

1. EXECUTIVE SUMMARY

FISTech proposes issuing an RFP to evaluate Autonomous Neighborhood Electric Vehicles (ANEVs), small, golf-cart-scale vehicles, as a privately owned, ride-share-enabled mobility layer supporting transportation hubs and community mobility.

The concept is feasible based on:

- proven demand for on-demand microtransit
- existing platform infrastructure
- alignment with market trends toward flexible mobility

The model offers a low-public-cost pathway to increase bus and trains ridership, improve access, and enable a new private mobility ecosystem.

2. CONCEPT OVERVIEW

Operating Model

- ANEVs (2–4 passengers) operate within ~2-mile station zones
- Vehicles are:
 - privately owned (individuals, fleets, employers)
 - dispatched via ride-share platforms
- Riders:
 - request trips to/from stations
 - connect seamlessly to rail or bus

Ecosystem Participants

Role	Function
Manufacturers	Produce ANEV vehicles
Private owners	Purchase & operate vehicles
Platforms	Scheduling, routing, payment
SMART	Optional integration & observation

3. MARKET & DEMAND FEASIBILITY

Strong Alignment with Transportation Trends

- On-demand microtransit is widely used to:
 - bridge first/last mile gaps
 - expand access to transit
- Approximately 60% of riders prefer flexible, on-demand mobility

4. TECHNICAL FEASIBILITY

Vehicle Characteristics (Achievable)

- 2–4 passengers
- Low-speed urban operation
- Short-range, high-cycle usage
- Compatible with existing roadway environments

Platform Integration

- Existing ride platforms already support:
 - on-demand booking
 - routing and dispatch
- ANEV fleet can operate within current microtransit ecosystems

Regulatory Pathway

- Vehicles can be:
 - registered similarly to low-speed vehicles
 - regulated under existing DMV categories for Autonomous Neighborhood Electric Vehicles.

5. FINANCIAL FEASIBILITY

Private Ownership Model

- Reduces need for:
 - public capital investment
 - agency-owned fleet

Revenue Model

- Per-trip fares (market-based)
- Employer-funded rides
- Potential shared ownership fleets

Cost Efficiency

- Smaller vehicles → lower capital and operating costs
- Dynamic routing → improved utilization

Enables non-subsidized or minimally subsidized operation

Additional Incentives

- Potential qualification as:
 - battery/energy assets (ITC eligibility)

6. ENERGY & SUSTAINABILITY FEASIBILITY

Clean Energy Integration

- Potential partnership with cities and counties
 - station-based charging hubs

Grid Benefits

- Aggregated batteries could:
 - reduce peak load stress
 - support distributed energy systems

7. OPERATIONAL & SYSTEM BENEFITS

1. Solves Last Mile Barrier

- Direct station access increases rail and bus adoption
- Converts “car-only trips” to “train/bus-first trips”

2. Increases Ridership

- First/last mile connection is a primary determinant of transit usage

3. Reduces Traffic & Parking Demand

- Fewer vehicles needed at stations
- Lower congestion in station areas

4. Creates Resiliency

- Distributed mobile battery fleet:
 - emergency response capability
 - flexible deployment

5. Supports Economic Opportunity

- ANEVs become:
 - income-generating assets
 - analogous to ride-share vehicles

6. Employer Participation

- Employers can:
 - provide rides as a benefit
 - reduce parking and commuting costs

8. RISKS & MITIGATION

Risk	Mitigation
Demand uncertainty	Pilot at select stations
Regulatory uncertainty	Use compliant vehicle classes
Platform integration	Leverage existing systems (e.g., TRC)
Owner adoption	Financing + employer partnerships
Safety concerns	phased rollout + standards

9. PUBLIC AGENCY ROLE (LIMITED)

Public agencies:

Provide:

- station access points
- potential charging locations
- data integration (optional)

Do NOT provide:

- vehicle capital funding
- operating subsidy (for ANEV layer)

10. FEASIBILITY CONCLUSION

HIGH FEASIBILITY (with phased implementation)

The ANEV concept is:

- Technically feasible (existing vehicle and platform capabilities)
- Financially feasible (private ownership + market pricing)
- Operationally feasible (aligned with microtransit models)
- Strategically aligned with transit goals

11. RECOMMENDATION

FISTech should:

Issue RFP to:

- vehicle manufacturers
- mobility providers
- fleet operators

Focus RFP on:

- cost validation
- ownership models
- integration with ride platforms

Develop:

- pilot deployment scenarios

FINAL TAKEAWAY

ANEV represents a new, privately funded mobility layer that complements existing bus and train options, improves access, increases ridership, and reduces long-term public cost, while enabling new economic and energy ecosystem benefits.