

# **Using The Hidden Assets of America's Communities and Regions to Ensure Sustainable Communities**

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Is the continued migration of city dwellers to the suburbs an indicator of the low value ascribed to America's cities? If so, that negative judgment is endorsed by score-keeping, ranging from the Census to the daily economic reports and news, all of which give low marks, on the whole, to the nation's largest cities. However, the environmental and economic assets of existing communities of all sizes are significant. Quality of life factors—such as a clean environment, convenience and access, workforce, and job availability—are assets that can return vibrant life and hope to our cities and all their residents.

These factors help explain why people choose to stay in core urban areas, as well as the attraction of these areas to immigrants, to businesses, and to developers of new markets. New incentives, including information technology, public policy and new kinds of transactions can be designed to help capture these hidden values. As this occurs, it will be to the benefit of communities, their residents and institutions. Achieving these benefits can occur once we recognize the assets of cities and regions, remove the barriers to asset valuation, and implement new tools to gain marketplace recognition of these assets held in common.

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In his recent book, *Consilience*, E.O. Wilson notes that the curse of the synthesist is to be aware of the likelihood that in covering so many fields, some reader of your document will know better. In the interests of continuous improvement, this paper is dedicated to a tireless co-founder of the Center for Neighborhood Technology, Stanley J. Hallett. At his untimely passing this year, John McKnight's eulogy referred to a person who may have known the limits of growth, but refused to limit his imagination and sense of community.

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## I. The Tangible Assets of Cities

Cities and regions have a variety of intrinsic values. Some of these are quite tangible, such as the aggregated purchasing power of families and households, or the value of in-place infrastructure for utilities and municipal services. Others are intangible in nature but still quite real and valuable: a sense of community and place, as evidenced by organizations committed to that area's future, or historic preservation, and quality of life, respectively. By recognizing and valuing both kinds of assets, new strategies can be crafted to capture these benefits and use the resultant resources for community renewal and reinvestment.

This approach has a tradition. When coffee first came to London in 1696, a smart entrepreneur named Edward Lloyd spotted the opportunity to service the needs of ship owners at the docklands. He observed them taking bets on the disposition of their cargoes and voyages, and decided to build a coffeehouse at that location. By providing a place to meet convivially and chalkboards on which to record their wagers, a new market mechanism for keeping score of risks was created. Seventy-five years later, his descendants sold shares in the enterprise, and Lloyd's of London (and the insurance industry) was born.<sup>1</sup>

Lloyd and his partners invented a way of collectively addressing hidden assets. Having identified that risk was real and that risk reduction was desirable, the creation of a score keeping mechanism made it possible to invest in the opportunity to share these risks together. Market development can occur when these conditions (disclosure and score keeping on hidden assets, new transactions to internalize these factors explicitly, and mechanisms for value-capture) are present. In the interests of community improvement, it behooves us to try and identify the hidden assets of cities and regions.

Some of these assets are tangible, and some are intangible. Tangibility refers not only to measurement, *per se*, but rather to how real the asset appears to concerned parties. A question posed by John Kenneth Galbraith in 1958, is still relevant today: which is the more valuable investment by a company, the investment in a product, or the resources invested in advertising and promoting that product?<sup>2</sup> Gary Becker, in work for which he eventually shared a Nobel Prize, estimated that the skills and training that generate present and future earnings represent three-quarters of the nation's wealth.<sup>3</sup> Michael Sherraden of Washington University, and Bob Friedman of the Corporation for Enterprise Development, have used these observations to fuel the movement towards the creation of "individual development accounts" to help needy families generate the savings which can build this kind of more intangible but vitally needed human capital asset.<sup>4</sup>

At the level of community, Roger Bolton of Williams College has developed a framework for understanding how assets held in common, whether those as tangible as long term investments in roads or infrastructure, or as intangible as a sense of place, are very bit as real as those held by individuals and corporations.<sup>5</sup> In this regard, he notes that the failure to treat concepts such as community and the sense of place as real within economic analysis would be as absurd as failing to count reputation and goodwill on a corporate balance sheet.<sup>6</sup> Albert Einstein once noted, not all that counts can be measured, and not all that is measured counts. There are at least ten major tangible assets intrinsic to urban areas today:

## **1. Urban Purchasing Power**

The purchasing power of older and of lower income areas is undervalued. There are at least two reasons why this is so.

The first reason is that typical market assessments use household income as the indicator of market capacity. This kind of assessment neglects the fact that the density of these areas is usually quite high. Recent analysis by Shorebank found that Chicago's South Shore community has twice the purchasing power per square mile than does all of the North Shore's Kenilworth, Chicago's "wealthiest community" (as measured by income alone).<sup>7</sup>

The second reason is that lower income communities have a higher fraction of cash transactions than for the economy at large. Since cash transactions tend to be undercounted, market potential is again underestimated.<sup>8</sup>

Because of the failure of the retail market to develop or re-develop in lower income areas, significant retail purchasing power is "leaking" out of these neighborhoods rather than being cost-effectively served by new facilities within the communities themselves. Michael Porter and the Boston Consulting Group found that the poorest seventeen zip codes in Chicago have a retail gap against consumer demand of at least \$1.8 Billion.<sup>9</sup> The total purchasing power within a two-mile radius of a single rail transit stop in low-income West Garfield Park is \$2 Billion a year.<sup>10</sup>

The sponsors of each study are pursuing a strategy of using their findings to mobilize investment. Shorebank Advisory Services' "Neighborhood Markets" group is initiating a new type of market research service to provide advance intelligence on emerging markets.<sup>11</sup> The Initiative for a Competitive Inner City is advising national retailers on the location of significant service gaps, and the Local Initiatives Support Corporation is linking national retailers with capital, locations and community development capacity.<sup>12</sup> And CNT has formed a partnership with Chicago United and Hispanic Housing Development. Known as Connections for Community Ownership, this venture was launched to link retail franchisers with minority entrepreneurs willing to locate within inner city transit-oriented development districts in Chicago. This is being done in conjunction with the "greenlining" of the Chicago Transit Authority.<sup>13</sup>

Interestingly, in a sense none of this recent activity is "brand-new." Prior to the rapid expansion of automobile ownership and roadway investment, the expenditure density associated with potential transit stop locations at activity centers helped justify transit system expansion in most American communities.<sup>14</sup> More recently, part of the winning argument (*circa* 1973) in favor of preventing the original South Shore National Bank from leaving their community (presented by Northwestern Kellogg School dean Al Drebin and Touche Ross managing partner Dennis Chookazian, later CEO of CNA Financial) was that the income, savings and expenditure densities existed for profitability and therefore a proposed relocation abrogated the bank's responsibility to serve.<sup>15</sup> The Comptroller of the Currency agreed, and what became the community development financial institution movement was born.

## **2. Concentrated Workforce**

Official reports of the locations of greatest job growth contribute to the impression that most job openings are located far from where the people are who need work

Some evidence indicates that modest improvements in transportation access can overcome those spatial mismatches. A study performed for Metra, Chicagoland's commuter rail agency, found that the Franklin Park stop near O'Hare Airport had an excess of 60,000 manufacturing jobs over workforce, measured within a two-mile radius of the stop. The same line served the inner city Humboldt Park community, whose stop had a job deficit against a workforce of 25,000, also measured within a two-mile station radius. An extra train scheduled at an earlier time enabled reverse commuters to show up for first shift on time and increased job access. The early train paid for itself in fares.<sup>16</sup>

This example may have larger implications for our welfare-to-work policy. The Bureau of Labor Statistics projects 50 million job openings nationwide in the next ten years; however, 35 million of these are **replacement** jobs, mostly located in older, central city or older suburban locations.<sup>17</sup> A widely accepted estimate is that businesses typically move only twice during their lifetime.<sup>18</sup> If we take the time to understand where these more traditional, better paying opportunities are located, it may not be necessary to focus our welfare-to-work policy on edge city, spatially mismatched locations (that is, getting former welfare recipients to the newest suburban business developments).

In St. Louis, a metropolitan Jobs Initiative (one of six supported by the Annie E. Casey Foundation) analyzed the potential for focusing on both new jobs and on replacement jobs, and found that including replacement jobs in the analysis helped identify many more good paying opportunities than revealed by traditional analysis alone.<sup>19</sup> This understanding has led to a commitment to using the area's MetroLink light rail system as the core of a "welfare to work without a car" strategy. Similar analysis is underway in Seattle, Los Angeles, Chicago, Philadelphia, and Miami, among other places.

### **3. *Mass Transit Systems***

Transit can potentially offer excellent access to jobs, schools, and retail services. From 1950 to 1990, residential density in Chicago dropped from 16,000 to 12,000 people per square mile, while density more than tripled in surrounding Cook County and the counties beyond. Nevertheless, out of a total of 7.5 million people in the greater Chicago region, 5.5 million still live in Cook County's 800 square miles. Most of Cook County's residents, 2.8 million people, live in Chicago's 221 square miles. While the balance of the region's population (8 million total minus 5.5 million in Cook County) reside in the "collar" counties, which cover 2,400 square miles, the majority live in more compact towns, villages and satellite cities.<sup>20</sup>

As a result, most of the region's residents live in areas with sufficient density to support mass transit, and the areas where most residents choose to live enjoy this amenity. They also enjoy the benefit of needing a full car per-household less than peer communities lacking the benefits of proximity, access and good transit.<sup>21</sup>

Mass transit that spans a region is a good example of an asset held in common by city communities and by suburbs. In Chicago, a concerted coalition of inner-ring suburban mayors and inner-city community leaders halted the proposed demolition of the oldest elevated line on the system. The appropriately renamed Green Line became the core of Chicago's empowerment zone and of west suburban Oak Park's successful downtown redevelopment. Joint planning

around the resultant transit oriented district at each station has enabled continued reinvestment at both city and suburban stops along this line.<sup>22</sup>

More generally, the stations (or in the case of bus service, the stops) are an undervalued asset.<sup>23</sup> In Chicago, there are approximately four hundred rail stations and thousands of busy bus stops. These historically were the cores of busy commercial and activity centers. The accessibility provided by proximity to transit service translates into tangible community and area-wide benefits.

The annual *Emerging Real Estate Trends* by PricewaterhouseCoopers continues to rate mass transit quality as one of the five defining characteristics of strong real estate markets.<sup>24</sup> And it is no coincidence that most of the six “gateway cities” to which the majority of “new Americans” are immigrating are well served by bus or rail. Evidence collected by Dowell Myers indicates that immigrant willingness to forgo automobile expense is a major factor in the high homeownership rates experienced in these communities (see section on race and poverty, below).<sup>25</sup>

#### 4. *Accessibility*

There is significant accessibility offered by the city center and by its older, traditional suburbs and satellite cities. However, because the costs of transportation are not scored, there is significant undervaluation of the benefits of this convenience. New geographic information systems and associated analytic tools are starting to clarify the incidence of transportation expenditures as a function of location and access.

Transportation costs, including investments in cars and related services, such as maintenance, insurance, and fuel, are now the “number two” U.S. household expense (just behind housing) outstripping spending for food, medical care, and clothing.<sup>26</sup> An accurate, mapped, geographic-score keeping system can assess the tangible benefits of access and provide a consistent valuation of these benefits to apply to qualifying ratios for home mortgages. Committees of lenders and planners, in conjunction with the Federal National Mortgage Association, have crafted underwriting standards to account for these benefits. As a result, these “location-efficient mortgages” will be offered starting this year in Chicago, Los Angeles, and Seattle. Agencies in other metropolitan regions including Miami, Portland, San Francisco, St. Louis, and Milwaukee are each planning similar programs.<sup>27</sup>

The underwriting of a location efficient mortgage counts the benefit of access as the equivalent of disposable income. This recognition increases credit availability by \$25,000 to \$35,000 for a first-time homebuyer. This has the effect of lowering the minimum income needed to purchase a home by \$5,000 and could result in a 5 percent increase in the home ownership rate in each participating region. The benefits of shifting household expenditures from transportation to homeownership include shifting from depreciating personal property and services to appreciating real property, from higher to lower maintenance expense, and from polluting to non-polluting investments.<sup>28</sup>

A bonus that results from creating the systems to track actual transportation demand in places is location-efficient or so-called “green” automobile insurance. Networks of membership affinity groups being assembled by large public interest organizations such as the Surface

Transportation Policy Project in Washington and the Conservation Law Foundation in Boston represent already aggregated buying power. Working with national automobile insurers, proposals are being crafted for basing insurance rates on the relatively lower risk factors associated with lower automobile use.<sup>29</sup> A family typically paying \$2000 per year could see an immediate drop to \$1300 for the same coverage due to the adoption of location-efficient underwriting.<sup>30</sup>

## **5. *Abandoned and Under-used Land***

Many cities have vast tracts of abandoned and under-utilized land including abandoned parking lots and shopping centers. In 1995, for example, more than 3,800 abandoned first-generation shopping centers dotted the nation's inner cities.<sup>31</sup> While local land reform movements have spurred some reinvestment, only in a few cities has reinvestment been undertaken on a large scale.

Leading re-developers of older urban and suburban areas were asked (in events sponsored by the Urban Land Institute, the MacArthur Foundation, the Smart Growth Network, and others) where they look for their best opportunities. The almost unanimous opinion (driven by the favorable economics associated with existing infrastructure) was "already-serviced land" (that is, land already connected by infrastructure such as roads, and utility lines for gas, telephone, electricity, water and sewer service), as represented by "excess parking capacity" and "first generation shopping centers."<sup>32</sup> When asked what the principal barriers are to using such spaces, the most commonly cited are "transaction costs" associated with "land assembly" and "information access."

There are several approaches to addressing these challenges to take advantage of abandoned land. One approach is to develop systems that track property ownership and conditions that increase public accountability or responsible performance and market awareness of potential property availability. Three good examples of such systems are The Neighborhood Early Warning System (NEWS) in Chicago, Neighborhood Knowledge Los Angeles (NKLA), and the Pittsburgh Regional Industrial Site Evaluation System (Pittsburgh RISES). Each program has developed the systems that community organizations, real estate investors and public agencies can use to "connect the dots" between physical condition and owner performance.<sup>33</sup>

Another is to identify new market tools for financing reuse, such as through the creation of an intermediary to enable the necessary partnership financing. Several institutional investors (for example, Columbus Real Estate Investment Trust in Dallas, Arcadia Development in New Mexico and Nokomura Bank) are modifying their investment policies to enter this market.<sup>34</sup>

A third approach that encompasses both the element of opportunity recognition and of value capture is to develop specialized capacity to address environmental contamination, known as land recycling or brownfields redevelopment. New intermediary organizations developing capital access systems for reinvestment in contaminated industrial properties include the California Center for Land Recycling, Phoenix Land Recycling in Pennsylvania, and the Brownfields Institute in Chicago.<sup>35</sup>

## **6. *Underutilized infrastructure***

Because of their loss of population over the past decades, most cities have underutilized infrastructure that could become the basis for a new collaborative, market-based approach to housing development.

An interesting and relevant question for any region is how much of the expected growth can be accommodated by land that is already serviced? Analysis in Chicago was performed using the Northeastern Illinois Planning Commission's digitized land use inventory. The results suggest that the region's communities can accommodate the entire expected growth (700,000 households over the next 20 years) within walking or shuttle distance of existing mass transit under current zoned densities.<sup>36</sup> At the national level, restructuring activities of entire industries such as utilities and railroads are creating newly orphaned land resources. One option for long-term metropolitan planning is to focus on these newly available lands. In some cases, already assembled rights-of-way could represent joint-stakes opportunities for coalitions of multiple municipalities and communities within regions along such corridors.

## **7. *In-Place Infrastructure with Underutilized Carrying Capacity***

These in-place investments include water, sewer, gas, electric, telecommunications, roads and mass transit systems. The Wharton Real Estate Center estimates the value of this infrastructure in the nine largest cities alone at \$1.6 Trillion.<sup>37</sup> Disinvestment and underutilization result in the premature write-off of these valuable assets, while maintenance of over-built systems leads to excess customer charges and taxes.<sup>38</sup>

The cost savings of new development in previously used lands also are worth considering explicitly. The costs of "hooking up" the "next" home developed can be defined as the "marginal costs" of new infrastructure to convert a farm or a ranch into a subdivision. This cost is approximately \$60,000 per dwelling unit, while the associated cost in the same region to upgrade infrastructure to connect that same home to existing systems may be less than \$10,000. The metropolitan areas of both Chicago and South Florida are each expected to grow by 2 million new persons over the next 20 years. In each case, the net saving which results from accommodating the expected new population where we can maximize existing infrastructure use is between \$35 and \$50 billion.<sup>39</sup>

## **8. *Already Assembled Rights-of-Way***

In addition to the tangible assets represented by physical infrastructure, centralized systems all bring with them the more intangible asset of being sited on already assembled rights-of-way.

American cities and suburbs were developed on grid-like patterns. Common area physical assets were located along the grid lines. These assets included roads, streetcar and railroad lines, and utility transmission and distribution lines for gas, oil, electric, water, sewer and telecommunications services.<sup>40</sup>

These patterns resulted in the benefits of enormous efficiencies in the delivery of goods and services, and in economies of scale. The explicit recognition of these benefits occurred through multi-generation investments in these systems, and in the organizations (both governmental and non-governmental) that facilitated and developed alongside. Continued



investment in these kinds of systems has advantaged European cities over their American counterparts. Pietro Nivola has documented how American public policies and investment practice have for four decades undercut these inherent economic benefits.<sup>41</sup>

A good example of reinvestment in these rights of way relates to the modern telecommunications industry. Access to high quality capacity is limited by available bandwidth. While expanded use of microwave and satellite communications can address some of the apparent capacity gap, the frequency spectrum for transmission is a fixed commodity. However, there is virtually no limit to the amount of glass fiber that can be installed. The trick is to find places to lay it in, and to provide access to the “last mile” of service directly to homes and businesses, which is where underutilized existing rights of way become relevant.<sup>42</sup>

The majority of American communities are not yet wired for wide-spectrum telecommunications. There is no plan yet in sight to guarantee that the “last mile” of high-capacity hookup will reach older and lower income communities, who will nonetheless help pay for system upgrade and modernization.<sup>43</sup> In places as diverse as Chicago, Los Angeles, Miami, and St. Louis, transit agencies have leased rights-of-way to new telecommunications providers for high capacity fiber optic carriers. In Los Angeles and St. Louis, and in fourteen communities in Ohio, partnerships with telecom providers have resulted in neighborhood-based telework centers that combine training, work, and access opportunities.<sup>44</sup> Oil pipeline companies in Southern California have provided right-of-way space for these functions. In several cases this occurred at low-cost or no cost as part of a settlement for environmental damages. In Tulsa, leasing of unused “wildcat” producer pipeline space has resulted in that city enjoying the largest base of airline reservations’ jobs in the country.<sup>45</sup>

It is instructive to distinguish between the types of expanded uses for existing rights-of-way. Some are being used for their originally intended purposes. For example, old spaces originally set aside by portions of freight rail operations by national shippers have become “orphaned” properties due to industry restructuring and/or abandonment of service territory. In many cases, these “short lines” of between 1 and 300 miles in length have become profitable stand-alone operations providing valuable links to the national intermodal (truck and train) shipping system. In other cases, freight line abandonment has resulted in the development of recreational trails, and greenways providing valuable ecosystem services including habitat, flood protection, and aquifer (water supply) recharge pathways.<sup>46</sup>

## **9. *Efficient Resource Use***

Lower-density and newer communities require more natural resources and produce more of the growth in pollutants than do older and denser ones. The compact nature of urban living makes recycling of consumer wastes easier than in sparsely populated areas. Compact areas also allow for easier exchange of industrial wastes between firms (one firm’s waste is often another firm’s gold, this is the theory behind the design and siting of “eco-industrial” parks).<sup>47</sup>

Increasingly, materials are being moved out of the earth’s crust and stored in man-made structures. Most of these structures are in urban centers. Buildings, infrastructure or scrap piles in metropolitan areas contain most of the materials ever mined out which are still in reusable condition.<sup>48</sup> Analysts and activists look at these material deposits as the “mines” of the future.<sup>49</sup> Interestingly, all structures age and require maintenance, if not eventual replacement. Each

metropolitan area has the resources necessary to develop recycling industries, regardless of whether or not an area is close to natural resource deposits or currently has industrial materials processing capacity.

From where does the demand for these “used” or secondary materials originate? The good news is, **everywhere**. Over the past forty years the portions of major commodities, which came from secondary or used materials increased significantly. Today 8% of construction minerals, 25% of paper and fiberboard, 30% of aluminum, 33% of copper, 40% of tin, 51% of steel and 78% of lead are derived from recycling. Scrap or secondary materials are the source of over half of all metals used in the United States.<sup>50</sup> The differences between 100% and each of these respective figures are the prospective market sizes for increased secondary materials use. The locations of human settlements and the locations of industry are, for the most part, the locations of materials demands. This is why metropolitan regions are the logical locus of materials markets. There are at least three benefits associated with finding new uses for used materials. First, such use replaces depleted domestic raw materials sources with new domestic sources, rather than with distant foreign sources or deeply located natural resources in environmentally sensitive areas. Second, recycling reduces the demand for energy needed to process raw materials into finished products by up to 95%. Third, these activities reduce the spatial mismatch between materials sources and destinations.

Seventy percent of mineral materials used in the US economy are for construction.<sup>51</sup> Since urban communities use fewer roads, sewers and power line on a per capita basis, materials use is more efficient than in sprawl development. For example, the Bureau of Mines found that per capita use of construction minerals in densely populated Cook County was 4½ tons per year. In sparsely populated nearby Lake County the annual rate was 11 tons.<sup>52</sup> Urban centers also provide specialized opportunities to extend the life of major industrial equipment such as engines and motors.<sup>53</sup> Researchers at Boston University have just compiled a first-time census of these re-manufacturing industries, and find total direct employment to be at least 468,000, more than the entire domestic steel industry.<sup>54</sup> Finally, there is some evidence that compact urban areas may use less energy per capita for heating, cooling and transportation. Centralization tends to reduce reliance on transportation because of the closer proximity of producers and consumers. The use of higher-density and multi-story buildings (both office and apartment housing) reduces materials used due to shared infrastructure, and energy resources due to shared heat.<sup>55</sup>

### ***10. Surprising biodiversity and natural capital***

At least in agricultural regions, urban areas may preserve the best remnants of biodiversity. In many cases, the monoculture of agriculture has removed most complex habitats. In these cases, some of the best uncultivated land is close to urban centers. The examples examined here each represent a region with very large species diversity and urban/industrial character.

A good example of this is the relationship between urbanized South Florida, on that state’s eastern shore, and the Everglades to the west. Fueled by concern about urban encroachment, a Governor’s Commission for a Sustainable South Florida recommended an “Eastward Ho!” strategy to promote reinvestment within that area’s traditional settlements. Polling there indicates strong support for this action. A multi-stakeholder “Sustainable Everglades Initiative” has helped build connections between environmental and urban

constituencies. Also, the recently established Smart Growth Center will further connections in this activity between market-based and community-based actors.<sup>56</sup>

Another good example is Chattanooga. Thirty years ago the area had the dubious distinction of the nation's worst air quality problem. Action to reverse this rating succeeded. Success led the way to industrial retention and to a civic commitment to environmental restoration in the city and along the Tennessee Valley generally. The city has won national and international recognition for its successful efforts in this regard: its "Sustainable Chattanooga" theme is notable for shared leadership with traditional interests including the Chamber of Commerce.<sup>57</sup>

Yet a third example is in the Calumet region spanning southeast Chicago and northwest Indiana along the southern end of Lake Michigan. Interestingly, this year marks the one-hundredth anniversary of the initial University of Chicago studies of the Dunes by Henry Cowles, which led to the modern study of ecology.<sup>58</sup> This region is home to both thirty-seven endangered species and to one quarter of the nation's steel-making capacity. Three decades of continued new federal, state and local designations, including National Park, national lakeshore, state parks, and wildlife refuges, recognize the necessary co-existence of both natural and human capital assets.<sup>59</sup> Recently, over seventy government and non-governmental organizations formed the Chicago Region Biodiversity Council. They have recognized the common biological heritage of an area spanning southeastern Wisconsin, northeastern Illinois, and northwestern Indiana. They have designated this area "Chicago Wilderness: A Regional Nature Preserve."<sup>60</sup>

There are additional benefits associated with natural capital, open space and watersheds associated with urbanized areas. Tangible benefits which are well-documented and "monetized" for their direct value include: property value enhancement; human health benefits; recreation and spending; tourism; infrastructure savings due to flood control; urban forests and "heat island" mitigation which reduces air conditioning expense and energy use; public expenditures and job creation. These are all in addition to the more intangible benefits of historic preservation, environmental protection and ecosystem enhancement, and furtherance of a sense of place.<sup>61</sup>

## **II. Barriers to Valuing the Assets of Cities**

What are the limits of performing this kind of asset inventory? Why, if the news about urban assets is potentially so good, do the public reports about cities and communities sound so challenging? What kinds of challenges do we face in trying to use this kind of asset-based approach? What are the barriers to a conservationist approach to systems development: making the most of existing social and economic networks and transactions? Such barriers include:

### ***1. The speed of disinvestment from older to newer communities***

In Chicago the region's land use grew by 50% from 1970-1990 and daily vehicle-miles of travel increased 49% while population grew by only 4%. During the same time frame metropolitan Cleveland spread out by 33% while its population dropped 8%. Philadelphia grew 32% and population grew 3%. San Francisco grew 45% against a population increase of 40%. In metro Seattle the figures were an 87% land increase vs. a 36% population growth. Baltimore's land use grew 101% against an 8% population increase. And metropolitan Los Angeles spread out 300% while the population grew 45%. This particular "sweepstakes" was won by (a) metro St. Louis, which lost half its central city population, still increased overall population by 35%, and experienced a 354% increase in utilized land; and (b) metropolitan Atlanta, which in the last ten years converted the largest amount of farmland, 1.1 million acres, to development, resulting in a twenty-county metropolitan statistical area.<sup>62</sup>

Whether population is growing, stable or shrinking, we are spreading out. The "independent variables" of public policy (subsidizing of new infrastructure and built-in regional tax base inequities), marketplace practice, and shifting demographics (aging, immigration, and the "baby boom echo") are leaving their footprint on the land, and on our sense of community. The speed at which this occurs outstrips the rate at which current policy and investment toolkits can cope.

At the same time, abandonment of older, central cities and "inner-ring" suburban areas have led to the all-too-familiar picture of vast tracts of central area abandonment. This has occurred even in the face of continued demand for developed land. Both metropolitan sprawl and older area abandonment are flip sides of the same phenomenon—the failure to renew our existing systems and places. It is been estimated that land in America is being consumed at three

times the rate of household formation.<sup>63</sup> A rule of thumb might be that for every 1% increase in use of land for development, daily metropolitan vehicle miles-traveled increases also by approximately 1%.<sup>64</sup> The well-publicized tracking of transportation congestion in metropolitan America too easily masks the under-reported continued transportation efficiencies of older and existing communities.<sup>65</sup>

## **2. *The failure to count the full cost of infrastructure for new development***

If it costs \$60,000 to service a new home in a previously undeveloped space, and only \$10,000 to service that home in an existing community, then there is a \$50,000 net advantage associated with the latter choice. The extra cost associated with the so-called “greenfield” site is a hidden liability. The failure to disclose and charge for the full cost of hooking up development disadvantages relatively efficient and accessible communities, both in central cities and in their older surrounding suburbs, where households own a full automobile per-household less than in the economy at large.

As sprawl continues people spend more time traveling longer. The average American now spends more time on the road than eating. Recent market research as reported in *American Demographics* magazine is titled “Fat Road Wallets”.<sup>66</sup> Goods need to move farther to connect demand and supply, and we are losing our sense of connection to place and to marketplace. One indicator of this is that work-related trips have dropped in thirty years from over one-third to less than one-fifth of the total travel. The balance of trips taken was short trips for shopping, recreational, school and social purposes.<sup>67</sup>

As we undercut our efficient development patterns and access, we increase our air and water pollution and health risks, and increase our contribution to global warming and more localized climate instability. And as economic networks become globalized, a new generation of civic leaders becomes increasingly less connected to the sense of “why here.”

There is a resurgence of research on the “costs of sprawl” and there are healthy debates around these costs in virtually every jurisdiction in the country. However, there is virtually no analogous research on the “benefits of reuse,” and this lack hampers systematic comparison of the relative merits of different growth patterns.

There are also split incentives for considering these merits. There may well be benefits at the regional level of reinvesting generally in older, serviced land versus those associated with spreading out. However, these benefits may not be easily apparent, and there may be disincentives to investing in this apparently more beneficial manner.<sup>68</sup> Some of these barriers relate to the need of individual jurisdictions to generate tax revenue. Another hurdle is the source of revenue used to invest in infrastructure. Revenue may be more available for new infrastructure than for its maintenance. The rules on use of funds for infrastructure differ between federal, state and local public sources and most utility services. Publicly regulated utilities are private corporations with yet another set of rules. Competition between jurisdictions within a region may be excessive. The hidden asset is multi-jurisdictional in location and so are the potential benefits. Since there is no value-capture mechanism associated with the infrastructure to fairly distribute the benefits of development between jurisdictions, the opportunities for collaborative development may not occur.

Cities may chose to recoup outlays through “development impact fees.” This is a preferred method in cases where the impacts of development seem excessive. The village of Naperville, Illinois first levied such fees in 1969. Development interests subsequently challenged this practice. In finding for the right to assess such fees, the Supreme Court found that development costs were “often a matter of intergenerational equity—today’s are being taxed to provide benefits to tomorrow’s residents and businesses.”<sup>69</sup> However, the Court left it up to individual jurisdictions to determine the level of assessments, which are rarely close to the full costs of services. Instead of directing the funds raised for redevelopment incentives, these resources are used for general purposes. Also, the impacts are regional but the developments are local. In this case, it is essential to have a regional mechanism to levy these fees on a consistent and extra-jurisdictional basis. When there is no such tool, it is all too easy to play off communities against each other.<sup>70</sup>

### **3. *The rapid pace of change***

The pace of these challenges is fast, perhaps faster than we are currently able to cope with.

Overall, the American economy is converting over 1 million acres of farmland per year to development, the equivalent of five family farms per day. Trends in global ownership of traditional “home-town” industry and corporate restructuring are equally rapid. In the past year, for example, South Florida watched as NationsBank, which in turn is merging with Bank of America swallowed Barnett Bank, aka “Florida’s Bank,” This transaction, valued at \$85 Billion, resulted in a Community Reinvestment Act commitment offer of \$350 Billion. The same week that the NationsBank-BankAmerica merger was announced, Bank One and First Chicago/NBD (which was created just a scant year ago) announced a similarly scaled merger. Both mergers were dwarfed by the proposed marriage of Citicorp and Travelers Insurance, a deal valued at \$700 Billion and a definitive step toward a consolidated financial services industry. A large sign across the parking lot of a remaining community bank in Chicago reads, “Bank Merger Victims Welcome Here.”

As traffic threatens health and we continue to age, “gated communities” replace traditional patterns. Researchers have found that the portion of new planned developments surrounded by security gating has grown to one out of six. This has occurred in just the past two decades.<sup>71</sup> As school-funding disparities increase while both the “baby boom” population and record immigration rates overwhelm older systems, the increasing lack of quality school choice drives outward migration even faster.<sup>72</sup>

### **4. *Inequality, racism and poverty***

The sustainability dialogue has been mostly a white, upper middle class dialogue, with few connections to urban, non-white and low-income populations. Looking at sustainability in urban centers forces us to deal directly with the tensions between the capacity to plan for the long-term future and the need to deal equitably with the survival needs of today.

America is becoming older overall, with more kids in school, and considerably more culturally and racially diverse. In the 1990’s, immigration has contributed almost one-third of total population gains. Of the nearly one million immigrants entering each year this past decade,

half are from Latin America and one quarter is from Asia. Almost three-quarters settle in just six states: California, New York, New Jersey, Florida and Illinois. As of 1990, 93% of the foreign born population lived in metropolitan areas. Just eight metropolitan areas received the lion's share: Los Angeles-Southern California, New York-New Jersey, Miami-South Florida, Chicago, Houston, and San Francisco-Bay Area. These "gateway" cities, each of which received over 100,000 immigrants during the 1980's, are home to 71% of the foreign born who arrived during the 1980's.<sup>73</sup> A recent National Academy of Sciences panel found that on net, the overall benefits of this level of immigration are positive, including long-term workforce development, while the short term costs of rapid influx pose fiscal challenges on these gateway cities and states.<sup>74</sup>

Fueled in part by this influx, the minority population is projected to increase by 16.5 million during the 1990's, and is expected to account for more than three-quarters of the population growth between 2000 and 2010. Combined with slower growth of the white population, these trends will boost the minority share of the US population from 24% in 1990 to 32 % in 2010 and almost 50% by 2050. In Chicago, of the projected 1990-2010 population growth of 1.8 million persons, one million will be Hispanic, who will most likely settle in the suburbs.<sup>75</sup>

We are now approaching the two decade mark in the history of documentation of the disproportionate burden of environmental health risk borne by the poor and particularly by people of color.<sup>76</sup> These same populations have borne the effects of displacement due to siting of expressways, major sports arenas and specialized facilities built for Olympics, conventions and World's Fairs. Central city minority householders in many regions earn only one-half to two-thirds the amounts their suburban cohorts are earning.<sup>77</sup>

The ability to directly address these inequities is confounded by the limits of political systems. Much the way that sprawl has resulted in disinvestment from older areas in favor of investment in new ones, so has the political result—as reapportionment occurs, newer districts tend to cover areas with growth oriented interests at the expense of the interests of older, smaller and more land-locked areas.

The strong concern expressed by advocates of metropolitan governance regarding the fragmentation of local government masks an even stronger concern of central city residents of under-representation. For example, the city council in Chicago has one elected representative, a ward alderman for every 50,000 residents, while the city councils of suburbs just over the border such as Evanston and Oak Park, with approximately the same populations each as a Chicago ward have one elected representative for every 5,000 residents—and their own "community" (albeit municipal) budgets.<sup>78</sup> The high degree of centralization of central city services which results from this kind of situation can leave residents and businesses feeling powerless to deal with their everyday concerns about crime and school quality, often described collectively as "push factors" leading to outmigration.

Another inequity apparently results from the way in which reapportionment in the House of Representatives occurs. While as a nation we are both spreading out and growing in population, the number of congressional representatives is fixed. As one recent impassioned organization to the President's Council on Sustainable Development testified, "do the math!"<sup>79</sup>

A recent study by Hal Wolman and Lisa Marckini of central city representation in Congress finds that over the past forty years, not only has central city effective representation declined, but that “suburban representatives are now firmly in control of the House.”<sup>80</sup>

A study of central city representation on the governing boards of Metropolitan Planning Organizations, which control significant resources for transportation planning and investment, found that while central city residents comprise 34% of the population, they are represented by just 5% of the votes.<sup>81</sup> Myron Orfield has studied tax policies in twenty-two major metropolitan areas. The studies show that as a result of these demographic patterns, the tax bases generating resources for schools and for infrastructure are being siphoned off from older and more central areas, where most people of color reside, to the benefit of newer and more distant communities.<sup>82</sup> A forthcoming study by the Surface Transportation Policy Project and others documents both the place-based and the civil rights effects of forty years of transportation decentralization in the Cleveland and Chicago regions.<sup>83</sup>

## 5. *Non-recognition of the Assets of Place*

In many of the examples noted above, the assets described are overlooked. This often happens, in part, because official systems for detecting and tracking activity are focused on change and not on stability or on enhancement of existing capacities.

In Part I above, I cited the benefit of concentrated workforce. Typical reporting of job opportunities is on the growth in new jobs in low-density areas located far from where people who need work live. This kind of reporting would be more accurate if it observed that the majority of job opportunities are replacement jobs at or near the traditional locations for employment. The debates over the future of transportation regularly make much of the demand for larger cars and houses and of the growing number of households with 3 or more cars each, but fail to track either the large numbers of Americans who enjoy mass transit and get by with either 1 car or no cars in their households, or the majority of households who seem to “get by” with dwelling units of considerably less than the 2300 square feet of living space on a footprint of 1 or 2 acres.

The same statistical challenge confounds the debates over natural resource utilization. The official reporting system for mineral resource availability tracks untouched resources only, and the reports of available supply, whether the subject is iron or gold, are in terms of “years remaining.” The same sources do report the fantastic growth in demand for recycled or scrap materials, but do not, for example, pick up the extent of the cumulative “mine” of available used materials in scrap piles, buildings and equipment. Two-thirds of the weight of new materials entering the economy is for construction and less than 10% of this total comes from scrap, even though the majority of materials ever mined reside in our existing buildings and infrastructure. America’s cities are its largest mine, yet used materials are officially labeled “speculative or sub-economic resources.”<sup>84</sup> One estimate is that the amount of steel and iron sitting in scrap piles is eight times annual ferrous metal consumption. Federal subsidies paid from local taxes continue to underwrite truly sub-economic and capital intensive mining, mostly in Western states and internationally, preventing the mobilization of resources for further growth in more labor-intensive and community supportive local land and materials recycling.<sup>85</sup> And since the stock of



used and reusable materials is distributed in the very places where people are settled, the potential supply market for materials from recycling exists in a ubiquitous (that is, everywhere equally available) geographic pattern.

An additional failure in community asset appreciation is in the realm of what is increasingly called “social capital.” Social capital refers to the norms and networks of civil society that lubricate cooperative action among both citizens and their institutions: without adequate supplies of social capital—that is, without civic engagement, healthy community institutions, norms of reciprocity, and trust—social institutions fail.<sup>86</sup> There are no mainstream, officially recognized “censuses” of organizations and networks, and so there is controversy over whether social capital is stable, increasing or eroding.<sup>87</sup> At its most formal, social capital is represented by government, and at its most informal, by very intangible interpersonal relationships. In efforts to describe the elements of “what works” in addressing economic and ecological challenges, it is critical to remember that there are people in the picture we’re trying to paint. So it is unlikely that our efforts to maximize community assets can be effective without the continued reinvestment in our social assets.

Whether the assets we are concerned with are economic, ecological or social in nature, the problem that we need to come to grips with is the need to recognize our **stocks** of capital. Ecologists regularly who regularly analyze the relationships of human and non-human communities distinguish between stocks and flows of natural and non-natural capital. Economists who are struggling to imbue a sense of importance to assets such as knowledge and ownership are turning to ecological metaphors to similarly distinguish the stocks of these assets (i.e., how much of the asset is there) from their flows (how quickly and in what ways are these stocks changing). Social scientists, civic leaders, community organizers and journalists are all beginning to use asset-oriented language and concepts to reinforce the importance of organizational stocks.

Why is this concept so critically important? First, an orientation toward assets and stocks carries the sense of accomplishment in the past, and can therefore aid in the equally critical task of goal setting and orientation toward the future. Second, an asset is something that can be invested in, borrowed from, and improved. Third, using assets and stocks as opposed to just flows to depict status is a truer picture: much as a business entity must augment a profit-and-loss statement with a balance sheet showing assets, liabilities and equity, communities can better firm up their understanding of what they are worth by constructing a balance sheet reflective of their full range of assets. Overall, by focusing on community assets a more complete picture of collective motivations for change can be created, increasing the likelihood that strategies for change can both enjoy widespread support and succeed.

What are some examples of how this orientation could help us not only detect and appreciate our assets, but put them to use? Some good examples are in the work to increase the efficiency of natural resources (materials, water and energy) including reduction of emissions and pollutants.

The current fleet of cars and trucks use only 1% of their fuel energy to move the driver. An incandescent light bulb converts only 3% of power plant energy to light, and only 1% of the materials we mine or reuse are actually put into and remain in the average product more than six

weeks after sale.<sup>88</sup> We are still wasting at least \$250 Billion per year worth of energy, enough to increase personal wealth by more than \$3,000 per family per year.<sup>89</sup> The extra car-per-household that is necessary in less accessible communities is a major reason why transportation is the “number two” household expenditure after housing. This expenditure is more even than is spent on food and up to three times what is spent on medical care) represents a similar family economic drain worth another \$3,000 to \$5,000 per household.<sup>90</sup> In regions such as Chicago, the ability exists to reuse the carrying capacity of existing serviced land (land with infrastructure largely in place). This opportunity exists in both the central city and in its suburbs. The asset is large enough to accommodate the next million households. Over a thirty-year period this more sensible land use pattern would avoid at least \$50 Billion in unnecessary new infrastructure investment (some \$15,000 per resultant household) and capture new tax base for schools and basic services worth tens of billions of dollars more.<sup>91</sup>

In a sense, the failure to use resources as efficiently as is theoretically possible at the local level translates into a burden, numerically the equivalent of a \$20,000 to \$25,000 hidden mortgage on every household in the greater Chicagoland region. These amounts are in addition to the social costs associated with continued decentralization and abandonment of existing communities and the opportunity costs associated with not reinvesting and capturing their potential efficiencies.

Another way of considering the potential benefits of recognizing existing communities is at the aggregate levels of the region, the nation, and the world. The World Bank recently estimated the value of existing infrastructure stock in the cities of developing countries—including water, sanitation, roads, bridges, public lighting, and traffic signals—to be on the order of U.S. \$3 Trillion. The annual investment in these sectors, that is, the flow, is on the order of \$150 Billion. An increase in the benefits coming out of this investment by only 5 percent per year would be equal to the entire flow.<sup>92</sup> The annual transportation expenditure in 1992 in the United States was approximately \$1 Trillion. Of that total, only \$160 Billion was from federal, state and local government, and of that amount, approximately \$30 Billion was the federal contribution. An increase of 3% in the “transportation efficiency” of the economy would equal the entire federal investment.

The job creation effects of rising to this challenge in a coordinated fashion could bring every community in each major urban region to full employment. Reaching full employment in this manner, where the conservation of existing communities and resources drives collective investment, is also the most likely way to actually reach attainment of environmental and climate change goals. For example, some of the best news in the economy is that environmental industries (ranging from manufacturing of energy efficiency products to cleanup services to “green services”) are growing more quickly than the economy at large (4% per annum). This is already a significant part of the economy: there are 34,000 jobs in the Chicagoland area with wage levels typically starting at \$15 per hour.<sup>93</sup> The impressive jobs figures for local environmental industries are part of a larger national trend: a growth from \$20 Billion in 1972 to \$171 Billion in revenues in 1996.<sup>94</sup> During roughly the same period, energy savings have cut America’s energy bill by at least \$150 billion and carbon emissions by one-fourth.<sup>95</sup> OECD in 1991 estimated that, per capita expenditures in environmental goods and services were \$313 in

the U.S., \$214 in all OECD countries, and only \$8 in the rest of the world.<sup>96</sup>

The personal asset development effects of rising to this challenge are equally significant. Creating standing for communities in the markets which improve the environment and that counter sprawl and disinvestment also creates a venue within which value can be captured directly to the benefit of individuals and families. This is an area where the work to create individual asset accounts (IDA's) becomes vitally important. Several contending proposals for reform of Medicare and Social Security financing are also based on this same logic.<sup>97</sup> If we can identify an appropriate method of transferring the tangible benefits of capturing the intangible assets identified above (both the benefits of reuse and community **and** the avoided costs of excessive resource use) as an outcome of our market development experiments, then it should be possible to craft a value-capture strategy for families and individuals directly as a result.

## ***6. Recognizing the Special Benefits of Social Capital and Place***

If these efficiencies and distributed benefits can be achieved, then they are certainly worth striving for. But if we can't recognize the potential benefits as achievable, we're unlikely to strive towards their achievement.

So what is the barrier to their recognition? It seems that the failure on the part of decision-makers to recognize the social benefits of place might be the most significant barrier of all.

The principal barrier to recognizing the benefits of place might be termed a failure of the imagination. The pragmatic example of this is the assumption that finding new ways to develop the economy will necessarily entail high transaction costs. The associated assumptions are that (a) entirely new organizations will need to be formed, (b) new forms of transactions created from scratch, (c) new systems of tracking and verification assembled, and (d) new subsidies approved.

A good example of how these observations might help new, place-based markets to develop is in the emerging area of achieving emissions reduction and air quality benefits. Air emissions are largely a function of excess energy use, and the strategies for reducing energy include cleaner technology (equipment, products, vehicles), cleaner fuels, and reductions in demand (locating people and what they do closer together to reduce transportation demand, designing buildings to require less energy, etc.). There is a growing belief there is a limit to how much of the problem can be addressed by strict (aka "command and control") regulation alone. The law on clean air enables the creation of a system to credit for voluntary actions, which can achieve national goals, which in turn supports the notion of a more "market-based" approach to improvement. This system has worked well in substantially reducing sulfur dioxide emissions from power plants, and chemical and metal refineries. There is interest in creating such market-based approaches to help engage a broader range of emissions sources. However the majority of further improvements will need to come from a large number of smaller sources, as opposed to the smaller number of large sources that have been the previous focus of air quality regulation.

***Assume we're organized.*** First, transaction costs associated with the means of organization are only prohibitive if we assume that the world is unorganized. On the contrary, we know that human activity is highly organized, and both social capital and business networks may be more highly evolved in the Great Lakes region than in any other part of the country. Such institutionalized ingenuity can make change happen rapidly. It took less than three decades for retail franchising to dominate small business start-ups, less than two decades for pre-paid health maintenance organizations to dominate medical insurance, and a similar period for secondary market securitization to dominate housing credit markets. There is increasing evidence that older and more geographically accessible areas with well-established networks utilize resources more efficiently, and therefore there is a “hidden asset” which can potentially be harnessed to attain environmental goals. A special opportunity may be constituted in the emerging interest in aggregating purchasing power for electricity, which could be linked to demand and emissions reduction incentives. Finally, reductions on the “supply side” are not free, and it may be that net organizational transaction costs are low compared to the costs of certain kinds of supply side improvements. For example, electricity from renewable energy in most of the Midwest will remain prohibitively expensive until demand is substantially reduced. If the costs of organization are relatively low, the advent of aggregation will enable quicker air quality and greenhouse gas improvement than can be expected from new technology alone.

***Adapt existing transactions.*** Second, not all transactions needed to envision a marketplace for emissions reduction require *de novo* creation. The work of many parties within the financial services community to create location efficient mortgages and insurance policies and to modify information flow and rules to recognize resource efficiency, are illustrative of a class of value-added, transaction modifications that make the most of existing systems of exchange. Evaluation work from the utility industry demand-side management programs highlighted the value of associating incentives with recurring billing cycle transactions. Work by Don Shoup at UCLA suggests that time-of-sale real estate transactions could hold the key to wholesale environmental performance commitments.<sup>98</sup> The emerging literature on the value of credit counseling to household asset development and financial services underwriting also suggests that market behavior can change effectively with small incremental investments in information at the household and community levels. The blurring of the lines between financial services and telecommunications services and the growth of small user Internet access are but two examples of the rapid growth in information infrastructure in place.

***Learning new ways to verify.*** Third, the debate over satisfying measurement and verification requirements can benefit from analogous work within disparate fields. These range from demography (the census debate on sampling), retail market enhancement (the discovery of the aggregate purchasing power of lower-income communities), statistical process control (the shift from measuring final product quality only to measurement of work-in-progress), to industrial ecology (the identification of common assets and benefits shared among multiple parties). In all these cases, indirect, sometimes unobtrusive and less expensive measures are used to complement the very expensive, inflexible and real-time continuous assessments that have traditionally dominated each respective field. In addition, the rapid evolution of geographic information systems holds special relevance and promise for the proposed activity. Much as maps and commensuration led quickly to the development of property rights (both individual and

in common), GIS systems make it possible to identify the place-based benefits of environmental quality, and the economic and environmental benefits of community improvements.

***Reduce the costs of transacting.*** Fourth, on a dollar-per-ton of emissions basis, it may actually be less expensive to target a large number of smaller sources than a small number of large ones. This is partly due to the relatively high capital cost of technological requirements for large emitters. It is also partly due to the summary effects of twenty-eight years of strict regulation (most large sources have exhausted their inexpensive options and further improvements are costly, whereas small sources are typically at the beginning of their learning curves). Finally, it is partly due to the opportunity costs of not investing close to the end-uses of energy and resources and the unwillingness to count derivative economic and social benefits which prevent effective cost-sharing across purposes, sectors, networks, and communities.

***Addressing the Barriers.*** This example and more generally these considerations suggest that a broader and more inclusive marketplace can and should be created. There are practical barriers to creating one at this time, which we believe are addressable.

The evolving nature of the networked economy makes it hard to expect that the “marketplace” will easily recognize the value of place. “Dis-connection” occurs with respect to place: reconnection requires new forms of ingenuity and incentives for this to occur. Practices in which communities struggle to recognize the value of place include historic preservation, geography, community development, community organizing, and regional economics, among others.<sup>99</sup> This calls for social capital. Here again, existing communities bring a set of assets that make it possible to succeed. So what are the social capital and learning assets of place?

### **III. Intangible Assets: Social Capital and Place**

#### *Making Place Matter: Recognizing the Value of Urban Assets*

Healthy communities do for people what ecosystems do for the rest of nature: provide a measure of stability and positive synergy in the otherwise chaotic lives of individuals. They also provide the means for recognizing mutual gain so that commitments to social and economic systems that inclusively benefit community members can occur.

Much as high-performance companies look into the future to anticipate changes in the market and technology, investment in continuous knowledge creation can build a collaborative advantage for communities and local markets.

Knowledge creation occurs when a community or an organization invests intentionally in understanding explicitly and tangibly what may previously have been vaguely, intangibly and tacitly understood.<sup>100</sup> It also occurs because of the desire to make the things that matter to people and communities count: quality of life considerations such as a clean environment, convenience and access, a sense of community and place, a labor force and job access, all represent values held in common that can lead to new economic opportunities through market development. By taking the time to understand and more explicitly value these assets, we can both express and aggregate the many quality of life demands as new goods and services, and build systems to deliver these in the places and communities that need work.

In the example cited at the beginning of this paper, the insurance industry was developed out of the explicit recognition of risk. The industrial revolution was made possible in part by the recognition that what steam engines were good for was work: by developing measures of work as “horsepower equivalents,” it became possible to finance the value of what the engines did rather than the cost of the engines themselves.<sup>101</sup> Grain elevators and refrigerator trucks may have been the technological edge enjoyed by the young industrializing Chicago, but it was the ability to commodify and monetize (value) into the future what these were worth that enabled the central development of the futures exchanges.<sup>102</sup> No less than today’s emerging derivatives

markets do for Wall Street (or than the original coining of “money” as representing exchange value thousands of years ago), market development depends on the ability to recognize and systematically understand hidden values and assets, however intangible or tacit, and to create the systems within which new value can be captured.<sup>103</sup>

Markets develop according to the definition above of knowledge creation. However, not all efforts at market development succeed. Observers of how markets typically fail have developed lists of obstacles to effective market functioning, including: capital misallocation, organizational failures, regulatory failures, informational failures, long developmental lead times, risk averse behavior by consumers, high levels of risk and uncertainty for potential producers in startup industries, perverse and split incentives, false or absent price signals (markets are good at setting prices but terrible at recognizing full costs), incomplete markets and property rights.<sup>104</sup>

A good example of the implied confusion arises in the public health field, particularly in the determination of the health effects of cities and regions. Respiratory ailments are on the rise, and the frequency distribution reports are aggregated at the level of city and region.<sup>105</sup> The risk factors of air pollution are mostly and increasingly associated with emissions from motor vehicles, including both cars and trucks.<sup>106</sup> Most of the use of vehicles is to move around and between cities, rather than to facilitate circulation within. The failure to clearly perceive and report this situation perpetuates a “density is bad” myth.

Similarly, the bulk of time wasted in congestion occurs either in the newer suburban areas, or by travelers choosing to travel in their cars rather than by more reliable means between cities. Typical journey to work travel times are lower for residents in older, more densely populated and accessible areas, but this benefit is masked statistically by large area aggregated reporting.<sup>107</sup>

A third example, also regarding public health, relates to the health benefits of a more pedestrian friendly environment. People who walk more tend to drive less. The Centers for Disease Control finds that the physical activity associated with walking is associated with lower rates of both morbidity and mortality from atherosclerotic disease (heart disease and stroke).<sup>108</sup> They also find for the population at large that when corrected for density, the risk of pedestrian accidents (crashes) may be lower in older and more densely populated areas with good amenities (sidewalks, signage, rules) as compared with newer areas which may lack these amenities altogether. An analysis by the Surface Transportation Policy Project of the relevant data basis found that the most dangerous places in America to walk in fact are neighborhoods (such as much of Florida) that were built without sidewalks. Their finding for these areas was that irrespective of income, “you are much more likely to be hit by a car than to be attacked by a stranger with a gun.”<sup>109</sup> It appears that neither the health nor automobile insurance underwriting industry is currently able to incorporate such understanding.

### ***Dense connections and opportunities for rapid learning***

Because of their compact nature, cities offer enormous opportunities for interaction and learning between individuals and organizations. They may contain the largest stocks of social capital, as represented in community and civic organizations, knowledge-based industries, independent

journalism, and inter-generationally endowed institutions with local interests such as libraries, universities and philanthropy.<sup>110</sup>

Several researchers have suggested that it takes more than just human capital to address economic inequities. Paul Romer distinguishes human capital from ideas, which he defines as “the instructions that let us combine physical resources in arrangements that are ever more valuable.”<sup>111</sup>

Thomas Homer-Dixon defines **ingenuity** as a key ingredient, defined as an aggregate supply of ideas that a society applies to its practical problems. In particular, he suggests that the supply of technical ingenuity “depends on an adequate supply of social ingenuity at many levels of society. Social ingenuity is key to the creation, reform, and maintenance of public and semipublic goods such as markets, funding agencies, educational and research organizations, and effective government.”<sup>112</sup>

Human ingenuity is usually so abundant that it hardly seems remarkable. On a daily basis, for instance, an average city receives an uninterrupted and seemingly coordinated supply of thousands of tons of food, fuel and materials. The amount of ingenuity needed to run such a system is not the same as the amount needed to create it, because at any one time a vast array of routines and standard operating procedures guide people’s actions. But the system and its countless elements are the products of the incremental accretion of human ingenuity. Many small ideas and a few big ones have created them over time. A survey conducted for a group of national foundations of “Innovations in Metropolitan Cooperation” by Julia Parzen identified hundreds of emergent collaborative efforts.<sup>113</sup> Their characteristics were that they tended to be public-private partnerships; supported by the sense of urgency on the part of civic leaders; creatively configured to be representative, inclusive and diverse; and “custom-designed” to address the issue at hand.

None of the ten “tangible” assets listed above would be possible without the simultaneous existence of and long-term investment in social capital, that is, in the systems, institutions, relationships, collective knowledge and rules which make change and improvement possible.

In the book *Built to Last*, James Collins and Jerry Porras identified the attributes of organizations that have lasted one hundred years or more. The two most fundamental attributes were a clear and unwavering sense of purpose, and a commitment to continuous and periodic improvement.<sup>114</sup>

A more complete “balance sheet” of the assets of cities and communities must therefore include such intangible assets as community and the sense of place; local knowledge creation and support for invention and ingenuity; values held in common and a culture which support these values; an orientation towards the future; and a commitment to equality and continuous improvement.

### ***Best Opportunities for Self-Actualization and Community Transcendence***

A truly sustainable society is one that honors the human need for self-actualization as well as providing the conditions for physical survival. Abraham Maslow suggests that human needs form a “hierarchy,” ranging from physical survival and safety to self-actualization. Gratifying



lower levels (e.g. ensuring safety from harm) creates less resistance to focus on higher levels (e.g. self-actualization).

Work on sustainability needs to be done in this context of the full range of human needs, not just the needs for physical survival. This broader focus is the natural outgrowth of the connection between sustainability and human learning. Learning cannot happen if our higher needs are not met. Thus building the “adaptive capacity” of human beings requires worrying about more than just our physical survival.<sup>115</sup>

If we either fail to penetrate deep enough to the hidden positive values that motivate what we do, or simply fail to see or appreciate the full range of values that are important to us and other people, we may fail to understand what is motivating the more tangible and seemingly threatening trends.<sup>116</sup> On the one hand, people seem to respond favorably to well-designed presentations of imagined futures: whether the subject is the Chicago Auto Show, or the Futurama exhibit at the 1939 World’s Fair, people seem to thirst for immediate access and beauty, in a word, transcendence.<sup>117</sup> On the other, surveys of suburbanites seem to suggest that the communities to which people are moving actually have the kinds of values which people are seeking: community and a sense of place embedded in the natural landscape, proximity to rural ways of life, schools that work; and that people believe that rather than “running away” from the city and older places, they are “running to” community.<sup>118</sup>

There is an emerging renewal of appreciation for a sense of place in the aesthetic sense of the term. In this sense, social history is embedded in urban landscapes. Dolores Hayden has documented how “place power” carries a cultural and historical sense.<sup>119</sup> It carries the resonance of homestead, location and open space in the city as well as a position in a social hierarchy. An individual’s sense of place is both a biological response to the surrounding physical environment **and** a cultural creation. People make attachments to places that are critical to their well being or distress. Children show an interest in landmarks at three or earlier and by age five or six can read aerial maps with great accuracy and confidence. Space is shaped for both economic production—barns or mine shafts, or piers, or a factory—as well as for social reproduction—housing for the workers, managers, and owners, a store, a school, a church. As the town grows, configuring streets and lots formalizes the earlier uses of land and path systems. This leads to infrastructure such as paved roads, bridges, water systems, streetcars, and railroads, all of which have substantial environmental effects.

All of these different kinds of private and public planning activities and public works have a social as well as a technological history. People fight for and against them. People also construct and maintain them. Long after community character has changed or disappeared, people celebrate cultural heritage. They can do so formally and institutionally, as in the case of cultural museums and oral history projects.<sup>120</sup> From 1984 to 1992, The Power of Place was a small nonprofit corporation whose purpose was to situate women’s history and ethnic history in downtown, in public places, through experimental, collaborative projects by historians, designers, and artists. “Rediscovering the African American Homestead” traces the Bidley Mason project where author served as director and historian. “Reinterpreting Latina History at Embassy Auditorium” discusses the reinterpretation of a union hall used by Latina and Russian Jewish garment workers. “Remembering Little Tokyo on First Street” covers the creation of a historic

district of small businesses launched by Japanese American immigrants. All these cover practice as well as theory: public art, dialogue, oral histories are used to remember and to reproduce public space.

People also celebrate community more informally. The powerful attachment to places that may no longer exist physically or socially is expressed as reunions. In older African American communities in Atlanta, annual reunions have become a method of celebrating and remembering community. For example, in the small neighborhood of Cabbagetown (population 1,200), the 1991 annual reunion drew 30,000 participants.<sup>121</sup> On Chicago's near south side, there is significant community redevelopment of the Bronzeville neighborhood around traditional African American landmarks and cultural institutions (newspapers, music clubs, locally owned insurance companies).<sup>122</sup> Using this kind of strategy to build a sense of heritage and community can work if we build within a conceptual framework of "cultural citizenship." As Rina Benmayor and John Kuo Wei Tchen have defined it, an identity that is formed not out of legal membership but out of a sense of cultural belonging.<sup>123</sup>

People also perceive and anticipate threats to community character and heritage. The National Trust for Historic Preservation supports the enhancement of small town character through its "Main Street America" program.<sup>124</sup> In 1990, a coalition of organizations came together to consider responses to the expiration of the federal legislative authority which supports transportation investment. Each organization present gave a reason for participating in a change-oriented process. Jackson Walters, President of the National Trust, stated: "After completing six hundred Main Street community projects, we just found out that Wal Mart has been following us around, and we're not going to take it any more."<sup>125</sup> More recently, the organization Imagine Chicago has formed and is dedicated to ensuring that the next generation of Chicagoans will grow up with an appreciation for their own cultural heritage and for local heritage as well. In the words of the organization's founder, this should result in a world where "nothing and no one is wasted."

## IV. A Newer Geography of Hope

The preceding analysis suggests that social capital is the key to mobilizing and enhancing the more tangible benefits of communities. It is important to consider the scale at which various kinds of activities occur, how formal the boundaries are that either constrain or enable activities, and since the capital is social, who gets to be involved.

Consider the question of just where communities are. From an administrative point of view, the United States is currently composed of fifty states, 3,000 counties, 24,000 municipalities and another 64,000 townships and special service districts, plus an unknown number of wards within these towns and villages.<sup>126</sup> From an ecological point of view, the boundaries are much fuzzier and relate more to the distribution of natural resources: is the U.S. composed of a handful of geological regions, dozens of airshed transport regions, or hundreds if not thousands of riverine watersheds?<sup>127</sup> And from the social perspective, home and neighborhood is where you have identity (Wendell Berry: if you don't know where you are, you can't know who you are). While much has been written about the "placeless" nature of the evolving information economy, it also appears that in many ways, the newer complexities of life require more face to face interaction than ever.<sup>128</sup>

### *Thinking About Small Places: Putting the Place Back Into Marketplace*

What are some of the institutional forms that place-based initiatives take, and what are the geographies that go with these activities?

One is the arena of community economic development. During the past two decades, a new local finance industry has emerged, consisting of some 3,700 community development corporations, 7,000 revolving loan funds with \$5 billion in assets, and a small but quickly growing number of community development banks and development finance intermediaries.<sup>129</sup> These non-governmental organizations by-and-large invest creatively and effectively in real estate-based community development and, along with their funding and investing partners, have begun to recognize the emerging nature of their respective economies. However, a recent study by Alice Shabecoff and colleagues for the Joyce Foundation of the latent opportunities for communities, particularly in rapidly emerging environmental markets, found that the systems which successfully built the current community development industry are insufficiently market-oriented for community pilot programs by themselves to achieve market-scale potential.<sup>130</sup>

Another is in the effort of entire economic sectors. Some high-performance sectors that **are** becoming place-based include: (1) the revived thrift industry, which just experienced its most profitable year;<sup>131</sup> (2) intermodal freight, including the 400 or so regional short line railroads on which all major shippers depend (in Chicago alone there are 900 jobs or more per year that are not being filled that pay excellent wages with modest training requirements);<sup>132</sup> (3) scrap industries, now the major suppliers for all metal industries in the country;<sup>133</sup> (4) local telecommunications providers of high bandwidth services without which cable TV, fast Internet service, or local telework centers are possible;<sup>134</sup> and (5) electrical utilities, which are divesting themselves rapidly of power plant ownership in favor of building stronger customer bases in the communities they currently serve and thus are becoming increasingly place-oriented in their business strategies.<sup>135</sup>

Other signs of social asset building include the emergence of the National Community Building Network;<sup>136</sup> a vibrant pair of church-based community organizing networks backed by the Industrial Areas Foundation and the Gamaliel Foundation, respectively;<sup>137</sup> movements to build sustainable communities and to create indicator systems which show “genuine signs of progress”;<sup>138</sup> the effort by John Kretzmann and John McKnight to help “build communities from the inside out” by helping them take stock of their social assets;<sup>139</sup> the growth of civic journalism and the recent approval by the Federal Communications Commission of very low wattage radio station licensing;<sup>140</sup> the replacement of the old interstate highway authorization with the place-oriented Intermodal Surface Transportation Efficiency Act of 1991 and its reauthorization as the Transportation Equity Act last year;<sup>141</sup> the increasing willingness of families to transfer both inherited and earned wealth into endowed institutions such as foundations, libraries and schools;<sup>142</sup> actions by Congress to remove apparent incentives to prematurely move from and/or sell property in the 1997 tax reform act;<sup>143</sup> and the emergence of “smart growth” and “livable communities” policies and initiatives (during the last election, 72 percent of 240 ballot measures to save open space and other “green” resources along with almost \$8 Billion in state and local conservation spending was approved).<sup>144</sup>

Much of this progress has been fueled by the efforts of community organizers, leaders and researchers to “disclose” a trend, an inequity or an opportunity that was heretofore poorly understood or “hidden.”<sup>145</sup> The efforts of university researchers to support community efforts to disclose the systematic flow of bank deposits out of their “home” communities to newly developing ones, a practice known as redlining, helped develop and support the Home Mortgage Disclosure Act and the Community Reinvestment Act.<sup>146</sup> These reports on reinvestment are now available on demand in every federal depository institution in the country and over the Internet.<sup>147</sup> Similar efforts around disclosing environmental risk after well-publicized tragedies at Love Canal and Bhopal led to the creation of a Toxics Release Inventory and a generation of newer efforts to clean up high risk sites and redevelop “brownfields.”<sup>148</sup> Emergent efforts around the country are developing new knowledge and awareness of tax base service inequities, transportation accessibility, pedestrian safety, and employment matches and mismatches.

Each of these knowledge creation efforts is supported by a constituency interested in building a sense of urgency around local threats, missed opportunities or both. These efforts are further building the sense of connection between Big Systems and the Small Places they purportedly serve. However quickly these improved policies and understandings are helping to address the barriers referenced above, we have a long way to go. The high levels of risk and uncertainty involved in developing inner-city and now older suburban markets mean that start-ups are much slower than desirable, resulting in a vicious cycle of waiting. Polling clearly shows consumer desire for safer and cleaner products and more accessible communities.<sup>149</sup> Businesses also express the desire to operate both profitably and responsibly. Everyone wants to eliminate poverty. But the connections do not get made fast enough, so the potential benefits remain largely unachieved.

### ***Approaching Regional Significance: Coordinating, Empowering, or ‘Entrepreneurial’?***

The concept of sustainable development has given rise to a variety of definitions, and increasingly, these definitions include the concepts of place and community. It is arguable that there now exists a sustainable communities movement in the United States, with self-selected

initiatives and/or staffed coalitions thriving several hundred jurisdictions to date, and new ones being created almost continuously.<sup>150</sup>

Many of these initiatives are as small as rural villages, while some (e.g., “Sustainable Seattle” or “Campaign for a Sustainable Milwaukee”) encompass entire metropolitan regions. All attempt to be comprehensive in their outlook, with multi-issue agendas the rule rather than the exception.

Over the past several years, in surveying the scope of practice included under the rubric of sustainable communities, I’ve observed that there has been considerable innovation in how communities to decide to act collectively. These initiatives have a common goal of seeking what might be termed collective efficacy—they anticipate and adapt with an orientation toward the future; set goals collectively and try to keep score; value performance and flexibility over pre-structured approaches; do not shy from taking on what are considered to be driving trends and indeed seek transformative solutions; respect ecosystem roles and ecological logic; value mutual gain; and in short, try to learn and improve continuously as a community.<sup>151</sup>

In acting this way, genuine innovations have arisen. Examples range from new kinds information-sharing and learning networks, to strategies to balance regulatory flexibility with performance and accountability, to new forms of financial institutions and even new financial services products and markets.

The pace, creativity and dynamism of these usually informally- (as opposed to governmentally-constituted) initiatives stands in contrast to the kinds of initiatives structured by local, state and federal governments, and helps frame the challenge to local government leaders considering their own futures.<sup>152</sup> A review by the author (in consultation with the National Academy for Public Administration and the Brookings Institution) of practice in jurisdictions across the country suggests a taxonomy of major strategies being advanced in the name of regional well being. The three major categories are: **(1)** regional strategy as intergovernmental coordination; **(2)** regional strategy as representative of the interests of all communities and people within that region; and **(3)** regional strategy as market-linked and community-responsive.<sup>153</sup>

Most communities’ governments spend significant time with the first of these and are struggling with (in the face of both mandates and incentives from the federal government, e.g., the Intermodal Surface Transportation Efficiency Act and its successor the Transportation Equity Act for the 21<sup>st</sup> Century, and devolution of national authority to the state and metropolitan levels) just how to make the second of these work. Most communities’ independent initiatives start with the third strategy and seek to add value to place through both governmental and non-governmental (including both private economic institutions and non-profit community organizations) partnership efforts.

Let’s examine the differences in these approaches and look at their potential reconciliation. If, as suggested above, the pace of change facing communities and regions demands a more dynamic and performance-based set of approaches than those typical of today’s local governmental initiatives, then it may well be that local government’s best futures are dependent upon assuming new roles, strengthening some that are undervalued (setting performance standards; providing information critical to issues and resource transparency,

market development and value capture; providing new incentives for collective investment activities, such as credit enhancement, economic valuation of environmental and community improvement, technology access), and minimizing those which may hamper regional and community performance, (e.g., subsidization of unhealthy trends and less-than-desirable development patterns; structural under-representation of dis-enfranchised and older communities; revenue distribution policies that contribute to fiscal disparities; capital budgeting which leads to premature write-off of long-term assets).

In this context, we can consider the potential for local government to evolve in ways which (1) build local knowledge and help convert intangible assets such as a sense of place and ecological integrity into tangible and motivating assets; (2) develop systems to support rapid learning and collective initiative for mutual gain and continuous improvement, and (3) support an enterprising and entrepreneurial culture of value generation and local value capture over the long term.

Following is my draft taxonomy for examining the nature of efforts conducted in the name of either regional strategy and/or sustainable communities:

## **1. Least ambitious—coordinate what we have**

- Intergovernmental coordination—the problem is seen as fragmentation, and the solutions are seen in terms of administrative consolidation and political confederation
- Direct service and project oriented
- Public funding only—the issue is framed in terms of those resources which can be directly programmed by governmental agencies
- Initiatives are *ad hoc* and demand-responsive
- Staff and elected officials drive it
- No formal citizen standing in decision making, low on the ladder of citizen participation
- Performance is judged by project completion, least-cost principles
- Defined mostly by single issues
- Built to serve, not to last
- Little room for continuous improvement
- Opportunities for value capture are either region-wide and diffuse, or apply to a limited number of communities within the region—“regional significance” is determined by scale
- Learning opportunities are limited: planning information used is *post-facto*, no real time information used
- Public input is episodic, and reactive

This is the “standard model” of how the governmental and civic communities approach regional opportunity. These kinds of assumptions drove a generation of proposals from civic and business leaders to create formal councils of government and metropolitan planning organizations, mostly in the 1960’s and 1970’s.<sup>154</sup>

While there is still considerable support for the idea that “regionalism” is about consolidation of fragmented governments and public services, there is considerable innovation

around the potential roles that government can play. In Chicago and Denver, mayors have formed Metropolitan Caucuses to explore new roles in arenas ranging from regional air quality to brownfields redevelopment to electricity deregulation. The U.S. Conference of Mayors and the National Association of Counties have teamed up to form a Joint Center for Sustainable Communities, which is helping identify and new city-county cooperative efforts around watershed based development and smart growth strategies generally.<sup>155</sup> There is considerable effort going into ways to “reinvent” the provision of services: new forms of procurement which broaden the definition of service providers to include non-governmental actors and which stretch public dollars through new kinds of financial partnerships are becoming the norm.

## **2. Incremental Improvements—take what we have and change it together**

- Representative regionalism—the problem is seen in terms of representativeness and exclusion, and so the solutions are seen in terms of new players, citizen participation, decentralization of solutions, devolution to the local level
- Broad, multi-issue orientation, some efforts towards policy changes
- Funding: mostly still dealing with public resources that can be directly programmed by public agencies, but considers innovative leverage of unusual public and private resources
- Initiatives and budgets fit within plans, i.e., planning precedes budgeting and commitments
- Driven by representative networks of community, business, governmental interests
- Formal decision making is moderated by community panels
- Performance is judged against community goals and scorecards, quality of life and quality of place are considered simultaneously
- Driven by multi-issue considerations
- Still mostly individual investments and projects, but must be scored against long-range goals in a plan
- Flexible budgeting: goals are important, how to get there is open to innovations
- Value-capture opportunities can be place-based and community-based: i.e., “regional significance” can be achieved either by scale OR by confederating many small initiatives aligned toward common goals
- Planning information is both *post facto* and current: increasing use is made of real-time information
- Public involvement is early and continuous

This is the kind of vision that sparked the coalition known as the Surface Transportation Policy Project, which so audaciously and successfully challenged the “highway lobby” and transformed an “interstate defense highway act,” first into the Intermodal Surface Transportation Efficiency Act of 1991 and later the Transportation Equity Act for the 21<sup>st</sup> Century in 1998.<sup>156</sup>

There are challenges associated with making this model work ideally. Community organizations and other non-governmental actors have no formal standing in the governing bodies of regional planning organizations, councils of governments, and metropolitan planning

organizations. Knowing just what to track and report in terms of measures of progress presents special challenges: a recent study of the state of the art in reporting systems found numerous special problems which arise from needing to report on the part of multiple parties.<sup>157</sup> The promise of flexibility is matched by the complexities of knowing how to match rules changes with incentives for desirable behavior.

Formally designated regional councils of government, regional planning organizations and metropolitan planning organizations belong to the National Association of Regional Councils or one of its affiliates. Its director, Bill Dodge, came to office after writing an imaginative description of the past and future roles for these organizations.<sup>158</sup> They have also begun publishing a quarterly journal to "...illuminate regional concepts and approaches across the social, physical and economic sectors of metropolitan and rural America."<sup>159</sup>

While there has been considerable innovation in the operation of regional governmental entities, there has also been considerable concern expressed as to their ability to operate independently. As noted above, there are constant struggles to enhance citizen participation in the membership of these organizations' councils and committees. Given the concerns with social equity and representation, it should not be surprising that there is a renewal of interest in the use of Title VI of the Civil Rights Act to challenge the participation practices of regional organizations.

In theory, and in some case practice, regional organizations can intermediate access to the kind of knowledge needed for new products and markets around these for community improvements to emerge. In addition to information, regional organizations can provide indirect and sometimes direct incentives for desirable social outcomes. For example, location efficient mortgages and insurance require regional assembly of data that may, in some areas, be ideally suited for governmental assistance. These organizations are also required to identify, in the case of transportation planning, control measures that can be used to offset the growth in land use and associated traffic and air quality problems. By providing the information necessary for new incentive approaches to be applied in their respective territories, and by qualifying these measures as acceptable approaches to address natural resource or transportation demand challenges, regional organizations can potentially play a valuable role.<sup>160</sup>

Despite the complexities involved, playing these kinds of roles at the regional level can make desirable changes possible. In commenting on the potential for incenting socially responsible behavior during the early days of environmental regulation, Jerry Rothenberg noted that the responsibility of the public sector is to enact policies that do elicit socially responsible behavior, and that the task for public administrators is to induce firms to act in ways that are in the aggregate socially desirable.<sup>161</sup> In a similar vein, Neil Chamberlain observed that incentives for desirable aggregate behavior can go only so far, and recommended that incentive systems would work best within the context of a national planning mechanism using social performance indicators of the type illustrated in the HEW pioneering report, *Toward a Social Report*.<sup>162</sup>

### **3. Ambitious—Start with what we have and work together entrepreneurially to make it the best we can imagine.**



- Market-linked and community-responsive regionalism—problem is seen as needing to “put the place back into marketplace,” and as the shortcomings of governmentally driven policies and resources to get the job done. Leads to a commitment of new investment practices and public policies crafted to recognize and add value to places, and new partnerships created to help direct investment where it can do the most good.
- Broad, dynamic, multi-issue, opportunity-driven orientation to systems and rules (both policy and investment) changes
- Investment banking approach to funding: full range of public and private finance tools utilized
- Performance-based planning and budgeting: planning precedes budgeting and investment banking approach used to assure adequate resources
- Proactive approach taken to creating the necessary networks of community, business, and government interests
- Formal decision-making moderated by community panels, strong business involvement, management by alignment
- Performance is judged against community goals and scorecards, scorecards award bonuses for exemplary performance. Quality of life, quality of place, quality of learning and ability to adapt, are all valued
- Mutual gain, multi-issue outcomes essential to approvals
- Managed as a network of investments against the regional long-range goals
- Innovations and continuous improvement are encouraged and rewarded
- Value-capture opportunities are place-based, community-based, and market-based. Regional significance includes inter-regional trade and idea exchange, and multi-region consortia for targeted purposes. National and international economic institutions make commitments.
- Planning information is *post facto*, current, and prospective. Real-time information and desired outcomes are used in models and scenarios. Development options are transparent and publicly available
- Public involvement is early, continuous, and expanding.

This is the kind of vision embraced by the sustainable communities movement, and increasingly, converging with business community practice, by coalitions in which business leadership is “rolling up its sleeves with the rest of us.”<sup>163</sup>

The vision being embraced here is quite different from that of the other two categories. Generally, the idea is one of flexible, inclusive, “just in time” social capital custom-tailored to the problem or area at hand. Places where this kind of emergent capacity is becoming complex and sophisticated include Chicago, where at least thirteen separate regional campaigns are in regular dialogue; Pittsburgh, where a multi-decade effort to turn around that region’s steel-based economy responsibly appears headed for success; and the San Francisco Bay Area, where the civic community has successfully adapted learning and organizational approaches from the private sector to the challenge of what is increasingly being called “civic entrepreneurship.”<sup>164</sup>

## *Imagining Governance*

DeToqueville is best remembered for extolling the virtues of small town government in America; in volume 2 of *Democracy in America*, he marvels at the ability of Americans to organize new institutions flexibly around goals ranging from education to business development.<sup>165</sup>

John Kirlin at USC has remarked, “Increasing the value of place is, I believe, the primary function of governments. The highest place value is found in sustaining collective discussion concerning the future of the affected populations.”<sup>166</sup> In conversations with over 1,000 civic leaders in twelve metropolitan areas in 1997 and 1998, the Metropolitan Initiative found that while “smart growth” and “livable communities” were strong emerging themes, a rallying cry common to urban, suburban and rural communities might be characterized as “sustaining existing communities.”<sup>167</sup>

At the beginning of this section I remarked on the pace and creativity of the community-based development finance movement. David Halberstam, in studying the economic trends which changed America after the second world war, remarked on the pace of economic innovations which made it possible for business startups to be replicated easily and rapidly.<sup>168</sup> Apparently, we’ve been able to do for small community developers what McDonald’s does for would-be hamburger stand operators. Given the pace of the trends which challenge communities and regions, we need to be able to appreciate the value of rapid learning and rapid replication in many other fields as well.

It is unlikely that today’s governmental structures by themselves will similarly rise to the rapid pace of change which challenges all of us. The arbitrariness of administrative geographies can’t hope to deliver the performance necessary to address the geographies of natural capital, such as watersheds and airsheds, nor can government easily contain growth within boundaries.<sup>169</sup>

Perhaps by marrying the best of what America’s economic, social and political systems have to offer, we can invent new venues for engagement which can stimulate people to recognize common assets and challenges, set goals together and work through the choices to achieve consensus, and strive to invest in these envisioned futures in ways that embody performance tracking and continuous improvement. J.B.S. Haldane, in a paper entitled, “On the Importance of Being the Right Size,” once pointed out that the human organism is exactly intermediate in size between the electron and the spiral nebula, the smallest and largest existing objects.<sup>170</sup> This, he suggested, gives man a privileged position in the world of nature. Tony Hiss has suggested that the amorphous idea of region may represent the largest size that people can cope with and the smallest unit necessary for effective action.<sup>171</sup> Two generations of “regionalists” have suggested that centralization may be necessary to combat “fragmentation,” and in the case of infrastructure law, we’ve observed regulations overly restrictive of local community priorities in the name of “regional significance,” and barriers between communities, government and business in the name of “joint development.”<sup>172</sup>

The analysis presented here suggests that regional significance can be assembled as meaningfully from a large number of small efforts, as from a small number of large ones. Much as ecological thinking is influencing the practice of economics to consider the aggregated value of activities at the level of watershed or habitat, (which interestingly is being called “expanding the asset boundary”).<sup>173</sup> Perhaps we need to learn to recognize the value of assets that are owned in common including the kinds of tangible and intangible assets accounted for in this brief paper. In long term studies of “what works” in fields ranging from community policing to local market development, the ideas of collective efficacy and mutual gain are gaining respect.<sup>174</sup> “Ensuring sustainable communities” will require “learning to sustain,” which in turn will require learning to “do it together.”



## V. Conclusion: Making Community Count

Cities, regions and communities need new strategies to counter disinvestment and to capture the benefits of market change.

Traditional strategies of growth management can be enhanced by new analysis, creating scorecards to identify disparities at both the local and national levels, and crafting policies and coalitions to address these.

A complementary approach is to identify reasons that can be appreciated by market institutions for reinvesting in and partnering with local economies. The intangible benefits of communities and regions, upon analysis, can also be scored for their tangible and economically monetizable access into home ownership opportunity, which has the potential for significant marketplace leverage.

An important tandem benefit of this approach is to make apparent the potentially value which can be captured at the community level. In economic opportunities ranging from environmental improvement to energy efficiency to transit-oriented development, support systems for the “franchising” of opportunities, analogous to today’s housing development finance intermediaries, are beginning to emerge. The coalescence of such new capacity with the desire to assemble a more robust community development capacity is a dynamic phenomenon that will require careful support and nurturing to achieve its potential.

A new research agenda that systematically identifies the previously “hidden” benefits of community reuse and associated market valuation tools will help “put the place back into marketplace” quickly enough to achieve a more effective urban and metropolitan strategy; the intent of this framing is to help organize our options for strategically organizing around and investing in sustainable communities and regions.

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<sup>1</sup>Peter L. Bernstein.. **Against the Gods: The Remarkable Story of Risk.** New York. John Wiley & Sons, Inc. 1996. Pages 88-95.

<sup>2</sup> John Kenneth Galbraith. **The Affluent Society.** Boston. Houghton Mifflin. 1958, updated 1998. See especially Ch. 11, “The Dependence Effect,” and Ch. 18, “The Investment Balance.”

<sup>3</sup> Becker, Gary. (1) “A Theory of the Allocation of Time.” **Economic Journal.** 75 (1965) pp. 493-517; and (2) **Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education.** University of Chicago Press and National Bureau of Economic Research. 1993 (3d. edition).

<sup>4</sup> (1) Michael Sherraden. **Assets and the Poor.** Armonk, NY. M.E. Sharpe, Inc. 1991. A good summary of Sherraden’s framework can be found in Ch. 6 of this book, “The Nature and Distribution of Assets.” (2) The Corporation for Enterprise Development is the leading organization in the United States promoting and demonstrating the efficacy of Individual Development Accounts, which are now being demonstrated in at least twenty states nationally. IDA’s, as they are known, are IRA-like, tax-advantaged savings accounts for individuals. Typically, funds that would otherwise be used for welfare subsistence are diverted to these accounts, limited to purposes such as down payments for homeownership, equity financing for business development, and education. Friedman’s and CFED’s work can be viewed at [www.cfed.org](http://www.cfed.org), and the work of the national network that has emerged at [www.idanet.org](http://www.idanet.org). And a good overview of the efforts to apply asset theory to practical applications for low income families can be found in (3) Canedy, Dana. “Down Payments on a Dream.” **Ford Foundation Report.** 29 (1), Winter 1998. Pages 4-7.

<sup>5</sup> Roger Bolton. “ ‘Place Prosperity vs. People Prosperity’ Revisited: An Old Issue with a New Angle.” **Urban Studies.** 29 (2) Sage Press 1992 pp. 185-203

<sup>6</sup> Roger Bolton. “ An Economic Interpretation of ‘A Sense of Place’.” Research Paper No. 130, Dept. of Economics, Williams College. pp. 40-43

<sup>7</sup> Robert Weissbourd, and Christopher Berry. “The Market Potential of Inner-City Neighborhoods: Filling the Information Gap”. Brookings Institution, Center for Urban and Metropolitan Policy, 1999. Available at [www.brook.edu/es/urban/urban.htm](http://www.brook.edu/es/urban/urban.htm).

<sup>8</sup> **ibid.** See also, E. Kacapyr, “Notes from Underground.” **American Demographics.** Stamford CT . Intertec Publishing. June, 1998. Estimates of this uncounted value (nationally) range from \$500 Billion to \$ 1 Trillion annually.

<sup>9</sup>The Boston Consulting Group. “Strategies for Business Growth in Chicago’s Neighborhoods.” Boston. Initiative for a Competitive Inner City. 1998.

<sup>10</sup> David Chandler. “Connections for Community Ownership: Taking the Next Step in Sustainable Community Development--A Program Prospectus.” Chicago. Center for Neighborhood Technology, in cooperation with Chicago United and Hispanic Housing Development. 1997. Available at [www.cnt.org/connections](http://www.cnt.org/connections).

<sup>11</sup> (1) Neal Peirce. “Urban Neighborhoods: Corporate Investment Targets? **Peirce Report.** Washington, DC. Washington Post Writers Group. October 20, 1997. At [www.citistates.com](http://www.citistates.com). and (2) “Social Compact Makes an Impact on Chicago.” **Profitwise.** Chicago, Il. Federal Reserve Bank of Chicago, Winter, 1999. Pages 1-5. At [www.frbchi.org](http://www.frbchi.org).

<sup>12</sup> [www.icic.org](http://www.icic.org).

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- <sup>13</sup> Kevin Gray. "Creating a New Vision for Franchises." *In Business*. Emmaus, Pa. **21** (1) January/February 1999. Pages 50-51.
- <sup>14</sup> "The Chicago Transit Authority and Real Estate Development." Evanston, Il. Northwestern University Transportation Center. 1961.
- <sup>15</sup> Personal Communications, Stanley Hallett, Illinois Neighborhood Development Corporation, 1974; Alan Drebin, Northwestern University, 1985; Dennis Chookazian, Touche Ross, 1975. Hallett's analysis used a simple spreadsheet method to aggregate representative household expenditures on a community-wide basis. Methods for generalizing this approach were later published, including (1) Mary O'Connell, *et. al.* . **Working Neighborhoods: Taking Charge of Your Local Economy**. Chicago. Center for Neighborhood Technology. 1985, and (2) Robert Giloth, *et. al.* **Neighborhood Retail Market Analysis**. Chicago. Center for Urban Economic Development, University of Illinois. 1985.
- <sup>16</sup> Maureen Hellwig, and Steve Basler. "Final Report: Connections Reverse Commute Demonstration Program." Chicago, Illinois. Center for Neighborhood Technology and Northern Illinois Passenger Rail Corporation (METRA). 1992. See also Steve Perkins. "The Schaumburg Connection." Youth Service Project. 1990.
- <sup>17</sup> George Silvestri. "Occupational Outlook: Fastest Growing Jobs in Categories Requiring at Least an AA." Washington, DC. *Monthly Labor Review*. Department of Commerce, Bureau of Labor Statistics. U.S. Government Printing Office. Also BLS, **Occupational Outlook, 1998**. Both available at [www.bls.gov](http://www.bls.gov).
- <sup>18</sup> Personal communication, Ric Gudell, Executive Director, Chicago Manufacturing Institute, 1998
- <sup>19</sup> Michael DeCourcy Hind. "The Jobs Initiative: Making Connections." Annie E. Casey Foundation . Baltimore, Md. 1997. Available at [www.aecf.org/aecpub/jobs/making.htm](http://www.aecf.org/aecpub/jobs/making.htm). Each of the six regional initiatives supported by this seven year effort have developed strategic plans; these are summarized in a recent publication, "Innovations and Products at the Casey Jobs Initiative Sites," prepared by Jobs for the Future and Business Communications. St. Louis project reference is based on author interviews with program staff and personal communications, Les Serman, Executive Director, East West Gateway Coordinating Council. A good piece which provides a context for this kind of effort is Blair Forlaw. "St. Louis Metropolitan Initiative Briefing Paper." Available at [www.cnt.org/mi/sl\\_briefing.htm](http://www.cnt.org/mi/sl_briefing.htm).
- <sup>20</sup> Scott Bernstein. "Imagining Equity." *Environment and Development*. Chicago. American Planning Association. December 1993. Calculations based on census data and land use mapping by the Northeastern Illinois Planning Commission. Land use data available at [www.nipc.org](http://www.nipc.org).
- <sup>21</sup> Mapping by CNT based on review of 1970, 1980 and 1990 census counts at the block and tract level, also Chicago Area Transportation Study, Travel Demand Surveys.
- <sup>22</sup> Michael Freedberg . "The Community Green Line Initiative." Chicago, Center for Neighborhood Technology. 1994. A good summary of urban community efforts to promote transit oriented development is : Laura Olsen. "Mobility Partners Transit Oriented Development Case Studies, which includes the Chicago Green Line Initiative, the Bayview Hunters Point Social and Ecological Justice Transportation Plan in San Francisco, and the Fruitvale BART Community Redevelopment Project in Oakland California, available at [http://www.transact.org/case/mp\\_case.htm](http://www.transact.org/case/mp_case.htm). Reviews of the work spawned by the Chicago initiative included in: Alf Siewers. "Neighborhoods Ride the Rails: City, Suburbs Alike Revisit Village Hub Idea." *Chicago Sun-Times*. February 21, 1995.

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<sup>23</sup> Transportation stops are an interesting case of how apparently public property rights can be arbitrarily restricted in favor of private interests. (1) Harold Crooks recounts the history of efforts to challenge monopoly building practices in the waste hauling industry, in which some two hundred firms nationally bought and sold among themselves the exclusive right to service “stops.” **Dirty Business: The Inside Story of the New Garbage Agglomerates.** Toronto. James Lorimer and Associates. 1983. Page 83 and Appendix A which details the consent decree which resulted from this challenge; (2) Jane Jacobs describes a 1960’s effort by the director of an interracial community hospital in Queens, New York to organize a “free” bus service. Riders who could afford to pay bought, with each ride, a twenty-five cent company bond, and those who could not, paid nothing. The early success of this pilot program led to a second bus line start-up, at which point the city government went to court and obtained an injunction against both lines which were forced to close. Jane Jacobs. **The Economy of Cities.** New York. Random House/Vintage. 1970. Pages 227-228.

<sup>24</sup> Jonathon D. Miller (ed.). **Emerging Trends in Real Estate 1999.** New York. PricewaterhouseCoopers and Lend Lease. October 1998. This was originally published annually, 1979- 1997, by Equitable Life Assurance and Real Estate Research Corporation. Available at [www.lendleaserei.com](http://www.lendleaserei.com). or [www.pwcglobal.com/us](http://www.pwcglobal.com/us). “*Livability: We continue to preach that 24-hour cities and diversified 24-hour suburban markets will be the best investment locations...Cities that work share five key elements,all contributing to their desirability as places to live: (a) appealing neighborhoods, (b) multi-dimensional environments with cultural and entertainment attractions, (c) convenient shopping districts, (d) relative safety and security, and (e) established mass transportation nodes—if you don’t live in the city, at least your can get there easily.*”

<sup>25</sup> Dowell Myers. **Analysis with Local Census Data: Portraits of Change.** New York. Academic Press. 1992. A more recent and extensive evaluation of the factors leading to immigrant homeownership is “Cohort Estimation of Homeownership Attainment Among Native-Born and Immigrant Populations,” by Dowell Myers, Isaac Megbolugbe & Seong Woo Lee. Washington, DC. Fannie Mae Foundation. 9 (2). 1998. The six “gateway cities” are New York, Chicago, Los Angeles, Miami, Houston, and San Francisco—all of which are experiencing surges in transit ridership commensurate with increased immigration rates.

<sup>26</sup> (1) United States Department of Labor, Bureau of Labor Statistics, Metropolitan series (BLS-CES-UX), at [www.bls.gov](http://www.bls.gov); (2) Maya Federman, Thesia I. Garner, Kathleen Short, W. Bowman Cutter IV, John Kiely, David Levine, Duane McDough, and Marilyn McMillen. “What does it mean to be poor in America?” **Monthly Labor Review.** Washington, DC United States Department of Labor. U.S. Government Printing Office. Vol. 119, No. 5, May 1996.

<sup>27</sup> Location-efficient mortgages were prompted by the development of a similar product, the energy-efficient mortgage, or EEM. EEM’s were developed by Harold Olin, Jay Luboff and colleagues at the U.S. League of Savings Associations in the early and mid-1970’s, and they vary the customary qualifying ratio (of principal, interest, taxes and insurance) to income by offsetting the projected energy savings of a home, based on the idea that savings translate into an increase in disposable income. LEM’s were developed by a consortium of the Natural Resources Defense Council, the Center for Neighborhood Technology, and the Surface Transportation Policy Project. A regression model is used, wherein the independent variables of net density, access (transit access and frequency and proximity to amenities) is used to predict household travel expense, with the dependent variables being automobile ownership, vehicle-miles traveled/household, and transit use; the model has been estimated with the multiple correlation coefficient, R-squared, equal to 0.92.

<sup>28</sup> James Hoeveler. “Accessibility vs. Mobility: The Location Efficient Mortgage. Chicago, Il. **Public Investment.** American Planning Association. September, 1997. John Holtzclaw. “Using Residential Pattern and Transit to Decrease Auto Dependence and Costs.” San Francisco, Ca. Natural Resources Defense Council. 1994. A more complete description of the location efficient mortgage can be found at [www.cnt.org/lem](http://www.cnt.org/lem), and at [www.nrdc.org](http://www.nrdc.org). The terms “location efficient mortgage” and “LEM” are registered service marks of the Location Efficient Mortgage Partnership. The Federal National Mortgage Association recently agreed to initiate alternative underwriting



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experiments using location efficiency underwriting in Chicago, Seattle and Los Angeles, and descriptive materials can be located at [www.locationefficiency.com](http://www.locationefficiency.com).

<sup>29</sup> Working memo on “green auto insurance,” Surface Transportation Policy Project, 1998. A more complete description of insurance incentives for travel demand reduction can be found in “Report to the President of the Policy Dialogue to Reduce Greenhouse Gas Emissions from Personal Motor Vehicles,” Executive Office of the President, 1996 and 1997 (also known as the “Car Talk” project), and misc. working papers from the archives.

<sup>30</sup> Personal communication, Doug Foy, Executive Director, Conservation Law Foundation, May 29, 1998. Discussed at “Exploring Urban Conservation-Based Development,” sponsored by the Ford Foundation and Aspen Institute, Chicago, Il. May 28-29, 1998. Also posted at [www.clf.org](http://www.clf.org).

<sup>31</sup> Constance Beaumont. **Superstore Sprawl**. Washington, DC. National Trust for Historic Preservation. 1994. Data available from the International Council of Shopping Centers, at [www.icsc.org](http://www.icsc.org).

<sup>32</sup> (1) Focus group on Financing Smart Growth, USEPA Office of Urban and Economic Development, 1997. (2) Smart Growth Network web site, at [www.smartgrowth.org](http://www.smartgrowth.org). (3) Christopher Leinburger. “South Florida Real Estate Market Outlook and Focus Group.” MacArthur Foundation . Palm Beach, Florida. 1998. (4) Sharon Feigon. **Rapid Growth in South Florida: Making it Sustainable**. Chicago, Center for Neighborhood Technology. 1998. Report of interviews and focus group.

<sup>33</sup> The Neighborhood Early Warning System was first proposed by the members of the Housing Abandonment Task force in Chicago in the early 1980’s, and was adopted in Chicago as a joint project of the City of Chicago and the Center for Neighborhood Technology during the administration of Mayor Harold Washington. It can be viewed at [www.cnt.org/news](http://www.cnt.org/news). It has been mimicked most prominently by the Neighborhood Knowledge Los Angeles project of the UCLA School of Public Policy, [www.nkla.org](http://www.nkla.org). Pittsburgh RISES was developed under the leadership of historian Joel Tarr, personal communications. Since the development of the National Information Infrastructure programs of the federal government, dozens of additional analogous systems have been developed around the country. A good review is “Information Technologies and Inner City Communities.” Special Issue, **The Journal of Urban Technology**. 3 (1), Fall 1995. Research in progress can be identified through the National Center for Geographic Information and Analysis, at [www.ncgia.org](http://www.ncgia.org).

<sup>34</sup> Personal communications, 1997.

<sup>35</sup> (1) Nan Stockholm , *et. al.* “Brownfield Funders Action Symposium.” Briefing Book. March 12 and 13, 1998. San Francisco. James Irvine Foundation. (2) George Brewster. “Land Recycling and the Creation of Sustainable Communities.” San Francisco, Ca. California Center for Land Recycling. 1998. At [www.cclr.org](http://www.cclr.org). (3) **Brownfields Forum: Recycling Land for Chicago’s Future**. Chicago, Il. City of Chicago, Departments of Environment, Planning & Development. June 1995.

<sup>36</sup> There are two contending analyses here. One by the Center for Neighborhood Technology suggests the 100% accomodation level, another more recent one by the demography staff of NIPC suggests 96%. CNT presentation incorporated in report of the Chicagoland Transportation and Air Quality Commission, available at <http://www.cnt.org/2020/planframe.htm>.

<sup>37</sup> (1) Joseph Gyourko, and Anita Summers. “Working Towards a New Urban Strategy for America’s Largest Cities: The Role of an Urban Audit.” Zell/Lurie Real Estate Center at Wharton. Impact Paper # 7. Philadelphia. University of Pennsylvania. February, 1995; (2) Joseph Gyourko. “Place-Based Aid Versus People-Based Aid and the Role of an Urban Audit in a New Urban Strategy.” **Cityscape: A Journal of Policy Development and Research**. 3 (3) 1998.

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<sup>38</sup> The practice of life-cycle cost analysis is commonly defined in civil engineering as “A process for evaluating the total economic worth of a usable project segment by analyzing initial costs and discounted future cost, such as maintenance, reconstruction, rehabilitation, restoring and resurfacing costs, over the life of the project segment.” By this definition, arbitrarily short useful life definitions (e.g., typically 25 years) for major infrastructure which arguably lasts for at least 100 years, can lead to premature abandonment. A leading proponent for extending useful life definitions is David Novick, former President of the American Consulting Engineers Council. (1) “Life Cycle Considerations in Urban Infrastructure Engineering.” *Journal of Management in Engineering*. **6** (2) April 1990; (2) **Life Cycle Cost Analysis** . United States Department of Transportation, Federal Highway Administration. Searching for Solutions No. 12. December, 1993; (3) “Transportation Infrastructure Management Based on Life Cycle Cost Analysis.” Draft Ms. Chicago. Dana Engineering. January 22, 1998. Novick notes that when the designer of the Golden Gate Bridge was asked by financiers how long its useful life was, he answered “Forever.”

<sup>39</sup> (1) Chicago estimates by author. (2) A comprehensive summary of methods used to estimate the costs of infrastructure associated with different levels of density and land use patterns is Robert Burchell, David Listokin, Anthony Downs, *et. al.* **Costs of Sprawl Revisited**. National Academy of Sciences/ National Research Council. Transportation Research Board TCRP H-10. 1998. (3) James Frank. **The Costs of Alternative Development Patterns: A Review of Literature**. Washington, DC. Urban Land Institute. 1989. (4) Donella Meadows. “The Escalating Costs of Sprawling Growth.” *The Neighborhood Works*. **20** (6) , November/December 1997. Chicago. Center for Neighborhood Technology. 1997. Page 7. (5) Apogee Research, Inc. **The Full Costs of Transportation**. Boston, Ma. Conservation Law Foundation. 1994.

<sup>40</sup> E.L Doctorow. **Waterworks**. The narrator of this historical fiction, set in 1870’s New York when most of modern Manhattan’s form was being established, while viewing the underground construction in process, stated the novel’s protagonist must have felt as if he was being “sired by the urban grid.” New York. Penguin/Signet. 1995. Page 19.

<sup>41</sup> Pietro S. Nivola. “Fat City: Understanding American Urban Form from a Transatlantic Perspective.” *Brookings Review*. **16** (4) Fall 1998. Pages 17-19.

<sup>42</sup> (1) Nicholas Negroponte. “Information for the 21<sup>st</sup> Century”, special issue of *Scientific American*, January 1995; (2) Robert D. Atkinson, “Technological Change and Cities.” *Cityscape: A Journal of Policy Development and Research*. **3** (3). Washington, DC. United States Department of Housing and Urban Development. 1998. Pages 129 - 170. (3) Office of Technology Assessment. **The Technological Reshaping of Metropolitan America**. OTA-ETI-643. Washington, DC. United States Government Printing Office. 1995.

<sup>43</sup> Office of Technology Assessment. **Technological Reshaping of Urban America**. *Op. Cit.* See also Eliot Sclar in Henry Cisneros, **Uneven Destinies**; Nicholas Negroponte, in Information for the 21<sup>st</sup> Century, special issue of *Scientific American*. Bandwidth limited in communications spectrum so use more fiber. See also Peter Barnes. “Who Owns the Sky.” Posted at [www.cfed.org](http://www.cfed.org).

<sup>44</sup> (1) CTC-Net is an umbrella organization of some 250 affiliated community telecommunications centers in the United States, at [www.ctcnet.org](http://www.ctcnet.org). (2) Gary Chapman. “Reaching Out to Bring Low-Income Blacks Across the ‘Digital Divide’ .” *Los Angeles Times*. Monday, April 12, 1999.

<sup>45</sup> Personal communications. Susan Savage, Mayor of Tulsa Oklahoma. Ellis Jacobs, Senior Attorney, Legal Services of Dayton, Ohio. Keith Laughlin, Associate Director for Sustainable Development, Council on Environmental Quality, Office of the President. 1997.

<sup>46</sup> (1) Linda O’Connor , and Ryan MacKenzie. “Greenways LA,”. Department of Urban Planning, School of Policy, UCLA. 1995 (2) **Economic Impacts of Protecting Rivers, Trails and Greenway Corridors: A Resource Book**. Washington, DC. United States Department of Interior, National Parks Service. (4<sup>th</sup> Ed. Rev.). 1995.

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- <sup>47</sup> (1) President's Council on Sustainable Development. **Sustainable America: A New Consensus for Prosperity, Opportunity, and A Healthy Environment for the Future.** Executive Office of the President. Washington, DC. United States Government Printing Office. February 1996. See report of the Eco-Efficiency Task Force, at [www.whitehouse.gov/PCSD](http://www.whitehouse.gov/PCSD). (2) Neal Peirce. "Recycling the Urban Junkyard." Washington Post Writers Group. Washington, DC. April 5, 1998. [www.citistates.com](http://www.citistates.com).
- <sup>48</sup> (1) Donald Rogich (ed.). *Minerals Yearbook*. United States Department of Interior, Bureau of Mines. 1993. Of the approximately 3 million tons per year of new minerals entering the economy, 2.1 million tons are construction minerals. (2) Robert Frosch. It's estimated that there is six times the current annual consumption of scrap iron and steel sitting in urban scrap piles. Cited in J.H. Ausubel. "Industrial Ecology: Proceedings of a Colloquium." *Proceedings of the National Academy of Sciences*. 89. 1992
- <sup>49</sup> First raised by Jane Jacobs in an essay titled "Cities as Mines." **The Economy of Cities**. New York. Random House/Vintage Books. 1970. Page 117
- <sup>50</sup> (1) Lorraine Lunow-Luke. "U.S. Minerals Reuse as a Percentage of Domestic Production, 1990." Staff memorandum. Materials Efficiency Project Archives, Center for Neighborhood Technology. 1992; (2) Nina Sandlin, William Eyring, Christina Scheidt. **Beyond Recycling: Materials Reprocessing in Chicago's Economy**; (3) James Lemons, Donald Rogich, Earl Amey. United States Department of Interior, Bureau of Mines, **Minerals Commodities Survey**, plus unpublished data. Congress unfortunately terminated this program in 1994.
- <sup>51</sup> Donald Rogich (ed.). **Minerals Yearbook**. United States Department of Interior, Bureau of Mines. 1993.
- <sup>52</sup> John Young and Scott Bernstein. **The Materials Efficiency of Communities**. Forthcoming, Materials Efficiency Project and Center for Neighborhood Technology. 1999. Based on source materials and calculations by James Lemons and Earl Amey, United States Geological Service, 1995-1996.
- <sup>53</sup> Walter Stahel. "The Product Life Factor." In Susan Grinton Orr (ed.). **An Inquiry into the Nature of Sustainable Societies: The Role of the Private Sector**. The Woodlands Center for Growth Studies. Houston Area Research Center. Woodlands, Texas. 1984. Pages 72-105.
- <sup>54</sup> Robert Lund and William Hauser. **The Remanufacturing Industry in the United States**. Boston University. 1997.
- <sup>55</sup> Scott Bernstein. "Environment, Distributive Equity and Energy Savings: Capturing the Benefits Where They Are Needed." **Proceedings of the 1994 Summer Study on Energy Efficiency in Buildings**. Volume 4, "Global and Environmental Issues." Washington, DC. American Council for An Energy Efficiency Economy. 1994.
- <sup>56</sup> (1) Feigon, CNT. *op. cit.* (2) Eastward Ho! Reports available through the South Florida Regional Planning Council. At [www.sfrpc.org](http://www.sfrpc.org). (3) Personal communications, Rod Petry, Collins Center for Public Policy, University of Florida.
- <sup>57</sup> Personal communications, David Crockett, Chattanooga Institute. At <http://www.csc2.org/page2.html>.
- <sup>58</sup> See, e.g., , a short history of Cowles' work at <http://oz.plymouth.edu/~lts/ecology/ecohistory/cowles.html>.
- <sup>59</sup> Archives, Center for Neighborhood Technology. Lake Calumet Airport Network and Calumet Ecosystem Projects.

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- <sup>60</sup> **An Atlas of Biodiversity**. Chicago, Il. Chicago Regional Biodiversity Council. 1997. The Council also produces a quarterly magazine, *Chicago Wilderness*. All available at <http://www.chiwild.org/>
- <sup>61</sup> National Parks Service. *Op. cit.*
- <sup>62</sup> Author's estimates and citations. Each set of figures is based on estimates by demographers or planners from each region's respective regional planning or metropolitan planning organizations. Also, Neil Peirce. "Farmland Loss: Squandering a Birthright." Washington, DC. Washington Post Writers Group. [www.citistates.com](http://www.citistates.com). **March 23, 1997**.
- <sup>63</sup> John Landis. In Burchell, National Academy of Sciences, *op. cit.*
- <sup>64</sup> Author's estimate from direct comparison with available annual reports on trends in growth of annual vehicle-miles traveled in each region
- <sup>65</sup> Annual reports by Texas Transportation Institute available at <http://tti.tamu.edu>.
- <sup>66</sup> Mathew J. Cravatta. "Fat Road Wallets." *American Demographics*. January 1998.
- <sup>67</sup> National Personal Transportation Survey, conducted by the United States Department of Transportation four times between 1977 and 1995, shows a clear trend toward reduction in trips for journey to work, and an increase in non-work trips overall. Available at [www.bts.gov](http://www.bts.gov).
- <sup>68</sup> Bruce Katz and Scott Bernstein. "The New Metropolitan Agenda: Connecting Cities and Suburbs." Introduction to special issue. *Brookings Review*. **16** (4) Pages 4-7. Also see Alan A. Altshuler, Jose` A. Gomez-Ibanez, and Arnold Howitt. **Regulation for Revenue: The Political Economy of Land Use Exactions**. Cambridge, Ma. Lincoln Institute of Land Use Policy. 1993
- <sup>69</sup> Jonathon Levine. "Equity in Infrastructure Finance." *Land Economics*. Madison, Wi. University of Wisconsin. **70** (2), May 1994, 210-222. Also Don Coursey and Jeannine Kannegiesser. "Suburban Impact Fees." Irving B. Harris Graduate School of Public Policy Studies. University of Chicago. 1998. In finding that the village of Naperville, Il. has the right to levy development impact fees, the court noted that this was a matter of "intergenerational equity," i.e., developing previously unserved areas which are financed by taxing a current population's activity is the equivalent of forward-committing to populations that are not yet established.
- <sup>70</sup> See proposals for regional impact fees from Chicagoland Transportation and Air Quality Commission, at [www.cnt.org/ctaqcom](http://www.cnt.org/ctaqcom), report of the Open Space Task Force (undated), Recommendation # 1: "Regional Impact Fees". To my knowledge, only in Pittsburgh, Pa. and Denver, Co. have these ideas been incorporated successfully, in both cases based on enacted "Regional Asset Districts"
- <sup>71</sup> Edward J. Blakely. and Mary Gail Snyder. **Fortress America: Gated Communities in the United States**. Washington, DC. The Brookings Institution. 1997
- <sup>72</sup> Myron Orfield. **Metropolitcs**. Washington, DC. Brookings Institution. 1997. For a good summary of the history of efforts to reverse school district funding inequities at the state level, see Richard Briffault. "Our Localism." two-part series. **Columbia Law Review**. 90 (1) and (2). New York. Columbia University. 1990. Pages 1-115, 346-454.
- <sup>73</sup> Nancy A. McArdle and Kelly S. Mikelson. **The New Immigrants: Demographic and Housing Characteristics**. Report No. W95-2. Cambridge, Ma. Joint Center for Housing Studies. Harvard University. 1994

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<sup>74</sup> National Academy of Sciences. **The New Americans: Economic, Demographic and Fiscal Effects of Immigration**. Washington, DC. National Academy Press. 1997 See also National Immigration Forum, at [www.immigrationforum.org](http://www.immigrationforum.org).

<sup>75</sup> United States Department of Justice. Immigration and Naturalization Service. **1996 Yearbook**. Washington, DC. United States Government Printing Office. 1997. Northeastern Illinois Planning Commission. 2020 Population Projection. At [www.nipc.org](http://www.nipc.org).

<sup>76</sup> (1) Gary Delgado. **Beyond the Politics of Place**. Oakland, Ca. 1994. (2) See also The Neighborhood Works, 15<sup>th</sup> anniversary issue on Community Organizing in America. Chicago, Center for Neighborhood Technology. January 1993. (3) Personal communications. Michelle Tingling Clemens, Food Research and Action Center. 1992. (4) James Noel Smith. **Environmental Quality and Social Justice in Urban America**. Washington, DC. Conservation Foundation. 1974. (5) Robert Gottlieb. **Forcing the Spring: The Transformation of the American Environmental Movement**. Washington, DC. Island Press. 1993.

<sup>77</sup> Gail Schechter, Steve Basler and Steve Perkins. **Report of the Poverty Task Force**. Chicago. Center for Neighborhood Technology. 1991.

<sup>78</sup> Misc. personal communications. Dick Simpson, University of Illinois at Chicago, and Stanley Hallett, Northwestern University.

<sup>79</sup> Presentation, Public Comment Period. President's Council on Sustainable Development. March, 1999.

<sup>80</sup> Harold Wolman and Lisa Marckini. "Changes in Central-City Representation and Influence in Congress Since the 1980's." **Urban Affairs Review**. 34 (2), November 1998. Pages 291-312.

<sup>81</sup> Bruce McDowell. "Central City Representation on Metropolitan Planning Organization Boards." Washington, DC. Advisory Commission on Intergovernmental Relations. 1994. Since the passage of the Intermodal Surface Transportation Efficiency Act of 1991, MPO's are required to be certified every three years as having the capacity to implement the law's planning requirements, known collectively as the Section 134 requirements. One of the most cited concerns during these reviews is the makeup of MPO governing bodies. See William Lyons, et. al. U.S. DOT, Volpe Transportation Systems Center, on MPO certifications, posted at [www.bts.gov](http://www.bts.gov).

<sup>82</sup> Orfield, *op. cit.* See also, "Mapping the Future: Resource Materials for Regional Conversations." Chicago. John D. and Catherine T. MacArthur Foundation. 1997.

<sup>83</sup> (1) Donald Chen, Peter Haas, *et. al.* **Social Equity and Transportation Investment**. Washington, DC. Surface Transportation Policy Project. Forthcoming, 1999. (2) Surface Transportation Policy Project and Center for Neighborhood Technology. **Transportation, Environmental Justice and Social Equity**. (Conference Proceedings, January 1995). Washington, DC. United States Department of Transportation, Federal Transit Administration. 1995. (3) Energy and Equity Task Force. Minutes and briefing books. Archival material. Center for Neighborhood Technology. 1993-1996.

<sup>84</sup> **Mineral Commodities Survey**. United States Department of Interior. Bureau of Mines. Washington, DC. Government Printing Office. 1995

<sup>85</sup> A good summary of the many studies which estimate levels of subsidy for extractive industries is Bill Sheehan and John Young. Welfare for Waste. Grass Roots Recycling Network and Materials Efficiency Project. 1999. At <http://www.grrn.org>.

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<sup>86</sup> Robert D. Putnam. "The Prosperous Community: Social Capital and Public Life." *The American Prospect*. 13. Spring 1993. Available at [www.ksg.harvard.edu/~saguaro/](http://www.ksg.harvard.edu/~saguaro/).

<sup>87</sup> (1) Putnam, *op.cit.*, believes it is eroding. However, his measures seem overwhelmingly oriented toward traditional organizations, such as bowling leagues and PTA's. "Bowling Alone: America's Declining Social Capital." *Journal of Democracy*. 6 (1) January 1995. Pages 65-78. (2) The work of John Kretzmann and John McKnight, which is based less on available statistical resources and more on direct measurement through participant observation engagement at the community level, appears to indicate that social capital in the form of community organization is alive and well. Available at [www.ipr.org](http://www.ipr.org). (3) An additional rebuttal is included in "Maintaining America's Social Fabric: AARP's Survey of Civic Involvement." Summary included in Debra E. Blum. "Americans Aren't Bowling Alone, Report Says: Charitable and Civic Involvement Found Strong." *The Chronicle of Philanthropy*. January 15, 1998. Page 38.

<sup>88</sup> Amory Lovins and L. Hunter Lovins. **Climate: Making Sense and Making Money**. Old Snowmass, Co. Rocky Mountain Institute. 1997. Available at [www.rmi.org](http://www.rmi.org).

<sup>89</sup> Calculation by author.

<sup>90</sup> Calculation by author.

<sup>91</sup> Calculation by author.

<sup>92</sup> Michael A. Cohen. "Stock and Flow: Making Better Use of Metropolitan Resources." *Brookings Review*. 16 (4). Washington, DC. The Brookings Institution. 1998, and personal communications with the author.

<sup>93</sup> **Environmental Industry of the United States: Overview by State and Metropolitan Statistical Area**; U.S. Department of Commerce, International Trade Administration, September 1997. Compiled by Environmental Business International Inc. San Diego Ca. The "environmental industry" is defined as those goods and services used in regulatory compliance plus the sale of clean water, energy efficiency and resources recovered from post-consumer waste or industrial by-products. By these definitions, EBI identifies the U.S. environmental industry as comprising some 115,400 companies. They employed 1,286,500 persons in 1996, and in that year had \$178.3 Billion in revenues and \$15.8 Billion in exports.

<sup>94</sup> **ibid.**

<sup>95</sup> Lovins and Lovins. *Op. Cit.*

<sup>96</sup> See ff. 53, above.

<sup>97</sup> See ff. 4, above.

<sup>98</sup> Donald Shoup. "Regulating Land Use at Sale." *Journal of the American Planning Association*. 62 (3) Summer, 1996. pp. 354-372.

<sup>99</sup> (1) Michael Storper and Allen Scott. *The Wealth of Regions*. Los Angeles, Ca. University of California at Los Angeles, Lewis Center for Regional Studies. 1995. (2) Bolton, 1994, *op. cit.* (3) David Listokin, Barbara Listokin, and Michael Lahr. "The Contributions of Historic Preservation to Housing and Economic Development." *Housing Policy Debate*. 9 (3). Washington, DC. Fannie Mae Foundation. 1998.



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<sup>100</sup> Ikujiro Nonaka and Hirotaki Takeuchi. **The Knowledge Creating Corporation**. New York. Oxford University Press. 1994. Pages 3-11, and 235-238. The authors are organizational development analysts who study the predicates of high performance within organizations that exist within very different cultures. While the examples given in the book are all from multi-national corporations, the definitions used and the functions analyzed seem entirely consistent with observed behavior within non-business settings and communities.

<sup>101</sup> (1) Hans Thirring. **Energy for Man**. New York. Harper and Row. 1958, updated 1976. Pages 15-16. One of Watt's inventions was the horsepower, measured by the amount of work that the average horse could do in unit time, which "...he multiplied by a safety factor of 1.5 in order to avoid reclamations from farmers who believed that their horses were stronger..." (2) Charles Singer. **A Short History of Scientific Ideas to 1900**. Glasgow, Great Britain. Oxford University Press. 1959. Pages 352-353. "When the firm of Boulton and Watt first began to manufacture their engines, the terms of sale devised by Watt involved the annual payment by the buyer, over a period of years, of one-third of the value of the savings in fuel effected by the new engine where it replaced an older type."

<sup>102</sup> William Cronon. **Nature's Metropolis: Chicago and the Great West**. New York. W.W. Norton and Company. 1991.

<sup>103</sup> (1) For a good, non-technical description of how financial services derivatives are structured, see Martin Mayer. **The Bankers: The Next Generation**. New York. Truman Talley Books/Plume. (2d ed.) 1998. (2) William Nordhaus suggested to me that the original derivative was money, in a seminar organized by Dick Kosubud, Executive Director of the Workshop on Market-based Solutions to Environmental Problems, 1998. (3) For an exploration of the ways in which valuation leads to alternative methods of exchange, for example, local currencies, see Viviana A. Zelizer. **The Social Meaning of Money: Pin Money, Poor Relief, and Other Currencies**. Princeton, N. J. Princeton University Press. 1997.

<sup>104</sup> (1) Paul Hawken. **The Ecology of Commerce: A Declaration of Sustainability**. New York. HarperCollins. 1993. Pages 82-90. (2) Amory Lovins and L. Hunter Lovins. **Climate: Making Sense and Making Money**. Old Snowmass, Co. Rocky Mountain Institute. November 13, 1997. Pages 11-20. (3) Julia Ann Parzen and Michael Hall Kieschnick. **Credit here It's Due: Development Banking for Communities**. Philadelphia, Pa. Temple University Press. 1992. Pages 33-49.

<sup>105</sup> Rich Killingsworth. United States Public Health Service. Centers for Disease Control. Personal communications. 1997.

<sup>106</sup> Emissions inventory information available at [www.usepa.gov/airnow.html](http://www.usepa.gov/airnow.html). Regional, state and metropolitan inventories available. Generally, the inventory of criteria pollutants (ozone, volatile organic compounds, oxides of nitrogen, carbon monoxide, unburnt hydrocarbons, fine particulate matter, and lead) is dominated by fossil fuel emissions generated at the point of combustion. The largest uses of such material are for electrical power generation, heating, and motor vehicle transportation, and the fastest growth in such emissions is from transportation. Typically, on a state or a regional basis, vehicle miles traveled are increasing at the rate of 3% per annum. This outstrips the rate of improvement due to the sum of vehicle efficiency improvements and cleaner fuels. Richard Kosubud, *et. al.* **Cost Effective Control of Urban Smog**. Chicago. Federal Reserve Bank of Chicago. 1993.

<sup>107</sup> Insert relevant numbers from the journey-to-work series. **Metropolitan Data Book**. United States Department of Commerce. Bureau of the Census.

<sup>108</sup> U.S. Department of Health and Human Services. **Physical Activity and Health: A Report of the Surgeon General**. Atlanta, Ga.: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 1996.

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- <sup>109</sup> Hank Dittmar, *et. al.* **Mean Streets**. Washington, DC. Surface Transportation Policy Project. 1997. Available at [www.transact.org](http://www.transact.org).
- <sup>110</sup> (1) Putnam. *Op. cit.* (2) Cornelia Butler Flora. At [www.agiastate.edu/centers/rdev/RuralDev.html](http://www.agiastate.edu/centers/rdev/RuralDev.html).
- <sup>111</sup> Paul Romer. "Two Strategies for Economic Development: Using Ideas and Producing Ideas." **Proceedings of the World Bank Annual Conference on Development Economics 1992**. Washington, DC. World Bank. 1992.
- <sup>112</sup> Thomas Homer Dixon. "The Ingenuity Gap: Can Poor Countries Adapt to Resource Scarcity?" **Population and Development Review**. 21 (3), September 1995.
- <sup>113</sup> Julia Parzen. **Innovations in Metropolitan Cooperation**. Chicago. Center for Neighborhood Technology. 1997. Available as a report of the Metropolitan Initiative, at [www.cnt.org/mi](http://www.cnt.org/mi).
- <sup>114</sup> James C. Collins and Jerry I. Porras. **Built to Last: Successful Habits of Visionary Companies**. New York. HarperCollins. 1994. This analysis of corporations which last for very long periods of time is complemented by their article "Building Your Company's Vision," **Harvard Business Review**, Cambridge, Ma. September-October 1996, in which the analysis is extended to other kinds of organizations such as philanthropies and religious institutions.
- <sup>115</sup> Parzen *et. al.* *Staying in the Game. op. cit.* Pp. 29-30.
- <sup>116</sup> Ron Engel. Response to Scott Bernstein's presentation, "The Hidden Assets of America's Cities," At conference, One Creation, held at Lutheran School of Theology. Unpublished. October 17, 1998.
- <sup>117</sup> Lawrence Sullivan. "Hidden Histories: Sensing Religion in American Experience." Harvard University, Center for World Religions. Undated. Cited in Engel, above. This theme was used forcefully to introduce a "community livability" strategy by Vice President Al Gore in a policy speech at the Brookings Institution, September 2, 1998. Available at [www.brook.edu](http://www.brook.edu).
- <sup>118</sup> (1) Polling conducted for the President's Council on Sustainable Development, by Porter, Novelli, Inc. (2) Polling conducted by Belden Russonello for the Consultative Group on Biodiversity. (3) Polling conducted by Celinda Lake & Associates for the Surface Transportation Policy Project. (4) For analysis on how polling is being used to assess attitudes toward development options see Parzen *et. al.*, **Staying in the Game**, *op.cit.* Pages 18-19. (5) The **Chicago Tribune** three part series, "Moving Out" (1995) reported extensively on the attitudes, apparent motivations and responses of 3,000 regional households who had moved from the cities to the suburbs. Although characterized as a "scientific sample," this study suffered from a failure to interview a similar sample of households who stayed in the city.
- <sup>119</sup> Dolores Hayden. **The Power of Place: Urban Landscapes as Public History**. Cambridge, Ma. MIT Press. 1996. Pages 15-20 and 40-42.
- <sup>120</sup>
- <sup>121</sup> Personal communications
- <sup>122</sup> (1) Bronzeville Redevelopment Plan. Centers for New Horizons and Ahkenaton Development Corporation. Chicago. 1995. (2) Alan Ehrenhalt. *The Lost City: The Forgotten Virtues of Community in America*. New York. HarperCollins. 1995.



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<sup>123</sup> Inter-University Project for Latino Research, Hunter College, Working Group, Concept Paper, 1988, quoted in John Kuo Wei Tchen, “The Chinatown-Harlem Initiative: Building a Multi-cultural Understanding in New York City,” in Jeremy Brecher and Tim Costello, eds., **Building Bridges: The Emerging Grass roots Coalition of Labor and Community**, NY, Monthly Review Press, 1990, page 189

<sup>124</sup> At [www.mainst.org](http://www.mainst.org).

<sup>125</sup> The Trust became a strong participant in the coalition which helped create the Intermodal Surface Transportation Efficiency Act of 1991. Personal communications. As of this year, the Trust counts 1,400 communities in the Main Street America program since 1980.

<sup>126</sup> **Census of Local Governments**. Washington, DC. United States Department of Commerce, Bureau of the Census. Government Printing Office. 1997

<sup>127</sup> Carolyn T. Hunsaker. Oak Ridge Laboratories. Personal communications. 1994.

<sup>128</sup> Michael Storper and Allen Scott. **The Wealth of Regions**. Los Angeles. Lewis Center for Regional Studies, University of California. 1995

<sup>129</sup> (1) NCCED census of community development corporations. Personal communications. Roy Priest, Executive Director. NCCED. Will be posted at [www.ncced.org](http://www.ncced.org). (2) Survey of revolving loan funds cited in **The Entrepreneurial Economy 1998**. Washington, DC. Corporation for Enterprise Development. Available at [www.cfed.org](http://www.cfed.org).

<sup>130</sup> Alice Shabecoff, *et. al.* **Green Jobs, Green Communities**. Washington, DC. Community Information Exchange. 1998.

<sup>131</sup> Personal communications. Ellen Seidman, Director, Office of Thrift Supervision. Data on industry performance available at [www.ots.treas.gov](http://www.ots.treas.gov). As the “thrift charter” has become more valuable, all kinds of new players are getting into the savings and loan business, from agribusiness giant Archer Daniels Midland to Hillebrand, the world’s largest manufacturer of caskets, to so-called “placeless” or “Internet” thrifts. Despite the variety and the difficulties in identification of primary service territory, the federal regulators have continued to enforce the place-oriented reinvestment requirements of the Community Reinvestment Act.

<sup>132</sup> Working draft, City of Chicago, Mayor’s Office of Employment and Training and the Initiative for a Competitive Inner City. 1998

<sup>133</sup> As of 1990, metals consumption from scrap sources and recycling surpassed that from primary sources. “Materials and the Future.” **Minerals Today**. Washington, DC. United States Department of the Interior. Bureau of Mines. U. S. Government Printing Office. April 1993. Page 21.

<sup>134</sup> (1) Robert Atkinson (ed.). **Technological Reshaping of Urban America**. United States Congress, Office of Technology Assessment. 1995. (2) Elliot D. Sclar and Walter Hook. “The Importance of Cities to the Nation’s Economy.” In Henry G. Cisneros (ed.). **Interwoven Destinies: Cities and the Nation**. New York. W.W. Norton. 1993. Pages 71-73.

<sup>135</sup> As the restructuring of the electric utility industry proceeds, utilities are divesting their ownership of power plants and focusing on getting more out of their current delivery (transmission and distribution) systems. This action is driven partly by the need to generate resources to pay for power plants completed in advance of demand, and

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partly to focus on system reliability and upgrade issues. This circumstance removes much of the incentive to this industry to prematurely sprawl out. Evaluation of utility interests in place-based strategy can be found in (1) Scott Bernstein. **The Role of Community Based Organizations in Utility Demand Side Management Programs.** Center for Neighborhood Technology, for the Corporation for Enterprise Development and Edison Electric Institute. 1992. (2) Nicholas Lenssen. "Local Integrated Resource Planning: A New Tool for a Competitive Era." **E-Source.** Boulder, Co. 1995.

136 [www.ncbn.org](http://www.ncbn.org).

137 Two journals which have consistently tracked the emergence of the faith-based organizing networks are (1) **The Neighborhood Works**, published by the Center for Neighborhood Technology in Chicago. [www.cnt.org/tnw](http://www.cnt.org/tnw); and (2) **Shelterforce**, published by the National Housing Institute in Orange, N.J., [www.nhi.org](http://www.nhi.org).

138 (1) Julia Parzen, John Cleveland, Scott Bernstein, Bob Friedman, Steve Gage, Carolyn Hunsaker. **Staying in the Game: Options for Urban Sustainability.** Chicago. Urban Sustainability Learning Group. Available at <http://www.cnt.org/sustain/book.html>. (2) Clifford Cobb, Ted Halstead, and Jonathan Rowe. "If the GDP is Up, Why is America Down? Why We Need New Measures of Progress, Why We Do Not Have Them, and How They Would Change the Social and Political Landscape." **Atlantic Monthly.** October, 1995. The authors are founders of the organization, Redefining Progress. [www.rprogress.org](http://www.rprogress.org). (3) For an interesting comparison with "state of the art" systems for tracking progress within corporations, see Robert S. Kaplan and David P. Norton. **The Balanced Scorecard.** Boston, Ma. Harvard Business School Press. 1996.

139 John Kretzmann and John McKnight. **Building Communities from the Inside Out.** Evanston, Il. Northwestern University Press. 1995. Information on their Asset Based Community Development program available at [www.ipr.org](http://www.ipr.org). An earlier paper which first introduced the ideas now known as "capacity inventories" and "associational maps" in the context of this kind of initiative is John McKnight. **The Future of Low-Income Neighborhoods and the People Who Reside There.** Evanston, Il. Center for Urban Affairs and Policy Research (now the Institute for Policy Research). June 1987.

140 Frank Ahrens . "Power to the Pirates? FCC May License Low-Wattage Operations." Washington, DC. **Washington Post.** February 9, 1999 Page C02.

141 (1) Resources for tracking ISTEA and TEA21 history and developments are included at [www.tea21.org](http://www.tea21.org), and [www.transact.org](http://www.transact.org), both maintained by the Washington, DC based Surface Transportation Policy Project. (2) Source material on the history of transportation planning as well as current source documents in federal, state and local transportation planning, investment and policy are available through the National Transportation Library, at [www.bts.org](http://www.bts.org).

142 See, for example, the last year's worth of coverage in the Chronicle of Philanthropy, available electronically at <http://philanthropy.com>.

143 (1) James McElfish. **Linking Tax Law and Sustainable Urban Development.** Washington, DC. Environmental Law Institute. August, 1998. The Clinton administration and Congress collaborated on the tax change after the President's Council on Sustainable Development called for reform of the former provision. Former section 1034 of the Internal Revenue Code indirectly compelled homeowners to purchase larger, newer, more expensive homes on larger parcels of land, rather than existing homes closer to older neighborhoods and urban centers, in order to avoid tax liability. In addition, the 1997 Taxpayer Relief Act offers homeowners the ability to generate tax-free capital gains by rehabilitating older homes, using the "serial seller" strategy. Because the seller no longer needs to purchase a more expensive home in order to avoid taxation, owners can successively purchase low cost homes for revitalization, rehabilitate and sell them, and pocket the entire gain. In this way, homeowners can spur the revitalization of urban neighborhoods while reaping significant economic gains. Summary at [www.eli.org](http://www.eli.org).

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(2) Tom Bier at Cleveland State University originally suggested this line of inquiry at meetings of the President's Council on Sustainable Development, and through participation in a Sustainable Communities Task Force of the Environmental and Energy Study Institute, Washington, DC, staffed by Don Gray of EESI. (3) Supplemental analytical work on the environmental benefits of the resulting capital gains tax exclusion was performed by the Urban and Economic Development Division of the Office of Policy, Planning and Evaluation, United States Environmental Protection Agency.

<sup>144</sup> Phyllis Myers, State Resource Strategies. "Livability at the Ballot Box: State and Local Referenda on Parks, Conservation and Smarter Growth, Election Day 1998." Washington, DC. Brookings Institution, Center on Urban and Metropolitan Policy 99:2. January, 1999. [www.brook.edu](http://www.brook.edu).

<sup>145</sup> (1) David Bollier. **Reinventing Democratic Culture in the Age of Electronic Networks**. Chicago, Il. John D. and Catherine T. MacArthur Foundation. October 26, 1996. (2) Carl Vogel (ed.). Special Issue on Information and Communication. *The Neighborhood Works*. Chicago, Il. Center for Neighborhood Technology. 19 (2) March/April 1996. (3) Ann Florini. "The End of Secrecy." **Foreign Policy**. Summer, 1998. Pages 50-63.

<sup>146</sup> (1) Calvin Bradford and Gale Cincotta. "The Legacy, The Promise, and the Unfinished Agenda." In Gregory D. Squires (ed.). **From Redlining to Reinvestment: Community Responses to Urban Disinvestment**. Philadelphia. Temple University Press. 1992. Pages 228-286. (2) The Woodstock Institute, Chicago, Illinois, works locally and nationally to promote community reinvestment and economic development in lower-income and minority communities.. At <http://www.nonprofit.net/woodstock/>. (3) The Financial Markets Center provides research and education resources to grassroots groups, unions, policymakers and journalists interested in the Federal Reserve system and in financial markets generally. Their publication, **FOMC Alert**, is available at [www.fmcenter.org](http://www.fmcenter.org). Appropriately, a regular feature is entitled "Tales of Transparency."

<sup>147</sup> (1) The Right to Know Network operates an electronic gateway to public data bases on community reinvestment and various environmental right-to-know data bases. Sponsored by Washington DC-based OMB Watch and the Unison Institute, it's available at [www.rtknet.org](http://www.rtknet.org). (2) Federal bank regulators and their data bases can be accessed through the web site of the Federal Financial Institutions Examination Council, [www.ffiec.gov](http://www.ffiec.gov).

<sup>148</sup> (1) Shamik Konar and Mark A. Cohen. "Information as Regulation: The Effect of Community Right to Know Laws on Toxic Emissions." Orlando, Florida. **Journal of Environmental Economics and Management**. 32 (1) January 1997. Pages 109-124.

<sup>149</sup> See ff. 117, above.

<sup>150</sup> (1) Cathy Lerza. **Defining Sustainable Communities**. Conference Report. 1994. (2) Executive Office of the President. Report of the Sustainable Communities Task Force, President's Council on Sustainable Development. Washington, DC. United States Government Printing Office. 1997. (3) Final Report (draft). President's Council on Sustainable Development. Ch. 4. Metropolitan and Rural Strategies. 1999. (4) Washington, DC. Concern, Inc.

<sup>151</sup> (1) Feigon, Sharon. **Making Rapid Growth Sustainable**. Chicago, Il. Center for Neighborhood Technology. 1998. (2) Parzen, *et. al.* **Staying in the Game**. *op.cit.* (3) John Cleveland. **The Changing Nature of Learning**. On Purpose Associates. East Lansing, Michigan. 1995.

<sup>152</sup> Michael Cohen. **Urban Policy and Economic Development: An Agenda for the 1990's**. Washington, DC. World Bank. 1991.

<sup>153</sup> Scott Bernstein, Gail Christopher, DeWitt John, Bruce Katz. "Designing a Network for Regional Enterprise." Working papers, Partnership for Regional Livability. Center for Neighborhood Technology. 1998

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<sup>154</sup> (1) Charles Merriam, misc. (2) For an imaginative and forward looking scenario of the evolving and potential roles of regional councils of government, see William Dodge. **Regional Excellence: Governing Together to Compete Globally and Flourish Locally**. Washington, DC. National League of Cities. 1996.

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<sup>156</sup> (1) Anthony Downs. "The Devolution Revolution: Why Congress Is Shifting a Lot of Power to the Wrong Levels." *Brookings Policy Brief #3*. Washington, DC. Brookings Institution. July, 1996. (2) Ed Weiner. **The History of Transportation Planning in the United States**. Washington, DC. United States Department of Transportation. 1994. Also available at [www.bts.gov](http://www.bts.gov). (3) R.A.W. Rhodes. "The New Governance: Governing Without Government." *Political Studies*. XLIV, Number 4, September 1996, Pages 652-666. (4) DeWitt John. **Building Stronger Regions and Communities: Can the Federal Government Help?** Washington, DC. National Academy of Public Administration. 1997. (5) Elizabeth Thompson and Roy Kienitz (eds.). **TEA-21 Users Guide: Making the Most of the New Transportation Bill**. Washington, DC. Surface Transportation Policy Project. 1998. Also Hank Dittmar (ed.). **The Planner's Guide to ISTEA**. STPP. 1995. (6) Grigsby, J.E. III. "Regional Governance and Regional Councils." *National Civic Review*. 85 (2) . Denver, Co. 1996

<sup>157</sup> See Shelley Metzenbaum. **Making Measurement Matter: The Challenge and Promise of Building a Performance-Focused Environmental Protection System**. Washington, DC. Brookings Institution, Center for Public Management. Report CPM98-2. October 1998. Pages 78-80.

<sup>158</sup> William Dodge. *Op.cit.*

<sup>159</sup> **The Regionalist**. Published jointly by the National Association of Regional Councils and the University of Baltimore. See esp. 2 (4), Winter 1997, Special Issue, "Initiatives for America's Regions."

<sup>160</sup> Playing this kind of role often requires the application of authority at multiple levels of government. In the case of air quality crediting and certification, USEPA issues guidance and delegates implementation authority to the state level; in the case of California metropolitan areas, this authority is also sub-delegated to the regional level. Coordination in this kind of complex environment is one of the many challenges which we face in attempting to innovatively use existing organizations and authority.

<sup>161</sup> Jerome Rothenberg. "The Physical Environment.", Chapter Eight in James W. McKie (ed.). **Social Responsibility and the Business Predicament**. Washington, DC. The Brookings Institution. 1974. Pages 191-215. "I have argued that a substitution of altruism for self-interest on the part of business enterprises is not called for in resolving environmental problems—indeed that an attempt at such substitution might have mischievous consequences. Self-interest is not simply to be left intact; it is to be relied on. The responsibility of the public sector is to enact policies that do elicit socially responsible behavior from firms that are following self-interest. The task for public administrators is to induce firms to act in ways that are in the aggregate socially desirable. In doing the job, three facets of business behavior must be kept in mind: (1) information, (2) short-run operations, and (3) long-term investment and innovation.

<sup>162</sup> Neil W. Chamberlain. **Social Strategy and Corporate Structure**. New York. MacMillan. 1982. Section entitled "The Question of Motivation." Pages 65-73. "The late Eli Goldston, president of Eastern Gas and Fuel, believed that private corporations had capacities for aiding in the solution of public problems: the trick was to enlist those capacities by appropriate incentives...the addition of a national planning mechanism would make for a major difference, especially if we assume that along with specific economic objectives such a plan would incorporate or be accompanied by social indicators of the type elaborated in the HEW pioneering investigation *Toward a Social Report*...We further assume that a sense of social responsibility, which might guide a corporation toward areas specifically identified as socially desirable, cannot be relied on, at least in the near term, but requires time and

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conditioning to develop. At this state we might fall back on certain flexible instruments that the government has at its disposal to sensitize private enterprise to the importance *to it* of gearing operations to public interest considerations. Most of these devices are familiar enough—preferred access to credit, loans at advantageous rates of interest, priority in the calendaring of equity or bond issues—but they have been used in an ad hoc manner, sometimes in response to business rather than social interest. In the new framework they would control commercial and financial traffic to give right of way to activities deemed most important.”

<sup>163</sup> cites: PCSD report, Joint Venture Silicon Valley Vision 2020 report, Sustainable Pittsburgh, Interreligious Sustainability Project, Imagine Chicago, Doug Henton New Economy and the Livable Community, maybe Marc Weiss).

<sup>164</sup> (1) Scan of Chicago efforts at [www.cnt.org/mi](http://www.cnt.org/mi). The latest, and in some ways the most promising is the Chicago Metropolis 2020 project of the Commercial Club of Chicago. (2) A cluster of areawide initiatives which are intentionally bringing together business, civic, community and environmental issue leaders is housed through the Pittsburgh High-Technology Council, including the Environmental City Initiative, Environmental Business Network and Sustainable Pittsburgh; <http://www.tc-p.com/council/history.html>. (3) The Bay Area Alliance for Sustainable Development formed two years ago to pursue regional consensus on economic and environmental sustainability in the Bay Area, [www.bayareacouncil.org](http://www.bayareacouncil.org). There have been recent efforts to formally align this effort with the nationally recognized Joint Venture Silicon Valley, [www.jointventure.org](http://www.jointventure.org). A civic entrepreneurs network has been formed to represent the leadership interests of these organizations and those of other metropolitan regions in California, see [www.coecon.com](http://www.coecon.com). A good summary of this effort by its facilitators is in: Doug Henton, John Melville, Kimberly Welsh. *Grassroots Leaders for a New Economy*. San Francisco. Jossey Bass. 1998.

<sup>165</sup> Alexis DeToqueville. **Democracy in America**. 1830. See especially the second volume.

<sup>166</sup> John J. Kirlin. “What Government Must Do Well: Creating Value for Society.” *Journal of Public Administration*. 6 (1), January 1996. Page 164, and personal communications. The specific quotation is, “Increasing the value of place is, I believe, the primary function of governments. The highest place value is found in sustaining collective discussion concerning the future of the affected populations.”

<sup>167</sup> Julia Parzen. Learning from the Regions: A National Strategy Session of the Metropolitan Initiative. Summary of Meeting, held November 12, 1997. At [www.cnt.org/mi](http://www.cnt.org/mi).

<sup>168</sup> David Halberstam. **The Fifties**. New York. Fawcett Books. 1994.

<sup>169</sup> (1) Nicholas Blomley. **Law, Space and the Geographies of Power**. New York. The Guilford Press. 1994. (2) C.H.W. Foster. **Experiments in Bioregionalism: The New England River Basins Story**. 1984. (3) Rutherford H. Platt, Rowan A. Rowntree, Pamela C. Muick. **The Ecological City: Preserving and Restoring Biodiversity**. Amherst, Ma. University of Massachusetts Press. 1994 Pages 281-282. (4) Charles Bowden and Lew Kreinberg. **Street Signs Chicago: Neighborhood and Other Illusions of Big City Life**. Chicago, Il. Chicago Review Press. 1981. (5) DeWitt John. **Civic Environmentalism**. Washington, DC. Congressional Quarterly Pub. 1993.

<sup>170</sup> J.B.S. Haldane. “On Being the Right Size.” **Possible Worlds**. 1927.

<sup>171</sup> Tony Hiss. “Designing the Metropolitan Initiative.” Chicago, Il. Center for Neighborhood Technology. 1997. At [www.cnt.org/mi](http://www.cnt.org/mi). See also Hiss’s earlier book, **The Experience of Place**.

<sup>172</sup> “Joint development” is a concept in real estate law which applies to public agencies. Typically, it is used in transportation planning to define rules which govern the allocation of responsibilities for development between a public agency and a private agency proposing to develop contiguous property. Until recently, these rules had the effect defining rigid boundaries around transit station properties, highway right of ways, and similar situations. The

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newer understanding of “transit oriented development” led to new rules being issued softening these boundaries in 1997. Interestingly, I had the opportunity to address the annual meeting of the Public Library Association in 1997 on the topic of “The Library of the Future.” When asked what the main barrier to partnering with communities and the private sector in creative development, the answer was “joint development rules.”

<sup>173</sup> (1) Thomas Prugh, et. al. **Natural Capital and Human Economic Survival**. Chapter 4, “Depletion and Valuation.” Solomons, Md. International Society for Ecological Economics. 1995. Pages 71-105. (2) R. Prince and P. Gordon. **Greening the National Accounts**. Washington, DC. United States Congressional Budget Office. March 1994. (3) David Ellwood. **Toward a Social Report**. United States Department of Health, Education and Welfare. Washington, DC. United States Government Printing Office. 1965

<sup>174</sup> Jeremy Travis, Executive Director. National Institute of Justice. Presentation to the Brookings Institution Center on Urban and Metropolitan Policy. 1998.