



MAAO

Minnesota Association
of Assessing Officers

Tanks A Lot

CIA Valuations Committee

- Robin Swanson, Washington County
- Bob Ehler, Vanguard Appraisals
- Tom Reineke, Ramsey County
- Joe Mako, Hennepin County
- Jake Pidde, Stearns County
- Chase Peloquin, Chisago County
- Benjamin Thomas, St Louis County
- Dustin Hinrichs, Dakota County
- Josh Johnsen, Olmsted County

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Presenters

David Kasperson, SAMA,
City of Minneapolis

Brian Kieser, MAI, SAMA,
City of Minneapolis

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Overview

- Recent trends
- Identifying tanks in your area
- What is taxable?
- Tank Valuation
- Brewery Tour

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Recent Trends

- Law changes have started a boom of breweries and distilleries in Minnesota
- Most are going into converted industrial, restaurant, and retail spaces

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Surly Bill

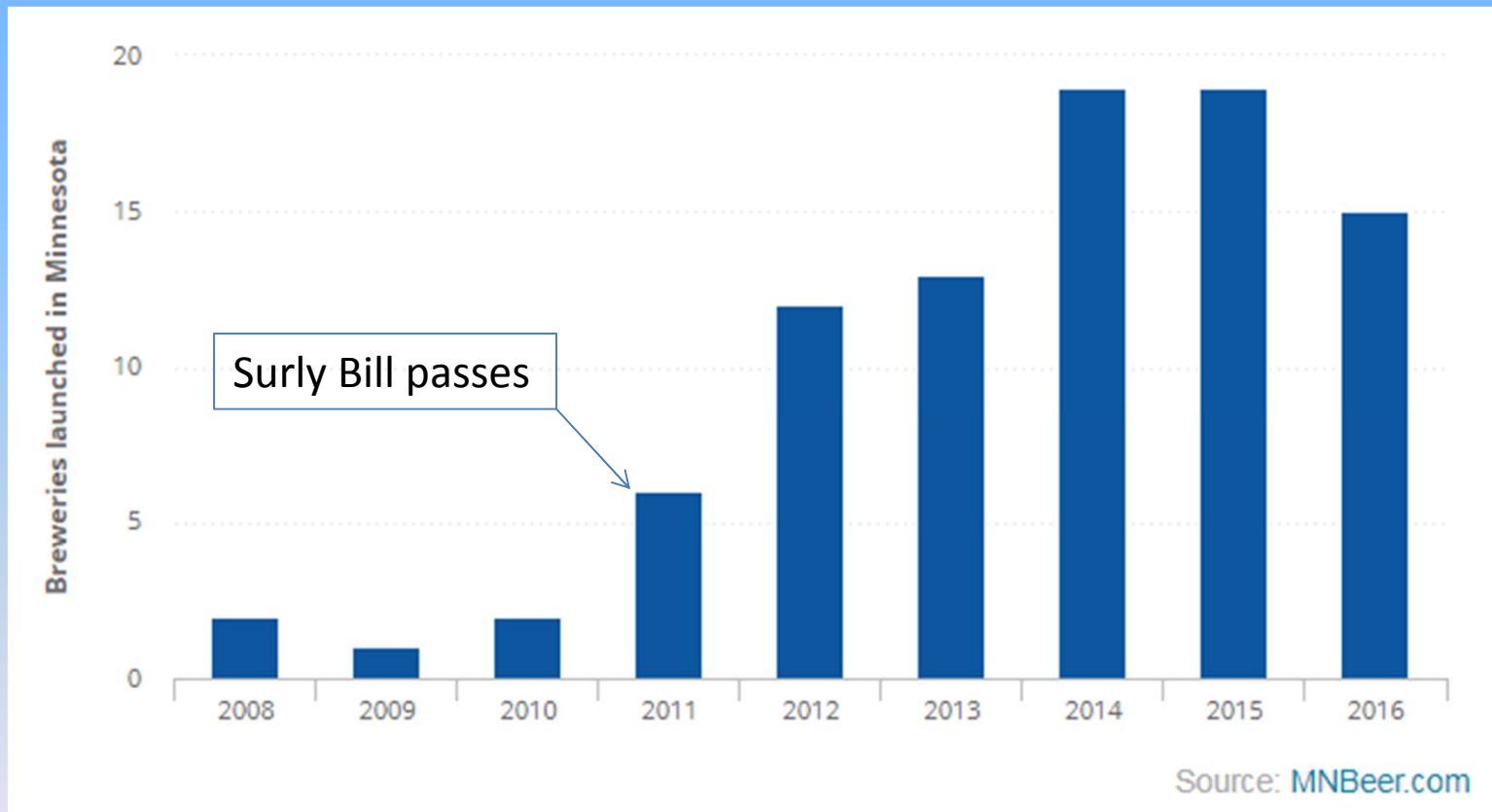
- “Surly bill” becomes law in 2011
- Allows brewers producing less than 250,000 barrels per year to sell on site
- Municipalities must opt-in



Omar Ansari

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Brewery Openings



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Current Total Count

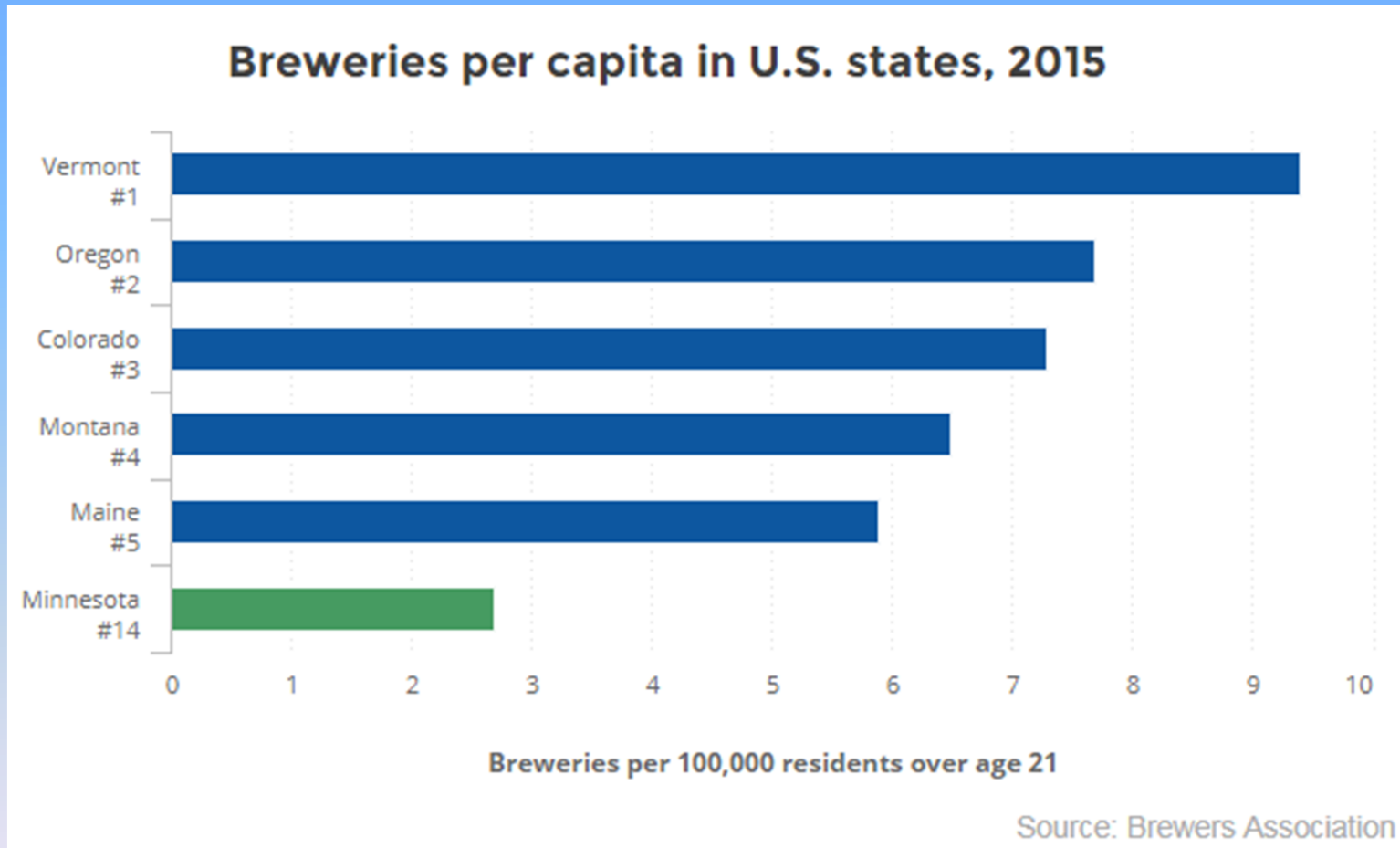
- Breweries: 143
- Distilleries: 21
- Wineries: 62
- Cideries: 14

- Total: 240

Source: growlermag.com

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Breweries per Capita



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Surly Brewing Co.

- Surly Beer Hall opens in 2014 in Minneapolis
- New construction
- 47,000 SF
- Originally 100,000 barrels per year



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TODD THE AT	WORK	CYNIC
HELL	FIERY HELL	BLACKB
BENDER	CACAO BENDER	WITCH'S TOWER
SMOKE	MOLE SMOKE	SAMEN
DAMPFBIER	EMPIRE'S AZOTHUM FILL	SCHADENFREUDE
		MILD
		BITTER BOCKWEI

Surly Brewing Co.

- Doubled production in 2016 with 8 new tanks
- Capacity increased to 200,000 barrels per year



Surly Furious IPA

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Indeed Brewing Company

- Taproom opened in 2012 in Northeast Minneapolis
- Retrofit of three story building, built 1914 with 1969 warehouse addition



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Indeed Brewing Company

- Expanded lease into warehouse in 2014
- Increased capacity to 17,000+ barrels per year



Day Tripper Pale Ale

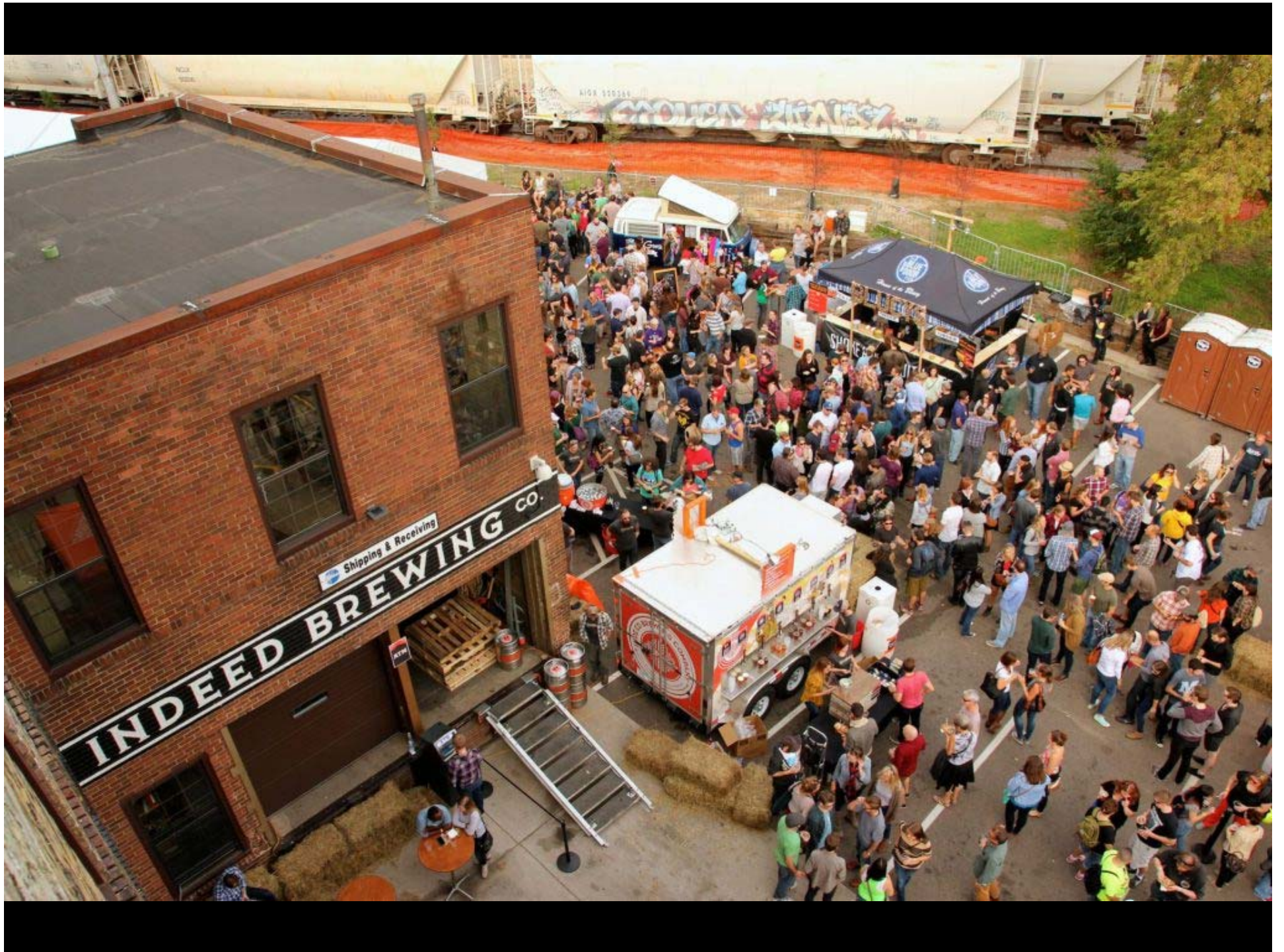
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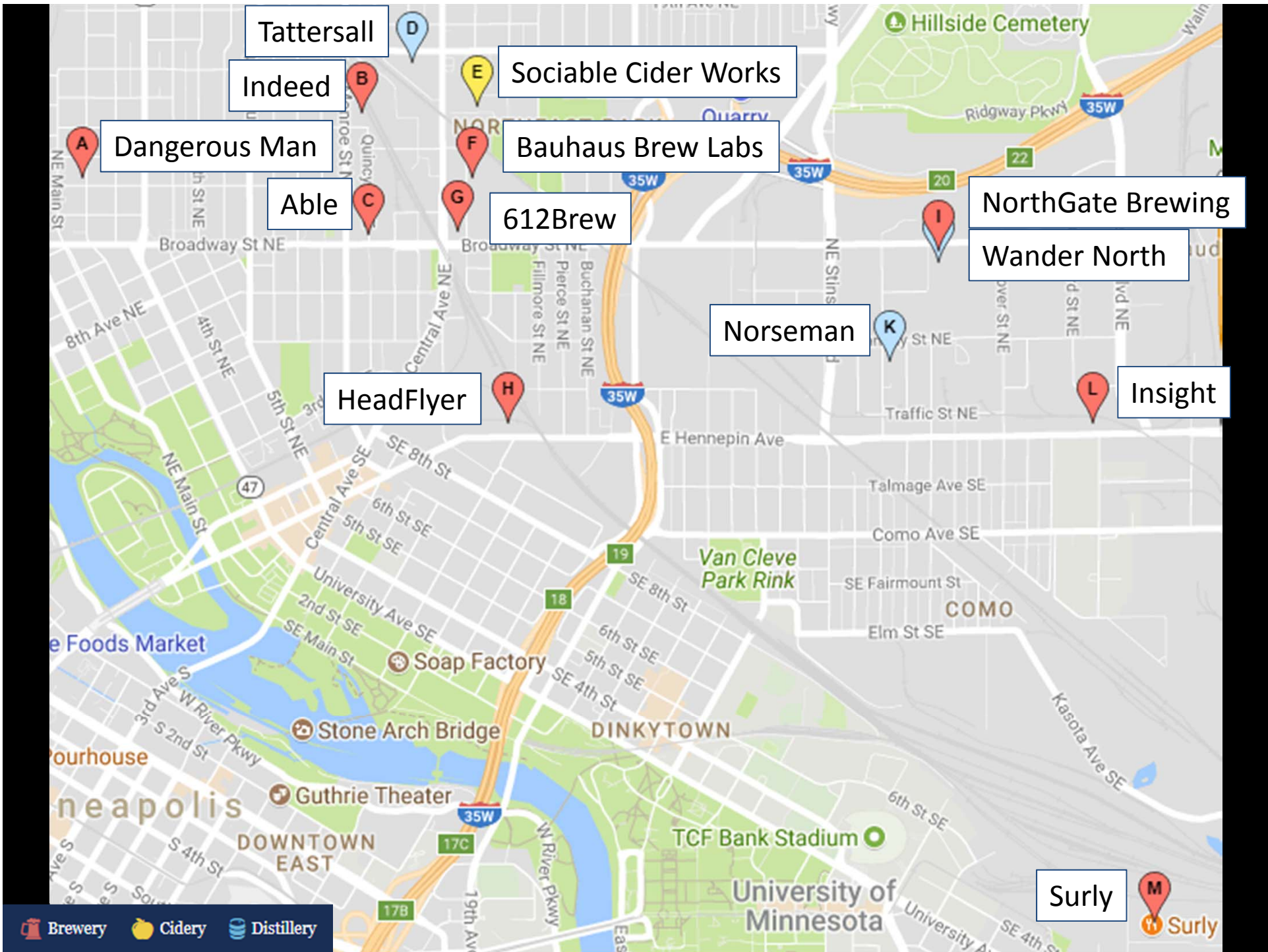















 Brewery
  Cidery
  Distillery

 Surly

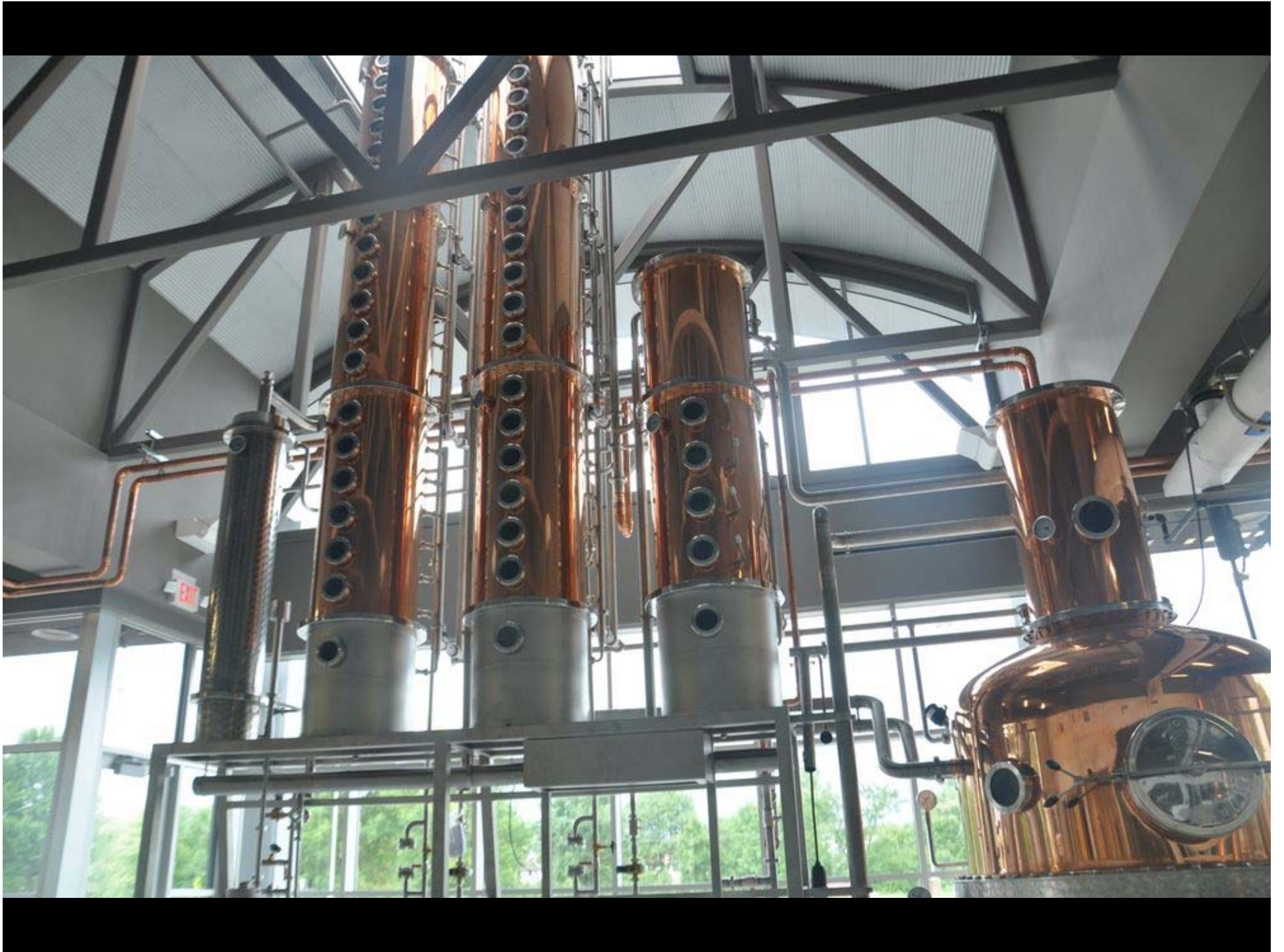
J. Carver Distillery

- Converted car dealership in Waconia
- 2014 – started selling to retailers and bars
- 2015 – tasting room opened
- 17,000 SF
- \$3,000,000 all-in



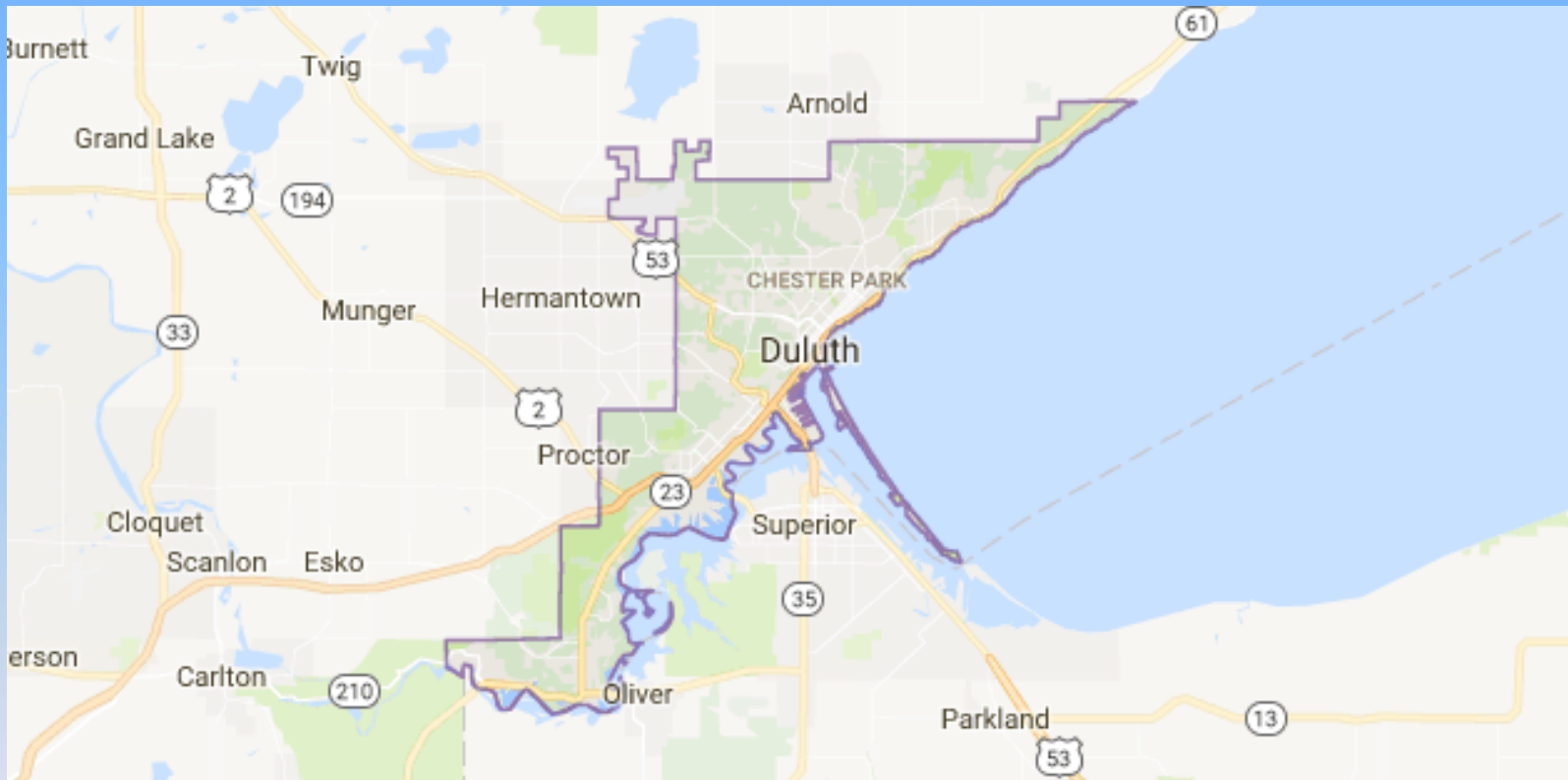
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Duluth



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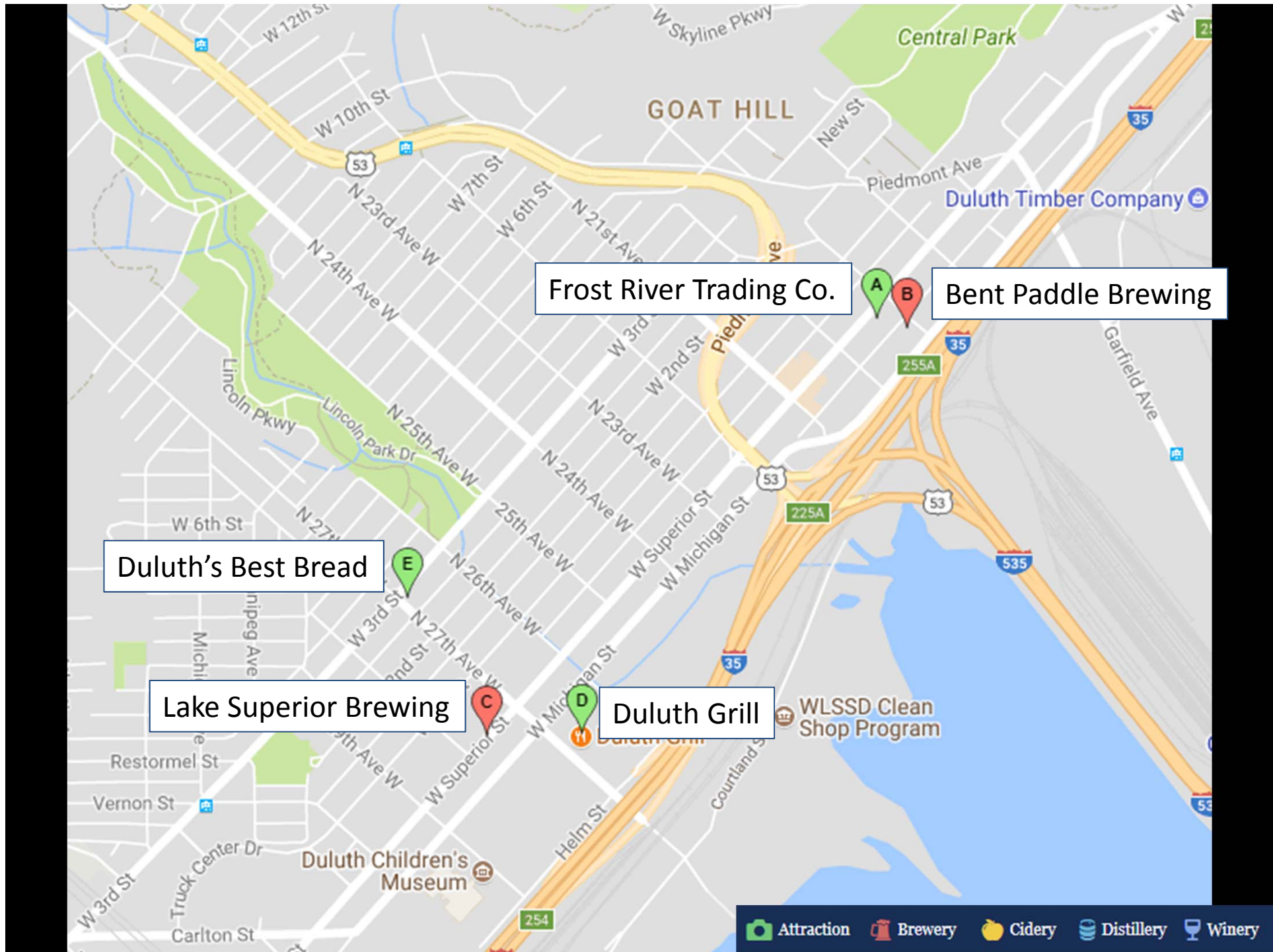
Lincoln Park Craft District

- Revitalization effort
- Frost River Trading
- Bent Paddle Brewing
- Lake Superior Brewing
- Duluth Grill
- Duluth's Best Bread
- Several new art galleries



Frost River Isle Royale Pack

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Frost River Trading Co.

Bent Paddle Brewing

Duluth's Best Bread

Lake Superior Brewing

Duluth Grill

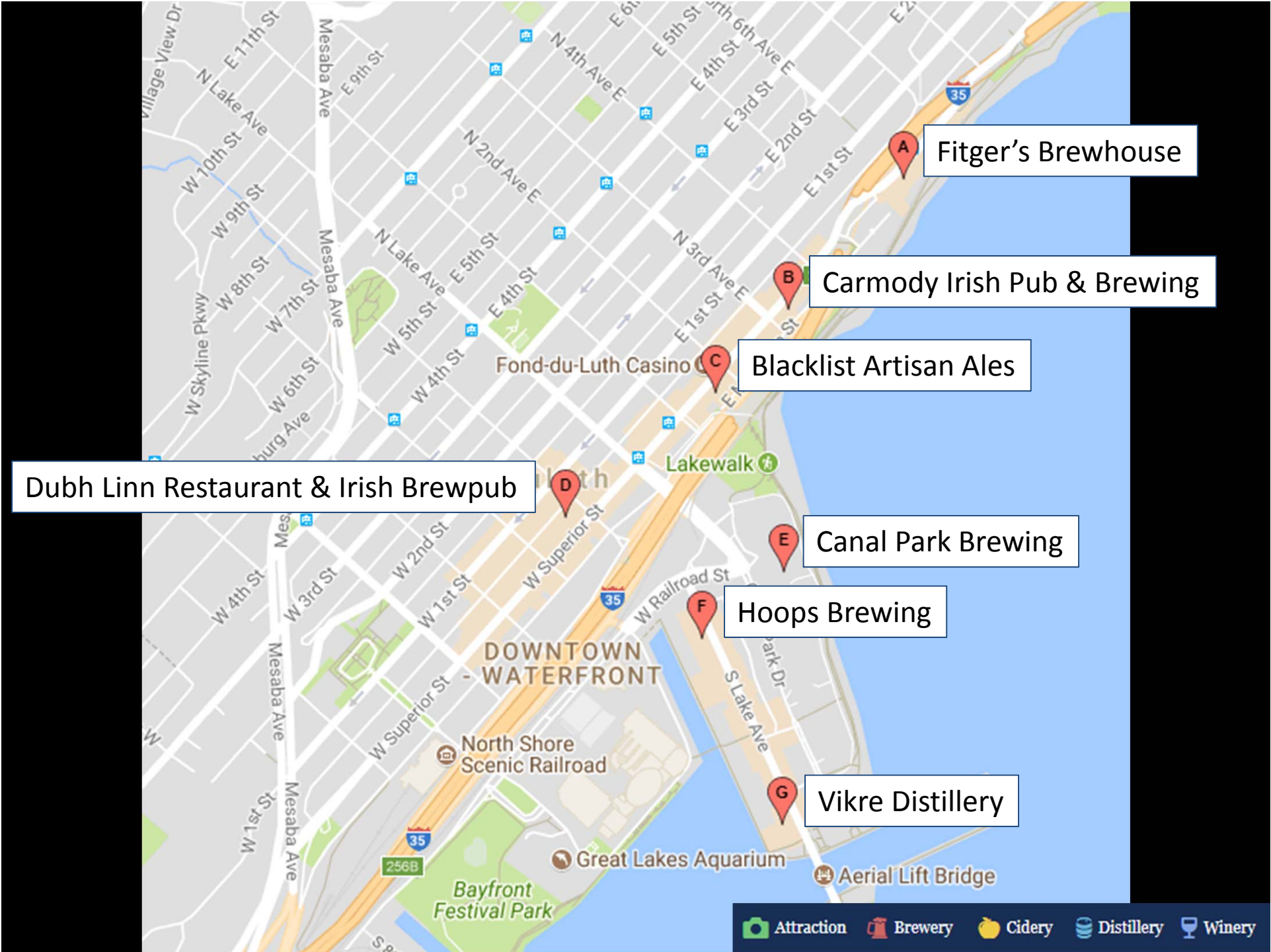
- Attraction
- Brewery
- Cidery
- Distillery
- Winery

All Pints North Festival

- Bayfront Festival Park every June
- Organized by Minnesota Craft Brewers Guild
- 120+ Brewers
- Food, music, and unlimited beer



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A Fitger's Brewhouse

B Carmody Irish Pub & Brewing

C Blacklist Artisan Ales

D Dubh Linn Restaurant & Irish Brewpub

E Canal Park Brewing

F Hoops Brewing

G Vikre Distillery

Hoops Brewing Co.

- Former Timber Lodge Steakhouse
- Dave Hoops – previously of Fitger's Brewhouse
- 250 seat capacity
- Opened 2017



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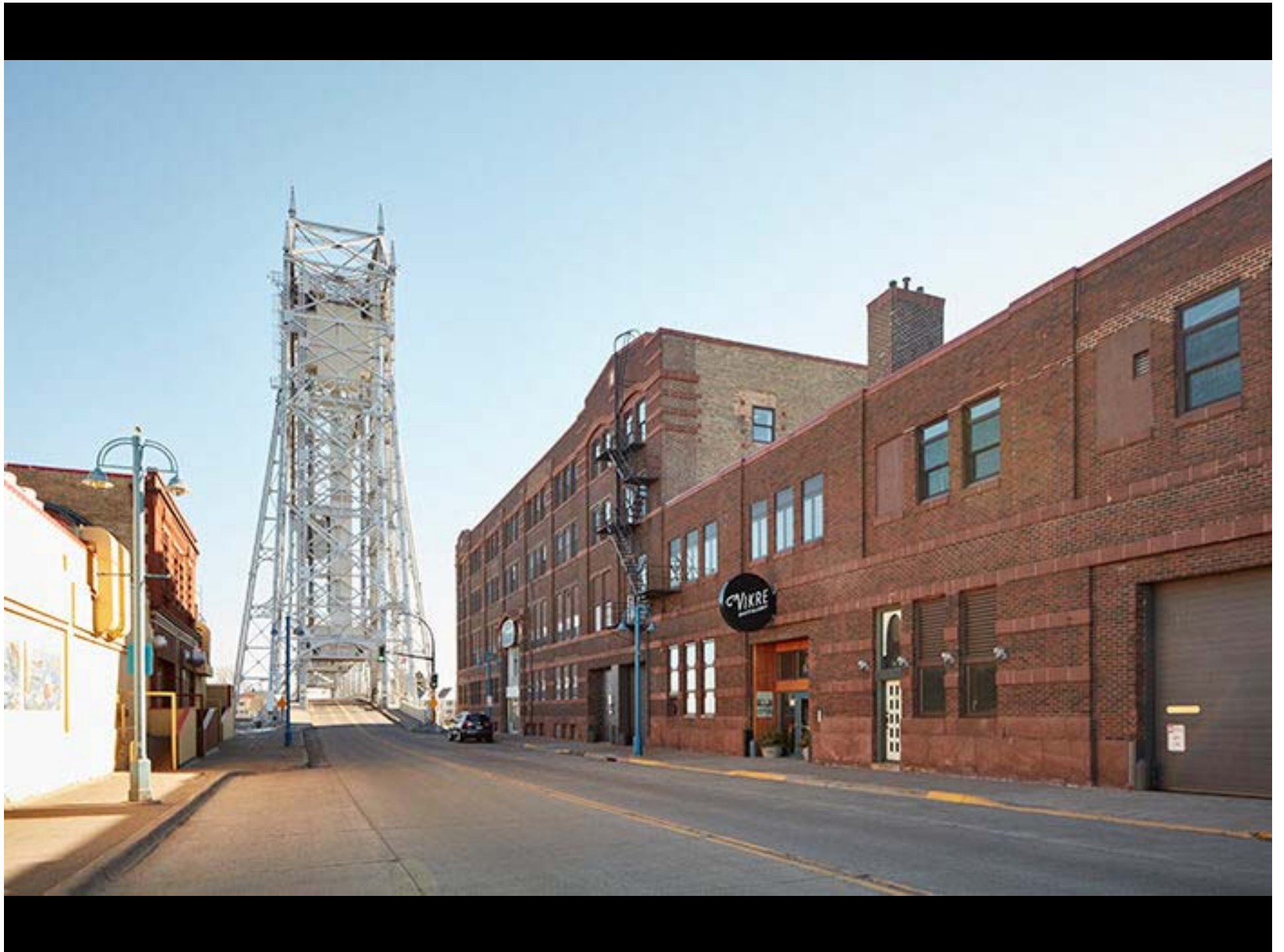


Vikre Distillery

- 2012 – established by Emily and Joel Vikre
- 2015 – new heating/cooling system to reduce water usage
- 2017 – began composting spent grain for biogas
- 2018 – solar panels, biogas heating



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MPCA

- With some exceptions, requires that all tanks with petroleum or hazardous substances be reported by the owner.
- Tanks with non-hazardous material not reported
- A list of tanks is available for download on the MPCA website



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MPCA

- “Owners of USTs with a capacity of **110 gallons or more** and ASTs with a capacity of **500 gallons** or more, which contain petroleum or hazardous substances used commercially, must notify the MPCA of the existence of these tanks.”
- “**Tanks not subject to notification** include farm and residential motor fuel tanks with a capacity of less than 1,100 gallons not used commercially; heating oil tanks less than 1,100 gallons; flow-through process tanks; septic tanks and agricultural chemical tanks.”

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MPCA



- Air ▾
- Water ▾
- Waste ▾
- Regulations ▾
- Living Green ▾
- Quick links ▾
- Data ▾
- About the MPCA ▾

Waste / Hazardous waste and problem materials

Storage tanks

The Tank Compliance and Assistance Program provides information and assistance to tank owners and others regarding technical standards required of all regulated underground storage tank (UST) and aboveground storage tank (AST) systems. The program also evaluates compliance of tank facilities with state statutes, rules, and permits through inspection and investigations, and determines appropriate enforcement actions when violations are discovered.

This program regulates a variety of industries. Some of the most common regulated facilities with hazardous liquid storage include service stations, trucking companies, bulk petroleum dealers, pipeline terminals, refineries, utility companies, airports, bus companies, school districts, highway departments, and industries such as sugar beet, ethanol, pulp and paper, mining, and chemicals.

Tank notification

Owners of USTs with a capacity of **110 gallons or more** and ASTs with a capacity of **500 gallons** or more, which contain petroleum or hazardous substances used commercially, must notify the MPCA of the existence of these tanks.

Tanks not subject to notification include farm and residential motor fuel tanks with a capacity of less than 1,100 gallons not used commercially; heating oil tanks less than 1,100 gallons; flow-through process tanks; septic tanks and agricultural chemical tanks.

Tank owners must also notify the MPCA within 30 days after any product change or status change (tank closure, removal, new owner, etc.) at a registered tank facility.

In this section:

[Aboveground storage tank \(AST\) systems](#)

[Underground storage tank \(UST\) systems](#)

[Minnesota tank site search](#)

[Storage tank publications](#)

[Underground Storage Tanks \(UST\) Update Rulemaking](#)

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MPCA



Google Custom Search



Data

Leaks/tanks search

Find leaking and registered tank sites in Minnesota: locations, details of tank installation and construction, and installed safety measures.

Please note that the MPCA is in the process of moving to a new data management system. Current tank site information is now available here. Leak site information has not been updated since April 2016.

We apologize for this inconvenience and all services will be fully restored once the transition is done. If you need up to date information, please contact MPCA Records Management staff at recordsmanagementintaketriage.pca@state.mn.us, or call 651-757-2728 or 1-844-828-0942.

Site type: Leak site
 Tank site

site id:

site name:

street:

city:

zip:

county:

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MPCA



Google Custom Search



Data

Leaks site search

Download data

New search

Site Search Results for:

Site type: Leak site
City: Minneapolis
County: Hennepin

total of 1475 site(s) found

|| Next >

ID	Site Name	City	County
3843	(former) Pie Terminal	Minneapolis	Hennepin
18561	1100 South 2nd Street Property	Minneapolis	Hennepin
13727	13735 Burger King	Minneapolis	Hennepin
19598	1620 LLC Property	Minneapolis	Hennepin
15493	1st Evangelical Free Church	Minneapolis	Hennepin
18739	222 Hennepin Ave Project/Former Jaguar Dealership	Minneapolis	Hennepin
19971	2900 Pleasant Ave Property	Minneapolis	Hennepin
14683	3017 Residential Property	Minneapolis	Hennepin
18408	312 Partnership LLC Property	Minneapolis	Hennepin

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MPCA

- Starting point for hazardous tanks
- Still need to pick up non-hazardous tanks



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What is Taxable? - Overview

- Guardian Energy case study
- Examples of what is taxable and what is not

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Guardian Energy



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Guardian Energy

- Ethanol Plant in Waseca County
- Filed on 2009, 10, and 11 assessments
- MN Tax Court determined what was taxable and what was not in 2013
 - Guardian challenged, Supreme Court upheld in 2014
- Case is ongoing because of questions around calculating economic obsolescence

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Guardian Energy

- 2013 finding outlines 3 part test, which had been established by S.C. in *S. Minn. Beet Sugar Coop v. Cnty. of Renville*
 1. Include all structures
 2. Exempt items used in production
 3. Exclude from the exemption items if they provide shelter

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Guardian Energy – Step 1

- Step 1: Is it a structure?
 - Structures have walls, ceilings, roofs *or* floors, *and*
 - Provides building like functionality including structural, insulation, or temperature control functions, *or*
 - Provides protection from the elements, even if it also has special functions distinct from that of a building.
- In this case:
 - all tanks on the site were considered structures
- Defined in 272.03 sub. 1(a)

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Guardian Energy – Step 2

- Step 2: Exempt tanks used for production
 - Exclude “tools, implements, machinery, and equipment attached to or installed in real property for use in the business or production...”
- In this case:
 - Those tanks where some production occurred were exempted. Tanks used only for storage were not exempted.
 - e.g., clarifier & fermenter tanks were exempted
- Defined in 272.03 sub. 1(c)(i)

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Guardian Energy – Step 3

- For the items exempted in step 2:
 - EXCLUDE FROM THE EXEMPTION the exterior shell (wall, ceiling, roof, floor) IF the shell has structural, insulation, or temperature control functions OR **provides protection from the elements**
- In this case:
 - the exterior shells of some tanks where processing occurred were made taxable, either because they provided insulation or because the tanks were located outside and thus provided protection from the elements.
- Defined in 272.03 sub. 1(c)(iii)

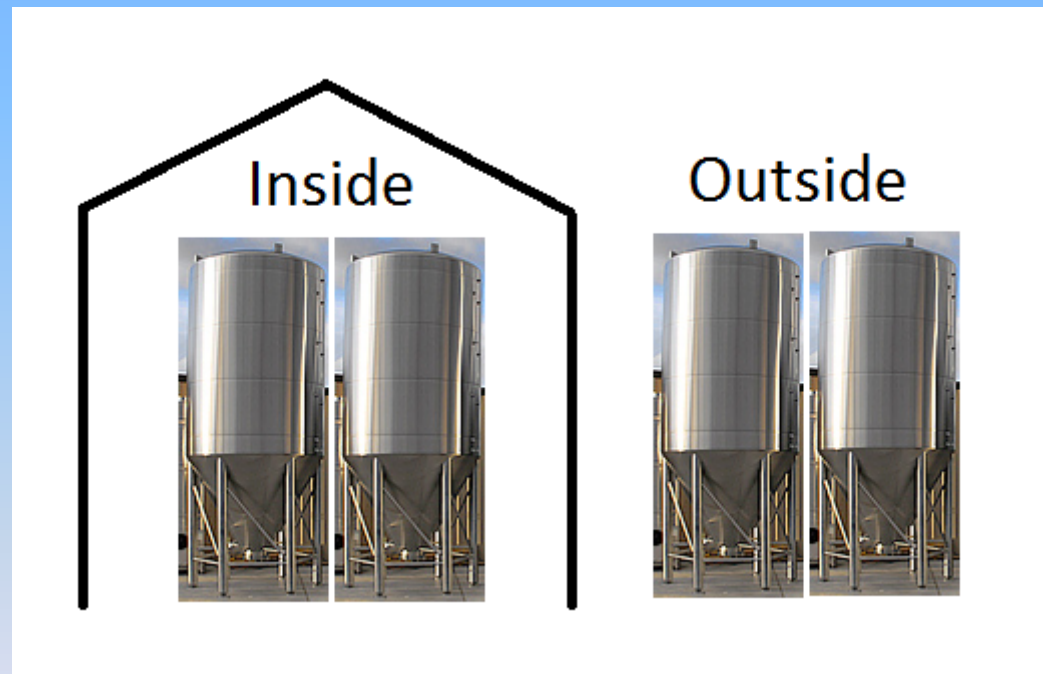
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Guardian Energy - Summary

- The only tanks that were entirely exempt
 - were used for production (not storage),
 - had no insulation or temperature control, and
 - were entirely inside a larger structure.

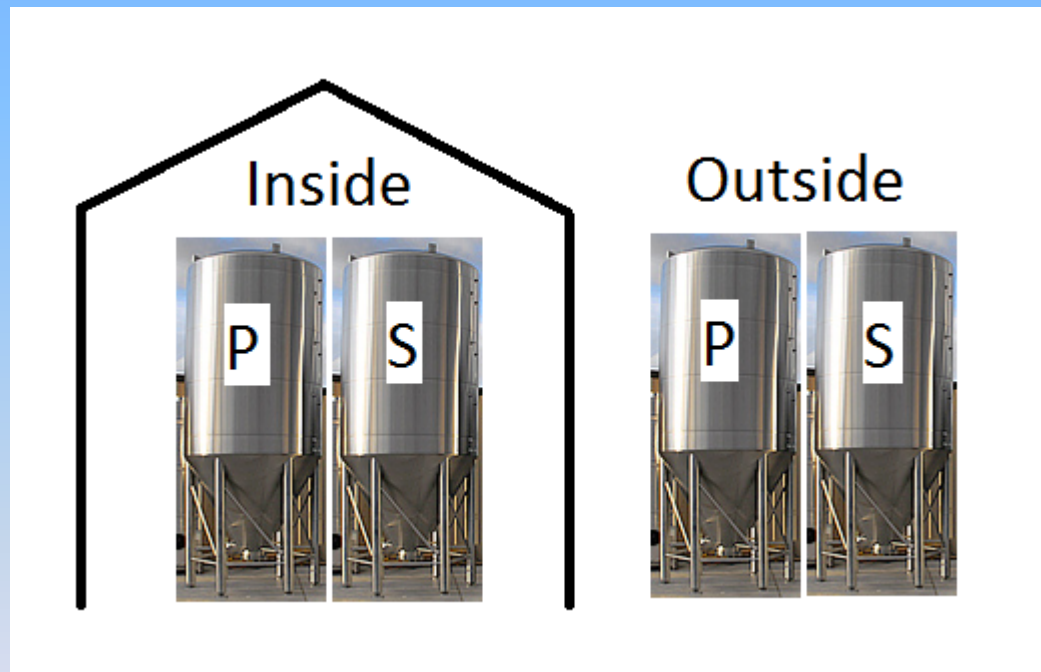
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3 Part Test - Demonstration



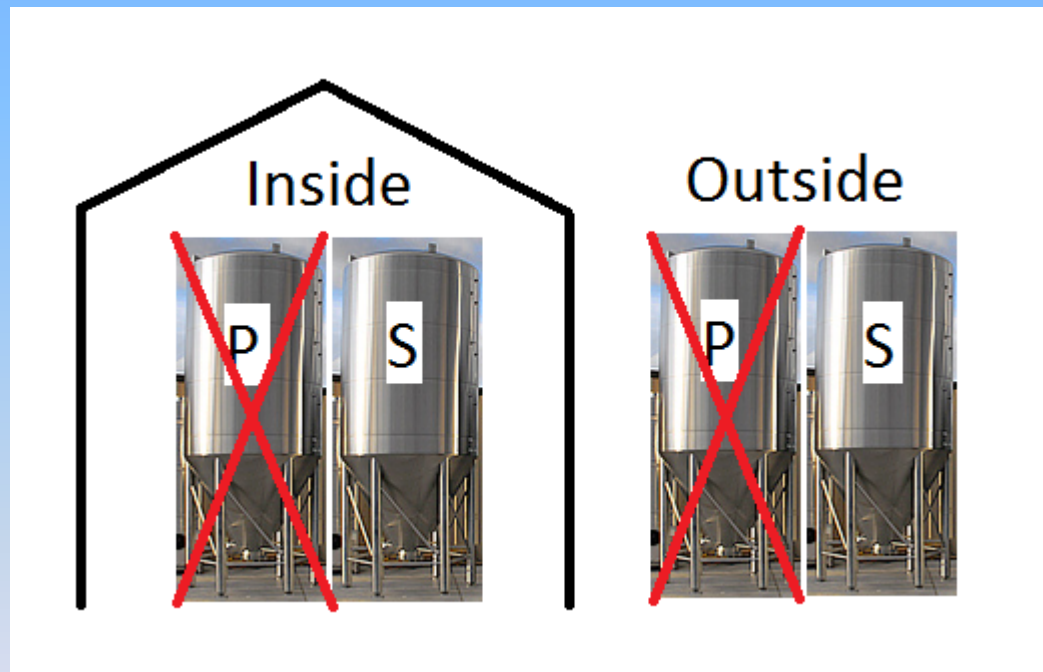
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3 Part Test - Demonstration



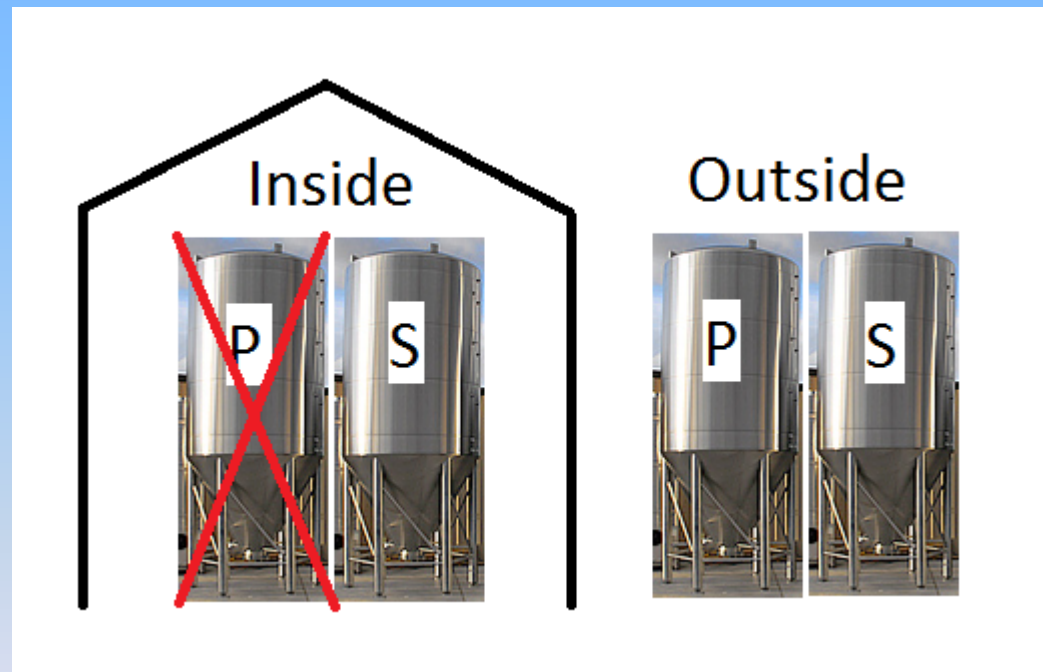
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3 Part Test - Demonstration



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3 Part Test - Demonstration



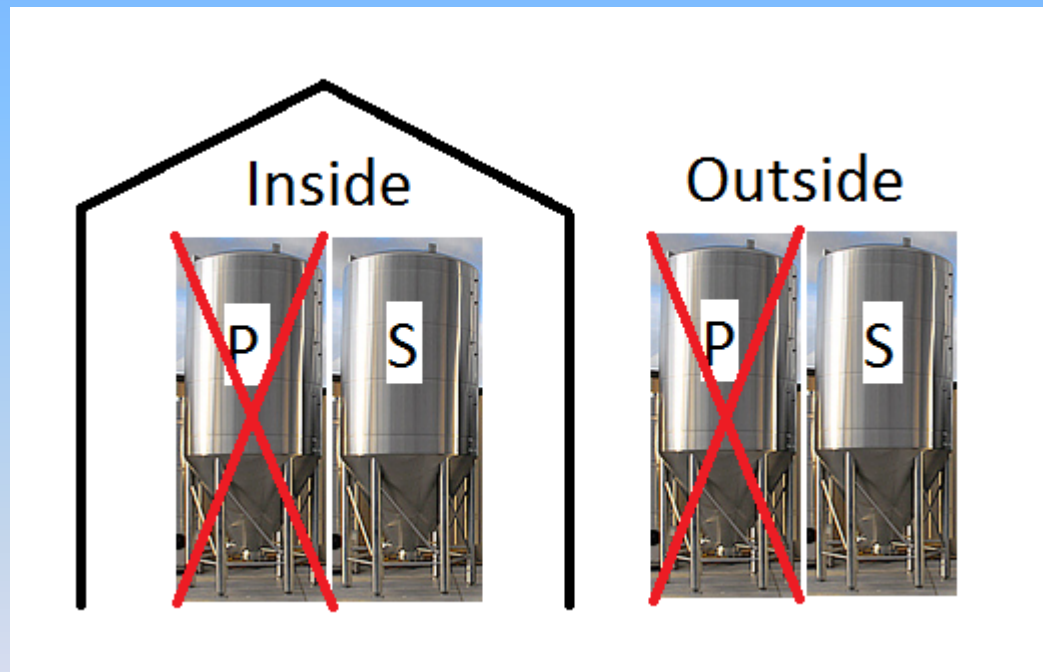
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But Wait...

- Biofuel, wine, beer, distilled beverage, and dairy production tanks were exempted 2014.
- Step 3 (shelter test) no longer applies to the tanks used in these types of production.
- Storage tanks are still taxable.
- Carve out contained in 272.03, subd. 1(c)(iii)

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3 Part Test - Demonstration



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Any Questions?



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Summit Brewing Exercise



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Malt Silo



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Brewhouse



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Cellar



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Clean-in-Place System



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New Fermentation Tanks



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Tank Valuation Overview

- Identify the type of tank
- Marshall & Swift
- Cost Spreadsheet
- Gas Station Case Study

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Identify the Property

- Main Considerations
 - Purpose
 - What it holds
 - Above or below ground
 - Construction
 - Factory vs. site-built
 - Material – steel, fiberglass, concrete, wood
 - Wall thickness and number of layers

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Marshall Valuation Service

- Section 17 – Sheds and Farm Buildings
 - Page 39 – Dairy
 - Refrigerated and unrefrigerated bulk tanks
 - May be the closest approximation in MVS for other types of tanks used in food/beverage production
 - Page 51-55 – Grain bins and silos
- Section 61 – Tanks
 - Petroleum, water, bulk storage
 - May not be applicable to tanks used in food and beverage processing, which are industry-specific

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Site-built Liquid Tanks

- Water – measured in gallons
- Oil – built to American Petroleum Institute (API) standards and measured in barrels (42 gallons)
- Different costs for each



Bolted steel



Welded steel

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Factory-built Petroleum Tanks



Underground fiberglass tanks



Fire-rated vaulted tank

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Pressure Tanks



Horizontal



Sphere

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Bulk Storage



Cylindrical



Hoppers

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Any Questions?

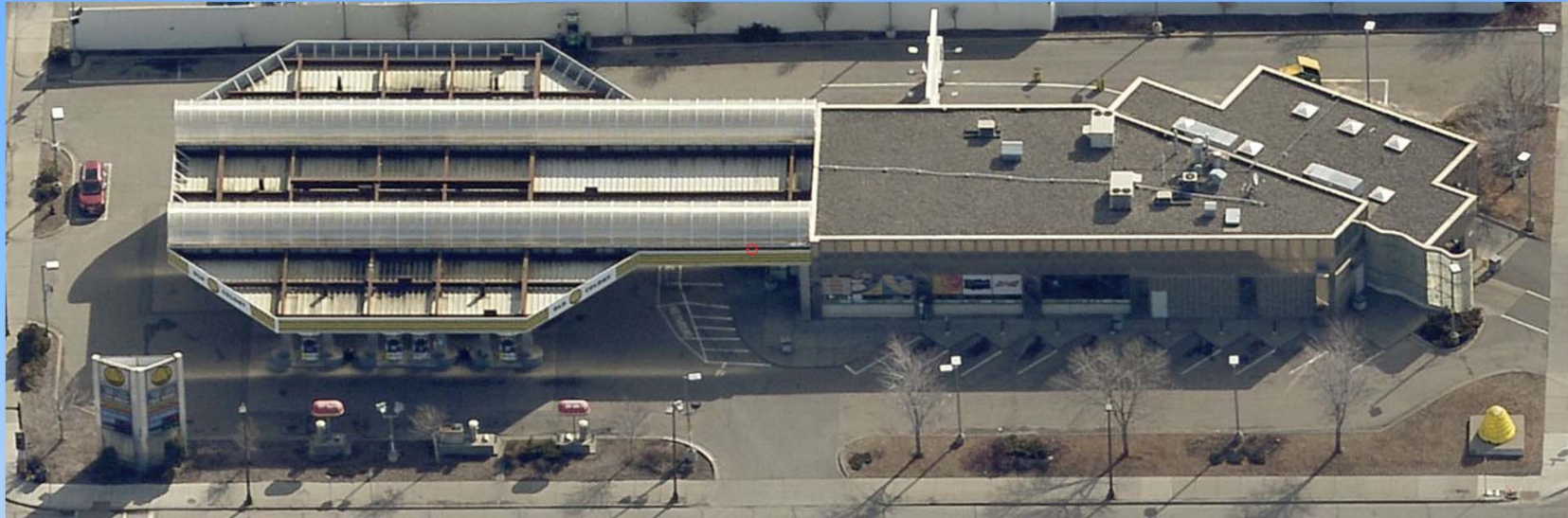


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Cost Spreadsheet

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Gas Station Case Study



Holiday Gas Station #461
Formerly Old Colony EZ Stop
1624 North Washington, Minneapolis

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Holiday

- Built in 1996
- Built on the site of a former gas station – all of the old tanks were removed
- 10,000 SF canopy
- 23 fuel dispensers
- 2,900 SF convenience store
- Double-bay car wash

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Holiday

- Single-walled, steel (sti-P3) USTs:
 - Tank 1 – 12,000 gallon E-10 blend
 - Tank 2 – 12,000 gallon E-10 blend
 - Tank 3 – 8,000 gallon E-10 blend
 - Tank 4 – 8,000 gallon E-10 blend
 - Tank 5 – 8,000 gallon diesel
 - Tank 6 – 4,000 gallon gas

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Holiday

TANKS

SECTION 61 PAGE 5
December 2016

UNDERGROUND FUEL STORAGE

Costs are averages for completely installed, fiberglass and steel tanks, including fittings, access manway, excavation and backfill. For multiple installations, two or more in one hole, deduct 7% for each extra tank, while considering the largest tank in the hole as the base. For difficult soil conditions, add for extra cost of excavation and bedding, as necessary. All tanks carry Underwriters' Label. Add \$7.33 to \$9.25 per cubic foot for concrete pad. Costs do not include piping. Add \$4150.00 to \$6400.00 for leakage-monitoring system per tank. Sizes are approximate averages of all tank types. For multicompartment tanks, add \$6050.00 to \$12100.00 per tank.

NOMINAL CAPACITY (gallons)	DIAMETER (feet)	LENGTH (feet)	FIBERGLASS		STEEL (sti -P3)		FIBER COATED STEEL	
			SINGLE WALL TANK COST	DOUBLE WALL TANK COST	SINGLE WALL TANK COST	DOUBLE WALL TANK COST	SINGLE WALL TANK COST	DOUBLE WALL TANK COST
300	3	5						
550	4	6						
1,000	4	11						
2,000	6	10						
3,000	6	13						
4,000	7	15 1/2			14700.00			
5,000	8	13 1/2						
6,000	8	18						
8,000	8	23			22400.00			
10,000	8	29			27000.00			
12,000	8	34						
15,000	10	29						
20,000	10	37						
25,000	12	33						
30,000	12	41						
50,000	12	60						

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Holiday

Tank	Capacity	Material	Wall	Base Cost	Multiple Tank Discount	Adjusted Cost
1	12,000	Steel	Single	\$ 30,500	1.00	\$ 30,500
2	12,000	Steel	Single	\$ 30,500	0.93	\$ 28,365
3	8,000	Steel	Single	\$ 22,400	0.93	\$ 20,832
4	8,000	Steel	Single	\$ 22,400	0.93	\$ 20,832
5	8,000	Steel	Single	\$ 22,400	0.93	\$ 20,832
6	4,000	Steel	Single	\$ 14,700	0.93	\$ 13,671
						<u>\$ 135,032</u>

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Holiday

Adjusted Cost	\$	135,032
Local Multiplier		1.15
Current Multiplier		1.00
<hr/>		
Direct Cost	\$	155,287
Entrepreneurial Profit		1.05
<hr/>		
Replacement Cost New	\$	163,051
Depreciation		90%
<hr/>		
Depreciated Cost	\$	16,305

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Gas Station Case Study



Super America #5009
7630 33rd St N, Oakdale

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Super America

- Built 2015-2016
- Greenfield construction
- 16 fuel dispensers
- Convenience store
- Single-bay car wash

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Super America

- Double-walled, fiberglass USTs:
 - Tank 1 – 20,000 gallon
 - Tank 2 – 12,000 gal. & 8,000 gal. compartments
 - Tank 3 – 12,000 gal. & 8,000 gal. compartments

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Super America

TANKS

SECTION 61 PAGE 5
December 2016

UNDERGROUND FUEL STORAGE

Costs are averages for completely installed, fiberglass and steel tanks, including fittings, access manway, excavation and backfill. For multiple installations, two or more in one hole, deduct 7% for each extra tank, while considering the largest tank in the hole as the base. For difficult soil conditions, add for extra cost of excavation and bedding, as necessary. All tanks carry Underwriters' Label. Add \$7.33 to \$9.25 per cubic foot for concrete pad. Costs do not include piping. Add \$4150.00 to \$6400.00 for leakage-monitoring system per tank. Sizes are approximate averages of all tank types. For multicompartment tanks, add \$6050.00 to \$12100.00 per tank.

NOMINAL CAPACITY (gallons)	DIAMETER (feet)	LENGTH (feet)	FIBERGLASS		STEEL (stl -P3)		FIBER COATED STEEL	
			SINGLE WALL TANK COST	DOUBLE WALL TANK COST	SINGLE WALL TANK COST	DOUBLE WALL TANK COST	SINGLE WALL TANK COST	DOUBLE WALL TANK COST
300	3	5						
550	4	6						
1,000	4	11						
2,000	6	10						
3,000	6	13						
4,000	7	15 1/2						
5,000	8	13 1/2						
6,000	8	18						
8,000	8	23						
10,000	8	29						
12,000	8	34						
15,000	10	29						
20,000	10	37		79250.00				
25,000	12	33						
30,000	12	41						
50,000	12	60						

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Super America

Tank	Capacity	Material	Wall	Base Cost	Multiple Tank Discount	Adjusted Cost
1	20,000	Fiberglass	Double	\$ 79,250	1.00	\$ 79,250
2	20,000	Fiberglass	Double	\$ 89,250	0.93	\$ 83,003
3	20,000	Fiberglass	Double	\$ 89,250	0.93	\$ 83,003
						<hr/> \$ 245,255

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Super America

Adjusted Cost	\$	245,255
Local Multiplier		1.15
Current Multiplier		1.00
<hr/>		
Direct Cost	\$	282,043
Entrepreneurial Profit		1.05
<hr/>		
Replacement Cost New	\$	296,145
Depreciation		0%
<hr/>		
Depreciated Cost	\$	296,145

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Not all tanks are equal

- Holiday
 - 6 steel single-wall tanks
 - 55,000 gallon total capacity
 - \$2.96/gallon average RCN
 - \$0.30/gallon depreciated cost
- Super America
 - 3 fiberglass double wall tanks
 - 60,000 gallon total capacity
 - \$4.94/gallon average RCN

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UNDERGROUND TANKS

REPLACEMENT COST NEW (UNDERGROUND TANKS)

The following table calculates the Cost per Tank, which will then be adjusted for time and location.

TANK COST SUMMARY						
Nominal Capacity	Description	Base Cost	Concrete Pad	Leak Detection	Underground Piping	Cost per Tank
4,000 gallons	Double Wall/Fiberglass	\$29,500	\$4,278	\$4,079	\$3,725	\$41,582
6,000 gallons	Double Wall/Fiberglass	\$37,200	\$6,417	\$4,163	\$3,725	\$51,505
8,000 gallons	Double Wall/Fiberglass	\$39,300	\$8,556	\$4,246	\$3,725	\$55,827
12,000 gallons	Double Wall/Fiberglass	\$50,000	\$12,833	\$4,413	\$3,725	\$70,972

The following tables apply multipliers for time, location, indirect costs, and entrepreneurial profit to the previously calculated tank costs.

UNDERGROUND TANKS - REPLACEMENT COST NEW											
Item	Description	Area (Units)	Number of Tanks	Cost Per Tank	Current Cost Multiplier	Local Area Multiplier	Cost New	Indirect 10.0%	Adjusted Cost	Profit 15.0%	Replacement Cost New
Double Wall/Fiberglass	Size (Gallons)	4,000	1	\$41,582	0.99	1.10	\$45,283	\$4,528	\$49,811	\$7,472	\$57,283
Double Wall/Fiberglass	Size (Gallons)	6,000	1	\$51,505	0.99	1.10	\$56,089	\$5,609	\$61,697	\$9,255	\$70,952
Double Wall/Fiberglass	Size (Gallons)	8,000	1	\$55,827	0.99	1.10	\$60,796	\$6,080	\$66,875	\$10,031	\$76,907
Double Wall/Fiberglass	Size (Gallons)	12,000	1	\$70,972	0.99	1.10	\$77,288	\$7,729	\$85,017	\$12,753	\$97,770
Totals							\$239,456	\$23,946	\$263,401	\$39,510	\$302,911

DEPRECIATION (UNDERGROUND TANKS)

UNDERGROUND TANKS - DEPRECIATION											
Item	Physical Curable	Functional	Adjusted	Economic	Effective	Dep %	Age/Life	Total	Adjusted	Economic 0.0%	Depreciated
Double Wall/Fiberglass	\$0	\$0	\$57,283	33	17	51.52%	(\$29,509)	(\$29,509)	\$27,774	\$0	\$27,774
Double Wall/Fiberglass	\$0	\$0	\$70,952	33	17	51.52%	(\$36,551)	(\$36,551)	\$34,401	\$0	\$34,401
Double Wall/Fiberglass	\$0	\$0	\$76,907	33	17	51.52%	(\$39,619)	(\$39,619)	\$37,288	\$0	\$37,288
Double Wall/Fiberglass	\$0	\$0	\$97,770	33	17	51.52%	(\$50,366)	(\$50,366)	\$47,404	\$0	\$47,404
Totals	\$0	\$0	\$302,911				(\$156,045)	(\$156,045)	\$146,866	\$0	\$146,866

Brewery and Distillery Tour

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Sources

- Minnesota Statute 272.03, Subdivision 1(a)
- *Guardian Energy, LLC v. Cty. of Waseca*, No. 81-CV-10-365 et al., (Minn. T.C. Feb. 21, 2013 & May 16, 2017).
- Act of May 20, 2014, ch. 308, art. 2, § 9, 2014 Minn. Laws 1875, 1893.
- Marshall & Swift Valuation Service, Sections 17 (Sheds and Farm Buildings) & 61 (Tanks)
- MPCA Storage Tanks website
<https://www.pca.state.mn.us/waste/storage-tanks>
- Minnesota Property Tax Administrator's Manual, Modules 1 & 5

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Any Questions?



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Hoops Brewing



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Hoops Brewing



CIA Valuations Committee

Hoops Brewing



CIA Valuations Committee

Hoops Brewing



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Vikre Distillery



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Vikre Distillery



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Vikre Distillery



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