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THE LITTLE BOOK:

***RESTRUCTURING Villages, COmmunities and
REgions, The Most Important Components of
Prosperous and Sustainable Human Habitat.***

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THE LITTLE BOOK: RESTRUCTURING Villages, Communities and REgions, The Most Important Components of Prosperous and Sustainable Human Habitat.

PROLOGUE – A Brief Introduction – NOT an Executive Summary

Before you dive into *THE LITTLE BOOK: RESTRUCTURING Villages, Communities and REgions*, the following notes will help readers **COMPLETELY UNDERSTAND** (aka, UnderStand) the scope and intent of this Four Chapter Perspective.

A. *THE LITTLE BOOK (TLB)* addresses fundamental questions related to the future of human civilization:

CHAPTER I:

Where is human society today and what is the current trajectory of human civilization? What are the roles of URban and NonURban human settlement pattern dysfunctions in the trajectory of contemporary civilization?

Once the existing trajectory is established, Chapter I also addresses additional questions: Why is the current trajectory worse than almost anyone admits? Is the current human civilization running on fumes and therefore may descend into **COLLAPSE** due to any one of many global, multi-nation-state, nation-state and REgional dysfunctions? What do we mean by “**COLLAPSE**”?

CHAPTER II:

How did human society acquire the current dysfunctional trajectory? Step by step down a path that was unsustainable at every turn over the past 150 plus-years and especially the last 70 years.

This Chapter also defines the Tools (Elements) of The Comprehensive Settlement Pattern Conceptual Framework.

CHAPTER III:

What Profound Transformations must citizens implement to achieve a prosperous economy, a stable social structure and a sustainable planetary environment? In addition: What must citizens of the United States do to survive and thrive, while at the same time providing positive, sustainable models for other societies? What is the scope of the imperative steps that must be taken?

Chapter III focuses on the core message of TLB. This Chapter articulates the Profound Transformations and intelligent actions with respect to:

STRUCTURE,

INFRASTRUCTURE &

SUPERSTRUCTURE of human civilization.

These Profound Transformations and intelligent actions must be undertaken to achieve resilient, sustainable settlement

patterns. In turn, these patterns – aka, functional human habitat – are required to achieve intelligent governance, economic prosperity, social stability and environmental sustainability.

CHAPTER IV:

Functional human settlement patterns are the sine qua non of a sustainable trajectory for civilization. How do citizens overcome obstacles to actions intended to address the compounded economic, social and physical dysfunctions in order to achieve functional human settlement patterns?

Chapter IV examines the overarching objectives and milestones based on an Understanding of the COMPREHENSIVE SETTLEMENT PATTERN CONCEPTUAL FRAMEWORK articulated in Chapter II.

Chapter IV also documents that there MAY BE light at the end of the tunnel. Time is of the essence.

If you are looking forward to skimming these perspectives and expect to grasp the scope of this book, please put the book down and go for a long walk – or whatever you usually do to clear your head. NOTE P – ONE

NOTE P – ONE: ON VOCABULARY & CAPITALIZATION.

This NOTE updates both APPENDIX ONE – LEXICON and APPENDIX TWO – CORE CONFUSING WORDS of *THE SHAPE OF THE FUTURE* (2000)

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 several Core Confusing Words and attempts to evolve words, phrases and letter sequences that are intuitively clear in the context used. The Core Confusing words that are avoided include UNCAPITALIZED use of the words “city”, “exurban”, “family”, “local”, “rural”, “sprawl”, “sub”urban”, “suburban” and “urban”.

Capitals are employed for the key settlement pattern Vocabulary because words that have specific meanings with respect to human settlement patterns must be treated like Proper Nouns to avoid confusion. Within the guidelines of conventional grammar, ENterprises, AGencies and INstitutions are free to employ All Caps, Initial Caps and Interior Caps to differentiate and advertise their products and services. Parents create new Proper Nouns when they become parents.

Why should those trying to UnderStand and articulate the complexity of human settlement patterns be required to rely on confusing words and phrases and arcane rules of grammar?

Due to the fact that Capitalization survives most inter-system translations, Capitalized terms are employed when a specific definition of a word or phrase is intended. ALL CAPS are used for emphasis. This is because *italics*, underlining, **bold**, **color** and **highlighting** are often removed in software translations – e.g. different software used by email providers.

Many words, phrases and letter sequences used in SYNERGY / E M Risse communications, Perspectives and books that APPEAR to exhibit ‘irregular capitalization’ are defined in the GLOSSARY linked from the *RESOURCES* page at www.emrisse.com. The evolution continues and some use of Capitals have not yet been added to SYNERGY’s on line GLOSSARY. Many of the words used by SYNERGY are defined in ***THE SHAPE OF THE FUTURE***, APPENDIX ONE – LEXICON, however, these definitions were current when the book was last revised.

In addition to consulting the GLOSSARY, one can Google ‘e m risse’ followed by the word, phrase or letter sequences in question – for example ‘e m risse J / H / S / R / A’ – and find a definition and / or find the word, phrase or letter sequence used in context.

Links are not provided for referenced resources which are out of the control of SYNERGY. References to resources not authored by E M Risse can be located via an Internet search.

An expanded Capitalization strategy has been employed since the publication of CP # 33 (June 2014). In the past, a second capital has been used **WITHIN** compound words with specific meanings (e.g. OpenSpace, SubRegional, etc.) to focus attention on the need to understand the exact meaning of these terms.

As noted in APPENDIX TWO of ***THE SHAPE OF THE FUTURE***, there are some confusing words for which there is no good substitute in English. In the past the words Unit, Cluster, Neighborhood, Village, Community and Region (including New URban REgions) have been capitalized. In Current Perspective # 33 and subsequent publications, a double capital is used to start the title of each organic component of human settlement pattern – e.g. UNit, CLuster, NEighborhood, VillAge, COmmunity, REgion. Also additional words will be given an interior Capital (e.g. HouseHold) as the need arises.

If you do **NOT** find the avoidance of Core Confusing Words and expanded Capitalization to indicate the application of a precisely defined Vocabulary useful to articulate a comprehensive Conceptual Framework for human settlement patterns, you are welcome to create your own Vocabulary system to achieve UnderStAnding in the context of Awareness => Interest => UnderStAnding => Informed Action with respect to human settlement patterns.

However: Do not be deluded and think that you will achieve UnderStAnding much less Informed Action using an inadequate Vocabulary which triggers Unfounded and Conflicting Neural Linguistic Frameworks. These words reflect Disorienting Naive Reality founded on Primitive Genetic Proclivities. See Current Perspective # 24 *Live By / Die By* linked from the *CURRENT PERSPECTIVES* page at www.emrisse.com .

NB: Evolving a functional Vocabulary is an ongoing process and feed back is welcomed. Please DO NOT provide blanket negative feedback UNLESS you also provide an alternative strategy to evolve a functional Vocabulary. The continued use of Core Confusing Words and limited Capitalization of words – especially for the organic components of human settlement – is NOT an acceptable response. Also see *Millennials Destroyed the Rules of Written English and Created Something Better: The Spelling and Grammar Rules Do Not Apply on The Millennial Internet*, Rachel Thompson, *Mashable* (2 APR 2018).

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B. COMPREHENSIVE SETTLEMENT PATTERN CONCEPTUAL FRAMEWORK

Chapter II of this Perspective articulates the COMPREHENSIVE SETTLEMENT PATTERN CONCEPTUAL FRAMEWORK with which one can UnderStAnd functional human settlement patterns and their importance to human survival.

Many paragraphs contain perspectives, principles, strategies, tactics and programs that may be new to most citizens. This lack of familiarity exists despite two centuries of scholarly articulation by George Tucker, Alexis de Tocqueville, Henry George and others and by 70 years of well regarded professional work by Benton MacKaye, Loren Eiseley, Ian McHarg, Christopher Alexander, Bernd Forester, Wes Jackson, Rachael Carson, Wilfred Owen, Lewis Mumford, Constantinos Doxiadis, Jane Jacobs, Herman Daly, David Brandon, Richard Florida, Richard Heinberg and Asher Miller. The **COMPREHENSIVE SETTLEMENT PATTERN CONCEPTUAL FRAMEWORK** is intended to provide a framework with which to UnderStAnd the perspectives of tens of thousands of well respected professionals who have now spoken, written and help evolve URban fabric in accordance with the perspectives addressed in *THE LITTLE BOOK*. **NOTE P – TWO**

NOTE P – TWO: THOSE WHO ALREADY AGREE IN PRINCIPLE WITH MANY OF THE PERSPECTIVES IN *THE LITTLE BOOK*.

Some may question the reference to “10s of Thousands of well-respected professionals having spoken, written or helped evolve URban Fabric in accordance with the perspectives addressed in *THE LITTLE BOOK*.” Estimates relied upon to support this assertion are based on the author’s academic and professional experience. The following are the rounded memberships numbers for the primary national professional INstitutions most concerned with settlement patterns and the percent of each INstitution’s membership that can be assumed to be on the same general wave length as the author with respect to Human Settlement Patterns: American Institute of Certified Planners, 38,000 / 20%; American Society of Landscape Architects, 15,000 / 15% , American Institute of Architects, 90,000 / 5%, National Society of Professional Engineers, 35,000 / 2.5% ; Congress of New Urbanism 2,600 / 70% with considerable overlap of professional INstitutions: Smart Growth America, 20,000, 80% with almost complete overlap with professional INstitutions. These estimates total well over 31,000. Add to this the Journalists, “Urbanists,” “Urban Economists” and “REgional Strategists” who have become more than just ‘familiar’ with the need for functional settlement patterns. Many are cited in the text and NOTES of *THE LITTLE BOOK*.

At the same time, some of these professionals and others may DISAGREE with perspectives articulated in this volume until they UnderStand their context – that is the function of the **COMPREHENSIVE SETTLEMENT PATTERN CONCEPTUAL FRAMEWORK**.

In addition to those who broadly agree, many others who only touch one or two of the key elements of the Comprehensive Settlement Pattern Conceptual Framework, if given the opportunity to consider the context and contents, would concur with the Perspectives presented in *THE LITTLE BOOK*.

If this is so, why is there not a more comprehensive perspective from the current fire hose of ‘information’ on aspects of human settlement patterns. **First**, almost all professionals now rely on the use of the **Core Confusing Words** and there-by confuse clients, colleagues and audiences. **Second** – and closely related – they lack access to a **Comprehensive, Robust Vocabulary** with which to communicate. **Third** they do not yet have access to the **Comprehensive Settlement Pattern Conceptual Framework** or some alternative comprehensive framework. Some rely on “The Transect” which often does more harm than good in gaining a comprehensive perspective, This is especially true with respect to the smaller components of Organic Settlement Patterns.

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In spite of this work, most settlement pattern realities and the central importance of creating functional human settlement patterns to avoid COLLAPSE remains territory *incognito* for the vast majority of the United States' citizens and their 'leaders.'

C. STRUCTURE, INFRASTRUCTURE AND SUPERSTRUCTURE.

Chapter III of this volume is an examination of three Frameworks of Human Civilization – Structure, Infrastructure and Superstructure – as articulated by Asher Miller. **NOTE P – THREE**

NOTE P – THREE: THE STRUCTURE OF CIVILIZATION

Asher Miller, the Executive Director of the Post Carbon Institute, in the opening of a 23 May 2017 email on Resilience, notes that “Structure” relates to the organization of the society – **ECONOMIC, SOCIAL AND PHYSICAL**. “Infrastructure” relates to the **ECONOMIC, SOCIAL AND PHYSICAL** means of obtaining and using food, water, energy and material. “Superstructure” consists of **SOCIAL** beliefs and rituals that supply a sense of meaning. The clarification supplied by the Capital and bold typeface in this NOTE reflect the Authors interpretation of Miller’s categories.

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D. TWO FUNDAMENTAL REALITIES

There are two fundamental realities upon which the COMPREHENSIVE SETTLEMENT PATTERN CONCEPTUAL FRAMEWORK rests. Citizens must come to UnderStand the importance of these realities.

Fundamental Reality One:

Human settlement patterns are complex Organic Systems. The COMPREHENSIVE SETTLEMENT PATTERN CONCEPTUAL FRAMEWORK introduced in Chapter II and by the work of E M Risse reflects several specific natural laws governing Organic Systems that are critical to functional human settlement patterns. Functional human settlement patterns do not conflict with any of the laws of Organic Systems.

The science of human settlement patterns is NOT rocket science, it is far more complex.

This complexity arises because the individual organisms and groups of organisms within the system have the ability to change and evolve the settlement patterns and thus the quantitative parameters of the relevant natural laws. Further, “Primitive Genetic Proclivities” continue to distort Homo sapiens decisions in ways that are in conflict with the continued evolution of functional and sustainable settlement patterns, functional economic systems, stable social relationships and rational governance structures. **NOTE P – FOUR**

NOTE P – FOUR

In Chapter I there is reference to human’s “Stone Age Brain” based on the fact that since the Paleolithic Period the size of the Homo sapiens brains have not increased in size. According to Google it would appear that E M Risse coined the phrase “Primitive Genetic Proclivity.” See reference to Current Perspective # 24 *Live By / Die By* linked from the *CURRENT PERSPECTIVES* page at www.emrisse.com Both E O Wilson -- in, for example, *The Social Conquest of Earth* (2012) and especially in *The Meaning of Human Existence*, (2014) e.g. “genetic predeterminations”, and “The Paleolithic Curse” – as well as Jared Diamond, in for example *The World Until Yesterday* (2012) articulate perspectives related to “Primitive Genetic Proclivities.”

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In the fourth century BCE Aristotle stated (Constantinos Doxiadis translation) that human settlement patterns were “an organic system.” This observation is well founded and consistent with contemporary science. However, those who have studied, discussed and impacted human settlement patterns, especially over the past 70 years have chosen to completely ignore the fundamental reality that:

TO REPEAT: HUMAN SETTLEMENT PATTERNS ARE COMPLEX ORGANIC SYSTEMS AND ARE SUBJECT TO THE NATURAL LAWS OF ORGANIC SYSTEMS.

In the known Universe there are two comprehensive ordering systems: One for Inorganic Systems (controlled by ‘laws’ such as thermodynamics, etc.) and one for Organic Systems. Organic Systems are controlled by the laws of inorganic systems (e.g. gravity) in addition to the laws of organic systems. **NOTE P – FIVE**

NOTE P – FIVE: TWO FUNDAMENTAL ORDERING SYSTEMS IN THE KNOWN UNIVERSE.

If you believe there are more than two fundamental ordering systems in the known Universe put down this book and document your third (or more?) system(s). Then prepare for a trip to Stockholm to collect your Nobel prize. If you do not believe that human settlement patterns are organic systems, take that up with Aristotle. No one has proven him wrong, they just ignore the ramifications of settlement patterns being complex organic systems.

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Fundamental Reality Two:

**UNDERSTANDING COMPLEX ORGANIC SYSTEMS
REQUIRES A PRECISE, ROBUST VOCABULARY.**

Comprehending the Comprehensive Settlement Pattern Conceptual Framework, defined in Chapter II, requires – nay DEMANDS – the use of several precise word and phrase definitions as well as updated capitalization protocols. This straight forward Vocabulary defines and articulates the anatomy of, and the interrelationships between, critical human settlement pattern components and parameters. Some may think that “vocabulary” cannot be THAT important to be one of two “fundamental realities” – IT IS. See again NOTE P – ONE

This Perspective presents specific, straight forward realities – principles, strategies, tactics and programs – with respect to human settlement patterns. One principle dates back over 2330 years, others as much as two centuries. However, most have their origins in the past 70 years. Almost all the principles, strategies and tactics advocated in this Perspective have been field tested somewhere on the Planet. Some of the most important ones have been field tested by the author.

Many of these principles, strategies and tactics have been – and continue to be – dismissed or avoided by the ‘leadership’ of human ORganizations. In this context, It is important to UnderStand that “ORganizations” established by humans include ENterprises, INstitutions, AGencies and HHouseholds.

‘Leaders’ fear that actions on needed Fundamental Transformations will negatively impact their spheres of control, power and influence. UnderStanding the principles, strategies and tactics is critically important in an era of “post-truth” confusion concerning a better way forward via enlightened governance, enterprise and philanthropy.

E. THE FOUNDATIONS OF THIS SUMMARY VOLUME

This is the third of three books by E M Risse. Many of the facts and insights in this book are based on two previous multi-volume books, *THE SHAPE OF THE FUTURE* (2000) and *TRILO-G* (2010).

Digital copies on CD's are bound with the printed version of TLB for ease of reference. The theses articulated in these books first emerged while carrying out research under contract to the New York State Office of Planning Coordination (1968 – 1972). The result of this work was contained in “*A Study of Planning and Zoning Problems in Areas of Transition*” E M Risse (1969). This study led to the Draft Planning and Zoning Enabling Act summarized in “*The Structure of Land-Use Planning: A Reappraisal and a Program*” 21*Syracuse Law Review* 2 *Winter 1969* (with James Coon) and to drafting the New York State legislation that now protects the 6 million acre Adirondack Park.

The author further articulated and refined the theses as he gained further experience: Teaching planning and design in a school of architecture; and Planning and supervising the implementation of Planned New Communities. (See “Bio / CV” page at www.emrisse.com)

A general overview of this material was presented to the World Futures Society's national conference in July 1989 and, after peer review, was published in *Futures Research Quarterly* Vol 9. Num 3, Fall 1993 as “**The American Settlement Pattern of the 21st Century – Where are the “sub”urbs Going?**” This document outlines the process of Urbanization from 1820 to 1990 in the United States. It identifies and quantifies the vast land area wasted on unsustainable scattered urban land uses. The paper also examines the evolution of urban form from the Fourth Century BCE to the present. An ever-more complex Conceptual Framework was articulated in SYNERGY reports. See for example *The Shape of Loudoun County's Future* (1998) and *The Shape of Prince William County's Future* (1999). The Conceptual Framework was first comprehensively articulated in *THE SHAPE OF THE FUTURE* (2000).

The same themes were articulated in *TRILO-G* and in material linked from the *RESOURCES* Page of www.emrisse.com. Again see “Bio / CV” page at www.emrisse.com They were also articulated in academic and in-service seminars, workshops and interviews. For example see

“*Fundamental Transformations, Community survival depends on Physical Metamorphosis.*” Bill Walsh, *Piedmont Business Journal* Spring 2011.

In addition to the publications noted above, the author had the opportunity over the last eight decades to live for at least a year in 15 communities in the United States – including Hawaii and Puerto Rico. These communities also included four large Planned New Communities – Columbia, MD (8 years), Reston, VA (8 years), Fairfax Center, VA (14 years) and The Woodlands, TX (current). He also traveled extensively in Europe and the Caribbean from Haiti to Tobago. The opportunity to live, work and learn in these diverse environments while living in

a range of shelter options provided valuable experience. See *Why Reston, Virginia, Still Inspires Planners 50 years Later*, Julian Spector 23 Mar 2016.

F. ***THE LITTLE BOOK – A BOOK FOR ALL SEASONS***

The Secretary of the Smithsonian Institution, I. Michael Heyman noted in the Foreword to ***THE SHAPE OF THE FUTURE*** (2000) that the first two volumes were written “not only for scholars and professionals, but for all people who are interested in understanding why many maladies of contemporary civilization are rooted in dysfunctional settlement patterns and how these can be changed.”

THE LITTLE BOOK was conceived in the spirit of *Why We Need a Better ‘Science of Cities [Core Confusing Word – CCW]’*, Richard Florida *The Atlantic Cities: Place Matters*, (Sept 2012). Some have considered the author’s three books – ***THE SHAPE OF THE FUTURE*** (2000), ***TRILO-G*** (2010) and ***THE LITTLE BOOK*** suggest that they lay the foundation for a ‘Unified Field Theory of Human Settlement Patterns.’

Because of the length of the first two books (presented in five volumes totaling over 5,470 pages) the most common response has been avoidance. (To paraphrase those who have viewed these books “A sustainable trajectory for human society just cannot be THAT complex and counterintuitive.”)

The first volume of ***THE SHAPE OF THE FUTURE*** (2000) documents **The Critical, Overarching Impact of Human Settlement Patterns on Citizens’ Economic, Social and Environmental Well-being**. The **New Urban Region** is demonstrated to be the primary building block of contemporary civilization. This volume also documents why the **New Urban Region** is the smallest Organic Component of human settlement that has the capacity to be resilient enough and have the Critical Mass to potentially be sustainable.

The second volume in ***THE SHAPE OF THE FUTURE*** outlines how citizens can **Prosper in 21st century New Urban Regions**.

The second book – published in electronic form – ***TRILO-G: Foundations, Bridges, Actions: How to Make the World a Better Place One Alpha Community at a Time*** (2010) applies lessons from the ‘00s to the principles outlined in ***THE SHAPE OF THE FUTURE*** and provides summaries of strategies that have been field tested.

TRILO-G establishes that Alpha Communities are, after **New Urban Regions**, the most important component of human settlement patterns. There are in total seven organic Components of New Urban Regions – HOUseHolds, DOOrYards, CLusters, NEighborhoods, Villages, and COMMunities.

The principles, strategies and tactics in *TRILO-G*, suggests how citizens and their ORganizations can restructure and evolve functional and sustainable New Urban Regions and their organic components.

Both earlier books document the need to evolve a precise Vocabulary in order to intelligently confront the crises facing citizens in 2018. **Again, please refer to NOTE P – ONE.**

As articulated in the prior books, human ORganizations are now structured to include ENterprises (established to make a profit), AGencies (established to manage human economic, social and physical activities aka to govern) and INstitutions (established to carry out ALL OTHER economic, social and physical actions not intended to make a profit or to govern) and HOUSeHolds. In this text, HOUSeHold replaces the use of the word ‘family’ in discussions of settlement patterns. This is done in order to distinguish HOUSeHolds from the many contemporary uses of the word ‘family’ when uncapitalized.

G. NAVIGATION DETAILS

The current volume is not a scholarly essay that follows arcane rules for citations and references. In the age of computers and Internet searches there is no rational reason for pro forma footnotes or formal citations. This Perspective includes NOTES that provide added context for the points raised. If readers have questions about specific words, phrases or strategies, as suggested by **NOTE P – ONE**, if in **Bold** and *Italics* there is an easy path to finding the meaning of words and phrases used in this Perspective. Not only the cited documents but also the resources noted in the referenced documents address and support the perspectives raised in *THE LITTLE BOOK*.

This Perspective is written for citizens of the United States. Many of the principles, strategies and tactics can be applied in other ‘developed’ / ‘first world’ / ‘Advanced Industrial Democracies.’ Many of the principles, strategies and tactics have already been applied in the European Union as well as in individual nation-states and sub-state ORganizations.

Because the United States has branded itself a ‘world leader’ and as a ‘beacon of Democracy’ for the global community, this nation-state must solve its own problems but also provide leadership for the planet’s human population. The U.S. of A. must help turn workers and peasants into resilient, and self-sufficient HOUSeholds of citizens to achieve a sustainable trajectory for human civilization..

Even if some or most of the recommendations in this Perspective are implemented, that does not mean that citizens and human civilization are out of danger. That is an indication of how human ORganizations have allowed the achievement of sustainability and resiliency to languish. Recent experience suggests that citizens will go to almost any length to secure what they hope will be better economic, social and physical outcomes. See Chapter I and II for an exploration of current

conditions and how citizens of the United States arrived at the present state of compounded dysfunction.

We wrap up this Prologue with a question raised by Loren Eiseley:

From very high altitude, – and especially from the Moon – Planet Earth appears to be a pristine green & blue sphere. Loren Eiseley in **The House We Live In** (1946 / 1957) [restated by Ian McHarg in *Design With Nature* (1969)] raises the following question:

Do the black, brown and gray blotches on the green and blue Planet document that “man is a planetary disease?”

THE LITTLE BOOK leaves it to the reader to decide if humans have a realistic chance to avoid a positive answer to Eiseley’s question.

PROLOGUE NOTES:

(At conclusion of editing, place Prologue Notes here)

CHAPTER I

Where is human society today and what is the current trajectory of human civilization? What are the roles of Urban and NonURban human settlement pattern dysfunction in the trajectory of contemporary civilization?

Once the existing trajectory is established, Chapter I also addresses additional questions: Why is the current trajectory worse than almost anyone admits? Is the current human civilization running on fumes and therefore may descend into **COLLAPSE** due to any one of many global, multi-nation-state, nation-state and REgional dysfunctions? What do we mean by “**COLLAPSE**”?

PART ONE – THE TRAJECTORY OF HUMAN CIVILIZATION

A. OVERVIEW OF THE CURRENT TRAJECTORY

Almost everywhere one looks, things seem to be falling apart. Is this just an illusion caused by the mass media’s hyper bullhorn that are based on the 24 hour news cycles and drive readership / viewership and thus advertising revenue? Is it the result of the two party monopoly’s partisan spin and counter spin? Is it the work of Russian trolls messing with our minds and our rights? Is it a product of the complexity of contemporary society? Is it all of this and more that are cumulatively putting “western civilization” on the trajectory to **COLLAPSE**?

It turns out that complexity and dysfunctional government, economic and physical **STRUCTURES** are the key drivers of the **COLLAPSE** trajectory. However, they are not the **ONLY** drivers. This Chapter focuses on grim reality. However, **THE LITTLE BOOK** in later

Chapters provides strategies, principles and programs to address current reality and turn civilization's trajectory positive.

Lets us start with the basics: Almost without exception individual citizens and their leaders focus on a handful of conditions and contexts. They focus on those factors that they believe most directly impact their personal Health, Wealth and WellBeing.

Goal-driven humans focus on winning the next election, on making the next million, on running the next marathon, on creating a beautiful landscape or on similar personal milestones.

NON-goal-oriented citizens shrug (“What, me worry?”) or are paralyzed by the contemporary complexity. In either case they just “go with the flow” or become True Believers of unfounded, convoluted conspiracy theories.

Yes, there are individuals and small INstitutions which, in spite of having rational, factually based perspectives are drowned out by the ‘Business As Usual’, ‘Let The Good Times Roll’, ‘Do Not Let The Perfect Drive Out The Good,’ “those who claim that a rising economic tide raises all boats in an equitable fashion” and the True Believers of all stripes.

A few work to optimize the good that their efforts and bequests can achieve. See Current Perspective #3 *Degrowth-Shrinking to Survive then Prosper*, 13 June 2010 linked from the CURRENT PERSPECTIVES page at www.emrisse.com.

The truth is that the vast majority of citizens and their leaders are not paying attention to the implications of the current trajectory of civilization. They are not acting to improve the overarching trajectory of civilization. This is a classic case of citizens failure to UnderStand or devote their resources to their own enlightened self-interest.

This book is a four chapter Perspective on dysfunctional human settlement patterns and on what is needed to evolve functional settlement patterns. Functional and sustainable human settlement patterns are the sine qua non of achieving sustainable trajectory for human society.

Dysfunctions in human settlement patterns are not often considered in a discussion of the future trajectory of civilization. They should be, as documented by this Perspective and the sources cited herein.

B. THE FIRST TRANSECT

The first step is to grasp the general parameters of civilization's current trajectory.

In April of 2017 BBC published a sampling of expert opinions on the current trajectory of civilization by Rachel Nuwer. This perspective is part of a *BBC* feature on "the shape of the future."

Below are some of the most important bullets from *How Western Civilisation Could Collapse*.

- ◆ It should come as no surprise that humanity is currently on an unsustainable and uncertain path –but just how close are we to reaching the point of no return?
- ◆ According to Benjamin Friedman, human society is akin to a rolling bicycle. Should the forward-propelling motion [from Friedman's perspective that is "economic growth"] slow or cease, the pillars that currently define our society – democracy, individual liberties, social tolerance and more – would begin to teeter. Our world would become an increasingly ugly place, one defined by a scramble over limited resources and a rejection of anyone outside of their immediate group [aka 'folks just like me.']. Should we find no way to get the wheels back in motion, [dysfunctional human settlement patterns is a primary rich winners and poor losers] we'd eventually face total societal COLLAPSE.
- ◆ Elites push society toward instability and eventual COLLAPSE by hoarding huge quantities of wealth and resources, and leaving little or none for commoners who vastly outnumber them yet support them with labour. Eventually, the working population crashes because the portion of wealth allocated to them is not enough. This is followed by COLLAPSE of the elites due to the absence of labour. See *Dream Hoarders: How the American Upper Middle Class is Leaving Everyone Else in the Dust, Why that is a Problem, and What to do about it*, Richard Reeves, *Brookings Institution* (2017).
- ◆ Another sign that we're entering into a danger zone is the increasing occurrence of what experts call nonlinearity [punctuated equilibria], – sudden, unexpected changes in the world's order, such as the 2008 economic crisis, the rise of ISIS, Brexit, the 2016 presidential election in the United States [or the unexpected severity of the 2017-2018 flu epidemic and the Next Energy Crisis profiled later in this Chapter].
- ◆ Imperial Rome fell because eventually, Rome could no longer afford to prop up the heightened complexities of managing its empire. While not a

democracy, it was fiscal weakness, not war [or barbarians], that did the Roman Empire in. So far, modern Western societies have largely been able to postpone similar precipitators of COLLAPSE by burning through fossil fuels [Natural Capital] and by industrial technology innovation – think hydraulic fracturing coming along in 2008, just in time to offset soaring oil prices.

NOTE I – ONE contains longer excerpts from the *BBC* article. This NOTE provides context and references supporting the bullets above. If a reader has any doubt about the bullets, read **NOTE 1 – ONE** If still in doubt, read the references provided by Rachel Nuwer.

NOTE I – ONE

The following is a lightly edited (to provide continuity with emphasis added) version of paragraphs that provide context for the passages from the April 2017 BBC Perspective *Future – How Western Civilisation Could Collapse: Some possible precipitating factors are already in place. How the West reacts to them will determine the world’s future*, by Rachel Nuwer. The full version of Nuwer’s perspective contains links to the cited material.

“Putting aside species-ending events like an asteroid strike, nuclear winter, a deadly pandemic [or a Super Volcano eruption], history tells us that it’s usually a plethora of factors that contribute to **COLLAPSE**. What are they, and which, if any, have already begun to surface? **It should come as no surprise that humanity is currently on an unsustainable and uncertain path –but just how close are we to reaching the point of no return?**

“In *The Moral Consequences of Economic Growth*, the political economist Benjamin Friedman compared modern Western society to a stable bicycle whose wheels are kept spinning **BY ECONOMIC GROWTH** [emphasis added]. **Should that forward-propelling motion slow or cease, the pillars that define our society – democracy, individual liberties, social tolerance and more – would begin to teeter. Our world would become an increasingly ugly place, one defined by a scramble over limited resources and a rejection of anyone outside of our immediate group. Should we find no way to get the wheels back in motion, we’d eventually face total societal Collapse.**

“According to findings that Safa Motesharrei [System Scientist at the University of Maryland] and his colleagues published in 2014, there are two factors that matter: ecological strain and economic stratification. The ecological category is the more widely understood and recognized path to potential doom, especially in terms of depletion of natural resources such as groundwater, soil, fisheries and forests – all of which could be worsened by climate change.

“That economic stratification may lead to collapse on its own, on the other hand, came as more of a surprise to Motesharrei and his colleagues. **Under this scenario, elites push society toward instability and eventual collapse by hoarding huge quantities of wealth and resources, and**

leaving little or none for commoners who vastly outnumber them yet support them with labour.

“Eventually, the working population crashes because the portion of wealth allocated to them is not enough, followed by Collapse of the elites due to the absence of labour. The inequalities we see today both within and between countries already point to such disparities. For example, the top 10% of global income earners are responsible for almost as much total greenhouse gas emissions as the bottom 90% combined. In addition, about half the world’s population lives on less than \$3 per day.

“According to Thomas Homer-Dixon, chair of global systems at the Balsillie School of International Affairs, Waterloo, Canada and author of *The Upside of Down* :

“Another sign that we’re entering into a danger zone is the increasing occurrence of what experts call nonlinenarities [or punctuated equilibria], or sudden, unexpected changes in the world’s order, such as the 2008 economic crisis, the rise of ISIS, Brexit, or the 2016 presidential election in the United States.

“According to Joseph Tainter, a professor of environment and society at Utah State University and author of *The Collapse of Complex Societies*, one of the most important lessons from Rome’s fall is that complexity has a cost. As stated in the laws of thermodynamics, it takes energy to maintain any system in a complex, ordered state –and human society is no exception. By the 3rd Century AD, Rome was increasingly adding new things –an army double in size, a cavalry, subdivided provinces that each needed their own bureaucracies, courts and defenses –just to maintain its status quo and keep from sliding backwards. **Eventually, it could no longer afford to prop up those heightened complexities. It was fiscal weakness, not war, that did the Roman Empire in.**

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C. THE SECOND TRANSECT

Here is a second transect through the current trajectory of contemporary civilization on planet earth.

In late November 1992, the Union of Concerned Scientist’s issued an open letter: *Science for a Healthy Planet and Safer World* signed by 1700 Scientists. On 13 November 2017 came a second open letter titled *World Scientists’ Warning to Humanity: A Second Notice*. It was signed by 15,373 members of The Alliance of World Scientists. See *Thousands of scientists issue bleak ‘second notice’ to humanity*, Sarah Kaplan 13 Nov 2017 *The Washington Post*.

“SOON IT WILL BE TOO LATE TO SHIFT COURSE AWAY FROM OUR FAILING TRAJECTORY.”

The new report from scientists graphs the trajectory of the nine global indicators of dysfunction that were the subject of the 1992 open letter. The ‘Indicators’ are: freshwater resources per capita; reconstructed marine catch; marine dead zones; total forests; vertebrae species abundance; carbon dioxide emissions; global temperature change; ozone depletors and population. All have direct relationships to human settlement patterns on the planet. All but one of the indicators have continued their unsustainable plunge since 1992.

Only the release of ozone depletors have improved. This Indicator is now ‘back down’ to 1988 levels. Not great but better.

Chapter IV of this Perspective includes a further analysis of this indicator documented by the very recent science.

There is a third transect through this same territory: In *The Shape of the Future* (2000) this author documented that human settlement pattern has controlling impact on civilization’s economic, social and physical conditions. In preparation of material for *THE LITTLE BOOK*, the author has assembled the summary of settlement pattern dysfunctions organized in the Economic, Social and Physical Spheres of Human Activity. This three part summary is presented later in Chapter I.

As will be documented in the Perspective the fact is that if one examines any of the general dysfunctions in detail there are levels upon levels of cascading dysfunctions.

D. JUST THE FACTS

Of critical importance are the facts that:

World-wide, there is grossly inequitable distribution of Citizen Wealth & Well Being AND At the same time,

There is Mass OverConsumption of resources by those who can afford this level of consumption.

The expanding population and current living standards of those at the bottom of the economic Ziggurat requires more effective education, and raising the standard of living and this in turn demands profoundly improved governance,

economic and physical Structures and profoundly different distribution of resources and wealth.

There is a planet-wide lack of Affordable and Accessible Housing – a profound shelter crisis. *Why losing a home means losing everything: How the housing market exploits the poor – and keeps them in poverty*, Emily Badger, *Workblog* (29 FEB 2016), *Losing a home, and losing hope*, Carlos Lozada, *The Washington Post* (6 MAR 2016), *Evicted: Poverty and Profit in the American City*, Matthew Desmond (2016), *Who Should Pay for a City's Homelessness Crisis?* Sarah Holder (26 July 2018), *Vacancy: America's Other Housing Crisis*, Richard Florida (27 July 2018.)

It appears that Advanced Democracies cannot survive gross inequity.

For democracy to survive, the majority of citizens of all stations and in all economic, social and physical Ziggurats must believe that they, and especially their children, have a chance to gain standing and achieve prosperity if they work hard and act in ways that support their enlightened self-interest (aka: “Keep their nose to the grindstone”).

In times past dysfunctional governance structures have maintained control over “the masses” in spite of vast differences in between the elite and the bottom 80 to 99 percent of the social, economic and physical Ziggurat. That WAS possible because many at the bottom of the Ziggurat were illiterate and did not have access to data, knowledgeable leadership and means of communication and weapons that can be lethal at a distance. Saying ‘we have always had down trodden majorities’ reflects ignorance of historic dynamics.

See perspectives supporting this summary in the following resources: *American Dream collapsing for young adults: Upward mobility declines for all Americas, but especially for the middle class*, Jim Tankersley, *The Washington Post* (9 OCT 2016.), Also see again *Dream Hoarders: How the American Upper Middle Class is Leaving Everyone Else in the Dust, Why that is a Problem, and What to do About It*, Richard Reeves, *The Brookings Institution*, 2017 and *“Inclusive Prosperity is Incredibly Rare”* (Richard Florida May 2017)

To UnderStand the context of this reality, contrast *The Moral Consequences of Economic Growth*, Benjamin Friedman (2005) – which contains the bicycle analogy referenced above – with *The Price of Inequality*, Joseph Stiglitz (2012). This inequality has been exacerbated by *SuperCapitalism: The Transformation of Business, Democracy and Everyday Life*, Robert Reich (2008) and *The Age of Greed: The Triumph of Finance and the Decline of America, 1970 to the Present*, Jeff Madrick (2011).

Consider these positions in the perspective provided by *Capital in the Twenty-First Century*, Thomas Piketty, (2014), *The Rise and Fall of American Growth*, Robert Gordon (2016) and *The Equality Effect: Improving Life for Everyone* Danny Dorling (2017)

Friedman’s book *The Moral Consequences of Economic Growth* cited above is often quoted to support “growth” as a universal good. However, this perspective is anchored by an unfounded assumption.

As outlined in the context provided in **NOTE I – ONE**, the only way to keep the wheels spinning to maintain Balance – but not Sustainability – is to continue traditional ‘economic growth.’ That is assumed to be possible even with continued Mass OverConsumption by “the rich” and an unBalanced consumption and distribution of resources. On a finite planet, it is not possible to sustain the current level of consumption and the inequitable distribution of benefits of consumption as well as support a growing population.

Since the dawn of the Industrial Revolution the vast majority of benefit from burning through the Planet’s Natural Capital has been hoarded by those at the highest levels of the economic, social and physical Ziggurat of each ‘developed’ nation-state. See again *Dream Hoarders: How the American Upper Middle Class is Leaving Everyone Else in the Dust, Why that is a Problem, and What to do About It*, Richard Reeves (2017), *The Brookings Institution*.

“Growth” does NOT raise all boats. The accumulation of wealth by “the rich” has accelerated dramatically since 1973 as documented by Edward Wolff in *A Century of Wealth in America* (2017).

In the United States the fortunate cohort is often termed “The One Percent.” By many measures, the gilded cohort includes part or all of the richest 20 percent of the population (aka, the Upper Class and the Upper Middle Class) as noted by Reeves above, however, even that distribution leaves behind 80 percent of the population.

In the ‘developing’ (aka, “Third World”) nation-states – especially those that have generated liquid capital by selling off their natural resources (Natural Capital) there is an even smaller percentage of the population that have enriched themselves due to their positions of power. For data documenting this reality, see again the sources cited above.

The ‘middle class’ in Western Civilization emerged in the “middle ages” society that evolved after the fall of the Imperial Roman Empire. The growth of the middle class was accelerated by the Black Death as perceptibly articulated by David Herlihy in *The Black Death and the transformation of the West* (1997). Later, the Industrial Revolution greatly expanded the Middle Class. After the long history of growth, over the past half century the classically profiled Middle Class has atrophied. The traditional Middle Class is now essentially gone in the United States. The plight of those left behind is movingly portrayed by J. D. Vance in *Hillbilly Elegy: A Memoir of a Family and A Culture in Crisis* (2016). See **THE SHAPE OF THE FUTURE** (2000) and more recently Tankersley and Reeves cited above. **NOTE I – TWO**

NOTE I-TWO THE TRADITIONAL MIDDLE CLASS.

See *THE SHAPE OF THE FUTURE* (2000) Chapter 8 for the forces at work to eroding the ‘traditional’ middle class since World War II. Since 2000 the middle Class has continued to atrophy. Some formerly middle class citizens have joined The One Percent or at least the Top Twenty Percent of the economic Ziggurat – the Upper Middle Class. Many of the rest have fallen into expanding ‘lower class’ or “The Working Class”. There will always be a ‘technical middle class’ if it is defined by the second, third and fourth quintile of the economic Ziggurat. However, the character and characteristics of the “Traditional Middle Class” have disappeared. In the 50's and 60's an able bodied teen could buy a car with a summers earnings and could also pay for a year of college with a summer’s earnings.

Also see the citations on different definitions of the Middle Class in *Who is Middle Class, and where are they going?* Chris Tomlinson, *Houston*Chronicle* (14 MAY 2018). Note Tomlinson’s lament concerning the current trajectory.

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When members of an expanding lower (aka, ‘working’) class are not satisfied with their economic, social and physical well being AND believe that they and their children do not have a realistic chance to better themselves, it sets in motion a chain reaction. First, many believe they are being intentionally bypassed or left behind. Then they start to believe populist politician’s promises. When the populists cannot deliver on their “infinite promises” in the context of a finite planet, the citizens revolt. In the normal course, these revolts are put down by an even more radical generation of populists who become totalitarian dictators. It is not hard to see that The United States may have taken the first step down this path in November 2016.

There is much to learn from the recent and current Venezuelan experience. Perhaps other South and Central American experiences are also very much to the point.

We are now learning that the Mayan culture was larger and more advanced than previously thought – *Maya civilization was much vaster than known, thousands of newly discovered structures reveal*, Cleve Wootson, *The Washington Post* (3 February 2018) Also see **Chapter II – Note II – One** In addition we are learning that the drought (potentially human-action-exacerbated) and identified as a key factor in the demise of the Mayan civilization lasted over 100 years between 800 and 1000 BCE. *An ancient lake hold secrets to the Mayan civilization’s mysterious collapse, study finds*, Kate Furby 2 August 2018, *The Washington Post*. Now comes information that many are leaving the Sao Paulo, the largest New URban REgion in Brazil. They are abandoning the URban area due to an extended drought. *As Brazil’s Largest City Struggles With Drought, Residents Are Leaving* Lulu Garcia-Navarro (4 August 2018) *NPR*. Even more startling, *The Wall Street Journal* reports that ‘Shaken by violence, thousands of TV stars, bankers, lawyers and wealthy Brazilians are fleeing the country. **“I’m Totally Freaked Out”**:

Brazilians Weigh a Farewell to Paradise. Samantha Pearson and Luciana Magalhaes, *The Wall Street Journal* (2 August 2018).

The reason that Central American citizens are attempting to flee across the U.S. / Mexican border is their home pseudo-nation-states are profoundly dysfunctional. Our trusted friend and talented gardener had his father and brother killed in politically motivated actions in Guatemala.

This should come as no surprise. See **NOTE I – THREE**

NOTE I–THREE DECADES OF PREACHING TO THE CHOIR

Year after year the **World Watch Institution** has published the annual *State of the World* reports which document other dysfunctional trajectories. Concerning specific settlement pattern dysfunctions see *THE SHAPE OF THE FUTURE* (2000) and *TRILO-G* (2010).

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E. ACROSS THE GLOBE – REFUGEES AND MIGRANTS FACE FAMINE AND STARVATION

According to the United Nations and two US not-for-profit INstitutions 20 million humans are facing potential famine TODAY.

At this time there are more citizens attempting to relocate in order to avoid dictators, insurgencies, wars, plagues and starvation than at any time in human history.

As portrayed by Fahmah [with light editing for context] here is Fahmah’s perspective on refugees and migrants: (For an introduction to Fahmah (Dr. James Mello) see Chapter 34 of *TRILO-G Dialogue with Fahmah.*)

“The question is, should ‘more developed’ nation-states open their borders or just let a growing number succumb to the forces of societal dysfunction. Do REgions open the doors and try to absorb the refugee millions, or do they bar the gates and look the other way? There are major problems with either answer.

“At present many of the displaced are hunkered down [on the south shore of the Mediterranean and] near the borders of Jordan, Turkey and Mexico, unable to go back and finding it very difficult to move on north. What must be done break the deadlock?

“A thousand years ago refugees might pledge themselves to a local lord and become his serfs in return for subsistence and protection. Is there an equivalent today?”

“Five hundred years ago, to make room for their expansion and exploitation, Europeans employed *Guns Germs and Steel*, Jared Diamond (1999) to wipe out both hunter gatherer tribes and advanced agrarian civilizations in North and South America as well as in Africa, Southeast Asia and Australia. Concerning advanced agrarian civilizations in the Americas **BEFORE** 1400 see **Note II – ONE**

“Is there something like that in the future of the displaced? This is a settlement pattern problem writ large.”

Demagogues in the United States and Western Europe rail against immigrants and refugees for stealing their jobs. Immigrants **DID NOT** “steal jobs.” It is now clear that the vast majority of well paying industrial jobs that were lost, were eliminated due to automation. The jobs that were lost due to off shoring were low-wage (e.g. textile) jobs. This movement was inspired by, among other things, the United States’s public policy to shift working class jobs to Puerto Rico to spur economic opportunity on that island and thus to discourage the accelerating immigration from this US territory to the mainland in the 40s and 50s. It was called “Operation Boot Strap.” *The Industrial Development of Puerto Rico 1940-1960*, Michael Canon, AUG 1972.

The success of this program prompted Southern States in the US to offer similar incentives to move jobs as well as tax base and “economic growth” to their states e.g. textile manufacturing relocated from the New England states to the Carolinas and Georgia.

Foreign nation-states with workers who would work for low wages saw this as something they could benefit from as well.

F. IN THE UNITED STATES – AN OVERVIEW

The United States of America is falling behind other advanced societies in education, health care, Infrastructure, travel safety, and basic shelter (aka “Housing”) of its citizens. The misallocation of resources is shrinking the opportunity for a growing majority of citizens to prosper. The astronomical cost and poor outcomes of the health system generates environmental health problems, and exacerbates social and economic inequity, racism, and crime. One stark marker of social dysfunction is the fact US jails a higher percentage of the nation-states citizens than any other country. The good news is that this percentage is at a two decade low BUT it is still number one on the planet. *America’s incarceration rate is at a two-decade low.* John Gramlich, *Pew Research Center* (2 MAY 2018)

The United States is also failing to conserve air quality, water and land primarily through dysfunctional settlement patterns. The United States per capita consumption is unsustainable. There is also a lack of protection of privacy, food chain security and an accumulation of ocean borne and intergalactic trash. The latter is hampering space research much less potential inter-planetary travel.

As noted earlier when one digs into a topic like food security there are layers upon layers of dysfunction. For example see The Environmental Working Groups portrayal of the impact of outsourcing our food and health to chemical farming and pharmaceutical industries. By some estimates the percentage of the population in the U.S. with chronic disease has grown from four percent to 50 percent in the last 40 years due to the impact of GMO foods and to ingestion of glyphosate that turns up in 93 percent of the urine samples collected in the United States.

With an economy based on Mass OverConsumption, the current trajectory is unsustainable. Most critical of all dysfunctional predictors of COLLAPSE is the 70 year accumulation of profoundly dysfunctional human settlement patterns. Again, see **NOTE I – THREE**

Quality air, land and water are all endangered resources. *The Ground Beneath Our Feet: Without healthy soil there won't be healthy crops. Without healthy crops there won't be healthy people.* National Public Radio 12 May 2017. *Only 60 Years of Farming Left If Soil Degradation Continues.* *Scientific American* 12 May 2017. These are not new perspectives. See *An Agricultural Testament*, Sir Albert Howard (1940) and note on food security above.

The erosion of top soil is exacerbated by the consumption of land for dysfunctional, scattered URban land uses. Loss of top soil and loss of the best land due to scattered URban development, along with aquifer depletion due to industrial agriculture and to lawn watering and ground water pollution threatens food security and generates air pollution, habitat loss and ecological ImBalance.

As explored below and in Chapter III, the last 50 years of consumption of land for scattered URban uses is 20 to 30 times the amount of land actually needed for functional and sustainable patterns and densities of URban land uses to support the same number of citizens with a balance of Jobs / Housing / Services / Recreation / Amenity.

This number is based on the fair allocation of the total cost of location-variable Services and the current market for functional and sustainable settlement at the REgional and COmmunity scale Walkable URbanism explored in Chapters II and Chapter III.

G. IMMIGRATION

But for immigration and refugees, the population of the United States would be in decline like that of Great Britain, Italy, South Korea and Japan. Those individuals, ENterprises and INstitutions that supply contributions to members of both political parties in both state legislatures and of Congress have benefitted from the work of immigrants and refugees. If they had not been so benefitted, the flow of Immigrants (legal and undocumented) and refugees would have been stopped long ago. This is especially true in REgions where the immigrants and refugees have not yet become influential voting blocks. ***How U.S. immigration has changed***, Dan Keating and Reuben Fischer-Baum (12 JAN 2018) *The Washington Post*. Also see ***Diversity Explosion: How New Racial Demographics are Remaking America***, William Frey (24 July 2018).

Immigrants and refugees are falsely blamed for crime. ***Are Refugees Dangerous? In nine out of the ten cities [REgions] that accepted the largest number of refugees, crime went down – sometimes dramatically*** (Tanvi Misra – 14 FEB 2017)

Where do Undocumented Immigrants Live? A New Pew report estimates the undocumented Immigrants population in cities [REgions] throughout the U.S. and finds that just 20 Metros are home to 60 percent of them, Natalie Delgadillo, 9 FEB 2017. ***Sanctuary Cities Are Safer and More Productive***, Tanvi Misra (26 JAN 2017) *New research contradicts President Trump’s claim that municipalities with large immigrant populations do “immeasurable harm” to their residents.*

Besides filling the jobs that others did not want, Immigrants have made important economic contributions since before there was a United States. ***How Immigrants changed the Geography of Innovation: A new report shows how immigrants fuels regional inventiveness, bolsters creative momentum within their industries, and drove long-term Technological Growth.*** Tanvi Misra (8 FEB 2017), ***Almost half of Fortune 500 companies were founded by American***

immigrants or their children, Ian Hathaway 4 DEC 2017 *Brookings Institution, Let’s Give Thanks for Immigrants*, Richard Florida (23 NOV 2017).

Internal migration has slowed and the ***Census shows Nonmetropolitan America is whiter, getting older, and losing population***, William Frey (27 JUN 2017) *Will it retain political clout?* Also see ***The Great Migration Breakdown***, James Bacon (10 NOV 2017). Based on the work of Edward Wolff cited above (*A Century of American Wealth* – 2017) there is good reason for the internal migration slowdown: There have been few places where good paying jobs acted as magnets. The “tight” oil and gas plays in the Dakotas, Texas and parts of Appalachia were options but then came the layoffs of 2014 and 2015. New technology and management has lowered the cost of production in these tight plays but now Russia and OPEC are considering new strategies.

H. POLARIZATION AND LONELINESS

To add pain to misery the United States is becoming more polarized and lonely. “**How Polarized U. S. Politics Are Driving Neighbors Apart.**” Laura Bliss (27 JUN 2016.) **Public Health: Americans Are A Lonely Lot, and Young People Bear The Heaviest Burden**, NPR (1 MAY 2018).

Dysfunctional settlement patterns are part of the problem but so are compelling electronic pastimes including virtual adjacency. **All We Want to Do Is Eat Junk and Watch Each Other Play Fortnite**, Nellie Bowles, *The New York Times* (2 MAY 2018), **‘Gaming Disorder’ is only a symptom of a much larger problem**, Jean Twenge, *The Washington Post* (29 June 2018) **Can America Depolarize?** Andrew Small (9 NOV 2017) *We went to a Better Angels workshop to see if Americans still knew how to talk politics without trying to kill each other.* **America’s Polarization Threatens to Undo Us**, Richard Florida (25 JAN 2018) *More and more, the geography of the U.S. is one of winners versus loser– but the populist backlash puts our future at risk.*

“**Is America getting lonelier?**” E. J. Dionne Jr., *The Washington Post*, (6 AUG 2017), **How to Break the Dangerous Cycle of Loneliness**, Olga Khazan (6 APR 2017), *Social isolation kills, and in the process it makes it harder to reach out to others. A psychologist explains how to stop the feedback loop.* **What Loneliness Does to the Human Body**, Ashley Fetters (22 JAN 2018), **The Cut, Fighting Loneliness With Public Living Rooms**, Jessica Hester (4 NOV 2017), **The World’s First Minister of Loneliness**, Feargus O’Sullivan (18 JAN 2018), *Britain just created an entirely new ministry to tackle the serious public health concern.* **Why a City Block Can Be One of the Loneliest Places on Earth**, Eve Andrews (27 JUN 2017).

One option to bring citizens together is the metamorphosis of retail space to complex, mixed use URban fabric. **The Future of Retail Is Stores That Aren’t Stores** Joe Pinsker (14 SEP 2017) *“Honey, I’m about to run to the town Square– you need anything?:”* **Are Retail Stores the New Community Centers?** Eillie Anzilotti (22 JAN 2016). **A Field Guide to Branded Urban Space**, Leo Shaw 10 OCT 2017), *As the department store and the mall die off, corporations are experimenting with branded environments that function as marketing tools as well as retail outlets.* **A spa in Burger King? A Taco Bell lounge? This is the future if fast food**, Travis Andrews (19 MAY 2016).

I. THE WEALTH AND WELL BEING GULF, MASS OVER-CONSUMPTION AND GROSS DEFICIT OF AFFORDABLE AND ACCESSIBLE SHELTER – THE FACE OF POVERTY

As noted at the outset of this Chapter, World-wide there is:

A grossly inequitable distribution of Citizen Wealth & Well Being;

A Mass OverConsumption of resources by those who can afford this level of consumption; AND

A lack of Affordable and Accessible Housing – resulting in a profound shelter crisis.

The United States is not immune to these three realities. All three compose “the face of poverty” in the nation-state. *America Can’t Fix Poverty Until It Stops Hating Poor People: A bipartisan plea to stop “othering” those living on the economic margins.*, John Powell and Arthur Brooks (10 OCT 2017), *Moving Americans Out of Poverty Will Take More Than Money*, Michael Anft (23 JAN 2018), *Does America Have a Caste System? Many Americans would be appalled to think that cast might exist in the supposedly meritocratic U.S. But is the country’s persistent, entrenched inequality really so different?* Subramanian Shankar 26 JAN 2018)

Is the wealth gap really all that bad? Michael Taylor, *Houston Chronicle* (28 May 2018) **Yes it is.** Even one who believes the conservative’s rationale for aggressive Capitalism finds the answer is **YES.**

Principles and strategies to change the structure of Governance and the structure of the economy to address shelter and the Wealth and Well Being Gulf (aka, **POVERTY**) and Mass Over-Consumption is a focus of Chapter III. For an exhaustive documentation of the roots and anatomy of the loss suffered by the vast majority of citizens due to The Great Recession see *A Century of Wealth in America*, Edward Wolff (2017). **NOTE I – FOUR**

NOTE I – FOUR PROPERTY DEVALUATION

Wolff’s description of the impact of the Great Recession on the lower four quintiles of the income distribution makes it clear that this impact was due to the fact that the majority of HouseHolds net worth was their equity in their dwelling. As exhaustive as Wolff’s description of the Great Recession’s impact on the Citizens Wealth and Well Being Gulf is, it is Location Blind. In fact there was a very clear spacial distribution of the bankruptcies and the loss of market value of homes. See Current Perspectives #s 30 through 34 linked from the *CURRENT PERSPECTIVES* page at www.emrisse.com. As will be further articulated in the section “THE

MOST IMPORTANT THREAT IS NOT YET THE SUBJECT OF HEADLINES.” The next devaluation of property values in the outer Radius Bands of New URban REgions will impact land as well as scattered URban houses in the CountrySide.

A careful review of Edward Wolff’s *A Century of Wealth in America* (2017) and his proposal for a “Wealth Tax” akin to that which exists in a number of European Union nation-states as well as a carbon tax are good ways to prepare for the Profound Transformations laid out in Chapter III.

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J. MASS OVERCONSUMPTION AND THE HIGH COST OF WASTE

The outright waste of resources is a major driver of Mass OverConsumption. There are two especially dangerous forms of endemic waste – AGENCY waste and HOuseHold waste. *CityLab*’s recent series on “Wastelands” documented Gross AGENCY Waste that goes far beyond Boston’s Big Dig and New York’s Second Avenue Subway. In *Epic Boondoggles Ranked* (Kriston Capps, 19 FEB 2017) surveyed major public works and found The Great Wall of China as the most costly futile AGENCY attempt to protect the Chinese heartland from the hoards.

On the home front *The Wastelands of Urban Renewal* , Andrew Small (13 FEB 2017) singled out Urban Renewal as a glaring AGENCY waste. But for Jane Jacobs and her allies, the cost would have been much greater.

Urban Renewal’s hand maiden was the building of Interstate expressways **WITHIN** existing Urban fabric. For a survey of the catastrophic result of the failure to UnderStand the difference between ‘Interstate Highways’ on the one hand and ‘Interregional Highways’ on the other, see *Interstate Crime*, E M Risse (28 Feb 2005). This Perspective provides a comprehensive survey of the stunning waste generated by the flawed implementation of what should have been an InterREgional highway system. **NOTE I – FIVE** Also see: *Highways gutted American cities [The Cores of American New URban REgions]*, *So Why did they build them?* (Joseph Stromberg, 18 MAR 2017)

NOTE I – FIVE MORE ON INTERSTATE CRIME

Twelve years on and now a resident of the State of Texas, the details the *Interstate Crime* story still ring true with two details that have come to the authors attention:

Dwight D. Eisenhower was an army Lt Col when he **PARTICIPATED** in the 1919 coast-to-coast army convoy noted in the original perspective. That convoy that took 62 days and was

staged to demonstrate the need for a network of limited access Interregional Highways. Eisenhower was keenly aware of the utility of interREgional highways. He also saw the benefit of the Autobahn during World War II. However, Ike missed the important detail: InterREgional limited access highways must NOT penetrate the Logical Location of the Clear Edge around large Urban Enclaves – that is, they should NOT have been constructed through existing URban fabric.

The Texas Department of Transportation did not learn from the failure of radial limited access roadways to limit “urban congestion” due to “continuos diamond interchanges / continous service roads on both sides” of Interstate Expressways. They have now set the record for futility by creating a 26 lane I-10 Katy Expressway west of the Core of Houston. *Eighty Years of false freeway claims, Public Square* 28 JUL 2017)

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And then there is the continuing HOuseHold waste that is rooted in Mass OverConsumption.

There has been, since the middle of the 19th century, those who saw the danger of Mass OverConsumption. The roots of Anti-Mass OverConsumption can be found in many places. One is the Henry David Thoreau branch of Transcendentalism that favored the simple life on Walden Pond. Anti-Mass-OverConsumption appears again in the view of the late 19th and early 20th century ‘conservationists’ including Theodore Roosevelt , John Muir et. al. and their revulsion at the excesses of the Gilded Age and the slaughter of Native Americans, American Bison and American Passenger Pigeons.

The expanded industrial capacity that resulted from the Second World War kicked HOuseHold Mass OverConsumption into high gear. Vance Packard, America’s Post War scold, tried to stem the consumption of goods and services in *The Waste Makers* (1960) and other books. He failed.

There is renewed interest in fighting waste. Strategies such as “The Sharing Economy,” buyer and worker owned Coops, CoHousing and tactics such as “The Library of Things” are being touted as solutions to HouseHold waste. *How to fight ‘throwaway culture’: We need to move from a ‘take, make, use, throw’ economic model towards one that encourages repair and reuse.* Christine Cole and Alex Gnanapragasem (26 AUG 2017). Also see the work of The Ellen MacArthur Foundation on “The Circular Economy” as well as the Zero Waste Movement and *Don’t Throw It Away – Take It to the Repair Café*, Linda Poon (17 July 2018).

K. THE SHELTER CRISIS

Perhaps the most pernicious and intractable economic, social and physical problem facing the United States is the Shelter Crisis – the lack of Affordable and Accessible Housing.

This crisis exists because the provision of shelter has been turned over to the ENterprise sector of the economy. Over the past 70 years those ENterprises engaged in the provision of shelter could make the most money over the shortest period of time by building and selling dwellings for URban buyers that collectively create dysfunctional human settlement patterns – The Wrong Size House in the Wrong Location. This is a complex problem impacting the health, safety and welfare of citizens – especially those at the bottom of the Economic Ziggurat.

The American Housing Crisis Might Be Our Next Big Political Issue, Benjamin Schneider (16 MAY 2018); *The Global Housing Crisis*, Richard Florida and Benjamin Schneider (11 APR 2018); *Is Housing Inequality the Main Driver of Economic Inequality?*, Richard Florida (13 APR 2018); *The Great Housing Reset*, Richard Florida, (3 MAY 2018) *The rise of renting in the U.S. isn't just about high housing prices, or preferences for city living, but about the flexibility to compete in today's economy*; *Homebuilding Isn't Keeping Up with Growth, Development, The Wall Street Journal* (16 APR 2018).

Who Will Buy Baby Boomers' Homes?, Mimi Kirk (14 APR 2018). This is an update of *Who Will Buy Grandmothers House?* by Emily Badger in 2013. The current story says the problem has shifted to Baby Boomers because they have decided to age in place rather than sell and retire elsewhere. The earlier story, which is cited in SYNERGY Perspectives, also quoted Arthur Nelson of Arizona State University on the gross oversupply of large single family detached homes on large lots – 25 million excess UNits nation-wide. The total score of The Wrong (size) House in the Wrong (scattered) Location.

The Shelter Crisis impacts the Economic, Social and Physical Spheres. *Worrying About the Rent Is Making People Sick*, Candace Butera, (30 Jan 2018). Also see prior citations and more on this topic in later sections of this Chapter and in the following Chapters.

L. A PYRAMID OF DEBT

Then there is debt:, The national debt; The states and municipalities debt; and the HouseHold debt. *One Nation, Under the Weight of Crushing Debt: An interactive map show where the highest concentrations of HouseHolds with unpaid bills are*, Tanvi Misra 12 AUG 2917. *The U.S. Isn't Prepared for the Next Recession: When it comes – and it will, eventually – it'll be worse than necessary*, Annie Lowrey 31 OCT 2017. *Signs of Impending Economic Recession Pile Up Early in 2018*, Peter Reagan *NEWS MAX FINANCE* (5 JAN 2018), *Beware the 'mother of all credit bubbles'*, Steven Pearlstein, (10 June 2018) . *The Washington Post*.

And it is not just the individual and Household debt. The United States has created a system that traps college graduates – except for Upper Class college students – in debt. These are the very persons that must be counted on to pull the nation back from the abyss. It is exactly the opposite strategy that was used to jump start the nation’s economic and social recovery following World War II. A good summary of the current trajectory of Federal Debt is captured by this headline:

The U.S. government is set to borrow nearly \$1 Trillion this year, an 84 percent jump from last year, Heather Long *The Washington Post* (3 February 2018).

World-wide, the picture is the same: ***The \$247 Trillion Global Debt Bomb,*** Robert Samuelson, *The Washington Post* (15 July 2018),

M. BEYOND GLOBAL WARMING AND CLIMATE CHANGE – THE COSTS OF WEATHER DAMAGE AND FREQUENT FLOODING

Setting aside the bickering about the facts of ‘Global Warming’ and who is responsible for ‘Climate Change’ there are the well documented rising cost of storms. ***The Huge Cost of Weather Damage in 2016.*** *Climate change, population growth, and infrastructure are all contributing to the rise in disasters that cost at least a billion-dollar each in the U.S. according to NOAA,* John Metcalfe, (10 JAN 2017). The total cost in 2016 of weather events that each cost a billion dollars or more was \$46 Billion. In 2017 the total cost of Billion Dollar Disasters was \$306 Billion.

The Author moved to the Gulf Coast of East Texas in May, 2017, three months before the arrival of Hurricane Harvey. The titles of articles and posts just before Harvey stalled over the Houston New URban REgion as well as those during and after the flood, document the level of preparedness and suggest the level of difficulty in addressing more and more intensive storms.

NOTE I – SIX

NOTE I – SIX THE WORD ON FLOOD CONTROL

In Texas, Toll Roads or Flood Preparedness? *The State is spending Billions on toll roads when it should be investing in flood infrastructure.* Kriston Capps (3 Jun 2016), ***Seven million Texans, flood-prone land and oil refineries stand in Hurricane Harvey’s path,*** Darla Cameron, Tim Meko, Chris Alcantra and Denise Lu (25 Aug 2017). ***Devastating flooding after Harvey will get worse before it gets better: Record levels of rain could affect more than 7 million people in Southeast Texas,*** Darla Cameron, Samuel Granados, Chris Alcantara and Gabriel Florit (28 AUG 2017) *The Washington Post*, ***A close-up view of the flooding in Houston,*** Denise Lu, Aaron William and Dan Keating (29 AUG 2017) *The Washington Post*. ***Floods are Getting Worse, and 2,500 Chemical Sites Lie in the Water’s Path,*** Horoko Tabuchi, Nadia Popovich, Blacki

Migliozzi, Andrew Lehren, *The New York Times* (6 FEB 18) The context of rising waters puts a focus on the difficulty of mobilizing citizen support for action on many fronts. ***The Disasters We Refuse to Imagine: A catastrophe like Hurricane Harvey was long predicated for Houston. But to live next to a dam and never fathom a breach is not a uniquely Texan brand of magical thinking.***

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Harvey was not the only bellwether. ***What We can – and Can't – Learn from the Floods in Baton Rouge*** Better planning, stricter construction standards, [land use controls] and expanded insurance can help cities [REgions] prepare for the next '1,000-year rain" But they won't be enough. (Laura Bliss, 17 Aug 2016); ***Where Tomorrow's Floods Will Come.*** Extreme rainfall events like Tropical Storm Cindy are becoming more common. But development on inland flood zones hasn't slowed down, Linda Poon (22 Jun 2017) ***Here's What We've Learned About Hurricanes Since Sandy: Scientists understand a lot more about how extreme weather affect the intensity of storms*** (Rebecca Leber 30 OCT 17, ***Lost to Sandy, Reclaimed by Nature: Here's why one community chose not to rebuild,*** Nathalie Baptiste 29 OCT 2017, ***Harvey vs Katrina: Have New Orleans lessons been learned?*** BBC 28 AG 17. (For the Authors perspective on Katrina see ***Down Memory Lane with Katrina,*** E M Risse (5 Sept 2005) and ***Katrina Yet Again,*** E M Risse (9 SEP 2008) both are linked from the *RESOURCES PAGE* at www.emrisse.com)

It is not just the Houston New URban REgion nor the United States that faces mounting threat of floods. ***Deadly South Asia floods affect 16 million people,*** BBC (18 AUG 2017). As of 29 August 2017: Over 1,200 dead, 10's of thousands physically displaced, farm land washed away.

The problems caused by the failure to prepare for the impact of climate change and the rising sea level are now self-evident in the Arctic, in the Ataractic and in the authors hometown – Glacier National Park, Montana. The author chaired the Ellicott City, Md Historic District Commission during the period of reconstruction following the flooding of Ellicott City by Hurricane Agnes in 1972. Ellicott City has since been flooded several more times including in both 2017 and 2018. ***Ellicott City flooding: Officials were warned for years,*** *USA Today* (1 JUNE 2018)

The rise of sea level and the reality of higher and higher storm surges expands the impact of storms and reflects the passing of time. ***We're not even close to being prepared for the rising waters,*** Bill McKibben *The Washington Post* (10 NOV 17). ***Planning for an era of sea level rise,*** Robert Steuteville, *Public Square* (13 DEC 2017).

N. TIMES RECALLED, TIMES FEARED AND INTERNATIONAL MAD MEN

Citizens who lived through the Cold War recognize a resurgence of the threat of thermonuclear war and of a “nuclear winter” in the threats by North Korea. They also see the re-emergence of “the Russian Threat.”

The Doomsday Clock is now just 2 minutes to ‘midnight,’ the symbolic hour of the Apocalypse, Lindsey Bever, Sarah Kaplan and Abby Ohlheiser (26 JAN 2018) *The Washington Post*. The last time the *Bulletin of the Atomic Scientists* Doomsday Clock was set that close to midnight was JAN 1953. Also see *Russia never stopped its cyberattacks on the United States*, Michael Morell and Mike Rogers 25 DEC 17 and *Kremlin trolls burned across the Internet as Washington debated options*, Adam Entours, Ellen Nakashime and Greg Jaffe, 25 DEC 17.

One of the indicators of dysfunctional societies according to Benjamin Friedman quoted in the opening section of this Chapter is “the rejection of anyone outside of our immediate [close knit] group.”

Institutions that champion the rights and interests of ‘immediate groups’ such as neo-Nazis and white supremacist provide a fertile ground for the rise of International Mad Men.

North Korea has provided a parade of scary ‘leaders’ threatening to use their atomic arsenal. None have been more scary than the current one. The Philippines, Turkey, Venezuela and some of the cogs of the former Soviet Union come to mind when the topic is International Mad Men.

After several rational leaders Russia has again produced a leader who presents a frightening menu of potential threats including Russia’s nuclear arsenal, election tampering in Democratic nation-states and support for North Korea.

There is a constant threat of thermonuclear destruction given the fact there may be as many as 20 nation-states that have both atomic weapons and sophisticated weapon delivery systems. At least one of these nation-states constantly rattles their saber. Others are one diplomatic misstep from **LAUNCH**.

Now the United States has its own home grown International Mad Man.

Sometimes it takes distance to create perspective. With stunning clarity, *BBC*’s North American reporter Anthony Zurcher portrays the strategy used by the Republican Party to win the 2016 presidential election. Many who now regret voting for the winning party will see themselves in the profile Zurcher provides in *Bannonism lives on in the White House* (5:24 PM, 19 Aug 2017). This is a re-write of “*Why Trump thinks he can win on race*” (10:40 AM, 18 Aug 2017) after Steve Bannon was fired. Anthony Zurcher *BBC. Fire and Fury: Inside the Trump White*

House, Michael Wolff (2018) For a splendid analysis of the ‘state of the Union’ see *Democrats, Donald Trump, and the Dark Underbelly of Economic Growth*, Brian Czech, *The Daly News* (31 JAN 2018).

O. MISGUIDED AGENCIES AND INSTITUTIONS

Sometimes instead of a Mad Man, the problem is ‘a timid committee’ or a misguided Agency or Institution such as the role of the United Nations has played as a protector of EXISTING nation-states regardless of their potential danger to their citizens and their neighbors as noted below.

Among the recent international misadventures have been the failure to encourage and take advantage of democratic sprouts of The Arab Spring. At one point these sprouts could have been nurtured and if need be, transplanted into fertile New Urban Regions ground. **NOTE I – SEVEN**

NOTE I – SEVEN INTELLIGENT APPLICATIONS OF MILITARY FORCE

At the outset of the Afghan war, SYNERGY advocated sending 25 +/- one star (major) generals (one for each Region / Province in Afghanistan) to evolve Regional resilience rather than sending one four star (full) general to rescue the illusion that Afghanistan could become a late 20th century nation-state IN THE FORESEEABLE FUTURE. Any stable governance structure at the multi-New Urban Region scale must be a result of cooperative New Urban Region action. A similar suggestion was made by SYNERGY as an alternative to starting a war and attempted nation-building in Iraq.

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Starting a war in Iraq was as large a mistake as believing that fighting a war in Viet Nam was the key to stopping the spread of global dictatorships masquerading as ‘Communism.’

Failing to stop wars and conflicts in Syria and Northern Iraq, Afghanistan, Sudan, South Sudan, Yemen – and others of the 15 nation-states where the United Nations now has ‘peace keepers’ – as well as places where ‘peace keepers’ are badly needed has resulted in millions killed and, as noted above, generated the largest cohort of displaced persons and refugees in human history.

Most of the international ‘leadership’ has focused on the goal of protecting failed nation-states from **COLLAPSE**. The United Nations is, in this context, “well named.” The UN has been ‘a nation-state preservation society’ based on the leadership’s realization that “there, but for the grace of the UN go I”, when the stability of an existing member nation-state nears **COLLAPSE** and is preserved by the U.N. Most would argue that the dismemberment of Yugoslavia has

resulted in more stable, if not yet completely calm, small nation-states. As noted in Chapter III these new nation-states are of New URban REgion scale.

Many of the conflicts in the Middle East and Africa are a result of the “lines-in-the-sand” drawn by the British, French and Germans at the end of the First World War. The lines in the sand did

not – and do not – delineate potentially functional nation-states. These pseudo nation-states have continued to generate conflict in part due to the fact that the line in the sand did not recognize the tribal and societal realities that reflected the organic structure of the historic settlement pattern.

In this context, the role of ‘international law’ may be more important than most understand. For a unique perspective on inter-nation-state actions see *What Happens When War is Outlawed?*, Louis Menand, *The New Yorker*, (18 SEP 2017). This is a review of *The Internationalists: How a Radical Plan to Outlaw War Remade the World*, Dona Hathaway and Scott Shapiro (2017).

There are more prosaic threats that have the potential to wipe out millions of humans and profoundly destabilize the planet. The lack of secure and robust food distribution systems and pollution of water for houseHold use and irrigation are examples. There has been no concerted effort to create a defense system to intercept asteroids, little work to suppress supper volcanos or even curtail the accumulation of space junk that now threatens space exploration and potential space travel.

There are other obvious causes of intra-nation-state and inter-nation-state danger. Religious zealots believe killing and destruction of human’s historical heritage are fair game in their effort to exert dominion and control over women and non-believers. Black Hats hacking ENterprises, INstitutions, AGencies(e.g. the recent national elections in the United States) and HHouseholds is only the most obvious danger from global communications interconnect. **NOTE I – EIGHT**

NOTE I – EIGHT – INTERNATIONAL INTERFERENCE

Nation-state interference in other nation-states elections is ‘useful’ if it includes sending ‘observers’ to ‘monitor’ elections but is cause for alarm if it involves spreading false information. Stay tuned for the results of Mr. Mueller’s Grand Jury.

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P. HORROR STORIES CONCERNING PENDING DOOM

There are many widely believed thesis documenting impending doom. They range from asteroids and super volcanoes to ticks and mosquitoes and genetic mutations as well as intentional detonation of nuclear or biological bombs .

One does need not sign onto The Dark Mountain Project’s advocacy for “DeCivilization”; join the supporters of “DeIndustrialization”; embrace the inevitable **COLLAPSE** of the Anthropogenic Era or agree with Stephen Hawking’s prediction of impending doom unless humans are able to decamp to an alternative planet to be scared shitless. **NOTE I – NINE.**

**NOTE I – NINE THE DARK MOUNTAIN PROJECT,
DeINDUSTRIALIZATION AND THE ANTHROPOGENIC ERA**

The Dark Mountain project is chillingly profiled by Brian Calvert in “*So what if we’re doomed? Climate chaos, mass extinctions, the collapse of civilization: A guide to facing the ecocide.*” (24 JUL 2017). Calvert is the Managing Editor of *High Country News*. Some may find this Business-As-Usual. For others it is far more draconian than the strategies outlined in Chapter III. DeIndustrialization is the “solution” of Edward Goldsmith in *The Great U-Turn: De-Industrializing Society* (1988) and the followers of Goldsmith’s *The Way: An Ecological World-View* (1998). The Anthropogenic Era is defined as the era in which Homo Sapiens are dominant and currently on the path to render the planet unliveable as articulated by *EcoCity Builders*.

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Just before his death, Stephen Hawking warned that within a brief moment of geologic time, the temperature on surface of the Earth will match that of Venus’ which is 864 degrees F. (or 462 degrees C.).

This will be due global warming (aka, “climate change”). The rising temperature of the earth’s surface will “blow off” the Earth’s atmosphere that now protects the Earth from the full impact of the Sun’s radiation. Hawking pointed out that ‘recently’ Venus was habitable until it lost its atmospheric protection due to greenhouse gases collecting in Venus’s atmosphere.

There is an overwhelming array of frightening threats from human caused and of ‘naturally occurring’ events. Even newsstand weeklies feature scary headlines. For example, *Time* for 15 May 2017 features a red cover stamped with “WARNING: WE ARE NOT READY FOR THE NEXT PANDEMIC” – much less, it turns out, the 2017 - 2018 flu season. There are, of course, those who suggest that these headlines are prompted by Big Pharm who what to get paid for stockpiling cures to every possible malady.

There are so many other possible tragedies – and conflicting spin – that citizens and their leaders have no time to worry about pandemics much less Cat 5 Hurricanes, Super Volcanos. NOTE I – TEN

NOTE I – TEN SUPER VOLCANOES, ASTEROID IMPACTS AND OTHER UNPLEASANTRIES

The BBC had a scary headline. “*Would a super volcano eruption wipe us out?*” – BBC (24 JUL 2017). The story notes there are 20 currently inactive Super Volcanoes. None are closer to eruption than the one underlying Yellowstone National Park. BBC followed up on this story with coverage of a NASA solution “*NASA’s Ambitious plan to save Earth from a Super Volcano.*” In a previously unpublished research finding, NASA staff suggest that a Super Volcano eruption is more likely than a asteroid impact. NASA’s ‘solution’ to build the volcano cooling infrastructure would require billions of dollars for each of the 20 Super Volcanoes. Such a project, as well as the asteroid deflection defense, would be far more important than a ‘wall’ on the Mexican border.

The eruption of Kilauea on the Big Island (Hawaii) provided the opportunity to put this eruption in context. *It is not Just Hawaii, The US has 169 Volcanos that Could Erupt*, Alan Blinder, *The New York Times* 14 MAY 2018. Those 169 volcanos include 50 ‘High Priority’ active volcanos. The 20 Super Volcanos world-wide hold the greatest potential for damage.

BBC does not have a corner on the scary news. *The Washington Post* chips in with “*How Trump is enabling famine*” Jackson Diehl (Deputy Editorial Page Editor) 20 Aug 2017 and *The most accurate climate change models predict the most alarming consequences, study finds*, Chris Mooney, 6 DEC 2017 *The Washington Post*. There is more from the BBC: *The great Thaw of America’s north is coming: One of the most profound effects of a warming world is underway on US soil (Alaska) – the impact will force thousands to relocate, and have far-reaching, global consequences.* Sara Goudarzi, *BBC* 16 OCT 2017.

Perhaps most scary of all are mass beliefs in scenarios that have absolutely no basis in fact.

Case in point is the conspiracy theories that revolve around QAnon. *What is QAnon? The Conspiracy Theory Tiptoeing Into Trump World*, Brandon Carter (2 August 2018) *NPR*, *QAnon is terrifying. This is Why*, Molly Roberts *The Washington Post* (2 August 2018), *QAnon: Meet a real-life believer in the online, pro-Trump conspiracy theory that’s bursting into view*, Isaac Stanley-Becker, *The Washington Post*, (3 August 2018).

Q. ON CLIMATE CHANGE

There are enough possible natural disasters that one need not even venture into the arguments over Climate Change beyond the obvious costs of fires and floods and Stephen Hawking’s Venus scenario. However, to avoid the topic altogether would be ill advised.

Horror stories related to Global Climate Change are not limited to melting ice, rising sea levels and starvation due to crop failures. They include **Mass Extinctions. *The Sixth Mass Extinction: An Unnatural History***, Elizabeth Kolbert (2005).

One of the frightening aspects of Climate Change's impact is recent research findings concerning high heat and humidity levels in South East Asia where a third of the world's population lives. "Wet bulb" readings in South East Asia "are projected to exceed 95 degrees Fahrenheit in the not-too-distant future."

Wet bulb readings of over 95 Degrees Fahrenheit result in death to humans within 6 hours. ("*Warming to boost deadly humidity levels across South Asia*" – BBC 2 AUG 17)

More widespread are the dangers of heat caused by shoddy construction and dysfunctional land use controls that create "Urban Heat Islands." Heat Islands are a result of dysfunctional human settlement patterns. Even when not deadly these elevated temperatures exacerbate common maladies such as asthma, diabetes and hypertension. "*The health dangers of urban heat islands are sneaky and pernicious – and researchers are trying to crack the code.*" Heat Islands primarily impact those at the bottom of the economic Ziggurat who must seek shelter that is close to their Urban work. See "*We can feel the Warmth in the Walls*" Molly Peterson, (15 JUN 2017.)

So what are the direct heat impacts on humans? The science is perhaps not yet 'settled but here are some of the current threads. ***Climate Change May Cause 26,000 More U.S. Suicides by 2050***, Robinson Meyer (24 July 2018), (*Unusually hot days have profound effects of mental health and human physiology*), ***Cities are getting hotter – and it's killing people: Extreme heat causes more deaths in U.S. cities than all other disasters combined***, Alissa Walker, (6 July 2018) ***Curbed. Heat makes you dumb, in four charts, Workblog Analysis***, Christopher Ingraham ***The Washington Post***, (17 July 2018), Air pollution spikes in hot weather. ***L.A.'s Air Pollution May be Harming Teen Brains; A new study from the University of Southern California suggests a link between air pollution and adolescent delinquency.*** Teresa Mathew (18 DEC 2017).

The combined impacts on human health, plus impacts on food, water and shelter are scary enough but add to that what is also known about the impacts on humans: All impacts are made worse by economic, social and physical inequality.

Inequality is already triggering 20 year differentials in life expectancy in the United States. ***U.S. life expectancy varies by more than 20 years from county to county*** (Joel Achenbach, 8 MAY 2017) and "***The Dramatic Health Disparities Between Rich and Poor Americans***", Olga Khazan 24 JUL 2017. The growing epidemic of opiate overdoses by those who have given up hope will widen this disparity. Google "Richard Florida and Inequality." See again ***Hillbilly Elegy: A Memoir of a Family and A Culture in Crisis***, J. D. Vance (2016).

One more marker: *More bad news for Monarch Butterflies – study shows climate change’s devastating effect*, Peter Fimrite 918 July 2018) *Houston*Chronicle*. Turns out that hotter weather and the higher levels of CO2 in the atmosphere changes the chemical compounds that plants produce. When Monarch Butterfly larva eat Swamp Milkweed leaves they do not get the chemicals that protect larva and adults from parasites.

Q. THE NEXT ENERGY CRISIS

When one hears “energy crisis” they immediately think about “running out of energy.” The next Energy Crisis may be indirectly caused by too much oil and gas that is too cheap. The short term abundance of petrochemicals that result from more efficient extraction of tight oil and gas ‘plays’ (aka, shale oil and shale gas) and the expanded drilling that the current Federal administration is promising off-shore and in wildlife refuges are projected to shift market shares and drive down prices in spite of what OPEC and Russia can do about it. *Is the United States the new Saudi Arabia?*, Samantha Gross (26 JAN 2018).

This ‘projected’ temporary abundance of cheap oil and gas and the elimination of federal incentives to expand wind, solar, geothermal and hydro sources of energy by the current administration may result in thousands of workers in the renewable energy business being put out of work and the incentives for innovation in renewables curtailed.

One theory is that the next time the world approaches ‘Peak Oil’ there will be no ready and waiting technology or INfrastructure to employ renewable sources of energy because of the current lack of support for developing the technology and infrastructure for renewable energy.

Not long ago – about the time the tight oil plays were laying off workers in 2014 due to the Saudi led attempt to freeze out the U.S.’s growing production by driving down the world wide price of crude – the picture looked a lot different. *Clean Disruption of Energy and Transportation: How Silicon Valley Will Make Oil, Nuclear, Natural Gas, Coal, Electric Utilities and Conventional Cars Obsolete by 2030*, Tony Seba (May 2014). At the same time that we read: *Don’t Count Oil Out: Alternative energies won’t replace oil, gas and coal anytime soon*, Robert Bryce *Slate, New America and ASU* (14 October 2011). Others were putting forth a different message based on different data and projections. As of May 2018 the oil patches are heating up due to the spike in crude prices. *Oil is back in Houston’s Driver’s Seat*, L. Sixel *Houston* Chronicle* (17 MAY 2018).

Trying to understand the short and medium range price and use of petrochemicals and coal is a guessing game. With a secretive and competitive energy ENterprise and a unpredictable AGencies it is impossible. One thing is clear: Clean energy must be provided incentives to support the expectations of the growing populations in ‘developing’ nation-states. But clean

energy is not yet a top priority for some “over-developed nation-states” including the United States.

One thing we know about clean energy is that it will be expensive to provide the Infrastructure to produce and deliver renewable energy, especially in ‘developing’ nation-states. Carbon based energy – including purportedly “clean” natural gas – produces most of the planet’s motive power – but for how long?

The only safe strategy is to encourage renewable energy technology. Eventually Homo sapiens must wean themselves from petrochemicals. The sooner the better.

The ‘best’ strategy for carbon sequestration is to LEAVE IT (Coal and Petroleum) IN THE GROUND.

R. ARTIFICIAL INTELLIGENCE

There are mixed views of the impact and role of Artificial Intelligence (aka, AI). In early 2018 The Motley Fool was knocking itself out hyping the stock of the “leading AI” ENterprises citing no less an authority than Stephen Hawking suggesting that “AI and Deep Learning” is “the most important event in the history of mankind.” The President of the Brookings Institution claims Artificial Intelligence will have profound, universal impact. *Trump’s 1st State of the Union: Artificial Intelligence and the future of America*, John Allen (30 JAN 2018).

On the other hand a number of those concerned with the future, including Elon Musk, have suggested that Artificial Intelligence could be **THE** paramount threat to human civilization.

To prove his point, Musk funded a startup open source Artificial Intelligence Bot Generator. A bot created by the generator proved Musk’s point. **“The worlds best Dota 2 players (Dota 2 is a multi-player ‘game’ that features an annual elite player convention) just got destroyed by a killer AI [bot] from Elon Musk’s startup”** *The Verge* 13 AUG 2017.

Creating complexity and dominance of giant ENterprises in all aspects of economic, social and physical activity with sophisticated AI tools could be the trigger for civilization’s COLLAPSE. See alternative Economic System Structure and ENterprise Structure in Chapter III. Also see *Friend or foe? New technologies can pose challenges for risk managers*, Joan Tuppence *Virginia Business*, 2 July 2018) and *AI advancements raise questions; Researchers consider ethical issues as the work on a variety of projects*, Gary Robertson *Virginia Business* (3 July 2018).

In July of 2017 *BBC* published a feature on the “**10 Grand Challenges**”, Bryan Lufkin, (13 JUL 2017) that humans will face in the next thirty years – in addition to the exploding world population, the future of nuclear energy and the widening chasm between rich and poor, the 10

Grand Challenges include: **Genetic Modification of Humans, A More Aged [and larger] Population Than Ever Before, Urban Enclaves [and Agricultural Land] Lost To Rising Sea Levels [as well as Desertification and perpetual flooding], The Evolution of Social Media, New Geopolitical Tensions, Safe Car [and safe pedestrian] Travel, Dwindling Resources, Settling Other Worlds, Boosted Brainpower** and last but not least **Artificial Intelligence**. In fact many of the other challenges that involve ethical and moral questions will be directly impacted by Artificial Intelligence – a mechanical abortion surgery Bot guided by AI with no doctor involved? Also see *Weaponized AI: AI experts list the real dangers of Artificial Intelligence*, Dave Gershgorin 22 FEB 2018) *Quartz*.

Is it safe or intelligent to face the future with the current Agencies and Institutions in control? This question is addressed in Chapter III.

Perhaps most frightening of all is that AI can support most of the other forces that are cumulative and any one or more could spell the end of Homo sapiens. *The Interaction of Human population, Food Production and Biodiversity Protection*. Eileen Crist, Camilo Mora and Robert Engelman, *Science* 21 APR 2017. For an entertaining speculation on the future of intelligent occupants of the planet earth and the end of Homo sapiens see *10 Billion Years From Now*, John Greer / *Adbusters, Utne Reader* (Fall 2015). Also see *Wikipedia Timeline of the far future*.

S. A BRIEF SUMMARY OF SETTLEMENT PATTERN DYSFUNCTIONS SORTED BY THE THREE SPHERES OF HUMAN ACTIVITY

THE ECONOMIC SPHERE

The Global and Nation state economies are based on Mass OverConsumption of finite resources and therefore are not sustainable on a FINITE PLANET. Functional human settlement patterns result in far less consumption per capita and per acre of URban land. See *THE SHAPE OF THE FUTURE*.

Every state, and every municipality seeks to ‘grow’ its economy; incessant advertising yammers for more and more consumption. For an alternative view see *Beyond Growth*, Herman Daly (1996) and *Prosperity Without Growth: Economics for a Finite Planet*, Tim Jackson (2011)

Forty percent of the counties in the United States have both high income inequality and high poverty due to dysfunctional human settlement patterns. Only 18 percent of the counties have low income inequality and low poverty. *America’s Economic Distress Belt*, Richard Florida (3 January 2017)

One ‘economic’ dysfunction that is also a Social and Physical dysfunction is the Affordable and Accessible Housing Crisis. *The American Housing Crisis Might Be Our Next Big Political Issue.* Benjamin Schneider 16 MAY 2018.

Every county in the United States has an Affordable and Accessible Housing Crisis (Tanvi Misra, 27 April 2017). *Income Inequality Is Making Rent Even Less Affordable*, Richard Florida, (24 August 2017). *For Renters, the Housing Crisis Never Ended. Harvard’s State of the Nation’s Housing report reveals exactly where, and why, the rent is too damn high*, Kriston Capps, (16 July 2017)

Jimmy Carter is right that Affordable and Accessible Housing is a Basic Human Right. *Jimmy Carter Believes Housing is a Basic Human Right*, Richard Florida (27 July 2017). The Canadians seem to agree.

Leveraged buy-outs and consolidations by national and multi-national ENterprises are reducing competition and nurturing monopolies that impact the ability to evolve Balanced and Sustainable human settlement patterns. *Want to rescue rural America? Bust Monopolies.* Lillian Salerno *The Washington Post*, (20 APR 2017) *Globalization and technology aren’t the only factors crushing the heartland.*

Regionally- and COmmunity-based retail ENterprises that support Balanced COmmunities are going out of business. *The Vicious Cycle of the Retail Meltdown* (Alana Samuels – 23 May 2017). *America’s ‘Retail Apocalypse’ Is Really Just Beginning*, Matt Townsend, Jenny Surane, Emma Orr and Christopher Cannon. (8 NOV 2017), *How to Survive a Retail Meltdown*, Nolan Gray, (30 APR 2017), *The Great Retail Retrofit*, Richard Florida (19 DEC 2017), This is a core human settlement pattern driven problem that was identified six decades ago in the early critiques of dysfunctional human settlement patterns. The weakness of retail establishments has been caused by the failure to plan and implement Balanced Components of New URban REgions as documented in ***THE SHAPE OF THE FUTURE.***

A growing number of New Urban REgions depend on imports of strategic resources. The failure to pursue ***Regional Import Replacement*** as **THE MAIN** strategy of REgional Economic and Resilience Strategies leaves entire REgions vulnerable to disruptions of food, water and other necessities because they are dependant upon the import of goods and Services from REgions over which they have no control.

‘Sub’URban Office Parks are attempting to become more compact and diverse “Mixed Use Places” articulated in Chapter III of this Perspective. ***“Looking for ‘city’ Living in the suburbs? Some are finding it in aging office parks”.*** Katherine Shaver (6 AUG 2017). ***‘Suburbanism’ Reversed in a Generation?*** Laurie Volk and Todd Zimmerman in ***Building a Better Burb*** (5 AUG 2017). Will such places result in functional and sustainable human settlement patterns at the COmmunity, and especially at the REgional scales?

Automation and innovation (e.g. robots), rather than ‘exporting jobs’; are the primary reasons for the loss of well paying jobs that supported the old middle class and provided a living wage for blue collar (working class) job holders. ***Forget Globalization. Worry About Automation.*** James Bacon ***BaconsRebellion*** (2 DEC 2016), ***The U.S. Metros Most at Risk from Automation***, Richard Florida (10 OCT 2017)

The “Global Economy” primarily benefits “the Global One Percent” and thus expands the inequitable distribution of Citizen Wealth and Well Being.

Improving the lives of ordinary people is emerging as a basic economic theme. ***At the World Economic Forum, Talk of Equitable Capitalism*** (Max Ehrenfreund 20 JAN 2017) and ***Geographic Inequality Is Widening*** (Richard Florida – 23 MAY 2017).

The political bromide of providing tax breaks for the rich to ‘encourage’ them to invest in job producing activity is profoundly flawed. With rare exceptions, the rich (the top net worth quintile) will only ‘invest’ in activities / ventures for their personal pleasure and /or projects that will cause them to become even more rich.

Most discussions of “capital” deal only with Financial Capital and avoid discussion of Social Capital, Material Capital, Natural Capital (Living Capital plus the resources that were on the planet before Homo sapiens started converting them to Financial Capital), Intellectual Capital, Experiential Capital and Cultural Capital. There are many alternative classifications of the multiple types of Capital but it is NOT just Financial Capital that is important to enlightened capitalism and shared prosperity. See ***8 Forms of Capital*** Ethan Appleseed, (2011) and sources cited. All types of Capital are in jeopardy due to the failure to consider them as critical resources.

THE SOCIAL SPHERE

Erosion of the Social Capital and abandonment of Social Compacts at the DOoryard, CLuster, NEighborhood, Village and COmmunity scales has been caused by:

- ◆ Ignorance of the existence of the organic components of human settlement.
- ◆ Communications technology that provides virtual (pseudo) adjacency.
- ◆ Primitive Genetic Proclivities – The stone-age brain attempting to solve the problems of Modern Society. **NOTE I – ELEVEN**

NOTE I– ELEVEN HUMAN’S STONE AGE BRAIN

“That is his stone age brain speaking” is used to discount political outbursts. See *Political Animals - How our stone-age brain gets in the way of smart politics*. (Rick Shenkman, 2016). As Shenkman explains, “the stone age brain” is a reference to the fact that the size and complexity of the present human brain developed during the Pleistocene. The Pleistocene, he notes, is the long ice age that lasted two and a half million years. From a human culture perspective, it is termed the “old stone age” or the Paleolithic Era. The succeeding human era is the Neolithic Era when the Pleistocene glaciers receded opening the way for the emergence of agriculture to replace hunter gather based societies and the rise of trade between willing citizens in Neolithic Villages. The two responses of fear and anger are native to the primitive (stone age) brain. These are the basic human emotions that over-ride rational thought.

SYNERGY has articulated the phrase Primitive Genetic Proclivities to identify a range of thought processes that prevent humans from pursuing actions which reflect their enlightened self-interest with respect to human settlement patterns and other decisions with social, economic and physical impact. See Chapter III of this Perspective and Current Perspective # 24 Live By, Die By linked from the CURRENT PERSPECTIVES page at www.emrisse.com.

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See again “*How Polarized U. S. Politics Are Driving Neighbors Apart.*” Laura Bliss (27 JUN 2016). Also see **POLARIZATION AND LONELINESS** above and the sources cited.

To summarize the condition of the Social Sphere of Human Existence:

Much of society has gone from *Bowling Alone* to *Not Bowling At All*. *Bowling Alone: The Collapse and Revival of American Community*. Robert Putnam (2000).

Direct social interaction has lost its home in comfortable **Third Places**. (See *The Great Good Place: cafes, coffee shops, bookstores, bars, hair salons and other hangouts at the heart of a Community*, Ray Oldenburg (1999) and the sources that have cited this classic, ground breaking work).

Third Places have been abandoned / foreclosed / or replaced with cookie cutter chain outlets. More important is the fact that the time that was spent in Third Places (those places beyond HouseHold dwellings and places of work) has been taken up by virtual relationships and the time consumed by keeping up with mobile devices.

THE PHYSICAL SPHERE

Natural Capital – especially non-renewal resources – has been over harvested. It is now estimated that it would require two plus planets of the scale of the Earth to supply the Natural Capital resources for the existing population with equitable allocation to all humans. **NOTE I – TWELVE**

NOTE I – TWELVE – NATURAL CAPITAL DEFINED

As used in this Perspective, “Natural Capital” includes primarily resources that were on the planet when Homo sapiens emerged or when new territory was “discovered” that could be converted directly (e.g. rough diamonds or timber) or indirectly (e.g. a waterfall that can be harnessed to grind corn and wheat in a water wheel mill). Since the Industrial Revolution the burning through of Natural Capital has increased exponentially. Rare earths, petroleum, top soil and some metals have been primary targets of consumption.

This definition is provided to distinguish the concept of “Natural Capital” from the idea of “Natural Capitalism” based on the book by Paul Hawken, Amory Lovins and Hunter Lovins, *Natural Capitalism: Creating the Next Industrial Revolution* (1999) which is a lifestyle guide to responsible capitalism.

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Many key resources are not YET completely exhausted. However, humans have harvested the low hanging fruit. For example much of the existing and future petroleum resources are now found in costly to harvest “tight oil” and “shale gas” contexts as well as deep ocean and arctic resources. The alternative is coal that will be very expensive when the cost of carbon capture and mountain top removal (environmental mitigation of current mass extraction strategies) are added to the cost of coal.

Air is still polluted inside homes and down wind from many ENterprise and AGENCY activities, especially ‘when something goes wrong at the plant.’ ***‘Unbearable’ Petrochemical Smells Are Reportedly Drifting Across Houston.*** *As historic rainfall and flooding continue to pound America’s fourth-most populated city [REgion], residents of the industrial fence-line communities are already feeling the consequences.* Emily Atkin, (28 AUG 2017. ***Floods are Getting Worse, and 2,500 Chemical Sites Lie in the Water’s Path,*** Horoko Tabuchi, Nadia Popovich, Blacki Migliozi, Andrew Lehren, *The New York Times* (6 FEB 18)

Surface water is polluted. The oceans are now polluted by acidification, microscopic plastic pellets and the floating Trash Vortexes. Fresh water aquifers are being drained by industrial agriculture and to supply municipal water – much of it wasted to water lawns, the largest ‘crop’

grown in the United States. For example, land surface in some places in the Houston NUR have been lowered 10 feet by pumping out water and petroleum.

However, it is primarily what humans have collectively done to the land they occupy (aka, dysfunctional human settlement patterns) that impacts not just the Land but the Air and Water as well as the economic and the social SStructure.

To match the over \$300 billion in \$1 billion plus storm damage events in 2017 noted earlier, Automobile traffic congestion in major New URban REgions, wastes \$300 billion plus to secure Mobility and Access in dysfunctional settlement patterns. *Traffic's Mind-Boggling Economic Toll*, Benjamin Schneider. (7 FEB 2018.)

In the United States gross expansion of land devoted to scattered URban land uses at an average of 2 or 3 persons per acre in New URban REgions wastes vast areas when the market documents that it is from 30 or 60 persons per acre where a reasonable allocation of TOTAL costs can be

afforded by the HouseHolds and which create functional and sustainable DOoryards, CLusters, NEighborhoods, Villages and COmmunities. **See Again NOTE P – THREE**

Among the most immediate detrimental settlement pattern dysfunctions is failure to provide Affordable and Accessible Housing that is near Jobs / Services / Recreation / Amenity.

PART 2 -- NOW FOR THE REMAINING QUESTIONS ADDRESSED IN CHAPTER I

A. THE ABHORRENCE OF HONEST ASSESSMENTS

Why is the current human condition worse than anyone admits?

First, both those in power and those who seek power do not want to scare the largely uninformed and misinformed citizens with the facts and reality. Leaders fear the potential of “self-fulfilling forecasts” and being accused of causing “**COLLAPSE**” as articulated by Jered Diamond in *Collapse: How Societies Choose to Fail or Succeed*, (second edition 2011.)

On the other hand, without a clear UnderStAnding of current reality, citizens see no reason to support the Profound Transformations such as those outlined in Chapter III of this Perspective.

Second, there is no well informed, NON-PARTISAN, science-based refutation of the ‘easy’ solutions such as tax cuts for the rich or jaw boning trading partners. It is obvious that the interest of the political party is considered over citizen interest in the Common Good.

In this context even a ground swell of well intended suggestions for change are too weak to address the causes of the current economic, social and physical dysfunctions. So is the “Global Unrest” described by Paul Hawken in *Blessed Unrest: How the Largest Social Movement in History Is Restoring Grace, Justice, and Beauty to the World* (2007).

Most of the ‘solutions’ proposed by thoughtful commentators could be undertaken without any significant AGENCY action. That will happen ONLY IF enough citizens think it is worth their effort OR if citizens believed the dangers ahead were onerous enough to justify Profound Transformations.

See for example; *What Then Must We Do?: Straight talk about the next American Revolution; Democratizing wealth and building a community-sustaining economy from the ground up.* (Gar Alperovitz, 2013) also see the agendas of the **New Economic Coalition**, the **Schumacher Center for a New Economics**. and the **Center for the Advancement of the Steady State Economy**.

There are perhaps a thousand ‘national,’ “multi-REgional and REgional INstitutions plus B Corps in tune with many of the principles and goals of the three INstitutions mentioned above. However, each INstitution has its own principles, frames of reference, goals and objectives and often relies on imprecise and confusing Vocabulary. **NOTE I THIRTEEN**

NOTE I – THIRTEEN AGAIN IT IS VOCABULARY

Can a ‘New Localism’ Help Cities Transcend Gridlock? Richard Florida (23 JAN 2018) is a review of *The New Localism*, Bruce Katz and Jeremy Nowak (2018). The problem with the review is that the title uses two of the eight Core Confusing Words. The topic must be The New Regionalism. *Cities Alone Can’t Fix What’s Wrong With American Government*, Joe Cortright (6 Feb 2018).

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Books such as Professor Alperovitz’s noted above and INstitutions with agendas such as those also noted above present useful strategies and tactics. However, they do not put forth proposals that mesh with a Comprehensive Settlement Pattern Conceptual Framework and that are robust enough to justify action beyond that of a few earnest “true believers” involving milquetoast proposals. In order to Transform Fundamentals – such as those outlined in Chapter III – it will require implementation of many or most of the modest, useful strategies and tactics put forward as ‘solutions.’ However, by themselves these timid steps will be ineffective.

Schumacher Center for a New Economics, which is dedicated to furthering the work of E. F. (Fritz) Schumacher, put forth in books such as the classic *Small is Beautiful: Economics as if people mattered*, (1975 / 2010) Schumacher's observations are as current as ever:

“We’ve got to come to something more rational than what we have now ... there is no virtue in maximizing consumption. You want to maximize satisfactions, and you want to get them with minimum consumption.”

Schumacher's perception of Buddhist Economics includes support for Jane Jacobs Regional Import replacement strategy. *The Economy of Cities* [REgions], Jane Jacobs (1967). Buckminster Fuller also made contributions to the basis for these perspectives.

The complexity and scale of the Governance and Economic Structures provide a fertile environment for wild conspiracy theories such as QAnon noted above.

B. IS THE CURRENT HUMAN CIVILIZATION RUNNING ON FUMES AND THEREFORE LIABLE TO DESCEND INTO COLLAPSE DUE TO ANY ONE OF MANY GLOBAL, MULTI-NATION-STATE, NATIONAL OR REGIONAL DYSFUNCTIONS?

How Western Civilisation Could Collapse, BBC 20 Aug 2017 opened this Chapter. Some possible precipitating factors are already in place. How the existing capitalist democratic nation-states react to them will determine Homo sapien's and the planet's future.

As noted earlier in this Chapter, to preserve Democracies that are not just dictatorships or political party governments requires the opportunity for all citizens to thrive and prosper. One-Party or Two-Party governments are ones where every aspect of AGENCY action is controlled by one or two **POLITICAL PARTIES**.

AGencies serving the largest organic components of Human Settlement must be LESS comprehensive and have fewer powers that they can exercise without the consent of the lower level AGENCIES. The AGENCY Structures must be much more robust at the smaller scales of organic components. There must be a “Component of Governance” for EVERY scale of organic component in the settlement pattern at and above the CLUSTER scale. There must also be a new REgional Economic STructure for each New Urban REgion. This is a primary topic in Chapter III.

In the United States, The One Percent numbers about 3.25 million super-rich citizens. This Cohort has acquired almost complete dominion over AGENCIES, ENterprises and INstitutions that are not directly controlled by voluntary agglomerations of HouseHolds – e.g. farmers, retail and/or

buyers **COOPERATIVES**. *Wealth: Millionaires Now Control Half of the World's Personal Wealth*, Suzanne Woolley *Bloomberg* (14 June 2018).

The One Percent have not yet come to the realization that it is in their own enlightened self-interest to foster a Profound redistribution of wealth and power. See *Born on Third Base: A One Percenter Makes the Case of Tackling Inequality, Bring Wealth Home , and Committing to the Common Good* , Chuck Collins, (2016) Also again see *The Equality Effect : Improving Life for Everyone* – Danny Dorling, 2017. This issue is further explored in Chapter III.

Populist Promises that sound too good to be true, ARE too good to be true.

That populist promises cannot be fulfilled on a finite planet has been relearned recently by the former citizens of Venezuela and of Brazil and other nation-states.

“Make America Great Again” is a good example of an unfulfillable promise if “great again” is defined to be “the way things were” at some specific time. “**Making America 1953 again**” George Will *The Washington Post* (29 DEC 2016). *The Washington Post* article on Mt. Airy (“Mayberry”) North Carolina put this in context. *N.C. town has faith Trump can bring back Mayberry: A Town built on nostalgia hopes for a return to old values*. (5 JAN 2017) That was the headline in the print addition. The On-line headline was “*How nostalgia for white Christian America drove so many to vote for Trump*. Also see *Texans to Trump, ‘Press on’ Across the state, those who voted for president mostly happy with result*, Jeremy Wallace, Emily Foxhall and Alejandra Matos, *Houston Chronicle* (28 January 2018)

Democracies cannot survive if there is an unorganized influx of migrants that disrupts the Economic, Social and Physical Spheres. At the same time and under the current economic structure, the United States (or Great Britain) cannot prosper without significant immigration to provide the work that citizens will not perform. Legal immigration to the United States has now slowed to the lowest level since the Great Depression. Unbounded population growth due to births over deaths is also not sustainable. As South Korea has learned regulating births to maintain a stable population is not easy but it will be essential. *South Korea Is Trying to Boost its Birth Rate. It's Not working*. Linda Poon (3 August 2018.)

Inter-REgional Transfers within a nation-state can also be disruptive. In recent decades Inter-REgional Transfers have favored REgions with at least one of the following: Jobs, sun or lower cost of living – primarily, the cost of housing, food and taxes.

“Caution” appeals to reason but taking logical, but timid steps, will not achieve a sustainable trajectory. More effective strategies are the topic of Chapter III

C. A BRIEF SUMMARY OF THE ROLE OF HUMAN SETTLEMENT PATTERNS IN THE TRAJECTORY OF CONTEMPORARY CIVILIZATION

Chapter I opened with a summary of the major causes of societal **COLLAPSE** including **UNSUSTAINABLE COST**, **SOCIETAL COMPLEXITY**, **UNSUSTAINABLE ENVIRONMENTAL CONDITIONS** and **WASTED RESOURCES**. Dysfunctional human settlement patterns create or contribute to all these conditions.

With respect to **COST**, see “The derivation of the 10 X Rule in *THE SHAPE OF THE FUTURE* (2000) for a summary of the excessive costs of scattered urban land uses. This is especially a problem for funding of new mega projects and for funding the second generation of Infrastructure – streets, roads, stroads, water, sewer, storm water management – costs after the original construction reaches the end of its useful life. See Charles Marohn and **Strong Towns** on this topic.

The **COMPLEXITY** of AGencies is primarily due to the scale and illogical boundaries of ‘local’ (CCW) governance laid down without regard to the organic structure of human settlement patterns.

With respect to the generation of land, air and water pollution that yields **UNSUSTAINABLE ENVIRONMENTAL CONDITIONS** see *THE SHAPE OF THE FUTURE* (2000)

With respect to the contribution of human settlement patterns to **WASTED RESOURCES** see the consumption of petrochemicals (gasoline and diesel) to provide Access and Mobility for the dysfunctional scattation of URban land uses and the excess use of potable water for maintaining residential lawns, the largest ‘crop’ by acreage that is ‘cultivated’ in the United States.

D. THE MOST IMPORTANT THREAT IS NOT YET THE SUBJECT OF HEADLINES

It is ironic that a future event will have more impact on more citizens of the United States in the near term than any of technological break-throughs, or even the oft cited dysfunctions, unintended consequences and natural disasters. This threat is the massive loss of the value of land and improvements in All New Urban REgions in the United States where millions of acres have been partially URbanized to accommodate scattered URban land uses. See Current Perspectives #s 30 to 34 linked from the *CURRENT PERSPECTIVES* page at www.emrisse.com. **NOTE I – FOURTEEN**

NOTE I – FOURTEEN OUTER RADIUS BAND LAND VALUES

This series of Current Perspectives profiles the author’s growing awareness of the Outer Radius Band “Dead Zone”. To grasp the importance of this antidote for Geographic Illiteracy first see the definition or the components of the Comprehensive Settlement Pattern Conceptual Framework in Chapter II of this Perspective. The five Current Perspectives noted in the text focus on the Outer Radius Bands of the National Capital SubREgion of the Washington-Baltimore New URban REgion. Since these Current Perspectives were written, concurring resources have been published. Nothing the author has seen would require a restructuring of the five original Perspectives. *Far from the city, far from recovery: Loudoun County’s distant suburbs were the D.C. area’s hottest market – until nightmare commutes and a revitalized District flipped the housing switch.* Jonathan O’Connell (5 AUG 2016) The houses O’Connell profiled are in the 20 to 35 mile Radius Band and have recovered value. That is because Loudoun County signed onto helping pay for the METRO extension, and the prospect of new jobs in the county. Houses and land in the 35 to 60 mile Radius Band have not recovered. *The Places That May Never Recover,* Alana Semules (2 JAN 2018). Single HOuseHOld dwellings are not the only properties that may never come back the same applies to large estates and to acreage speculatively held for future Urban land uses. Also refer to Section on Area and Density, Chapter III, PART THREE, Section E.

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The loss in value will be spread among most land and building owners outside The Logical Location of the Clear Edge Around the Cores of New URban REgions. The primary beneficiaries will be HouseHolds that are attracted to farming, forestry and other beneficial uses of land that is now held by Armature Speculators in anticipation of future URban land uses. This land is in excess of the amount necessary to meet the needs of existing and future URban citizens and is land that cannot support the evolution of functional **URban** human settlement patterns.

The total loss due to the realization that there is no market for URban use of this land will make the \$7.7 trillion of lost property value due to The Great Recession seem trivial. (The loss of HouseHold wealth between spring 2007 and spring 2009 was \$16.4 trillion. ‘Recovery’ through 2011 has recovered \$ 8.7 trillion leaving a net lost of \$7.7 trillion.

Recall that almost all of the ‘recovery’ was price increases on close-in / premium properties near the Cores of New URban REgions. Further the increased value has fallen to the top quintile of U.S. HouseHolds who owned these well located properties. The majority of those who lost the \$16.4 trillion have not recovered anything. See *America’s Lost Trillions*, Chris Isidore *CNN Money* June 2011. *A Great Recession Brief: Income, Wealth, and Debt and the Great Recession*, Timothy Smeeding, *The Russell Sage Foundation and the Stanford Center of Poverty and Inequality* Oct 2012. This specter is further explored in Chapter II and IV. **NOTE I – FIFTEEN**

NOTE I – FIFTEEN VOCABULARY AND GEOGRAPHIC ILLITERACY YET AGAIN

Some of the coverage is not helpful due to the problems of Vocabulary, Core Confusing Words and Geographic Illiteracy. An example is *Density's Next Frontier: The Suburbs*. Richard Florida, (2 JAN 2018). Both the author and the study which is the subject of the post uses Core Confusing Word and profoundly underestimates both how much land there is in the Outer Radius Bands and how little land needs to be densified to meet the goal of 30 persons per acre at the Alpha Community scale. Again see Section on Area and Density, Chapter III, PART THREE, Section E.

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E. DEFINING COLLAPSE

We wrap up Chapter I with a discussion of “COLLAPSE.”

First – in the long run the Earth will be toast. See Wikipedia, *Timeline of the far future*. For an alternative Perspective see *10 Billion Years From Now – Science and Technology*, John Greer / *Adbusters, Utne Reader* (Fall 2015). Greer’s focus is on the survival and the naturally occurring sequence of species of “intelligent beings” on the planet over the next 10 billion years. By this time the planet will have disappeared due to the normal sequence of the Sun’s evolution.

From the other end of the telescope one can take their lead from the subtitle of Jared Diamonds best seller *Collapse: How Societies Choose to Fail or Succeed* (Second Edition 2011). Diamond focused on isolated or largely isolated societies – Easter Island, The Norse in Greenland, etc. In spite of best efforts, there continues to be speculation about the factors that resulted in the Fall of the Roman Republic and the Roman Empire.

Perhaps the most compelling area of investigation is what happened to the advanced agrarian societies in South East Asia (the subject of the new Afterword in the Second Edition of *Collapse*) as well as the newly emerging information on advanced agrarian societies in the Amazon basin, in MesoAmerica and what is now Southeastern United States. See **Chapter II NOTE II – ONE**. These societies are now understood to have been far larger and far more complex than they were believed to have been less than a decade ago.

The causes of their demise may be due to a much larger / longer sequence of impacts of “germs” – from the title of Diamond’s earlier book *Guns, Germs and Steel* (1997) – than is currently assumed. For example plagues may have been transfer to the Americas in the Fourteenth and early Fifteenth century by those fleeing their impact in the Middle East and Europe. Again see **Chapter II NOTE II – ONE.**

Setting aside for the moment the far distant future or the chance of a large asteroid impact, a super volcano eruption and the fact that humans have the technical means via nuclear and / or biological ‘bombs,’ to wipe themselves out along with their natural life support Infrastructure.

What we mean by **COLLAPSE**?

The theses of ***THE LITTLE BOOK*** is that the current trajectory is headed for total COLLAPSE of Homo sapien societies because every part of the globe is now knitted together with trade, finances and travel.

We Do NOT mean that the **COLLAPSE** results from the Earth’s surface heating to the temperature on Venus and thus making the planet uninhabitable as suggested by Stephen Hawking. Just before passing away, Hawking recommended that humans move to different planet ‘soon’ because surface of the earth will follow the course of Venous atmosphere and burn off resulting in temperatures akin to Venus.

***THE LITTLE BOOK’s* trajectory is based on the current level of resource consumption, failure to pay the full cost of goods and services and resources, the agglomeration of dysfunctional settlement patterns and the inequitable distribution of resources.**

There appear to be three choices

1. A few humans might escape from planet only to befoul another planet. See the detailed discussion of “No Exit” in ***THE SHAPE OF THE FUTURE*** and “Still No Exit” in **TRILO-G**. More planets have been discovered outside our Solar System but the basic math of Intergalactic Quarantine still holds.
2. Intentionally kill off – or allow ‘natural’ forces to eliminate – 4 to 6 billion humans so there is enough resource to support the remaining humans at something like the current level of consumption
3. Cut the level of consumption and the pollution of air, water and land as well as simplifying life by changing the Structure of Governance and the Structure of Economic Systems so that humans can achieve a Sustainable Trajectory.

If put to a vote the author assumes that the vast majority of humans now living on the planet would desire that the planet to be pretty much as it is now **WITHOUT** the dysfunctions noted earlier for as long as possible.

NOTES FOR CHAPTER I

[CHAPTER I NOTES TO BE RELOCATED HERE UPON FINAL EDITING]

CHAPTER II

How did human society acquire the current dysfunctional trajectory? Step by step down a path that was unsustainable at every turn over the past 150 plus-years and especially the last 70 years. **(PARTS ONE & THREE)**

This Chapter also defines the Tools (or Elements) of The Comprehensive Settlement Pattern Conceptual Framework. (PART TWO)

PART ONE – THE OPPOSING HEADWINDS

A. BUT FIRST...

Before focusing on the topics explored in Chapter II, one preliminary question must be addressed:

If the author has documented the current state of compound dysfunction in the economic, social and physical spheres of human activity (Chapter I); and

If the author has articulated a comprehensive set of principles, strategies, tactics, policies and programs to address these dysfunctions (Chapter III), then

WHY bother to delve into the forces that created the current dysfunctions?

Here is why:

Many of the principles, strategies, tactics, policies and programs currently relied on to guide AGENcies, ENterprises, INstitutions and HOuseHolds are the CAUSES – or contribute to the causes – of the dysfunctions that plague Homo sapiens. Many rest on short sighted and ill-founded economic, social, physical and cultural perceptions.

If citizens and their leaders do not understand the context and drivers of the current

dysfunctions, they will try to apply shop-worn and counter-productive ‘solutions’ that are in fact the CAUSES of the dysfunctions.

If a Critical Mass of interest in curing the existing dysfunctions coalesces, then citizens and their leaders will, – unless otherwise informed – try to apply principles, strategies, tactics, policies and programs that have gotten humans onto the current dysfunctional trajectory. Here is a simple example: widening radial expressways to “**SOLVE TRAFFIC CONGESTION**”. In fact ***Congestion can be good, study reports***, Robert Steuteville Public Square 8 June 2018. What is important is Mobility and Access, not mindless expansion of infrastructure that provides neither.

Many of the forces that have resulted in the current dysfunctional human settlement patterns and the trajectory of Western Civilization are recognized as problems even if they are not yet well articulated or UnderStood. Some of the drivers of society’s dysfunctions have been on the agendas of individual INstitutions for decades as noted in Chapter III.

B. OVERVIEW

CONTEMPORARY HUMAN SETTLEMENT PATTERNS – 15,000 YEARS IN THE MAKING.

One way to grasp the scope of current settlement pattern dysfunctions is to consider the sequence of transformations over the past 15,000 years. These patterns have morphed over the centuries to result in the current settlement patterns, especially in the United States.

About 15,000 years ago hunter-gatherers started to convert their temporary shelters into seasonal camps. Some of those camps that were near place-based resources became Neolithic Trading Villages. These Neolithic Trading Villages evolved to become the Cores of Bronze Age advanced agrarian societies. See *The Economy of Cities*, Jane Jacobs (1969).

In the context of this “main sequence,” URban Agglomerations that emerged from Neolithic Trading Villages morphed into ‘cities’ as classically defined and then into ‘city-states, that became the URban heart of empires, kingdoms and then industrial based ‘nation-states.’ Most recently New URban REgions have emerged as the basic building blocks of the contemporary economic, social and physical Ziggurat we call “civilization” as documented in *THE SHAPE OF THE FUTURE* (2000).

In spite of ‘temporary’ retrogressions such as ‘The Dark Ages’ – and some suggest that even the Dark Ages were not that “dark” – this was, by-in-large, a positive evolution. There are now new insights based on recent research concerning the earliest milestones as well as what transpired in

the Americas, Africa and Southeast Asia over the period from 2,000 BCE and 1800 CE. **NOTE**

II – ONE.

NOTE II – ONE

The events noted above ‘milestone’ the broadly accepted ‘main sequence’ of the evolution of trade and economic activity. It turns out that there may have been trading economies far earlier. ***Colored Pigments and Complex Tools Suggest Humans Were Trading 100,000 Years Earlier Than Previously Believed: Transformations in climate and landscape may have spurred these key technological innovations***, Lorraine Boissoneault *Smithsonian* (15 MAR 2018)

The ‘main sequence’ of the evolution of settlement patterns is explored in ***THE SHAPE OF THE FUTURE*** (2000). However, since 2000 far more has come to light concerning the evolution of the advanced agrarian civilizations, especially in the Americas, between 2,000 BCE and 1800 CE. See ***1491: New Revelations on the Americas Before Columbus***, Charles Mann (2006) as well as the extensive evidence documented by Richard Thornton @ www.peopleofonefire.com .

Charles Mann documents research on advanced agrarian societies in the upper Amazon Basin including intentional Amazon forest management to produce food and materials. Mann also profiles advanced agrarian societies in what is now Peru and elsewhere. He does not address related events in what is now Southeastern United States or in the Caribbean Basin.

Richard Thornton explores the role of the Maya traders (Tamahiti) as ‘the Phoenicians of the Caribbean and the Gulf and Atlantic coasts of North America.’ One example is the importation of pigment for the decoration of buildings in Mesoamerica from mines in what is now the State of Georgia.

Thornton also explores the evolution of “Native American tribes, societies and nations” based on original maps and archives and on current technology such as DNA and Lidar. For example, genetic testing of several extended families at the North Carolina Cherokee Reservation and of many individuals who claim Cherokee heritage but are not Federally Recognized, revealed that they are primarily of Middle Eastern decent. This ancestry is believed to have been from Sephardic Jewish miners, who settled in the Southern Appalachians during the late 1500s and 1600s – prior to the arrival of ethnic Cherokees from the North.

New evidence appears on a regular basis. For example, in early 2018 there has been the discovery in Guatemala of thousands of Maya buildings, settlements and Urban complexes. These discoveries raise the estimated population of the classical Maya civilization. ***Maya civilization was much vaster than [previously] known, thousands of newly discovered structures reveal***, Cleve Wootson, (3 February 2018) *The Washington Post* . Also see ***Speaking of Science: Archaeologists discover 81 ancient settlements in the Amazon***. Sarah Kaplan *The Washington Post* 27 March 2018. These are only some of many facts that will eventually rewrite the history of the Americas, and of the Planet.

As important as these findings and insights are to UNDERstanding the history of the Americas, they do not change what is recorded to have happened in the last 150 years as to settlement patterns in the United States.

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The patterns of settlement laid down over the period 2000 BCE to 1865 are with us today. Rome and Roman provincial capitals had rectilinear blocks with apartment buildings, corner stores and atrium Single Household Dwellings. These settlement patterns still “fit” contemporary requirements. This is because humans are about the same size and can comfortably walk about the same distances to meet their daily URban needs as they could two thousand years ago. Many of these settlement patterns that have survived are among the most treasured human habitats on the planet. Tourists spend \$billions to visit. and expats to retire in these places.

Many of the advanced agrarian societies in the Americas were wiped out by pre-Columbian epidemics and plagues as well as by the more recent European-based germs as documented in **Guns Germs and Steel** Jared Diamond (1997). Also see **500 years later, scientists discover what probably killed the Aztecs: Within five years, 15 million people – 80% of the population – were wiped out in three epidemics.** The most died in the second epidemic named ‘cocoliztli’ meaning pestilence, **The Guardian** 18 January 2018.

The settlement patterns established by the advanced agrarian societies would have been more sustainable than the recent settlement patterns that have been shaped by the reliance on Large Private Vehicles to provide Mobility and Access.

That is because the settlement patterns of the advanced agrarian societies reflected the organic structure of human economic, social and physical relationships that had evolved over the prior 15,000 years.

The advanced agrarian societies in the America were decimated by plagues BEFORE Columbus. The settlement patterns that were established in the Untied States by the advanced agrarian societies were wiped out by rivals and by successor “Native American” societies and tribes. After Columbus, advanced agrarian societies and their works were obliterated by Conquistadores, more diseases, European settlers, yeoman farmers and plantation owners as well as more recently by road and dam builders.

By and large, the sequence of evolutionary steps toward the current human settlement patterns was positive until about 200 years ago when industrialization began causing ‘urban squalor’ in the UrbanSide. This condition was due to formerly NonURban workers and HouseHolds moving to URban Agglomerations to seek industrial jobs and a better life. Many ended up in tenements located along streets deep in horse manure.

C. HUMAN SETTLEMENT PATTERNS – THE LAST 150 YEARS IN THE UNITED STATES

The patterns of settlement laid down outside The Logical Location of the Clear Edge from 1865 to 1920 morphed due to the impact of steel wheels on steel rails and on the evolution of “commuter” villages that agglomerated in commuter rail station-areas.

In the UrbanSide during the period from 1865 to 1945 steam power, steel wheels / rails, electricity, telegraph, steel frame buildings. elevators, air conditioning, radio, television and municipal water / sewer service transformed Urban fabric.

From 1920 to 1945 in the CountrySide witnessed the rise of planned ‘villages.’ See *Paradise Planned: The Garden Suburb and the Modern City*, Robert Stern, David Fishman and Jacob Tilove (2013)

In the first decade following World War II the future looked bright in the United States. Citizens and their leaders had the economic and technological where-with-all to solve the “URban Problems” caused by the Transformation from agrarian based societies to industrial and technologically shaped societies.

By 1965 across the United States many professionally prepared “REgional plans” were in place to guide future development based on the successful models of URban land use built in the 1920s and 30s. There were however, underlying forces that detoured the application of lessons from REgional Plans and from Planned New COmmunities before and after World War II as spelled out in *THE SHAPE OF THE FUTURE* (2000):. **NOTE II – TWO**

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NOTE II – TWO

THE SHAPE OF THE FUTURE (2000) and *TRILO-G* (2010) are (will be) provided on CDs in Portable Document File (PDF) format with each copy of *THE LITTLE BOOK: RESTRUCTURING COmmunities and REgions*. When either of these volumes are cited in this four Chapter Perspective without specific chapter or section reference, readers can use the ‘find’ function of PDF Readers to pin-point multiple locations for the referenced material.

Citations for publications by the author that take the form of a title and an exact publication date (e.g. *Interstate Crime* E M Risse, 28 Feb 2005) can be located by a Google search of “e m risse interstate crime 28 Feb 2005.” Some resources such as this one pop up as the first option. In a few cases this may be a more tedious process since over the years some of the Internet links have gone dead due to website crashes and intentional ‘cleansing’ by ideologues. Most of these documents are also available linked from the *RESOURCES* page at www.emrisse.com which

provides links to backgrounders, columns and blog entries between 2005 and 2015 among other sources. This is not a quick fix, however. Some of the linked PDFs run from 500 to 1,000 pages.

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D. CORE FORCES DRIVING CURRENT DYSFUNCTIONAL SETTLEMENT PATTERNS

Based on acreage, the vast majority of human settlement over the past 115 years in the United States do not reflect the organic structure of human economic, social and physical reality. Rather they have been corrupted by failure to evolve a fair and equitable distribution of the true cost of the settlement patterns. See *Progress and Poverty: An inquiry into the cause of industrial depressions and the increase of want with increase of wealth ... The Remedy*, Henry George, (1879) Also see *THE SHAPE OF THE FUTURE* on the topic of settlement pattern cost allocation.

The long term impact of this failure has been masked by the ‘prosperity’ generated by burning through the Natural Capital. This exploitation has primarily benefitted those at the top of the economic, social and physical Ziggurat. This reality impacts the current state of Civilization.

In addition to the failure to evolve an equitable allocation for the cost of settlement pattern decisions, there are three specific principle drivers of Settlement pattern dysfunction that steered society into the ditch between 1900 and 2015:

1. **Affordable and Accessible Shelter.** The provision of shelter to citizens of the United States has been assumed to be a competitive, ENterprise activity for most forms of housing. This has led to the citizens in the lower half of the population distribution being poorly housed and / or spending more that a reasonable percentage of HouseHold income on Shelter. *What you Have to Earn to Rent a Modest 2-Bedroom Mapped*, Tanvi Misra, 13 June 2018. In the worst cases this results in the growing cohort of the homeless. The *CityLab Daily* for 28 June 2018 provides a comprehensive list of contemporary links to Homeless Shelter Resources. Also see: *Big Tech Isn’t the Problem with Homelessness. It’s All of US*, Adam Rogers *Wired* 24 June 2018.

Conventional wisdom was summarized by President Harry Truman who noted in his 1949 State of the Union address: “most of the houses we need will have to be built by private enterprise, without public subsidy.” As George McCarthy, President of the Lincoln Institute of Land Policy notes. “Nearly 70 years later, our collective failure to solve the affordable housing deficit may stem from wrongheaded analysis of the problem, and the conclusion that market-based solutions can be designed to solve the mismatch between the supply of affordable housing and demand for it.” **NOTE II – THREE.**

NOTE II – THREE.

Message from the President of the Lincoln Institute of Land Policy, January 2018 issue of *Land Lines*. The entire issue of *Land Lines* is devoted to Affordable and Accessible Housing and demonstrates the profound transformation at the Lincoln Institute since McCarthy has taken over as President.

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The nation-state role in the provision of Shelter and the resulting settlement patterns in the Soviet Union and Eastern European satellites are **NOT** the answer. The approaches of Sweden and Denmark are a better guide. Following the REgional plans developed in the 50s and 60s with provision of Planned New COmmunities would have resulted in far better of Shelter if accompanied by a fair allocation of location-variable costs. *The New City*, Don Canty, 1969.

The goal of ENterprise shelter providers in the United States was, and is, to make the most money in the shortest period of time. The “lack of patient capital” thwarted the widespread development of Planned New COmmunities. New Communities U.S.A. Raymond Burby and Shirley Weiss, (1976).

These economic realities resulted in a lack of Affordable and Accessible Housing especially for those at the bottom of the economic Ziggurat. Housing is not yet seen as **A BASIC HUMAN RIGHT** because it was “assumed” that the private market and ever growing wages would (or could) supply all HouseHolds with shelter. Since 1973 that has been less and less the case.

2. **Autonomobiles** (Large Private Vehicles – LPVs) LPVs and the expressways, stroads and parking lots to serve LPVs as well as cheap fuel to propel LPVs created THE ILLUSION that URban land uses could (or should) extend into the CountrySide without limitations and without regard to the lessons provided by existing settlement patterns that reflected the evolution of functional and sustainable habitat.
3. **Land Use Controls** Zoning and other land use controls were enacted to SEPARATE the elements of Urban Fabric rather than encourage a functional mix of uses aka, “Walkable URbanism.” Land use controls were fashioned to reflect the unfounded fears of Not In My Backyard (NIMBYs). *A Better Place to Live*, Philip Langdon, 1994, *Confronting Suburban Decline: Strategic Planning for Metropolitan Renewal*, William Lucy & David Phillips, 2000 and *Within Walking Distance: Creating Liveable Communities for All*, Philip Langdon, 2017.

It turns out that building Walkable URbanism **RAISES** the value of adjacent Single HouseHold Dwellings and if well planned **REDUCES** traffic. (See evidence provided by The Rosslyn-Ballston Corridor in Arlington County, VA. based on 45 years of experience.)

These three specific forces – 1) lack of Affordable and Accessible Shelter (ENterprise home builders), 2) Large Private Vehicles (and Limited Access Roadways and free Parking) and 3) Misguided Land Use Controls – converted almost every land owner in the CountrySide within 60 miles of The Logical Location of The Clear Edge around the Core of large New URban REgions into **AMATEUR SPECULATORS**. Based on the windfall location of interchanges and major roadways, **SOME** Amateur Speculators cashed in on the value differential between URban and NonURban land uses when location-variable costs are not fairly allocated. The result was profoundly dysfunctional human settlement patterns.

Some Amateur Speculators who missed the windfalls just jacked up their reservation price – “my land is worth \$15k an acre because I heard Joe Doe got \$12k and his land is all rocks.”

These three factors also generated governance dysfunction among fragmented AGencies with land use control powers and led to the abandonment of the detailed REgional plans. These REgional plans would have provided for functional future settlement patterns at the REgional scale. NOTE II – FOUR

NOTE II – FOUR

There are a number of alternatives to the three factors cited above as **THE** factors driving dysfunctional human settlement patterns. Many of the alternative ‘causes’ of dysfunctional human settlement patterns are indeed partial causes.

One recent “solution” is championed by the Congress of New Urbanism via the INstitution’s *Public Square* publication. *Twelve Steps to Sprawl Recovery*, Steve Mouzon (13 Feb 2018). There are so many problems with this post – and similar ‘formulas’ – that it (they) deserve a full Perspective (forthcoming from SYNERGY).

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Contemporary planners have lost track of the fact that these functional REgional plans exist even though they are referred to in well-respected texts e.g. *The Wright Plan for New York State in The City in History: Its Origins, Its Transformations, and Its Prospects*, Lewis Mumford (1961). Also see the REgional and SubREgional plans for the National Capital Area created between 1960 and 1965.

Over the past 150-plus years when many of the current dysfunctions documented in Chapter I first emerged there have also been many clear advances: Horse manure is gone from streets (and most roads); there is now **THE ABILITY** to deliver pure water to every HouseHold; and there is **THE ABILITY** to process human waste to be drinkable at the sewerage treatment plant outflow. There are municipal, REgional and international examples of successful universal health care strategies, educational systems and ecosystem preservation.

However, the United States has not solved the need to provide Affordable and Accessible Housing for many of its citizens.

The United States has also not solved the problem of the widening Citizen Wealth and Well-Being Gulf.

The United States has not embraced a comprehensive strategy to create a sustainable future trajectory such as “The Natural Step” in Sweden.

All three conditions are reflected in the dysfunctional settlement patterns. See *Economic Inequality and Health Inequality Are Inextricably Linked*, John Lettieri and Steve Glickman (5 December 2017). For a global overview see *Globalization and its Discontents Revisited*, Joseph Stiglitz (2018). Stiglitz provides a comprehensive overview of the forces at work. Also Google “Richard Florida class inequality” for an avalanche of links to supporting perspectives.

Some other nation-states have done a better job of avoiding most of the dysfunctions of contemporary civilization. Most have not done a better job.

E. POPULATION

Advances in agriculture, medical science, transport and industrial capacity have allowed the world population to balloon from about one billion 200 years ago to over seven billion – on the way to ten billion – today. The United States has grown from a population of about 4 million at its founding to over 320 million today.

Having more (and more) Homo sapiens on a finite planet is NOT a good thing. Without intelligent and comprehensive strategic planning education and implementation, will be impossible to achieve or maintain “sustainability” as defined in *Our Common Future* G. H. Brundtland *The United Nations* (1987) with an ever expanding population..

Richard Heinberg noted in the August 2017 Post Carbon Institute *PCI Messenger: Why Technology Won't Save Us*:

“Our core ecological problem is not climate change. It is OVERSHOOT (emphasis added) of which global warming is a symptom. Overshoot is a systemic issue..”

Consumption of resources to feed and shelter seven plus billion humans settled in dysfunctional Urban and NonUrban patterns has put humans on a trajectory to exhaust the planet's Natural Capital.

If this trajectory is not profoundly Transformed, it will require multiple planets with as many resources as the Earth had 150 years ago to support human society . See *Half-Earth: Our Planet’s Fight for Life*. E. O. Wilson (2017) and *WE NEED NATURE, NATURE NEEDS HALF, ERGO, WE NEED NATURE TO GET HALF*, Brian Czech *The Daly News*, Center for the Advancement of the Steady State Economy (9 JAN 2018).

As yet, no one knows if such resource-rich planets exist or if humans can get there and back with a significant payload. See literature on *Consumption Overshoot* and on *Ecological Footprint*, by Mathis Wackernagel 1996 and following, Also see discussion of **NO EXIT** in *THE SHAPE OF THE FUTURE* and in *TRILO-G*

There are now CUMULATIVE threats outlined in Chapter I that will accelerate the voyage to **COLLAPSE**. These threats have been generated by the human settlement patterns and the misapplication of technology over the past 150 years and especially over the last 70 years. They include: *The Citizen Wealth and Well Being Gulf* (aka, the Wealth Gap) and the addiction to Mass OverConsumption by those who can afford unsustainable levels of consumption (in the **Economic** sphere); Erosion of Social Capital and the rise of inter-personal and intra-group conflict (in the **Social** sphere); air, water and land pollution and the lack of Affordable and Accessible Housing and a sustainable food supply (in the **Physical** sphere) as outlined in Chapter I.

F. CONTEXTUAL REALITIES

The following is a brief summary of the social and cultural forces that have contributed to creation of the current settlement pattern dysfunctions.

NB: The length of these descriptions vary from item to item. The short descriptions of some topics reflect the fact that these contextual realities are broadly accepted or are comprehensively addressed in *THE SHAPE OF THE FUTURE* and / or in *TRILO-G* or other SYNERGY publications AND the conditions have not changed since that earlier publication.

- 1. Collective Ignorance and Opposition to Intelligent Change.** See *Innovation and Its Enemies: Why People Resist New Technologies*, Calestous Juma (2016), *Humans once opposed coffee and refrigeration: Here’s why we often hate new stuff*, Steven Overly (2016). In this context ‘innovation’ and ‘technology’ are the markers for any significant ‘change.’ Attacks on education per se are not rare. For example see *Elitists, crybabies and junky degrees: A debate over higher education funding, A Trump supporter explains rising conservative anger at American universities*, Kevin Sullivan, Mary Jordan (26 NOV 2017) *The Washington Post*. Also see the curated comments on this post.

2. **Geographic Illiteracy and Spatial Ignorance in the Context of Complex Urban Human Settlement Patterns.** In very large nation-states creating an Understanding necessary to create useful Community, SubRegional and Regional strategies is difficult. See *Overcomplicated*, Samuel Arbesman (2016) and *Are Cities Too Complicated?* Richard Florida (2016) Also see *The Most Important Video You'll Ever See* Albert Bartlett (2007 / 2017). *Americans – especially but not exclusively Trump supporters – believe crazy, wrong things.* Catherine Rampell (26 Dec 2016) *The Washington Post*. The topics of Geographic Illiteracy and Spatial Ignorance are explored at length in *THE SHAPE OF THE FUTURE* (2000).

3. **The Unquestioned Belief that ‘GROWTH’ is an Unblemished Good Thing that Naturally Raises All Boats.** See Chapter I. A related malady is the ethic of “winner take all.” See *The Winner-Take-All Society: How more and more Americans compete for ever fewer and bigger prizes, encouraging economic waste, income inequality, and impoverished cultural life*, Robert Frank and Philip Cook (1995). Also see *The State Story: Growth Without Growth*, Richard Florida, *The Atlantic*, April 2011. *Growing Wealthier: Smart Growth, Climate Change and Prosperity*, Chuck Kooshian and Steve Winkelman January 2011. *Relationship between Growth and Prosperity in 100 Largest U.S. Metropolitan Areas*, Eben Fodor Dec 2010. *Prosperity Without Growth: Economics for a Finite Planet*, Tim Jackson (2009), *Economics for a Full World*, Herman Daly, *Great Transition Initiative* June 2015.

4. **Everything will be OK if society reverted to some date in the past.** “Making America 1953 Again” (George Will) , “The Coalition of Restoration” (Ron Brownstein) Society cannot retreat because 1900 or 1945 agriculture cannot feed 7 -plus billion people. *More professionalism, less populism: How voting makes us stupid, and what to do about it.* Jonathan Rauch and Benjamin Wittes *Introduction: The Cult of Democratization* (May 2017) *The Brookings Institution*.

5. **The One Percent.** The scope of the dysfunctions have been exacerbated by the rise of the Super Rich who can buy the support of Agencies and Institutions. See *Supercapitalism: The Transformation of Business, Democracy, and Everyday life*, Robert Reich (2007) in *The Age of Greed: The triumph of finance and the decline of America, 1970 to the present.* Jeff Madrick (2011).

Large democracies cannot plan effectively for dramatic future events when there is a SMALL minority with the resources to create DOUBT that the event will occur at some point. For example, there is an ever growing body of information that document that the Planet warming and thus the Planet’s Climate IS Changing and that humans have “something” to do with this fact. One immediate impact is the rising of the sea level that is directly caused by the calving

of glaciers, the melting of ice caps. It is also indirectly caused by the melting of sea ice. In addition there is subsidence of coastal land due to pumping out fresh water aquifers and petrochemicals as well as coastal geography subject to subsidence. **NOTE II – FIVE**

NOTE II – FIVE

See *Merchants of Doubt: How a Handful of Scientists Obscured the truth on Issues from Tobacco Smoke to Global Warming*, Naomi Oreskes and Erik Conway, (2010). The water need not rise another inch for what has already happened to be repeated across the United States. In 2016 there were 15 weather (water related) disasters that caused more than \$1 billion in damages each. There was a total of \$46 billion in total damage from these events. See *The Huge Costs of Weather Damage in 2016*, John Metcalfe (10 Jan 2017). Also see *Down Memory Lane with Katrina*, E M Risse (5 Sept 2005) and *Katrina Yet Again* E M Risse (8 Sept 2008). Blog post linked from the *RESOURCES* Page at www.emrisse.com

In Chapter I it was noted that the flooding that followed hurricane Harvey stalling over the Houston New Urban Region as a harbinger of water disasters to come and an indicator of Global dysfunction. A closer look at Harvey illustrates the difficulty of avoiding future floods. As currently structured, Agencies cannot plan for catastrophic events. Only now almost a year after Harvey are the details emerging. See *Final Report: Harvey's impact on Houston area laid out in grim detail*, Mike Snyder *The Houston Chronicle*, 5 JUNE 2018. This event will be the subject of a forthcoming *Current Perspective*.

6. **The Importance of PRIMITIVE GENETIC PROCLIVITIES in Human's "Stone Age Brain"** is noted in Chapter I. **See again NOTE I – ELEVEN**,
7. **Politically Rigged Gerrymander Maps.** The majority of those who belong to 'major' political parties have no REAL agenda beyond winning the next election. Gerrymanders election districts erode democracy and functional governance.
8. **Economist's Doctrinaire Views.** In the vacuum created by the lack of a Comprehensive Settlement Pattern Conceptual Framework such as the one articulated later in this Chapter, economists (and others) are free to churn out theories and models that are unrelated to reality.

Neither Gross National Product (GNP) nor Gross Domestic Product (GDP) are a valid measure of the economy's Health. *Good for GDP NOT good for workers: Key to spurring job growth and equality lies in boosting the economy's tradeable sector*, Steven Pearlstein citing Michael Spence, *The Washington Post* 13 March 2011.

The measures of inflation are badly flawed. *Where Does Inflation Hide?* Herman

Daly 20 February 2018), *The Daly News*. This post also documents how the economic system is structured to support the rich at the expense of those at the bottom of the economic Ziggurat.

The most common error that economists make is to toss everything they cannot easily define and quantify into the category of “EXTERNALITIES.”

There are some who challenge the basic concepts upon which economics is based. *Economics Ignores Thermodynamics – Part 1* (3 June 2015) and *Thermodynamics in Economics, Revolutionary Portent, Future History – Part 2* (10 June 2015) Eric Zencey *The Daly News, The Future History of Political Economy*.

Compounding all these sources of Economic Sphere misinformation is the fact there are tens of thousands of ‘economists’. These economists generate and rely on everything from simple homilies to maddeningly complex equations and arcane theories to support their arguments. These economists are aligned / affiliated in ‘schools’ that often take at least two sides of every question. See *Economists Disagree on what Caused U.S. Financial Crisis*, Max Eurenfreund (17 January 2017)

Economists pontificate to support the mission of their employer and / or the guru of their department. One can shop for an economist to support any position in the Economic Sphere of human experience. The only common trait is that almost all treat far too many relevant Economic, as well as Social and Physical, forces as **EXTERNALITIES**.

Some tools used by economists and money manipulators (ranging from Quantitative Easing to promoting subprime mortgages) can have immense impact on citizens and settlement patterns. For example see opinion pieces related to **The Great Recession**. The impact and the success or failure of these tools is

NOT based on a Comprehensive Settlement Pattern Conceptual Framework that could have predicted the outcome.

9. **The Real Speed of “Change.”** One of the myths that the author attempted to put to rest in 2000 was that “everything” was going faster and faster – *Future Shock* vs *Past Shock*. See *THE SHAPE OF THE FUTURE* Chapters 2, 19 and 31.

As noted by Kenneth T. Jackson, author of *Crabgrass Frontier: The Suburbanization of the United States* (1985) the period with the most profound change was from 1880 to 1950. Since then ‘life’ has become much more hectic and citizens have become more frazzled but that is due not to rapid fundamental

change but to instantaneous communications and citizens taking on more activities that they believe to be important as well as diversions such as addiction to gaming and Social Media. *All We Want To Do is Eat Junk and Watch Others Play Fortnite*, Nellie Bowles, *The New York Times* (2 MAY 2018). Citizen frazzle is also due to the dysfunction of the AGENCY and Economic STRUCTURES addressed in Chapter III.

Now there is a rash of new publications that purport to document that the reason that citizens are so harassed and frazzled is that the world “is speeding up.” See *Thank you for Being Late*, Thomas Friedman 2016 and *Megachange: Economic Disruption, Political Upheaval, and Social Strife in the 21st Century*, Darrell West (2016). Citizens ARE frazzled but that, by and large, is of their own choosing in an attempt to do more in less time because they have access to more things that they think they want to do or worry about.

Here is a quote that captures the alternative perspective:

“A second story of this age of technological transformation says that it’s mostly a facade – that the last 30 years has been a productivity bust and little has changed in everyday life aside from the way everyone reads and watches videos. People wanted flying cars and got Netflix binges instead.” *Airbnb and the Unintended Consequences of ‘Disruption’*, Derek Thompson (21 February 2018)

10. **The politics of resentment.** Over the last two months of 2016 there was a tsunami of interest in “The Politics of Resentment.”

A scholarly presentation of the political perspective of many who still believe they live in “rural America” – as opposed to “low density America” – was published just in time to help explain the November 2016 presidential election. *The Politics of Resentment: Rural Consciousness in Wisconsin and the Rise of Scott Walker*, Katherine Cramer (2016).

This is not a ‘new’ topic. See *The Politics of Rich and Poor: Wealth and the American Electorate in the Reagan Aftermath*, Kevin Phillips (1990). There is a powerful best seller by someone who escaped the poverty of “Scots Irish Appalachia” and the industrial collapse for the white working class in Middletown Ohio to succeed in law and technology on the right and left coasts. *Hillbilly Elegy: A Memoir of a Family and Culture in Crisis*. J. D. Vance (2016).

Recent analysis suggests that nation-state-wide the beliefs of those in small URban agglomerations in lower density REgions of the Untied States are not really the ones who are hurting. *Who’s hurting the worst out there? It’s not the white working class*, Ana Swanson (15 January 2017)

Inhabitants of socially complex small, low density NEighborhoods and COmmunities are very capable of UnderStanding but they are not interested in learning because they have so many other things taking up their time and their capacity for “current interests” – things like commercial ‘entertainment’ and local INstitutions. As pointed out in Chapter III it is easy to make the actions of nation-state and state AGencies seem irrational and intended to hurt their personal interest: “Drain the Swamp.”

Failure to leave the comfort of their relationships with friends, extended family and INstitutions to move to where opportunity exists – or put together a new ENterprise where they grew up – places these low-density Urbanites in a limbo-land. Persons who still live in the same COmmunity where they graduated from high school and if the COmmunity has a stagnant economy are good candidates for the “Resenters.”

Steven Pearlstein puts an interesting twist on the “Resenters perspective”: *Wait for it: The rise of the real socialist moochers; Red state voters are, in reality, socialist moochers.* (11 Dec 16).

And beyond that, the imagined “real” – aka rural – America is its own bubble.” Richard Cohen provides context in *Real America’ is its own bubble*, 12 DEC 2016) *The Washington Post*. That is why “rural” is a Core Confusing Word.

11. **The failure to adjust to diversity and the resulting conflict at all scales.** Due to international migration (legal and illegal) as well as InterREgional and IntraREgional migration there is a growth of **DIVERSITY** at the COmmunity and SubREgional scale. Growth of non-diversity (that is a return of segregation) at the Village and NEighborhood scales also exists. *The Increasingly Diverse United States of America: The racial and ethnic diversity of communities varies greatly across the country, but rapid change is coming to many of the least-diverse areas.* Dan Keating and Laris Karklis (4 December 2016) Also see the ‘diversity’ documented by *The Washington Post Magazine* in their “*State of the Union*” cover story on 14 January 17. *Diversity Explosion: How New Racial Demographics are Remaking America*, William Frey, *The Brookings Institution* (24 July 2018).

The message here is that with such diversity NO ONE could be a REAL “president” for every part of a nation-state with over 320,000,000 citizens. See *The Hardest Job in the World: What if the problem isn’t the president – it’s the presidency?* John Dickerson *The Atlantic* May 2018. *The president has more imagined power than real power.* More on this topic in Chapter III.

It is not just the Cherokee Nation noted in **NOTE II – ONE** that must give careful

consideration to their REAL ancestry. Many who claim their ancestors came over on the Mayflower or are of pure “X” heritage are not. *Who are you? DNA results can surprise: Class at Pennsylvania college looks to genetics to bridge racial divides; Finding a bit of African, a dash of Dutch.* Susan Svrluga. 30 Dec 2016.

It is not just poor folks moving to the booming REgions. *More Americans Leave Expensive Metro Areas for Affordable Ones*, Chris Kirkham 1 Nov 2016. This migration triggers fears among existing residents that the new comers are “different” and not like us.

Increasing diversity of NEighborhoods, Villages and COmmunities is seen as Gentrification and / or generates nostalgia for ‘White America’. The horse is long out of the barn on the topic of genetic purity nation-state wide. However, that does not ease the angst among old timers caused by new neighbors. That is especially true where there is not a clear sense that things are better now than then.

Ironically, it is well documented that racial and cultural diversity yields **BETTER** economic outcomes for everyone at the SubREgion and the New Urban REgion scales. *Diverse Metros Mean Higher Wages for All: A Rise in the Number and Types of Immigrant Workers Has Benefits for High- and Low-Earning Residents*, Tanvi Misra 12 January 2017. See again *Diversity Explosion: How New Racial Demographics are Remaking America*, William Frey, *The Brookings Institution* (24 July 2018).

12. **Changes in the Age Distribution of the Population.** The largest cohort of citizens the United States has produced (the Millennials, aka Gen Y) is changing the trajectory of society in ways that traumatize those who seek a return of “ the good old days.” See *Why We Blame Millennials for Everything*, Malcom Harris argues that grim realities are driving the disdain for Gen Y , Elizabeth King (1 DEC 2017) [Malcom Harris is author of *Kids These Days: Human Capital and the Making of Millennials* (2017)

Also see *Minorities are the demographic engine of millennial urban growth*, William Frey (21 FEB 2018) *Brookings* and *Millennials disrupted the system. Gen Z is here to fix the mess* Rhonda Colvin (24 FEB 2018) *The Washington Post*. Yet again see *Diversity Explosion: How New Racial Demographics are Remaking America*, William Frey, *The Brookings Institution* (24 July 2018).

The other end of the population profile raises a different set of problems. Even early adopters of the newest technology when they were young are growing old in larger and larger numbers. These citizens lose the ability to recall passwords and use technology-based security, employ new communications technologies and mechanical functions as they approach 60 or 70 much less 80.

13. **Vocabulary** The failure to evolve a robust, clear and concise VOCABULARY is critical. See again **NOTE P – ONE** as well as APPENDIX ONE AND TWO OF *THE SHAPE OF THE FUTURE*, PART THIRTEEN of *TRILO-G* and *The World until Yesterday*, Jared Diamond (2012). Also see again **NOTE II – ONE**
14. **Irrelevant Past Events** Citizens, scholars and leaders attempt to understand and explain current conditions by recalling past events. Two favorites are the fall of the Roman Republic (31 B.C.) and the fall of the Roman Empire (fifth century A.D.) In *The Fall of Rome – Five Myths*, Nathan Pilkington (Dec 2016) *The Washington Post*. This Perspective documents that a serious historian can pick apart almost ANY sweeping generalization. That is due to the descent of “the OverDeveloped World” – especially the United States – caused by a complex and unique combination of facts and events within the contexts noted above.

This is NOT an exhaustive list but rather a brief summary of the forces that few consider when summarizing the drivers of civilization’s unsustainable trajectory.

G. PLUNDERED NATURAL CAPITAL

A potential pitfall that humans face is that due to the failure to conserve and protect the Natural Capital found on the planet 200 years ago may mean that the critical resources are exhausted before they are needed most.

For example petroleum resources may be needed for life-saving drugs but they have been spent fueling Large Private Vehicles, which are the core driver of settlement pattern dysfunction. Natural Capital should have been conserved to support alternatives to the current dysfunctional trajectory of economic, social and physical actions. This would shrink humans ecological footprint and would be (and would have been) TRUE CONSERVATISM.

From the dawn of civilization including prehistoric (paleolithic and neolithic periods) as well as the early Agrarian / URban periods, humans have been living off of Natural Capital. This span of human ascendancy is “The Plantation Era” as defined by Jane Jacobs. During all but the last 200 years, Homo Sapiens puny efforts did not have the power to extract, convert and consume most forms of Natural Capital on a massive scale.

Four exceptions that come to mind are:

- 1) The extensive use of fire to modify the forest and grassland environments by the first Homo sapiens to inhabit North America and Australia;

2) The application of selective forestry that turned natural ecosystems into ‘managed forests’ as occurred in the Amazon Basin; See *1491: New Revelations of the Americas Before Columbus*, Charles Mann, 2011.

3) Humans killed off most of the Megafauna planet-wide except in Africa and South East Asia.

4) Human activity has wiped out select plants and animals that thrived in niche ecosystems. **NOTE II – SIX**

NOTE II – SIX

There are multiple sources to document human actions 1, 2, 3 & 4. As to “The Plantation Era” and Jane Jacobs: See one of Jacobs’ last major public presentations (*The End of the Plantation Era*) included in *Vital Little Plans: The Short Works of Jane Jacobs*, Samuel Zipp and Nathan Storrington, Editors (2016). Jacob’s 2004 Lewis Mumford Lecture was a “preview” of a planned book that was not completed before her death in 2006. For a short and perceptive review of Jacob’s perspectives *Vital Little Plans: Jane Jacobs in the age of global capitalism and rent seeking: After all these years, Jacobs’s thinking still contrasts starkly with the planning and economic orthodoxy of assembling large sites for mass development and subsidizing the likes of Amazon*, Hank Dittmar 17 November 2017)

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Once the Industrial Revolution started its march across the globe, the Late Plantation Era ORganizations became more effective at plundering Natural Capital. Early in the 19th century in the United States, the plundering of Natural Capital had a vocal cheerleader. Andrew Jackson believed that humans had Devine RIGHT to consume the Natural Capital which he believed was INFINITE. See Chapter 11 Box 3 and Chapter 24 of *THE SHAPE OF THE FUTURE*. The election of Jackson in 1828, was the first time the United States had a nakedly populist President who articulated yeomen farmers right to consume the vast public domain. **NOTE II – SEVEN**

NOTE II – SEVEN

In the early Colonial Period, the British were attracted to North America by, among other resources, the timber to serve as masts for their navy and merchant marine fleets. They made as much of a dent in the North America’s timber resource as one could make with axes and horse / ox log skidders. Steam powered transportation and mills denuded vast tracks in the 1800's. Theodore Roosevelt was the first U.S. president to sound the alarm concerning consumption of Natural Capital and follow up with effective counter strategies.

The Sagebrush Rebellion has attempted to transfer federal lands to state or private ownership so that private interests (HOUSEHolds and ENterprises) could more completely extract Natural

Capital from what is now a federal public Commons. The recently elected president has stated his view of Jackson. ***Trump touts Andrew Jackson as his hero, and reflection: 45th president pays homage on the 250th birthday of the 7th.*** (“... his campaign and his whole thing (sic) was most like mine.”) Jenna Johnson and Karen Tumulty *The Washington Post* 16 March 2017. Trump is so badly informed that he does not UnderStand the tragedy of this perspective.

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H. ANTI-INTELLECTUALISM

Anti-Intellectualism in the United States is not a new story. In the 1830s Alexis de Tocqueville observed and wrote about this national character trait. In de Tocqueville’s view Americans were geared to action, not contemplation. In *Anti-Intellectualism in American Life*, Richard Hofstadter (1963 – 1964 Pulitzer Prize for Non-Fiction) outlined the history and role of anti-intellectualism in the United States to that point.

The most important impacts of anti-intellectualism are the contributions to the justification for plundering Natural Capital articulated in Section G above and to all 14 flavors of Contextual Realities articulated in Section F above.

Since the 60's Anti-Intellectualism has grown worse and has been exacerbated by the vast and growing Human Wealth and Well Being Gulf (aka, the growing class inequity). The Anti-Intellectualism has also been more comprehensively documented. In 2016, J. D. Vance clearly

articulated the context and perspective of Anti-Intellectualism in *Hillbilly Elegy*. Also see *Deer Hunting with Jesus, Dispatches from America’s Class War*, Joe Bageant, 2008.

More important to the UnderStanding of dysfunctional human settlement patterns, anti-Intellectualism has expanded to include Anti-URbanism and is seen as a badge of honor by denizens of ‘rural’ American. This has been the case even as the conditions that were defined as ‘rural’ have disappeared as documented in *THE SHAPE OF THE FUTURE*.

Over the last three decades political perspective – especially at the State level and most damaging in “red” states – aided by gross gerrymandering – has favored Non-URban interests. See *Anti-Urban States Aren’t Just Hurting Their Cities*, Richard Florida 21 Dec 2017 and *The religious right’s scary, judgemental old men*, Michael Gerson 23 Nov 2017 *The Washington Post*.

The president elected in 2016 ran on a platform that could be summarized as “Don’t allow fuzzy thinking to get in the way of me making REAL MONEY and thus making America Great Again.”

Anti-intellectualism has become a basis for class sorting. For a perceptive summary of this

process see *The Lines That Divide America*, Nitin Nohria Dec 2017. *Americans are increasingly segregated by socioeconomic class – and have forgotten that all citizens deserve a shot at moving ahead.* **NOTE II – EIGHT**

NOTE II – EIGHT

Nitin Nohria is Dean of the Harvard Business School and has provided a short, powerful and insightful review (and expansion of the theme of) Airlie Russell Hochschild’s well regarded 2016 book *Strangers in Their Own Land: Anger and Mourning on the American Right*.

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Anti-Intellectualism is a basic ingredient of Class Sorting. (See *The Big Sort*, Bill Bishop (2009) and other books on Class and “know nothing and proud of it” perspectives.

As Airlie Russell Hochschild demonstrates in *Strangers in Their Own Land: Anger and Mourning on the American Right* (2016) “the right” has developed an entire epistemology based on the ‘fact’ that “the other side” is lying and trying to take advantage of them.

It is in EVERYONE’s best interest that there be NO Underclass and No SuperClass. In the past, democracies have evolved underclasses that have become the majority. When they do, they elect populist “leaders.” When the populist ‘leaders’ cannot deliver, citizens revolt. The precursor to revolt of the underclass is electing pseudo-populist pre-dictators who lie about their intent and almost everything else.

Anti-intellectualism allows those who want to confuse the public with Myths (e.g. ‘The world is flat,’ ‘the planet is not warming’, et. al.) in order to spin lies, focus on diversions, suggest they are not critical issues. **NOTE II – NINE**

NOTE II – NINE

See, *Nominees* [for appointed position in the Trump administration] *accept climate change but appear unworried: Most appear focused on whether action to reverse it would affect [the growth of the] economy*, Brady Dennis and Chris Mooney, *The Washington Post* 20 January 2017.

On the other hand, an intellectual approach to planned obsolescence and a declining popularity of technological ‘toys’ may help curtail Mass OverConsumption and curtail ‘the inevitability’ of ‘advances’ such as Artificial Intelligence. See *Techno-skeptics’ objection(s) growing louder*, Joel Achenbach *The Washington Post*, 26 December 2016,

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The Enterprise Media (aka, “main stream media”) also contribute to Anti-Intellectualism. Enterprise media is compensated directly and indirectly for advertising based on the volume of readership or viewership. The author has new appreciation for this reality having lived in “the energy capital of the world” for a year.

In order to avoid losing readership or viewership Enterprise media outlets pitch their content at about the fourth grade intellectual level. This makes things easy to understand and easy to misunderstand. This is one reason there needs to be Citizen Media: To broaden and deepen the citizen UnderStAnding of the FACTS related to issues and events. (See *Citizen Media, The Next Step*, CURRENT PERSPECTIVE # 09, 24 March 2011)

Anti-Intellectualism allows myths to grow into accepted truths that become political platforms. For example see *The Working Class that Wasn’t: The most common jobs for workers without college degrees have never been industrial*, Tanvi Misra (11 Nov 2017). This myth has become a plank in the platform of nearly every right-of-center political candidate.

Two other contextual facts confound Anti-Intellectualism:

There is a well documented **Digital Divide** (access to Broad Band Communication). It will cost \$billions to bring Broad Band to dysfunctionally scattered HouseHolds.

There is also a **Digitalization Divide**. Most important information is now presented in a digital format which many citizens do not have access to, do not bother with and / or do not UnderStAnd even if they have ‘theoretical access’ e.g. an Internet Connection – that they use for streaming old Television sitcoms and Netflix, multi-player gaming and diatribes concerning ‘false news.’

The Digitalization Divide prevents those profiled in *Hillbilly Elegy* cited above from getting jobs that would encourage them to become more broadly informed. NOTE II – TEN

NOTE II – TEN

Americas’s Digitalization Divide: A New Study maps digital-skilled jobs across industries, metro areas and demographic groups, revealing deep divides. Richard Florida 16 Nov 2017 and *Digitalization And The American Workforce*, Mark Muro, Sifan Liu, Jacob Whiton and Siddharth Kulkarni. **The Brookings Metropolitan Policy Program**, Nov 2017.

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I. CRITICAL MISUNDERSTANDINGS AND FALSE NEWS

It is easy to UnderStAnd how Anti-Intellectualism and distrust of Enterprise Media provides a

fertile environment for profound misunderstandings and belief in the claims of “false news.”

One example is the belief that immigration is stealing “middle class” jobs. The opposite is the case. For example *Almost half of the Fortune 500 companies were founded by American immigrants or their children*, Ian Hathaway, The Center for American Entrepreneurship 4 December 2017. **NOTE II – ELEVEN**

NOTE II – ELEVEN

Without Immigrants, the Fortune 500 Would be the Fortune 284, Richard Florida, 5 Dec 2017, *Let’s Give Thanks for Immigrants*, Richard Florida, 23 Nov 2017, *Immigrants and diversity have powered the growth of America and its cities [New URban REgions] going back to the 19th Century*. Immigrants are also willing to perform work that citizens will not take even if unemployed e.g. cleaning buildings, yard maintenance and agricultural labor.

There never were many “well paying middle class industrial jobs” that did not require a college degree. See again *The Working Class that Wasn’t, The most common jobs for workers without college degrees have never been industrial*, Tanvi Misra (11 Nov 2017).

Much of the skilled job loss is not due to off-shoring but rather to automation. *The Long-Term Jobs Killer Is Not China. Its Automation*, Claire Miller *The New York Times*, (21 DEC 2016). Also see *Where Automation Poses the Biggest Threat to American Jobs* Alana Semuels 3 May 2017.

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PART TWO – THE COMPREHENSIVE SETTLEMENT PATTERN CONCEPTUAL FRAMEWORK

A. THE TOOLS / ELEMENTS NECESSARY TO ESTABLISH ESSENTIAL SETTLEMENT PATTERN UNDERSTANDINGS – THE COMPREHENSIVE SETTLEMENT PATTERN FRAMEWORK DEFINED

In the context of Collective Ignorance, including Geographic Illiteracy and Spacial Ignorance, citizens and their leaders have no overarching CONCEPTUAL FRAMEWORK to aid them in UnderStanding their own enlightened self-interest with respect to human settlement pattern.

In 70 years of experience, research and practice, the author has found only one set of tools that addresses the Collective Ignorance concerning the importance of and anatomy of human settlement patterns. There may be alternative sets of tools but none have surfaced to date.

The key is for the majority of citizens to UnderStand the following basics articulated in *THE SHAPE OF THE FUTURE, PART ONE – Vol I, The Critical, Overarching Impact of Human Settlement Pattern on Citizen’s Economic, Social and Environmental Well-Being* (2000) and *TRILO-G* (2010). Here is a summary of the essential tools:

1. The anatomy of the *Organic Structure of human settlement patterns*, (HouseHolds, DOorYards, CLusters, NEighborhoods, Villages, COmmunities, and New URban REGions) as articulated in *THE SHAPE OF THE FUTURE*. It is also important to understand the **BETA** and **ALPHA** state of each of these Organic components. and
2. The four categories of human organizations that emerged from the process outlined in *The Estates Matrix* in *TRILO-G*. The categories are HouseHolds, AGencies, ENterprises and INstitutions, and
3. The articulation of the *Cost of Service Curve* and the applications of that Curve including derivation of the sweet spot density at the scale of each Organic Components of human settlement patterns. The sweet spot on the *Cost of Service Curve* reflects market demand and functionality. See *Foot Traffic Ahead, 2016* by Richard Leinberger and *Suburbanism Reversed in a Generation?*, Laurie Volk, and Todd Zimmerman in *Building a Better Burb*, 5 Aug 2017, and
4. The ability to grasp the impact of $A = \pi R^2$ in a REgion with radial limited access highways. The combination of a failure to understand the ramifications of plane geometry at the REgional scale and the impact of Large Private Vehicles results in a vast amount of land being polluted by scattered URban land uses. In this context see the discussion of human’s inability to grasp the impact of the power of the exponential documented in *The Most Important Video You’ll Ever See* Albert Bartlett (2007 / 2017) cited above, and
5. *The 10 X Rule* and *The 10 pn Rule* articulated in *THE SHAPE OF THE FUTURE, PART ONE*, Chapter Four, (Recall that these Natural Laws can migrate in Quantity due to the fact that in Complex Organic Systems, the Organisms themselves (e.g. humans) can change individual and collective behavior.
6. The importance of a Comprehensive and Consistent Vocabulary including avoiding the use of Core Confusing Words as articulated in both *THE SHAPE*

OF THE FUTURE and *TRILO-G*. See again **NOTE P – ONE and NOTE II – TWO**
Without an UnderStanding of these six tools / elements and being able to apply them,
there is no way for citizens to:

- ◆ Fully grasp the process that shaped the human settlement pattern, or
- ◆ UnderStand the current dysfunctional result of processes over the past 150 years, or
- ◆ Plan for a functional and sustainable future trajectory for contemporary civilization.

Taken together these six elements are the COMPREHENSIVE SETTLEMENT PATTERN CONCEPTUAL FRAMEWORK.

Without the Comprehensive Settlement Pattern Conceptual Framework Tools with which to build Balanced Components of functional and sustainable settlement patterns, citizens are left to be sidelined by arcane economic theory and models wielded by the handmaidens of the rich and powerful. **NOTE II – TWELVE**

NOTE II – TWELVE

The reasons there are no other ‘rules’ for creating Comprehensive Conceptual Frameworks are many: First is the lack of an UnderStanding of the absolute necessity of a rigorous Vocabulary. The use of Core Confusing Words is endemic. For example the use of ‘city’ instead of New Urban REgion for contemporary civilization’s basic Urban Building Block. The failure to recognize the scales of the organic components of human settlement patterns is of equal importance. In fact the failure to grasp each of the six Tools makes UnderStanding human settlement patterns impossible. One of the most confusing issues is citing a ‘density’ without noting the organic scale of the component in question. Saying the density of a municipality is 12 without identifying what scale component (and if it is either an Alpha or a Beta component) is meaningless.

There is one very weak tool used in some circles, the ‘Rural [Core Confusing Word] to Urban Transect.’ Each of the five zones of the Transect have important and valid characteristics but when traveling from The Logical Location of the Clear Edge around the URban Core of a New URban REgion to the Centroid of that Core one encounters a series of COmmunities each made up of DOoryards, CLusters, NEighborhoods and Villages. One does not just pass from the prototypical low density transect stage to the next more intensive stage on the way to the Centroid. Draw a line form the Clear Edge to the Centroid of any REgion and prove this for yourself. Also see again **NOTE II – FOUR**

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PART THREE – CLOSING PERSPECTIVES

A. GROSS SETTLEMENT PATTERN SUBSIDIES VS. THE FAIR ALLOCATION OF TOTAL COSTS

In cultures that embrace and enshrine short term economic goals, and profits, the fair and complete allocation of costs have enormous impact. There are two critical cost-allocation based strategies that drive settlement pattern dysfunctions:

FIRST, NO ONE is NOW paying the full cost of contemporary “OverDeveloped” nation-state society as noted in Chapter I.

SECOND, There is NO fair allocation of the costs of alternative settlement patterns – HouseHolds living in more efficient settlement patterns are subsidizing HouseHolds living in inefficient settlement patterns. This is due to flat rate pricing

and failure to account for externalities as documented by The 10 X Rule articulated in *THE SHAPE OF THE FUTURE*.

On the first topic, NO ONE is paying the fair share of the ‘first’ world’s (“over-developed nation-states”) **TOTAL** costs. The fair share of total cost of contemporary society should have been allocated to HouseHolds, AGencies, ENterprises and INstitutions. Instead, it has been paid for and subsidized with the cash flow generated by burning through the planet’s Natural Capital – especially, but not only, petrochemicals – and by treating many of the **DIRECT** costs of extraction, refining, manufacture, transport, packaging, distribution and consumption as **EXTERNALITIES**.

The indirect impacts are loss of top soil, pollution of surface and ground water and air pollution. The costs of habitat loss and of ecological ImBalance must also be fairly allocated. The fair allocation of the costs of alternative settlement patterns is the topic **EXPOSED** by the derivation of **The 10 X Rule** noted above.

The fair allocation of **LOCATION-VARIABLE COSTS** has been an elusive goal pursued since the mid 1970s under the rubric of “The Cost of Sprawl.” (See *The Costs of Sprawl: Environmental and Economic Costs of Alternative Residential Development Patterns at the Urban Fringe*. Real Estate Research Corporation (RER) (1974).

Without tools – including those noted under the tools to establish **ESSENTIAL UNDERSTANDINGS** (especially *The 10 X Rule*) above, – the ‘cost of sprawl’ effort has led

down many rabbit holes as suggested by the subtitle of *The Costs of Sprawl* report cited above.

NOTE II – THIRTEEN

NOTE II – THIRTEEN

The problem **IS NOT JUST** “residential settlement patterns” but rather total (Complete) Community Settlement Patterns. There is no way to draw meaningful “Borders” around the geographies that RER studied. The “cost of sprawl” effort, upon which ‘good government’ forces have spent millions of dollars over the past 40 years never came to useful and convincing conclusions for reasons documented in *THE SHAPE OF THE FUTURE*. There are many ‘helpful’ but not yet comprehensive measures See *How Much Does Sprawl Cost American Commuters?* , Laura Bliss (JUN 2016), *The High Cost of Free Parking*, Donald Shoup (2011) and the sources cited there in.

Illustration of a straight forward derivation of the costs and benefits of alternative settlement patterns does not require complex technical calculations involving thousands of acres of land and the alternative patterns of land use to accommodate thousands of HouseHolds. This alternative calculation would include the cost of infrastructure and distribution of electric power, natural gas,

water, collection of waste and others of the 40 plus components of contemporary lifestyle demands. The simple derivation is the recently articulated “The Money Shot.”

The “Money Shot” is a straight forward comparison of a Big Box on a large site along an arterial roadway with a multi-story building with the same square footage on a small site in a Walkable Urbanism context that fronts on a Complete Street. See *Walmart versus the city, Robert Steuteville* (Sept 2016). Steuteville’s example is based on Joe Minicozzi’s (Urban3) calculations from Asheville, NC. This sketch compares a Wal*Mart on 34 acres to a six story downtown mixed use building on 0.20 acres. A similar calculation can be carried out in any REGION.

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B. NEW FORCES COMPOUNDING COLLECTIVE SPACIAL IGNORANCE AND GEOGRAPHIC ILLITERACY

The post truth era. The impact of the claim of “Fake News” in the newly declared “Age of Post-Truth” has been enabled and exacerbated by the rise of electronic communications and the emergence of Social Media as a place to hide from reality in the company of a cohort who agree with everything the ‘false news’ advocate says.

The specter and threat of Cyber Crime and Cyber Warfare and the illusiveness of Cyber Security cause citizens and their Organizations to intentionally limit their sources of information. They are content to believe as they do, regardless of information that many choose to ignore. **NOTE II –**

FOURTEEN

NOTE II – FOURTEEN

Even ‘Official’ information often turns out to have the appearance of misinformation intended to support the AGencies mission and prior publications and not to communicate reality. For example, the U.S. Department of Energy’s Energy Information Administration (EIA) publishes an Annual Energy Outlook (AEO) in which the national energy supply is forecast through 2040. Compare the *AEO 2015* and the *AEO 2016* with *Drilling Deeper* (2015) and *2016 Tight Oil Reality Check* and *2016 Shale Gas Reality Check* all by David Hughes (2015 and 2016).

Regardless of one’s view of the future of tight oil and shale gas the questions raised by David Hughes must be addressed for the AEOs to have creditably.

NB: This is not a discussion of peak oil, or the end of oil. It relates to the cost of petroleum extraction due “tight play” wells going dry after a short period and the requirement to keep drilling more and more costly wells to maintain production.

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In the search for revenue, print media have adopted the practice of not only inserting colorful grocery store, glossy department store and pushy auto sale fliers but also have taken to publishing special ‘supplements’ on newsprint with content prepared by foreign nation-states – China, Russia and Turkey among others – and by ENterprises and INstitutional interest groups. These supplements have perspectives that may or may not be valid but are clearly not written as they would appear in the ‘front section’ that supports the ethics and practice of Journalism with a Capital “J”. AND THEN THERE IS THE Russian Troll Factory.

It is no different on-line. IBM, Xerox and many others pay for informational blurbs that are inserted in the text of ‘otherwise trusted web sites’ such as ICMA, CityLab and REgional and nation-state media websites.

For example, “commuting” is **NOT** “a necessary evil” as claimed by Xerox in sponsored text IF the settlement pattern is functional at the Village and COMMunity scales. This fact has been proven by COMMunity scale Planned New COMMunities as documented in *THE SHAPE OF THE FUTURE*. **NOTE II – FIFTEEN**

NOTE II – FIFTEEN

There are many ways to reduce congestion such as “congestion pricing”. See *5 Ways to seriously Battle Traffic: So long as cars are among us, congestion pricing, road pricing, ramp meters and diamond-shaped intersections can mitigate horrendous commutes*, Laura Bliss (25JUL 2017).

Since these techniques lower the amount of driving done and the ad sponsors make money off of MORE driving, these solutions are subject to one-sided hype rather than ‘Balanced’ Journalism.

See section below and *Eighty Years of false freeway claims*, Robert Steuteville *Public Square* (28 JUL 2017)

The Washington Post dot Com has recently published an insert sponsored by British Petroleum (BP) titled “*How Technology Makes oil and Gas Safer*.” That view is creditable only if one forgets the lessons learned from the *Deepwater Horizon* and believes that it is a waste of time to worry about fracking or the Dakota Access Pipeline (DAPL), the Mountain Valley pipeline (MVP) and the Atlantic Coast Pipeline (ACPL).

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In both the print and electronic media, the content is on the same general topics as could be expected from the host publication but with a specific ENterprise spin – e.g. “Commuting is a Necessary Evil” is a header for “ads” by Xerox advertising to provide technical assistance to “cities” to fight “congestion.”

Beyond these confusing sources of information – and the intentional misinformation in the claims of “Fake News” – there is the fawning news coverage of new technology such as the ‘excitement’ about AutoAutos (aka, autonomous vehicles) or the latest cell phone mini-advancement. See summary of “speed of change” noted above.

Culture eats strategy for breakfast. Culture is crushed by Mass OverConsumption.

This mash-up of two titles from trusted information sources provides an illustration of the respective power of AGENCY “strategies,” of historic “cultural parameters” and of “Mass OverConsumption.” *Culture eats strategy for breakfast*, the *New Economy Coalition* quoting Malachi Garza (Dec 2016) and *A culture crushed by consumption*, a review by John Domini of *If Venice Dies* by Salvatore Settis. (Dec 2016) seemed destined to jump together.

C. CONTRIBUTING FACTORS TO INTERPERSONAL TENSION

Timid Solutions. The problem of timid ‘solutions’ to profound dysfunction was noted in Chapter I. There are few better illustrations than a project of *The Washington Post Magazine* to solicit ideas to “**Fix this democracy – now.**” Thirty eight ideas were profiled in the 26 October 2017 issue. There were several useful ideas but none were above the level of ‘interesting.’ As to how they would ‘solve’ the dysfunctions noted in Chapter I on a scale of 0 to 10 there were only 3 above a ‘3’ and none above a ‘5’.

Few Villains. It is comforting for some to know that there are very few intentional Villains in the

evolution of dysfunctional human settlement patterns. Few, if any, set out to put human civilization on the path to **COLLAPSE**. There were billions of individual and collective decisions in the marketplace (ENterprises) and in the councils of governance (AGencies) be they chiefs, princes, kings, republics, emperors and recently decisions made in the voting booth that were believed by the actors to be in their enlightened self-interest.

The Selfish Objectivists. When those who claim to live by Randian principles are given the opportunity to head an Agency or be a Judge they often do not do a creditable job. With a large number of Objectivists in the 2016 / 2018 nation-state administration it will be interesting to see if they can abandon Rand for reality. See *Ayn Rand acolyte Donald Trump stacks his prosperous Cabinet with fellow Objectivists*, James Hohmann (15 Dec 16).

D. THE OVERARCHING ROLE OF INFRASTRUCTURE

It is widely suggested that one of the key facts generating economic stagnation and congestion is the failure to build and rebuild ‘infrastructure.’ In fact it is the building of the wrong infrastructure which is a powerful driver of dysfunction. First, carefully articulate the parameters of functional settlement patterns, **THEN** plan and implement the infrastructure needed to support those settlement patterns. See *Five Ways Federal Infrastructure Spending Makes Cities Poorer*, Charles Marohn (11 Jan 2017). More on this topic in Chapter III. In this context, “Mobility-as-a-Service” may provide a new pathway for Mobility and Access service providers to avoid paying for externalities.

Two categories of technology shaped Urban Agglomerations: Roadway systems **SPREAD SETTLEMENT PATTERNS OUT** (e.g. created Lower Density settlement patterns) while Steel frame buildings, mechanical heat and air conditioning and elevators (vertical transport) created the **POTENTIAL** for **MUCH** Higher Density in **URban Cores**.

Large Private Vehicles brought Roadways into favor just in time to nix the potential impact of steel wheels on steel rails to leverage steel frame buildings as well as mechanical heat and air conditioning. The expansion of communications alternatives (telegraph, telephone, radio, television, the Internet) also came along a bit too late to effect an efficient trade off between travel and communication – aka, TeleWork.

Cars (Large Private Vehicles) and the space to drive and park cars when not in use **BLEW APART** human settlement patterns after 1920. Individually owned LPVs required more space than horses in the Cores of **REgions**. First, most HouseHolds did not own horses and second, those who rely on horses for daily activity had staff to move them to less dense and / or lower valued locations.

The Great Depression put on hold the disaggregation of human activity and the expansion of the human ecological footprint. After WW II the industrial capacity built for the war effort focused

on building Large Private Vehicles and large appliances to fill ever larger, Low Density Dwellings.

No one thing contributed more to the dysfunctional human settlement patterns than Transportation infrastructure implemented in the last 70 years. See *Interstate Crime* E M Risse (28 February 2005) and *More Interstate Crime* 25 February 2009. Also see *Highways gutted American cities. So why did they build more of them?*, Peter Norton *VOX* (14 May 2015). *How Cars Divided America: Car dependence not only reduces our quality of life, it's a critical factor in America's economic and political divisions*, Richard Florida (19 July 2018).

The short answer to the dysfunctional role of transport infrastructure is this: the space to drive and park Large Private Vehicles disaggregates functional human activities.

CityLab Daily for 6 July 2018 features a map on the evolution of the Interstate Highway System. In a summary paragraph at the end of the discussion states the following:

In 1956 the U.S. began building a much more ambitious – and sometime infamous – Countrywide road network: the **Interstate Highway System**. ... President Eisenhower's massive public works project marked a dramatic shift in United States road building, from construction of public trails that connected 'cities' to massive highways that gutted them. While that wasn't the plan at the start, some scholars have argued that the Interstate Highway System should have been two separate systems: Roads between cities and road within cities.

In fact that was the first plan released in 1924 – The Inter-Regional Highway System.

E. SAINT JANE JACOBS

There is no way to end a summary of 'contributing factors' without rendering what is due to Saint Jane Jacobs. There was an plethora of good ink on the occasion of the 100th anniversary of the birth of Jane Jacobs. One of Jane Jacobs most important observations in *Death and Life of Great American Cities* was her discussion of 'Border Vacuums.' *CityLab* [not really "City" "Lab" but rather "URban and NonURban Settlement Patterns Lab."] published a series of observations concerning the importance of avoiding Border Vacuums at all scales of human settlement from the DOorYard to the New URban REgion. Avoiding Border Vacuums is a strategy that results in Complete Villages and COmmunities. Jacobs identified 'the city' as an organic system and not a "machine for living" but her writing fails to argue in favor of organic governance STructure. Also see *How Jacobs and Alexander unlocked 21st Century problems* Robert Steuteville *Public Square* (16 NOV 2017)

For a current readers her economic perspectives (*The Economy of Cities* [REgions] (1969), *Cities*

and the Wealth of Nations: Principles of Economic Life (1984) and *The Nature of Economies* (2000) are must reads. *Dark Age Ahead* published in 2005 was Jacob's last book and many believe it is prophetic. See *Did Jane Jacobs Predict the Rise of Trump?* Richard Florida (20 Dec 2016).

Finally, *Vital Little Plans: The Short Works of Jane Jacobs*, Samuel Zipp and Nathan Storrington (2016) contains her last lecture "*The End of the Plantation Age*." This lecture was the outline for a planned book that was never completed. This lecture sketches out a Conceptual Framework for UnderStAnding the evolution of human ORganizations from the dawn of the Agrarian transformation and the rise of Trade 15,000 years ago to the hoped for end of industrial monopolies and "Plantation Economies". This will be the subject of a future Perspective that expands and extends *THE ESTATES MATRIX*.

F. LOST IN THE STEW

Without a Comprehensive Settlement Pattern Conceptual Framework which contains Tools to build functional and sustainable New URban REgions, there is no assurance that even intelligent principles, strategies, tactics, policy and programs will result in a sustainable trajectory of civilization. That will require a functional economy, a stable social structure based on a rational AGENCY structure and functional and sustainable settlement patterns that can win over frustrated citizens who have voted for a combination of populist promises and feel good authoritarian get-evens.

There are many ways to summarize our current condition.

James Mello (Fahmah) puts it this way:

Folks, we have a problem with how we are structuring our settlements. Our present practices are resulting in a waste of time and resources including land. And they must change to achieve sustainable trajectory for our civilization.. There are six tools or elements which comprise the **COMPREHENSIVE HUMAN SETTLEMENT PATTERN CONCEPTUAL FRAMEWORK** that can be applied to make future development more coherent and functional (Chapter II, PART TWO). This book is about how we got to the state we are in, what the entrenched interests and established practices are doing to prevent positive change and what is needed from an informed public to make that change.

Jim Schulman raises a question:

Is it guaranteed that should a REgion adopt the framework of UnderStanding you are proposing, that change in infrastructure design / pattern and density of land use would be adopted? Are we not to some extent ‘locked-in’ by the previously made INfrastructure investments and tax-reduction expectation?

To some extent that is the case. However, existing Urban Fabric is so wasteful that there are plenty of opportunities to go from 3 persons per acre at the Beta COmmunity Scale to 30 persons per acre at the Alpha COmmunity scale. All it takes is Profound Transformation with Missing-Middle-Housing and a few two, three and four story multi use buildings in many DOoryards and in most CLusters and thus in every NEighborhood, Village and COmmunity. There are groaning shelves of how to books. Among the best are *A Better Place to Live*, Philip Langdon, 1994, *Confronting Suburban Decline: Strategic Planning for Metropolitan Renewal*, William Lucy & David Phillips, 2000 and *Within Walking Distance: Creating Liveable Communities for All*, Philip Langdon, 2017 cited earlier in this Chapter.

But FIRST there must be a consensus that there is a desperate need for Profound Transformation of the current dysfunctional trajectory of human civilization outlined in Chapter I.

CHAPTER II END NOTES

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(Move END NOTES TO THIS LOCATION IN NEXT DRAFT)

CHAPTER III

What Profound Transformations must citizens implement to achieve a prosperous economy, a stable social structure and a sustainable planetary environment? In addition: What must citizens of the United States do to survive and thrive while at the same time providing positive, sustainable models for other societies? What is the specific scope of the imperative steps that must be taken?

Chapter III focuses on the core message of TLB. This Chapter articulates the Profound Transformations and intelligent actions with respect to:

STRUCTURE,

INFRASTRUCTURE &

SUPERSTRUCTURE of human civilization.

These Profound Transformations and intelligent actions must be undertaken to achieve resilient, sustainable settlement patterns. In turn, these patterns (aka, human habitat) are required to achieve functional governance, economic prosperity, social stability and environmental sustainability.

PART ONE OVERVIEW

This Chapter may be seen as a summary of the steps necessary to make contemporary Democracy more Stable and more Fair. For a summary of how to achieve “Stable and Fair” for just one sector of the Economic Sphere see **Chapter 4 of *Globalism and It Discontents Revisited***, Joseph Stiglitz, (2018). *The Daily 202: A poll commissioned by Bush and Biden shows Americans losing confidence in democracy* James Hohmann, *The Washington Post*, (26 June 2018).

The American Revolution achieved many of the founding fathers objectives, as documented by Alex de Tocqueville's *Democracy in America* (1835 / 1840). The leaders of what would become the United States had the advantage of writing on a blank slate to specify the STRUCTURE of the governance and of the economy of a new nation-state. The second major "democratic" revolution – the French Revolution – had a more rocky start, due to the fact that there were hundreds of years of 'history' to factor into the process of Profound Transformation. Likewise in the United States Profound Transformation has, in recent decades been stonewalled by inertia and by those (a small minority) who profit from the existing systems and the status quo.

There were festering issues in the United States as the nation-state approached the middle of the 19th century that have not yet been comprehensively addressed – e.g. economic and social inequity represented by slavery. A bloody Civil War should have signaled the need for serious reconsideration of the governance STRUCTURE. Instead of considering changes in STRUCTURE, the 'winners' of the Civil War relied on business-as-usual. The Americans chose to muddle their way forward in the English tradition.

Surviving The Long Depression (1873-1897); Being on the winning side in World War I, Surviving The Great Depression, Playing a key role in winning World War II; Surviving and then "winning" the Cold War and at the same time riding the fantastic economic tide from 1950 to 1973 gave the citizens of the United States and their intellectual and political leaders the mistaken view that the existing governance STRUCTURE was not just stable but profoundly good and, in fact, impossible to improve.

As outlined in Chapter I and II the United States is on the cusp to profound change. Will the result be COLLAPSE or resilience based on intelligent change?

A. THE OUTMODED GOVERNANCE STRUCTURE

The current United States governance STRUCTURE was the most advanced on the planet for a nation-state when the Northwest Ordinance was passed 230 years ago. As noted in Chapter I, at that time it took a person, or an idea, about a week to get from either Portsmouth, NH or Savanna, GA to the future location of the United States Capitol on the Potomac River. It took about the same time for a person, or an idea, to get from the farthest reaches of some States to the Capitol of that State.

Does it make sense to rely on the same system of governance today when ideas and broadcasts including two-way video conversations move at the speed of light?

Does it still make sense to rely on the same governance structure that it did when most residents of the United States were not citizens, when many residents were illiterate and most who were educated and literate had the educational equivalent of today's 8th graders?

Does it still make sense for the highest level – that is the current nation-state governance Structure – to dictate what all citizens must do when a majority of the citizens may have a better idea for their REgion or their home component of that REgion? In other words, can the original Representative Democracy still function for 320,000,000 “citizens”?

Does it make sense to rely on the fragmented municipal, State, Nation-State structure of governance when the basic building blocks of contemporary first world civilization have evolved to be New URban REgions as established by *THE SHAPE OF THE FUTURE* (2000). (Some New URban REgions that are in close proximity may choose to form New Urban MegaREgions with agreed to appropriately distributed functions and powers.)

The author has chosen the trilogy of **STRUCTURE, INFRASTRUCTURE** and **SUPERSTRUCTURE** to organize the ACTION – Principles, strategies, tactics, programs and policies – necessary to put democracy and civilization on a sustainable trajectory. **NOTE III – ONE.**

NOTE III – ONE.

As observed in **NOTE P – TWO** Asher Miller, Executive Director of the Post Carbon Institute, opened the 23 May 2017 email *Resilience Notes* with the observation that “STRUCTURE” relates to the organization of the society, “INFRASTRUCTURE” relates to means of obtaining food, water, energy, materials [and for processing waste – solid and liquid] and “SUPERSTRUCTURE” consists of beliefs and rituals that supply a sense of cultural meaning and identity.

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The focus of Chapter III is on human settlement patterns and embraces the evolution of the governance structure and the other Profound Transformations necessary to achieve functional and sustainable human settlement patterns. Such patterns are the sine qua non of a prosperous economy, a stable society and a sustainable environment.

That is a lot to fit into one short Chapter. The Chapter starts with the **PART ONE Overview** and then proceeds to outline the needed ACTIONS in three PARTs devoted to:

- **Structure,**
- **INfrastructure, and**
- **SUperStructure.**

B. TERMINOLOGY

To address dysfunctions documented in Chapter I, and further explored in Chapter II, citizens of the United States must evolve completely new STRUCTURES to manage key elements of Civilization.

At the outset it is important to keep in mind four separate sets of important terms:

1. **Structure, Infrastructure and SuperStructure, and**
2. **“Economic, Social and Physical”** – the three Spheres of Human Experience / activity defined in *THE SHAPE OF THE FUTURE*; (2000). These Spheres of Human Experience span Structure, Infrastructure and Superstructure, and
3. **UNits, DOoryards, CLusters, NEighborhoods, Villages, COmmunities, and New URban REgions** – the seven scales of organic human settlement patterns that range in SCALE between **HOuseHold** and the **MegaREgion** as articulated in Chapter 27, PART EIGHT of *TRILO-G*; (2010). (SubREgions can be an important subset of REgions but are not Organic Components of those REgions. SubREgion may vary in existence, number and character from New URban REgion to New URban REgion),
4. **HOuseHolds, AGencies, ENterprises and INstitutions** – These are the four ORganizations that humans have evolved to support their existence. These are the four ORganizations that have resulted from the process and events outlined in *THE ESTATES MATRIX: 700 Years of Profound Transformations and Estate Conversions*, Chapter 5, PART TWO of *TRILO-G* (2010) **NOTE III – TWO**

NOTE III – TWO

For those not familiar with **THE ESTATES MATRIX, Chapter 5, PART TWO** of *TRILO-G*) this *Matrix* traces the planet-wide evolution of human’s ORganizational Structure from the Estates General convened in 1302 by King Philip the Fair of France up until the current time. The *Matrix* was originally constructed by SYNERGY to help UnderStand how the term “the Fourth Estate” evolved and to illustrate the need for the establishment of **Citizen** (HouseHold) **Media** distinct from **ENterprise Media, INstitutional Media** and **AGency Media**.

The Estates Matrix turned out to also be useful in grasping the COMPREHENSIVE SETTLEMENT PATTERN CONCEPTUAL FRAMEWORK. *The Estates Matrix* does this by identifying the roles and functions of the ORganizations that citizens have evolved over the past 715 years.

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These four sets of terms are all important constructs that support the Tools provided by the COMPREHENSIVE SETTLEMENT PATTERN CONCEPTUAL FRAMEWORK. The four sets of terms are needed to UnderStand human settlement patterns. The COMPREHENSIVE SETTLEMENT PATTERN CONCEPTUAL FRAMEWORK and associated Tools are defined and articulated in Chapter II.

With respect to SStructure the focus must be on the Four ORganizations that humans have evolved to manage modern civilization – HouseHolds, AGencies, ENterprises and INstitutions. Here is a brief summary of the scope of SStructural Transformation that is needed in each of the four ORganizations :

HouseHolds: In the most advanced societies on the planet – including The United States -- HouseHolds today have more “Freedom” and flexibility than at any time in human history. The range of choice of the citizens forming a HouseHold is without limit **SO LONG AS THEIR HouseHold formation and management DECISIONS DO NOT LIMIT THE FREEDOM OR CHOICE OF OTHER HouseHolds.**

Protecting and perfecting the existing Freedoms, and shifting the Balance outlined below are important objectives but no SStructural changes are needed in the HOuseHold as currently defined.

Over the past 200 years the threshold of ‘negative impact’ generated by unique, rare or unconventional HOuseHold formations has narrowed drastically. In advanced societies it does NOT meet the threshold of ‘negative impact’ to be just that: 1) the HouseHold’s choice makes some citizens ‘uncomfortable;’ 2) that the action might not be the choice those outside the HouseHold would choose to make or; 3) that the action is contrary to other citizen’s SUperStructure ‘beliefs.’ Historic limiting criteria for HOuseHold formation and characteristics such as color, sexual orientation, national origin, race, religious beliefs are NOT grounds controlling HOuseHold formation or function. Standards of conduct within HOuseHolds must meet standards similar to those now enforced in bellwether REgions.

The Primary Requirements for Profound Change fall to AGencies and ENterprises and to a lesser extent to INstitutions:

AGencies: AGencies are responsible for the management of human activities including guidance of the evolution of human settlement patterns. For these reasons, when it comes to **SStructure** and SStructural Transformation, the subject IS PRIMARILY “AGencies” (aka, Governance / Government SStructure). If more citizens UnderStood how AGencies evolved and why AGencies were created in the first place, then citizens would better UnderStand why they should become ACTIVELY involved as participants in AGENCY creation and function at all scales from the CLuster to the New URban REgion and beyond.

The Profound Transformations of AGencies that citizens must evolve – and evolve quickly – are

similar to the scale and impact of the Magna Carta and the Charter of the Forest in the Anglo-American legal context. (As noted in the section “Citizen and the Structure of Government – An Ancient Ideal” below, The Magna Carta and the Charter of the Forest did not extend to citizens any rights with respect to governance.)

Enterprises: Enterprises carry out functions to generate income, capital and equity. Enterprises actions are so important to the stable functioning of HouseHolds and Institutions that oversight and management of Enterprises by Agencies is an absolute necessity. Agencies must be responsible for establishing the scope, limits and functioning of Enterprises within their jurisdictions. An overview of Enterprise Structure is included in **PART TWO** below.

Institutions: Institutions are defined as the Organizations that are established by citizens in HouseHolds to provide for all actions that are **NOT** core Household, Governance (Agency) or Enterprise functions. These VOLUNTARY Organizations were one of the things that impressed Alex de Tocqueville most when he wrote *Democracy in America* (1835 / 1840). There are few characteristics of Institutions that require Structural guidance from Agencies. Criteria for tax exempt status is one and perhaps the most important one.

C. BEFORE PROCEEDING FURTHER LET THERE BE NO MISTAKE:

NOTHING IN THE PROFOUND TRANSFORMATION OF AGENCIES SHALL IMPINGE UPON THE RIGHTS, PRIVILEGES AND RESPONSIBILITIES OF CITIZENS GUARANTEED BY UNITED STATES CONSTITUTION.

THE RATIONAL, INTELLIGENT INTERPRETATION OF THESE RIGHTS, PRIVILEGES AND RESPONSIBILITIES MUST BE INCLUDED IN THE CONSTITUTIONS OF NEW URBAN REGIONS AND NEW URBAN MEGAREGIONS. Some might call this “Constitutional Localism” but that title includes one Core Confusing Word and as currently advocated Constitutional Localism has no impact on dysfunctional governance **STRUCTURE** nor is it a cure for economic, social and physical maladies that flow from dysfunctional human settlement patterns. See discussion of *Healing American Democracy: Going Local*, Mike Hais, Dour Ross and Morley Winograd (2018) in Chapter IV.

In fact the core Transformations should go beyond the Declaration of Independence and the Constitution’s principle that “all men are created equal.” When drafted, this sweeping language did not include slaves nor did it include women or persons who did not own real property. These classes of ‘citizens-but-not-yet-citizens’ were ignored by those documents. There is still distance to make up to achieve ‘true and full equality’ for all humans, especially in the ‘less developed’ (in the past referred to as ‘Third World’) nation-states. **NOTE III – THREE**

NOTE III – THREE

The concept that “*all men are created equal*” was a key objective of the European Enlightenment. It made its way into the United States Founding Documents but was winked at for decades and is still not completely embraced by some.

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D. A TWO PART PRINCIPLE:

The Profound Transformation of AGENCIES outlined in this Perspective is based on a two part Principle which SYNERGY has championed since the publication of ***THE SHAPE OF THE FUTURE*** (2000). The STructural ramifications of this Principle have not been explicitly articulated until now.

This two part Principle is as follows:

THE LEVEL OF A DECISION BY ANY AGENCY SHALL BE AT THE LEVEL OF IMPACT, and

IF THERE ARE MULTIPLE LEVELS OF IMPACT – WHICH THERE ALMOST ALWAYS ARE WHEN CONSIDERING AGENCY ACTIONS – THEN THERE MUST BE SHARED DECISION MAKING AMONG AGENCIES REPRESENTING THE IMPACTED SCALES OF HUMAN SETTLEMENTS.

The first part of this Principle refers to all seven scales of components that make up the New URban REgion as well as MegaREgions, COntinents and the Planet Earth. This requires that each scale of human settlement pattern has an AGENCY representing the citizens (HOuseHolds) of that component. *The Citizen Handbook* (PART TWELVE of ***TRILO-G***) outlines a three step process to evolve a functional governance structure. This is one method of evolving the STructure of AGENCIES from the CLuster scale to the New URban REgion scale. Many of the CLuster, NEighborhood, Village and COmmunity scale elements in this process have been field tested by the author.

The second part of the two-part Principle requires a complete restructuring of governance processes. That is because,

THIS PRINCIPLE SPELLS THE END OF “BIGGESTDOG” GOVERNANCE.

BiggestDog Governance is one of the last remnants of The Divine Right of Kings. “The king has the final say” has morphed to be “The nation-state Governance STructure has the final say.” That perspective must now be abandoned) **NOTE III – FOUR**

NOTE III – FOUR

“The BiggestDog” Governance has already been eroded by The International War Crimes Tribunal, The World Trade Organization, the North Atlantic Treaty Organization, the United Nations and other AGencies created by agreement among nation-states. The Global AGencies in the future should be similar to ‘global’ AGencies which have been created to date by nation-states. These Global Agencies would be limited in scope AND would be subject to override by a majority of Continental AGencies that created the Global Agency. In turn Continental AGencies could be overridden by a super majority of New URban REgion / MegaREgional AGencies.

The overall strategy, as will be detailed later in this Chapter, is to move the decision making power DOWN and make it more accessible to HOuseHolds in all levels of the components of New URban REgions.

E. AN IMPORTANT REALITY THAT PROVIDES CONTEXT FOR PROFOUND TRANSFORMATION.

As the AGencies and other ORganizations are currently structured, and clearly stated in Chapter II,

NO ONE is paying their fair share of the cost of contemporary civilization.

It is not just the One Percent or the top 10 or 20 percent of the economic Ziggurat and it is not just those at the bottom of the economic food chain that are not paying their fair share.

NO ONE IS PAYING FOR THE DIRECT AND INDIRECT COSTS OF THE CURRENT SOCIETIES’ LEGAL AND SANCTIONED ACTIVITIES, MUCH LESS THE UNLAWFUL ONES. IN ADDITION, MANY ARE NOT PAYING FOR DIRECT BENEFITS RECEIVED FROM USE OF THE COMMONS.

No one is paying for the discharge of Greenhouse gases into the atmosphere. No one is paying the full cost of contamination of surface soil and waters (fresh water or salt water) and no one is paying for the contamination of aquifers. No one is paying for the satellites that become junk that have been launched into space either by the NASA or other AGencies at the nation-state scale or by ENterprises that collect fees for use of space-based services. This cost may seem trivial but it already limits scientific space exploration to say nothing of space travel that may be necessary (not just tourism) at some future time.

However, all these impacts and costs are insignificant compared to the unpaid costs that are wrung up by dysfunctional human settlement patterns and the infrastructure to support these patterns. (See 10 X Rule of The Comprehensive Settlement Pattern Conceptual Framework articulated in Chapter II.)

This means that, among other things, the current version of Agency regulation of Enterprises and the current Structure of Capitalism economies **DO NOT WORK**.

In *The Age of Greed: The Triumph of Finance and the Decline of America, 1970 to the Present*, Jeff Madrick, (2011) and in *SuperCapitalism: The Transformation of Business, Democracy, and Everyday Life*, Robert Reich, (2007) the distribution of the Total Cost of Current Civilization is **Profoundly Unfair – aka Broken.**

***To Find Alternatives to Capitalism, Think Small: Why co-ops, regional currencies and hackerspaces [Community Labs, Community Commons, Regional Internets, etc.] are pointing the way toward a new economic vision*, David Bollier (2017).**

From ***The Changing Politics of Woods Work: Cash-strapped Agencies use Private contractors to the detriment of local communities*, Hal Herring, (2017) to *champions of high tech: For a Strong Economy, Focus on Inclusive Growth: In our increasingly unequal cities [Regions], inclusion is good for growth, and growth is good for inclusion, Two new reports show how it can be done*. Richard Florida 2017), ***the changes must be profound in scope*.****

The changes must not include traditional ‘growth’ due to the externalities of dysfunctional settlement patterns for which no one is now paying. Paying their fair share of the current costs is beyond the capacity of most of the seven plus billion persons on the planet. Once the total costs of the actions that drive dysfunctional human settlement patterns are fairly allocated the activities that drive dysfunctional settlement patterns will cease and humans will be able to provide “Half for Nature” as advocated by E. O. Wilson in *Half-Earth: Our Planet’s Fight for Life*. (2017)

Intelligent actions will mean LESS ‘traditional’ economic GROWTH. Less traditional GROWTH is what is imperative to stem Mass OverConsumption and bring Homo Sapiens’s ecological footprint into BALANCE with the Earth’s holding capacity. These profound transformations must also exterminate ALL economic model externalities.

Some suggest that the END OF GROWTH is what humans will get, like it or not. ***IS U.S. ECONOMIC GROWTH OVER? FALTERING INNOVATION CONFRONTS THE SIX HEADWINDS*, Robert Gordon AUG 2012 National Bureau of Economic Research. *The Rise and Fall of American Growth: The U.S. Standard of Living Since the Civil War*, Robert J. Gordon, (2016), *These 3 Advantages Once Ensured U.S. Prosperity. They’re Not Coming Back*, Robert Samuelson, *The Washington Post* 23 July 2018. Also see *Economics for a Full World*, Herman Daly, JUNE 2015, GREAT TRANSITION INITIATIVE.**

Up to this point even those who get most things right like Richard Florida and Steven Pearlstein cannot bring themselves to advocate negative Growth. ***What Amazon’s HQ2 plan gets right: Move the jobs to the workers***, Steven Pearlstein, Oct 2017. **NOTE III – FIVE**

NOTE III – FIVE

Not so fast Steve, the intelligent reason to move jobs or workers must be to create Walkable / Sitable / Talkable Urban fabric at ALL scales. (Also the strategy Pearlstein believes humans cannot achieve is “turning every Houston into a San Francisco.” NOT “turning every San Francisco in a Houston.”)

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As noted in Chapter I the current \$25 Trillion value of ‘urban land’ will plummet due to the vast over supply of land devoted to scattered URban land uses and vacant / underutilized land with reservation values based on phantom future URban land uses. ***The Staggering Value of Urban Land***, Richard Florida Nov (2017.)

F. TWO MORE IMPORTANT REALITIES:

1. **The Citizen Wealth and Wellbeing GULF is growing daily. It is very clear that there is a very high (The) Price of Inequality: (How) Today’s Divided Society Endangers our Future**, Joseph Stiglitz, 2012.

In this context, a growing number of HOuseHolds cannot afford the cost of maintaining dysfunctional human settlement patterns even if the fair total cost is not being collected.

Many in what was formally called “The Middle Class” cannot afford the Housing + Transport cost of *Drive-til-you-Qualify* house location. It is not just individual HouseHolds but also Municipal Governments that cannot afford the cost of dysfunctional settlement patterns. This is especially true when it comes time to replace infrastructure at the end of its useful life. ***How to Build Strong, Resilient ‘Cities’ (sic) and Towns***, James Bacon, ***Bacon’s Rebellion*** (25 OCT 2017.)

As suggested throughout this volume, those that can afford to invest in Shelter and ENterprise space, choose Walkable / Sitable / Talkable Urban Fabric (Henceforth “WaSiTaUF” or better yet lets call it “UrVille” to avoid five word phrases and cumbersome acronyms. (The name UrVille was recommended by a reviewer as a reminder of what is considered to be one of the first URban places in Mesopotamia. Ur was a Sumerian city-state that evolved from before 6800 BCE until circa 600 BCE and is the site of the Ziggurat of Ur.)

To achieve the diversity and complexity of **URVille**:

AGencies **INSIDE** the Logical Location of the Clear Edge around the Core of New **UR**ban **RE**gions must evolve **Complete** **CO**mmunities with a **BALANCE of J / H / S / R / A**.

AGencies **OUTSIDE** the Logical Location of the Clear Edge around the Core of New **UR**ban **RE**gions must evolve Complete **BALANCED-But-Disaggregated** **CO**mmunities in the **CO**untry**SI**de.

2. **Just as the organic components of contemporary, functional human settlement pattern have ancient roots, so do the elements of a sustainable (circular / sharing) economy. *How Indigenous Land-Use Practices Inform the Current Sharing Economy*, Aaron Fernando, (3 NOV 2017).**

PART TWO: STRUCTURE

A. GOVERNANCE STRUCTURE

The **PART ONE OVERVIEW** above dropped the biggest shoe: “The **BiggestDog** **AGencies** (**Governments**) no longer fills the need to achieve a sustainable future for human society.

The primary objective of ending The BiggestDog Governance is to move decision making closer to the citizens and ORganizations that are impacted by the large Agency’s actions.

Two primary shortcomings of citizens and their ‘leaders’ cause the current economic, social and physical dysfunctions. These two shortcomings are:

1. **Failure to recognize the Organic Structure of human settlement patterns.** This oversight leads to a failure to match the Organic Structure of functional settlement patterns with a functional Governance Structure. This failure is especially important at the **CL**uster, **NE**ighborhood, **V**illage, **CO**mmunity and **New UR**ban **RE**gion scales. The failure also impacts actions at the **State**, **nation-state** and **multi-nation-state / CO**ntinental Scales.
2. **Failure to honor the appropriate, distinct, roles of AGencies, ENterprises, INstitutions and HOuseHolds.** These are the four **OR**ganizations that citizens create to 1) **Manage** their common economic, social and physical interests (**AGencies**) ; 2) **generate** profit for the owners and investors (**ENterprises**); 3) to **manage** the smallest scale of human habitat – the **HOuseHold**, and 4) to **carry out** all other activities beyond the **HOuseHolds**, **AGencies** and **ENterprises**

(INstitutions).

HOuseHolds are the basic unit of human activity but must have the support of functional AGencies, ENterprise and INstitutions. There must not be any confusion concerning the existence and the proper functions of these ORganizations.

One way to keep firmly in mind that the basic building block (organizing structure) of human society is the New URban REgion or the New URban MegaREgion as documented in *THE SHAPE OF THE FUTURE*, is to keep a copy of Graphic I **POSTED ON THE WALL WHERE YOU SEE IT EVERY DAY**. Graphic I is a *Mesmerizing Commute Map* [that] *reveals we all live in Mega-REgions, Not Cities* Garrett Dash Nelson and Alasdair Rae (2016 *Plos One*).

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INSERT GRAPHIC I in a two page spread.

Also see *What the U.S. map should really look like*, Ana Swanson and Jonathan O’Connell *The Washington Post* (12 DEC 2016) and *How 4 Million Commutes Shape America’s “Megaregions”* Laura Bliss, 7 December 2016.

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B. LEVEL OF PARTICIPATION IN GOVERNANCE

To achieve functional governance there must be many MORE citizens involved in Governance, especially at the CLuster, NEighborhood, Village and COmmunity scales. If citizens have no interest in Governance, if they find it too complex to follow or participate in or would rather stream NetFlex or play video games then they will deserve the governance they get. Historically what an obsession with “circuses” has resulted in has been populism that evolves to totalitarian dictatorships.

Will the needed changes in governance structure and the economic system slow ‘economic growth’ and limit Mass OverConsumption? Absolutely.

That is what is needed to achieve the broad, genuine prosperity and what will be required to overcome **The Citizen Wealth and Well-Being Gulf**.

Broad, genuine prosperity will also be necessary to provide Accessible and Affordable Housing for all citizens. In the longer run, broad, GENUINE prosperity will be required to establish a sustainable civilization for humans on the Finite planet. As documented in *THE SHAPE OF THE FUTURE Chapter 1 Box 1 and Chapter 23 Box 1*(2000), in spite of day dreams to the

contrary **THERE IS NO EXIT** from human's "Galactic Quarantine." See perspectives on this reality in the Prologue.

C. THE INSANITY TEST

Doing the same thing over and over and expecting a different result is said to be a sound field test of insanity. Keeping the same governance structure long after it has outlived its usefulness and expecting a satisfactory result is MASS INSANITY.

The same governance structure exists now as when the United States of America had about 4 million people in 13 states. There are now over 320 million citizens in 50 states plus territories. Two hundred years ago there were 1 billion humans on the planet, now there are over 7 billion.

As noted in the Chapter III OVERVIEW, unless one was rich enough to set up a purpose-built transport system that maximized the application of good weather and favorable winds as well as the use of horse power, in 1775 it would take nearly a week to get a person OR AN IDEA from Savannah, GA or Portsmouth, NH to what would be the new US Capitol. One can get from anywhere in the United States to the nation-states Capitol in hours, not days and an idea can get there instantly.

The vast majority of the residents of the thirteen original states were illiterate in 1775. What is more, the Vast majority of residents were not yet even citizens. The majority did not have the right to vote; many could not own property. In this context, INstitutions such as political parties and activities such as party platforms made some sense.

Almost everything about contemporary society is different from the world in 1775 except the United States Governance SStructure. See again NOTE I – TEN

D. CITIZENS AND THE STRUCTURE OF GOVERNANCE – AN ANCIENT IDEAL

After the atrophy of the Greek City States and especially after the collapse of the Roman Republic in 27 BC the idea that citizens should have a say in governance passed out of favor. Governance reverted to Chiefs, Princes, Kings and Emperors and their hand picked minions. The Church, some Dukes and Barons, merchant bankers and burgers in places such as the maritime 'republics' in the Adriatic and the Baltic gained some political status over the next twelve centuries.

In the period 1215 to 1217 the English started the evolution toward a constitutional monarchy with the Magna Carta and the Charter of the Forest. These documents limited the power of British kings but granted little in terms of citizen rights beyond access to "the bounty of the forest." The Magna Carta and the Charter of the Forest provided for no participation in

governance for citizens much less ‘democracy’ as practiced by Greek AGencies. Over the next five and a half centuries it was NOT citizens who were in control. They did not decide the state religion, did not elect the leaders nor did they authorize the revenue levies.

Ideas and ideals in the Declaration of Independence (1776) and in the U. S. Constitution (1787) were the latest thinking on the topic of Governance with a role for citizens in the late 18th century. They wiped out much of the Divine Right of Kings which was replaced by the Divine Right of nation-state Governance.

In 1787 the Northwest Ordinance was the latest thinking on how to survey and subdivide the vast public domain to serve yeomen farmers and provide for schools and sub-state governance. The French Revolution (1789 - 1799) and the Haitian Revolt in 1804 set the table for governance evolution in other nation-states.

The Estates Matrix PART TWO of TRILOGY (2010) traces the evolution of Citizen rights from 1302 to the current era focusing on events in England and France.

It is critically important to understand that in this context, Thomas Jefferson, a principal author of the Declaration of Independence, wrote in 1816:

“I am certainly not an advocate of frequent and untried changes in laws and constitutions.... But I know also that laws and institutions must go hand in hand with the process of the human mind. As that becomes more developed, more enlightened, as new discoveries are made, new truths discovered and manners and opinions change with the change of circumstances, ... institutions [AGencies] must advance also to keep pace with the times.” Thomas Jefferson to Samuel Kercheval, 1816. ME 15:40

Could there be a more clear basis for a Profound Transformation of the governance structure and the boundaries of the governing AGencies than the perspective of Thomas Jefferson in the context of 200 years of profound change that followed?

It was less than a decade after Jefferson’s letter to Mr. Kercheval until Andrew Jackson established the philosophy and administrative structure that set the United States on the mission of plundering the nation-states Natural Capital to support the Divine Right of Consumption and to wipe out / relocate the remnants of Advanced Agrarian Societies as well as Hunter Gather Tribes and Clans. It was at this point that the evolution of governance structure should have started. In the following decades there was The Civil War that also should have triggered profound change in the governance structure.

It is well documented that the period from 1880 to 1950 saw the most profound technological and economic change in human history. A person born in 1880 who lived to 1950 would have witnessed the highest concentration of profound changes of any human life span ever. **Crabgrass**

Frontier, Kenneth Jackson (1985). Surely THAT meets Jefferson’s threshold for a profound level of change.

E. THE BORDERS OF GOVERNANCE

AGencies are the ORganizations that Citizens establish to manage their **COMMON** Economic, Social and Physical Interests and Activities.

An AGENCY at any scale is NOT the same as an ENterprise at any scale. An ENterprise is established to make money, to turn a profit for the investment of the owners.

Managing an AGENCY is NOT the same as managing an ENterprise. There may be ‘competition’ between AGENCIES and between ENterprises but the objectives and ground rules of the competition must be profoundly different.

For most AGENCIES, the boundaries between AGENCIES at all levels are essentially in the same LOCATION that they were at the time of creation of the AGENCY – Nation-state, state or municipal. This is true when in fact economic, social and physical reality has rendered these borders obsolete. See *When Invisible Borders Trump the Real Ones*, Richard Florida (12 JAN 2017). (Professor Florida might just as well have used ‘Surreal Borders’ in the title to his perspective.)

F. THE STRUCTURE OF GOVERNANCE MUST MATCH THE STRUCTURE OF ECONOMIC, SOCIAL AND PHYSICAL REALITY

In *Mesmerizing Commute Maps Reveal We All Live in Mega-Regions, Not Cities*, Garrett Dash Nelson and Alasdair Rae (2 DEC 2016) **Graphic I** referenced and included in PART ONE drives home the reality of New URban REgional configuration of the United States as articulated in *THE SHAPE OF THE FUTURE* (2000).

The map documents that ‘we all live in New URban REgions’ (what the authors call “Mega-Regions”) NOT in “states.” Many of the New URban REgions in the United States fall in two or more existing states. Some New URban REgions straddle International borders.

There have been numerous proposals to redraw State borders on more rational criteria that reflect the economic, social and physical reality that has evolved since 1880. See *Geography and*

Politics in America, Stanley Brunn (1974) and *Nine Nations of America*, Joel Garreau (1981). There are continuing proposals for the bifurcating states (Arizona, California, Colorado, Florida, Idaho, Illinois, Kansas, Maine, Maryland, Massachusetts, Minnesota, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Texas, Utah, Virginia, Vermont, Washington, Wisconsin and Wyoming) or secession (Arizona, California, Jefferson, Cascadia, Lakotah, Texas, and Vermont).

This does not mean the 70% of the states are ready to leave the United States tomorrow. The point is that reconfiguring state borders is NOT a new topic in the majority of the states. NOTE III – SIX

NOTE III – SIX

It was only six days after the 45th president was inaugurated that a separatist movement in California raised the number of signatures required to put “Calexit” on the ballot. *Persistent Silicon Valley billionaire earns ballot spot on spitting California into 3 states*, Meagan Flynn *The Washington Post* 13 June 2018. Colin Woodard identifies and maps 11 “rival” REgions in his 2011 book *American Nations*. These historic roots of REgions are of interest but are less relevant than the mapping in GRAPHIC 1 at the end of **Section A** above nor Stanley Brunn’s 1974 delineation or Joel Garreau’s 1981 delineation noted above.

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Some who have considered the topic suggest that no matter how one draws the borders, states are just obsolete. *States are a relic of the past. It’s time to get rid of them*, Laurence Samuel (15 November 2016). Those states which have legislative sessions of 30, 45 or 60 days out of the year would appear to be walking proof of the states’ obsolescence and / or irrelevance.

G. STATE GOVERNMENT ROADBLOCKS

State governments play little sister to the big, bad federal “BiggestDog” Government. For over 200 years they have been taking it out on the governance structures they can control based on their “reserved powers.”

The origin of sub-state governance dysfunction is that states have failed to expand and modernize the delegated powers of the ‘municipal’ (including counties) structure so that decisions are made in a process that includes citizens at the primary level of impact.

The core dysfunction is the extreme specificity of most state constitutions that require state legislative action to “allow” rational New Urban REgional and COMMUNITY actions. This is especially true for “Dillon Rule” states. NOTE III – SEVEN

NOTE III – SEVEN

The Author has had personal experience with legislatures and legislators in California, Montana, Hawaii, New York, Puerto Rico, Maryland and Texas. Every one of these states have legislatures that second guess what is best for REgions and COmmunities. The fact that several of these legislatures meet for only part of the year and some for only 30 or 45 days a year is prima facie evidence that there is something terribly wrong (irrelevant) with a governance structure that does not meet regularly in a fast paced world.

The author had only lived full time in Texas for two months when our state assemblyperson sent all registered voters a list of seven “constitutional amendments” to be acted on in the coming session. These actions deal with subjects that should NOT be in a ‘constitution” and document a failure to separate constitutional questions from topics that should be found in statues and regulations. *Proposed Constitutional Amendments*, M. J. Keogh (undated).

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H. STARTING AT THE TOP – FOUR STEPS ON THE PATH TO FUNCTIONAL GOVERNANCE

The package of “Nation State Powers” now rest (sic) at far TOO LARGE a scale.

A population of over 314,000,000 is far too large to intelligently exercise Nation-State Powers. It is well documented, and has been for a while – like 40 years!! – that the citizens who are the most satisfied with their “nation” are those who live in nation-states with populations of 4,000,000 to 10,000,000 citizens. *Big government, big business, big everything – how the crises that imperil modern America and the inevitable result of giantism grown out of control – and what can be done about it.* Kirkpatrick Sale examines a nation in the grips of growthmania and presents the ways to shape a more efficient and liveable society built to the **Human Scale**, Kirkpatrick Sale (1980).

The World Justice Project’s **Rule of Law Index**, the World Bank’s **Governance Index** and **Social Progress Indexes** measure the quality of governments. A recent **BBC** feature on “*What it’s like to live in a Well Governed Country*” (12 JAN 2018) uses these and other guidelines to survey the most well regarded examples of nation-state governance on six COntinents. Five of the six (Canada, New Zealand, Denmark, Chile and Botswana) average about 5,000,000 citizens each. None is very far above 1/10th the size of the United States’ population. Only Japan is over 40 million and there are many reasons that Japan is unique – including the fact that the United States helped rebuild Japan after the Second World War. These nation-states also rank high in citizen satisfaction and happiness criteria. In 1950 The United States ranked with the best of them. Since then, for reasons outlined in Chapters I & II, the level of satisfaction, and the quality of governance has slipped dramatically.

Before anyone starts a fight over where to draw new borders, let us get to the basics:

STEP ONE: Move most “nation-state powers” down to New Urban REgion or New URban MegaREgion scale.

The New URban Region is the smallest Organic Component of human settlement pattern that can approach sustainability. It should also be the level of governance that has primary responsibility to exercise the traditional package of nation state powers. That would mean the scale of governance that would exercise nation-state powers would have between 3,000,000 to 30,000,000 citizens – between 10 and 100 times SMALLER than at the present.

New URban REgions at the upper end of that population spectrum would need to have SubREgional governance STructures. For example the Northern New Jersey SubREgion of the New York New URban MegaREgion, the Baltimore SubREgion of the Washington-Baltimore New URban REgion or the San Antonio SubREgion of the Central Texas New URban MegaREgion. The power distribution criteria would establish that for REgions with two or more SubREgions (the Cores of the SubREgions are coterminous) would have the scale to be a New Urban REgion but for the fact that the Cores are coterminous.

The overarching principle guiding Steps One through Four is that the level of governance (control) is at level of primary impact in the governance structure’s actions.

It is understood that there are almost always multiple levels of impact of a given AGENCY action. In this case there would be shared responsibility for constitutional, legislative and regulatory enforcement.. However, as noted in Step Three below, the highest level is NOT where The Buck Stops. For example: New URban REgion laws and regulations might be overturned by 80 percent of the COMMUNITIES (and / or) SubREgions in the NUR.

Step One would not just create ‘city-states’ but would recognize New URban REgions as an organic component of human settlement patterns that include UrbanSides AND in most cases an extensive CountrySide. As articulated in *THE SHAPE OF THE FUTURE*, New URban REgions are often the expansion of Metropolitan Statistical Areas and are also referred to as MegaRegions or MegaPolitian areas. *A Governance Alternative to Faltering Nation-States*, Benjamin Barber (5 December 2016) suggests a Global Parliament of Mayors would be a step in the right direction. ‘Cities’ such as Boston and the Federal District of Columbia are just a small component of their respective New URban REgions. As noted above, it is the New URban REgions that is the smallest sustainable component of human settlement pattern and must be the key building block: New URban REgions, NOT “cities.” That is especially true given ossified existing City borders. New URban REgions may have one or more large URbanSides as well an extensive CountrySide reflecting existing economic, social and physical reality. See **NOTE III – EIGHT**

NOTE III – EIGHT

To date there has been a hit or miss devolution of a nation-states into smaller nation-states. The subdivision of Yugoslavia into Croatia, Slovenia, Macedonia, Serbia and Bosnia & Herzegovina has been a positive move but may devolve further. The same is true for Czechoslovakia dividing into the Czech Republic and Slovakia. The division of Sudan into Sudan and South Sudan has been more problematic due to continuing divisions and conflict within South Sudan. There may have been more nation-state subdivisions if the United Nations had not served as the ‘Nation-State Preservation Society’ since it’s inception as noted in Chapter II.

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There is no one-size-fits all. The size of components depends of the informed and well considered judgement of the citizens involved. The Unification of Germany within the context of the European Union is an example of the need for flexibility. The next step for Germany may be to increase the role for New URban REgions in Germany such as has taken place in Italy.

The European Union is undergoing new pressure due to right-wing ‘nationalism’ and concern about immigrants. If the United States subdivides, parts of the European Union may follow suit. As far as moving decision making to the New URban REgion, the European Union is far ahead of the United States. Italy which is sometimes thought of as having ‘flaky’ (aka, basket case) Governance has turned many of the nation-state functions over to the better organized and more responsive New URban REgions

When one looks to the major ‘good government’ INstitutions for guidance in how to establish REgional Governance they find a porridge pot of weak gruel. ***Stop One-Party Rule in Big Cities: A former Democratic mayor argues that his party’s grip on urban politics needs to end***, Anthony Williams, 16 (October 2017), ***Mayoral Powers in the Age of New Localism*** Bruce Katz / Alaina Harkness ***The Brookings Institution***. (15 November 2017) ***The new localism: How cities can thrive in the age of populism: A Conversation with Tom Friedman, Bruce Katz, and Jeremy Nowak***, The Brookings Institution (6 December 2017). ***For Cities of the Future, Three Paths to Power: In an era of geopolitidal turbulence, urban leaders [NOT just mayors!] will have to demand representation at international institutions – or take more radical action***. Ian Klaus, (19 March 2017), There are ***Four*** [actually MANY] ***Challenges to metropolitan Governance*** David Hatch (13 January 2017). ***Urbanist Just Cleaned Up in MacArthur ‘Genius Grants’*** Kriston Capps, (11 October 2017), ***Designing for a Better Democracy: From graphic explainers of government regulation to board-game-style community workshops***, New MacArthur Fellow Damon Rich uses design to make cities more democratic.

STEP TWO: Abandon the ‘state’ as a level of governance.

This would seem appropriate since states do not make current economic, social or physical sense as suggested above. Also see ***A New Book Examines the Virginia Way*** by James Bacon / Peter Galuszka ***Bacon’s Rebellion***, (27 October 2016) a review of: ***Virginia Politics and Government***

in a New Century: the price of power , Jeff Thomas (2016). “Taken together, the events [of recent years] might be a tipping point for the Old Dominion, ending, or at least reining in, the so-called “Virginia Way” of lax ethics rules and the assumption that players are honest gentlepeople.”

The “state” scale of AGENCY should be abandoned unless a current state happens to coincide with a New Urban Region (perhaps Delaware or Rhode Island?). Some Western New Urban Regions will be much larger than those two states. The author’s high school district in Montana was larger than Rhode Island. The New Urban Region would be many times larger than several existing States.

STEP THREE: The higher level of Agency does NOT control or automatically override lower scales of governance. The End of BiggestDog Governance.

The relocation of nation-state powers should be tailored to the effected New Urban Region or New Urban MegaRegion. Some powers might be agreed by New Urban Regions to be assigned to agglomerations of these New Urban Regions – for example the New Urban Regions from Hampton Roads to beyond Boston Harbor might become a MegaRegion with powers that the New Urban Regions agree to delegate up. Provisions for defense would be a logical category of powers to be focused at a larger scale. The nation-states that comprise NATO have over 600,000,000 citizens. The NATO charter provides checks and balances.

As noted above, New Urban Regions would not have the final word. For example the New Urban Region might be overruled by 80 percent of the Communities in the New Urban Region. NO dog-in-the-manger AGENCY could veto other New Urban Regions collective actions.

STEP FOUR: Evolving Community and Community Component Borders.

With the goal of each Community striving to achieve Alpha status by having a Balance of Jobs / Housing / Services / Recreation / Amenity, it would be appropriate and equitable for an 80 percent vote of the Alpha Communities as the way to insure the no New Urban Region runs amuck.

The scale of the an Alpha Community would depend on its location within The New Urban Region. Communities in the UrbanSide of the New Urban Region (that is inside the Logical Location of the Clear Edge) would have a larger population than most Disaggregated-But-**BALANCED** Communities in the CountrySide. Size and thus diversity would depend on their distance from the Centroid (the “center” of the Core) of the New Urban Region. An Alpha Community might vary in population from 50,000 to 500,000 depending on location. CountrySides would be allocated to New Urban Region Cores based on economic social and physical parameters. See again **Graphic I**.

I. THE OPPOSITION TO GOVERNANCE RESTRUCTURING.

The most vocal opposition to governance REStructuring and those who will whine the loudest about the “sanctity” of the current Municipal / State / Federal structure laid out in the US Constitution and in the Northwest Ordinance (both of 1787) are those elected and appointed governance practitioners who’s current job depends on the existence of the current system.

There is no way to avoid heated support of the historic system of governance. Niccolo Machiavelli stated in *The Prince* (1537) that the most difficult task a ruler [the author assumes that would include ‘all the citizens’ as ‘ruler’] must face is to “change the current order of things” aka, the governance STructure. How dysfunctional must governance become before citizens recognize their own enlightened self-interest?

The objective is to have simple rules and functional governance process at EACH level of the Organic Structure of human settlement patterns from the CLuster up.

NOTE III – NINE

NOTE III – NINE

Governance at the Cluster, NEighborhood and Village scale may seem like ‘overkill’ to some but it is not. This distribution of governance levels has been field tested using covenants that run with the land in a Village scale Planned New Community, Burke Centre, VA. After 40 years the governance entities at the CLuster, NEighborhood and Village scales are working well. They would work even better if more of the decisions made by the ‘municipal’ government (Fairfax County, VA with a population of over a million residents) were delegated down to the appropriate level and there was a source of revenue – perhaps endorsement fees should replace the deductibility of advertising expenses as a cost of doing business. Advertising drives Mass OverConsumption. Endorsement address the quality of a needed good or service..

J. THE INSINCERE CHAMPIONS OF ‘small’ GOVERNMENT

Many members of one national political party incessantly champion “small Government” but only because it “**SOUNDS GREAT TO THE BASE.**” Neither the national or state parties nor members of parties have put forth **ANY** substantive proposals to create “small government” or shift “decisions closer to the people.”

They propose to eliminate Federal AGencies and reduce tax revenue ‘to starve the beast’ as pointed out at the start of CHAPTER IV. In fact **NO ONE** is paying their fair share of Governance **AND** smaller levels of governance would be closer to those who need supporting programs and thus would have a better grasp of what is really needed.

Ronald Reagan was a vocal champion of small government. However, when he left office the

Federal government was larger than eight years before and the national debt was significantly bigger as well. Reagan relied on the question: “Are you better off now than you were then?” To gain reelection. The answer for many was ‘YES’ but only because Mass OverConsumption was funded by burning through more of United States Natural Capital and growing the national debt.

See discussion of *Healing American Democracy: Going Local*, Mike Hais, Dour Ross and Morley Winograd (2018) in Chapter IV.

K. THE DRIVER OF GOVERNANCE DYSFUNCTION

The dysfunction of governance is NOT due to the **PEOPLE** in government, it is due to the **STRUCTURE** of governance **AGencies**. If citizens put a critic of ‘government’ in office, the former critic will perpetuate most of the preexisting dysfunctions.

The existing political parties that say they are trying to represent diverse **COmmunity** and **REgional** interests are not doing that. Their real objective is **PARTY PRESERVATION** as opposed to meeting citizen real wants or needs. There is no way a single national party ‘platform’ can reflect the interests, priorities and needs of diverse **COmmunities**, **New URban REgions** and **New URban MegaREgions** with over 320,000,000 citizens.

The party that is out of power fights Gerrymandering, but they really are fighting THE OTHER PARTY’s Gerrymandering.

Political Parties so far have successfully avoided Thomas Jefferson’s wise advice of 1816 noted above.

L. ECONOMIC SYSTEM RESTRUCTURING

As important as the restructuring of governance is, the complete retooling of the economic system is of equal importance. Once in place the new **AGencies at all scales from **CLuster** to **Mega New URban REgion** must launch a comprehensive economic system restructuring.**

Some argue that economic restructuring must come first because those with deep pockets will use their resources to fight governance restructuring to protect their economic interests. The better choice may be to pursue both profound transformations at the same time.

1. A PARTIAL LIST

In the Economic Sphere there are many INstitutions in every advanced industrial democracy that are working hard to articulate a ‘NEW ECONOMICS.’ What will be needed to achieve a sustainable trajectory for civilization? Here is a partial list of those INstitutions that exhibit sound perspectives:

The Center for the Advancement of the Steady State Economy, is carrying forward the work of Herman Daly – *Beyond Growth: The economics of sustainable development* (1996).

The Schumacher Center for a New Economics is carrying forward the work of E. F. (Fritz) Schumacher – *Small is Beautiful: Economics as if People Mattered* (1973)

The Post Carbon Institute is exploring the status of the current carbon fuel supplies and the rates of production and consumption. Based on this data PCI is working to articulate the anatomy of the economy when carbon fuel is exhausted, intelligently reserved for critical future applications or sequestered to prevent further global climate change.

The New Economy Coalition is an umbrella group with 175 member INstitutions in 29 states and 5 Canadian provinces. NEC is working with grass roots Institutions to articulate the new economy.

The DeGrowth Movement. See *CURRENT PERSPECTIVE Number 03 DEGROWTH – SHRINKING TO SURVIVE THEN PROSPER* linked from the *CURRENT PERSPECTIVE* Page @ www.emrisse.com Also see Paul Hawken *Blessed Unrest* (2010).

Most of the ideas involve CLuster, NEighborhood, Village, COmmunity, SubREgional, REgional cooperatives, worker owned ENterprises and put forward working examples of these ENterprises and INstitutions. These ENterprises, INstitutions and movements are ignored by major “players” for the reasons outlined in CHAPTER II.

2. A FEW OF THE EXISTING RESOURCES

There are groaning shelves laden with books on the topic of economic system restructuring. Here are three useful volumes:

The Bridge at the Edge of the World: Capitalism, the Environment, and Crossing from Crisis to Sustainability, Gus Speth (2008)

Prosperity Without Growth: Economics for a Finite Planet Tim Jackson (2009)

What's the Economy for Anyway: Why it's Time to Stop Chasing Growth and Start Pursuing Happiness. John DeGraaf & David Batker.

To grasp the focus and scope of the proposed changes called for in this perspective requires a broad understanding of many aspects of the human experience. **Current Perspective # 12 “The Alpha Community Reading List”** linked from the *CURRENT PERSPECTIVES* page at www.emrisse.com summarizes 22 recent books. This Perspective also cites the bibliographic resources curated by SYNERGY. There are 146 books catalogued in **THE SHAPE OF THE FUTURE Appendix Three: Readings**, the two volumes of **THE SHAPE OF THE FUTURE**

cite over 190 books in the 60 pages of End Notes. PART 10, Chapter 36 of **TRILOGY**, **Fireside Readings** summarizes or notes over 100 books.

From all these resources there is not yet a consensus of a sustainable path to the future. Further, one need only read the **Economics Research Network's Professional Announcements** and **Job Openings** to understand there are 10s of thousands of persons with the title ‘economist’ on their business card who are each toiling in their own silo – or in a silo shared with followers and True Believers. Their efforts are directed to continuing the condition where as many facts can be termed EXTERNALITIES as possible because their models then have fewer variables. They have little hope of achieving detente much less consensus. A volume that insightfully outlines the path ahead in one sector of the Economic Sphere is Joseph Stiglitz's **Globalization and its Discontents Revisited : Anti-Globalization in the Era of Trump** (2018).

M. FOUR PRINCIPLES

Four principles that will define the focus of the NEXT ECONOMY appear to be paramount:

1. The focus must be broad enough to embrace the range of New URban REgion economic systems including **DeGrowth** (See again *CURRENT PERSPECTIVE Number 03 DEGROWTH – SHRINKING TO SURVIVE THEN PROSPER* linked from the *CURRENT PERSPECTIVE* Page @ www.emrisse.com and **Regional Import Replacement** strategies to achieve sustainability.
2. The focus must be fine grained enough to insure there are few, if any, EXTERNALITIES.
3. There must be consideration of all of the forms of capital, not just monetary capital but especially Natural Capital and Social Capital. See **8 Forms of Capital – in the Context of Financial Permaculture**, E. Roland and G. Landua (April 2011).

4. Any new Economic Structure must outline a clear path to provide Affordable and Accessible Housing for all citizens / HouseHolds AND provide a path to close the **Citizen Wealth and WellBeing Gulf**.

Both Fundamental Transformation of Governance Structures and Fundamental Transformation of the Economic Systems will be required to achieve transformation of human settlement patterns and thus achieving a positive trajectory for civilization.

Walkable Urbanism (the creation of **UrVilles**) and Access by Adjacency are MARKET driven. However, as insane as it appears, Walkable Urbanism settlement patterns are often prevented by current AGENCY Principles, strategies, tactics, policies, programs and regulations and well as being discouraged by ENTERprise short term goals and unfounded NIMBY fears.

N. ENTERPRISE SCALE

The maximum scale of ENTERprises regardless of form – Corporations, Limited Liability Corporations, B Corporations, Partnerships, and others – must evolve to be no larger than the scale of the New URban REgion where it's headquarters is located. This will be achieved by implementing InterREgional Transfer Fees covering all InterREgional profits. This in turn will require the inversion of the perspectives embedded in the Interstate Commerce Clause of the U. S. Constitution which was designed to overcome the impediments to 'growth' of early 'state' economies.

As noted above, Economic Balance will be aided by Regional Import Replacement. See Jane Jacobs *The Economy of Cities* (1969), *Cities and the Wealth of Nations: Principles of Economic Life* (1984) and *The Nature of Economies* (2000).

In addition to issues of scale and Import Replacement, ENTERPRISES monopolies MUST be eliminated and competition must be encouraged at all scales. This treatment of ENTERprises would be paralleled by parameters for AGENCY relationships as well as Public, Private Partnerships (PPP3s) as noted below.

Would these ENTERprises parameters slow 'economic growth,' 'innovation,' 'disruption' and moderate the rapid changes caused by "Creative Destruction" that accommodate and inspire ENTERPRISES (corporate) Bloat and the concentration of wealth?

Yes they would!! That must be a GOAL OF ALL economic strategies on a Finite Planet.

The change in scale would give citizens fewer things to worry about at any one time and thus provide time to reach consensus on economic, social and physical actions by AGENCIES.

O. ADVERTISING

The cost of advertising must not be a cost of doing business for tax and accounting purposes. One alternative would be an endorsement fee paid to Communities, Villages and NEighborhoods that tested the product or service. Advertising drives Mass OverConsumption. The alternative is to tax advertising.

P. AGENCY COMPETITION

Just as ENterprises should not prey on citizens via monopoly positions ‘justified’ by Creative Destruction or limitations to competition such as those on generic drugs, AGENcies should not hold monopoly positions with respect to Borders or majority discrimination of minorities. The way to avoid these problems is laid out in *TRILO-G, PART TWELVE CITIZEN HANDBOOK: Three Step Process to Create Balanced Communities and Sustainable New URban REgions*. Also see *This Government Competition Could Completely Change the American City*, Mike Laris (9 JUN 2016) *The Washington Post*.

Under the process laid out in *TRILO-G* noted above, citizens choose the component of human settlement pattern of which they become residents. This starts at the DOoryard scale: “What Cluster do you want to be part of?” The borders of the CLuster are agglomerated by this process. There must be principles and guidelines to insure there is no gerrymandering that benefits political parties or disenfranchises minority cohorts.

Next CLusters decide what NEighborhood of which they want to become part. Again there would be principles and guidelines to insure no gerrymandering.

The next step is for the NEighborhood to decide on the Village to which they would become part and finally, each Village would decide to which COMMunity the Village would be a part. At the Village scale and at the COMMunity scale there would again be anti-gerrymandering principles and guidelines and in addition criteria for achieving a Balance of Jobs / Housing / Services / Recreation / Amenity at these two scales.

Even under NIMBY “comprehensive” Planning and land use controls, the decisions at the NEighborhood, Village and COMMunity scales turn out to be quite straight forward and “natural” as documented by *The Four Communities Plan for Eastern Loudoun County, VA* and the similar process for Prince William County, VA. By SYNERGY in the late 90s.

This process would embrace optimizing BALANCE under the present conditions AND AT THE SAME TIME planning for the future within New URban Region-wide Conceptual Plans that reflect topography, existing infrastructure and historic settlement patterns. See *The Wright Plan for New York State* cited in, and illustrated in *The City in History*, Lewis Mumford, (1961).

There must also be a process by which, over time, citizens can rethink these decisions and switch components. This opportunity might come up once a decade and would reflect the reality that human settlement patterns are organic systems. For example some Villages may become less attractive because of a failure to invest in appropriate infrastructure. On the other hand some NEighborhoods may grow to be Village scale or Villages splitting off from the original Community to form a new Community.

Q. FOUR DELUSIONAL EXCUSES TO THWART PROFOUND ECONOMIC STRUCTURE TRANSFORMATION

- 1. The Commons is not a viable economic Structure**
- 2. Tax Cuts for the rich will result in investments to benefit the poor and to “grow” the economy**
- 3. Traditional Economic ‘Growth’ Raises All Boats.**
- 4. Unfettered “Market Activity” will eventually result in an equitable distribution of resources for all humans.**

1. The Commons is not a viable economic Structure

Elinor Ostrom won the 2009 Nobel Prize in Economics for her work debunking “the tragedy of the Commons.” In fact The Commons at all scales and in every aspect of human activity is a more democratic and more sustainable strategy than ENterprise, INstitutional or AGency competition. That is especially true in the context of finite resources as is the case of resources on a finite planet. Humans can UnderStand and voluntarily implement cooperative strategies to regulate the consumption of scarce and limited resources. ***The Commons, The Science of Cooperation: Nobel laureate Elinor Ostrom takes the prize for her commons sense.*** Fran Korten, *Yes*, February 2010. ***A New Land Tenure System***, The Schumacher Center of a New Economics, December (2016).

Retail / Service Coops as well as worker owned ENterprises and INstitutions can implement circular and shareable economic systems within REgional and REgional component contexts. ***The Commons are Everywhere.*** Keith Goetzman *Utne Reader* October 2010. ***The Case for the Commons***, Raj Patel from ***The Value of Nothing: How to Reshape Market Society and Redefine Democracy***, 2010.

The circular / shareable economic systems can put forward the concept of “**Borrow, Do Not Buy**” to help curtail Mass OverConsumption. *The Women in Red: The Sharing Economy: 7 things you should borrow instead of buy*, Kate Ashford, *House and Home* (9 NOV 2010). There are now “How-to” manuals on COmmunity resilience. *The Community Resilience Reader: Essential Resources for an Era of Upheaval*, Daniel Lerch, (2017). The leaders proposing new Economic STructures can provide a focus for creative demonstrations. *Re-Imaging Politics through the Lens of the Commons*, David Bollier, (October, 2017) *Cities Will Save Democracy If They Don’t Kill it First* Nicole Flatow, October 2017.

2. Tax Cuts for the rich will result in investments to benefit the poor and to grow the economy

The rich did not get that way by making foolish decisions. The only reason that the rich will ‘invest’ is so that they can make even more money or meet other of their personal goals. Philanthropy offsets this to some extent but obviously not enough. **The Citizen Wealth and Well Being Gulf** documents that this unfounded gimmick is a counter-productive approach to economic structure. *U.S. Stock Ownership Down Among All but Older, Higher-Income*, Jeffrey M. Jones (May 2017). *The Service Class Deserves Better: Our nations’s future depends on our ability to provide the largest segment of our labor force with stable, family-supporting work.* Richard Florida, (Sept 2017).

Finally, the last thing that Homo Sapiens need is ‘Growth’ that drives Mass OverConsumption. Some aspects of Growth have in the past improved life for those at the bottom of the Ziggurat. However, with seven-plus billion citizens on the planet humans are now forced to seek ways to bring all those at the bottom up to a “decent” standard of living without traditional ‘growth.’

3. Traditional Economic ‘Growth’ Raises All Boats.

The Citizen Wealth and Well Being Gulf documents that this is baloney. *Small is Beautiful: Economics as if People Mattered*, E. F. Schumacher 1973. While some believe that the poor are better off now than 40 years ago – “they not only have TV sets, they have indoor plumbing!!” The real measure of welfare is the **GULF** between the position the top 20 percent and the balance of the Ziggurat especially the bottom 40 percent as noted in Chapter I. In some post industrial nation-states the access to food, clothing and shelter is assured. But with as many as 40 million facing starvation including in places such as Venezuela – all the boats have not been raised.

4. Unfettered “Market Activity” will eventually result in an equitable distribution of resources for all humans.

Any intelligent review of the past 100 years of experiments with unfettering markets will document that the FizCons will strive for an **INEQUITABLE** distribution of resources to maximize their own wellbeing. Again see *The Price of Inequality: How today’s Divided Society*

Endangers Our Future, Joseph Stiglitz (2012). *Urbanism Shouldn't Be a Story of Winners and Losers*, Richard Florida, 12 June 2018.

R. FACTS AND PROJECTIONS TO CONSIDER:

There will be wailing and caterwauling concerning the sanctity of the 'founding fathers' perfect system of governance...

Here are three realities to consider:

First: If Profound Transformations are not committed to soon, there will be no choice but to rush to make profound changes in the 'near future' due to evolving reality. This point is summarized by Norman Ornstein in an article by Philip Bump in *The Washington Post: In about 20 years, half the population will live in eight states.* (12 July 2018). Further, by this time 70 percent of the population of the United States will live in 15 states.

What this means for governance Structure is that if current trends of migration continue, seventy percent of the population will elect 30 U.S. Senators, the other thirty percent will elect 70. This will continue and magnify the inflated impact of voters in low density / NonURban areas of states. Profound Transformation spelled out in this Chapter will take two decades to completely implement. The time to start is NOW.

Second: The vast majority of URban citizens of the United States will live in New URban REgions. Richard Florida raises a critical question: *What To Do About the Rise of Mega-Regions?* [New URban REgions and agglomerations of New URban REgions]. **"We need to make urbanism more inclusive and democratic if we want to realize a better future [a sustainable trajectory], and that means devolving power from the dysfunctional nation-state [and dysfunctional states] to cities and neighborhoods. [to New URban REgions and organic components of New Urban Regions.]**

Third: James Piketty, author of *Capital in the 21st Century* (2014) puts it this way: **"If democracy is to someday regain control of capitalism, it must start by recognizing that the concrete institutions in which democracy and capitalism are embedded need to be re-invented again and again."**

PART THREE – INFRASTRUCTURE

A. OVERVIEW

The most important and extensive changes in the current trajectory of human civilization will be changes in INfrastructure both inside and outside The Logical Location of the Clear Edge around the Core of New URban REgions.

Unfortunately, meaningful and intelligent changes in the way INfrastructure is planned, designed, implemented, maintained and recycled will first require Profound Transformations in AGencies (Governance STructure) and Economic Structure addressed in PART TWO.

In addition, successful planning, design, implementation, maintenance, and recycling of INfrastructure will vary from New URban REgion to New URban REgion and from New URban REgion Organic Component to New URban REgion Organic Component.

There are few universal “Best Practices” except for what works best, REgion by REgion.

PART THREE opens with a review of two important **INfrastructure Principles**. Next PART THREE addresses **Four Strategic Shortcomings** of the current discussion concerning INfrastructure. The next Section is devoted to a summary of what the provision of sustainable INfrastructure should lead to: **Walkable URbanism** – aka, **URVille**. This is followed by a review of **Green INfrastructure** both inside and outside **The Logical Location of the Clear Edge around the Core of New URban REgions**. Finally there is a quantitative sketch to help readers grasp the scale of New URban REgions.

Bottom Line: There is plenty of land for URVille for All that want it AND for Green INfrastructure as well as OPenSpace and OPenLand both inside and outside The Logical Location of the Clear Edge (LLCE) around the Core of New URban REgions.

This PART considers the problems and opportunities with INfrastructure in the order outlined above. But first, the Principles that should guide ALL INFRASTRUCTURE DISCUSSIONS.

B. INFRASTRUCTURE PRINCIPLES

The first Principle of Infrastructure is that before ANY plan for ANY Infrastructure component is drafted, the desired human settlement patterns at no less than New Urban Regional Scale must be agreed upon in Principle. ONLY THEN can Agencies determine what Infrastructure is needed to serve and support implementation of the desired, functional and sustainable human settlement patterns. If the Infrastructure is to serve an area greater in scale than a single New Urban Region then the general settlement patterns for this larger area must be agreed upon.

This agreement on the pattern and density of land use is also needed to determine what Agency or Agencies will plan, design, implement, maintain and recycle this Infrastructure.

To Understand the MultiRegional aspect of this principle, consider one clear example that did NOT follow this principle. Consider the history of the InterRegional (later “Interstate”) Highway System over the 39 year period from the time an **InterRegional** system was demonstrated to be needed at the end of World War I to the start of implementation 11 years after the end of World War II. See *Interstate Crime* (Column # 50, 28 Feb 2005) in *TRILO-G*, Chapter 46 linked from the *RESOURCE* page at www.emrisse.com.

The second Principle of Infrastructure is that, in the context of the Climate Change / Global Warming debate, it makes absolutely no difference if the current Climate makes it appear that the planet is currently warming or cooling or what is causing it to change.

Recently, infrastructure has been confused by the conflicting perceptions of ‘global warming’ and ‘climate change.’ What needs to be done to evolve resilient Infrastructure is what needs to be done REGARDLESS of the current debate on these variables. There have been floods, fires, hurricanes, tornados and tsunamis in addition to Mega Volcanos and Asteroid impacts on the planet for millions of years. They may get more or less frequent and more or less powerful but they will happen and the investment in Infrastructure must reflect the best judgement on design resilience. Resilient Infrastructure will not be cheap. Cheap infrastructure is deadly AND in the long run, very costly.

Looking at Before and After views of Harvey, Irma, or Maria – or Katrina, Sandy or Pompeii – to say nothing of wildfires in Greece or wildfires and mudslides in California, one can identify actions NOT to take. For example “DO NOT BUILD INFRASTRUCTURE THAT WILL BE DAMAGED BY FLOODS IN THE 100 YEAR, THE 500 YEAR OR THE 1,000 YEAR FLOOD PLAINS – current or projected. The same is true for unstable land due to slope, soil type, geological faults or other conditions outside flood planes. Consider trends over the past 100 years and plan for resilience.

C. THE STRATEGIC SHORT COMINGS OF THE CURRENT DISCUSSIONS OF INFRASTRUCTURE

There are four areas of Strategic Vacuum in the recent and current discussion of INFrastructure:

- ◆ **Two Colossal Topics are not considered INFrastructure – They Should Be**
- ◆ **The Scope of the Individual Topics Discussed is too narrow / limited.**
- ◆ **There are unfounded Fabrications with respect to some INFrastructure ‘Solutions’**
- ◆ **Due to the prior three systematic short comings, vast areas of land are wasted by providing partial and / or environmentally unsustainable INFrastructure Systems.**

1. TWO COLOSSAL TOPICS ARE NOT CONSIDERED INFRASTRUCTURE, BUT THEY SHOULD BE.

There are two colossal subjects that should be considered ‘infrastructure’ but they are not yet. They are not even thought about in the context of intelligent INFrastructure achieving Balance of J / H / S / R / A. The two topics are **SHELTER AND FUNCTIONAL SETTLEMENT PATTERNS.**

a. The First Neglected Topic: Shelter:

Water, food and SHELTER are the three requirements for Homo sapiens (or any other animal) to survive. Water supply and management and the Mobility and Access systems to grow, process and deliver food are considered “infrastructure.” Shelter is not. This made sense in an Agrarian society when most shelter was built by the eventual occupant. **NOTE III – TEN**

NOTE III – TEN

As recently as the end of World War II there were still a number of ‘Hope Houses’ built by veterans. ‘Build a basement to live in and ‘hope’ for the money to build the house on top of the basement / foundation.’ The author’s father built two houses for his HouseHold during his

lifetime. He built them largely by himself with help from his wife and children. The first was on a farm in California, the second was at the edge of a small hamlet in Montana. Not many do this anymore.

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The provision of SHELTER has been given over to ENterprises with too often counter-productive guidance and regulations from AGencies. A supply of Affordable and Accessible Shelter is a basic human Right in a modern, well-regulated society. This is a good example of the need to re-balance the relationship between private rights and public (Commons) responsibilities.

Trickledown housing does not work. ENterprises construct the housing that produces the most profit in the shortest amount of time thus minimizing risk. That is what ENterprises do.

America's affordable-housing stock dropped by 60 percent from 2010 to 2016, Tracy Jan (23 October 2017) *The Washington Post*, *Why Is 'Affordable' Housing So Expensive to Build?* Joe Cortright, *City Observatory* (October 2017), *A Bipartisan Fix to the Housing Crisis*, Kriston Capps (August 2017), *If Rent Were Affordable, the Average Household Would Save \$6,200 a Year*, Tanvi Misra (20 September 2017), *The housing designers solving urban living's big problem*, Dan John, (22 October 2017), *How Mobile Homes Hinder the American Dream, A new book examines how trailer parks trap their residents in a cycle of deprivation*, Mimi Kirk (25 October 2017)

- b. The Second Completely Neglected Topic with Respect to Infrastructure Is the Imperative That UrbanSide Infrastructure Support the Evolution of Settlement Patterns Composed of Walkable, Sitable and Talkable Urban Fabric in accordance with the first Principle above.**

These Walkable URban settlement patterns are the sine quo non of functional and sustainable organic components of urban fabric – let us call it “UrVille.” See Section D below on this topic.

2. NARROW TOPIC DISCUSSIONS

The Scope of the Individual Topics Discussed is too narrow / limited.

Even the topics included in discussions of infrastructure are discussed in far too limited a context.

There are critically important components of INfrastructure that are omitted from the discussions of “infrastructure.”

Debates about “infrastructure” are generally limited to technical, engineering, financial and politically related discussions of the provision of one specific system to provide water and sewer services, storm water management, a road or a bridges, a power line or a pipeline as well as an airport, seaport, railroad and recently a telecommunications network. For example see the periodical memo *Infrastructure at Brookings Metro* – which provides sound perspectives on a limited range of topics.

The problem with this perspective is that the topics included are discussed in far too limited a context e.g. storm water management discussions often do not address sustainable, REgional water supply or even flood control in the context of climate change. There is little overarching guidance from any source. *The White House’s Leaked Infrastructure Plan Is a Road Map with Few Details*, Laura Bliss (23 January 2018).

“Storm water management,” “water supply management” and “wastewater management” must include flood control and in coastal areas it must include tidal storm surge. There is plenty of high ground in every New URban REgion. It is not just the rich who should be safe from floods and storm surges. With the transformation to Walkable, Sitable, Talkable URban fabric discussed in **Section D** below, there is now the need for FAR LESS high ground per capita to meet the needs of the existing and projected populations. Also see discussion of Gulf Coast floods in CHAPTER II.

The determination of the best scale of design, construction, servicing / management and replacement of INfrastructure depends on the most efficient design, construction and maintenance scale of that INfrastructure. REgional transportation or storm water management must be a REgional responsibility. A ‘state’ cannot efficiently provide REgional transportation INfrastructure. A REgional transportation system requires Regional funding, management and replacement to meet REgional responsibilities and needs.

As recent tropical storms and woodland wildfires document, the effectiveness and survivability of the existing INfrastructure is tragically inadequate. Contemporary civilization will not get by on the cheap, shoddy INfrastructure. NOTE III – ELEVEN

NOTE III – ELEVEN

There are many misconceptions about ‘infrastructure’ to say nothing of the misconceptions concerning ‘INfrastructure.’ *Five myths about infrastructure*. Joel H. Moser, *The Washington Post* August (2017).

Charles Marohn has demonstrated that the existing infrastructure was designed and built without a plan to pay for maintenance and eventual replacement of basic settlement-pattern-determining infrastructure – roads, water, sewer, storm management. See *The Growth Ponzi Scheme* Charles Marohn and other *Strong Towns* publications for documentation of this reality.

One threshold way to address the problem of limited scope of topics included at INfrastructure is via Vocabulary. For Example ‘transportation’ should be called Mobility and Access Systems.

This puts “Access by Adjacency” on the front burner in discussions that are usually limited to ‘road building’.

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3. PURE FANTASY

The Third Problem the Current Discussions of Infrastructure Is That Pure Fabrications Have Been Concocted with Respect to the Impact of Some Infrastructure Elements e.g. the idea that ‘Improving’ Radial Roadways to Reduce ‘Congestion’.

There is not one example in the United States known to the author where a radial expressway congested by ‘commuters’ that has been ‘fixed’ by increasing the radial capacity **UNLESS** there were also profound changes in settlement patterns that reduce commuter travel demand. Unless land uses changes, increasing radial capacity induces increased demand and thus more congestion. See *Eighty years of false freeway claims, PSQ (Public Square)* Robert Steuteville (28 July 2017) and *5 Ways to Seriously Battle Traffic: So long as cars are among us, road pricing* [congestion pricing], *ramp meters and diamond-shaped intersections can mitigate horrendous commutes*, Laura Bliss (25 July 2017).

4. CUMULATIVE LAND CONSUMPTION

Finally, due to the prior three systemic short comings, a vast area – millions of acres nation-state wide – have been supplied with a SOME INfrastructure services that prices the land out of reach for agrarian and forestal land uses but does not yield enough tax revenue under the current AGENCY Structure to pay for the Services rendered.

The role of amateur speculators, which is discussed in *THE SHAPE OF THE FUTURE* (2000) and in **Chapter II**, plays a key role in this pricing land out of reach for agrarian and forestal land uses. The vast excess of partially URbanized land is discussed in CHAPTERS II AND IV.

Due to the **First Principle of INfrastructure** noted above, it is imperative that the discussion of functional and sustainable settlement pattern is the central focus of the design, construction and maintenance of INfrastructure.

D. FUTURE SETTLEMENT PATTERNS

This Section is devoted to a summary of what the provision of sustainable Infrastructure should lead to: Walkable URbanism – aka, URville.

Over and over again in this Perspective the imperative of evolving Walkable Urban Places has been noted. This is where the primary mode of transport is Access by Adjacency and where Households can live, work and seek Services, Recreation and Amenity without resorting to the use of a Large Private Vehicle.

This settlement pattern is an imperative not just for the well-to-do URbanites but for ALL citizens even many of those employed in COUNtryside activities in Agrarian NEighborhoods – e.g. commuting by tractor or log skidder. That is because this is the settlement pattern that meets most of the needs of most of the citizens, most of the time AT THE LOWEST TOTAL COST.

Walkable, Sitable, Talkable URban Fabric is the settlement pattern where the location-variable costs are at a minimum and the total costs can be fairly allocated as documented in PART ONE of *THE SHAPE OF THE FUTURE* (2000) concerning the *Cost of Services Curve*.

Not only does this settlement pattern meet the needs of the two largest cohorts of citizens (Empty Nest Boomers and Millennials) but it is where the market has moved over the past two decades.

On many fronts Millennials and the generation that follows and feeds into the 18 to 34 age cohort are driving fundamental transformations. *Not drinking or driving, teens increasingly put off traditional markers of adulthood*, Tara Bahrapour, (19 September 2017), *The Washington Post*, *Why Are Millennials Leaving New Jersey?* Alastair Boone (30 November 2017), *The Urban Fitness Revolution, Once rife with grit and nightlife, many urban NEighborhoods now embrace fitness as a lifestyle*, Richard Florida, (2 January 2018), *Cities turn to ‘missing middle’ housing to keep older millennials from leaving*, Katherine Shaver (9 December 2017) *The Washington Post*, *No, Young People Aren’t Fleeing Cities*, Joe Cortright, (20 December 2017), *A growing number of young Americans are leaving desk jobs to farm*, Liz Whitehurst, (23 November 2017). *Great Cities [New URban REgions] Enable You to Live Longer*, Joe Cortright, (16 January 2018). *Catalytic Development for Walkable Urban Places*, Robert Steuteville (18 May 2018).

The current market for shelter and prosperous small businesses is about 30 persons per acre **AT THE ALPHA COMMUNITY SCALE**. See *Foot Traffic Ahead*, Christopher Leinberger (2016). Also see resources cited under the step to achieve *Urville* below. **NOTE III – TWELVE**

NOTE III – TWELVE

There **WAS** a Sweet Spot on the Cost of Service Curve at around 10 persons per acre. This was the original settlement pattern design of all of the most successful Planned New Communities in the United States designed from 1950 to 1970 and initially “built out” circa 2010. There are now Sweet Spots at about 30 persons per acre at the Alpha **Community** scale as well as between 100 and 200 persons per acre at the Alpha **Village** scale. The latter settlement patterns require high capacity Shared Vehicle Systems (aka ‘heavy rail transit’). Also see *Walkable City: How Downtown can Save America, One Step at a Time*, Jeff Speck (2012). *Within Walking Distance, Creating Livable Communities for All*, Philip Langdon (2017).

The rising direct and indirect cost of providing Mobility and Access – primarily via Large Private Vehicles – as well as the life-cycle costs of the other 40 plus Services required to support contemporary advanced societies have caused the 10 persons per acre Sweet Spot to disappear.

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To create *UrVille* citizens must:

Evolve **THE 20 MINUTE VILLAGE**. *How to become a ‘20’ minute “city” [Village] Transit-Oriented Development Resources* (16 October 2017), *Great Idea: Pedestrian shed and the 5-minute walk*, Robert Steuteville, (7 February 2017) *PSQ* and *The million Dollar NEighborhood(s)* that recognizes *The Beauty of 25-foot urbanism* (an ode to small lots). Robert Steuteville, *PSQ* 27 October 2017.

Citizens can do this through *Shock and awe for ‘cities’ and ‘towns’* [urban fabric] Robert Steuteville, Charles Marohn and Joe Minicozzi, *PSQ* February 2017, by taking things into their own hands *Made in Place: Small-scale Manufacturing and NEighborhood Revitalization, Smart Growth America* (7 November 2017), and by rebuilding The Commons and the INstitutions that support The Commons such as *Open Bio Labs hosts conference for Community-based Science*, Josh Mandell. *Charlottesville Tomorrow* (3 August 2017). Also see *65 reasons why urbanism works*, Hazel Borys (21 November 2017) *PSQ*.

Can these strategies result in *Suburbanism Reversed in a Generation?* Laurie Volk & Todd Zimmerman *Building a Better Burb (BBB)* August 2017 and thus *The End* [of the causes] of “*Sprawl*” [dysfunctional human settlement patterns] Christopher B. Leinberger *BBB*, August 2017).

This is *Why walkability is not a luxury* Robert Steuteville *PSQ* (28 September 2017) and that is why *Companies [ENterprises and INstitutions] return to ‘downtown’ to up their ‘cool’ factor and appeal to millennials*, in *Back to the Center*, Richard Foster, *Virginia Business* October 2017.

E. DESTRUCTION OF HABITAT AND GREEN INFRASTRUCTURE

Finally, with respect to INfrastructure, due to the same forces that have created the vast oversupply of Semi-URbanized land, URban land uses (especially low density Single HOuseHold Dwellings URban uses) have been scattered in the COuntrySide. This has led to the destruction of habitat in the COuntrySide and the failure to evolve Green INfrastructure in the UrbanSide.

Whether back yard song birds, polar bears or exotic fungi of medical importance, the common theme about their future sustainability is “loss of habitat.” There is one primary reason for loss of habitat: human activities – aka, dysfunctional human settlement patterns.

What is missing here is UnderStanding of the vast amount – tens of millions of acres in the United States that has been wasted by scattered URban land uses.

Wasteful scatteration of human habitat is the first problem. If that is addressed, there will be plenty of room in as yet undisturbed and ReNaturalized areas to provide habitat for all of the planet’s flora and fauna. See again *Half -Earth,: Our Planet’s Fight for Life*, E. O. Wilson (2017).

One important way to approach the preservation of habitat for ALL is to view the URbanSide as human habitat. See *People Habitat, 25 Ways to Think About Greener, Healthier Cities [URbanSides]* Kaid Benfield (2014). In this context the identification of OpenSpace as Green INfrastructure will provide for ‘all creatures big and small.’

The identification of areas best suited for OpenSpace has a clear record of success following the principles laid down by Ian McHarg in *Design With Nature* (1971 / 1995). The McHarg (MRT) and Richard P. Browne (RBA) design for the Planned New Community of The Woodlands, TX proves this strategy works even in the flat, flood-prone Houston New URban REgion.

In summary:

Green INfrastructure is NOT just stream valleys through which to run utility lines.

Green INfrastructure of the future is composed of two major realms:

INSIDE The Logical Location of the Clear Edge (LLCE) around the Core of New Urban Regions Green INfrastructure goes by the name of OpenSpace. OpenSpace is organized and protected uses of Common Land. In most cases this should occupy from 40 to 55 percent of the land within the LLCE.

OUTSIDE the LLCE Green Infrastructure is composed of Working Landscapes as well as, organized and protected uses of Common Land that are Natural Areas and Wildland (Wilderness). Within the area outside the LLCE from 95 to 99 percent of the land should be dedicated to these three land uses. Within Working Landscapes and some Natural Areas there would be Agrarian Neighborhoods that would include one or more Urban Hamlets within the Agrarian Neighborhoods.

A general overview of this material was presented to the World Futures Society's national conference in July 1989 and, after peer review, was published in *Futures Research Quarterly* Vol 9, Num 3, Fall 1993 as "**The American Settlement Pattern of the 21st Century – Where are the “sub”urbs Going?**" This document outlines the process of Urbanization from 1820 to 1990 in the United States and outlines the most effective future projection of land uses.

This Profound Transformation is made possible by ABANDONMENT of large tracks of Single Household Detached Dwellings for the reasons noted in PARTS ONE, TWO AND THREE and the conversion of the land outside the Logical Location of the Clear Edge into Working Landscapes (Private and Common areas devoted to Agriculture, Forestry and Natural System Generation and ReCharge Areas) Natural Areas (Private, Public and Common areas devoted to Conservation) and Wildland (SubRegional and New Urban Regional Wilderness).

F. UNDERSTANDING SCALE AND DENSITY OF NEW URBAN REGIONS AND THEIR COMPONENTS

The Geographic Illiteracy of citizens and their leaders severely impacts their economic prosperity, social stability and physical sustainability by fogging their Understanding of settlement patterns.

The several root causes of this failure are explored in *The Deception of Density*, Garrett Nelson (26 October 2016). Ironically while correctly describing the deception of “density,” Nelson fails to identify the primary cure: **RECOGNIZE** and **QUANTIFY** the **ORGANIC COMPONENTS** of human settlements patterns.

Every notation of ‘density’ must include both 1) a Quantification AND 2) the Scale of the unit that is clearly defined.’ For example: “Thirty persons per acre at the Alpha Community scale.” Where Community is the Complete, Balanced (J / H / S / R / A) Community inside the Logical Location of the Clear Edge (LLCE) around the Core of a New Urban Region (the UrbanSide) or the Balanced-But-Disaggregated Communities in the CountrySide.

Especially useless, as Garrett Nelson points out, are statements of density per ‘county.’ The US Bureau of the Census uses persons per square mile and does not include the Organic Component of the enumeration unit(s).

The following sketch provides a primer on scale. This exercise underscores the vast quantity of acreage that is **PARTIALLY** URbanized around the core of New URban REgions.

AN EXERCISE IN UNDERSTANDING SCALE

Take any moderate scale, free-standing New URban REgion in the United States: Draw a circle with a radius of 20 miles centered on the Centroid in the Core of the REgion. The area contained in this circle would be 804,250 acres.

If one half of the area within 20 miles of the Centroid were reserved for REgion serving OpenLand and OpenSpace, the remaining area would provide – at the densities that support the market for Walkable Urban Places and associated COmmunity Scale OpenSpace for about 12,000,000 citizens.

Draw a second circle with the same center point and a radius of 100 miles. The outer Radius Band between the two circles is about 19,301,990 acres.

A close examination of this area – for example via *Google Earth* – and municipal land use controls will document that the vast majority of this land is now set aside for low density residential land uses. However, most of the land is vacant and if in use for residential or other URban land uses land uses is vastly underutilized when compared to functional settlement patterns. The most dense area in this outer Radius Band usually pencil out at about 6 persons per acre at the Beta Community Scale.

NB: This sketch assumes the settlement pattern that is not constrained by a large body of water (New York NUR – New York, Conn, New Jersey, The Bay Area NUR – California or a mountain range Los Angles NUR – California that is inside Radius = 20 Miles. These conditions require adjustments to reflect the dominate topographic features but do not invalidate the overarching rationale.

Also see *Visualizing Density*, Julie Campoli & Alex MacLean (2007). This text helps visualize different densities but does not provide an overarching Conceptual Framework (i.e. defining the Organic Structure of human settlements articulated in Chapter II), the first step to UnderStanding settlement patterns. As noted above the “persons per acre” is not useful without a clearly stated organic Component. In most cases the illustrations in this book are of CLuster scale

PART FOUR – SUPERSTRUCTURE

As suggested by Asher Miller (**See again NOTE III – ONE**) SUPERSTRUCTURE addresses ‘culture’ in all its many aspects.

A. CULTURE

The sphere of human activity that is in the least need of Profound Transformation along with the HouseHold – is the SuperStructure. There is little need for an overarching ‘plan for culture.’ AGencies just need to provide the opportunity for cultural Infrastructure and INstitutions to evolve and then AGencies need to stay out of the way – “the separation of state and church writ comprehensive.” ENterprises must avoid taking advantage of human emotions to fuel Mass OverConsumption.

Much of the current divisive red vs blue acrimony concerning governance is the attempt by some cohorts to enforce thru government (AGencies) their individual / like-minded group view of ‘culture’ (or lack there of) on others especially via political parties.

Alexis de Tocqueville in his classic survey of 19th century ‘American’ culture *Democracy in America* (1835 / 1840) was profoundly impressed by the ability for citizens to come together to voluntarily carry out a broad range of activities that were in their Common Interest. *How Culture Shapes Economic Development*, Richard Florida (7 June 2018).

Religion is now used by political parties to inappropriately lather up “the base” to achieve narrow political / electoral goals. This is in spite of the fact that there is a growing atrophy of core religious beliefs and activities. *The Non-Religious States of America: New survey data indicate that religiously unaffiliated people in the U. S. Are diverse – and in many places, they make up a greater share of the population than any faith group.* Emma Green (4 September 2017).

B. HAPPINESS AND HARMONY

There must be a replacement for GDP used as the measure of human satisfaction and success in evolving a sustainable future.

One possible approach is to articulate specific measures of happiness and harmony. The most sure path may be to reestablish Trust. *How to Make America Trust Again: Despite growing political polarization at the national level, local [Core Confusing Word - try REgional, COMMunity or Village] INstitutions are still strong – and local [Core Confusing Word] actors have a key role to play,* Joseph Parilla 12 December 2017). *On this Black Friday, some mall visitors came out for more than bargains,* Abha Bhattaral (24 November 2017). Profound Transformations in AGENCY (government) structure is the first step.

That is not to say the path to HAppiness is easy to define or measure much less achieve. See for example: See *Happiness: A History*, Darrin McMahon (2006) *The Happiness Myth: Why What We Think Is Right is Wrong; A History of What Really Makes Us Happy* Jennifer Hecht (2007), *Happy City: Transforming Our Lives Through Urban Design*, Charles Montgomery (2013), *Ten Reasons to Build COmmunity through Urban Design*, Robert Steuteville (17 January 2017).

The current status of ‘happiness’ is on a downward trajectory. *The Unhappy States of America*, Richard Florida, (20 March 2018)

Also see: *A Lazy Persons’s Guide to Happiness*, James Hamblin (October 2017), *One of the Greatest Threats to Our Lifespans [and HAppiness] is Loneliness: What would society be like if health insurers and public bodies [AGencies and INstitutions] invest as much in encouraging social encounters as exercise and good diet?*, Laura Alcock-Ferguson (October 2017), *In a Lonely City, Volunteer Listeners Are Here to Help: Often, lonely people long to be noticed by another person who says, “I see you”. That is where Sidewalk Talk comes in.* Juli Fraga October 2017. *The Strange Power of Weak Ties: It’s not hard to bond with people just like you. What Americans need are more connections to people who Aren’t.* Eric Liu (June 2017. *The Geography of Desperation: A recent study maps where white, black, and Hispanic Americans experience the most pain and work – and optimism*, Richard Florida 9 November 2017. (NB: The text and the maps are not congruent in this publication)

There are few books that outline the process of evolving a sustainable trajectory better than Harmony: A New Way of Looking at Our World, Charles, HRH, The Prince of Wales (2010)

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MOVE CHAPTER III NOTES TO THIS LOCATION

CHAPTER IV

Functional human settlement patterns are the sine qua non of a sustainable trajectory for civilization.

How do citizens overcome the obstacles to actions intended to address the compounded economic, social and physical dysfunctions in order to achieve functional human settlement patterns and thus a sustainable trajectory for human civilization?

Chapter IV examines overarching objectives and milestones based on an Understanding of:

The Current Trajectory articulated in **Chapter I**,

The Comprehensive Settlement Pattern Framework articulated in **Chapter II**, and

The Profound Transformation of SStructure, INfrastructure and SUpErStructure outlined in **Chapter III**.

This book does not end with a stirring manifesto for Profound Transformation. Rather it completes the job of providing a summary of the existing trajectory of human civilization, a summary of the forces driving that trajectory and a concise Perspective of what needs to be done before it is too late.

You need not believe the author, rather, believe the sources cited. If you do not believe the brief summary of the sources' Perspective, read the cited material and the sources they cite.

This chapter also documents that there MAY be light at the end of the tunnel. Time is of the essence.

A. AUTHORS PERSPECTIVE

The author grew up in the Northern Rocky Mountains. Glacier National Park is an encyclopedia of geological time. Although he could not articulate it in the early 50s, the author was aware that profound forces were at work that might change the planet as he knew it. Tens of thousands of year old glaciers were melting within view of his front porch. At 15 the author hiked 80 miles alone to see Boulder Glacier before it melted away. A reviewer of this document reported that he understood the impact of projected population growth when in grade school.

The author sensed – but could not yet articulate the fact that, what are now termed ‘human settlement patterns’ were fragile and thus unsustainable.

Bottom line? The events driving the current dysfunctional trajectory were known 60 years ago. See Prologue Section D for the cairns on the trail to the conclusions presented in *The Little Book*.

Chapter I opened with three perspectives on the dysfunctional trajectory of human civilization. The chapter introduced evidence that documents:

“SOON IT WILL BE TOO LATE TO SHIFT COURSE AWAY FROM OUR FAILING TRAJECTORY.”

The 2017 report from the Alliance of World Scientists graphs the trajectory of the nine global indicators of dysfunction. The ‘Indicators’ are: freshwater resources per capita; reconstructed marine catch; marine dead zones; total forests; vertebrae species abundance; carbon dioxide emissions; global temperature change; ozone depletors and population. All have direct relationships to human settlement patterns and resources on the planet and all but one of the indicators has continued their unsustainable downward trajectory.

Only the release of ozone depletors have improved. This Indicator is now back ‘down’ to 1988 levels. Not great but better.

But wait!

Scientists suspect that someone, somewhere is making banned chemical (chlorofluorocarbon) that destroys the ozone layer. Chris Mooney, *The Washington Post* (16 MAY 2018)

It is still important to UnderStand why ozone HAD BEEN the lone Indicator with a positive trajectory.

First, there was clear evidence that the Ozone in the stratosphere protected the planet from harmful ultraviolet radiation. **Second**, there was clear evidence that this shield was being eroded by chlorofluorocarbons. **Third**, there were known replacements for the use of chlorofluorocarbons in refrigerators, air conditioners and aerosol cans. **Fourth**, the economic impact of changing to alternative solutions was primarily limited to one industry sector. **Fifth**, that cohort could charge more for upgraded refrigeration units using replacements for chlorofluorocarbons. **Sixth**, many HOuseHolds in the late 90s, early 00s could afford to pay for these added charges due to the Pre-Great Recession prosperity.

A similar set of conditions does not apply to any of the eight remaining trajectory Indicators identified by Alliance of World Scientists (AWS).

The AWS offers 13 strategies to reverse the current trajectory. None of them are congruent with the conditions of chlorofluorocarbon replacement and the ozone layer protection / recovery ‘success’.

This Chapter summarizes key strategies to guide a robust (well funded and comprehensive) effort to implement the needed Profound Transformations. Without these actions, intelligent programs may be derailed or delayed until it is too late. What comes first: Finding a source of funding or wide spread support that includes the grass roots AND the ‘leadership’?

The first line of defense would be to address the causes of the current dysfunctional trajectory summarized in CHAPTER I and CHAPTER II.

B. THREE NOTES OF CLARIFICATION

1. *Humans are Blind to Imminent Environmental Collapse: “A curious thing about H. Sapiens is that we are clever enough to document – in exquisite detail – various trends that portend the collapse of modern civilization, yet not nearly smart enough to extricate ourselves from our self-induced predicament.” **The Sixth Extinction: an Unnatural History**, Elizabeth Kolbert (2014)*
2. While **THE LITTLE BOOK (TLB)** addresses Profound Transformations, it does NOT support draconian and regressive alternatives such as The DaRK Mountain Project (**Uncivilization**) or the strategy of Edward Goldsmith (**De-industrialising Society**). **TLB** presents Profound Transformations that:
 - ◆ The vast majority of citizens with average intelligence and a basic education can understand and come to realize that the Profound Transformations outlined in Chapter III are in ALL citizens best interest, and

- ◆ Citizens can come to support these strategies WITHOUT sacrificing the benefits of 15,000 years of civilization’s evolution and of contemporary science. **NOTE IV – ONE.**

NOTE IV – ONE.

Upon completion of *TLB*, the author intends to turn his attention to the as yet unfinished CURRENT PERSPECTIVES (Completed CURRENT PERSPECTIVES can be found on the *CURRENT PERSPECTIVES* page at www.emrisse.com) and create new Perspectives that address specific topics within the context established by *TLB* and resources cited herein. This will include rational explorations of draconian strategies and milquetoast feel good perspectives such as the political smoke and mirrors included in the annual State of the Union messages from the office of the President of the United States.

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- 3. Before proceeding one must understand that SOME believe “*Things may be not as bad as we think*” Nick Higham *BBC News* 26 December 2017.**

With so many negative trajectory indicators documented in Chapters I and II, they all cannot be false alarms or amenable to be cured with a ‘fix’ later. In fact many are beyond the direct control of humans. These events and processes require humans to take actions in their enlightened self-interest to avoid the consequences. Examples include flood control measures to address rising sea levels, volcano eruptions, asteroid impacts and climate change. There are responses to each of these that require implementation of strategic plans. In addition, the strategies laid out in Chapter III would make the world a MUCH better place even if some of the projected events do not materialize.

Professor Stephen Pinker may be the most articulate current spokesperson for “the Dr. Pangloss Perspective” on citizen well being. He points out that [SOME] “humans live longer, healthier, richer, safer, happier and more interesting lives than at any time in the past.” He attributes this to The Enlightenment which shifted the focus to reason and science as opposed authority, tradition, dogma and superstition. He says this in an era where the nation-state Agencies are preaching anti-science. *What makes for a meaningful life? Steven Pinker knows. Harvard professor talks about what drives human beings in Enlightenment Now*, Mike Yawn, *Houston Chronicle* 11 March 2018.

The Pinker perspective is true for SOME humans. However, there is a growing gap (aka, The Wealth and Well Being Gulf) between those living longer, healthier, richer, safer and happier lives and those who live “lives of quiet desperation” to say nothing of billions who live shorter lives, suffer from preventable illness, are NEVER safe or happy.

Some near the bottom of the Ziggurat may have it better than in the past but the issue is THE GAP. As the signs in the London Tube worn: **MIND THE GAP**. While some at the bottom have a better life in some ways, the problem is that the GAP between these citizens and the ones at the top of the Ziggurat has stopped closing and has started to widened dramatically since 1975. These gross economic, social and physical differences cannot be sustained and, at the same time, preserve democracy and freedom.

There are those who believe nothing can fundamentally improve unless there are far fewer humans on the planet. These observers underestimate the order of magnitude difference that functional human settlement patterns would make. See the 10X Rule outlined in Chapter II and articulated in *THE SHAPE OF THE FUTURE* (2000). The longer humans dither, the sooner there will be no choice to make because the planet will not be able to support even a half of the current population. This is what an unsustainable trajectory means.

C. THE COMMONS

There is an urgent need to reestablish “The Case for the Commons” across all economic, social and physical contexts. The institution of ‘private’ property is a recent innovation that reflects the levels of individual and group actions such as Mass OverConsumption that are being paid for by the exhaustion of Natural Capital. As humans confront the reality of finite resources there is a need to evolve “a situation where people are working less and consuming less, but they’re sharing more” *The Case for the Commons, Private property is a relatively new invention, what’s the future of sharing stuff and services?* Ilana E. Strauss *Navigator* 3 Jan 2017.

Our Common Future (1987) was published by the United Nations sponsored World Commission on Environment and Development. (Gro Harlem Brundtland the former Prime Minister of Norway Chaired the Commission. The AGENCY is sometimes cited as “The Brundtland Commission.”) The report is given credit for establishing ‘sustainability’ as an economic, social and physical imperative that requires the shrinking of human’s ecological footprint. These are humanitarian goals of the first order.

The Commission defined sustainable activity (including “development”) as that which “meets the needs of the present without compromising the ability of future generations to meet their own needs.”

The 1968 publication of *The Tragedy of the Commons*, by Garrett Hardin set the intellectual support for ‘THE COMMONS’ back on it heels. Hardin claimed that individual humans would ALWAYS over-consume the resources that are held in common thus suggesting that private control of resources were more ‘conservative.’

In 1990 with the publication of *Governing the Commons: The evolution of Institutions for Collective Action*, Elinor Ostrom drove a stake through Hardin's thesis by demonstrating that humans have in fact found systematic ways to manage The Commons sustainably for the benefit of all in many contexts. Dr. Ostrom won the 2009 Nobel Prize for her work.

Since 1990 there has been a steady flow of theses and guides outlining applications of The Commons. For example see *ALL THAT WE SHARE: A Field Guide to the Commons; How to Save the Economy, The Environment, The Internet, Democracy, Our Communities, and Everything Else That Belong to All of Us*, Jay Walljasper. (2010), *Creating Sustainable Cities [New URban REgions] by 'Reimagining the Civic Commons*, Kriston Capps (8 September 2016).

Pope Francis' encyclical *On Care For Our Common Home* establishes a sound theme for conservation.

Private ownership of 'public' INfrastructure presents a clear example of the conflict that sometimes results from "Public / Private Partnerships" (3Ps) to create INfrastructure. The failure of the public to put up the needed capital is a clear example of the citizens not being willing to pay the full cost of supporting functional human settlement patterns and functional ORganizations. That private ENterprises can make a profit from these ventures documents that AGencies could also receive a return on their investment but for the false assumption explored in Chapter III that the public need not pay the full cost of the critical INfrastructure. *A troubled bridge over international water: the wealthy owners of a vital but aging link between U.S., Canada seek to fend off a new span.* Kevin Williams, *The Washington Post*. 4 July 2016.

There are many manuals on how to apply The Commons if citizens just realize that they need to grasp the levers of power and use them to secure safe, prosperous lives for ALL, not just the richest, the brightest or the fastest. *Open Ground: Effective Local Strategies for Protecting Natural Resources*, [aka, Natural Capital] John Nolon (2003)

INstitutions that claim to be protecting natural resources by private ownership are simply pointing out where AGencies could and should do a better job of managing The Commons. The bromides championed by INstitutions such as the Property and Environment Research Center (PERC) work only if there are individuals or ORganizations willing and able to pay for the privately managed resources – e.g. fishing stream access, trophy hunting on game farms and sportsmen paying to shoot small birds on crop private lands.

D. CREATING A CRITICAL MASS OF SUPPORT

It is the author's position that Profound Transformation will not be the result of "inspired" or "dedicated" leaders but will come from a ground swell of citizen UnderStAnding of a comprehensive agenda of what is needed – for example the strategies laid out in Chapter III.

Any ‘leader’ that would jump on a soap box and propose the steps articulated in Chapter III without an informed electorate that UnderStands the need for action would be booed off the box. The 2016 presidential election demonstrates that uninformed and poorly informed citizens will cheer and vote for what they want to hear, not what they need to hear. *A Citizen’s Guide To Power*, Tanvi Misra 17 March (2017). *Trump’s foreign policy is perfectly coherent*, Dannielle Allen, *The Washington Post*, 23 July 2018. Support for citizen organizations can be gained from the work of *The National Coalition for Dialogue and Deliberation* (ncdd.org). **NOTE IV – TWO**

NOTE IV – TWO

In *Blessed Unrest: How the Largest Social Movement in History is Restoring Grace, Justice and Beauty to the World*, (2007) Paul Hawken suggested that citizens across the planet who are concerned about the current trajectory would coalesce into a single ‘movement.’ The problem is that each of these groups has their own ‘charter’ and objectives. The issue of dysfunctional human settlement patterns is too abstract to appear to answer their specific needs. Mr. Hawken gave us great gardening tools and useful insights (*The Next Economy* (1983), *Growing a Business* (1988), *The Ecology of Commerce* (1993) and *Natural Capitalism: Creating the Next Industrial Revolution* (with Amory Lovins) (2010). but failed to grasp how populism would be used to defeat what he and his supporters hold dear – Grace, Justice, Beauty and Freedom.

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One international example of a process to create nation-state wide consensus is *THE NATURAL STEP* carried out in Sweden. *The Natural Step* is a clear declaration that the citizens of Sweden – from the King and Queen to the vast majority of the elite, the middle class and the working class – ‘BELIEVE’ that shrinking the ecological footprint of citizens individually and collectively is in the best interest of all citizens individually and collectively. This is *The Natural Step*.

The nationwide process including Study Circles at the DOoryard, CLuster, NEighborhood, Village and COmmunity scales is worthy of careful study. See *The Natural Step for Business: Wealth, Ecology and the Evolutionary Corporation*, Brian Nattrass & Mary Altomare, 1999, *An Introduction to Study Circles*, Study Circles Resource Center (January 1990)

A second source of international inspiration is Vaclav Havel’s 1978 essay *The Power of the Powerless*, included in *Open Letters: Selected Writings 1965– 1990* Vaclav Havel (1992).

E. NARROWING WINDOW OF OPPORTUNITY

As the 20th Century ended and early in the 21st Century, citizens and their ORganizations began to reconsider the wisdom of ‘Sub’Urbanization for all the reasons noted in the resources cited in Chapters I, II and III. Following a few years of boom times for the already-well-to-do HouseHolds and The Great Recession the tide turned to ReURbanization. From 2010 to 2016 there has been an expansion of the Back to the Core movement. This trend was based on an UnderStanding of the value and amenity of Urban living, especially Walkable Urbanism.

Now there are signs of another shift. There is not enough Walkable Urbanism to meet the market demand so, as could have been foreseen, the price of land and improvements as well as rent has gone up in intelligently designed components of URban fabric that embrace Walkable Urbanism.

Many, especially the young college graduates are priced out of the places they would like to live – even if for just a few years. This is not all bad because ‘second tier REgions’ need the Social Capital to create prosperity.

The impact is predictable and clear. Core jurisdictions must provide Affordable and Accessible Housing or lose Social Capital. *US population disperses to suburbs*, [Core Confusing Word (CCW)] *exurbs* [CCW], *rural* [CCW] *area*, and “*middle of the country*” *metros*, William Frey, 26 March 2018 *The Brookings Institution*. *Brooklyn is Booming, So Why Is It Shrinking?*, Laura Bliss, 23 March 2018. Also see *Are Americans Fleeing Cities for Suburbs? Not So Fast* Joe Cortright (11 June 2018).

Efforts must be redoubled to implement form based Codes and other Smart Growth American and New Urbanist TACTICS that will provide additional Walkable URbanism.

Private equity ENterprises have had a clear impact which has resulted in large tracks of well served land (the sites of former ‘regional malls,’ ‘power centers’ and ‘strip centers’) being available due to bankruptcies for redevelopment to meet Walkable URbanism standards. *The Real Retail Killer: How private equity is gouging some of the county’s best-known corporate brands*, Alex Shepard 28 March 2018, *The New Republic*.

It is also clear that there is still an allure to low density, disaggregated settlement patterns for those who are attracted to the lower costs-per-square-foot of these UNits and who do not need Access to the Core of New URban REgions. *The Seductive Power of a Suburban* (CCW) *Utopia*, Mimi Kirk 16 MAR 2016, Serenbe, an intentional community at Chattahoochee Hills, outside Atlanta, promises urban pleasures without the messiness of city (CCW) life. These projects contribute to the need for action to create Walkable URbanism at 30 persons per acre at the Alpha COMMunity Scale close to the Core of New URban REgions and served by high capacity Shared Vehicle Systems.

There is a profound difference between ‘lets play farmer’ low density SubDivisions and the evolution of Agrarian NEighborhoods with nodes of Agrarian Hamlets outline in Chapter III, PART E.

F. IS THERE COMPETITION FOR THE MATERIAL PRESENTED IN THE LITTLE BOOK?

According to the promotional material two books that appeared in late spring of 2018 attempt to cover some of the territory covered by *TLB*. They Do Not but they offer support for some of the strategies and tactics presented in *TLB*.

The books are *Healing American Democracy: Going Local*, Mike Hais, Doug Ross and Morley Winograd (MAY 2018) and *Sustainable Nation: Urban Design Patterns for the Future*, Douglas Farr (MAY 2018). Those two books plus *The New Localism: How Cities (Sic) Can Thrive in the Age of Populism*, Bruce Katz and Jeremy Nowak, *Brookings Institution* (January 2018) support the perspectives and theses put forth in *TLB* but they do not stand alone nor do they provide comprehensive approaches to the dysfunctional trajectory of contemporary civilization.

We will start with *Healing American Democracy: Going Local. Healing...* This is a book of 78 pages in a 6X9 format. The problems start with the title. “Local” is a Core Confusing Word in the context of human settlement pattern. There are five components of human settlement pattern below the scale of the Alpha COMMUNITY. The authors use ‘community’ uncapitalized interchangeably with ‘local’; they do not mention SubREgional and mention the REgional context only twice.

The phrase they rely on to carry their message – without defining the scope of the phrase – is ‘Constitutional Localism.’ This would be a useful term, especially in the context of those associated with the book’s origin. From the Acknowledgments and Blurbs it is clear that this document grew out of a culture that holds what most consider to be dysfunctional human settlement patterns aka “sprawl” in high regard. This cohort is suspicious of ANY AGENCY action that might infringe on individual rights.

“Constitutional Localism” implies ‘local’ activity within the parameters established by ‘constitutions’ – federal, state (and other?). This is consistent with the documents home ground AND CONSISTENT WITH THE CORE THESES OF *THE LITTLE BOOK* as made clear in Chapter III. But this is only one of many parameters that are relevant in the context of moving governance powers DOWN to the primary levels of impact.

The book makes many generally sound points but neglects to point out that moving to a sustainable trajectory requires Profound Transformations of Structure and Infrastructure not just the good works of enlightened leaders within the existing governance and economic framework.

The most annoying part of the book is the repeated use of “civic ethos” as if ‘everyone’ knows what this amorphous phrase means. The authors use it to fabricate a framework of multi-generational historic periods that each have a different “civic ethos”. They also use the term to flog the shortcomings of “The New Deal” (aka, the big bad federal government is relied on to solve all problems). This is another favorite perspective of some of those acknowledged for their support in writing the book.

While the first book noted above does not mention human settlement patterns as a topic, the second book, *Sustainable Nation: Urban Design Patterns for the Future*, is all about human settlement pattern and focuses on little else.

The author is a well respected and widely connected architect. The book is a over 400 pages (plus blank sheets) in an 8 ½ X 11 format. Except for the Preface, Chapter 1 and Chapters 4 through 6 the entire book is about sites, buildings and spaces up to the scale of the ‘neighborhood,’ Most of the ‘neighborhoods’ illustrated are in fact the scale of Alpha NEighborhoods.

There is no mention of the smaller scales of the organic components of human settlement **WITHIN** NEighborhoods and almost no mention of larger scales. Part Three (Chapters 4-6) is an interesting three chapter personal perspective of “The Theory of Change.” Chapter 1 is the only chapter devoted to a consideration of the large-scale economic, social and physical dysfunctions. Chapter 1 consists of small-scale, copyrighted reproductions PowerPoint slides with little text to explain their relevance to the rest of the book.

The last 200 plus pages of *Sustainable Nation* presents 70 vignettes by a range of well known built-environment practitioners. *Sustainable Nation* attempts to make the case that comprehensive sustainability can be achieved through broad citizen embrace of the attributes of Walkable Urbanism at the “neighborhood” scale.. That has not happened in the past 50 years in spite of thousands of architects best efforts. See for example *Streets for People*, Bernard Rudofsky (1969), and *The Pedestrian in the City*, David Lewis (1965)

One of *Sustainable Nation*’s key claims is that what *TLB* terms “functional human settlement patterns at the NEighborhood scale” can be universally admired and achieved as the PREFERRED settlement pattern in four generations. This claim is based on the speed at which humans have abandoned other ‘bad habits’ such as chlorofluorocarbons that destroy the ozone layer and smoking cigarettes.

But wait! There is indications that ‘someone’ is again producing chlorofluorocarbons as noted earlier in Chapter IV and that the despair that is causing opium addiction is also causing an increase in tobacco use. In this author’s view, solutions will only arise from broad public UnderStAnding of the basic drivers of civilization’s dysfunctional trajectory – economic, social and physical.

Sustainable Nation is a very interesting and thoughtful book that speaks to architects and designers who desire to build low impact (small ecological footprint) buildings and spaces. It does not address the full range of forces that drive civilization's current dysfunctional trajectory. The Index cites 19 references to "rainwater" and none to "REgions." For a well constructed review of the positive aspects of the book see *Neighborhoods are key to sustainable future*, Philip Langdon, *Public Square*, (12 June 2018).

The third book mentioned above, *The New Localism: How Cities (Sic) Can Thrive in the Age of Populism* has some of the same problems with vocabulary as *Healing American Democracy*. However, the primary author Bruce Katz after the titles and headlines containing the same Core Confusing Words – especially the use of 'city' UnCapitalized – makes a point of noting the primary venue of importance is the Metropolitan Area (not The New URban REgions but better than "city"). Katz strategies are hobbled by a unwillingness to cite the absolute need for REgional governance structure and Profound Transformations of Structure and INfrastructure. That is because there are, as yet, few viable REgional AGENCY horses to pull his wagon. This book is further examined in the context of 'localism' in the following section.

G. LIGHT AT THE END OF THE TUNNEL

As the author was competing the third draft of Chapter IV, there erupted a tidal wave of important and relevant reports and perspectives.

Urbanizing the "suburbs" [Core Confusing Word [CCW]] *goes big*, is Robert Steuteville's review of *Suburban Remix: Creating the Next Generation of Urban Places*, edited by Jason Beske and David Dixon (2018). *Suburban* [CCW] *Remix* captures the essence of the movement to create Walkable Urbanism where there has been vacant and underutilized land in and near the core of New URban REgions. This focus is reinforced by Philip Langdon's *Within Walking Distance: Creating Livable Communities For All*, (2017).

A second thrust is the emergence (or re-emergence) of 'LOCALISM': *The New Localism: How Cities Thrive in the Age of Populism*, Bruce Katz and Jeremy Nowak *The Brookings Institution* summarized in *Cities: Don't Wait for the Feds*, (16 February 2018), *One Nation, United Yet Different: Valuing Localism: The United States is an amalgam of places and people. As long as essential values are preserved we should appreciate the ability of local [CCW] government to respond to unique communities* Stephen Goldsmith 7 June 2018. *Can 'Localism' Restore Sanity to U.S. Politics?*, Gracy Olmstead, *The New York Times* (11 April 2018). Some not so new support for 'local' *Putting Hope in Localism*, Eric Utne, *Utne Reader* (Fall 2015) and *Going Local, Creating Self-Reliant Communities in a Global Age*, Michael Shuman, (2000).

'Localism', to be effective, must evolve to recognize the all the organic components between the UNit and the New URban Region – DOoryard, CLuster,

NEighborhood, Village and COMMunity – as well as SubREgion if applicable – because by itself “local” is a Core Confusing Word (CCW).

These two movements have the potential to further undermine the drive-til-you-qualify market in the- Outer Radius Bands. *Why Outer Suburbs in the East and Midwest Have Stopped Booming*, Robert Gebeioff *New York Times* (21 March 2018) documents the impact of the 2010 to 2016 shift in URban land and improvement values. Gebeioff’s perspective reflects the content

of Current Perspectives #s 30 through 34 linked from the *CURRENT PERSPECTIVES* page at www.emrisse.com.

A project in Fairfax County, VA drew REgional and nation-state wide coverage: *Area near Mount Vernon Estate in VA. headed for overhaul, with 13,000 homes, parks and hotels*. Antonio Olivo, *The Washington Post*, 30 March 2018. *Integrating Transit Oriented Development*, TOD Resources.org (23 March 2018). Richmond Highway (US Route 1) in Fairfax County, VA 13,000 new residential UNits at eight new Bus Rapid Transit (BRT) stations integrating transportation, new development, & the natural environment.

This project is in the jurisdiction where the author planned and helped develop Burke Centre, Fair Lakes / the Fairfax Center Planned New Community and other projects between 1972 and 2000. In spite of being the jurisdiction that includes Tysons (Corner) and Reston, this transformation to Walkable Urbanism is a profound change in strategy for the steadfastly “SubUrban” jurisdiction of over a million population. Projects such as the US Route 1 development can address the Affordable and Accessible Housing Crisis and yield components of COMMunities with 30 pn ac at the Alpha COMMunity Scale – aka Walkable URbanism.

There are also proposals to thwart NIMBY opposition to new projects. *Can you defeat NIMBYism by bribing NIMBYs?* John Meyers. *City Metric* 20 MAR 2018. A similar proposal to guarantee existing owners that their value will not DECREASE with the introduction of more intensive CLusters, NEighborhoods and Villages inside the walk-shed of Shared Vehicle Systems can be found in *THE SHAPE OF THE FUTURE* (2000). This strategy compensates objecting adjacent owners IF their values do go down (which NIMBYs say that they fear) after a new project (such at the US Route 1 project outlined above) is approved.

There is growing awareness of the need for Affordable and Accessible Housing. *Four Radical Real Estate Ideas To Fix Our Broken Housing System*, Eillie Anzilotti, *Fast Company*, (23 March 2018) All these strategies (Limited Equity Cooperatives, Community Land Trusts, Tenement Syndicates and Mutual Aid Housing Cooperatives) can provide affordable shelter within the understanding that Affordable and Accessible Shelter is a RIGHT, not just a need.

Even on the world-wide front there may be light at the end of the tunnel. *Five takeaways from the 2018 World Urban Forum*. Michael Mehaffy, *Public Square* 19 March 2018. This author attended the first of these UN sponsored fora in Berlin in 2000. The difference in quality and

substance between then and now is profound. At least they are now talking the right talk. Also see *Rapid Urbanization Is a Risk to Global Security*, Antonio Sampaio (23 July 2018)

How they miss the impact on the amount of Urban Land needed when the economy shifts from the mode of the market being Single Household Detached Dwellings at four person per acre at the Beta Community scale to thirty persons per acre at the Alpha Community scale is hard to Understand.

APPENDIX ONE

NB: THIS IS A PLACE EMR NEEDS HELP FROM REVIEWERS. THE RESOURCES LISTED HERE ARE THE SOURCES THAT SYNERGY MONITORS ON A WEEKLY BASIS AND / OR RECEIVES A DAILY OR WEEKLY NEW LETTER. ARE THERE OTHER RESOURCES THAT SHOULD BE LISTED HERE?

RESOURCES

Background resources to support the text of *THE LITTLE BOOK* can be found in the following listings by the Author:

APPENDIX THREE: READINGS, *THE SHAPE OF THE FUTURE* (2000)

CHAPTER 36 FIRESIDE READING as well as PART FOURTEEN- RESOURCES in *TRILO-G*. (2010)

CURRENT PERSPECTIVE # 12 *The Alpha Community Reading List* 27 April 2011.

More important than background texts are the CURRENT essays, perspectives and blog posts by well informed professionals. After about 100 years of settlement pattern dictated by space to drive and park Large Private Automobiles, the Market is returning to historic patterns and densities of land use as documented by the sources cited in Chapter III. This can be characterized as “Walkable, Sitable, Talkable Urbanism.” Citizens have coalesced around the desire to live, work and seek services in a built environment where they can walk out of their door and BE WHERE THEY WANT TO BE without an Automobile trip. If citizens cannot walk or rely on self powered vehicles to reach their desired destination, then they want to be able to rely on a fast, clean, safe Shared Vehicle Mobility System.

These parameters yield human settlement patterns of about 30 persons per acre at the Alpha Community Scale. The patterns and densities within walking distance (1/4 mile) of a Shared Vehicle Mobility System Platform should be at a density of 100 persons per acre at the Station-area Village scale. They may be higher depending on the capacity of the Shared Vehicle Mobility System.

Because those most directly concerned with planning, designing, constructing and managing these settlement patterns have not yet written books that cover all of the needed information, and because the parameters are changing, citizens concerned with achieving a sustainable trajectory should subscribe to the following resources.

For Example the critiques of Large Private Vehicles is becoming more pointed: *How Cars Divide America: Car dependence not only reduces our quality of life, it's a crucial factor in America's economic and political divisions*, Richard Florida (19 July 2018). Further, the range of alternatives to provide Urban Settlement Patterns with Mobility and Access is wider than anyone would have imagined just five years ago: *Why Little Vehicles Will Conquer the City*, Benjamin Schneider (21 June 2018), *Lyft Just Became America's Biggest Bikeshare Company*, Andrew Small (2 July 2018), *Let's Reconnect With Our Streets*, Allison Arieff, *The New York Times* (3 July 2018), *The future Will BE Dockless: Could a city really run on 'Floating Transport?*, Alex Hern *The Guardian* (11 July 2018).

Also see *PLANETIZEN Top 20 Urban Planning Books* (of all time) 16 August 2016.

Here is a brief list of must-keep-up-with Resources.

Access, the Magazine of the University of California Transportation Center and the Center on Economic Competitiveness in Transportation.

Brookings Metropolitan Policy Update and related publications from **The Brookings Institution**.

Daly News and related publications of **The Center for the Advancement of the Steady State Economy**.

Newsletter and related publications from *Ecocity Builders*.

Newsletter, related publications and conferences by the *New Economic Coalition*.

Newsletter and programs of the **National Coalition for Dialogue and Deliberation**.

Newsletters and publications on Resilience and post carbon reality from the **Post Carbon Institute**.

Public Square, Building a Better BURB and related publications of the **Congress of New Urbanism**.

Publications and resources from the **Schumacher Center for a New Economy**.

Smart Growth America, Locus Complete Streets and related publications from *Smart Growth America*.

Books, Blog and information from *Strong Towns*.

One important resource was intentionally omitted from this list. That resource is perhaps the most focused and comprehensive with respect to human settlement pattern concerns. However it suffers from a tragic flaw.

The work of this publication is cited more than any other source in *THE LITTLE BOOK*. However the title of the entity contains the embedded word 'city.' While most of the writers and the editor of the publication, Richard Florida, repeatedly publish words to the effect: "when I say 'city', I really mean REgion." Many of their Perspectives have 'city' in the title and then cite REgional or Metropolitan data. The word 'city' uncapitalized is a Core Confusing Word. Every time it is used, except when capitalized as the proper name of a specific municipality, it clouds the issue whatever the topic.

This is for one simple reason: For many New URban REgions most of the Urban residents do not live in ANY CITY. Many of the Urban citizens have a distinctly negative neural linguistic image of 'city'. In many New URban REgions the core City is very small in the context of the New URban REgion of which it is part. For example Boston and San Francisco. Finally even the Bureau of the Census designated "Central City" is often a cluster of municipalities only some of which are "cities." For example in the National Capital SubREgion, the City of Alexandria and Arlington COUNTY join the Federal District as THE 'central city' of the National Capital SubREgion of the Washington / Baltimore New URban REgion.

The uncapitalized word "city" is a core confusing word for the reasons spelled out in *THE SHAPE OF THE FUTURE*. The term is used so often critics of the strategies and tactics use the use of 'city' as an excuse not to consider whatever the topic. Many lay persons do not realize that city suggestions relate to them because they do not live in a "city" and are proud of it.