

ABSTRACT: G4, A Nationwide High-Speed Monorail Grid for the US.

This paper proposes a new nationwide transportation grid for the US, G4. G4 is a fixed guideway for high-speed rail service. The paper uses four criteria. First, "***Is it technically feasible?***" It reviews the various technologies and concludes that neither conventional rail nor maglev could do the job and comes down for the high-speed monorail being developed in Colorado. Second, "***Is it economically viable?***" It examines how G4 could be financed and proposes a new financial instrument, FAT bonds, which would be serviced by a toll on the highways while monorail passengers ride free. Third, "***Is it environmentally desirable?***" It examines "good growth" that avoids sprawl and suggests high density developments in the empty space over existing highways, connected by the monorail. Fourth, "***Is it politically achievable?***" Finally, this paper examines who votes for transit - Democrats more than Republicans - and why, and then suggests how to win approval for G4.