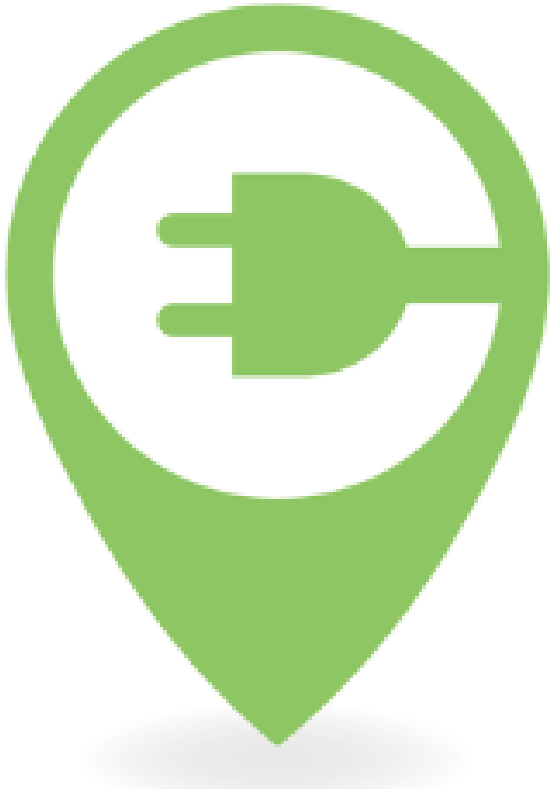
State and Regional Economic Impact:

Sustainability Movement & Electrification of Vehicles

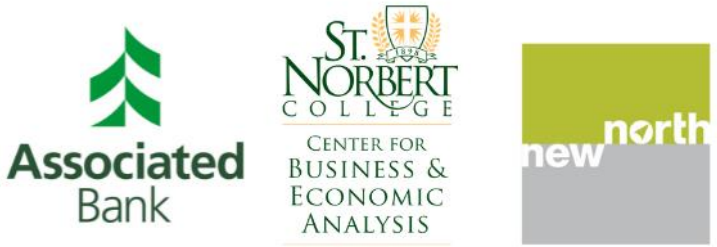


Associated Bank

St. Norbert College
Center for Business & Economic Analysis

northeast

Welcome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new north

Agenda

11:00 A.M. **Start of Program – Networking**

11:30 A.M. **Plated Lunch Served**

11:50 A.M. **Welcome – Event Corporate Sponsor**
Erik Swan, Senior Vice President, Associated Bank

11:55 A.M. **State and New North Region Economic Report**
Secretary Peter Barca, WI Department of Revenue
John Dickert, Division Administrator, WI Department of Revenue

12:10 P.M. **State Industry Perspective: Electrification Report**
Secretary Craig Thompson, WI Department of Transportation

12:25 P.M. **New North Regional Industry Perspective**
Marc Schaffer, Ph.D., Associate Professor, Director of
St. Norbert College Center for Business & Economic Analysis
Lydia Brosig, SNC CBEA Student Fellow
Devon Linssen, SNC CBEA Student Fellow

12:45 P.M. **Local Industry Perspective**
Jeremy Hock, Team Leader Engineering, Schneider

12:55 P.M. **Closing Remarks**

Associated Bank
St. Norbert College Center for Business & Economic Analysis
new north

Wisconsin – Best Fiscal Shape in 50 Years

Wisconsin Department of Revenue | Secretary Peter Barca
New North State and Regional Economic Intel Forum| October 31, 2022
|

Mission

Strengthen Wisconsin through fair tax and lottery administration, while educating and serving the public, our customers and communities.

Vision

To be the premier agency in providing innovative, accessible resources, and exceptional customer service built on a foundation of trust, inclusivity and creativity.

Values

- Integrity
- Knowledge
- Innovation
- Empathy
- Inclusivity
- Security

Fiscal state of the state – strongest in a half century

- Major tax relief
- Tax rate drop amongst the largest in the nation
- Equalized values breaking records
- Lottery credit highest ever in its 33-year history
- Best fiscal position in a half century
- Main Street and infrastructure investments

Tax Relief

One of the largest tax cuts in Wisconsin state history:

- $2 billion in individual income tax relief over the biennium
- 2.4 million filers receiving tax relief when combined with the tax rate cuts in 2021 WI Act 1
- Median family of 4 will enjoy over $800 in annual tax relief beginning tax year 2021 – from this budget along with cuts in 2019 WI Act 9 and 10.
- Combined with the tax rate cut, wage earners are keeping more of their paychecks each month

With all tax cuts Governor Evers signed into law, **86 percent of Wisconsin taxpayers see a 15 percent income tax cut.**

Other Tax Relief

- Ongoing tax relief of $1 billion annually
- 2/3 funding for education means property tax relief
- $72 million over the biennium in Tech College property tax relief
- Child and dependent care tax credit claimers will be able to claim 50% of the federal credit for WI purposes
- Exempts all "active-duty" income

Withholding Table Updates

- Withholding tables change effective January 1, 2022

- Combined with the tax rate cut, wage earners are keeping more of their paychecks each month

Governor Evers new plan to cut taxes

Helps working families afford rising costs and reduce barriers to employment

- 10% tax cut for working families
- Increase Homestead Credit income limit to $35,000 and index
- Expand Veterans and Surviving Spouse eligibility to 70% disability
- Eliminate gasoline minimum mark-up law
- Cap cost-sharing of insulin at $35
- Caregiver tax credit of up to $500
- Expand Child and Dependent Care Credit to 100% of federal credit

Wisconsin's drop in tax rank among nation's largest – tax burden hits new low

- In 2020, ranked 18th in total state and local taxes. In 1999, ranked 4th.
- If you look at taxes and fees, we ranked 31st. In 1999, 7th.
- As a percentage of personal income, went from 10.3% in 2018 to 10.07% in 2020. Lowest figure on record since 1993 and below the national average
  - Decline due, in part, to growth in the economy and personal income
  - Also due to the drop in individual income taxes and property taxes as a share of income

Wisconsin Public Schools are ranked 8th in the nation

- Wisconsin ranks 5th for quality
- Wisconsin ties with Minnesota for highest median SAT score
- Wisconsin's pupil-to-teacher ratio is 15:1 – lower than the U.S. average

Equalized Values are breaking records

- The 2022 report indicates that the increase was approximately 14%
- Largest increase since 1979
- Largest market value increase on record
- New construction values increased by $11.6 billion (2%) while market value increased by $77.3 billion (12%).
- Residential market value experienced a robust increase of 15%

Wisconsin Lottery

On a roll for homeowners

- In 2021, Lottery and Gaming Credit found on property tax bills was 38 percent higher than in 2020
- $229 average credit to homeowners in 2021
- $166 average credit to homeowners in 2020
- Highest amount ever certified for distribution in the Lottery's 33-year history
- Overall, $343.6 million available 2021. In 2020, that figure was $237 million.

State fiscal health is strongest in a half century

- FY22 Revenue collections ended $1.6 billion above estimates. On track to close FY 23 with a $5 billion surplus
- On track to close FY22 with highest-ever positive GAAP balance in state history at more than $4.4 billion
- $1.7 billion sitting in our ‘rainy day’ fund, the highest it's ever been and is at capacity

State fiscal health is strongest in a half century

Bond Rating Upgrade:

- Upgraded to AAA from AA+ by Kroll
- Upgraded to AA+ from AA by S&P
- **First AAA rating since 1982**

Bond Rating			
Moody's	S&P	Grade	Risk
Aaa	AAA	Investment	Lowest
Aa	AA	Investment	Low
A	A	Investment	Low
Baa	BBB	Investment	Medium
Ba,B	BB,B	Non Investment	High
Caa/Ca/C	CCC/CC/C	Non Investment	Highest
C	D	Non Investment	In Default

BADGER BOUNCEBACK

Through federal pandemic aid the Evers administration:

- Supported more than 100,000 small businesses, and nearly 3,000 of which have opened new storefronts on Main Streets across our state
- Directed $100 million to support Wisconsin farmers through our Farm Support Program. In one round alone, we helped more than 20,000 farmers in more than half of Wisconsin's 72 counties

BADGER BOUNCEBACK

$1 billion in direct support for:

- small businesses
- farmers
- tourism, lodging and entertainment industries

Governor Evers Main Street BounceBack

- Governor Evers announced $100 million in grants
- $10,000 grants to locate in vacant commercial spaces
- New and existing business and nonprofits
- Grants made in all 72 counties
- Program extended until 12/31/2022

For more info: wedc.org

BADGER BOUNCEBACK

Work left to do after Budget

- Economic Development
  - $200 million to assist small businesses with retaining and rehiring employees
  - $100 million venture capital fund of funds to spur long-term growth across the state
- Personal Property Tax repeal
  - Left $200 million in budget for the repeal
  - Drafted bill that reduces litigation risk and funds local governments
- Badger Care
  - Provide coverage to tens of thousands of uninsured Wisconsinites – a savings of **$630M** in state dollars
- Workforce Housing $500 million bonding

Business Development and Government Relations

Research & Policy Division

- DOR compiles local, state, and federal economic and tax data
- Review most bills introduced to the legislature and provide fiscal estimates
- Dozens of reports, the Wisconsin Economic Outlook, Interactive Data Visualizations: DORViz.wi.gov

Thanks!

Any questions?

DORSecretary@wisconsin.gov

New North Regional Data

WI Dept of Revenue | State and Local Finance Administrator John Dickert

New North State and Regional Economic Intel Forum| October 31, 2022

Topics

- Population
- Employment
  - Share of Manufacturing, Leisure & Hospitality Employment
  - 2021 Employment
- Forecast for MSAs

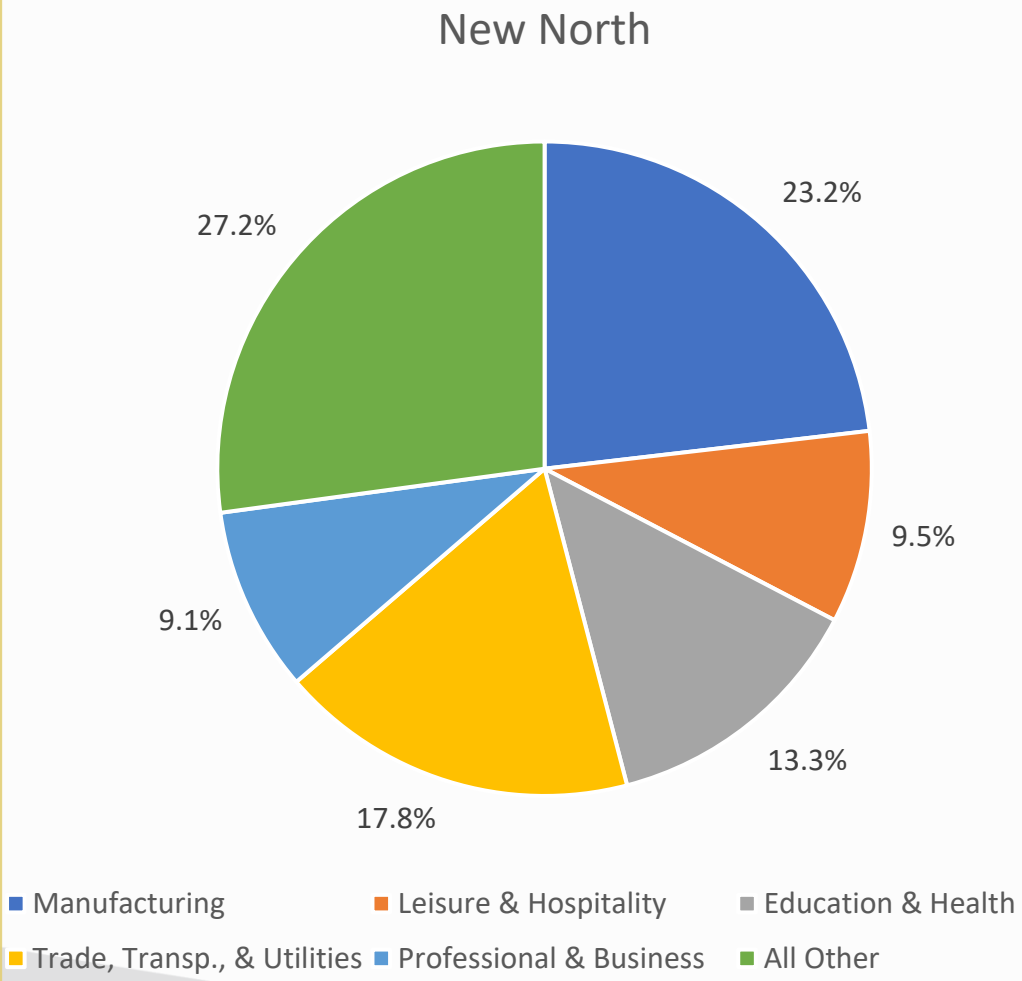
Population of New North Counties

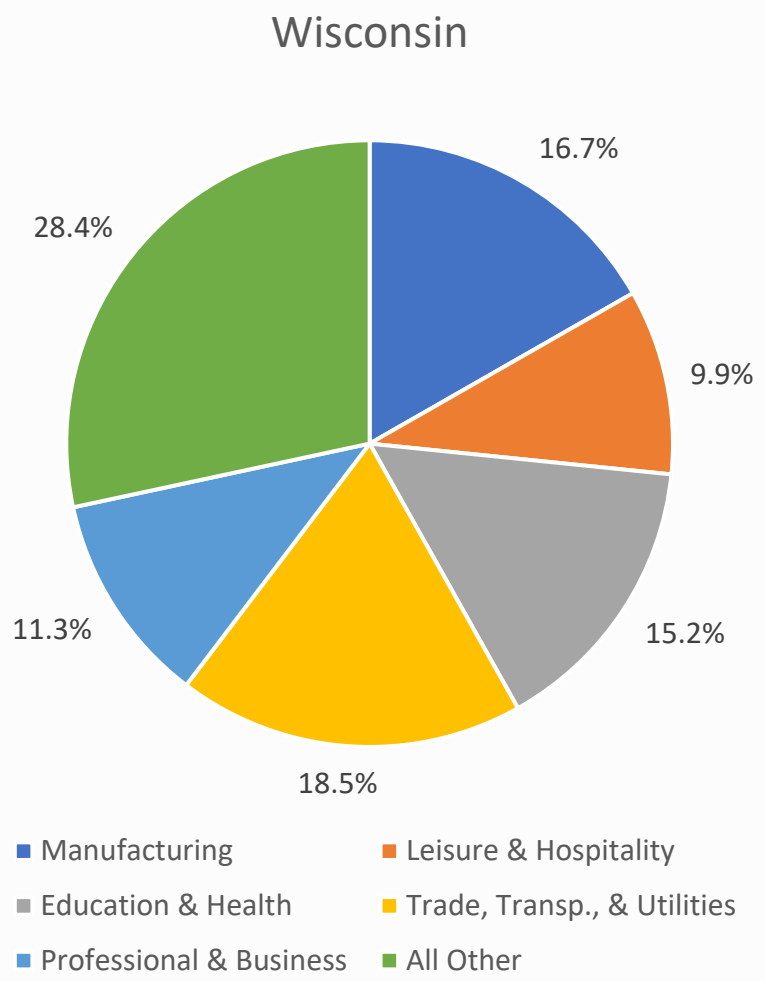
- New North county population growth:
  - 903,000 in 1969
  - 1,258,000 in 2020
- Most of the increase between 1970 and 2000
- Share of the population steady over past 20 years

Population breakdown

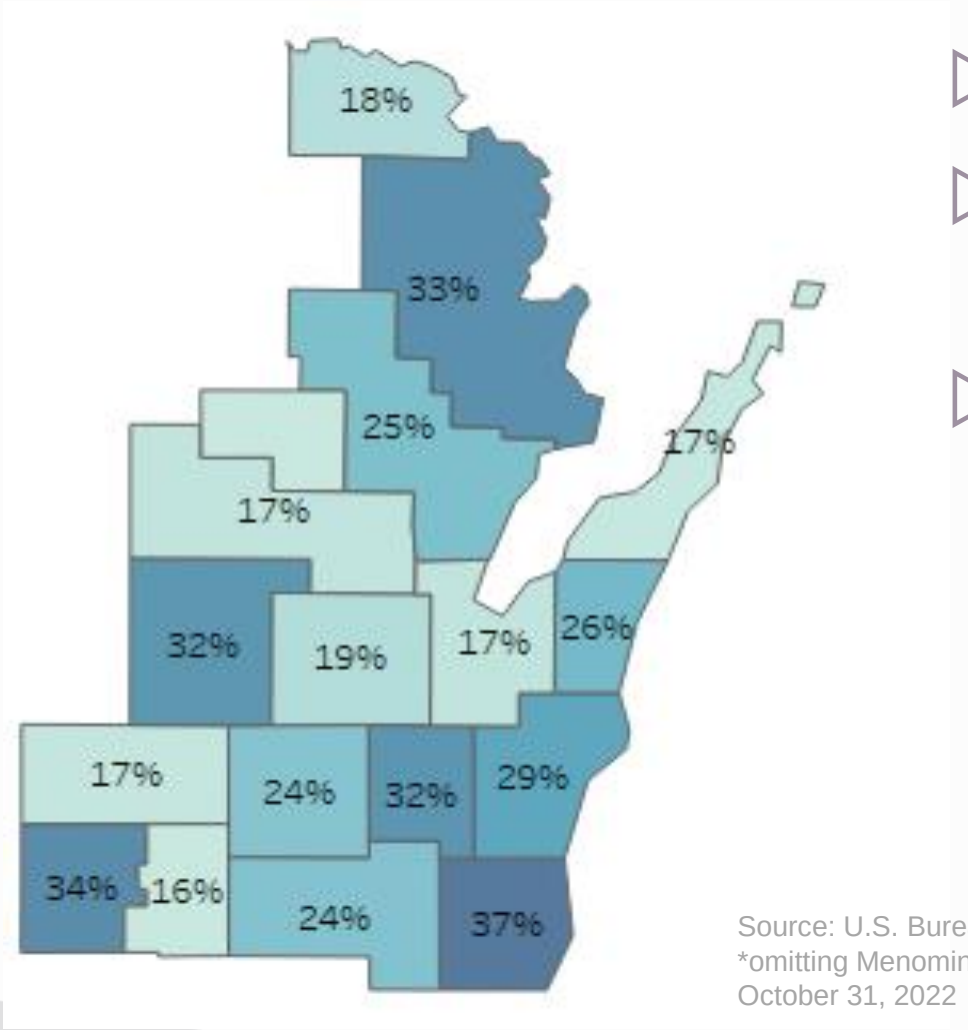
- Brown County
  - 264,000 residents in 2020
  - 21% of regional population
  - 4.5% of state population
- Outagamie County
  - 188,000 residents
  - 15% of regional population
  - 3.2% of the state population
- Fastest growing over past decade
  - Outagamie (up 6.7%) Brown County up (6.5%)
- Menominee County, among smallest counties
  - Up 6.5% (state's population increased 2.5% over same period)
- Population down since 2010
  - Marinette (-3.4%) Waupaca (-3.3%) Manitowoc (-3.2%)

Manufacturing is strong in New North





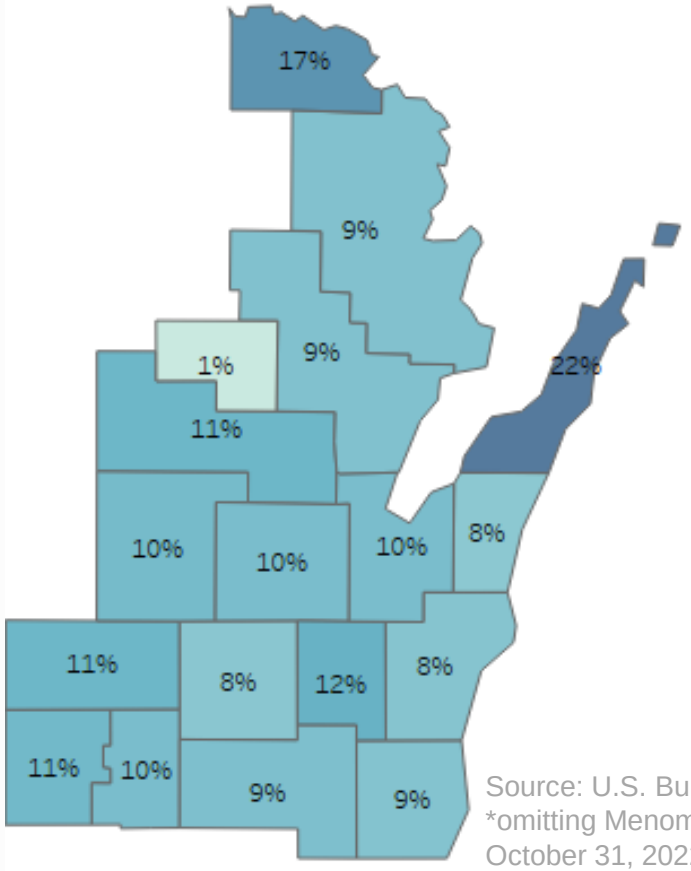
Manufacturing Employment



- 17% of employment in WI
- 23.2% of total employment* in New North
- Share of total employment:
  - 16% in Marquette - lowest
  - 37% in Sheboygan – highest

Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment & Wages, 2019 Average
*omitting Menominee County due to data suppression
October 31, 2022

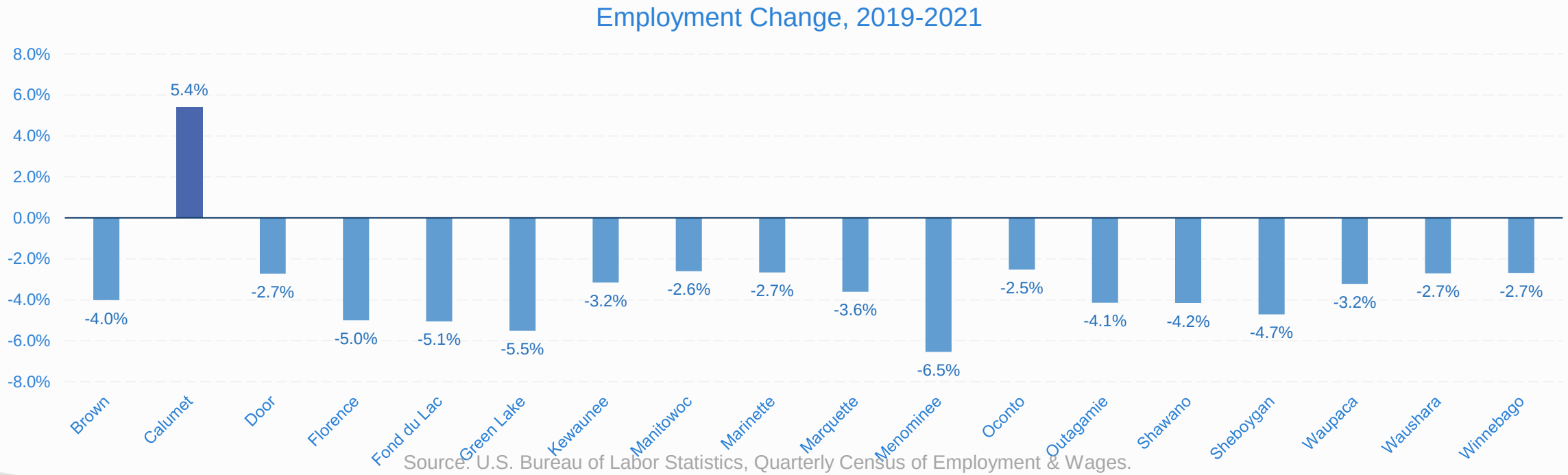
Leisure and Hospitality Employment



- 9.9% of Wisconsin employment.
- 9.5% of employment in the New North*
- Share of total employment is higher in counties with a larger tourism sectors
  - Door - 22%
  - Florence - 17%

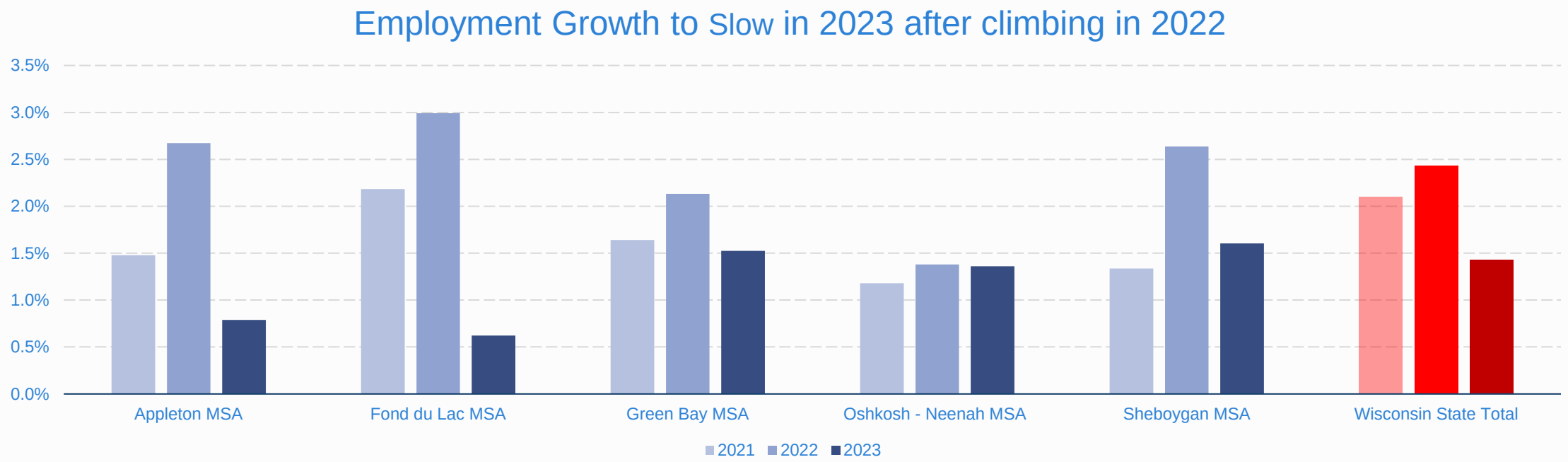
Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment & Wages, 2019 Average
*omitting Menominee County due to data suppression
October 31, 2022

Closer to pre-pandemic employment levels(2021 Average)



Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment & Wages. October 31, 2022

Employment Forecast

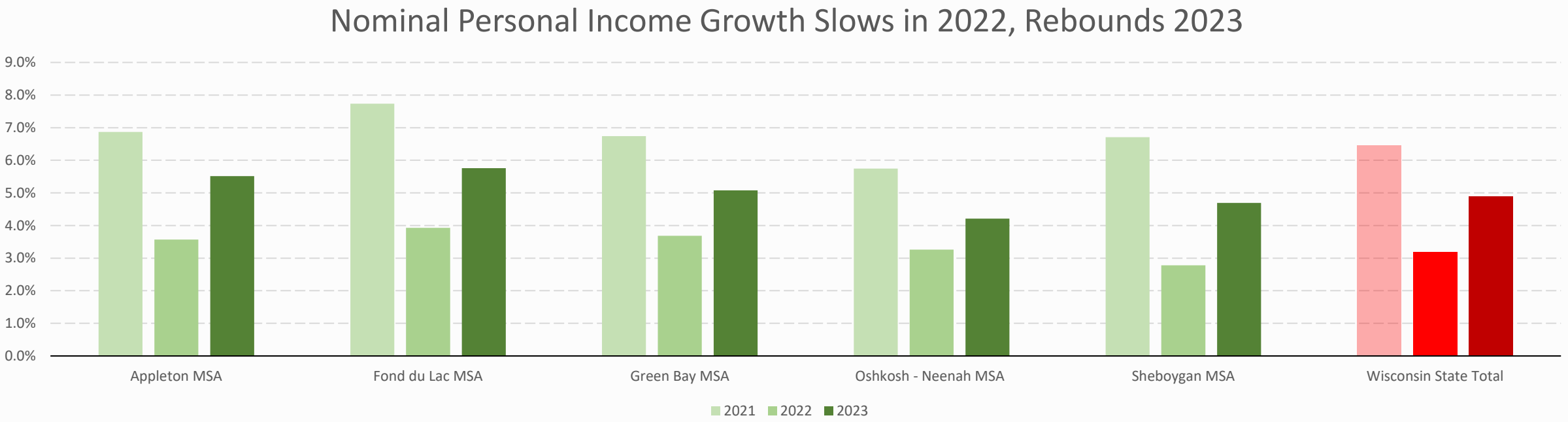


Source: U.S. Bureau of Labor Statistics, Current Employment Statistics and the Wisconsin Department of Revenue.
October 31, 2022

Employment Growth Compared to State Average

- 2022
  - Fond du Lac – 3.0%
  - Appleton – 2.7%
  - Sheboygan – 2.6%
  - State – 2.4%
- 2023
  - Sheboygan – 1.6%
  - Green Bay 1.5%
  - Oshkosh – 1.4%
  - State – 1.4%

Personal Income Forecast



Source: U.S. Bureau of Economic Analysis and the Wisconsin Department of Revenue.
October 31, 2022

Income Growth Compared to State Average

- 2022
  - Fond du Lac – 3.9%
  - Green Bay – 3.7%
  - Appleton – 3.6%
  - Oshkosh - Neenah – 3.3%
  - State - 3.2%
- 2023
  - Fond du Lac – 5.8%
  - Appleton – 5.5%
  - Green Bay – 5.1%
  - State – 4.9%

Thank you!

Email: doreconomists@Wisconsin.gov

Reports and Data Visualizations: DOR Reports (wi.gov)

WIEV

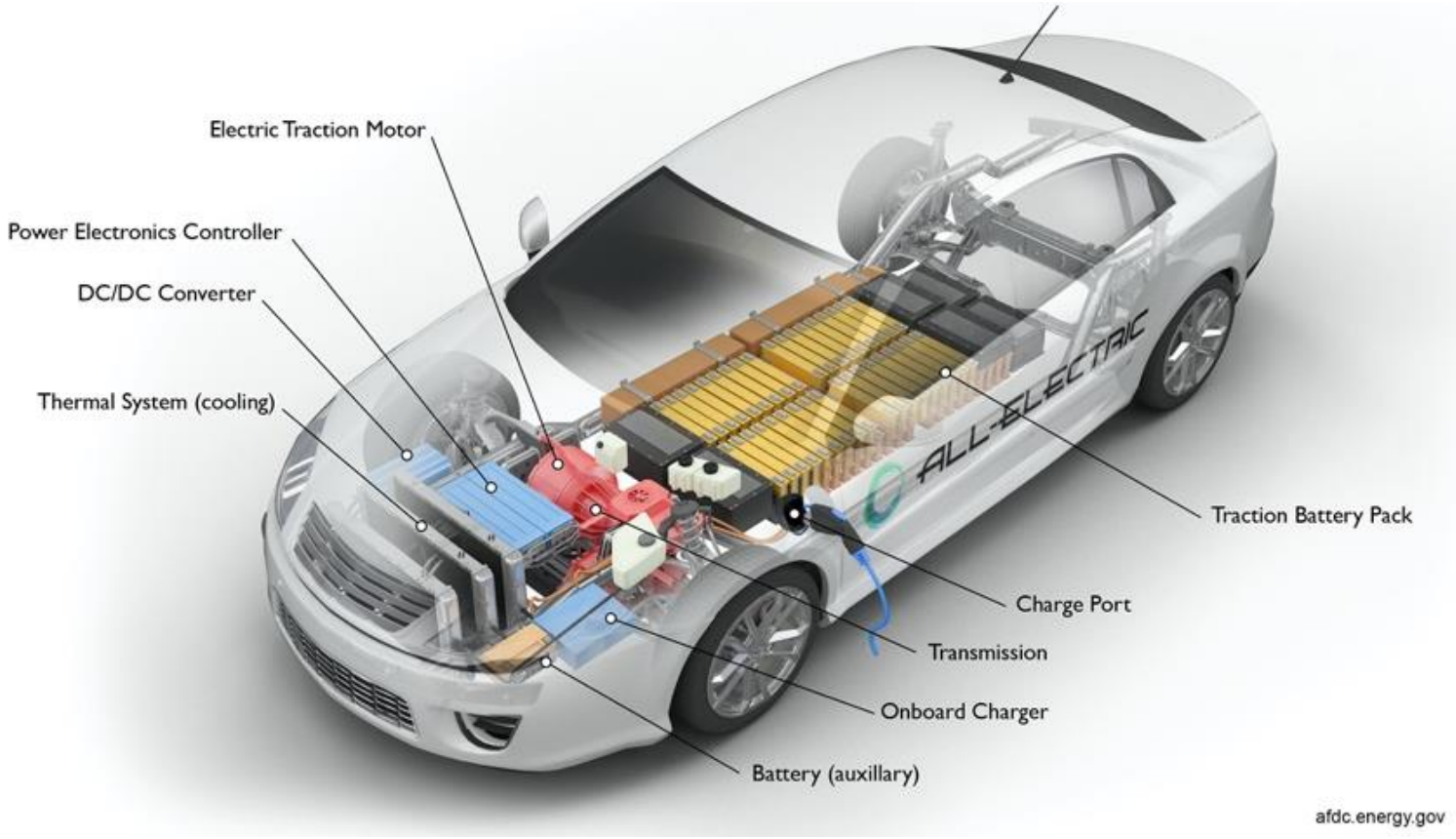
Wisconsin Electrification Initiative

Craig Thompson, Secretary

Wisconsin Department of Transportation

ELECTRIC VEHICLES (EVs)

- Battery stores electrical energy that powers the motor
- Battery charged by plugging in to outside electric power source
- Zero tailpipe emissions
- Driving range of 100 to over 400+ miles



EVs have a battery instead of a gasoline tank and an electric motor instead of an internal combustion engine.

Source: Alternative Fuels Data Center

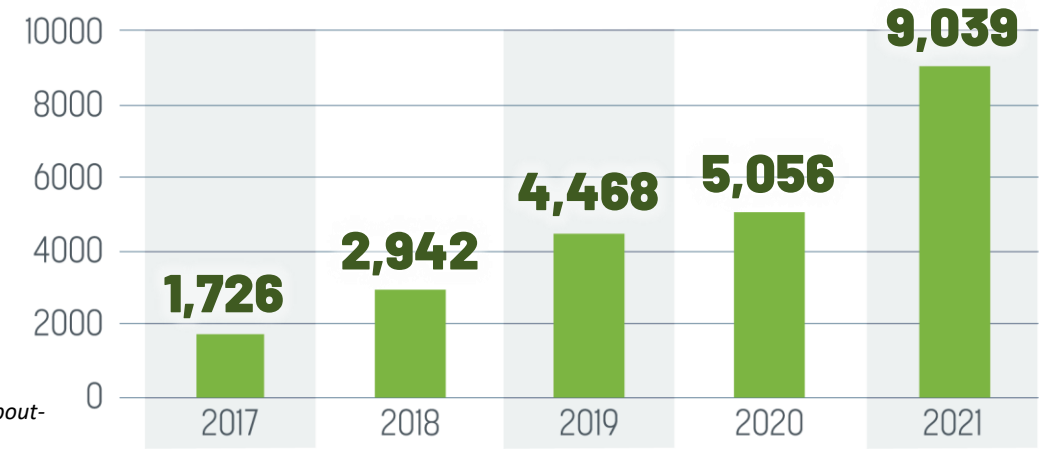
BATTERIES

- Energy storage systems, such as batteries, are essential for electric-drive vehicles
- The predominant battery chemistry used in commercial EVs today is **lithium-ion** batteries.

Source: Alternative Fuels Data Center

ELECTRIC VEHICLES

EVs registered in Wisconsin

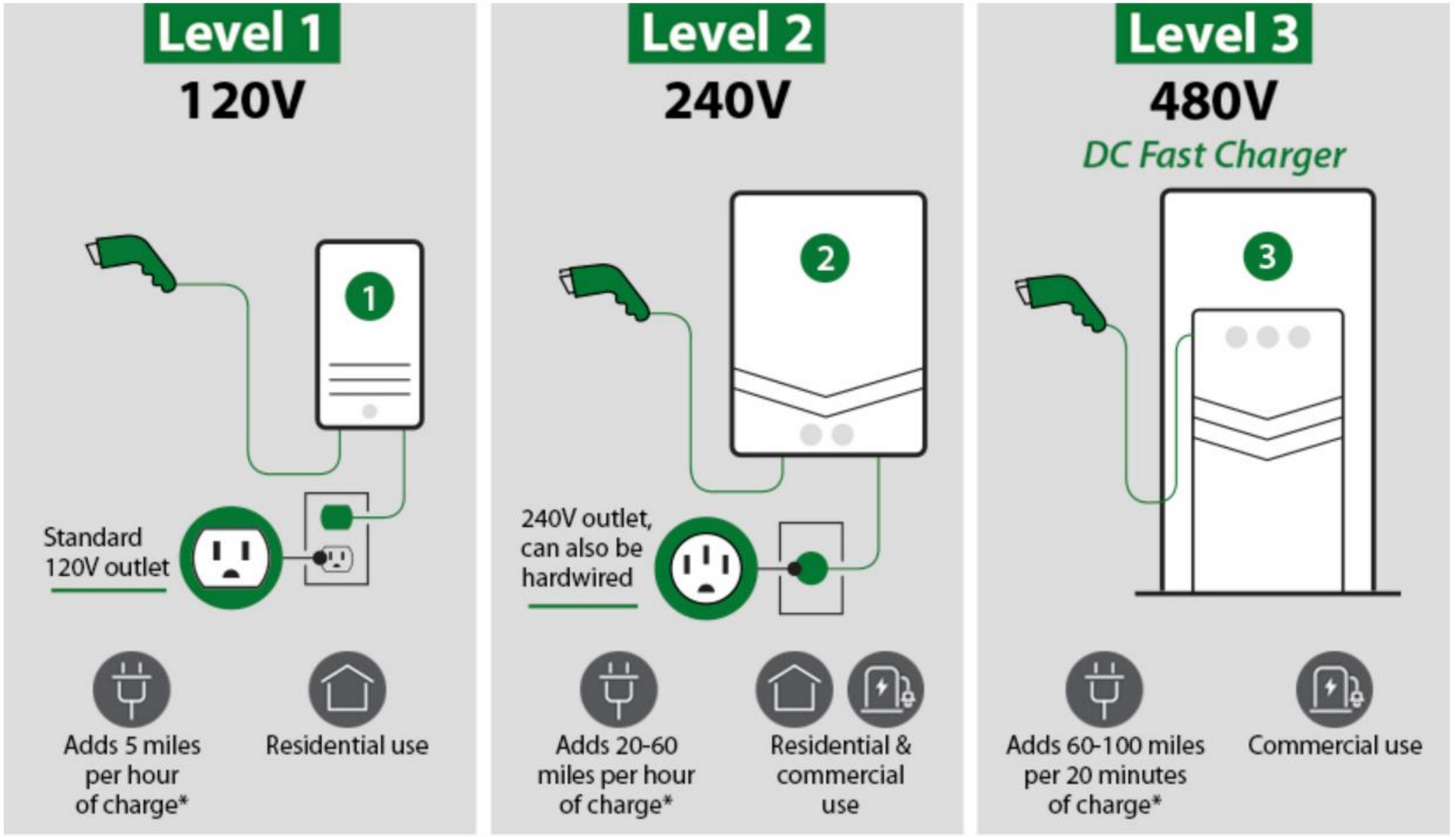


Source: https://wisconsindot.gov/Pages/about-wisdot/newsroom/statistics/veh-info.aspx

150+ new EV models are anticipated to hit the market from 2023 to 2028.

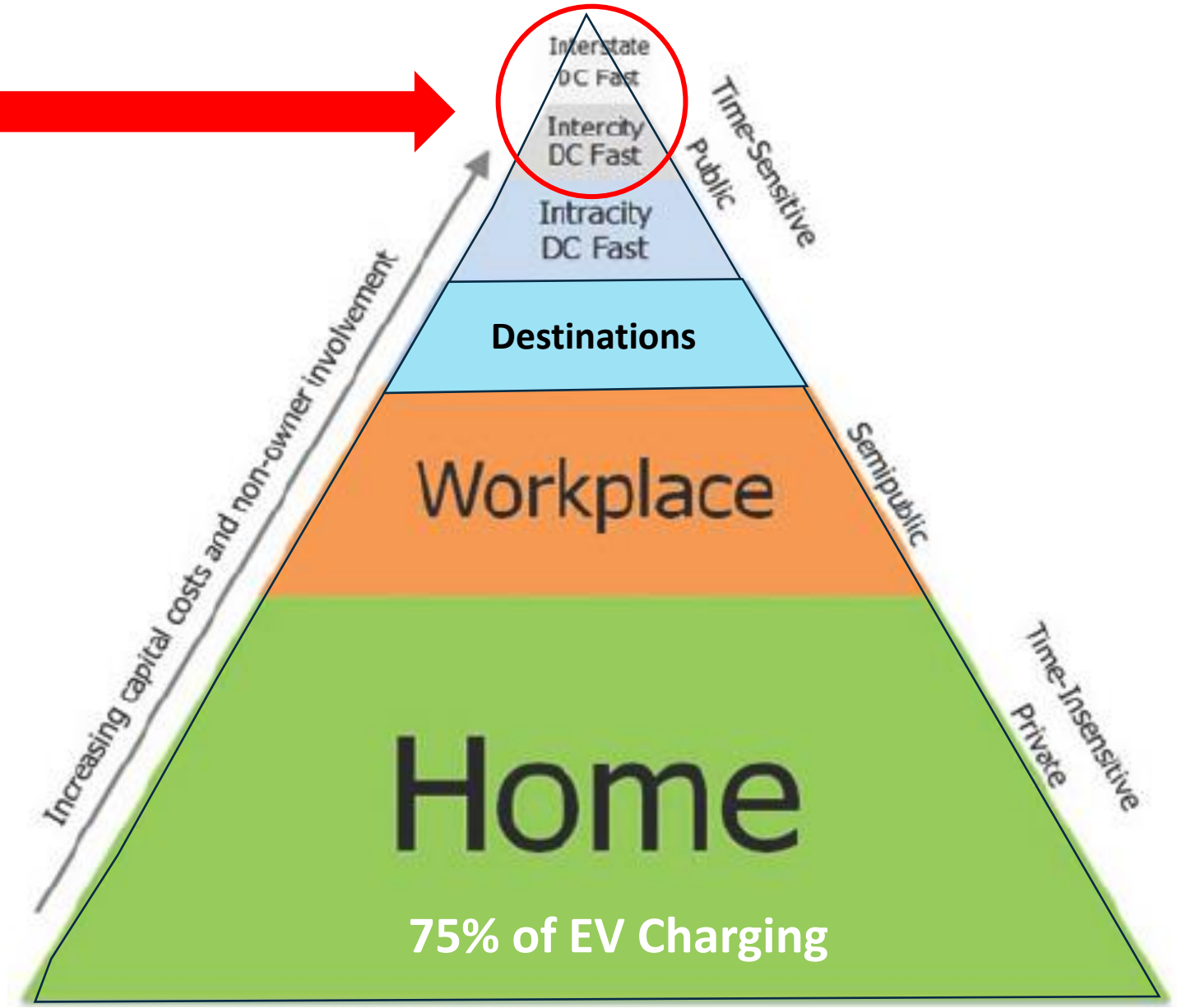
Source: www.renewwisconsin.org/wp-content/uploads/2021/04/EV-Market-Outlook-4.2021.pdf

Source: University of Michigan's Transportation Research Institute. https://climatechange.wi.gov/



* *Estimated. Actual charge times may vary.*

NEVI & WIEV


Interstate DC Fast
Intercity DC Fast
Intracity DC Fast
Destinations
Workplace
Home
75% of EV Charging
Increasing capital costs and non-owner involvement
Time-Sensitive
Public
Semipublic
Time-Insensitive
Private

BIPARTISAN INFRASTRUCTURE LAW

EV FUNDING OPPORTUNITIES

$5 billion

National Electric Vehicle Infrastructure (NEVI) Formula Program

- $78.65 million to Wisconsin over five years
- $11.64 million is Wisconsin's first allocation

$2.5 billion

EV and other alternative fuel infrastructure discretionary grant funds

- Corridor Charging Grant Program ($1.25 billion)
  Strategically deploy publicly accessible EV charging stations and other alternative fuel infrastructure along Alternative Fuel Corridors.
- Community Charging Grant Program ($1.25 billion)
  Priority given to projects that expand access to alternative fueling infrastructure within rural areas, low-and moderate-income neighborhoods, and communities with a low ratio of private parking spaces.

NEVI PROGRAM CRITERIA

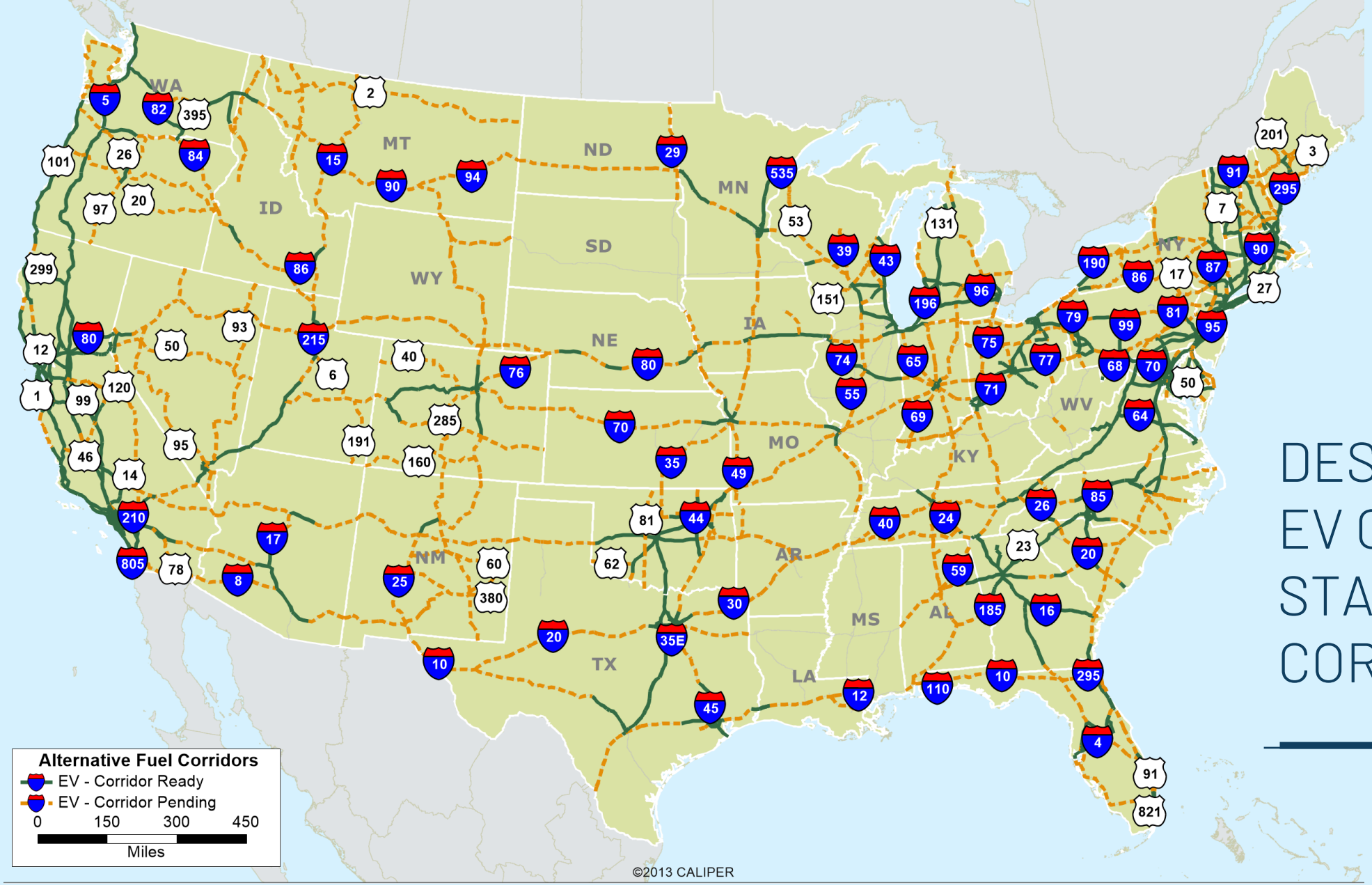
- Charging stations installed **every 50 miles along** the State's Alternative Fuel Corridors (AFC) within **1 travel mile of a highway intersection or exit.**

- EV charging station locations have a minimum of **four ports** that can charge a minimum of **150kW** simultaneously.

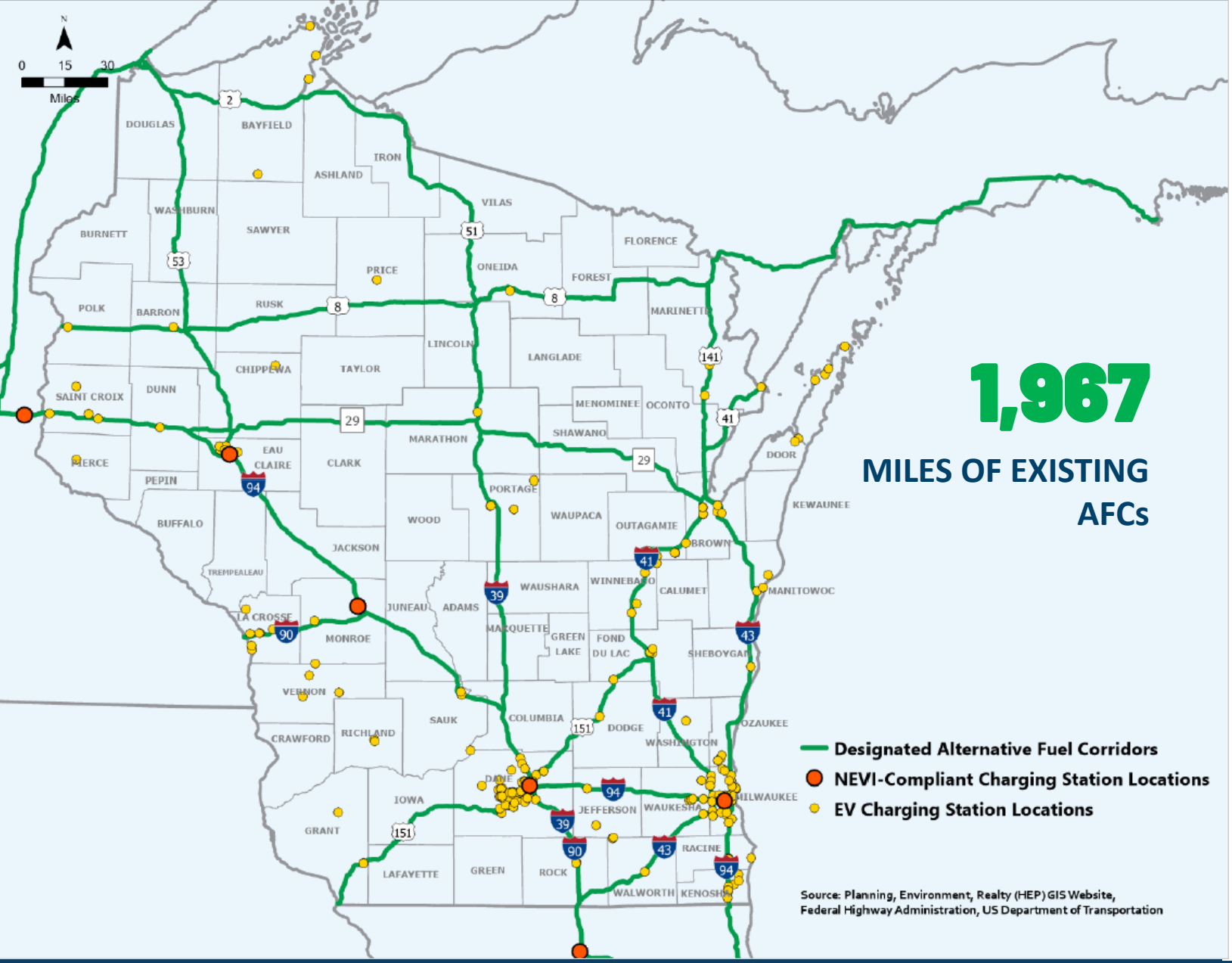
PLAN OBJECTIVES

The WEVI Plan as approved on 9/14/2022

- Provides for the use of NEVI funds to incentivize private investment in Electric Vehicle Charging Infrastructure.
- Determines potential preferred locations to support charging infrastructure on Wisconsin's Alternative Fuel Corridor system.
- Details our stakeholder outreach that provided critical input in plan development.
- Outlines program structure including a process for competitive grants and contract development to ensure ongoing maintenance and operation of charging stations funded by the program.



DESIGNATED EV CHARGING STATION CORRIDORS



WISCONSIN'S EXISTING EV INFRASTRUCTURE

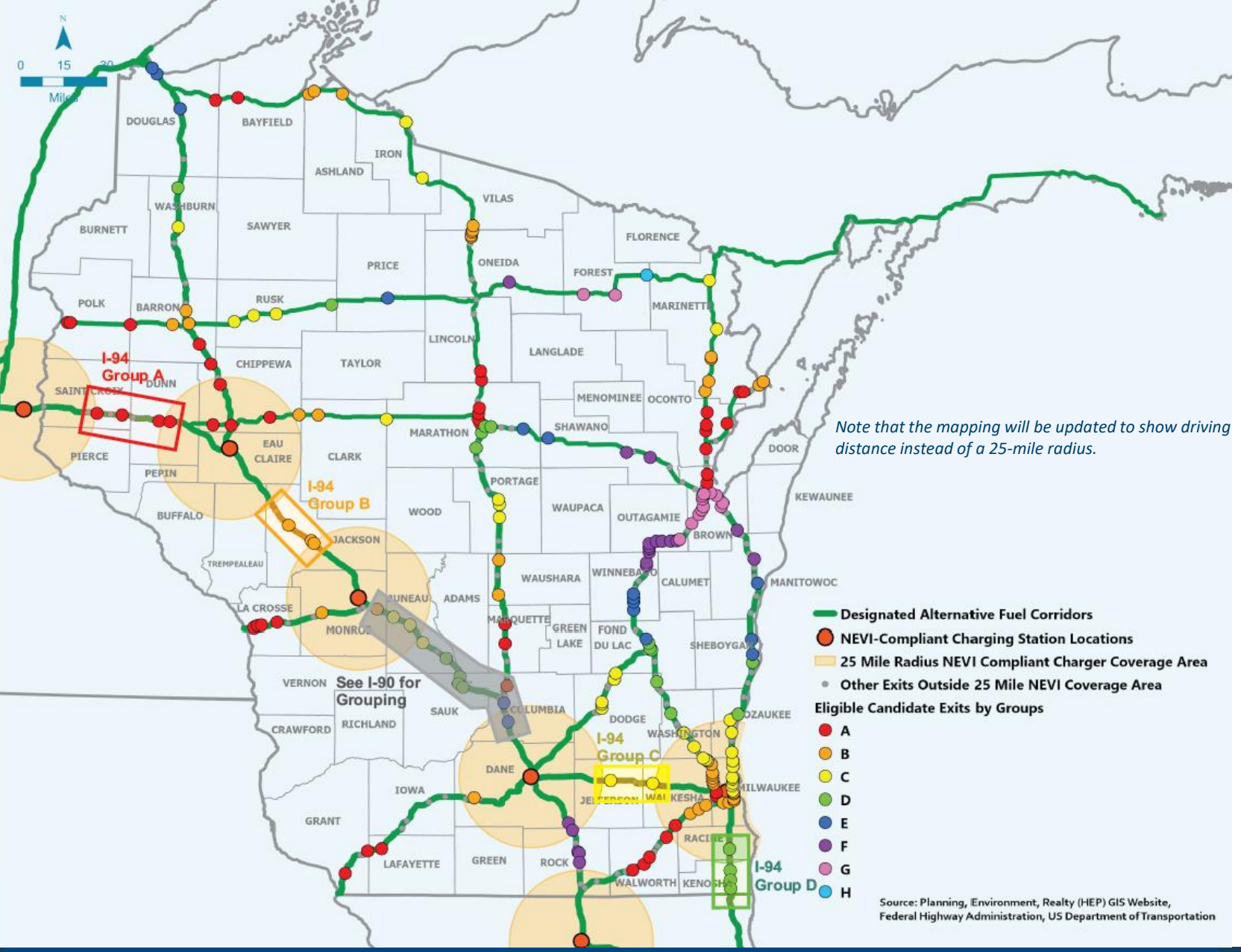
306 Total publicly available charging station locations

164 Charging station locations within one mile of AFC exit or intersection

4 NEVI-compliant charging station locations

79 Tesla-only charging station locations (not mapped)

Source: https://afdc.energy.gov/stations/states. Accessed on April 21, 2022



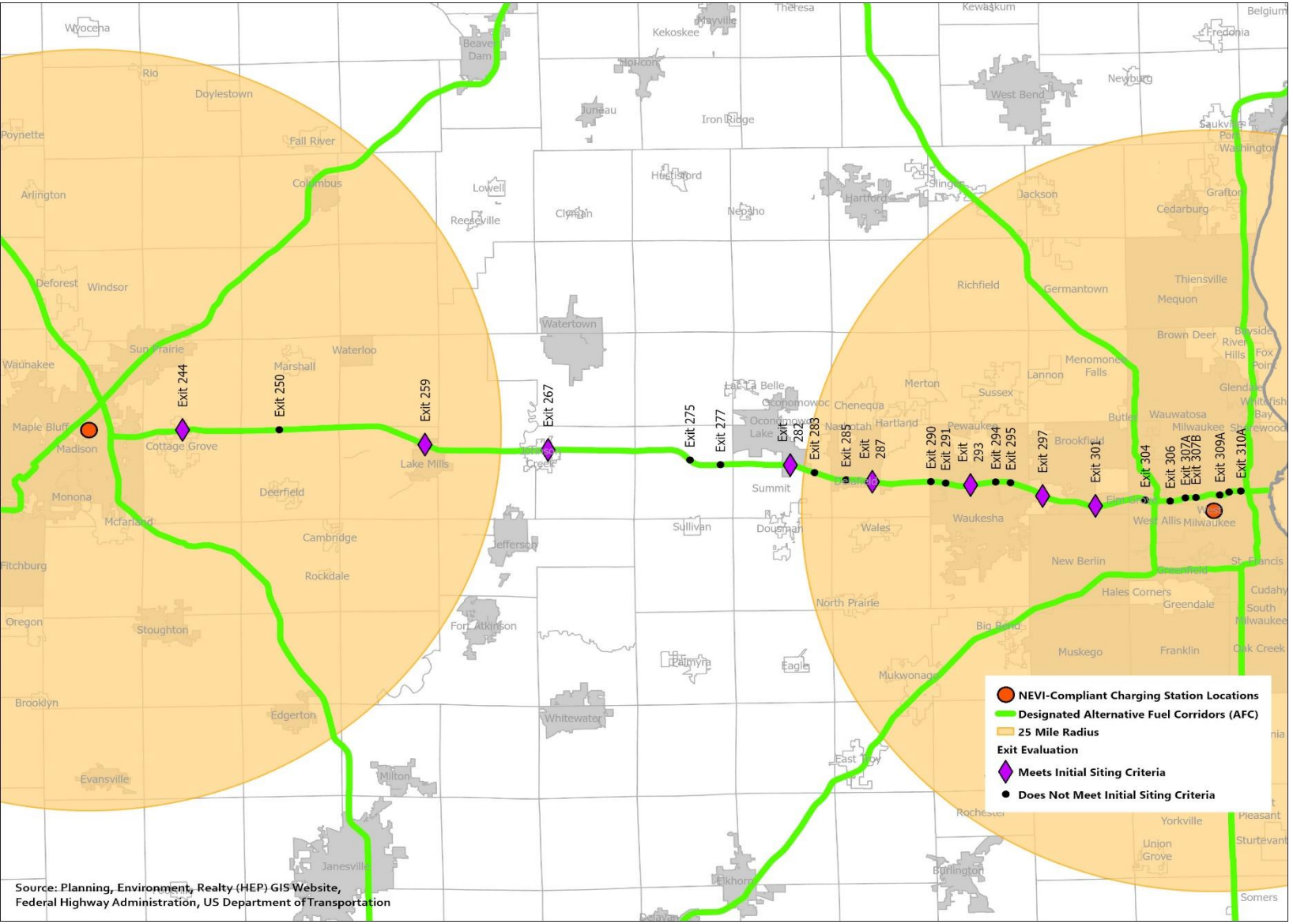
Note that the mapping will be updated to show driving distance instead of a 25-mile radius.

Identify NEVI-compliant EVSE on Interstates and AFCs

1 Identify existing NEVI-compliant charging sites.

- Ensures WisDOT can use funding to maximize coverage of Wisconsin.
- Minimizes risk of causing lower utilization at existing compliant stations in near-term.

2 Create a 25-mile driving distance buffer around NEVI-compliant sites.



Identify gaps and exits eligible to fill gaps

3 Identify gaps in charging coverage areas.

- Wherever there is a gap between two 25-mile buffers, there will need to be a NEVI compliant charging station.

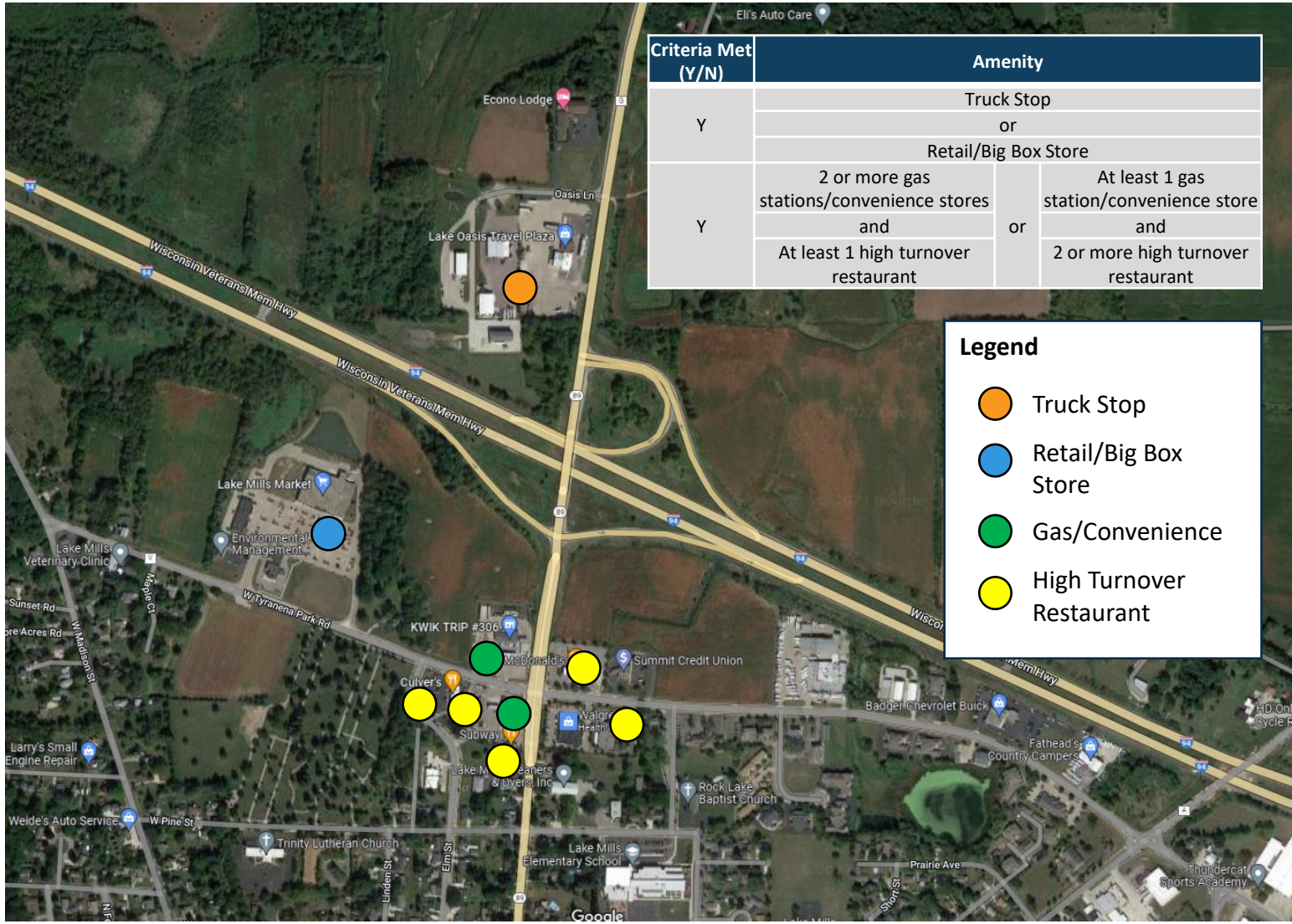
4 Identify all exits within the gaps.

- In most cases, each gap will have multiple eligible exits.
- Because of this, WisDOT will need to develop objective prioritization criteria for grant program scoring.

Higher priority exit example

WisDOT's plan and future grant program will seek to prioritize locations with:

- Multiple prospective site hosts
- Multiple destination amenities
  - » Gas Stations
  - » Truck Stops
  - » Restaurants
  - » Retail
- Available Utility Power Capacity
- Site Readiness
- Accessibility
- Etc.



Criteria Met (Y/N)	Amenity		
Y	Truck Stop		
	or		
	Retail/Big Box Store		
Y	2 or more gas stations/convenience stores	or	At least 1 gas station/convenience store
	and		and
	At least 1 high turnover restaurant		2 or more high turnover restaurant

Legend

- Truck Stop
- Retail/Big Box Store
- Gas/Convenience
- High Turnover Restaurant

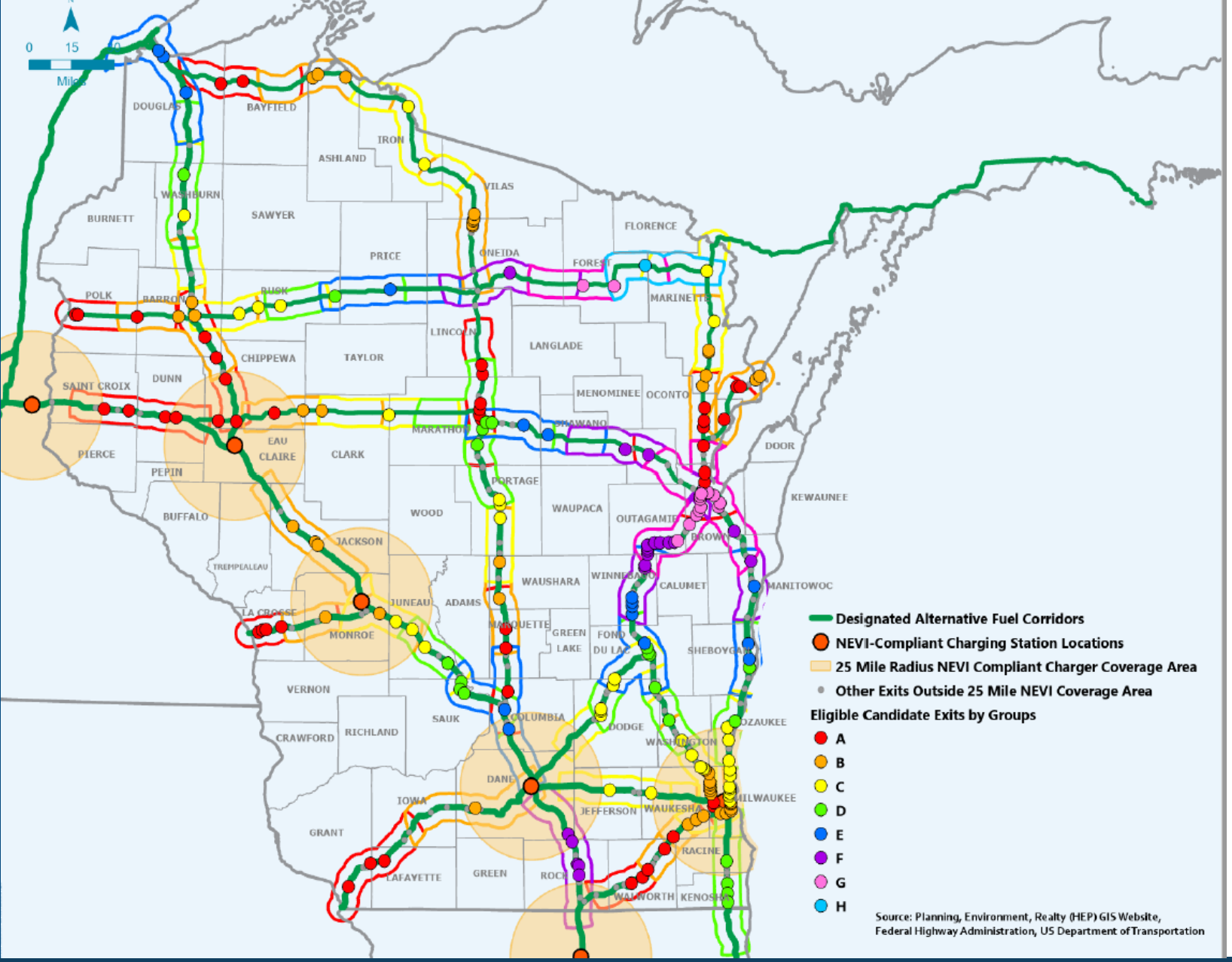
Low priority exit example

WisDOT will not eliminate or define lower-prioritized exits as ineligible for NEVI Funds.

Priority/scoring will come into play in cases where both low and high priority exits apply for NEVI funded projects.

In these cases, WisDOT will have objective scoring criteria to award sites based on the level of amenities and readiness.

Criteria Met (Y/N)	Amenity		
N	Truck Stop		
	or		
	Retail/Big Box Store		
N	2 or more gas stations/convenience stores	or	At least 1 gas station/convenience store
	and		and
	At least 1 high turnover restaurant		2 or more high turnover restaurant



Identify "Approximate Locations" of NEVI-compliant EVSE on Interstates and AFCs

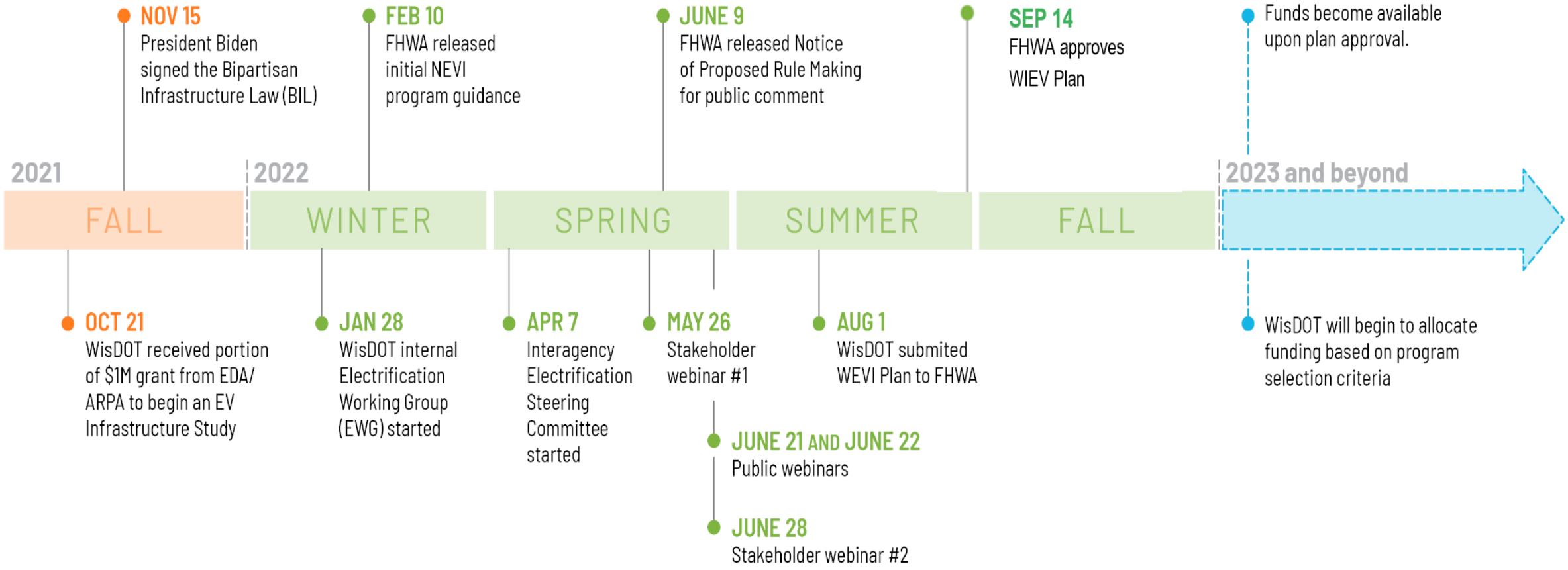
5 200 viable exits identified as potential charging sites

- Based on available amenities AND
- Likelihood of 3-Phase commercial utility power based on types and numbers of commercial businesses.
- *Wisconsin is continuing utility coordination on power availability.*

6 There are 61 groups of exits.

- This ensures that regardless of which exit in a group is chosen, a NEVI-compliant EV charging station will provide for the 50-mile gap coverage.
- *Explained in detail in Ch. 4 Deployment, WEVI Plan*

Planning Process



KEY ROLES and RESPONSIBILITIES

Federal

- **FHWA:** Determine NEVI policy and state guidance, approve NEVI plans, disseminate funding to states.
- **Joint Office of Energy & Transportation (JOET)** Provides expertise to deploy a network of electric vehicle chargers and zero-emission fueling infrastructure.

State Agencies

- Develop the Wisconsin Electric Vehicle Infrastructure Plan.
- Determine policies, technical specifications, contracting processes, and grant regulations.
- Review private sector site applications and allocate funding.

Private Sector

- Includes: Charging station suppliers, owners, operators, and operations & maintenance companies
- Apply for grants to build and maintain Wisconsin's charging station network

Local, Tribal & Regional Govts

- Coordinate electric vehicle infrastructure activities to develop a robust and equitable charging station network in Wisconsin.

Utilities

- Supply electric power
- Work with sites to design and build connections
- Potential EV charging station and infrastructure owners/operators

WIEV

Wisconsin Electrification Initiative

ST. NORBERT COLLEGE

CENTER FOR BUSINESS & ECONOMIC ANALYSIS

State and Regional Economic Intel Forum:

Electrification of Vehicles

CBEA Research Analysts
Lydia Brosig
Devon Linssen

Marc Schaffer, PhD
Executive Director, CBEA
Professor of Economics & Data Analytics

Overview

- General Trends in EV
- Consumer Perspectives
- Producer Perspectives
- Infrastructure
- New North Anecdotes
- Key Takeaways

Overview

- General Trends in EV
- Consumer Perspectives
- Producer Perspectives
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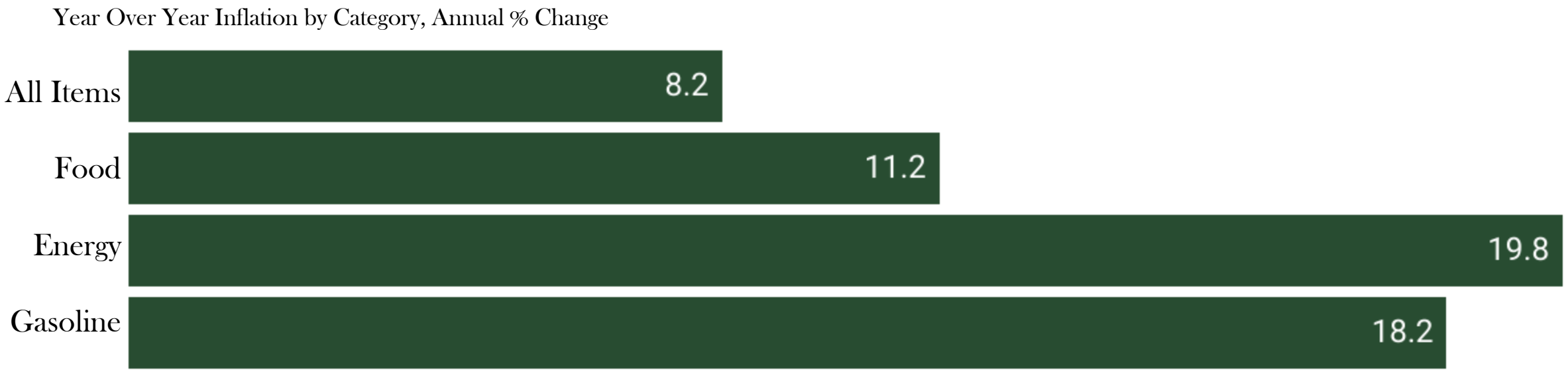
- Key Takeaways

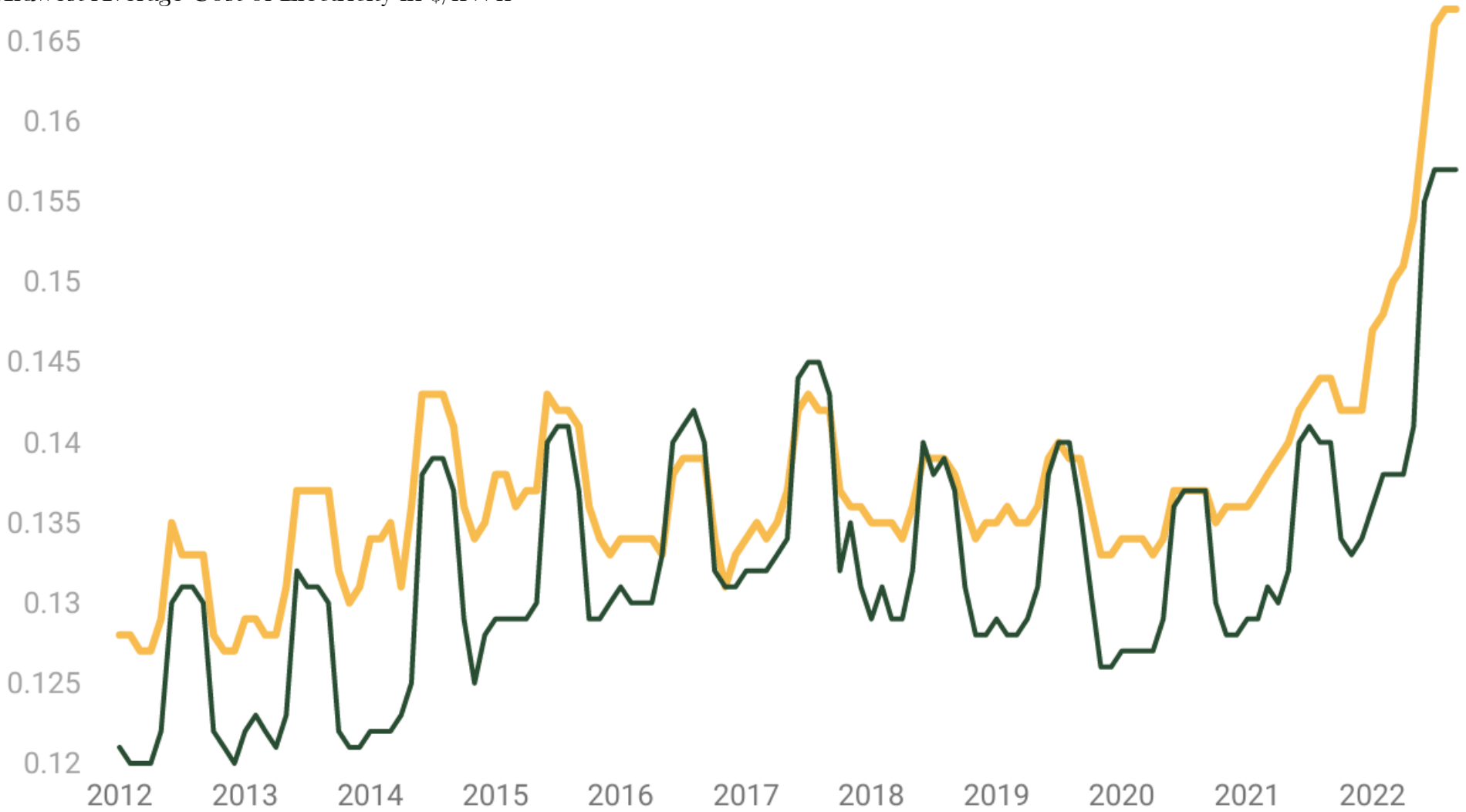
US inflation is still running hot, especially in the energy and gasoline categories



Source: BLS

However, Midwest electricity costs come in notably lower than the national average, with a strong seasonal cycle

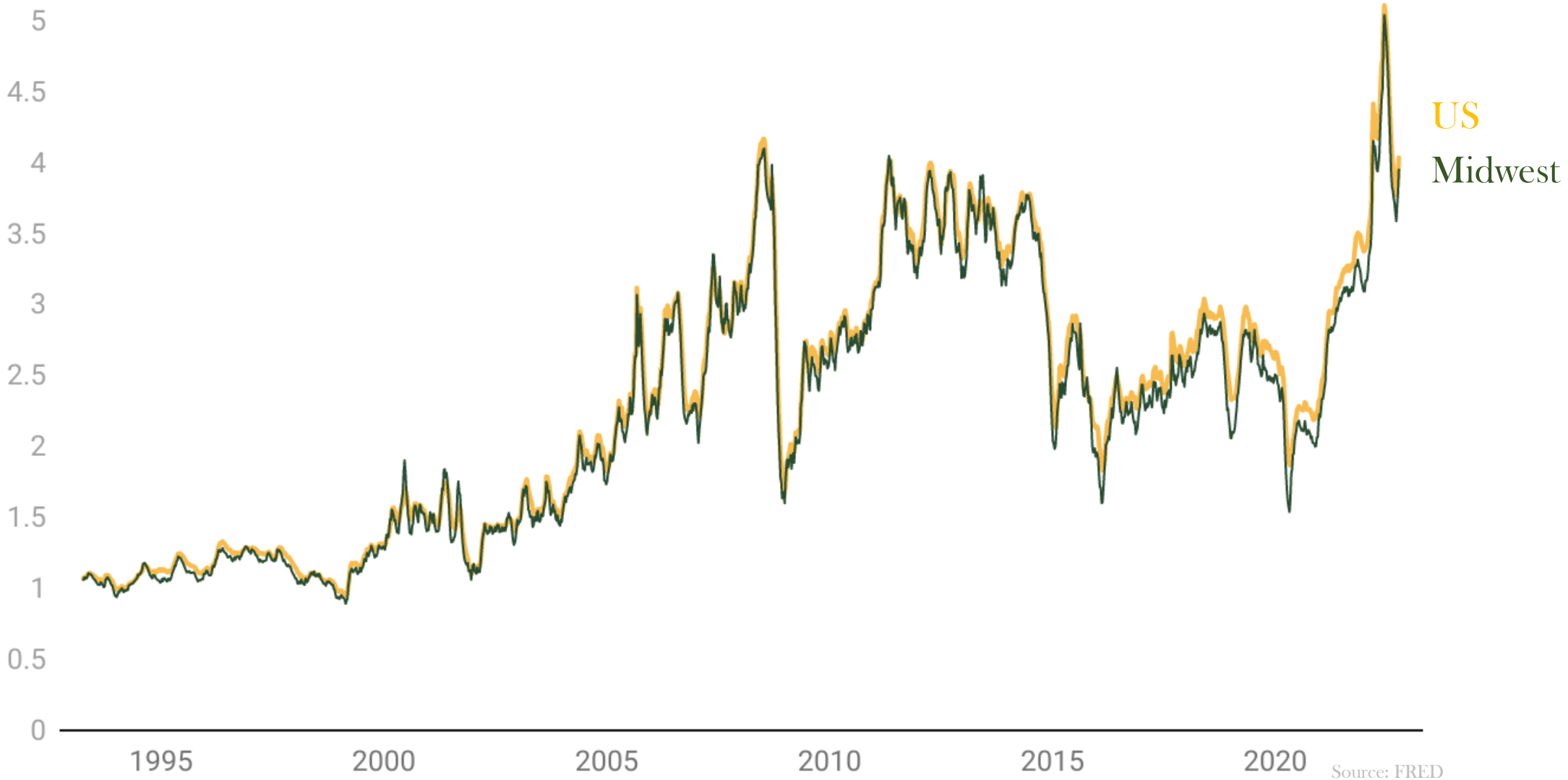
US vs. Midwest Average Cost of Electricity in $/kWh



Source: FRED

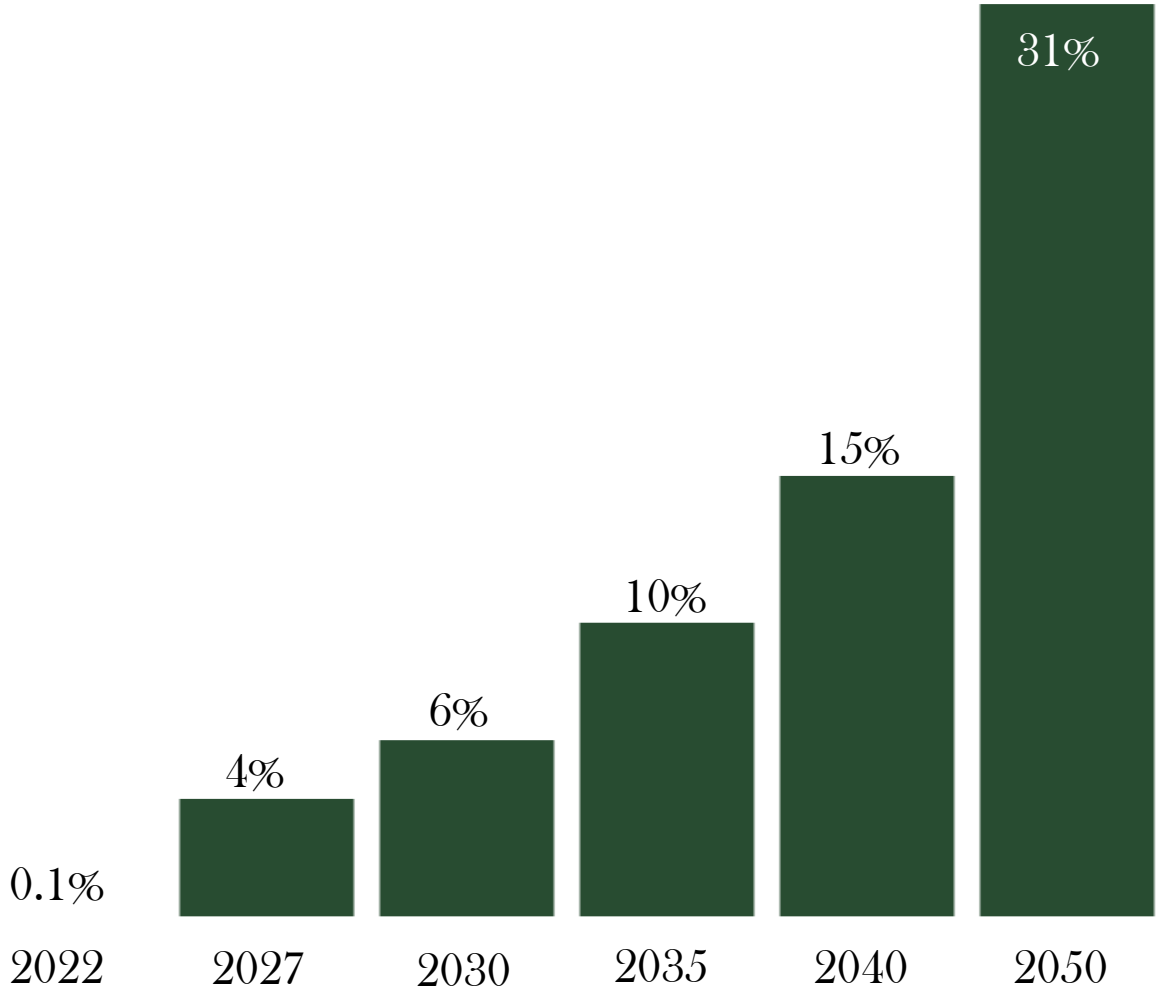
The Midwest also trends slightly lower than the national average for gasoline costs, but still closely follows the pattern

US vs. Midwest Average Cost of Gasoline in $/gallon



Despite these surging gas and energy prices, Wisconsin is projected to continue seeing steady increases in EVs on the road

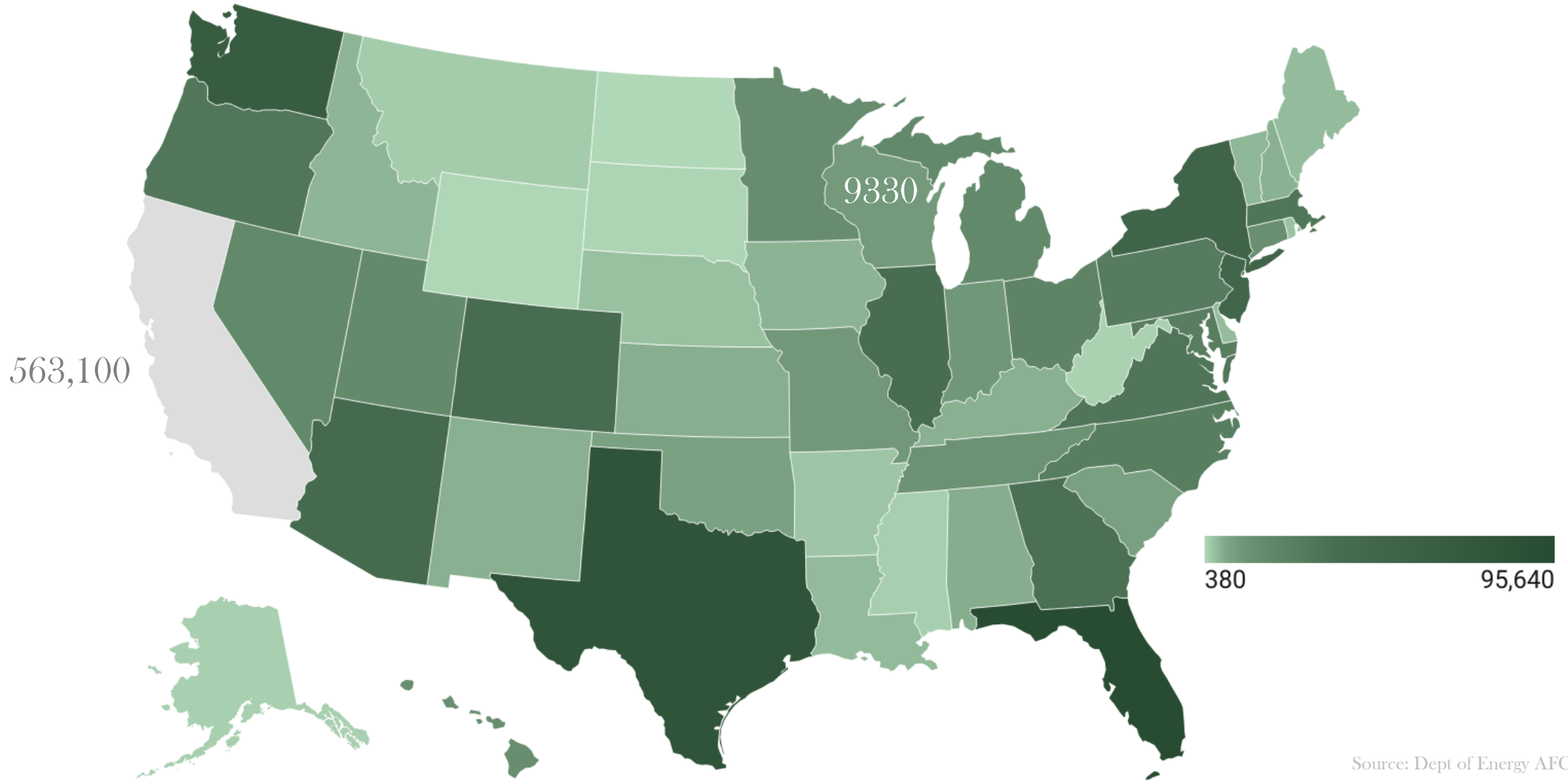
Projected Wisconsin Electric Vehicle Registrations as a Percent of Total Fleet



Source: WIEV Initiative

Wisconsin sees a lower number of registrations compared to other states, especially those on the coasts...

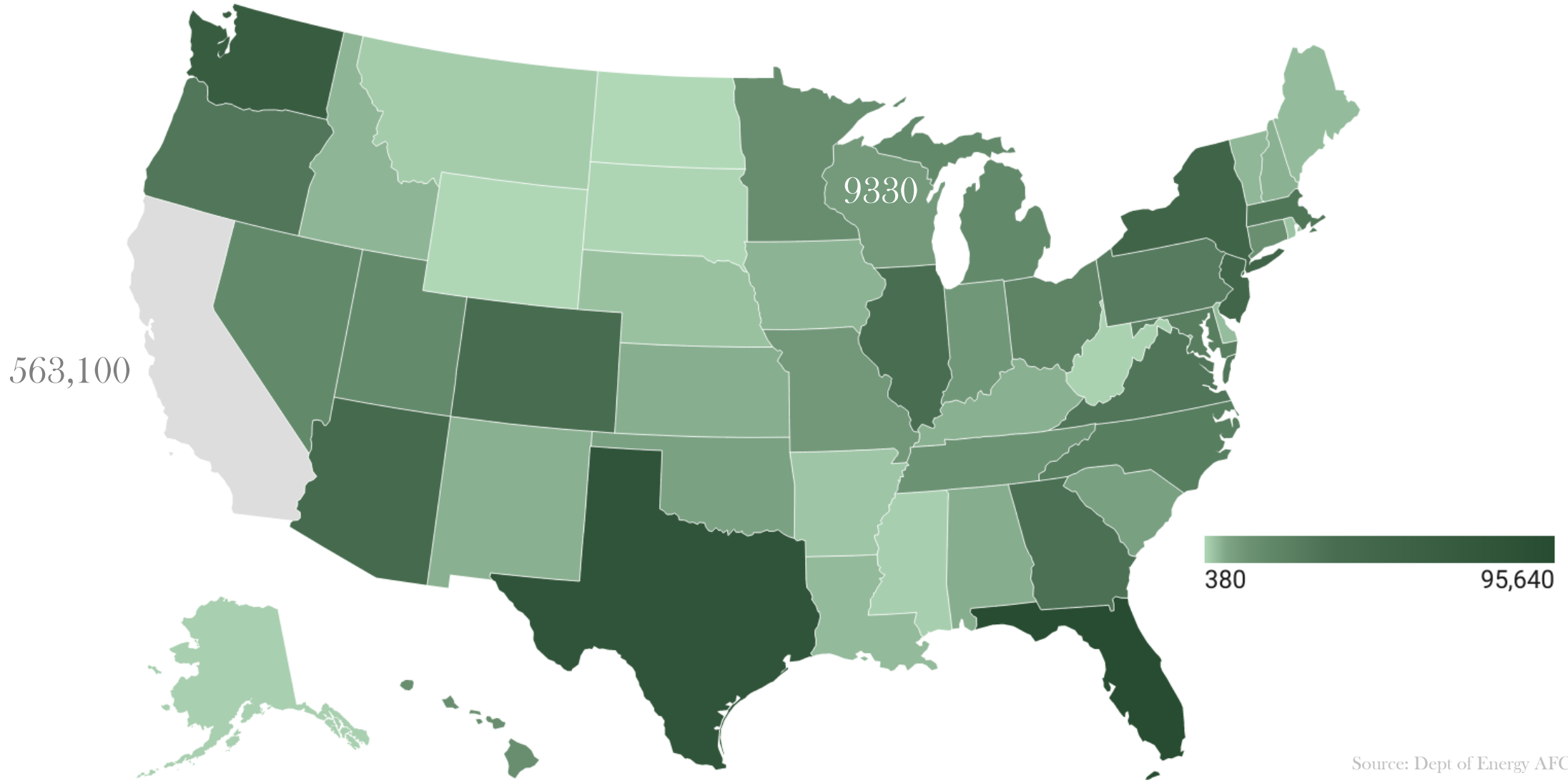
Number of 2021 EV Registrations by State



Source: Dept of Energy AFC

...However, this is a 48% increase in year-over-year growth, indicating a strong upward trend in Wisconsin EV adoption

Number of 2021 EV Registrations by State



Source: Dept of Energy AFC

Overview

Historical Demographic of EV Owners

- Male
- White
- In the business, finance, or management fields
- Owns a home with an average value of $450,000 to $749,999
- Likely living in Florida, California, or Texas

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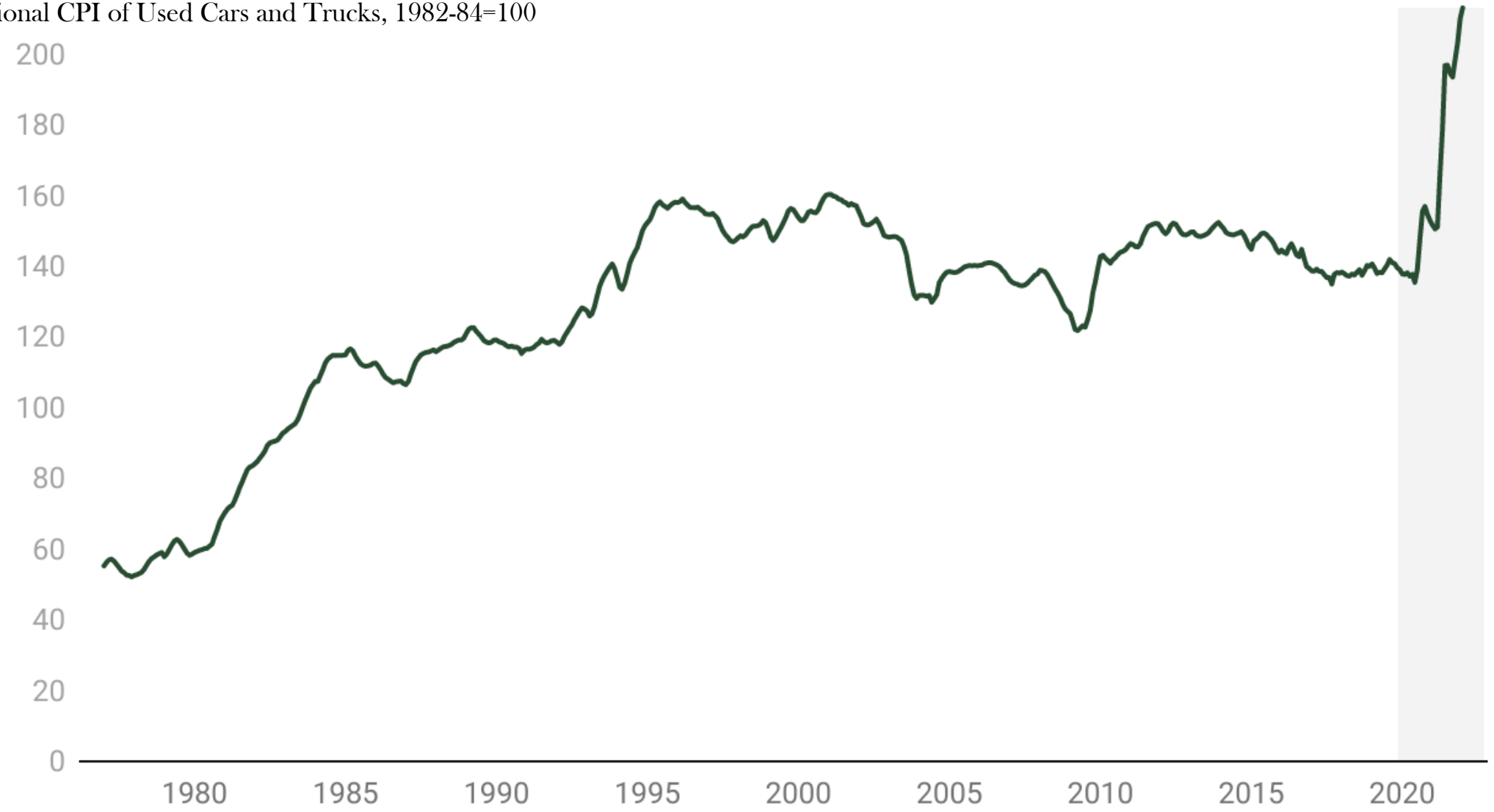
So what has changed?

Chip Shortage Increased Demand in the Used Vehicle Market, Driving Used Vehicle Prices Closer to EV Prices

EVs Have Been on the Road Long Enough to Trickle Down into the Used Vehicle Market, Opening a New Demographic of EV Owners

This is evident when observing the prices in the used vehicle market, which have risen over 50% since 2020

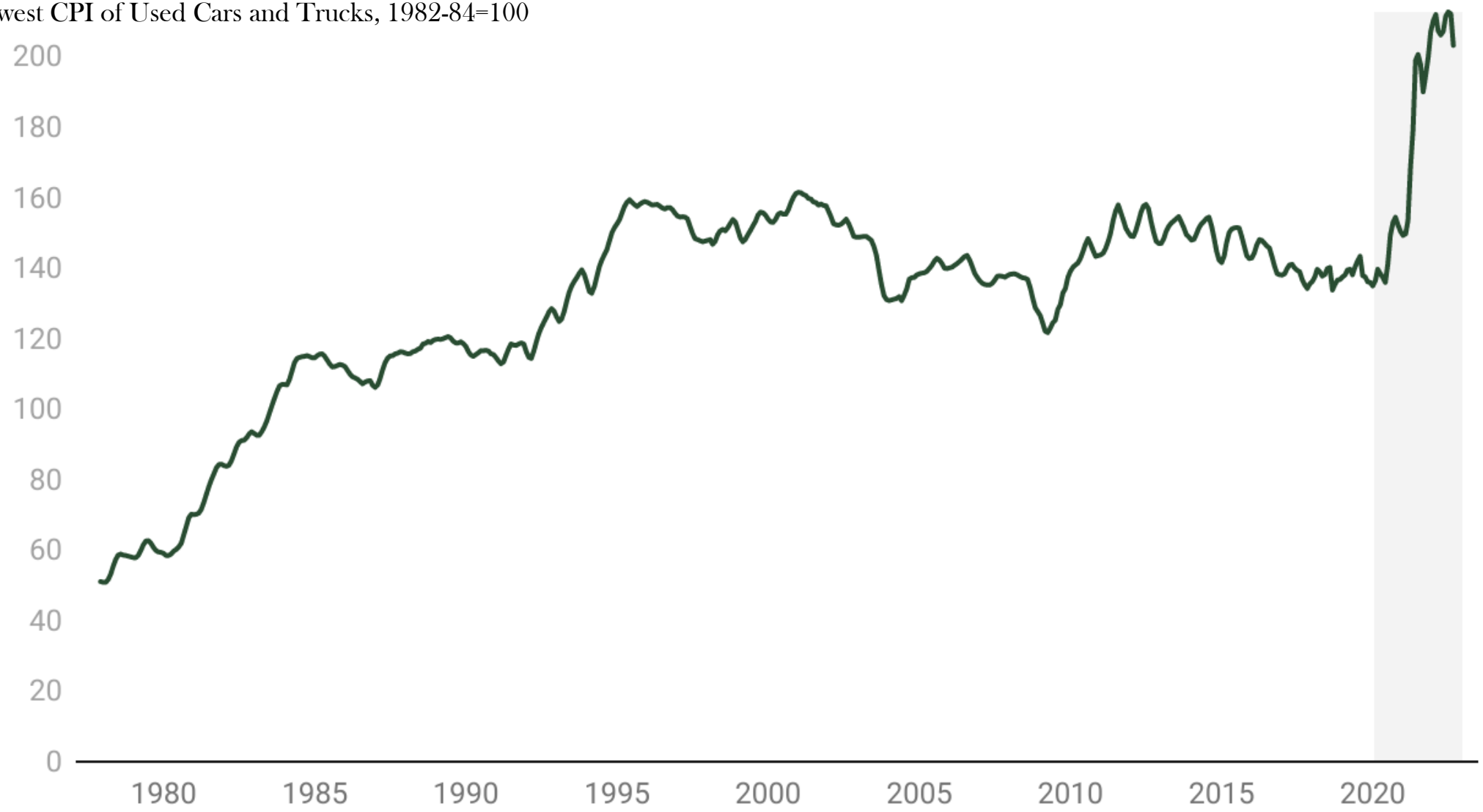
National CPI of Used Cars and Trucks, 1982-84=100



Source: FRED

A similar trend is visible in the Midwest, but prices do seem to be turning downward in recent months

Midwest CPI of Used Cars and Trucks, 1982-84=100

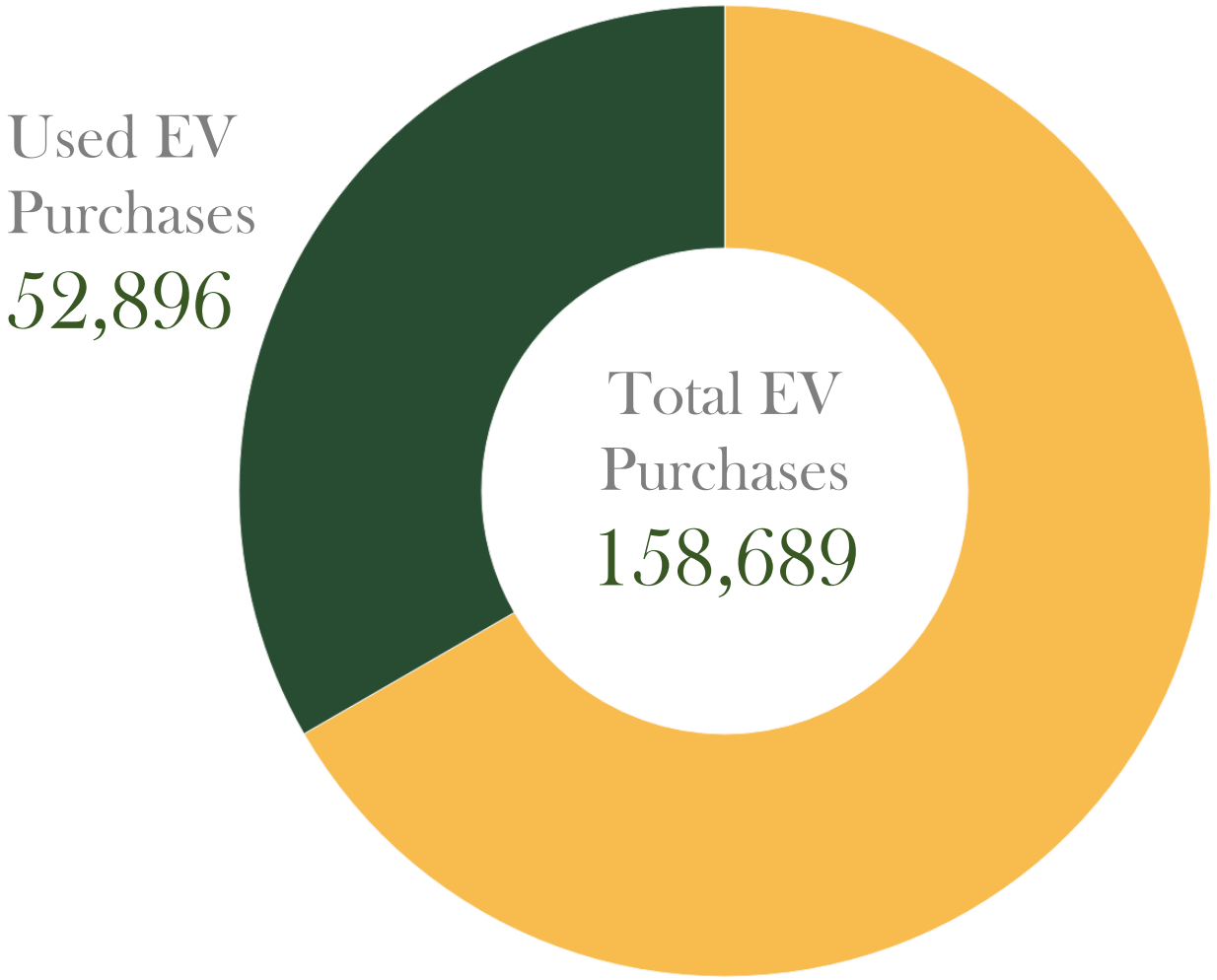


Source: FRED

Chip Shortage Increased Demand in the Used Vehicle Market, Driving Used Vehicle Prices Closer to EV Prices

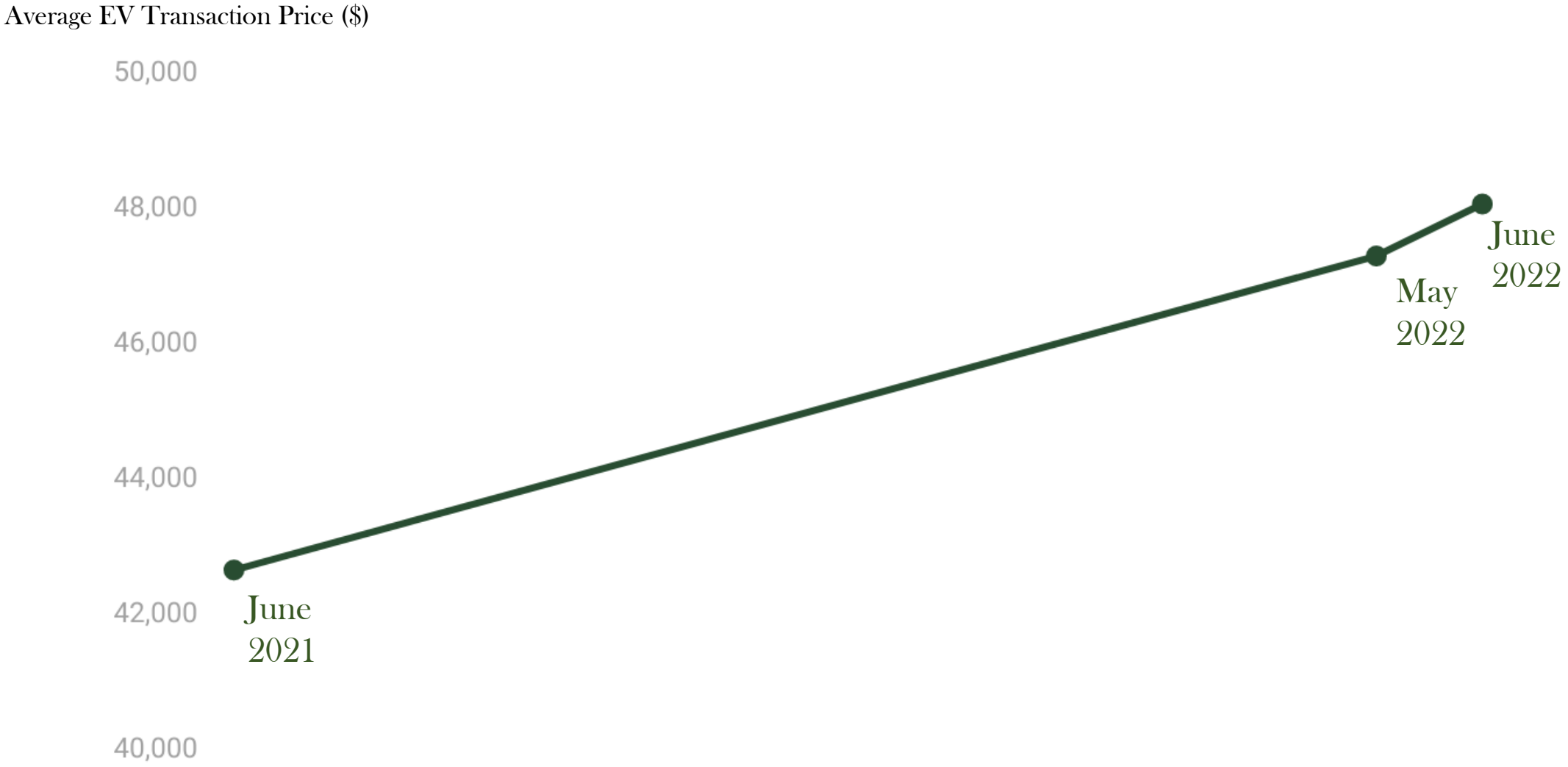
EVs Have Been on the Road Long Enough to Trickle Down into the Used Vehicle Market, Opening a New Demographic of Potential EV Owners

Notably, used EVs comprised roughly 1/3 of total EV purchases in Q1 of 2022



Source: Recurrent Auto

The average cost of new EVs are rising, but proposed tax credits may help lower the out-of-pocket cost for consumers, potentially to less than $25,000



Source: Electrek

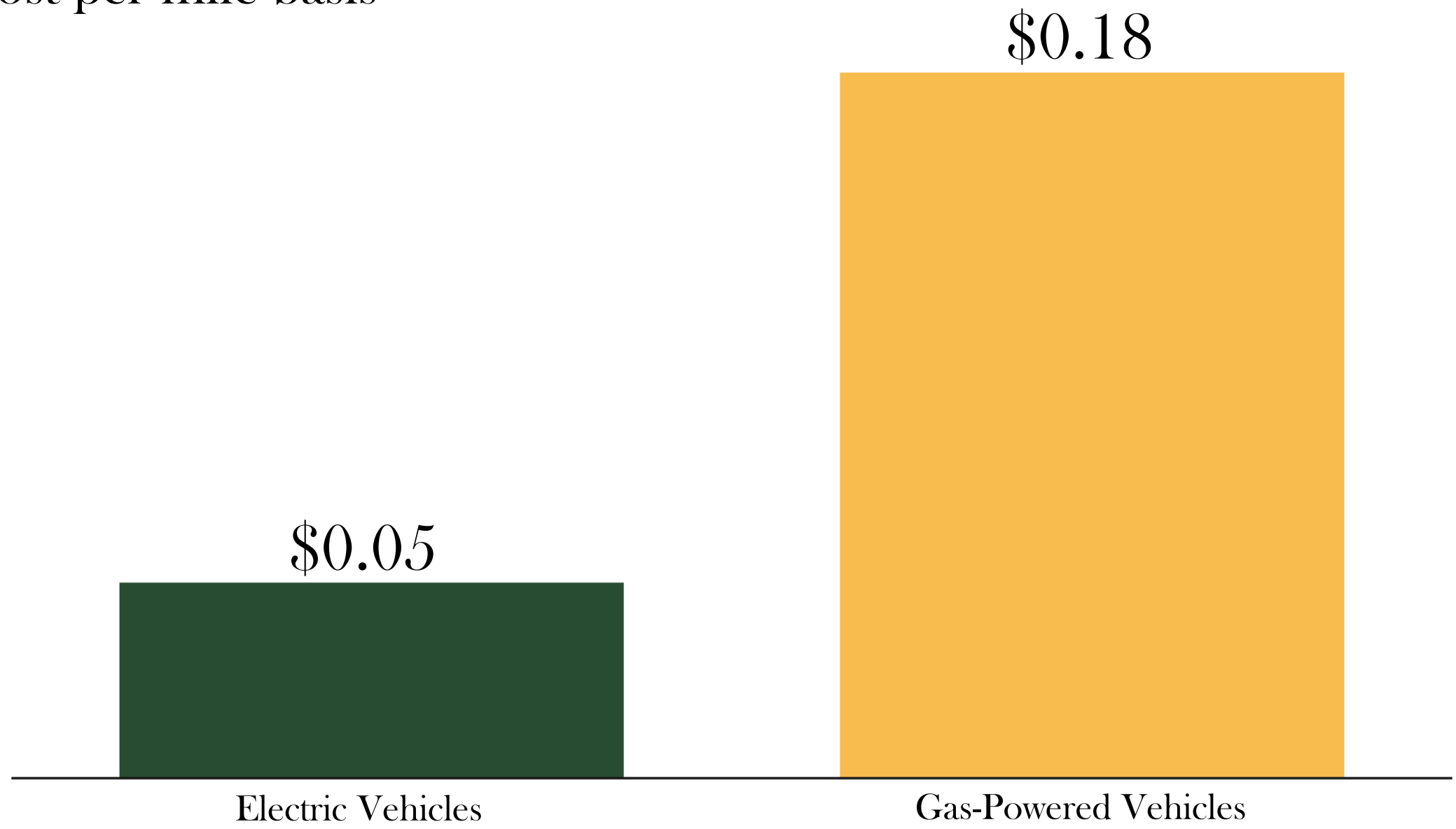
Overview

As EVs become able to travel longer distances between charges, the limitation becomes the frequency of charging stations

Source: WIEV Initiative

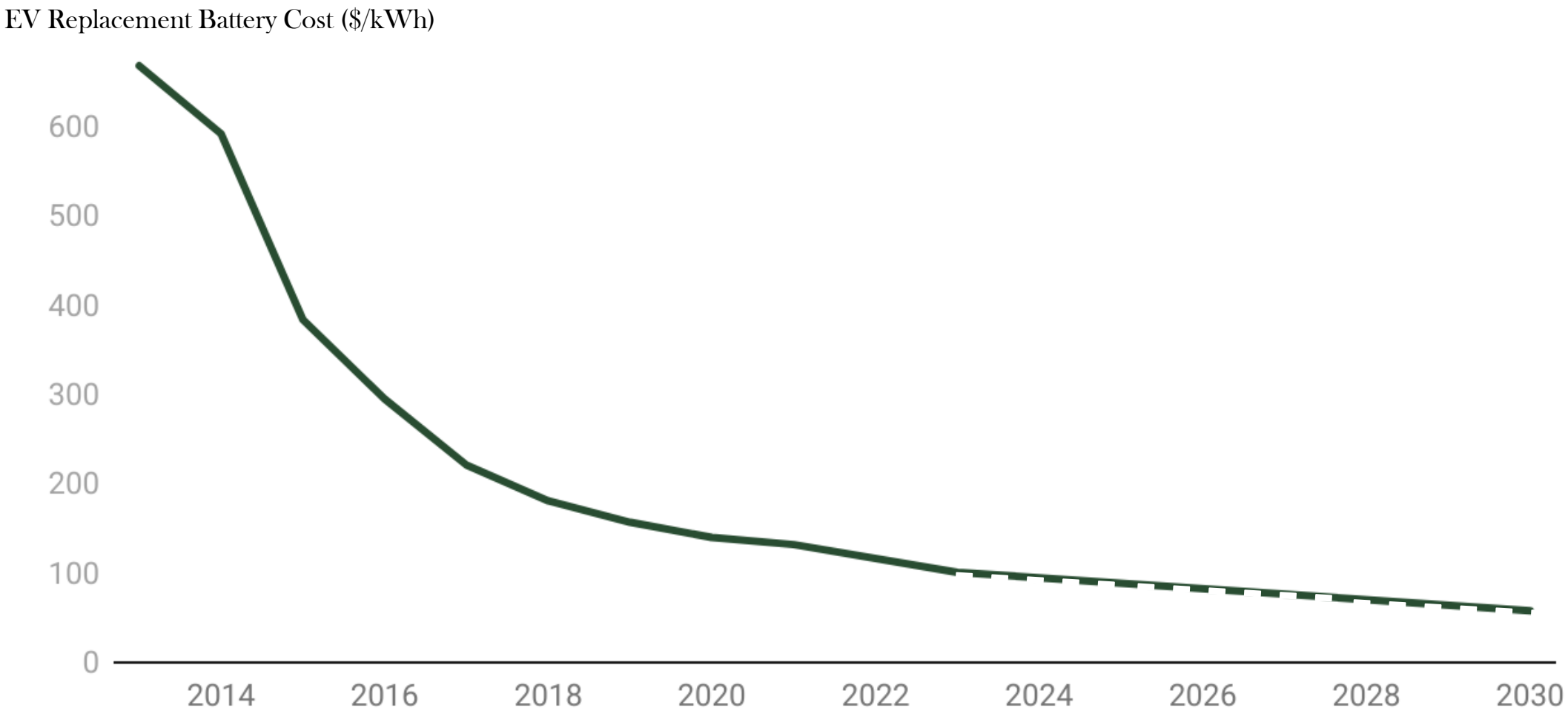
Overview

Overall, it is cheaper to run an EV over a gas-powered vehicle on a cost-per-mile basis



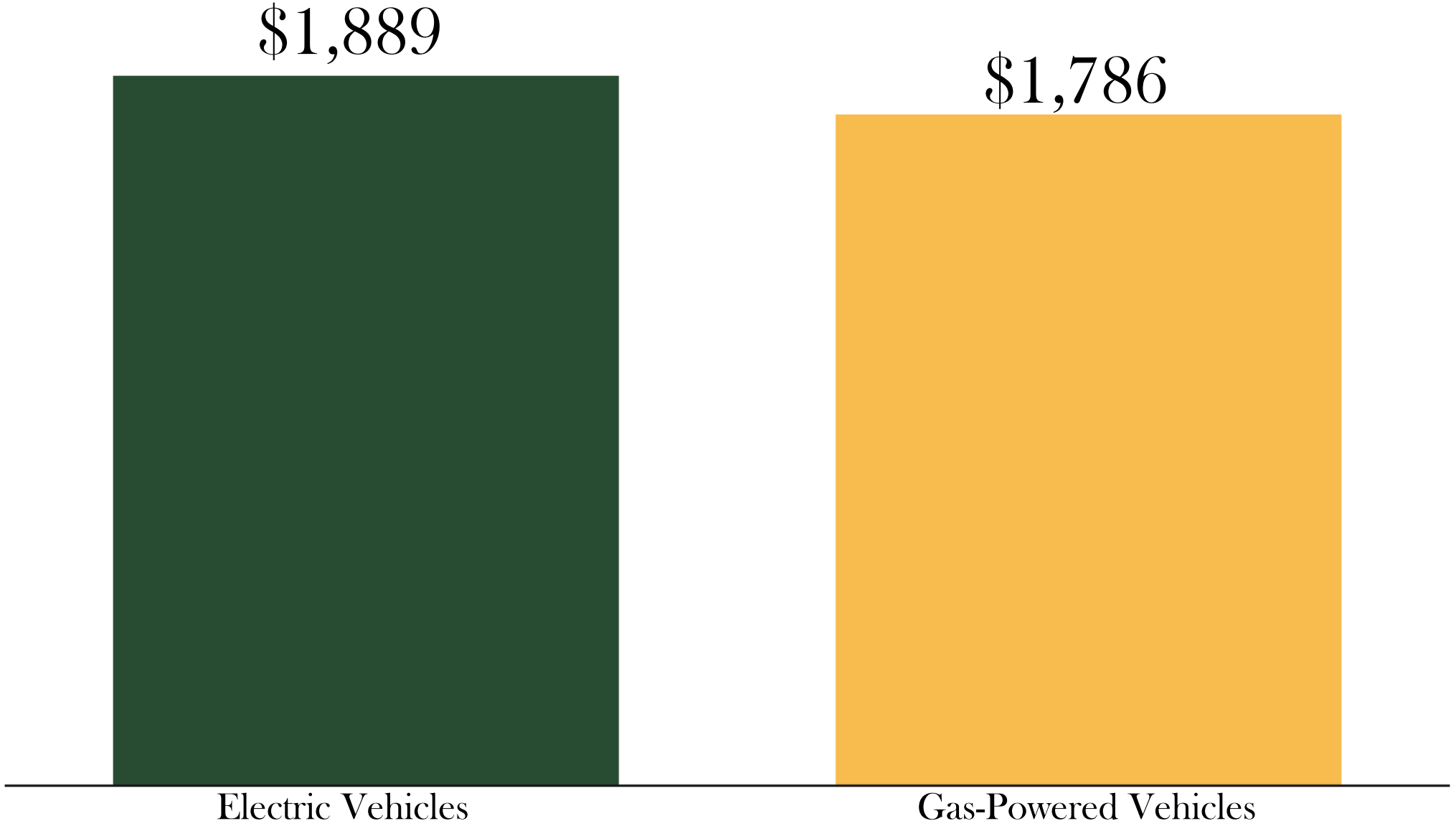
Source: US DOE/EPA

Even though battery costs have steadily decreased, they are put into perspective when considering the average capacity is 100kWh



Source: BloombergNEF

Not to mention it is still slightly more expensive to insure an EV than a gas-powered vehicle, on average



Source: Forbes

Overview

- General Trends in EV
- Consumer Perspectives
- Producer Perspectives
- Infrastructure
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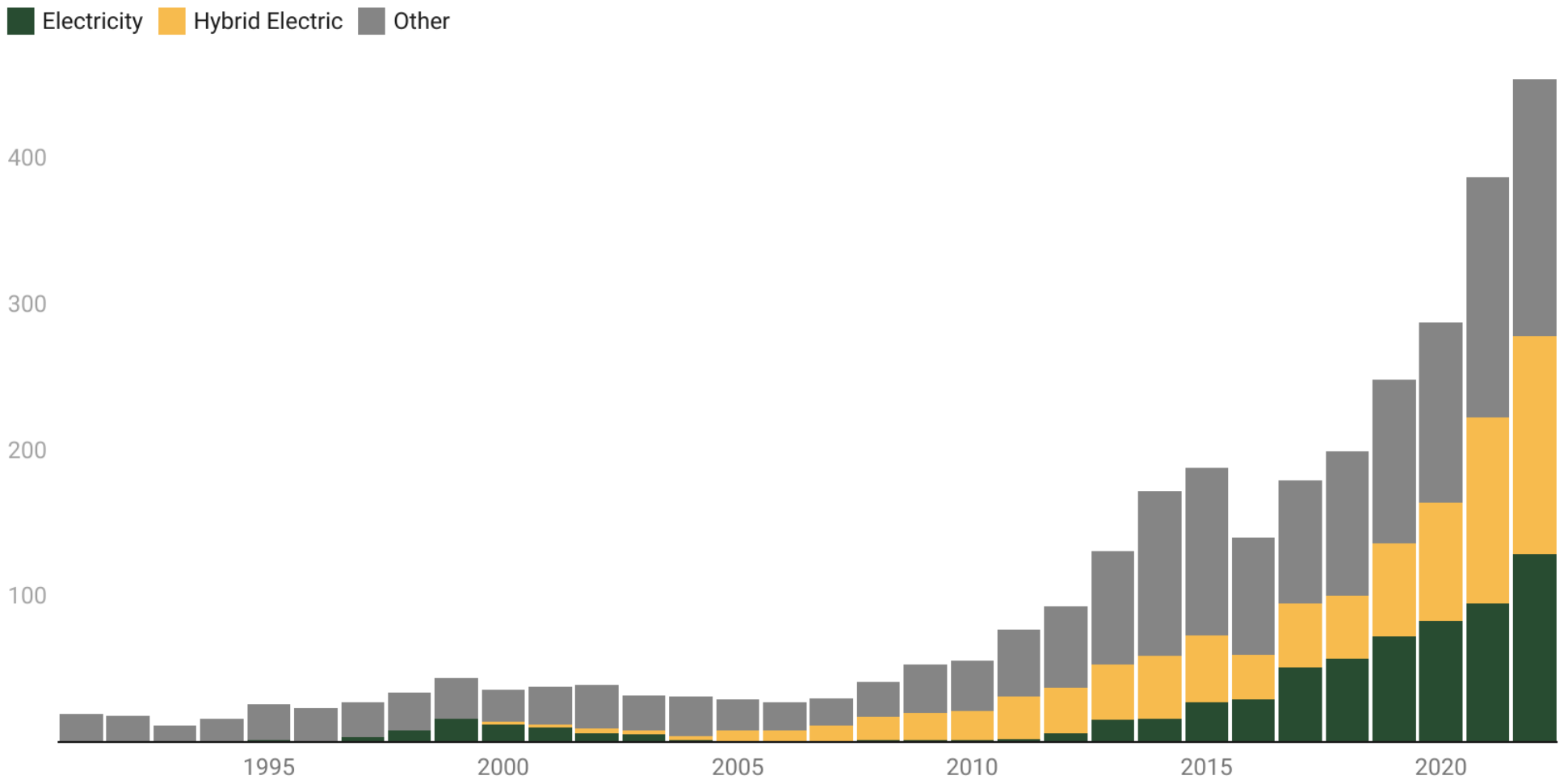
- Key Takeaways

Automotive Manufacturers are Announcing Desired Thresholds for their Model Lineups and Total Sales...

Leading to Increased Demand for Various Components Needed in EV Production, and Necessary Infrastructure to Support this Change

Manufacturers continue to add alternative fuel and hybrid electric vehicles to their lineups

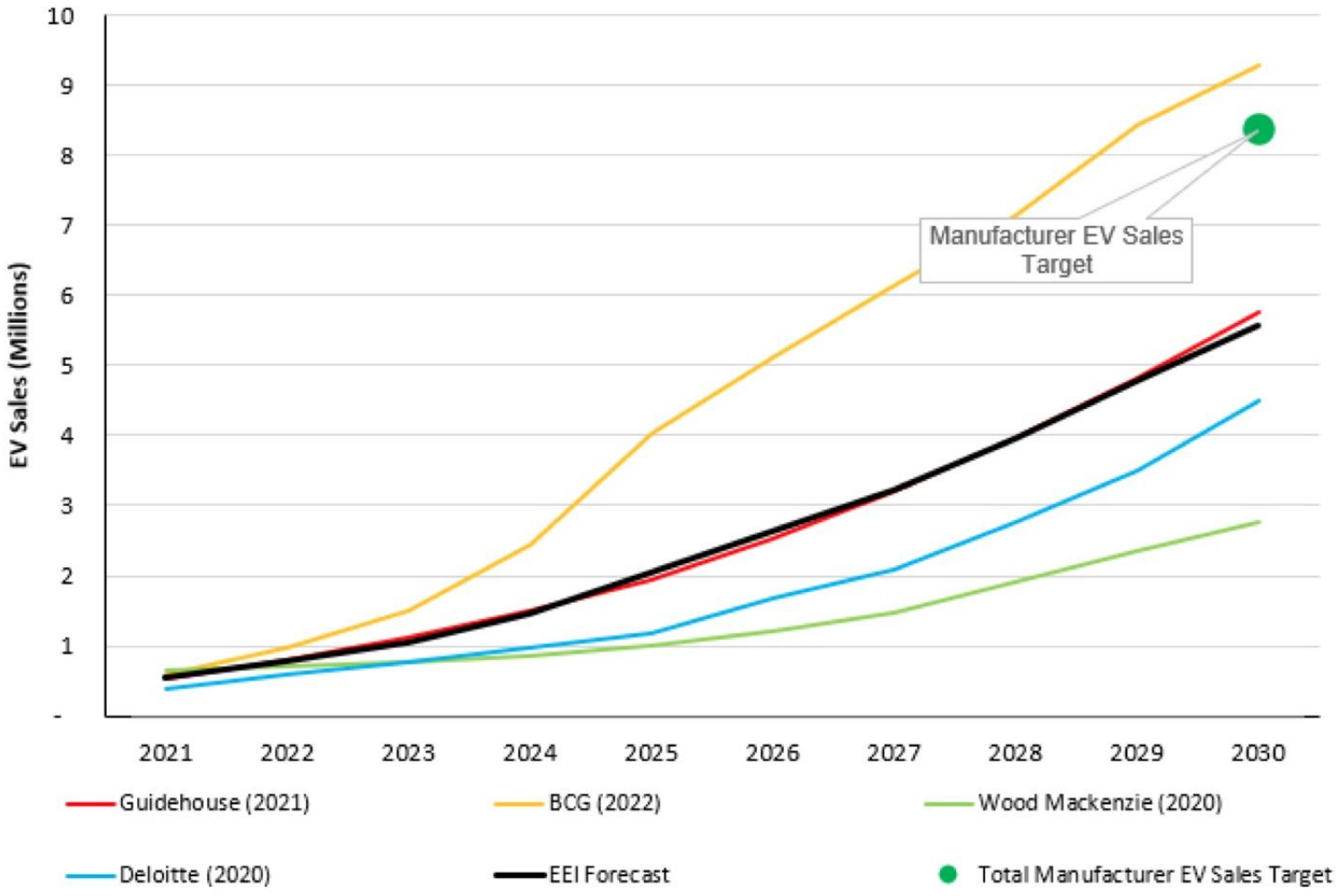
Light-Duty Alternate Fuel Model Offerings



Source: Dept. of Energy

Yet, forecasts tend to show manufacturers may underperform on their goals

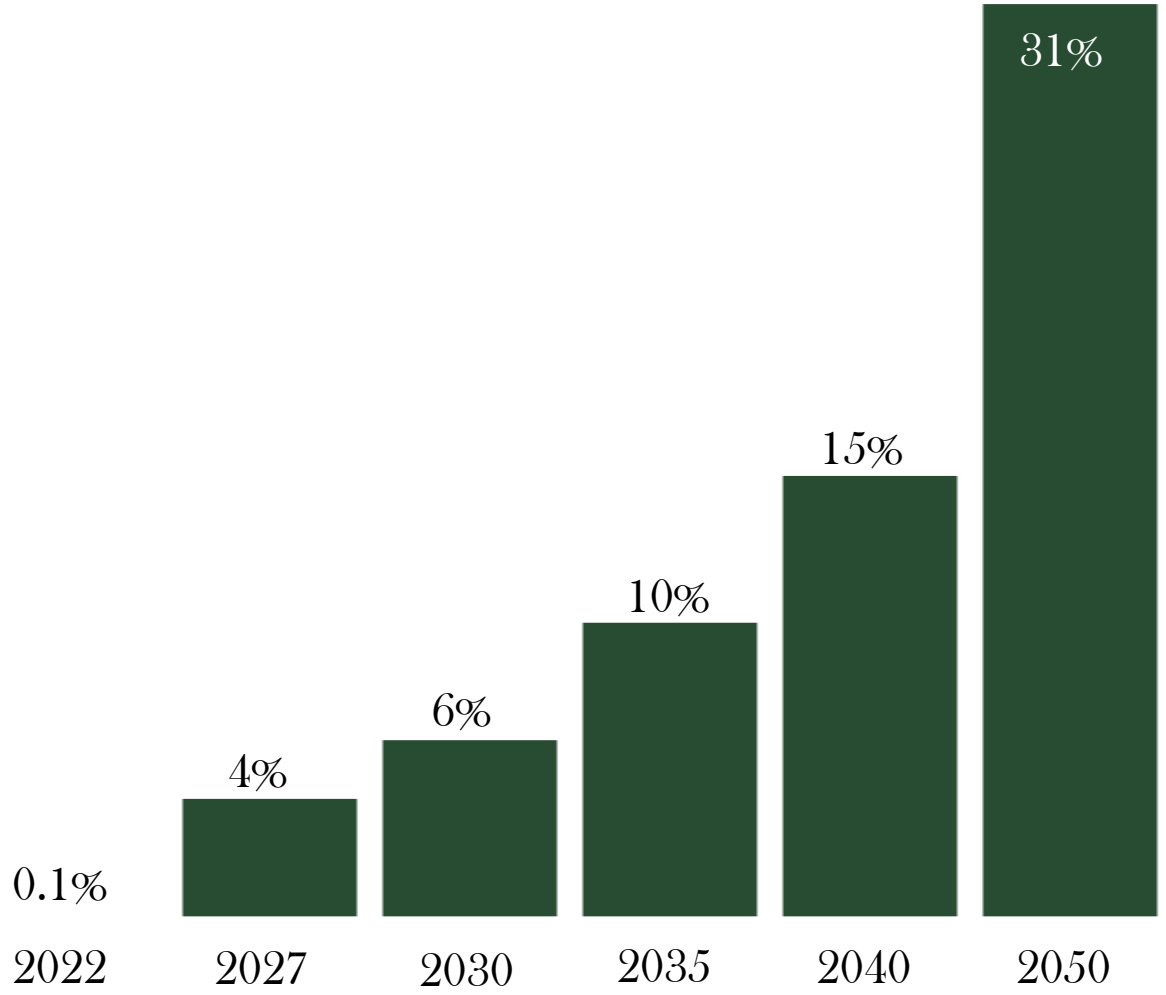
Annual EV Sales Forecast Model Comparison



Source: Edison Electric Institute

Here in Wisconsin, we can expect a considerable increase in EV registrations over the next 30 years

Projected Wisconsin Electric Vehicle Registrations as a Percent of Total Fleet



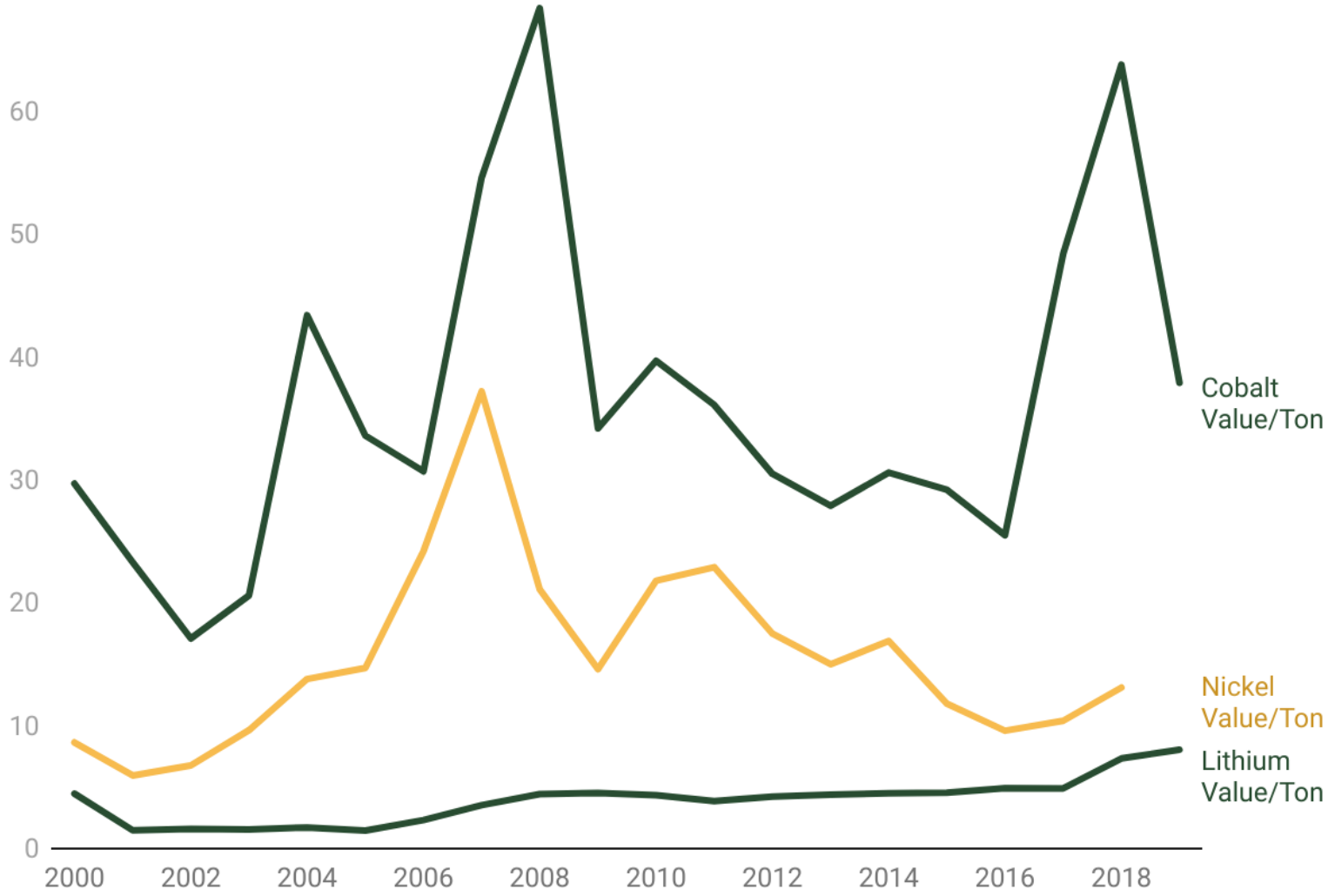
Source: WI EV Initiative

Automotive Manufacturers are Announcing Desired Thresholds for their Model Lineups and Total Sales...

Leading to Increased Demand for Various Components Needed in EV Production, and Necessary Infrastructure to Support this Change

Producers must source important components… such as batteries

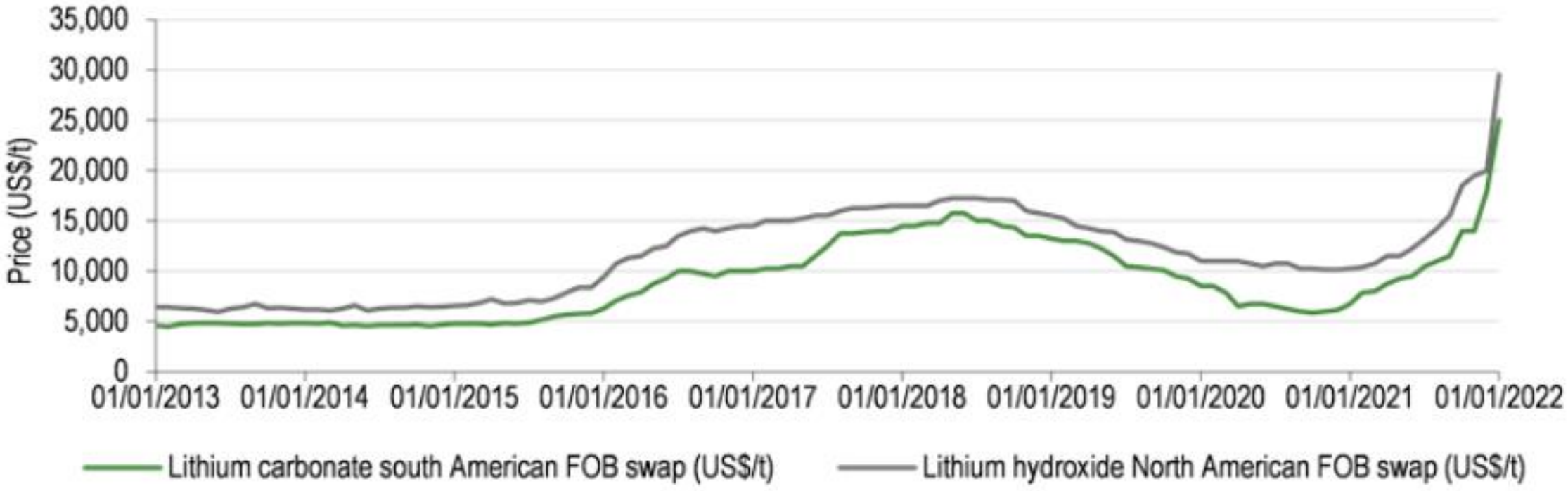
Critical Mineral Value/Ton



Source: USGS

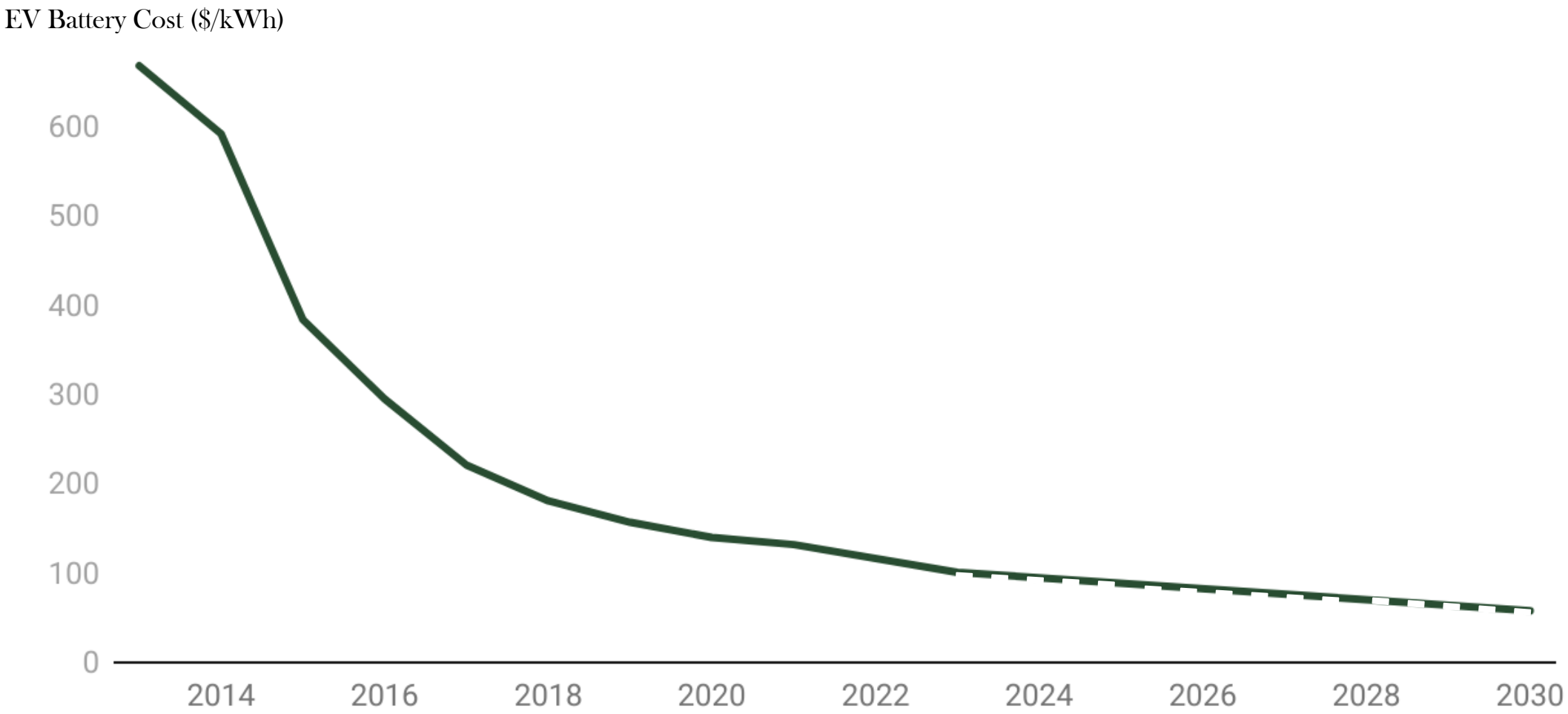
While battery-grade lithium has increased drastically lately, it is important to consider technological advancements, too

Refined Lithium Costs/Ton by Type



Source: Bloomberg

Even if mineral costs are volatile, battery costs have continued to decline overall



Source: BloombergNEF

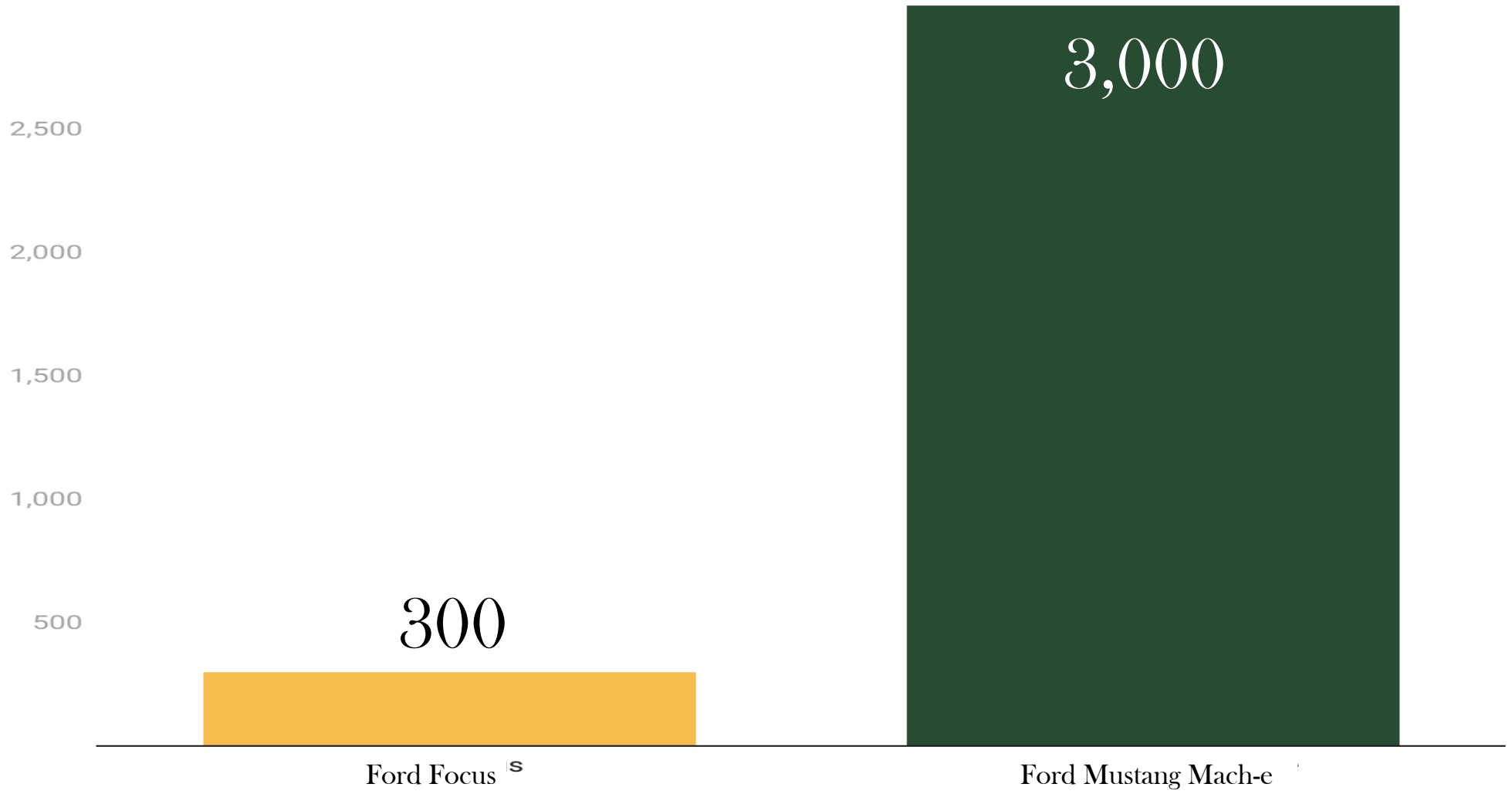
Producers must source important components... such as chips

Import Price Index of Semiconductors

Source: FRED

And electric vehicles use more chips than current popular internal combustion models

Estimated Number of Semiconductor Chips Used in Various Vehicle Models



Source: CNBC

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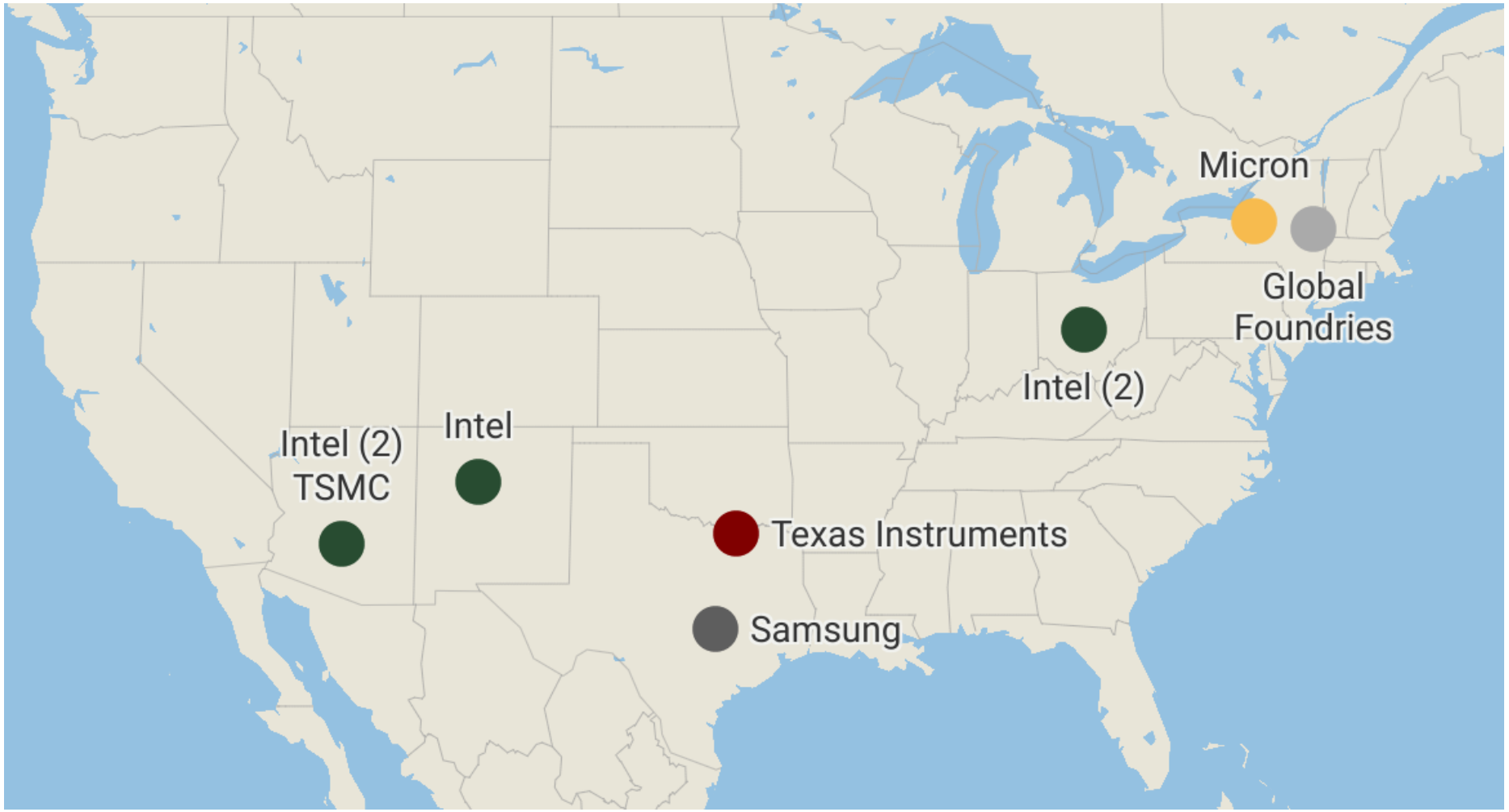
Federal investment in chips has initiated a wave of new foundries planned and under construction

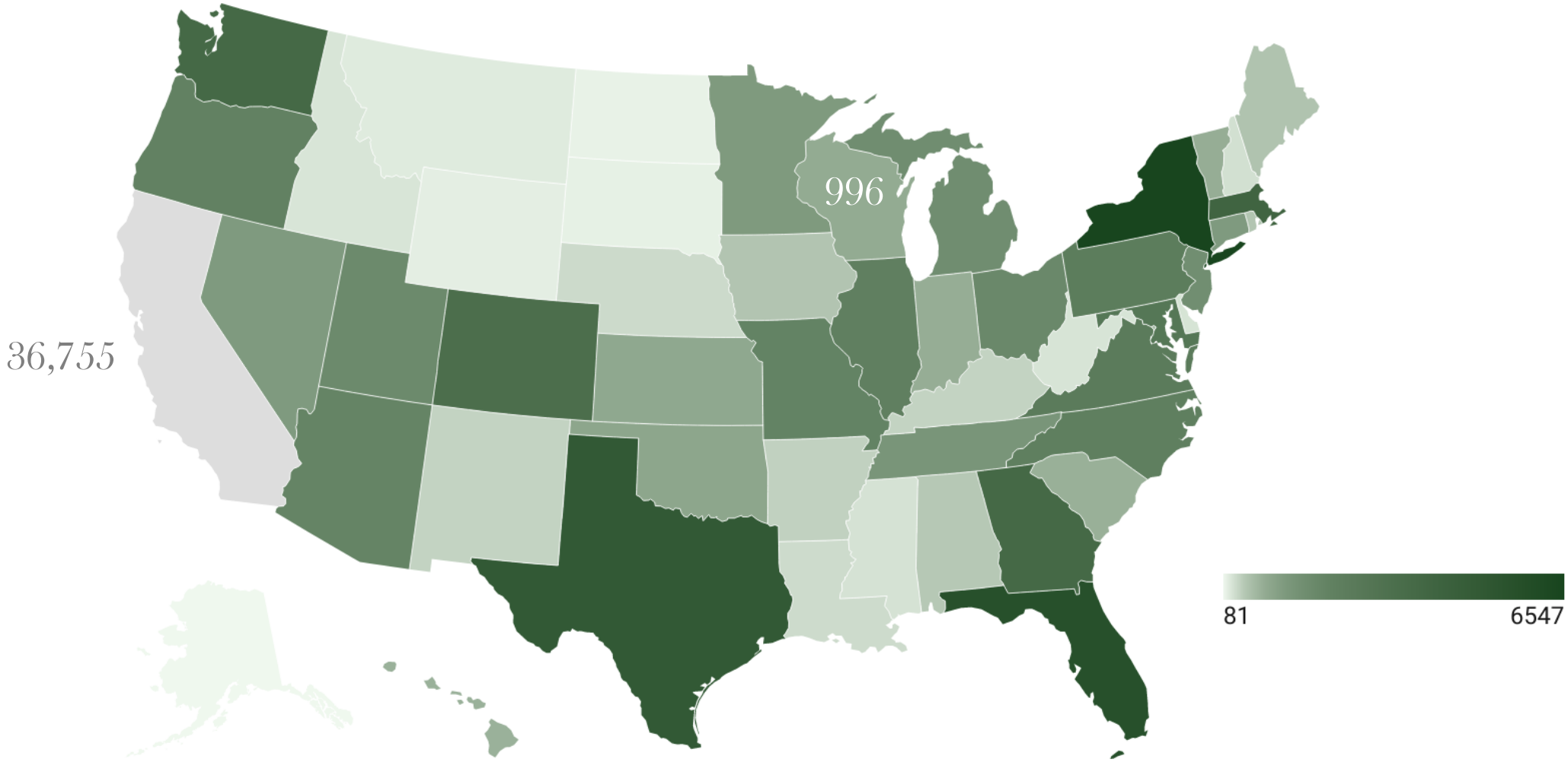
Future Semiconductor Foundries in the United States



Source: Company Press Releases

Additionally, a network of charging stations is needed to accommodate EVs

Charging Ports By State



Source: EV Adoption

And how does that translate to Wisconsin?

Wisconsin EV Infrastructure Breakdown

Stations	**427**
Ports	**996**
Level 1	**4**
Level 2	**744**
Level 3	**248**

Source: Dept. of Energy

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Companies like this, and more, are actively participating in fostering EV adoption here in the New North

Pierce®

PERFORM. LIKE NO OTHER.℠

FTI™

FAITH TECHNOLOGIES INCORPORATED

EnTech™ SOLUTIONS

Source: The New North

Overview

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Key Takeaways

1. Inflation is still impacting gasoline and energy prices, yet adoption of electric vehicles in Wisconsin is expected to continue to rise
2. Chip shortages and length of time EVs have been on the road have pushed demand into the used vehicle market, opening new demographics of potential EV owners while highlighting certain considerations
3. Manufacturers continue to respond to increasing demand with more models in their lineup, introducing greater strain on raw materials and automotive supply chains
4. Government investment in both chip production and charging infrastructure will ameliorate challenges facing EV adoption in WI and throughout the US
5. Wisconsin and the New North are looking ahead to the future of EV from both a government and firm perspective

A SHARED COMMITMENT TO A SUSTAINABLE FUTURE

SCHNEIDER®

SCHNEIDER'S SUSTAINABILITY GOALS

As a transportation company, we recognize that sustainability is an important driver of better business performance. That’s why we are integrating a sustainability mindset across our entire enterprise through transparency and proactive disclosure. This year, we set four ambitious sustainability goals:

Reduce CO2 emissions by 7.5% per mile by 2025

Double our intermodal business by 2030, thus reducing CO2 emissions by an additional 700 million pounds per year.

Achieve a 60 percent reduction in CO2 emissions per mile by 2035.

Achieve carbon neutrality by 2035 in all company-owned facilities.

FUNDING LARGE-SCALE ZEV DEPLOYMENT

Schneider has deep, collaborative relationships with many key stakeholders in vehicle electrification. The level of commitment to our vision of an electric future is evident in the funding Schneider has received to support the large-scale development and deployment of zero emissions fleets. We have received grant funding from the following organizations:

SCHNEIDER

SCHNEIDER WILL BECOME ONE OF THE LARGEST BATTERY ELECTRIC TRUCK FLEETS IN NORTH AMERICA

Beginning in 2022, Schneider will deploy 92 Freightliner eCascadias.

Funding for 50 Battery-Electric Vehicles (BEV) is provided as part of the Joint Electric Truck Scaling Initiative (JETSI).

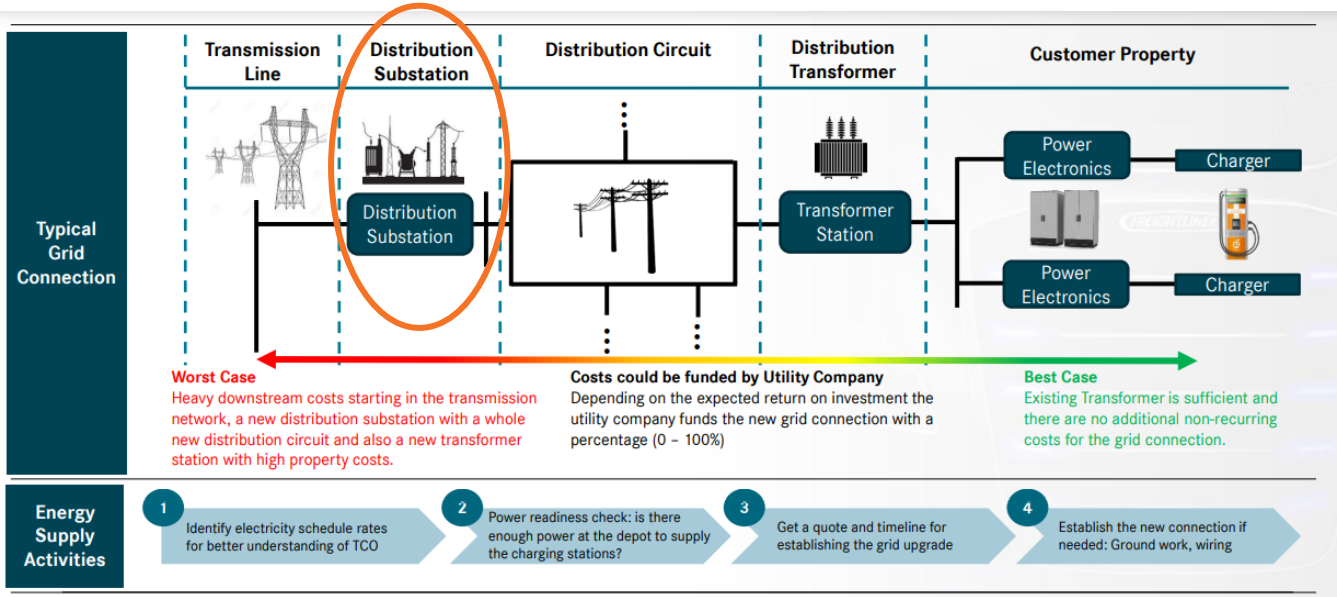
- Sponsors: South Coast Air Quality Management District (South Coast AQMD), California Air Resources Board (CARB) and the California Energy Commission (CEC).

The project is working to significantly increase the number of zero-emission heavy-duty trucks in California while achieving necessary emission reductions.

It's poised to reduce nine tons of pollutants such as nitrogen oxides (NOx) and particulate matter (PM) annually along Southern California's I-710 corridor, as well as eliminate 15,174 metric tons of greenhouse gas emissions.

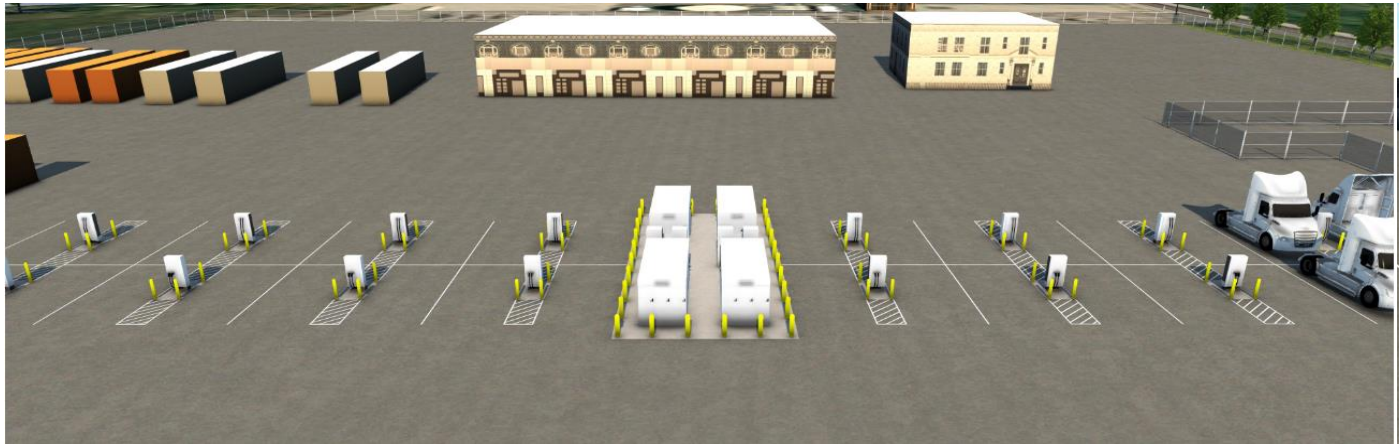
These 92 trucks will operate in our Intermodal drayage operation based in El Monte, CA.

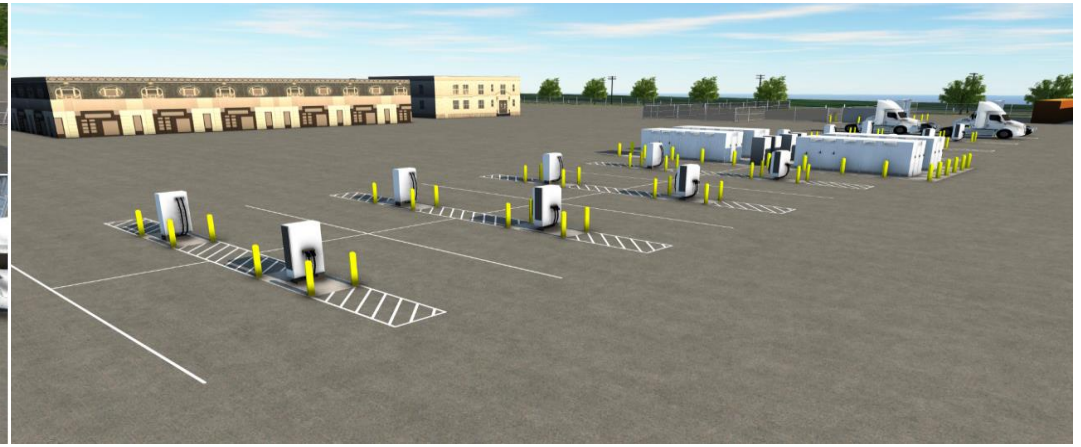
INFRASTRUCTURE DEVELOPMENT



- **Infrastructure Modifications**
  - Two year project development period
  - Grid upgrades necessary to support an additional 4.8MW supported through Southern California Edison via their Charge Ready Transport Program
  - 4 – 1.2MW NB15000 Power Cabinets
  - 16 – NBDC350 Dual cord sequential chargers
  - Over the air rate of charge management
  - 16,185sqft dedicated to EV charging
  - Daily energy consumption is equivalent to placing 2,000 homes at our facility

- Construction begins November 15th, 2022





SCHNEIDER

SCHNEIDER

THANK YOU

Thank you for attending!

The State and Regional Economic Impact:

Sustainability Movement & Electrification of Vehicles