ATN/PODCARS, THE MISSING LINK

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The Mineta Transportation Institute has had confidence in the Podcar concepts for more than a decade and has conducted related studies and supported conferences throughout the US and Europe. It’s time to move beyond concepts and models to create practical applications.

Our Earth is growing smaller with eight billion people to host in only a few years. All of those will require mobility. That means moving beyond automobiles, highway congestion, and rampant air pollution and instead relying more heavily on new, more sustainable transit modes. It also means using every resource in our transportation tool kit – and that must occur very quickly.

Some of the traditional tools of the past 100 years have become obsolete. In other cases, those tools are still good but used in the wrong way. One excellent example is the reemergence of rail but in the form of electrically powered high-speed trains to cover intermediate distances between 50 and 800 miles. Throughout the world, except in the US, reliable, safe, and clean high speed rail replaces short-haul air trips which are expensive, inconvenient, and exacerbate climate change. Though California is showing the way for the nation by building the first North American system, the lack of integrated feeder service at most stations is painfully apparent.

Among the most serious gaps is the first and last mile connection supporting the higher throughput rail and express bus modes that stop infrequently so serve only one stop in a large complex. For heavily used high-speed, commuter, metro, light rail and rapid bus lines to operate optimally, riders must have convenient feeders to the stations on the housing end and a seamless connection to jobs on the employment end. That is especially true when serving sprawling industrial or commercial parks, airports, special event venues, universities, hospitals, and other major trip generators. That last mile from the station through interminable parking lots and blocks of intervening developments frustrates the riders' use of the major throughput modes.

That last mile gap, especially in the rapidly growing US sunbelt areas with typically lower-density, spread out developments, is transit’s Achilles heel. Automated transit network (ATN) applications such as Podcars seem an optimum way to meet many of those first and last-mile challenges, integrating effectively with existing systems while cost-effectively suspended over available rights-of-way. But the Federal Transit Administration, which will oversee the alternative analysis before providing construction funding, and local transit operators will not risk building a new mode without a proven operating example.

First operating systems are expensive to produce and speculative but absolutely necessary. The old adage is that a picture is worth a thousand words. The Mineta Transportation Institute expands on that by noting that an operating Podcar system could fill the first and last mile gaps, make the national transit systems irresistible, and catapult the US into sustainability. With highways nearing terminal gridlock and climate change in crisis, that game-changer is due!