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New 100 + Year Road RALE System With T-Beam Foundation Saves Energy and Increases Safety by Reducing Work Zones DAVID PRESSLER, Primary Nuclear Research — Traffic crashes represents a loss of 2.2 percent of the U.S. Gross Domestic Product a year. By reducing congestion and the number of dangerous construction zones it is possible to increase user safety with fewer accidents. This new system once implemented eliminates many major national road preservation projects, which include replacing or reconstructing the highway pavements over the long period. Other included costs like those of lost time and lost fuel incurred by passenger and freight transportation on the section being reconstructed amount to well over 100 billion dollars a year. All other things being equal, thicker concrete highway pavements will last longer, however, thicker pavement costs more. By utilizing the physics of the T-Beam or the "floor-joist," concept where the upper deck of the highway is supported and reinforced by longitude beams or rails that protrude into the soil, there is a great improvement in the strength of the pavement system. The pavement structure configuration of rails supports and carries vehicle loads, which is transferred "down-the-road." Much like a snowshoe or like a rail bridge this device spreads out the applied stresses over a much larger area and the high strength pavement resists flexing of the concrete. Stress reduction reduces concrete fatigue and this allows the highway to last three to four times as long without major road reconstruction.

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