

Collaborative Industrial Optimization

Collaborative Industrial Optimization integrates public-sector planning with private-sector commerce and capital to simultaneously benefit industrial activity, communities, and the environment

The principles and perspectives of OnTrackNorthAmerica's (OTNA) Collaborative Industrial Optimization are outlined here. We have studied the "infrastructure of infrastructure planning" in the United States, since 1994, by interviewing over 10,000 knowledgeable individuals while advising on transportation policy and infrastructure projects in 45 U.S. states.

The Principles and Perspectives of Collaborative Industrial Optimization

- At this critical moment, there is nothing more important than aligning public and private investment with global sustainability
- Unfortunately, the marketplace itself does not somehow alchemize individual business projects into coherent systemwide progress
- The productivity of major U.S. industrial arenas such as mining, energy, and agriculture is suffering because transportation planning is too often an afterthought in industrial investment
- There is no shortage of intelligent, hardworking individuals or competent organizations, but we are mired in an obsolete paradigm of competition and mistrust
- We now need to imbue commerce and investment with collaboration, coordination, whole systems thinking, and trust
- A modern, well-working society needs to orient its supply chains around the energy-, space-, and capital efficiency of moving freight by rail
- Society's decision to publicly fund roads that compete with privately funded railroads has contributed to a modal imbalance that can only be addressed through conscious dialogue
- As we speak, investment of capital and land is surging into North American infrastructure and supply chains that overly depend on trucks moving on already congested roadways
- Our tax dollars are about to be spent on transportation infrastructure and industrial development without addressing these underlying gaps and inefficiencies
- Strategic mineral mines and electric vehicle factories are being sited and built with the related materials and goods moving by truck instead of rail, missing the opportunity to create sustainable supply chains, not just sustainable production

- Moving heavy weight over land in trucks with rubber tires on rough concrete and asphalt only makes sense when integrated with the use of railroads
- The goods moved by a one-mile train require a 25-mile convoy of trucks on the highway
- How goods are moved to and from an industrial site is as important as the activities at the site, yet we aren't planning and investing with this fundamental understanding in mind
- Simply focusing on moving more and more freight while marginalizing how we move, where we move, and what we move is short-sighted
- Major benefits will accrue from the implementation of new end-to-end industrial systems, including the transportation and processing of solid waste and forest materials into sustainable energy and valuable products
- The transition to Collaborative Industrial Optimization must incorporate sustainability into the performance measures, recognition, and compensation for individuals in companies and agencies

OnTrackNorthAmerica has developed a comprehensive set of tools that enable this level of multidimensional planning and investment, including:

- The [North American Freight Forum](#) for gathering collective intelligence into smart policies, plans, and investments
- [Regional, corridor, and commodity action planning](#) to aggregate individual infrastructure projects into coherent infrastructure systems
- The [Land Freight Lifecycle Impact Project](#) to account for the full range of internal and external costs of freight movements

OnTrackNorthAmerica works with partners who want to forward these principles and goals.

If that is you, please connect.