CONNECTIVITY AND ACCESSIBILITY

There is growing appreciation that the benefits of transportation systems should be measured in terms of the access and connections that they provide to job, commerce and personal activity opportunities, rather than merely the value of time and cost savings. EDR Group has been at the forefront of developing methods to assess these benefits and their productivity consequences.

Freight Accessibility Study. For FHWA and AASHTO, EDR Group evaluated methods of measuring freight accessibility, and ways that business location and productivity can be affected by local access to both the interstate highway system and intermodal freight facilities. The study examined ways that accessibility is affected by the availability, time, distance, cost, reliability and frequency of freight services. The report defined freight access metrics, and provided case studies to illustrate how they can be used.

Measuring Productivity: Roles of Connectivity and Accessibility. For the National Cooperative Highway Research Program (NCHRP Report 786), EDR Group led an international team that assessed ways to measure and calculate the productivity impacts of transportation projects. The study examined effects of transportation system changes on labor and business customer market accessibility, intermodal connectivity and supply chain costs, and their wider effects on the economic productivity of regions.

Transportation and Telecom Connectivity. For Virginia DOT (under subcontract to Michael Baker), EDR Group is assessing transportation connectivity in central Virginia and its economic impacts. "Connectivity" is defined to include both road and broadband data networks, as well as social and institutional connections affecting business access to a skilled workforce. The study is examining ways that infrastructure connectivity can support broader economic development strategies.

North Jersey Multimodal Connectivity. For the North Jersey Transportation Planning Authority, EDR Group, EDR Group (under subcontract to Louis Berger Group), is assessing key connectivity performance metrics for evaluating origin-destination connections in the region. The study considers four key themes: reliability, route directness, transit-supportiveness, and bicycle/pedestrian connectivity. The connectivity evaluations are designed to aid in the development of future transportation investment strategies.

National Highway System Passenger Connectors – For FHWA (under contract to Cambridge Systematics), EDR Group is documenting the mobility and connectivity aspects of NHS (National Highway System) passenger intermodal connectors, to show how they facilitate connecting American households to the global economy, and to recommend way that they can be improved. Of special interest that NHS passenger intermodal connectors connect the transportation disadvantaged, economically disadvantaged and underserved populations to employment opportunities.

Aviation Connectivity and National Productivity. For the Airport Cooperative Research Program (ACRP Report 132), EDR Group led a study to quantify the relationship between the national aviation system and the national economy. The study examined the broader role of the commercial aviation and US airports in connecting regions across the US and enabling economic growth. It also broke new ground by showing how changes in aviation network connectivity can affect national productivity.