

Developing affordable housing in Door County

Reports from Real Estate 651: Green Sustainable Development







Sturgeon Bay

Pocket Neighborhood





Table of Contents

01

Background

02

Demographics / Linkages

03

Plot Layout / Concepts

04

Sustainability Aspects

05

Financials

06

Conclusion

01

Background

Door County and City of Sturgeon Bay The Introduction of Pocket Neighborhoods

Project Goals

- 1. Create a financially feasible 20 unit pocket neighborhood located within Door County
- 2. Provide an alternative to public transportation, examining the feasibility and functionality of the proposed transportation
- 3. Examine the development aspects of rooftop solar, constructing a cost analysis
- 4. Produce a child-care concept, promoting "live-work"



Why Pocket Neighborhoods?









The following comments were selected from community input in the **Sturgeon Bay Comprehensive Zoning Plan 2040.**





Community Input



"I'd like to see the development of sub-communities that have areas for growing food and electrical infrastructure for promoting electric car use."

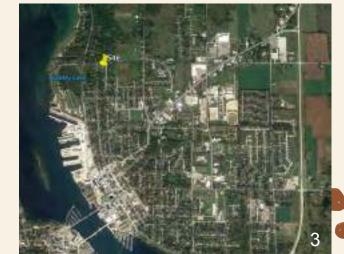


"Allow small home (cottage) developments. Include intergenerational co-op housing..."

"We could probably use more single-family housing, but smaller homes. Like a cottage community or pocket neighborhood. Shared outdoor spaces instead of single large lots. I hear much interest in co-housing."

Site Context Sturgeon Bay Wisconsin Jake Michigan





Site Boundary





Site: 24

City of Sturgeon Bay

Legend

Subject Parcel

Parcels

Water Line

Sewer Line

— 2 ft Contour Line

Contact:

Magnus Ryan Capital, LLC 749 Happ Rd Northfield, IL 60093

N



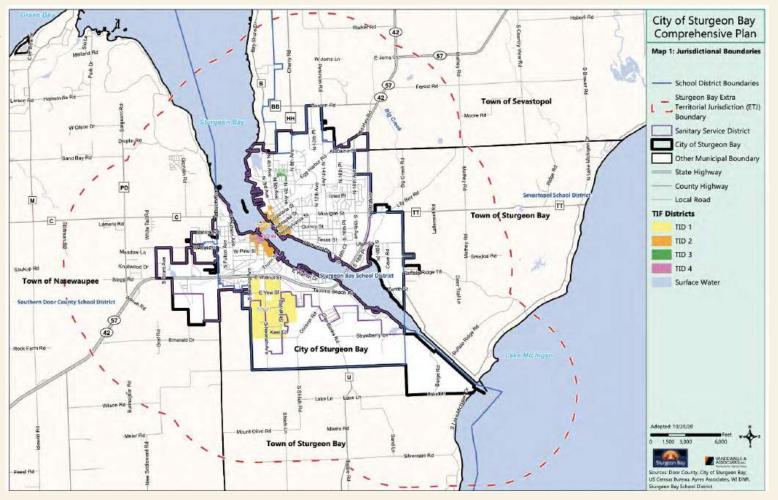
1 inch = 100 feet



City of Sturgeon Bay Commmunity Development 421 Michigan Street Sturgeon Bay, WI 54235 920-746-2910

Photo: April 2017

TID Area



Close **Proximity** to TID

City of Sturgeon Bay Moore Rd Comprehensive Plan Styrgeon Bay Map 1: Arisdictional Boundaries Iowa Pi Town of S C THE Districts **Quinty St.** W Pine St Smelkal Rd Sturgeon Bay School District Taponia Beach R Strawberry by Emerald Dr City of Sturgeon Bay

School District Soundaries Sturgeon Nay Evera Permonal Amudiction ETH

Sanitary Service District City of Storgeon Bay Other Municipal Roundary

State Highway County Highway Local Road

Surface Water

Subject Site

The subject is close to TID #3, making it a good candidate for expansion of this existing TID.



Demographics

Sturgeon Bay Employs 4,520 People

Social Assistance, & Retail Trade

Industries: Manufacturing,

55%

viedian

roperty

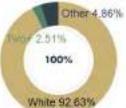
Military

ersonne Served **Vietnam**

Sturgeon Bay 10.8%

Poverty

National Average 13.1%



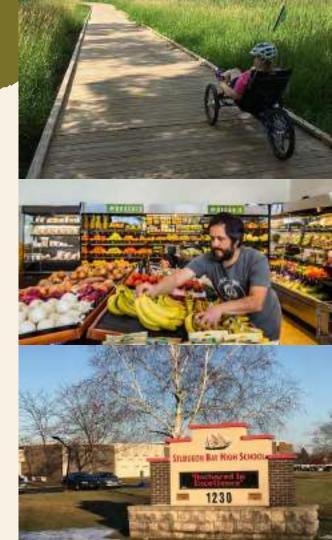


Homeownership Rate 60.7%

Primary Single Vehicle Median Travel Time 14.3 minutes 2 Vehicles / Household

Linkages





03 Plot Layout & Concepts

Plat Layout





Sample Pocket Neighborhood Layout

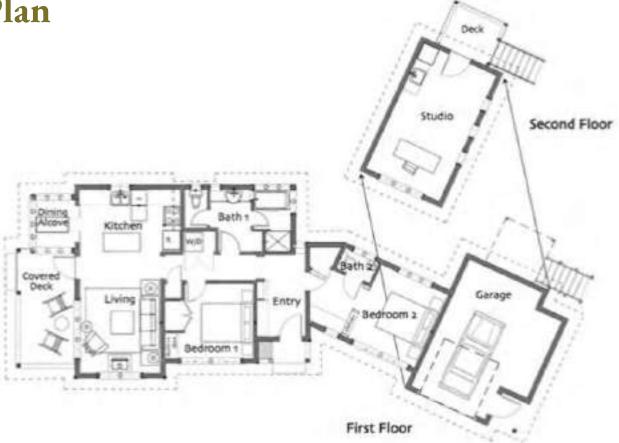




Our Site Master Plan



Sample Floor Plan





Cottage Exterior Concepts









Cottage Interior Concepts





Childcare

- Childcare facilities / options in Sturgeon Bay
 - 3 child-care facilities currently operating in Sturgeon Bay
 - Median age being around 42, there are likely families
 - We have incorporated a communal flex space into the design of the neighborhood
 - Depending on the demographic of the subdivision after 1 year of sales, the homeowner's committee will determine how they would like to build out this space
 - The developer will provide additional funds for any improvements (including creating a childcare center here)

Why we need to account for Childcare

- Childcare is a major expense in US households
- In 2017 the cost of center-based care for 2 children exceeded housing costs for homeowners with a mortgage in 35 states and the District of Columbia
- Essentially what this means is that by accommodating for child care in our building, many tenants with children will be apt to choose our complex when we enter the sales process.

Live-Work

- In the design of each house, we incorporated a studio space
 - This space can be used for
 - Artistic studio space
 - Work from home office
 - Guest space for visitors

O4 Sustainability Aspects

Solar System and Electric Vehicles

Need For Transportation

- Limited access to public Transportation
 - Infrequent routes
 - Small supply of transportation
- High costs of personal vehicle ownership
 - High gas prices and maintenance costs
- Lower income
 - Spread out areas make public transportation less feasible

The Solutions



Partnership with Door 2 Door



Hourly EV Rentals



Monthly EV Rentals

Partnership with Door 2 Door

- Shared ride taxi services throughout Door County
- Site Located in "Taxi Core"
- Minimum of 40 minute notice for rides within Green Zone
- Crossing Zones requires reservation 24 hours in advance



Door 2 Door Pricing

	"Orange Core"	Other Zones
Adult	\$4	\$7
60+	\$2	\$3.50
Student (3-22)	\$2	\$3.50

Crossing Zones:

- Crossing the first zone is a flat \$10 fare
- \$5 per each additional zone crossed.

^{**}All fares are based on one way trips per person.

Electric Vehicle Selection

Chevrolet Bolt:

- Highest rated EV on Consumer Reports
- 119 Mile Range on full charge
- Low maintenance costs
- No fuel or electric charge due to solar panels
- Bulk order discount
- \$23,500 per car for 10
 - Monthly Payment of \$279.70 per car for 7 years



5 Bolts Available for Hourly Rentals

- Not everyone needs or can afford a full time vehicle
- Public transportation can be expensive

Our offerings:

• 5 electric vehicles available to our 20 units for hourly rentals

Charging a rate of just \$4.00 per

hour

 Each car only needs to be rented 70 hours per month to break even (about 2.3 hours per day)



5 Bolts Available for Monthly Rentals

 People who need a car, but cannot afford to own one can choose to rent by the month

Our offerings:

• 5 electric vehicles available to rent monthly

 Charging a rate of just \$400 per month

 Monthly car rentals generally cost upwards of \$1,000 per month



The Impact

- A **solution** for **everyone** in need
- Door 2 Door allows those traveling to not need to worry about hourly or monthly fees
- **Hourly EV rentals** give people the opportunity to rent a car at their convenience for the lowest

price available

- Monthly EV rentals provides a low cost option for frequent car users
- All options create a more sustainable environment



Rooftop Solar

- Current local energy cost per kWh
 - o \$0.119/kWh
- Effective Federal Tax Rate of 21%
- 30% Federal Investment Tax Credit: \$39,000



Rooftop Solar



- **167 Total** Proposed **Solar Panels**
- 41.67kW Proposed Project Size
- 50,000 kWh Base Generation
- Kilowatt Hours Generated in the First Year
 - o 53,995 kWh

Solar Financing Analysis

- Discount Rate: 6%
- Net Present Value: \$105,207
- **IRR:** 7.7%
 - Both NPV & IRR indicate a value-creating project

- \$88,614 required in Debt Financing
- 5% Interest Rate
- Debt Payback: 13 Years
 - By the end of year 13, the project will have a cumulative value of solar kWh generated of \$95,510

05 Financial Information

Site & Dwelling Area

- Site size
 - o 3.85 acres or 167,706 square feet
- Average size per dwelling unit
 - 1,250 square feet
- Ounit Breakdown
 - o 20 units
 - Shared Green-space

\$5,400,000

Total Estimated Project Cost*

Funding Sources

- Estimated cost per unit: \$240,000
- Based on current taxes, we are requesting a **TIF of** \$621,000
- With the city TIF funding, the estimated cost would decrease to \$4,750,000

\$240,000

Minimum Asking Price per Home, after funding

06 Conclusion & Closing Remarks

Final Thoughts

- The City of Sturgeon Bay is the ideal site for the development of a pocket neighborhood
- Financially feasible
- Eco-Friendly
 - Car Sharing options
 - Rooftop Solar Panels
 - Space for work-from-home, art studio, or guest rooms in homes

Sources

https://www.co.door.wi.gov/245/Maps-and-Land-Records

http://map.co.door.wi.us/map/

https://www.door2doorrides.com/service-map.html

https://carbuying.consumerreports.org/prices-new/chevrolet/bolt-ev-pricing/?zipcode=53706

https://www.consumerreports.org/cars/chevrolet/bolt/2021/overview/

https://www.door2doorrides.com/



Thanks!



Does anyone have any questions?

asiepmann@wisc.edu bipfeffer@wisc.edu ermiller5@wisc.edu oschapiro@wisc.edu ojahn@wisc.edu

CREDITS: This presentation template was created by **Slidesgo**, including icons by **Flaticon**, and infographics & images by **Freepik**Please keep this slide for atribuition







- Cherry Blossom

Project Overview

Location

Sustainability

Child Care Center

VRBO

Financials



Vision & Investment Overview



Sources:

- Debt: \$4,405,632
- Equity: \$1,156,478

Uses:

- Hard Costs: \$4,260,000
- Soft Costs: \$657,000
- Developer Fee: \$590,040
- Loan Fees: \$55,070



Value Creation:

- Solar panel rooftops create energy efficiency
- Strong job market increasing short- and long-term demand
- Neighborhood amenities to attract families and promote sustainability
- "Development made Sustainably"



Property Highlights:

- 3.85-acre parcel in Sturgeon Bay with pocket neighborhood plan
- 20,1300 SF homes featuring two-car garages
- Centrally located childcare center and surrounding green space
- Shared-car program for residents



Pocket Neighborhood

TERC Development Group

Alabama Street & N 4th Avenue:

- Development of 20 market rate single-family rentals
- All three-bedroom homes with 2 bathrooms and 1300 square feet in size
- Houses include 2-car parking garage, two entrances, and basement
- 3,000 square-foot child day care conveniently located in the center of greenspace
- Energy efficient homes featuring rooftop solar panels







+ Cherry Blossom

Project Overview

Location

Sustainability

Child Care Center

VRBO

Financials



City of Sturgeon Bay

Population: 8,885

Median Household Income: \$52,947

Amenities:

- Proximity to Lake Michigan
- Sturgeon Bay School District
- Outdoor Recreation Activities
- Quaint Downtown Area





Also known as "Bird City"





Proximity To:

Sunset Park.... 0.9 miles

Downtown Sturgeon Bay.... 1.2 miles

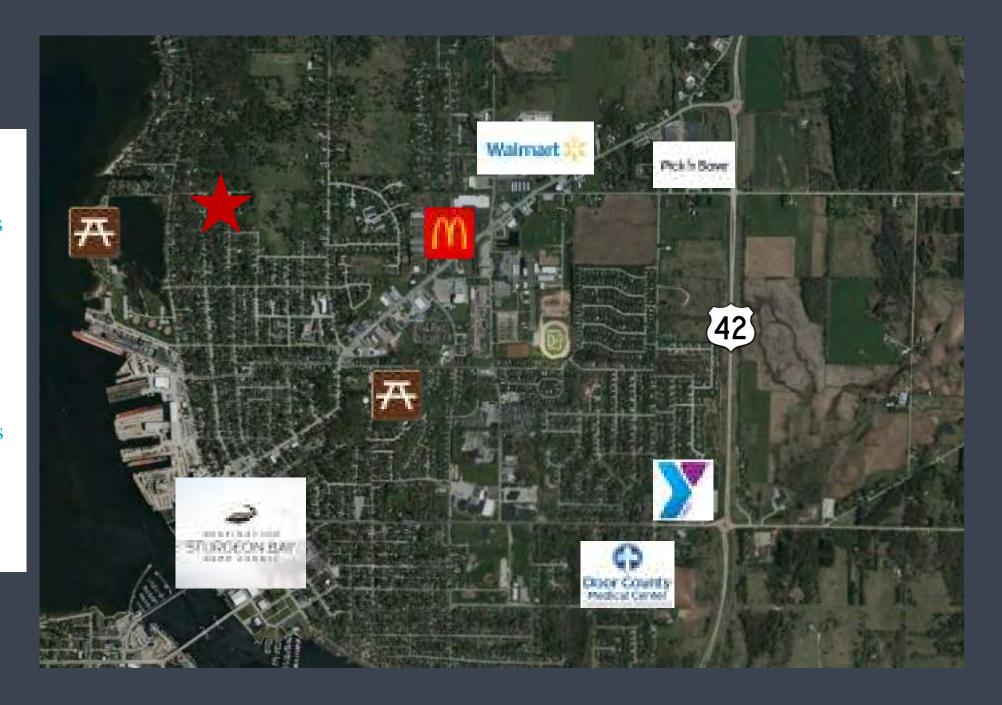
Walmart....1.7 miles

Pick 'n Save 2.1 miles

Highway 42....2.2 miles

Door County Medical Center.... 2.7 miles

YMCA....2.8 miles





+ Cherry Blossom

Project Overview

Location

Sustainability

Child Care Center

VRBO

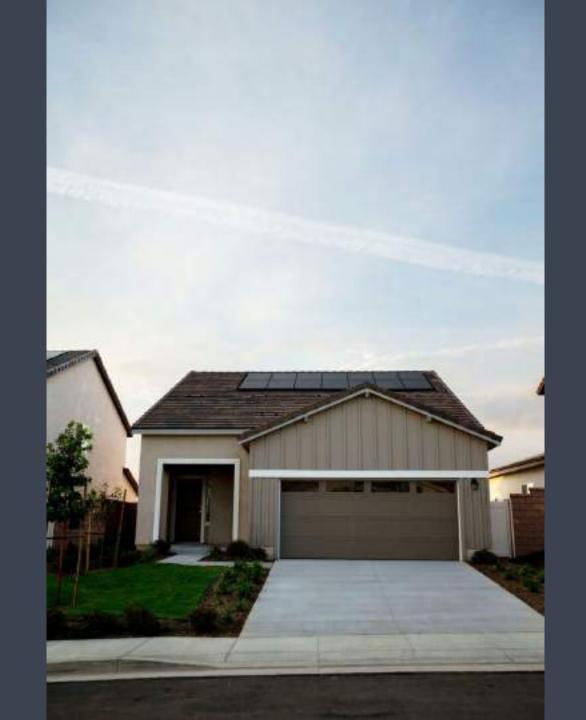
Financials



Solar Power

Solar panels will be installed on each unit:

- 41.67 kw Proposed SizeEquates to 139 panels
- \$74,791 net cost after purchase of tax incentives
- Break even after year 10
- IRR of 9.73% given 6% discount rate
- \$226,727 in cumulative energy savings



Community Electric Vehicle



Purchase one electric vehicle for the use of the residents to encourage sustainable actions

Follow Zip-Car model, in which residents can sign-up weekly for use of the vehicle

Charging station will be located at center clubhouse

No initial charge to rent the vehicle, but a per-hour charge to encourage responsible usage

Monitor regulations and adapt when needed



Cherry Blossom

Project Overview

Location

Sustainability

Child Care Center

VRBO

Financials



Cherry Blossom Child Care Center

Designed to meet an unmet need in Sturgeon Bay that will grow with addition of the Cherry Blossom neighborhood

- In Sturgeon Bay there is only 8 licensed child care centers;
- Very few child care centers offer PT option or drop in care;
- The lack of child care centers in close proximity to homes often force parents to choose between work and child care





Benefits of having neighborhood child care center

- Attract young families to the neighborhood;
- Allow parents of young children to not sacrifice income and work benefits
- Create a sense of community in the neighborhood
- Provide job opportunities
- Provide neighborhood children with opportunity to build social skills and cognitive development



- Cherry Blossom

Project Overview

Location

Sustainability

Child Care Center

VRBO

Financials





Door County and Sturgeon Bay in particular is a vacation destination.

Single Family
homes are being
purchased by
investors and
developers and
being rented on the
vacation rental
market

Vacation Rental Strategy



Option 1

Sell several of the rental units to developers to be marketed as vacation rentals.

Potential Income \$125,000-\$150,000 per home

Option 2

Designate several of the rental units to be marketed as vacation homes. Would be responsible for furnishing and maintaining the rental home.

Investment Cost: \$100,000 for furnishings

Potential Income: \$90,000.00 annually (average of \$2,500.00 per

week accounting for some unrented weeks)



Cherry Blossom

Project Overview

Location

Sustainability

Child Care Center

VRBO

Financials



Sources of Capital



Uses of Capital





Cherry Blossom

Project Overview

Location

Sustainability

Child Care Center

VRBO

Financials



Risk Mitigation

Construction Costs



- Recent spikes in construction costs due to COVID-19 slowdowns
- We were able to mitigate this risk by signing a Guaranteed Maximum Price contract

Financing



- Interest-only construction loan at 150bps above WSJ Prime
- We assume 5.50% rate in our modeling assumptions

Absorption



 New single-family rentals have seen strong demand since the beginning of COVID-19

Reversion



 These homes could be sold to another investor to be used as long-term or VRBO rentals, or sold as single-family homes to individuals





Pocket Neighborhood Development Proposal

Badger Investment + Management Group



Project Vision | "Not just a home, a community"

VISION

- o A close-knit community consisting of 2 pocket neighborhoods, each with 10 homes surrounding a green courtyard
- o Each home has a basement, private garage, and rooftop solar panels
- o Homes are centered around a common garden courtyard
- The two neighborhoods are connected by a park
- o The community will accommodate on-site childcare and contain a parking structure with access to electric vehicle ride-share options

VALUE

- Capture strong and growing single-family housing demand with high-quality, reasonably priced homes
- o Use solar power for eco-conscious living and long-term financial savings
- Offer shared electrical vehicles to all community members to cut back on gas emissions and enable easy transportation options
- o Encourage on-site, in-home childcare at affordable rates, with potential to cultivate intergenerational care

RISK + REWARD

0	\$3.59M	70% LTC (traditional	construction/	mini-permanent recourse	loan)	
---	---------	----------------------	---------------	-------------------------	-------	--

o \$1.28M 25% ETC Equity Investor IRR 14.2% Equity Multiple 2.6x

o \$256K 5% ETC Developer IRR 28.1% Equity Multiple 3.7x

\$5.13M Total Budget
 IRR 14.0% Equity Multiple 2.6x

Vision Location Market Development Financials Appendix

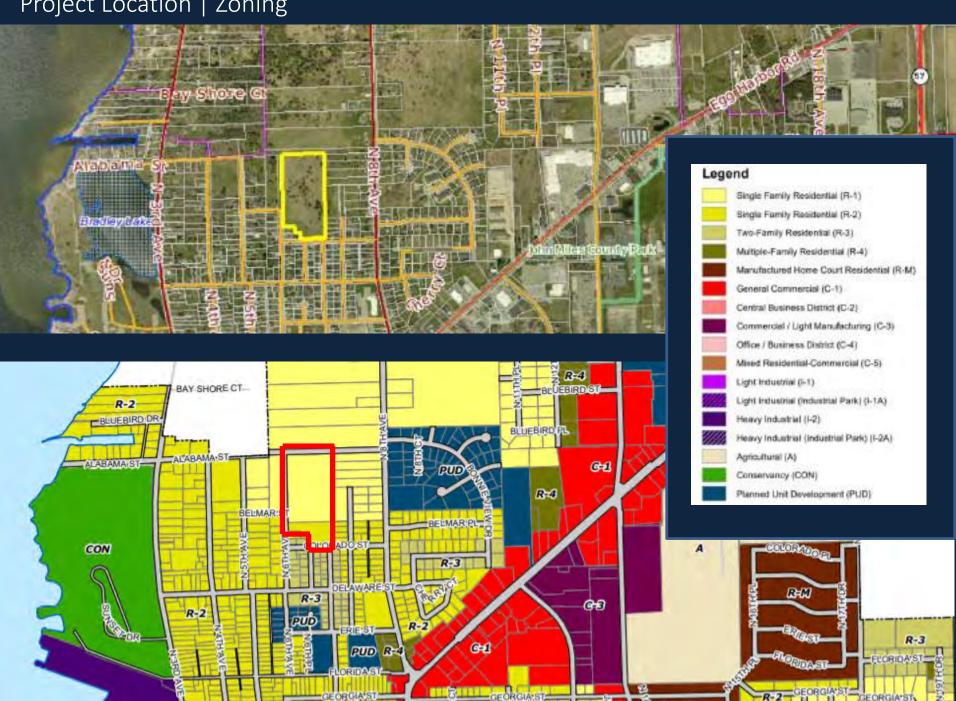
Project Location | Sturgeon Bay, Wisconsin



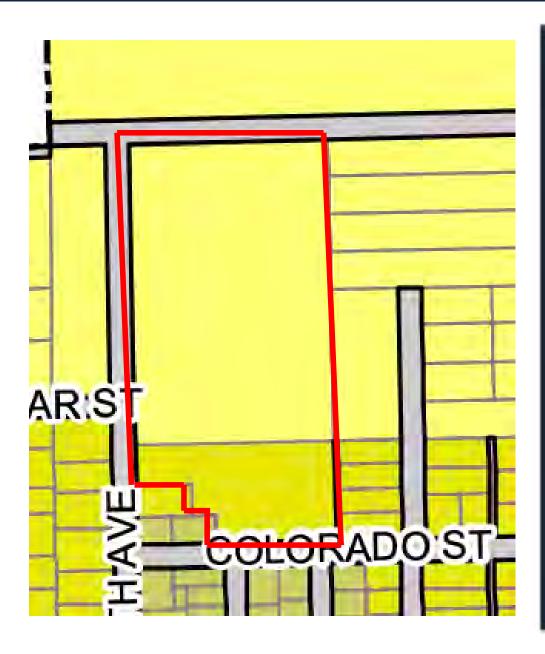




Project Location | Zoning



Project Location | Zoning Considerations | R-1 and R-2



- o The property we'd like to develop is zoned primarily as R-1 with a small area dedicated as R-2.
- o R-1 and R-2 are residential zones that require single family homes to occupy lots sized at 10,000 and 7,500 square feet, respectively.
- o These large lot sizes undermine the intimate community atmosphere that characterize pocket neighborhoods.
- The ideal lot size for our development is approximately 4,500 sq ft per unit.
- o As such, we plan to petition the city of Sturgeon Bay to redesignate the property as a Planned Unit Development (PUD) zone.

Project Location | Zoning Considerations | Planned Unit Development



NOTE: Sturgeon Bay's City Zoning Manager (Christopher Sullivan-Robinson) responded to our inquiry and verified this area could be petitioned for rezoning, assuming we connect the development to a comprehensive plan, ensure the residential density does not exceed 8 units per acre, and go through the proper process.

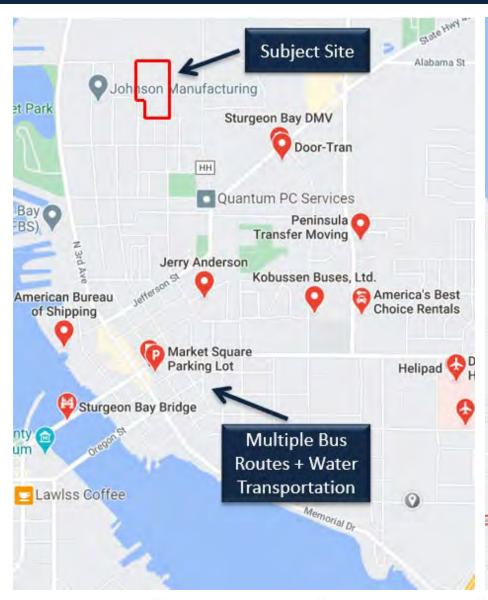
This process takes approximately 5-6 months to complete:

- o Conceptual Presentation (Q&A) with the Plan Commission
- o Preliminary Project Presentation / Public Hearing with the Plan Commission
- o Recommendation By Plan Commission to the Common Council
- o Approval of Preliminary Project by Common Council
- o Final Project Presentation by Plan Commission w/ Recommendation to Council
- o Approval of Final Project by Common Council / 1st Reading of the PUD Ordinance
- o 2nd Reading of the PUD Ordinance by Common Council

Project Location

Transportation

Restaurants and Recreation





Vision

Location

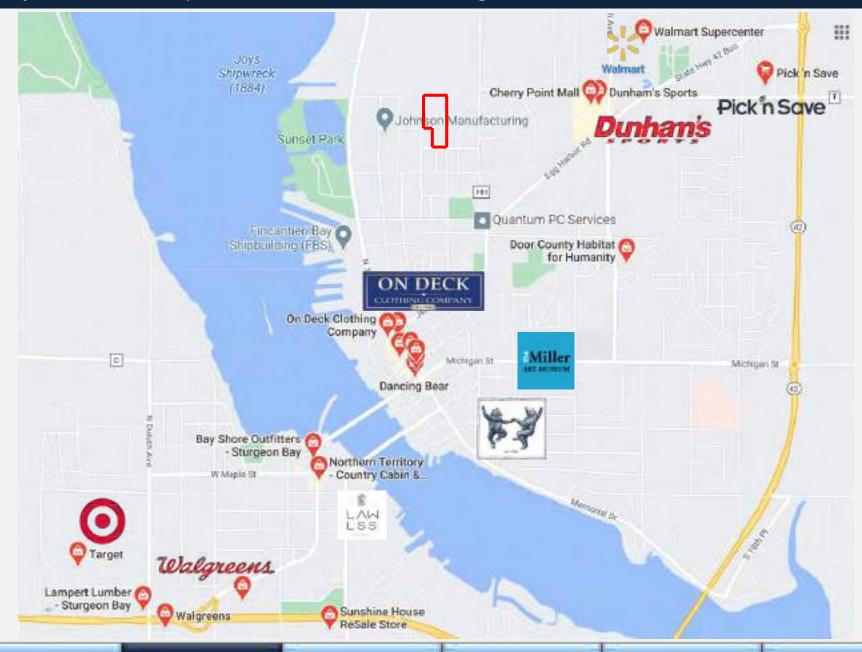
Market

Development

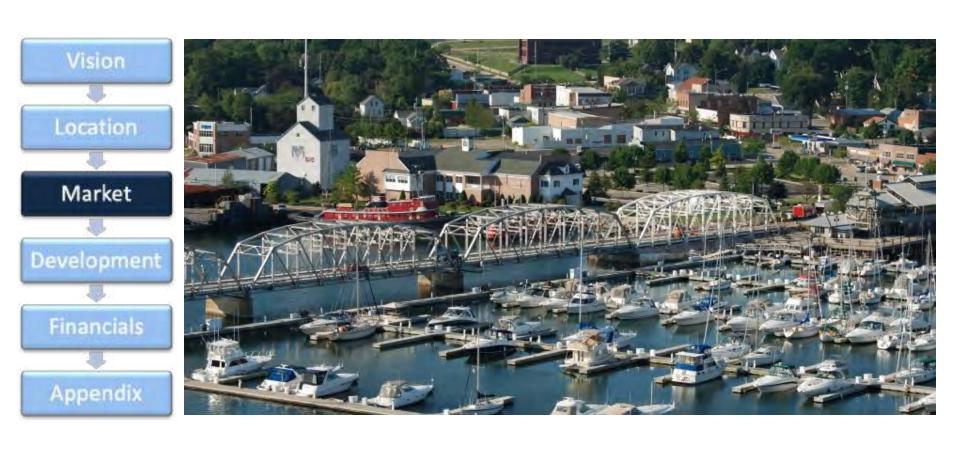
Financials

Appendix

Project Location | Retail and Service Linkages

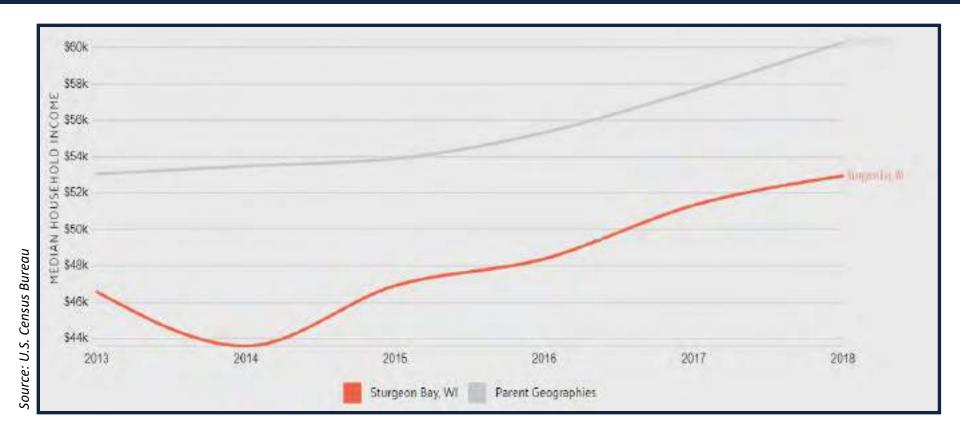


Market | Sturgeon Bay





Demographic Trends | Median Household Income

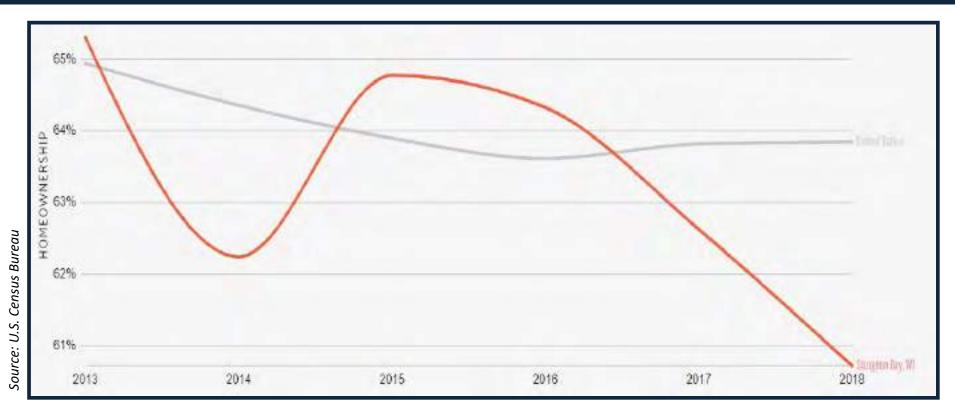




\$52,947 Median Household Income

3.15% Annual Growth

Demographic Trends | Homeownership

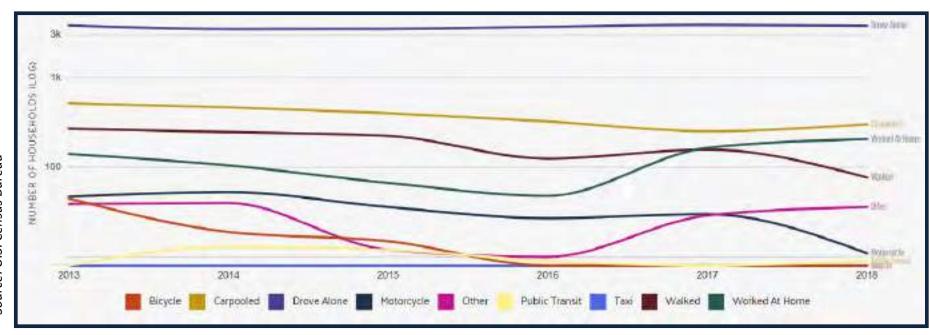




62.6% 2017 Homeownership

60.7% 2018 Homeownership

Demographic Trends | Commuter Transportation



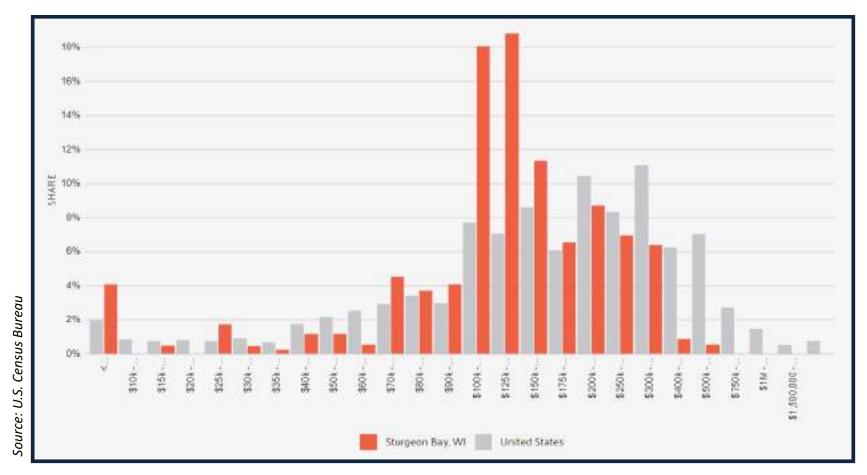






Source: U.S. Census Bureau

Demographic Trends | Property Value

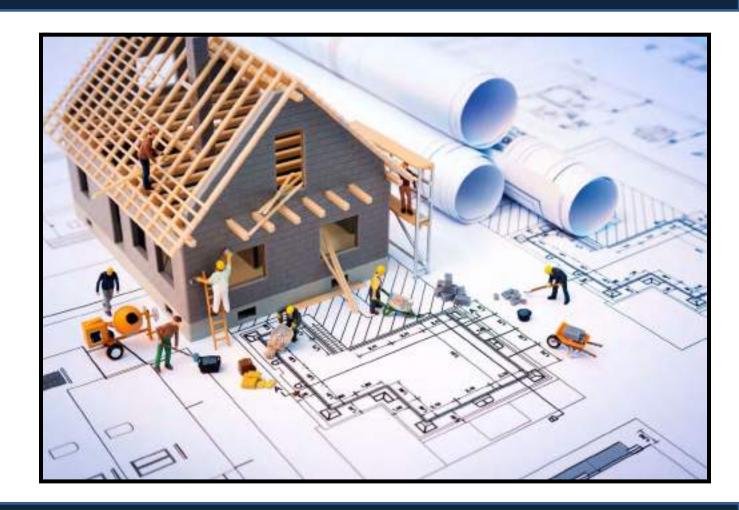




\$138,300 2017 Median \$142,000 2018 Median

Project Development Plan







Development Plan

- o Two adjacent pocket neighborhoods with 10 houses, each
- Houses have individual garages and rooftop solar panels
- o Neighborhoods have central courtyard space for gardens, community gathering area, and/or play space for kids
- o Additional shared greenspace on the north end of the property
- o The two neighborhoods have the option to also share a community garage that houses 5 electrical cars available for residents (please see Appendix for details)



Land for phased development of future pocket neighborhoods

Shared greenspace for proposed neighborhoods that would connect to future developments

Access streets to connect neighborhoods to each other and to existing roads

Individual housing lots surrounding shared neighborhood courtyard (not to scale)

Optional community garage for 2 shared electric cars

Development Plan | Concept (borrowed from Ross Chapin Architects)



Development Plan | Concept







- o Roughly 1,285 square feet with full height ceilings.
- o Basement ready for extra bedroom / expansion space.
- o Detached garage in back of home with street access.
- o Renewable Energy solar PV on roof (option).
- o Cost in-line with area housing stock.

Project Financials







Project Financials

Total Project Costs

- Total Capital Budget: \$5,127,360
- Hard Costs: \$3,795,000
- Appliances: \$120,000

The Development

- 20-unit pocket neighborhood development
- Integrated roof mount solar system technology
- Community electric vehicle

Sources of Funding

- \$703,419 in potential TIF from City of Sturgeon Bay
- 70% LTV bank loan

TIF Assumptions

1.24%
Community Tax Rate

\$2,505
Current Property Tax

\$63,579
Proposed Property Tax

\$61,074
Property Tax Increment

\$703,419
Total Potential TIF

Conclusion







Appendix

Option | Rooftop Solar
Option | Electric Cars
Option | In-home Childcare
Reference | Financial Models



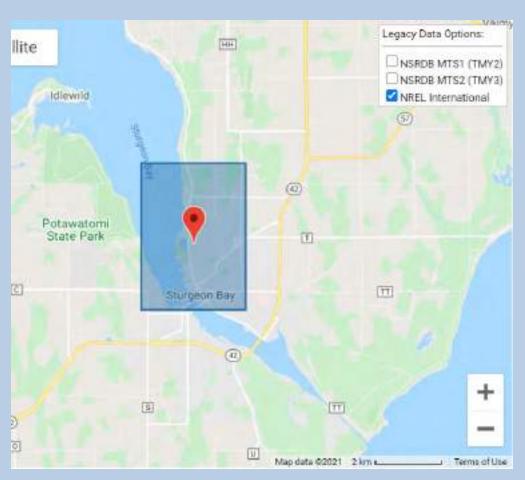


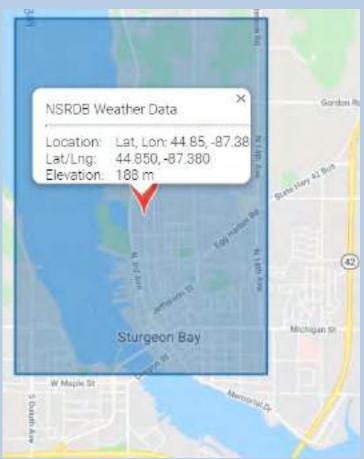






PV Watts Map





Appendix | Rooftop Solar Power



PV Watts Calculator Results

RESULTS Print Results	54,564 kWh/Year* System output may range from 52,204 to 55,583 kWs per year new two location Grick MERIE for hope information.						
Month	Solar Radiation (NMh (m² / day)	AC Energy (RMT)	Value (1)				
January	2.22	2,640	302				
February	2.96	2,996	356				
March	4.58	4,850	677				
April	5.61	6,585	664				
May	6.12	6,212	739				
June	6.62	6,226	740				
July	6.64	6,351	755				
August	6.11	5,823	692				
September	5.41	5,168	613				
October	3.57	3,667	438				
November	2.79	2,880	342				
December	2.04	2,277	271				
Annual	4.55	54,565	\$ 6,487				

Location and Station Identification	i e
Requested Location	1038 N 4th Ave, Sturgeon Bay, WI 54235
Weather Data Source	Lat, Lon: 44.85, -87.38 0.2 ml
Latitude	44.85° N
Longitude	87.38° W
PV System Specifications (Residen	ntial)
DC System Size	41.67 kW
Module Type	Standard
Array Type	Fixed (roof mount)
Array Tilt	26.6"
Array Azimuth	180°
System Losses	14%
Inverter Efficiency	96%
DC to AC Size Ratio	1.2
Economics	
Average Retail Electricity Rate	0.119 SAWN
Performance Metrics	
Capacity Factor	14.9%

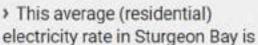


Residential Electricity Rates

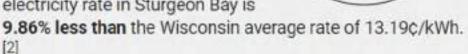


Residential Electricity in Sturgeon Bay

The average residential electricity rate in Sturgeon Bay is 11.89¢/kWh.[1]



[2]

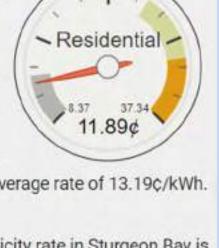


> The average (residential) electricity rate in Sturgeon Bay is

0.08% greater than the national average rate of

11.88¢/kWh. Residential rates in the U.S. range from

8.37c/kWh to 37.34c/kWh.[2]



Location Appendix Vision Market Development **Financials**

Appendix | Rooftop Solar Power



Costs and Savings

Year	Utility Rates Increase / year on everage	Solar Energy kWh Generated	Value	of Solar ienerated				
			5	(73,580)	1	werage	C	imulative
1	\$0.1189	54564		8,488	5	6.488	5	0.488
- 2	\$0,1225	54346		5,656	5	0.488	5	12.975
3		54128		6,828	\$	6,544	5	19.631
.4	50.1299	53912		7,005	5	6,625	5	26,459
S	\$0.1338	53696		7,185	5	6,693	\$	83,463
6	50.1378	53481		7,372	5	6,775	5	40,549
7	\$0,1420	53267		7,563	5	6,360	\$	48,021
8	\$0,1462	53054		7,758	5	6,948	\$	55,583
9	\$0.1505	52842		7,959	5	7,038	5	63,342
10	\$0.1531	52631		8.105	\$	7,130	\$	71,30)
11	\$0.1598	52420		8,376	S	7,224	5	79,458
12	\$0.1646	52211		8,593	\$	7,320	\$	87,842
13	\$0.1695	52002		8,815	\$	7,418	\$	96,435
14	\$0.1746	51794		9,044	\$	7,518	5	105,251
15	\$0,1798	51587		9,278	\$	7,620	5	114,294
16	\$0.1852	51390		9,518	S	7,723	5	123,572
17	\$0.1908	51175		9,764	5	7,829	5	133,090
18	\$0,1965	50970		10,017	5	7,936	5	142,854
19	\$0.2024	50766		10,276	\$	8,046	5	152,871
20	\$0.2085	50563		10,542	5	8,157	5	163,147
21	\$0.2147	50361		10.815	\$	8,271	S	173,689
22	50.2212	50159		11,095	5	8,387	5	184,503
23	\$0.2278	49959		11,382	S	8,504	\$	195,590
24	\$0.2347	49759		11,676	5	8,624	5	206,980
25	\$0.2417	49560		11,979	\$	8,746	5	218,656

\$0.119	Energy Cost per Kwh						
103.00%	Assumed annual increase in utility energy and fixed charges						
21.0%	Effective Tax Rate (Federal Only)						
\$32,503	30% Federal Investment Tax Credit						
\$16,251	One Half of Federal Investment Tax Credit						
\$0.90	Investor Investment per \$1 of tax credits						
\$218,656	Cumulative energy savings over assumed solar panel life (25 years)						

Debt	\$73,580
Interest Rate	5.00%
Term	11
Annual Debt Service	\$8,858
Total Debt Service	\$97,441

Appendix | Community Electric Car Option

Total Costs

- Lease 5 cars (Kia Niro): \$199/month/car
- Level 2 charging line: \$400
- Electric vehicle service equipment (EVSE): \$650/car
- 10 car garage: \$80,000
- Total: \$83,650 + \$12,000/year

The Proposition

- 10 car garage in case demand is higher than 5 cars
- Proof of insurance required from each tenant
- New cars leased at end of every leasing period
- Waiver required

Sources of Funding

Additional \$150/month in HOA costs



Appendix | Child Care Option

- o In the interest of encouraging an intergenerational community with easy and affordable options for childcare, there will be an opportunity for one of the residences to house an in-home daycare capable of serving up to eight children.
- o The additional 200-square feet included in the designated 2-bedroom home would be considered flex-space to accommodate in-home play and care.
- The abundance of planned outdoor area in both the courtyard and the adjacent greenspace would also enable a variety of activities for neighborhood youth.
- o The following information is the average amount a family spends on daycare in the area, per child. It would be up to the resident provider to determine his/her fees, with the assumption that costs would be affordable to the community.

\$164 dollars per week

\$656 per month

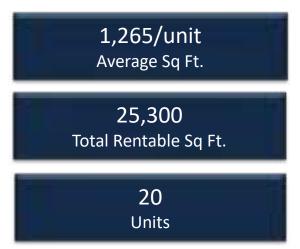
\$656 x 8 kids x 12 months

= \$62,976 potential Gross Income



Appendix | Financial Model (Front Door 1)

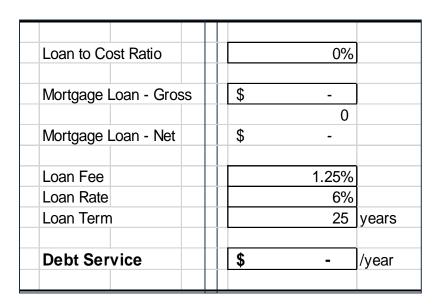
SQUARE FOOTAGE INPUTS							
Total Home Sq. Ft.	z_TotSqFt	25300					
Avg. Home Sq. Ft.	z_AveSqFt	1265					
Zero Bedroom	z_ZeroSqFt	0					
One Bedroom	z_OneSqFt	0					
Two Bedroom	z_TwoSqFt	1200					
Two Bedroom w/Child Care	z_TwoDenSqFt	1500					
Three Bed	z_ThreeSqFt	1300					



SQUARE FOOTAGE INPUTS								
	Unit		#				Square	
INCOME	Туре		Units				Footage	
Market Rate							0	
	Two Bedroom		9				10,800	
	Two Bedroom with Child Care		1				1,500	
	Three Bedroom		10				13,000	
							0	
					Total Unit Rental Square Foo	otage	25,300	
		TOTAL UNITS	20		Average Square Footage per unit		1,265	
		Percent Market Units	100.00%					

Appendix | Financial Model (Front Door 2)

Assumptions	Site acquisition Cos	st .			\$	_	p/unit	\$	_	Ì	
7.000	One de quienter i e e				Ψ		p, a	Ψ.			
Efficiency	Residential Area	Hard Cost per S	quare Foot	25,300	\$	150.00	/sf	\$	3,795,000		
0%	Common Area	Hard Cost per S	Square Foot	0				\$	-		
	Commercial Area	Hard Cost per S	Square Foot	0			/sf	\$	-		
Unit #'s				25,300				\$	3,795,000		
20									_		
	Number of undergro	ound parking sta	lls								
Avg. Sq. Ft.	Cost per undergrou	nd parking stall					/stall	\$	-		
1,265	65 Appliances / Furniture / Equipn				\$	6,000	unit	\$	120,000		
	Soft Cost as a perc	ent of total Hard	Cost			20%		\$	783,000		
Commercial									•		
Sq. Ft.	Construction Budge	et						\$	4,578,000		
0											
	Developer Fee					12%		\$	549,360		
Tax Credt Rate											
0%	Total Capital Bud	dget						\$	5,127,360		
	Less: City Contr			% of Cost		0.00%			0		
	Less : Tax Credit	Equity		% of Units		0.00%			0		
							Net Cost	\$	5,127,360	\$	256





Appendix | Financial Model (Front Door 3)

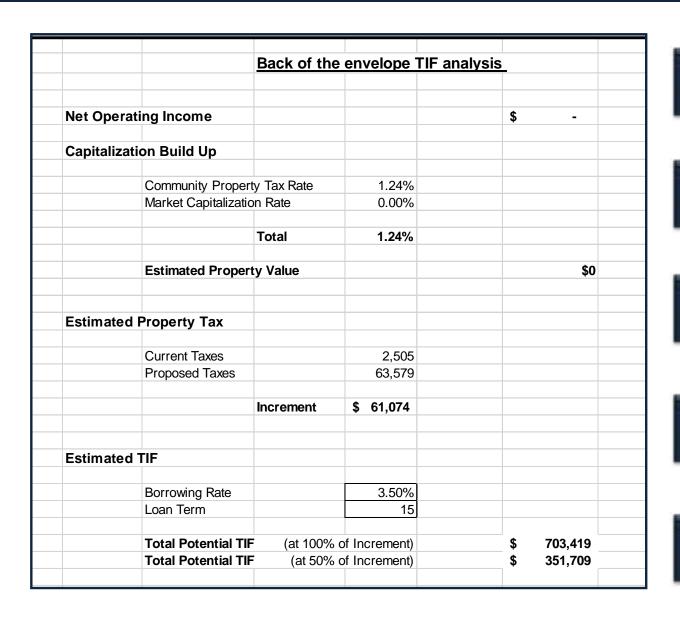
Tax Incremental Financing / City Funds \$ 703,419 Net Required Sale Proceeds \$ 4,423,941 Required Cash on Cash Return 0%		
	Required Cash on Cash Return	0%
Tax Incremental Financing / City Funds \$ 703,419	Net Required Sale Proceeds	\$ 4,423,941
	Tax Incremental Financing / City Funds	\$ 703,419

\$703,419 TIF / City Funds

1.24%
Property Tax Rate

Net Operating Inc	come							\$	-	
				100%						
Net Leasable Are	a		Residential	25,300	sf					
			Commercial	-	sf					
Operating Expens	ses		Residential	\$0	PUPY (w/o pi	roperty taxes)		\$	-	
			Commercial		/sf/year			\$	-	
Property Tax			CAP Rate	0.00%		Taxable Value				
			Tax Rate	1.240%		\$4,423,941		\$	54,857	
Effective Gross R	Revenue Requi	red						\$	54,857	
Vacancy Loss			Vacancy Rate	0.00%				\$	-	
Potential Prop	erty Tax An	nual Revenue				Total Property T	ax Revenue	\$	54,857	/year
						Commercial Rev	enue	\$	-	
	Residential L	Jnit Analysis				Total Revenue		\$	54,857	
Avg.Sq.Feet p/H0	OME	Number of units	Per Home Cost							
1265		20	\$ 221,197							
							Residential			/sf/yea
							Commercial	\$	-	/sf/yea
							Total		\$0	*
						*should be rough	hly equal to Gr	oss Pote		

Appendix | Financial Model (Front Door 4)



1.24%
Community Tax Rate

\$2,505
Current Property Tax

\$63,579
Proposed Property Tax

\$61,074
Property Tax Increment

\$703,419
Total Potential TIF

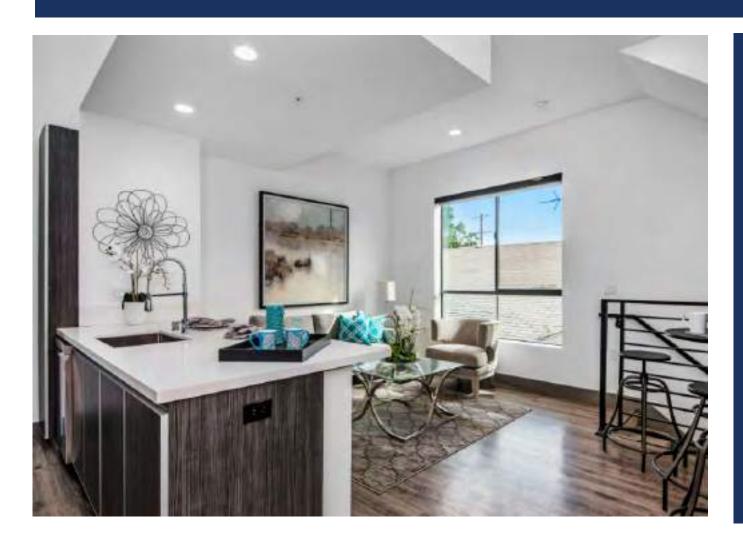


Parcel: 2815406020801

PROPOSED
POCKET
NEIGHBORHOOD
DEVELOPMENT

SPONSOR:
Door County Capital (RE 651)

Table of Contents



- 1. Project Overview
- 2. Demographics
- 3. Linkages
- 4. Plot Layouts
- 5. Exterior & Interior Concepts
- 6. Solar System
- 7. Live / Work Concepts
- 8. Child Care
- 9. Electric Vehicles
- 10. VRBO
- 11. Financial Information
- 12. Feasibility

VALUE PROPOSITION

Our team looks to capture value in the project through:

- 1. Functional product & design
- 2. Strong demographics and positive linkages
- 3. Vertically integrated, experienced sponsors (DCC)
- 4. Favorable deal structure

PROJECT OVERVIEW

- Door County Capital (DCC) will construct 20 new homes on 3.85 acres in a "pocket neighborhood" style development
- Located in Door County, the current SFR (R-2 Zoning) allows for high density residential development
- 20 three-bedroom homes each with a two car garage and a finished basement
- 24 months construction
- All units will be finished with vinyl floors, European style kitchen cabinets, quartz countertops, central air and washer/dryer hookups in each unit
- Sewer and Water Infrastructure in place



Demographics

Footnotes:© 2020 Easy Analytic Software Inc. (EASI) is the source of all updated estimates.
All other data are derived from the US Census and other official government sources. Consumer Expenditure data are derived from the Bureau of Labor Statistics.

		1 Miles	10 Miles	25 Miles		1 Miles		10 Miles		25
POP	PULATION BY YEAR					Miles				
Popu	lation (4/1/2010)		3,007	15,949	65,779	GENERAL HOUSEHOLD CHARACTERISTICS Households (4/1/2010)	1,465		7,263	
Popu	lation (1/1/2020)		3,040	15,978	64,505	28,763	1,405		7,203	
Popu	lation (1/1/2025)		3,040	15,978	64,522	Families		747		
Perce	ent Growth (2020/2010)	1.1	0.18	-1.94		4,541 Non-Family Households	18,398 718		2,722	
Perce	ent Forecast (2025/2020)	0	0	0.03		10,365	710		2,722	
						Average Size of Household 2.25	2.02		2.16	
HOU	JSEHOLDS BY YEAR					Median Age of Householder	52.9		55.9	
Hous	seholds (4/1/2010)		1,465	7,263	28,763	54.6				
Hous	seholds (1/1/2020)		1,521	7,473	29,134	Median Value Owner Occupied (\$) \$116,860.00 Median Rent (\$)	\$167,221.00 \$555.00	\$128,396.00	\$590.00	
Hous	seholds (1/1/2025)		1,546	7,596	29,664	\$508.00	φ333.00		\$570.00	
Perce	ent Growth (2020/2010)	3.82	2.89	1.29		Median Vehicles Per Household 2		2.3		2.3
Perce	ent Forecast (2025/2020)	1.64	1.65	1.82		GENERAL HOUSING CHARACTERISTICS				
						Housing, Units	1,651		10,330	
GEN	IERAL POPULATION CHA	RACTERISTICS				39,461				
Medi	an Age		41.2	47.6	45.3	Housing, Owner Occupied 21.370	822		5,292	
Urba	an 37,099			2,905	8,617	Housing, Renter Occupied 7,393	643		1,971	
Rura	28,680			102	7,332	Housing, Vacant 10,698	186		3,067	
						GENERAL INCOME CHARACTERISTICS Median Household Income (\$) \$37,527.00 Average Household Income (\$) \$44,158.00 Per Capita Income (\$)	\$49,050.00 \$67,817.00 \$21,879.00	\$48,522.00 \$61,334.00 \$31,106.00	\$27,059.00	

Linkages/Location

- Access to numerous eateries and chain restaurants
- Nearby medical services though Aurora health care
- Walmart Supercenter within a short drive proximity
- Short drive to multiple state parks, including Whitefish Dunes State Park, Cave Point County Park, and the Eastern Terminus of the Ice Age Trail



Whitefish Dunes State Park Trail



Whitefish Dunes State Park Beach



Cave Point County Park

Linkages/Location Map



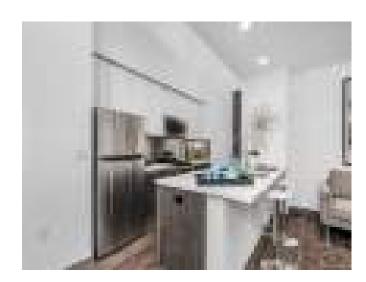
Plot Layouts



Interior Concepts







Exterior Concepts

Design Guidelines

- Bungalow style architecture
- Front porches to encourage neighborhood interaction
- Orientation of home and active spaces within home towards shared common spaces
- Strong design covenants to maintain coherence of neighborhood aesthetic









Rooftop Solar Systems

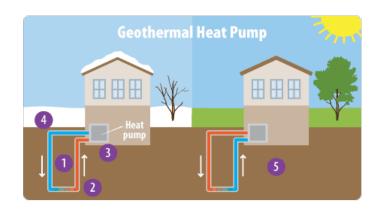
- Fixed, open rack system with 139 solar panels
- Using ratio of 24 units: 50 KW, our 20 unit development would thus be about 42 KW
- Given the parameters of the system, a debt financing amount of about \$73,500 would be required
- Given this debt amount, energy net savings would begin to be generated within year 11, when the cumulative amount of savings generated would be reaching about \$76,500 (\$73,500 of debt financing would have been initially required)
- Assuming a discount rate of 6%, this leads to a NPV of about \$102,400 and an IRR of 9.4%





Additional Green Energy Sources

- Geothermal would be a possibility, to supplement the solar energy system and generate more green energy
 - An efficient water heater system would help to reduce the energy consumption of the geothermal system
- Wind Power, though not as substantial, could also help to supplement the development's energy need
- Skylights installed to increase natural light and reduce reliance on electricity







Live / Work Artist Studio Concepts

Background:

- 250+ active painters in county
 90 + galleries in county
 Nationally renowned destination for art tourism

Benefits to Project:

- Desirable amenity for potential tenants
- Source of income for potential tenants
 Creates long term sense of community and place, reducing tenant turnover

Benefit to Community:

- Supports craft and maker culture in Door County Contributes to Door County's identity as destination for art tourism.
- Adds supply of studio space, helping keep studio rents lower.



Home Front Concept



Garage Conversion Concept



ADU Concept



Garage Addition Concept

Child Care: Project Benefits

Benefits of In-Home Child Care to Project:

- Desirable neighborhood amenity for prospective buyers
- Reduces childcare commute and associated costs/impacts
- Economic support for neighborhood families
- Economic support for childcare provider
- Creates community and connection



Basement Concept



In-Home Concept



ADU Concept



Above Garage Concept

Child Care: Community Benefits

Community Benefits of In-Home Child Care: Meets pressing needs of community:

- ❖ Overall shortage of childcare in Sturgeon Bay and Door County. Within 10 mile radius of site, 4500 families with current childcare capacity for 475 children.
- Shortage of **affordable** childcare options. In-home certified child care is more affordable than alternatives.

 Currently only capacity for 12 children within 10 mile radius of site.

Door County Child Care Supply

	#	Capacity	Full Time	Part Time
Center	10	470	✓	X
In Home	4	12	✓	X

Average Child Care Costs State of Wisconsin

	Infant	Toddler	4 Year Old
Child Care Center	\$12,268	\$11,563	\$9,954
In-Home Child Care	\$9,645	\$9,300	\$8,611
Difference	(\$2,623)	(\$2,263)	(\$1,343)

Footnotes: © 2020 Easy Analytic Software

Household Incomes in Proximity to Site

	1 Mile Radius	10 Mile Radius	25 Mile Radius
Median Household Income	\$37,527.00	\$49,050.00	\$48,522.00
Per Capita Income	\$21,879.00	\$31,106.00	\$27,059.00

2018 Report

childcareaware.org/costofcare

Electric Vehicles

Neighborhood Car Sharing Model Benefits:

- Ability to travel by car without the cost of owning a vehicle
- Reduces carbon footprint through electric vehicle use
- Stationed at pocket neighborhood for quick access
- ❖ Easy reservations through app-based reservation system





Electric Vehicles: Preliminary Affordability Analysis

3 Year Electric Vehicle Lease:

Estimated \$2,400 annual leasing cost per vehicle for developer

Neighborhood Car Sharing Model Benefits:

- Eliminates insurance, repair,
 maintenance costs of owning a car
- Significantly reduces costs of using a vehicle
- More affordable option than Uber and purchasing a vehicle

Deposit	\$300
Application Fee	\$25
Monthly Fee	\$15
Per Hour	\$3.75
Per Mile	\$0.50

AAA average annual cost to buy medium sedan = \$8,643

Estimated Annual Uber Cost

	Average Miles Driven	Average Cost per Mile	Annual Cost
Uber	9600	2	\$19,200

Estimated Costs by Household for Carsharing Model

	Average Miles Driven	Rate per Mile	Annual Cost*	Per Household (20 participating)	Per Household (15 participating)	Per Household (10 participating)
Carsharing Model (Per Vehicle)	9600	.50	\$6,240	\$492	\$596	\$804

* Annual cost includes annualized costs per mile and annualized hourly fees to use vehicle.

Impacts of Vacation Rentals by Owner (VRBOs)

Positives

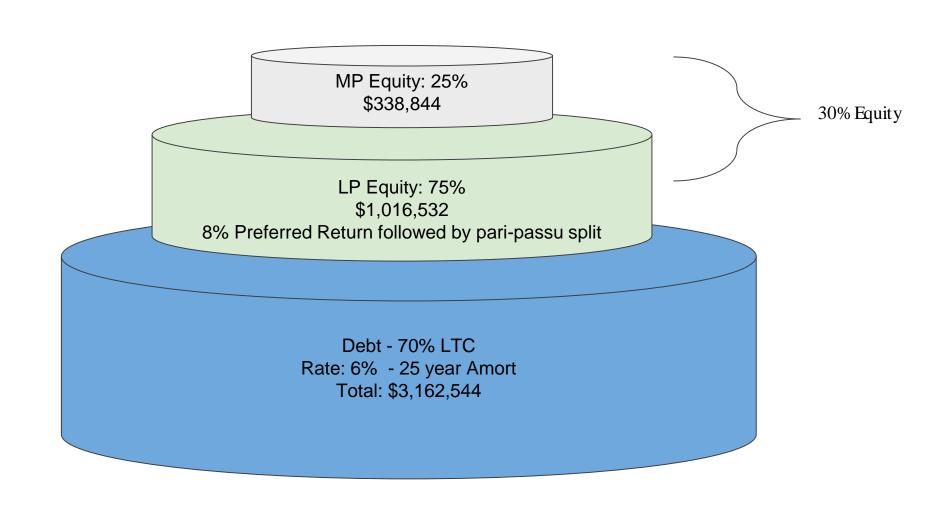
- Economic impact through additional income creation (restaurants, retail, taxes, etc.)
- Increased tourism activity
 - correlation between short-term rentals and employment
 - popularizes less visited areas (could also be a negative from a neighborhood perspective

Negatives

- Decreases the supply of available long-term rentals (leads to increasing rents)
- Changes neighborhood dynamics
 - "Ghost Neighborhoods" (i.e. constantly changing 'neighbors')
 - NIMBYism
- Government still working to fully regulate
- Loss of tax revenue
 - STRs are not subject to same standards as traditional hotel lodging

https://granicus.com/blog/six-ways-that-short-term-vacation-rentals-are-impacting-communities/ https://www.epi.org/publication/the-economic-costs-and-benefits-of-airbnb-no-reason-for-local-policymakers-to-let-airbnb-bypass-tax-or-regulatory-obligations/

Proposed Capital Stack: Upfron For Sale Model



Financial Information: UpfrontFor Sale Assumptions and Returns

Assumption	DCC
Sale Price	\$250,000
Residential Hard Cost	\$130psf
Residential Soft Cost (20% of hard)	5,500 per unit
Developer Fee	12%
LTC	70%
Rate / Amort	4.25% I/O
MP/LP equity	75/25
Project time	24 months

- Gross Potential Revenue: \$5,000,000

- Total Cost: \$4,517,920

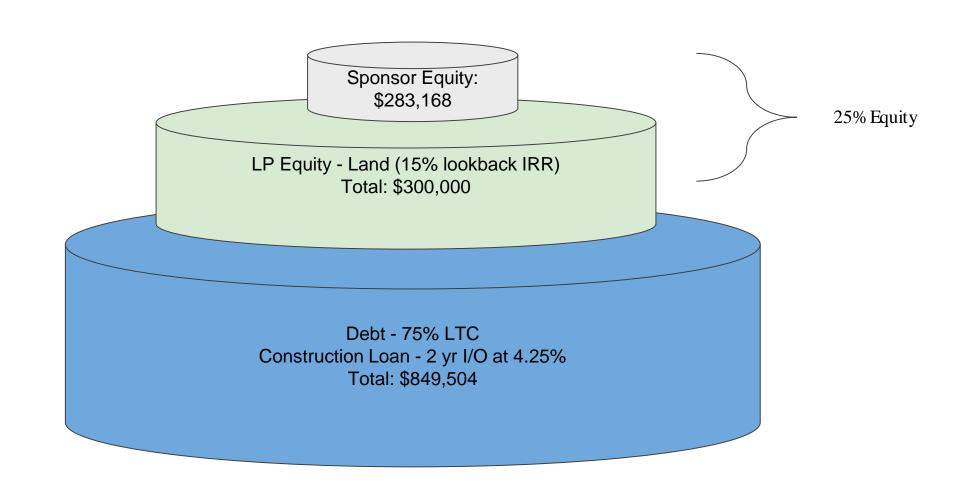
- CF from operations: \$482,080

- Development fee (12%): \$451,920

- LP IRR (9% pref): 10%

- MP IRR: 53%

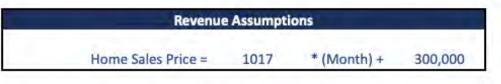
Proposed Capital Stack: 3 Phased Development Sale



Financial Info 3 Phased Development - For Sale Assumptions and Returns

Construction Assumptions				Comment
Land Cost =	\$300,000.00			
Lot Construction Cost =	264	* (Month) +	50,000	Lot are developed over 3 month period
Home Hard Cost =	340	* (Month) +	156,000	Homes are developed over 4 month period
Home Soft Cost =	187	* (Month) +	31,200	Homes are developed over 4 month period

Assumptions:



Capital Structure	
Debt: 75% . Contribute 3rd. Paid 1st. 4.25% I/O	
LP - Land: \$300,000. Contribute 1st paid 2nd	
MP-Sponsor: Gap Equity. Contribute 2nd. Paid Last	

Debt	Sec.
Interest Only	4.25%
Interest Reserve	200,000

*Project completed in 22 months

Returns:

1	XIRR	EM	Profit
Escrow Account			
Debt	88.2%	2.02	\$863,276
LP - Land Equity	15.0%	1.14	\$43,430
MP - Sponsor Cash Flow	17.0%	1.20	\$56,093

Feasibility Analysis

Upfront Development Model:

- Need to obtain ~\$250,000 per unit sales price to justify the upfront development model
 - Could be tricky with the median income within 10 miles at slightly under \$50,000, while we need closer to \$57,000 in median income to justify the sales price The mortgage lender would need to allow for a debt to income ratio of 25% instead of 20%
 - These are newer units in a pocket development with amenities, which may attract some slightly higher income buyers
- In this scenario the LP returns would be slim and it would be difficult to attract LP investors
- Need to obtain a 24 month I/O loan at around 4.25%

Phased Development Model:

- This model assumes that the land is being contributed by an LP equity partner who requires a 15% lookback IRR
- In order for this approach to be feasible we will need a sales price of \$300,000 per home
- This approach does not include developer fees
- Includes some additional lot infrastructure hard costs which are not included in the upfront development model

THANK YOU!



About UniverCity Year



UniverCity Year is a three-phase partnership between UW-Madison and communities in Wisconsin. The concept is simple. The community partner identifies projects that would benefit from UW-Madison expertise. Faculty from across the university incorporate these projects into their courses, and UniverCity Year staff provide administrative support to ensure the collaboration's success. The results are powerful. Partners receive big ideas and feasible recommendations that spark momentum towards a more sustainable, livable, and resilient future. Join us as we create better places together.