

**NINTH ANNUAL NORMAN WILLIAMS DISTINGUISHED  
LECTURE IN LAND USE PLANNING AND THE LAW,  
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**RISE TO THE LAND USE CHALLENGE:  
HOW PLANNERS AND REGULATORS CAN HELP SUSTAIN  
OUR CIVILIZATION\*\***

**Robert L. Liberty\*†**

INTRODUCTION

You do me a great honor by including me in your roster of speakers in the Norman Williams Jr. Lecture Series. But a greater honor is to be asked to address this audience of public servants, active citizens, faculty members, and law students, who have contributed so much and have so much to offer Vermont and the nation in our challenge to create livable, lovable, and sustainable communities and landscapes. Those honors alone were probably enough to entice me to accept your invitation, but my acceptance was certainly guaranteed because the invitation came through John Echeverria.

Professor Echeverria has been a nationally important advocate for a sensible interpretation of the Takings Clause in the Fifth Amendment.<sup>1</sup> John has come to our aid in Oregon when so-called property rights initiatives threatened to destroy decades of work to stop sprawl, and he has helped us

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\*\* See Robert L. Liberty, *Rising to the Land Use Challenge: How Planners and Regulators Can Help Sustain Our Civilization*, YOUTUBE (Feb. 11, 2013), <http://www.youtube.com/watch?v=oxoFdkE7ev4&list=FLBR72Yg7aXaTq-84DqBTSLA>, for a video recording of this speech.

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† In addition to Professor John Echeverria, who extended the invitation to me to deliver this lecture, I am grateful for the warm welcome extended to me by Vermont Law School President Marc Mihaly, his colleagues on the faculty, the students, and various Vermonters and residents of New Hampshire who attended the lecture. I appreciate the work of my diligent editors of these remarks, Vermont Law School students Peter Dysart, Sophie Guilfoyle, and Kelli Rockandel. Finally I thank Gerrie and Jim Rikert at the Antiqued Inn Time Bed and Breakfast who hosted me while I recovered from the flu during the blizzard of 2013, immediately after delivering this lecture. Looking out the window as snow blanketed the beautiful Vermont landscape contributed to my quick recovery.

1. See *John D. Echeverria: Biography*, VT. LAW SCH., [http://www.vermontlaw.edu/Our\\_Faculty/Faculty\\_Directory/John\\_D\\_Echeverria.htm](http://www.vermontlaw.edu/Our_Faculty/Faculty_Directory/John_D_Echeverria.htm) (last visited Nov. 22, 2013) (noting that Professor Echeverria “has written extensively on the takings issue and other aspects of environmental and natural resource law” and “has frequently represented state and local governments, environmental organizations, planning groups, and others in regulatory takings cases and other environmental litigation at all levels of the federal and state court systems”).

build livable cities and conserve our farms, forests, and rangelands.<sup>2</sup> Professor Echeverria is one of many Vermonters, past and present, who have made contributions to Oregon's planning efforts. In 2004 I hired a young man from Vermont as my campaign manager, Matt Reed, who had experience working on Peter Shumlin's campaign for Governor. Matt is an example of the bonds of affinity linking our two states; what we have in common is our deep interest in the proper use of land and deep concern for the environment.

People from other states think that both Vermonters and Oregonians wear Birkenstocks to the office—assuming we work at all—lighten our lattes with milk from cows we know on a first-name basis, and bait our barbless trout hooks with organic tofu.

But those who ridicule our states' values and efforts will find their laughter fading away in the not-too-distant future because I think the environmental problems we face on this planet are no joke. My concern is not based only on what I have read, but what I have seen and experienced over the last decade.

#### I. OUR CIVILIZATION FACES AN EXISTENTIAL CHALLENGE

On a warm summer afternoon in 2003, two friends and I were trudging, sweating up the snowy chute leading to Spider Pass in the Glacier Peak Wilderness of Washington State, a trip I had made seventeen years earlier. As we neared the summit, I breathlessly told my friends of a wonderful sight awaiting them: a small, pure white, tabular glacier spilling into the Lyman Lakes Basin from the North flank of Chiwawa Mountain. At the pass, I dropped my pack and walked down the trail a bit to look for the glacier. It was gone. All that was left was a small remnant clinging to the upper end of the escarpment.

A few years later, I looked down from a jet traveling south over central British Columbia. For twenty minutes, we flew over spruce forests the color of dried tobacco, part of the millions of acres of conifer forest stretching

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2. See JOHN ECHEVERRIA, GEO. ENVTL. L. & POL'Y CENTER, PROPERTY VALUES AND OREGON MEASURE 37: EXPOSING THE FALSE PREMISE OF REGULATION'S HARM TO LANDOWNERS 1 (2007) (stating the report's objective of "inform[ing] discussion of the issues surrounding" Oregon's Measure 37, which required state or local governments to provide compensation when land-use regulations reduced the fair market value of property); John Echeverria, *The Track Record on Takings Legislation: The Results from Florida and Oregon*, 60 PLAN. & ENVTL. L. 3, 8 (2008) (discussing the negative consequences if Measure 37 had remained in place).

from Oregon to Kachemak Bay.<sup>3</sup> They were killed by the spruce budworm, its population exploding as the winters warm.<sup>4</sup>

In recent years, I have traveled to China to exchange ideas about how to make its massive urbanization more sustainable. In 2011 in Beijing, I was briefed about one of the many new cities being built in China: a new eco-city for 800,000 people called Caofeidian on the Bohai Sea.<sup>5</sup> The project director told us their goals were for 80–90% of the trips made by walking, biking, and transit. A 1,000-acre estuarine wetland park would clean all of the storm-water from the city. “Not one hectare of farmland” was used to build the city, he added proudly. When we toured the site of the new city, I discovered it was built on an area of fill I estimated as being between 30 and 100 square miles. More fill was used to create causeways for roads for more cars. Offshore from the city was a large, new island that was being developed as an industrial park for steel smelting, oil refining, and coal shipments. The entrance to the city was a billboard showing the entrance road we were on—a road ten lanes wide. Spaces in the city parks would be reserved for pumping oil and natural gas. Eco-city indeed.

A month later, I watched a 100-car train rumble past in front of my sister and brother-in-law’s home on the shores of Puget Sound, carrying coal north to Bellingham for shipment to China. That coal was used to help produce our smart phones, our furniture, and our Christmas decorations.<sup>6</sup>

And then this April, terrible news came from Netarts Bay in Oregon, the location of the Whiskey Creek oyster hatchery. Shortly after the turn of

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3. See K. DAVE COATES ET AL., CAN.-B.C. P’SHIP AGREEMENT ON FOREST RES. DEV.: FRDA II, FRDA REP. 220, ECOLOGY AND SILVICULTURE OF INTERIOR SPRUCE IN BRITISH COLUMBIA 2, 6–8 (1994) (showing the geographic distribution of spruce forests across the Pacific Northwest and North America generally).

4. See ROBERT W. DUNCAN, CAN. FOREST SERV., CONIFER DEFOLIATORS OF BRITISH COLUMBIA 264, 268 (2006) (stating that spruce budworms are the most destructive defoliators in Canada, causing a “scorched” appearance and tree mortality); Jacques Régnière et al., *Predicting Insect Distributions Under Climate Change from Physiological Responses: Spruce Budworm as an Example*, 14 BIOLOGICAL INVASIONS 1571, 1571–72 (2012) (finding that climate change is causing a shift in the geographic distribution of spruce budworm populations throughout Canada).

5. Ma Qiang, *Eco-City and Eco-Planning in China: Taking an Example for Caofeidian Eco-City*, in THE 4TH INTERNATIONAL CONFERENCE OF THE INTERNATIONAL FORUM ON URBANISM 511, 513–15 (2009), available at <http://newurbanquestion.ifou.org/proceedings/>.

6. See Mamta Badkar, *The Ultimate Guide to China’s Voracious Energy Use*, BUS. INSIDER, Aug. 17, 2012, 10:24 AM, <http://www.businessinsider.com/china-energy-use-2012-8?op=1> (showing that coal accounts for 70.4% of China’s energy and that manufacturing accounts for 59% of China’s energy use); see generally Jonathan Thompson, *As Coal Use Declines in U.S., Coal Companies Focus on China*, YALE ENV’T 360 (Dec. 8, 2011), available at [http://e360.yale.edu/feature/as\\_coal\\_use\\_declines\\_in\\_us\\_coal\\_companies\\_focus\\_on\\_china/2474/](http://e360.yale.edu/feature/as_coal_use_declines_in_us_coal_companies_focus_on_china/2474/) (discussing U.S. coal exports to China).

the century, the oysters stopped reproducing.<sup>7</sup> Marine biologists searched for parasites until they discovered the water had become too acidic for the oyster sprats to form their shells; the carbonate compounds were dissolving in the water.<sup>8</sup> Ocean acidification is caused primarily by atmospheric carbon dioxide dissolving into seawater.<sup>9</sup> As such, it is often treated as an aspect of climate change.<sup>10</sup>

That is a mistake because its impact is not on the climate but on our global marine ecosystem.<sup>11</sup> Consider the vast numbers of mollusks and fish in the ocean dependent on carbonate compounds for their bones and shells and reflect on the reality that a very large share of the oxygen we breathe comes from marine phytoplankton that grow around calcareous structures.<sup>12</sup>

Alan Barton, a researcher who worked for the Whiskey Creek Oyster Hatchery, said:

I'm afraid the ocean will be dead long before we have to worry about the . . . implications of global warming . . . . I didn't believe any of this stuff three years ago. I was always skeptical about our global models. . . . But ocean acidification is pretty cut-and-dry for me now. You see it every day.<sup>13</sup>

A growing host of social and physical scientists, historians, economists, and policy advocates (like Jared Diamond, Richard Wright, Paul Gilding, Lester Brown, E.O. Wilson, Martin Rees, Dennis Meadows, and Vermont Law School's Gus Speth) believe that our civilization is in peril. Some of them believe it may not survive this century.<sup>14</sup>

7. Alan Barton et al., *The Pacific Oyster, Crassostrea gigas, Shows Negative Correlation to Naturally Elevated Carbon Dioxide Levels: Implications for Near-term Ocean Acidification Effects*, 57 LIMNOLOGY & OCEANOGRAPHY 698, 699 (2012).

8. *Id.* at 698–99.

9. *Id.* at 698.

10. Scott C. Doney et al., *Ocean Acidification: The Other CO<sub>2</sub> Problem*, 1 ANN. REV. MARINE SCI. 169, 170 (2009).

11. *Id.* at 184; see generally THE ROYAL SOC'Y, OCEAN ACIDIFICATION DUE TO INCREASING ATMOSPHERIC CARBON DIOXIDE (2005) (discussing the impacts of ocean acidification on ocean chemistry, organisms, and ecosystems).

12. Doney, *supra* note 10, at 184 (“Acidification will directly impact a wide range of marine organisms that build shells from calcium carbonate . . . .”); see also John Roach, *Source of Half Earth's Oxygen Gets Little Credit*, NAT'L GEOGRAPHIC NEWS (June 7, 2004), [http://news.nationalgeographic.com/news/2004/06/0607\\_040607\\_phytoplankton.html](http://news.nationalgeographic.com/news/2004/06/0607_040607_phytoplankton.html) (stating that half of the world's oxygen is produced by marine phytoplankton).

13. Eric Scigliano, *The Great Oyster Crash*, ON EARTH (Aug. 17, 2011), <http://www.onearth.org/article/oyster-crash-ocean-acidification?page=2>.

14. See William E. Halal & Michael Marien, *Global MegaCrisis: Four Scenarios, Two Perspectives*, in WORLD FUTURE SOC'Y, URGENT WARNINGS, BREAKTHROUGH SOLUTIONS 2, 2, 6–7 (2d ed. 2011) (discussing different scholarly views on the global condition).

Dennis Meadows is a professor emeritus of systems policy at the University of New Hampshire.<sup>15</sup> More than forty years ago, he led a team at the Massachusetts Institute of Technology (MIT) that created a computer model of the world's demand and supply of natural resources. The results of their modeling were published in 1972 under the title *The Limits to Growth*.<sup>16</sup>

According to an online article published in *Scientific American* in May 2012, "Meadows contends that the model's sustainable pathways are no longer within reach . . ." <sup>17</sup> He has observed that "[c]ollapse will not be driven by a single, identifiable cause simultaneously acting in all countries."<sup>18</sup> "It will come through a self-reinforcing complex of issues," including climate change, resource constraints, and socioeconomic inequality.<sup>19</sup> He warns that "[w]e're in for a period of sustained chaos whose magnitude we are unable to foresee."<sup>20</sup>

Meadow's predictions bring to mind a poem:

I met a traveller from an antique land  
 Who said: Two vast and trunkless legs of stone  
 Stand in the desert . . . Near them, on the sand,  
 Half sunk, a shattered visage lies, whose frown,  
 And wrinkled lip, and sneer of cold command,  
 Tell that its sculptor well those passions read  
 Which yet survive, stamped on these lifeless things,  
 The hand that mocked them, and the heart that fed:  
 And on the pedestal these words appear:  
 'My name is Ozymandias, king of kings:  
 Look on my works, ye Mighty, and despair!'  
 Nothing beside remains. Round the decay  
 Of that colossal wreck, boundless and bare  
 The lone and level sands stretch far away.<sup>21</sup>

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15. See Dennis L. Meadows, *UNH Faculty/Staff Directory*, UNIV. OF N.H., <http://db.unh.edu/directories/facstaff2/getfs.asp?id=3042> (last visited Nov. 22, 2013).

16. DONELLA H. MEADOWS, DENNIS L. MEADOWS, JØRGEN RANDERS & WILLIAM W. BEHRENS III, *THE LIMITS TO GROWTH* 11–12 (1972).

17. Madhusree Mukerjee, *Apocalypse Soon: Has Civilization Passed the Environmental Point of No Return?*, *SCI. AM.*, May 23, 2012, <http://www.scientificamerican.com/article.cfm?id=apocalypse-soon-has-civilization-passed-the-environmental-point-of-no-return>.

18. *Id.* (internal quotation marks omitted).

19. *Id.* (internal quotation marks omitted).

20. *Id.* (internal quotation marks omitted).

21. PERCY BYSSHE SHELLEY, *Ozymandias*, in 2 *THE COMPLETE POETICAL WORKS OF PERCY BYSSHE SHELLEY* 53, 53 (Elect. Classics Series 2012), available at <http://www2.hn.psu.edu/faculty/jmanis/shelley/shelley-2.pdf>.

I always understood that poem, *Ozymandias* by Percy Bysshe Shelley, as a meditation on the hubris of kings, or of humans in general, whose pride is inevitably humbled by time. But now the key sentence for me is the last one, about the sands.

Archaeologists believe the ancient city-states in the valley of the Tigris and Euphrates collapsed in large part because of salinization caused by unsustainable agriculture. The ruins of those cities are now surrounded by deserts their own farm practices created—deserts stretching to the horizon.<sup>22</sup> I thought of that poem when a dust storm blowing out of the desert advancing upon Beijing turned the sunset skies over Oregon a deep red.

## II. IT IS TIME FOR NEW MODEL ACTS FOR LAND USE AND TRANSPORTATION PLANNING AND REGULATION

Well that was pretty grim, wasn't it? It is my great hope that decades from now I will run into one of you and you will make me blush with embarrassment when you remind me of the doomsday tone of this lecture and how very wrong I was in imagining that our civilization faced an existential crisis. That is what I hope. But it is not what I believe. But just in case, I have hedged my bets. Almost everything I will propose doing this evening has practical benefits that will justify its adoption, no matter what happens in the coming decades. So, what is to be done?—obviously many things, by many people, from economic restructuring to social and technological change. But I will address only the subjects that fall within my limited area of expertise: land-use planning and regulation and transportation planning and project analysis.

Much of what I propose is based on my long work on the implementation, enforcement, improvement, and political defense of the Oregon planning program, which will celebrate its fortieth anniversary in three months.<sup>23</sup> But my perspective also reflects the eighteen months of research I carried out and wrote up in three reports, totaling 800 pages, on sprawl curtailment efforts of all types undertaken in all fifty states and at the regional and local level.

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22. Mohamed T. El-Ashry et al., *Salinity Pollution from Irrigated Agriculture*, 40 J. SOIL & WATER CONSERVATION 48, 48 (1985).

23. OR. DEP'T OF LAND CONSERVATION & DEV., INTRODUCTION TO OREGON'S STATEWIDE PLANNING PROGRAM 1 (2010), available at [http://www.oregon.gov/LCD/docs/goals/goals\\_introduction.pdf](http://www.oregon.gov/LCD/docs/goals/goals_introduction.pdf).

We are approaching the centenary of the publication of the Standard State Zoning Enabling Act and the Standard City Planning Enabling Act.<sup>24</sup> When they were drafted, America's industrialization and urbanization was nearing its peak, supported by new technology and fueled by rapid exploitation of America's abundant land, water, timber, and mineral resources. It is time for a new model act to address the Twenty-First Century, when we must confront the challenges posed by the depletion, destruction, and contamination of the resources and natural systems that support our civilization. I will describe a few of the reforms that should be part of the new model act. They are grouped under four broad headings: reforming urban growth patterns, transportation planning, curbing rural sprawl, and monitoring and enforcement.

### A. Changing Urban Growth Patterns

#### 1. Reforming Exclusionary Zoning

The essence of most residential zoning, from the time of its inception a century ago, is the use of the state's police powers to separate housing by its type and cost and thereby segregate the residents by their income, and by extension, their race, ethnicity, and national origin.

The federal district court judge in the seminal case of *Euclid v. Ambler* understood this aspect of zoning very clearly when he discussed the Supreme Court's invalidation of Kentucky's racial zoning statute in *Buchanan v. Warley* many years before:

And no gift of second sight is required to foresee that if this Kentucky statute had been sustained, its provisions would have spread from city to city throughout the length and breadth of the land. And it is equally apparent that the next step in the exercise of this police power would be to apply similar restrictions for the purpose of segregating in like manner various groups of newly arrived immigrants. The blighting of property values and the congesting of population, whenever the colored or certain foreign races invade a residential section, are so well known as to be within the judicial cognizance.

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24. Stuart Meck, *Model Planning and Zoning Enabling Legislation: A Short History*, in 1 AM. PLANNING ASSOC., MODERNIZING STATE PLANNING STATUTES: THE GROWING SMART WORKING PAPERS 1, 1-2 (1996).

The purpose to be accomplished is really to regulate the mode of living of persons who may hereafter inhabit it. In the last analysis, the result to be accomplished is to classify the population and segregate them according to their income or situation in life.<sup>25</sup>

And that was the same defect he found in Euclid's zoning ordinance, which he invalidated as unconstitutional.<sup>26</sup> But what the district court regarded as a threat, the Supreme Court majority accepted as a legitimate public purpose:

With particular reference to apartment houses, it is pointed out that the development of detached house sections is greatly retarded by the coming of apartment houses, which has sometimes resulted in destroying the entire section for private house purposes; that in such sections very often the apartment house is a mere parasite, constructed in order to take advantage of the open spaces and attractive surroundings created by the residential character of the district. Moreover, the coming of one apartment house is followed by others . . . .<sup>27</sup>

The result of residential zoning is a landscape of class separation visible from the air in the suburban belts around nearly every city in America.<sup>28</sup> Over here is the manufactured home park—next to the highway and trucking warehouse; over there are the apartment buildings; off in a pod by itself are the town homes; over here is the tidy subdivision with small lots; and over there are the homes built on two-acre lots on cul-de-sacs next to the golf course.

Judicial supervision of zoning, as undertaken by the New Jersey courts after the *Mt. Laurel* decision, was a noble effort.<sup>29</sup> But it will never be effective in remedying exclusionary zoning. As that sequence of cases showed, the court system is not designed to supervise local government

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25. *Ambler Realty Co. v. Village of Euclid*, 297 F. 307, 313, 316 (N.D. Ohio 1924), *rev'd*, 272 U.S. 365 (1926).

26. *Id.* at 317.

27. *Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365, 394 (1926).

28. See generally John Hill, *Get a Bird's-Eye View of America's Housing Patterns*, HOZZ, <http://www.houzz.com/ideabooks/6557287/list/Get-a-Bird-s-Eye-View-of-America-s-Housing-Patterns> (last visited Nov. 22, 2013) (showing aerial photographs of residential developments across the U.S.).

29. Editorial, *Judicial Duty in New Jersey*, N.Y. TIMES, Feb. 24, 1986, <http://www.nytimes.com/1986/02/24/opinion/judicial-duty-in-new-jersey.html>.



zoning and zone administration.<sup>30</sup> Nor can we expect any help on this front from the United States Supreme Court, a body of men and women with little experience or knowledge of real life when it comes to planning matters and no evidence of a passionate concern for these issues. The remedy lives in planning and zoning reform to end exclusionary zoning. Many states and cities have ended exclusionary zoning, or at least some aspects of it.<sup>31</sup>

Oregon state law mandates that every city have an adequate supply of land zoned for apartments.<sup>32</sup> Manufactured homes must be allowed on any vacant lot in any residential zone.<sup>33</sup> Minimum lot sizes must be reduced.<sup>34</sup> Local governments' home-rule powers cannot be used to block affordable housing projects. Clear and objective standards must be applied to the review of housing to prevent exclusionary zoning from creeping in under the guise of design or neighborhood compatibility standards.

In the Portland region, accessory dwelling units must be allowed on any lot in any single-family zone in every city, and in the city of Portland duplexes are allowed on all corner lots in single-family residential zones.<sup>35</sup> The average size of new single-family residential lots in the Portland region fell from approximately 13,000 square feet in 1978 to about 8,000 square feet in 1982 and is below 5,000 square feet today.<sup>36</sup> The amount of land zoned for apartments tripled in four years, and apartment zoning was spread across all cities.<sup>37</sup> The equity results after a decade of effort were impressive.

The Portland region grew more economically and racially integrated during the 1990s as other regions moved backwards.<sup>38</sup> Breaking

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30. *See id.* ("This kind of response, one that would permit us to withdraw from [the zoning] field, is what this court has always wanted and sought." (quoting then-New Jersey Supreme Court Chief Justice Robert Wilentz) (internal quotation marks omitted)).

31. Mark Seitles, *The Perpetuation of Residential Racial Segregation in America: Historical Discrimination, Modern Forms of Exclusion, and Inclusionary Remedies*, 14 J. LAND USE & ENVTL. L. 89, 112 (1998).

32. OR. REV. STAT. § 197.312 (2011).

33. *Id.* § 197.314.

34. *Id.*

35. PORTLAND, OR., ZONING CODE § 33.110.240(E), 33.205.020 (2010).

36. Robert Liberty, *Overview and Accomplishments of the Oregon and Metro Portland Planning Programs*, LANDWATCH, (Sept. 1997), <http://www.landwatch.org/pages/perspectives/accomplishments.htm>; KAREN HOHNDEL ET AL., METRO DATA RESEARCH CTR., HOUSING PRICE STUDY – SFR SALES IN THE 3 COUNTY AREA 2000–2006, at 6 (2008).

37. Robert L. Liberty, *Abolishing Exclusionary Zoning: A Natural Policy Alliance for Environmentalists and Affordable Housing Advocates*, 30 B.C. ENVTL. AFF. L. REV. 581, 595–96 (2003) (citing Robert L. Liberty, *Oregon's Comprehensive Growth Management Program: An Implementation Review and Lessons for Other States*, 22 ENVTL. L. REP. 10367, 10367, 10379 (1992)).

38. Betsy Hammond, *All Income Groups Mingle in Portland, Ore., Area*, THE OREGONIAN, May 15, 2002, available at 2002 WLNR 11978228.

exclusionary zoning means that families of modest means can have the chance to live in a school district or school boundary that provides a high quality education. It means access to jobs and shopping.

More economic and social integration in our neighborhoods will help, if only in a small way, to counteract the widening class divide that weakens our social fabric, which is one of the risks to our civilization called out by Gus Speth, Jared Diamond, and others.<sup>39</sup> Ending exclusionary zoning will reduce sprawl significantly and save land, natural resources, and money invested in infrastructure. By allowing the market to build more densely, we develop patterns of urbanization that work better with transit, active transportation, and mixed uses. What is essential for fairness and opportunity is also integral to the conservation of our land and resources.

## 2. Substituting Adaptive Reuse, Infill, and Redevelopment for Greenfield Development

Reforming exclusionary zoning should be part of a larger and more fundamental re-thinking of urban development. Our starting point should be redefining greenfield development as the rare exception instead of the default method for how urban growth and development occurs.

In 1950 the average household size was 3.37 people and the average new single-family home size was 983 square feet.<sup>40</sup> By 2006 the average new single-family home size was 2,469 square feet and the average household size in 2010 had fallen to 2.58 people.<sup>41</sup> In other words, in 60 years the amount of space in a single family home, per person, tripled. Today about 60% of our households are just one or two people.<sup>42</sup> The

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39. See, e.g., James Gustave Speth, *America the Possible: A Manifesto Part II*, ORION (May, 2012), <http://www.orionmagazine.org/index.php/articles/article/6810> (“The widespread persistence of relative poverty at home and absolute poverty abroad [and] the growth of economic inequality now matching that of 1928 . . . warn us that business as usual is not an option.”).

40. U.S. CENSUS BUREAU, AVERAGE POPULATION PER HOUSEHOLD AND FAMILY: 1940 TO PRESENT (2004), available at <http://www.census.gov/population/socdemo/hh-fam/tabHH-6.pdf>; Christopher Solomon, *The Swelling McMansion Backlash*, MSN REAL ESTATE, <http://realestate.msn.com/article.aspx?cp-documentid=13107733> (last visited Nov. 21, 2013).

41. U.S. CENSUS BUREAU, MEDIAN AND AVERAGE SQUARE FEET OF FLOOR AREA IN NEW SINGLE-FAMILY HOUSES COMPLETED BY LOCATION (2010), available at <http://www.census.gov/const/C25Ann/sfttotalmedavgsqft.pdf> (stating that the average size of single-family homes built in 2006 was 2,469 square feet); DAPHNE LOFQUIST ET AL., U.S. CENSUS BUREAU, HOUSEHOLDS AND FAMILIES: 2010, at 10 (2012), available at <http://www.census.gov/prod/cen2010/briefs/c2010br-14.pdf>.

42. U.S. CENSUS BUREAU, STATISTICAL ABSTRACT OF THE UNITED STATES: 2012, at 55 (2012), available at <http://www.census.gov/compendia/statab/2012/tables/12s0061.pdf>.

percentage of households that consist of two parents and one or more children is about 25%.<sup>43</sup>

Our new model code and our building code should provide for the evolution of those big suburban “McMansions” into duplexes, triplexes, and group homes for the young, the old, and the lonely. The space over the big garage can become a flat. We must encourage the development and siting of prefabricated homes and components.

To the extent we need land to build new housing stock we can find it through infill and redevelopment, not greenfield sprawl. We have decades’ worth of land available along the thousands of miles of strip commercial sprawl across America. The reality is that a combination of rapidly falling infrastructure funding combined with shifting consumer preferences and income stagnation means that infill and redevelopment and adaptive reuse are already accelerating, and now we simply need to show how to welcome and facilitate that evolution through the new model code.<sup>44</sup>

### 3. Urban Growth Boundaries

It is time—past time—to stop treating urban growth boundaries as an exotic outlier too radical for general adoption, which is how it is generally regarded in establishment planning circles. There are urban growth boundaries (sometimes with a different name) in Colorado, Kentucky, California, Florida, South Carolina, South Dakota, Washington State, and Oregon.<sup>45</sup> I estimate that more than twelve million Americans live inside urban growth boundaries, more than the number of people living in Ohio.

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43. JONATHAN VESPA ET AL., U.S. CENSUS BUREAU, AMERICA’S FAMILIES AND LIVING ARRANGEMENTS: 2012, at 20 (2013), available at <http://www.census.gov/prod/2013pubs/p20-570.pdf> (showing that, in 2010, 23.5% of households were occupied by two parents and children under eighteen).

44. MUN. RESEARCH & SERVS. CTR OF WASH., AFFORDABLE HOUSING TECHNIQUES: A PRIMER FOR LOCAL GOVERNMENT OFFICIALS (1992), available at <http://www.mrsc.org/publications/textaht.aspx>.

45. See HEIDI A. ANDERSON, CTR. FOR REG’L & NEIGHBORHOOD ACTION, USE AND IMPLEMENTATION OF URBAN GROWTH BOUNDARIES 4, 6 (1999), available at <http://www.colorado.edu/conflict/5010/CRNA-UGBReport.pdf> (describing urban growth boundaries in California, Colorado, Florida, Kentucky, Oregon, and Washington state); see also CITY OF CHARLESTON, JOHNS ISLAND COMMUNITY PLAN 2 (2007), available at <http://sc-charleston.civicplus.com/DocumentCenter/View/1404> (describing the urban growth boundary for Johns Island in Charleston, S.C.); Arthur C. Nelson et al., *Urban Containment and Central-City Revitalization*, 70 J. AM. PLANNING ASS’N 411, 416, 421–22 (2004) (describing urban growth boundaries in California, Colorado, Florida, Kentucky, Oregon, and Washington State, and stating, “Far from being limited to a few fast-growing states and an environmentally active citizenry, . . . containment boundaries are found in such places as Sioux Falls, South Dakota . . .”).

The new model code should include urban growth boundaries as a key element of a multi-faceted approach to curbing urban sprawl and leapfrog development that has the following components:

- A boundary to mark the limits to urban development, adopted and implemented through binding comprehensive plans, consistent land-use regulations, and maps that are unambiguous. The boundary is also used to limit the extension of urban services and facilities (urban highways, sewers, and water lines).
- Effective measures to prevent urban and exurban development outside the boundary.<sup>46</sup>
- Inside the boundary: changes to land-use regulations to allow higher density, more efficient housing; more mixed-use development; and promotion of infill and redevelopment through changes to zoning to allow more dense development, targeted infrastructure investments, and private-sector incentives such as tax breaks or subsidies.
- A government body with the authority to take and compel action and with the funds to pay for the work and defray the costs of compliance by local governments.

These places also have something that lies outside the scope of planning and land-use regulation: a strong civic infrastructure of nonprofit groups and civic institutions that monitor, enforce, and defend the program during the frequent periods when political will falters or political attention is focused elsewhere.

The purposes, methods, and benefits of urban growth boundaries have been tested and refined for decades. There is a substantial body of statutes, rules, and analytic methods for: (1) determining land needs; (2) initially drawing the boundaries (based on facilities, services, and the value of rural lands for food, fiber, water, and wildlife); (3) managing urban growth boundaries shared by multiple incorporated places; (4) measuring land absorption; and (5) setting criteria for boundary adjustments.<sup>47</sup>

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46. See discussion *infra* Part II.C.

47. See ANDERSON, *supra* note 45, at 7 (“Today, most cities and counties use sophisticated mapping techniques and population forecasting models [to draw urban growth boundaries].”).

The drafters of the new model code will have more years and varieties of experience with urban growth boundaries than the creators of the model zoning and planning enabling acts had with zoning and planning.

### *B. Transportation Planning*

Twenty-five years ago, transportation planners in our region began the study that would lay the foundation for a long-expected beltway arcing around the western part of the Portland metropolitan area (the “Western Bypass”), completing the standard ring-road pattern.<sup>48</sup> I was concerned that this new highway, which lay beyond the urban growth boundary, would become the argument for extending the boundary, so I began to learn about how transportation planning was done. An article by John Pucher at Rutgers shaped my thinking by showing the significant role that land-use patterns—dictated by plans and zoning—had in influencing transportation.<sup>49</sup>

When we began to speak out against the Western Bypass, an aide to Governor Goldschmidt told me that the Bypass was a “done deal.” Her comment was certainly a spur to our work in the courts, in local organizing, at the capitol, in the press, and in many, many meetings.

The weather last night reminded me of the night in 1988 when we had to file the brief challenging the approval of the Bypass. We were standing outside in the freezing wind, holding thirty pounds of briefs, fifteen minutes before midnight. Our cab did not show up and we began to panic over missing the filing deadline. A passing motorist stopped to ask what we were doing and ended up driving us in his slowly chugging Volkswagen van to the post office, where we slid our briefs through the mail slot at three minutes to midnight.

We won that case, on the basis that the regional government could not approve an urban use—a highway—outside an urban growth boundary. But that was just the first shot in a battle that lasted a decade.<sup>50</sup> Ultimately we won that battle—not by litigation but by raising and spending \$3 million to develop an alternative to the highway, a land-use alternative. The analytic effort was led by Keith Bartholomew, now a professor at the University of

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48. Metro Council Res. 97-2497 (Or. 1997), available at [http://media.oregonlive.com/argus\\_impact/other/Metro%20Resolution%2097-2497%20-%20Western%20Bypass.pdf](http://media.oregonlive.com/argus_impact/other/Metro%20Resolution%2097-2497%20-%20Western%20Bypass.pdf).

49. For a list of Dr. Pucher’s publications, see *John Pucher, Ph.D.*, RUTGERS EDWARD J. BLOUSTEIN SCH. OF PLANNING AND PUB. POLICY, <http://policy.rutgers.edu/faculty/pucher/> (last visited Nov. 21, 2013).

50. FREGONESE ASSOCS., ALTERNATIVE LAND USE AND TRANSPORTATION SCENARIO PLANNING ANALYSIS: A REVIEW OF SIX CASE STUDIES IN OREGON 8, 10–11 (2009), available at <http://www.oregon.gov/ODOT/TD/OSTI/docs/hb2186/orscenario.pdf>.

Utah, and is known as the Land Use Transportation Air Quality (LUTRAQ) project.<sup>51</sup>

The LUTRAQ alternative used changes in zoning to allow or require more compact, mixed-use development, especially near transit stops; new street connectivity standards; and arterial improvements to benefit pedestrians and cyclists.<sup>52</sup> Our alternative delivered as good or better congestion relief but with much less driving, less pollution, and stronger support for our regional land-use policies. LUTRAQ shows that integrated land-use and transportation planning goes far beyond *context sensitive design* and access management. Urban design from the scale of a single building up to land-use patterns across a metropolitan region shape how we travel, how much we travel, when we travel, and where we travel.

The new model code will advance the integration of land-use and transportation planning in seven different ways: first, by requiring an integrated, internally consistent regional-transportation and land-use plan; second, by redefining the problems that transportation investments are supposed to address, which will make it clear that transportation investments are means, not ends; third, through the development of criteria for judging various alternatives; fourth, by including regional land-use effects in identifying environmental impacts and as mitigation measures; fifth, by including changes to land uses as alternative solutions or parts of solutions; sixth, through the development and use of new, integrated, dynamic, and econometric transportation and land-use models to analyze problems and define solutions; and seventh, by institutional reform that separates transportation and land-use planning, planners, and decision-makers.

But that is just one modest piece of the reform of transportation-system and project planning that needs to be advanced through our new model code. A part of what the new model code has to fix is the transportation project analysis carried out under the National Environmental Policy Act (NEPA).<sup>53</sup> Environmentalists celebrated NEPA because it forced the consideration of environmental impacts and the development of alternatives that would have less impact upon the environment. That is not what happened. As NEPA was adapted and applied in the context of transportation project analysis, it has, if anything, provided an intimidating greenwash for new and wider highways and interchanges. The NEPA analyses I have observed for various highway and bridge projects have a common set of fundamental flaws:

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51. *Id.* at 8.

52. *Id.* at 14–15.

53. National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–4370h (Supp. IV 2010).

- The absence of a context for the project in a real regional transportation plan;
- The way the problems are defined at the outset;
- The limited geographic area chosen for analysis;
- An inappropriately restricted palette of alternatives to be considered;
- Reliance on defective transportation-planning computer models and questionable modeling assumptions;
- The absence of any rigorous cost-benefit analysis. When I refer to costs and benefits in this context I mean the full range: fiscal, economic, environmental, and social-justice effects; and
- The absence of a regional or statewide opportunity-cost analysis.

These flaws are maintained over time by a small priesthood of NEPA transportation project specialists (lawyers and planners primarily). Many of them work for consulting firms that have a direct or indirect stake in those solutions that result in the largest amount of construction. I have many thoughts on this topic, but they require more time than we have tonight. The new model code can help correct these flaws and thereby lead to smarter, cheaper, greener outcomes.

I will close this transportation-planning segment with a story showing how difficult reform remains. I mentioned that a member of Governor Goldschmidt's staff told me that the Western Bypass was a done deal. Not many years later she became President of the Board of 1000 Friends of Oregon and served ably. She was President when LUTRAQ won national prizes from the U.S. Environmental Protection Agency and the American Planning Association. And then she was selected to chair the Oregon Transportation Commission. And lo and behold, she has become the chief advocate for another massive project: the Columbia River Crossing, which includes a proposed \$2.4 billion investment in new interstate freeway lanes, interchanges, and a new interstate freeway bridge for a five mile stretch of

Interstate 5 between Portland, Oregon and Vancouver, Washington.<sup>54</sup> The new bridge will require the demolition of existing bridge piers and construction of new piers in the Columbia River, which “is a migratory corridor for 16 species listed under the Endangered Species Act (ESA), including three endangered runs of salmon.”<sup>55</sup>

As a member of the Metro Council, I objected strenuously to the project on multiple grounds—fiscal, social, and environmental. But one of my objections was that it did not analyze land-use causes of congestion and land-use alternatives to address congestion; in other words, it did not include a LUTRAQ analysis. These concerns were brushed aside by the Oregon Department of Transportation.

Near the height of the controversy (which is still going on), the Chair of the Oregon Transportation Commission, my former Board President, called me. She said she had seen my PowerPoint based on the LUTRAQ project. The presentation explained how changes in land-use patterns could be used to reduce greenhouse gases. She wanted to borrow it to show to Al Gore. I thought about the irony of it all, but then decided, “What the hell”; we’re a small state, she might be an ally again sometime in the future and I let her use it.

### *C. Stopping Rural Sprawl and Protecting Resource Lands*

A few years ago, I attended a presentation by a scientist who received the Nobel Prize for his work as a member of the International Panel on Climate Change. His PowerPoint presentation featured images of melting glaciers, hurricanes, and dire warnings of the havoc that will be wreaked by climate change. Then he transitioned to a discussion about the steps we could take to reduce the emission of climate-changing pollutants. At the end of his talk, he showed us an image of a pleasant suburban home on a small lot. “This was our home,” he explained, the home where he and his wife had raised their children. He described its energy inefficiency. “And this is where my wife and I live now,” he said showing a photo of their new home and proudly describing how it functioned as a passive solar home despite the cold winter climate. The same impressive energy efficiency was achieved in his outbuilding, he said, where he had a workshop and parked

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54. Doug Hecox, *U.S. Department of Transportation Gives Green Light for I-5 Columbia River Crossing*, U.S. DEP’T OF TRANSP. (Dec. 7, 2011), [http://www.fta.dot.gov/newsroom/12288\\_14158.html](http://www.fta.dot.gov/newsroom/12288_14158.html).

55. *CRC Project Wins 2012 National Environmental Excellence Award*, COLUMBIA RIVER CROSSING (Mar. 6, 2012), <http://www.columbiarivercrossing.org/Newsroom/Article.aspx?ID=50>.



his cars. He concluded by noting that not only was the home energy efficient, but it demonstrated that such homes could be very attractive.

At least at my table, there was an appalled silence. We stared at the image showing a new house clearly bigger than 2,000 square feet, for two people, and an outbuilding almost the size of my own home, sitting on what appeared to be a ten- or twenty-acre rural home-site in a forest in the mountains probably forty miles from the nearest large city.

It was mind-boggling. A Nobel-Prize-winning scientist, an honorable man, dedicated to alerting the world to the perils of climate change was so blind to the larger issue of the massive consumption of materials (which generates climate-changing pollution) and the enormous waste of land, the destruction of habitat, the paving of roads, and the substantial amount of driving associated with building new rural houses on acreage home-sites.

Rural, residential sprawl—that is, building homes on ten-, twenty-, and forty-acre lots, or in the arid West, on eighty- and one-hundred-and-sixty-acre lots—is having massive impacts on the resources and lands of America and now in Europe and developing countries.<sup>56</sup> This pattern of development in the U.S. dwarfs urban sprawl in its extent. We must find a way to stop the residential land division and development on lands that have useful—and soon to be critical—roles in providing food, fiber, water cleaning and storage, carbon storage, and refuges for biodiversity.

Many states, notably Vermont, but also Florida, Maryland, and New Jersey, have tried to protect rural lands by buying conservation easements, development rights, or the land outright.<sup>57</sup> After twenty years of both public and private investment in conservation easements and acquisitions in

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56. See JAMES M. MCELFISH, JR., ENVTL. LAW INST., TEN THINGS WRONG WITH SPRAWL 1–5 (2007), available at [http://www.elistore.org/Data/products/d17\\_02.pdf](http://www.elistore.org/Data/products/d17_02.pdf) (describing the negative impacts of sprawl, such as strain on existing infrastructure, greater resource consumption, degrading water and air quality, and altering or destroying natural habitats).

57. See VT. HOUS. & CONSERVATION BD., 2012 ANNUAL REPORT TO THE GENERAL ASSEMBLY 5–6 (2012), available at [http://www.vhcb.org/pdfs/ar2012\\_with\\_financials+project\\_list.pdf](http://www.vhcb.org/pdfs/ar2012_with_financials+project_list.pdf) (outlining past and present land conservation policy and financing in the state of Vermont and stating that Vermont has conserved approximately 400,000 acres of land since the Vermont Housing and Conservation Board was established twenty-five years ago); *Florida Forever*, FLA. DEP'T OF ENVTL. PROT., [http://www.dep.state.fl.us/lands/fl\\_forever.htm](http://www.dep.state.fl.us/lands/fl_forever.htm) (last updated Mar. 5, 2013) (“Since its inception in July 2001 to the present, the *Florida Forever* program has acquired more than 683,000 acres of land with \$2.87 billion.”); see also EMILY WILSON, MD. DEP'T OF NATURAL RES., FY2013 DNR OWNED LANDS ACREAGE REPORT 3 (2013), available at <http://www.dnr.state.md.us/land/stewardship/pdfs/CurrentAcreageReport.pdf> (noting that “Maryland is recognized throughout the Nation for its innovative land acquisition and protection programs” and that the Maryland Department of Natural Resources “manages over 475,000 acres of public lands and protected open space in the State”); N.J. NATURAL LANDS TRUST, 2012 ANNUAL REPORT, at ii, 1 (2012), available at <http://nj.gov/dep/njnltpdf/annualreport2012.pdf> (stating that the New Jersey Land Trust manages 27,000 acres obtained from 1968 to the present via acquisitions and conservation easements).

Vermont, about 430,000 acres of farm and forestlands and natural areas have been protected—about a fifth of the rural lands of the state.<sup>58</sup> I believe this makes Vermont first among all fifty states in the proportion of rural lands that have been conserved through easement and acquisitions.<sup>59</sup>

But in most states, public funds and tax credits will never be able to protect more than a modest percentage of rural resource lands. For example, after spending \$2.5 billion (\$300 million per year), Florida has protected about 2% of the state's rural land area. At that rate, it will take a century to protect one-quarter of Florida's remaining rural lands.

A lower-cost and effective way to protect rural resource lands is through zoning—simply prohibiting rural residential development.<sup>60</sup> This has been done in many scattered locations around the country like Pennsylvania, South Dakota, and Virginia, regionally in Washington and parts of California, and statewide in Oregon.<sup>61</sup> In Oregon about 94% of all private lands are in the Exclusive Farm Use (EFU) or Forest zones, covering about 40,000 square miles—an area the size of Maine and Connecticut combined.<sup>62</sup> Each year between 1997 and the end of 2007

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58. *Accord* VT. HOUS. & CONSERVATION BD., *supra* note 57, at 5; *Data Tables: State Data: Number of Land Trusts and Acres Protected by Local and State Land Trusts as of December 31, 2010*, LAND TRUST ALLIANCE, <http://www.landtrustalliance.org/land-trusts/land-trust-census/data-tables> (last visited Nov. 21, 2013) (showing that Vermont has conserved over 600,000 acres through easements, acquisitions, and other means).

59. This ranking can be determined by comparing the ratio of conserved area to total area for each state. *See* LAND TRUST ALLIANCE, *supra* note 58 (listing total acres conserved by each state); *Profile of the People and Land of the United States*, NAT'L ATLAS, [http://nationalatlas.gov/articles/mapping/a\\_general.html](http://nationalatlas.gov/articles/mapping/a_general.html) (last updated Jan. 14, 2013) (listing total area for each state). Vermont ranks first with a ratio of approximately 0.1. *Id.*

60. *See* David Newburn et al., *Economics and Land-Use Change in Prioritizing Private Land Conservation*, 19 CONSERVATION BIOLOGY 1411, 1412, 1419 (2005) (finding there will “never be enough money to protect all the biologically valuable areas that exist on private lands” and that zoning is a valuable conservation tool as it restricts development without requiring compensation to private landowners, as with acquisitions and easements).

61. *See, e.g.*, John M. Hartzell, *Agricultural and Rural Zoning in Pennsylvania: Can You Get There from Here?*, 10 VILL. ENVTL. L.J. 245, 261–62, 274 (1999) (discussing the efficacy of agricultural zoning restrictions in Pennsylvania); ESTALENA THOMAS & C. TIMOTHY LINDSTROM, CHESAPEAKE BAY FOUND., *A CITIZEN'S GUIDE TO PLANNING & ZONING IN VIRGINIA* 38, 40 (2003), *available at* <http://www.cbf.org/Document.Doc?id=150> (stating that most Virginia counties have some form of rural zoning, including a wide range of approaches varying in restrictiveness on rural development); WASH. REV. CODE § 36.70A.060 (2011) (“Except as [otherwise] provided . . . , each county that is required or chooses to plan under [Washington's comprehensive planning statute], and each city within such county, shall adopt development regulations on or before September 1, 1991, to assure the conservation of [designated] agricultural, forest, and mineral resource lands . . . .”); *Forest Land Protection Program*, OR. DEP'T OF LAND CONSERVATION & DEV., <http://www.oregon.gov/LCD/pages/forlandprot.aspx> (last visited Nov. 21, 2013) [hereinafter *Forest Land Protection Program*] (discussing Oregon's rural zoning restrictions).

62. *See Forest Land Protection Program*, *supra* note 61 (noting that approximately 10.4 million acres are zoned for forest or mixed farm-forest use in the state of Oregon); *see also* DLCD

about 1,000 new homes were approved on those 40,000 square miles, about 6% of all homes.<sup>63</sup>

Does that seem like a good performance or a bad performance? Compared to almost all states, it is very good; compared to what we should be doing, it is not good enough. Zoning to protect farm, forest, and rangelands is very difficult politically. Since 1973, there have been no fewer than seven ballot measures to directly, or indirectly, repeal the land-use laws.<sup>64</sup> A remedy that is politically realistic, financially affordable, and effective can be created by drawing on a combination of best practices from a variety of states (Vermont, New Jersey, Maryland, New York, Kentucky, and Oregon), supplemented with a few new elements. That is not to say this will be inexpensive or without controversy. Here are the elements I propose for the new model code:

- A land conservation plan for the entire state, or very large parts of it, should identify lands and resources on those lands to be conserved. The plan must identify specific measurable conservation goals or outcomes tailored to different types of lands and resources. Deadlines must be set for implementation of each phase of the plan.
- A new agency must be given the mission of achieving the objectives with authority to carry out the program, preferably with the willing participation of local governments, but able to act when local governments refuse to act.

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*Farmland Protection Program*, OR. DEP'T OF LAND CONSERVATION & DEV., <http://www.oregon.gov/LCD/pages/farmprotprog.aspx> (last visited Nov. 21, 2013) (stating that 16.1 million acres of land are zoned for EFU in the state of Oregon); *Generalized Zoning: State of Oregon*, OR. DEP'T OF LAND CONSERVATION & DEV., <http://www.oregon.gov/LCD/PublishingImages/statezon.gif> (last visited Nov. 21, 2013) (showing that the vast majority of the state of Oregon has been zoned for forest use, EFU, or farm-forest use).

63. OR. LAND CONSERVATION & DEV. COMM'N, APPROVED 2006-07 FARM REPORT 11 (2009), available at <http://www.oregon.gov/LCD/docs/rural/farm2006-07.pdf>; OR. LAND CONSERVATION & DEV. COMM'N, APPROVED 2006-07 FOREST REPORT 6 (2009) [hereinafter FOREST REPORT], available at <http://www.oregon.gov/LCD/docs/rural/forest2006-07.pdf>. In the eleven years from 1997 through 2007, Oregon's population grew by 443,315 people. RISA S. PROEHL, PORTLAND STATE UNIV., 2008 OREGON POPULATION REPORT 5 (2009), available at [http://www.pdx.edu/sites/www.pdx.edu/prc/files/media\\_assets/PopRpt08.pdf](http://www.pdx.edu/sites/www.pdx.edu/prc/files/media_assets/PopRpt08.pdf). That population increase required about 180,000 new homes (assuming 2.46 residents per home), which means about 6% of all new homes were built in farm and forest zones. See *State and County QuickFacts: Oregon*, U.S. CENSUS BUREAU, <http://quickfacts.census.gov/qfd/states/41000.html> (last updated June 27, 2013) (showing that, from 2007–2011, the average number of persons per household in Oregon was 2.46).

64. See JOHN D. GRAY, OR. CMTY. FOUND., LAND USE PLANNING INFORMATION FOR THE CITIZENS OF OREGON 7–8 (2006), available at [http://oregonexplorer.info/data\\_files/OE\\_topic/landuse/documents/gray\\_white\\_paper.pdf](http://oregonexplorer.info/data_files/OE_topic/landuse/documents/gray_white_paper.pdf) (listing ballot measures from 1970–2004 in opposition to land-use planning).

- Funding for administration of the program and for various incentives in it must be provided. An assessment on government-created land-value windfalls, resulting from rezoning or publicly financed infrastructure, could provide some of the funding.
- Existing rural-, residential-development entitlements must be quantified, capped, assigned as rights to landowners, and given expiration dates.
- Rural cluster zoning would become mandatory. This zoning should be exercised according to a set of state criteria and/or maps and designed to protect the most valuable lands. Development should be organized in ways that make sense for the provision of infrastructure and services.
- The open space left after clustering would be protected by zoning and conservation easements.
- The extinction of an important share of the residential-development rights needed to achieve conservation objectives would be carried out through a combination of a publicly- and privately-funded purchase of development rights and a transferable development rights (TDR) program.

Experience in New Jersey and elsewhere shows that, to be successful, TDR programs require very high demand for development in the landing zone area and a specialized bank that facilitates transactions.<sup>65</sup> State infrastructure investments, operations and maintenance, and state-provided services should be revised to reflect and support the rural conservation agenda and to enhance the desirability of the landing zones.

Local system development charges, permit fees, and property taxes should be reformed to support the program through, for example, current use assessment of conserved lands and the prohibition of the extension of urban services into the conservation lands. This means everything from sewers to fire protection to school transportation. This approach has a lot of moving parts, and complexity can make implementation more challenging.

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65. See N.J. FUTURE, REALIZING THE PROMISE: TRANSFER OF DEVELOPMENT RIGHTS IN NEW JERSEY 5-6 (2010), available at [http://www.dvrpc.org/tdr/taskforce/pdf/2010-08\\_TDRFinalReport.pdf](http://www.dvrpc.org/tdr/taskforce/pdf/2010-08_TDRFinalReport.pdf) (explaining why TDR programs have succeeded in only a few places).

But I think it borrows the best from the alternatives to rural-conservation zoning.

*D. Shifting Focus to Implementation Outcomes:  
Monitoring, Enforcement, and Innovation*

From substance, I now shift to process. There are many prizes awarded and much prestige afforded to the adoption of plans but almost no prizes and no prestige to their effective implementation. That is backwards. A plan is only as good as its implementation. The new model code needs to treat performance monitoring and enforcement as central concerns, not afterthoughts. This is a very big subject in itself.

I am going to confine myself to two ideas that seem to be unique to Oregon, but which I think can be adapted and applied in many other states. The first is the Oregon Land Use Board of Appeals (LUBA), which is part of the overall reform of land-use decision-making. In Oregon, only local governments have the power to find the facts that are the basis for granting or denying a development application.<sup>66</sup> Trials *de novo* on land-use matters carried out by state trial courts were ended decades ago.<sup>67</sup> Once a local government land-use decision is made, LUBA has primary jurisdiction over almost all appeals from those decisions and many state agency land-use decisions.<sup>68</sup>

Developers wanted LUBA so that appeals of their decisions could avoid lengthy dockets and expensive trials in the circuit court.<sup>69</sup> In addition, developers wanted consistency in interpretation of planning statutes and planning goals.<sup>70</sup> Furthermore, they asked for and received an extremely accelerated appellate review process: appeals must be filed within three weeks of the local decision and briefs are due just a few weeks later.<sup>71</sup> Developers later asked for, and received (without opposition from 1000 Friends of Oregon), the mandatory award of attorney fees for frivolous appeals.<sup>72</sup>

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66. OR. REV. STAT. § 197.835(2)(b) (2011).

67. *Id.* § 197.850(8).

68. *Id.* § 197.825.

69. *See About Us*, LAND USE BD. OF APPEALS, [http://www.oregon.gov/LUBA/Pages/about\\_us.aspx](http://www.oregon.gov/LUBA/Pages/about_us.aspx) (last visited Nov. 21, 2013) (“LUBA was created to simplify the appeal process, speed resolution of land use disputes and provide consistent interpretation of state and local land use laws.”).

70. *Id.*

71. OR. REV. STAT. § 197.830(3)–(7); OR. ADMIN. R. 661-010-0035(1) (2013) (“Unless otherwise provided by [LUBA], respondent’s brief together with four copies shall be filed within 42 days after the date the record is received or settled by [LUBA].”).

72. OR. REV. STAT. § 197.850(13).

But much of what the developers wanted—speed, consistency, lower cost—planning groups wanted too. It turned out that LUBA was a fairly accessible forum where average citizens could effectively represent themselves without an attorney. After thirty years of existence, LUBA has an impressive affirmance rate by the court of appeals.<sup>73</sup> Today, no one can imagine how we could operate without it.

Another reform Oregon undertook, not much known outside the state, was the abolition of the ridiculous Nineteenth Century doctrine of standing to appeal on land-use matters. Oregon has more than twenty years of experience with allowing anyone who makes an argument on the merits in a local land-use proceeding to challenge that decision before LUBA. None of the imagined horrors of floods of litigation and frivolous appeal has materialized. What *has* happened is that citizens and citizen groups have provided a critical layer of oversight, especially of conservation goals, that could not have been supplied by the Attorney General's office.

### III. RESILIENCE AND ADAPTATION: PHYSICAL AND SOCIAL

My final comments are not about matters to be included in a new model code, but concern the evolution of our thinking about planning and land regulation, including some clear ideas about what kinds of communities we are trying to grow. The Scientific American article about Dennis Meadows notes that “[h]e no longer spends time trying to persuade humanity of the limits to growth. Instead, he says, ‘I’m trying to understand how communities and cities can buffer themselves’ against the inevitable hard landing.”<sup>74</sup>

During a lunch with Paul Gilding, author of *The Great Disruption*, there was a nervous discussion about what personal preparations we should be making in anticipation of this hard landing, a hard landing that Gilding believes will take the lives of a fifth or more of the world's people.<sup>75</sup> In response to my dark comment about buying guns, Gilding said: “If we have to buy guns then we have failed. Strong social bonds are what will allow us to survive through difficult times.”

I have thought about that remark often since then. The kind of communities we should be redeveloping should put an emphasis on social

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73. Nancy E. Stroud, *A Land Use Board of Appeals for Florida?*, 14 *FORESIGHT*, no. 4, 2001, at 2, 9, available at [http://www.nasuad.org/sites/nasuad/files/hcbs/files/18/883/fof\\_citizens\\_participation.pdf](http://www.nasuad.org/sites/nasuad/files/hcbs/files/18/883/fof_citizens_participation.pdf).

74. Mukerjee, *supra* note 17.

75. See PAUL GILDING, *THE GREAT DISRUPTION* 53 (2011) (“[W]e’re now, in my view, inevitably going to pass through a rough patch . . . , and in the geopolitical, economic, and climate chaos involved I expect we’ll tragically lose a few billion people.”).

relationships and experience, and de-emphasize planning for private consumption, consumption that does not lead to happiness. They will have more places and spaces where we can gather; more gardens and playgrounds, libraries, and cafes; more group living; fewer “McMansions”; more villages; and a lot less acreage for home-sites.

We need to challenge the absurd artificial-intellectual world of the neo-liberals, in which sprawl is the manifestation of the free market and freedom. No, sprawl is the result of subsidies, public investments, tax codes, banking practices, engineering handbooks, and the dead hand of tradition. We must challenge the neo-liberals’ assumptions about our economy. The pollution of land, air, and water, and destruction of ecosystems are not just “externalities” or “market imperfections” but infringements on the enjoyment of our own property and our freedom from breathing polluted air and drinking contaminated water. This intellectual enterprise of rethinking property rights, responsibilities, and their connection to freedom must go hand in hand with the practical steps of designing and implementing new model codes for the use and conservation of land and resources.

#### CONCLUSION

Perhaps the most important part of the entire effort will not be the particulars of what we do, but the forward thinking and community conversations that will prepare us for the difficult journey from our unsustainable civilization today to a sustainable civilization a century from now. Our greatest danger will come when the cumulative stress on our natural system and the related social and economic problems—rising food prices, governmental collapse, and war—begin to shake public confidence in our institutions.

At that moment of crisis there must be a reservoir of thought and people with constructive ideas about how to meet that crisis. They will provide hope by offering alternatives to ideological extremes, nationalism, demagoguery, conspiracy theorists of all shades that can lead us down the path to war, death, and destruction. Will we succeed in rising to the challenge of creating a sustainable civilization? I don’t know. But if we do, it will be thanks to people like you.

