

APPENDIX A:

U.S. EPA

Environmental Justice Screen Reports

Darbo-Worthington

Tennyson

Truax

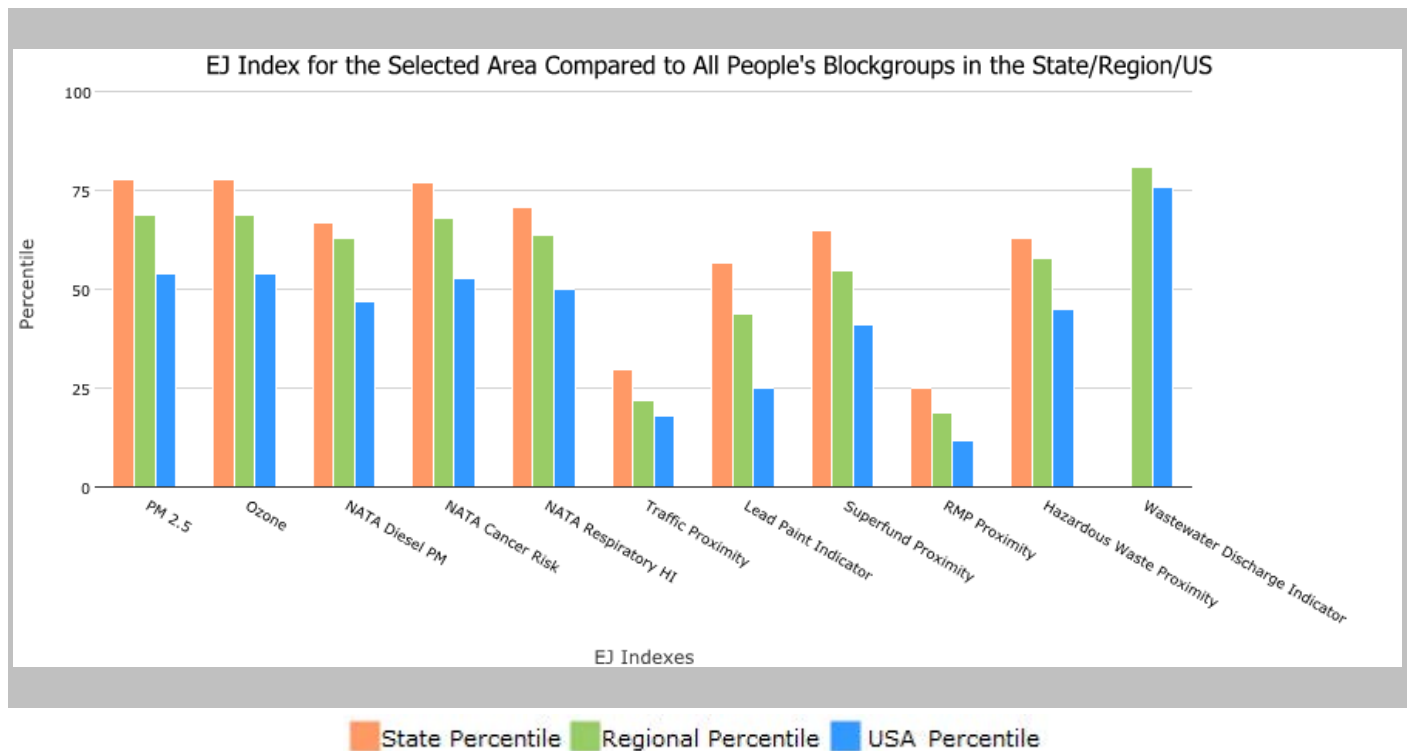
the User Specified Area, WISCONSIN, EPA Region 5

Approximate Population: 3,824

Input Area (sq. miles): 0.69

Darbo-Worthington-Starkweather

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	78	69	54
EJ Index for Ozone	78	69	54
EJ Index for NATA* Diesel PM	67	63	47
EJ Index for NATA* Air Toxics Cancer Risk	77	68	53
EJ Index for NATA* Respiratory Hazard Index	71	64	50
EJ Index for Traffic Proximity and Volume	30	22	18
EJ Index for Lead Paint Indicator	57	44	25
EJ Index for Superfund Proximity	65	55	41
EJ Index for RMP Proximity	25	19	12
EJ Index for Hazardous Waste Proximity	63	58	45
EJ Index for Wastewater Discharge Indicator	N/A	81	76



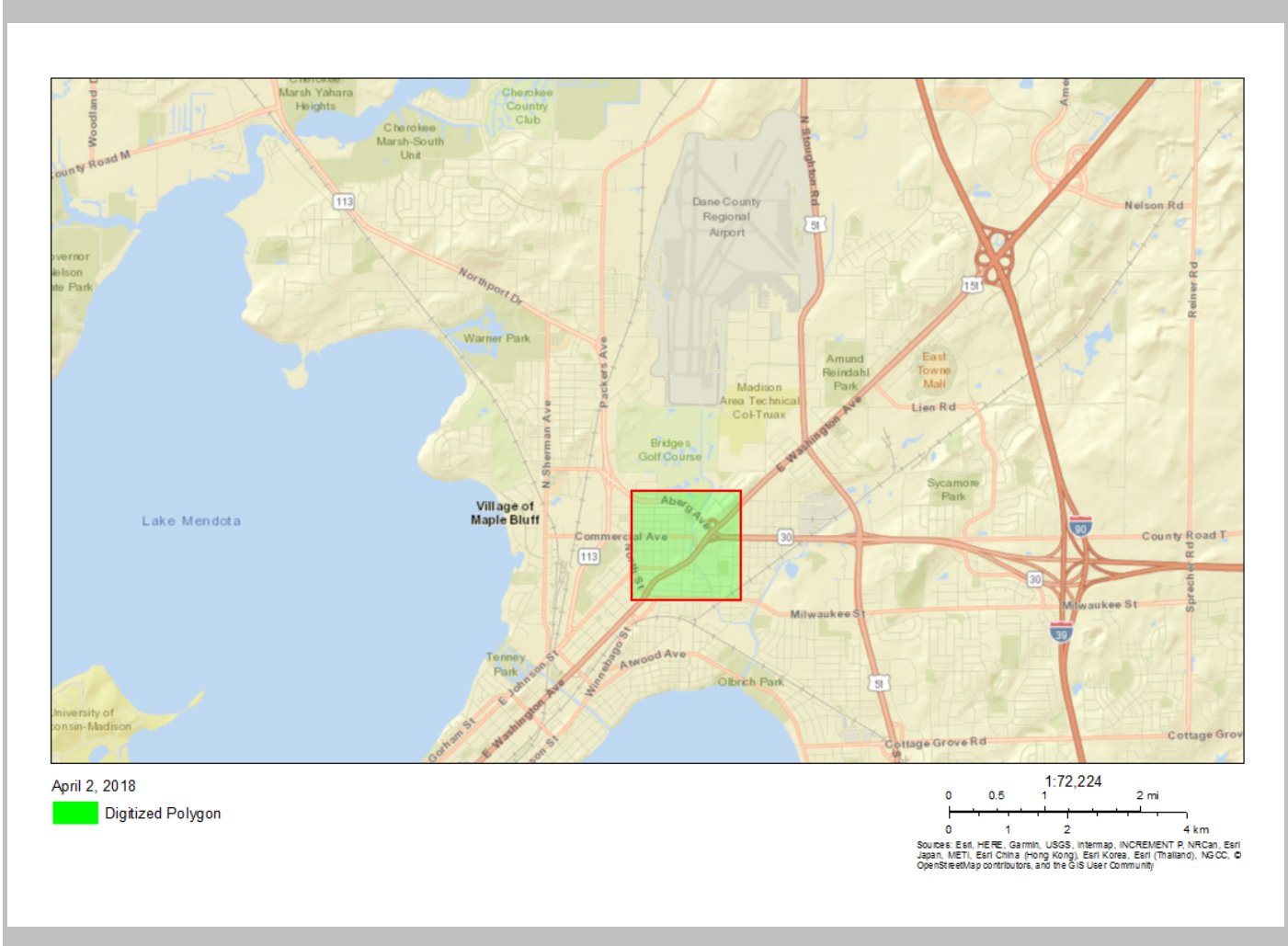
This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

the User Specified Area, WISCONSIN, EPA Region 5

Approximate Population: 3,824

Input Area (sq. miles): 0.69

Darbo-Worthington-Starkweather



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJSCREEN Report (Version 2017)

the User Specified Area, WISCONSIN, EPA Region 5

Approximate Population: 3,824

Input Area (sq. miles): 0.69

Darbo-Worthington-Starkweather

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$)	9.57	8.96	69	10.1	25	9.14	57
Ozone (ppb)	39.8	38.7	73	37.6	88	38.4	73
NATA* Diesel PM ($\mu\text{g}/\text{m}^3$)	1.02	0.656	81	0.932	60-70th	0.938	60-70th
NATA* Cancer Risk (lifetime risk per million)	41	29	96	34	80-90th	40	50-60th
NATA* Respiratory Hazard Index	2.3	1.3	96	1.7	80-90th	1.8	70-80th
Traffic Proximity and Volume (daily traffic count/distance to road)	1300	300	95	370	93	590	90
Lead Paint Indicator (% Pre-1960 Housing)	0.68	0.37	81	0.39	79	0.29	86
Superfund Proximity (site count/km distance)	0.13	0.13	75	0.13	77	0.13	74
RMP Proximity (facility count/km distance)	2.8	0.88	92	0.81	94	0.73	95
Hazardous Waste Proximity (facility count/km distance)	0.084	0.071	77	0.091	68	0.093	68
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0	1.2	N/A	4.2	29	30	40
Demographic Indicators							
Demographic Index	34%	24%	80	29%	71	36%	55
Minority Population	24%	18%	79	25%	66	38%	45
Low Income Population	43%	30%	79	33%	72	34%	68
Linguistically Isolated Population	1%	2%	71	2%	65	5%	50
Population With Less Than High School Education	6%	9%	37	11%	34	13%	29
Population Under 5 years of age	7%	6%	68	6%	67	6%	64
Population over 64 years of age	8%	15%	16	14%	19	14%	23

* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: <https://www.epa.gov/national-air-toxics-assessment>.

For additional information, see: www.epa.gov/environmentaljustice

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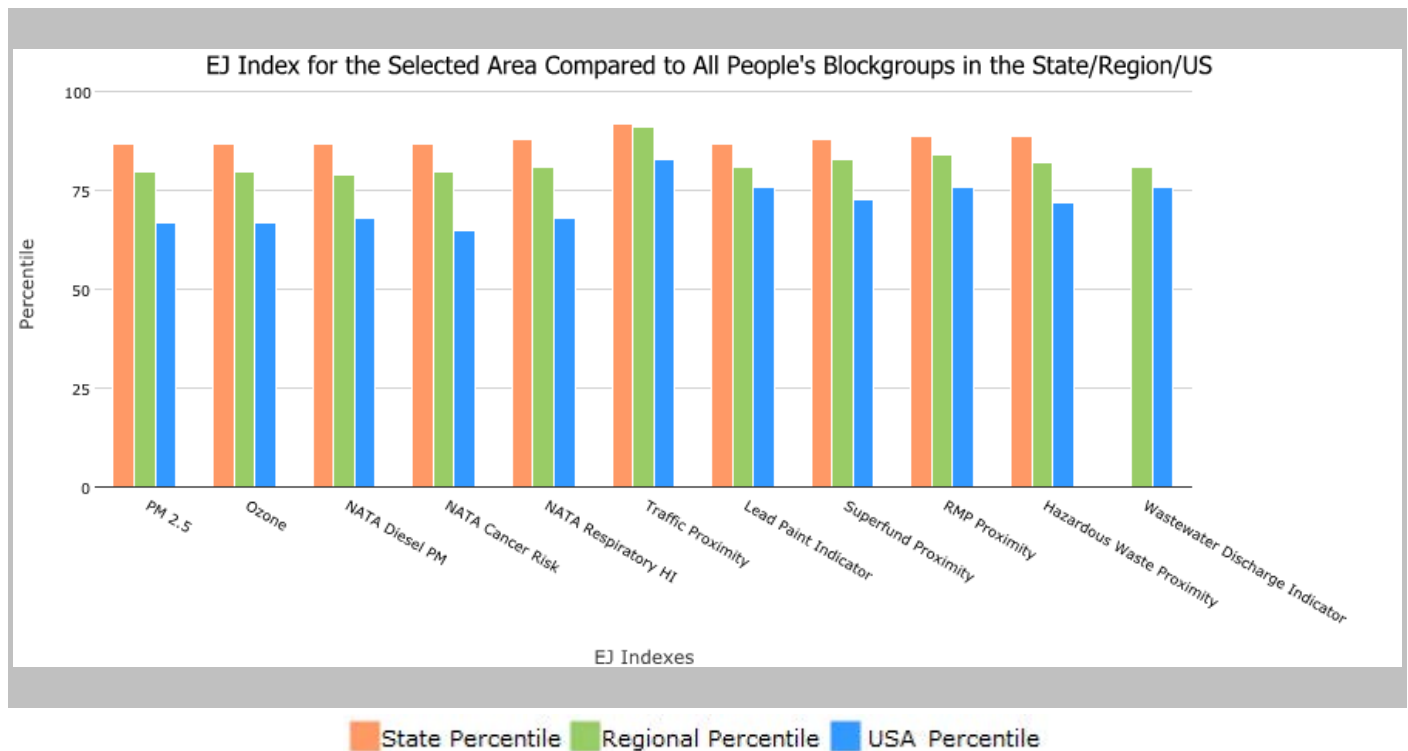
the User Specified Area, WISCONSIN, EPA Region 5

Approximate Population: 637

Input Area (sq. miles): 0.14

Truax

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	87	80	67
EJ Index for Ozone	87	80	67
EJ Index for NATA* Diesel PM	87	79	68
EJ Index for NATA* Air Toxics Cancer Risk	87	80	65
EJ Index for NATA* Respiratory Hazard Index	88	81	68
EJ Index for Traffic Proximity and Volume	92	91	83
EJ Index for Lead Paint Indicator	87	81	76
EJ Index for Superfund Proximity	88	83	73
EJ Index for RMP Proximity	89	84	76
EJ Index for Hazardous Waste Proximity	89	82	72
EJ Index for Wastewater Discharge Indicator	N/A	81	76



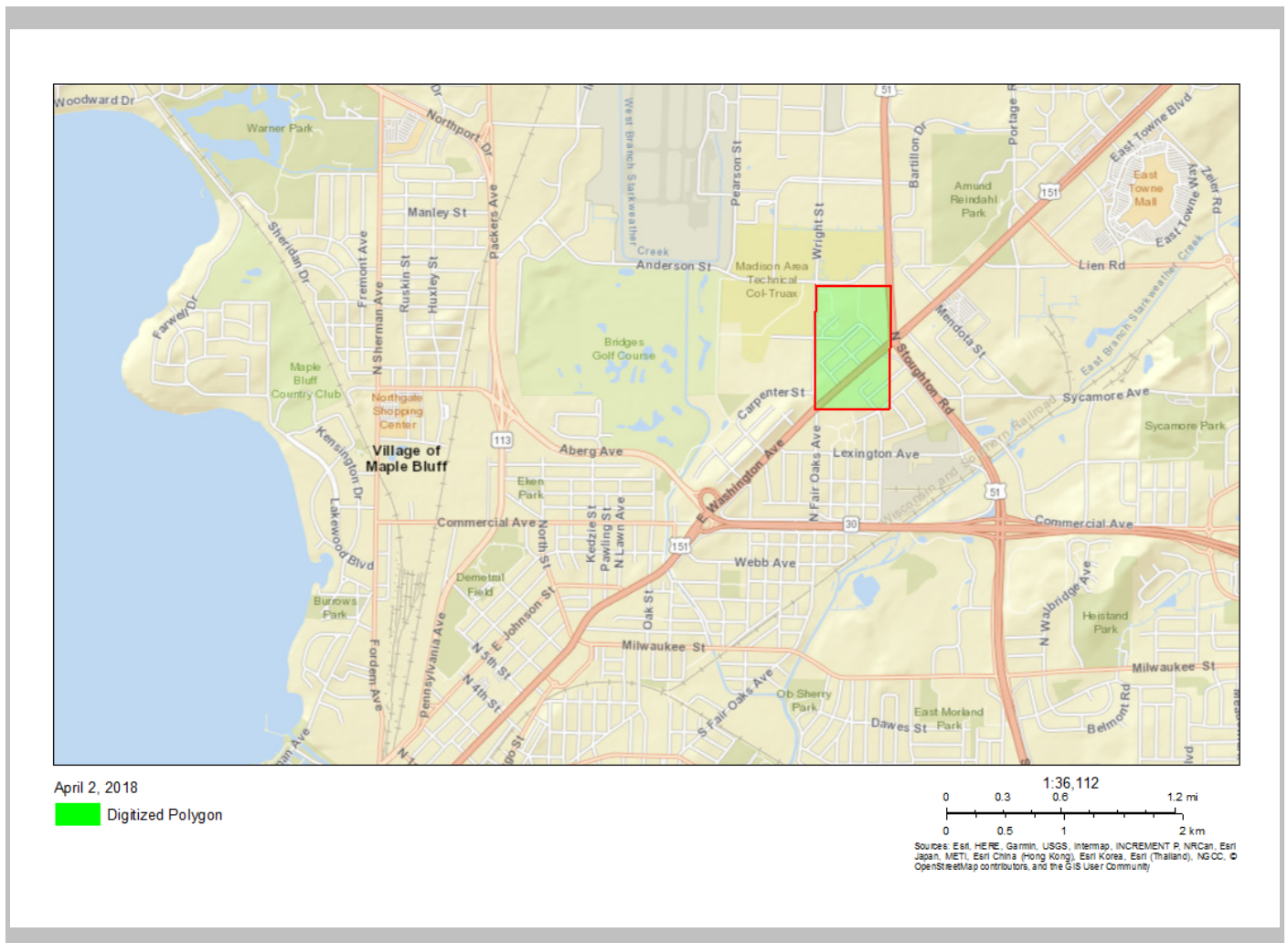
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the User Specified Area, WISCONSIN, EPA Region 5

Approximate Population: 637

Input Area (sq. miles): 0.14

Truax



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJSCREEN Report (Version 2017)

the User Specified Area, WISCONSIN, EPA Region 5

Approximate Population: 637

Input Area (sq. miles): 0.14

Truax

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$)	9.55	8.96	67	10.1	24	9.14	56
Ozone (ppb)	39.8	38.7	77	37.6	89	38.4	73
NATA* Diesel PM ($\mu\text{g}/\text{m}^3$)	0.811	0.656	69	0.932	<50th	0.938	50-60th
NATA* Cancer Risk (lifetime risk per million)	37	29	88	34	60-70th	40	<50th
NATA* Respiratory Hazard Index	2.1	1.3	94	1.7	70-80th	1.8	70-80th
Traffic Proximity and Volume (daily traffic count/distance to road)	1100	300	94	370	92	590	88
Lead Paint Indicator (% Pre-1960 Housing)	0.34	0.37	52	0.39	52	0.29	64
Superfund Proximity (site count/km distance)	0.1	0.13	67	0.13	71	0.13	67
RMP Proximity (facility count/km distance)	1.2	0.88	73	0.81	77	0.73	80
Hazardous Waste Proximity (facility count/km distance)	0.085	0.071	77	0.091	69	0.093	68
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0	1.2	N/A	4.2	29	30	40
Demographic Indicators							
Demographic Index	47%	24%	88	29%	82	36%	71
Minority Population	37%	18%	87	25%	76	38%	57
Low Income Population	58%	30%	89	33%	86	34%	84
Linguistically Isolated Population	3%	2%	83	2%	75	5%	61
Population With Less Than High School Education	17%	9%	87	11%	79	13%	69
Population Under 5 years of age	6%	6%	59	6%	58	6%	55
Population over 64 years of age	11%	15%	32	14%	35	14%	40

* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: <https://www.epa.gov/national-air-toxics-assessment>.

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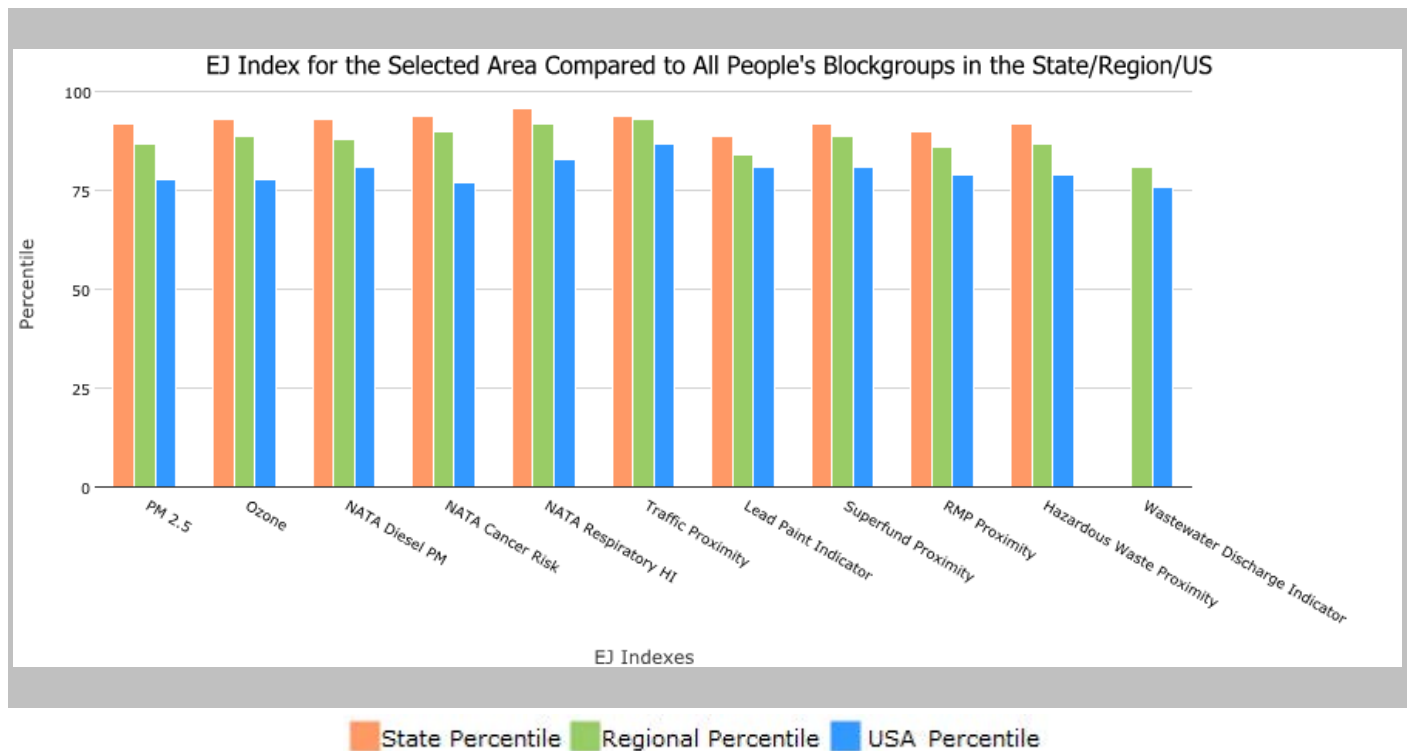
the User Specified Area, WISCONSIN, EPA Region 5

Approximate Population: 1,531

Input Area (sq. miles): 0.69

Tennyson

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	92	87	78
EJ Index for Ozone	93	89	78
EJ Index for NATA* Diesel PM	93	88	81
EJ Index for NATA* Air Toxics Cancer Risk	94	90	77
EJ Index for NATA* Respiratory Hazard Index	96	92	83
EJ Index for Traffic Proximity and Volume	94	93	87
EJ Index for Lead Paint Indicator	89	84	81
EJ Index for Superfund Proximity	92	89	81
EJ Index for RMP Proximity	90	86	79
EJ Index for Hazardous Waste Proximity	92	87	79
EJ Index for Wastewater Discharge Indicator	N/A	81	76



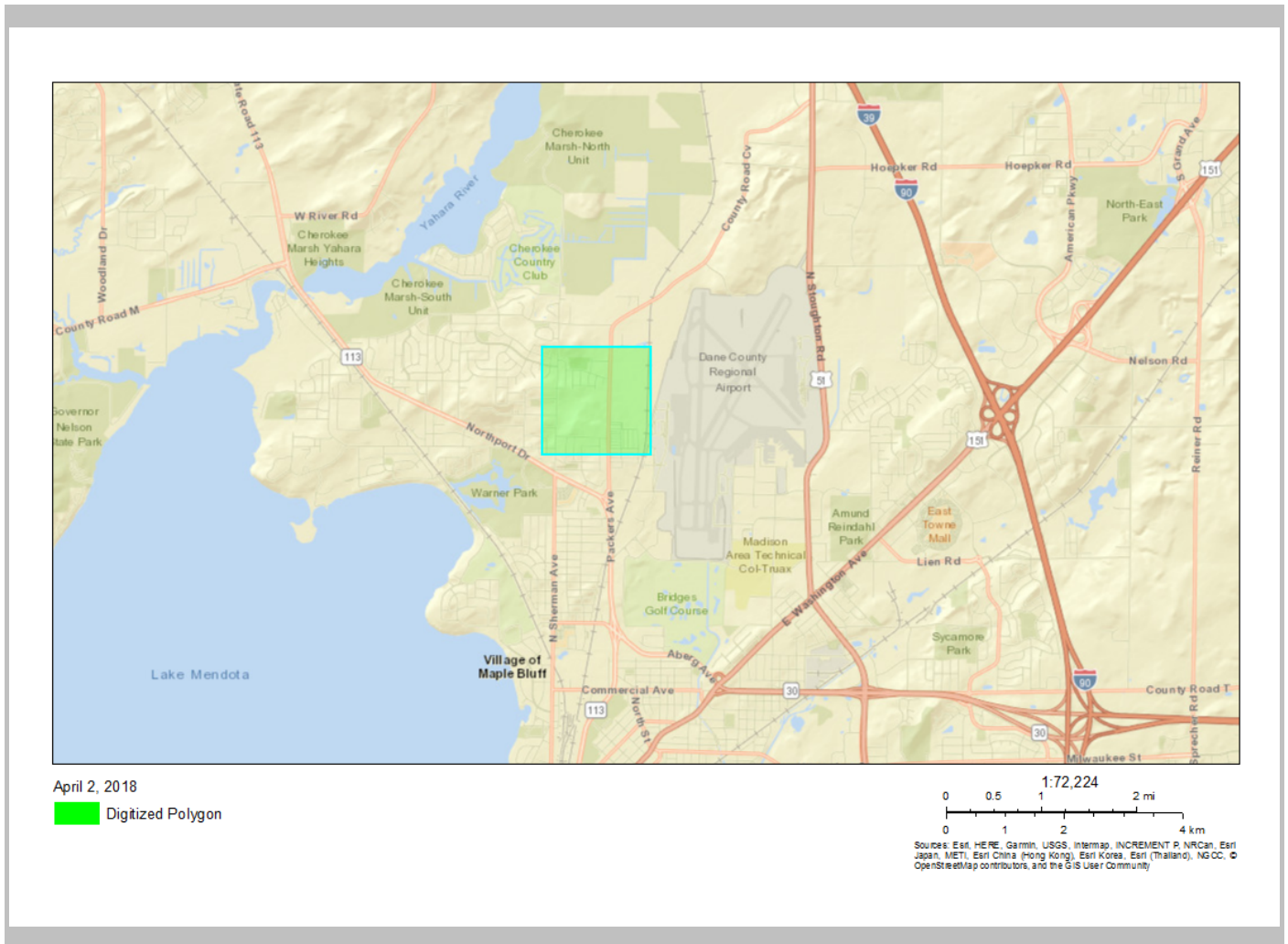
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Tennyson



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJSCREEN Report (Version 2017)

the User Specified Area, WISCONSIN, EPA Region 5

Approximate Population: 1,531

Input Area (sq. miles): 0.69

Tennyson



Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$)	9.52	8.96	64	10.1	23	9.14	55
Ozone (ppb)	39.8	38.7	77	37.6	89	38.4	73
NATA* Diesel PM ($\mu\text{g}/\text{m}^3$)	1.18	0.656	89	0.932	70-80th	0.938	70-80th
NATA* Cancer Risk (lifetime risk per million)	43	29	97	34	80-90th	40	60-70th
NATA* Respiratory Hazard Index	2.8	1.3	99	1.7	90-95th	1.8	80-90th
Traffic Proximity and Volume (daily traffic count/distance to road)	620	300	87	370	85	590	81
Lead Paint Indicator (% Pre-1960 Housing)	0.25	0.37	38	0.39	41	0.29	56
Superfund Proximity (site count/km distance)	0.09	0.13	62	0.13	67	0.13	63
RMP Proximity (facility count/km distance)	0.59	0.88	58	0.81	60	0.73	64
Hazardous Waste Proximity (facility count/km distance)	0.071	0.071	71	0.091	63	0.093	62
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0	1.2	N/A	4.2	29	30	40
Demographic Indicators							
Demographic Index	51%	24%	90	29%	84	36%	74
Minority Population	46%	18%	89	25%	81	38%	65
Low Income Population	56%	30%	88	33%	84	34%	82
Linguistically Isolated Population	8%	2%	95	2%	90	5%	80
Population With Less Than High School Education	20%	9%	91	11%	85	13%	77
Population Under 5 years of age	8%	6%	75	6%	73	6%	71
Population over 64 years of age	8%	15%	18	14%	21	14%	25

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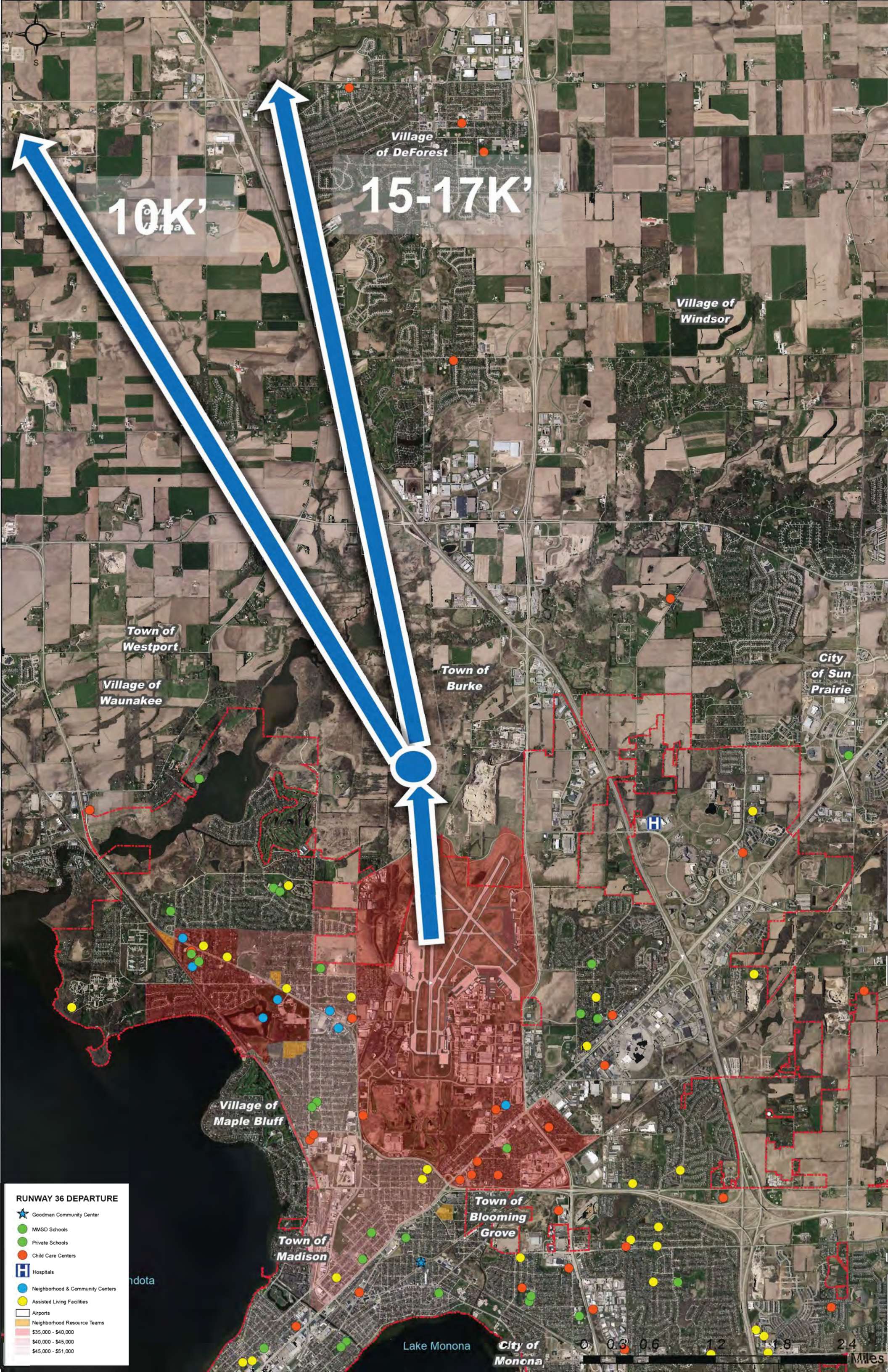
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APPENDIX B:

Truax Field F-16 Flight Plans

Maps prepared by City of Madison

The maps include nearby schools, child care centers, hospitals, and community centers, assisted living facilities and low-income census block groups.



10K'

15-17K'

Village of DeForest

Village of Windsor

Town of Westport

Village of Waunakee

Town of Burke

City of Sun Prairie

Village of Maple Bluff

Town of Madison

Town of Blooming Grove

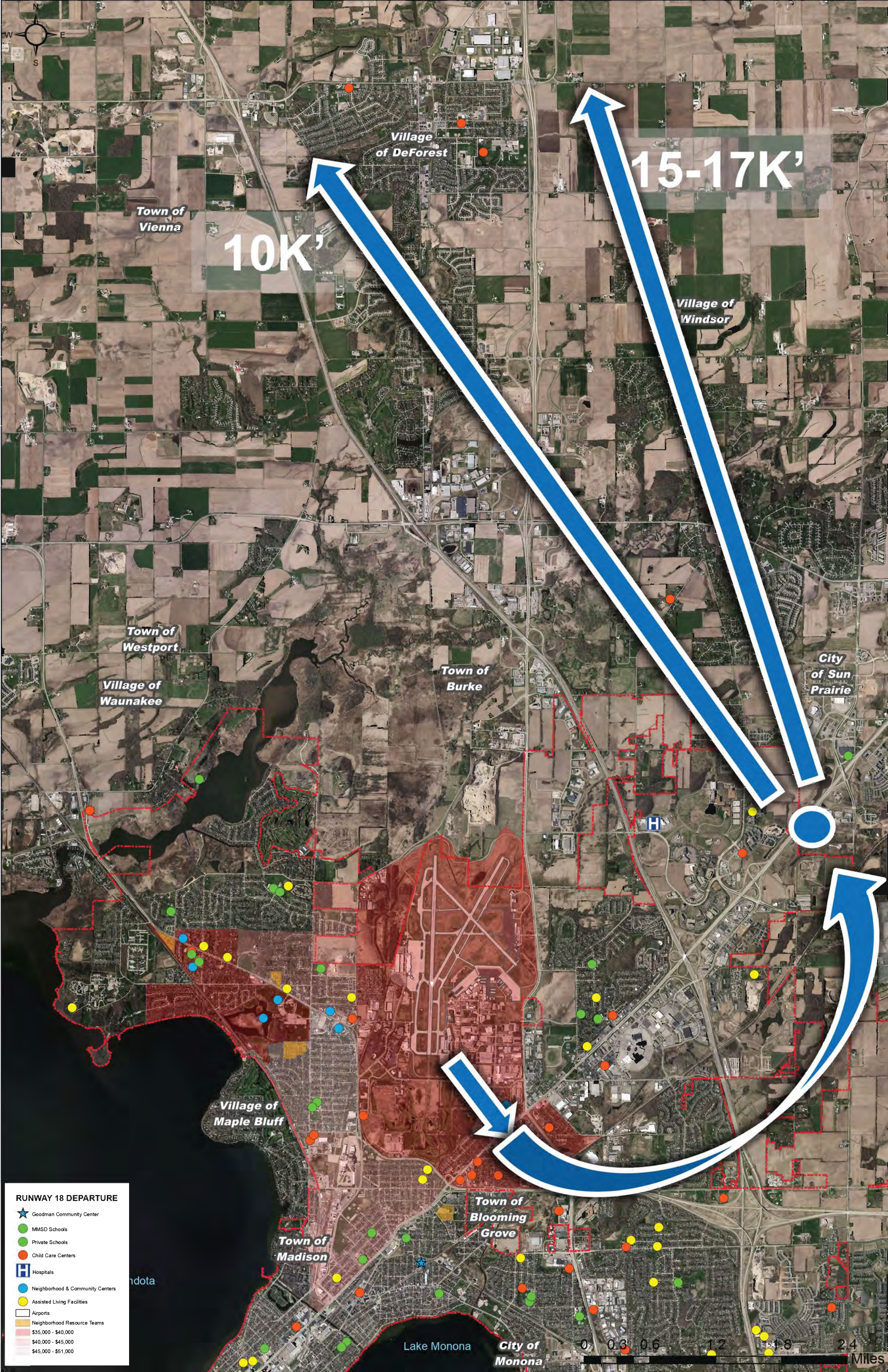
Lake Monona

City of Monona

RUNWAY 36 DEPARTURE

-  Goodman Community Center
-  MMSD Schools
-  Private Schools
-  Child Care Centers
-  Hospitals
-  Neighborhood & Community Centers
-  Assisted Living Facilities
-  Airports
-  Neighborhood Resource Teams
- \$35,000 - \$40,000
- \$40,000 - \$45,000
- \$45,000 - \$51,000





Town of Vienna

Village of DeForest

15-17K'

10K'

Village of Windsor

Town of Westport

Village of Waunakee

Town of Burke

City of Sun Prairie

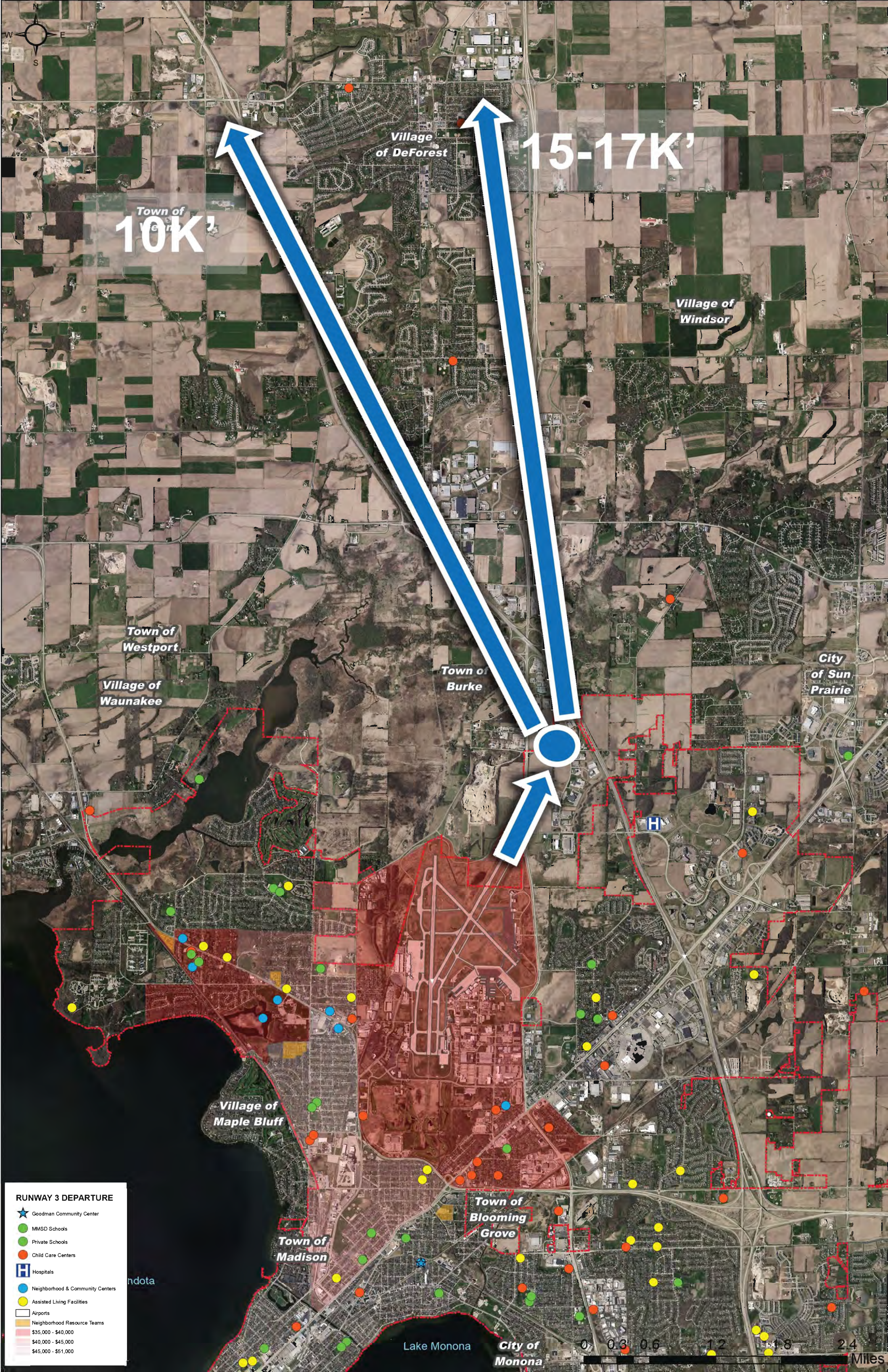
Village of Maple Bluff

Town of Blooming Grove

Town of Madison

- RUNWAY 18 DEPARTURE**
- ★ Goodman Community Center
 - MMSD Schools
 - Private Schools
 - Child Care Centers
 - H Hospitals
 - Neighborhood & Community Centers
 - Assisted Living Facilities
 - Airports
 - Neighborhood Resource Teams
 - \$35,000 - \$40,000
 - \$40,000 - \$45,000
 - \$45,000 - \$51,000

0 0.3 0.6 1.2 1.8 2.4 Miles



10K'

15-17K'

Village of DeForest

Village of Windsor

Town of Westport

Village of Waunakee

Town of Burke

City of Sun Prairie

Village of Maple Bluff

Town of Blooming Grove

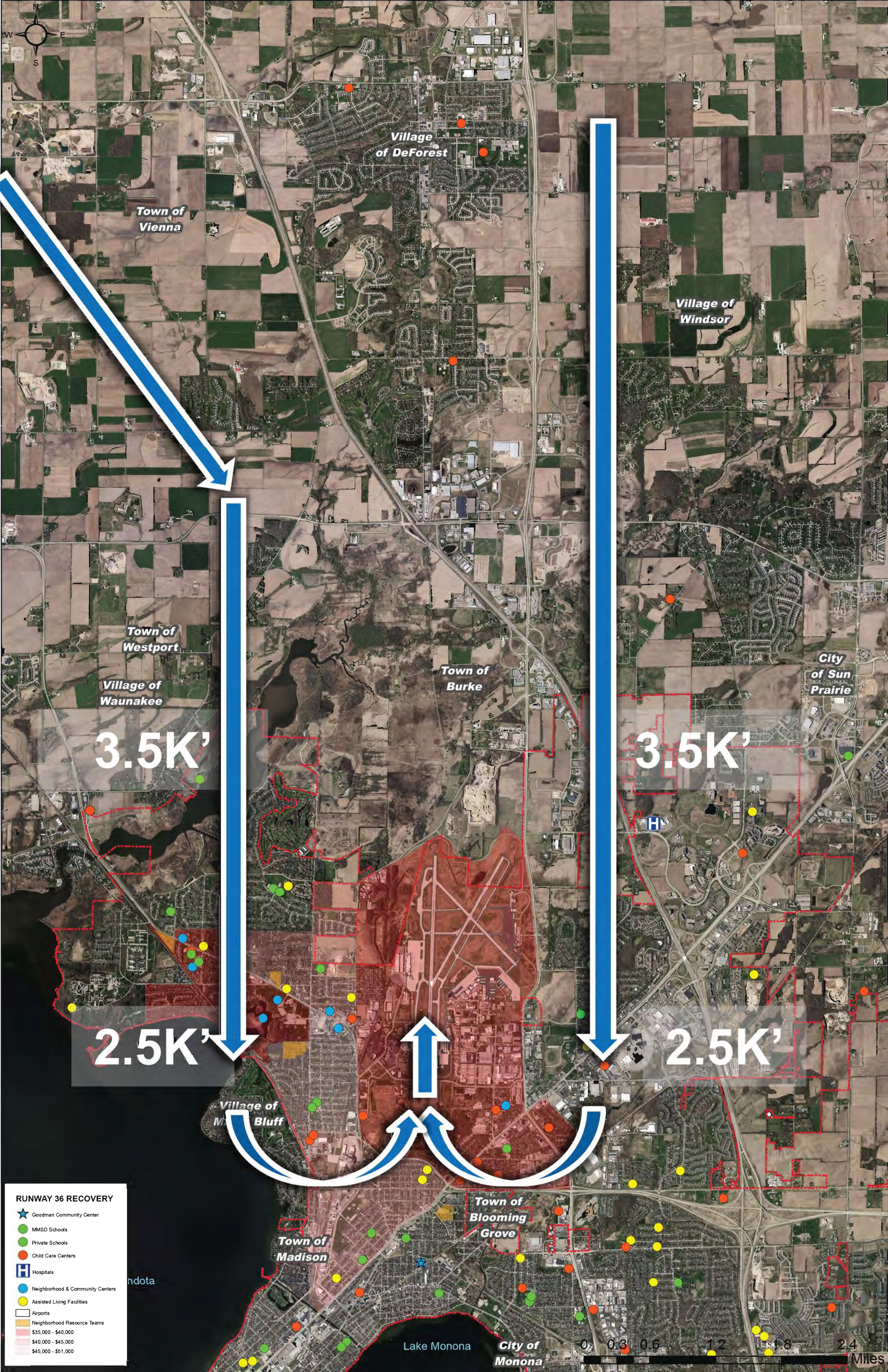
Town of Madison

Lake Monona

City of Monona

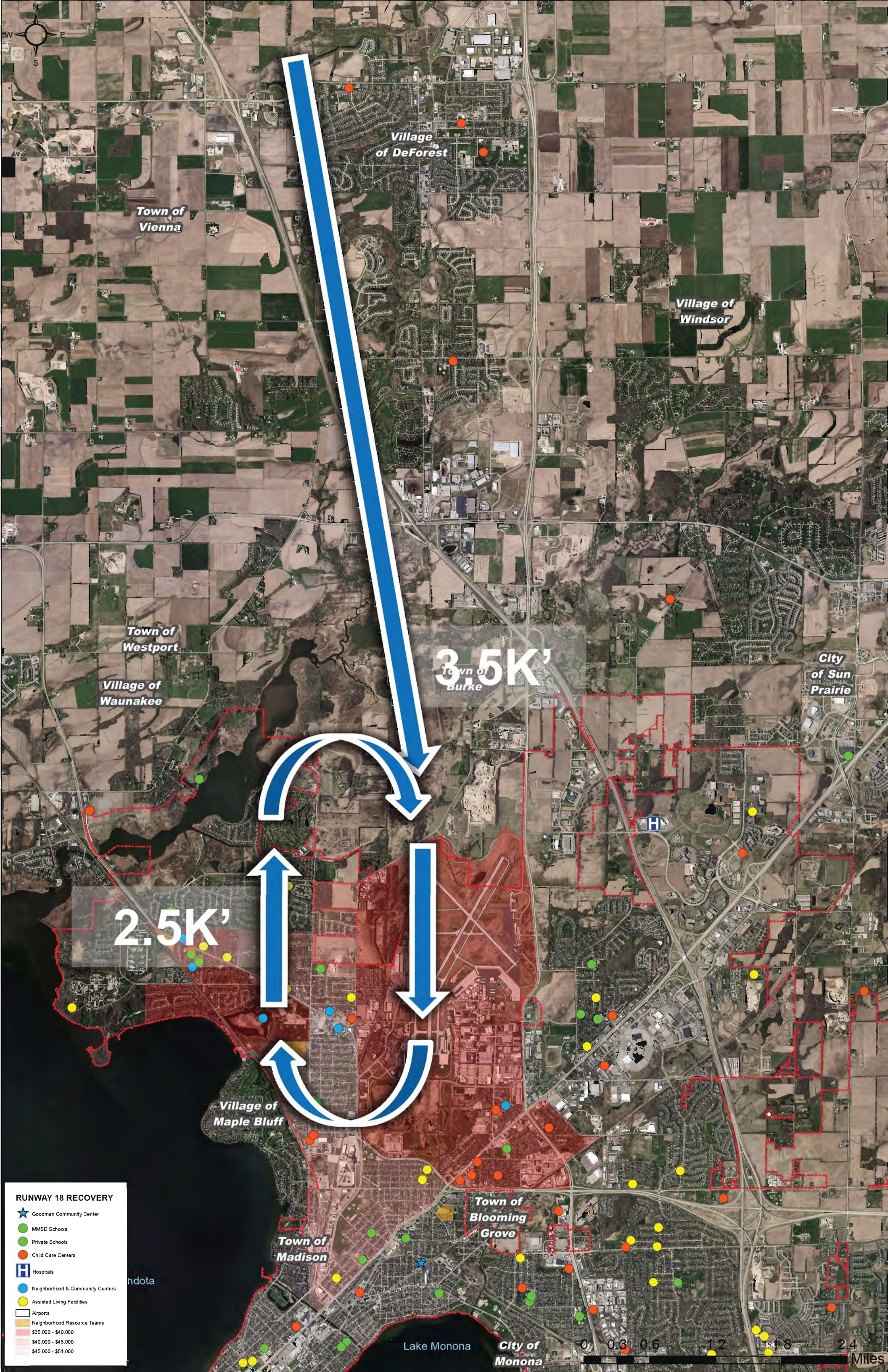
- RUNWAY 3 DEPARTURE**
- ★ Goodman Community Center
 - MMSD Schools
 - Private Schools
 - Child Care Centers
 - H Hospitals
 - Neighborhood & Community Centers
 - Assisted Living Facilities
 - Airports
 - Neighborhood Resource Teams
 - \$35,000 - \$40,000
 - \$40,000 - \$45,000
 - \$45,000 - \$51,000





- RUNWAY 36 RECOVERY**
- ★ Goodman Community Center
 - MMSD Schools
 - Private Schools
 - Child Care Centers
 - H Hospitals
 - Neighborhood & Community Centers
 - Assisted Living Facilities
 - ✈ Airports
 - Neighborhood Resource Teams
 - \$35,000 - \$40,000
 - \$40,000 - \$45,000
 - \$45,000 - \$51,000





- RUNWAY 18 RECOVERY**
- ★ Goodman Community Center
 - MMSD Schools
 - Private Schools
 - Child Care Centers
 - H Hospitals
 - Neighborhood & Community Centers
 - Assisted Living Facilities
 - Airports
 - Neighborhood Resource Teams
 - \$35,000 - \$40,000
 - \$40,000 - \$45,000
 - \$45,000 - \$51,000

0 0.3 0.6 1.2 1.8 2.4 Miles

APPENDIX C:

Cultural Resources Truax Air Park Mound

Trust's Linear Mound Easement in Truax Park
December, 2017 Comments
Kurt Stege

Since 1979, the Trust has held a perpetual easement “for the purpose of maintaining the Indian Mound located [in Truax Air Park West, Outlot 1. MTHP] agrees to preserve the archaeological and historical character of the Indian Mound; no alteration which may impair the archaeological or historical value of the Mound may be made to the described property without the express written permission of [Dane County] and [MTHP].”

The property is owned by Dane County but they did not consider themselves to be positioned to protect and “maintain” it.

The Trust's file (now in the custody of the Treasurer) includes several copies of a survey map showing the precise location. According to Daniel Einstein, former Trust Vice-President, the mound is pretty close to a building, has a depression in the center, and has invasive trees (buckthorn and honeysuckle) growing on and around it. Daniel suggested that unless the holder of the easement is in a position to both clear the invasives and re-seed the area with something that will take hold and still do follow-up maintenance, it is not worthwhile to just cut the invasive trees.

Daniel provided me further background information about mounds generally and about the Trust's mound.

Linear (long) and conical (round) mounds are viewed as an older rendition of the effigy mounds that also exist in the Madison area and in Wisconsin. Archeological excavations on numerous mounds have established the general rule that all mounds are burial mounds, i.e. have or had human remains.

When Dane County was preparing for airport expansion some years ago, they hired a consultant who surveyed the area and that consultant identified the feature in question as an Indian Mound, even though he may not have been expertly qualified to do so.

Bob Birmingham, former State Archeologist at the Historical Society, advised Daniel several years ago that he had serious doubts the feature covered by the Trust's easement is an “Indian Mound” rather than a naturally occurring shape, possibly due to glacial activity. His opinion is based on the fact that at least at this point, the feature is not near water and does not provide a special view of the surrounding landscape, either one of which was typical of confirmed mounds.

Nevertheless, the feature covered by the Trust's easement is listed in the official inventory so it is definitely subject to all of the restrictions imposed on mounds.

Daniel does not view the Trust as being very well equipped to carry out the responsibilities covered by the easement. He noted that the Wisconsin Archeological

Society holds other such easements and it might make sense for us to look into transferring the easement to them.

Daniel has collected approximately 15 to 20 pages of correspondence relating to the establishment of the Trust's easement and hopes to provide that information to me.

He suggested that it would be worthwhile if the Trust visited the building nearest the site, point out the site to the building occupants and remind them that it is on County property and may not be disturbed.

1627382

1645142

Office of Register of Deeds
Dane County, Wisconsin

Re-Recorded Nov 28 1979

At 2:11 o'clock P.M.

VOL 1396 PAGE 37

EASEMENT AGREEMENT

Carol R. Mahnke, Register

DANE COUNTY, a Wisconsin municipal corporation, Grantor, hereby conveys to MADISON TRUST FOR HISTORIC PRESERVATION, INC., Grantee, a perpetual

easement in the following described property located in the City of Madison,

Dane County, Wisconsin: Triax Air Park West, Outlot 1**

~~Triax Air Park West, Lot 1*~~
~~Outlot 1 of Replat of Lot 3, Certified Survey Map 1275, recorded in page 23, Volume 50 of Plats in the office of the Dane County Register of Deeds as Document #1599591.~~

This easement is granted for the purpose of maintaining the Indian Mound located on the described property. Grantee agrees to preserve the archaeological and historical character of the Indian Mound; no alteration which may impair the archaeological or historical value of the Mound may be made to the described property without the express written permission of Grantee and Grantor.

* This document is being re-recorded to correct the legal description.

Dated this 21st day of June, 1979.

Office of Register of Deeds
Dane County, Wisconsin

Recorded June 27 1979

At 11:08 o'clock A.M.

Subscribed and sworn to me, by my presence, the 21st day of June 1979, a Notary Public in and for the (county) (state) of Dane - Wisconsin

Patricia C. Keller
Signature
Notary Public

My commission expires Sept. 6, 1981.

DANE COUNTY

Carol R. Mahnke, Register

By: Francis R. Hebl
Francis R. Hebl
Dane County Clerk

MADISON TRUST FOR HISTORIC PRESERVATION, INC.

By: Gary Tipler
Gary Tipler, President

APPROVED CORP. COUNSEL
AM 5.8.79

APPROVED RISK MNGT
5/8/79

Signature of [redacted] Gary Tipler authenticated this 27th day of June, 1979.

** This document is being re-recorded again to correct the legal description.

Robert T. Kasdorf
Robert T. Kasdorf
Member, State Bar of Wisconsin

Office of Register of Deeds
Dane County, Wisconsin
Re-Recorded Oct 18 1979
At 3:11 o'clock P.M.
Carol R. Mahnke, Register

This instrument was drafted by Attorney Robert T. Kasdorf.

TRUAX

47 I

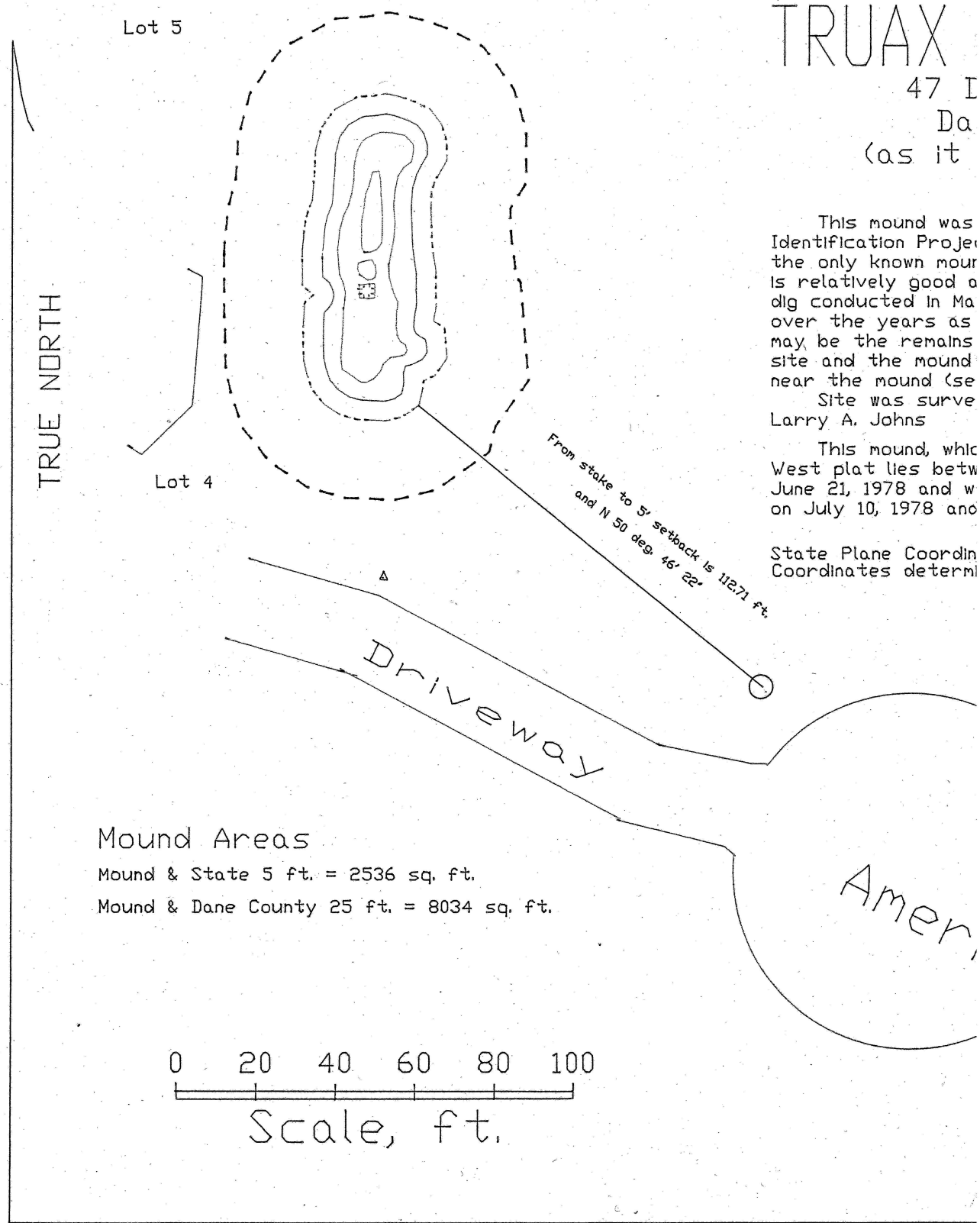
Da

(as it

This mound was
Identification Project
the only known mound
is relatively good
dig conducted in Ma
over the years as
may be the remains
site and the mound
near the mound (se
Site was surve
Larry A. Johns

This mound, whic
West plat lies betw
June 21, 1978 and w
on July 10, 1978 and

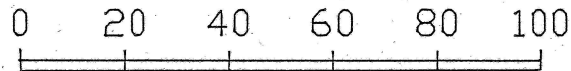
State Plane Coordin
Coordinates determi



Mound Areas

Mound & State 5 ft. = 2536 sq. ft.

Mound & Dane County 25 ft. = 8034 sq. ft.



Scale, ft.

Amer,

AIR PARK MOUND








-59 Town of Burke
County, Wisconsin
(Discovered on 20 May 1991)

Surveyed as a part of the Indian Mounds
of the Dane County Park Commission. This is
thought to exist at this site and its present condition
though it has been damaged by an archeological
excavation in June of 1977. The mound has been described
as oval and a linear but this map indicates that it
is an effigy. There are no known threats to this
area as part of an easement barring development
(part of Truax Air Park West).
Surveyed by Prof. James P. Scherz, Fabian Carrimon and

is designated as Outlot 1, on the Truax Air Park
Lots 4 & 5. The C.S.M. (# 1275) is dated
done by Richard G. Rasmussen. Plat was revised
August 7, 1978.

Coordinates of center of culdesac - x = 2173180 y = 411019
by digitizing an Orthophoto quad (+/- 10-40 ft.)

LEGEND

-  Mound with approx. 1 ft. formlines
-  State of WI 5 ft. Setback
-  Dane County 25 ft. Setback
-  Building and Roads
-  Iron Pipe found
-  Station
-  Pit

an Lane

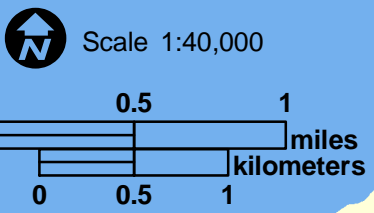
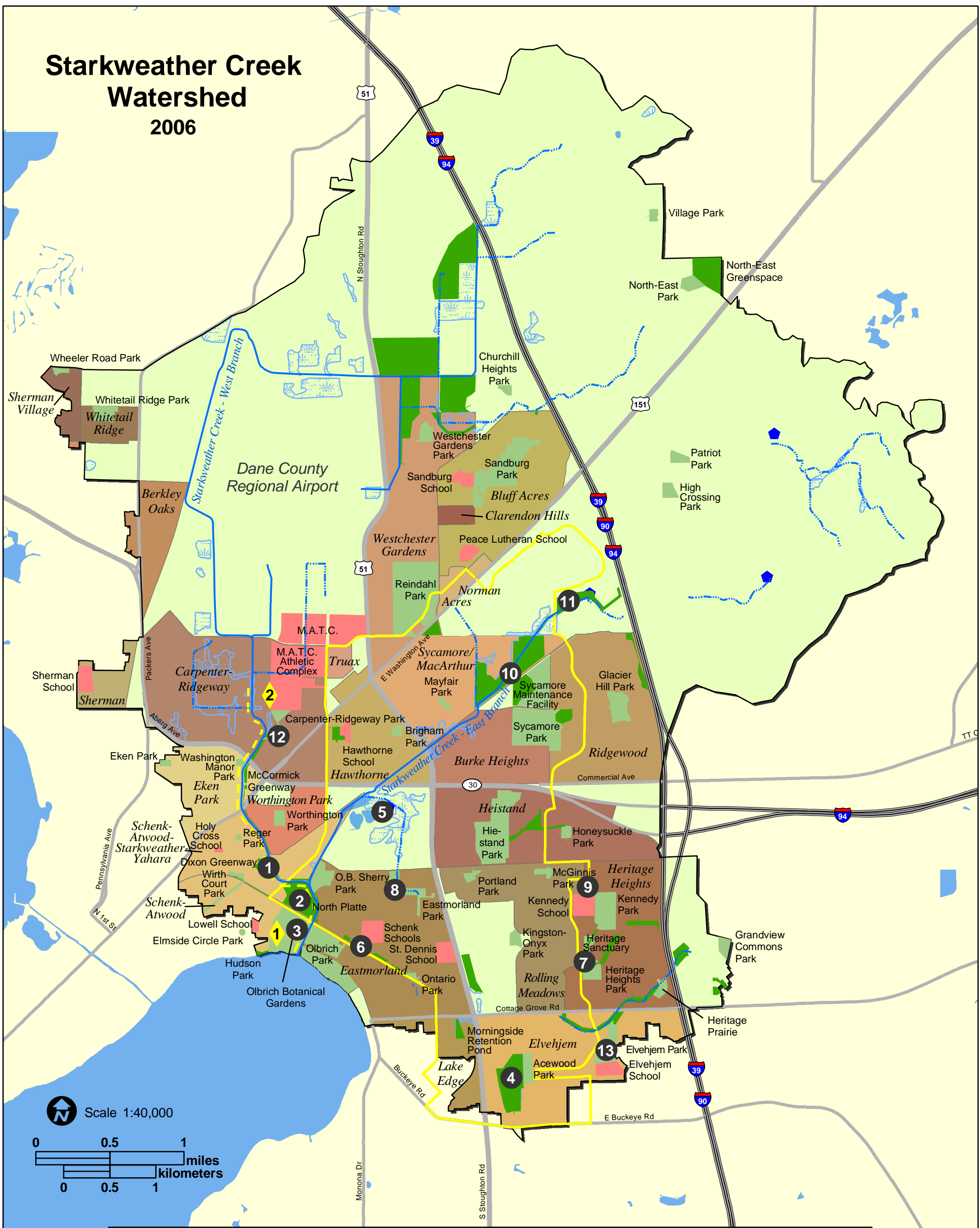
RUE EAST

APPENDIX D:

Starkweather Creek

Starkweather Creek Watershed

2006



Explore Your Watershed!	Hydrologic Features	Community Features
Bike Route	Intermittent Stream	Neighborhoods (shades of brown)
Watercraft Route	Perennial Creek	Park
Walking Trailheads	Watershed Boundary	Open Space
Points of Interest	Lakes and Ponds	School
	Wetlands	Roads
	Springs	Arterial Road
		Highway

Map created by:
 Water Resources Management Practicum, 2005
 Nelson Institute for Environmental Studies
 University of Wisconsin – Madison
 With assistance from:
 Friends of Starkweather Creek

STARKWEATHER CREEK WATERSHED

is the largest watershed in Madison. It encompasses the eastern parts of the city as well as the towns of Burke and Blooming Grove. The creek begins as two branches, the East and West, each fed by springs in the upper watershed. As the branches flow toward Lake Monona, they are augmented by urban runoff that increases the total discharge of the stream. The two branches converge southeast of the intersection of Fair Oaks Avenue and Milwaukee Street and flow into Lake Monona and the larger Rock River. Historically, the watershed was rich in wetland and marsh ecosystems, although less than one-quarter of these wetlands remains today. Although the watershed has experienced serious environmental degradation, with the help of private citizens, businesses, and community groups, some of these conditions can be restored.



Five things you can do to help the Starkweather Creek watershed

1. Install rain gardens and rain barrels at your home, business, school, community center, and place of worship to use precipitation that might otherwise enter the watershed as runoff.
2. Rake and compost leaves and debris regularly so that they are not carried by storm drains into our lakes where their decomposition adds to nutrient loading.
3. Report any illegal or suspicious dumping activities to the Wisconsin Department of Natural Resources (800/TIP-WDNR — 800/847.9367).
4. Take part in the Starkweather Creek cleanup days organized by the Friends of Starkweather Creek and the Dane County Lakes and Watershed Commission
5. Educate yourself, your family, friends, and co-workers about Starkweather Creek watershed.

Sites of interest

Numerous natural and cultural landmarks make the Starkweather Creek watershed a unique landscape in Dane County. The following are just a few locations in the Starkweather Creek Watershed that are worth getting to know.

1. **Madison Gas & Electric Marsh.** A small remnant fen nestled between the Creek's West Branch, the SOO rail line and the MG&E substation, the marsh is a unique example of a wetland that has survived heavy urbanization. It contains to more than forty wetland plant species. *To ensure the continued survival of this wetland, please do not enter—view from the bike/hiking trail that lies along the creek.*
2. **North Platte.** The North Platte, a recent addition to the Olbrich Botanical Gardens holdings, has been home to a number of different industries over the course of Madison's history, including a sugar beet processing plant and Garver Feed and Supply Company. Unfortunately, the North Platte was also used during its industrial phase as an area to dump fill from construction and dredging operations, so it is also home to degraded wetlands, which will become the focus of restoration work in the near future.
3. **Olbrich Botanical Gardens.** One of the premier botanical centers in Wisconsin, Olbrich is dedicated to the creation, conservation, and interpretation of gardens and plant collections hardy to the American Midwest or native to the world's tropics. Olbrich is a leading partner in educating Starkweather Creek watershed and Madison residents about watershed issues via the gardens located on the banks of Starkweather Creek and the shores of Lake Monona.
4. **Acewood Pond and Park.** A small kettle pond located at the southern edge of the watershed, Acewood Pond ranges from open water to shallow emergent marsh at the pond's edge. The pond has a healthy community of floating hydrophytes as well as other wetland species, such as bulrushes, cattails, and broad-leaf arrowheads. Acewood Park borders the pond along the eastern edge and allows some access for fishing as well as for viewing the waterfowl that feed in the pond.
5. **Voit-Blattner Property.** The Voit-Blattner property is one of the largest undeveloped areas in

the urbanized central part of the watershed. The area is bounded by Milwaukee Street, Fair Oaks Avenue, and Highways 51 and 30. The property hosts a number of small springs and foxes. One of the main landowners is discussing plans with the city to sell part of the property; surrounding residents and the Friends of Starkweather Creek Watershed are putting forward an environmentally friendly development plan for the area.

6. **Dempsey Ditch.** Running along Hangrove Street and Dempsey Road, the Dempsey Ditch is a concrete lined, open stormwater drainage ditch that drains much of the southern and far eastern parts of the watershed into the natural part of the creek. The manmade channel is dry for part of the year and might one day be the target for restoration to a more natural channel.
7. **Heritage Sanctuary Woods Conservation Area.** An 8.5-acre oak forest stand, Heritage Sanctuary offers a 0.5-mile trail hiking trail. Although the canopy is composed of oak trees, the wildflowers that make up the forest floor are consistent with those that would be found in a maple forest. May is the peak period of trillium bloom and an ideal time to visit.
8. **Eastmorland Park.** Eastmorland Park lies west and south of Woodman's Food Market. The park is used by residents of the Eastmorland neighborhood and also stores stormwater runoff from the neighborhood and Woodman's. Eastmorland Park also has a concrete channel to convey water through the area, and it may be targeted in the near future for restoration.
9. **Kennedy School Prairie Restoration.** Intended as a place to teach fifth-grade students about the environment in conjunction with the Arboretum's Earth Partnership Curriculum, the Kennedy School Prairie was restored six years ago at a cost of \$1,000. Today, the prairie provides habitat to many native Wisconsin plants and also contains a number of community gardens.
10. **Lien Wetlands.** The Lien Wetlands lie along the East Branch of Starkweather Creek to the south of Lien Road. This area contains a remnant fen, peat mound, and emergent marshes along retention ponds built to store stormwater runoff. Nearly fifty species of wetland plants can be observed here.
11. **East Towne Mitigation Wetlands.** Created to mitigate wetlands lost during the construction of the East Towne Mall shopping complex, the East Towne Mall Wetlands accept runoff from the parking lots and rooftops on the East Towne property. The entire complex, which extends along East Springs Drive, contains springs and is one of the more pristine stretches of the creek.
12. **Carpenter Ridge Neighborhood Restoration.** In conjunction with the Carpenter Ridge neighborhood, members of the Friends of Starkweather Creek have been involved in restoration work along the West Branch of the Creek across from the Bridges Golf Course. This work involves removing invasive species and returning the creek banks to a more natural state.
13. **Elvehjem Sanctuary.** Connected to the Heritage Prairie and Elvehjem Park, this 9-acre sanctuary has 1.2 miles of trail and a Native American Mound. It is composed of a red oak-basswood forest and boasts exposed sandstone bedrock. Elvehjem Park has a shelter, tennis courts, playing fields, and a playground.

Walking trails

1. Olbrich Park, Botanical Gardens, and the North Platte

- Begin across from Olbrich Botanical Gardens on south side of Atwood Avenue at Olbrich Park. The mouth of the creek is at the edge of the park.
- Cross Atwood Avenue and enter Olbrich Botanical Gardens. Walk along the streambank walkway. Note the watershed signage near the bank.
- Exit Olbrich Botanical Gardens and walk north through the parking lot, across the Capital City Bike Trail and railroad tracks to the North Platte. Notice the large brick Garver Building.
- Walk east, past the Garver Cottage toward Starkweather Creek.
- Walk north along the creek and notice the wetland restoration (in progress). OB Sherry Park lies across the convergence of the two branches of the creek.
- Continue walking along the West Branch of Starkweather Creek through the wooded area of the North Platte.

- Cross South Fair Oaks Avenue. Two blocks north are rain gardens and rain barrels being used by residents.
- Return to south side of the Fair Oaks Avenue creek crossing and head northwest on the trail that follows the stream. On the left side of this trail is the MG&E Marsh.

2. Carpenter Ridgeway

The Carpenter Ridgeway neighborhood is north of East Washington Avenue off Carpenter Street.

- Follow the bike trail northeast toward the tree stands that line the creek.
- On the left side of the paved trail is a gravel trail that leads toward the creek through a wooded area that is being restored by the Friends of Starkweather Creek.
- Follow the creek side trail to the northeast. Across the creek lies Bridges Golf Course, built on a former garbage dump. Water seeping from this area is leaching organic pollutants from the soil into the creek.

Starkweather Creek Watershed Bike Trail

Approximately 15.5 miles long, the Starkweather Creek Watershed Bike Trail visits many natural and cultural landmarks that make the watershed a unique part of Madison. The trail follows the lake bike path for almost its entirety and focuses on the East Branch of the Creek. Signs mark the City bike path and should be followed except where noted.

- Starting point: Olbrich Gardens Graver Building and its intersection with the lake trail (1).
- Start heading east on the lake trail. Notice the Garver Building on the North Platte to the left.
- After crossing Dennett Drive, notice the Dempsey Ditch on either side of the trail (2).
- Continue on the lake trail and follow the trail signs until you reach the intersection of Lakeview Avenue and Buckeye Road; turn left on Buckeye Road.
- At Woodvale Avenue, turn left.
- At Academy Avenue, turn left off the path and continue two blocks to Acewood Pond (3).
- Return to Meadowlark Drive/Path via Eldorado Lane.
- To the right is Elvehjem Sanctuary Conservation Park (4).
- North of Twin Oaks Drive is Heritage Sanctuary Woods Conservation Park (5).
- At Milwaukee Street, turn right off the path and right at Lamplighter Way, where the Kennedy School Prairie Restoration is located (6).
- Return on Milwaukee Street to the path and turn right at Swanton Road.
- North Thompson Drive climbs the ridge that is the source of springs in wetlands along the East Branch (7).
- Zeier Road crosses the East Branch between Lien Road and East Springs Road.
- To the right of East Springs Road is the East Towne Mall Mitigation Wetlands (8).
- East Springs Drive circles around East Towne Mall, a major area of impervious surfaces in the watershed (9).
- Continue following path markers through Reindahl Park and MATC until Wright Street/Fair Oaks Avenue and continue south by turning left.
- At the junction of Fair Oaks Avenue and Milwaukee Street on the northeast corner is the Voit Property, one of the largest undeveloped areas in Madison (10).
- After crossing the East Branch, a small trail leads west to the MG&E Marsh (11).
- Continue on the trail back to the Garver Building and Olbrich Gardens.

Resources

Friends of Starkweather Creek

www.starkweatherfriends.org

For creek cleanups, canoeing/walking/bicycling advice, rain-garden building/monitoring assistance, and streambank-restoration projects.

City of Madison Engineering

© 608/266.4751 www.cityofmadison.com/engineering/

For rain-garden building/monitoring assistance, including grant and stormwater utility credit information.

Olbrich Botanical Gardens

© 608/246.4550 www.olbrich.org/

For vegetation, gardening, and environmental education activities.

Dane County Lakes and Watersheds Commission

© 608/224.3764 www.danewaters.com/

For creek and lake cleanups, watershed events, and education activities.

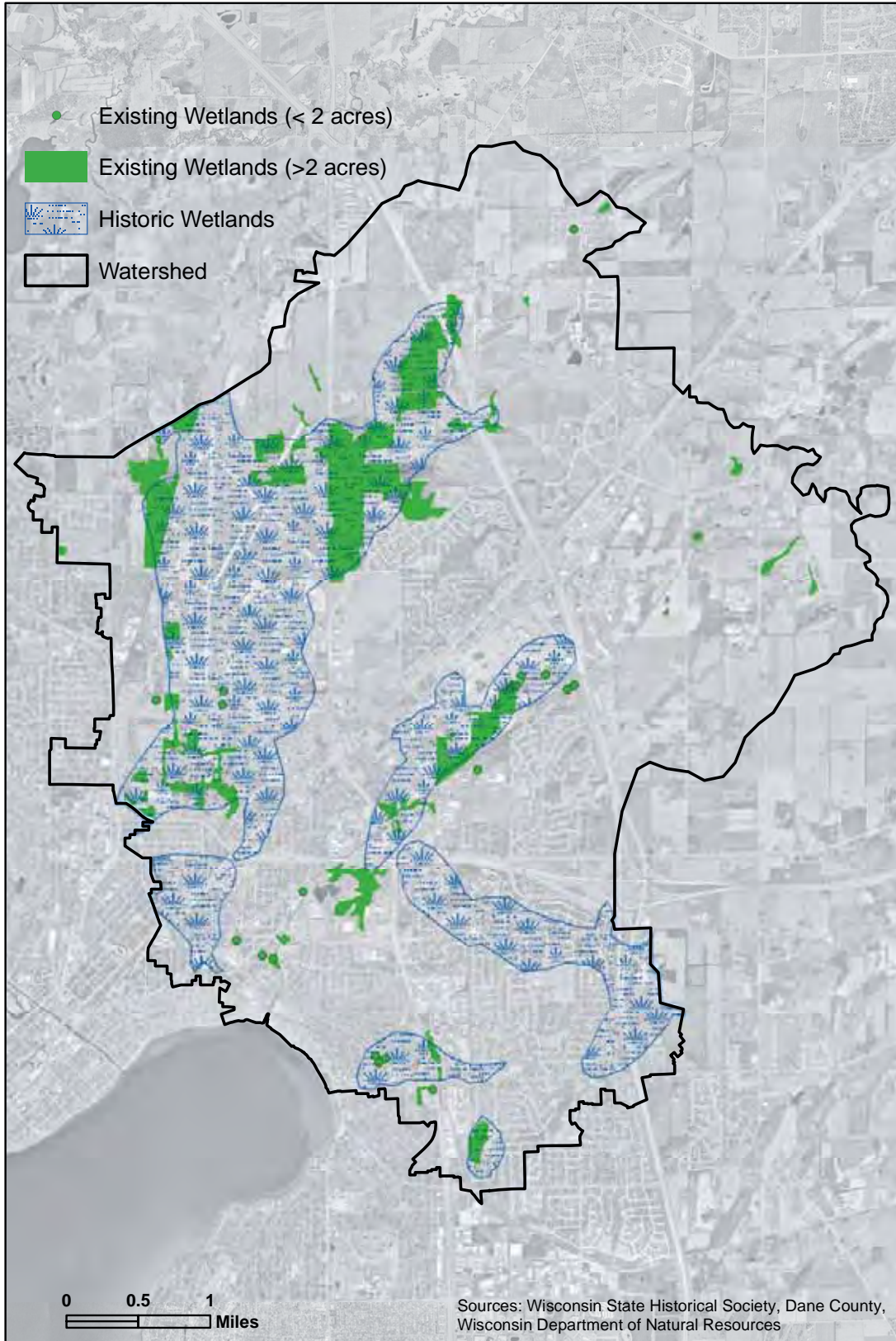


Figure 4-1. Extent of wetlands loss within Starkweather Creek watershed.

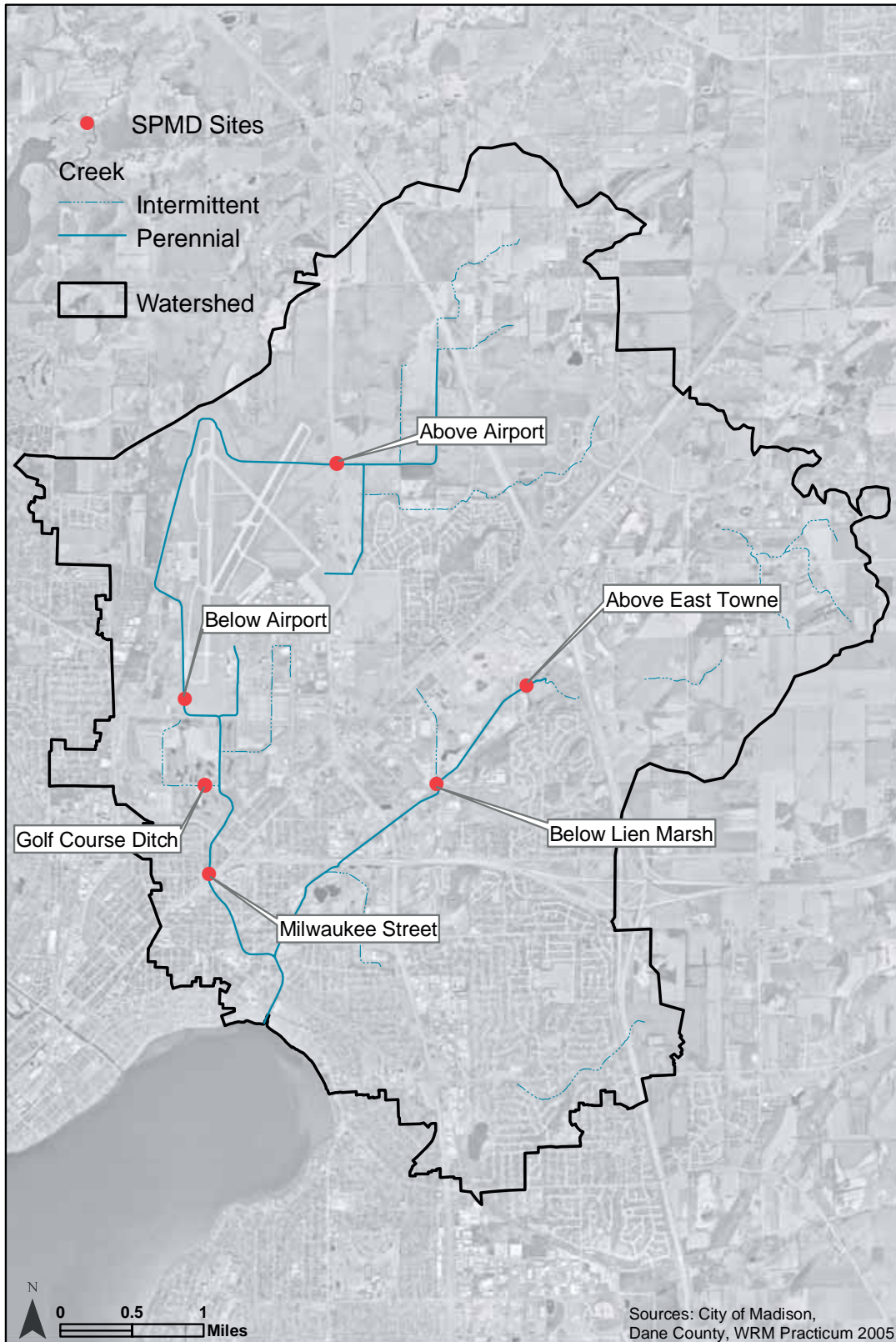


Figure B-1. SPMD sampling sites.