

## DETERMINING AUTOMATED VEHICLE DEPLOYMENT AREAS

## **KPIs to Monitor**

There are several necessary benchmarks in technology transit operations, public sentiments, and other factors necessary for the potential success of an Automated Vehicle (AV) deployment. While there is value in experimentation, agencies should consider deployment when AVs can provide comparable or better service than currently exists. These benchmarks can help with that reasoning.

Our benchmark checklist can give your agency the ability to gauge when AV technology might be ready for deployment.

This is based off of typical rural operational characteristics and so should be considered a starting point for consideration.

The idea is that AVs provide at least the same level of service as you currently manage in order to be worth the investment.

AV BENCHMARK CHECKLIST			
CATEGORY	BENCHMARK	MET?	
Automation	Level 3*		
Battery Life	118 miles		
On-Board Memory	16 GB RAM, 4 TB per day		
Vehicle Speed	24 mph average, 45 mph top*		
Regulatory Conditions	Federal & State Law		
<b>Operations Cost</b>	\$45-\$55 per trip		



## AV DEPLOYMENT CHALLENGES:



Weather (rain, wind, etc.) presents technological challenges for the AV software.



A generational divide makes adoption a challenge for older residents.

\$

AV deployments are typically short due to funding challenges.

## **AV BENCHMARK CHECKLIST (cont.)**

CATEGORY	BENCHMARK	MET?
Funding	Pilot funding	
Road Conditions	Optimal roads, winds <40 mph	
Vehicle Storage & Availability	Storage facility, <20 min. wait	
Buy America & ADA	Compliant	
Training (Operators)	Available	
Vehicle Maintenance	7 years, 175K miles	
Public Sentiment	Support	
Population Density	1.1 households/acre	

\*Level 3 automation requires a safety driver behind the steering wheel. Pending state and federal law, it could potentially reduce the need for CDL for drivers.

