



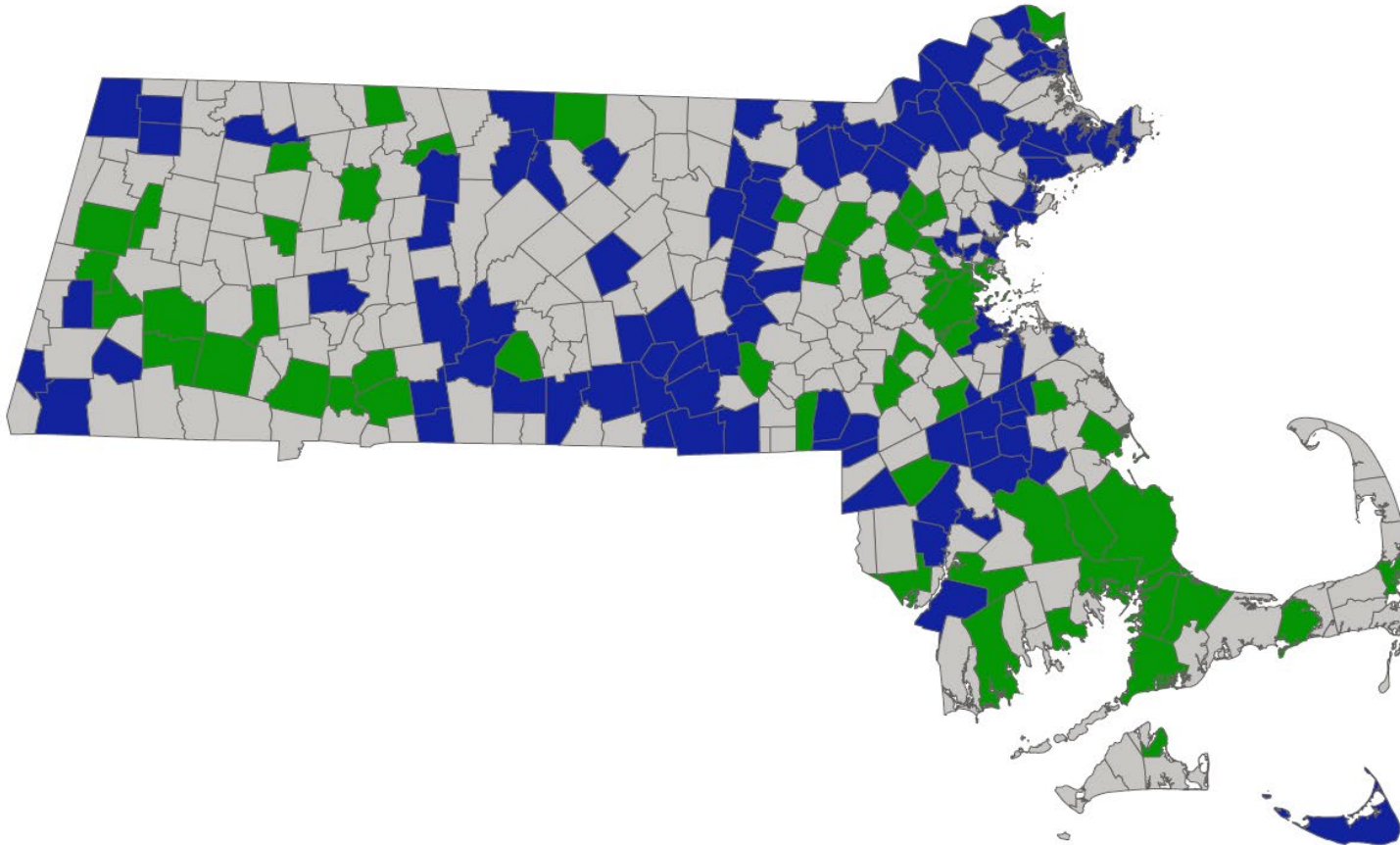
EVSE Deployment: Bridging Planning & Implementation

Justin Eichenberger
Program Manager, Electrification



What We've Learned

Utility ● Eversource ● National Grid



Additional Partners:

- MA DOER Leading by Example
- Massachusetts Port Authority
- Massachusetts Department of Transportation
- Mass Lottery
- Massachusetts Water Resources Authority
- 8 Transit Agencies
- 17 Colleges & Universities
- 10 Additional Sheriff Departments, State & Federal Agencies

The Challenge: Getting from plan to operational charging stations

Navigating the EV Industry



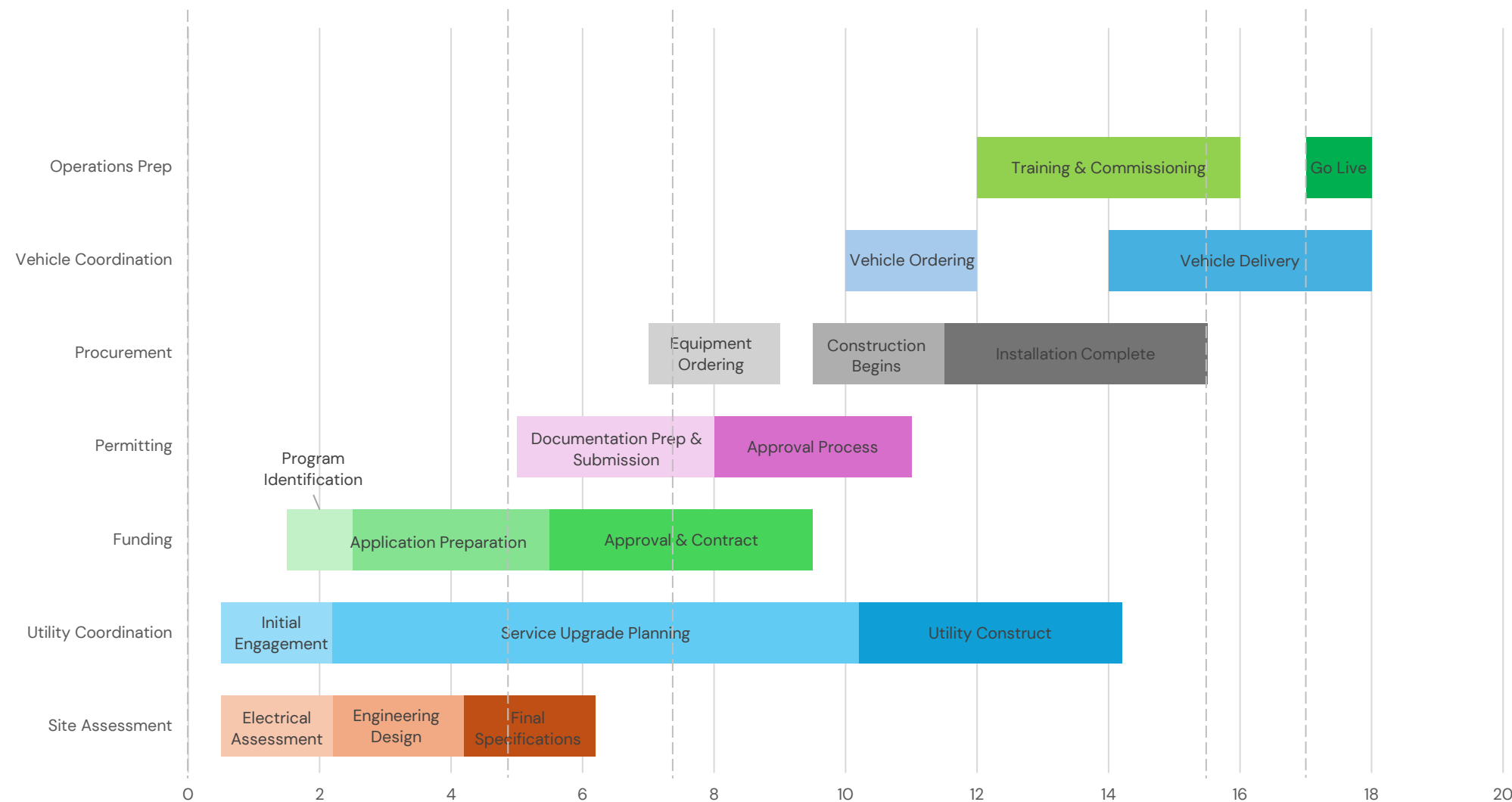
Path A: If You Haven't Assessed Yet

1. **Fleet Advisory Assessment** (no-cost if eligible)
2. **Understand your opportunity** – Which vehicles? What infrastructure?
3. **Identify eligible policies** – What programs apply to you?
4. **Plan EVSE deployment** – Timeline, budget, execution

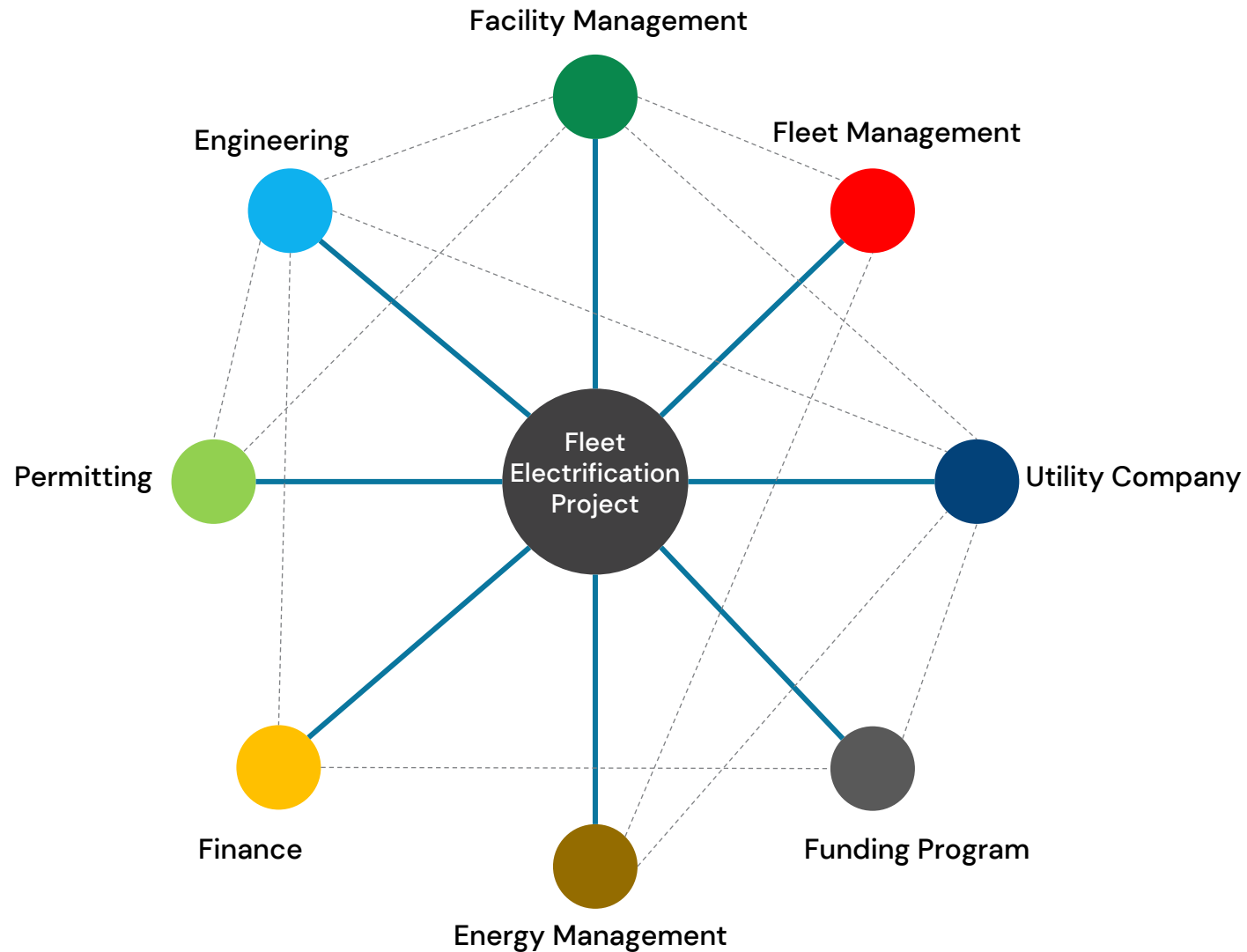
Path B: If You Have Assessed

1. **You know your opportunity** – Which vehicles, how many chargers
2. **Identify applicable MA policies** – Match programs to your project
3. **Time your EVSE deployment** – Coordinate with funding cycles
4. **Execute with support** – Implementation phase begins

12-18 Month Journey



The Multi-Party Challenge



Site Assessment – Why it Matters

Every Site is Different – Plan Accordingly

- Can your existing electrical service handle the load?
- What upgrades are needed?
- What's the construction scope?
- How long will it take?

Key Insight: When installing 5+ EVSE units, additional infrastructure upgrades are typically required

Reality Check: USPS fleet deployment – all 29 sites had delays averaging 219 days

Real Project Economics

Real Customer Installation: 5 DCFC 100 kW Chargers

Type	% of Total Project Cost	% of Customer Rebate	Description
Eligible Customer Side Make Ready Costs	59%	11.4%	50-149 kW: Up to 100% (\$30,000/port cap)
Eligible Utility Side Make-Ready Cost	2.2%	0.9%	Encased Duct Bank = \$6,000; Installed pad = \$3,500; Oil Containment = \$6,500; Guardrails = \$7,000
Eligible EVSE Hardware	25%	15%	50-149 kW/port: Up to 100% (\$40,000/port cap) for any EJC.
Ineligible Infrastructure Make-Ready Costs	4%	-	Future Proofing (trenching/conduit & cable, etc.)
Ineligible EVSE Costs	9%	-	Warranty/maintenance plan, Networking, Activation
Total Costs	100%	28% of total rebate	
Customer Investment	72.5%		Net costs paid after rebate

Michigan State University

- **52,000+ Students, 12,000+ faculty/staff**
- **560+ buildings, 25M GSF**

University Fleet

- **1,000 vehicles & 250 trailers**
- **FY25 1,845,419 miles driven, 140,655 by EV**
- **48 electric vehicles**
- **50 Level 2 non-public chargers**
- **14 Level 2 public chargers**
- **2 DCFC public chargers**



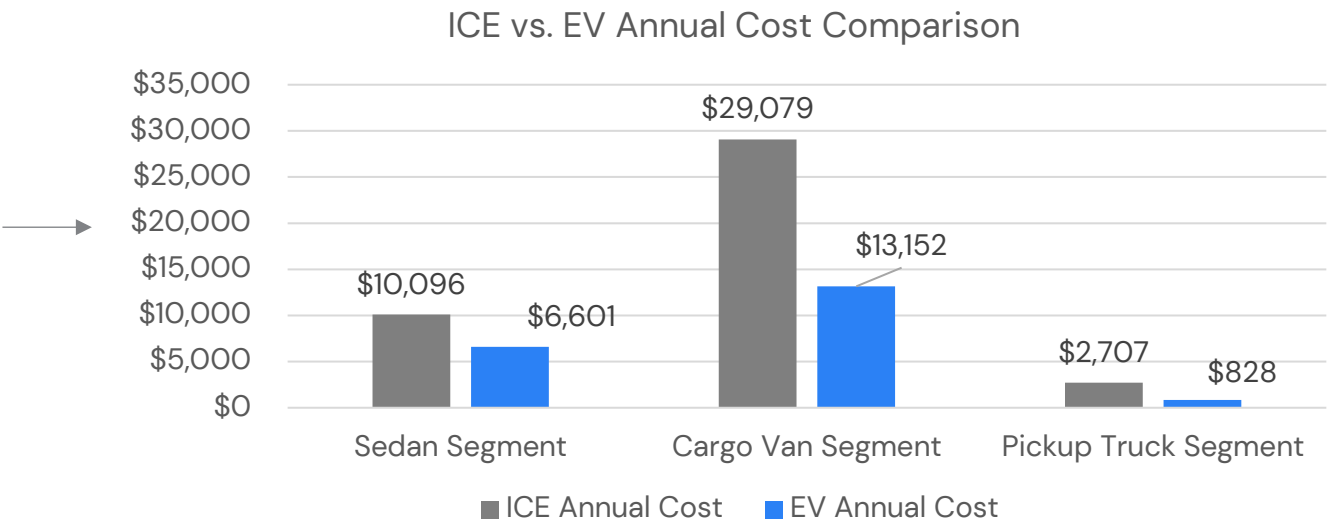
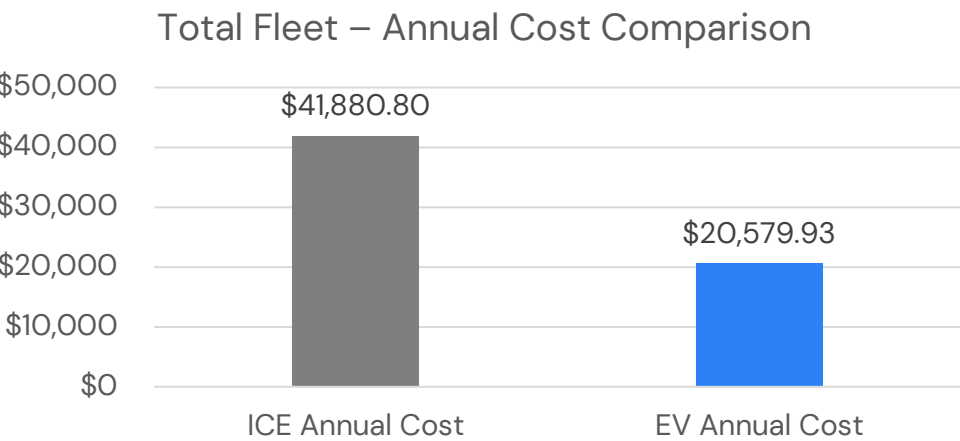
Total Infrastructure Cost

50 Level 2 Chargers at (3) separate building sites

Total 3-Year Charger and Software Cost	\$95,785
Total Construction Cost	\$438,579
Subtotal	\$534,364
Average Capital Cost Per Charger	\$10,687
Rebates and Incentives	(\$389,240)
Subtotal	\$145,124



Real Project Economics



	Maintenance & Repairs		Fuel Cost	Electric Cost
	ICE Avg/Year	EV Avg/Year	ICE	EV
Sedan Segment	\$5,334	\$4,147.75	\$4,761.67	\$2,453
Cargo Van Segment	\$16,837.55	\$10,880.52	\$12,241.09	\$2,271
Pickup Truck Segment	\$1,108	\$512.66	\$1,598.50	\$315
Subtotal	\$23,279.55	\$15,540.93	\$18,061.26	\$5,039

Phased Deployment Reduces Risk

Pilot

- ✓ 1-2 Sites
- ✓ Test operations
- ✓ Train staff
- ✓ Learn what works
- ✓ Identify challenges early

Expand

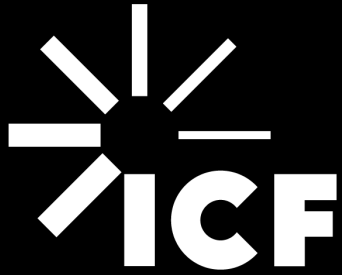
- ✓ Scale with confidence
- ✓ Apply learnings
- ✓ Refine processes
- ✓ Optimize energy management
- ✓ Build internal expertise

Deploy

- ✓ Full Fleet Rollout
- ✓ Proven approach
- ✓ Streamlined execution
- ✓ Operational excellence
- ✓ Continuous operation

Lessons Learned

- Seek partnerships with local utility companies and build a strategic 'alternative fuel' roadmap
- Pilot, pilot, pilot
- Leverage existing fleet utilization data to inform charging infrastructure strategy
- Build your pilot metrics to track progress and help to frame future decisions.




Get in touch with us: **Justin Eichenberger**

Program Manager, Electrification
617-218-3617
Justin.Eichenberger@icf.com

icf.com

 [linkedin.com/company/icf-international/](https://www.linkedin.com/company/icf-international/)

 twitter.com/icf

 <https://www.facebook.com/ThisIsICF/>

About ICF

ICF (NASDAQ:ICFI) is a global consulting and digital services company with over 7,000 full- and part-time employees, but we are not your typical consultants. At ICF, business analysts and policy specialists work together with digital strategists, data scientists and creatives. We combine unmatched industry expertise with cutting-edge engagement capabilities to help organizations solve their most complex challenges. Since 1969, public and private sector clients have worked with ICF to navigate change and shape the future.