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Strategic Transportation Investments for Economic Development

By Glen Weisbrod

MAKING THE CONNECTION WORK FOR YOU

TRANSPORTATION ROLES IN ECONOMIC DEVELOPMENT ARE SHIFTING. In a world of transformational changes in technology, trade and workforce requirements, business and economic development interests are interacting with transportation planners in new ways. Transportation investment impacts range from enabling just-in-time supply chains to supporting global gateways and high tech workforce growth. This article examines how new transit, rail, highway, and aviation investments are now being planned and implemented to leverage broader economic development. Even more importantly, it examines how private business organizations are joining with economic developers to coordinate and support public investments that can reinforce economic development strategies for communities and regions.

strategic transportation

INVESTMENTS FOR ECONOMIC DEVELOPMENT

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A LONGSTANDING IDEA WITH NEW MEANING TODAY

The idea that transportation investments can be strategic steps required to enable economic development is an idea that has been around since ancient Roman times and earlier, and it was certainly recognized by leaders at the dawn of America's development as a country. From local actions such as a franchise for cross-harbor ferry service by Boston's leaders in 1630, and federal actions such as funding America's first national road in 1811, the movement of workers and freight was seen as the enabler of economic growth. And yet even in current times, government and business leaders still are working on how to best coordinate to effectively ensure that public infrastructure and service investments are being made to ensure our economic future. For this reason, it is worthwhile to consider the opportunities, risks, and examples of success in how we address the issue today.

Public leaders across the entire political spectrum widely speak of the importance of supporting local or regional economic competitiveness, and do recognize transportation infrastructure and services as being a relevant aspect of it.

FIGURE 1: EXAMPLES OF STATE DOT MISSION STATEMENTS

Public leaders across the entire political spectrum widely speak of the importance of supporting local or regional economic competitiveness, and do recognize transportation infrastructure and services as being a relevant aspect of it. We can see this phenomenon in the examples of state DOT mission statements, as shown in Figure 1. Of course, there can be a wide gap between noting the connection and doing something about it.

Regardless of the position taken by state leaders, it is quite evident from numerous site location surveys over the years that highway access has been a top factor in commercial and industrial business siting, along with skilled labor market access for industries that have high value products requiring specialized skills. Airport access is widely cited as important for many professional and financial services, and headquarters for globally traded industries. Rail access is particularly important for industries with major resource or commodity based inputs and products. The table shows an exam-

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TABLE 1: SURVEY OF TOP BUSINESS SITE LOCATION FACTORS

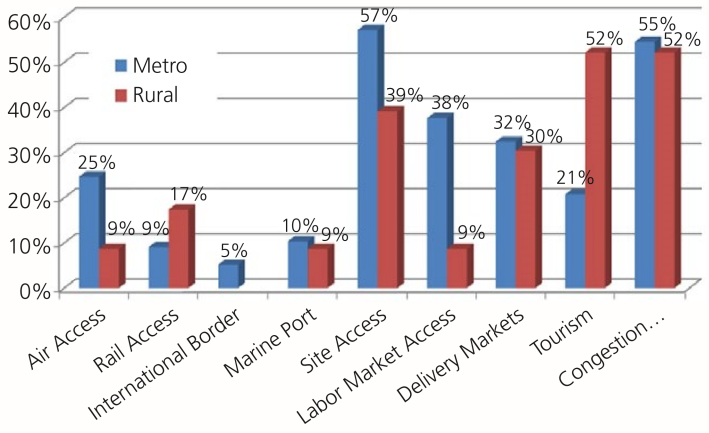
Business Site Location Factor	% Importance	Rank
Availability of Skilled Labor	93%	1
Highway Accessibility	88%	2
Proximity to Major Markets	76%	8
Inbound/Outbound Shipping Costs	65%	19
Proximity to Suppliers	64%	20
Accessibility to Major Airport	59%	21
Railroad service	32%	27
Waterway or ocean port accessibility	24%	28

Source: Area Development Magazine, Q1, 2016

ple of rankings from a widely recognized national site location survey. And yet, it is critical to note that these various access factors differ substantially in importance among industries – a fact that provides the basis for viewing transportation investments as support for strategically important target industries in a region.

These same factors also show up in the economic development motivation for major highway projects around the US. A national study, focusing on 100 case studies of highway focused projects, found that many highway projects are being motivated by a desire to enhance market access and/or reduce costs of congestion. The most dominant forms of market access motivating highway investments were: industry site access, labor market access; delivery market access; tourism; and connectivity to air, rail, and marine ports. These results are shown in Figure 2.

FIGURE 2: MOTIVATION FOR MAJOR HIGHWAY CAPITAL INVESTMENT PROJECTS



Source: Strategic Highway Research Project, Interactions Between Transportation Capacity, Economic Systems, and Land Use, 2014

STRATEGIC CONSEQUENCES TODAY

There are many ways that specific transportation investments can be linked to the growth of particular industries, regardless of whether that was the original intent. For instance, as I-81 emerged as a north-south truck route alternative to the crowded I-95 corridor in eastern states, there was a flurry of new business investment along the corridor. This included a concentration of new warehousing in eastern Pennsylvania, featuring regional logistics and distribution centers. These locations made it possible for central distribution facilities to more cost effectively serve the multiple markets – including the Washington, Philadelphia, and New York City regions. (See Figure 3.)

FIGURE 3: EMERGENCE OF LOGISTICS AND WAREHOUSING CENTERS ALONG I-81, IN PENNSYLVANIA

While new highway capacity can enable growth of economic activity, conversely traffic bottlenecks can threaten and hold back growth of economic activities that depend on regional trade. This was found by a study of the Oregon Business Council with Oregon DOT, which surveyed major businesses and found strong evidence of adverse manufacturer and distributor location decisions in cases where traffic bottlenecks were adding to scheduling and logistics costs. Of course, that same issue can apply anywhere regional distribution networks cross urban centers or tourism destination centers. However, the rising cost of congestion is most critical for firms in high growth industries, as they need to constantly reevaluate the competitiveness of their current locations in terms of the capacity and adequacy of those sites to meet further growth demands.

HIGH-TECH, GROWTH INDUSTRIES

The nation's industries with the highest growth rates include knowledge-based technology industries, such as biotech and software. High tech employment centers typically depend on access to a large market of workers with specialized skills. Consequently, they tend to locate at sites that are accessible to a broad regional labor market. For instance, the most well-known high tech, knowledge-based clusters in the Boston and the San Francisco Bay areas both started as computer hardware manufacturers located in highway oriented business

FIGURE 4: SILVER LINE STATION IN BOSTON SEAPORT DISTRICT

FIGURE 5: VANCOUVER GATEWAY MULTIMODAL TRANSPORTATION PLAN

parks in outlying fringe areas – Silicon Valley (California) and the Route 128 belt (Massachusetts). However, the newer software development centers in both of those markets have been moving to urban redevelopment areas that attract millennials with a more exciting urban lifestyle and public transit access – such as SoMa (South of Market) in San Francisco, and Kendall Square and the Seaport District in the Cambridge/Boston area. Other areas, such as Denver's Tech Center, have also grown with public transit access as an integral complement to highway access for workers. (See Figure 4.)

PARTNERSHIPS WITH ECONOMIC DEVELOPMENT ORGANIZATIONS

In general, economic development organizations tend to be focused on promoting business attraction, generation, and growth today, not 20 years from now. Yet the time frame for planning, building, and opening major new highway, rail and air infrastructure can total as much as two decades or sometimes even more. That creates a challenge for officials of economic development and transportation agencies to find common ground for planning. To fill that gap, a variety of civic organizations have emerged, frequently founded by business leaders with the intent to bring together business, government, and other stakeholders to do more strategic investment in promoting future economic development.

The Greater Vancouver Gateway Council in British Columbia was a pioneer group of this sort, which focused on multimodal surface transportation planning to support Vancouver's economic role as Canada's Pacific Gateway for air and sea travel affecting both cargo and visitor movements. The plan brought together passenger and freight planning – spanning rail, transit, and highway infrastructure – to support gateway access needs. A $3 billion plan of investments (Figure 5) has since been essentially completed. This plan provided new and enhanced links from the airport and marine port to downtown visitor sites as well as regional manufacturing areas, and regional truck and freight rail routes. Bob Wilds, formerly executive director of the Greater Vancouver Gateway Council, notes that "a major reason for the success of this plan was the fact that the council brought metro and provincial government leaders together with private industry leaders."

Many other civic partnerships have also examined and advocated for long range regional transportation plans as strategic investments. They include Chicago Metropolis Solutions (which has disbanded after generating significant interest in regional freight plans); the ITASCA Group that promoted regional transit to enhance job access and job growth in the Minneapolis-St. Paul region; and ABC (A Better City), a Boston-based civic group which has supported studies of the need for strategic transportation infrastructure investment to promote industry growth. Portland, Oregon, is also a case example where the local/regional and state government organizations joined with the Portland Business Alliance (Chamber of Commerce), Greater Portland (economic development organization), and Port of Portland to jointly cosponsor studies to document the need to address congestion and promote greater market access for traded industries.

The role of these types of economic development civic partnerships is described by Rick Dimino, executive director of ABC, as follows: "ABC represents the business and institutional communities in its role in shaping and influencing the built environment. Our organization is benefitted by the inclusion of these private parties, who see the benefit of their investment in ensuring both near term and long term global competitiveness for Greater Boston and the Commonwealth. High quality infrastructure is at the heart of a successful economy."

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EVOLVING NATURE OF TRANSPORTATION INTERVENTIONS

State and local transportation agencies across the US have a long history of initiating major new highway and bridge projects to leverage private investment in new manufacturing plants and distribution centers. There are several contemporary examples of this phenomenon. The state of Nevada accelerated funding for a new USA Parkway from I-80 to US 50 to facilitate development at the Tahoe Reno Industrial Park including the new Tesla battery factory. Ohio and Kentucky also coordinated to finance construction of two bridges on the Ohio River in the Louisville area in part to enable a new distribution center for Amazon.com which would then have a direct route to the UPS "WorldPort" freight hub at Louisville International Airport. In each case, the inflow of associated jobs and wages is expected to significantly exceed the cost of the transportation investments.

Today, the need to develop and implement multimodal transportation development strategies is receiving increased attention. These plans combine transit, highway, and fiber optic investments, with the aim of expanding workforce and business visitor access to high tech businesses. Massachusetts DOT and the city of Boston enabled development of the new "Seaport District" from what had been an old warehouse district, in part by extending I-90 to the area and connecting it with the airport, and completing the Silver Line bus rapid transit, a new bridge connector to the downtown financial district, and new underground utilities including fiber optic lines through the area. The concept of developing this area as an "innovation district" was the dream of the former mayor, Tom Menino. The city developed an areawide plan featuring further coordination with the state DOT, Massachusetts Port Authority, Convention Center Authority, and ABC (A Better City) – a business council organization that has been involved from the beginning. The dream is being realized and the area has since attracted the new headquarters for General Electric and Vertex Pharmaceuticals. (Figure 6)

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FIGURE 6: BOSTON'S EMERGING NEW SEAPORT DISTRICT

FIGURE 7: I-15 TECH CORRIDOR IN LEHI, UTAH

Another emerging case of planned, multimodal transportation is the I-15 technology corridor developing along I-15 south of Salt Lake City. (Figure 7) Utah DOT has been working with several Utah metropolitan planning organizations (MPOs) as well as the Salt Lake Chamber and other business organizations in a long-range planning effort intended to develop a vision and plan to accommodate unprecedented growth in the state during the next 40 years, including growth of high tech business in the area. The plan includes public investments in a new FrontRunner commuter rail line, extension of TRAX light rail to the area, completion of a new SR92 east-west expressway route, and expansion of frontage roads and connectors along the north-south interstate route. The projects also include public-private partnership financing, development of a prominent area that previously was home to a state penitentiary and are coordinated with new fiber optic lines placed along major transportation corridors. Utah DOT's executive director, Carlos Braceras, notes that the multimodal transportation investments are part of a broader vision and that "our role at Utah DOT isn't to build roads and bridges, it is to help build the communities of our dreams."

LEARNING FROM RECENT EXPERIENCE TO IMPROVE THE FUTURE

In each of these cases, a similar pattern has evolved, in which there is a vision for economic development, supported by a package of multi-modal transportation investments that is targeted to provide wide access for businesses, workers, and visitors to attract high growth

industries. To generalize from these assorted cases, national transportation organizations have started to more systematically assemble collections of case studies. Known as "ex post" analysis, these are follow up efforts (after project completion) to document the value of infrastructure investment for economic development.

The American Public Transportation Association has funded a series of case studies of how transit investments have enabled high tech development (see http://www.apta.com/resources/reportsandpublications/Pages/default.aspx). The American Association of State Highway and Transportation Officials has coordinated with US DOT to offer a national database of highway and transit case studies that document transportation investments and their economic development consequences (see https://planningtools.transportation.org/223/case-study-search.html). These case studies also feature stories documenting the role of business and economic development organizations in working with local and state government agencies to plan and focus resources to achieve targeted economic development results.

There are some common lessons to be learned from the cases laid out here. The first is that transportation investment can be an important tool in enabling longer term economic development. It helps to start with a collective vision or dream for the area's future, though it must also be supported by realistic assessments of economic development opportunities and the roles that transportation improvements can play to enable them. To succeed, private and public investments must also be coordinated. Most importantly, all of this can only take place if there is ongoing conversation among the business community, state and metropolitan transportation agencies, and economic development organizations to enable coordinated action.

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