AV SHUTTLES "CHEAT SHEET"

- **1.** There is no federal definition of a AV Shuttle.
- 2. NHTSA defines Low-Speed Vehicles as "(a) battery electric vehicle that has four wheels, a top speed of more than 20 mph and less than 25 mph, a gross vehicle weight rate of less than 3,000 pounds"
- 3. LSAVs operate at Level 4 (High Driving Automation) which means the vehicle is capable of performing all driving functions under certain conditions; the driver may have the option to control the vehicle. Level 5 (Full Driving Automation) which means the human driving is completely eliminated.
- **4.** AV shuttles can be slow or fast; electric or have internal combustion engines.

LSAV LINGO LIST

PURPOSE BUILT

AV shuttles are purpose-built low-floor shuttle vehicles with high ceilings which can accommodate 6 to 22 passengers.



Purpose built "pod cars" that carry 1 to 6 passengers and can be configured as "trains" or platoons.



NEIGHBORHOOD ELECTRIC VEHICLES AKA GOLF CARTS

Some shuttles are retrofits of, s neighborhood electric vehicles in (or "NEVS") which can carry 4 to 10 seated passengers and some standing passengers. Top speeds are 35 mph and they can travel on roads posted at 45.



LIGHT DUTY SEDANS/VANS

LSAVs may be also be retrofitted light duty vehicles like vans or sedans.



TRANSIT-STYLE/TRANSIT QUALIFIED

Coined by a major resort owner and transit operator, both follow a functional definition rather than a recognized vehicle type. Roughly defined as suitable in design to move bus load of people, with wheel chair access, and meeting federal requirements for use in transit and for on the road usage. Some would include trackless trams and large buses that may travel at low or medium speeds.

LOW SPEED DELIVERY VEHICLES

Low speed delivery vehicles span road approved vehicles like NUROs grocery delivery vehicle which received NHTSA's first exemption from the FMVSS to sidewalk robots for food delivery and indoor bots for medicine delivery. During covid NEV and purpose built vehicles have been used to deliver meds, food, and covid test samples.





NEW FORM FACTORS

The form factors for low speed use the gamet from e-bikes and wheel chairs, baggage carts, gantries, forklifts and attentuators or "crash" vehicles following work vehicles.









