

## **A marketability study of a proposed residential housing development located in Madison, Wisconsin. October, 1989**

Landmark Research, Inc.

[s.l.]: [s.n.], October, 1989

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A MARKETABILITY STUDY  
OF A  
PROPOSED RESIDENTIAL HOUSING DEVELOPMENT  
LOCATED IN  
MADISON, WISCONSIN

*Landmark  
Research  
Inc.*

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OCTOBER, 1989

PREPARED FOR  
MCGRATH ASSOCIATES  
AND  
SVEUM ENTERPRISES

PREPARED BY  
LANDMARK RESEARCH, INC.  
MADISON, WISCONSIN

Landmark  
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Jean B. Davis, President

James A. Graaskamp, 1933-1988

November 10, 1989

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Dear Gentlemen:

With this letter we are providing you with our analysis and conclusions which focus upon the marketability potential of a proposed residential housing development on a 28.0 acre site located on the near east side of Madison. The major objectives of this study are to evaluate the supply and demand of both multifamily and single family housing proposed for the subject site, to recommend appropriate pricing levels for the rental and sale of new housing units, to identify amenities that will maximize the marketability of the proposed housing units, and to estimate the effective demand for each of the two housing types.

We are pleased to report that our analysis and interpretation of the secondary census data and the general economic conditions in the defined multifamily and single family market areas indicate a steady demand for housing on this site. Our estimates of effective demand are subject to the correction of certain site problems discussed in Section III of this report.

Assuming that one and two bedroom multifamily rental units are built with amenity packages which meet the market's competitive standards, and are strategically priced for the target market described within this report, we estimate that approximately 35 to 45 multifamily units may be captured annually through 1994 at the subject site.

If selling prices can be kept within the range suggested in this report and if a suitable amenity package can be offered, we estimate that between 30 and 45 owner-occupied units may be sold at the subject site annually through 1994. Both multifamily and single family effective demand estimates assume that no significant new housing developments will be built in the vicinity of the subject site.




Mr. Todd R. McGrath and Mr. Phillip A. Sveum  
Page Two  
November 10 1989

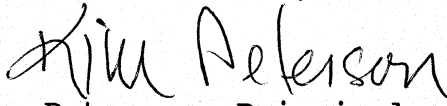
Our estimates of effective demand are based upon a careful analysis of the secondary data on a tract by tract basis in each market area, and an analysis of the existing supply of housing. This study did not include any primary consumer research to confirm our estimates of effective demand.


We invite you to study our analytical approach and research data provided in the following report to see if you concur with our conclusions. It should be noted that our summary of major research findings at the beginning of this report, and our more detailed analysis and conclusions within the report, are subject to the statement of limiting conditions found at the end of this report.

Thank you for the opportunity to be of service to you. We look forward to your comments and any questions you may have.

FOR LANDMARK RESEARCH, INC.

  
Jean B. Davis, President  
Landmark Research, Inc.

  
Kim Peterson, Principal  
Land Use Research Associates

  
Robert Schwarz  
Real Estate Analyst

JBD:rjb

Enclosure

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## I. SUMMARY OF MAJOR RESEARCH FINDINGS AND CONCLUSIONS

### A. Introduction

Landmark Research, Inc. has conducted this marketability analysis for McGrath Associates and Sveum Enterprises. The subject property is located in Madison, Wisconsin, near the northeast shore of Lake Monona, immediately north of Olbrich Botanical Gardens. The property comprises approximately 28.0 acres, and residential development is proposed.

#### 1. Market Research Objectives

The objectives of this analysis have been to:

- a. Define the market areas from which single family and multifamily housing components of the project may draw residents
- b. Evaluate demand and supply conditions in these market areas
- c. Recommend appropriate pricing levels for the rental and sale of new housing units developed on the subject site
- d. Identify amenities area consumers desire in apartments and single family homes
- e. Estimate the effective demand for the housing developed on the subject property--that is, the number of units the subject property may rent or sell each year between now and 1994

This research was conducted in the late summer and early fall of 1989, and reflects market forces that were operative at that time.

#### 2. Organization of Report

Salient findings and conclusions of this study are summarized in this section (Section I) and are expressed in greater detail in Sections II through V. The summary of findings and conclusions appear in the same order as the report sections that support them, and so may be easily referenced to the text for elaboration. The

content of the report sections are summarized as follows:

- a. Section II - Description of the general characteristics of the Madison, Wisconsin housing market
- b. Section III - Description and evaluation of the physical, legal/political, linkage, dynamic, and environmental attributes of the subject site
- c. Section IV - Assessment of the demand and supply conditions relative to residential development on the east side of Madison
- d. Section V - Recommendation of product positioning strategy for the subject property including marketable amenities and price, and estimate of effective demand

#### B. Summary of Findings and Conclusions

The general conclusions to be drawn from this study are that there is modest demand for new multifamily rental housing at the subject site, but that changing demographics in the market will provide even more demand for owned single family homes, especially for those at moderate price levels. The research findings and important qualifications that support this general conclusion are presented in sequential order by section. Summary conclusions are highlighted within the findings.

##### 1. Market Characteristics Section II

\* Overall conditions of population growth and economic activity in the area are favorable to residential development:

- a. The Madison/Dane County economy is diversified and relatively stable
- b. Prospects for future growth in the area are good, and development activity on the east side of Madison is improving as evidenced by the planned expansion of American Family and the proposed Madison Corporate Center

##### 2. Property Analysis Section III

\* The subject property is an assemblage of four land parcels comprising approximately 28.0 acres. These include 17.5 acres

owned by Madison Farm Structures, Inc. and known as Madison Silo Properties, 5 acres owned by the proprietors of the Garver Feed and Supply Company, and 5.5 acres belonging to Frito-Lay, Inc.

- \* The soils of all four parcels are from the Colwood series, which consist of deep, poorly drained, nearly level soils on low benches in old lake basins. From an engineering and construction standpoint these soils present considerable problems. They are highly unsuitable for dwellings with basements and are susceptible to wetness and flooding. These soils are also unsuitable for local streets and roads, since the subsoil is unstable when wet, and is highly vulnerable to frost action.
- \* On-site inspections of the property have revealed underground storage tanks at various locations. A review of records at the State of Wisconsin Department of Industry, Labor, and Human Relations showed that as many as 13 tanks may be located on the four sites. These tanks range in size from 1,000 to 10,000 gallons, and must be removed or filled with an inert material before construction of residential units begins.
- \* A more significant issue affecting development of the site is the potential loss of 30 to 40 percent of buildable area. The Dane County Regional Planning Commission (DCRPC) has identified a sizable area of wetlands in the northwest third of the site, and this falls within an environmental corridor. This corridor delineates wetland and flood plain areas via mutual acknowledgment between the State of Wisconsin Department of Natural Resources (DNR) and the DCRPC. Installation of sanitary sewers through wetlands in environmental corridors requires the approval of the DNR, local planning departments, and possibly the U.S. Army Corps of Engineers. Officials at the DCRPC and the DNR foresee serious political difficulties in making any significant changes to the corridor.
- \* Assuming this environmental corridor issue can be resolved, there is still a floodplain with which to contend. This floodplain is located along the eastern boundary of the site along Starkweather Creek.
- \* The subject property has good local transportation linkage to downtown, and to Madison's east side in general. The site is approximately two miles from the Capitol Square and is close to significant concentrations of federal, state, county, and city offices. The University of Wisconsin and the State Street commercial area lie just beyond the Square to the west.
- \* Transportation arteries in the neighborhood of the site are considered adequate. Traffic moves well along Atwood Avenue,



which is currently at approximately 20,000 vehicles per day near the site. Traffic along Fair Oaks Avenue carries approximately 10,000 vehicles per day. City of Madison transportation engineers note that even with as many as 350 units developed at the site there would be very little impact on these traffic flows. The 450 or so vehicles departing the site would create little extra congestion at the Fair Oaks intersections with Atwood Avenue and Milwaukee Street.

- \* The site's dynamic attributes, those features that stimulate an emotional response from the public, may be viewed as potentially problematic. Success in marketing residential units will depend very much on project design.
- \* At present, the property has limited visibility. Current expansion of Olbrich Gardens blocks views of the site from Atwood Avenue, while an on-site wooded area along Fair Oaks Avenue makes it impossible to see into the site from its northwest end. Perhaps the subject property's best marketing feature, the historic Garver Feed and Supply Company building, is also effectively neutralized. The facade of the feed mill could provide an outstanding site conditioning zone, as well as a theme for the entire residential project. Unfortunately, this opportunity has been foreclosed through the vacating of Sugar Avenue.
- \* Contrasting with project visibility is the quality of views available from the site, and in this regard the site offers both pluses and minuses. Olbrich Botanical Gardens, located directly south of the subject, is an outstanding potential amenity. But realization of its full value will depend on whether access is provided along the common boundary with the subject.
- \* Starkweather Creek has the potential to become either an amenity or a liability to the project. While the creek provides a natural ambiance, the land adjoining it is low and swampy, and is not conducive to residential development. If parents view the creek as a potential hazard to their children, or if the creek remains the slowly moving, malodorous, mosquito infested waterway it has been in summers past, efforts to market residential units at the site will be significantly hindered.
- \* **THE GENERAL CONCLUSIONS TO BE DRAWN FROM THIS PROPERTY ANALYSIS ARE THAT THE SUBJECT PROPERTY IS SUITABLE FOR RESIDENTIAL DEVELOPMENT, BUT HAS SOME SIGNIFICANT SHORTCOMINGS THAT MUST BE OVERCOME. THE SITE OFFERS SOME EXTREMELY POSITIVE FEATURES, INCLUDING PROXIMITY TO OLBRICH GARDENS AND CONVENIENT ACCESS TO DOWNTOWN EMPLOYMENT AND ENTERTAINMENT CENTERS. HOWEVER, ON THE NEGATIVE SIDE THERE ARE FOUR SIGNIFICANT PROBLEMS. THE PRECISE SIZE, LOCATION, AND DEVELOPMENT IMPACT OF THE ENVIRONMENTAL CORRIDOR AND FLOOD PLAIN MUST BE RESOLVED IN ORDER TO DETERMINE**

HOW MUCH OF THE PROPERTY CAN BE DEVELOPED. IT WILL ALSO BE NECESSARY TO CLEAN UP STARKWEATHER CREEK AND THE SWAMPY LAND ADJOINING IT, LEST THIS POTENTIAL AMENITY BECOME AN ADVERSE INFLUENCE ON THE MARKETABILITY OF THE DEVELOPMENT. A WAY SHOULD ALSO BE FOUND TO USE THE GARVER BUILDING'S FACADE AS A VEHICLE FOR MARKETING THE PROJECT, SINCE THE BACK OF THE BUILDING, THE SIDE FACING THE FAIR OAKS AVENUE ENTRANCE, IS NOT ATTRACTIVE. FINALLY, PROJECT DESIGN MUST FIND A WAY TO BOTH INTEGRATE AND INSULATE THIS PROJECT. EFFECTIVE MARKETING WILL DEPEND ON OVERCOMING THE PROPERTY'S LACK OF VISIBILITY FROM EITHER ATWOOD AVENUE OR FAIR OAKS AVENUE. CONVERSELY, SURROUNDING AREAS INCLUDE BOTH MODEST RESIDENTIAL HOUSING AND INDUSTRIAL-COMMERCIAL ENTERPRISES, AND SO ANY NEW UPSCALE HOUSING THAT IS DEVELOPED WILL HAVE TO PROVIDE SOME MEASURE OF INSULATION.

### 3. Market Supply and Demand Analysis Section IV

- \* The market area most likely to be the source of consumers for the multifamily rental component at the site includes 10 census tracts lying in the Isthmus area and near east side of Madison. (See Exhibit IV-14.) In 1989 this area included 22,075 or 29 percent of Madison's 77,307 households.
- \* Significant portions of this area may be characterized as densely populated, slowly growing, and dominated by older, rented, multifamily housing which is occupied by moderate income residents. New housing could enjoy a competitive advantage, but should be tailored to the income levels of the population base currently living in this market demand area.
- \* The market area most likely to be the source of consumers for the single family component at the site is somewhat more extensive than that for multifamily housing. It includes 13 census tracts and 27,128 households as of 1989. This represents approximately 35 percent of the total households in Madison. (See Exhibit IV-18 for the delineation of this market area.)
- \* Given these market areas for the two housing components proposed for the site, potential demand was computed using a two step approach. Population and household formation data for 1980, 1989, and 1994 were obtained, and adjustments were made for initial area vacancies that differed from normal or structural levels. These projections were then verified through comparison with locally generated and maintained data, including building permits, demolition permits, and information on the conversion of existing structures to/from residential use.

\* Projections of potential annual demand for the project were then made using three scenarios:

1. SCENARIO 1: PESSIMISTIC

Both multifamily and single family housing components of the proposed development will draw customers from only the smaller 10 census tract market area, the one defined for the multifamily component.

2. SCENARIO 2: PROBABLE

The multifamily housing component will draw customers from its delineated market area, and the single family component will draw customers from the larger 13 census tract market demand area.

3. SCENARIO 3: OPTIMISTIC

Both the multifamily and single family components will draw customers from the relatively larger market area defined for the single family component.

\* Demand estimates corresponding to these scenarios are shown in Exhibit IV-22, which is reproduced below. Note that the range between probable and optimistic estimates of demand is fairly narrow, but that there is a sizable downside potential shown in the pessimistic scenario. All three scenarios assume the continued availability of 10 to 12 percent mortgage money, as well as a recession free economy. The scenario that best reflects consumer response to this project will depend on the design, development, and marketing competence of the development team.

EXHIBIT IV-22  
PROJECTED POTENTIAL ANNUAL HOUSEHOLD DEMAND

	SCENARIO 1 PESSIMISTIC	SCENARIO 2 PROBABLE	SCENARIO 3 OPTIMISTIC
	NO. UNITS	NO. UNITS	NO. UNITS
SINGLE FAMILY	172	244	244
MULTIFAMILY [1]	<u>83</u>	<u>83</u>	<u>102</u>
TOTAL HOUSEHOLDS	255	327	346

[1] REFLECTS AN INCREMENT FOR SUBNORMAL MARKET AREA MULTIFAMILY VACANCY AS OF 1989 (10 UNITS PER YEAR FOR SCENARIOS 1 AND 2, AND 12 UNITS PER YEAR FOR SCENARIO 3).

- \* Estimates of future multifamily supply are based on conversations with area project managers, developers, and City of Madison planning officials. The consensus view is that in the near term, at least, there should be little new multifamily housing developed on the east side of Madison within current city limits.
- \* Neither should there be much new single family development in this infill area, in part because of the scarcity and expense of that space, and in part because of the demographics of the market area. Given the modest rent levels and current housing values supported in the area, it appears that most new infill units would be too expensive for area residents.

#### 4. Marketability and Effective Demand Analysis Section V

- \* The housing market in Madison is expected to behave much like the larger national market throughout most of the 1990s. Between 1989 and 1994 the majority of new households will be headed by persons from 34 to 55 years of age. These households are characterized by high levels of homeownership, which implies there will be negligible need for new apartments. Apartment stock will instead be generated mostly for replacement of older obsolete units.
- \* It follows that the multifamily component at the subject property must be developed carefully, and must achieve a competitive advantage using design features as well as price. Good design and careful pricing will also be needed for the single family component, since the incomes and wealth levels of Madison's east side populace are predominantly in the moderate range. The subject property will draw first-time and move-up buyers primarily from the Isthmus and surrounding neighborhoods, and these are decidedly downscale in contrast with neighborhoods located in the east side periphery.
- \* Area demographics also suggest slackening demand for larger units; there should be increasing demand for studio and one-bedroom units, stable to falling demand for two-bedroom units, and falling demand for three-bedroom units.
- \* New apartments should be targeted to area households earning in the \$25,000 to \$35,000 range, those that can afford rents of between \$520 and \$730 per month, excluding utilities. At this level slightly more than 54 percent of multifamily market area households can afford the units. At rents above this range the project would compete for households in age groups with very high propensities for home ownership.

- \* ASSUMING THAT ONE AND TWO BEDROOM UNITS ARE BUILT AT THE SUBJECT PROPERTY, AN AMENITY PACKAGE IS OFFERED WHICH MEETS THE MARKET'S COMPETITIVE STANDARD, AND THESE UNITS ARE POSITIONED IN THE \$520 TO \$730 MONTHLY RENT RANGE (\$520 TO \$650 FOR ONE AND TWO BEDROOM UNITS, UP TO \$730 FOR THREE BEDROOMS), EXCLUDING UTILITIES, THERE SHOULD BE STRONG DEMAND FOR THE PROPOSED DEVELOPMENT. IT IS ESTIMATED THAT BETWEEN 35 AND 45 UNITS MAY BE CAPTURED ANNUALLY THROUGH 1994 DUE TO NEW HOUSEHOLD FORMATION, AND A SIGNIFICANT INCREMENT TO THIS MAY BE DRAWN OUT OF OLDER SURROUNDING AREA UNITS. THIS ASSUMES THAT NO SIGNIFICANT NEW COMPETITIVE MULTIFAMILY HOUSING IS BUILT IN THIS MARKET AREA.
- \* The size of the single family housing units offered at the subject will depend on factors of both supply and demand. Land and construction costs will dictate how much product can be built within the budget limits of the targeted buyer group(s), and the tastes and preferences of these buyers will define the ideal. A survey of area brokers revealed that most existing single family units are older and modest, with the majority falling in the 1,300 to 1,500 square foot range. Three bedroom 1.5 bath units set the competitive standard, but area buyers will pay more for an extra full bath rather than a half bath.
- \* Given features of the area population base and housing stock, new single family homes built at the subject should be targeted to households with incomes of \$35,000 to \$50,000 -- those who can afford payments of between \$817 and \$1,167 per month. Assuming the current local financing terms of 10.5 percent interest, 30 year mortgage, and a 10 percent downpayment are available, and given taxes and insurance at 3.2 percent of purchase price, this translates into a home purchase price range of \$77,000 to \$110,000. Interviews with area real estate brokers, recent home buyers, and officials at the east side offices of area lending institutions all indicated that new housing should be targeted toward the bottom of this range, which implies homes priced from \$75,000 to \$85,000.
- \* ASSUMING THAT PRICES CAN BE KEPT WITHIN THIS RANGE, AND THAT A SUITABLE AMENITY PACKAGE CAN BE OFFERED, BETWEEN 30 AND 45 UNITS MAY BE SOLD AT THE SUBJECT SITE ANNUALLY THROUGH 1994. THIS ESTIMATE ASSUMES THAT THERE WILL BE NO SIGNIFICANT NEW SINGLE FAMILY DEVELOPMENT TAKING PLACE IN THE VICINITY OF THE SUBJECT SITE.

## II. MARKET CHARACTERISTICS

### A. Location and Access

Madison is the capital of Wisconsin and is located in the center of Dane County, in the south central part of the state. (See **Exhibit II-1.**) The city extends east and west along an isthmus formed by Lakes Mendota and Monona, the two largest lakes in Dane County.

Access to the Madison area is excellent. Interstate 90 connects Madison with La Crosse to the west, and with Beloit, Rockford, and Chicago to the south; Interstate 94 links Madison to Eau Claire and Minneapolis-St. Paul to the northwest, and to Milwaukee and Chicago to the east and to the south. U. S. Highway 51 intersects Interstate Highways 90 and 94 just north of Madison, and runs north through the center of Wisconsin to Wausau and Rhinelander. Distances and drive times are shown in **Exhibit II-2.** In addition to Madison's highway access, nine commercial airlines serve the Dane County Regional Airport, and freight service is provided by three railroads and 30 common carrier truck lines. These varied linkages strengthen Madison's ability to compete for economic development, especially in light of the pleasing environment afforded by the community.

### B. Environment

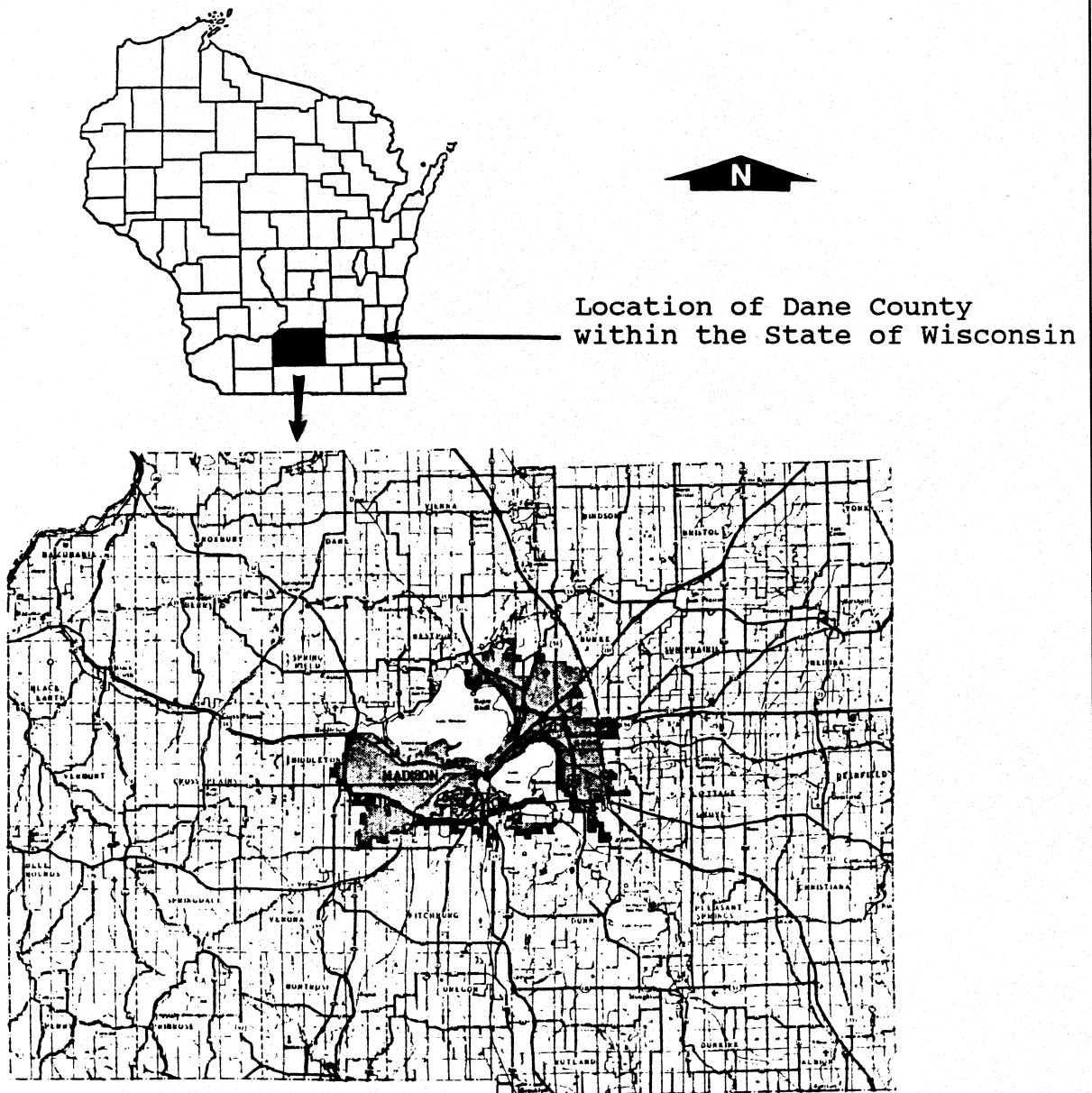
Madison is situated in the geographical center of Dane County, and is routinely cited as one of the nation's most livable cities. Lying between Lakes Mendota and Monona, the city provides outstanding access to water recreation, and also provides its residents use of the University of Wisconsin arboretum. Ties to the University mean that area residents have access to a wide variety of cultural and major university athletic events, and the University's world wide reputation for academic excellence and research facilities provide a solid foundation for attracting high technology business.

### C. Population and Households

Madison's estimated 1989 population of 179,835 represents a 5.4 percent increase over the 1980 count of 170,617. This rate of growth is up significantly from the 1970 to 1980 increase of 0.7



Exhibit II-1  
LOCATION OF DANE COUNTY AND THE CITY OF MADISON



Location of City of Madison within Dane County

EXHIBIT II-2

DISTANCES AND DRIVE TIMES TO MADISON

Metro Area	Distance in Miles	Drive Time in Hours
Minneapolis-St. Paul	261	5.0
Rockford	65	1.5
Milwaukee	77	1.5
Chicago	146	3.0
Wausau	140	3.0
Rhineland	197	4.0
La Crosse	129	2.5
Green Bay	132	2.5

Source: Land Use Research Associates



percent, but is still less than the approximately 10.1 percent rate achieved by Dane County from 1980 through 1989. This implies that although the City of Madison has enjoyed significant growth throughout the 1980s, growth has been even greater in Dane County areas beyond the boundaries of the city.

Growth in the number of households in Madison has been more dramatic. The 1970 to 1980 increase was 24.6 percent, and the increase from 1980 to 1989 was 15.3 percent to a total of 77,307 households as of 1989. These increases reflect modest population growth coupled with significant declines in average household size, which also have important implications with respect to residential development. The total population and number of households in the City of Madison for 1970 and 1980 with estimates for 1989 and projections for 1994 are shown in **Exhibit II-3**.

#### D. Employment

Employment in Madison has historically been very stable, as measured by a comparison of unemployment rates in Madison with those in the State of Wisconsin as a whole. (See **Exhibit II-4** for annual unemployment rates between 1982 and 1987.) This follows from the diversity of the area economy, a relatively smaller proportion of manufacturing jobs, and the inherent stability of a large government sector. As shown in **Exhibit II-5**, 10.7 percent of Dane County's population is employed in manufacturing jobs whereas in the State, as a whole, 26.4 percent are in manufacturing jobs. In Dane County, 33.8 percent of the population is employed in government related jobs as compared with 16.6 percent of the State's population. Many of these government jobs are at the University of Wisconsin and in state offices, although establishments such as the Forest Products Laboratory and the Veteran's Hospital add numerous federal jobs as well. Additional service positions are found at insurance and regional sales offices.

#### E. Future Distribution of Development Activity

The distribution of population increases and economic activity to the year 2010 has been forecast based on a study undertaken by the Dane County Regional Planning Commission in 1985. Using the delphi survey procedure, a group of community leaders and development experts was assembled and asked to predict in which geographical sectors future population growth and economic activity were likely to occur. Results were tabulated and distributed to the participants. They were then asked to rank the sectors again, given their knowledge about how the other participants had responded. The results of this survey were then used as a guide in conjunction with information

EXHIBIT II-3  
GROWTH IN POPULATION AND NUMBER OF HOUSEHOLDS  
City of Madison

	1970 Census	1980 Census	% Chg 70-80	1989 Estimate	% Chg 80-89	1994 Proj.	% Chg 89-94
Population	169,482	170,617	1%	179,835	5%	186,142	4%
Households	53,832	67,066	25%	77,307	15%	83,684	8%
Household Size	2.88	2.36	-18%	2.16	-8%	2.07	<-1%

Source: National Planning Data Corporation.  
Percentage change rounded to the nearest whole number.

EXHIBIT II-4  
COMPARISON OF MADISON AND WISCONSIN UNEMPLOYMENT RATES

Year	Madison	Wisconsin
1982	6.7%	10.7%
1983	6.8%	10.4%
1984	5.1%	7.4%
1985	4.4%	7.2%
1987	3.8%	6.0%

Source: Civilian Labor Force Estimates; Wisconsin Department of Industry, Labor, and Human Relations.

Compiled: Land Use Research Associates

EXHIBIT II-5  
DANE COUNTY AND WISCONSIN EMPLOYMENT, BY INDUSTRY, 1981

Industry	% In Labor Force Dane County	% In Labor Force Wisconsin
Farming	1.7%	2.5%
Agricultural Services, Forestry, Fisheries	0.4	0.4
Mining	0.1	0.1
Construction	3.3	3.2
Manufacturing: Nondurables	5.7	9.5
Manufacturing: Durables	5.0	16.9
Transportation & Public Utilities	3.5	4.6
Wholesale Trade	3.9	4.9
Retail Trade	16.0	16.6
Finance, Insurance, & Real Estate	7.8	4.9
Services	18.8	19.8
Federal Gov't: Civilian	2.0	1.4
Federal Gov't: Military	0.7	1.0
State & Local Gov't	31.1	14.2
Total [1]	100.0%	100.0%

Source: U. S. Bureau of Economic Analysis, April, 1983.

[1] Percentages may not add to 100% due to rounding.

about area land use plans, the availability of vacant land, and historic trends to forecast where development activity would occur. A map identifying the areas studied and the survey group's rankings of the areas are shown in **Exhibit II-6**.

Survey participants in 1985 predicted that in the decades ahead the Southwest sector would be the primary focus of residential and population growth. The Far West and Urban Fringe were next in order, followed by the South and Northwest sectors, which were rated fourth and fifth. Of the East Madison sectors, only the Northeast was expected to do well, and then only in terms of employment.

Some of this prophecy has come true, but it appears that more is happening in the East Madison sectors than was anticipated at the time of this survey. Plans for a new American Family Corporate Headquarters, a special development plan for the East Towne-Burke Heights area, and numerous smaller but cumulative initiatives have all taken place since the time of this survey, and much of this activity has had positive ripple effects that have benefited the entire east side community. This commercial development activity can be viewed as encouraging with respect to residential development at the subject site.

#### F. Conclusion

Overall conditions of population growth and economic activity are favorable to the proposed residential development on the subject site. The Madison/Dane County economy is diversified and relatively stable, and the prospects for future growth in the area are encouraging.

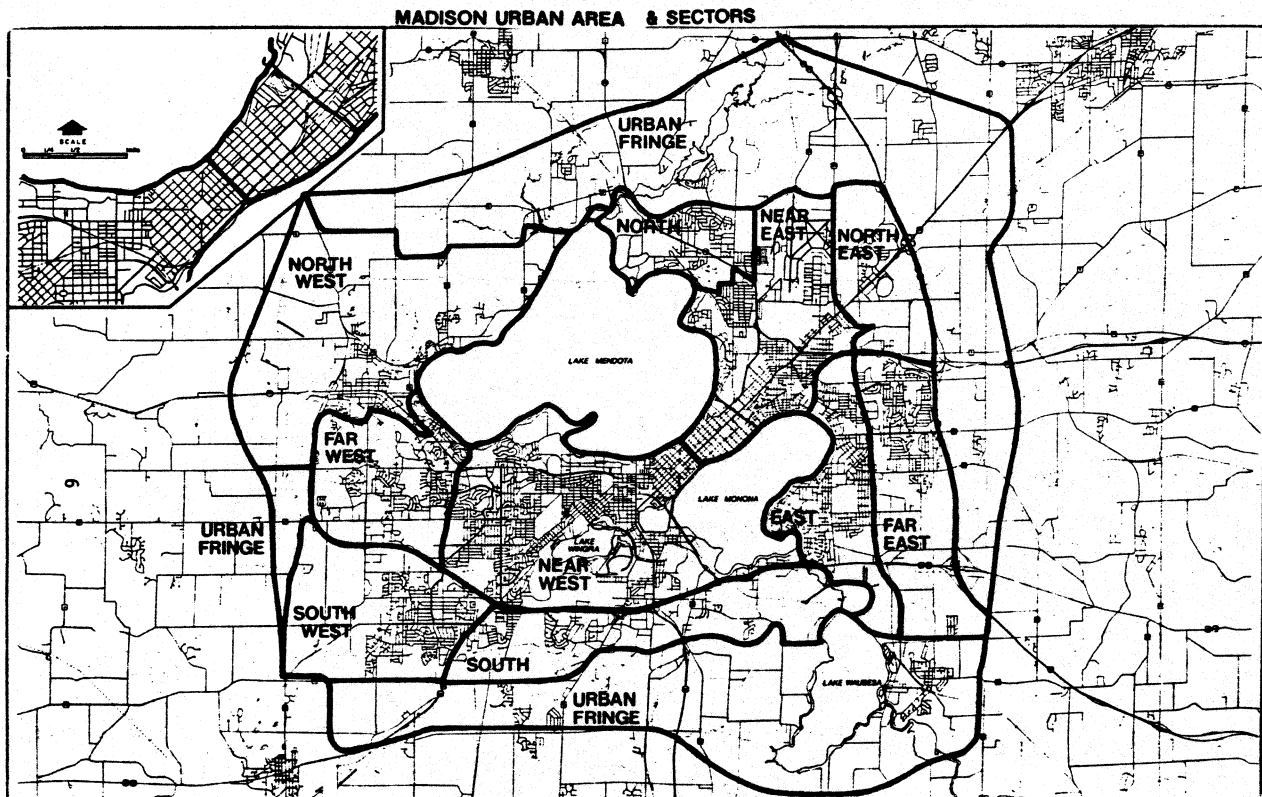
EXHIBIT II-6  
1985 DELPHI SURVEY SECTOR RATINGS AND RANKINGS  
AND LOCATIONS OF SECTORS

TOTAL RATING SCORES BY SECTOR FOR:

Sector	Growth in Population [1]	Growth in Number of Dwelling Units [1]	Growth in Employment [1]
Near West	11	10	44 (4)
Far West	69 (2)	74 (2)	92 (1)
South	30 (5)	44 (4)	50 (2)
Southwest	91 (1)	87 (1)	6
Near East	3	4	20
East	2	0	7
Far East	3	2	16
North	1	0	4
Northeast	18	19	49 (3)
Northwest	43 (4)	41 (5)	20
Urban Fringe	67 (3)	64 (3)	39 (5)

Source: Dane County Regional Planning Commission, 1985.

[1] Shown as total points rating and (ranking), where (1) is first, etc.



### III. PROPERTY ANALYSIS

#### A. Physical and Locational Attributes

The subject property is an assemblage of four land parcels comprising approximately 28.0 acres. These include 17.5 acres owned by Madison Farm Structures, Inc., 5 acres owned by the proprietors of the Garver Feed and Supply Company, and 5.5 acres belonging to Frito-Lay, Inc. The property is located near the northeastern shore of Lake Monona, on the near east side of Madison and is a part of Census Tract 20. The site and this general area are shown on the map in **Exhibit III-1**.

The site is irregularly shaped and is bounded by dedicated City of Madison land which parallels a curving branch of Starkweather Creek on the east, and by a second branch of the creek on the north. The long, straight southwestern side of the subject property borders the Chicago & Northwestern Railroad line with its southwestern corner notch defined by a somewhat rectangular commercial lot, and its short northwestern edge bordered by Fair Oaks Avenue. The approximate size, shape, and orientation of the site are shown on the certified survey map found in **Exhibit III-2**.

Site topography is basically flat. The 1904 United States Geological Survey topographic map shows that the land bordering Starkweather Creek was marsh at that time. This marsh extended as far west as the eastern border of the Oak Park Properties (now part of the Kessenich commercial lot which defines the site's southwest corner), which means that a sizable area of the subject property has been filled since 1904. This has significant environmental and legal implications.

The soils of all four parcels are from the Colwood series, which consist of deep, poorly drained, nearly level soils on low benches in old lake basins. From an engineering and construction standpoint these soils present considerable problems. They are highly unsuitable for dwellings with basements and are subject to wetness and flooding. These soils are also unsuitable for local streets and roads since the subsoil is unstable when wet and is highly susceptible to frost action.

A study done by Soils & Engineering Services, Inc. (1987) suggests substantial difficulties associated with construction and recommends the removal of all fill materials, topsoil, peat, and organic silt from under the proposed buildings and any other critical structures. Enough soils should be removed to allow for a minimum of 36 inches of compacted granular fill under building footings. A similar situation was apparently encountered at Camelot Apartments,



EXHIBIT III-1  
MAP OF SUBJECT SITE AND NEIGHBORHOOD

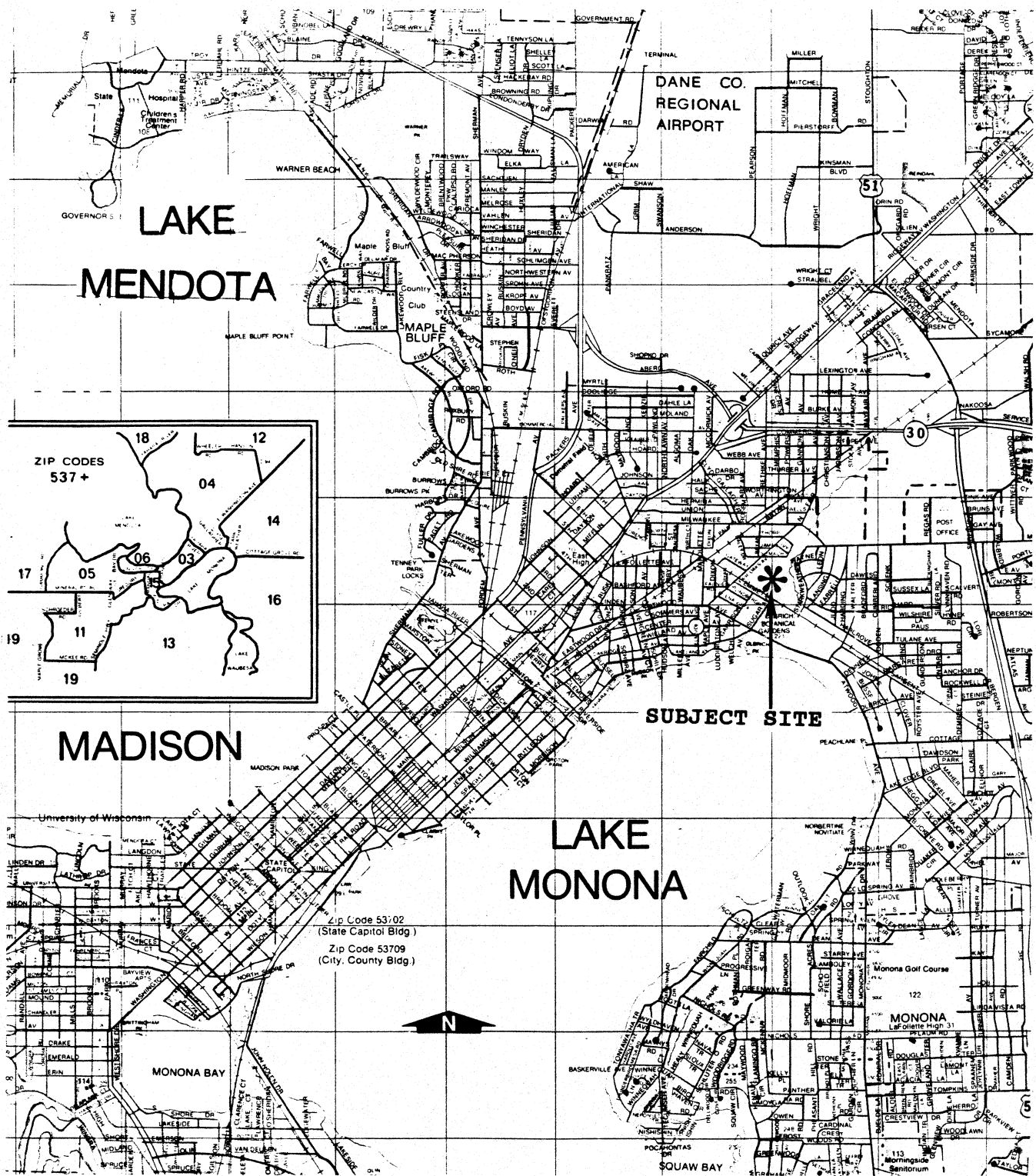
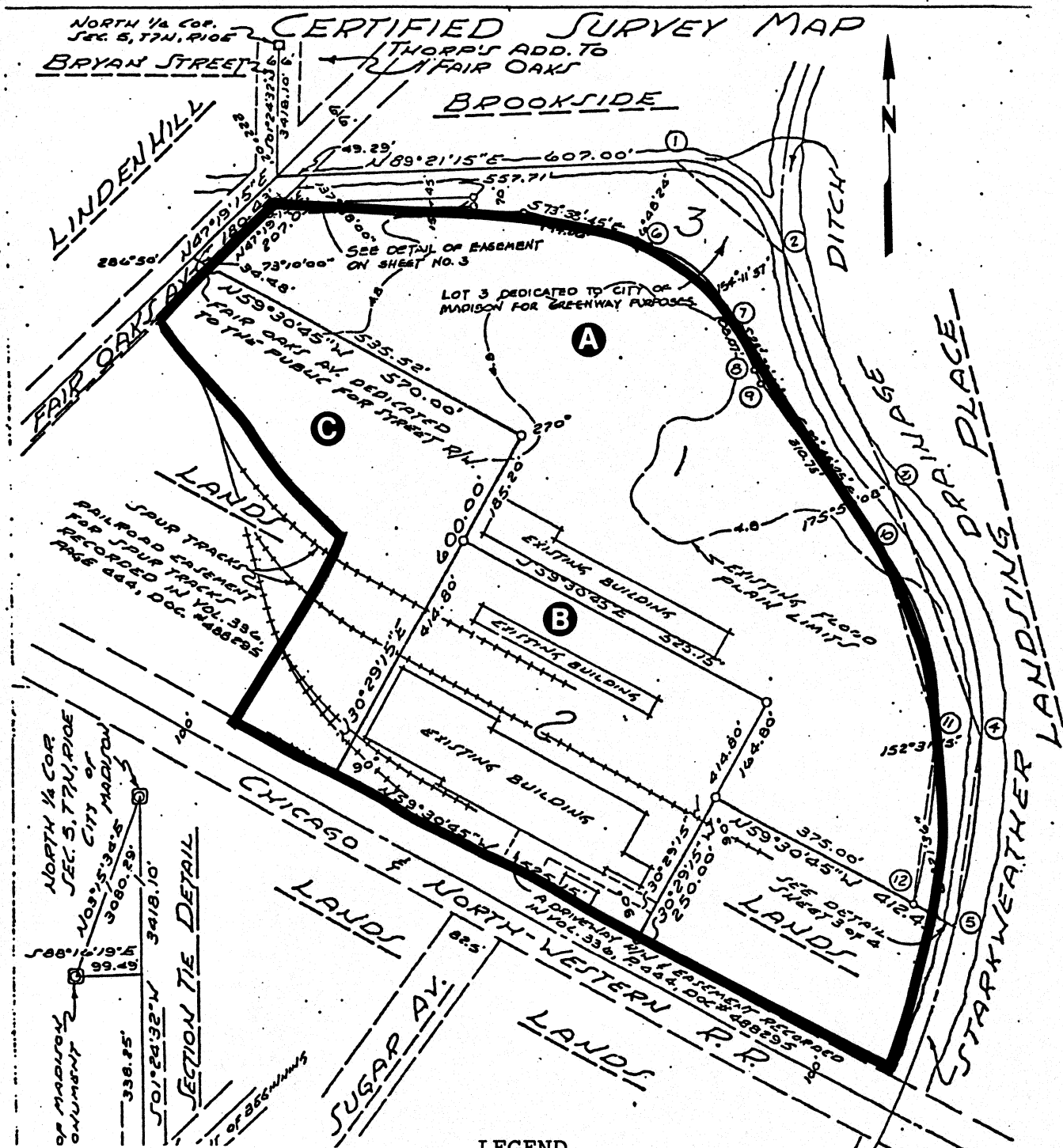




EXHIBIT III-2  
CERTIFIED SURVEY MAP OF SUBJECT SITE  
Document Number 1471090  
Certified Survey Number 2030



**Note: Boundary lines  
of subject site  
are approximated**

### LEGEND

- A** SECRET Madison Silo Properties  
**B** Garver Feed Mill  
**C** Frito-Lay, Inc.

which are located near the corner of Fordem Avenue and Johnson Street, also on Colwood series soils. In that case, the project's developer was forced to excavate to good subsoil and then bring in substantial quantities of fill before construction could begin.

A study done by Warzyn Engineering (1989) revealed abandoned chemical or oil drums on site, asbestos in the boilers and piping of several abandoned buildings, underground storage tanks that will need to be either removed or filled with inert materials, and chemical contamination of both surface soils and subsoils at several locations. These conditions will need to be remedied and will increase the cost of any new construction. (See **Appendix, Section III, Note 1** for further detail.)

#### B. Existing Site Improvements

The buildings already located on the site are generally older and in various states of repair. The Madison Farm Structures site includes five buildings: a large steel garage located in the southeastern corner of the site, an old office building, the Madison Silo Company manufacturing building, an old warehouse, and a sheet metal building located next to the warehouse. The Garver Feed and Supply Company site includes four buildings: a large brick structure which houses grain elevators, a small brick office, a steel hopper building where grain is loaded onto trucks, and a large corrugated steel storage building. The Frito-Lay, Inc. property includes a greenhouse with an attached brick building. An aerial photograph taken in October of 1986 shows the relationship of the site and its improvements to the surrounding neighborhood and is presented in **Exhibit III-3**. Photographs of selected features of the property follow as **Exhibit III-4**.

On-site inspections of the property have revealed considerable junk littered across the site, much of this concentrated on the Madison Farm Structures property. This junk includes old machinery, tires, concrete forms, asphalt, bricks, and old 55-gallon chemical drums.

In addition to this surface junk there are underground storage tanks at various locations around the site. A review of records at the State of Wisconsin Department of Industry, Labor, and Human Relations revealed as many as 13 tanks may still be located on the four parcels. These tanks range in size from 1,000 to 10,000 gallons, and will have to be removed or filled with an inert material before construction of residential units can begin.

#### C. Utilities

Overhead electric lines currently serve the site from Fair Oaks Avenue. These lines carry 4,000 volts and are considered

EXHIBIT III-3

AERIAL PHOTOGRAPH OF THE SUBJECT PROPERTY  
AND  
SURROUNDING LAND USES

Photograph Taken April 10, 1986

LEGEND

1. Madison Farm Structures  
(a/k/a Madison Silo)
2. Garver Feed and Supply Building
3. Kessenich Food Service Warehouse
4. Olbrich Botanical Gardens
5. Starkweather Creek
6. Olbrich Park
7. Lake Monona
8. Atwood Avenue
9. Fair Oaks Avenue
10. Garrison Street
11. Sugar Avenue
12. Chicago & Northwest Railroad Lines
13. Fire Oaks Avenue Entrance to Site
14. Milwaukee Street
15. Voit Field
16. Lowell Elementary School
17. Elmside Oakridge Residential Area
18. Eastmorland Residential Area

(Locations and Site Area Are Approximated)





- |   |   |
|---|---|
| ① Madison Farm Structures<br>(a/k/a Madison Silo) | ② Garver Feed & Supply Building         |
| ③ Kessenich Food Service Warehouse                | ④ Olbrich Botanical Gardens             |
| ⑤ Starkweather Creek                              | ⑥ Olbrich Park                          |
| ⑦ Lake Monona                                     | ⑧ Atwood Avenue                         |
| ⑨ Fair Oaks Avenue                                | ⑩ Garrison Street                       |
| ⑪ Sugar Avenue                                    | ⑫ Chicago & Northwestern Railroad Lines |
| ⑬ Fair Oaks Avenue Entrance To Site               | ⑭ Milwaukee Street                      |
| ⑮ Voit Field                                      | ⑯ Lowell Elementary School              |
| ⑰ Elmside Oakridge (Residential Area)             | ⑱ Eastmorland (Residential Area)        |



EXHIBIT III-4  
PHOTOS OF SUBJECT PROPERTY



View of Garver Feed and Supply main building, from northeast on Sugar Ave. A corrugated steel grain elevator extends above building roof line and small brick office building appears at right.



Northwest end of Garver main building. The single story attachment could become enclosed parking for main building apartment units. The Chicago and Northwestern Railroad tracks are somewhat elevated, and show how close to the south property line the main building is situated



EXHIBIT III-4 (CONTINUED)



View of the site from the intersection of Sugar and Atwood Avenues. The construction shown is the expansion of Olbrich Botanical gardens, which will partially obscure views of the property from Atwood Avenue when completed.



North side (back) of Garver main building showing grain elevator on roof, steel hopper building with truck in loading process, and corrugated steel warehouse - all owned by Garver. A warehouse owned by Madison Farm structures appears in foreground. Back of building is basically flat and unadorned. The architecturally interesting facade on the south side of the building is wasted due to the closure of Sugar Ave.



EXHIBIT III-4 (CONTINUED)



View from the southeast corner of the site, looking northwest. The abandoned Madison Silo Company manufacturing building appears in the foreground and at the extreme right. (These are part of the Madison Farm structures property). The brown brick Garver main building appears behind it.



View from the second floor of the Garver main building looking south over the Chicago and Northwestern railroad tracks, Sugar Ave., and a fenced storage area at Olbrich Gardens. The Olbrich Gardens expansion will presumably make views for the subject property more appealing.



EXHIBIT III-4 (CONTINUED)



View of the wooded northwestern corner of the site in the vicinity of Fair Oaks Avenue entrance. The unpaved access road is typical of those found through the site. Brown metal scrap is shown near photo center right, and is typical of the site junk that has been dumped at the property over the years.



View of Starkweather Creek from the southeast corner of the site. Failure to clean up the shoreline and swampy mosquito breeding areas adjacent to it will significantly hinder the marketability of any residential development.



adequate for any residential development. However, new transformers would be required to distribute the power, and if a path were cleared from Fair Oaks, the entire service would be buried. The site is also served with a natural gas line which has been brought to the Garver feed mill from Fair Oaks Avenue.

Sanitary sewer service is presently available to the site via Sugar Avenue. This is six inch service that would have to be expanded to accommodate a significant residential project. Development of more than five acres will require a dry holding pond for storm water runoff, with location depending on topography and soils. The Madison Water Utility presently serves the site with a six inch main along Sugar Avenue. This would probably be changed to an eight inch main that would be looped through the project.

#### D. Legal and Political Attributes

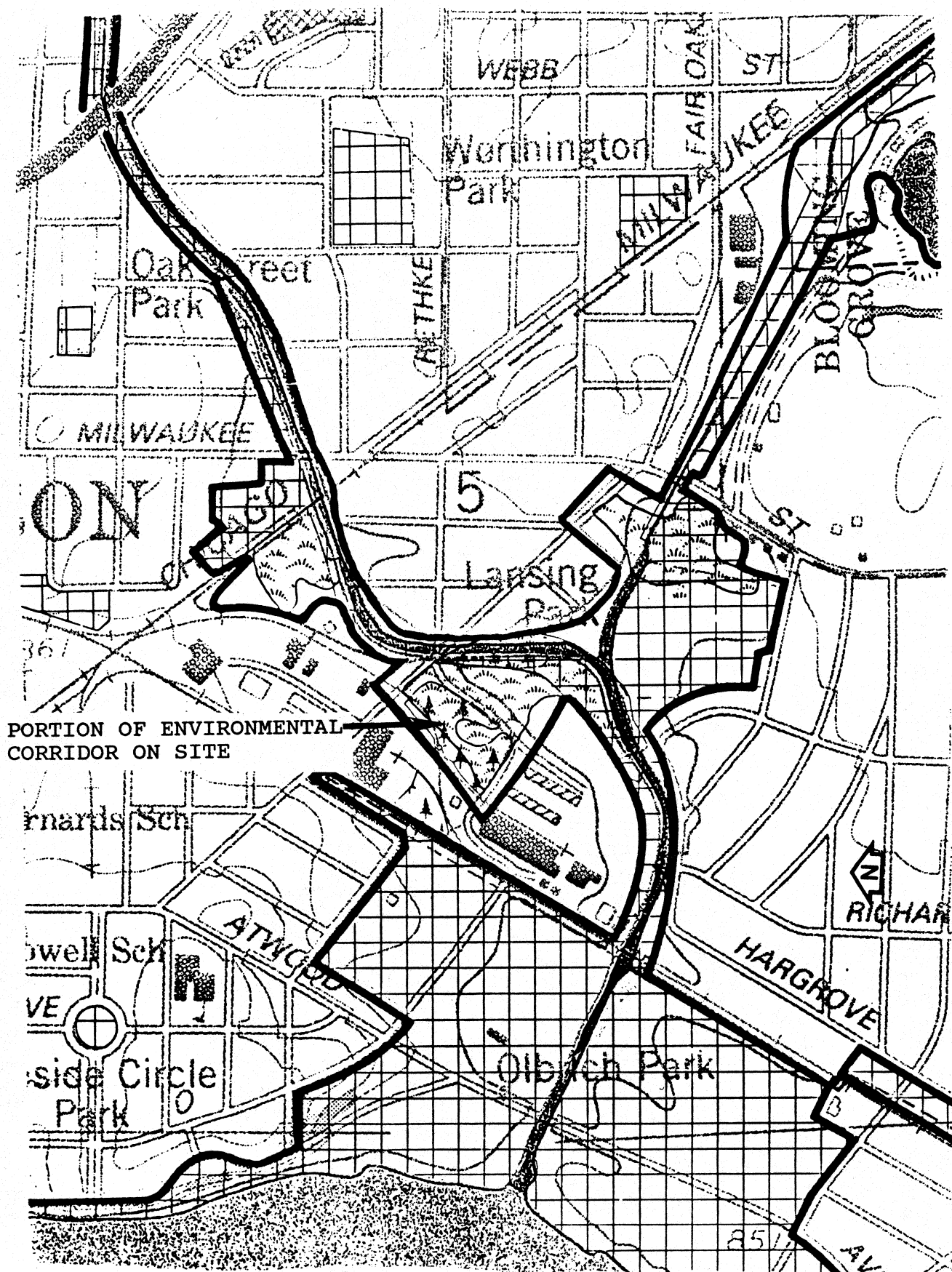
For purposes of this study the four parcels comprising the subject property are assumed to be a whole under unified ownership. At present, the zoning for all parcels is M-1, which is Madison's limited manufacturing district. City officials are reported to favor a residential use of this site, so there should be no difficulty in having the property rezoned to R4, although a planned unit designation would afford more flexibility.

Area politics favor residential development, and mid-range to upscale units are preferred. The alderperson for this district has been an advocate for residential development at the site, and has indicated that medium density housing will be needed in order to secure public sector financial support. The Schenk-Atwood Revitalization Association also favors residential land use, as long as it is not low income housing.

Perhaps the most significant issue affecting development of the site is potential loss of 30 to 40 percent of buildable area. The Dane County Regional Planning Commission (DCRPC) has identified a sizable area of wetlands in the northwest third of the site, and this falls within a boundary known as an environmental corridor. This corridor appears to coincide with the area identified as wetland in the 1904 USGS map referenced previously, the area that the Warzyn Engineering study said had been filled in. This corridor is identified in **Exhibit III-5**.

An environmental corridor delineates wetland and flood plain areas via mutual acknowledgment between the State of Wisconsin Department of Natural Resources (DNR) and the DCRPC. Installation of sanitary sewers through wetlands in environmental corridors requires the approval of the state DNR, local planning departments (Madison and Dane County), and possibly the U.S. Army Corps of Engineers. Officials at the DCRPC and the state DNR foresee serious political difficulties in making any significant changes to the corridor. (See **Appendix, Section III, Note 2** for details.)

EXHIBIT III-5  
ENVIRONMENTAL CORRIDOR IN RELATION TO SUBJECT SITE



Given the substantial site area involved, this issue should be resolved before the property is purchased. To the extent that the usable site area is reduced, site costs as a percentage of each residential unit developed will increase. Since land costs at the site are already higher than at locations along the northeast and east side periphery, this will place the proposed project at an even greater disadvantage relative to its low-cost-land competitors who have built along the east and northeast periphery of Madison.

Assuming this environmental corridor issue can be resolved, there is still a wetland area and floodplain with which to contend. The wetland is located along Starkweather Creek at the northeastern corner of the subject property, near the point where Starkweather Creek separates into western and northern branches. The floodplain lies somewhat southeast of this point, extending toward the southwest in an area shaped something like a thumb. This floodplain can be seen on the site plan presented previously in **Exhibit III-2**.

There appear to be no problems with easements related to the four parcels. For purposes of this marketability study, the property is also assumed to be free of any covenants or special building restrictions that would preclude use of the property for residential purposes.

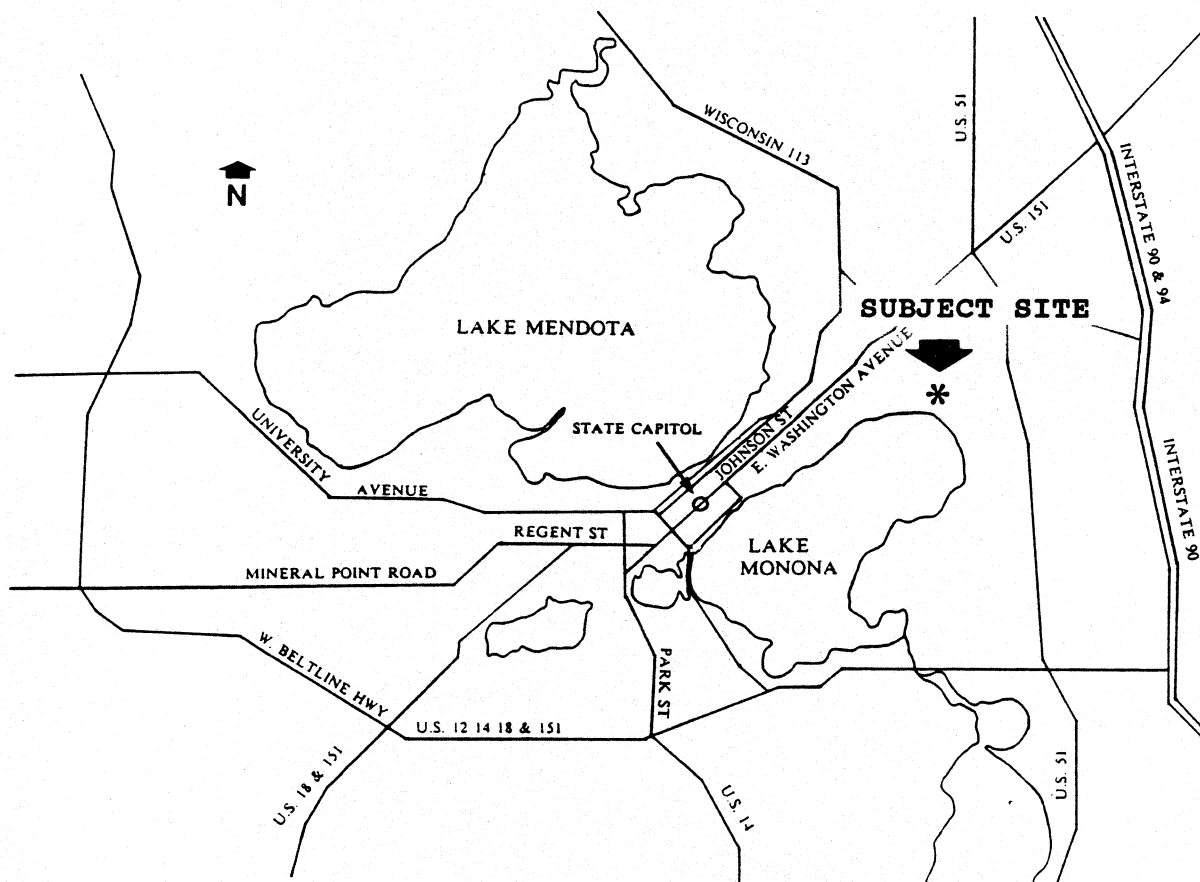
#### E. Linkages

##### 1. Transportation - General Area

The subject property is located near three main thoroughfares, Atwood Avenue, Fair Oaks Avenue, and Monona Drive, which link the site to downtown and to Madison's east side, in general. The site is approximately 2.3 miles from the Capitol Square and is close to significant concentrations of private and public sector employees. The University of Wisconsin and the State Street commercial area lie just beyond the Square to the west. These linkages are shown in the map of the neighborhood shown previously in **Exhibit III-1**.

The subject and its neighborhood also enjoy good access to major highways. Fair Oaks Avenue connects with Wisconsin Highway 30 (Commercial Avenue running east-west), and with U.S. Highway 151 (East Washington Avenue running north-south). Both of these highways connect with Interstates 90 and 94, which lie to the north and east of the city. Atwood Avenue becomes Monona Drive heading south from the site, and Monona Drive now connects with the recently completed South Beltline Highway (U.S. Highways 12 and 18 running east-west). As a consequence of these linkages, the site is no more than a 15 minute drive from any point in the metropolitan area. These transportation linkages are shown in **Exhibit III-6**.

EXHIBIT III-6  
TRANSPORTATION LINKAGES



## 2. Transportation - Immediate Area

Transportation arteries in the vicinity of the site are satisfactory. Traffic moves well along Atwood Avenue, which is currently at approximately 20,000 vehicles per day just southeast of the Fair Oaks Avenue intersection. Traffic along Fair Oaks Avenue is approximately 10,000 vehicles per day between Atwood Avenue and Milwaukee Street. Given that primary access to the site will be via Fair Oaks, the issue of increased traffic generated at the subject site was investigated. City of Madison transportation engineers indicated that even with as many as 350 units developed at the site there would be little impact on traffic flows. The 450 or so vehicles departing the site would create little extra congestion at the Fair Oaks intersections with Atwood Avenue and Milwaukee Street.

Provision of a turn lane into the site does not seem to be necessary, from either a practical or marketing standpoint. Traffic volumes along Fair Oaks are sufficiently light, and few east side apartment complexes enjoy this ease-of-access related amenity.

While the area streets serving the immediate site environs are considered adequate and provide effective links to areas of commercial activity along Atwood Avenue (to the northwest) and Monona Drive (heading southeast and then south), linkages with commercial areas along Milwaukee Street and Stoughton Road (U.S. Highway 51) are problematic. There is considerable congestion at the Milwaukee Street-Stoughton Road intersection, and this makes access difficult to the U.S. Post Office, Woodman's (warehouse supermarket), and several restaurant and banking enterprises in the area.

In summary, transportation networks linking the subject property to downtown Madison and the east side are satisfactory. This means that the advantage of the site's proximity to downtown employment and central Madison entertainment and cultural activities will not be negated by clogged area roadways.

## 3. Transportation - Buses and Bikes

In addition to good local roadway access, the subject property is served by Madison Metro (bus service), which maintains a route that includes Fair Oaks Avenue. There is also a designated bike path along the southern boundary of the site next to Olbrich Botanical Gardens and along Atwood Avenue linking this area to downtown. This path may eventually be linked to an abandoned rail corridor that would run the length of the Isthmus to Law Park and downtown.

## 4. Water Access to Lake Monona

Although Starkweather Creek links the subject property to Lake

Monona, there is very little clearance beneath the Chicago & Northwestern Railroad bridge that crosses the creek, and this limits access to only canoes or rowboat size craft. This effectively eliminates any opportunity to promote the site with respect to recreational boating.

#### 5. Area Schools

Children of families living at the subject property would be attending Lowell Elementary, Marquette Middle, and East High Schools. Discussions with the Assistant Superintendent for Elementary Education in the Madison Metropolitan School District revealed that Lowell and Marquette are expected to be at, if not over, capacity this fall of 1989. When asked what would be done if enrollments increased dramatically due to development at the Garver site, officials stated that these students might be sent to Schenk Elementary and Middle schools.

This issue may be important to the extent that parents perceive there are differences in quality among these east side schools. There apparently were some problems arising from performance differences between students at Schenk Elementary and other Madison schools, as reported in an analysis of district-wide achievement test results (August 1989). However, district officials determined that these performance problems were not valid. Assuming this issue is resolved, it should not significantly influence the tendencies of families to buy or rent at the subject site.

#### F. Dynamic Attributes

The site's dynamic attributes, those features that stimulate an emotional response from the public, may be viewed as potentially problematic. Success in marketing residential units will depend very much on project design.

The natural setting of the site offers a unique opportunity to blend urban area ambiance with project features typically found in suburban residential developments. The site is definitely urban, given traffic volumes on Atwood Avenue, commercial and industrial land uses along Fair Oaks Avenue (the Kessenich food service warehouse, Petrolane LP gas depot), and linkages to nearby theatres, restaurants, and retail strip developments. The northwest edge of the property is also very close to a glide path for commercial jets using the Dane County Regional Airport; such jets were observed flying quite low over the area. However, the site also offers a suburban view, with modest single family homes and a park located across Starkweather Creek to the north, and Olbrich Botanical Gardens immediately to the south.



At present, the property has limited visibility. The current expansion of Olbrich Gardens restricts views of the site from Atwood Avenue, and an on-site wooded area along Fair Oaks Avenue makes it impossible to view the site from Fair Oaks Avenue. (See **Appendix, Section III, Note 3** for further discussion.)

Perhaps the subject property's best marketing feature, the historic Garver Feed and Supply Company building, is also effectively neutralized. The facade of the feed mill could provide an outstanding site conditioning zone, as well as a theme for the entire residential project. Unfortunately, this opportunity has been foreclosed through the vacating of Sugar Avenue, and it remains to be seen if any solution can be found using the Fair Oaks entry. Garrison Street at the northwest end of the site offers an attractive view of the Garver building, but access to Atwood Avenue would be problematic during rush hours for anything but a right turn heading northwest on Atwood Avenue toward downtown.

Contrasting with project visibility is the quality of views available from the site, and in this regard the site offers both pluses and minuses. Olbrich Botanical Gardens, located directly south of the subject, is an outstanding potential amenity. For the site to benefit from this amenity, residents of the proposed development must be provided access along the common boundary, without forcing them to exit onto Fair Oaks Avenue and then drive or walk around to the Atwood Avenue entrance.

Starkweather Creek may be either an amenity or a liability to the project. While the creek imparts a naturalness to the property, the land adjoining it is low and swampy, and is not conducive to residential development. If parents view the creek as a potential hazard to their children, or if the creek remains the slowly moving, malodorous, mosquito infested waterway it has been in past summers, efforts to market residential units at the site will be significantly impeded.

Two other dynamic features of the project are the level of prestige and reputation of the general area, since these will help determine the maximum rent level or home price that can be charged for new development. This area is not viewed as a high prestige neighborhood; it is an area of very modestly priced homes. This may pose difficulties for new development, since site and construction costs may force rents and home prices markedly higher than those of surrounding properties.

Another dynamic feature is the problem of crime in a nearby neighborhood. Incidence of police calls confirm the Webb-Rethke neighborhood's reputation for being a tough place in which to live. This area is located approximately one quarter mile north of the subject site. However, problems from this area should not influence the safety of the immediate environs of the property. In addition to distance, Milwaukee Street and a railroad corridor bordering this neighborhood seem to effectively buffer it from residential areas to the south.

Although these problems should not affect the safety of the subject property's immediate environment, they may pose marketing problems for the subject site. Perception of a problem of crime can affect the marketability of the proposed development because potential customers may be frightened to enter the general neighborhood.

In conclusion, the lack of site visibility, the apparent loss of an opportunity to utilize the historic theme of the Garver building, and the absence of an image of status and prestige for the neighborhood are all compelling reasons that care must be taken to design the entire site from the outset, including Starkweather Creek and its low lying adjoining areas. This infill site must be developed in such a manner that it will create its own ambience, prestige, and sense of security.

#### G. Environmental Attributes

Development of the subject property could have positive effects on the social and aesthetic environment of the immediate area, and should therefore be favorably received by area neighborhood associations, and by regulatory and administrative bodies concerned. Cleanup of the site itself is an aesthetic plus, and dismantling of the Garver grain elevator will provide a much more positive backdrop for Olbrich Gardens. Provision of significant quantities of new housing will be a social benefit, since households forming within the Isthmus and near east side will no longer be forced out of the area to find new units.

#### H. Conclusions

The general conclusions to be drawn from this property analysis are that the subject property is suitable for residential development, but has some significant shortcomings that must be overcome. The site offers some extremely positive features, including proximity to Olbrich Gardens and convenient access to employment and entertainment centers downtown. However, on the negative side there are four significant problems. The precise size, location, and development impact of the environmental corridor and flood plain must be resolved in order to determine how much of the property can be developed. It will also be necessary to clean up Starkweather Creek and the swampy land adjoining it, lest this potential amenity become an adverse influence on the marketability of the development. A way should also be found to use the Garver Building's facade as a vehicle for marketing the project, since the



back of the building, the side facing the Fair Oaks Avenue entrance, is not attractive. Finally, project design must find a way to both integrate and insulate this project. Effective marketing will depend on overcoming the property's lack of visibility from either Atwood Avenue or Fair Oaks Avenue. Conversely, surrounding areas include both modest residential housing and industrial-commercial enterprises, and so any new upscale housing that is developed will have to provide some measure of insulation.

#### IV. MARKET DEMAND AND SUPPLY ANALYSIS

##### A. Current Housing Situation

Between 1970 and 1980 the housing stock in Dane County increased from approximately 92,000 to 126,000 dwelling units. This represents an average annual increase of 3.7 percent over the ten year period.

Much of this growth took place in the City of Madison, with growth concentrated on the far west and southwest sides of the city. This growth pattern has persisted since 1980, as reflected by the building permit data shown in **Exhibit IV-1**. The five City of Madison planning areas listed in **Exhibit IV-1** are delineated on the map found in **Exhibit IV-2**.

##### B. Delineation and Description of Study Area

###### 1. Delineation of the Study Area

This market analysis begins with the delineation of a study area that is extensive enough to include all important sources of demand and supply for both the multifamily and single family housing components of the proposed development. The actual market area for each housing type (multifamily and single family) is then analyzed as a sub-area within this larger study area.

The census tract is the smallest geographical area for which reliable data can be acquired and validated. The 16 census tracts defined as the study area were selected based upon information obtained from the following sources:

- a. Managers of east and north Madison residential rental projects
- b. Real estate brokers selling single family homes east of Madison's Isthmus
- c. A telephone survey of recent east Madison home purchasers

In considering the demographic data discussed in this report, the reader should be aware that 1989 household estimates are extrapolated from 1980 data, the last time a census was conducted. Given that nine years have passed since this 1980 census, there is potential for error in these estimates. Diligence has been exercised in confirming census based estimates and projections wherever possible.

EXHIBIT IV-1  
BUILDING PERMIT ACTIVITY FOR RESIDENTIAL CONSTRUCTION:  
By Planning Areas in the City of Madison

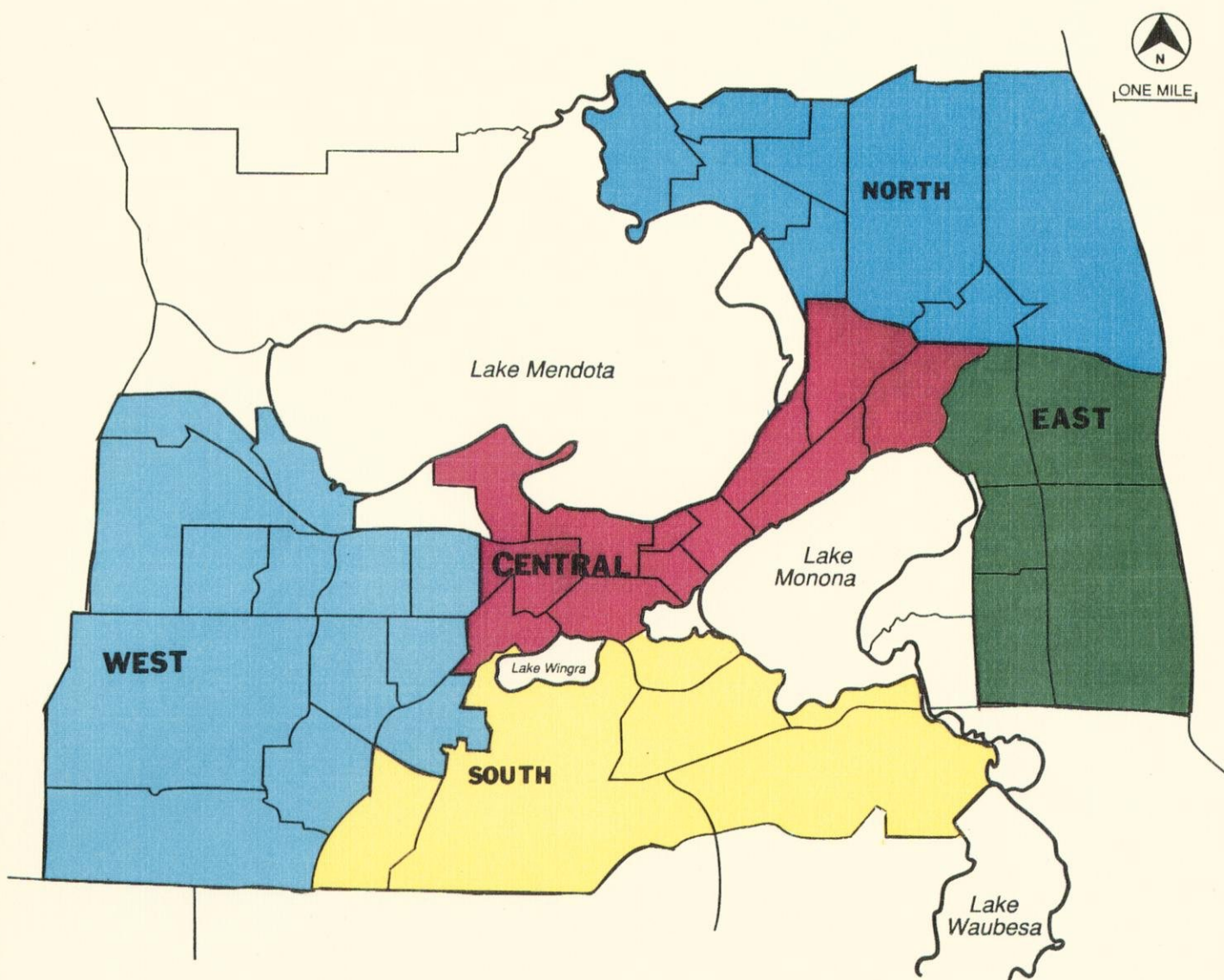
Planning Area	1980	1982	1984	1986	1988
Single Family					
Central	3%	1%	0%	0%	0%
North	15%	11%	13%	14%	17%
East	24%	28%	19%	19%	16%
South	31%	3%	1%	2%	5%
West	27%	56%	67%	64%	63%
Total [1]	100%	100%	100%	100%	100%
Multifamily					
Central	13%	1%	6%	20%	7%
North	7%	39%	9%	19%	23%
East	14%	4%	4%	3%	3%
South	31%	7%	4%	1%	3%
West	35%	49%	77%	57%	65%
Total [1]	100%	100%	100%	100%	100%

Source: City of Madison Planning Department.

Note: Multifamily housing includes all units in structures that have at least two dwelling units in the structure.

[1] Percentages may not add to 100 due to rounding.

EXHIBIT IV-2  
PLANNING DISTRICTS  
CITY OF MADISON



Source: City of Madison Department of Planning and Development

## 2. Description of the Study Area

The study area may be described in terms of several types of demographic data which are detailed in Exhibits IV-3 through IV-8 and include:

### Demand Elements

- a. The estimated number of households comprising each census tract as of 1989
- b. Projected growth in the number of households between 1989 and 1994
- c. Median income by tract

### Supply Elements

- d. Percentage of dwelling units in each tract that are renter occupied and owner occupied
- e. Percentage of dwelling units that are classified as multifamily (including duplexes)
- f. Percentage of dwelling units that were built before 1960

A brief description of each of these supply and demand elements follows.

#### a. Estimated Number of Households as of 1989

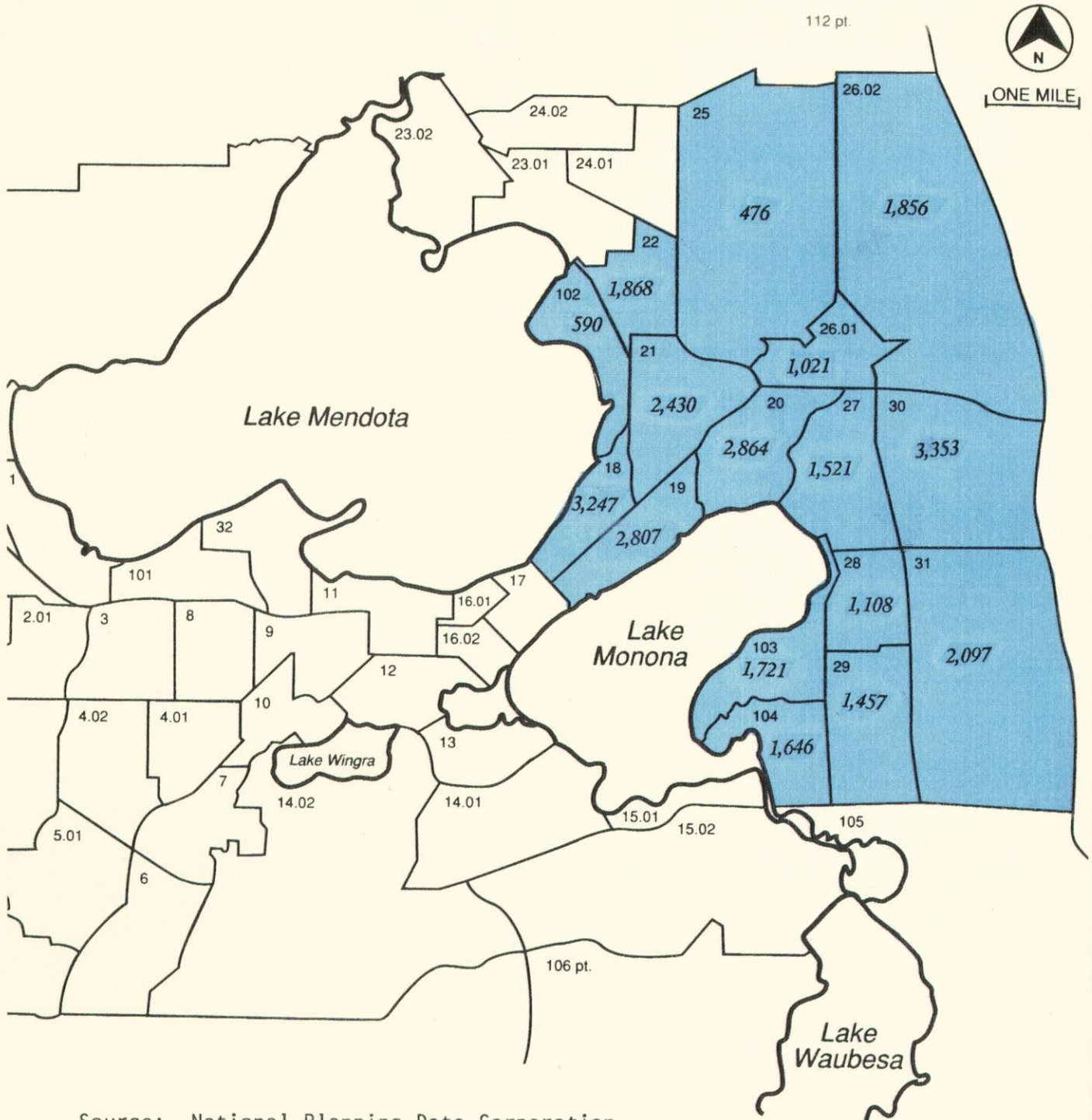
As of 1989, a total of 30,062 households comprise the 16 census tract study area as shown in Exhibit IV-3. (See the Appendix, Section IV, Note 1 for definition of household.) The study area represents approximately 39 percent of the total of 77,307 households located in the City of Madison as a whole. Isthmus area tracts tend to be the most densely populated (including the tract in which the subject property is located), while Maple Bluff, Monona, and peripheral tracts tend to be less densely populated.

#### b. Projected Growth in Number of Households 1989 to 1994

The percentage change in the number of households between 1989 and 1994 is expected to be greatest in the tracts farthest to the



EXHIBIT IV-3  
ESTIMATED NUMBER OF HOUSEHOLDS, 1989  
Market Study Area  
16 Census Tracts



north and east, including tracts 26.02, 30, and 31. Given that these tracts are fairly well populated, they will contribute substantially to the study area housing demand potential. Census tract 18 is also projected to grow substantially, while tract 20 (location of subject property) is projected to experience a minor decrease. The rates of growth of households for the entire study area and for the City of Madison are expected to be 5.7 percent and 8.2 percent, respectively. (See **Exhibit IV-4.**)

c. Median Income  
by Tract

Median household income is one measure of the purchasing or renting ability of area households. (See the **Appendix, Section IV, Note 2** for definition of median income.) Tract 20, the location of the subject property, shows a median income in line with tracts in the Isthmus area, but Tract 20 has a considerably lower median income when compared to census tracts 26.02, 27, 30, and 31 located to the north and east. (See **Exhibit IV-5.**)

d. Percentage of Renter and  
Owner Occupied Households

Renter occupied housing tends to be most concentrated in the Isthmus area (tracts 18 and 19), and in tract 26.02 to the northeast. (See **Exhibit IV-6.**) Tract 20, the location of the subject property, shows a high proportion of rental units, as does neighboring tract 21. The percentage of renter occupancy for the study area as a whole is 41.3 percent. This implies an owner occupancy of 58.7 percent.

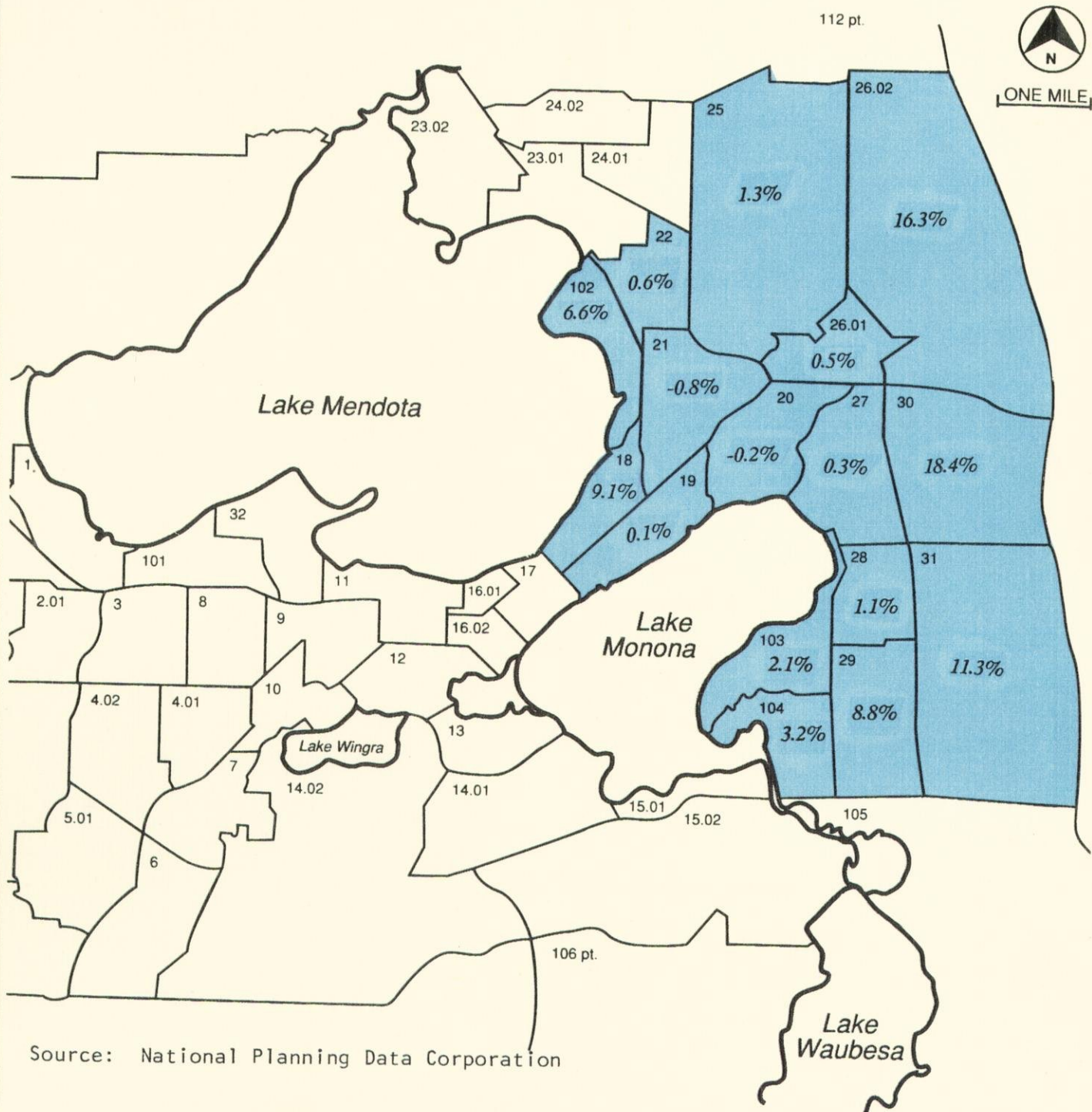
e. Percentage of Multifamily  
Households

Multifamily housing units in the subject tract comprised 43.5 percent of total units as of 1980. (See **Exhibit IV-7.**) An examination of building permit data between 1980 and 1989 revealed that this proportion has not changed as there was a net increase of only 7 multifamily units in tract 20 for this nine year period. The tracts showing high percentages of multifamily housing stock are the same tracts that show a concentration of rental units, as would be expected.

f. Percentage of Dwelling Units  
Built Before 1960

The age of area housing provides clues about the potential competitiveness of new space built at the subject site, since new

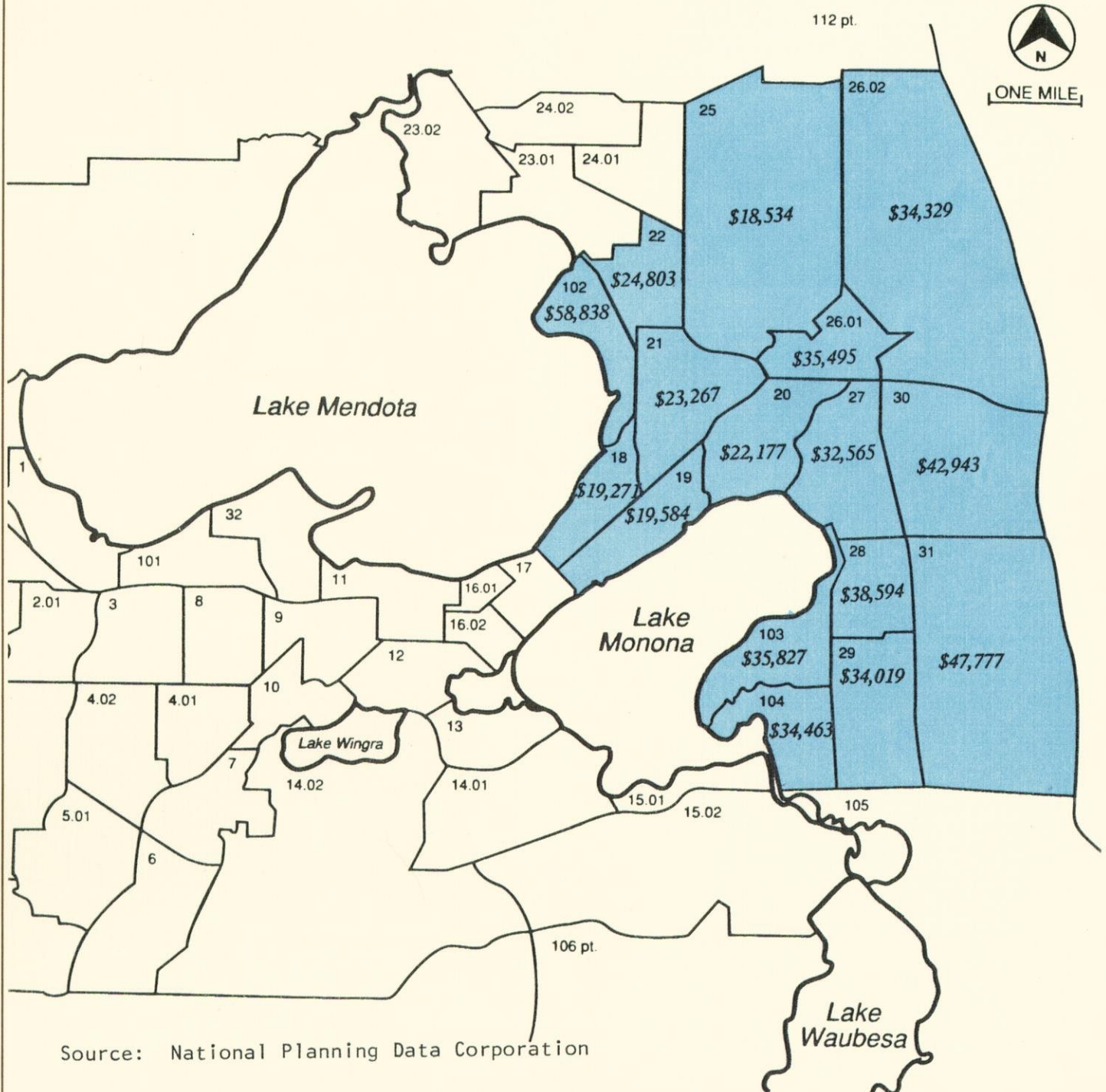
EXHIBIT IV-4  
ESTIMATED PERCENT CHANGE IN NUMBER OF HOUSEHOLDS 1989-1994  
Market Study Area  
16 Census Tracts



Source: National Planning Data Corporation

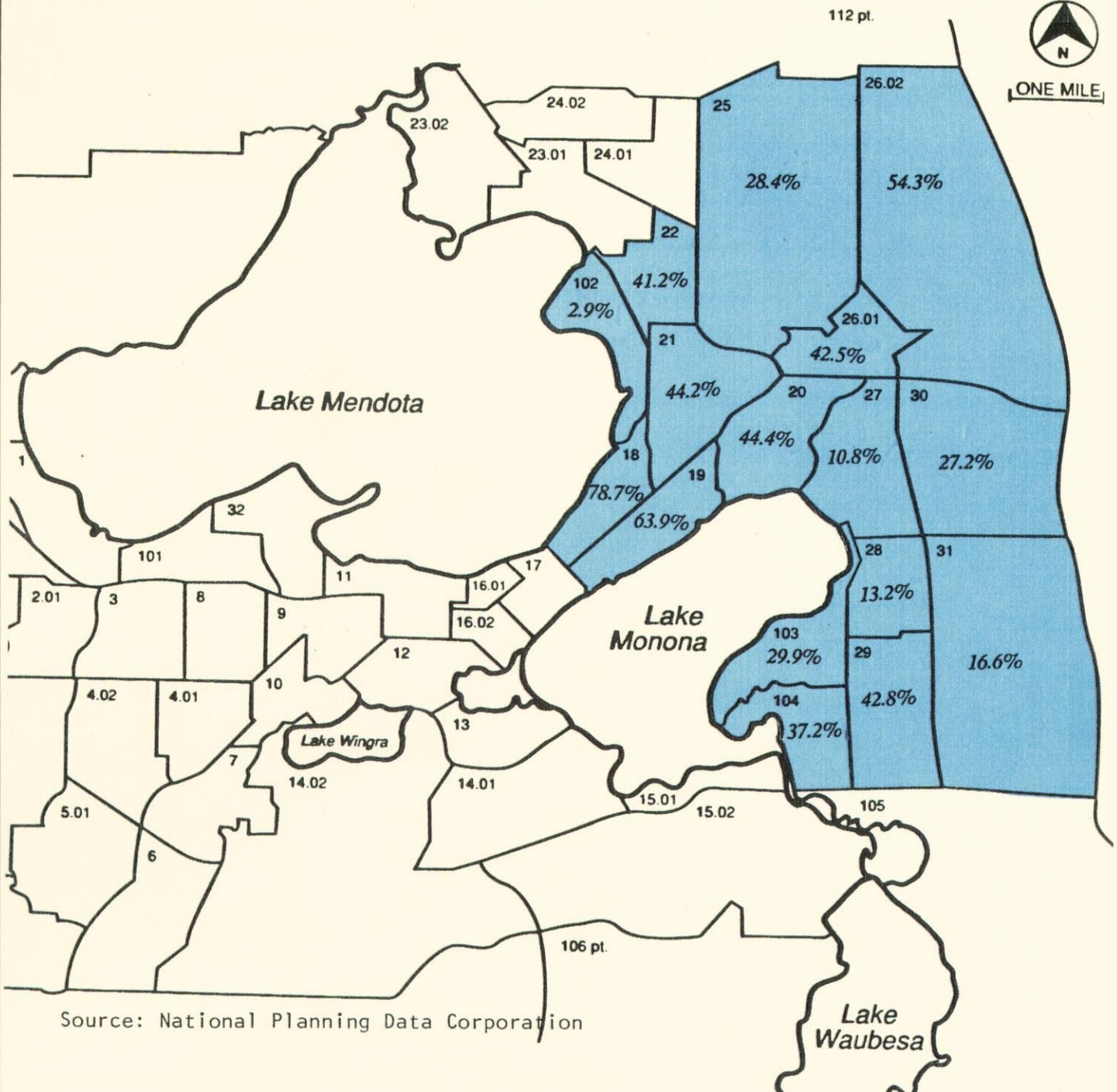


EXHIBIT IV-5  
ESTIMATED MEDIAN HOUSEHOLD INCOME, 1989  
Market Study Area  
16 Census Tracts



Source: National Planning Data Corporation

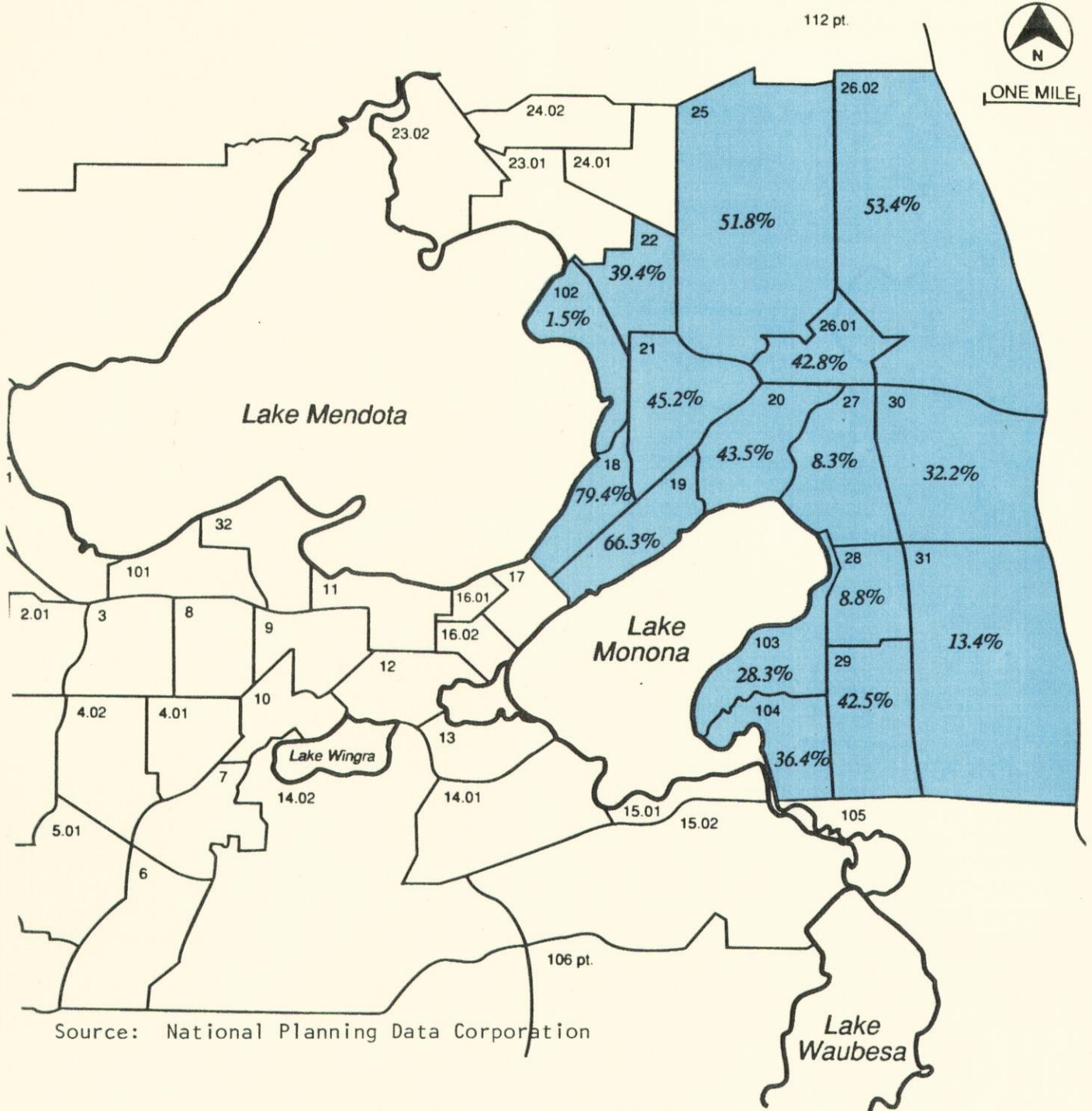
EXHIBIT IV-6  
PERCENTAGE OF RENTER OCCUPIED HOUSING, 1980  
Market Study Area  
16 Census Tracts



Source: National Planning Data Corporation



EXHIBIT IV-7  
PERCENTAGE OF MULTIFAMILY HOUSING, 1980  
Market Study Area  
16 Census Tracts



units may provide amenity and design features not readily available in older housing (See **Exhibit IV-8.**) Since Isthmus area and central Madison tracts tend to be older (e.g., 88.5 percent of tract 20 housing was built before 1960), it appears that a new development at the subject site would enjoy a competitive advantage in this regard.

In summary, the study area is varied in terms of density of households, projected rates of change in numbers of households through 1994, concentrations of rental and multifamily housing, age of the housing stock, and the incomes of area residents. The geographical area that includes and immediately surrounds the subject property may be characterized as relatively dense, slow growing, and dominated by owned, older single family housing which is occupied by moderate income residents.

### C. Demand for Housing in Study Area

#### 1. Overview of Approach

Potential demand for new housing is projected using a two step procedure. Given population and household formation estimates for 1980, 1989, and 1994 purchased from National Planning Data Corporation (NPDC), adjustments are made for area vacancies that differ from normal or structural levels. (See the **Appendix, Section IV, Note 3** for further discussion.)

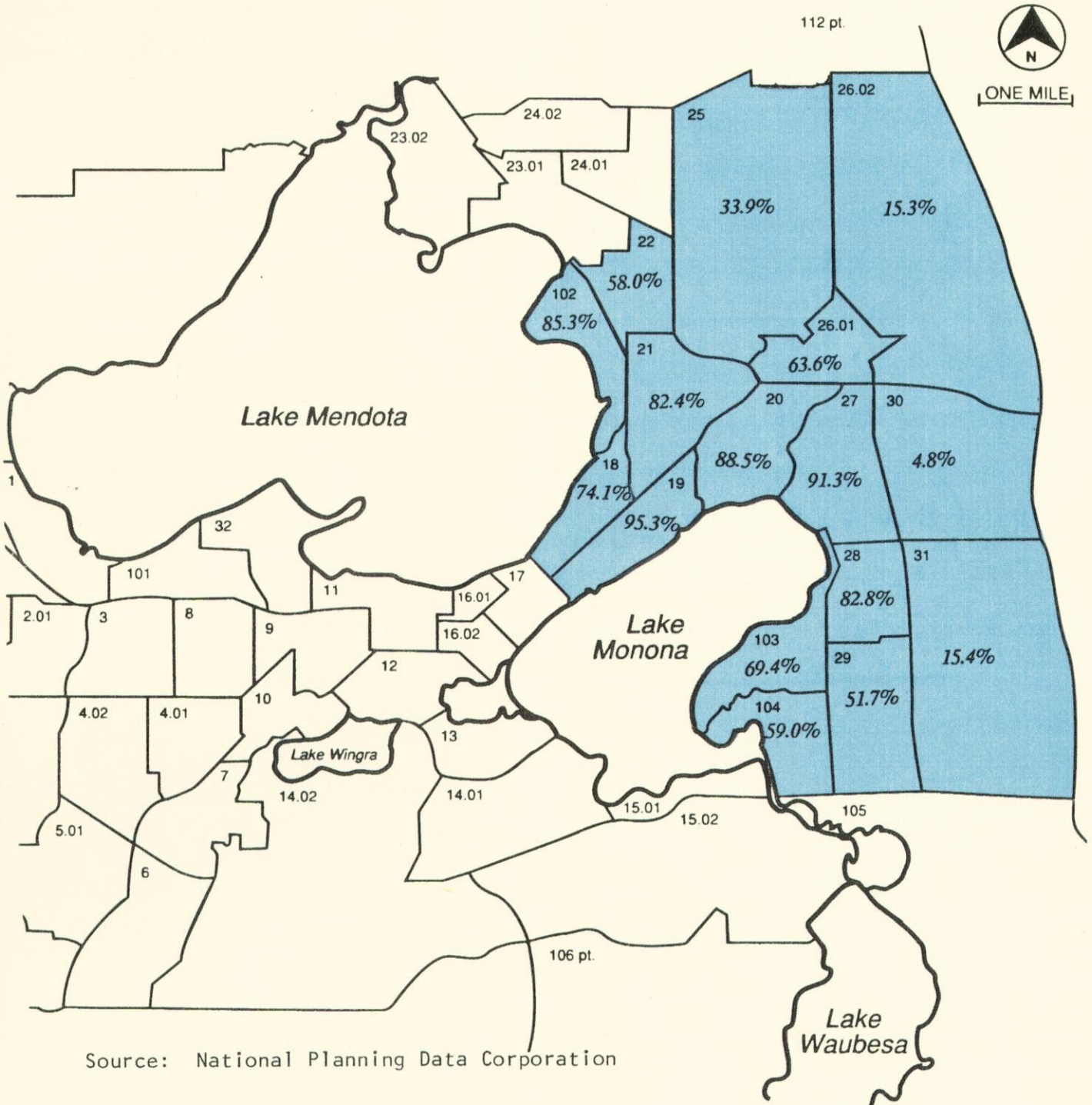
These projections are then verified by comparison with locally generated and maintained data, including building permits, demolition permits, and information on the conversion of existing structures to or from residential uses.

#### 2. Net Household Formations

Increases in the number of households occur due to both population increases and household size decreases. In **Exhibit IV-9** the data are arranged by age groups, and show the number of households for each age group as reported from the 1980 census, as estimated for 1989, and as projected for 1994. The average annual change (increase or decrease) in net household formations is calculated for each age group. (See **Exhibit IV-9.**)

These data show a study area population that is dominated by young adults (aged 25 to 34 years), but that is shifting to middle

EXHIBIT IV-8  
PERCENTAGE OF HOUSING UNITS BUILT BEFORE 1960  
Market Study Area  
16 Census Tracts



Source: National Planning Data Corporation



EXHIBIT IV-9  
NET HOUSEHOLD FORMATION IN STUDY AREA  
16 Census Tracts

Age	<u>Number of Households</u>			<u>Average Annual Increases</u>	
	1980 Census	1989 Estimate	1994 Projection	1980-89	1989-94
15-24	3,387	2,504	2,232	-98	-54
25-34	8,306	9,235	9,290	103	11
35-44	3,905	5,407	6,166	167	152
45-54	3,534	3,834	4,638	33	161
55-64	3,641	3,610	3,423	-3	-37
65-74	2,623	3,242	3,474	69	46
75+	<u>1,801</u>	<u>2,230</u>	<u>2,564</u>	<u>48</u>	<u>67</u>
Total	27,197 =====	30,062 =====	31,787 =====	318 ===	345 =====

Source: National Planning Data Corp.

age over the 1989 to 1994 projection period. The following pattern is shown in **Exhibit IV-9**:

- a. Households in the 25 to 34 year age group are the most numerous (8,306 in 1980, 9,290 as of 1994), but are not increasing in number as rapidly as households in the 35 to 44 year age group (3,905 in 1980, 6,166 as of 1994)
- b. The average annual increase in the number of households has been 103 per year between 1980 and 1989 for 25-34 year olds, as compared with an increase of 167 households per year for the 35-44 group. This difference is projected to become even more dramatic in the period between 1989 and 1994

As householders age, they are more likely to become homebuyers. Thus the maturing of baby boom households shown in **Exhibit IV-9** suggests strong growth in demand for single family homes, and a shift away from demand for apartment space. The large numbers of households headed by 25 to 34 year olds implies significant first-time buyer demand, but the large annual increases in the 35-44 and 45-54 age groups point to the possibility of significant move-up demand.

Population totals shown in **Exhibit IV-9** indicate there will be an increase of 345 net households formed in the study area each year between 1989 and 1994. This is due in part to population increases in the area and, in part, to projected decreases in average household size. Changes in the number of persons per household in the study area compared to the City of Madison are as follows:

	Study Area Average No. Persons <u>Per Household</u>	City of Madison Average No. Persons <u>Per Household</u>
1980	2.44	2.36
1989	2.25	2.16
1994	2.17	2.07

### 3. NPDC Projections Adjusted to Account for Normal Vacancy

At any point in time there are a number of housing units that are unoccupied as residents move into and out of accommodations. This normal vacancy is analogous to the structural unemployment rate. When projecting the number of household units that will be needed to satisfy demand into the future, an adjustment must be made to the NPDC household projections to account for the normal, or structural

vacancy rate for the study area. The best data available are the vacancy rates reported for both owned and rented household units in the 1980 census. Housing vacancy data for each of the 16 census tracts located in the defined study area are found in **Exhibit IV-10**.

Vacancies are generally low in older residential areas that show high percentages of owned, single family housing, and vacancies rise in the census tracts along the periphery of the study area. These peripheral tracts show higher percentages of rented and multifamily housing. (See **Exhibits IV-6 and IV-7** presented earlier.) Vacancy in census tract 20 in which the subject property is located is 3.4 percent, which compares quite favorably with the total study area figure of 4.0 percent. But in tracts 21 and 26.01, which have a comparable mix of housing types to those in tract 20, the vacancy rates are somewhat lower.

Vacancy rates for multifamily housing were obtained for 1986 through 1988 from the Madison Apartment Association. These follow in **Exhibit IV-11**. Vacancies for the east side, which includes the study area, have varied between 5.6 and 4.4 percent. Figures for the total survey area, which includes all of Madison plus some areas outside of city limits, as defined by the Madison Apartment Association, range between 7.3 percent and 5.0 percent.

Madison's east side is presently close to or slightly below its normal or structural vacancy level. The area as a whole has been relatively slow growing, and while there may be some excess vacancy in newer peripheral areas, this is balanced by lower vacancy levels in the remainder of the area. As a consequence, one-half a percentage point of additional demand has been added to the estimates of multifamily demand. The calculations are found in the **Appendix, Section IV, Note 4** and will be discussed in more detail later in the report.

#### D. Market Demand for the Multifamily Housing Component

##### 1. Delineation of Multifamily Housing Market Area

The level of demand for housing at the subject site will depend on the extent of the market area for particular product types. Research suggests that the markets for single family and multifamily housing are somewhat different and neither encompasses the full extent of the study area.

For the multifamily component, fourteen apartment managers and one market researcher for a major area development firm were interviewed. Results indicated that nearly all of the tenants moving into their projects were coming from the east side of Madison.



EXHIBIT IV-10  
 AREA VACANCY RATES FOR TOTAL HOUSING UNITS, 1980  
 Market Study Area  
 16 Census Tracts

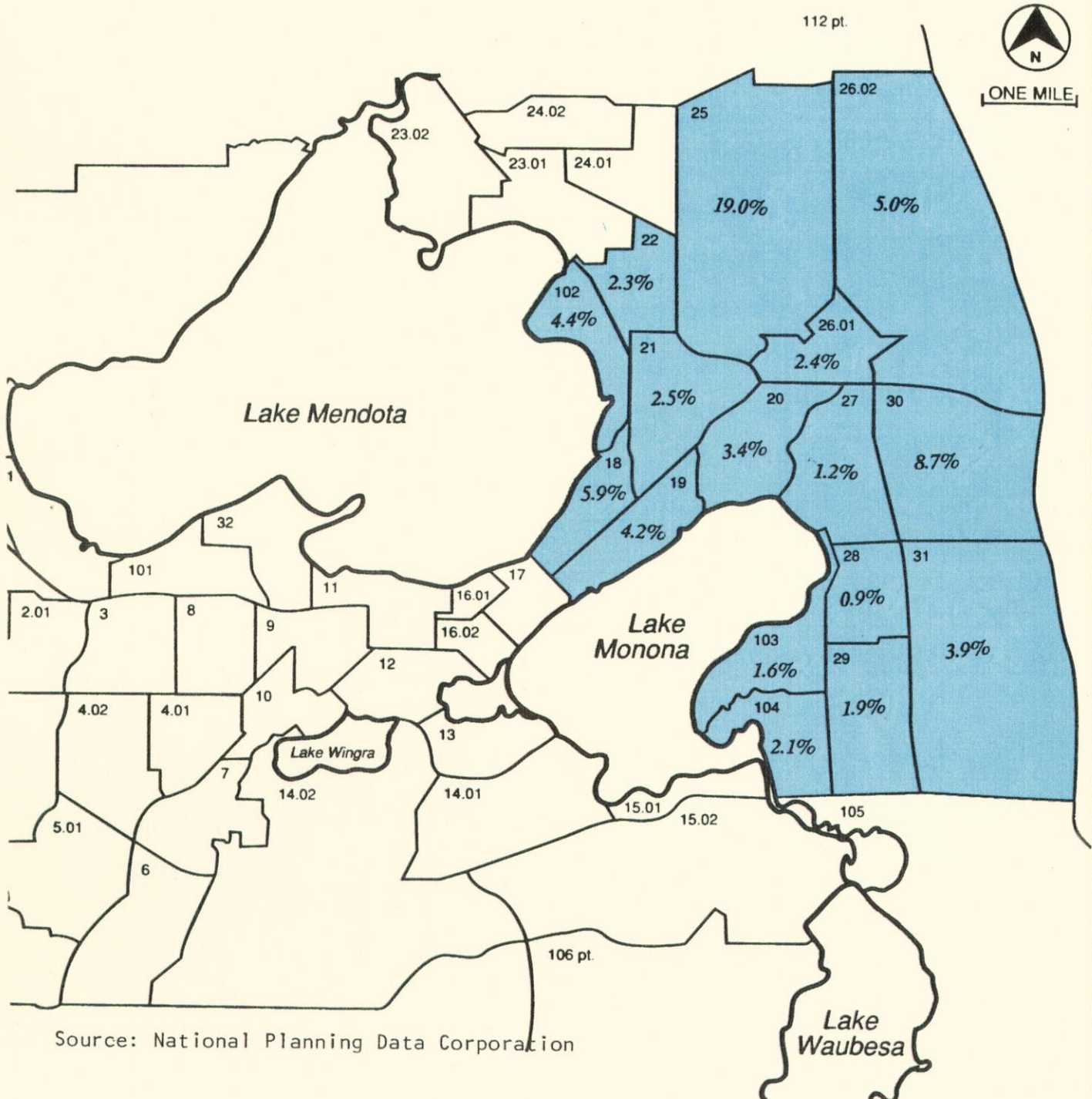


EXHIBIT IV-11  
MULTIFAMILY HOUSING VACANCY RATES, 1986-88  
Market Study Area  
16 Census Tracts

	1980	1986	1987	1988
<hr/>				
East Side (inside city) [1]				
Rate	N/A	4.9%	5.6%	4.4%
Units	N/A	4,356	3,707	4,014
Total Survey Area [2]				
Rate	7.2% [3]	7.3%	6.5%	5.0%
Units	N/A	17,577	16,046	19,199

Source: Madison Apartment Association and U.S. Bureau of the Census.

- [1] Includes all units in the City of Madison lying east of Blair Street.
- [2] Includes all units reported by Madison Apartment Association members both inside and outside city limits.
- [3] This is a regional total, not a City of Madison figure.

A summary of the interviews with apartment managers is found in **Exhibit IV-12** and a map indicating the location of these projects is shown in **Exhibit IV-13**. Follow-up questions were then asked to pinpoint the east side neighborhoods of origin. Responses to the interviews resulted in the following conclusions:

- a. The size of the market area is positively associated with rental price. That is, low rent units attract tenants from immediately surrounding areas (e.g., Webb Street Apartments, 2052 Atwood Avenue Apartments, Victory Arms, and 2095 Winnebago Street). Conversely, higher rent projects, such as Morningside on the Green, Yahara Place, Camelot, and Stonewood Village drew from Madison's entire east side.
- b. Project managers for Camelot, Stonewood Village, and Morningside on the Green stated that they drew significant numbers of tenants from other less expensive rental projects. Camelot is drawing from Nichols Station, Stonewood Village attracts tenants from The Meadows, and Morningside is drawing from Stonewood Village.
- c. The rental market area also includes households which are migrating to Madison from outside the area or state. Project managers stated that these households were predominantly young singles who are professionals with higher income levels and that these renters move into reputable, safe projects such as Village Green East and Camelot. Households with somewhat lower income levels are more likely to move to projects such as Briarwood.
- d. The market area for higher priced projects may include outlying rural areas or towns in the east and northeast sections of Dane County, including Windsor and McFarland. However, this is estimated to be less than five percent of the demand.

On the basis of these interviews, it was concluded that many east side residents are loyal to the east side and value their familiar surroundings and social associations enough to stay in the area as they move to larger, more expensive housing.

These interviews suggest that the specific multifamily housing market demand area can be defined as the 10 census tracts delineated in **Exhibit IV-14**. This area comprises census tracts 18, 19, 20, 21, 22, 26.01, 26.02, 27, 28, and 30. (See the **Appendix, Section IV, Note 5** for further details.) The subject site is most likely to draw its residents from households that currently live in this defined market area.

EXHIBIT IV-12  
INVENTORY OF SELECTED MULTIFAMILY HOUSING PROJECTS  
IN STUDY AREA  
16 Census Tracts

Comparable Apartment Project	Year Built	Occupancy	Tenant Type [1]	Type of Units	# of Units	Rent/ Month	Unit Sq. Ft.	Rent/ Sq. Ft.	Utilities	Type of Parking	Parking Spaces	Parking Fee	Pet Policy	Selling Points	Renewal Rate							
									Paid By Lessor													
1. Atwood Apartments 2052 Atwood Ave. 50% Units Rent to HHs @ 60% Cty. Median	1987	95%	Elderly	1 Bd, 1 Ba	8	\$395	540	\$0.73	Water,	Outside	19	None	No pets allowed	Security, private entrances, public transit	High Tenant loss due to poor health							
				1 Bd, 1 Ba	7	\$415	540	\$0.77	Sewer,													
				2 Bd, 1 Ba	4	\$495	760	\$0.65	Hot Water, Heat													
				-----		-----																
				Total	19	Average		\$0.72														
2. Briarwood 1818 Fordem Ave.	1987	97%	Clerical, Family, Young Professionals, Students	Efficiency	4	\$350	457	\$0.77	Water,	Outside	136	None	Cats, if declawed & neutered plus \$100 deposit; no dogs	Undrgrd. park., pool, landscaping	50% per year							
				1 Bd, 1 Ba	4	\$385	534	\$0.72	Sewer,		136											
				1 Bd, 1 Ba	80	\$430	685	\$0.63	Hot Water	Attached												
				2 Bd, 1.5 Ba	16	\$520	1,036	\$0.50			-----											
				2 Bd, 2 Ba	16	\$555	1,084	\$0.51	Total	272												
				3 Bd, 2 Ba	16	\$620	1,248	\$0.50														
				-----		-----																
				Total	136	Average		\$0.60														
3. Camelot <i>Apts + Towers</i> 1614 Fordem Ave.	Built in 3 Phases: 1976 1983 1985	96%	Young Professionals, Students, Family, Elderly, Clerical	Efficiency	6	\$365	456	\$0.80	Water,	Outside	160	None	Only cats, if neutered and declawed in Towers with \$200 deposit	Undrgrd. park., pool, landscaping, elevators, laundry (some units), garbage chutes professional management	High							
				Efficiency	6	\$395	456	\$0.87	Sewer		321											
				1 Bd, 1 Ba	144	\$430	644	\$0.67	Attached	-----	w. lease; \$50/mth monthly											
				1 Bd, 1 Ba	36	\$500	756	\$0.66														
				2 Bd, 1 Ba	116	\$545	863	\$0.63	Total	481												
				2 Bd, 2 Ba	84	\$585	1,018	\$0.57														
				3 Bd, 2 Ba	22	\$580	1,300	\$0.45														
				3 Bd, 2 Ba	4	\$880	1,600	\$0.55			-----											
				Total	418	Average		\$0.65														
				4. Eastwood Court 330-336 Amoth Ct.	Completed May, 1988	83%	Young Professionals, Elderly	1 Bd, 1 Ba	10	\$480	700	\$0.69				Water,	Outside	24	None	No pets allowed	Access to down- town and UW, private entrances, ample storage, microwave, energy	65% per year
								1 Bd, 1 Ba, Den	2	\$585	800	\$0.73				Sewer						
2 Bd, 1 Ba	6	\$600	875					\$0.69	-----													
Total	18	Average						\$0.70														
-----		-----																				

[1] Tenant types are listed in order of prevalence.



EXHIBIT IV-12  
(CONTINUED)

Comparable Apartment Project	Year Built	Occupancy	Tenant Type [1]	Type of Units	# of Units	Rent/ Month	Unit Sq. Ft.	Rent/ Sq. Ft.	Utilities Paid By Lessor	Type of Parking	Parking Spaces	Parking Fee	Pet Policy	Selling Points	Renewal Rate
5. Lakewood Gardens [2] 1909 Sherman Ave.	1968	95%	Young Professional, Family, Student, Clerical	1 Bd, 1Ba 2 Bd, 1 Ba 3 Bd, 1.5 Ba	49 108 51	\$410 \$490 \$575	744 960 1,025	\$0.55 \$0.51 \$0.56	Water, Sewer	Outside Garage- Detached	208 10	None \$60/mth.	Cats allowed; no dogs	Private entrances, basements, washer and dryer hookups	High
				Total	208		Average	\$0.54		Total	218				
6. Morningside on the Green [3] Hayes Rd.	Started in 1989	81%	Elderly, Young Professional	1 Bd, 1 Ba 1 Bd, 1 Ba 2 Bd, 1.75 Ba 2 Bd, 1.75 Ba 3 Bd, 1.75 Ba 3 Bd, 1.75 Ba	10 10 12 12 6 6	\$510 \$535 \$595 \$620 \$670 \$695	850 850 1,050 1,050 1,400 1,400	\$0.60 \$0.63 \$0.57 \$0.59 \$0.48 \$0.50	Water, Sewer	Outside Garage- Detached	98 56	None None	No pets allowed	Private entrances full size laundry in units, inside storage closet, landscaping, profes. management, easy access to interstate	Not relevant
				Total	56		Average	\$0.56		Total	154				
7. Sherman Terrace 26 Sherman Terrace	1948	98%	Young Professional, Clerical, Student, Elderly	2 Bd, 1 Ba 2 Bd, 1 Ba	75 141	\$375 \$450	800 800	\$0.47 \$0.56	Water, Sewer	Outside	216	None		Washer/dryer in units (\$450 only); low rents; land- scaping	55% per year
				Total	216		Average	\$0.52							
8. Stonewood Village 302 Parkwood Lane	Built in 2 Phases: 1984 1985	98%	Young Professional, Family	1 Bd, 1 Ba 2 Bd, 1 Ba 2 Bd, 1 Ba	17 132 131	\$470 \$525 \$535	840 1,000 1,027	\$0.56 \$0.53 \$0.52	Water, Sewer	Outside	280	None	Dogs < 20 lbs., cats if declawed; minor \$ chg.	Private entrances, full size laundry in units, inside storage closet, landscaping, prof. management	High
				Total	280		Average	\$0.54							

[1] Tenant types are listed in order of prevalence.

[2] In Lakewood gardens there are 2 types of two and three  
BR units: 18 of them are in a three-story apt. bld.,  
have 766-980sq. ft. and rent for \$475-495/mth; 49 two BR  
units are in townhouses, have 960 sq. ft., and rent for \$489;  
the 3 BR units have 1300 sq. ft. and rent for \$450; in  
addition, all the townhouse units have full unfurnished basements  
suitable for storage.

[3] Morningside on the Green is zoned for 232 units with 56  
units completed in 1989 and 112 units planned for 1990.

112  
56  
168

232  
168  
64

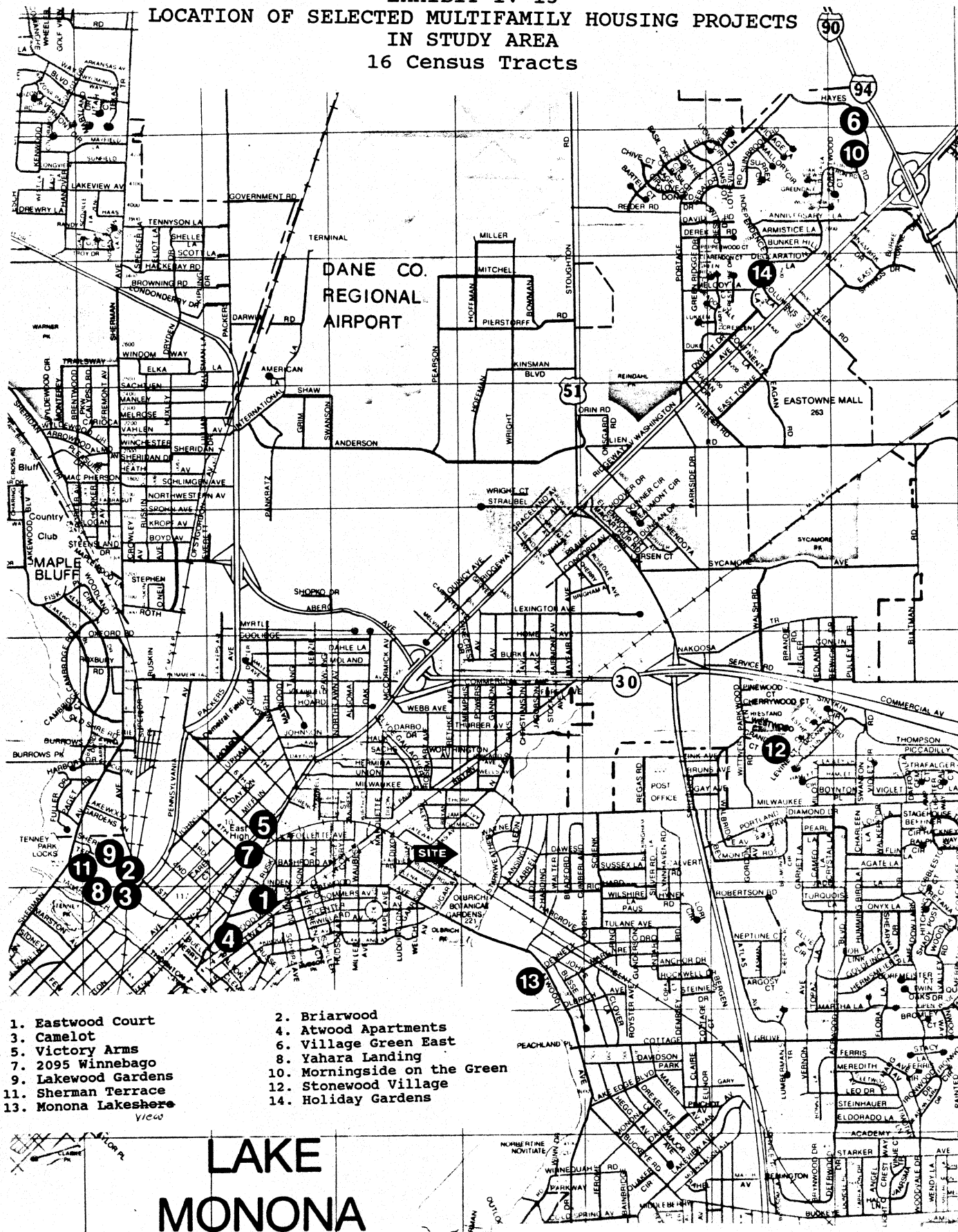
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EXHIBIT IV-12  
(CONTINUED)

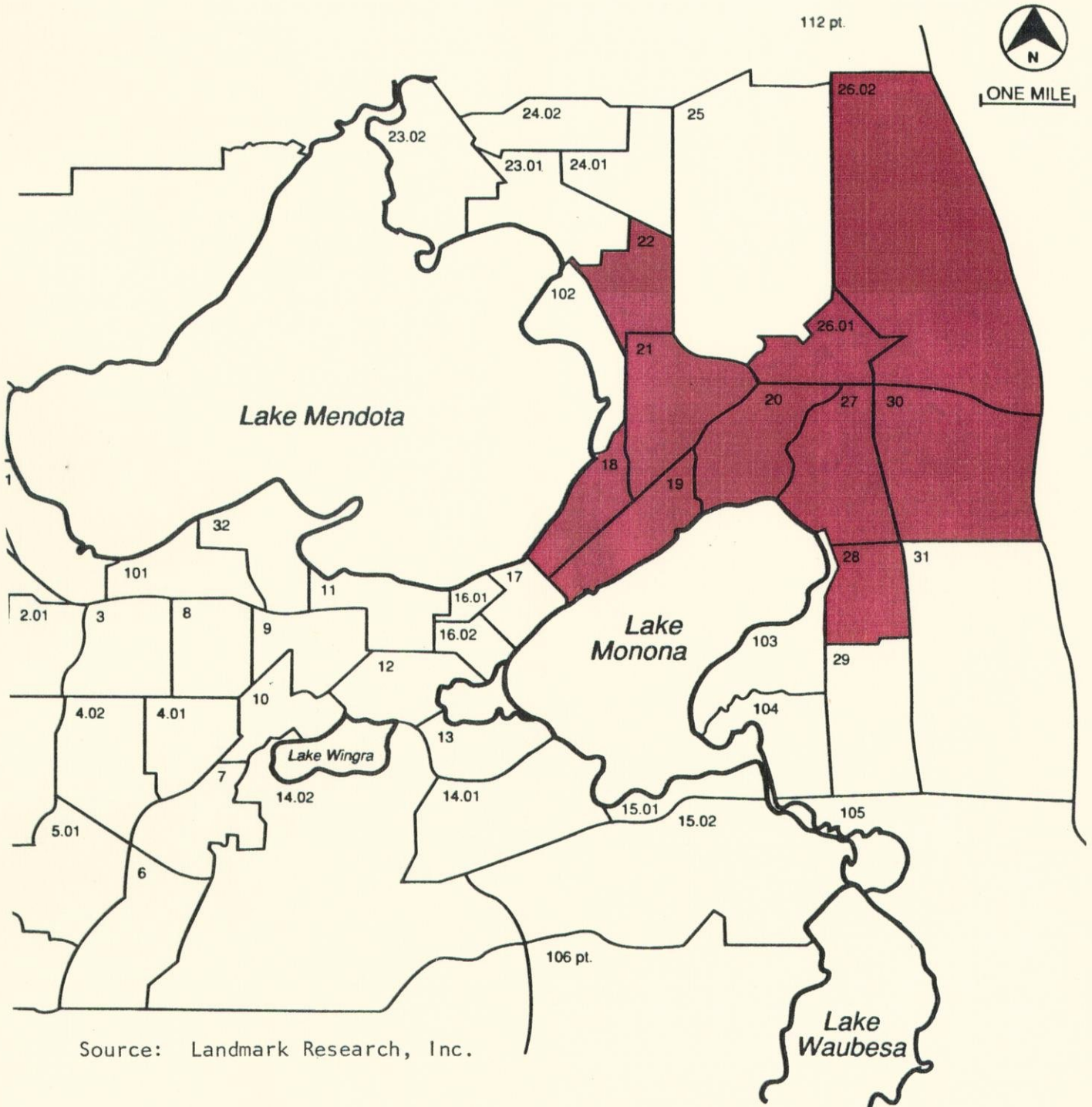
Comparable Apartment Project	Year Built	Occupancy	Tenant Type [1]	Type of Units	# of Units	Rent/ Month	Unit Sq. Ft.	Rent/ Sq. Ft.	Utilities Paid By Lessor	Type of Parking	Parking Spaces	Parking Fee	Pet Policy	Selling Points	Renewal Rate
9. Victory Arms Apts. 2420 E. Washington	1948	100%	Student, Elderly, Clerical	1 Bd, 1 Ba 2 Bd, 1 Ba	9 9	\$315 \$380	500 600	\$0.63 \$0.63	Water, Sewer, Hot Water, Heat	Outside	15	None	Cats allowed; no dogs	Access to public transportation, low rent	High
				Total	18		Average	\$0.63							
10. Village Green East Hayes Rd.	Built in 2 Phases: 1976 1983	98%	Young Professional	1 Bd, 1 Ba 1 Bd, 1 Ba 2 Bd, 1 Ba 2 Bd, 1 Ba	56 8 64 112	\$445 \$450 \$495 \$520	665 775 880 930	\$0.67 \$0.58 \$0.56 \$0.56	Phase1: Water, Sewer, Hot Water, Heat Phase2: Water, Sewer	Outside	420	None	Dogs < 20 lbs., cats if declawed; minor \$ chg.	Private entrances, laundry in units landscaping, prof. management	70% per year
				Total	240		Average	\$0.59							
11. 2095 Winnebago St.	1962	88%	Elderly	2 Bd, 1 Ba	8	\$390	900	\$0.43	Water, Sewer, Hot Water, Heat	Outside	8	None	No pets allowed	Access to grocery and public trans., low rent	High tenants stay until health worsens"
12. Yahara Landing 1624 Fordem Rd. 14 Units Rented at \$10 off for HHs < \$24.5K	1986	90%	Young Professional, Student, Family	2 Bd, 2 Ba 2 Bd, 2 Ba 2 Bd, 2 Ba 2 Bd, 2 Ba	18 18 18 18	\$585 \$600 \$629 \$655	1,040 1,040 1,092 1,092	\$0.56 \$0.58 \$0.58 \$0.60	Water, Sewer, Hot Water	Outside Garage- Attached	72 33	\$35/mth. w. lease	No pets allowed	Attached parking, laundry in unit, basement storage, pool, landscaping	50% per year
				Total	72						105				
13. Monona Lakeshore 3825 Monona Drive	Approx. 1959	97%	Elderly, Young Professional	Efficiency 1 Bd, 1 Ba 2 Bd, 1 Ba 2 Bd, 1 Ba	5 142 29 30	\$360 \$435 \$470 \$650	550 675 850 1000	0.65 0.64 0.55 0.65	Water, Sewer, Hot Water, Heat	Outside Garage- Attached Total	111 119	None \$25/mo 25-30	Cats allowed, of declawed & neutered, plus \$100 deposit and \$5/mo. No dogs		Approx. 85% 36 units/yr turnover
				Total	206		Average	0.63							
14. Holiday Gardens	1975	1988-97% 1989-84% (Now offer rental incentives)	Young Professionals, Seniors, Students, Families	1 Bd, 1 Ba 2 Bd, 1 Ba 2 Bd, 2 Ba	148 95 56	\$430 \$509 \$529	680 960 1,060	0.63 0.53 0.50	Heat, Hot Water	Surface Underground Total	300 39	None \$15/mo	\$100 pet fee plus \$10/mo Cats only if neutered and declawed. No dogs	Outdoor pool, sauna, whirlpool, party room, fireplace, wet bar, adjacent to city park and close to interstate	
				Total	299		Average	0.42			339				
				(Total does not include 1 model and 1 maintenance)											

EXHIBIT IV-13  
LOCATION OF SELECTED MULTIFAMILY HOUSING PROJECTS  
IN STUDY AREA  
16 Census Tracts



**SOURCE:** Landmark Research, Inc.

EXHIBIT IV-14  
DELINEATION OF MULTIFAMILY HOUSING MARKET  
10 Census Tracts



## 2. Household Formation

As shown in **Exhibit IV-14**, the market area for multifamily housing at the subject site includes 10 of the 16 census tracts which comprise the overall study area. The number of households located in these 10 tracts in 1980, 1989, and 1994 are detailed in **Exhibit IV-15**.

As would be expected, by decreasing the size of the market demand area for multifamily housing to 10 census tracts, the 224 households estimated to form annually between 1980 and 1989 is considerably smaller than the 318 households estimated for the study area as a whole. Between 1989 and 1994, 245 net household formations per year are projected annually for the multifamily area as compared to 345 households for the study area.

Verification of the 1980 to 1989 estimate of 224 annual net household additions was made using City of Madison building permit, demolition, and conversions data for this same time period. To the extent that these building data imply households that have already formed, the National Planning Data estimates and the City of Madison data compare favorably. Because the 1989 estimates are close to what actually happened in Madison, we can therefore be confident in the NPDC projections.

## 3. Housing Tenure

These annual household formation estimates may be partitioned on the basis of whether the households will own or rent housing space. Although the multifamily market area describes the census tracts from which the multifamily rental (apartment) component of the proposed development will draw, the decision of those householders to own or rent will depend upon their financial abilities and housing preferences. In this 10 census tract market area, as of 1980, the proportion of households that owned their own homes was 54.2 percent; this implies an area rental rate of 45.8 percent. These figures compare with 58.7 percent owned and 41.3 percent rented, respectively, for the study area as a whole.

The best recent data available suggest that the percentage of home ownership in Dane County has not varied much since 1980. A post-1980 slowdown in home purchasing led to a decrease in the percentage of homeownership by 1984, but the area's overall ownership rate is estimated to have risen slightly by 1989. This rate is expected to continue rising through 1994 as more of the baby boom generation reach prime homebuying age. (See the **Appendix, Section IV, Note 6** for source of information.)

**Exhibit IV-16** details the average annual change in the number of rented and owned housing units in the multifamily market area from



EXHIBIT IV-15  
NUMBER OF HOUSEHOLDS: 1980, 1989, 1994  
Multifamily Housing Market Area  
10 Census Tracts

Census Tract	1980 Census	1989 Estimate	1994 Projection
18	2,750	3,247	3,544
19	2,800	2,807	2,809
20	2,869	2,864	2,859
21	2,460	2,430	2,411
22	1,846	1,868	1,879
26.01	1,010	1,021	1,026
26.02	1,365	1,856	2,159
27	1,512	1,521	1,525
28	1,085	1,108	1,120
30	<u>2,360</u>	<u>3,353</u>	<u>3,969</u>
Total	20,057 =====	22,075 =====	23,301 =====
Change Annual Change	2,018 224	1,226 245	

Source: National Planning Data Corp.

EXHIBIT IV-16  
OWNED AND RENTED HOUSING: 1980, 1989, 1994  
Multifamily Market Area  
10 Census Tracts

	Number of Households						Average Annual Change	
	1980 Census	%	1989 Estimate	%	1994 Projection	%	1980 to 1989	1989 to 1994
Owned	10,865	54.2%	11,940	54.1%	12,802	54.9%	119	172
Rented	<u>9,192</u>	45.8%	<u>10,135</u>	45.9%	<u>10,499</u>	45.1%	<u>105</u>	<u>73</u>
Total	<u>20,057</u>		<u>22,075</u>		<u>23,301</u>		<u>224</u>	<u>245</u>

Source: National Planning Data Corp.

City of Madison building and conversion permit data from 1981 through 1988 were then added to produce estimates for 1989. The combined total of all unit types was within five units of the NPDC estimate of 22,075 households in the multifamily market area. Given this accuracy in the 1989 estimate, the NPDC projection of 23,301 households projected for 1994 was used as a base to make allocations among housing types. Since the proportions of single family and multifamily units had shifted between 1980 and 1989, an average percentage was computed for each housing type to reflect expected conditions as of 1994. The resulting percentages of 52.0 percent single family, 47.9 percent multifamily, and 0.1 percent mobile homes and the average annual increases for these two time periods are shown in **Exhibit IV-17**.

The projected average annual decrease in multifamily households and increase in single family households reflect the assumption that the local market will shift more toward home ownership. During the 1980s nearly 81 percent of net residential construction in this market area was multifamily, so many of the baby boomers who occupied these units are now approaching home purchasing age. Assuming that most single family residences are owned and that most multifamily units are rented (compare **Exhibits IV-6** and **IV-7** presented earlier), these data present a picture of post-1989 multifamily housing potential that is similar to the own/rent data shown previously in **Exhibit IV-16**.

#### E. Market Demand for the Single Family Housing Component

##### 1. Delineation of the Single Family Housing Market Area

The market area for single family housing to be located on the subject site is somewhat more extensive than that for multifamily housing. Compared to the defined market area for multifamily housing, the market demand area for single family housing includes the City of Monona census tracts 103 and 104, the southeast Madison tracts 31 and 29, but excludes northeast Madison tract 22. This market area comprises 13 of the 16 study area census tracts and is delineated in **Exhibit IV-18**.

As noted earlier, this market area definition is based on interviews with area real estate brokers, and on a telephone survey of 27 randomly selected recent purchasers of single family homes in

EXHIBIT IV-17

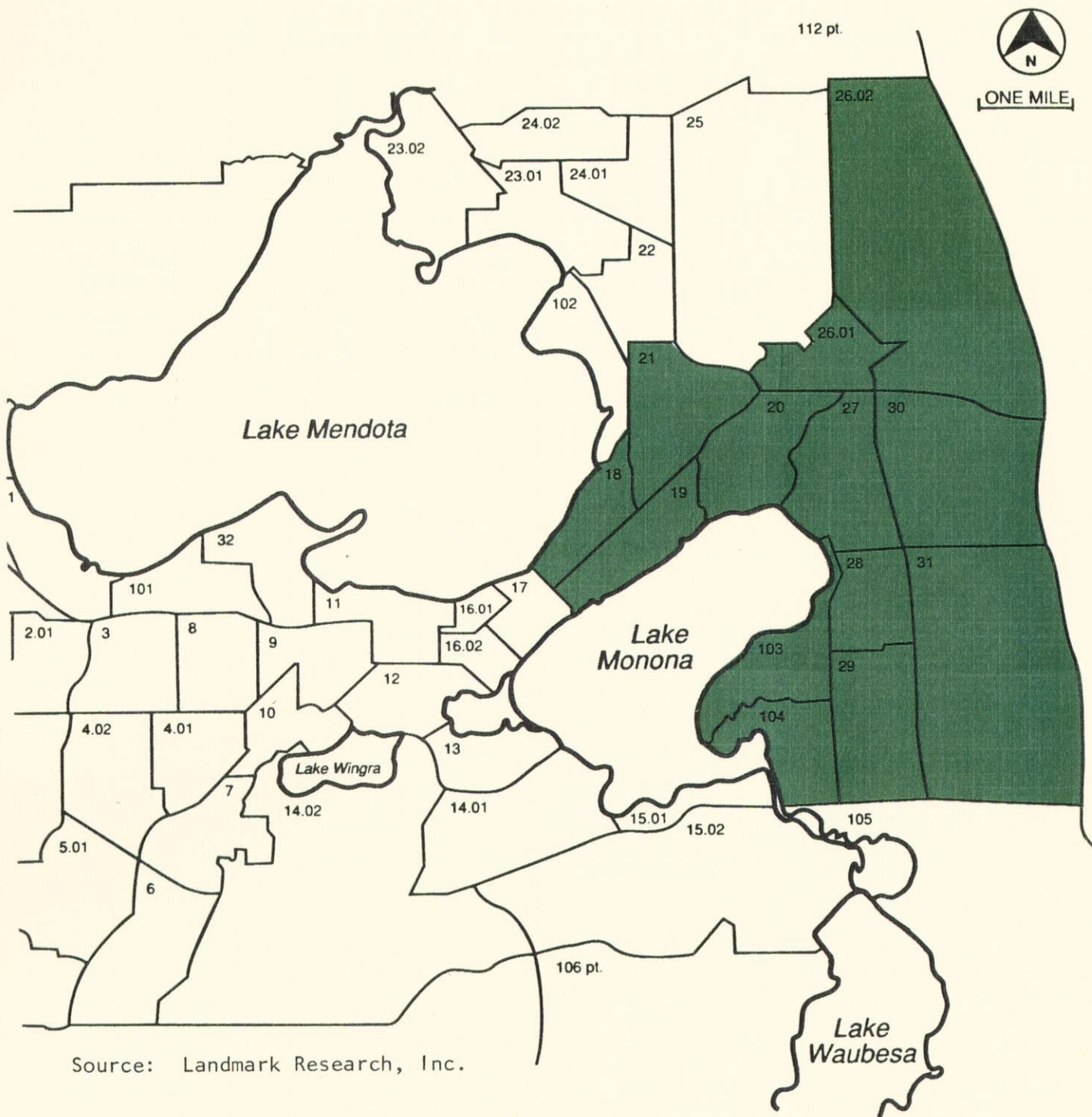
SINGLE FAMILY AND MULTIFAMILY HOUSING: 1980, 1989, 1994  
Multifamily Market Area  
10 Census Tracts

	Number of Households						Average Annual Change	
	1980 Census	%	1989 Estimate	%	1994 Projection	%	1980 to 1989	1989 to 1994
Single	10,742	53.6%	11,125	50.4%	12,110	52.0%	43	197
Multi	9,293	46.3%	10,926	49.5%	11,165	47.9%	181	48
Mobile	<u>22</u>	0.1%	<u>24</u>	0.9%	<u>26</u>	.1%	<u>0</u>	<u>0</u>
Total	<u>20,057</u>		<u>22,075</u>		<u>23,301</u>		<u>224</u>	<u>245</u>

Source: National Planning Data Corp.  
City of Madison Planning Department



EXHIBIT IV-18  
DELINEATION OF SINGLE FAMILY HOUSING MARKET AREA  
13 Census Tracts



Source: Landmark Research, Inc.

the census tracts surrounding the subject site. Results of the telephone survey follow:

		<u>Number</u>	<u>%</u>
Location of Previous Residence:	Out of State	1	4%
	Outside City	7	30
	West Side	2	9
	East Side	<u>13</u>	<u>57</u>
		23	100%
Work Location	East Side	11	34%
	Central	6	19
	South Side	5	16
	W. Side/Campus	6	19
	Other	<u>4</u>	<u>13</u>
		22	100%
First Time Buyer	Yes	13	57%
	No	<u>10</u>	<u>43</u>
		23	100%
Dual Income Household	Yes	11	48%
	No	<u>12</u>	<u>52</u>
		23	100%
Buyer of Investment Property		2	

## 2. Household Formation

This market area for single family residences includes almost all of the slowly growing east central census tracts discussed within the multifamily market section of this report. In addition, it includes City of Monona tracts, which are also projected to grow slowly. As a consequence, annual change in household formations is less than 100 units greater than for the multifamily market area: a net change of 334 households is expected annually in the area between 1989 and 1994. These figures are shown in **Exhibit IV-19**.

Since this estimate appeared optimistic, a second set of demographic data was purchased from another vendor (CACI, Inc.) to verify NPDC estimates. CACI, Inc. estimates of 1989 market area households were approximately 3 percent below the NPDC figures, which showed 27,128 households while CACI showed only 26,344. The 1994 projections increased the disparity to 7 percent; NPDC projected 28,797 households in 1994 compared to the 26,751 households projected by CACI. The more optimistic NPDC figures are assumed to be reliable and are, therefore, used in this analysis.

EXHIBIT IV-19  
NUMBER OF HOUSEHOLDS: 1980, 1989, 1994  
Single Family Housing Market Area  
13 Census Tracts

Census Tract	1980 Census	1989 Estimate	1994 Projection
18	2,750	3,247	3,544
19	2,800	2,807	2,809
20	2,869	2,864	2,859
21	2,460	2,430	2,411
26.01	1,010	1,021	1,026
26.02	1,365	1,856	2,159
27	1,512	1,521	1,525
28	1,085	1,108	1,120
29	1,244	1,457	1,585
30	2,360	3,353	3,969
31	1,709	2,097	2,333
103	1,651	1,721	1,758
104	<u>1,549</u>	<u>1,646</u>	<u>1,699</u>
Total	24,364 =====	27,128 =====	28,797 =====
Change Annual Change	2,764 307 =====	1,669 334 =====	

Source: National Planning Data Corp.

### 3. Housing Tenure

The proportion of households that reside in owned housing is much higher in this delineated market than in the market shown for multifamily housing. This is due to the inclusion of the City of Monona tracts 103 and 104, and southeast Madison tracts 29 and 31. The percentage of ownership in the area was 57.7 percent in 1980. This figure fell slightly to 57.6 percent by 1989, but is expected to increase to 58.5 percent by 1994. The data is detailed in **Exhibit IV-20**.

Note the shifting relationship between growth in owned and rented householder categories. There is substantial growth in both owned and rented housing during the 1980s, but a dominance of homeownership is projected through 1994. This is due primarily to the aging of the baby boom generation, and its increasing propensity to leave rented space to buy homes. The average annual changes in net household formations are shown in **Exhibit IV-20**. **THESE DATA INDICATE THERE WILL BE NEED FOR APPROXIMATELY 244 NEW OWNED UNITS IN THIS SINGLE FAMILY MARKET DEMAND AREA EACH YEAR THROUGH 1994.**

### 4. Housing Type

In projecting a most probable allocation for single and multifamily housing types in this 13 census tract market area for 1994, 1980 data were used as a starting point, and then 1989 NPDC estimates were modified based on 1980 to 1989 building permit data. The resulting percentage allocations for the two dates were then averaged and applied to the 28,797 households projected for 1994. The supporting data are found in **Exhibit IV-21**.

There is a dramatic shift in average annual change in the number of households between the two time periods. Multifamily based households dominated through the 1980s, but the desire for single family units is expected to accelerate between 1989 and 1994. This change is consistent with the aging of the baby boom generation.

### F. Forecast of Potential Demand

Given projections of net household formations for the 1989 through 1994 forecast period, potential demand for the proposed development can be estimated from the market areas studied.

#### 1. Description of Three Possible Outcomes

Three scenarios are suggested based upon differences in market



EXHIBIT IV-20  
OWNED AND RENTED HOUSING: 1980, 1989, 1994  
Single Family Market Area  
13 Census Tracts

<u>Number of Households</u>						<u>Average Annual Increase</u>	
1980 Census	%	1989 Estimate	%	1994 Projection	%	1980 to 1989	1989 to 1994
Owned	14,046 57.7%	15,618 57.6%		16,838 58.5%		175	244
Rented	<u>10,318</u> 42.3%	<u>11,510</u> 42.3%		<u>11,959</u> 41.5%		<u>132</u>	<u>90</u>
Total	24,364 =====	27,128 =====		28,797 =====		307 ===	334 ===

Source: National Planning Data Corp.

EXHIBIT IV-21  
SINGLE FAMILY AND MULTIFAMILY HOUSING: 1980, 1989, 1994  
Single Family Market Area  
13 Census Tracts

<u>Number of Households</u>							<u>Average Annual Increase</u>	
	1980 Census	%	1989 Estimate	%	1994 Projection	%	1980 to 1989	1989 to 1994
Single	13,954	57.3%	14,823	54.6%	16,115	56.0%	97	258
Multi	10,363	42.3%	12,257	45.2%	12,630	43.8%	210	75
Mobile	<u>47</u>	0.2%	<u>48</u>	0.2%	<u>52</u>	0.2%	<u>0</u>	<u>1</u>
Total	<u>24,364</u>		<u>27,128</u>		<u>28,797</u>		<u>307</u>	<u>334</u>

Source: National Planning Data Corp.  
City of Madison and City of Monona Planning Departments

area extent. The major portion of demand for multifamily rental units is expected to come from those households in 10 census tracts closest to the subject property, and the majority of demand for single family units is expected from a larger market area. At this point these scenarios describe only potential demand; the ability of the subject site to capture this demand is discussed in **Section V**. The three scenarios follow:

**SCENARIO 1: PESSIMISTIC**

Both multifamily and single family housing components of the proposed development will draw customers from only the smaller 10 census tract market area, the one defined for the multifamily component.

**SCENARIO 2: PROBABLE**

The multifamily housing component will draw customers from its delineated market area, and the single family component will draw customers from the larger 13 census tract market demand area.

**SCENARIO 3: OPTIMISTIC**

Both the multifamily and single family components will draw customers from the relatively larger market area defined for the single family component.

The data for these three scenarios are presented in **Exhibit IV-22**. The average annual net new household projections for 1994 are taken from the owned versus rented analyses detailed in **Exhibit IV-16** for the multifamily market area, and in **Exhibit IV-20** for the single family market area. These data are considered to be more reliable than projections based upon housing type. (See the **Appendix, Section IV, Note 8** for further discussion.)

**2. Adjustments to Normalize Vacancy**

A multifamily housing increment was calculated to reflect the excess demand generated by subnormal rental market vacancy conditions (as discussed **Section IV-C.3.**) This one-half percent increment was calculated using the appropriate multifamily or single family market defined populations of households as of 1989, and has been conservatively spread over the five year projection period. Calculations by market demand area were detailed in the **Appendix, Section IV, Note 4** referred to previously.

EXHIBIT IV-22  
PROJECTED POTENTIAL ANNUAL HOUSEHOLD DEMAND

	Scenario 1 (Pessimistic)	Scenario 2 (Probable)	Scenario 3 (Optimistic)
	<u>NO. OF UNITS</u>	<u>NO. OF UNITS</u>	<u>NO. OF UNITS</u>
Single Family	172	244	244
Multifamily [1]	<u>83</u>	<u>83</u>	<u>102</u>
Total	255 ===	327 ===	346 ===

[1] Reflects an increment for subnormal market area multifamily vacancy as of 1989 (10 units per year for Scenarios 1 and 2, and 12 units per year for Scenario 3).

The range between probable and optimistic estimates of demand is fairly narrow, but there is a sizable downside potential shown in the pessimistic scenario. All three scenarios assume the continued availability of 10 to 12 percent mortgage money and a recession free economy.

### 3. Conclusions

THE PRECEDING ANALYSIS SUGGESTS A POTENTIAL DEMAND FOR 83 MULTIFAMILY HOUSING UNITS PER YEAR THROUGH 1994 IN THE MULTIFAMILY MARKET AREA MOST LIKELY TO BE THE SOURCE OF EFFECTIVE DEMAND FOR THE SUBJECT SITE. FROM THE SINGLE FAMILY MARKET AREA MOST LIKELY TO AFFECT THE SUBJECT SITE, A POTENTIAL DEMAND FOR 244 SINGLE FAMILY UNITS PER YEAR IS PROJECTED THROUGH 1994.

The supply of alternative housing options is one of several factors which will determine the number of households the proposed development can capture each year.

#### G. Study Area Housing Supply

Evaluation of the housing supply in the 16 census tract study area is based on discussions with area real estate brokers, a number of recent homebuyers in the area, apartment complex managers, and other people familiar with the area. The analysis begins with an overview of area neighborhoods, then addresses the supply of apartments and single family homes.

#### 1. Area Neighborhoods

Area neighborhoods expected to have the greatest impact on the demand for the subject property include Tenny-Lapham, Marquette, Emerson, Oscar Mayer, Webb-Rethke, and Schenk-Atwood. Their importance is based on their expected contribution of potential move-up renters and buyers, and because, in some cases, they exert an influence on the dynamic and environmental attributes of the subject property. In the following discussions a household is defined as the person or persons occupying a housing unit. Families are defined as two or more persons, including the householder, who are related by birth, marriage, or adoption, and who live together as one household. (See Exhibit IV-13 for location of places referenced.).



Neighborhood: Tenny-Lapham

Part of census tract 18:

Households as of 1989:	3,247
Change in households since 1980:	18.1%
1989 household size:	1.80
Percent population in families:	38.1%

Neighborhood boundaries: Blount Street, Lake Mendota, the Yahara River, and East Washington Avenue.

Housing stock: Generally older (60+ years), rented (79 percent as of 1980), and mixed in quality, but improves toward northern and eastern ends of the neighborhood. Some recent increase in the level of homeownership, according to neighborhood association president, although this is largely impressionistic.

Neighborhood: Marquette

Part of census tract 19:

Households as of 1989:	2,807
Change in households since 1980:	0.3%
1989 household size:	1.83
Percent population in families:	51.1%

Neighborhood boundaries: East Washington Avenue, the Yahara River, Lake Monona, and Blair Street.

Housing stock: Mostly older and typically two-story wood frame; heavily renter occupied (64 percent as of 1980); quality varies widely and generally improves moving from north to south toward Lake Monona.

Neighborhood: Webb-Rethke

Part of census tract 20

Households as of 1989:	2,864
Change in households since 1980:	-0.2%
1989 household size:	2.04
Percent population in families:	72.0%

Neighborhood boundaries: East Washington Avenue, Commercial Avenue, the Soo Line railway, Chicago and Northwestern railway.

Housing stock: Small, wood frame, one story homes built in the late 1940s and 1950s; these are mixed with fourplex apartment buildings near Webb Avenue and Clyde Gallagher Drive; overall, the housing stock seems undermaintained, especially in the area northeast of the west branch of Starkweather Creek. There is also a Community Development Authority project with 36 low income apartments on Worthington Street.

Neighborhood: Schenk-Atwood

Part of census tract 20:

Households as of 1989:	2,864
Change in households since 1980:	-0.2%
1989 household size:	2.04
Percent population in families:	72.0%

Neighborhood boundaries: The Yahara River, Chicago and Northwestern railway, Starkweather Creek, and Lake Monona.

Housing stock: Approximately half renter occupied; three general geographic tiers of quality and size depending on distance from the Lake Monona shorefront; homes close to the lake are large, on good size lots, and some are architecturally significant; to the north are large two and three story wood frame structures on smaller lots; the third tier north includes smaller homes, including working class bungalows. All housing is well maintained, save for some problem areas in the Winnebago Street corridor south of East Washington Avenue.

Neighborhood: Emerson

Part of census tract 21:

Households as of 1989:	2,430
Change in households since 1980:	-1.2%
1989 household size:	1.92
Percent population in families:	70.2%

Neighborhood boundaries: First Street, Pennsylvania Avenue, Packers Avenue, Commercial Avenue, North Street, and East Washington Avenue.

Housing stock: Mostly owner occupied older one and two story wood frame houses; many small bungalows and cape cod style homes north of East Johnson Street. Quality declines from south to north.

Based on this analysis, there are relatively large numbers of potential first time or move-up homebuyers in these Isthmus area neighborhoods. The percentage of the population in families is high in Marquette (51.1 percent), Webb-Rethke (72.0 percent), Schenk-Atwood (72.0 percent), and Emerson (70.2 percent), and these neighborhoods have high percentages of rental stock with a substantial number of older units that show signs of functional obsolescence.

## 2. The Multifamily Housing Market (For-Rent Housing)

The east side rental housing market may be segmented into

three distinct submarkets on the basis of rent levels. The descriptions that follow are based on interviews with area apartment managers, property management firms and rental agents, and property inspections.

#### Low Rent Market

**Product:** One bedroom units rent for \$275 to \$350 per month while two bedrooms rent for \$325 to \$400. These units are typically in older and/or undermaintained buildings and neighborhoods, and have little curb appeal. They are generally managed by nonprofessionals or absentee landlords. Example: Webb Street Apartments.

**Tenants:** Tenants are mostly 19 to 24 years of age, single, and of low income. Access to public transit is often a key concern.

**Market Extent:** The geographical market for this type of housing is generally restricted, and is often limited to the immediately surrounding neighborhood for housing products of this type.

#### Mid-Rent Market

**Product:** One bedroom units rent for \$350 to \$425 per month, two bedrooms rent for \$400 to \$500, and three bedrooms for \$475 to \$600. These are the largest share of the market, and units are often in well maintained older buildings (i.e., 40 years old), or in somewhat newer buildings located in safe, stable neighborhoods. Management is generally professional and responsible. Examples: Lakewood Gardens, Briarwood, Holiday Gardens.

**Tenants:** Tenant types are wide-ranging, and include graduate students, young lower paid professionals and clericals, dual income households, the blue collar, and the elderly. Many of these tenants purchase their first home when moving out of this market.

**Market Extent:** The geographical extent of the market for this product type may be the entire east side of Madison, the Isthmus and University areas, and, to a limited degree, rural Dane County communities.

#### High-Rent Market

**Product:** One bedroom units rent for \$425 to \$600+ per month, two bedrooms for \$500 to \$700+, and three bedrooms in the \$600 to \$1000+ range. Most of these units are less than 15 years old or are historically rehabilitated, and almost all have professional management. Amenities typically include enclosed parking, air

conditioning, modern fixtures and appliances, washers and dryers in each unit, private entrances, and landscaped grounds. Projects in this group include Camelot, Yahara Landing, Stonewood Village, and Morningside on the Green.

**Tenants:** Tenants tend to be higher paid young professionals, well-off elderly, or empty nesters desiring a rental lifestyle. For the young professionals this is the last stage in the rental market before home ownership.

**Market Extent:** The market for this type of unit is mostly the east side, although some tenants move from smaller Dane County communities such as DeForest and Windsor.

### 3. Multifamily Housing Market Features

Several market features should be considered in relation to the proposed development. These are features of the current east side Madison housing product, or population based factors that may exert a significant influence on the project's long term success.

#### a. Fringe Development

The first market feature of importance is the continuing multifamily development along Madison's eastern fringe. Cheap land in this area has allowed several builders to provide amenity-laden multifamily projects at highly competitive rents. Morningside on the Green, which rents at an average of only \$0.56 per square foot, is one example. This implies that it will be difficult for the proposed development to be price competitive at the same amenity level with projects along Madison's periphery.

#### b. New Product

A second market feature is the prevailing attitude that newer is better. Young urban professionals prefer upscale rental units before they can afford downpayments on the kind of owned housing they desire, and are often willing to spend 30 percent of gross income or more for new, amenity-rich rental units. Unfortunately, as these young professionals form families they move out of rented housing and into owned residences. Empty nesters have similar preferences for newer units, since older apartments often cannot provide the amenities this older population segment has grown accustomed to in their homes (e.g., enclosed parking, full size washers and dryers in-apartment). It follows that the newness of the proposed development, coupled with the amenities that the customer desires, will provide a competitive edge.

### c. Market Demographics

As the last members of the baby boom generation age and reach prime child rearing age (30 to 45 years), they are more likely to purchase homes. Since the age cohorts behind them are smaller in number, the higher priced rental units that they occupied are likely to experience a slackening of demand. Many projects may be forced to reposition toward less affluent rental market segments. This argues for economical design and modestly priced units.

### d. Affordable Owned Residences

Homes on Madison's east side tend to be more affordable than those on Madison's west side. Values can be found ranging from \$40,000 for small older units to as little as \$90,000 for new 1,500 square foot units on quarter-acre lots. Overall rates of appreciation during the last decade have been low or stable, and some older neighborhoods have experienced absolute depreciation in housing values. Taken together, these facts suggest that the east side rental market may be affected by any home buying-related economics sooner than the west Madison market, where entry level homes have been more pricey. East side households and young families may accumulate their downpayments more quickly, and thereby move out of rental housing more readily.

### e. Scarcity of Infill Sites

The proposed development enjoys a competitive advantage as being one of the few developable infill locations remaining on Madison's east side. Much of the east side's available land is in built-up areas adjacent to unstable neighborhoods (East Main and Williamson Street), adjacent to light industrial uses (East Washington and Fordem Avenues), or has undevelopable soils (areas north of Aberg Avenue). Although located northwest of the study area, another potential infill site is the 46 acre Lakeview Sanatorium site zoned R-1 and owned by Dane County. Its future is an unknown at this time; the County is considering the disposition of the site and the neighborhood is opposed to its development. Better sites on the near east side or close to downtown (the old City Market area, for example) are expensive and, therefore, limit development options to upscale product types.

## 4. Anticipated New Multifamily Supply

Based on conversations with area project managers, developers, and City of Madison planning officials, there should be little new multifamily housing developed in the study area in the near future. Morningside on the Green (see Exhibit IV-13 for location) is a new



56 unit project that will add 112 more units in 1990, and possibly 64 more units in subsequent years (up to a zoned limit of 232 units).

The most serious competition could come from development of the Voit site located in the Town of Blooming Grove just northeast of the subject and shown on the aerial map in **Exhibit III-3** presented earlier. The Voit property owners are still using the property for their cement business and are apparently not interested in selling. Conversations with Town of Blooming Grove officials and other interested parties suggest that it will be at least five years before anything is done with the site.

A second property that could provide competition is the Madison Corporate Center site, located just southwest of the intersection of U.S. Highway 51 (Stoughton Road) and Highway 30 (Commercial Avenue). The property owners are anticipating office and possibly hotel development, but there is enough land available so that multifamily housing is also possible. The Madison Plan Commission approved a plat plan submitted by the property owners on October 2, 1989, but the approval was made subject to many conditions. Significant among these was resolution of substantial access problems. It appears doubtful that these problems will be resolved anytime soon, so competitiveness of the parcel remains only a potential.

A third potential competitor is located near the northeast corner of Femrite and Monona Drives. This land is presently held by the Sand County Foundation, a nature conservancy group, and includes approximately nine acres of wooded land fronting on Monona Drive. This property is presently zoned for commercial uses, but the problematic health of area businesses implies that residential use may be more appropriate. The Sand County Foundation is reportedly trying to sell this property.

A fourth competitor for multifamily housing customers is a site yet to be assembled in the Schenk-Atwood area. Joe Krupp, owner of 2020 Construction Group, and developer of Eastwood Court, may be able to assemble a two to three acre site between Atwood Avenue and Eastwood Drive near the Barrymore Theatre. He has options on a few of the older residential properties on this site near Eastwood Court and plans to develop elderly multifamily rental housing.

#### 5. Single Family Housing (For-Sale Housing)

The single family home areas most important to the proposed development are located in the east central and near east sectors of Madison. These areas comprise 16 separate Madison tax assessment districts and include residences that would compete on location with the subject site. Residents wishing to stay in this near east side area because of job linkages, loyalty to the area, or because friends

and family live nearby will consider this area housing stock as an alternative to housing located on the subject site. Both 1988 and 1989 average assessed valuations follow in **Exhibit IV-23**; these areas are found on the map provided in **Exhibit IV-24**.

The proposed development is located in Assessment Area 38, Atwood-Winnebago. The average assessed value for this area was only \$47,000 in 1989, as compared with \$73,892 city-wide. Other nearby areas include Elmside-Oakridge (Area 69) with an average value of \$65,900, Olbrich (Area 40) with an average value of \$44,600, and Eastmorland (Area 41) at \$52,800.

This is clearly an area of modestly priced homes, which implies some upside restrictions in new product pricing at the subject site. Nearby area move-up households may be unable to buy significantly more expensive housing than they own now. Moreover, area renters may also find it difficult to move from their current rental situation to more than a starter home, which in this case is a home in the \$40,000 to \$50,000 price range.

#### 6. Single Family Housing Market Features

Several market features affecting the east side multifamily market also influence the single family market. These include development along Madison's eastern fringe, a large proportion of modestly priced single family housing stock, and significant numbers of first time homebuyers.

##### a. Fringe Development

New single family development along Madison's eastern fringe is priced mostly at \$80,000 and above. However, it is unclear how competitive these projects are with respect to infill projects such as the subject. People moving into the Madison area from outside the region, or from rural Dane County communities may well prefer these larger lot suburban homes to the more urban product offered at the subject site. However, residents from the market area's Isthmus and near east side tracts may prefer the urban ambiance that can be captured by the development of an infill site.

##### b. Existing Product

Area real estate brokers were surveyed for their impressions of single family housing market activity within an area bounded by the Yahara River (western boundary), East Washington Avenue to Highway 30 (northern boundary), Stoughton Road (east), and Cottage Grove Road (south). This area corresponds to census tracts 20 and 27

EXHIBIT IV-23  
EAST MADISON SINGLE FAMILY HOUSING VALUES

Assesment Area	Name of Neighborhood	1988 Average Value	1989 Average Value
East Central			
26	Lapham School-Breese	\$ 47,100	\$ 48,900
27	Wil-Mar	\$ 40,700	\$ 41,600
28	Tenney Park	\$ 55,500	\$ 57,900
29	Orton Park	\$ 55,000	\$ 58,500
37	East High	\$ 47,400	\$ 47,600
38	Atwood-Winnebago	\$ 47,100	\$ 47,000
39	Fair Oaks	\$ 42,400	\$ 42,400
50	Northgate-Aberg Ave	\$ 43,300	\$ 44,100
69	Elmside-Oakridge	\$ 62,800	\$ 65,900
83	Lakeshore-Near East	\$135,700	\$143,000
Near East			
31	Highwood (Glendale)	\$ 82,300	\$ 89,200
33	Glendale	\$ 59,700	\$ 59,900
34	Lake Edge	\$ 52,700	\$ 54,500
40	Olbrich	\$ 44,500	\$ 44,600
41	Eastmorland	\$ 52,700	\$ 52,800
71	Olbrich Park- Cottage Grove	\$ 47,000	\$ 48,400
City Wide		\$ 70,593	\$ 73,892

Source: City of Madison Assessor.

EXHIBIT IV-24  
ASSESSMENT AREAS



as shown in **Exhibit IV-18**. The consensus opinion is that the majority of existing housing product consists of small homes in the 1,300 to 1,500 square foot range, costing between \$50,000 and \$70,000. Since most of these units are relatively old (refer to **Exhibit IV-7**), comparable new product in this area would enjoy a substantial competitive edge.

### c. Market Demographics

Brokers also reported that most current homebuyers in the defined area are between 25 and 34 years old, first time buyers, from scattered neighborhoods across the east side, and without children. These buyers have been evenly distributed between professionals and blue collar workers, and many are dual income households earning in the \$40,000 annual income range.

The conclusion that follows from this analysis is that any new single family housing project built at the subject site must be moderately priced. The best prospective customers are current area apartment dwellers or move-up homebuyers, and these householders are presently living in modestly priced units. Rents in even the upscale east side projects (e.g., Morningside) are in the \$600 monthly range (2 bedroom units), and move-up buyers are presently situated in \$40,000 to \$70,000 units. It is therefore doubtful that these consumers can afford new single family units more than one full price level above their current monthly payment status, and so prices in the \$70,000 to \$90,000 range would seem to set the upper limit.

### 7. Anticipated New Single Family Supply

Apart from some historic preservation units in Madison's Isthmus area, most new single family housing has been built along the periphery. The Mira Loma/Rustic Ridge area, located in census tract 31, in the southeast sector of the market area has been platted for 492 units. Of the 414 single family homes to be built, 204 are completed. They are reported to be at \$90,000 and above; the remaining lots are selling in the \$19,000 to \$24,000 range. Buckeye Hill Estates homes (developed by Dave Simon in 1987-88) are selling between \$120,00 to \$130,000, on the average.

The Sun Garden/Village Green area in Madison's northeast sector (census tract 26.02) has been platted for 761 units, but only 269 of these are for single family units. As with the Mira Loma area, many of these units have been built, but the extent of the area's competitiveness with the subject site is uncertain.

The Burke Heights area surrounding East Towne mall is the only other area holding the potential for significant single family



development. Dave Simon has apparently platted 90 acres for single family development, but it should be at least two years before development starts. Because of its peripheral location, this project may not be a direct competitor for the proposed infill site.

Little in the way of new infill single family units is anticipated, in part, because of the scarcity of affordable space, and, in part, because of the expense of that space: given the modest rent levels and current housing values in the area, most new infill units would be too expensive for the available customer base. In general, the least expensive new construction on the east side is approximately \$90,000 for 1,500 square feet built on an 8,800 square foot lot.

#### H. Conclusions

The conclusions to be drawn from the market supply and demand analysis are that the market demand areas for multifamily and single family housing are somewhat different and will, therefore, lead to different levels of potential demand. Single family units will draw customers from larger market areas than will the multifamily units, and potential demand will, therefore, be greater. Changing demographic characteristics of the Madison east side population base also serve to reinforce this bias for single family homes.

Overall, these market results are encouraging, but the percentage of demand that can be captured within each of these market areas will vary with its distance from the subject site. The capture rate will also depend upon design and pricing issues and upon the developers' ability to overcome significant site related environmental deficiencies.

## V. MARKETABILITY AND EFFECTIVE DEMAND ANALYSES

### A. Introduction

Between 1989 and 1994 the majority of new households formed in the U.S. will be headed by persons from 34 to 55 years of age. These households are characterized by high levels of homeownership, explaining why many housing economists are bearish on apartments for the 1990s. Their projections call for negligible need for new apartment units, with stock being generated mostly for replacement of older obsolete units.

Other economists feel that during the 1990s the middle class will shrink, relatively speaking, and that the classes of wealthy and poor will expand. Lower paid workers will be unable to buy, and so will be forced to continue renting. Overall ownership rates will fall, and the rental market will continue to be strong.

The housing market in Madison is expected to behave according to the first of these scenarios, since the local population base is shifting significantly into the 34 to 55 year age group, and the local economy continues to be strong. This suggests the multifamily component of the subject property must be developed carefully and must achieve a competitive advantage using design features as well as price. Good design and careful pricing will also be needed for the single family component, since the incomes and wealth levels of Madison's east side populace are predominantly in the moderate range. The subject property will draw first-time and move-up buyers from the Isthmus area and surrounding neighborhoods, and these areas are decidedly downscale in contrast with neighborhoods located on the east side periphery. (See Exhibit IV-5).

### B. Multifamily Housing Component

#### 1. Recommended Product Features: Unit Size

Based on estimates of how households in this multifamily market area will age through the first part of the 1990s, projections indicate an increasing demand for studio and one-bedroom units, stable to falling demand for two-bedroom units, and falling demand for three-bedroom units. Historical and projected demand for unit types in multifamily housing in Dane County are shown in Exhibit V-1.

These estimates are based on 1987 data gathered for the Madison area market as a whole, but are also considered appropriate for the study area of the subject property. As previously discussed, the study area household size was somewhat smaller than the Madison

EXHIBIT V-1  
Madison Market

No. of Bedrooms	% Unit Mix 1980-87	% Unit Mix 1987-92	% Unit Mix 1992-97
Studio	5%	7%	9%
1	27%	31%	36%
2	32%	34%	27%
3	25%	20%	18%
4+	<u>11%</u>	<u>8%</u>	<u>10%</u>
Total [1]	100% =====	100% =====	100% =====

Source: Land Use Research Associates and Benchmark Real Estate Forecasts, Inc., based on NPA Data, Inc. estimates for mid-year 1987.

[1] Percentages may not add to 100 due to rounding.

average as of 1980 (2.44 vs. 2.56 persons per household), and is projected to decline to 2.17 persons per household as of 1994.

## 2. Recommended Product Features: Amenities

Apartment managers at several area projects felt that new units enjoy a competitive advantage relative to older units. They cited the observed migration of some tenants from established mid- and high-priced projects such as Village Green East and Stonewood Village to new projects such as Morningside on the Green. One important reason for this advantage is the provision of amenities. Newer units allow for design features and amenities that may not have been possible or necessary, or even popular several years or decades earlier. A summary of information about other multifamily projects in the study area was previously shown in **Exhibit IV-12**.

Listed below, in descending order of importance, are some of the features that newer area apartment complexes are likely to have. According to managers, these are features for which tenants are willing to pay extra:

- a. Covered parking, especially private garages attached to each unit, or detached (as opposed to underground or under-building parking areas). Tenants prefer private protected parking facilities that will also provide storage space
- b. Full size washer and dryer in each apartment
- c. Private entrances to apartment units
- d. Extra half, three-quarters, or full bathroom units, especially for two bedroom units and larger
- e. Energy efficient heating and cooling equipment and water heaters
- f. Air conditioning units in living room and bedroom, or central air as opposed to one AC sleeve that cools only one living space
- g. Extra storage space within the apartment unit

It appears the increment in rent that the market will tolerate can be as much as \$100 per month between units that are otherwise of

comparable quality. Compare the differences between two bedroom units located in Village Green East (last units built in 1983) and Morningside on the Green (new as of 1989 with more units on the way). Both projects are located in the Hayes Road area (as shown in **Exhibit IV-13**), so there are no locational factors accounting for price differences. Morningside provides a somewhat larger unit (1,050 SF as compared with 930 SF), but also offers amenities that Village Green East does not; these include detached, private parking, full size rather than three-quarter size laundries in units, in-unit extra storage, and an extra three-quarter bath. The rent charged for these two bedroom units is \$100 per month more at Morningside. (See **Exhibit IV-12**.)

### 3. Suggested Pricing Strategy

The type of multifamily (for-rent) housing that may be successful at the subject site is partly a function of the age and income levels of the householders living in the market area. **Exhibit V-2** shows the number of households in each age and income group living in the 10 tract multifamily market demand area in 1989. The total number of households estimated to be in this area is 22,075.

**Exhibit IV-2** also shows what percent of the 22,075 households each age-income entry represents; these entries are on the lower half of the same exhibit. As of 1989, 33.70 percent of the market area's households are headed by persons in the 25 to 34 year age group. The next two most populous age groups are the 35 to 44 year olds with 16.76 percent of the households and the 45 to 54 year olds with 11.60 percent of the households.

Assuming, for the moment, that most households want to pursue the American dream of homeownership, and that home buying is limited only to consumer purchasing ability, then demand for apartment space may be considered a residual. By this line of reasoning the most probable demand for apartments will be generated in the 15 to 24 year age group. There were estimated to be 2,180 such households in the multifamily market in 1989. These are the consumers whose lifestyles do not require single family homes, and who have probably not accumulated a sufficient downpayment to purchase one.

The next most likely population of apartment dwellers comes from the 25 to 34 year age group. In this category, those householders earning less than \$35,000 will not have had time to accumulate a significant downpayment, and will not have sufficient income to service debt on even a starter home. As can be found in **Exhibit V-2**, there were approximately 5,045 such likely renters in the market in 1989:  $1,662 + 1,721 + 1,662 = 5,045$  households with incomes less than \$35,000 per year.



EXHIBIT V-2  
NUMBER AND PERCENTAGE OF HOUSEHOLDS BY AGE AND INCOME, 1989  
Multifamily Market Area  
10 Census Tracts

Annual Income	Age of Householder in 1989						
	15-24	25-34	35-44	45-54	55-64	65-74	75+
Number of Households							
Under \$15,000	879	1,662	457	276	299	782	944
\$15,000-\$24,999	632	1,721	618	411	399	647	364
\$25,000-\$34,999	392	1,662	649	416	445	304	155
\$35,000-\$49,999	226	1,542	904	697	603	295	101
\$50,000-\$74,999	41	730	862	601	390	168	64
\$75,000 or more	<u>11</u>	<u>122</u>	<u>210</u>	<u>160</u>	<u>171</u>	<u>40</u>	<u>24</u>
Total	2,180	7,439	3,700	2,561	2,307	2,236	1,652
	=====	=====	=====	=====	=====	=====	=====
Percentage of Households							
Under \$15,000	3.98%	7.53%	2.07%	1.25%	1.35%	3.54%	4.28%
\$15,000-\$24,999	2.86	7.80	2.80	1.86	1.81	2.93	1.65
\$25,000-\$34,999	1.78	7.53	2.94	1.88	2.02	1.38	0.70
\$35,000-\$49,999	1.02	6.99	4.10	3.16	2.73	1.24	0.46
\$50,000-\$74,999	0.19	3.31	3.90	2.72	1.77	0.76	0.29
\$75,000 or more	<u>0.05</u>	<u>0.55</u>	<u>0.95</u>	<u>0.72</u>	<u>0.77</u>	<u>0.18</u>	<u>0.11</u>
Total	9.88%	33.70%	16.76%	11.60%	10.45%	10.13%	7.48%
	=====	=====	=====	=====	=====	=====	=====

Source: National Planning Data Corp.

Similar analyses may be applied to the remaining age segments in order to estimate the future level of apartment demand. As an alternative, however, these data may be translated into estimates of potential demand at various rent levels. **Exhibit V-3** contains the same percentages as **Exhibit V-2**, except the income levels have been translated into ranges of affordable monthly rent, assuming the tenant pays utilities. These rents assume maximum expenditures of 25 percent of gross income for rental payments. This is somewhat less than the 28 percent mortgage lending guidelines for principal, interest, taxes, and insurance.

Notice the large percentages of 25 to 34 year olds whose upper limit is a monthly rent of \$729:  $7.53 + 7.80 + 7.53 = 22.86$  percent. (See **Exhibit V-3**.) For the purposes of this report, all references to monthly rent assume the tenant is responsible for the payment of utilities (heat and electricity). The distribution of households in each age group shifts to higher rent levels in each successively older age group. Given that luxury or near-luxury apartments can be rented on Madison's east side in the \$600 to \$800 monthly range, this upward shift also argues for an increasing propensity for home ownership; paying more rent will not bring appreciably more or better housing space in this market, so households will look toward single family housing in order to obtain this.

With respect to the rental price positioning of new multifamily housing space, the six rent pricing categories in **Exhibit V-3** show generally declining levels of consumer demand. This can be seen more easily in **Exhibit V-4**.

The conclusion follows that new apartments built at the subject property will be more marketable if targeted to households earning \$25,000 to \$34,999; those are the householders who can afford rents in the \$521 to \$729 monthly range. At this pricing level, 54.29 percent of the market area households can afford the units; this represents the percentage of households which have 1989 incomes of \$25,000 or more as shown in **Exhibit V-4**:  $18.22 + 19.79 + 12.94 + 3.34 = 54.29$  percent. At rents above this range, the target market becomes those households in age groups with very high propensities for home ownership.

#### 4. Rent Increases

Based on a survey of the management at nine east side apartment projects, it appears that rent increases since 1985 have averaged between 2 and 4 percent annually. Increases were occasionally greater if units had not been kept up to market rates, but such rent spikes tended to be infrequent. Units at Camelot have increased 2 to 3 percent per year over the last three to four years, but remodeled units there have been bumped an average of 15 percent upon first re-rental.

EXHIBIT V-3  
PERCENTAGE OF HOUSEHOLDS BY AGE AND IMPLIED RENT  
Multifamily Market Area  
10 Census Tracts

Rent/Month [1]	Age of Householder in 1989						
	15-24	25-34	35-44	45-54	55-64	65-74	75+
Under \$312	3.98%	7.53%	2.07%	1.25%	1.35%	3.54%	4.28%
\$312-\$521	2.86%	7.80%	2.80%	1.86%	1.81%	2.93%	1.65%
\$521-\$729	1.78%	7.53%	2.94%	1.88%	2.02%	1.38%	0.70%
\$729-\$1,042	1.02%	6.99%	4.10%	3.16%	2.73%	1.34%	0.46%
\$1,042-\$1,562	0.19%	3.31%	3.90%	2.72%	1.77%	0.76%	0.29%
\$1,562 or more	0.05%	0.55%	0.95%	0.72%	0.77%	0.18%	0.11%
Total	9.88%	33.70%	16.76%	11.60%	10.45%	10.13%	7.48%

Source: National Planning Data Corp. and Landmark Research, Inc.

[1] Monthly rent payment is set at 25 percent of monthly gross income.

EXHIBIT V-4  
PERCENTAGE OF HOUSEHOLDS BY AFFORDABILITY OF RENT  
Multifamily Market Area  
10 Census Tracts

Income Level	Implied Rent	Percent of Households All Age Groups
Under \$15,000	Under \$312	24.08%
\$15,000-\$24,999	\$312 - \$521	21.71%
\$25,000-\$34,999	\$521 - \$729	18.22%
\$35,000-\$49,999	\$729 - \$1,042	19.79%
\$50,000-\$74,999	\$1,042 - \$1,562	12.94%
\$75,000 or more	\$1,562 or more	3.34%

Source: National Planning Data Corp. and Landmark Research, Inc.

## 5. Estimate of Subject Property Capture of Demand for Multifamily Units

Assuming that one and two bedroom units are built at the subject property, an amenity package is offered which meets the market's competitive standards, and these units are positioned in the \$521 to \$729 monthly rent range, strong demand is expected for the subject development. The most marketable rent levels would be \$521 to \$650 for one and two bedroom units, and up to \$729 for three bedrooms.

**GIVEN THE PROJECTED AVERAGE ANNUAL INCREASE OF 83 MULTIFAMILY HOUSEHOLDS IN THE 10 CENSUS TRACT MARKET AREA, BETWEEN 35 AND 45 OF THESE MULTIFAMILY HOUSEHOLDS MAY BE CAPTURED BY THE SUBJECT PROPERTY ANNUALLY THROUGH 1994. THIS ESTIMATE IS BASED ON PROJECTED NEW HOUSEHOLD FORMATIONS, BUT A SIGNIFICANT INCREMENT TO THIS ESTIMATE MAY BE DRAWN FROM OLDER SURROUNDING AREA HOUSING UNITS.**

In making this estimate it is assumed that the 64 new units coming on line at Morningside on the Green during 1990 will have been absorbed by the time the subject property begins its marketing program and that no significant new multifamily competitors are built. At present, no such projects are known.

### C. Single Family Housing Component

#### 1. Recommended Product Features: Unit Size

The size of single family housing units offered at the subject property will depend on factors of both supply and demand. Land and construction costs will dictate how much product can be built within the budget limits of the targeted buyer group(s), and the tastes and preferences of these buyers will determine the ideal standards.

Most existing single family product in this market area is older and modest with the majority of units falling in the 1,300 to 1,500 square foot range. Three bedroom 1.5 bath units set the competitive standard, but area buyers will pay extra for a second full bathroom rather than a half bath.

#### 2. Recommended Product Features: Amenities

The amenities that should be provided in new single family housing were identified in a survey of 15 area brokers. This survey also provided insight into the demographics of prospective buyers,



and characteristics of existing single family product. An open ended question was also used to capture broker opinion of whether or not a new single family project would succeed in the area of the subject site (the specific site was not revealed to the brokers). The following consensus was derived:

- a. Buyers of new houses expect to find the following items included in the purchase price:

- 1) stoves and stove hood fans
- 2) dishwashers
- 3) at least one and one-half baths, three bedrooms
- 4) carpeting throughout

These above items are considered standard items for which buyers do not expect to pay extra.

- b. A majority of brokers said buyers would pay extra for:

- 1) second full bath
- 2) garages
- 3) central air conditioning
- 4) wood burning fireplaces
- 5) hardwood floors
- 6) a combined kitchen/dining area in contrast to a small sit-down area in the kitchen, or a counter only in the kitchen
- 7) soundproofing between units and rooms.

- c. Most brokers said buyers either did not want or would not pay extra for:

- 1) draperies
- 2) home security wiring
- 3) ceramic tile in baths
- 4) a formal dining room

- d. Brokers split 50-50 on whether buyers would pay extra for balconies (decks) or patios.

- e. A unanimous concern was for adequate storage space, and buyers will pay extra for a utility room

- f. Serious concern was expressed when the prospect of no basements in new units was posed. One experienced broker went so far as to say "no basement, no sale". Other brokers said that if units lacked basements, then other easily accessible areas would be needed, including walk-up attic stairs (versus pull-down stairs from hallway ceilings), or oversized utility rooms.

When brokers were asked whether a new project would be successful in the vicinity of the subject site, the overwhelming response was yes, with a caveat. Prices would have to be kept in the moderate range for the area. Given that average assessed home values were between \$44,600 and \$65,900 in area neighborhoods as of 1989 (see **Exhibit IV-23**), the cost of new housing should not be significantly higher than the top of this range. The components that would help a new project succeed include attractive park-like landscaping and quality exterior finishes, and brokers said that east sides like the quaintness of their neighborhoods, so relatively barren tract type development would not do well at the subject site.

### 3. Suggested Pricing Strategy

The number of single family units and appropriate pricing strategy for the subject property can be determined using the data shown in **Exhibit V-5**. The 27,128 households identified in the single family market area as of 1989 are disaggregated on an age-by-income basis. Recall that the single family component of the project will draw from a somewhat larger geographical market than will the multifamily component, encompassing 13 census tracts rather than 10.

**Exhibit V-5** shows the number of households in each age-income category for this single family market area; the sum of all entries equals 27,128 households. In the lower part of the exhibit these entries are translated into percentage figures for each age group by income level; these percentages sum to 100 percent of the 27,128 households.

The conclusion to be drawn from **Exhibit V-5** is that the largest age group of prospective market area householders is the group of 25 to 34 year olds. There are estimated to be approximately 8,546 of these households in the market area as of 1989. The next most populous groups are the 35 to 44 year olds with 4,941 households and the 45 to 54 year olds with 3,440 households. Households in the 35 to 54 year age categories have traditionally shown very high levels of homeownership, with approximately 90 percent of all married couples in these categories owning their own homes.

Assuming that homebuying depends primarily on income and an adequate downpayment, the best prospective customers for the proposed development may be found in the \$35,000 or higher income categories of these three age groups; this includes approximately 31 percent or 8,417 households of the total number of households in the single family home market area. (See footnotes in **Exhibit V-5** for source of data.)

EXHIBIT V-5  
NUMBER AND PERCENTAGE OF HOUSEHOLDS BY AGE AND INCOME, 1989  
Single Family Market Area  
13 Census Tracts [1]

Annual Income	Age of Householder in 1989						
	15-24	25-34	35-44	45-54	55-64	65-74	75+
Number of Households							
Under \$15,000	894	1,692	465	280	350	912	1,049
\$15,000-\$24,999	673	1,875	691	418	460	802	441
\$25,000-\$34,999	434	1,832	796	461	578	416	200
\$35,000-\$49,999	279	1,901	1,276	951	820	368	114
\$50,000-\$74,999	52	1,057	1,362	1,023	658	178	94
\$75,000 or more	11	189	351	307	320	69	29
Total	2,343	8,546	4,941	3,440	3,186	2,745	1,927
Percentage of Households							
Under \$15,000	3.30%	6.24%	1.71%	1.03%	1.29%	3.36%	3.87%
\$15,000-\$24,999	2.48%	6.91%	2.55%	1.54%	1.70%	2.96%	1.63%
\$25,000-\$34,999	1.60%	6.75%	2.93%	1.70%	2.13%	1.53%	0.74%
\$35,000-\$49,999	1.03%	7.01%	4.70%	3.51%	3.02%	1.36%	0.42%
\$50,000-\$74,999	0.19%	3.90%	5.02%	3.77%	2.43%	0.66%	0.35%
\$75,000 or more	0.04%	0.70%	1.29%	1.13%	1.18%	0.25%	0.11%
Total	8.64%	31.50%	18.21%	12.68%	11.74%	10.12%	7.10%

Source: National Planning Data Corp.

[1] Total number of households = 27,128

[2] The sum of all householders 25 to 54 years old with incomes of \$35,000 or more is 8,417.

[3] The percentage of 25-54 year old householders with income of \$35,000 or more is 31 percent (8,417/27,128).

Households in the 15 to 24 year age group are unlikely to have the lifestyle or economic means that would favor home ownership, and lower income households in the 25 to 34 and 35 to 44 year age groups are unlikely to have saved an adequate downpayment.

Households in the 55 to 64 year age group are likely candidates only to the extent that they become empty nesters or newly single. If they do not already own a home they are unlikely to buy one at this stage of life (a vacation or second home is more likely), and if they do own they are unlikely to buy new unless it is for some major change in life.

For added insight into possible pricing strategies, refer to the data shown in **Exhibit V-6**. This exhibit has the same percentage entries as shown in **Exhibit V-5**, but the income categories have been converted to equivalent monthly house payments. In converting the income categories local lending institution guidelines were used that limit payments to 28 percent of monthly gross income. The payment is assumed to include principal, interest, escrow for taxes, and insurance.

Of the potential home purchasing households shown in the 25 to 54 year age groups, the greatest numbers fall in the \$817 to \$1,167 payment range, a proxy for households with income levels of \$35,000 to \$49,999. This group of households comprises approximately 15 percent of the market total, or 4,128 households. (See footnote in **Exhibit V-6** for data source.) Of course, households in the higher payment categories may also be home purchase candidates, but these households may have significantly different expectations regarding unit size and amenities.

If one considers all age categories, not just the 25 to 34 year and older segments, the \$817 to \$1,167 monthly payment category is still the most important as a source of potential homebuyers. The percentage of households included in each payment category is shown in **Exhibit V-7**.

Assuming availability of current local financing terms with a 30 year term mortgage, 10.5 percent interest, 10 percent downpayment, and taxes and insurance escrowed at 3.2 percent of purchase price, the \$817 to \$1,167 monthly payment range translates into a home purchase price range of \$76,650 to \$109,486, or rounded, \$77,000 to \$110,000.

To test whether this range for new housing would be reasonable in the subject area, two loan officers at east side Madison lending institutions were interviewed. The loan officers suggested the top of this purchase price range is probably high.

EXHIBIT V-6  
PERCENTAGE OF HOUSEHOLDS BY AGE AND IMPLIED HOUSE PAYMENT  
Single Family Market Area  
13 Census Tracts

Monthly Payment [1]	Age of Householder in 1989						
	15-24	25-34	35-44	45-54	55-64	65-74	75+
Under \$350	3.30%	6.24%	1.71%	1.03%	1.29%	3.36%	3.87%
\$350 - \$583	2.48%	6.91%	2.55%	1.54%	1.70%	2.96%	1.63%
\$583 - \$817	1.60%	6.75%	2.93%	1.70%	2.13%	1.53%	0.74%
\$817 - \$1,167	1.03%	7.01%	4.70%	3.51%	3.02%	1.36%	0.42%
\$1,167 - \$1,750	0.19%	3.90%	5.02%	3.77%	2.43%	0.66%	0.35%
\$1,750 or more	0.04%	0.70%	1.29%	1.13%	1.18%	0.25%	0.11%
Total	8.64%	31.50%	18.21%	12.68%	11.74%	10.12%	7.10%
	=====	=====	=====	=====	=====	=====	=====

Source: National Planning Data Corp.

[1] Monthly payment is set at 28 percent of monthly gross income, and reflects payment of principal, interest, taxes, and insurance.

[2] The percentage of householders 25 to 54 years of age with income suggesting monthly payments of \$817 to \$1,167 is calculates as follows: (7.01% + 4.70% + 3.51%) = 15.22%



EXHIBIT V-7  
PERCENTAGE OF HOUSEHOLDS BY AFFORDABILITY OF PAYMENT  
Single Family Market Area  
13 Census Tracts

Income Level	Implied Payment	Percent of Households All Age Groups
Under \$15,000	Under \$350	20.80%
\$15,000-\$24,999	\$350 - \$583	19.76%
\$25,000-\$34,999	\$583 - \$817	17.39%
\$35,000-\$49,999	\$817 - \$1,167	21.04%
\$50,000-\$74,999	\$1,167 - \$1,750	16.31%
\$75,000 or more	\$1,750 or more	4.70%

Source: National Planning Data Corp. and Landmark Research, Inc.

The product most in demand in this east side market is priced in the \$50,000 to \$70,000 range, but there is very little of this product available. Area lenders report that present owners of such homes feel anxious about the economy, have seen very little appreciation in their properties over the last 10 years, and have received pay increases that barely keep up with inflation. Since much of the new construction coming on line is priced in the \$90,000 to \$120,000 range, and really does not offer the homeowner much more space, these households are postponing the purchase of a move-up home.

Demand for homes in the \$50,000 to \$70,000 range apparently is also flowing up from less expensive product segments. Homes in the \$40,000 to \$50,000 range usually require substantial rehabilitation, so would-be buyers in this lower cost segment sometimes jump over it to the next highest range.

There is some movement of homes in the \$100,000 to \$120,000 range. But area lenders claim buyers are nervous about these high prices when the housing stock surrounding them is of significantly lower cost. Buckeye Hills was mentioned as an example. These units are selling and the subdivision is apparently doing well, but buyers are talking to their lenders about these fears. This may be of special relevance to homes built at the subject property, since the disparity between \$100,000 housing and surrounding neighborhood values would be even more extreme.

On the basis of the demographic analysis, the new single family homes built at the subject property would be most marketable if targeted to households with incomes of \$35,000 to \$49,999, in other terms, those households most likely to afford a monthly payment of \$817 to \$1,167. On the basis of interviews with area real estate brokers, recent home buyers, and officials at the east side offices of area lending institutions, new housing should be targeted toward the very bottom of this range; this suggests homes priced from \$75,000 to \$85,000.

#### 4. Estimate of Subject Property Capture of Demand for Single Family Housing Units

A strong demand should exist for this proposed development assuming the following:

- a. Single family homes have adequate basements or alternative storage areas
- b. A competitive amenity package, as described previously, is provided
- c. Priced to sell near the lower end of the \$77,000 to \$110,000 price range

GIVEN THE PROJECTED AVERAGE ANNUAL INCREASE OF 244 SINGLE FAMILY HOUSEHOLDS IN THE 13 CENSUS TRACT MARKET AREA, BETWEEN 30 AND 45 SINGLE FAMILY HOUSEHOLDS MAY BE CAPTURED BY THE SUBJECT PROPERTY ANNUALLY THROUGH 1994.

This estimate is based on the assumption that there will be no significant new single family development taking place in the vicinity of the subject, and that much of the new product being offered on the east side periphery will not be highly competitive.

#### D. Areas of Significant Future Growth

Future marketing opportunities and potential competition for the subject property will arise in relation to ongoing development at two area locations, which are the new American Family Insurance properties located in the northern quadrant of the intersection between Interstate Highways 90-94 and U.S. Highway 151 and the East Towne-Burke Heights area located at the south quadrant of the intersection. (See Exhibit III-6, presented previously.) New development in the area surrounding South Towne Mall has been mentioned as contributing to housing demand at the subject site, but most of its benefit will be felt in Fitchburg and McFarland, and in the newly developing areas east of Highway 151 and south of Interstate 94.

##### 1. American Family Insurance

American Family Insurance is significant to the subject property because of its anticipated future growth. Its staff is presently just under 3000 employees, but within ten years this number should increase to 5000. The firm presently uses two major facilities, and will add a third north of the Interstate Highways 90-94 and Highway 151 intersection by the end of 1992.

American Family's employees are a potential market target for both the multifamily and single family components of the subject. However, it is questionable how important a target it will be. Interviews with American Family's personnel department revealed that the majority of employees are either technical or clerical people, and that the ranks of management are relatively thin. The technical/clerical split is approximately 70 percent technical and 30 percent clerical at corporate headquarters (the future Town of Burke site), 65 percent 35 percent at the regional office (Highways 30 and 51), and a 50 percent split at the centralized line companies located in their East Washington Avenue location.

The current wage scale for technical employment is in the low to mid \$20,000 range for new college graduates, and extends to \$35,000. As there are presently only 17 vice presidents, the opportunities for upward mobility beyond this range appear to be limited. Clerical positions are typically filled by high school graduates and pay \$13,000 annually, although these salaries rise to \$18,000 in a fairly short time. It follows that the demand generated by these employees will be for modestly priced space, although dual income households could probably afford somewhat more than this.

Most of American Family's employees live outside the City of Madison, primarily in Sun Prairie, Waunakee, DeForest, and scattered rural locations. Some of its younger employees rent at Holiday Gardens (across from East Towne) as well as at other northeast area apartment projects. Employees nearing retirement were cited as selling their homes and moving to condominiums at Cherokee (northeast side of Madison). Housing near the regional office is also popular (near Highways 30 and 51), and a fair number of employees live between Milwaukee Street and Buckeye Road, in an area where starter homes average in the \$50,000 range. Very few employees live in the Marquette, Jenifer, and Lakeland Avenue areas near the subject site.

The conclusion follows that American Family may contribute some demand to the subject development, but its impact will not be significant. Most of its employees presently rent or own away from the subject property's immediate environs, and their orientation is likely to shift even more to areas north of East Towne Mall when the new corporate headquarters are built in the Town of Burke. Since most employees are technical or clerical types, demand will probably be focused on apartment or starter home space.

## 2. East Towne-Burke Heights Area

The East Towne-Burke Heights area is located just south of the Interstate Highways 90-94 and U.S. Highway 151 interchange, opposite the American Family expansion area located in the northern quadrant. There is a good deal of commercial activity either in or expected to enter the area, including East Towne Mall, Cub Foods, and Wolohan Lumber, and a number of industrial firms have located there as well. However, housing demand generated for the subject property will be minimal at best through 1994.

This area has been designated as one of Madison's four regional commercial districts by local planning authorities, but three significant features will keep it from being an important source of housing demand for the subject site:

- a. Linkage to the subject property will be problematic at best, since current access roads are oriented toward East Washington Avenue, Town Drive, and Lien Road

- b. Many of the potential employees of the firms in this area hold lower paid service or clerical positions and are unlikely to be purchasers of new housing space
- c. There are sizable quantities of residentially zoned land in the immediate area, and the residential units built there will intercept demand before it finds the subject site.

### 3. Conclusion

On the basis of these investigations, it is assumed that anticipated commercial development in these future growth areas will neither create strong effective demand for the subject property over the next five years nor will anticipated residential development create strong competition. The residential development that is stimulated by commercial and industrial enterprises in these areas will not be focused toward the subject, and there would not be much effective demand for the type of product recommended for the subject property.



APPENDIX

# EXPLANATORY NOTES BY SECTIONS

## SECTION III

NOTE 1: The Soils & Engineering Services, Inc. report was done for the City of Madison Engineer's Office, December 15, 1986. The Warzyn Engineering, Inc. study was done for the City of Madison Community and Economic Development Unit in July of 1989.

NOTE 2: It appears that the City of Madison can make minor changes of up to two acres, but these changes can affect only the 75 foot wide buffer area that surrounds the designated wetlands. Changes to the wetland itself are considered major, in which case an approval process must be followed.

NOTE 3: This situation may be less problematic from November through May, since most of the wooded area's trees are deciduous, and lose their leaves at the end of each growing season.

## SECTION IV

NOTE 1: A household is defined as the person or persons occupying a housing unit, including a family, a person living alone, or a person living with persons not related to him or her.

NOTE 2: The reported median incomes show the dollar income level for which half of all census tract households have higher incomes and half of the households have lower incomes.

NOTE 3: Note that these data account for reductions in the housing stock due to demolition and additions from non-new construction, and so an adjustment is made for only the units needed to return the area to its normal, or structural, vacancy level.

NOTE 4: Calculations for Subnormal Multifamily Vacancy Adjustment

For single family market area of 13 census tract:

Renting Households as of 1989	11,510	
times	<u>.005</u>	
equals		
Increment	58	
divided by	<u>5</u>	years
equals		
Annual Increment	12	multifamily household units

For multifamily market area of 10 census tracts:

Renting Households as of 1989	10,135	
times	<u>.005</u>	
equals		
Increment	51	
divided by	<u>5</u>	years
equals		
Annual Increment	10	multifamily household units

NOTE 5: The approximate street boundaries within these tracts are Blount Street on the west to Gorham Street on the north, to Sherman Avenue, to Aberg Avenue, to East Washington avenue, to Portage and then Hayes Roads, to Interstate 90 on the east, to Cottage Grove Road on the south, to the northeastern shore of Lake Monona running back to the point of beginning (the intersection with Blount Street).

NOTE 6: The source of information regarding the rate of change of homeownership is Benchmark Real Estate Forecasts, Inc.

NOTE 7: There are problems associated with all of these allocation scenarios, since they are either arbitrary or require questionable assumptions. Planning commissions may allocate land according to the percentages of unit types they expect developers should/will build, but there are currently wide differences in opinion as to what the baby boom generation is likely to desire and will be able to afford. These scenarios also assume that historical percentages reflect current desires, or at least that they are accurate with respect to the extent that past desires were satisfied. Neither of these assumptions are necessarily correct, since past allocations reflect conditions of supply as well as demand, and consumer behavior may have been constrained by shortages of product, financing, or market imperfections.

NOTE 8: Percentage of housing units owned vs. rented is conceptually more closely tied to consumer demand than is the percentage of single family vs. multifamily units. The single/multifamily split reflects developers' responses to temporal market constraints (e.g. interest rates, availability of appropriately zoned land, sewer moratoria, etc.) as well as to consumer demand. The owned/rented split is somewhat less dependent on these supply side features. The single/multifamily split reported by the census also includes vacant as well as occupied units; in contrast, the owned/rented split is computed on only occupied units.

STATEMENTS OF GENERAL ASSUMPTIONS AND  
LIMITING CONDITIONS

1. Facts and Forecasts Under Conditions of Uncertainty

- . Inferences of market demand which combine census data estimates and parameters generated from survey research are always subject to an unknown degree of error due to the time differences in underlying economic conditions and other circumstances as well as variations in definitions and research frame of reference of the two types of study inputs.
- . Primary survey research is always subject to an unknown bias in sample selection as well as potential bias in the nature of the response and non-response rates from different segments of the sample population. Traditional statistical tests of statistical inference are not considered appropriate.
- . The presentation and analysis of data in this report has been done in a craftsmanlike manner, but the results suggested are only intended to scale the potential market opportunity since ultimate achievement is conditional on so many intervening factors both within and beyond the control of the developer.

2. Contribution of Other Professionals

- . All information regarding property sales and rentals, financing, or projections of income and expense is from sources deemed reliable. No warranty or representation is made regarding the accuracy thereof, and it is submitted subject to errors, omissions, change of price, rental, or other conditions, prior sale, lease, financing, or withdrawal without notice.
- . Information regarding property sales and rentals, financing, or projections of income and expense is from sources deemed reliable. No warranty or representation is made regarding the accuracy thereof, and it is submitted subject to errors, omissions, change of price, rental, or other conditions, prior sale, lease, financing, or withdrawal without notice.
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**JEAN B. DAVIS**

**EDUCATION**

Master of Science - Real Estate Appraisal and Investment Analysis  
University of Wisconsin

Master of Arts - Elementary Education - Stanford University

Bachelor of Arts - Stanford University (with distinction)

Additional graduate and undergraduate work  
Columbia Teachers College and the University of Wisconsin.

**PROFESSIONAL EDUCATION**

Society of Real Estate Appraisers

Appraising Real Property Course 101

Principles of Income Property Appraising Course 201

American Institute of Real Estate Appraisers

Residential Valuation (Formerly Course VIII)

**PROFESSIONAL DESIGNATIONS**

MAI (Candidate) - American Institute of Real Estate Appraisers

SRPA (Candidate) - Society of Real Estate Appraisers

**PROFESSIONAL AFFILIATIONS**

Wisconsin Association of Homes and Services for the Aging, Inc.

National Association of Senior Living Industries

**PROFESSIONAL EXPERIENCE**

Trained in appraisal and investment analysis under the guidance of the late James A. Graaskamp, Ms. Davis is President of Landmark Research, Inc., and specializes in market and survey research to estimate effective demand for elderly housing, residential development, and for office and retail projects. She also emphasizes the appraisal of major income properties, rehabilitated older commercial properties, and residential properties.

Her experience includes tax assessment as the former assessor in the Village of Maple Bluff, which is adjacent to Madison, Wisconsin, and as a representative of property owners appealing assessed valuations in other jurisdictions.

**KIM PETERSON**

**EDUCATION**

Ph.D. - Real Estate and Urban Land Economics  
Minors in Marketing Research and Economic Geography  
University of Wisconsin - Madison

Master of Science - Real Estate Appraisal and Investment Analysis  
University of Wisconsin - Madison

Bachelor of Arts - Computer Science  
University of Wisconsin - Madison

**PROFESSIONAL EXPERIENCE**

As President and founder of Land Use Research Associates, Dr. Peterson serves as advisor to various public agencies and private consulting firms. His range of activities includes marketing and survey research in support of real estate project design, the preparation of market and financial feasibility studies related to commercial and community development, and the assessment of economic impact. Specific projects have included hotels, multi-family housing projects, life care communities, resorts and other recreational developments, office and industrial parks, retail developments, and the relocation of manufacturing plants.

Dr. Peterson also designs and executes primary research in support of Wisconsin's recreation - tourism industry. This research is typically state wide or regional in scope, and produces information needed by state and local governments, consultants, appraisers, and planning firms for the conduct of market and financial feasibility analyses, economic impact studies, and cost-benefit analyses.

**ACADEMIC BACKGROUND**

In addition to teaching classes in real estate appraisal and finance at the University of Wisconsin - Madison, the University of Wisconsin - Milwaukee, and the University of Texas at Austin, Dr. Peterson has done basic research in consumer shopping behavior, the delineation of recreation and tourism markets, and the estimation of economic impacts due to tourism. He has written and published monographs on these topics.

**ROBERT B. SCHWARZ**

**EDUCATION**

**University of Wisconsin - Madison, School of Business**  
M.S. in Real Estate Analysis and Appraisal

**State University of New York, College at Purchase**  
B.A. with Honors in Urban Studies

**City University of New York, Graduate Center**  
Additional graduate work in Economics

**EMPLOYMENT**

**Wisconsin Housing and Economic Development Authority;** Walter Hollander Fellow; Researched and prepared report on preservation of Wisconsin's stock of government-subsidized housing projects.

**University of Wisconsin - Madison; Graduate Assistantships:** **School of Business:** Compiled and analyzed data using SAS and SPSS for study of banking and telephone industries. **Department of Family Resources:** Conducted interviews and data analysis using SYSTAT for study of elderly homeowner behavior. **Center for Health Policy and Program Evaluation:** Assisted project director in writing surveys and analyzing data for study of health uninsured in Wisconsin.

**Port Authority of New York/New Jersey, Division of Regional Economic Analysis,** New York, NY; Graduate Intern, assisted with development of a regional econometric model.

**Flatbush-East Community Development Corp.,** Brooklyn, NY; Housing Director: Managed all aspects of program funded by city and state housing agencies including planning, staffing, service delivery, budgeting and reporting; organized tenant associations; provided energy conservation education and rehabilitation loan marketing and packaging for homeowners and landlords.

**City of New York, Urban Fellows Program;** One of twenty college seniors selected in nationwide competitive search; placed with Council Member Ruth W. Messinger as Special Assistant. Researched and prepared briefs on transportation and housing policy; prepared report on Tax Commission.

**OTHER**

**Computer Skills**

Micro word processing, spreadsheet and data analysis;  
Proficient in LOTUS, BASIC, SYSTAT and PROJECT  
Mainframe VAX/VMS using SAS and SPSS

**Board Member of Project Home**

A nonprofit, low-cost home repair and weatherization service

