

Autonomous Vehicles and Transit Equity

A Framework for First-Mile Access in Underserved Communities
Position Paper - Revised October 2026

Executive summary

Connect Illinois Network supports responsible development and evaluation of autonomous vehicle technology as a potential complement to public transportation. The test is whether it creates usable access for people whose trips are not adequately served.

Emerging technology must not become a reason to postpone improvements that can be made with human-operated service. Nor should a promise of lower costs substitute for evidence about safety, accessibility, reliability, labor effects, and total operating costs.

CIN advocates a three-layer framework: improve human-operated service now; evaluate autonomous technology for longer-term first-mile connections; and preserve human assistance wherever riders need it. This paper states our policy position, not a finding that a particular deployment is authorized or ready.

Begin with an accurate service baseline

Elburn has Metra UP-West rail service and a scheduled connection through DeKalb's Route 12 shuttle. [1-2] Ride in Kane serves eligible residents. [3] Western Kane should therefore not be described as having no transportation service at all.

The useful question is more precise: which trips remain unavailable or impractical because of location, hours, eligibility, accessibility, or transfers? A first-mile proposal should identify those trips and consider the services already operating before choosing a technology.

Layer 1: Human-operated service now

CIN supports improving access through available transportation models, including human-operated demand-response service and better connections to rail and bus networks. Residents should not have to wait for a future technology before practical improvements are explored.

Any expansion needs an operating plan, realistic cost estimates, funding, accessible vehicles, and local and provider participation. The appropriate model should follow the needs of the trip and the community.

Layer 2: Evaluate autonomous first-mile service

Autonomous vehicles may eventually offer another tool for connecting people to public transit. Their suitability should be demonstrated in the conditions in which they would actually operate, including weather, road layout, boarding locations, and the need for help during a disrupted trip.

CIN supports carefully evaluated pilots that address documented unmet needs and complement useful existing services. We do not assume that automation alone makes a low-density service affordable or that every autonomous trip represents new access.

Compare the full costs of a proposal with realistic human-operated alternatives, including vehicles, supervision, maintenance, insurance, accessible boarding, customer support, and backup transportation. Evaluate whether a pilot improves whole journeys, not simply how many vehicle trips it records.

Layer 3: Preserve human assistance

Riders who need personal assistance must continue to have an appropriate human-supported option. Technology should expand choices without reducing the quality or availability of support that people rely on.

Assistance needs differ among individuals. Age or disability alone does not determine whether someone can use a service independently. Riders and disability organizations should help define accessible booking, boarding, communication, and support requirements.

Do not assume that a current service includes escort or caregiver assistance. The actual support offered by each provider must be checked. An accessible vehicle and a complete accessible journey are related but different requirements.

What a public-interest evaluation should measure

New access: Can people complete necessary trips they could not previously make? Record origins, destinations, times, and connections without overstating population coverage.

Reliability and safety: Can the service perform consistently within its operating conditions, and what happens when it cannot complete a trip?

Affordability and accessibility: Can riders use it without prohibitive cost, inaccessible interfaces, or loss of assistance? Include people who cannot rely on a smartphone.

Effects on existing service and workers: Assess whether the project adds access, diverts resources, changes jobs, or reduces human-supported options. Involve workers and riders in that assessment.

Applying the framework in western Kane County

CIN's immediate role is to research existing services and unmet needs through Connect Kane, then discuss feasible responses with communities and transportation providers. We are not announcing an autonomous pilot location, operator, funding source, or launch date.

Elburn's rail connection makes station access a relevant research question, but the existence of a rail terminus does not establish that an autonomous service is the best response. Existing connections, trip demand, operating constraints, and alternatives all need to be assessed.

The planned Unmet Demand Registry could complement service research with resident input once its intake, consent, accessibility, and data-handling processes are established. Registration is not open, and CIN does not yet present it as an operating dataset.

Regional planning

CIN advocates for regional planning that considers access, affordability, and usable connections across service types. Proposed technology should be evaluated against those public goals. The success of an innovation should be judged by the trips it makes possible and the quality of service riders receive.

Legal authority, approvals, procurement, funding, and operating requirements must be established for any actual pilot. This edition does not rely on unverified legislative timelines or interpret a general research power as authorization for a particular deployment.

Conclusion

We support human-operated improvements now, responsible evaluation of emerging technology, and human assistance wherever it is needed. Autonomous vehicles should earn a place in a transit access strategy through demonstrated public value. Our priority remains the ability to reach work, education, healthcare, and everyday destinations.

Service references

Reviewed October 8, 2026. These sources support the existing-service baseline; the evaluation framework above expresses CIN's position.

[\[1\] Village of Elburn: Metra station](#)

[\[2\] City of DeKalb: Route 12 Elburn shuttle](#)

[\[3\] Kane County: Ride in Kane](#)

[CIN service guide](#)

[Connect Illinois Network - Illinois nonprofit organization](#)