increase in average day demand. The REC is a convenient unit for measuring customer demand since most new customers will be single-family residences, and the amount of water used can be expected to be relatively similar across the residential customer class. The expected water use of nonresidential customers can be expressed in terms of a number of RECs based on the amount of water demanded compared to the average single-family residence.

The first step to determining the amount of the fee per REC is to convert the incremental future water demand to the total number of RECs of demand. As shown in Table 68, the increase in average day demand between 2000 and 2020 is expected to be 1.95 MGD. From the Water System Study, the average day demand by residential customers was assumed to be 55 gallons per day per capita, or 169 gallons per day per household. Based on the above data, the future increase in average day demand amounts to an increase of 11,538 RECs.

Based on the future growth share of water system improvements of $10,714,815, the appropriate fee would be $929 per REC as shown in Table 69. A fee of $929 would be charged to each new single-family residential dwelling unit or two-family dwelling unit constructed. For nonresidential or multi-family construction, the total amount of the fee charged would be determined based on the anticipated water use. The average day use would be converted to the number of RECs by dividing the average day demand by 169 gallons. The fee of $929 per REC would be multiplied by the total number of assigned RECs to determine the total charge.

Meter Size

An alternative method of dividing the costs among individual users would be to calculate impact fees based on meter size. This method would essentially distribute the future growth share of the costs based on each new user's share of the total peak demand, as approximated by the size of the water meter installed for each connection. The size of the water meter that is required is determined by the uses and the number of fixtures installed in a building and is generally proportionate to the expected peak rate of water demand.

Table 68
Water Facilities Needs Assessment
Computation of Incremental Future Residential Equivalent Connections: 2000 through 2020

2020 Average Day Demand (gpd)	3,750,000
Less: 2000 Average Day Demand (gpd)	1,800,000
Incremental Average Day Demand (gpd)	1,950,000
Average Residential Water Use (gpd per connection) [(1)(2)(3)]	169
Incremental Residential Equivalent Connections	11,538

1) Average water use calculated in the *City of Franklin Water System Study, 2000.*
2) Includes City of Oak Creek retail customers.
3) Does not include the Milwaukee Co. House of Corrections

Table 69
Water Facilities Needs Assessment
Computation of Water Facilities Impact Fee per REC

Future Growth Share of Water System Costs	$10,714,815
Incremental Residential Equivalent Connections (RECs)	11,538
Impact Fee per REC	$929

The projection of the total number of new future connections, and the distribution of water meters by size among those new connections, requires several computations based on a number of assumptions. The major assumptions that were made in order to project the future number of connections and meter sizes were as follows: 1) the future distribution of meter sizes within each customer class would be essentially the same as the current distribution of meter sizes; and 2) new customers in each class would have average water demand per customer as existing customers.

Table 70 shows the existing nonresidential Water Utility customers in 1998 by customer class and meter size. The Utility served 610 commercial customers, including multi-family residential connections, 21 industrial customers, and 10 public customers.

The next step in computing the future number of new nonresidential connections is to estimate the average amount of water demand per connection for each customer class. Table 71 shows the computation of average water demand per connection for commercial, industrial and public customers. In 1998, commercial customers used an average of 571,717 gallons of water per day, of which 43,150 gallons per day was used by the five largest customers. The water used by the five largest customers was excluded from the computation since these customers use large amounts of water and are not representative of commercial customers as a class. The remaining 605 commercial connections had an average water demand of 874 gallons per day per connection. The computation of average water demand per industrial connection was determined based on the demand of the four largest industrial customers, as these customers were believed to be the most representative of the typical industrial customer. The Water System Study noted that water use by industrial customers in Franklin is considerably lower than industrial water use in other communities. Therefore, it was determined that the average demand of the four largest customers would be more representative than the average of the entire industrial customer class of the amount of water demand per connection that could be expected from future industrial connections. As shown in the table, the average water demand of these four customers is 17,675 gallons per day per connection. The average water demand of public customers is 9,675 gallons per day per connection, excluding the four largest customers.

The average demand per customer was next used to determine the number of new future nonresidential connections based on the projected total future increase in demand per customer class, as shown in Table 72. Since the Water System Study only projected water demand by customer class for ultimate build-out conditions, the projected demand was scaled back to a projection of 2020 demand per customer class based on the ratio of 2020 average day demand to ultimate average day demand. As computed in the table, the increase in water demand between 2000 and 2020 is expected to be 313,083 gallons per day for the commercial class, 336,854 for the industrial class, excluding one expected new major customer, and 83,747 gallons per day for public users. Based on the average demand per customer for each class, this incremental demand will be generated by 358 new commercial connections, 20 new industrial connections (19 smaller customers plus one major customer), and 9 new public customers.

From the Water System Study, the current number of residential customers, including single-family and two-family dwelling units, is approximately 4,528 units. The total ultimate number of single-family residential dwelling units expected to be served is 12,881. If this projection is

Table 70
Water Facilities Needs Assessment
Nonresidential Water Connections by Customer Class and Meter Size: 1998

	Commercial [1]		Industrial		Public	
Meter Size (inches)	No.	Percentage Share	No.	Percentage Share	No.	Percentage Share
1/2	5	1%	0	0%	0	0%
3/4	329	54%	8	38%	0	0%
1	123	20%	4	19%	0	0%
1 1/2	82	13%	5	24%	3	30%
2	50	8%	4	19%	7	70%
3	10	2%	0	0%	0	0%
4	2	0%	0	0%	0	0%
6	3	0%	0	0%	0	0%
8	6	1%	0	0%	0	0%
Total	610	100%	21	100%	10	100%

Source: *Water System Study Report* , Kaempfer & Associates, May 2000

1) Includes multi-family residential dwelling units.

Table 71
Water Facilities Needs Assessment
Average Daily Water Use per Connection: 1998

	Commercial	Industrial [1]	Public
Total Average Day Demand (gpd)	571,717	70,700	166,253
Less: Largest Customers (gpd)	43,150		108,204
Net Average Day Demand (gpd)	528,567	70,700	58,049
Total No. of Customers	605	4	6
Average Day Demand per Customer (gpd)	874	17,675	9,675

Source: *Water System Study Report* , Kaempfer & Associates, May 2000

1) Industrial use per customer based on 4 largest industrial customers.

Table 72
Water Facilities Needs Assessment
Incremental Future Connections: 2020

	Commercial	Industrial [1]	Public
Total Future Average Day Demand (gpd)	884,800	500,000	250,000
Less: Exist. Ave. Day Demand (gpd)	571,717	76,346	166,253
Incremental Future Demand (gpd)	313,083	423,654	83,747
Less: New Major Customer Demand (gpd)	-	86,800	-
Net Incremental Future Demand (gpd)	313,083	336,854	83,747
Average Day Demand per Customer (gpd)	874	17,675	9,675
Total Incremental Connections	358	20	9

1) One new major industrial customer anticipated.

scaled back to 2020 in proportion to the ratio of 2020 general use water demand to ultimate general use water demand, the projected number of single-family residences served in 2020 is 10,305, or an increase of 5,777 units.

These anticipated new connections were assumed to have meter sizes with a distribution similar to the existing distribution of meter sizes within each customer class, as shown in Table 73. As the City's current standard residential meter is a ¾-inch meter, all new residential customers were assumed to have ¾-inch meters. It was also assumed that there would be no new ½-inch meters in any customer class.

Since each meter size allows for a different rate of peak water use, a different impact fee must be computed for each meter size in proportion to the rate of peak capacity of the meter, relative to a basic unit of peak capacity. For purposes of determining the schedule of fees, the capacity of a standard ¾-inch residential water meter was used as the basic unit of peak capacity. In order to determine the amount of the fee to charge per ¾-inch meter, the incremental future connections were converted to an equivalent number of ¾-inch meters based on relative peak capacity, as shown in Table 74. A total of 6,164 new connections are expected from all customer classes, in the distribution shown in the table. The maximum safe operating capacity, in terms of gallons per minute, for each meter size is displayed in the table. The Residential Meter Equivalency Factor represents the operating capacity of each meter size as a multiple of the operating capacity of a ¾-inch meter. For example, an 8-inch meter has a capacity approximately 100 times that of a ¾-inch meter. The Residential Meter Equivalency Factor was multiplied by the number of meters in each size category to equate the number of future connections to an equivalent number of new residential connections. The expected new connections would equate to approximately 7,069 new residential connections, in terms of the peak rate of water demand. As shown in Table 75, the number of equivalent residential meters, divided into the future growth costs of $10,714,815, yields a cost of $1,516 per equivalent meter.

Table 76 displays the recommended water facilities impact fee per meter for each meter size. The recommended fee per ¾-inch meter is $1,516. All meters larger than the ¾-inch size would be charged a multiple of $1,516 based on the capacity of each meter compared to a ¾-inch meter, as shown in the table.

Comparison of the Alternative Methods and the Recommended Impact Fee Schedule

Two methods of determining the amount of the water impact fee have been presented above. These two methods were compared with respect to the fairness and ease of implementation of each method in order to select the recommended method.

The first method utilizes average demand to determine each new customer's share of the cost of water system facilities. It therefore distributes costs in proportion to each customer's overall level of water demand, rather than the amount of water demand at times of peak demand. Since the water facilities for which the impact fees are to be imposed—storage tanks and transmission mains—are designed on the basis of maximum day or peak hour demand, this method may not distribute costs in exact proportion to the demand for water facilities. In terms of ease of implementation, a fee based on RECs would require a change from the City's current administration of water connection fees. The City currently charges a water connection fee, not

Table 73
Water Facilities Needs Assessment
Incremental Water Connections by Customer Class and Meter Size: 2020

	Residential [1]		Commercial [2]		Industrial [3]		Public [3]	
Meter Size (inches)	No.	Percentage Share	No.	Percentage Share	No.	Percentage Share	No.	Percentage Share
1/2	0	0%	0	0%	0	0%	0	0%
3/4	5,777	100%	196	55%	8	38%	0	0%
1	0	0%	72	20%	4	19%	0	0%
1 1/2	0	0%	48	13%	5	24%	3	30%
2	0	0%	29	8%	4	19%	6	70%
3	0	0%	6	2%	0	0%	0	0%
4	0	0%	1	0%	0	0%	0	0%
6	0	0%	2	0%	0	0%	0	0%
8	0	0%	4	1%	0	0%	0	0%
Total	5,777	100%	358	100%	20	100%	9	100%

1) Includes single-family and two-family residential dwelling units. Multi-family units included with commercial.
2) Future connections allocated according to 1998 distribution of meter sizes, except that it was assumed that there would be no more new 1/2" connections.
3) Future connections allocated according to 1998 distribution of meter sizes.

Table 74
Water Facilities Needs Assessment
Incremental Future Connections Expressed in Terms of Equivalent Residential Meters: 2020

Meter Size (inches)	Total Incremental Connections	Maximum Safe Operating Capacity (gpm)	Residential Meter Equivalency Factor	Equivalent Residential Meters
3/4	5,981	25	1.0	5,981
1	76	40	1.6	122
1 1/2	56	70	2.8	156
2	39	120	4.8	188
3	6	350	14.0	82
4	1	1,000	40.0	47
6	2	2,000	80.0	141
8	4	2,500	100.0	352
Total	6,164			7,069

Table 75
Water Facilities Needs Assessment
Computation of Water Facilities Impact Fee per Residential Meter

Future Growth Share of Water System Costs	$10,714,815
Incremental Residential Equivalent Meters	7,069
Impact Fee per Residential Meter	$1,516

Table 76
Water Facilities Needs Assessment
Recommended Water Facilities Impact Fee per Meter

Meter Size (inches)	Residential Meter Equivalency Factor	Impact Fee per Meter
3/4	1.0	$1,516
1	1.6	$2,426
1 1/2	2.8	$4,245
2	4.8	$7,277
3	14.0	$21,224
4	40.0	$60,640
6	80.0	$121,280
8	100.0	$151,600

an impact fee, that is based on the size of the service lateral to each connection. An impact fee based on the number of RECs would require that nonresidential customers submit information with the application to connect that would allow the City to estimate the amount of water demand for each connection. Thus, this method would be somewhat more difficult to implement than the current fee based on lateral size, or the alternative method of fees based on meter size, as proposed in this report. However, one advantage of this method is that it requires only broad, rather than detailed, assumptions about the characteristics of future water customers, so it should provide a reliable projection of future increases in overall demand regardless of the exact mix of new customers. Therefore, an impact fee based on this method is likely to generate the appropriate amount of total impact fee revenues.

The second method utilizes meter sizes to determine each new customer's share of water facilities costs and therefore distributes costs in proportion to each customer's maximum allowable rate of peak water demand, in terms of gallons per minute. Since the water facilities for which the impact fees are to be imposed, storage tanks and transmission mains, are designed on the basis of maximum day or peak hour demand, this method appears to distribute costs in proportion to the demand for water facilities. However, the distribution of costs may not be in proportion to the demand for water facilities for two reasons. First, there are a finite number of meter sizes that may be used by a customer, but an infinite range of water use needs. The result is that a small difference in the rate of water demand may require that a customer use the next larger size meter, which may have many times the operating capacity, and therefore a fee that is many times larger, than that of the smaller meter. Second, the operating capacity of a water meter is in terms of an instantaneous peak rate of water use, while water system facilities are designed based on peak hour or maximum day demand. It is unlikely that a customer will demand water for an entire hour or an entire day at the same rate as the maximum operating capacity of the water meter. It is possible that a customer may have a meter with several times the capacity of a residential meter for occasional brief periods of peak water demand, but have an average peak hour or maximum day demand that is more comparable to that of a residential customer. In terms of ease of implementation, a fee based on meter size would be very similar to the City's current water connection fee that is based on lateral size. An impact fee based on the size of the water meter would require no additional information to be submitted with an application for connection, and no computations on the part of the City. Thus, this method would be very easy to implement. However, this method requires rather detailed assumptions about the characteristics of future water customers, so it may not provide as reliable a projection of future increases in overall demand depending on the exact mix of new customers and the required meter size of each new customer. Therefore, an impact fee based on this method may not generate the appropriate amount of total impact fee revenues if future customers have different water demand characteristics than current customers.

A comparison of the two methods reveals that the amount of the fee per single-family residence would be significantly higher under the method based on meter size than under the REC method. This is probably the case due to the high number of commercial customers with ¾-inch meters. Approximately 54 percent of the Utility's commercial customers have ¾-inch meters, the same size as the standard residential meter. However, residential customers are projected to use approximately 169 gallons per day per connection, while commercial customers, excluding the five largest customers, use approximately 874 gallons per day per connection. This indicates that while the commercial customers have peak rates of demand that are similar to residential

customers, their water use is more constant throughout the day. Therefore, although the meter size is the same, these commercial customers contribute more to the maximum day demand and the overall need for water system facilities than do residential customers.

Recommended Impact Fee Schedule

Based on the previous analyses and comparisons, it is recommended that the City of Franklin impose a water facilities impact fee of $931 per Residential Equivalent Connection, as shown in Table 69. Although an impact fee based on the meter size of each customer would be somewhat easier to implement, a fee based on RECs is recommended because it offers a more equitable method for distributing water system costs for the reasons described above. Furthermore, it is more likely to generate the appropriate level of impact fee revenues than a fee based on meter size.

The proportionate share of water system facilities to serve new development includes both connections of existing buildings served by private wells and connections created by new construction. However, Wisconsin Statute only allows for collection of impact fees from development, where development is defined as "construction or modification of improvements to real property that creates additional residential dwelling units within a political subdivision or that results in nonresidential uses that create a need for new, expanded or improved public facilities within a political subdivision." Therefore, impact fees may not be charged to an existing building that connects to the water system. However, Wisconsin Statutes allow for the imposition of a connection fee to pay for water system capital costs, and does not restrict a municipality from charging such fee to prior existing buildings that connect to the system. Therefore, the City could impose a water facilities *impact fee* on new construction and a water facilities *connection fee* in the same amount on existing buildings that connect to the system.

CAPITAL FACILITIES PLAN

Table 77 shows a capital improvement plan, which details all of the construction and improvement projects identified in the Water System Study and actual and estimated City responsibility for water main oversize costs through the impact fee study year of 2020. The table includes a brief description of each project, the project location, and the year in which it is anticipated that future demand will require additional facilities. The plan also includes the total cost of the project, the year in which expenses will be incurred, the portion of the project cost to be collected through impact fees, and those to be collected through alternative financing.

As described previously in the chapter, the projects listed in the plan will occur in four phases between the years of 2000 and 2019. Construction is currently underway for a large portion of the improvements that are recommended for completion prior to the year 2002. The project costs in each year shown are based on actual costs (when available), projected costs from the Water System Study and estimated average annual costs for water main oversizes. All costs are shown in terms of 2002 dollars. The current year dollars were calculated using the estimated amounts found in the City's Water System Study and applying an inflation factor of 1.061

Table 77
Water Facilities Needs Assessment
Capital Facilities Plan

Improvement / Land Acquisition	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
2.00 MG Elevated Storage Tank	$2,499,186																			
2500' -24"Diameter W. Puetz Road	$388,670																			
4200' -16"Diameter W. Rawson Road	$317,200																			
1200' -16"Diameter W. Puetz Road	$124,631																			
800' -16"Diameter W. Puetz Road	$436,366																			
800' -16"Diameter W. Drexel Road	$38,503																			
100' -16"Diameter W. Drexel Road	$10,395																			
100' -16"Diameter W. Drexel Road	$10,395																			
2000' -12"Diameter S. 68th Street	$161,224																			
800' -16"Diameter W. Loomis Road	$83,158																			
Group II Communication Bldg.	$14,976																			
Kaitlin Woods	$24,267																			
Loomis at Forest Hill	$38,652																			
Victory Creek		$11,864																		
S. 68th / Drexel		$3,014																		
Barbian Estates		$11,964																		
Franklin Square		$130,815																		
Autumn Park		$25,518																		
Imperial Heights West			$265,800																	
W-B Company			$292,301																	
5300' - 12" Diameter W. Drexel Road			$397,573																	
Future Water Main Oversizes				$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000
2.00 MG Elevated Storage Tank										$2,499,186										
5200' -20"Diameter S. 51st Street										$694,112										
5200' -24"Diameter W. Puetz Road										$785,968										
2.00 MG Elevated Storage Tank															$882,066					
5200' -20"Diameter S. 51st Street																				$694,112
8000' -24"Diameter W. Puetz Road																				$1,209,181
Total [1]	$4,147,622	$183,175	$955,674	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$4,079,266	$100,000	$100,000	$100,000	$100,000	$982,066	$100,000	$100,000	$100,000	$100,000	$2,003,293
Impact Fee Share of Costs	$1,011,341	$183,175	$955,674	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$4,079,266	$100,000	$100,000	$100,000	$100,000	$982,066	$100,000	$100,000	$100,000	$100,000	$2,003,293
Net to be Financed	$3,136,281	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Note:
1. All costs in terms of constant 2002 dollars.

percent, representing the construction cost index. In total, the estimated cost of recommended improvements to the water system through the year 2020 is $13,851,096. Approximately $10,714,815 of these costs are eligible for recovery through impact fees.

The capital improvement plan shown in Table 77 is based on improvements to the system necessary to provide for the current and future demands as they were identified in the City's system-wide study. The future need for water supply facilities should continue to be monitored to respond to any significant changes in the patterns of development and population growth, or to changes in the demand of water resources.

CONCLUSIONS AND RECOMMENDATIONS

The facilities needs assessment completed in Chapter Nine determined that the new water supply facilities, in addition to remedying existing deficiencies in storage and supply, will be sufficient to provide water resources adequate to meet the demands on the system through 2020. The total average day water demand in 2020 is projected to be 3,750,000 gallons per day or an increase of 1,950,000 over the current average day demand. The total increase average day demand will be equivalent to approximately 11,538 new RECs by 2020.

The cost to improve or expand the water supply facilities to meet 2020 demand is equal to $13,851,096. Of the total, $10,714,815 can be attributed entirely to future demand and can be collected from new development through the imposition of impact fees. Based upon the anticipated costs to serve future demand and estimated new RECs, it is recommended that the City of Franklin implement impact fees for water storage and supply facilities according to the schedule shown in Table 69.

CHAPTER TEN:
SANITARY SEWER FACILITIES NEEDS ASSESSMENT

INTRODUCTION

The City of Franklin Sewer Service Area is shown on Map 2, and excludes areas in the South and Southwest portions of the City as shown on the Map. According to the City Engineer, an estimated 94 percent of the City population is presently provided with sanitary sewer service. Because the City of Franklin does not currently own and operate its own wastewater treatment facility, nearly the entire developed portion of the City within the sewer service area is served by a public sewage collection system that is connected to Milwaukee Metropolitan Sewerage District (MMSD) treatment facilities.

The Sanitary Sewer Master Plan for the City of Franklin was completed in 1967, and was subsequently revised in 1971 and updated in 1991. In 1996 J.C. Zimmerman Engineering Corp. completed a new Sanitary Sewer Master Plan for the City. The primary purpose of the 1996 report was to develop new daily base sewage flows for each of the drainage basins within the City based upon the forecast population and land use conditions from the City of Franklin Comprehensive Master Plan completed in 1992. The report documented the remaining allowable amount of flow for each basin, the planned land use conditions for each basin, and the base flows for the projected 2010 population. It also provided a preliminary plan for sewer main extensions to serve unsewered portions of the City.

INVENTORY

Map 6 shows the location of the City's sanitary sewer collection system, and the size of the collector and interceptor mains within the system. Wastewater from the City of Franklin is conveyed to the MMSD treatment facilities for treatment and disposal. The MMSD manages growth throughout its service area by limiting the amount of average daily sewage flows from each drainage basin to an amount determined by the planned land use conditions for that basin. MMSD has identified 19 drainage basins within the City of Franklin. Of the 19 drainage basins, 12 are currently provided with sewer service. Most lands within sewered basins have sewer service available. Significant portions of the City remain undeveloped and unserved by sewer; these areas are presently considered unsewerable because there is no MMSD collection system connection point available at a sufficient depth to connect the gravity-flow sewers typically installed in the City.

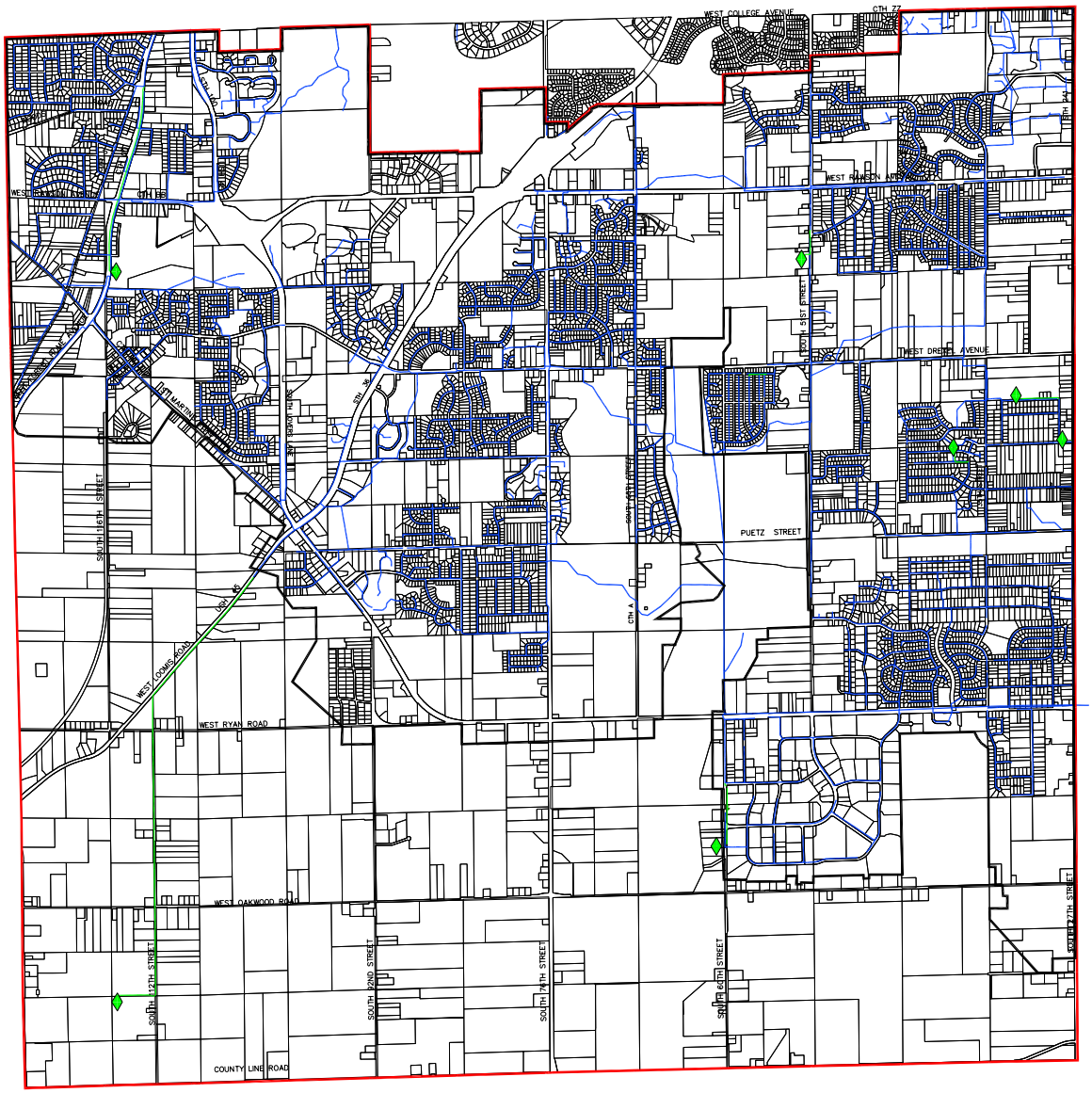
The City Engineer indicated that the current system has adequate capacity to serve those areas currently within the sewer service area. To date, the system has not experienced any backups or conveyance problems. The MMSD growth flow philosophy assigns an "allowable growth" sanitary base flow to each drainage basin within the City and determines the amount of capacity available to serve new development and sewer extensions. The decisions to extend sanitary sewer service within a sewered basin is evaluated based on existing capacity within a drainage basin, or the overall capacity allowed within an MMSD drainage basin.

RM811PB

MAP 6

EXISTING SANITARY SEWERAGE SYSTEM MAP

CITY OF FRANKLIN
MILWAUKEE COUNTY, WISCONSIN



LEGEND

- MUNICIPAL BOUNDARY
- MILWAUKEE METROPOLITAN SEWERAGE DISTRICT SERVICE AREA BOUNDARY
- EXISTING SANITARY SEWER
- EXISTING FORCE MAIN
- EXISTING LIFT STATION

N
W E
S

0 1250 2500 5000
SCALE IN FEET

City of Franklin

SOURCE: CITY OF FRANKLIN

Apr 24, 2002 10:36am
G:\Land\5892033\dwg\z-map-06.dwg Layout1
IMAGES: G:\Land\5892033\dwg\Franklin.tif; G:\SHT\RMGrphic.jpg;
XREFS: G:\Land\5892033\dwg\BASEMAP.dwg; G:\Land\5892033\dwg\SANSWR.dwg

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RECOMMENDED IMPROVEMENTS

The City has not maintained a capital improvement plan to identify sewer projects and does not typically assign a date when a sanitary sewer project is expected to occur. In the past, projects have been determined based on need and paid for by those properties that benefit from the project. The City's Engineering Department identified two sewer extension projects expected to occur in the near future. Table 78 provides a description of the project location and a detailed breakdown of the project materials and overall cost of construction.

One of the sewer projects planned in the City of Franklin, is a sanitary sewer extension project along W. Ryan Road, from S. Cobblestone Way to S. 51st Street. This project will involve the installation of approximately 1,300 lineal feet (LF) of 8" sanitary sewer main, and will provide approximately 8 new connections to the system. The total cost of this project will be approximately $207,520 as shown in Table 78.

A second major sewer extension project planned in the City of Franklin will extend sewer service to Development Area C located on South 27th Street, south of Rawson Avenue and north of W. Drexel Avenue. This project will provide sewer service to the second office campus for Northwestern Mutual Life, and a potential site for a secondary business park development that was identified in the Franklin First Development Plan. This project will involve the installation of approximately 9,250 LF of sanitary sewer main to the properties in the surrounding area. The total cost of the project is estimated to be approximately $1,481,539 as shown in Table 78. Although a financing method has not yet been determined, the project may be developed as a Tax Increment Finance District (TIF) or financed with special assessments.

In addition to the two projects described above, the City of Franklin Sanitary Sewer Master Plan identified a number of additional sewer extensions to serve the unsewered drainage basins. Because these areas are not currently in the Sewer Service Area or the MMSD drainage basins, these areas may not be extended sewer service within the next twenty years. Therefore, the projects identified in the Sanitary Sewer Master Plan are not considered in the sewer facilities needs assessment.

ALLOCATION OF COSTS

As determined by the previous analyses, the planned sanitary sewer extension projects will extend sewer service to currently undeveloped areas of the City. Therefore, the costs of these projects could be considered eligible for impact fees. However, it would not be equitable to charge impact fees to all new development in the City to recover the costs of these projects. Furthermore, a significant portion of the costs will be recovered through other means.

To date, the City's sewage collection system has been financed through special assessments to properties fronted with sewer mains. Connection fees have been used to finance any oversize of collection mains to serve future growth. The first project described above will provide sewer service to properties along W. Ryan Road. The total cost of the extension project was $207,520. The majority of the cost, or $130,755, will be recovered through special assessments. There will be approximately $76,745 of the total project cost remaining that will be not be covered by

Table 78
Sanitary Sewer Facilities Needs Assessment
Sanitary Sewer System Improvements and Estimated Costs

S. 31st Street, S. 27th Street, W. Drexel Ave. Sewer

Description	Quantity	Unit	Cost
8" sanitary sewer main	1,250	LF	$96,760
12" sanitary sewer main	3,774	LF	$355,780
15" sanitary sewer main	538	LF	$64,560
18" sanitary sewer main	1,400	LF	$196,000
21" sanitary sewer main	698	LF	$108,190
24" sanitary sewer main	1,582	LF	$246,170
6" sanitary riser	87	VF	$4,350
6" lateral and fittings	403	LF	$18,335
Lawn restoration	4,974	LF	$19,896
Pavement replacement	1,570	LF	$13,956
Wetland restoration	75	LF	$375
48" diameter precast manhole	33	EA	$91,500
Connection to existing sanitary sewer	1	LS	$2,000
Television inspection	9,244	LF	$9,244
Traffic control	1	LS	$5,000
Erosion control	1	LS	$2,500
Subtotal			$1,234,616
Engineering and Design [1]			$246,923
Total			$1,481,539

W. Ryan Road (STH 100) Sanitary Sewer Extension

Description	Quantity	Unit	Cost
8" sanitary sewer main	1,300	LF	$117,000
48" diameter precast manhole	5	EA	$12,500
6" sanitary lateral	200	LF	$17,000
Lawn restoration	1,140	LF	$11,400
Pavement replacement	160	LF	$4,000
Connection to existing sanitary sewer	1	EA	$3,000
Television inspection	1,300	LF	$2,600
Traffic control	1	LS	$5,000
Erosion control	1	LS	$1,000
Subtotal			$173,500
Engineering and Design [2]			$34,020
Total			$207,520
Less: Amount to be Special Assessed			$130,775
Net Amount to be Financed			$76,745

1. Based on 20% of project costs.
2. Based on 19.6% of project costs

assessments. The second project planned near Drexel Avenue is likely to be mostly funded by either special assessments or TIF funds.

The City currently collects connection fees to pay for the oversize of facilities to serve future development. There is currently $2,160,589 in the connection fee fund that was collected to pay for the capacity to serve future growth. This balance is more than sufficient to fund the share of the above mentioned projects that is not funded by special assessments or TIF.

RECOMMENDATIONS

Because the planned sewer projects are to serve limited unsewered areas and will be financed using connection fees, special assessments, or TIF funding, it is recommended that no impact fee be collected to finance construction costs to serve future growth. The City can continue to collect connection fees to pay for the additional capacity required by new development.

There are still significant areas of the City that remain undeveloped and unsewered. At such time as the Sewer Service Area is expanded and sewer service is extended to such areas, it is recommended that the City reconsider implementing an impact fee to pay for sanitary sewer facilities in the City.

CHAPTER ELEVEN:
TRANSPORTATION FACILITIES NEEDS ASSESSMENT

INTRODUCTION

The City of Franklin is served by a network of local access streets, collector streets and arterial streets. Local access streets generally have a smaller cross-section width, serve to provide access to properties in a localized area, and do not carry through traffic. Collector streets "collect" traffic from several local streets and provide access from one local street network to another or to the major streets and highways. Arterial streets are the major streets, often with wider cross-sections, that serve to carry traffic through the community between major destination points or that carry inter-community traffic. The local and collector streets are generally owned and maintained by the local municipality. Arterial streets and highways may be owned by the local municipality, the County, the State or even, in the case of interstate highways, the Federal Highway Administration. The City of Franklin, Milwaukee County, and the State of Wisconsin each own portions of the network of arterial streets and highways in the City.

The State of Wisconsin is currently planning for improvements to STH 100 between South 27th Street and West Loomis Road, and on Ryan Road from STH 100 to W. Loomis Road. Milwaukee County is planning to reconstruct S. 76th Street from Terrace Drive to Puetz Road and West College Avenue from South 51st Street to South 27th Street. As previously noted in Chapter Two of this report, the City does not have a facility plan or Capital Improvements Plan for future reconstruction or expansion of the arterial streets and highways under its jurisdiction. Therefore, a facilities needs assessment was conducted to determine the improvements that will be needed in the future to expand the capacity of City-owned arterial streets to accommodate increases in traffic volume created by new development.

INVENTORY OF EXISTING FACILITIES

The network of existing arterial streets, and the jurisdiction of each segment, is shown on Map 7. As indicated on the map, significant portions of the arterial streets in the City of Franklin are owned by Milwaukee County or the State of Wisconsin. All of the City-owned arterials have two lanes of vehicle travel.

The primary measure for assessing the adequacy of a segment of street is the volume of traffic carried by the street during a period of time, relative to the maximum capacity of the roadway. For purposes of identifying any deficiencies in the capacity (i.e. number of travel lanes) of each segment, the traffic volume used was the peak hour, or "rush hour" traffic volume. The Wisconsin Department of Transportation (WisDOT) regularly performs traffic counts along major arterials throughout the state. The data contained in the WisDOT 2000 Wisconsin Highway Traffic Volume Data Book (issued May 2001) was utilized for this study.

The level of service provided by each segment of roadway was rated on a scale from level of service (LOS) "A" to level of service "F" based on a comparison of measured traffic volumes to roadway capacity. These level of service designations are defined qualitatively as follows:

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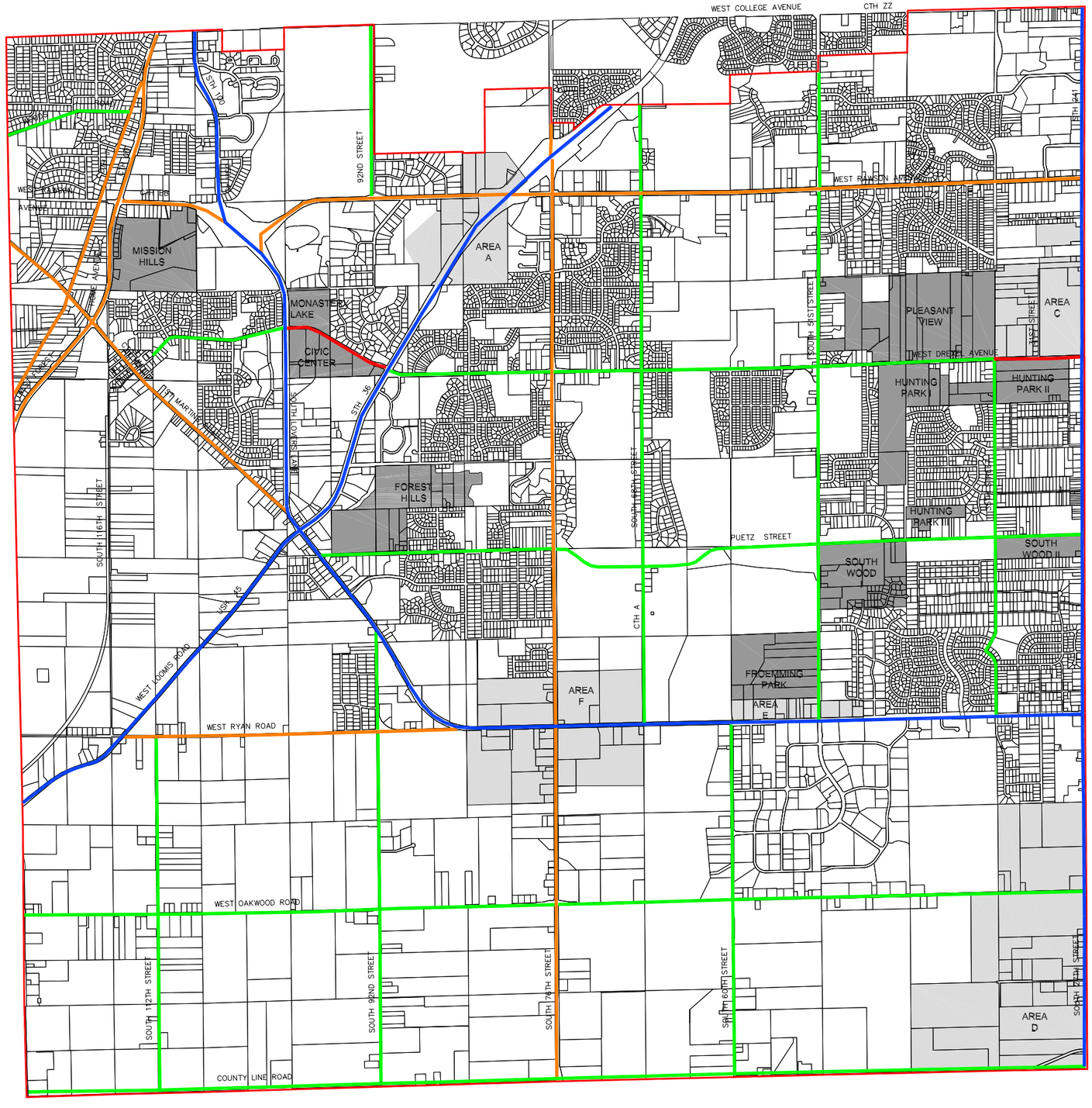

City of Franklin

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SCALE IN FEET

MAP 7

TRANSPORTATION NEEDS ASSESSMENT STUDY AREAS AND JURISDICTIONAL ARTERIAL STREET AND HIGHWAY SYSTEM

CITY OF FRANKLIN
MILWAUKEE COUNTY, WISCONSIN

LEGEND

- MUNICIPAL BOUNDARY
- STATE TRUNK HIGHWAY
- COUNTY TRUNK HIGHWAY
- LOCAL ARTERIAL STREET
- LOCAL ARTERIAL REQUIRED TO BE WIDENED
- TRANSPORTATION NEEDS ASSESSMENT STUDY AREA
- FRANKLIN FIRST DEVELOPMENT PLAN AREA INCLUDING IN TRANSPORTATION NEEDS ASSESSMENT STUDY

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SOURCE: RUEKERT AND MIELKE, INC.

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LOS A—Motorists are virtually unaffected by the presence of others in the traffic stream – they are able to select desired speeds and maneuver (pass) quite easily. In other words, the motorist's comfort, convenience, and satisfaction with the quality of travel is excellent.

LOS B—The presence of others in the traffic stream begins to be noticeable; freedom to select desired speeds is unaffected, but the ability to maneuver declines slightly from that of a level of service A. As a result, the driver's comfort, convenience and satisfaction begin to decline as well.

LOS C—The selection of speed, as well as the ability to maneuver, is now affected by the presence of others in the traffic stream. Thus, a driver's comfort, convenience, and satisfaction begin to decline considerably.

LOS D—Due to high-density traffic flow, speed and freedom to maneuver are severely restricted, and drivers experience a poor level of comfort, convenience and satisfaction.

LOS E—Traffic volume is at or near capacity; speeds are reduced significantly and the ability to maneuver is nearly impossible. Such conditions result in extremely poor levels of comfort, convenience and satisfaction resulting in a high degree of driver frustration.

LOS F—Traffic volume is at or exceeding capacity which results in traffic queues and complete breakdown of traffic flow. Drivers experience stop-and-go driving.

The level of service is defined quantitatively by the V/C ratio. The V/C ratio is defined as the hourly traffic volume, V, as a percentage of the maximum capacity, C. The maximum capacity that a two-lane street is able to accommodate is approximately 2800 vehicles per hour, according to the "Highway Capacity Manual". As the V/C ratio increases, it indicates that the traffic volume is increasing toward the maximum capacity of the roadway, and the level of service is declining. The levels of service are defined by a range of V/C ratios, as shown in Table 79.

Table 80 shows the peak hour volume of traffic along each segment of arterial street under the jurisdiction of the City, in terms of vehicles per hour, and the computed V/C ratio and level of service for each segment. As indicated by this analysis, all segments of the arterial street system under the jurisdiction of the City are currently providing a relatively high level of service. There are, therefore, no existing deficiencies in the capacity of City-owned arterial streets.

The network of City-owned arterial streets was also evaluated relative to the expected future volume of traffic in 2020. An analysis of the traffic impacts of the development of every currently undeveloped parcel in the City would require a lengthy, detailed transportation system study and the development of a complex model of all of the City's streets, a task that was beyond the scope of this study. However, it was determined that the majority of the traffic impacts on the City-owned arterial streets could be projected by focusing on significant areas of undeveloped land in the City that are adjacent, or in close proximity, to such City-owned arterials. Areas selected for the study met all of the following criteria: 1) was in agriculture or open space use as of 2000; 2) is of a significant area (capacity for 15 or more residential lots or 10 or more acres of commercial development); 3) the major point of access would be directly from a City-owned arterial, or the area is sufficiently close to a City-owned arterial that a

Table 79
Transportation Facilities Needs Assessment
Level of Service Criteria for General Two-Lane Highway Segments

	V/C Ratios					
	Percent No Passing Zones					
Level of Service	0	20	40	60	80	100
A	0.15	0.12	0.09	0.07	0.05	0.04
B	0.27	0.24	0.21	0.19	0.17	0.16
C	0.43	0.39	0.36	0.34	0.33	0.32
D	0.64	0.62	0.60	0.59	0.58	0.57
E	1.00	1.00	1.00	1.00	1.00	1.00
F	--	--	--	--	--	--

Source: *Highway Capacity Manual* , Special Report 209, Transportation Research Board, Washington, D.C., 1985

Table 80
Transportation Facilities Needs Assessment
Existing Level of Service Provided By Local Arterials: 2000

Road Segment	Peak Hour Volume (vph)	V/C Ratio	Level of Service
35th St. from Drexel to Puetz	58	0.02	A
35th St. from Puetz to Ryan	120	0.04	A
51st St. from College to Rawson	490	0.18	B
51st St. from Rawson to Puetz	380	0.14	A
51st St. from Puetz to Ryan	190	0.07	A
60th St. from Ryan to County Line	320	0.11	A
68th St. from S.T.H. 36 to Rawson	170	0.06	A
68th St. from Rawson to Puetz	200	0.07	A
92nd St. from College to Rawson	150	0.05	A
92nd St. from C.T.H. MM to County Line	74	0.03	A
Woods Road from Cape to W. City Limits	250	0.09	A
Drexel Ave. from 27th to 35th	610	0.22	B
Drexel Ave. from 35th to 51st	590	0.21	B
Drexel Ave. from 51st to 76th	740	0.26	B
Drexel Ave. from 76th to S.T.H. 36th	550	0.20	B
Drexel Ave. from S.T.H. 36 to S.T.H. 45	700	0.25	B
Drexel Ave. from S.T.H. 45 to C.T.H. MM	610	0.22	B
Puetz Rd from 27th to 35th	160	0.06	A
Puetz Rd from 35th to 51st	180	0.06	A
Puetz Rd from 51st to C.T.H MM	210	0.08	A
Oakwood Rd from 27th to 60th	110	0.04	A
Oakwood Rd from 60th to 76th	81	0.03	A
Oakwood Rd from 76th to 124th	52	0.02	A
County Line Rd from 27th to 124th	9	0.00	A

substantial portion of the traffic generated would travel on a City-owned arterial; 4) the area is likely to develop by 2020; and 5) the area is planned for residential, commercial, industrial or institutional land uses. Map 7 shows the areas selected for analyses and the planned land uses are described below. Each study area is designated according to the neighborhood that it is located in, as defined in the Comprehensive Master Plan, or as an Area identified in the Franklin First Plan.

Southwood I (adjacent to W. Drexel Avenue)—the planned land uses for this area consists of approximately 150 single-family residential lots.

Southwood II (adjacent to W. Puetz Road)—the planned land uses for this area consist of approximately 35 single-family residential lots.

Froemming Park (adjacent to S. 51st Street)—the planned land uses for this area consist of approximately 125 single-family residential lots.

Forest Hills (adjacent to W. Puetz Road)—the planned land uses for this are consist of approximately 175 single-family residential lots and 15 two-family residential lots.

Monastery Lake (adjacent to Area A from the Franklin First Development Plan)—the planned land uses for this area consist of approximately 38 single-family residential lots.

Hunting Park I (adjacent to W. Drexel Avenue)—the planned land use for this area consists of approximately 225 single-family residential lots.

Hunting Park II (adjacent to W. Drexel Avenue)—the planned land use for this area consists of approximately 100 single-family residential lots.

Hunting Park III (adjacent to W. Puetz Road)—the planned land use for this area consists of approximately 25 single-family residential lots.

Mission Hills (adjacent to W. Rawson Avenue)—the planned land use for this area consists of approximately 175 single-family residential lots.

Pleasant View (adjacent to W. Drexel Avenue and S. 51st Street)—the planned land use for this area consists of approximately 170 single-family residential lots.

Franklin First Development Plan Area A (W. Rawson Avenue and STH 36)—the planned land use for this area consists of approximately 128 acres of retail development.

Civic Center (adjacent to W. Drexel Avenue)—the planned land use for this area consists of approximately 28 acres of recreational community center development, 10 acres of retail development, and 7 acres of office development.

Franklin First Development Plan Area C (W. Drexel Avenue and S. 27th Street)—the planned land use for this area consists of approximately 130 acres of business park development.

Franklin First Development Plan Area D (adjacent to W. Oakwood Road and County Line Road)—the planned land use for this area consist of approximately 370 acres of business park development.

Franklin First Development Plan Area E (S. 51st Street and W. Ryan Road)—the planned land use for this area consists of approximately 50 acres of commercial development.

Franklin First Development Plan Area F (W. Ryan Road and S. 76th Street)—the planned land use for this area consist of approximately 232 acres of business park development.

In order to project the future traffic volumes generated by each of these areas, trip generation factors published in the 6th Edition of the Institute of Transportation Engineering Trip Generation Manual were applied to each proposed land use. The acres of commercial development were converted to a projected number of square feet of building area based on the range of gross floor area ratios allowed for commercial zoning districts by the City's Unified Development Ordinance. Table 81 shows the amount of projected development for each area, in terms of residential dwelling units, square feet of commercial building space, or acres of industrial or business park development, and the total number of peak hour trips projected to be generated by each area.

The number of trips from each area was then distributed along the adjacent roadways according to reasonable estimates of the percent of vehicles that would travel in each direction from each study area. Total trips from each study area were distributed through the first intersection in each direction from the area. For example, trips generated by the Franklin First Plan Area F were distributed east and west along W. Ryan Road and north and south along S. 76th Street, and north along S. 68th Street, and then were analyzed at the intersections of W. Ryan Road and S. 92nd Street, W. Ryan Road and S. 60th Street, S. 76th Street and W. Peutz Road, S. 76th Street and W. Oakwood Road, and S. 68th Street and W. Peutz Road. This was not intended to provide an exhaustive analysis of the impact of trips from each area on every segment of arterial street throughout the City, but rather to capture the majority of the impacts on surrounding streets. As traffic is dispersed farther and farther from the point of origin, more assumptions must be made regarding the pattern of traffic flow, and the results become less reliable. Therefore, this needs assessment focused on the relatively immediate area surrounding each study area.

The resulting number of estimated trips per segment of street, together with the existing traffic volumes from Table 80, were used to analyze the level of service that each segment would provide in 2020, assuming the current capacity of each segment. The city-owned arterial streets, and the 2020 peak hour traffic volume, V/C ratio and level of service provided by each segment are shown in Table 82. As indicated in the table, only two segments of street—W. Drexel Avenue from 27th Street to 35th Street and Drexel Avenue from STH 36 to STH 45—are anticipated to decline below a level of service C by 2020.

As previously stated, this needs assessment did not perform a complete, detailed modeling of all of the additional trips expected to be generated by every parcel to be developed by 2020. There will be some additional traffic created on city-owned arterial streets by other small areas of new development, and by areas of development that are not immediately adjacent to city-owned

Table 81
Transportation Facilities Needs Assessment
Projected Peak Hour Vehicle Trips from Future Development Areas

Study Area	Future Development		Peak Hour Trips/Unit	Total Trips
Southwood I				
Single family residential	150	(1)	1.02	153
Southwood II				
Single family residential	35	(1)	1.02	36
Froemming Park				
Single family residential	125	(1)	1.02	128
Forest Hills				
Single family residential	175	(1)	1.02	179
Two family residential	30	(1)	1.02	31
Monastery Lake				
Single family residential	38	(1)	1.02	39
Hunting Park I				
Single family residential	225	(1)	1.02	230
Hunting Park II				
Single family residential	100	(1)	1.02	102
Hunting Park III				
Single family residential	25	(1)	1.02	26
Mission Hills				
Single family residential	175	(1)	1.02	179
Pleasant View				
Single family residential	170	(1)	1.02	173
Franklin 1st Area A				
Retail	1,733	(2)	3.74	6,481
Civic Center				
Rec. Community Center	464	(2)	2.26	1,048
Retail	148	(2)	3.74	554
Office	144	(2)	1.50	216
Franklin 1st Area C				
C-2 - Business Park	58	(3)	16.84	978
C-3 - Business Park	25	(3)	16.84	423
C-4 - Business Park	46	(3)	16.84	781
Franklin 1st Area D				
D-2 - Business Park	168	(3)	16.84	2,834
D-3 - Business Park	76	(3)	16.84	1,285
D-4 - Business Park	125	(3)	16.84	2,107
Franklin 1st Area E				
Commercial	488	(2)	2.62	1,278
Franklin 1st Area F				
F-1 - Business Park	72	(3)	16.84	1,204
F-2 - Business Park	56	(3)	16.84	936
F-3 - Business Park	30	(3)	16.84	510
F-4 - Business Park	75	(3)	16.84	1,256
Total				23,164

1) Future development measured in dwelling units.
2) Future development measured in thousand square feet of building area.
3) Future development measured in acres developed.

Table 82
Transportation Facilities Needs Assessment
Future Level of Service Provided By Local Arterials: 2020

Road Segment	Peak Hour Volume (vph)	V/C Ratio	Level of Service
35th St. from Drexel to Puetz	468	0.17	B
35th St. from Puetz to Ryan	235	0.08	A
51st St. from College to Rawson	500	0.18	B
51st St. from Rawson to Puetz	529	0.19	B
51st St. from Puetz to Ryan	554	0.20	B
60th St. from Ryan to County Line	824	0.29	C
68th St. from S.T.H. 36 to Rawson	311	0.11	A
68th St. from Rawson to Puetz	361	0.13	A
92nd St. from College to Rawson	291	0.10	A
92nd St. from C.T.H. MM to County Line	123	0.04	A
Woods Road from Cape to W. City Limits	288	0.10	A
Drexel Ave. from 27th to 35th	1472	0.53	D
Drexel Ave. from 35th to 51st	983	0.35	C
Drexel Ave. from 51st to 76th	782	0.28	C
Drexel Ave. from 76th to S.T.H. 36th	772	0.28	C
Drexel Ave. from S.T.H. 36 to S.T.H. 45	1387	0.50	D
Drexel Ave. from S.T.H. 45 to C.T.H. MM	1075	0.38	C
Puetz Rd from 27th to 35th	248	0.09	A
Puetz Rd from 35th to 51st	467	0.17	B
Puetz Rd from 51st to C.T.H MM	414	0.15	A/B
Oakwood Rd from 27th to 60th	730	0.26	B
Oakwood Rd from 60th to 76th	233	0.08	A
Oakwood Rd from 76th to 124th	101	0.04	A
County Line Rd from 27th to 124th	325	0.12	A

arterials. Therefore, the future traffic volumes shown in Table 82 may not project the total volume of traffic on each segment in 2020. However, the study areas and the methods used to forecast traffic volumes were chosen so as to capture as much of the impact as possible and to indicate those areas that would be in need of expansion by 2020. Most of the segments analyzed were projected to continue providing an A or B level of service through 2020. Therefore, even if all traffic impacts from every development in the City were modeled, it is likely that the same segments would be recommended for future expansion.

RECOMMENDED IMPROVEMENTS

As described above, only two segments of the arterial streets network under City of Franklin jurisdiction are projected to decline to a low level of service due to increased traffic volumes from new development. Therefore, this facilities needs assessment recommends reconstruction of these two segments to four-lane urban cross-sections in order to increase the capacity to accommodate future increases in traffic volumes. Other road rehabilitation projects may be needed prior to 2020, however road reconstruction that does not increase the carrying capacity of the road would not be considered eligible for recovery through impact fees.

The reconstruction of W. Drexel Avenue from 27th Street to 35th Street and from STH 36 to STH 45 to a four-lane urban cross-section would cost approximately $3,500,000 per mile (WisDOT), or a total of $3,500,000 for these two half-mile segments. The proposed improvements are depicted on Map 6.

In addition to the recommended improvements to the city-owned arterials, the State of Wisconsin is planning improvements to STH 100 between South 27th Street and West Loomis Road, and on Ryan Road from STH 100 to W. Loomis Road. Milwaukee County is planning to reconstruct S. 76th Street from Terrace Drive to Puetz Road and West College Avenue from South 51st Street to South 27th Street. The City will pay for the street lighting and sidewalks installed along the STH 100/Ryan Road project, at an estimated cost of $630,000. The City share of the West College Avenue project is approximately $1,000,000 including street lights and sidewalks. The City is currently negotiating with Milwaukee County over the City contribution for the South 76th Street project. The City share will be either 10 percent or 30 percent of the design, construction, and real estate costs, plus sidewalks, street lights, and utility adjustments, or a cost to the City of approximately $983,500 or $3,010,500.

ALLOCATION OF COSTS

As determined by the previous analyses, the recommended transportation improvements will be needed to accommodate future increases in traffic volumes generated by new development. This expansion of roadway capacity will be needed in order to continue to offer an adequate level of service as new development occurs in the City. Therefore, the cost of these facilities may be charged to new development through the imposition of a transportation facilities impact fee.

Wisconsin Statutes state that a municipality may only charge new development for the proportionate share of the new or expanded facilities required to serve new development. Therefore, the costs of transportation facilities improvements must be divided into the proportionate share attributable to the need to serve existing development and the share

attributable to the need to provide excess capacity to accommodate future development. Since there is no existing deficiency in any of the City-owned streets considered in this facilities needs assessment, all of the costs for future expansion of West Drexel Avenue are attributable to future development.

As previously noted, the City has been asked to contribute a portion of the costs of the reconstruction of West College Avenue and South 76th Street by Milwaukee County. However, Wisconsin impact fee law does not allow counties to use impact fees to pay for transportation facilities. Therefore, the City's share of these costs would not be eligible for impact fees.

In total, the costs attributable to future development and eligible for recovery through impact fees are $3,500,000 for the Drexel Avenue reconstruction.

RECOMMENDED IMPACT FEE SCHEDULE

It has been determined from the previous analyses that future increases in traffic volumes created by new development will require the reconstruction of two segments of the City's network of arterial streets from two lanes to four lanes in order to continue providing a high level of service. It was further determined that, since there are no existing deficiencies in the capacity of the arterial streets under City jurisdiction, the entire cost of reconstructing the two segments of roadway would be eligible for recovery through the imposition of impact fees on new development. In order to determine the appropriate amount of the impact fee to impose, the costs of the transportation facilities concerned must be distributed over the projected amount of future development by land use category.

Every type of new development generates traffic, and therefore has an impact on the need for transportation facilities. It would therefore be appropriate to charge transportation impact fees to both residential and nonresidential development, in proportion to the expected amount of traffic to be generated. Furthermore, since new development in any part of the City has an impact on the transportation facilities, and may have an impact on the particular segments recommended for reconstruction, it would be appropriate to charge a transportation facilities impact fee to new development occurring anywhere in the City. The needs assessment for City-owned arterials considered only certain limited study areas in an effort to identify the segments of road that would need to be expanded by 2020; it did not intend to measure the impacts of all new development. The exact magnitude of the impact of a particular development on every segment of roadway cannot be predicted with any degree of certainty; however a new development is likely to have *some* impact on every segment of roadway. Therefore, even those development areas that were not analyzed will have some impact on the need for the expanded transportation facilities identified by this needs assessment.

For the reasons stated above, the costs of the improvements to Drexel Avenue, were allocated to all projected future development in the City, both residential and nonresidential. Table 83 shows the projected number of single-family, two-family and multi-family residential units of development, and the projected square feet of commercial, industrial and institutional

Table 83
Transportation Facilities Needs Assessment
Allocation of Transportation Improvements to Future Development by Land Use Category

Land Use Category	Incremental Development	Average Trips Generated per Unit per Day	Total Incremental Vehicle Trips per Day	Percent of Total Vehicle Trips per Day	Allocated Share of Future Growth Costs
Residential					
Single-family dwelling units	3,378	9.57	32,331	4.2	$146,303
Two-family dwelling units	443	9.57	4,239	0.5	$19,182
Multi-family dwelling units	1,032	6.63	6,840	0.9	$30,952
Commercial (SF)	6,791,113	0.02717	184,515	23.9	$834,960
Industrial (SF)	27,169,940	0.00696	189,103	24.4	$855,722
Institutional (SF)	9,233,814	0.03860	356,425	46.1	$1,612,881
Total			773,453	100.0	$3,500,000

building space through 2020. An average number of vehicle trips per day per unit of development was applied to the expected development to project the total increase in the number of vehicle trips per day. The projected costs of $3,500,000 the road reconstruction projects, were allocated to each category of land use in proportion to its share of the future increase in vehicle trips.

Table 84 shows the computation of the recommended impact fee per unit of development. The costs allocated to each category of development were divided by the projected number of units of development to determine the fee per unit. It is recommended that the City impose a transportation facilities impact fee in the amounts shown in the table.

CAPITAL FACILITIES PLAN

Since all segments of W. Drexel Avenue currently provide a level of service B, and are experiencing traffic volumes of only 20 to 26 percent of the total capacity, no improvements should be needed in the next five years. However, it is recommended that the City continue to monitor traffic volumes along all segments of Drexel Avenue as new development occurs. Depending on the location and intensity of development, there may be a need for the recommended improvements within five to ten years. In addition, if new development in other areas of the City result in a higher than expected levels of new traffic along Drexel Avenue, other segments may need to be expanded as well. Table 85 shows a preliminary transportation capital facilities plan, including the estimated City share of State and County road projects.

CONCLUSIONS

The previous analyses indicated that future development in the City of Franklin will have significant impacts on the volume of traffic on arterials streets under the jurisdiction of the City. The needs assessment identified two half-mile segments of W. Drexel Avenue for which the projected 2020 traffic volumes would be high enough to require reconstruction from two lanes to four lanes, at a total estimated cost of $3,500,000. Since the city-owned arterial streets do not have any deficiencies in terms of capacity, the entire cost of these reconstruction projects was determined to eligible for recovery through impact fees. In addition, the City is planning to contribute a share of the costs for the reconstruction of two county-owned arterials, 76th Street and W. College Avenue. However, these projects were determined not to be eligible for recovery through impact fees.

It is therefore recommended that the City impose transportation facilities impact fees in the amounts shown in Table 84. It is further recommended that the City continue to monitor traffic volumes along all segments of Drexel Avenue to determine the exact timing of the needed improvements and to identify any additional segments that may warrant reconstruction to provide expanded capacity. It is further recommended that the City consider requiring a Traffic Impact Analysis (TIA) from any development that is expected to generate 100 or more peak hour vehicle trips. A TIA would include a much more detailed, site-specific analysis of impacts on traffic flows, particularly at intersections, and could indicate the need for such improvements as turning lanes, signalization, bypass lanes, and additional stop signs. Such detailed analyses were beyond the scope of this study, but could be performed on a site-specific basis to assist the City in recovering the costs of additional transportation improvements not identified in this study.

Table 84
Transportation Facilities Needs Assessment
Computation of Recommended Impact Fees by Land Use Category

Land Use Category	Allocated Share of Future Growth Costs	Incremental Future Development		Recommended Fee per Unit
		Quantity	Units	
Residential				
Single-family dwelling units	$146,303	3,378	d.u.	$43
Two-family dwelling units	$19,182	443	d.u.	$43
Multi-family dwelling units	$30,952	1,032	d.u.	$30
Commercial	$834,960	6,791,113	s.f.	$0.123
Industrial	$855,722	27,169,940	s.f.	$0.031
Institutional	$1,612,881	9,233,814	s.f.	$0.175
Total	$3,500,000			

Table 85
Transportation Facilities Needs Assessment
Capital Facilities Plan

Project	2002	2003	2004	2005	2006	2007	2008	2009	2010
Drexel Avenue--S. 27th Street to 35th Street									$1,750,000
Drexel Avenue--STH 36 to S. Lovers Lane									$1,750,000
Ryan Road--S. 27th Street to S. 60th Street [1]					$630,000				
STH 100/Ryan Road--S. 60th St. to W. Loomis Rd. [1]									$988,200
76th Street--Terrace Drive to Puetz Road [2]			$983,500						
College Avenue--S. 27th Street to S. 51st Street					$1,000,000				
Total [3]	$0	$0	$983,500	$0	$1,630,000	$0	$0	$0	$4,488,200
Impact Fee Share	$0	$0	$0	$0	$0	$0	$0	$0	$3,500,000
Net to be Financed	$0	$0	$983,500	$0	$1,630,000	$0	$0	$0	$988,200

1) City share of project is installation of street lights and sidewalks, at an approximate cost of $60 per lineal foot.
2) City share of project cost is currently under negotiation with Milwaukee County. Under the cost-sharing formula used in the past, the City share of costs would be 10 percent of design, construction, and real estate, plus sidewalks and streetlights, or a total of $983,500.
3) All costs in terms of constant 2002 dollars.

CHAPTER TWELVE:
RECOMMENDED IMPACT FEES

INTRODUCTION

The purpose of this study was to determine the appropriateness, under current Wisconsin Statutes, of impact fees as a source of funds for library, park and recreation, police and municipal court, fire and rescue, storm sewerage, water supply, sanitary sewerage, and transportation facilities under construction or anticipated for the City of Franklin. This report was also intended to fulfill the "public facilities needs assessment" procedural requirement under Wisconsin Statutes s. 66.0617 and serve as a basis for the City to amend its impact fee ordinance.

In order to determine the appropriate amount of impact fees for each of the above facilities, an inventory was conducted of existing conditions in the City, forecasts were made regarding future conditions, and the existing facilities were evaluated against existing and future conditions to identify current and future deficiencies. The costs of recommended improvements were allocated to the proportionate share needed to remedy existing deficiencies and the proportionate share needed to provide excess capacity to accommodate future development. The costs allocated to future development were then distributed to future development in proportion to the expected use of each facility by each type of land use.

RECOMMENDED IMPACT FEE SCHEDULE

Based on the analyses described above, it was determined that it would be appropriate for the City to impose impact fees for library, park and recreation, police and municipal court, fire and rescue, water supply and distribution, and transportation facilities. No impact fees were recommended for sanitary sewerage facilities, since most of the undeveloped land in the Sewer Service Area of the City is already served with sewer facilities, and sanitary sewerage facilities are primarily paid for through special assessments and sewer connection fees. No impact fees were recommended for storm sewer facilities, as it is the policy of the City to require developers to construct storm water management facilities to control the storm water runoff from each site. Therefore, there are not expected to be any City-funded storm water management projects.

The recommended schedule of impact fees is shown in Table 86. As shown in Table 86, the total recommended fee for a single-family residence is $3,809. By comparison the existing fee charged to a single family residence is $1,825, as shown in the tables. Commercial, industrial and institutional development would be charged a fee per square foot of building space as shown in the table, plus a water impact fee of $929 per Residential Equivalent Connection (REC), where a REC is defined as an average daily water demand equivalent to that of a typical single-family residence.

IMPACT ON THE AFFORDABILITY OF HOUSING

The impact fee statute requires an estimate of the effect of recovering capital costs through impact fees on the availability of affordable housing. The imposition of a residential impact fee may have an economic effect upon the cost of new development, existing home prices and housing affordability. While impact fees can have a direct and measurable effect upon the prices

Table 86
Public Facilities Needs Assessment
Summary of Recommended Impact Fees

	Single-Family Residential (per d.u.)		Two-Family Residential (per d.u.)		Multi-Family Residential (per d.u.)		Commercial (per SF)		Industrial (per SF)		Institutional (per SF)	
	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
Library	$38	$465	$38	$465	$38	$310	$0	$0	$0	$0.000	$0	$0.000
Park and Recreation	$340	$2,219	$340	$2,219	$340	$1,480	$0	$0	$0	$0.000	$0	$0.000
Police and Municipal Court	$248	$38	$248	$38	$248	$26	$0	$0.088	$0	$0.019	$0	$0.153
Fire and Rescue	$399	$115	$399	$58	$399	$29	$0	$0.041	$0	$0.012	$0	$0.036
Water System [1]	$800	$929	$800	$929	[1]	[2]	[1]	[2]	[1]	[2]	[1]	[2]
Transportation Facilities	$0	$43	$0	$43	$0	$30	$0	$0.123	$0	$0.031	$0	$0.175
Total [3]	$1,825	$3,809	$1,825	$3,752	$1,025	$1,875	$0	$0.252	$0	$0.063	$0	$0.364

1) The City currently charges a water connection fee in the amount of $800 per single-family residential unit and $800 per unit for the first unit of multi-family housing, plus $400 per unit for every additional unit. The water connection fee for nonresidential uses is $1,600 per connection for the first 1 inch of water main connection diameter, and $480 for every 1/4 inch of diameter over 1 inch. This fee is charged to any new connection to the system, including connections by previously existing buildings.
2) Amount of fee depends on estimated amount of water use--one fee of $929 for every 169 gallons of expected average daily water demand.
3) Total for commercial, industrial and institutional excludes water impact fee.

of new homes, the influence upon the prices of existing homes and property tax values within a community is less direct and measurable. These effects can vary considerably depending upon local housing market dynamics.

Although the initial incidence of impact fees is on the land developer or homebuilder, the cost is ultimately passed through to those who purchase a new home. Impact fees can be completely passed on to purchasers of homes in communities that provide a more desirable environment than can be found in surrounding areas. In such communities the local demand for housing may be relatively price inelastic or insensitive to small changes in housing prices.

Table 87 presents an estimate of the effect of the proposed Library, Park and Recreation, Police and Municipal Court, Fire and Rescue, Water System, and Transportation Facility Impact Fees on housing prices and required income levels to purchase housing in the City of Franklin. Assuming that the home is financed, the table shows the increase in annual housing costs and the additional income required for financing a home. The costs are calculated for both a $125,000 home and a $250,000 home, representing typical home prices in the Milwaukee area. If the down payment were 10% of the price of the home, the amount to be financed would increase by $3,428. Assuming a 30-year fixed rate mortgage at 8% interest would result in an increase of $305 in the amount of the annual principal and interest payment. Based on tax rate of $30.34 per $1,000 of value, property taxes would increase by approximately $110 due to the imposition of the impact fee. In total, the annual cost of a new home in the City would increase by $415. By conventional mortgage underwriting guidelines, the annual cost for principal and interest, property taxes and insurance should be no more than 28% of the annual household income. According to these standards, the additional income required to finance a new home with the impact fee would be approximately $1,482 per year. This equates to an increase of approximately 3.0 percent for the purchaser of a $125,000 home or 1.5 percent for a $250,000 home.

As demonstrated here, the imposition of library, park and recreation, police and municipal court, fire and rescue, water system and transportation facility impact fees in the total amount of $3,809 per single-family residence will not have a substantial impact on the affordability of housing in the City of Franklin.

CAPITAL FACILITIES PLAN

Capital facilities plans for each type of public facility were presented in the previous chapters. These facilities plans are summarized in this chapter to demonstrate the total estimated cost by year of recently constructed, in progress or planned major future projects, and the share of that cost that may be recovered through impact fees. The total estimated cost by year of library, park and recreation, police and municipal court, fire and rescue, water system, sanitary sewer, and transportation facilities is shown in Table 88. Also shown is the total amount of the capital costs that is recoverable through impact fees for each year's project costs. Costs for future years have been inflated by 3.4 percent per year, which was the average annual increase in the Construction Cost Index from 1995 through 2001. The total cost of all anticipated capital projects is approximately $71.5 million. The amount recoverable through impact fees is approximately $36.1 million, or 50 percent of the total. A portion of the remaining costs to be financed by the

Table 87
Public Facilities Needs Assessment
Effect of Recommended Impact Fees on Housing Affordability

	Housing Prices and Income Requirements			
	$125,000 Home		$250,000 Home	
	Without Impact Fee	With Impact Fee	Without Impact Fee	With Impact Fee
Home Price	$125,000	$128,809	$250,000	$253,809
Down Payment	12,500	12,881	25,000	25,381
Amount Financed [1]	$112,500	$115,928	$225,000	$228,428
Annual housing Cost				
Principal and Interest Payment	$9,993	$10,298	$19,986	$20,291
Taxes [2]	3,584	3,694	7,168	7,278
Insurance	200	200	400	400
Annual Housing Cost	$13,777	$14,192	$27,554	$27,969
Income Required [3]	$49,204	$50,686	$98,407	$99,889
Additional Income Required		$1,482		$1,482
Additional Income as Percent of Total		3.0%		1.5%

1) Assumes 8 percent annual interest rate, 30 year fixed rate mortgage.
2) Assumes a tax rate of $30.34 per thousand of value, based on the 2001 tax rate for the City.
3) Based upon standard conventional mortgage underwriting guidelines.

City may be financed with other fees, such as water connection fees or sewer connection fees, with special assessments, with existing impact fee fund balances from impact fees previously collected, or with Tax Incremental Financing.

CONCLUSIONS

As demonstrated in previous chapters of this report, it was determined that it would be appropriate for the City of Franklin to impose impact fees for library, park and recreation, police and municipal court, fire and rescue, water system and transportation facilities. The recommended schedule of such fees is set forth in Table 86. An analysis of the impact of the recommended fees on housing affordability indicated that a fee in the amount of $3,809 per single-family residence would not have a significant impact on housing affordability.

Table 88
Public Facilities Needs Assessment
Summary Capital Facilities Plan

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Total Costs [1]																					
Library		$5,808,804																			$5,808,804
Park and Recreation				$834,929	$1,269,452	$1,366,418	$1,069,068	$1,286,894	$9,274,317	$520,998	$538,712	$557,028	$575,967	$489,668	$1,663,379	$2,881,960					$22,328,789
Police		$10,950,995																			$10,950,995
Fire and Rescue		$1,443,700				$414,565	$1,097,882				$1,666,217										$4,622,364
Water System	$4,147,622	$183,175	$955,674	$103,400	$106,916	$110,551	$114,309	$118,196	$122,215	$5,154,966	$130,667	$135,109	$139,703	$144,453	$1,466,855	$154,443	$159,694	$165,123	$170,737	$3,536,663	$17,320,470
Sanitary Sewer			$1,689,059																		$1,689,059
Transportation [2]					$1,051,515		$1,863,244				$5,864,575										$8,779,334
Total	$4,147,622	$18,386,674	$2,644,733	$938,329	$2,427,882	$1,891,534	$4,144,503	$1,405,090	$9,396,531	$5,675,964	$8,200,170	$692,137	$715,670	$634,120	$3,130,234	$3,036,403	$159,694	$165,123	$170,737	$3,536,663	$71,499,815
Impact Fee Share [1]																					
Library		$1,781,537																			$1,781,537
Park and Recreation				$314,420	$480,734	$1,250,548	$412,182	$487,340	$4,637,158	$223,657	$231,261	$239,124	$247,254	$6,718	$629,913	$1,430,261					$10,590,570
Police		$3,072,203																			$3,072,203
Fire and Rescue		$601,920				$209,360	$197,619				$841,459										$1,850,358
Water System	$1,011,341	$183,175	$955,674	$103,400	$106,916	$110,551	$114,309	$118,196	$122,215	$5,154,966	$130,667	$135,109	$139,703	$144,453	$1,466,855	$154,443	$159,694	$165,123	$170,737	$3,536,663	$14,184,189
Sanitary Sewer																					$0
Transportation [2]					$0		$0				$4,573,328										$4,573,328
Total	$1,011,341	$5,638,835	$955,674	$417,820	$587,650	$1,570,459	$724,110	$605,536	$4,759,373	$5,378,623	$5,776,714	$374,233	$386,957	$151,171	$2,096,767	$1,584,703	$159,694	$165,123	$170,737	$3,536,663	$36,052,185
Net to be Financed	$3,136,281	$12,747,839	$1,689,059	$520,509	$1,840,232	$321,075	$3,420,393	$799,554	$4,637,158	$297,341	$2,423,455	$317,904	$328,713	$482,949	$1,033,467	$1,451,699	$0	$0	$0	$0	$35,447,630

1) All costs for 2003 - 2019 inflated by 3.4 percent per year (the average annual increase in the Minneapolis and Chicago construction cost indices from 1995 through 2001). Costs include land acquisition and improvements.
2) City share of project cost for the 76th Street reconstruction is currently under negotiation with Milwaukee County. Costs shown assume the City share of costs for the 76th Street project would be 10 percent of design, construction, and real estate, plus sidewalks and streetlights, or a total of $983,500.

CHAPTER THIRTEEN:
IMPLEMENTATION

INTRODUCTION

Based upon the public facilities needs assessment presented, it was recommended that the City adopt development impact fees for the library, park and recreation, fire and rescue, and police and municipal court, water supply and distribution, and transportation facilities in accordance with the fee schedule provided in Table 86. The impact fees should be imposed upon all new development within the City of Franklin. Wisconsin Statutes s.66.0617 sets forth procedural requirements that must be followed in order to implement an impact fee. This chapter explains the statutory requirements and makes recommendations regarding practices for impact fee collection and account management.

ENACTMENT OF AN IMPACT FEE ORDINANCE

To implement the recommendations of this report and impose impact fees for library, parks and recreation, police and municipal court, fire and rescue, water supply and distribution, and transportation facilities, the following tasks will need to be completed:

A. The findings of this report must be presented to the Common Council of the City of Franklin.

B. The Common Council must direct that a public hearing be held to hear public comment on this public facilities needs assessment and the proposed impact fees.

C. An ordinance must be drafted to implement the recommended impact fees.

D. A Class 1 notice must be published in the Village newspaper to provide the public 20 days notice prior to the public hearing as required under Wisconsin Statutes 66.0617(4)(3)(b). The needs assessment must be available 20 days prior to the public hearing to allow the public sufficient time to review.

E. A public hearing must be held to hear public comment on the needs assessment and the proposed ordinance to impose public facilities impact fees.

F. After the public hearing, the Common Council may adopt the proposed ordinance as recommended or adopt the ordinance with amendments.

Since the City already collects impact fees from each residential dwelling unit in the amount of $340 for parks, $399 for fire protection and emergency medical facilities, $248 for law enforcement facilities, and $38 for library facilities, the existing impact fee ordinance must be amended to change the amounts of the existing fees and add new impact fees for water supply and distribution and transportation facilities.

In addition to the existing impact fees, the City currently collects a water connection fee from all new connections to the water system, under section 207-22 of the Municipal Code. If the City imposes a water impact fee in accordance with the recommendations of this report, the water connection fee ordinance should be amended to impose the connection fee only on connections

to the system by existing buildings that have not paid a water impact fee, or existing connections that have a change in use that results in additional water demand.

According to Wisconsin Statutes 66.0617, an ordinance imposing impact fees must include the following provisions:

1. Statement that impact fees must be paid by the developer, builder or property owner before a building permit is issued and whether the fees are to be paid in full or in installment payments. The existing City impact fee ordinance specifies that impact fees shall be collected prior to issuance of a building permit. This provision should remain the same.

2. Statement that impact fees collected and not expended within a reasonable period of time after collection shall be refunded to the current owner of the property with respect to which the impact fees were imposed. Since the City is already in the process of building many of the facilities or plans to undertake construction within the next five to ten years, it is anticipated that all of the funds collected through impact fees will be expended within a 20-year time frame at most. This is a reasonable time period for infrastructure with a usable life of 20 years or more. The existing ordinance specifies that all fees not expended for the purpose for which they were collected within 10 years shall be refunded to the then owners of the property upon which the fee was collected. Wisconsin Statutes s.66.0617 stipulates that refunds of previously collected impact fees be returned to the current property owner. Therefore, it is recommended that this provision of the ordinance be amended to direct that any necessary refunds be given to the current property owner. It is also suggested that the timeframe for expending the funds be extended to 20 years.

Many of the projects for which impact fees are recommended will be completed in future years and may be expected to have higher construction costs than what is currently estimated. In addition, the City may borrow funds to complete many or all of the projects, thereby incurring interest costs. For these reasons, it is recommended that the City increase the amount of the impact fees each year to account for future increases in construction costs and interest costs. This practice also make the fees more equitable, in that the amount paid by future development is increased each year to keep it approximately equal to the amount paid by new development in the first year, in terms of today's dollars. If the City intends to increase impact fees on an annual basis, the ordinance should state that intention and specify the amount by which fees will be increased or the method that will be used to determine the amount of the increase. This will allow the fees to be increased without an amendment to the ordinance and the public hearing that is required whenever an impact fee ordinance is adopted or amended. The existing impact fee ordinance states that impact fees shall be reviewed each year and adjusted according to the latest available Construction Cost Index. It is recommended this provision be revised to increase the fees by 5 percent per year. This would allow the City to recover the carrying costs, or interest costs, of borrowing the funds needed to complete major capital projects.

IMPACT FEE ACCOUNT MANAGEMENT

The Statutes require that impact fee revenues must be placed in a segregated account and accounted for separately from other City funds. The City currently has impact fee funds established for Parks and Recreation, Fire Protection, Law Enforcement, Emergency Medical,

and Library Impact Fees. In order to implement the fees recommended by this report, new accounts would need to be created for Water Impact Fees and Transportation Impact Fees.

Wisconsin Statutes specify that all impact fee revenues and interest earned on such revenues may be expended only for capital costs of the facilities for which the impact fees were imposed. The City applied a portion of the existing impact fee fund balances toward project costs for the Library, Police Station and Fire Station, and debt financed the remaining costs. For these projects, future impact fee revenues can be used to pay for a percentage share of the annual debt service requirements in proportion to the amount to be recovered through impact fees as a percent of the amount that was debt financed. If the balance in the segregated impact fee account is not sufficient to pay for the impact fee share of the debt in a given year, the amount advanced from other funds should be reimbursed with impact fee collections in future years. Future projects could be cash financed from the impact fee funds if a sufficient balance was available. If sufficient funds were not available, projects could be debt financed and annual impact fee revenues could be used to meet a share of the annual debt service, as described above.

Table 89 shows the projected annual expenditures for the projects listed in Table 88, assuming that most projects will be debt financed. For those projects that have already been financed, the actual debt service schedule is presented. Water system and sanitary sewer projects completed in 2000, 2001 and 2002, were assumed to be cash financed from existing water utility and sewer utility fund balances. The impact fee share of annual expenditures represents the amount of each year's debt service that should be paid for from the impact fee funds. In the case of water system facilities, the table shows a payment schedule for using the impact fee fund to repay the water utility for the impact fee eligible portion of capital expenditures incurred in 2000, 2001 and 2002.

Table 90 shows the projected future revenues from the recommended impact fees, the impact fee portion of annual expenditures, and the cumulative balance in each impact fee fund. The table demonstrates that the recommended fees should generate sufficient revenues to cover the proportionate share of annual debt service costs related to providing public facilities to serve future development. The project revenues that would be generated by the City's existing impact fees if the new fee schedule was not adopted are shown for comparison purposes. The cash flow forecast is only shown through year 2020. However, debt service for projects completed after 2001 may extend beyond 2020, and the balances shown for year-end 2020 would be used to retire existing debt over the following years.

Table 89
Public Facilities Needs Assessment
Projected Annual Expenditures per Year, 2002-2020

	2000-01	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Expenditures [1]																				
Library [2]		$438,775	$439,300	$439,375	$439,000	$439,150	$438,800	$438,925	$439,475	$439,425	$439,750	$439,425	$439,425	$439,700	$440,200	$439,900	$439,775	$440,750	$441,750	$441,750
Park and Recreation			$66,997	$168,861	$278,506	$364,291	$467,554	$1,211,750	$1,253,556	$1,296,783	$1,341,481	$1,387,698	$1,426,990	$1,560,464	$1,791,720	$1,791,720	$1,791,720	$1,791,720	$1,791,720	$1,791,720
Police [2]		$874,775	$874,273	$874,356	$874,464	$874,546	$874,555	$874,441	$875,131	$874,576	$871,214	$726,092	$725,942	$725,617	$725,555	$725,680	$726,405	$727,142	$727,817	$727,867
Fire and Rescue [2]		$102,050	$102,675	$102,175	$135,816	$224,138	$224,213	$224,138	$223,913	$357,239	$357,689	$356,964	$358,039	$357,889	$357,539	$356,989	$355,264	$294,364	$255,064	$255,064
Water System [3]	$4,090,449	$26,834	$169,721	$190,401	$211,784	$213,172	$229,922	$110,674	$517,945	$521,836	$525,859	$530,019	$534,320	$644,487	$649,086	$653,841	$658,758	$663,842	$938,723	$944,159
Sanitary Sewer [3]		$1,689,059																		
Transportation [4]				$84,376	$84,376	$233,888	$233,888	$233,888	$233,888	$704,476	$704,476	$704,476	$704,476	$704,476	$704,476	$704,476	$704,476	$704,476	$704,476	$704,476
Total Expenditures		$3,131,493	$1,652,965	$1,859,545	$2,023,946	$2,349,185	$2,468,932	$3,093,816	$3,543,908	$4,194,336	$4,240,469	$4,144,674	$4,189,193	$4,432,633	$4,668,576	$4,672,606	$4,676,398	$4,622,294	$4,859,551	$4,865,037
Impact Fee Share [5]																				
Library		$136,688	$136,852	$136,875	$136,758	$136,805	$136,696	$136,735	$136,906	$136,891	$136,992	$136,891	$136,891	$136,977	$137,132	$137,039	$137,000	$137,304	$137,615	$137,615
Park and Recreation			$25,230	$63,805	$164,152	$197,227	$236,332	$608,430	$626,377	$644,934	$664,122	$683,962	$684,501	$735,047	$849,815	$849,815	$849,815	$849,815	$849,815	$849,815
Police		$259,010	$258,861	$258,886	$258,918	$258,942	$258,945	$258,911	$259,116	$258,951	$257,955	$214,987	$214,942	$214,846	$214,828	$214,865	$215,079	$215,298	$215,498	$215,498
Fire and Rescue		$53,708	$54,037	$53,774	$70,771	$86,747	$86,786	$86,747	$86,628	$153,952	$154,189	$153,807	$154,373	$154,294	$154,110	$153,820	$152,912	$120,861	$100,178	$100,178
Water System [6]		$133,638	$276,525	$297,205	$318,588	$319,977	$336,726	$217,479	$624,749	$628,640	$632,663	$636,823	$641,125	$751,291	$755,890	$760,645	$765,562	$770,646	$1,045,528	$1,050,963
Sanitary Sewer																				
Transportation [4]										$366,976	$366,976	$366,976	$366,976	$366,976	$366,976	$366,976	$366,976	$366,976	$366,976	$366,976
Total Expenditures		$583,045	$751,505	$810,546	$949,188	$999,698	$1,055,486	$1,308,302	$1,733,776	$2,190,343	$2,212,897	$2,193,446	$2,198,807	$2,359,430	$2,478,750	$2,483,159	$2,487,344	$2,460,899	$2,715,609	$2,721,044

1) Assumes all projects debt financed for 20 years at an interest rate of 5 percent, with the exception of library, police and fire department projects financed in 2000-2001, and water and sanitary sewer projects completed in 2000-2002.
2) Actual debt service schedule for projects in 2001.
3) Assumes that projects completed in 2000-2002 are cash financed from existing utility fund balances, with the exception of watermain oversize costs, which are repaid to developers over a 5-year peiod.
4) Assumes the City share of the 76th Street project is 10 percent.
5) Impact fee share of debt service based on impact fee eligible costs as a percentage of the total amount borrowed.
6) Assumes that impact fee revenues will be used to repay the Water Utility for the impact fee share of projects completed in 2000-2002, at an interest rate of 5%, over a 20-year period.

Table 90
Public Facilities Needs Assessment
Projected Impact Fee Revenues and Expenditures per Year, 2002 - 2020

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Revenues from Proposed Fees[1]																				
Library		$157,087	$164,941	$173,188	$181,848	$190,940	$200,487	$210,511	$221,037	$116,044	$121,847	$127,939	$134,336	$141,053	$148,105	$155,511	$163,286	$171,451	$180,023	$189,024
Park and Recreation		$750,589	$788,118	$827,524	$868,900	$912,345	$957,962	$1,005,860	$1,056,153	$554,481	$582,205	$611,315	$641,881	$673,975	$707,673	$743,057	$780,210	$819,220	$860,181	$903,190
Police		$230,415	$241,936	$254,033	$266,734	$280,071	$294,075	$308,778	$324,217	$170,214	$178,725	$187,661	$197,044	$206,896	$217,241	$228,103	$239,508	$251,484	$264,058	$277,261
Fire and Rescue		$119,263	$125,226	$131,488	$138,062	$144,965	$152,213	$159,824	$167,815	$88,103	$92,508	$97,133	$101,990	$107,090	$112,444	$118,066	$123,970	$130,168	$136,677	$143,510
Water System		$803,942	$844,139	$886,346	$930,664	$977,197	$1,026,057	$1,077,360	$1,131,228	$593,894	$623,589	$654,769	$687,507	$721,882	$757,977	$795,875	$835,669	$877,453	$921,325	$967,392
Transportation[2]		$262,500	$275,625	$289,406	$303,877	$319,070	$335,024	$351,775	$369,364	$193,916	$203,612	$213,792	$224,482	$235,706	$247,491	$259,866	$272,859	$286,502	$300,827	$315,869
Total Revenues		$2,323,796	$2,439,986	$2,561,985	$2,690,084	$2,824,589	$2,965,818	$3,114,109	$3,269,814	$1,716,653	$1,802,485	$1,892,609	$1,987,240	$2,086,602	$2,190,932	$2,300,479	$2,415,503	$2,536,278	$2,663,092	$2,796,246
Impact Fee Share of Expenditures[3]																				
Library		$136,688	$136,852	$136,875	$136,758	$136,805	$136,696	$136,735	$136,906	$136,891	$136,992	$136,891	$136,891	$136,977	$137,132	$137,039	$137,000	$137,304	$137,615	$137,615
Park and Recreation			$25,230	$63,805	$164,152	$197,227	$236,332	$608,430	$626,377	$644,934	$664,122	$683,962	$684,501	$735,047	$849,815	$849,815	$849,815	$849,815	$849,815	$849,815
Police		$259,010	$258,861	$258,886	$258,918	$258,942	$258,945	$258,911	$259,116	$258,951	$257,955	$214,987	$214,942	$214,846	$214,828	$214,865	$215,079	$215,298	$215,498	$215,498
Fire and Rescue		$53,708	$54,037	$53,774	$70,771	$86,747	$86,786	$86,747	$86,628	$153,952	$154,189	$153,807	$154,373	$154,294	$154,110	$153,820	$152,912	$120,861	$100,178	$100,178
Water System		$133,638	$276,525	$297,205	$318,588	$319,977	$336,726	$217,479	$624,749	$628,640	$632,663	$636,823	$641,125	$751,291	$755,890	$760,645	$765,562	$770,646	$1,045,528	$1,050,963
Transportation[2]				$0	$0	$0	$0	$0	$0	$366,976	$366,976	$366,976	$366,976	$366,976	$366,976	$366,976	$366,976	$366,976	$366,976	$366,976
Total Expenditures		$583,045	$751,505	$810,546	$949,188	$999,698	$1,055,486	$1,308,302	$1,733,776	$2,190,343	$2,212,897	$2,193,446	$2,198,807	$2,359,430	$2,478,750	$2,483,159	$2,487,344	$2,460,899	$2,715,609	$2,721,044
Cumulative Impact Fee Fund Balance[4]																				
Library	$9,218	$29,617	$57,706	$94,019	$139,108	$193,243	$257,034	$330,810	$414,941	$394,095	$378,949	$369,997	$367,442	$371,519	$382,492	$400,964	$427,250	$461,397	$503,805	$555,214
Park and Recreation	$85,046	$835,635	$1,598,523	$2,362,241	$3,066,989	$3,782,107	$4,503,737	$4,901,167	$5,330,944	$5,240,490	$5,158,573	$5,085,926	$5,043,305	$4,982,233	$4,840,092	$4,733,334	$4,663,729	$4,633,135	$4,643,501	$4,696,877
Police	$78,042	$49,447	$32,521	$27,668	$35,485	$56,613	$91,743	$141,610	$206,712	$117,975	$38,744	$11,419	($6,480)	($14,429)	($12,016)	$1,223	$25,652	$61,838	$110,398	$172,161
Fire and Rescue	$96,432	$161,987	$233,176	$310,890	$378,181	$436,399	$501,827	$574,904	$656,091	$590,242	$528,561	$471,888	$419,505	$372,301	$330,635	$294,881	$265,939	$275,246	$311,745	$355,077
Water System		$670,304	$1,237,918	$1,827,059	$2,439,135	$3,096,355	$3,785,685	$4,645,566	$5,152,044	$5,117,299	$5,108,224	$5,126,170	$5,172,552	$5,143,144	$5,145,230	$5,180,461	$5,250,568	$5,357,374	$5,233,172	$5,149,600
Transportation		$262,500	$538,125	$827,531	$1,131,408	$1,450,478	$1,785,502	$2,137,277	$2,506,641	$2,333,581	$2,170,218	$2,017,034	$1,874,541	$1,743,271	$1,623,787	$1,516,677	$1,422,561	$1,342,088	$1,275,939	$1,224,832
Total	$268,738	$1,740,751	$3,429,232	$5,180,671	$6,921,567	$8,746,458	$10,656,790	$12,462,597	$13,998,635	$13,524,944	$13,114,532	$12,813,696	$12,602,129	$12,329,300	$12,041,482	$11,858,802	$11,786,960	$11,862,339	$11,809,822	$11,885,023
Revenues from Existing Fees[5]		$727,370	$752,101	$777,672	$804,113	$831,453	$859,722	$888,953	$919,177	$475,215	$491,372	$508,079	$525,353	$543,215	$561,685	$580,782	$600,528	$620,946	$642,059	$663,888

1) Assumes that fees will be increased by 5 percent per year.
2) Assumes City share of 76th Street project is 10 percent.
3) These amounts do not include all expenditures that would be funded by the impact fee revenues. Debt service for certain projects would extend beyond 2020.
4) Includes existing impact fee fund balances as of 12/31/01.
5) Projected revenues that would be collected if the City did not implement the recommended fees. Shown for comparison purposes.