The GRID (**G**reen **I**nfrastructure **I**ntelligent **D**istribution) project proposes regional-level zero‑emissions port operations and goods movement modernization.

The San Pedro Port complex is a crucial sector of our regional and national economy, yet container handling and related transport operations have not been modernized since the 1960's. It uses a Ptolemaic system that expanded with existing processes intact.

Port container handling and transport must be updated to accommodate current and projected international trade volumes. US goods movement is a component of the global trade supply chain that has not been developed to its full efficiency or profitability.

The primary policy points of the GRID project are:

1) it shifts the majority of container transport from truck to rail,

2) it separates freight traffic from passenger traffic, and

3) it relocates container transit from surface to underground routes.

This project will generate a major sustainable job boom; reduce diesel truck traffic by more than half; reduce traffic congestion, highway repair and maintenance needs; and reduce air, ground, greenhouse gas and water pollution. It meets and exceeds every goal and requirement of the 2012 SCAG RTP, and the AB 32 and SB 375 mandates.  If implemented soon enough, possibly as a project of national significance, the GRID project can resolve the need for several planned highway expansions, near-dock and off-dock facilities - all projects that are destructive to health, environment and quality-of-life throughout our region.

At its very simplest, the GRID project modernizes on-dock rail operations by sorting and storing containers at the port terminals. This eliminates the need for over 70% of the freight truck traffic - the heaviest, most dangerous and most polluting vehicles on the road - required by the current port systems.

The primary GRID components are:

* A deep berth ‘superdock’ that sorts and stores containers on-dock, in the vertical space under the cranes, and loads directly to conventional rail, presorted by destination.
* An underground electric rail freight pipeline that shuttles containers to and from the ports, inland railyards and intermodal distribution centers.
* A smaller inland version of the superdock that loads electric or hydrogen fuel cell trucks for local delivery and final-destination distribution.

Each GRID component is ultra-low emission and electrically- powered; uses existing transportation platforms and is built from currently manufactured, American-made parts. It can be primarily financed with private equity, and has a revenue model that can fully pay for the design, build, operation and maintenance of the entire system.