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European Contributions to American City and Regional Planning: A Snapshot of the Flow of Concepts and Ideas Across the Atlantic

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Abstract

It has long been noted that America has adopted and adapted many of its city planning principles based on the experiences of European nations. This paper identifies and concisely explains ten of the most significant European planning elements that have influenced American planning since Puritan times (1630-1680) to the present. These examples were selected as a result of our scholarly research, field work and consulting experiences both in Europe and the United States. The intent of the paper is to contribute to the dialogue on the transference of planning visions, concepts and approaches from European nations to the New World.

Key words:

Town Planning, Transference of Planning Ideas, International Linkages

1. Introduction

Over the past twenty years as we have taught, undertaken research, and provided professional consulting at European universities, we have often been asked questions concerning the degree to which the United States adapted European planning principles and practices. We had a general knowledge of many examples but had never endeavored to put them together in one place. The purpose of this paper is to correct that shortcoming. It is an effort to identify and analyze the most significant elements of European City Planning that have had an influential impact on American Planning.

The selected examples were chosen based upon our collective planning experience of fifty years as academics, researchers and practicing planners in both North America and Europe. The paper is not intended to be exhaustive, comprehensive or the last word on the topic. It is intended to stimulate discussion and add to the transatlantic dialogue concerning urban planning. If the paper generates interest on the topic of the importation of European ideas to the culture of American planning, both in a historical and current context, we will consider it to have been a success.

We define urban planning quite broadly. It encompasses a concern with the physical form of the city, processes undertaken to improve them, social justice and equality and forward-looking thinking and visioning. We provide examples of all of these in the following sections.

Finally, to be as accurate as possible, we have endeavored to show "connectivity" between the old and new worlds. This does not mean that there is a direct line from an aspect of European to American planning. It does mean that one can find the discussed elements or ideas in Europe before America and that there is, at least, the likelihood of knowledge of these by American planners. North America is a product of many nations and so is its planning. One can find direct evidence of Spanish, English, French, Italian, German and even Russian examples and ideas spread throughout the nation. In all cases, the European experiences were adapted to North American needs, culture and land forms.

2. *Law of the Indies*

By far, the most extensive influence on any American planning was the Law of the Indies. Arguably the most interesting feature was that the church was to be constructed so powerfully and located so strategically that it could serve as both a secular and spiritua and secular refuge in times of attack. It was to be both a sacred space and a place of safety. Promulgated by Philip II of Spain, on July 3, 1593, the Law called for a highly regularized settlement plan for Spanish towns in the New World. As the Spanish moved into Florida, the American Southwest and California, hundreds of communities were developed under the guidance of the Law. Indeed, it has been referred to as "America's First Planning Legislation".[1] The regulation reflected values of permanence and conquest. It also dictated town centers that would reflect the majesty of god (the prominent placement of the church), the power of the state (town hall, arsenal and customs houses) and a small retail center. Major roads were to match the four points of the compass and be laid out in an orthogonal pattern. While the law was promulgated by the Spanish king, it is most likely the product of centuries of Spanish conquest and settlement in the Americas.[2] The fact that the laws were so rigorously enforced as the Spanish moved across the Americas has resulted in the formation of townscapes that can still be noted today.[3]

3. *The English Village*

Imperialistic control from a distant kingdom and massive religious structures dripping with ornamentation were cultural attributes that were abhorrent to the Puritans who settled New England. If anything, they developed planning concepts that continually and actively made the adoption of such concepts impossible to employ.

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[1] John Reps, The Making of Urban America (Princeton: Princeton University Press, 1965), p. 29.

[2] For more on the Spanish town planning see Dan Stanislawski "Early Spanish Planning in the New World", *The Geographical Review*, vol. 37, no. 1 (January 1947), pp. 94-105.

[3] Francis Violich, "Evolution of the Spanish City: Issues Basic to Planning Today", *Journal of the American Institute of Planners*, vol. 28, no. 3 (August, 1962), pp. 170-199.

Puritan settlement planning emerged from the learned pen of John Winthrop and the culture of the Puritans, most of whom were from the southern and eastern parts of England. This region, marked with small towns surrounded by farms and small but growing manufacturing activities, was the cultural base for the Puritan community.[4] Three key points from the English experience became quite important in the development of its New England community. First, the term town applies to a small village and adjacent common farmlands and pasturage. Thus, they were a self governing political entity. Secondly, towns were, by design, kept small and occupied by culturally and religiously unified residents. Thus, town planning governance was overwhelmingly local. Moreover, when the population expanded to the point that common lands were becoming overused, new towns were created as part of a "harving off" process.. Thus, these new towns kept the same Puritan values. And thirdly, the planning principles had to be continually adapted to local conditions.[5]

The physical layout of the Puritan community is of great significance to America and, again, it is rooted in the English experience. The community featured a meeting house that served at once as a place of worship and the place of governance. It also could serve as a place of protection. It was the most important structure in the early Puritan era, a time when each Puritan community functioned as a theocratic entity. Near the meeting house were the residential structures, the tavern, and a small number of retail facilities, most notably one which housed the blacksmith. All of these structures were clustered quite closely together and designed to meet the weather patterns of New England and available construction materials. Close by was the town common which also served as drill field for the local militia. The only critical feature of daily life that was absent from the village was the miller who, due to the need to be close to water and/or wood resources, would be required to set up his facility close to the power source.[6]

From these basic forms has emerged the much beloved New England Village. It is a national icon and romantically embedded in America's culture.[7] It represents farm, field and factory, it is valued as a compact environment where local values prevail and it is a place where God and country are perceived as being in balance. The reality of New England village life does not matter: it is its iconic image that counts!

4. Bastide Towns

Almost as important as the Law of the Indies was to the formation of early American cities and planning, was the creation of the border or frontier towns as the Europeans settlers moved away from the coast and inland. Wherever these settlers moved they often met resistance from Native Americans. Thus, as soon as they took control of the land, they immediately had to defend it. To do so, they adopted (and adapted) elements of the Bastide towns that emerged across Europe

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[4] D. W. Meinig, The Shaping of America, vol. 1 (New Haven: Yale University Press), pp. 91-93.

[5] For more on the Puritan village see Sumner Chilton Powell, *Puritan Village: The Formation of a New England Town* (Middletown: Wesleyan University Press, 1963).

[6] John R. Stilgoe, *Common Landscape of America 1580-1845* (New Haven: Yale University Press, 1982), pp. 48-50.

[7] Joseph S. Wood, *The New England Village* (Baltimore: Johns Hopkins Press, 1997), pp. 165-168.

following the Dark Ages. In that period, these towns were emplaced in order to protect borderlands, reclaim lands lost during the plague or to establish a ruler's domain. They were commonly simple, functional and quickly emplaced military outposts that were intended to protect the settlers living within the compound and working at nearby lands. They typically included walls, gun emplacements, an armory, civic buildings, a central square, a small retail center, housing for civilians and a church.

These border towns were constantly adapted to local geographic conditions, the size of the population and the extent of hostility. There was nothing imperial about them, little that would create awe and nothing that reflected long term commitments. They were rarely laid out by engineers or trained members of the settlement. They were far more a product of culture, common sense and the need for immediate protection. Towns with these characteristics dot the American landscape as one moves steadily westward. Nonetheless, they represent a powerful contribution of European city planning thought to the American experience.[8]

5. The Hippodamian Plan

The ideas expressed in both the communities developed under the Law of the Indies or the Bastide system were marked by order, symmetry, simplicity, and rationality It is simplicity that, to Americans, was critical. From the time of the application of the grid pattern of development designed by Hippodamus in Miletus through the Roman Castrums and many European towns following the plague, the square, the rectangle and the geomorphic form ruled. American planners, as the country grew, embraced these concepts. They can be found in the layout of such large cities as New York, Philadelphia and Savannah and the small,almost countless late nineteenth century railroad villages clustered around a depot. However, the most significant employment of the ordered grid could be found in the creation of the six mile by six mile town.

From the very beginning of American settlement there was a desire to control the size of towns and villages. Indeed, the Puritans first endeavored to apply the concept as they "planted" new towns across New England. Interestingly, the Puritan leadership saw this highly rational approach as a means to culturally unify their communities: The thirty-six square mile town enabled farmers to comfortably walk to and back from their plots to a nucleated village and the meeting house which served as both a civic and religious center. While the concept was sound in theory, it didn't work due to changes in terrain, the presence of meandering water bodies and the often poor skills of surveyors. Despite the failing to implement the concept, the idea was embraced, at least in principle across many of the American colonies.[9]

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[8] For a comprehensive analyses of the Bastide towns see Thomas F. Tout, *Medieval Town Planning: A Lecture* (Manchester: The Manchester University Press, 1934). Also see James E. Vance, *The Continuing City: Urban Morphology in Western Civilization* (Baltimore: John Hopkins, 1990), pp. 178-205.

[9] For more on the place of the Hippodamian grid in the United States see John R. Stilgoe, *Common Landscape of America 1580 to 1845* (New Haven: Yale University Press, 1982), pp. 99-107.

With the coming of the new nation after the Revolution, the leaders realized that they had to bring order to its millions of acres of land if it was to create a climate where land could be bought and sold and communities developed. To accomplish this, the Federal Government in 1785 passed the Land Ordinance Law which called for the creation of towns into six mile by six mile squares with thirty-six square sections of 640 acres each. The law has long endured, has been culturally accepted and its impact can still be seen most vividly in the states of the Western Reserve.[10] It was an effort to bring fairness, order, control and simplicity to the settlement needs of a nation. To illustrate how deeply it is embedded in American culture, the American phrases such as "a square deal" and he is a "four square man" became expressions of righteousness and fairness.[11]

6. L'Enfant's Renaissance Ideals

While America may have been embracing the ordered Spanish styled settlements of the mid southeast and southwest, the organic English inspired villages of New England and the French Bastide towns in its western movements, it was not immune to capturing the planning ideas and concepts of the Renaissance. Nowhere could this be better observed than in Washington D.C. Its plan was primarily developed by Major Pierre-Charles L'Enfant, a Frenchman who had served in the American Revolution. His concepts, quite eclectic, included elements found in Wren's Plan for London, the plan for Versailles and the concepts of Sixtus V.[12] Gridded streets intercepted by wide boulevards and roundabouts abutted by parks laced the entire plan. The major structures, often designed with overtones of Hellenistic antiquity, were situated at key points throughout the city and placed such as to catch the eyes of those moving around it. The plan called for the creation of a royal city of a European empire far more than a pragmatic center of government for a small newly formed nation. To show the audacity of the plan, President Jefferson expected it to need no more than 600 hectors – L'Enfant planned for 24,000. What is more, at a time when Boston, one of the nation's largest cities, had a population of 18,000 L'Enfant perceived a capital of 500,000![13] It was clear that a French born architect familiar with the grandeur of Europe and its "royal plans" was preparing the building of a capital of a new empire.

7. The English Mill Community

As L'Enfant's plans were being implemented to varying degrees in Washington D.C., Alexander Hamilton, Secretary of the United States Treasury, contracted with him to build a model industrial city at the Passiac Falls in what now is Patterson, New Jersey. Hamilton, unabashedly a supporter of an activist government, perceived that if America was to take its place as a world power it would

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[10] Hildergard Binder Johnson, "Towards a National Landscape", Michael P. Conzen (ed.), *The Making of the American Landscape* (New York: Routledge, 1989), pp. 127-145.

[11] John R. Stilgoe, *Common Landscape of American 1580 to 1845* (New Haven: Yale University Press, 1982), pp. 106-109.

[12] Sibyl Moholy-Nagy, *Matrix of Man* (New York: Frederick A. Praeger, 1969), pp. 146-147.

[13] Ervin Y. Galantay, *New Towns: Antiquity to the Present* (New York: Braziller, 1975), p. 11-12.

have to have a strong manufacturing base.[14] His plan called for a massive well ordered, technologically advanced city that would employ the best practices of European industrial communities and that would eliminate all of the evils found in England's "dark and satanic mills".[15] L'Enfant's plan failed. America, however, embraced the concepts of British mill towns for better or worse.

From the very beginning of America its leading political and business leaders visited England, France and Germany to gain knowledge of European industrialization. They could be found, among others, in the fine linen villages of France, the iron towns of the Ruhr and, above all, the textile cities of England. The industrial works and machinery of James Hargreaves, Richard Arkwright and Samuel Crompton, among others, were inspiring and the systems of production were far ahead of those of America.[16] But arguably, it was the character of England's industrial communities that captured them. As one author labeled them, they were the "shock cities" of the time.[17] Cities such as Manchester and Birmingham were hardly places where families and nature came together in harmony and where one could achieve a high quality of life. They were cities built for production and profit. They were hastily built, unsanitary, provided few amenities and created a class of workers who functioned at a level slightly above serfdom. What's more, they employed young children to such a degree that they were denied a childhood.

The American visitors, upon returning home, were determined that the evils of Britain's industrialization would be eliminated. In the first stages of the American industrialization they were successful. The early industrial villages of Samuel Slater were superior to those found in Britain and the utopian inspired city of Lowell, for a short period, showed that one can work and live in an industrial city quite comfortably.[18] Unfortunately, as time passed, economic rationalism and the pursuit of profit overpowered the American desire for industrial communities where a high quality of life could be obtained. By the 1860's, the American industrial cities, had all of the evils found in Europe.[19] The ideal defeated by the pragmatic. What's more, these communities could be found

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[14] For perspectives on Hamilton and manufacturing see Ron Chernow, *Alexander Hamilton* (New York: Penguin, 2004), pp. 363-378.

[15] The phrase has become part of American and English culture in terms of defining the dark side of mill life. It is a phrase in William Blakes's short poem entitled "And Did These Feet in Ancient Times" that served as a preface to his 1804-1810 era epic "Milton a Poem"(London: Trianon Press, 1967).p.1.

[16] For more on the systems of production see David J. Jeremy, *Transatlantic Industrial Revolution: The Diffusion of Textile Technologies between Britain and America, 1790-1830s* (Cambridge: The MIT Press, 1981).

[17] For more on the "shock city" of Manchester see Harold L. Platt, *Shock Cities: The Environmental Transformation and Reform of Manchester and Chicago* (Chicago: University of Chicago Press, 2005).

[18] For more on the Lowell and Slater system mills see Steven Dunwell, *The Run of the Mill* (Boston: Godine Publishers, 1978), pp. 52. Also see Margaret Crawford, *Building the Working man's Paradise: The Design of Company Towns* (London: Verso, 1995), pp. 11-28.

[19] This point is vividly pointed out in Theodore Steinberg, *Nature Incorporated: Industrialization and the Waters of New England* (Amherst: University of Massachusetts Press, 1994).

throughout America's northeast, mid-west and into the Rocky Mountains. This was one instance where, unfortunately, the negative features of Btitish indstrial community planning were embraced.

8. Haussmann's Paris And the City Beautiful Movement

America was equally in awe with the work of Baron Georges Haussmann in the revitalization and re-ordering of Paris. He was commissioned by Napoleon III in 1853 to modernize the city for purposes of commercialism (i.e. increase real estate values), advancing manufacturing and to enable the French Army and police to move quickly along wide boulevards to bring order and defend the city. Connected by axis points and surrounded by impressive architecture his Paris was awe inspiring. With long walkways along the Seine, small open spaces laced throughout the city and extensive vistas, there were few visitors that were not moved. Beyond the beauty, Haussmann also developed the most extensive and technologically advanced sewer and water system of the time.[20]

Haussman's plan for Paris significantly inspired America's City Beautiful Movement which emerged following the 1893 World's Columbian Exhibition. The exhibition was designed, in part, to show the public what a well planned city should be. It was a major stimulis in promoting civic improvements across the country. In its aftermath, the City of Chicago embarked on creating a comprehensive plan that embraced many of the concepts of the movement. As part of the process, its planners visited Paris and came away overwhelmingly impressed. To them, Paris was a model of city planning and design and set the standard for civilized urbanity. The Chicago Plan, in turn, employing many of Haussmann's concepts, became the template for city plans across the nation.

Among those who were apparently influenced by Haussmann's Paris was Edward Bellamy. Bellamy was the author of America'smost popular utopian novel of the nineteenth century. Called "Looking Backward" and published in 1888, it was was set in a futuristic Boston of 2001. No where can the influence of the impact of Haussmann's Paris be better illustrated than when Bellamy's major character describes utopian Boston as follows:

> "At my feet lay a great city. Miles of broad streets, shaded by trees and lined with fine buildings, for the most part not in continuous blocks but set in larger or smaller enclosures stretched in every direction. Each quarter contained large open squares filled with trees, along which statues glistened and fountains flashed in the late afternoon sun. Public buildings of a colossal size and architectural grandeur unparalleled in my day raised stately piles upon every side. Surely I had never seen this city nor one comparable to it before"[21]
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> The description could have been applied directly to Paris! The legacy of Houssmann's legacy can still be found across the nation.

[20] Sibyl Maholy-Nagy, *The Matrix of Man* (New York: Praeger, 1968), p. 150. Also see Joan Margaret Chapman, Brian Chapman, *The Life and Times of Baron Haussman* (London: Weidenfeld and Nicholson, 1957).

[21] Edward Bellamy, *Looking Backward 2000-1887* (Boston: Ticknor, 1888), p. 52.

9. The Garden City Movement

The Garden city Movement owes its genesis to Ebenezer Howard who, while working as a clerk in the English House of Commons, became greatly concerned over the seemingly endless urbanization of Greater London. Influenced by Edward Bellamy's Looking Backward and Henry George's Progress and Poverty, Howard created the idea for a new type of community that would capture the best elements of the city and the country. This community would be called a Garden City" in which 32,000 people would live in a settlement of 9000 acres. It would be sustainable place where residential life, industrial production and agriculture would co-exist to the betterment of all. Moreover, the residents would govern themselves in a cooperative environment to ensure the basic needs of all citizens were met. As this core city was approaching capacity, satellite communities would be formed which would be connected to it by radial highways and rail lines. In essence, the concept not only provided a plan for a new way of living in a set of communities but a template for planning at a regional scale. Howard initially presented his ideas in a popular book called "Tomorrow: A Peaceful Path to Real Reform" and, in a second edition, "Garden Cities of Tomorrow."

Howard's message was well received and he was able to find the means to build two such garden cities called Letchworth and Welwyn. His ideas became widely popular in America during the first quarter of the twentieth century. However, as so common with planning ideas from Europe, they were adapted to creating smaller garden villages and suburbs where many, but not all, of his concepts were applied. They also influenced America's efforts to create "Greenbelt Settlements". Under the auspices of the United State's Settlement Administration, they were intended to serve as a showcase for the best practices of town planning. The most successful was Greenbelt, Maryland. At the same time, the Garden City Movement created great interest in regional planning at a large scale such as in the Tennessee River Valley and in New York state. In short the Garden City Movement was arguably the most important planning concept that came to America in the twentieth century. Its concepts still resonate.

10. The Lex Adickes

In the aftermath of the Chicago World's Fair and the emergence of the City Beautiful Movement an enormous surge in interest in urban planning and reforms occured. The fair itself provided a key catalyst toward civic improvements. This was coupled with a desire to create sanitary water and sewer systems and to improve living conditions of the urban poor. It was quickly realized that if planning and reforms were to occur, then the speculation must be limited, reparcelization would have to be undertaken and land uses had to be controlled. As a model for these regulations American planners looked to Germany and the work of Franz Adickes, the mayor of Frankfurt, Germany.

Mayor Adickes was quite concerned over the rapid growth of his city, speculation, the poor housing, the mixture of incompatible uses and the poor configuration of lots. To combat speculation, he was able to put a tax on real estate transfers. To overcome residential issues, he created housing corporations. To reconstitute lots, he passed a land reconfiguration law that provided compensation for displaced owners. And for land use reforms, he created a zoning by-law. All of these acts were

quite successful. While American planners were enamored of all of them, it was the zoning by-law provision that was most popular.

As a result of reports after visits to Frankfurt by Benjamin Marsh, President of the Commission on Congestion of Population (1907) and a social reformer Edward M. Bassett, the American planning community became quite aware of the Frankfurt experience and endeavored to apply the zoning to the American context. In particular, it was applied most spectacularly to the zoning of New York City. Peter Hall, succinctly summarized the results: "And so zoning came to New York from Germany".[22] More specifically, it was the fact the Frankfurt model employed, in concert, controls on both height and uses. At the time, the ordinance was hailed as the most significant in the early history of American city planning.[23] Within a few short years, zoning became one of the most fundamental regulations in the American Planner's tool kit. The Germans made a major contribution to bringing order to the American City.

11. The Autobahn

The Germans also exported one of the most significant infrastructure advancements of the twentieth century: The creation of a national highway network. Beginning in the 1920s the German government realized that there was a need to connect its cities via limited access, high speed road routes as part of its Autobahn building program. By the late 1930's, the autobahn consisted of a network of interconnected highways that, ultimately would link all major cities in the nation. In the early 1940s, the autobahn was modified for defense purposes including serving as shelters and hangers and runways for military aircraft. Heavily damaged during World War II, they were reconstructed in the post war era and are still being expanded today. [24]

The United States had long aspired to create such a system but through the Great Depression (1929-1938) did little. It clearly was a focus of civil engineers, planners and architects. Indeed, the concept was even featured at the New York World's Fair of 1939 when the designer Norman Bell Geddes presented his highway ideas as part of the Futurama exhibit at the General Motors Pavilion. [25]

It was only during the 1950s that America began to comprehensively focus on a system that had many of the attributes of the Autobahns. President Eisenhower, among many other government officials, was quite aware of the system as a result of his military responsibilities in World War II. Moreover, like the Germans during World War II, he saw the value of building the American System in a manner that it could meet both civilian and military needs. He became a strong supporter of the

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[22] Frank Backus Williams, *The Law of City Planning and Zoning* (New York: Macmillan, 1922), p. 34.

[23] Peter Hall, *Cities of Tomorrow* (Cambridge: Blackwell, 1988), p. 58. Also see John R. Mullin, "American Perceptions of German City Planning at the Turn of the Century", *Urbanism Past and Present*, vol. 3 (1977), pp. 5-15.

[24] For an overview of the construction of the Autobahn see Richard Vahrenkamp, *The German Autobahn: Hafraba Visions and Mega Projects, 1920-1945* (Cologne: EUL Verlag, 2010).

[25] Mel Scott, *American City Planning Since 1890* (Berkeley: University of California Press, 1969), pp. 85-87 and pp. 360-363.

program and was a key leader on the passage of the Interstate Act of 1956.[26] Indeed, the national network of these roads is today called the Eisenhower Interstate System.

The goals of the system were to make automobile and truck traffic safer, travel times faster, make freight movement more economical and to provide the means for rapid military deployment if necessary. Today, there are more than 47 thousand miles of such highways in all fifty states. It has been called the largest public works program since the construction of the Pyramids and, in a national survey of planners (2000), it has been labeled as the most significant influence on the American metropolis in the last fifty years.[27]

12. Conclusions

In the aftermath of World War II, the distance between European Nations and America in a communications sense dropped significantly. Indeed from decade to decade the use and frequency of the sharing of ideas via conferences, exchanges, telephone communication and the internet has increased to the point that the flow of planning ideas back and forth is quick, inexpensive and constant. In such a climate, it is almost impossible to find the genesis of a new planning idea or concept: With input from both sides of the Atlantic they emerge quickly and simply enter the public domain. And indeed they should! However, we are still confident that in some place in Europe, or the United States, there is another great idea that will truly cross the Atlantic in the near future. We look forward to finding it.

Biography

Dr. John R. Mullin is Professor Emeritus of Urban Planning at the University of Massachusetts. His research focuses on New England industrial history and planning. Dr. Mullin is a Fellow of the American Institute of Certified Planners and a Senior Fulbright Scholar.

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[26] Henry Petroski, “On the Road”, *American Scientist*, vol. 94, no. 5 (2006), pp. 396-399.

[27] Richard Weingroff, “The Genie in the Bottle: The Interstate System and Urban Problems, 1939-1957”, *Public Roads*, vol. 64, no. 2 (September-October 2000), www.fhwa.dot.gov/publications/publicroads/00septoct/ (accessed on April 20, 2013).