UNREAL ESTATE – Beta 2.1

I. THE MESSAGE:

INTRODUCTION AND SUMMARY

Vast tracks of what has been thought of as ‘real estate’ in the United States are about to become UNREAL ESTATE.

The current value of much of the land in the United States is based on the assumption that MORE Urban land will be needed to provide for FUTURE Urban land uses.

The fact is that there is ALREADY far too much land devoted to Urban land uses. There is an even greater excess of land which is held for FUTURE Urban Land Uses. This oversupply of Urban land will exist even if population continued to grow at or above the rate of the last six decades. See resources documenting the 45 years of data on this fact found in Section VIII.

The over-valuation of land for Urban uses applies to 10s of millions of acres of land in the large Urban agglomerations (The Urbansides) and to 100s of millions of acres of land in the NonUrban areas (The Countryside). In the Countryside this overvalued land includes land devoted to, and held for future, large-lot Urban dwellings and for ‘second homes’ to meet the ‘needs’ of Urban Households.

Due to The U TURN documented in Section V, there will be minimal market demand in the foreseeable future for Urban activities on most of the land speculatively held for future Urban use or on much of the land NOW devoted to Urban use.

The reason is very simple:

The profound shift in market supported patterns and densities of land use for Urban residential, non-residential and mixed use Urban fabric.
The controlling parameter is the amount of land per capita required to create Balanced, Complete Communities. Balanced, Complete Communities create quality places to live, work and seek Services and are sustainable within the context of projected resource availability. The Key words and phrases are Balanced Communities, Complete Communities, Walkability and Quality Place Making.

The impact of UNReal Estate will have economic, social and physical consequences for every Household and every Organization in every Region in the United States.

There are valid strategies to avoid profound negative economic, social and physical disruption by mass land re-evaluation to reflect real demand. However, the more time that passes before citizens understand the facts about UNReal Estate, the harder it will be to transform governance structure, economic systems and human settlement patterns to reflect reality and achieve a sustainable trajectory – A Better Path Forward.

This Perspective provides links to the information needed for citizens to understand UNReal Estate and outlines strategies that must to be taken by Households, Agencies, Enterprises and Institutions to avoid economic, social and physical Collapse.

The facts documenting UNREAL Estate are not complex. However: Many of the realities are counter-intuitive; Most of the facts do not support conventional wisdom; Reality is the obverse of the babble that has been the lingua franca of pandering governance practitioners, huckster Enterprises and obfuscating Institutions.

The illusion of expanding demand for land devoted to Urban uses has been and continues to be reinforced by billions of dollars of misleading and deceptive advertising and propaganda.

This Perspective is presented in an annotated outline format. If the reader does not understand or disagrees with the brief text under each subheading, please consult the references noted in that subsection before leaping to unfounded conventional wisdom-based assumptions.

To conserve space, one reference is cited for most subsections. The cited material contains multiple supporting references. See Section XII, END NOTE ON VOCABULARY AND REFERENCES which includes information on how to access additional resources supporting most sentences and paragraphs in this Perspective. Also see the references listed in Section XIII. SUGGESTED READINGS ON UNREAL ESTATE.
NOTE ON THE BETA 2.0 VERSION OF UNReal Estate

As a general rule, SYNERGY does not publish Perspectives until they have reached the Beta 3.0 version based on reviews and editing. There are two reasons for an exception in this case:

First, new data and information to support this Perspective is cascading in at an accelerating rate. It is not possible with limited staff support to bring every section up to a common level of detail and currency or to include all the references that arrive in any given week. The primary comments on the Beta 1 draft were that positions outlined in prior SYNERGY work should also be re-explained in this Perspective. There are just not enough hours in the day to re-explore perspectives that have already been documented and can be easily retrieved if there are questions or doubts. See Section XII. End Note of Vocabulary and Capitalization with respect to explanations of SYNERGY perspectives.

Second, there no broadly accepted comprehensive Conceptual Framework nor a robust Vocabulary to articulated that Framework which will be required for a broad education program. At the same time it is imperative that well considered judgements are made by informed citizens. The discussion of UNReal Estate must start soon if citizens are to avoid Collapse.

II. THE FOUNDATION OF UNREAL ESTATE

A. THE BLIND SPOT

Professor Emeritus Albert Bartlett of the University of Colorado has suggested that failure to comprehend the power of the exponential function as it applies to natural systems such as population and consumption is the most important defect clouding contemporary human comprehension of their economic, social and physical environment. See Professor Albert Bartlett “The Most Important Video You’ll Ever See.”

The wisdom of Professor Bartlett’s thesis is demonstrated by the inability of citizens to comprehend the application of $A=\pi R^2$ to the amount of land accessible by an extension of a radial roadway system in a large Urban agglomeration. Lack of human comprehension of the power of the exponential function is compounded by the distance covered in a short time by a Large Private Vehicle on an uncongested roadway.

The failure to comprehend the power of the exponential function as it applies to the amount of land needed to support an Urban society is THE driving force behind endemic Geographic Illiteracy and Spacial Ignorance. See Section XII concerning the definitions of words and phrases that may appear to represent irregular Capitalization.
B. THE CORE ECONOMIC DRIVER

The failure to fairly allocate the full, location-variable cost of alternative settlement patterns is a core driver of inflated land values. Existing policies and programs treat the economic, social and physical costs of dysfunctional settlement patterns as externalities that are not allocated to Households, Enterprises, Agencies and Institutions. See Charles Marohn, founder of the Strong Towns movement concerning “the Ponzi Scheme of The ‘Sub-urban’ Experiment’ as well as “Second Life Cycle Blues.”

The reality of UNReal Estate is not a ‘new story’; it has been evolving for 15,000 of years as humans transitioned from hunter-gather clans to Urban citizens. See section XI. BACK STORY and documentation in the resources noted in the SubSections below. Also see Section XIII. SUGGESTED READINGS ON UNREAL ESTATE and Volume I of THE SHAPE OF THE FUTURE (2000).

C. BABBLE AND BABEL

An important underlying cause of the profound confusion about UNReal Estate is the failure of citizens and their Organizations to evolve a Comprehensive Conceptual Framework to understand human settlement patterns and the companion failure to evolve a robust Vocabulary with which to articulate that Framework.

This failure is rooted in confusion concerning the organic structure of human settlement patterns and the failure to evolve a functional classification system for the organic components of human settlement. See Prologue and PART ONE of THE SHAPE OF THE FUTURE as well as Chapter 26, Gibberish: The Vocabulary of Babel and Chapter 27 - Building Blocks: The Components of Contemporary Society in TRILo-G (2010) and the resources cited there in.

Over the past 165 years there have been profound changes in the scale and complexity of Urban agglomerations. These changes have magnified the confusion noted in the prior paragraph. See Regional Plan Association, American 2050 (2006), Florida, Richard, Gulden, Tim and Charlotta Mellander, The Rise of the Mega Region (2007), and Organization for Economic Cooperation and Development, Redefining “Urban”: A New Way to Measure Metropolitan Areas. (2012)

D. MARK TWAIN AND WILL ROGERS

Due to Geographic Illiteracy and Spacial Ignorance many still believe the advice of Mark Twain: “Buy land, they’re not making it anymore.” Later, Will Rogers chipped in with “Buy land, they ain’t making any more of it.”

That advice sounds ‘reasonable’ to those who do not consider this question:
How much land can citizens efficiently and sustainably use per capita on a daily basis in a technology-based Urban society?

The amount of land per capita that can be effectively and efficiently used by Urban humans on a daily basis has dramatically changed due to The U TURN that is articulated in Section V. THE U TURN.

E. DISTORTING THE AMERICAN DREAM

Unfortunately, for over six decades many assumed that a big house on a big lot would guarantee that they and their Household would automatically achieve ‘the American Dream.’ The reality has been quite different.

First, let us be clear: ‘The American Dream’ is a complex and constantly evolving concept. In addition, the ‘dream’ is one thing for those at the top of the Ziggurat and something completely different for those that are not so fortunate.

The most fundamental parameter of the American Dream concerns individuals and Households being able to secure a quality life in a physical, economic and social environment where they are happy and safe.

In spite of complexity and relativity, the American dream has NEVER been JUST about a big house on a big lot as the shelter industry would have citizens believe. Billions in advertising and propaganda target Primitive Genetic Proclivities that create and reinforce Unfounded and Conflicting Neural Linguistic Frameworks and contribute to Disorienting Naive Reality. See Section XII., End Note on Vocabulary and Capitalization.

The reason that so much money has been spent to create an illusion of a connection between a big house on a big lot and the American Dream is very simple. Due to many converging factors and multiple, reinforcing subsidies, a big house on a big lot (aka, the Wrong Size House in the Wrong Location) has been the fastest way to make the most money in short term for land owners, speculators, developers, builders and agents.

As noted in Section II., B. above, one of the main drivers of this economic reality is that those who profit from building The Wrong Size House in the Wrong Location over the past 60 years have not been required to account for or pay for externalities. See THREE OVERARCHING DETERMINANTS, Current Perspective # 30 linked from the CURRENT PERSPECTIVE page at www.emrisse.com .

A second major factor is that those who develop and build shelter make the largest margins on the most expensive dwellings. For this and other reasons there has been a reliance on Trickle Down shelter strategies to provide Housing for those in the lower half of the economic Ziggurat.
This strategy worked marginally well when only a small percentage of the Households could afford a Large Private Vehicle to secure Access and Mobility to large dwellings on large lots – the ‘sub’Urban ideal. However, as Urban agglomerations grew larger Trickle Down resulted in fewer and fewer Households being able to afford shelter in locations close to Jobs and Services. For example see “How Suburbia Inhibits the American Dream” (30 July 2013) and “Walkability and the American Dream (12 August 13) at Better! Cities & Towns.

With the Citizen Wealth and Well Being Gulf growing ever larger since the mid 70s, Trickle Down – and the resulting Wrong Size House In The Wrong Location – has resulted in one of three interrelated Crises noted in Section II. G.

The rational, market driven result has been The U TURN outlined in Section V. This reality is based on an ALTERNATIVE to the shelter industry’s ‘American Dream’ with respect to human settlement patterns. Note the subtitles of the books that document current demographics and market forces in Section XIII., A.

The shelter and human settlement pattern aspect of The American Dream is embedded within a larger context that reflects the reality of finite global resources documented in ENOUGH?, Current Perspective # 18 and summarized by the editor of Utne Reader this way:

“...there’s a new American Dream out there worth pursuing. Where the old dream encourages social status and the accumulation of material wealth, the new dream encourages the pursuit of happiness and fulfillment that material wealth can never provide.” Editor’s Note, Sept-Oct 13 Utne Reader.

This is fortunate because democracy and informed markets cannot survive when the majority come to understand they cannot achieve a fair share of a Mass OverConsumption based ‘dream.’

F. TRIO OF CRISES

Direct and indirect subsidies of dysfunctional human settlement patterns have resulted in the Mobility and Access Crisis, the Affordable and Accessible Housing Crisis and the Helter Skelter Crisis. These three economic, social and physical crises undergird the unsustainable trajectory of contemporary, technology-based civilization.

It is now clear that:

A. It is a physical and economic impossibility to provide Mobility and Access for the vast majority of citizens with Large Private Vehicles in the large Urban agglomerations upon which contemporary civilization depends. See THE PROBLEM WITH CARS – PART III of TRILO-G and Section III. below.
B. Trickle Down shelter strategies do not meet citizen needs for Affordable and Accessible Housing. The shelter that those in the lower half of the economic Ziggurat can Afford are NOT in locations that are Accessible to Jobs and Services. They are NOT located in Neighborhood, Village and Community scale components of Urban fabric with a Balance of J / H / S / R / A.

C. The Helter Skelter Crisis – dysfunctional human settlement patterns – are the driver of many of the problems citizens now face as documented in Vol I of \textit{THE SHAPE OF THE FUTURE}.

Additional factors related to the evolution of UNReal Estate explored in Section IX. \textbf{WHY DID CITIZENS NOT SEE UNReal Estate COMING?}

\section{III. THE VEHICLE OF ECONOMIC DEMISE}

\textbf{A. THE ROAD TOO OFTEN TAKEN}

Large Private Vehicles are wonderful appliances. However, they can be used to provide Mobility and Access for only a small percentage of the travel demand in large Urban agglomerations.

Wide-spread reliance on Large Private Vehicles require that the origins and destinations of travel demand be widely scattered across the landscape. It is now clear that it is a physical and economic impossibility to provide Mobility and Access for most citizens in large Urban agglomerations with scattered origins and destinations of travel. See \textit{THE PROBLEM WITH CARS – PART THREE of TRILO-G}.

\begin{quote}
The short-sighted and ill-fated attempt to subsidize Large Private Vehicles as the primary strategy to provide Mobility and Access for the majority citizens in the United States over the past 73 years has resulted in dysfunctional settlement patterns Region-wide and nation-wide.\end{quote}

It appeared to be possible to rely on Large Private Vehicles to provide Mobility and Access to citizens when only 20 to 30 percent of the Households could afford a Large Private Vehicle and the income from one wage-holder could support most Households.

With the cost of Mobility and Access artificially reduced by subsidies, the roadway systems become congested. Recently, due to the rising cost of Large Private Vehicles; the rising cost of fuel to propel them; and the cost of maintaining – much less expanding – the roadway system to serve them and need multiple workers to support a Household with children; the use of Large Private Vehicles (the Autonomobile) has now peaked.
“Driving [Large Private Vehicles] has been in decline in the United States since 2004, as researchers have documents every which way.” “America’s Driving Less, and This Evidence Suggests It’s Not About the Economy” Atlantic Cities 29 August 2013.

This topic will be further explored in THE ROADS TO HELL and WHAT FOLLOWS THE AUTONOMOBILE? (two forthcoming Current Perspectives by SYNERGY)

B. THE RESULT

The strategies to drive a consumption-based economy by building scattered Large Single Household Detached dwellings and by selling vehicles to access these dwellings is clearly a failure.

As documented in THE PROBLEM WITH CARS – PART THREE of TRILIO-G, the space required to drive and park Large Private Vehicles (LPVs) has disaggregated human settlement patterns resulting in the current condition of profound dysfunction. If LPVs are stored in multi-level structures, the costs escalate. Expressways, roads and Stroads to move LPVs bifurcate the organic components of human settlement, require vast amounts of land and / or are very expensive to bury or elevate.

As has been long predicted that it must, the market for Urban fabric has executed The U TURN – explored in Section V. – to support settlement patterns that do NOT rely on Large Private Vehicles for Mobility and Access for the vast majority of Urban travel demand. See Leinberger, Christopher Walk Ups (2012) and other documents cited in Section XIII. SUGGESTED READINGS ON UNREAL ESTATE.

Vast public subsidies to pay for the roadway system to serve the settlement patterns that “citizens thought they wanted” has resulted in a Mobility and Access System that a growing majority can no longer afford.

About half the employed workers in the US cannot now afford to buy and maintain a vehicle that is both fuel efficient and safe to drive on the Interstate Highway System. As the Citizen Wealth and Well Being Gulf Widens, fuel costs rise and more expensive technology is loaded on Larger Private Vehicles the percentage who cannot afford Large Private Vehicles increases.

For these and other reasons, the market for new development is turning away from patterns and densities of land use that are dependent on Large Private Vehicles to achieve Mobility and Access.

The logical response is and has been ACCESS BY PROXIMITY a phrase favored by Richard Register founder of Ecocities Builders.
C. IN SUMMARY

The reliance on Large Private Vehicles for Mobility and Access and the public investment in roadways to serve these Vehicles has spread the Urban fabric of New Urban Regions across millions of acres. The illusion that more land will be needed for Urban land uses has driven up the reservation price for land far into the Countryside and far outside The Logical Location of The Clear Edge around the Cores of New Urban Regions.

The patterns and densities of human settlement patterns reflecting The U TURN documented in Section V. require FAR LESS Urban land per capita. The U TURN means that much of the land already devoted to Urban land uses – and most of the land that has been and is held for future Urban land uses – will not be needed for those uses – EVER.

In the economic, social and physical context that reflects reality for human existence on a finite planet, over time the amount of land functionally devoted to support Urban and NonUrban uses will dramatically change. Enlightened self-interest and economic reality will reinforce current trends to reverse population growth and per capita consumption.

IV. A NATIONAL BELLWETHER – URBAN GROWTH IN THE NATIONAL CAPITAL SUBREGION

A. WINDOW ON REALITY

Due to declining ad revenue, The Washington Post recently shrunk its ‘Real Estate’ section -- AGAIN. The section was at one time, robust and interesting with features such as Roger Lewis’ insightful cartoon / columns. Now each Saturday the front page of the “Automotive / Cars” section has a note That reads:

“Real Estate Inside.”

That weekly notice is profoundly prophetic at many levels.

The reliance on ‘cars’ (Large Private Vehicles) as the primary way to provide Mobility and Access in Urban areas has shaped every New Urban Region in the United States. Few Regions have been more dramatically impacted than the Washington-Baltimore New Urban Region and its two large SubRegions – The Baltimore SubRegion and the National Capital SubRegion. Data for the later is provided below. Similar data can be presented for every New Urban Region in the United States. For the definitions of New Urban Regions and SubRegions with coterminous Cores see GLOSSARY linked from the RESOURCES page at www.emrisse.com
B. THE SCALE OF THE SETTLEMENT PATTERN DYSFUNCTION

The Cores of the National Capital SubRegion and the Baltimore SubRegion are coterminous. Together the two Cores contain 85 percent of the jobs and 75 percent of the residences of the entire Washington-Baltimore New Urban Region. The Washington-Baltimore New Urban Region is the fourth largest in the United States – and the fifth largest in North America – with about 10 million citizens.

The area within The Logical Location of The Clear Edge around the Core of the National Capital Subregion encompasses about 1.2 million acres. However, the total area impacted by Urban activity in the Core of the SubRegion encompasses over 20 million acres.

Much of the 1.2 million acres within The Logical Location of The Clear Edge around the Core is vacant and underutilized.

Much of the land both inside and outside The Logical Location of The Clear Edge around the Core of the SubRegion is speculatively held for FUTURE Urban development.

It is easy to see why the opening section of this Perspective contains reference to “tens of millions” and “hundreds of millions” of acres of land nation-wide that are UNReal Estate.

C. THE ANATOMY OF A SUBREGION DRIVEN BY AN URBAN LAND DEVELOPMENT GROWTH ENGINE

The growth of Urban activity and population in the National Capital SubRegion has been driven by expansion of Agencies (‘government’), by ‘post-industrial’ Enterprises and by land development and construction of Urban fabric (aka, The Growth Machine).

The National Capital SubRegion does not have a superior natural port – compared to Baltimore or Hampton Roads. The SubRegion did not evolve as an inland rail hub – such as Atlanta – and it was not near sources of natural resources or a logical place to bring resources together – for example Pittsburgh with iron ore and coal.

The topography of the National Capital SubRegion lends itself to land speculation. Within Radius = 60 Miles of the Centroid of the National Capital SubRegion the land is relatively flat interrupted only by rivers and creeks and the occasional wetlands.

Most of the land was farmed in the Colonial Period but much of it was ‘worn out’ by shortsighted farm practices and was abandon for agricultural use by the start of the 20th century. The demand for serious Urban expansion began with World War I and then exploded during and after World War II.
The Founding Fathers speculated in real estate. The location of the United States Capital’s Federal District was a politically inspired real estate deal. Land development – along with governance and the Enterprises supporting and spawned by Agencies – was the BUSINESS of the National Capital SubRegion from the 1920s until the early 2000s. Universities, hospitals, museums and community centers are replete with facilities named for families that made their fortunes from Real Estate ‘development’ – agents, developers, builders and speculators.

V. THE U TURN

A. WHAT IS THE U TURN?

The U TURN is SYNERGY’s term for the profound change in the market for Urban fabric. See documents cited in Section XIII. SUGGESTED READINGS ON UNREAL ESTATE.

The U TURN converted the market for Urban fabric to WALKABLE components and from DRIVEABLE components. Driveable components had dominated the vast majority of land Urbanized between 1920 and 2005.

Walkable components provide functional and sustainable Urban fabric to support from 10 to 20 times as many Households and Jobs per acre as the DRIVEABLE components.

The U TURN is the most important economic, social and physical reality to shape the future since the introduction of steel frame buildings, elevators, air conditioning and electric powered Shared Vehicle Systems. It places the Large Private Vehicle in an appropriate and subordinate role with respect to Mobility and Access in the Urbanside and in the Countryside.

See Leinberger, Christopher B., *The Option of Urbanism: Investing in a New American Dream* (2009, Revised 2011) and the data from the National Capital SubRegion that documents that the most desirable (marketable) patterns and density are Walkable components (Activity Centers) in Walk UPS,(Leinberger – 2012). Similar results were recently published for the Atlanta Region. See Badger, Emily, “Have We Reached Peak Sprawl?” The Atlantic Cities 2 October 2013.

The demographic and economic drivers of The U TURN are spelled out in *Reshaping Metropolitan America: Development Trends and Opportunities to 2030* (Nelson) and *The End of the Suburbs: Where the American Dream is Moving* (Gallagher) and other recent books included in Section XIII.

There is little INFORMED debate about the reality of The U TURN. See Section IX. C.
At the same time, there is almost no recognition of the profound collective economic, social and physical impact of The U TURN on the demand for Urban land. This is due to Geographic Illiteracy / Spacial Ignorance and to intentional obfuscation by Agencies, Enterprises and Institutions that profit / depend upon Business-As-Usual.

B. THE OVERSHOOT

Expansion of Urbanized land to meet the phantom ‘demand’ to support Urban land uses is a classic case of ‘overshoot.’ This overshoot was based on an unfounded assumptions concerning the need to expand human’s Urban footprint to meet projected population growth and economic ‘development.’

The overshoot reflects a profound collective underestimation of the land within an area with a radius of 2X vs the land within an area with a radius of X. See Section II, A.

The overshoot also reflects unfounded speculative exuberance about the economic feasability of Urban fabric exhibiting dysfunctional patterns and densities of land use in dysfunctional Regional locations.

In large part, the overshoot is a result of the abject failure of Agencies to fairly allocate the costs of alternative human settlement patterns.

A note on terminology: After SYNERGY started using the phrase “The U TURN”, the work of ecologist Edward Goldsmith and his 1988 book *The Great U-Turn: De-industrializing Society* was called to our attention. Ironically, “de-industrialization” occurred in the United States between 1950 and 2005. It is now nation-state policy to bring back industrial Jobs that have been ‘off-shored.’ The goal must be Community and Regional Balance. A world-wide movement to “de-industrialize consumption” will be required to bring consumption into Balance with resources. The U TURN supports settlement patterns necessary to achieve that Balance and thus will achieve the REAL goal of Goldsmith’s life-long efforts.

C. ECONOMIC FUNDAMENTALS

There are no ‘fundamentals’ to support continued growth of the human Urban footprint, especially in the Outer Radius Bands of large Urban agglomerations in the United States. A basis for continued expansion of human’s Urban footprint would require:

♦ Lowering costs of energy and scarce resources – However, more functional and sustainable settlement patterns reflecting The U TURN are the most effective way to lower per capita energy and resource consumption
♦ A lower cost of accessing J / H / S / R / A – However, the more functional and sustainable settlement patterns reflecting The U TURN are the most effective way to provide Access by Proximity and other parameters of efficient and sustainable human settlement patterns.

♦ An infinite supply of the materials and resources to support exponential growth in per capita consumption – This is a physical impossibility on a finite planet. It is also a social impossibility to maintain a democracy without a fair allocation of resources and it is an economic impossibility to continue subsidy to support dysfunctional settlement patterns.

♦ A growing population. The nation-state population of the United States has already reached the long projected plateau that reflects enlightened self interest and economic reality – EXCEPT FOR IMMIGRATION both LEGAL AND ILLEGAL. When the true total costs of immigration as a temporary source of cheap labor for some Enterprises has been fairly allocated, population growth will reverse as it has in other ‘advanced’ nation-states. The goal must be to make humans happy and safe in every Region, MegaRegion, nation-state and continent, not force them to migrate.

In summary, functional and sustainable settlement patterns reflected in The U TURN are the most effective and efficient way to create patterns and densities of land use that are not dependent upon unsustainable activity.

The nation-state / state / municipal policy, programs and projects to create individual and Household Access and Mobility by subsidizing the use of Large Private Vehicles has resulted in conversion of land to Urban uses in patterns and densities that are ‘incomplete’ and dysfunctional. See Risse, A Study of Planning and Zoning Problems in Areas of Transition, New York State Office of Planning Coordination (1968).

D. THE U TURN IS ‘RECENT’ BUT HAS A LONG HISTORY.

The U TURN did not happen all at once. It may seem that way to those who have not been paying attention. See Section XIII.

To those paying attention, it has been widely recognized that markets have long reflected the true value of alternative settlement patterns in spite of conventional wisdom.

On a square foot basis, there are few – if any – examples where functional Urban fabric has not been more highly valued in components that possess a Balance of J / H / S / R / A.
The values of residential, non-residential and co-mixture land uses in the places now favored by The U TURN market have, for the last 60 plus years, had higher per square foot values than those places that were touted as reflecting ‘sub-urban’ settlement patterns because it was ‘what citizens really want.’

The invisible hand of the market has been writing on the wall in very clear numbers. Think Georgetown, Beacon Hill and Nob Hill for residential use. Consider where the ‘exclusive shops’ have been located. Consider the Urban places in Western Europe where citizens of the United States have spent vacations: Paris, Vienna, Praha, Stockholm, Barcelona, etc.

E. THE FOUNDATION OF THE U TURN

Functional Urban fabric at the component scales of Dooryard, Cluster, Neighborhood and Village has been evolving over the past 15,000 years reflecting and facilitating the shift from Hunter Gather Societies to Agrarian Societies. At the Village, Community (aka, ‘city’ before 1850) and Regional scales, the patterns and densities have been evolving over the past 8,000 years reflecting the transition from Agrarian Societies to Urban Societies. This process proceeded slowly until the mid 15th Century. Over the past 300 years the Industrial Revolution has Urbanized human society. See Volume I of THE SHAPE OF THE FUTURE.

Most of the physical changes in Urban fabric have occurred since 1850. Opposition to scattered Urban land uses in the Countryside began to build from the outset of wholesale Urban land use scatteration. Leap frogging beyond the natural ‘Cambium Layer of Urban Expansion’—that is, beyond The Logical Location of The Clear Edge—was widely recognized as being ‘wrong’ and wasteful. This perspective did not accumulate a Critical Mass of citizen support for reasons spelled out in Section II. Over the period from 1870 to the present there have been ‘better’ models than what became the mode-of-the-market. See Section XIII C., Better Models Ignored.

The Great Recession is often cited as the cause of The U TURN. That is not the case. Auto use peaked in 2004. The development of projects that reflect The U Turn has been one of the few positive trends since the onset of The Great Recession and is now well documented in the resources included in Section XIII.

The Great Recession has had many direct and indirect impacts on citizens and their Organizations. Perhaps one of the most important is that it constitutes a mile stone that marks the end of one era and the start of another with respect to human settlement patterns. The Great Recession provides a platform from which to observe that the settlement patterns that best meet the needs of Urban humans are not those that have generated the highest short term rate of return for the Enterprises and Institutions that have dominated the agglomeration of the built environment over the past 70 plus years.
F. THE NUMBERS

1. Holding Capacity Overview – At the Alpha Community Scale

The pervasive direct and indirect subsidies – Policies / Programs / Projects / Controls (regulations) – by Agencies that favored the provision of Mobility and Access by Large Private Vehicles have been a core contributor to The Mobility and Access Crisis, The Affordable and Accessible Housing Crisis and the overarching Helter Skelter Crisis. See THE SHAPE OF THE FUTURE Vol I. for a comprehensive summary.

The quantifiable result of The Helter Skelter Crisis – dysfunctional human settlement patterns – is that 80 to 90 percent of the Urbanized land within 100 miles of the Centroid of large New Urban Regions has an unsustainably low density at the Alpha Community scale.

As documented in THE SHAPE OF THE FUTURE, the old ‘minimum’ sustainable density established by the analysis of Planned New Communities where development Enterprises were required to INTERNALIZE most (but not all) of the location-variable costs WAS 10 persons per acre (pn / ac) at the Alpha Community scale. This density reflected dependence on the use of Large Private Vehicles to provide Access and Mobility for MOST of the residents.

The developers of successful Planned New Communities and Planned New Villages that reached a Critical Mass were in part compensated for having internalized what were treated as ‘externalities’ by less-than-Community-scale developers by achieving higher values for residential and non-residential projects. See “The $100,000 Difference – Same House, Same Builder, Different Location” in “The Future of Loudoun County” SYNERGY (1998). This study examined Reston vs alternative locations in the National Capital SubRegion. The $100,000 Difference did NOT, however, completely offset the subsidies provided to scattered Unit, Dooryard and Cluster scale ‘projects’ (aka, ‘subdivisions’). This is the primary reason Planned New Communities did not eclipse Business-As-Usual scattered Urban development between 1965 and 1985. Developers could make more money in a shorter period of time taking advantage of the Agency subsidies of dysfunction.

In 1980s SYNERGY repeatedly documented in public presentations that if all of Fairfax County were redeveloped at the at density of Greater Reston (10 pn / ac) then 2 / 3 of the County would be VACANT. This was at a time when the population of Fairfax County was about 600,000 and citizen groups were working to limit ‘development.’ SubRegional Agencies and Enterprises were projecting and investing in Urban development beyond Fairfax County (that is, beyond Radius = 20 Miles from the Centroid of the SubRegion) because “Fairfax was all built out.”

The population of Fairfax County is now about 1,200,000. If half the County were in OpenSpace and the other half developed in Alpha Communities the holding capacity would be 3.7 million.
See Chapter 17 – Vignettes of Land Use and Land Management Dysfunction in PART FOUR of TRIL0-G.

The vast majority of the Urbanized land within the influence area of large Urban agglomerations was developed at far lower densities than even the auto-dependent minimum of the Alpha Community scale.

The net project density often ranged from 0.3 to 10 pn / ac at the Cluster (‘project’) scale and from 2 to 4 pn / ac at the Beta Community Scale. These are BETA Communities (by definition) because they do not have a Balance of J / H / S / R / A.

As illustrated by the calculations in SETTLEMENT PATTERN CONSILIENCE, Current Perspective # 26, The U TURN will result in settlement patterns that do not rely on Large Private Vehicles for Mobility and Access. These patterns and densities of land use will rely on Walkability, Low Power Private Vehicles and Shared Vehicle Systems for Mobility and Access. The resulting minimum sustainable density at the Alpha Community scale will move from to 10 pn / ac to 30 pn / ac at the Alpha Community scale. This means that New Urban Regions will be composed of Urban settlements – inside AND outside The Logical Locations of the Clear Edges that have a minimum density of 30 pn / ac. That is a three times increase in the holding capacity per acre at MINIMUM sustainable density.

2. Residential Holding Capacity

From 70 to 90 percent of the Urbanized land area within The Logical Location of The Clear Edge around the Core of New Urban Regions is devoted to residential land uses (Housing) and to Service land uses directly serving residential activity as well as OpenSpace serving the Dooryard, Cluster, Neighborhood, Village and Community scales.

While the “minimum functional density” WAS 10 pn / ac, the REAL density was – and still IS – from 2 to 5 pn acre. With the new minimum sustainable density of 30 pn / ac at the Alpha Community scale there is CONSERVATIVELY from 6 times to 15 times TOO MUCH land devoted to Urban land uses in contemporary New Urban Regions – Urbanside and Countryside. In the alternative, current Urbanized land can accommodate from 6 to 15 times the current population without Urbanizing another acre. The need for dedicated OpenSpace at all component scales will modify these overarching parameters but not by that much given the current waste of land that are already supplied with Urban Services. See Henry George.

In addition the evolution of Third Places and other shared / common space has resulted in smaller dwelling Units becoming more attractive.

These densities may seem ‘high’ until one understands that the ‘AVERAGE’ lot size for Urban dwellings in municipalities outside Radius = 35 Miles from the Centroid in the National Capital SubRegion is between four to eight acres PER LOT.
That there is too much land devoted to and held for future Urban land uses is NOT ‘new’ information. See Risse, *A Study of Planning and Zoning Problems in Areas of Transition*, New York State Office of Planning Coordination (1968). In the intervening 45 years SYNERGY has evolved quantitative techniques (Regional Metrics) to analyze and calculate densities of the larger organic components of human settlement – Alpha Communities, New Urban Regions and MegaRegions.

3. **Non Residential Holding Capacity**

The amount of Urban land needed for non-residential Jobs / Services and other non-residential uses occupies a smaller percent of SubRegions, Regions and MegaRegions than land devoted to residential and direct residential support uses but the numbers are every bit as dramatic.

During the period for 1960 to 1990 outside the Zentra of New Urban Regions and (SOME ‘Edge Cities’) the non-residential Floor Area Ratios (FARs) averaged from 0.20 to 0.50. These densities applied to ‘strip commercial’ projects, to enclosed malls and to office parks. See Mozingo, *Pastoral Capitalism: A History of Suburban Corporate Landscapes*.

The mode-of-the-market for non-residential Urban land uses was a FAR 0.20 for leafy Corporate Campuses office parks and 0.50 for Class B space with no landscaping, surface parking and 250 sq ft per employee.

Now the mode of the market for non-residential and mixed use Urban land uses in ‘Town Centers’ and the station areas of Shared Vehicle Systems FARs range from 2.0 to 6.0. In addition, occupancy densities have morphed from 250 sq ft per employee of 100 to 1500 sq ft / pn. In some special applications an astounding 20 sq ft of office space can support an assigned employee by applying ‘hotelling,’ home offices, third party satellite centers near employees dwellings and other techniques. See Halzac, Sarah “Accenture’s Office: Designed for Millennials” *The Washington Post’s Capital Business* 2 Sept 13.

As with residential holding capacity, the non-residential holding capacity increases dramatically from a factor of 4 to a factor of 30 depending upon the location, land use mix and Shared Vehicle System access.

4. **The Market – Demand Side**

These holding capacities are theoretical. What does the market say? Based on the work of Leinberger and others the market says:

We Want MORE Walkable Urban places that meet the density criteria in 2. and 3. above!
See again Leinberger, Christopher B., *The Option of Urbanism: Investing in a New American Dream* (2009) and the data from the National Capital SubRegion that documents that the most desirable (marketable) patterns and density are Walkable components (aka, Activity Centers) in *Walk UPS* (Leinberger – 2012). Also see Badger, Emily, “Have We Reached Peak Sprawl?” The Atlantic Cities 2 October 2013, concerning the data on the Atlanta Region.

The market demand should not be a surprise. During the late 90s and early 00s the National Capital SubRegional association of municipal governments carried out an analysis of ‘Activity Centers’ in the member jurisdictions. This analysis documented that the vast majority of the Urban activity was focused on a few locations. See “Shaping the Future” April 2003.

The results of the analysis were abandoned and reports recalled because the analysis did not support municipal jurisdictions projections for land consumption based on unfounded optimism (aka, Irrational Exuberance). “See Metropolitan Washington Regional Activity Centers: A Tool for Linking Land Use and Transportation Planning,” Metropolitan Washington Council of Governments. (2002).

The study of Activity Centers was catalyzed by a coalition of Enterprise and Conservation Institutions. The geographic reality was documented by Conservation Institutions. A smarter growth coalition produced a PowerPoint documenting the vast supply of vacant and underutilized land adjacent to existing METRO stations. See *Blueprint for a Better Region*. Over the past decade this web based PowerPoint has been revised to make it more ‘citizen friendly’ (aka, dumbed down) and no longer makes this point as clearly as earlier versions.

5. The Market – Supply Side

Writing in 2009 (and 2011 – see Preface to the Paperback Edition), Leinberger suggested in *The Option of Urbanism* that there would be a future market for BOTH Walkable Urbanism and Driveable SubUrbanism. However, it is now clear, based on the trajectory of property and improvement values that there is a FAR larger supply of Driveable SubUrbanism than Walkable Urbanism.

One need only read Enterprise Media to see proof of this reality. On one recent day *The Washington Post* had stories about the evolution of Walkable Urbanism in Arlington County (Columbia Pike), the Federal District (Buzzards Point) and Montgomery County (The Purple Line) ALL within R = 10. Then there is the Montgomery County Transit Way and the extension of the metro Silver Line to Tyson’s (nee Tyson’s Corner), Reston, Dulles Airport and Eastern Loudoun.

Prince George’s County has, for 20 years, been a sleeping giant of settlement pattern capacity with thousands of acres of vacant and underutilized land adjacent to METRO station platforms. See *Blueprint for a Better Region*. With renewed planning processes, the location of the new
SubRegional Hospital Center and several ‘Town Centers’ these areas of vacant and underutilized land will be ripe for serving the Walkable Urbanism market.

New Urbanists have been promoting Transit Oriented Development (TOD) for years. There is finally a Critical Mass of at-scale examples. There is also proof that TOD patterns and densities can be achieved without ‘Transit’ if there is Balance and there are alternatives to Large Private Vehicles (Electric Bike / Scooter Share, Cargo Bikes, ZipCarts (sic), etc).

6. The Role of Shared Vehicle Systems.

One reality that continues to escaped most of those commenting about the Transformation of Urban fabric is the role of Shared Vehicle Systems in providing Mobility and Access. The role of Shared Vehicle Systems is NOT to meet the demand for every travel need generated in the station area. Rather the Shared Vehicle System (e.g. METRO) needs to meet most of the High Value Trips. The Balanced and functional settlement patterns in the station area allow MOST of the travel demand to be met by pedestrians and by Self Powered Vehicles, LowPowered Vehicles and by supporting Shared Vehicle Systems including time-share Vehicles.

This has been a theme of SYNERGY’s since “It is Time to Fundamentally Rethink METRO and Mobility in the National Capital Subregion” was first published in 1984. The reality is that Most of the METRO trains STILL leave most of the METRO station most of the time essentially empty. A tragic flaw in the original design of the system was to assume that it was possible to design a Shared Vehicle System that pumped IN in the AM and OUT in the PM. Station area Balance is the key to optimizing system capacity. See the 2004 version (BackGrounder / BG 5) linked from the RESOURCE page at www.emrisse.com For a recent version of how Enterprise Media gets it wrong see in The Washington Post's Capital Business for 14 to 20 October 2013. This edition of Capital Business also documents the pace and location of development noted in 5. above.

G. KEY QUESTION ONE: WILL THE CORE MUNICIPALITIES SKIM THE CREAM?

Let us assume there is a market for Walkable Urbanism and, as is the case now, there is more value and property tax revenue from these patterns and densities of land use. See Katz, “The Missing Metric” Government Finance Review (2013). Also see “The Future of the Suburbs” Planning Theory and Practice, Routledge.

What is to keep the Core municipal jurisdictions from skimming the cream of this market and forcing workers and support uses to rely on fringe jurisdictions to find places to live and secure Service, Recreation and Amenity?
This is EXACTLY what Core municipal jurisdiction in the favored corridors did with the most desirable (highest property tax generating) land uses in the Edge City Era. The answer can be summarized by the IMPERATIVE of one factor:

That word is **BALANCE**

Those Enterprises that will make decisions on investment locations will demand Balance. With literally thousands of options in Large New Urban Regions and many well positioned Alpha Communityscaled options in the Countryside (e.g. Staunton, VA), those jurisdictions that do not provide Balance will not attract new investments. The fact that so much land is available will facilitate the provision of choice and promote competition. The primary bellwether will be the provision of REAL WALKABLE URBANISM and a major component will be Workforce Housing.

This reality is already shaping the mix and density of Shared Vehicle System station area developments. What is needed is MORE of what the market supports. The law of supply and demand will work if Agencies get out of the way.

**H. KEY QUESTION TWO: WHAT HAPPENS TO THE UNUSED LAND?**

This question has already been given considerable consideration by SYNERGY. The most important changes will occur at and near The Logical Location of The Clear Edge. See SETTLEMENT PATTERN CONSILIENCE - Current Perspective # 26 linked from the CURRENT PERSPECTIVES page at [www.emrisse.com](http://www.emrisse.com)

**I. KEY QUESTION THREE: HOW SOON WILL THESE CHANGES TAKE PLACE?**

It is clear that it has taken over 70 years to dig ourselves into the hole of dysfunctional settlement patterns due to an excess of land devoted to and held for future Urban land uses. It will take a while to dig ourselves out of that hole and create whole, Complete Communities and functional Urban fabric.

**HOWEVER, the value of land and improvements is based on FUTURE use. Once citizens and their Organizations understand the reality of UNReal Estate, the changing land values will accelerate rational actions such as those spelled out in SETTLEMENT PATTERN CONSILIENCE - Current Perspective # 26. Also see PROPERTY DYNAMICS – PART ELEVEN of TRILO-G.
VI. THRESHOLD STRATEGIES TO ACHIEVE FUNCTIONAL SETTLEMENT PATTERNS

Here is a brief outline of the strategies needed to facilitate profound Transformations of the human settlement patterns that reflect the need to achieve a sustainable trajectory for technology-enabled contemporary civilization.

A. OVERARCHING STRATEGIES

The core strategy must undertake those actions to secure a Balance of J / H / S / R / A at all five organic scales of human settlement from Alpha Dooryard to Alpha Community.

Functional human settlement patterns can be agglomerated at the SubRegional, Regional and MegaRegional scales ONLY from functional and sustainable organic components of citizen’s economic, social and physical activity at the Dooryard, Cluster, Neighborhood, Village and Community scales.

A key goal will be to evolve Balance Metrics to guide Policies / Programs / Projects / Regulations and to provide citizens with the tools and information they need to make intelligent decisions in the voting booth and in the marketplace. Agencies, Enterprises and Institutions have all been using the WRONG metrics and citizens are profoundly confused.

There also must be new, comprehensive processes to evolve SubRegional, Regional and MegaRegional settlement pattern strategies tailored to the Urbansides and the Countrysides in EACH New Urban Region and each MegaRegion. See CITIZEN HANDBOOK – PART TWELVE of TRILo-G.

As will be suggested by the Section VII, these comprehensive processes must NOT be controlled by existing municipal and state Agencies. There are also fundamentals question about the appropriate role of the Federal government and noted in Section VII.

B. THE SPHERES OF CHANGE: INSIDE CLEAR EDGE – OUTSIDE CLEAR EDGE – AT AND NEAR THE CLEAR EDGE

A first step will be to identify the current Logical Location of The Clear Edge. This is because there are profoundly different Programs / Policies / Programs / Regulations that are applicable in the two domains of New Urban Regions – The Urbanside and the Countryside. Quantification of the areas within the current Logical Location of The Clear Edges will provide the starting point for application of the strategies outlined in SETTLEMENT PATTERN CONSILIENCE -
Current Perspective # 26. Mitigation of the negative impacts of the UNReal Estate will be profoundly different inside, outside and at The Logical Location of The Clear Edge. See THE IMPACT OF THE U TURN IN THE PIEDMONT, Current Perspective # 32 and GREEN INFRASTRUCTURE IN CONTEXT, Current Perspective # 33.

In a nutshell:

♦ Inside The Clear Edges there must be functional and sustainable / Balanced components of human settlement.

♦ Outside The Clear Edges there must be Countryside. However, the NonUrban activities of the Countryside have been and must be supported by Urban enclaves organized in Balanced But Disaggregated Alpha Communities.


As documented in THE SHAPE OF THE FUTURE, The Clear Edge is the Cambium Layer of the transition from Urban to NonUrban land uses.

VII. IN ORDER TO ACHIEVE SETTLEMENT PATTERN TRANSFORMATION

As documented in TRILO-G, evolving functional settlement patterns require more than just creating different patterns and densities of land use.

A. GOVERNANCE TRANSFORMATION

For over a century there has been a well documented need for the evolution of REGIONAL governance structures. Concerted effort to evolve effective Regional governance structures over the past sixty plus years has been thwarted by municipal and state Agencies and by Organizations that benefit from Business-As-Usual.

However citizens at the Cluster, Neighborhood, Village and Community scales are reluctant to give up ‘power’ to higher level Agencies until and unless there is a reallocation of appropriate governance responsibility DOWN to the smaller organic components of human settlement as opposed to the arbitrary allocations frozen in municipal and state borders.

It is not just governance at the Region scale that is important. There must be functional governance BOTH BELOW and ABOVE the New Urban Region scale.
There must be a rational allocation of governance responsibility at the Alpha Cluster, Alpha Neighborhood, Alpha Village and Alpha Community scales as articulated in *THE SHAPE OF THE FUTURE* and in *TRILO-G*. States have been reluctant to implement these reallocations of democratic responsibility in ways that reflect current economic, social and physical reality.

States have also stonewalled strategies to reconfigure state borders to reflect the reality of New Urban Regions even when those Regions fall in two or more States.

Above the New Urban Region scale there must be a role for MegaRegion, and reconsideration of the relevance of current role of ‘state’ and a relocation of powers of the ‘nation-state.’

The key strategy must be: Level of Control is the Level of Impact. Where there is multi-scale level impact – a very frequent reality – there must be equitable process for sharing control as opposed to the ‘highest’ level CONTROLS PERIOD – which is a hold over from the sovereignty of kings.

One key question is the roles of the Federal government. More accurately stated: There must be a democratic process to determine the powers and responsibilities now exercised by the Federal government: At what scale should ‘nation-state powers’ be exercised? This is a topic to be explored in a future Perspective.

See A NEW METRIC FOR CITIZEN WELL BEING: The End of Politics-As-Usual – PART FIVE of *TRILO-G*.

**B. ECONOMIC SYSTEM TRANSFORMATION**

In addition to Fundamental Transformation of the governance structure there must also be a Fundamental Transformation of the economic structure. There must be a shift from an economy based on Mass OverConsumption to one based on quality of life for the reasons spelled out in ENOUGH?, Current Perspective # 18.

Happy and safe citizens are the foundation of democracy and informed markets.

C. REVENUE TO SUPPORT THE COMMON NEEDS OF URBAN CITIZENS

The largest problem in achieving Fundamental Transformations in governance structure and in economic systems is that the citizens and their Organizations as well as the leadership of the most powerful nation-states have been spoiled by living off the planet’s Natural Capital.

No one wants to even consider, much less, pay the TRUE, TOTAL COST of a functional and sustainable, technology-based Urban society. Humans are addicted to avoiding paying the full costs of externalities.

Well, perhaps not ‘everyone’ but the vast majority. As to the impact on human settlement patterns this reality has been clear for 150 years. Consider the ideas of Henry George and the opposition which they still generate. See DEGROWTH – SHRINKING TO SURVIVE THEN PROSPER, Current Perspective # 3.

VIII. IS UNREAL ESTATE INEVITABLE?

There is no doubt about the current trajectory. No one has come forward with data to suggest why the current trajectory will not continue for the next 20 years or to articulate a data-based scenario for a return to the good old days. There are the NeoLuddites noted in Section IX., C. They are shouting: “No, no, it is not happening!!; Believe in the myths of the old American Dream!!; The past WILL return!!”

Jared Diamond summarizes the current condition in the conclusion of Collapse: Why Societies Choose to Fail or Succeed (Rev. 2011):

Societies CHOOSE to fail because:

♦ They fail to plan for the future, and
♦ They fail to change traditional values and goals when conditions change

Conditions have changed.

To underscore the profound importance of The U TURN and the creation of UNReal Estate it is useful to point out that there ARE other ways the trajectory of civilization might change that are NOT related to UNReal Estate. Here is a short list of things that might change the trajectory of civilization:

♦ A nuclear event triggered by conflicts in East Asia or in the Middle East.
A pandemic plague caused by drug resistant pathogens.

A large asteroid / comet that becomes a meteor and then a meteorite with mass at impact sufficient to create tectonic earthquakes.

Collapse of Urban civilization as it has evolved to date (democracies with semi-informed markets) due to ‘The New Socialism’ spreading from Latin America driven by the widening Citizen Wealth and Well-Being Gulf.

On the current trajectory it would require vast new subsidies to avoid the market reflecting the true future value of land for Urban land uses.

It should be noted that since international events started to impact land values in Japan, a nation-state policy has been rigorously applied to keep land prices artificially high. That has been possible due to the nature of the Japanese society reflected in the governance structure and in the economic system. These underlying proclivities have prevented Japan from developing an effective Planned New Community program. Subsidies and land use controls are unlikely to be implemented in the United States because there is already so much land speculatively held for future Urban land uses and there is such an emphasis of ‘property rights.’ In this case property ‘rights’ will not support ‘property value.’ Again see Henry George.

IX. WHY DID CITIZENS NOT SEE UNREAL ESTATE COMING?

A. IT IS THE STUPID ECONOMY

The overarching factor that has clouded a clear vision of the future is the current economic system. Living off Natural Capital and the predatory strain of capitalism that has evolved since the end of the US Civil War are the generators of bubbles and the cause of the Citizen Wealth and Well-Being Gulf.


B. A FLOOD OF INFORMATION

Current society is complex and there is an almost infinite spectrum of voices clamoring for attention. Many of these voices, including Enterprise Media, have vested interests in a return to the conditions from which they have wrung profits in the past.
The prospect of a return to past trajectories such as those which followed past recessions is what those who do not have time to consider the alternatives want to hear. They read the headlines ‘housing is back’ without understanding the meaning of the information in the Enterprise Media ‘stories.’ That is especially true with respect to geographical distribution data.

For some it is impossible to comprehend that there are now more Households with one person than Households with a mother, father and their children. “How can there not be a market for a four bedroom house on a big lot? That is what ‘everyone’ wants and needs.” “Everyone” can afford a car, right?”

In fact:

♦ The majority of employed workers in the US cannot afford to buy and maintain a Large Private Vehicle that is both fuel efficient and safe to drive on the Interstate Highway System, and

♦ The vast majority of couples who choose to raise a family cannot afford a detached dwelling that is both Affordable and Accessible.

Many professional and research Institutions representing planners, economists and governance practitioners are still beholden to members and sponsors that believe in Business-As-Usual. That number is declining. See Section XIII.

C. SPOKESPERSONS FOR THE PAST

Wendell Cox, Robert Bruegemann, Joel Kotkin, Ron Utt, Randall O’Tool and others make a living from those who have profited – or hope to profit in the future – from Business-As-Usual. Rather than point out deficiencies in their data and perspectives here, it is suggested that any reader who has a doubt about the current trajectory do an Internet search of these (and others) who are saying: “No, no, it is not happening!!; Believe in the myths of the old American Dream!!; The past WILL return!!.”

These advocates of settlement patterns from times past are supported by those who spout superficial, simplistic bromides such as “small government is solution to all problems.”

D. NOT EVERYONE HAS BEEN IN THE DARK

Developers and those who make a living from land development are aware of the reality of UNReal Estate. Institutions such as The 2030 Group and the Northern Virginia Transportation Alliance in the National Capital SubRegion were established years ago to support the effort to build more roadways to salvage speculative investments in unaccessible land.
The current trajectory is no surprise to those who outlined the need for PROPERTY DYNAMICS – PART ELEVEN of *TRILO-G*.

**X. THE BETTER (?ONLY?) WAY FORWARD – CITIZEN AWARENESS / INTEREST / UNDERSTANDING LEADING TO ACTION**

A sustainable future trajectory can only be shaped by those who understand the imperative of closing the Citizen Wealth and Well-Being Gulf. See Stiglitz, Joseph, *The Price of Inequality: How Today’s Divided Society Endangers the Future* and the references cited in Section XIII.

**A. THE SILVER BULLET**

In a democracy, the silver bullet is EDUCATION. A Critical Mass of citizens must overcome cheerleading for Mass OverConsumption by Enterprise Media and those who profit from Business-As-Usual.

Citizens must come to understand human settlement patterns just as they must come to understand the basics of human health. They cannot rely on agents and advertisers to shape human settlement patterns or their health.

> The evolution of human settlement must be guided by an informed market and not by shelter industry Enterprises and Institutions intent on maximizing their short term gain by reliance of passing of costs to the public and to the environment as externalities.

In addition to understanding the basics of functional human settlement patterns citizen must be able to calculate Net Present Value, Internal Rate of Return and Alternative Investment Analysis. This is not rocket science. However, it is much more important to survival of civilization as it is currently understood.

Citizens must come to understand why Agrarian Urbanism is important and why the Households in the Countryside that are dependent upon NonUrban activity needs to grow from around five percent at the present time to about 20 percent in the future. They must also come to understand why the Households that depend on Urban activity in the Countryside needs to change from 60 percent now to perhaps five percent in the future. See SETTLEMENT PATTERN CONSILIENCE, Current Perspective # 26.
B. ALLOCATING MITIGATION LOSS OUTSIDE THE CLEAR EDGES

All land owners outside Clear Edges are facing declining value of land and improvements due to The U TURN.

Fortunately, as things stand now, the BIGGEST LOSERS from The U TURN and UNReal Estate are those who have been speculating on land Outside The Clear Edge around the Core of New Urban Regions.

Unfortunately as things stand now, the SECOND BIGGEST LOSERS from The U TURN and UNReal Estate are those who THOUGHT they were doing just the right thing based on the advice they received directly from real estate agents, builders, lenders and indirectly from municipal governance practitioners.

The later cohort of losers are home owners who bought a Large Single Family Household outside the Logical Location of the Clear Edge. The typical owners are an older couple, perhaps one or both were laid off in The Great Recession staff reductions.

Some may have paid off their mortgage and planned to sell their dwelling to finance retirement. Some may have refinanced to send children or grandchildren to college or to cover major medical expense.

What is also universal is that these citizens have been cut off from interest income on their nest egg by policies intended to kick re-start the Mass OverConsumption based economy by encouraging those at the top of the Ziggurat to ‘invest.’

Most Urban home owners in the Countryside occupy a dwelling that was built or substantially improved between 1970 and 2005. Almost without exception, the unit was poorly built and is equipped with energy hog appliances. Depending on the year of construction the dwelling may have FRT plywood, aluminum wiring, grey PVC plumbing, deteriorating siding and / or a failing septic system.

Many of the mechanical systems and appliances have reached their design life but the owners now cannot afford a new HVAC system (two in many Units), new appliances, a new sump pump or a new water heater. Many cannot afford a new Large Private Vehicle that is needed to provide Access and Mobility. The owners may not even be able to afford a replacement garage door opener and so the old vehicle sits outside.

This is a grim picture and a critical priority is to sort the losers so that society can assist the innocent losers as distinguished from the speculators.

There are other factors to consider:
There will ‘always’ be SOME Households interested in buying – and able to afford – well maintained properties for most of the reasons that the current owner bought them. However, due to oversupply, these existing dwellings will not appreciate and that removes one of the primary reasons for purchase of “more house than we need” – the ‘investment’ potential.

Finally, there will be little market for new construction because the cost of new construction would be far higher than the reservation price of the well maintained properties. Any new construction of Wrong Size House in the Wrong Location – Large Single Household Detached Dwellings on lots outside the Clear Edges around Urban enclaves with Balance that were not suitable for profitable Agrarian activities – would lower the value of existing Large Single Household Detached Dwellings

The opportunities to evolve functional and sustainable settlement patterns inside, outside and especially at and near The Clear Edge is explored in SETTLEMENT PATTERN CONSILIENCE, Current Perspective # 26.

XI. THE BACK STORY

As documented in Chapter One, Box 1 of THE SHAPE OF THE FUTURE the amount of land that Homo sapiens can efficiently and effectively use per capita in their daily / weekly / seasonal existence as a member of human society has been declining for 15,000 years.

Hunter gathers clans and tribes required about 100 acres per person for their ‘territory’ unless they could take advantage of a location specific, focused resource – e.g. a salmon fishery.

Agrarian societies that evolved from 15,000 BCE up to 1500 CE required about 10 acres per person.

The Industrial Revolution Urbanized human civilization. The amount of land that could be used efficiently and effectively per capita at the Alpha Community scale dramatically shrank from 10 ac / pn to 10 pn / ac – a one hundred times reduction.

This per capita requirement was held at 10 pn / ac due to the expanded use of Large Private Vehicles (LPVs) from 1920 to 2004. Except for reliance on LPVs for Mobility and Access the per capita land consumption would have continued down to around 30 pn / ac which is representative of the most functional patterns and densities of the 1890 to 1945 Urban fabric.

As noted in Section III, the LPV was the catalyst for evolving settlement patterns that were and are NOT functional, efficient or sustainable. But what triggered the unfounded optimism and irrational exuberance concerning the amount of land needed to support an Urban society after World War II?
Let us start with the 1950 Census. This Census generated Awareness of impact of the Baby Boom and the formation of Households.

The changes between the 1950 and the 1960 Census documented the vast area occupied by and assumed to be destined for Urban development over the first 15 years following World War II. This land consumption was subsidized and facilitated by Federal, state and municipal actions – e.g. the Interstate Highway System.

The nuts and bolts of the new Urban settlement patterns were the primary responsibility of municipalities. Provided with Federal ‘701’ money to hire consultants and staff, municipalities revised their plans to ‘accommodate’ growth. After all, “EVERYONE needs a place to live the American Dream requires owning a home.” See Section II.

Almost every jurisdiction within 100 miles of the Centroid of major New Urban Regions and many other jurisdictions responded to the perceived demand with plans and zoning to accommodate projected growth. This was the foundation of the overshoot.

A Vignette: A study of the four counties in the Washington-Baltimore Corridor where the Cores of the two SubRegions are coterminous (The Quad County Study) in the mid 70s documented that the four counties (Howard, Anne Arundel, Prince George’s and Montgomery) had planned to accommodate 7 times the projected two decade share of Regional growth in the I-95 Corridor.

Two other data points from the National Capital SubRegion:

In late 80s to mid 90s ‘plans’ for West Prince William County would accommodate floor area equal to four Midtown Manhattans. Much of this area was later ‘downplanned’ to accommodate scattered subdivisions of Urban dwellings and residential support Services.

In Eastern Loudoun County the planned capacity in the 80s and 90s was two Midtown Manhattans. Due to the Dulles Airport Aircraft Noise Zone some of the area was not replanned. In spite of Loudoun County being the fastest growing municipality in the 90s and the 00s, much of the land is still vacant. That is ‘fortunate’ since a six lane road (VA Route 28) is already congested because it was constructed by a special tax district to with land uses generating travel demand for serve 16 lanes if Large Private Vehicles are used to provide Access and Mobility.

As noted in Section V., in the 70s functional human settlement patterns for Urban uses needed to achieve a MINIMUM density of about 10 pn / ac at the Alpha Community scale to avoid ‘The Ponzi Scheme of the ‘sub’ urban experiment. About 94 percent of the citizens in the United States live in Urban Households. The majority of Households could, until 2005 live efficiently – if not sustainably – at densities of 10 persons per acre at the Alpha Community scale. This is the original PLANNED density of Reston, VA, Columbia, MD, The Woodlands, TX etc. See Chapter One THE SHAPE OF THE FUTURE.
As documented in SETTLEMENT PATTERN CONSILIENCE, Current Perspective #26 and summarized in Section V., The U TURN has moved that minimum sustainable density from 10 pn / ac to 30 pn / ac at the Alpha Community scale.

Ten persons per acre WAS the amount of land persons at the Alpha Community scale could make efficient and effectively use of in their daily lives. This is NOT Urban human’s ‘ecological footprint’ which also includes the land required for food, fiber, Recreation, air and water recharge and other support functions provided by land in the Countryside.

XII. END NOTE ON VOCABULARY AND CAPITALIZATION

In the evolution of a robust and functional Vocabulary to accurately articulate the complexity of human settlement patterns, SYNERGY / E M Risse avoids the use of Core Confusing Words and makes every attempt to create words, phrases and letter sequences that are intuitively clear in the context used.

Most words, phrases and letter sequences used in SYNERGY / E M Risse communications, Perspectives and books that APPEAR to exhibit ‘irregular Capitalization’ are defined in GLOSSARY linked from the RESOURCES page at www.emrisse.com. The evolution continues and some have not yet been added to SYNERGY’s GLOSSARY.

In addition to consulting GLOSSARY, one can Google ‘E M Risse’ and the words, phrases or letter sequences in question – for example ‘J / H / S / R / A’ – and find a definition and / or the word, phrase or letter sequence used in context.

Due to the fact that Capitalization survives most inter-systems translations, Capitalized terms are employed when a specific definition of a word or phrase is intended and ALL CAPS are used for emphasis. Reverences to specific resources not authored by E M Risse can be located via an Internet search. Links are also provided for key referenced resources.

XIII. SUGGESTED READINGS AND REFERENCES ON UNREAL ESTATE.

No useful discussion of The Shape of the Future – the path to a sustainable trajectory for human habitation – is possible without an understanding of the relevant resources and applying market based Quantification parameters to determine the amount of land needed for existing and future Urban fabric.
A. PRIORITY READING

In addition to the resources cited in each subsection of this Current Perspective please see.

Nelson, Arthur C., *Reshaping Metropolitan America; Developing Trends and Opportunities to 2030*. (2013)

Gallagher, Leigh, *The End of the Suburbs; Where the American Dream is Moving* (2013)


Leinberger’s subsequent report *DC: The Walk UP Wake-Up Call: The Nation’s Capital As a National Model for Walkable Urban Place* (2012) documents the market acceptance, Regional economic importance and minimal space demands of ‘Walk U Ps.’ This report provides the foundation for predicting the spacial impact of UNREAL ESTATE. Also see Badger, Emily, “Have We Reached Peak Sprawl?” The Atlantic Cities 2 October 2013.

A multi-phased ‘Activity Center’ study (1998 to 2003) by a SubRegional association of Agencies representing part of the National Capital SubRegion (Washington Area Council of Governments) was suppressed by the Institution when the spacial conclusions from Activity Center analysis were found to profoundly conflict with the published ‘predictions’ of member Agencies and Enterprises that rely on continued expansion of Urbanized land.


Professionals concerned with health understand what needs to happen: See *Designing Health Communities* (Richard J. Jackson with Stacy Sinclair (2012).

Professionals concerned with economics understand what needs to happen: See *The Economics of Place: The Value of Building Communities Around People*, Colleen Layton, Tawny Pruitt and Kim Cekola editors.

Professionals who understand the economics of infrastructure have documented the Ponzi Scheme basis for providing roads, water and sewer to service dysfunctional settlement patterns: See Marohn, Charles L. Jr., *Thoughts on Building Strong Towns*. (2012)

**Near Public Transportation.** American Public Transportation Association in partnership with National Association of Realtors. (2013)

In addition to the vast literature on ‘New Urbanism’ a number of authors have explored the nuts and bolts of building functional Urban fabric. See Oldenburg, Ray, *The Great Good Place.* (1989), Sucher, David, *City Comforts: How to Build an Urban Village* (1995), Lewenz, Claude, *How to Build a Village* (fourth printing 2007) and *Life, Liberty and Happiness: Something has Gone Wrong and What We Can Do About It*


Also see THREE OVERARCHING DETERMINANTS (Beta 3.0), Current Perspective #30 linked from the CURRENT PERSPECTIVE page at [www.emrisse.com](http://www.emrisse.com) Also see Current Perspectives #s 29, 28, 27 and 26.

**B. SUPPORTING REFERENCES**

The following are a few key of resources from the SYNERGY library that are useful in helping citizens understand UNReal Estate.


Lucy, William H., *Foreclosing the Dream; How Americas’s Housing Crisis is Reshaping Our Cities and Suburbs.* (2010)


McKnight, John, and Block, Peter, *The Abundant Community: Awakening the Power of Families and Neighborhoods.* (2010)


The author knows of no quantification of human settlement patterns that contradict the basic tenants of this Current Perspective. As noted in Subsection IX. C, there are those who pretend that The U TURN has not occurred. An Internet search of any of their books and postings will yield ample reasons why to ignore these advocates supported by Enterprises and Institutions that profit from the unsustainable trajectory of Business-As-Usual.

C. BIBLIOGRAPHIC NOTES

1. They Told You So

Wilfred Owen, E. F. Schumacher, Jane Jacobs and Eric Hoffer who’s contributions to an understanding of Human Settlement Patterns are profiled in *THE SHAPE OF THE FUTURE* and in *TRILO-G* were NOT the only ones writing books in the 50s, 60s and 70s that SHOULD have awakened citizen Awareness / Interest / Understanding / Action concerning the dysfunctional trajectory of human settlement patterns. Their work and that of many others should have prepared Households, Agencies, Enterprises and Institutions to evolve functional and sustainable human settlement patterns.

Before *Cities for People* (Jan Gehl, 2010) or *Made for Walking* (Julie Campoli, 2012) there was *The Shape of Towns* (Kurt Rowland, 1966) and *Streets for People* (Bernard Rudofsky, 1969). A listing of 78 of these publications in included as APPENDIX VI – BIBLIOGRAPHY in *A Study of Planning and Zoning Problems in Areas of Transition*, E M Risse (1968).

Among the books published after this New York State study which COULD have established a more enlightened path is Clawson, Marion, Suburban Land Conversion in the United States. (1971). Risse discussed his findings at length with Professor Clawson, a highly regarded land economist during the preparation of the New York State study. Professor Clawson chose to ignore the emerging reality of far more land being held for future Urban uses than there was a conceivable need. In general land economists are among those most afflicted by Geographic Illiteracy and Spacial Ignorance. Having never actually faced the challenge of converting raw land to Urban fabric, they are completely oblivious to the need for Quantification by organic component, the evolution of Balance Metrics or Access by Proximity.
2. Better Models For Evolving Functional Human Settlement Patterns were Ignored.

Here are a few of the ideas that surfaced between 1865 and 2005 that, while largely ignored, provided examples of how to evolve more functional settlement patterns.

As noted in Section V., the most dramatic physical changes in Urban fabric over the past 15,000 years have occurred in since 1850. Over this period there have been many ‘better’ models than what became mode-of-the-market ‘sub’urban (literally) settlement patterns.

New technology and the demand for Urban workers began to impact human settlement patterns in profound ways by the middle of the 19th century. In response to more intensive Urban development – required to put workers near industrial and Service Jobs reflecting Urbanization of the economy – and the problem of relying on horses for Urban transport (horse manure) resulted in growth of demand for upscale residential enclaves for the well-to-do near railroad stations outside the Urban fabric. These stations became ‘commuter stations.’

After the World War I similar development patterns agglomerated near roadways (‘parkways’) that provided access to the Urban Core via Large Private Vehicles. These developments created what appeared to be desirable Urban dwelling locations in a faux Countryside and provided a safe and secure environment for those who could afford the cost of Access.

Ebenezer Howard while working as a telegraph agent in Howard County, Nebraska observed a more Balanced approach to settlement patterns that evolved adjacent to stations along the expanding railroad lines serving Mid-Western agricultural Regions. Howard’s observations inspired his concept of Garden Cities as an alterative to Urban squaller in the Core of Greater London and ‘sub’urban isolation on the fringe.

Some Garden City-inspired Workforce Urban enclaves evolved to support disaggregated industrial activities were build in the United States. The idea of Planned New Communities next appeared in the New Deal Greenbelt Towns during the Depression.

In the meantime, there were also alternative settlement patterns proposed for auto oriented ‘subdivisions’ such as Radburn in New Jersey. Some of the railway and roadway commuter projects became attractive Neighborhood scale enclaves that later inspired founders of New Urbanism. Thus to some, New Urbanism was thought of as New SubUrbanism.

Following World War II the advent of the Levitt Towns and smaller agglomerations of similar dysfunctional fabric ignited the growing opposition to low density / ‘sub’urban settlement patterns.

In England, Scotland, Sweden, France and elsewhere the response to the need for Post War housing was an ambitious Planned New Community program.
In spite of adopted national policy (See Canty, *The New City*, National Committee on Urban Growth Policy (1969) and establishment of the HUD New Communities program Planned New Communities did not achieve the success envisioned. The private sector efforts of Jim Rouse (Columbia, MD) and Bob Simon (Reston, VA) that inspired the by partisan support reflected in *The New City* did not translate in to a successful national program.

The enthusiasm of planners and residents of these Planned New Communities as well as Irvine (CA), Peachtree City (GA) and The Woodlands Texas were never given an effective voice. It is a crime that Ann Forsyth who talked to all the right people to create *ReFormIng SubUrbiA: The Planned Communities of Irvine, Columbia and The Woodlands* was not more effective in outlining the lessons to be learned from these Planned New Communities and Planned New Villages. See Chapter 18 – Sources of Inspiration – Planned New Communities, The New Urbanism and other Prospects for Guidance on the Future – *THE SHAPE OF THE FUTURE* (2000).

The unprecedented development boom 1950 to 2005 provided the incentives for Business-As-Usual driven by the forces outlined in Section II. & III. In this context, the Planned New Community movement failed to generate a Critical Mass of support for alternative settlement patterns.

There was well founded opposition to ill-conceived Urban Renewal strategies anchored by Jane Jacobs (*Death and Life of Great American Cities* – 1961) and others. The ‘New-Town-In-Town’ idea also did not achieve a Critical Mass of support.

The realization that failure to fairly allocate the true cost of dysfunctional patterns and density of land use was subsidizing dysfunctional settlement patterns was recognized by the late 60s. See Risse, *A Study of Planning and Zoning Problems in Areas of Transition*, New York State Office of Planning Coordination (1968).

The ‘Cost of Sprawl’ dialogue (1974 to 1998) did not change the trajectory of human settlement pattern for three reasons:

♦ Over whelming subsides for scattered, auto-dependent settlement patterns.

♦ No comprehensive Conceptual Framework / no Robust Vocabulary so there was never a way to compare apples with apples – the organic components of human settlement patterns.

♦ There was a lack of political will to address externalities in ever more remote jurisdictions.
More recently ‘cost of sprawl’ studies have become more persuasive and support The U TURN. See Smart Growth America, *Fiscal Impact Analysis of Three Development Scenarios in Nashville-Davidson County, TN* (2013).

Due to the Urban focused turmoil in 1960s and 1970s, ‘white flight’ to auto-dependent jurisdictions became ‘the story’ of the 70s and 80s. As negative reaction to the proliferation of ‘sub’urban settlement patterns grew, a movement to ‘small towns,’ especially in areas of high Amenity became the ‘the story’ in the 80s and 90s.

Planned New Communities and New Urbanism (New SubUrbanism) as well as sensitive and functional Urban fabric revitalization have evolved full scale models of functional Urban settlement patterns at the Cluster, Neighborhood, Village and Community scales. This sparked a return to Urban locations in the late 80s. The shift in market preferences during the 90s became evident in the 2000 Census. It was the mid 00's before The U TURN became a reality.