# Urban Sprawl DA

## 1NC

### Uniqueness

#### Development in smart growth means urban sprawl decreasing now, but investment must be well spent

Samuels 11-29-12, (Diana Samuels (reporter), November 29, 2012 at 10:07 AM, The Times Picayune, A greater New Orleans, http://www.nola.com/news/baton-rouge/index.ssf/2012/11/smart\_growth\_summit\_tips\_for\_b.html)

Mark Goodson, executive vice president and chief operating officer of the East Baton Rouge Redevelopment Authority, spoke at a panel on the city-parish's FuturEBR plan and attended [the keynote address Monday by American Planning Association President Mitchell Silver](http://www.nola.com/news/baton-rouge/index.ssf/2012/11/smart_growth_summit_speaker_ba.html).¶ Silver spoke about the economic return communities can see by making investments that follow "smart growth" concepts, such as putting money toward denser infill development and creating vibrant downtowns and neighborhoods, rather than big roads leading out to the suburbs.¶ "That certainly resonated with me," Goodson said.¶ One example of how that may play out in Baton Rouge was mentioned during Goodson's session on FuturEBR: In response to a question from the [audience](http://www.nola.com/news/baton-rouge/index.ssf/2012/11/smart_growth_summit_tips_for_b.html), the panelists acknowledged that street connectivity is not one of the first priorities for the FuturEBR plan.¶ FuturEBR does call for hundreds of millions of dollars in street upgrades, but Goodson said the team implementing the plan is focusing first on easier, cheaper "low-hanging fruit," like creating an urban renewal program to spur revitalization in neighborhoods like Mid City.¶ Ryan Holcomb, project planning coordinator with Baton Rouge's Office of the Planning Commission, said he and other planning staffers attended the summit. He said the event is valuable because it "showcases the importance of planning and highlights best practices." He said learning about other communities' approach to transportation planning was especially relevant for Baton Rouge

### Link

#### <Feel Free to insert a more specific link instead of the next card>

#### **New modes of transportation contribute to urban sprawl**

Rog, 2010, Morgan E. Rog, J.D./M.P.H Candidate at Georgetown University Law Center and Johns Hopkins University Bloomberg School of Public Health, Georgetown International Environmental Law Review, “Highway to the Danger Zone: Urban Sprawl, Land Use, and the Environment”

While urban sprawl was the result of many factors, the effects of the advent and popularity of the automobile on American city planning were crucial. Although their environmental impacts are often discussed in terms of carbon emissions, the lifestyle they have made possible in this country represents the most serious environmental hazard posed by cars. n44 As discussed previously, the car was popularized in the United States as a tool to combat urbanism. This was one reason why Henry Ford, responding to the numerous issues associated with population density in cities at the time, determined to ensure the automobile's success. n45 Thus, automobiles and zoning, both of which reached the height of popularity when the United States had a blatant disgust for city life, have developed a symbiotic relationship--the unrestrained mobility of an automobile fueled the desire to separate one's home from everything else with as much distance as possible, aggravating the phenomenon of urban sprawl. n46 As a quintessential part of American culture, the automobile has done much to aggravate the trend towards urban sprawl. Presently, becoming "eco-friendly" has become fashionable, leading to the rise in popularity of hybrid vehicles. While these cars are certainly more energy efficient than automobiles that run exclusively on gasoline, this trend may actually be counter-productive. n47 As [\*713] vehicles become more fuel efficient, like the many. popular hybrid models available on the market currently, vehicle travel becomes less expensive. This has the unfortunate effect of actually encouraging more vehicle travel. n48 Naturally, suburban expansion would not have been possible without the creation of an expansive network of streets and highways. This transportation infrastructure also plays an important role in the sprawl story. As urban sprawl increased, so did the necessity to drive longer and longer distances to work. Although commute times have remained relatively constant over the years, efficiency has increased, indicating that as people's drive to work takes less time, they are working further and further away from their homes. n49 This is in keeping with Down's Law, which provides that as transportation capacity increases, demand expands to fill that capacity. n50 Numerous behavioral changes also take place in response to changes in transportation infrastructure. n51 These include triple convergence, induced travel, and induced development, all of which contribute to sprawl and the issues associated with it. n52 Triple convergence is a term used to refer to three ways in which travelers respond to a new transportation facility--they can change the time that they travel, their travel mode, or their travel route. n53 Induced travel comprises travelers' response to changes in transportation capacity--typically as the cost of travel in terms of time decreases, people tend to take advantage of the increased efficiency, and travel more frequently and for longer distances. n54 Finally, induced development occurs when significant transportation capacity increases result in long-term changes to land use patterns, which ultimately reflect shifts in the duration or origin of trips. n55

### IL

#### Urban Sprawl causes every single environmental impact

Maya 08, (Michael Maya, 5-21-08, New York University School of Law, J.D., magna cum laude, 2008, Order of the Coif, New York University M. Maya, Professor of Law at NYU, New York University Law TRANSPORTATION PLANNING AND THE PREVENTION OF URBAN SPRAWL, <http://www.law.nyu.edu/ecm_dlv4/groups/public/@nyu_law_website__journals__law_review/documents/documents/ecm_pro_058032.pdf>)

Previous commentators have discussed the economic, environmental, and social costs of sprawl at great length;¶ nevertheless, a¶ brief review of their findings will help situate the remainder of this¶ Note. The environmental effects of sprawl have been particularly well¶ documented. Many of these effects stem from a simple fact:¶ Residents of sprawling areas drive greater distances than people who¶ live in more compact communities.¶ This increased use of cars results¶ in a rise in automobile emissions, which undermines efforts to reduce¶ air pollution.¶ Although air pollution itself has not been found to¶ cause respiratory illness, it does have the potential to exacerbate preexisting medical conditions.¶ Furthermore, scientists have concluded¶ that it is very likely that greenhouse gas emissions, in particular, have contributed to global climate change.¶ Beyond its effects on humans,¶ sprawl poses an extreme threat to ecosystems, including by destroying¶ and fragmenting animal habitats.¶ As more land has been paved over¶ to make way for development, leaving less green space to absorb rainwater and chemical runoff, soil erosion and water pollution have also¶ increased.

#### Studies prove that an increase in transportation outweighs fuel efficiency, this turns Aff environmental advantages

Ewing 07, (Reid Ewing is a Research Professor at the National Center for Smart Growth, associate editor of the Journal of the American Planning Association, columnist for Planning magazine, and Fellow of the Urban Land Institute. Formerly, he was Director of the Voorhees Transportation Center at Rutgers University, and earlier in his [career](http://www.planetizen.com/topthinkers/ewing), he served two terms in the Arizona legislature and worked on urban policy issues at the Congressional Budget Office. He holds master degrees in Engineering and City Planning from Harvard University and a Ph.D. in Transportation Systems and Urban Planning from the Massachusetts Institute of Technology., “Growing Cooler: The Evidence on ¶ Urban Development and Climate ¶ Change”, http://postcarboncities.net/files/SGA\_GrowingCooler9-18-07small.pdf)

Carbon dioxide is more difficult to control through vehicle technology than are conventional air¶ pollutants. Conventional pollutants can be reduced in automobile exhaust with sophisticated ¶ emission control systems (catalytic converters, on-board computers, and oxygen sensors).¶ Carbon dioxide, meanwhile, is a direct outcome of burning fossil fuels; there is no practical way ¶ to remove or capture it from moving vehicles. At this point in time, the only way to reduce CO2¶ emissions from vehicles is to burn less gasoline and diesel fuel.¶ An analysis by Steve Winkelman of the Center for Clean Air Policy, one of the coauthors of this¶ publication, finds that CO2 emissions will continue to rise, despite technological advances, as the¶ growth in driving overwhelms planned improvements in vehicle efficiency and fuel carbon ¶ content. The U.S. Department of Energy’s Energy Information Administration (EIA) forecasts¶ that driving will increase 59 percent between 2005 and 2030 (red line, Figure 0-2), outpacing the¶ projected 23 percent increase in population. The EIA also forecasts a fleetwide fuel economy ¶ improvement of 12 percent within this time frame, primarily as a result of new federal fuel¶ economy standards for light trucks (green line, Figure 0-2). Despite this improvement in ¶ efficiency, CO2 emissions would grow by 41 percent (dark blue line, Figure 0-2).¶ VMTU.S. fuel economy has been flat for almost 15 years, as the upward spiral of car weight and ¶ power has offset the more efficient technology. Federal and state efforts are underway to ¶ considerably boost vehicle efficiency and reduce greenhouse gas emissions. In June 2007, the¶ U.S. Senate passed corporate average fuel economy (CAFE) standards that would increase new¶ passenger vehicle fuel economy from the current 25 miles per gallon (mpg) to 35 mpg by 2020.¶ (As of this writing, the House has not acted.). California plans to implement a low carbon ¶ standard for transportation fuels, specifically a 10 percent reduction in fuel carbon content by¶ 2020.¶ Even if these more stringent standards for vehicles and fuels were to go into effect nationwide,¶ transportation-related emissions would still far exceed target levels for stabilizing the global¶ climate (see Figure 0-3). The rapid increase in driving would overwhelm both the increase in ¶ vehicle fuel economy (green line) and the lower carbon fuel content (purple line). In 2030, CO2¶ emissions would be 12 percent above the 2005 level, and 40 percent above the 1990 level¶ (turquoise line). For climate stabilization, the United States must bring the CO2 level to 15 to 30 ¶ percent below 1990 levels by 2020 to keep in play a CO2 reduction of 60 to 80 percent by 2050.¶ As the projections show, the United States cannot achieve such large reductions in ¶ transportation-related CO2 emissions without sharply reducing the growth in miles driven.

### TI

#### **ExtinctionGlobal warming causes extinction**

Molloy 7/6 (Ivan, Associate Diploma of Geology: Royal Melbourne Institute of Technology, Rebuff to Climate Change Denial, <http://www.mysunshinecoast.com.au/articles/article-display/rebuff-to-climate-change-denial,26302>, 2012)

As a former geologist I have to respond to those who deny human induced Climate Change. Yes its true the worlds climate and geomorphology have been continually changing throughout natural history providing favourable conditions for some forms of life at times, while extinguishing others. In recent geological time, the planet has provided favourable conditions for the flourishing of human life, which in turn like other forms of life also contributes to climate and geomorpholigical change. However, unlike no other form of life, the impact of modern human civilisation has greatly distorted and added to global climate change, and impacting heavily on flora and fauna. Human kind through massive over population and industrialisation is now like a cancer on the planet exterminating hundreds of other life species annually, and now it threatens its own survival with massive pollution. The Global Climate has always changed but not at such a massive rate due to human activity which in turn now threatens our survival. But other forms of life, such as cockroaches will continue on.

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## Uniqueness

#### No sprawl now—too costly, stats prove

El Nasser & Overburg ’12 (Haya and Paul, April 5, El Nasser: demographics reporter at USA Today, Overburg: database editor at USA Today, USA Today, “America’s romance with sprawl may be over”, <http://www.usatoday.com/news/nation/story/2012-04-05/sprawl-census-urban/54007292/1> DOA: 6/21/12 ARW)

Almost three years after the official end of a recession that kept people from moving and devastated new suburban subdivisions, people continue to avoid counties on the farthest edge of metropolitan areas, according to Census estimates out today. The financial and foreclosure crisis forced more people to rent. Soaring gas prices made long commutes less appealing. And high unemployment drew more people to big job centers. As the nation crawls out of the downturn, cities and older suburbs are leading the way. Population growth in fringe counties nearly screeched to a halt in the year that ended July 1, 2011. By comparison, counties at the core of metro areas are growing faster than the nation as a whole. "There's a pall being cast on the outer edges," says John McIlwain, senior fellow for housing at the Urban Land Institute, a non-profit development group that promotes sustainability. "The foreclosures, the vacancies, the uncompleted roads. It's uncomfortable out there. The glitz is off." A USA TODAY analysis shows: • All but two of the 39 counties with 1 million-plus people — Michigan's Wayne (Detroit) and Ohio's Cuyahoga (Cleveland) — grew from 2010 to 2011. • Twenty-eight of the big counties gained faster than the nation, which grew at the slowest rate since the Great Depression (0.73%). The counties' median growth rate was 1.3% (half grew faster, half slower). Those 28 — including California's Alameda and Contra Costa counties, Florida's Broward and Hillsborough, Texas' Harris and Dallas — generated more than a third of the USA's growth. Before the recession and housing bust, when people flocked to new development on farmland, they contributed just 27%. "It shows the locational advantage of being in the biggest cities," says Robert Lang, professor of urban affairs at the University of Nevada-Las Vegas and author of Megapolitan America. "The core is what's left of our competitiveness as a country." •Central metro counties accounted for 94% of U.S. growth, compared with 85% just before the recession. "This could be the end of the exurb as a place where people aspire to go when they're starting their families," says William Frey, demographer at the Brookings Institution. "So many people have been burned by this. … First-time home buyers, immigrants and minorities took a real big hit."

#### Sprawl slowing—census proves

Mosemak et al. ’12 (Jerry, Chad Palmer, Haya El Nasser, Paul Overburg, April 5, Mosemak: art director at USA Today, Palmer: senior design developer at USA Today, El Nasser: demographics reporter at USA Today, Overburg: database editor at USA Today, USA Today, “U.S. population growth slows, especially in far suburbs”, <http://www.usatoday.com/news/nation/story/2012-04-05/sprawl-census-urban/54007292/1> DOA: 6/21/12 ARW)

Five years ago, millions of Americans were streaming to new homes on the fringes of metropolitan areas. Then housing prices collapsed and the Great Recession slowed growth to levels not seen since the Great Depression in the 1930s. Growth remained slow last year, and largely confined to counties at the center of metropolitan areas. Maps show population gain or loss in 2006 and 2011, based on new Census Bureau estimates.

#### No sprawl now—previous economic enticement is gone

McIlwain ’12 (John, April 5, senior resident fellow and chair for housing at the Urban Land Institute, JD from New York University, Urbanland, “The Great Recession: A Slayer of Sprawl”, <http://urbanland.uli.org/Articles/2012/April/McIlwainSprawl> DOA: 6/21/12 ARW)

Finally, and by no means the least of the reasons to anticipate that the current decline in outer-ring growth is the start of a long-term trend, is that the bloom is off the rose. Whether the concern is the price of gasoline, the loss of time to commuting, or the bleakness of living surrounded by foreclosed homes and vacant lots, the glitz is gone from outer-ring suburbs. The only people buying in the outer-rings today are those attracted by their rock-bottom prices. Sadly, they will discover that what they thought were savings will be eaten up by the higher cost of living on the outer edges with no nearby jobs, stores or services. And, when the time comes to sell their homes, these owners will find that there has been little appreciation and that they have made penny-wise and pound-foolish choices. Disasters and tough times seem to accelerate existing trends, and the recession and housing crash are no exceptions. The shift to more urban housing development has been growing slowly during the past couple of decades and thanks to the recession and housing crash, this trend has accelerated. It is probable that the trends that the USA Today analysis points to are the precursors to a long-term shift in suburban development resulting in more in-fill, close-in development and far less growth on the outer edges of metropolitan areas. It is increasingly clear that just as the past century was the century of suburbanization, this is the century of urbanization for the United States.

## Link wall

### Generic

#### Transportation infrastructure leads to urban sprawl – EU proves

Christansen 11, (Petter Christiansen, Department of Mobility and Organization, TOI Report: Drivers behind urban sprawl in Europe, <https://www.toi.no/getfile.php/Publikasjoner/T%D8I%20rapporter/2011/1136-2011/1136-2011-el.pdf>)

Trans-European Transport network (TEN) is also an area that focuses on infrastructure investments and TEN is strongly related to the common market. A prerequisite for goods, persons and services to flow freely is that the quality of the infrastructure is good. The funding mainly goes to the modernization and development of high-speed trains. In Central and Eastern Europe, the largest share is devoted to the construction of highways (Milanovic et al. 2007:113). Eastern European countries have recently experienced a restructuring of the economy where they are more dependent on international transport. For example, both freight and passengers to the Western European market has increased significantly (ibid). The theoretical effects of increased investments in infrastructure and increased availability are summarized by Dieleman and Wegener (2004:314). Increased availability may contribute to new areas becoming attractive for residential, industrial and office space and thus can contribute to urban sprawl. Below we will associate this point with some empirical examples. In Greece, it appears that large-scale infrastructure investments, combined with poor political management, have led to urban sprawl associated with construction of both residents and industries. Transportation-related industries located along highways and formed their own districts. Residents also localized in these areas (Leontidou et al. 2007). Residents often follow jobs and industry. In more recent times investments related to the Olympics in 2004 contributed to urban sprawl. Developments related to the Olympic Games were spread over large parts of Attica. Industrial investments around the highways are also a driver of urban sprawl in Eastern Europe (Milanovic et al. 2007).

#### Empirical evidence for transit-enabled sprawl – Japan and America prove

Smith ’11 (Andrew Smith, Seattle Transit Blog, “Can Rail Cause Sprawl?”, <http://seattletransitblog.com/2011/03/29/can-rail-cause-sprawl/>, 29 Mar 2011 DOA: 21 June 2012 JOL)

First, I think it’s worth defining what “sprawl” is exactly. There are two main connotations to the word. The first images that comes to mind are far-flung environments far from the center-city, and the second are car-oriented, low density developments. Transit can certainly cause – or be the cause of – the first sort of “sprawl”. In Japan’s post-war boom, many heavy-rail transit lines were built through what had previously been farmlands around major cities. Areas such as the [Tama New Town](http://en.wikipedia.org/wiki/Tama_New_Town) were communities planned by the government around transit lines to ensure that new communities had enough infrastructure to become economically sustainable. The [line I lived on in Japan](http://en.wikipedia.org/wiki/Denentoshi_Line) was built the same way in the 1950s. Transit-enabled sprawl has also taken place in America. The [streetcar suburbs](http://en.wikipedia.org/wiki/Streetcar_suburb), while much closer than modern suburbs, were some of the first suburban developments enabled by motorized transport. While streetcar suburbs are generally less dense than center-cities, most streetcar suburbs that remain are more dense than the surrounding areas. In Seattle, Ballard, Fremont, the University District, Ravenna and Columbia City originally developed as streetcar suburbs. [This paper](http://faculty.washington.edu/chalana/urbdp565/ClayVeka_Final.pdf)by University of Washington student Clay H. Veka is a good introduction to the subject for those curious.

### **HSR**

#### HSR specifically causes urban sprawl

Kambitsis 10, (Jason Kambitsis, City Planner and Wired Contributor, Wired: High-Speed Rail As a Conduit of Sprawl, <http://www.wired.com/autopia/2010/03/high-speed-rail-and-sprawl/>)

It’s fast, it’s efficient and it is the future of transportation, but will high-speed rail cause sprawl? Yes, it could, warn some urban planners. Despite the promise of creating more densely populated urban centers, high-speed rail could do quite the opposite by making it easier for people to live far from urban centers. Let’s use California as an example, since high-speed rail has made the most progress there. The Golden State, long known as a trendsetter for transportation and environmental policy, has received more than $2.3 billion in stimulus spending toward a proposed line linking San Francisco to Los Angeles by way of the Central Valley. The money is earmarked for construction, land acquisition and engineering and it follows the $9.95 billion allocated by a state ballot initiative. If and when the line is completed by 2030, riders will zip between the two cities in 2 hours and 38 minutes and pay less than half what it would cost to fly. But that convenience could increase emigration from California’s urban centers to the exurbs and beyond. In other words, it could lead to more sprawl. An example of this can be seen in cities like Palmdale, which is 58 miles north of Los Angeles. By cutting the commute time between those two cities from 1hour and 25 minutes, to 27 minutes, outward growth of the Los Angeles area will undoubtedly continue. It’s easy to see why — home prices in Palmdale are more than half of those in L.A., and high-speed rail could make getting downtown as quick and easy as living downtown. Pushing people further into the exurbs runs counter to a major goal of high-speed rail, namely cutting our carbon output while creating denser, more sustainable communities. Before this conversation goes any farther it should be said adopting high-speed rail is fundamental to the country’s economic vitality because it provides cost-effective transportation options that link major commerce centers. It is in many ways more beneficial than the continued use of automobiles as the primary means of moving people around. The time is now and the technology is here. That said, there are some potential flaws regarding where stations are built and how the rail infrastructure is integrated with communities that could lead to sprawl. The goal for high-speed rail in the United States, as in Europe — which, like Japan, is held as a model for HSR — is linking large cities. But the big difference between the European and American approach is Europeans have made a large investment in rail and the accompanying infrastructure that links it with stations and communities. The United States, on the other hand, has invested heavily in a highway system. The result is our land use patterns are quite different. In addition to making rail a priority, Europe has long supported public transit and multi-modal transportation infrastructure that supports bicycling, walking and other ways of getting around. It has all but taken the car out of the equation and solved the so-called “last mile” problem — addressing how people get from the transit stop to their final destination. Public transit options, along with dense, compact communities built around transit hubs (an approach called transit oriented development, or TOD) has created inherent convenience and in many cases eliminated dependence on cars. In the United States it is a completely different story. We rarely embrace TOD. This could be a problem with  high-speed rail. Without a rapid transformation of our building patterns and a push to make existing communities denser, high-speed rail could be a conduit of sprawl, not a deterrent. If stations include vast parking lots, or they’re built in remote areas away from urban cores instead of being made a part of the community, it will all but guarantee people drive to the stations and create a system that is only accessible by car. Drivers already comfortable with a commute of an hour or more could move further away from urban centers, drive to a station and ride to work and still enjoy a shorter overall commute time. “HIgh-speed rail will simply add another layer of access to the far-flung suburbs/exurbs and Central Valley, resulting in more mass-produced subdivisions,” warns Robert Cervero, director of the University of California Transportation Center and author of Development Around Transit.

### Highway

#### Highway system causes urban sprawl.

Armbruster & Crary 05

“The Interstate High way system” Andrew Armbruster& Economic History of the United States 375 Dr. David Crary 5 April, 2005

<http://www.emich.edu/studentorgs/place/Officers/andrew/Econ%20375%20-%20The%20Construction%20of%20the%20IHS-B.pdf>

This Interstate Highway System and its corresponding spatial structure have contributed to land-use patterns that need to accommodate the private automobile. Many have argued that this accommodation progressively and inevitably leads to congestion,

pollution, economic and physical decentralization and a physical design of the urban environment that lacks character an,.,.. xvd supports architectural anonymity. These characteristics together compose the term ‘Urban Sprawl’. Urban Sprawl has had an enormous effect on the US metropolitan structure. Urban sprawl, catalyzed by the Interstate Highway System, has helped lead to a disintegration of the country’s core cities, while integrating a larger metropolitan framework. There are several reasons why this has occurred. After the highway networks were built people and later jobs followed them out from the core areas to the lesser-developed lands surrounding them. During the 1950’s and early 1960’s, assisted by the IHS, there was a shifting of the residential population to newly formed suburban developments. This is because the IHS now made transportation much quicker and more efficient for the private automobile. The residential population would then use the highway system to ‘commute’ (a relatively new term at the time) from the suburb to the urban core where the largest concentration of jobs still existed. However, in time, with loose land-use restrictions and friendly tax incentives in the suburban areas, developers began to see the profit to-be-gained by developing primary commercial economies in these outlying areas. These developments could not be of the same spatial structure as those in traditional urban areas, however, because the nature of the transportation structure was altogether different. The transportation structure of the outlying areas was defined by the arterial highway and the automobiles that use them. Thus an entirely new form of urban development was composed that fit perfectly the needs of this hybrid spatial structure. This is exemplified by the suburban shopping center, or ‘mall’, which was built along the basis of spatial inversion and represents the epitome of the term ‘urban sprawl’

### Roads/Buses

#### Roads, buses, and general spending on TI causes urban sprawl

Campos 07 ,(Annalie L. Campos, ¶ Ph. D. Student, Department of Geography ¶ Michigan State University, Local roads spending and Urban Sprawl: An Analysis of the Causal Relation in the ¶ Detroit Metropolitan Area, <http://nercrd.psu.edu/taluc/Papers/AdelajaCamposTransportationSpending.pdf>)

Transportation, including highways and local roads, represents a particularly ¶ major area of state government expenditure. Concern about the potential role of ¶ government in growth management has sparked significant interest in the special area of ¶ transportation. With a few exceptions, empirical studies have consistently shown that ¶ among the many identified causal factors, public spending on transportation is a key ¶ facilitator of sprawl (Davis 1996; Downs 1999; Garrison et al. 1959; Handy 2005; Rii ¶ 1983). For example, some studies suggest that the development of the interstate highway ¶ system significantly reduced the cost of intrametropolitan mobility, encouraging ¶ individuals and households to relocate to suburban communities which offer better public ¶ goods, amenities and quality of life. Essentially, interstate highways facilitated increasing ¶ spatial interactions between the central city and suburban and rural areas (Black 2003; ¶ Hanson and Giuliano 2004), and transformed the form, structure, and function of cities ¶ (Chandra and Thompson 2000; Ebner 1985; Feridhanusetyawan and Kilkenny 1996; ¶ Howe et al. 1998)

### Hydrogen

#### Hydrogen fuel causes urban sprawl

Robert S. Cherry, National Engineering and Environmental Laboratory, “A hydrogen utopia?” International Journal of Hydrogen Energy 29 (2004) National Academy of Engineering, Washington, DC, USA <http://www.sciencedirect.com/science/article/pii/S0360319903001216> (accessed 9/21/12)

Promotion of the benefits of hydrogen-fueled cars might lead to greater overall vehicle usage and therefore more congestion, urban sprawl, and even total energy use. This behavior is known in the insurance industry as moral hazard, where having insurance against a problem (in this case, a transportation fuel with pollution and availability problems) can lead to greater risk taking (vehicle energy consumption). Claims of “no environmental effects—emits only water”, true in a local sense but possibly not in a life cycle analysis, might hinder efforts to further reduce energy consumption in consumer products. Increasing restrictions on fossil fuel availability might lead to greater use of public transit if hydrogen vehicles cost significantly more than conventional cars. Providing the necessary buses or trains and upgrading rail lines or bus terminals could be a significant expense for chronically under- funded metropolitan transit agencies, especially if the new vehicles themselves must run on hydrogen.

### Cheap gas

#### Low gas prices cause urban sprawl

Kaplan 12, (Marshall Kaplan, Nov. 23, 2012*,* former Dean of the Graduate School of Public Affairs at University of Colorado and directed the Wirth Chair in Energy, Climate Change and Community Development related issues and policies.  Before that, he served in the Carter, and Kennedy Administrations and was the principal in the policy advisory firm of Marshall Kaplan, Gans and Kahn. Mr. Kaplan has advised numerous federal, state, and local governments as well as non-profit groups and businesses on diverse public policy alternatives. He also facilitated consensus of international leaders at Aspen Global Forums focused on issues of economic development, privatization of energy, and[**financing**](http://www.fuelfreedom.org/author/mkaplan/) infrastructure. <http://www.ocregister.com/articles/gas-378559-housing-fuel.html>)

Steven Sexton and his colleagues at the University of California's Center for Energy and Environment Economics suggest that low energy prices during the housing boom, in combination with lax lending practices and new mortgage products, made suburban houses affordable to a new class of homeowners with low incomes, high leverage, [low credit](http://www.ocregister.com/articles/gas-378559-housing-fuel.html) worthiness and long work commutes.¶ While cheap [fuel prices](http://www.ocregister.com/articles/gas-378559-housing-fuel.html) lead to urban sprawl and the expansion of homeownership, dramatic increases in fuel prices disproportionately impacted suburban homeowners. High commuting costs decreased home values. Mortgages became unaffordable for some households and imprudent for others, leading to unavoidable and strategic defaults. While predatory and subprime lending have been blamed for the housing crisis and certainly contributed to the problem, another economic factor has been almost entirely overlooked in the timing and the geography of the nation's housing market implosion. The rise in gas prices during the last decade dealt a major blow to consumer purchasing power and weighs most heavily on people who have to drive the farthest.

## Internal Links

### Transportation key

#### Transportation is key

Ewing 07, (Reid Ewing is a Research Professor at the National Center for Smart Growth, associate editor of the Journal of the American Planning Association, columnist for Planning magazine, and Fellow of the Urban Land Institute. Formerly, he was Director of the Voorhees Transportation Center at Rutgers University, and earlier in his [career](http://www.planetizen.com/topthinkers/ewing), he served two terms in the Arizona legislature and worked on urban policy issues at the Congressional Budget Office. He holds master degrees in Engineering and City Planning from Harvard University and a Ph.D. in Transportation Systems and Urban Planning from the Massachusetts Institute of Technology., “Growing Cooler: The Evidence on ¶ Urban Development and Climate ¶ Change”, http://postcarboncities.net/files/SGA\_GrowingCooler9-18-07small.pdf)

The United States is the largest emitter worldwide of the greenhouses gases that cause global¶ warming. Transportation accounts for a full third of CO2 emissions in the United States, and that¶ share is growing as others shrink in comparison, rising from 31 percent in 1990 to 33 percent¶ today It is hard to envision a “solution” to the global warming crisis that does not involve¶ slowing the growth of transportation CO2 emissions in the United States.

## Impacts

### 1NC

#### Ext. Maya 08: Urban sprawl causes all environmental atrocities

#### Ext. Molly 7/6: This warming can and will cause extinction

#### Extinction

Tickell 8 (Oliver Tickell, Environmental Researcher, 2008, “On a planet 4C hotter, all we can prepare for is extinction”, http://www.guardian.co.uk/commentisfree/2008/aug/11/climatechange)

We need to get prepared for four degrees of global warming, Bob Watson [PhD in Chemistry, Award for Scientific Freedom and Responsibility from the American Association for the Advacement of Science] told the Guardian last week. At first sight this looks like wise counsel from the climate science adviser to Defra. But the idea that we could adapt to a 4C rise is absurd and dangerous. Global **warming on this scale would be a catastrophe that would mean**, in the immortal words that Chief Seattle probably never spoke, "the end of living and the beginning of survival" for humankind. Or perhaps the beginning of our **extinction**. The collapse of the polar ice caps would become inevitable, bringing long-term sea level rises of 70-80 metres. All the world's coastal plains would be lost, complete with ports, cities, transport and industrial infrastructure, and much of the world's most productive farmland. The world's geography would be transformed much as it was at the end of the last ice age, when sea levels rose by about 120 metres to create the Channel, the North Sea and Cardigan Bay out of dry land. Weather would become extreme and unpredictable, with more frequent and severe droughts, floods and hurricanes. The Earth's carrying capacity would be hugely reduced. Billions would undoubtedly die. Watson's call was supported by the government's former chief scientific adviser, Sir David King [Director of the Smith School of Enterprise and the Environment at the University of Oxford], who warned that "if we get to a four-degree rise it is quite possible that we would begin to see a runaway increase". This is a remarkable understatement. The climate system is already experiencing significant feedbacks, notably the summer melting of the Arctic sea ice. The more the ice melts, the more sunshine is absorbed by the sea, and the more the Arctic warms. And as the Arctic warms, the release of billions of tonnes of methane – a greenhouse gas 70 times stronger than carbon dioxide over 20 years – captured under melting permafrost is already under way. To see how far this process could go, look 55.5m years to the Palaeocene-Eocene Thermal Maximum, when a global temperature increase of 6C coincided with the release of about 5,000 gigatonnes of carbon into the atmosphere, both as CO2 and as methane from bogs and seabed sediments. Lush subtropical forests grew in polar regions, and sea levels rose to 100m higher than today. It appears that an initial warming pulse triggered other warming processes. Many scientists warn that **this historical event may be analogous to the present**: **the warming caused by human emissions could propel us towards a similar hothouse Earth**.

### Turns Case

#### Urban sprawl incites economic collapse

Michael **Mehaffy** and Galina **Tahieva, 2011**, (Michael Mehaffy is a strategic planning consultant based in Portland, Oregon, and a leader of the Sprawl Retrofit Initiative of the Congress for the New Urbanism; Galina Tachieva is a partner in Duany Plater-Zyberk & Company, Architects and Town Planners, and author of the Sprawl Repair Manual.) “The Unbearable Cost of Sprawl”, <http://www.theatlanticcities.com/jobs-and-economy/2011/11/the-unbearable-cost-of-sprawl/423/>

It's no secret that America's sprawling, car-dependent exurbs were Ground Zero for the economic meltdown. These "drive 'til you qualify" communities were built on risky decisions and over-leveraged debt—buyers betting that the price of gasoline for commuting wouldn't go up too much, or that they'd be able to sell their pricey McMansions before their artificially low mortgages reset. Millions of homeowners lost that bet, and the entire world paid the economic price. But we haven't gotten rid of the danger. In fact, the worst might be yet to come. Energy costs continue to skyrocket, making travel and heating exorbitant. New research suggests sprawl is hurting our health. For example, rates of obesity in unwalkable suburbs are near epidemic levels. And local municipalities that tried to grow their tax base through sprawl may soon be overwhelmed by the extra costs of maintenance. We can't afford to throw these places away, as they represent a huge investment of resources, energy and human capital. Luckily, some promising new tools are emerging to retrofit sprawling neighborhoods into walkable and sustainable communities. To do that, planners should take advantage of these principles:

### Obesity

#### Urban sprawl has increased obesity in the U.S by around 20%

**Zhao ‘7** (Zhenxiang, Department of Economics, University of Illinois at Chicago, published in the Journal of Health Economics, Vol. 29 pgs 7779-906, Pre-Doctoral Fellowship from Chicago Center of Excellence in Health Promotion Economics and the Provost Awrds for Graduate Research from UIC)

Over the past thirty years, the prevalence of obesity in the US increased dramatically. Between 1960-1962 and 2004, the proportion of adults who were obese increased from 13.4% to 32.2% (Flegal at al. 2002; Ogden et al. 2006). This increase is worrisome because obesity has been found to be significantly associated with type II diabetes, high blood pressure, high cholesterol, asthma and poor health status. Obesity has been estimated to have caused 365,000 deaths in 2000 (Mokdad et al., 2005). Further, obesity-related morbidity has been estimated to account for 9.1% of total annual U.S. medical expenditures in 1998 ($92.6 billions in 2002 dollars). 1 Public financing of these costs is considerable since half of all health care is paid by government through Medicare and Medicaid (Finkelstein et al., 2003). The spatial distribution of the population in the United States also has changed over the same period. Between 1950 and 2000, the share of the population living in metropolitan areas has grown from 56% to 80% (Transportation Research Board Special Report 282, 2005). While a greater proportion of the population is living in urban areas broadly defined, all of the growth in metropolitan areas occurred in suburban areas, as central cities actually declined in population (Baum-Snow, 2007). In 1950, the population of metropolitan areas was roughly evenly divided between the suburban fringe and the central city; currently, approximately two-thirds of the population of metropolitan areas resides in the suburbs, and this proportion has been rising (Pisarski, 2001). Table 1 shows that between 1970 and 2000, the population weighted population density for 53 major metropolitan areas has fallen over 19% with more dramatic declines observed for the densest parts of metropolitan areas. Urban sprawl, characterized by low-density development patterns, has been found to be related to higher rates of obesity (Ewing, 2003; Frank et al., 2004; Lopez, 2004; Giles Corti et al., 2003; Saelens et al., 2003).2 Increased distance between home and destination, and poor accessibility to amenities that come with low-density development patterns increase the reliance on the automobile for many purposes and minimize walking. Furthermore, the lack of sidewalks or bicycle trails and the cul-de-sac street layouts of large residential developments may also affect residents’ propensity to be physically active by walking less or bicycling less. In addition, greater availability of large chain stores (big box stores) in the suburbs would lead to lower costs of food. All of this is hypothesized to result in changes of obesity rates (Berrigan et al., 2002; Saelens et al., 2003; Cervero et al., 1995; Handy, 1996; Hess et al., 1999; Boarnet et al., 2000; Crane et al., 1998; Chung, 1999).

#### Australian empirics collude

**Garden and Jalaludin ‘9** (Frances L. and Bin B New South Wales Health Department, Center for Epidemiology and Research, Sydney, Australia, Center for Research, Evidence Management and Surveilance, Sydney South West Area Health Care Service, School of Public Health and Community Medicine, University of New South Wales)

Significant, positive associations between urban sprawl and the likelihood of being overweight, obese, inadequate physical activity, and no time spent walking during the past week after controlling for individual and area level covariates were demonstrated in this study. The results shown are for a decrease of 1,000 persons per square kilometer. However, if the odds ratios for an inter-quartile increase in urban sprawl (a population decrease of 2,755 persons per square kilometer) is considered, where this increase is similar to moving from an inner city suburb to an outer suburb of Sydney, an adult living in the outer suburbs of Sydney has 1.28 times the odds of being overweight (95% CIhttp://www.ncbi.nlm.nih.gov/corehtml/pmc/pmcents/x2009.gif=http://www.ncbi.nlm.nih.gov/corehtml/pmc/pmcents/x2009.gif1.10–1.44), 1.47 times the odds of being obese (95% CIhttp://www.ncbi.nlm.nih.gov/corehtml/pmc/pmcents/x2009.gif=http://www.ncbi.nlm.nih.gov/corehtml/pmc/pmcents/x2009.gif1.24–1.75), 1.38 times the odds of inadequate physical activity (95% CIhttp://www.ncbi.nlm.nih.gov/corehtml/pmc/pmcents/x2009.gif=http://www.ncbi.nlm.nih.gov/corehtml/pmc/pmcents/x2009.gif1.21–1.57), and 1.58 times the odds of not spending any time walking during the last week (95% CIhttp://www.ncbi.nlm.nih.gov/corehtml/pmc/pmcents/x2009.gif=http://www.ncbi.nlm.nih.gov/corehtml/pmc/pmcents/x2009.gif1.28–1.93) compared to an adult living in an inner city suburb.

## Misc

### States solve for this

#### States solve for Urban Sprawl

Maya 8, (Michael M. Maya, Professor of Law at NYU, New York University Law Review: Transportation Planning and The Prevention of Urban Sprawl, <http://www.law.nyu.edu/ecm_dlv3/groups/public/@nyu_law_website__journals__law_review/documents/documents/ecm_pro_058032.pdf>)

In recent years, a number of states have passed comprehensive land use reform bills. Many of these statutes have appeared in response to the phenomenon of urban sprawl—a pattern of haphazard, automobile-dependent development on the fringes of existing cities. With rising personal incomes and persistent consumer demand for single-family homes on large lots in ethnically and physically homogeneous jurisdictions, urban sprawl has boomed. Fearful of the myriad costs of sprawl—which many commentators have chronicled—some states have acted to prevent it altogether. The most egregious costs of sprawl include the abandonment of urban centers, severe air and water pollution, and the loss of open green spaces. In economic terms, sprawl also vastly increases transportation costs for residents and workers who must travel greater distances to reach their homes, their jobs, and other destinations. Without statewide coordination, sprawl is difficult to prevent. For example, if one county prohibits the subdivision of its farmland into low-density residential lots, a neighboring county will not necessarily do the same. In fact, precisely because the restrictive county has stifled consumer demand, its neighbor may have greater incentives (in the form of spillover demand) to permit sprawling development. In addition, neither county is likely to be particularly well attuned to the negative effects of sprawl, which are often geographically and temporally dispersed and thus less salient for many local politicians. To combat these structural and political problems, some states have addressed sprawl as a matter of statewide, rather than local, concern.

## A-To

### A-To Urban Sprawl Good

#### C/all impacts Maya 08 saying how they upset every single possible vulnerability in the environment then also Molly 7/6 giving an extinction scenario, urban sprawl causes extinction

#### <Also read “turn case” cards and explain how this proves that urban sprawl is bad>