

Commission Briefing Paper 4L-02

Implications of Investment in Corridors of National Significance

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Introduction

This paper is part of a series of briefing papers to be prepared for the National Surface Transportation Policy and Revenue Study Commission authorized in Section 1909 of SAFETEA-LU. The papers are intended to synthesize the state-of-the-practice consensus on the issues that are relevant to the Commission's charge outlined in Section 1909, and will serve as background material in developing the analyses to be presented in the final report of the Commission.

This paper provides: background and key findings (i.e., an executive summary); some assumptions used in the paper; some background on the issue of "What is a Corridor and Are Corridors Multimodal or Highway Only; Legislative History of Identifying Corridors; and What to Expect from Corridor Based Investment.

Background and Key Findings

Corridors are logically used for analysis, identification of national importance, and strategic emphasis of connectivity between major destinations. Some corridor programs in the past were to enhance economic development; some to expedite corridor construction; and, some to improve efficiency in existing corridors.

Emphasizing corridors in funding transportation means that corridors identified as funding recipients will be improved faster, and all other transportation assets will be improved more slowly, than would otherwise be the case, more specifically:

- If, for example, a lean system (say 30,000 miles) of Corridors of National Significance is designated and funding equivalent to several of the existing funding programs supports the corridors, these corridors may reach premium quality.
- If, for example, an expansive system (say 200,000 miles) is designated and funding equivalent only to the existing National Highway System program supports the corridors, performance of these corridors will likely deteriorate.
- Because of the stakes, substantial controversy can be expected in any process designating corridors as being "of National Significance".
- Because there are many reasons to designate corridors and because of the intermodal question, any designation will need to be subjective.
- If travel increases faster than expected, more corridors will require emphasis for congestion relief, including improvement to non highway modes.
- The extent to which private funds can be used for corridors is being explored.

Staff Comments

In the sections that follow of this paper, more background information is provided on corridors--including a definition for corridors, and legislative history and information. Implications for investment in corridors of national significance are presented with respect to possible designation outcomes, funding program possibilities, and advocacy among corridor stakeholder groups.

Assumptions

For the purpose of this paper, we assume as a baseline that the future will be like the past; that is, more people traveling more miles each year; and more freight moving more miles each year. In short: trend is like destiny. We also assume two possible deviations from the baseline. In one, travel decreases substantially due to such factors as increasing energy costs and/or telecommunications and/or miniaturization of commodities. In the other, travel increases substantially from the baseline due to increased personal wealth, discovery of a cheap energy source, etc.

What is a Corridor? Are Corridors Multimodal or Highway Only?

There are at least four reasons for using the term corridor.

The first is as a unit of system or project analysis. When doing project planning and environmental documentation, the study will usually include transportation facilities and services parallel to and directly connecting to the transportation facility that is the primary element of study. This allows, for example, for better traffic analysis. Such corridors are typically not much more than a few hundred miles long for system planning analysis or a dozen or so miles long for project analysis. Project analysis may be for highways or public transit or other modes.

The second is that many corridors are, in effect, brands. For example, I-95 west of Boston, MA has been called the "New England Technology Corridor" or similar names for a number of years (in 1955 it was called the miracle semicircle). The chain of cities connected by US 101 in the vicinity of San Jose, CA has been called "Silicon Valley" since 1971. Other corridors are given names by the citizens who use the transportation infrastructure in the corridors. These corridors are typically longer than the analysis corridors but typically less than 50 miles. These are typically highway corridors.

The third reason is that corridors may be thought of as the transportation connection between cities, between other important destinations, or even between other corridors. For example, the Missouri I-70 corridor connects Kansas City and St. Louis (the 1985 World Series was called the I-70 Series because the Royals played the Cardinals). These corridors could be hundreds, possibly over 1000 miles long. Generally, the longer the corridor, the more important it is to freight and the less important it is to passenger travel. The USDOT "Corridors of the Future Program" (FHWA administered) is focused on improving the flow of interstate freight in order to relieve congestion. Many intercity corridors are served by highway, freight railroad and passenger air (and the I-95 corridor from Washington, D.C., to Boston is also served by a high-design level Amtrak).

The fourth reason is that corridors are referred to in statute. For example, Congress designated corridors in section 1105 of the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA).

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Congress also created section 1302 of SAFETEA-LU and used the phrase “Corridors of National Significance” within the legislative language. Essentially all these corridors are highway corridors.

Legislative History of Identifying Corridors

In a real sense, the Interstate Highway System was a set of corridors of national significance. These corridors clearly acted as both an agent of economic development and also a way of expediting construction.

The Interstate

As the Interstate Highway System matured, groups looking at the future had various ideas about what the next “big thing” should be. In 1984, AASHTO established a task force on “Future Directions for the Federal-Aid Highway Program”. The task force developed a number of recommendations that were adopted in 1985. One of these was to establish a “System of Highways of National Significance” that would include the Interstate System and other highways of truly national importance.

The National Highway System

The 1991 ISTEA contained several provisions that could have become the next big thing. One of these, similar to the 1985 AASHTO recommendation, was the National Highway System. This was developed per the direction in the ISTEA and designated by Congress in 1995 with provisions for modification of the system.

The National Highway System includes the Interstate Highway System, other important highways, defense-related highways and connectors between these three elements and military installations and intermodal facilities. The National Highway System is about 160,000 center lane miles in length, including the approximately 47,000 center lane miles of Interstate Highway System. The purpose of the National Highway System, as stated in the 1991 legislation and codified in section 103 to title 23 U.S.C., is:

...to provide an interconnected system of principal arterial routes which will serve major population centers, international border crossings, ports, airports, public transportation facilities and other intermodal transportation facilities and other major travel destinations; meet national defense requirements; and serve interstate and interregional travel.”

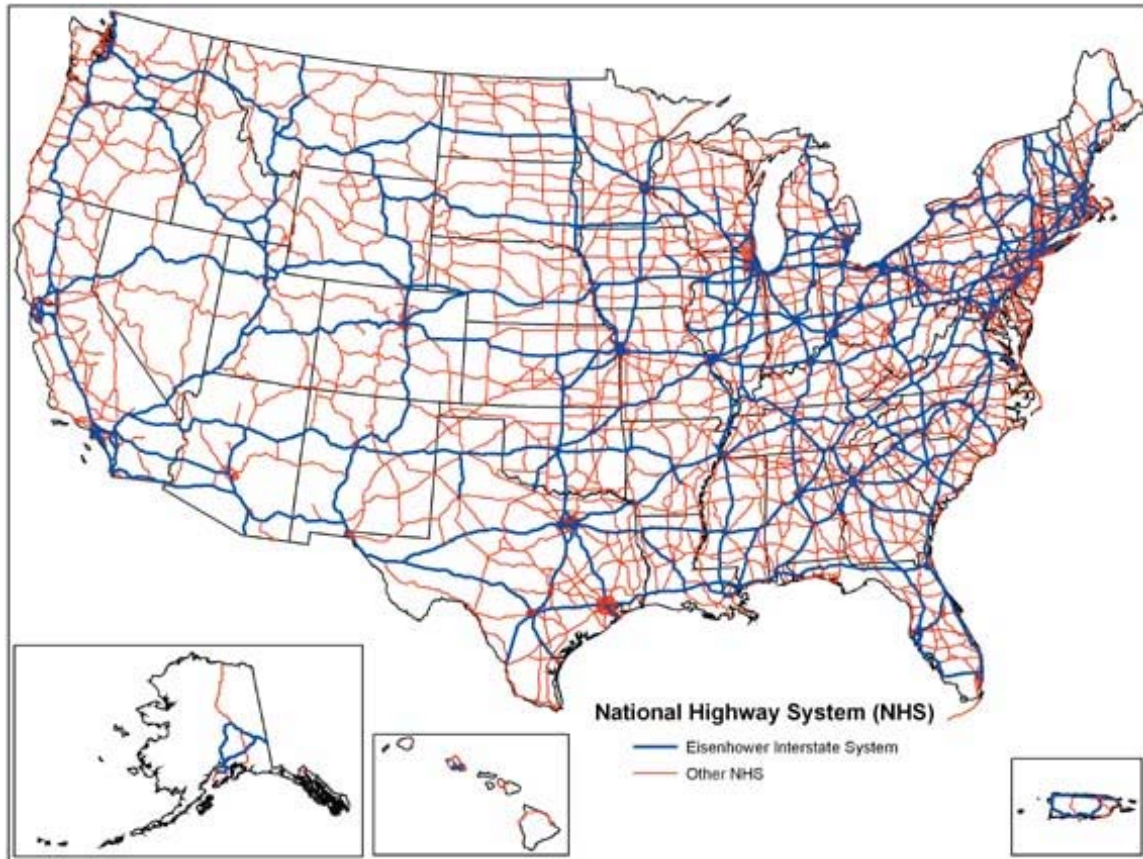


Figure 1. Interstate Highway System and National Highway System

Congressionally Designated High Priority Corridors

Another provision of the 1991 ISTEA was to identify High Priority Corridors (section 1105(c) of that Act). The 1991 act identified 21 corridors. Other provisions required inclusion of these corridors one provisions in the National Highway System, about \$1.2 billion in funding for specific sections of these corridors and about \$50 million for a discretionary program for feasibility and design studies on these corridors. Subsequent legislation has amended section 1105(c) ten times so that there are now 80 such High Priority Corridors (although some are duplicative).

The language (in section 1105 (a) and (b) of the 1991 legislation) contained the following:

[T]he construction of the Interstate Highway System...greatly enhanced economic growth...many regions of the Nation are not now adequately served by the Interstate System of comparable highways and require further highway development in order to serve the travel and economic development needs of the region...the development of transportation corridors is the most efficient and effective way of integrating regions and improving efficiency and safety of commerce and travel and further promoting economic development.

...It is the purpose of this section to identify highway corridors of national significance; to include those corridors on the National Highway System; to allow the Secretary, in cooperation with the States, to prepare long-range plans and feasibility studies for these corridors; to allow the States to give priority to funding the construction of these corridors; and to provide increased funding for segments of these corridors that have been identified for construction.

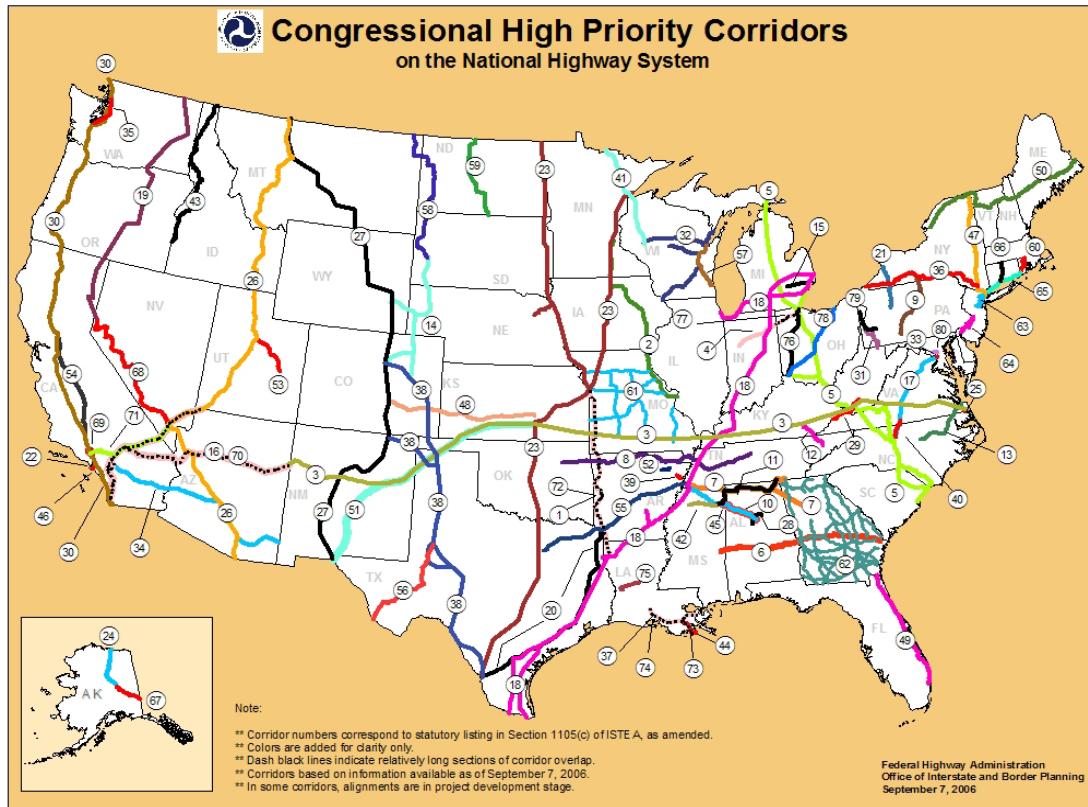


Figure 2. Congressionally Designated High Priority Corridors

In subsequent legislation, Congress amended subsection (e) of section 1105 to designate some of these corridors as future interstates. Much of this was done to promote economic development.

In the 1998 Transportation Equity Act for the 21st Century, Congress established a discretionary program to provide funding to improving the corridors designated by section 1105(c) of ISTEA. This legislation was complicated by several factors. For one thing, the funding also included improvements to highways near the Canadian and Mexican border and allowed use of the funds for corridors not designated in section 1105(c). By 2002, all of the funding for projects was identified in report language accompanying appropriation acts (i.e., the program was no longer in any way discretionary). Also, by 2002 more than 50% of the funding went for projects that were neither near the Canadian and Mexican borders nor designated in section 1105(c). Almost all the funding in this program went for highway projects. However, some went to transit projects, freight rail project and water port transportation projects.

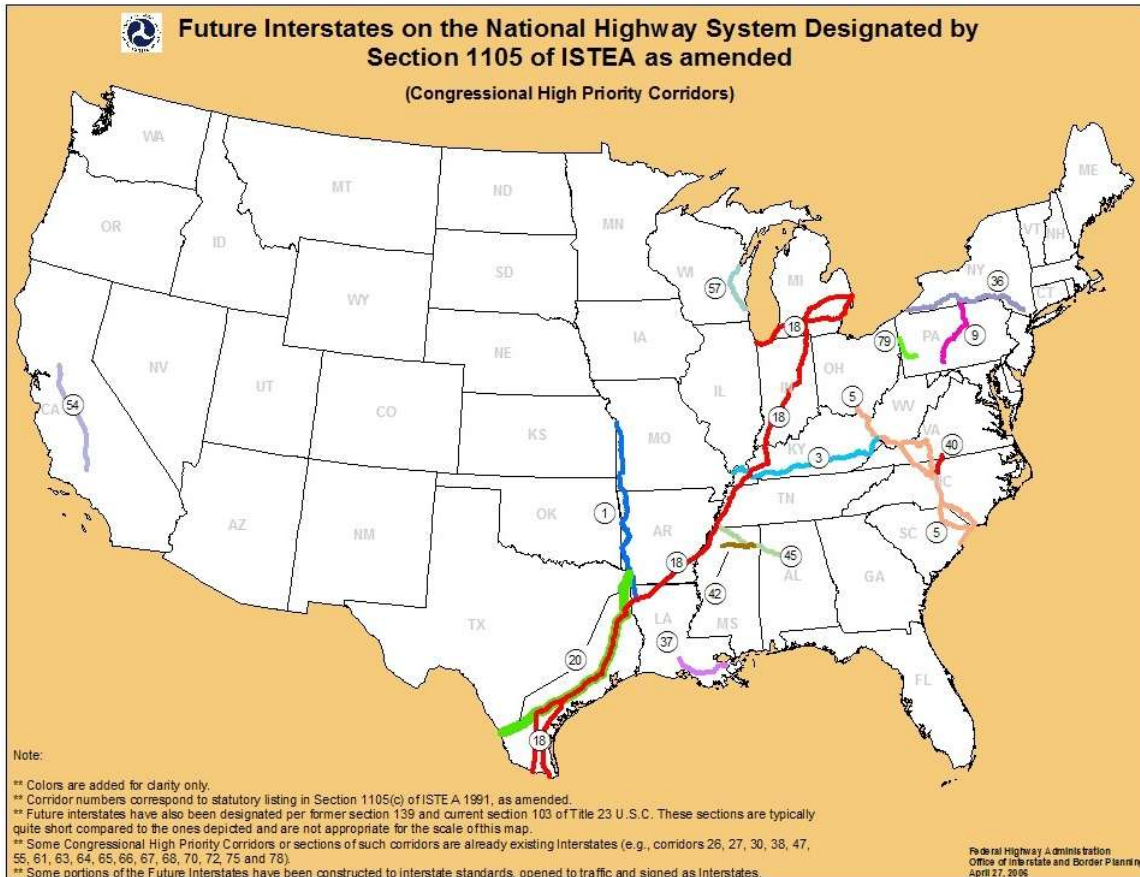


Figure 3. Future Interstates Designated by Congress

SAFETEA-LU Corridors of National Significance

The most recent legislative language identifying corridors is in section 1302 of SAFETEA-LU. The language includes the following:

The Secretary shall establish and implement a program to make allocations to States for highway construction projects in corridors of national significance to promote economic growth and international or interregional trade pursuant to selection factors provided...

Furthermore the statute lists selection factors such as connectivity, economic growth, commercial vehicle travel, commodity flow, congestion relief, travel time decrease, freight value and leveraging of federal funds. Nonetheless, all funding is designated in statute to specific corridors.

In September 2006, the FHWA announced the corridors of the future program. The goal of the program is to accelerate development of multi-State transportation Corridors of the Future for one or more transportation modes. These corridors are ultimately to relieve congestion (especially freight-related congestion) and by doing so promote economic growth. Several dozen corridor proposals were submitted. Subsequent to selection of corridors FHWA expects to work with the States and private sector partners to develop these corridors to seek financial

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opportunities and implement projects. By April 2007 FHWA expects to identify corridors to receive priority consideration in technical assistance. It will be some time after this that FHWA will have a good understanding of the potential for private sector funds to be used in corridor development.

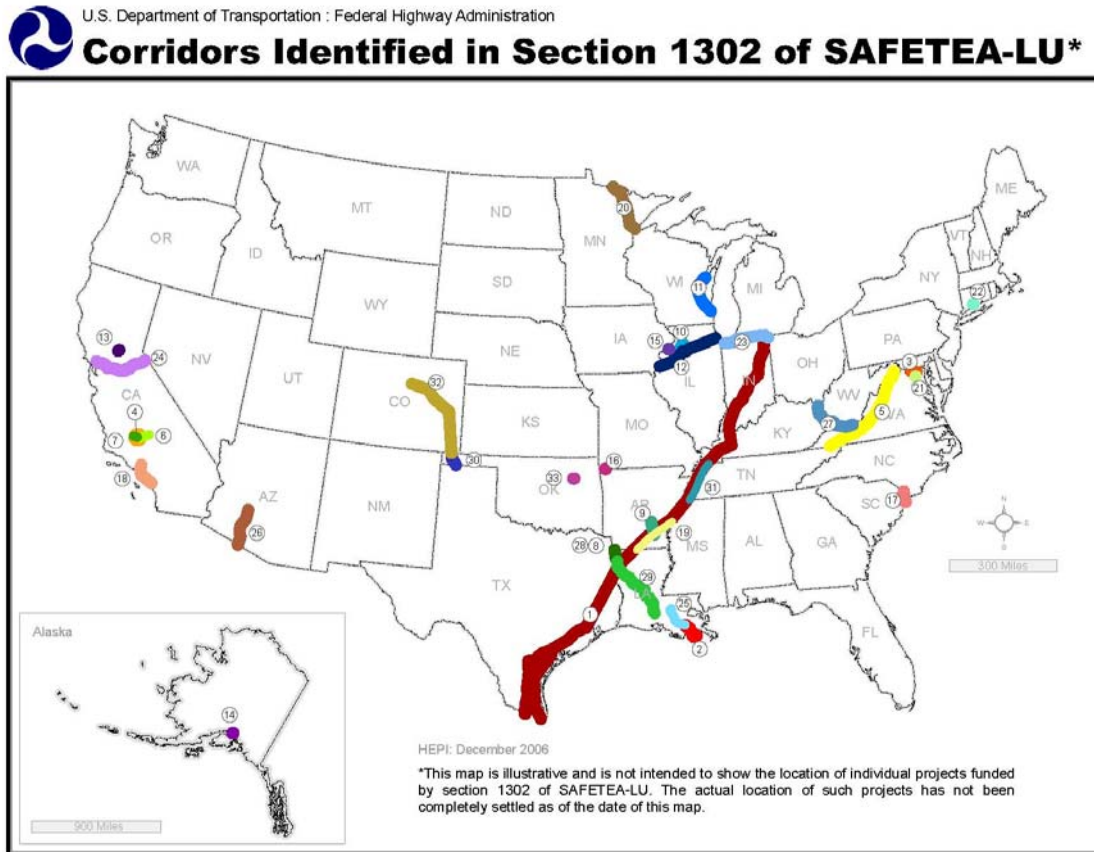


Figure 4. Map of 1302 Corridors

What to Expect from Corridor Based Investment

Before dealing with what to expect from Corridor Based Investment, designation issues have to be considered.

One such issue is whether (or how many) corridors are to be designated on the basis of economic development or on the basis of expediting major corridor construction or facilitating improvement to existing infrastructure.

Another issue is the extent to which legacy corridor designations (e.g., the corridors designated by 1105 of ISTEA, as amended) are to be considered in any future designation.

Other issues are whether short urban corridors or longer intercity corridors are to be the primary corridors to be designated, whether the corridors are to be highway only or multimodal (and the extent to which the highway trust fund should fund other modes) and whether access to the major corridor facility is considered to be part of the corridor (and if so, how much access).

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These considerations may result in any one of the following designation outcomes:

1. The entire about 160,000 miles) National Highway System (NHS) is designated as Corridors of National Significance.
2. The NHS is designated as containing Corridors of National Significance but the Secretary may designate additional Corridors of National Significance (up to say, 200,000 miles) based on specific criteria (economic development, construction expediting or improvement facilitation) even if those corridors are not added to the NHS.
3. Much but not all of the NHS is designated (based on criteria) as Corridors of National Significance (say about 90,000).
4. Only the Interstate System and a small section of the non Interstate NHS (say about 60,000 miles) are designated (again based on criteria) as corridors of national significance.
5. Only those portions of the NHS (including the Interstate Highway System) that are robustly multimodal (say about 30,000 miles) are designated (based on criteria) as Corridors of National Significance.

Other designation outcomes are also possible.

Subsequent to the designation outcomes, funding issues must be considered. These may result in the following funding outcomes:

1. A funding program is established for Corridors of National Significance consisting of the approximate equivalent of the NHS.
2. A funding program for Corridors of National Significance is established consisting of the approximate equivalent of the part of the Interstate Maintenance Program and all the NHS, National Corridor Infrastructure Improvement Program, Projects of National and Regional Significance Program and High Priority Projects Program.
3. A funding program like #1, but including some of the funding from the Bridge Program, Surface Transportation Program and Congestion Mitigation and Air Quality Improvement Program.
4. A funding program like #2, but with additional funding from user related taxes and fees.
5. A funding program like #3, but with the funding eligibility expanded to all modes within a corridor.

Other funding outcomes are also possible.

Obviously, the fewer miles designated as Corridors of National Significance and the more funding directed at those corridors, the faster these corridors can be improved. Similarly, if traffic growth accelerates, the physical needs of these corridors (capacity and pavement structure) will increase compared to the alternate futures.

With respect to combining designation and funding outcomes, if, for example designation option 4 is combined with funding option 3, the Corridors of National Significance will be improved rather quickly (assuming environmental and other project related considerations can be met). On the other hand, if designation option 2 is combined with funding option 1, the Corridors of

National Significance will likely be improved slower than is now the case and, in fact, will performance will probably deteriorate.

Because of the variety of corridors and the history of special status for corridors, any designation of corridors as being “of national significance” will, while using quantitative data, be ultimately subjective.

Groups that support improvement of specific corridors are already well organized and have made trips to the US DOT and Capital Hill in search of support. Substantial advocacy can be expected from these and other groups prior to, during and even after a process designating Corridors of National Significance. Furthermore, advocates of using the highway trust fund for other modes, advocates of limited growth, slow growth, smart growth and no growth as well as numerous other related groups already exist and will use a designation process to focus their advocacy.

The table below provides some examples of corridor support groups.

Table 1. Corridor Improvement Advocacy Organizations		
Organization	Website	Context
I-95 Coalition	www.i95coalition.org	Part of I-95 is corridor 49 of 1105(c) of ISTEA
Ports-to-Plains Corridor	www.portstoplains.com	Corridor 38 of 1105(c) of ISTEA; corridors 30 and 32 of 1302 of SAFETEA-LU
River of Trade Corridor	www.rotcc.org	Part of this corridor is corridor 20, 34 and 55 of 1105(c) of ISTEA
FAST Corridor	www.psrc.org/fastcorridor	Corridor 35 of 1105(c) of ISTEA
Alameda East Corridor	www.theaceproject.org	Corridor 34 of 1105(c) of ISTEA
I-29/35 Corridor	www.nascocorridor.com	Corridor 23 of 1105(c) of ISTEA
I-69 Corridor	Not Available	Corridors 18 and 20 of 1105(c) of ISTEA; corridors 1 and 19 of 1302 of SAFETEA-LU
CANAMEX	www.canamex.org	Corridor 26 of 1105(c) of ISTEA
SPIRIT	Not Available	Corridor 51 of 1105(c) of ISTEA
Hoosier Heartland	Not Available	Corridor 4 of 1105(c) of ISTEA
Note: The above is merely an illustrative list and not meant to be comprehensive, nor is it meant to indicate which corridors FHWA considers most important or most influential; there is also a coalition of corridor organizations. Their website is: http://www.tradecorridors.org/index.html		

Another factor to be considered is whether travel growth will, over the next 50 years, increase at the same rate, a slower rate or a faster rate than in the previous 50 years. It is reasonable to assume that if the rate of traffic growth slows, that economic development corridors will be more important than if the rate of traffic growth increases (because more corridors will have excess capacity). Similarly, if the rate of traffic growth increases, multimodal management of corridors is likely to increase in importance. The current maximal multimodal concept being advanced is the State of Texas concept of the Trans-Texas Corridor system. This system would, potentially, be about 4,000 miles in extent, require over \$180 billion to complete, and include highway, transit (both commuter and intrastate), freight rail, fiber optics and pipelines.

NOTES on SOURCES:

A substantial amount material is available from various FHWA websites. For example, the site: <http://www.fhwa.dot.gov/hep10/nhs/index.html> has a basic map of the NHS, information on the

components of the NHS and details on map inquiry. The maps showing the high priority corridors and future interstates are at: <http://www.fhwa.dot.gov/hep10/nhs/hipricorridors/index.html#map>. Information on the National Corridor Planning and Development and Coordinated Border Infrastructure grants program is at: <http://www.fhwa.dot.gov/hep10/corbor/index.html>. The map of 1302 corridors was created for this paper.

CONSOLIDATED COMMENTS FROM MEMBERS OF THE BLUE RIBBON PANEL OF TRANSPORTATION EXPERTS - PAPER 4L-02

One reviewer commented as follows:

The paper is a good overview of the options, but leaves open what the criteria should be to choose an option. It does not specifically address a major policy question, which is, “what is the role of transportation?” Because it doesn’t make an assumption as to the answer, it is an interesting outline of options, but provides no guidance as to what issues/factors to use in deciding which option to choose. Transportation is a tool to manage and promote economic growth. Rather than be a system that is responding to growth, it should guide growth (or lack thereof). Simply put, we can’t invest in every highway, or proposed highway, everywhere in the country.

Another reviewer commented as follows:

This issue of national corridors is a critical federal role that is not being addressed except in authorization bills through “earmarkings.” The federal government is the only player that can effectively make decisions across state lines. Virginia cannot effectively address I-81 without the surrounding states. If Virginia acts to widen the interstate on its own, it will create a significant parking lot consequence at its borders- not a good decision for transportation or the environment. Furthermore, the corridors need to be analyzed as multimodal corridors, where appropriate.

Another reviewer commented as follows:

The paper discussed several methods used to designate national corridors to date, many of which were political processes. The paper would benefit from a greater description of the importance of designating national corridors on the basis of “needs” based criteria, such as the importance to the national economy, trade flows, connection to major ports of entry (international border crossings, seaports and airports), importance to interstate travel (as opposed to local commuting), etc. Designation criteria could also include the availability of alternative modes, as one descriptor of nationally significant corridors could be that they are multimodal.

The paper would also benefit from a discussion of how to finance national multimodal corridors, especially given the existing modal program funding silos, and various options for financing these corridors in the future. A discussion of the benefits of investing in national corridors could be added. This could include a description of benefits to the economy and intercity travel such

as mentioned above, and the benefit of diversion of passenger or freight travel to a more efficient mode along the corridor.

The paper's discussion of investing in national corridors seems focused on capital investment. Managing the operation of these corridors should also be discussed. A federal focus on managing national corridors could include coordinating information for long distance travelers, coordinating construction activity and work zones along the corridor on a multi-state basis, and other similar management/operation strategies that seek to provide travelers with less delay. This could improve the efficiency of long distance travel of people and goods, which benefits the national economy. The following attached summary paper prepared by NYSDOT describing its evolving corridor management focus and the potential expansion of this concept to the national level provides some context.

INTEGRATED CORRIDOR MANAGEMENT -NYSDOT

NYSDOT has undertaken a Corridor Initiative that focuses attention and investment on strategically important corridors to better integrate New York State's population centers with the emerging global economy. This integration is achieved by enhancing the connections of our major population centers to important regional, national and international economic centers and gateways. The corridors are not facility-focused or locally-focused, but consist of strategically important multi-modal highway, rail, air and marine facilities.

The Initiative involves a comprehensive and coordinated consideration of transportation assets (regardless of facility ownership) to address our customers' needs and expectations as they relate to the movement of trade, tourists, intercity passengers and commuters.

The Initiative is considering all aspects of a transportation corridor to effectively and efficiently utilize financial resources and manage the multiple modes of the transportation system including, maintenance, operations, use of emerging technologies, infrastructure enhancements and strategic expansion of services and facilities. It will also integrate economic development opportunities and land use/transportation relationships.

A corridor vision has been developed and early strategies being progressed include: providing focused and readily-available information and services for long distance travelers (both passenger and freight); coordinating location and services at rest areas and truck parking facilities that complement private facilities; coordinating construction scheduling and consistent work zones operations throughout the corridor; and, coordinating among highway and modal operators to facilitate the movement of oversize/overweight commercial vehicles.

While the Initiative described above is focused on New York State, it can and should be expanded to a national perspective. This will require a national policy commitment and strong leadership from USDOT to integrate perspectives of the many states, modal operators/owners and stakeholders along the major corridors.

Transportation improvements have all too often been limited to single modes and/or narrow lengths/breadths of a corridor. Extending corridor consideration to a national perspective would allow for solutions that consider a larger geographic perspective and provide for more consistent, compatible and effective infrastructure, operations, maintenance and long distance traveler information and services. It would facilitate multimodal investment decision-making that considers regional and national travel. Most importantly, it would enhance the integration of local and regional economies and allow the nation to more fully and effectively realize economic opportunities of the global economy.