

SAE J3194™ TAXONOMY & CLASSIFICATION OF POWERED MICROMOBILITY VEHICLES

POWERED MICROMOBILITY VEHICLE

A wheeled vehicle that must:

- Be fully or partially powered
- Have a curb weight ≤ 500 lb (227 kg)
- Have a top speed \leq 30 mph (48 km/h)

Scope of J3194™

- Only includes vehicles that are primarily designed for human transport and to be used on paved roadways and paths
- Excludes solely human-powered vehicles

TYPES OF POWERED MICROMOBILITY VEHICLES¹

	Powered Bicycle	Powered Standing Scooter	Powered Seated Scooter	Powered Self-Balancing Board	Powered Non-Self-Balancing Board	Powered Skates
Center column	Υ	Y	Υ	Possible	N	N
Seat	Υ	N	Υ	N	N	N
Operable pedals	Υ	N	N	N	N	N
Floorboard / foot pegs	Possible	Υ	Υ	Υ	Υ	Υ
Self-balancing ²	N	N	N	Υ	N	Possible

¹All vehicles typically designed for one person, except for those specifically designed to accommodate additional passenger(s) ²Self-balancing refers to dynamic stabilization achieved via a combination of sensors and gyroscopes contained in/on the vehicle

CLASSIFICATION SYSTEM

The classification system consists of the micromobility vehicle type with descriptors of curb weight, vehicle width, top speed and power source.

Name	Code	Description
Curb weight Ultra lightweight Lightweight Midweight Midweight Plus	WT1 WT2 WT3 WT4	Curb weight \leq 50 lb (23 kg) 50 lb (23 kg) < curb weight \leq 100 lb (45 kg) 100 lb (45 kg) < curb weight \leq 200 lb (91 kg) 200 lb (91 kg) < curb weight \leq 500 lb (227 kg)
Vehicle width Standard-width Wide Extra-Wide	WD1 WD2 WD3	Vehicle width \leq 3 ft (0.9 m) 3 ft (0.9 m) < vehicle width \leq 4 ft (1.2 m) 4 ft (1.2 m) < vehicle width \leq 5 ft (1.5 m)
Top speed Ultra low-speed Low-speed Medium-speed	SP1 SP2 SP3	Top speed ≤ 8 mph (13 km/h) 8 mph (13 km/h) < top speed ≤ 20 mph (32 km/h) 20 mph (32 km/h) < top speed ≤ 30 mph (48 km/h)
Power source Electric Combustion	E C	Powered by an electric motor Powered by an internal combustion engine



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GUIDANCE ON TERMINOLOGY USE

The following naming convention may be used to develop either word- or code-based terms using classifiers and vehicle types.



- Curb weight: 40 lb
- Width: 2 ft
- Top speed: 18 mph
- Propulsion: electric

"Ultra lightweight, standard-width, low-speed, electric standing scooter"

"WT1/WD1/SP2/E standing scooter"



- Curb weight: 190 lb
- Width: 2 ft
- Top speed: 30 mph
- Propulsion: electric

"Midweight, standard-width, medium-speed, electric seated scooter"

"WT3/WD1/SP3/E seated scooter"