

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 \leq 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	Y	Y	Y	Possible	N	N
Seat	Y	N	Y	N	N	N
Operable pedals	Y	N	N	N	N	N
Floorboard / foot pegs	Possible	Y	Y	Y	Y	Y
Self-balancing ²	N	N	N	Y	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	WT1	Curb weight \leq 50 lb (23 kg)
Lightweight	WT2	50 lb (23 kg) < curb weight \leq 100 lb (45 kg)
Midweight	WT3	100 lb (45 kg) < curb weight \leq 200 lb (91 kg)
Midweight Plus	WT4	200 lb (91 kg) < curb weight \leq 500 lb (227 kg)
Vehicle width		
Standard-width	WD1	Vehicle width \leq 3 ft (0.9 m)
Wide	WD2	3 ft (0.9 m) < vehicle width \leq 4 ft (1.2 m)
Extra-Wide	WD3	4 ft (1.2 m) < vehicle width \leq 5 ft (1.5 m)
Top speed		
Ultra low-speed	SP1	Top speed \leq 8 mph (13 km/h)
Low-speed	SP2	8 mph (13 km/h) < top speed \leq 20 mph (32 km/h)
Medium-speed	SP3	20 mph (32 km/h) < top speed \leq 30 mph (48 km/h)
Power source		
Electric	E	Powered by an electric motor
Combustion	C	Powered by an internal combustion engine



TO LEARN MORE ABOUT MICROMOBILITY, CONTACT:

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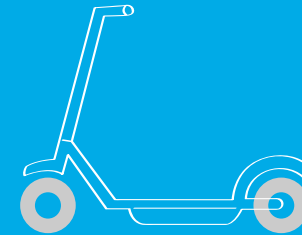
[sae.org/micromobility](https://www.sae.org/micromobility)

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Source: SAE International from SAE J3194™ Standard - TAXONOMY & CLASSIFICATION OF POWERED MICROMOBILITY VEHICLES. https://www.sae.org/standards/content/j3194_20191/

GUIDANCE ON TERMINOLOGY USE

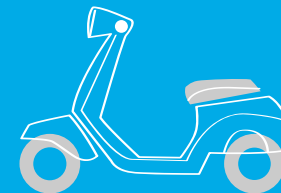
The following naming convention may be used to develop either word- or code-based terms using classifiers and vehicle types.



- 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”