



# U.S. Forest Service Briefing Paper

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**Date:** February 15, 2017

**Topic:** Electric Bicycles (E-bikes)

**Issue:** Classification of E-bikes Under the Travel Management Rule (TMR)

## Summary/Key Points

- E-bikes are motorized bicycles.
- E-bikes are growing in popularity, and their design and capabilities are rapidly changing.
- E-bikes travel at speeds of 20 to 28 mph, compared to pedestrians and non-motorized bicycles, which typically travel at speeds ranging from 3 to 10 mph.
- The Forest Service is monitoring new technologies, visitor access and safety, social and sustainability issues, and natural resource effects associated with e-bike use on NFS roads and NFS trails.
- The TMR defines “motor vehicle” as “any vehicle which is self-propelled, other than (1) a vehicle operated on rails; and (2) any wheelchair or mobility device, including one that is battery-powered, that is designed solely for use by a mobility-impaired person for locomotion, and that is suitable for use in an indoor pedestrian area.” 36 CFR 212.1.
- This definition is consistent with the definition for a “wheelchair” in federal wilderness in section 508(c)(2) of the Americans With Disabilities Act, 42 U.S.C. 12207(c)(2).
- E-bikes do not meet either exception to the definition of a motor vehicle in the TMR.
- Consistent with 36 CFR 212.1, the Forest Service is managing e-bikes as motor vehicles.
- The International Mountain Bike Association regards e-bikes as motorized devices.
- The Bureau of Land Management, U.S. Fish and Wildlife Service, Federal Highway Administration, and the nations of Canada, Australia, Europe, and South Africa regard e-bikes as motor vehicles.
- The National Park Service has not made a determination regarding e-bikes.
- Under the TMR, e-bikes may be ridden where motor vehicles are allowed, including on National Forest System (NFS) roads open to all vehicles; NFS trails open to all vehicles; NFS trails open to vehicles 50 inches or less; NFS trails open to motorcycles only; and NFS trails open to e-bikes as a special designation.
- The Forest Service will use the information obtained from monitoring to reassess and, if needed, adjust guidance for designating the use of e-bikes on NFS roads and NFS trails.

## Background

E-bikes have been available for years overseas and were first used by commuters on roadways in Europe. There are two basic types of e-bikes, pedal-assist and throttle-twist. On pedal-assist e-bikes, the motor does not have to be on the entire time the bicycle is being ridden and can be activated by pedaling to augment human power. Throttle-twist e-bikes are activated by twisting the handle grip to propel the bike with or without pedaling. In addition to a motor, e-bikes have a battery and a controller to operate specific options.

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