FROM THE DRIVER'S SEAT

Future Fleet Demo Day

July 24, 2025

Follow-Up Survey Results & Next Steps

23	7	20+
Respondents	Vehicles Evaluated	Departments

Facilities Management Division | University of Georgia | 2025

FMD Auto Center Staff Phillip Wawrzyniak and Colten Bingham inspect a Ford F-150 Lightning Electric Truck

Executive Summary

On July 24, 2025, the Facilities Management Division hosted the Future Fleet Demo Day, giving operational staff across more than 20 departments direct, hands-on experience with seven electric and hybrid vehicle candidates. Twenty-three respondents from across FMD and UGA (from Grounds and HVAC to the Automotive Center and College of Engineering) completed follow-up surveys evaluating each vehicle's fit for their shop's daily needs.

The results reveal a UGA and FMD workforce that is broadly open to electrification but grounded in practical realities: charging infrastructure, payload capacity, and operational upfitting requirements remain the defining factors in adoption readiness. The Ford Lightning F-150 emerged as the top candidate overall, while the Club Car Urban Extended, Ford E-Transit Cargo Van, and Kia Niro each showed strong niche potential across specific shop types.

Key Takeaways for Leadership

- Staff are ready for EVs. Skepticism is lower than anticipated
- Charging infrastructure investment is the primary bottleneck factor for adoption
- A tiered replacement strategy (admin/supervisory → trades shops) is the path forward
- Pro Power Onboard was widely valued as a practical field tool

Participation & Survey Overview

The survey was distributed following the July 24th Demo Day held at the UGA Auto Center and attended by 40 participants. 23 completed survey responses were received, representing a diverse cross-section of FMD and UGA operational units. Departments represented include:

- FMD | Grounds (multiple zones including North Zone and Central Zone Shop)
- FMD | Operations & Maintenance (O&M Admin, HVAC Shop, Plumbing Shop, Shop 55)
- FMD | Automotive Center
- FMD | Sustainability
- University Housing
- Marketing & Communications
- College of Engineering

**UGA Police Department, Franklin College and Student Affairs – Tate Center facilities staff were also in attendance but did not complete the survey.*

All 23 respondents viewed and evaluated the Ford Lightning F-150. Viewership of other vehicles ranged from 35%–78%, reflecting a *self-directed station model* during the Demo Day.

Vehicle-by-Vehicle Results

The table below summarizes respondent viewership and fit assessments for each of the seven vehicles.

Vehicle	Viewed	Good Fit	Not a Fit	Maybe
Ford Lightning F-150	23 (100%)	**11 (48%)**	4 (17%)	8 (35%)
Ford Maverick	18 (78%)	**8 (44%)**	6 (33%)	4 (22%)
Ford E-Transit Cargo Van	8 (35%)	5 (63%)	1 (13%)	2 (25%)
Ford Mustang Mach E	10 (43%)	2 (20%)	7 (70%)	1 (10%)
GEM E4 LSV	8 (35%)	0 (0%)	4 (50%)	4 (50%)
Club Car Urban Extended	10 (43%)	5 (50%)	4 (40%)	1 (10%)
Kia Niro Sedan	9 (39%)	4 (44%)	2 (22%)	3 (33%)

Ford Lightning F-150 — Highest Interest, Broadest Applicability

The Lightning was the most universally reviewed vehicle (100% viewership) and received the strongest overall "Good Fit" response at 48%, with an additional 35% indicating "Maybe." It was broadly seen as a viable working truck for most Athens-area shops. See Appendix 1-1 for additional details re: fit respondents.

Top themes from respondent comments:

- Towing capacity (up to 10,000 lbs) and Pro Power "Frunk" charging were standout pros
- Weight (~8,000 lbs) reduces payload, raising concerns for trades with heavy materials. May not be the best fit for some skilled trade shops. Better fit for zone shops.
- A camper top or upfit would be needed for secure equipment storage
- Concern with charging infrastructure at satellite facilities (e.g., Riverbend Farms, Chicopee) is a current barrier
- Crew cab configuration does not suit all shops — a 2-door extended bed option was requested

Notable Quotes

"***The Lightning would be a great vehicle for all Athens-area shops.***"

"*High cost*; not a practical option for towing and hauling due to decreased battery range when loaded*."

**Note - cost concerns did not align with our research which examined parity with gas powered equivalents in 2025, and supported by subsequent procurement of three Lightnings in September 2025 at less than the cost of gas-powered equivalents after a federal rebate.See Appendix for current status details of the F-150 Lightning EV.*

Ford Maverick — Best Fit for Admin, Supervisory & Light-Duty Roles

The Maverick (hybrid) was viewed by 78% of respondents. Of those who assessed fit, 44% rated it a "Good Fit." The hybrid drivetrain was particularly valued as a lower-risk EV transition

step, requiring no dedicated charging infrastructure. See Appendix 1-2 for additional details re: fit for specific respondents.

- Ideal for foremen, supervisors, and admin staff navigating campus
- Short bed limits utility for shops carrying ladders or larger equipment
- Hybrid capability seen as a practical bridge to full electrification
- Well-suited for zone shops and point-to-point campus travel

Ford E-Transit Cargo Van — High Satisfaction Among Those Who Viewed It

Though only 35% of respondents viewed the E-Transit, it achieved the highest proportional fit rating of any vehicle (63% "Good Fit"). Those who assessed it highlighted its enclosed storage, which is a significant advantage for trades carrying tools and sensitive equipment. See Appendix 1-3 for additional details re: fit for specific respondents.

- Most applicable for building trades: HVAC, Plumbing, Electricians
- Visibility concerns noted for maneuvering in tight campus spaces (shared by O&M and Housing)
- Some uncertainty about whether it would be cost-justified for smaller shops

Club Car Urban Extended — A Practical Niche for Campus Operations

The extended Club Car received 50% "Good Fit" ratings among viewers, with notable enthusiasm from shops that already use standard Club Cars. The lockable cargo box and interior ladder storage were highlighted as genuine improvements over the standard model. See Appendix 1-4 for additional details re: fit for specific respondents.

- Ideal for light-duty campus use: equipment transport, event support, media/photography
- 500 lb payload limit remains a key constraint
- Parts availability and reliability were consistent concerns, echoing existing LSV fleet frustrations

Kia Niro Sedan — Strong Case for Administrative Fleet

The Niro was viewed by 39% of respondents and was well-received for administrative and supervisory use. The Automotive Center noted its rental fleet potential, while O&M leadership highlighted it as a fit for key shop operations. The hybrid variant was preferred over full EV due to range anxiety concerns (this application specifically for rental fleet applications).

Ford Mustang Mach E — Limited Operational Fit

The Mach E had limited relevance for most operational respondents. With 70% "Not a Fit" responses among those who viewed it, comments largely reflected that a sporty passenger SUV does not align with FMD's day-to-day operational needs. Exceptions included the rental fleet and potentially supervisory/administrative use.

GEM E4 Low-Speed Vehicle — Familiar, But Flagged for Replacement

The GEM E4 received no "Good Fit" votes. FMD's first fleet EVs were GEM carts purchased in 2015 and 2018. Based on this experience respondents cited poor parts availability, durability concerns, and an inability to travel on roads posted above 35 mph (see Safety Concerns in Appendix 3) as barriers to expanding the GEM fleet. This vehicle's inclusion in the demo appears to have reinforced prior views rather than generated interest in the platform. There is currently one GEM E4 in the FMD fleet which is used by O&M managers to access on-campus shops and job sites, and this vehicle functions well as a low footprint people mover for these purposes.

Pro Power Onboard: A Compelling Field Feature

Respondents were asked whether the Ford's built-in 120V outlet system (Pro Power Onboard) would benefit their shop. The response was **overwhelmingly affirmative** — approximately 85% of those who commented indicated it would be useful, with specific use cases including:

- Charging cordless tool batteries between jobs (most common use case)
- Powering laptops and building automation devices in the field
- Running saws and concrete-forming equipment on remote job sites
- Charging electric chainsaw batteries for tree crews
- Providing lighting for outdoor photo/video shoots (UGA Marcomm)

Notable Quotes

"The service world is built around battery-operated tools. This would give us the opportunity to always have power available."

"Keeping all cordless tools charged without having to bring them in — YES."

Current Fleet Replacement Priorities

Respondents were asked to identify vehicles most urgently in need of replacement. Themes point to a fleet with significant aging infrastructure:

- Ford Rangers, F-150s, and Explorers from the mid-1990s through early 2000s, many with 150,000+ miles
- 15–25-year-old vehicles across Grounds shops — approximately 10 actively in service
- GEM carts identified by multiple respondents as functionally obsolete and parts-starved
- 12- and 15-passenger vans (University Housing)
- Specialized vehicles: CDL-required dump trucks, Chevy Astro Vans, and utility-body F-250s for electricians

Ideal replacement preferences trended toward:

- **Hybrid-first** for shops uncertain about charging infrastructure
- **Electric where charging is feasible** — particularly Lightning F-150s for area shops
- **Upfitted trucks** (ladder racks, toolboxes, shell toppers) rather than bare pickups
- **Vans** with enclosed, lockable storage for trades carrying high-value equipment

Post-Demo Day Sentiment

Respondents were asked whether attending Demo Day changed their views on fleet vehicles or their department's needs. Findings were notably positive:

- A majority indicated their views shifted positively — either **increasing openness to EVs** or reinforcing the **urgency of vehicle replacement**
- Several respondents noted they were surprised by how receptive their colleagues were to electric vehicles
- Infrastructure readiness remained the most cited reservation, particularly for shops at satellite locations
- The hands-on format was repeatedly praised as more effective than reading specs or attending presentations alone

Selected Respondent Voices

- "I was impressed that attendees were not as skeptical of electric as they might have been."
- "Hands-on with the vehicles was a great way to highlight what these vehicles have to offer."
- "YES — need to proceed with replacements as soon as possible."
- "We need to develop a longer-term strategic plan for needs and purchasing, especially considering electric options."
- "I am glad to see that actual input is being gathered from the people who would use these vehicles."

Recommendations and Next Steps for Leadership

Based on our survey results, the following strategic priorities are recommended for FMD fleet planning:

1. Prioritize Aging Vehicle Replacement Immediately

Multiple respondents flagged late-1990s and early-2000s vehicles exceeding 150,000 miles across Grounds, O&M, and zone shops. The case for replacement is both operational and safety-driven. Delay increases maintenance costs and risk.

2. Adopt a Tiered Electrification Strategy

Continue to expand EV adoption where infrastructure exists or can be easily expanded based on electrical infrastructure. Consider where use cases and performance fit are clear (admin/supervisory vehicles, campus-bound light duty). Pursue **hybrid vehicles** for shops at locations where charging infrastructure is hindered. A phased approach reduces adoption risk while building steady momentum for achieving EV benefits.

3. Invest in Charging Infrastructure and Planning at Key Facilities

Infrastructure was the single most cited barrier to adoption. Example: “"*We would love to have electric, but that would require installing stations in our parking lot.*". Taking the guess work and possible confusion out of charging infrastructure planning for shops is key to frictionless adoption. Performing **“location specific” charging infrastructure capacity assessments** in coordination with Maintenance Engineering for those shops scheduled as “priority” for vehicle replacements would be a beneficial next step. Based on those assessments, FMD should **prioritize charging installation at zone shops and other key facilities** such as: Chicopee (in-progress), Grounds/Riverbend Farms facility, South Zone and other FMD shared parking areas would be good next step. As charging stations are installed with additional capacity for expansion, this will unlock a significantly larger portion of the fleet for electrification.

4. Develop Vehicle Upfitting Standards

Respondents consistently noted that base vehicles do not meet shop needs without upfitting Example: “*It would need a camper top or something like that to securely store equipment and material.*" **Establishing standard upfit packages** (ladder racks, toolboxes, shell toppers, cargo dividers) **per shop type** will streamline procurement and improve vehicle utility moving forward.

5. Expand the Club Car Urban Extended for Campus Shops

The extended model's lockable box and 6-foot ladder clearance represent a meaningful operational improvement over standard LSVs. Example: "*I like the extra cargo space — a 6-foot ladder will fit on the inside*." Given existing deployment of standard Club Cars across campus, an expanded order of the Urban Extended model could be a low-friction near-term win if placed with the correct shops. 50% of viewers rated the Club Car Urban as a “Good Fit,” second only to the E-Transit (see Appendix 1-1).

6. Formalize Stakeholder Engagement in Fleet Planning

The event generated strong goodwill and actionable data. Multiple respondents requested that this type of engagement continue. Additional formal processes for gathering operational feedback during vehicle procurement cycles should be institutionalized going forward.

This REPORT prepared by FMD Sustainability
Facilities Management Division | University of Georgia | 2026

Direct additional questions regarding this Report to
Justin Ellis, FMD Fleet Electrification Working Group Chair
justin.ellis@uga.edu | 706.499.2261

Appendix 1: Respondents identifying “Good Fit” with specific vehicles

1-1: "Good Fit" respondents for the FORD F-150 Lightning

- **Justin Ellis** — FMD Sustainability
- **John Evans** — FMD Grounds
- **Noah Ray** — Operations and Maintenance
- **Brian Long** — FMD/63 *("All pros, no cons")*
- **Barry Mathews** — HVAC Shop
- **Justin Meeler** — O&M Admin
- **Lisa Turner** — Auto Center
- **Adam Gibby** — North Zone
- **Royce Dingley** — Grounds (Urban Forester)
- **David Helms** — Grounds
- **Cale Caudell** — Operations & Maintenance

1-2: "Good Fit" respondents for the FORD Maverick Hybrid

- **John Evans** — FMD Grounds
- **Noah Ray** — Operations and Maintenance
- **Justin Meeler** — O&M Admin
- **Bill Brinn** — Automotive Center
- **David Helms** — Grounds
- **Brett Ganas** — Grounds
- **Cale Caudell** — Operations & Maintenance
- **Matthew Deason** — University Housing

** Senior Director Brett Ganas signed off as "very impressed"*

1-3: "Good Fit" respondents for the Ford E-Transit

- **Noah Ray** — Operations and Maintenance
- **Keith Marable** — Plumbing Shop
- **Terry McCollum** — FMD O&M Central Zone Shop
- **Cale Caudell** — Operations & Maintenance
- **Matthew Deason** — University Housing (already uses them)

1-4: "Good Fit" respondents for the Club Car Urban Extended

- **Noah Ray** — Operations and Maintenance
- **Brian Long** — FMD/63
- **Adam Gibby** — North Zone
- **Lindsay Robinson** — Marketing & Communications
- **Matthew Deason** — University Housing

Appendix 2: Updates on EV availability in a shifting Marketplace

The Ford F-150 Lightning EV – UGA Purchases and Future Availability

In September 2025, FMD purchased three Ford F-150 Lighting EVs at a price that was less than F-150 gas equivalents. Two of these vehicles were placed with FMD O&M Zone Shops and a third was placed with Waste Reduction Services and fitted with a solar cart tipper for quickly capturing waste loads from roll carts on campus.

Unfortunately, the Ford F-150 Lighting EV was discontinued from production by Ford in December 2025 creating a short-term setback for FMD's fleet electrification efforts into full-size trucks with payloads between 1,800 and 2,200 lbs. Gas versions of the F-150 do have slightly larger payload capacities which can exceed 3,000 lbs in some configurations which is worth noting. Despite winning Motor Trend's 2023 Truck of the Year, the Lightning was discontinued based on faltering demand for electric trucks based on projections.

F-150 Lightning Actual Sales vs. Projections:

Year	Actual Sales	Projected
2022	15,617	~50,000+
2023	24,165	150,000
2024	~33,500	150,000
Total Lifetime	**~80,000**	**450,000+**

Ford continues to be committed to EVs but with a different strategy. The company is pivoting to an Extended Range Electric Vehicle (EREV) platform for its next-generation F-150 Lightning, expected as a 2027 model year vehicle. The EREV powertrain retains 100% electric propulsion but adds a gasoline generator, not connected to the wheels, that charges the battery on demand, targeting a combined range of approximately 700 miles and addressing the range anxiety that deterred many truck buyers from the original Lightning.

Ford is also developing a new compact electric pickup on a purpose-built EV platform, expected to launch around 2027 at a starting price near $30,000, with over 300 miles of range and a footprint similar to the Maverick.

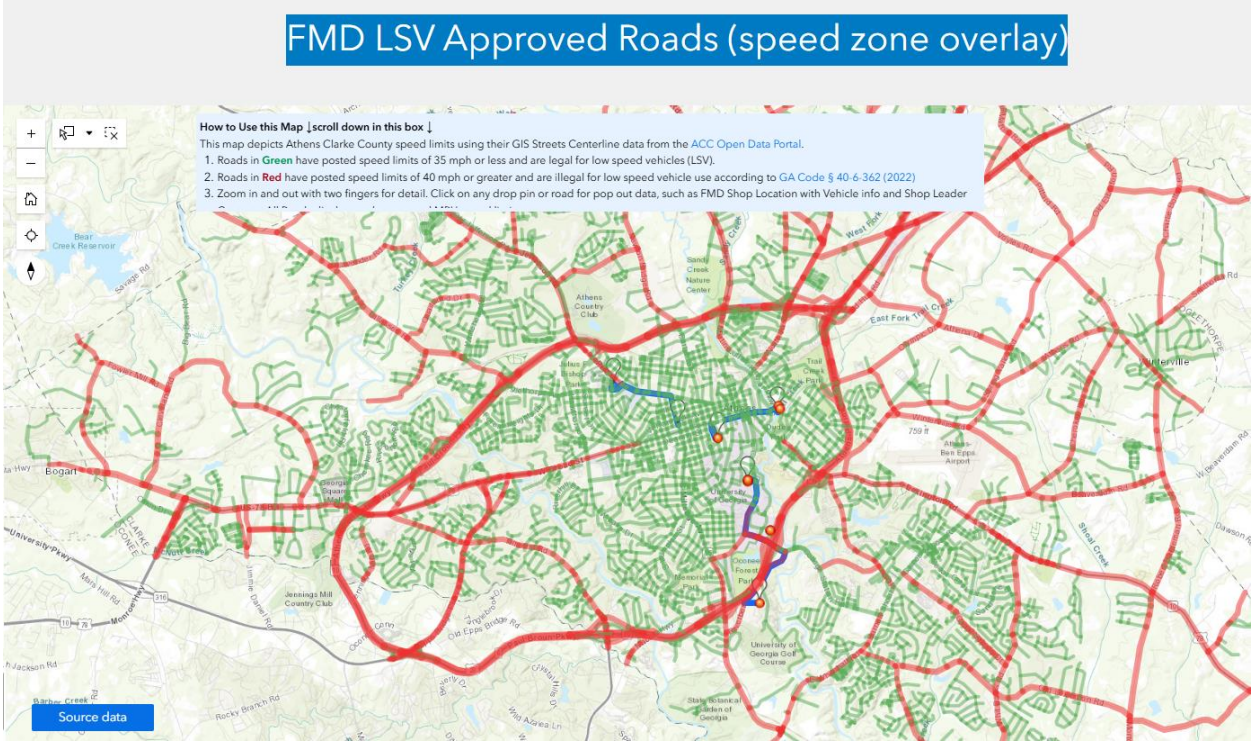
UGA is likely to pause or wade cautiously into EV planning around medium and full-sized trucks as the market stabilizes over the next several years.

Appendix 3: Safety Considerations for EV Low-Speed Vehicles (LSVs)

Conversations with Club Car drivers have consistently highlighted concerns regarding the operation of LSVs on roadways where surrounding traffic frequently exceeds 40-50 mph. Because LSVs lack key safety features such as airbags and anti-lock braking systems, ensuring driver safety must remain a top priority.

The development of an **FMD LSV Approved Roads Web Map**, along with ongoing discussions with Senior Directors, has elevated awareness of these risks. While LSVs can access VTM for servicing via indirect and circuitous routes on roads with posted speed limits below 40 mph (per federal regulations), additional safety measures should be considered. These may include the optional use of trailering to transport LSVs to and from service locations.

Responsibility for trailering operations should be evaluated by the **FMD Fleet Management Committee** in coordination with Operations and Maintenance (O&M), Grounds, Building Services, Support Services, and any other units that currently operate or may operate LSVs in the future. The Auto Center and FMD Safety should also be engaged in the evaluation and resolution process and included in final decision-making.



FMD will continue to maintain a map of approved roads for LSV travel to share with all drivers and the broader UGA community.

Appendix 4: Photos from the Demo Day Event

Appendix 5: Survey Questions

Respondent Information

1. First and Last Name
2. Department / Shop

Ford F-150 Lightning

3. Did you view the Ford F-150 Lightning?
4. Do you think the Ford F-150 Lightning would be a good fit for your shop's needs?
5. Share your impressions of this vehicle. Consider pros and cons, how well it fits your shop's day-to-day needs, size, maneuverability, and whether it is suited to your typical tasks.

Ford Maverick

6. Did you view the Ford Maverick light pickup?
7. Do you think the Ford Maverick would be a good fit for your shop's needs?
8. Share your impressions of this vehicle. Consider pros and cons, how well it fits your shop's day-to-day needs, size, maneuverability, and whether it is suited to your typical tasks.

Ford E-Transit

9. Did you view the Ford E-Transit Cargo Van?
10. Do you think the Ford E-Transit Cargo Van would be a good fit for your shop's needs?
11. Share your impressions of this vehicle. Consider pros and cons, how well it fits your shop's day-to-day needs, size, maneuverability, and whether it is suited to your typical tasks.

Ford Mustang Mach-E

12. Did you view the Ford Mustang Mach-E SUV?
13. Do you think the Ford Mustang Mach-E would be a good fit for your shop's needs?
14. Share your impressions of this vehicle. Consider pros and cons, how well it fits your shop's day-to-day needs, size, maneuverability, and whether it is suited to your typical tasks.

GEM e4

15. Did you view the GEM e4 low-speed vehicle?
16. Do you think the GEM e4 would be a good fit for your shop's needs?
17. Share your impressions of this vehicle. Consider pros and cons, how well it fits your shop's day-to-day needs, size, maneuverability, and whether it is suited to your typical tasks.

Club Car Urban Extended

18. Did you view the Club Car Urban Extended low-speed vehicle?

19. Do you think the Club Car Urban Extended would be a good fit for your shop's needs?
20. Share your impressions of this vehicle. Consider pros and cons, how well it fits your shop's day-to-day needs, size, maneuverability, and whether it is suited to your typical tasks.

Kia Niro

21. Did you view the Kia Niro sedan?
22. Do you think the Kia Niro would be a good fit for your shop's needs?
23. Share your impressions of this vehicle. Consider pros and cons, how well it fits your shop's day-to-day needs, size, maneuverability, and whether it is suited to your typical tasks.

Fleet Needs and Preferences

24. What vehicle(s) in your current fleet are most in need of replacement?
- List specific vehicle makes, models, years, and/or asset numbers.

25. What do your ideal replacement vehicles look like?
- Describe specific vehicles and characteristics you would prioritize (e.g., make, model, fuel type such as electric or gasoline, payload, range, upfitting needs).

Technology and Perception

26. Pro Power Onboard is a built-in feature in select Ford vehicles that provides 120V power through standard household outlets, allowing you to operate tools and equipment directly from the vehicle. Would this feature be useful for your shop? Please explain.
27. After attending the Future Fleet Demo Day, have your views on fleet vehicles or your department's vehicle needs changed in any way? Please explain.

Appendix 5: Survey Questions

UGA FUTURE FLEET DEMO DAY

WHAT: Join us for a **hands-on demo** of new vehicle options being considered for UGA's fleet! Explore vehicles, review specs, ask questions, and even take a test drive. This is your opportunity to help shape the future of transportation for your department.

WHERE: UGA Automotive Center, 205 Riverbend Rd.

WHEN: Thursday, July 24, 2025
- 8:30-10:30AM – FMD Personnel
- 10:30-11:30AM – Other UGA Departments

FEATURED VEHICLES:

FORD F-150 LIGHTNING (EV)

FORD MUSTANG MACH E (EV)

CLUB CAR EXTENDED CHASSIS (EV)

ALSO FEATURING:
- FORD E-TRANSIT VAN (EV)
- FORD MAVERICK (HYBRID)
- KIA NIRO (EV)
- GEM E4 (EV)

HOSTED BY:
UNIVERSITY OF GEORGIA
Facilities Management Division

Scan the QR Code Now to Sign Up!

NOTE: The Ford F-150 Lightning EV will be priced $3,500 lower than the gas version through September 30th!