

# Building Better Communities: *A Toolkit for Quality Growth*

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The American Consulting Engineers Council (ACEC) is the largest national organization of engineers engaged in the practice of consulting engineering. It is comprised of 52 state and regional Member Organizations, representing more than 5,700 independent engineering firms throughout the United States. These firms employ a quarter of a million engineers, architects, land surveyors, scientists, technicians, or other professionals, who design some \$100 billion of private and public works annually.

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The American Highway Users Alliance is a nonprofit advocacy organization serving as the united voice of the transportation community promoting safe and efficient highways and enhanced freedom of mobility. Known as The Highway Users, the group has worked for sound public policy in the United States since 1932. The Highway Users' membership includes over 250 national trade associations, corporations, small businesses and other state and local nonprofit organizations that represent 45 million highway users.

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Established in 1902, ARTBA is the only association that exclusively represents the legislative and regulatory interests of the \$160 billion per year U.S. transportation construction industry in the Nation's Capital. The association's membership includes construction contractors, engineering firms, heavy equipment and safety device manufacturers and distributors, materials suppliers, state and local transportation officials, educational and research facilities and private-sector financiers of transportation projects.

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The Associated General Contractors of America (AGC) is the nation's largest and oldest construction trade association, founded in 1918. AGC represents more than 33,000 firms, including 7,500 of America's leading general contracting firms. AGC's general contractor members have more than 25,000 industry firms associated with them through a network of 100 AGC chapters.

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The Construction Industry Manufacturers Association (CIMA) is a full service trade association representing over 500 construction equipment manufacturers and services providers. CIMA is a co-producer of the CONEXP-CON/AGG international exposition for the construction, aggregates, and ready mixed concrete industries.

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The Equipment Manufacturers Institute (EMI) provides trade association services on a worldwide basis to companies that manufacture and market most of the agricultural, construction, forestry, materials handling and utility equipment used throughout the world. EMI's 140 voting members manufacture and place whole goods in the marketplace, mostly through independent equipment distributors and dealers.

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The Laborers-Employers Cooperation and Education Trust (LECET) is a partnership between the 750,000-member Laborers' International Union of North America (LIUNA) and its affiliated construction and environmental contractors. The Trust generates business opportunities for LIUNA's partner employers and, consequently, jobs for LIUNA's well-trained, highly-skilled members.

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The National Asphalt Pavement Association (NAPA) is the national trade association representing the interests of the Hot Mix Asphalt (HMA) Industry. NAPA is dedicated to the proposition that high performance Hot Mix Asphalt pavements are in the best interests of the nation and its mobility as expressed in its world—recognized system of roads, streets and highways.

### **National Stone Association**

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The National Stone Association is the national trade association representing the many interests and concerns of the aggregate industry. The association, founded in 1918, is based in the nation's capital. It provides support to member companies in such areas as governmental and public affairs; operations and productivity improvement; market development; engineering and technical research; and safety, health, and environmental enhancement.

### **National Utility Contractors Association**

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The National Utility Contractors Association is comprised of nearly 2,000 member companies, including 41 chapters nationwide, which help build and maintain our nation's network of sewer, water, gas, cable, and other underground utility systems.

### **The Road Information Program**

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Founded in 1971, TRIP is a nonprofit organization that promotes transportation policies which relieve traffic congestion, improve air quality, make highway travel safer and enhance economic productivity.

### **Transportation Construction Coalition**

The Transportation Construction Coalition (TCC) is a group of 27 national associations and labor unions with a direct market interest in the federal transportation programs. The unique membership of the TCC enables the coalition to articulate the impact of federal policies and investment levels on all aspects of the transportation construction industry. TCC member organizations represent contractors, the planning and design community, materials and manufacturing industries and their employees. The TCC is co-chaired by the American Road & Transportation Builders Association and the Associated General Contractors of America.

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**OUR VISION FOR QUALITY GROWTH  
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# OUR VISION FOR QUALITY GROWTH

Across the country, Americans are talking about the pace of growth in their communities and the challenges associated with it. They are discussing how to manage future development, alleviate traffic congestion, prevent overcrowding in schools, preserve open space, and revitalize deteriorated urban and suburban neighborhoods.

With rising prosperity during the last half of the 20th century, it is no wonder that the nation has witnessed an unprecedented increase in the number of Americans who own homes and an equally significant advance in the average citizen's personal mobility. Today, more than half the population lives in the suburbs, 40 percent of jobs are located in the suburbs and most workers commute from one suburb to another.

Since 1970, the U.S. population has increased by 32 percent, vehicle miles traveled is up by 131 percent, the number of licensed drivers climbed by 64 percent and the number of vehicles jumped 90 percent, according to the U.S. Census Bureau (1990) and the U.S. Department of Transportation. In contrast, national road mileage grew during the same period from 3,730,082 miles in 1970 to 3,944,601 in 1997—an increase of just 5.7 percent. Consequently, urban freeways are more congested than ever.

The movement of people and jobs from core cities to suburbs and the increased personal mobility afforded by automobiles has significantly improved the quality of life for millions of Americans. Yet, those changes also have created problems that many growing communities face today.

Decisions made about these issues will have a profound effect on the quality of life for future generations. While most Americans want effective, common sense solutions to the challenges related to economic and population growth, few

would support policies that limit individual choices about where to live and how to travel.

This document, *Building Better Communities: A Toolkit for Quality Growth*, is a toolkit divided in two sections that can help citizens, civic leaders, and elected officials identify effective, common-sense solutions that will work in their communities. Part One of the toolkit, called "Knowing the Facts" provides information on suburban development, traffic congestion, and other growth-related issues. Part Two, called "Building a *Quality Growth* Campaign," provides suggestions on building a coalition of community supporters, developing appropriate information and materials to support coalition activities, getting the coalition actively involved in transportation planning, and delivering the message effectively to the media, public officials, and civic groups.

Five simple principles have guided the development of the *Quality Growth Toolkit*:

- Americans are and should remain free to choose where they live and how they travel, and public policies related to future growth should not limit those choices.
- Economic development and population growth confer benefits on communities if the challenges associated with them are properly managed.
- Citizens should have an opportunity to participate in decisions affecting future growth in their communities.
- Infrastructure investments should reflect public sentiment and needs, and transportation improvements should be aimed at improving road safety, in addition to accommodating, rather than stifling, projected growth in travel.

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*...few [Americans]  
would support policies  
that limit individual  
choices about where to  
live and how to travel.*

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- As our nation continues to grow, environmental improvement and economic development should complement each other to produce healthy, vibrant communities.

This toolkit provides information, talking points, and case studies on methods to relieve traffic congestion, preserve undeveloped space in neighborhoods, provide transportation facilities to accommodate residential and commercial growth, and improve air quality. It also provides a list of outside information resources on transportation issues and step-by-step instructions for developing a campaign to improve mobility in one's own growing community.

Quality growth means taking a balanced, sensible approach to solving a community's growth-related problems. A balanced approach means using all the tools at our disposal. Flexible work schedules and telecommuting would help relieve traffic congestion. Transit—including private transit such as vans that pick people up at home and drop them at their office door—can also make a difference. In addition, however, we need to explore ways to make the existing road system more efficient: synchronized traffic lights for smoother flowing traffic, reversible commuter lanes, and computerized systems to route traffic around congested areas. In areas where highway capacity has not kept pace with new business and housing development, we need to add lanes or build new roads to accommodate the increased traffic.

To preserve open space, local governments and private citizens should work together to set aside undeveloped land. Federal and state officials should ensure that tax policy, such as the estate tax, does not force farmers and landown-

ers to sell parcels of undeveloped property. Equally important, however, local zoning laws should take into account most Americans' desire to have their own open space in the form of a backyard or local playground.

Public officials should take into account local economic conditions, aesthetic values, and other quality-of-life issues when making land-use plans and developing zoning laws. Traditionally and appropriately, county planning commissions, city boards, and other local planning authorities have developed these laws; such entities should retain these responsibilities. Efforts to regulate the pace and geographic scope of development in a community should be tempered with an understanding of the effects that zoning restrictions may have on housing and commercial prices. It is important to ensure that future generations will be able to pursue the American dream of home ownership.

Our quality growth philosophy is the foundation for this toolkit and the basis for fostering more vibrant and healthy communities and building a better future. We hope this toolkit is helpful and supports local campaigns for greater mobility. Addressing the challenges of economic development and population growth is important. It will require a dialogue, community by community. Common sense, though, will lead public officials to solutions that can improve the quality of life for everyone.

#### Endnotes

U.S. Census Bureau. (1990). *1990 Census of Population and Housing*. Washington, D.C.

U.S. Department of Transportation. *American Travel Survey*. Washington, D.C.

**PART ONE:**  
**KNOWING THE FACTS**  
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**PLANNING FOR QUALITY GROWTH:  
BUILDING BETTER COMMUNITIES  
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# PLANNING FOR QUALITY GROWTH: BUILDING BETTER COMMUNITIES

## Background

People living in growing communities are benefiting from the many by-products of growth. Growth in suburban areas often is the result of new businesses and new jobs, producing a larger tax base and a stronger local economy. Growth in communities also provides individuals with more choices for shopping, dining, daycare, health care, recreation, and entertainment. There is a general feeling of progress driven by newcomers finding homes, schools, and jobs to improve their quality of life. A recent poll indicates that nearly three-quarters of Americans agree that growth, when managed properly, is good for the community.

People choose where they live based on the perception of good schools and safe streets. However, if not addressed effectively, increased traffic congestion, high rates of crime, crowded schools, and less open space can adversely affect citizens' quality of life. Consequently, people across the nation are debating what to do about future growth in their communities.

Some want to accommodate growth by providing necessary public infrastructure—roads, schools, water and sewer systems, and so forth—and developing a comprehensive plan to preserve open space and maintain local aesthetic values. Others want to slow or stop growth entirely by limiting the number of building permits, drawing growth boundaries to prevent development outside the lines, and rejecting new road capacity that is necessary to accommodate new residential or commercial development.

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*...nearly three-quarters  
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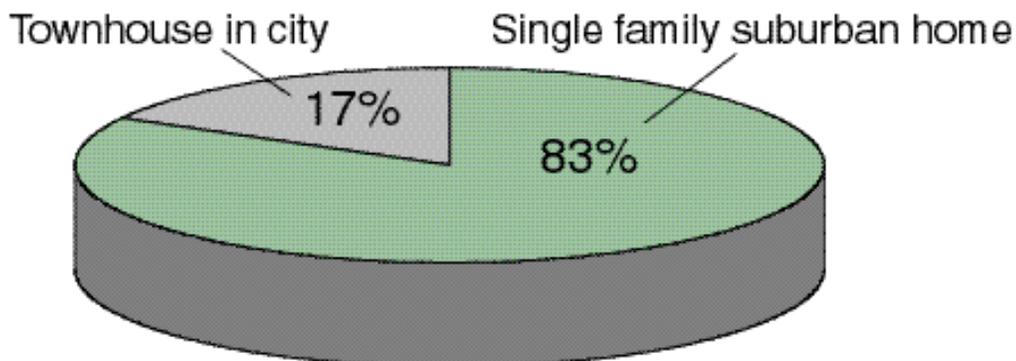
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## The Myth

Adopting restrictions on growth to curb new development and foster high-density residential and work

zones will create a more livable community by reducing traffic congestion, providing more desirable housing, preserving open spaces, and lowering the cost of public services and infrastructure. High-density development, by making transit, bicycling, and walking more viable alternatives to driving, will reduce traffic congestion.

## Americans Prefer Single Family Suburban Homes



Source: National Association of Home Builders

## The Facts

**America's population is growing, creating demand for new housing and an expanded transportation infrastructure.**

- Growth boundaries and other restrictions that limit development to areas where infrastructure already exists will severely curtail citizens' freedom to choose where they live and which mode of transportation they can use.
- The United States will need about 1.5 million new homes each year for the next decade to accommodate increases in population, according to the National Association of Home Builders (1999).
- In a nationwide survey by the National Association of Home Builders (NAHB), 83 percent of respondents said they would prefer a detached, single-family home in the suburbs instead of an equally priced townhouse in the city, even though the suburban home would entail longer distances to work, shopping, and public transportation.
- With a projected U.S. population increase of 60 million during the next 25 years, total travel also is expected to rise significantly, according to the U.S. Census Bureau (1990) and the U.S. Department of Transportation. The best way to accommodate travel increases without greater traffic congestion is to expand and improve all components of transportation systems.
- While growth boundaries or prohibitions against new construction may prevent development, thus preserving open space in particular areas, it is important to note that residential and commercial growth are fluid. If stopped in one place, growth will occur somewhere else. David Schulz (1998), a professor at Northwestern University, in comments made to the *Chicago Tribune*, concluded that inadequate road facilities in the developed areas of Chicago's suburbs has led to "hyper-sprawl" or noncontiguous, leap-frog growth.

**Growth boundaries and similar policies, which aim to increase a city's**

**population density by artificially limiting the supply of developable land, tend to increase housing costs.**

- The nation's 25 most affordable housing markets have an average population of 1,260 people per square mile, while the 25 most expensive housing markets have an average density that is three times as high—3,170 people per square mile—according to NAHB's housing-affordability index.
- Disproportionate shares of the nation's least-affordable housing markets are in Oregon, where growth boundaries have been in effect for more than 20 years. Rapid population growth may account for some of the increased housing costs in Portland, Eugene, Salem, and Medford, but other fast-growing cities, such as Denver, Las Vegas, and Phoenix, are not included among the nation's most expensive housing markets. The NAHB index shows that the artificial shortage of land created by Oregon's growth boundaries has made home ownership unaffordable for some residents.

**Environmental improvement and economic development can work together to enhance our nation's quality of life.**

- Building better communities means meeting human needs for natural resources, industrial products, energy, food, transportation, shelter, and effective waste management while improving environmental quality and conserving natural resources essential to future development.
- Economic competition drives companies to produce high-quality products using fewer raw materials, resulting in better management of our nation's resources.

**Additional road capacity is a necessary part of a comprehensive plan to reduce traffic congestion in growing areas.**

- An analysis of the Texas Transportation Institute's (1999) annual study of traffic congestion in the nation's 68 largest cities indicates a significant correlation between increased urban density and higher levels of traffic congestion. As population increases, additional road capac-

ity and other measures are needed to avoid increased congestion.

- Regardless of density, driving accounts for more than 80 percent of commuter trips in every urban area of the United States except New York City, according to the U.S. Department of Transportation.
- The best way to relieve traffic congestion is through long-term regional planning that includes a variety of measures, such as computerized traffic signals, programs to expedite the removal of stalled cars and other roadway obstructions, construction of more turn lanes and new roads where needed, and improved safety and efficiency of transit.
- While traffic congestion is worsening across the country, according to the Texas Transportation Institute (TTI), cities that have aggressively added road capacity in response to regional growth have had smaller increases in congestion than have other areas.

## Our Position

America's population is growing, creating demand for new housing and an expanded transportation infrastructure. As Americans address the challenges associated with community growth, we should continue to emphasize development that preserves each person's right to choose where to live and how to travel.

Effective community development should take into account the type of open spaces, transportation facilities, housing, and commercial space desired by local citizens. Results of a

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*Effective community development should take into account the type of open spaces, transportation facilities, housing, and commercial space desired by local citizens.*

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NAHB (1999) survey showed that Americans strongly prefer to live in detached, single-family homes with easy access to highways and neighborhood parks. The survey shows that the public adamantly rejects higher density development plans currently being implemented in certain parts of the country as solutions to growth issues. Those attitudes must be taken into account at all levels, especially at the local level where planning decisions should take place.

Efforts to regulate the pace and geographic scope of development in a community

should be tempered with an understanding of the impact that zoning and growth restrictions or inadequate road capacity can have on housing, prices, and traffic congestion. It is important to ensure that future generations will be able to pursue the American dream of affordable home ownership.

### Endnotes

- National Association of Home Builders. (1999). *Housing Opportunity Index, First Quarter 1999*. <[www.nahb.com](http://www.nahb.com)>.
- Schulz, David. (1998, November 16.) Quoted in "Congestion and Sprawl Pave Way for Debate," *Chicago Tribune*.
- Texas Transportation Institute. (1999.) *Urban Roadway Congestion Annual Report 1999*. College Station, TX: Texas A&M University.
- U.S. Census Bureau. (1990). 1990 *Census of Population and Housing*. Washington, D.C.
- U.S. Department of Transportation. *American Travel Survey*. Washington, D.C.

**A CRITIQUE OF “SMART-GROWTH” PLANS  
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# A CRITIQUE OF “SMART-GROWTH” PLANS

## Background

Across the country and particularly in large metropolitan regions, people are talking about growth. While most appreciate the tremendous economic and social benefits that come with growth, many people are expressing concern over “growing pains,” such as traffic congestion, school overcrowding, and the development of open spaces.

Some advocates and politicians have coalesced behind a set of growth strategies they describe as “smart growth.” To these proponents, “smart growth” means the imposition of growth boundaries to limit development in the suburbs, thereby decreasing the average person’s living space (for example, allowing only the development of high-rise apartments and townhouses) and stopping new infrastructure investments (such as roads, waterlines, and sewers).

## The Myth

“Smart-growth” practices, such as the imposition of suburban growth boundaries, increasing housing density, and transportation policies that invest more in rail transit and less in road improvements, will reduce traffic con-

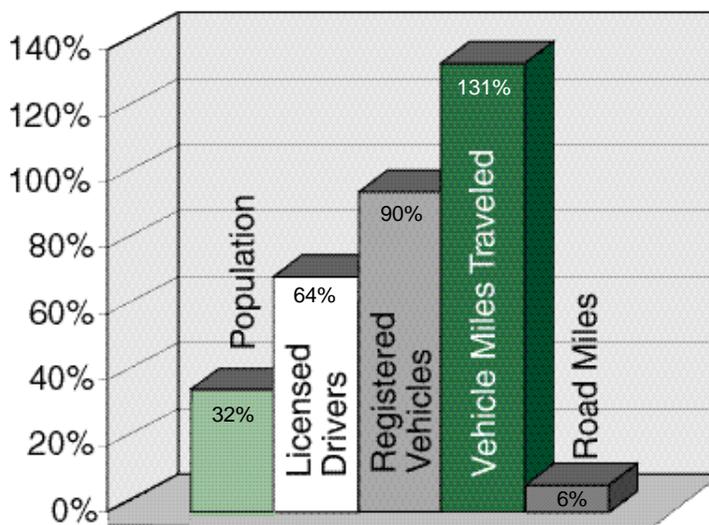
gestion, slow suburban development, and make communities more livable.

## The Facts

**Americans value their freedom to choose where to live and work and how to travel. “Smart-growth” plans aimed at decreasing personal living space and stopping new roads and road improvements will significantly limit home and travel choices.**

- Americans are choosing to drive more now than ever. Since 1970, the U.S. population has grown by 32 percent, the number of licensed drivers by 64 percent, the number of vehicles by 90 percent, and the number of miles driven each year by an amazing 131 percent (U.S. Census Bureau 1990; U.S. Department of Transportation).
- Increased travel requires additional road capacity to avoid congestion. While the number of miles driven annually has increased 131 percent over the past three decades, road mileage in the United States grew from 3,730,082 miles in 1970 to 3,944,601 miles in 1997—an increase of just 5.7 percent (U.S. Department of Transportation).

## Increases in Travel Demand and Road Capacity Since 1970



Source: Federal Highway Administration & U.S. Census Bureau

- As a result, more than 31 percent of urban freeways are congested, and congestion now costs Americans more than \$72 billion a year in wasted time and fuel, according to the Texas Transportation Institute (1999).
- More than ever, Americans are choosing to live and work in the suburbs. Over half the population now lives in the suburbs, where 40 percent of jobs are located. Most workers commute from one suburb to another since more jobs are being created in the suburbs than anywhere else, according to transportation expert Alan Pisarski (1996).
- Growth boundaries and similar restrictions on development can make housing less affordable, limiting the choices available to homebuyers.
- Many of the factors that suburbanites list as top priorities in deciding where to live—an affordable, spacious house with a yard and low traffic congestion—are incompatible with the “smart-growth” vision of high-density, apartment-style living and restricted highway capacity.

**Severe restrictions on growth promote high-density living and prevent the construction and improvement of roads, thereby leading to further traffic congestion.**

- Regardless of density, driving accounts for more than 80 percent of all commuter trips in every urban area in the United States except New York City, according to U.S. Department of Transportation. The Texas Transportation Institute (TTI) has compared urban population densities with patterns of automobile travel and concluded that congestion gets worse as density increases unless highway capacity also increases.
- Increased density may result in lower *per-person* automobile use, but total automobile use increases with density because of the higher population in the affected area. For example, if doubling the population density in a region cuts automobile use by 20 percent on a per-capita basis, total automobile use will rise by

60 percent. Additional road capacity will be necessary to avoid increased congestion.

**A fundamental problem with encouraging high-density, apartment-style living is that most people choose to live otherwise.**

- In NAHB’s nationwide survey, 83 percent of respondents said they would prefer a detached, single-family home in the suburbs instead of an equally priced townhouse in the city, even though the suburban home would necessitate longer distances to work, shopping, and public transportation.

**By artificially limiting the supply of available land, growth boundaries drastically increase housing costs.**

- For example, disproportionate shares of the nation’s least affordable housing markets are in Oregon where growth boundaries have been in effect for more than 20 years. Rapid population growth may account for some of the increased housing costs in Portland, Eugene, Salem, and Medford, but other fast-growing cities, such as Denver, Las Vegas and Phoenix, are not included among the nation’s most expensive housing markets. The artificial shortage of land created by Oregon’s growth boundaries has made home ownership unaffordable for some residents.
- Growth boundaries create higher population densities by channeling new residential and commercial development into areas within the boundary. High-density housing generally equals more-expensive housing. The NAHB’s housing-affordability index indicates that the nation’s 25 most affordable housing markets have an average population of 1,260 people per square mile, while the 25 most expensive housing markets have an average density more than two-and-a-half times higher (3,170 per square mile).

**We should focus first on preserving open, green space close to home, such as neighborhood playgrounds, rather than large tracts of land in distant areas.**

- Most people expressing an interest in the preservation of open, undeveloped space want

that space close to home. They want larger backyards, neighborhood playgrounds, and city parks, market research has indicated.

- A prohibition against development in one area will inevitably result in development (and the elimination of open space) elsewhere. Efforts to preserve large tracts of open space by imposing growth boundaries or similar development restrictions can create leap-frog, noncontiguous development, described as “hyper-sprawl” by David Schulz (1998).

## Our Position

Americans value their freedom to choose where they live and work and how they travel. People continue to live and work in the suburbs because they enjoy the quality of life in those communities. So-called “smart-growth” plans aimed at increasing housing densities and limiting highway capacity will restrict home and travel choices.

While some growth management is necessary to help alleviate the challenges associated with growth, such policies should follow, and not dictate, public sentiment. Growth-management policies must work with, not against, the overwhelming housing preference in this country: the detached, single-family home. While

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*Growth-management policies must work with, not against, the overwhelming housing preference in this country: the detached, single family home.*

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transit plays an important role in serving the transportation needs of some commuters, most Americans rely on the mobility and flexibility of travel offered them by the automobile. Growth management policies that restrict mobility, such as the failure to build needed road capacity, run counter to the needs and choices of most Americans.

“Smart-growth” policies, particularly those aimed at increasing urban density, often lead to higher housing costs and increased traffic congestion.

Building additional road capacity is an effective way to reduce traffic congestion and make transportation more efficient. Policies aimed at shifting people out of private vehicles and into public transit have been ineffective as people continue to meet the growing demand for mobility by making travel decisions based on convenience, cost, comfort, and safety. Policies aimed at preserving open, green space should focus on areas close to home. Americans prefer larger backyards, neighborhood playgrounds, and city parks to tracts of land in outlying areas.

### Endnotes

National Association of Home Builders. (1999). *Housing Opportunity Index, First Quarter 1999*. <[www.nahb.com](http://www.nahb.com)>.

Pisarski, Alan. (1996). *Commuting in America II*. Washington, D.C.

**TRAFFIC CONGESTION**  
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# TRAFFIC CONGESTION

## Background

Traffic congestion is getting worse throughout the country and is becoming a major concern of the American public. Recent public opinion polls nationwide show consistently that increased traffic congestion is among the top two or three factors people cite as having a major impact on their daily lives.

A 1999 study by the Texas Transportation Institute (TTI) shows that traffic congestion is no longer just a big city problem: Traffic congestion is growing in small- and medium-sized markets at an even faster rate than in urban areas. Increasingly, major roads are becoming congested, and rush hours are lengthening.

Anti-road groups cite traffic congestion as one of the biggest problems caused by rapid growth of neighborhoods and communities. These groups advocate policies to restrict road-capacity improvements and impose or encourage high-density and mixed-use developments designed to make transit, bicycling, and walking more practical as alternatives to driving.

## The Myth

“You can’t build your way out of congestion,” or, “Build it and they will come.” These two phrases summarize the theory of induced travel. Building more roads leads to an increased number of cars and vehicle travel, thereby exacerbating congestion and increasing development.

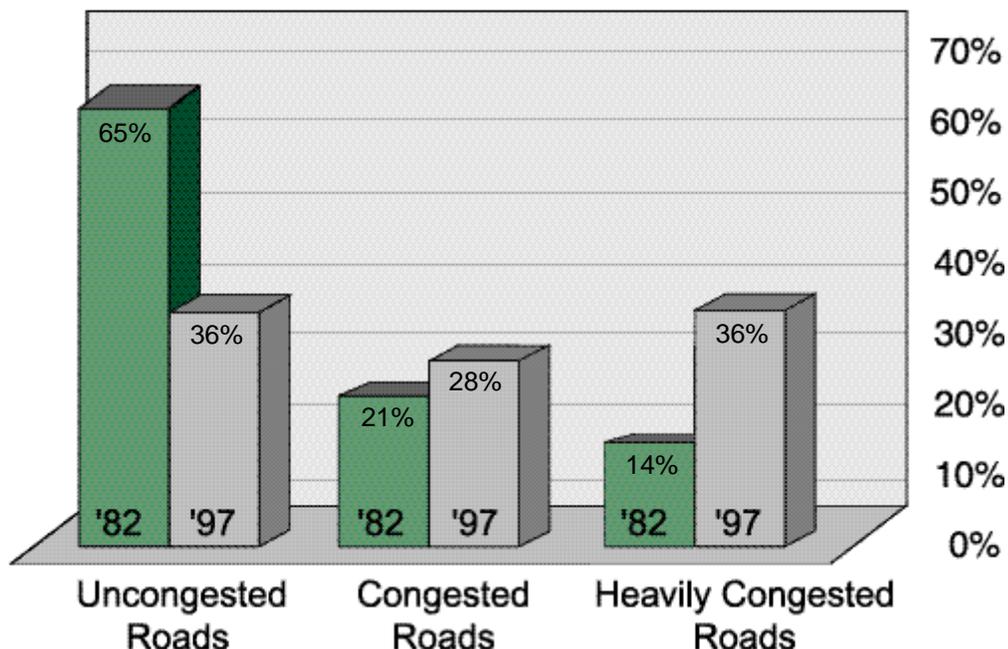
## The Facts

**Traffic congestion is growing nationwide, leading to increased costs to motorists in wasted time and fuel use.**

According to TTI (1999):

- More than 31 percent of urban freeways throughout the country are congested.
- Traffic congestion costs motorists more than \$72 billion a year in wasted time and fuel costs.
- Americans waste more than 4.3 billion hours per year stuck in traffic—approximately 34 hours per driver.

## Congestion is Increasing in 70 of the Nation’s Largest Urban Areas



Source: Texas Transportation Institute

- The amount of time motorists in small- and medium- sized cities spend stalled in traffic has more than quadrupled since 1982, and this figure is growing at a much faster rate than in larger cities.

**Highway travel in the United States is growing and will continue to grow in the years ahead.**

- Over the past quarter-century, highway travel in the United States has increased by 131 percent and the population has increased by 32 percent, while road mileage has grown from 3,730,082 miles in 1970 to 3,944,601 miles in 1997, an increase of just 5.7 percent (U.S. Census Bureau 1990; U.S. Department of Transportation).
- The U.S. Census Bureau estimates that the population of the United States will grow by 60 million people between 1995 and 2020.
- Highway travel is forecasted to increase about 40 percent by 2015, according to the U.S. Department of Transportation.

**Building new roads and improving existing roads are effective ways of reducing traffic congestion and enhancing transportation efficiency; new and improved roads have only a limited effect on inducing new travel demand.**

- While traffic congestion is worsening across the country, according to the Texas Transportation Institute (TTI), cities that have aggressively added road capacity in response to regional growth have had smaller increases in congestion than have other areas.
- A 1998 Federal Highway Administration report found that increased vehicle travel on expanded road capacity is largely the result of traffic being diverted from nearby routes or from shifts in travel times. Diverting traffic reduces overall regional traffic congestion. The study concluded that only 5 to 13 percent of the new traffic on expanded urban highways is attributable to new highway travel actually induced by the expanded capacity.
- A study by the University of Illinois at Chicago (1998) of regional development patterns in the Chicago area did not find a connection

between road building and rapid growth of neighborhoods and communities. Chicago has experienced tremendous suburban growth despite the lack of any new urban highways. This study concluded that urban decentralization was caused largely by increasingly affluent residents and businesses pursuing their preferences in lifestyles, environments, and community amenities.

- The General Accounting Office (1999), an investigative arm of Congress, recently concluded that many factors contribute to urban dispersal. The relationships among these factors are so complex that it is very difficult to assess what roles are played by individual factors, such as highway development.

## Our Position

The best way to reduce traffic congestion is through better long-term regional planning that incorporates a comprehensive approach to expand and improve our nation's transportation system. To achieve this goal, we should use all of the tools at our disposal, including computerized traffic signals and new computer technology to improve traffic flow, additional turn lanes at crowded intersections, safer and more convenient transit, and, where appropriate, wider roads and new roads. This also includes strategies in the private sector to promote options that do not involve the use of our transportation system, such as employee flextime and telecommuting.

### Endnotes

Federal Highway Administration, *Highway Statistics 1997*, Washington, D.C.

General Accounting Office. (1999). *Community Development: Extent of Federal Influence on "Urban Sprawl" is Unclear*. <[www.gao.gov](http://www.gao.gov)>.

Texas Transportation Institute. (1999.) *Urban Roadway Congestion Annual Report 1999*. College Station, TX: Texas A&M University.

University of Illinois at Chicago, Urban Transportation Center. (1998).

**AIR QUALITY**  
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# AIR QUALITY

## Background

The nation's air quality continues to improve, largely a result of the continued reduction in emissions from motor vehicles because of the ongoing improvements in vehicle and fuel technology, according to an analysis of the U.S. Environmental Protection Agency's (EPA) annual air quality trends report (1998). This reduction in overall highway vehicle emissions has occurred even while national levels of highway travel continue to increase. For example, highway travel *increased* by 131 percent during the last three decades, but tailpipe emissions of smog-causing volatile organic compounds (VOCs) *decreased* by 60 percent.

The level of emissions from individual vehicles depends on various factors, including the maintenance of the vehicle, driver behavior, and traffic conditions. Cars that are well maintained have lower levels of emissions. Vehicles also have lower levels of emissions at speeds between 15 and 60 miles per hour.

Vehicles that experience quick accelerations and variances in speed emit more pollutants. Therefore, traffic congestion can cause increased emissions because it results in slow-moving traffic, inefficient stop and go travel, and longer engine running times.

Projects that improve traffic flow and relieve traffic congestion improve air quality.

## The Myth

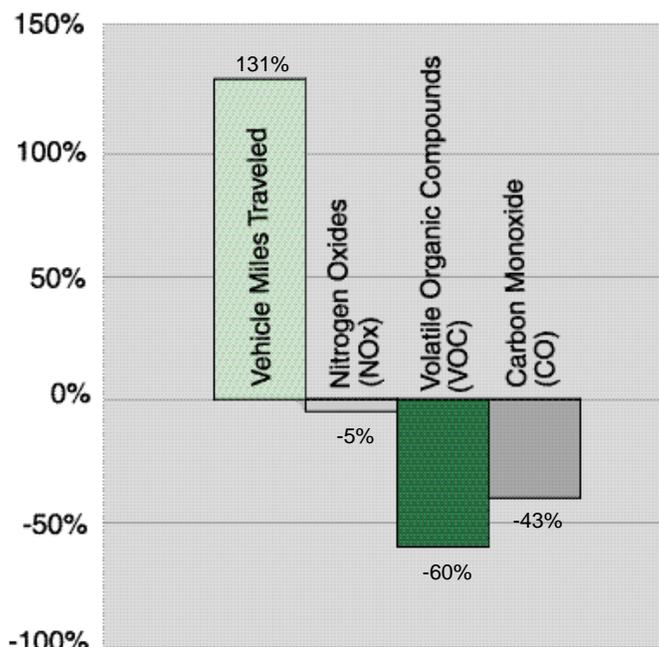
Meeting the nation's air quality goals will require that Americans reduce their level of private vehicle travel.

## The Facts

**The reduction in overall vehicle emissions has occurred at the same time highway travel has increased.**

The most critical emissions from cars and trucks are VOCs and nitrogen oxides (NO<sub>x</sub>). These two compounds react with sunlight to form ground-level ozone, which is the primary constituent of smog.

## Auto Emissions Decreased While Highway Travel Increased Dramatically (1970–1997)



Source: Federal Highway Administration and Environmental Protection Agency

Between 1970 and 1997, overall emissions from all U.S. highway vehicles declined significantly. According to EPA (1998):

- Volatile organic compounds decreased by 60 percent.
- Nitrogen oxides fell by 5 percent.
- Carbon monoxide decreased by 43 percent.
- Lead has been virtually eliminated.

These decreases have occurred despite continued significant increases in overall highway travel in the U.S. In fact, between 1970 and 1997, highway travel increased 131 percent, and the number of licensed drivers increased 64 percent nationally (U.S. Census Bureau 1990; U.S. Department of Transportation).

**The EPA predicts that motor vehicle emissions will continue to decrease through the year 2010 even as highway travel continues to increase.**

The EPA (1999) forecasts that between 1997 and 2010 vehicle emissions of:

- Volatile organic compounds will decrease by 30 percent.
- Nitrogen oxide will decrease by 31 percent.
- Carbon monoxide will decrease by 20 percent.

A variety of means, including the following, can decrease emissions of pollutants from motor vehicles:

- Properly maintaining the pollution technology installed on the vehicle

- Combining errands because pollution reduction equipment operates more efficiently when the engine is warm
- Improving transportation infrastructure to reduce congestion and eliminate stop-and-go driving

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## Our Position

Improving air quality is an important challenge that we must address in the most practical way possible. We should reject policy approaches that suggest that transportation improvements and air quality improvements are mutually exclusive. In fact, transportation improvements to reduce congestion and smooth the flow of traffic should be important components of a comprehensive plan to improve air quality.

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*Our nation's air quality is getting much better largely because of a combination of cleaner cars and improvements in fuel technology.*

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Our nation's air quality is getting much better largely because of a combination of cleaner cars and improvements in fuel technology. In contrast, programs encouraging citizens to reduce travel in their personal vehicles have not worked to improve air quality.

### Endnotes

U.S. Census Bureau. (1990). *1990 Census of Population and Housing*. Washington, D.C.

U.S. Department of Transportation. *American Travel Survey*. Washington, D.C.

U.S. Environmental Protection Agency. (1998). *National Air Quality and Emissions Report*, Washington, D.C.

**TRANSIT  
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# TRANSIT

## Background

Transit continues to play an important role in providing Americans with mobility, and future increases in transit ridership would help meet the nation's growing transportation needs. Today, the nation's public and private transit systems operate mostly in several niche markets. These key markets include commuting, particularly along heavily traveled routes in large urban areas, mobility for those who are either unable or cannot afford to travel in a private vehicle, and for institutional travel, such as school busing. Increasing transit's modest share of overall travel, however, remains a significant challenge and may require some changes in how it is currently operated.

## The Myth

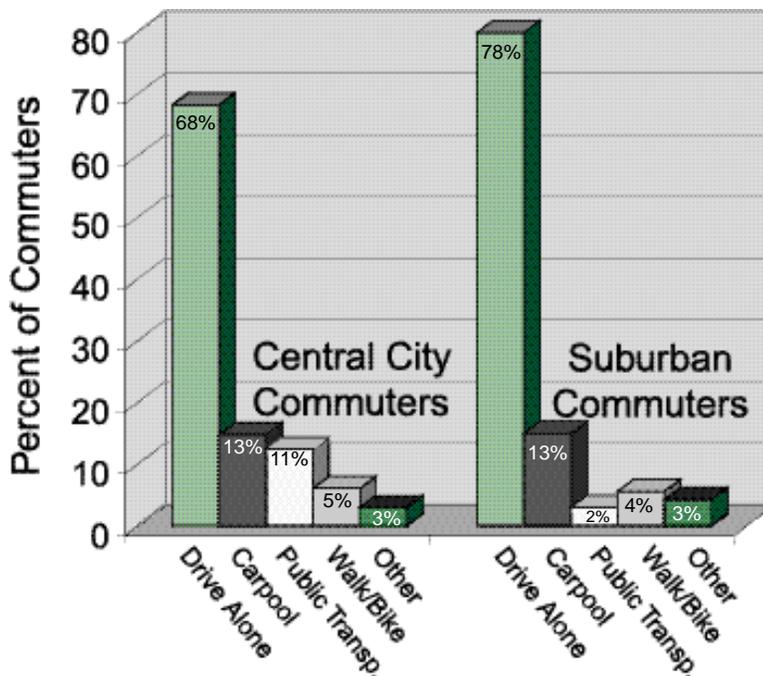
Increased ridership on public transit systems alone can meet the nation's additional future urban transportation needs and will reduce traffic congestion and improve air quality.

## The Facts

**Transit's share of travel has declined despite substantial public investments over the past 30 years.**

- Transit ridership in the United States peaked during World War II and then declined significantly as increased car ownership and suburban growth reduced population in the urban core, according to the American Public Transit Association (1999). The continued dispersal of homes and jobs to the suburbs and outer suburbs based on growing incomes and a desire for additional space have reduced the competitiveness of transit with private vehicles. While 11 percent of workers in central cities commute by transit, only 2 percent of suburban workers commute by transit.
- In 1991, Congress passed the Intermodal Surface Transportation Efficiency Act (ISTEA) which gave state and local governments unprecedented flexibility in using federal dollars, previously restricted largely to road and bridge projects, for public transit investments.

## How America Gets to Work



Source: U.S. Census Bureau and *Commuting In America II*

The additional federal funds have so far been unable to boost the share of travel on public transit. Between 1980 and 1995, the use of transit for commuting to work decreased from 6.3 percent to 3.5 percent with its overall share of travel standing at only 2.1 percent, according to a report by the Reason Foundation (1998).

- Time is a very precious commodity, especially to families. Most people prefer to commute in a private vehicle, because they wish to minimize travel time. The average commute by car is 21 minutes, by bus it is 38 minutes, and by rail it is 45 minutes, according to transportation analyst Alan Pisarski (1996), using data from the 1990 census.
- Many people, especially working mothers, make frequent stops on the way to and from work, to drop off and pick up children from school, to buy groceries, and run other errands. Trips like these require the flexibility of the personal automobile, since transit, especially rail transit, runs along fixed routes.

**An emphasis on rail transit systems has not reduced urban traffic congestion.**

- The availability of federal funds to pay for the construction of large urban transit projects has contributed to a resurgence of rail transit over the last 15 years. New systems have opened in Baltimore, Buffalo, Dallas, Denver, Miami, Portland, Sacramento, San Jose, and St. Louis.

- Despite this increase in funding and expansion of the system, there has been a decrease in transit's share of travel. In fact, Jonathan Richmond of Harvard University (1998) notes, "...with low ridership and most patrons drawn from bus transit, there is no case where new rail service has been shown to noticeably improve highway congestion or air quality."
- In the 1970s, officials in the Washington, D.C., metropolitan area decided to limit road building and focus more resources on construction of a rail transit system and high-occupancy vehicle (HOV) lanes. Today, despite remarkably high levels of transit use and carpooling, Washington has the second worst traffic congestion in the United States, according to the Texas Transportation Institute (1999).
- An analysis of recent U.S. urban transportation policy by the University of Texas (1999) concluded that regional governments "...generally erred by using disproportionate amounts of available subsidy dollars to construct and operate costly and ineffective rail transit systems instead of improving bus service and reducing fares."
- A much more affordable way to increase transit ridership is the construction of bus-only express lanes or HOV lanes. Research indicates that the overall costs per person-trip for bus-only lanes or HOV lanes is significantly lower than for rail transit expansions.

**Average Commute Times For Various Travel Modes (1996)**

**CAR** 21 minutes



**BUS** 38 minutes



**RAIL** 45 minutes



Source: U.S. Census Bureau and *Commuting in America II*

## Privately operated transit services may reduce costs and increase ridership.

- Despite the investment of \$200 billion in government subsidies over the last 30 years, transit's share of national travel has decreased. This failure is partially the result of declining productivity corresponding to a shift from privately operated transit systems to public operation. In fact, public transit operating costs have increased four times faster than the rate of inflation over the last 30 years according to the Reason Public Policy Institute (1998).
- In 1955, only 3 percent of the nation's transit systems were publicly owned. Nevertheless, by 1980, 94 percent of all transit service provided in the United States was by government transit agencies, according to the University of Texas study. Today, transit continues to be largely provided by government agencies, with only 10 percent of transit services nationwide contracted through competitive bidding. Studies show, however, that bus service provided by competitive services is significantly less costly than that provided by noncompetitive services.

## Our Position

A more efficient and improved transit system has an important role to play in reducing traffic congestion. If we are truly going to reduce traffic congestion and improve the environment, however, transit improvements must be supplemented by additional capacity to our road system and better use of computerized traffic signals and other "smart-road" technologies.

Increasing future levels of transit usage will be an important objective of an overall strategy for meeting the nation's growing transportation needs, but higher transit use alone will not resolve our nation's growing traffic congestion problems. Attracting more riders to transit will require that transit service be better designed to

meet the needs of potential riders. It must become more convenient and provide its patrons with increased personal safety if it is to meet the complex transportation needs of an increasingly suburbanized society.

Transit investment should be based on the type of service—rail, bus, demand-responsive, or van programs—that will offer the largest increase in mobility. Transit providers must also be allowed to provide their service at the most competitive cost possible while still providing appropriate service.

Transit should not be seen as an alternative to expanding road capacity in meeting the demand for additional mobility. Instead, improvements in the capacity and efficiency of transit and roads systems are complementary elements of a comprehensive approach to relieving congestion and meeting long-term transportation and environmental goals.

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*transit improvements must be supplemented by additional capacity to our road system and better use of computerized traffic signals and other "smart-road" technologies.*

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### Endnotes

- American Public Transit Association. (1999). *Transit Facts*. Washington, D.C.
- Lave, Charles. (1994). "It Wasn't Supposed to Turn Out Like This: Federal Subsidies and Declining Transit Productivity." *Access*. University of California Transportation Center.
- Pisarski, Alan. (1996). *Commuting in America II*. Washington, D.C.: Eno Transportation Foundation.
- Richmond, Jonathan. (1998). *New Rail Transit Investments*. Cambridge, MA: Taubman Center for State and Local Government, John F. Kennedy School of Government, Harvard University.
- Texas Transportation Institute. (1999). *Urban Roadway Congestion Annual Report 1999*. College Station, TX: Texas A & M University.
- Reason Public Policy Institute. (1998). *A Critique of 'Dollars and Sense: The Economic Case for Public Transportation in America'*. <[www.reason.org](http://www.reason.org)>.
- Kain, John (1999). *The Urban Transportation Problem: A Reexamination and Update*. University of Texas at Dallas.

**THE AUTOMOBILE: PROVIDING FREEDOM AND OPPORTUNITY**  
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# THE AUTOMOBILE: PROVIDING FREEDOM AND OPPORTUNITY

## Background

The automobile is a fundamental part of modern American culture. It is the most practical and democratic transportation device in history. The automobile enables millions of people to go to work, to the store, to the doctor's office, to the soccer field—to go where they want to go, when they want to go, and do what they need to do—within a reasonable amount of time.

Before the twentieth century, a few wealthy Americans had horses and carriages for urban travel and traveled mostly by train between cities. The vast majority of Americans rarely traveled more than 50 miles from home. Today, the average American travels 14,000 miles per year by automobile (cars and light trucks), according to the Bureau of Transportation Statistics (U.S. Department of Transportation 1998). Most non-auto travel is by air: an average of 1,700 miles per person per year.

Millions of Americans rely on the U.S. highway system to ship their products to other businesses, consumers, and markets here and abroad. Mobility on America's Interstate Highway system has been a key factor in the sustained economic growth and prosperity during the 1990's. Business establishments in the U.S. shipped more commercial freight and packages in 1997 than in 1993, valued at \$6.4 trillion. Changes in how and where goods are

produced and increases in international trade will contribute to the rise in freight tonnage over the next decade.

The automobile has opened the vistas of the United States. Most Americans can spend a weekend hiking in the mountains or swimming at the shore with only minimal travel time. Most people also use their cars when they travel longer distances on vacation.

The automobile has made it easier for Americans to live where they want to live and pursue their own lifestyles. Most Americans live only minutes away from medical care. People can live in one county and work in another. Mobility provides employers with a greater choice of workers and gives employees a greater choice of jobs. Farm families, once isolated from the rest of the world for most of the year, can now journey to town in minutes.

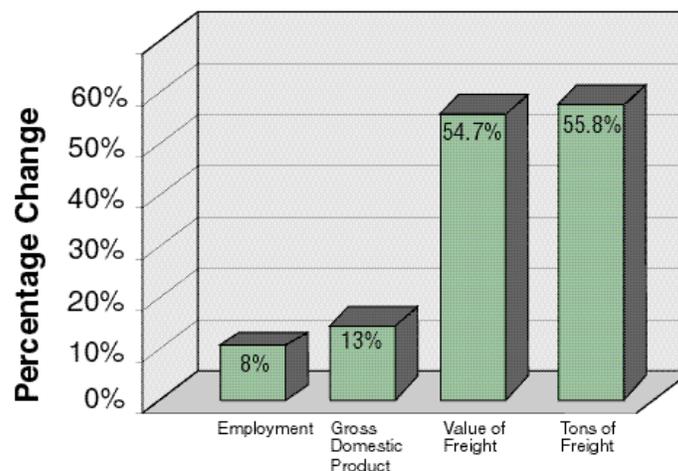
## The Myth

America's high level of dependence upon the automobile has lowered the standard of living, snarled traffic, and lowered air quality.

## The Facts

**The mobility provided by our highways is critical to the modern American lifestyle.**

## Truck Shipments and Related Factors of Growth: 1993–97



Source: U.S. Department of Transportation

- Six out of every seven trips taken by Americans are in a car, truck, or motorcycle, according to the Bureau of Transportation Statistics (U.S. Department of Transportation 1998). These trips are for a variety of purposes, with only 20 percent of trips for travel to work or on work-related business.
- Highway travel accounts for 90 percent of all passenger miles traveled in the United States. Air travel provides 9 percent and rail transit 1 percent, according to the Bureau of Transportation Statistics.
- Motorists pay considerably more each year in taxes and fees related to driving than the full cost of roads, according to a report by the American Petroleum Institute (1998). Highway taxes not spent on roads are diverted to mass transit and other non-highway expenses.
- Air quality has significantly improved, thanks in large part to reductions in overall highway vehicle emissions, while at the same time highway travel has increased.
- Transit's share of overall travel has not increased over the past decade largely because average travel times on transit are approximately double the travel time in private vehicles, says transportation analyst Alan Pisarski (1996). Studies also show that working women are especially dependent on their own cars to do family errands on the way to and from work.
- The automobile gives most Americans fast, easy access to medical care, fire and police protection, and other lifesaving, emergency assistance.
- The Federal Highway Administration (1999) makes it clear that only a small portion of additional travel occurs solely because of new capacity added to a previously congested road.
- The nation's road system remains the vital link in a national transportation system that allows Americans to travel outside their communities for tourism or to visit friends or

relatives. The American Travel Survey (1998) found that Americans took 82 percent of all trips to a destination at least 100 miles away for tourism or visiting in personal vehicles.

- Highways and the mobility they afford play a key role in the growing US economy and contribute a sizable portion to the Gross Domestic Product.

## Our Position

The automobile has made it possible for people to enjoy a great deal of freedom in all aspects of their lives. The mobility provided by automobiles is critical to the modern American lifestyle.

Well-planned and maintained roads prevent many of the problems about which critics complain. Traffic congestion is not a result of people driving too much but is a result of a road network that has failed

to keep pace with the nation's growing transportation demands. By adopting a balanced approach to congestion, including building the necessary road capacity, improving the efficiency of existing roads, and making transit safer and more convenient, we can relieve congestion.

Faster, smooth-flowing traffic is also better for the environment, because it results in fewer emissions than stop-and-go traffic. Technology also is making great strides in reducing air pollution from automobiles. Tailpipe emissions have already decreased 95 percent since 1970, thanks to cleaner cars and cleaner fuels, a technological trend expected to continue in the future.

### Endnotes

American Petroleum Institute. (1998). *The Benefits of Road Travel and Transport*. Washington, D.C.

Federal Highway Administration, *Highway Statistics 1997*, Washington, D.C.

Pisarski, Alan. (1996). *Commuting in America II*. Washington, D.C.: Eno Transportation Foundation.

U.S. Department of Transportation, Bureau of Transportation Statistics. (1998). *American Travel Survey*. Washington, D.C.

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*The mobility provided by automobiles is critical to the modern American lifestyle.*

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**TRAFFIC CALMING  
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# TRAFFIC CALMING

## Background

The term “traffic calming” includes a variety of measures to slow motor vehicles and make room for bicycles and pedestrians. Originally, traffic-calming measures were designed to improve safety by reducing speed on neighborhood streets. More recently, however, calming devices have been proposed for some major commuting corridors to impede the flow of traffic, thereby encouraging motorists to choose other routes or other means of transportation. Traffic-calming devices include the following:

- *Speed bumps*: pavement bumps that are either narrow and abrupt or wider with a more gradual rise
- *Traffic circles on residential roads or rotaries on major corridors*: raised islands, often landscaped with ground cover and trees in the middle of an intersection
- *Chicanes, bends, or deviations*: curbs that extend alternately from opposite sides to form a serpentine path
- *Chokers*: various forms of narrowing the road at mid-block or intersections usually by protruding sidewalks or sharp turns
- *Narrow roads*: significantly reduced lane widths, often including wider sidewalks that eliminate any road shoulder area
- *Directional barriers*: diverters that either force people to turn or prevent vehicles from entering certain streets

Traffic calming can slow vehicular traffic very effectively. Depending on the type of device and the road on which it is deployed, however, traffic calming can present significant safety hazards for motorists and bicyclists, delay emergency response vehicles, increase traffic

congestion, reduce access for commercial vehicles, and increase air pollution.

## The Myth

By forcing drivers to slow down, traffic-calming devices improve public safety and encourage motorists to consider other means of transportation.

## The Facts

**Improving access for pedestrians and bicyclists and better integrating streets into residential and commercial areas is an important challenge for regional planners. The traffic-calming strategies adopted by a region must be tailored to the unique transportation and aesthetic needs of a community.**

Traffic-calming devices that slow emergency response time should be of particular concern to communities. A study in Boulder, Colorado, found that speed bumps, for example, increased emergency response time by an average of 14 percent—a potentially fatal difference.

Some traffic-calming methods may also tend to punish the majority of responsible drivers rather than the handful who do not drive appropriately. In San Jose, California, city officials recently decided to eliminate the city’s speed bumps, noting they would no longer penalize 95 percent of drivers for problems caused by the other 5 percent.

Much of the desire for traffic-calming strategies is based on a wish to make residential or smaller commercial streets safer, less congested, and more friendly for those who are not driving. But many traffic-calming strategies may actually have unintended consequences, such as increasing overall traffic congestion, both on

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*When crafting appropriate traffic-calming strategies, care must be taken to not solve one problem and create another.*

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the affected streets and on other, larger streets, where traffic is diverted by the reduced capacity of streets with traffic-calming devices. This increased congestion results in increased emissions and degraded air quality in the region.

When crafting appropriate traffic-calming strategies, care must be taken to not solve one problem and create another. Traffic calming should not reduce emergency vehicle access, discourage access to commercial sites, or cause increased traffic congestion on other routes. It should contribute to increased safety for pedestrians, bicyclists, and motorists. Many of the goals of traffic calming can be achieved by ensuring that major roads are able to carry appropriate levels of traffic and minimizing the desirability of less appropriate routes. Appropriate traffic-calming measures that a community may wish to implement include the following:

- better synchronization of traffic signals, which has been found to reduce travel times by 30 percent

- raised sidewalks and separate bike paths
- strict enforcement of speed limits on all streets
- adequate traffic capacity on major roads
- medians to separate directional traffic

## Our Position

Traffic calming may be an effective way of designing streets to balance the transportation needs of pedestrians, bicyclists, and motorists. To be effective, traffic calming should not reduce safety, increase congestion, harm air quality, or reduce access by emergency vehicles. Traffic-calming decisions are best made after conducting a comprehensive study on environmental, economic, and safety impacts.

**CASE STUDY: SHOULD WE FOLLOW THE EUROPEAN MODEL?  
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# CASE STUDY: SHOULD WE FOLLOW THE EUROPEAN MODEL?

## Background

Europe, with its higher population densities, greater public transit service, lower road capacity per capita, and higher fuel prices, offers an opportunity to examine many of the policies being proposed in the United States to alter transportation and development patterns. Many of these policies are being promoted as a way to reduce automobile dependence and discourage suburbanization. Recent trends in Europe suggest that these policies may actually prove ineffective in changing American lifestyle choices.

## The Myth

Land-use planning and heavy transit investments have produced low levels of dependence upon the automobile and little suburban development in Europe.

## The Facts

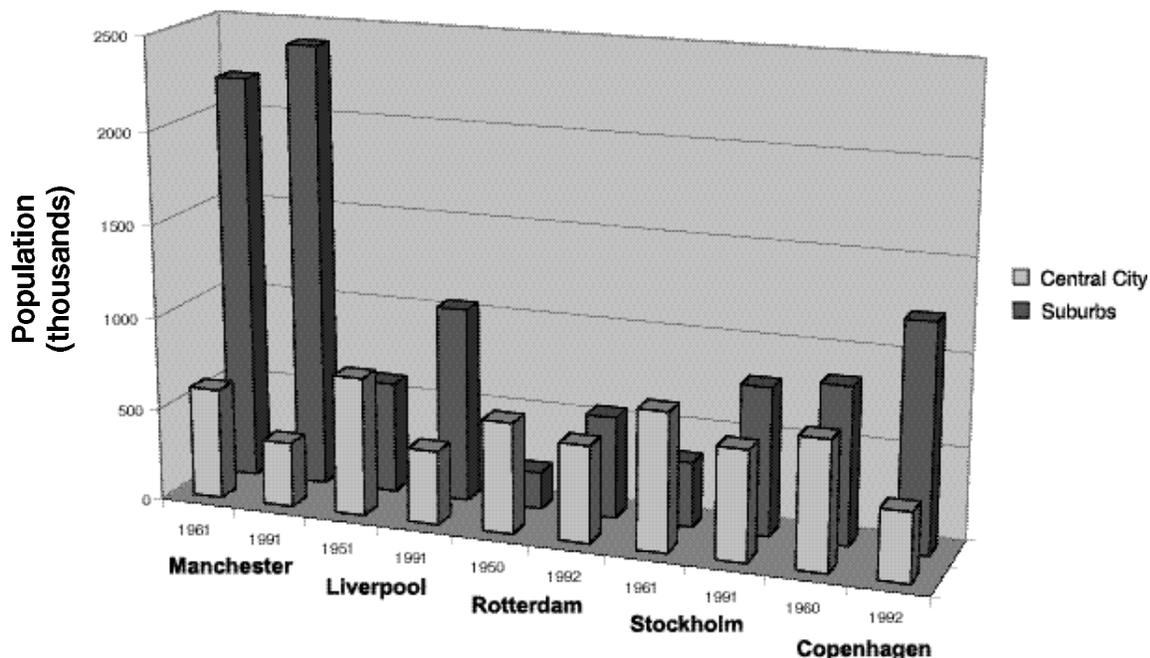
**As average incomes have risen over recent decades, Europeans are buying more cars and driving more.**

- European car ownership is increasing three times faster than it is in the United States, according to transportation analyst Wendell Cox (1999).
- Cox also found that despite the availability of public transit, 82 percent of all travel in the European Union is by car; 18 percent is by rail, bus, or trolley.

**Despite the efforts of planners, most European cities are rapidly decentralizing.**

- European inner-city populations are falling. Between 1950 and 1992, Amsterdam's central city population decreased 10 percent; between 1960 and 1992, Copenhagen's central city pop-

## Europe's Suburban Population is Growing



Source: Professor Genevieve Giuliano, University of Southern California

## Our Position

ulation fell 35 percent; between 1954 and 1991, Paris's central city population fell 27 percent; and between 1961 and 1991, Stockholm's central city population fell by 16 percent (Newman and Kenworthy (1989) with additional information supplied by Wendell Cox (1999)).

- Newman and Kenworthy also found that Europe's suburban populations are increasing. Between 1950 and 1992, Amsterdam's suburban population increased by 197 percent; between 1960 and 1992, Copenhagen's suburban population increased by 138 percent; between 1954 and 1991, Paris's suburban population increased by 105 percent; and between 1961 and 1991, Stockholm's suburban population increased by 164 percent (Cox 1999).
- In addition, Newman and Kenworthy's research showed that, as a result of the significant population decentralization occurring in Europe, a majority of people in many urban regions now live in the suburbs. By the early 1990s, 58 percent of Amsterdam's residents were suburban; 72 percent of Copenhagen's residents were suburban; 79 percent of Paris's residents were suburban; and 55 percent of Stockholm's residents were suburban.

Despite punitive taxes on motor vehicles and fuels (which make gas almost twice as expensive as it is in the United States), rules to discourage driving, and draconian land-use laws regulating suburban development, car ownership and suburban development are on the rise in Europe. As average incomes have risen over recent decades, Europeans are buying more cars and driving more. European car ownership is increasing three times faster than it is in the United States.

The concept of using anti-growth policies to force high-density living has simply not achieved its goal of keeping the citizens of the continent in central cities. Most European cities are rapidly decentralizing.

### Endnotes

Cox, Wendell. (1999). *Demographic Briefs and Urban Policy*. <[www.publicpurpose.com](http://www.publicpurpose.com)>.

Newman, Peter, and Jeff Kenworthy. (1989). *Cities and Automobile Dependence: An International Sourcebook*. Brookfield, VT: Gower Technical.

**CASE STUDY: THE PORTLAND EXPERIMENT**  
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# CASE STUDY: THE PORTLAND EXPERIMENT

## Background

Portland, Oregon, is often held up by anti-growth activists as an example of all the best that high-density planning can accomplish. They claim that an urban growth boundary drawn in 1979 has controlled growth and that light rail lines have led Portlanders to be less dependent on automobiles. Public officials and reporters from all over the country are regularly taken on tours of the city to see how planning ought to be done. They are shown the rejuvenated downtown, the light rail line, and the urban growth boundary and are told by planners and anti-growth activists that Portland is “one of the nation’s most livable cities,” as cited in a Sierra Club report (1998). But is it?

## The Myth

By encouraging higher population densities, building transit instead of roads, and adopting other restrictive planning policies, Portland has improved residents’ quality of life, revitalizing the community and making residents less dependent on cars.

## The Facts

**By imposing strict zoning policies, Portland’s planners have severely limited**

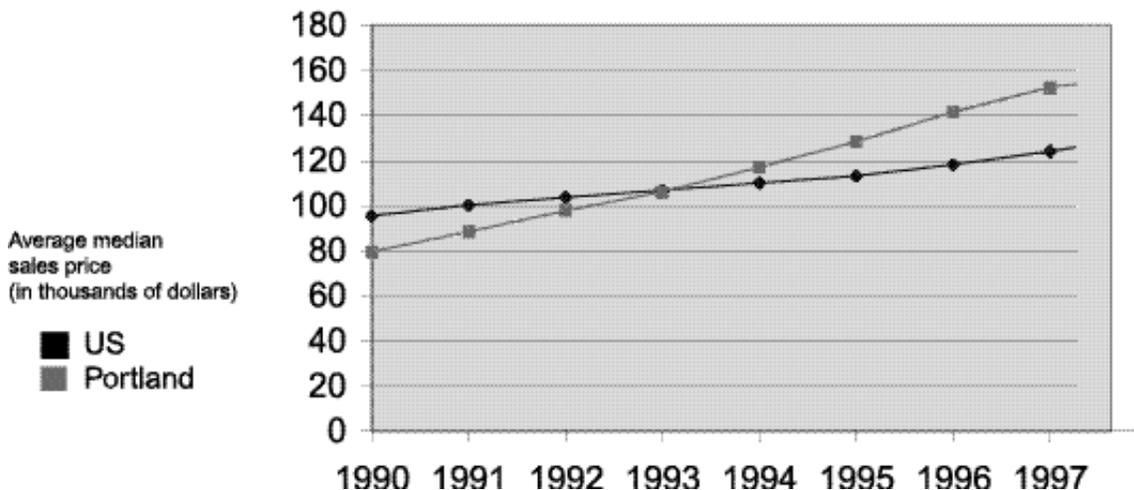
**the choices of city residents about how and where they live.**

- Limitations on development outside the city’s growth boundary have made Portland one of the least affordable cities in the country in which to buy a house. Data from the National Association of Home Builders (1999) indicate that Portland went from being one of the nation’s most affordable housing markets in the late 1980s to one of the least affordable in the late 1990s.
- Housing prices skyrocketed 99 percent in seven years during this decade (the highest rate of increase in the country), while the national average was a 35-percent increase.
- Portland created a regional authority with unprecedented power over zoning and land use issues.

**Portland’s emphasis on transit instead of highway capacity has had little impact on transit’s share of overall travel: Portlanders remain as reliant on their cars as residents of any other city.**

- Ninety-two percent of all trips in the Portland area are by automobile and fewer than 2.5 percent are by transit, according to Metro (1994), the Portland area’s regional planning authority. Even if their policies are fully implemented,

## Portland Housing Costs Now Exceed U.S. Average



Source: National Association of Home Builders

Portland planners still predict that 88 percent of travel in the area will be by car and less than 5 percent will be by transit, according to Metro.

- Although a relatively high percentage of downtown commuters use transit, only a small percentage of Portland-area jobs are downtown. The area's light rail system has not attracted even one-half the number of riders originally projected by planners, and voters have rejected expensive additional light rail plans three times in the last five years.
- Portland's policy of spending most of the region's transportation dollars on transit rather than roads has made congestion in the area worse. As a result, Portland now ranks among the top ten most congested cities in the United States, according to the Texas Transportation Institute's roadway congestion index (1999). Regional planners project that future levels of traffic congestion will get substantially worse as a result of Portland's transportation policies.

## Our Position

Growth should be recognized as a reality and planned for adequately. Rather than adopting the Portland model, localities should adopt a balanced, comprehensive approach to planning that recognizes the need for both low- and high-density development and for additional road capacity, as well as transit and other options to address congestion.

Business groups in the Portland metropolitan area and statewide have joined together to recommend urban growth and economic development policy changes that will balance Portland's decision to contain growth with the need to provide adequate land for housing and jobs. In the Portland area, groups have identified the need to expand the urban growth boundary to accommodate a 20-year supply of land for industrial and commercial development as well as housing.

### Endnotes

National Association of Home Builders. (1999). *Housing Opportunity Index, First Quarter 1999*. <[www.nahb.com](http://www.nahb.com)>.

Texas Transportation Institute. (1999). *Urban Roadway Congestion Annual Report 1999*. College Station, TX: Texas A & M University.

Metro, (1994) *Region 2040 Recommended Alternative Technical Appendix*, Portland, Oregon.

Sierra Club, (1998) *The Dark Side of the American Dream: The Costs and Consequences of Suburban Sprawl*, [sierraclub.org](http://sierraclub.org).

**CASE STUDY: THE LOS ANGELES SYNDROME:  
A PRESCRIPTION FOR THE REST OF US?  
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# CASE STUDY: THE LOS ANGELES SYNDROME: A PRESCRIPTION FOR THE REST OF US?

## Background

Los Angeles, the nation's most populous metropolitan area, has a variety of cultural, educational, and economic opportunities that continue to attract thousands of new residents each year. Yet Los Angeles, where the average driver wastes more than 82 hours each year sitting in traffic, also ranks first in the nation for traffic congestion (Texas Transportation Institute 1999) and air pollution (U.S. Environmental Protection Agency 1998). The Sierra Club (1998) describes Los Angeles as "the granddaddy of sprawl" and says that it is the "standard for the worst that sprawl has to offer."

Arguing that the city is too spread out and too dependent on highways, anti-growth activists often cite L.A.'s congestion and air quality problems as evidence that higher-density, more compact urban development and less emphasis on highways will produce less traffic congestion, cleaner air, and a more livable community. But will it?

## The Myth

Los Angeles is a sprawling area served extensively by freeways. Los Angeles's traffic congestion and air quality problems are largely the result of the extensive freeway system and sprawling development.

## The Facts

**Los Angeles is a high-density metropolitan area that has invested heavily in the development of a rail transit system rather than adding highway capacity to address its traffic congestion problems.**

- At 5,500 people per square mile, Los Angeles is the highest density metropolitan area in the country, according to the Federal Highway Administration (FHWA 1997).

- The population density of Los Angeles is more than one-third greater than the New York-Northern New Jersey metropolitan area, which has 4,100 people per square mile.
- The population density of Los Angeles is relatively uniformly distributed. Unlike New York, which has a very high density in Manhattan surrounded by low-density suburbs, Los Angeles has a relatively low-density downtown but relatively high densities throughout the rest of its metropolitan areas.
- At 52 miles per million people, Los Angeles has the lowest number of miles of freeway per capita of any U.S. city, according to the FHWA. By comparison, the national average is 114 freeway miles per million people. Due to inadequate road capacity, the average driver in Los Angeles wastes more than 82 hours each year sitting in traffic, according to TTI (1999).



- Los Angeles has spent billions of dollars building a rail transit system. With much lower than projected ridership and cost overruns in the millions of dollars, support for the system has virtually evaporated.

## Our Position

Anti-growth activists argue that the best way to avoid the air quality and traffic congestion problems of Los Angeles is to restrict road mileage and increase urban density. However, Los Angeles is one of the highest-density metropolitan areas in the United States, and it has the lowest number of freeway miles per person. Los Angeles also has the poorest air quality and worst traffic congestion in the nation. High-density development and inadequate road capacity have not worked for Los Angeles.

Localities should adopt a balanced, comprehensive approach to planning that recognizes the need for both low- and high-density development and for additional road capacity, as well as transit and other options to address congestion.

## Endnotes

Federal Highway Administration. (1997). *Highway Statistics 1997*. Washington, D.C.

Sierra Club. (1998). *The Dark Side of the American Dream: The Costs and Consequences of Suburban Sprawl*. <[www.sierra-club.org](http://www.sierra-club.org)>.

Texas Transportation Institute. (1999). *Urban Roadway Congestion Annual Report 1999*. College Station, TX: Texas A & M University.

U.S. Environmental Protection Agency (1997), *National Air Quality and Emissions Report, 1997*, Washington, D.C

**CASE STUDY: WASHINGTON, D.C.: A MAP FOR CONGESTION  
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# CASE STUDY: WASHINGTON, D.C.: A MAP FOR CONGESTION

## Background

In the 1960s, officials in Washington, D.C., and the surrounding suburbs of Virginia and Maryland devised an ambitious, comprehensive transportation plan for the metropolitan region. The plan called for construction of

- a world-class underground rail system
- high occupancy vehicle (HOV) lanes to encourage carpooling
- 14 new highways

In the 1970s, however, regional leaders made a conscious decision to limit road building and to focus more resources on the Metrorail transit system and HOV lanes. As a result, 13 highway projects—representing nearly 1,500 lane miles—were dropped from the original transportation plan. What has this loss of addi-

tional highway capacity meant for the nation's capital?

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*The lesson of Washington, D.C. is that growing communities cannot afford not to build new roads.*

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## The Myth

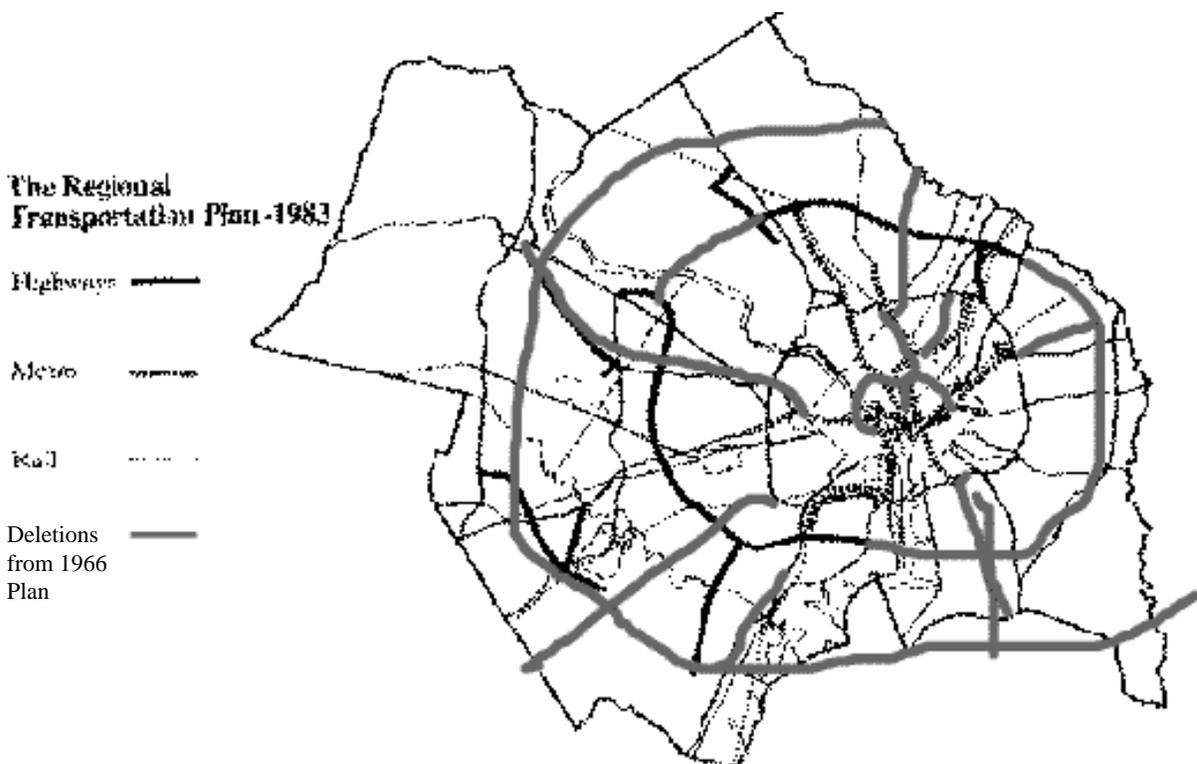
By investing in transit and other transportation alternatives, growing cities can eliminate the need for additional highway capacity.

## The Facts

**At the expense of highways, Washington's rates of transit use and carpooling rank among the nation's highest.**

- Washington's transit investments have paid remarkable dividends. Washington has the second highest rail ridership and the fourth highest bus ridership in the country. Overall, Washington ranks third in the percentage of commuters who use transit (13.4%).

## Washington, D.C.'s Map for Congestion



Source: Greater Washington Board of Trade

- Washington ranks first in the nation in percentage of workers who carpool (16%). This ranking is partially due to the HOV lanes, but also is a result of the large number of federal employees in downtown D.C. who receive preferential parking and other incentives for carpooling.

**Despite remarkably high levels of transit use and carpooling, Washington has the second worst congestion in the U.S. according to the Texas Transportation Institute (1999).**

- Washington's failure to invest in additional highway capacity has left residents with the second longest average commute in the nation (29.5 minutes), 30 percent higher than the national average.
- Congestion costs Washingtonians dearly in terms of wasted time and fuel. Washington's \$1,260 annual per-driver congestion cost ranks second nationally (TTI 1999).

## Our Position

The lesson of Washington, D.C., is that growing communities cannot afford not to build new roads. While it is clear from past experience that no single strategy can adequately address the problems of traffic congestion, a balanced, comprehensive approach can lessen the stifling gridlock found on many highways.

Such an approach needs to include improving the convenience and safety of transit. At the same time, we need to use the roads we already have in the most efficient way possible. Investing in smart-road technologies, such as synchronized traffic lights, computerized systems to route traffic around congested areas, reversible commuter lanes, and movable barriers that add road capacity during peak hours of travel, will help. Nevertheless, additional lanes and new roads are needed in some locations to meet growing transportation demand.

### Endnote

Texas Transportation Institute. (1999). *Urban Roadway Congestion Annual Report 1999*. College Station, TX: Texas A & M University.

**PART TWO:**  
**BUILDING A QUALITY GROWTH CAMPAIGN**  
**TAB HERE**

**DEVELOPING A QUALITY GROWTH COALITION**  
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# DEVELOPING A QUALITY GROWTH COALITION

State and local officials, business owners, and local residents supporting highway investments and other policies designed to accommodate, rather than stifle, growth often face a daunting array of opponents. The *Quality Growth Toolkit* was developed to aid community growth advocates trying to build community support for investment in safe, efficient roads and other quality growth initiatives. This toolkit also provides information to counteract myths that are disseminated by anti-growth activists.

For quality growth advocates, it is important to know the facts about important issues in the debate over suburban development, traffic congestion, and other growth-related issues. Part One of this toolkit, called “Knowing the Facts,” provided information about those issues.

Armed with the facts, the next step is to develop a strong, effective local campaign to support highway improvements and other quality growth policies. Here, in Part Two of the *Quality Growth Toolkit*, we suggest ways to build a coalition of community supporters, develop appropriate information and materials to support coalition activities, get the coalition actively involved in transportation planning, and deliver the message effectively to the media, public officials, and civic groups.

## Building a Coalition

Building a coalition is the most important step in any campaign. This section includes instructions on identifying, organizing, and motivating businesses, civic groups, and individuals who can help build community support for highway improvements and provides a list of activities that could be part of a mobility coalition’s agenda.

## Coalition Structure

A coalition may be:

- *Informal*: dividing tasks among individual members and representatives of member organizations and meeting to coordinate tactics, make assignments, and review accomplishments.
- *Formal*: incorporating as a nonprofit organization with a full- or part-time staff to carry out administrative, technical, or other professional tasks at the direction of coalition members. Depending on financial considerations, the staff may include a lobbyist, grassroots organizer, public relations and media specialist, researcher, and attorney, among other specialties.
- *Existing*: making use of existing like-minded coalitions that already are targeting the “smart-growth” issue. Candidates include chambers of commerce, boards of trade, home builders, or civic groups.

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*Building a coalition  
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## Coalition Members

Following is a list of potential members for a quality growth coalition:

- *Highway users*: automobile associations, such as the local American Automobile Association (AAA) club, trucking companies and truck drivers, automobile dealers, service station dealers, automobile and parts manufacturers and their suppliers
- *Construction industry*: home and commercial builders; construction contractors; asphalt, cement, stone, and other construction suppliers; and equipment suppliers, manufacturers and distributors
- *Safety interests*: automobile and property insurance companies and agents; highway-sign and other safety-device manufacturers or distributors
- *Agricultural interests*: farmers and farm associations, such as the local Farm Bureau

representative; farm equipment dealers; farm supply distributors

- *Labor unions:* members of the Laborers International Union; the International Union of Operating Engineers; and other labor organizations, particularly those whose members are involved in highway construction or related trades
- *Business community:* chambers of commerce; boards of trade; professional societies; retail and commercial developers; retailers and other businesses
- *Other supporters:* private property rights organizations; neighborhood associations; state and local elected officials; public officials in transportation; think tanks and academic experts
- *Emergency service providers:* fire, medical, police, and other emergency service providers

## Coalition Activities

A quality growth coalition may wish to engage in a variety of activities aimed at educating the public and persuading elected officials to support highway improvements and other quality growth policies. Following are some potential activities that may help the coalition achieve its objectives:

- *Research and polling:* A scientifically conducted public opinion survey on growth issues can be extremely useful both for “intelligence” purposes and as a tool to generate media coverage and educate the public. The intelligence gained through a local poll can help determine how the public views the issues and where the public stands on the opposition’s approach. Focus groups can be a useful tool for developing and defining the coalition’s messages to the public. The coalition can release the results of a scientifically conducted public opinion poll as part of a news conference to help generate media coverage and show public support. Results from a public opinion poll also can be incorporated into fact sheets, speeches, and presentations. The best way to conduct market research—including public opinion polling and focus groups—is to hire a firm that has demonstrated experience in con-

ducting market research and a philosophical approach to the issues generally consistent with that of the coalition.

- *Development of local, site-specific information:* In forming a coalition and advancing the quality growth approach, the collection and dissemination of information is critical to convince the public, the media, and policymakers of the wisdom of the coalition’s approach. Part One of this toolkit, “Knowing the Facts,” is designed to provide such information on a national level and suggest some rhetorical approaches to cornerstone issues such as traffic congestion. However, to be effective, local, site-specific information needs to be supplied. Sources for such information include local and state transportation departments, housing groups, and business groups, such as chambers of commerce or boards of trade.
- *Quality growth report:* One way to pull together local information is to research, prepare, and release a local quality growth report to call attention to travel trends, transportation needs, and the important role they play in the community. Having this information as a research-based report can give it additional credibility and will enable it to be released as part of a publicity campaign and used very effectively in meetings with elected officials and other policymakers. Much of the necessary information probably already exists in various forms at local and state governments, but the coalition may need someone with experience to compile the information into an effective report.
- *Public outreach:* The research, polling, and information assembled by the coalition can be used most effectively as part of an ongoing, comprehensive public outreach and public information campaign. Public outreach can influence public opinion and policymakers, build support for the coalition, and get groups and individuals involved. An effective way to do this is by developing a presentation based on this toolkit and local information for the public. Enlist speakers who can make appearances before local groups and organizations to tell them about the quality growth approach. Develop a list of community groups-civic

groups, such as Rotary clubs, business groups, such as local chambers and boards of trade, and other groups—that the coalition can educate about these issues. Make a list of these groups and send members from the coalition to approach them about speaking and making presentations. A critical component of public outreach is making presentations and providing “leave-behind” materials, such as brochures, fact sheets, or even copies of the presentation. A visually appealing brochure highlighting the major points is preferable, but this option can be expensive. A professional-looking fact sheet listing the major points is a useful alternative.

- *Media campaign:* Clearly, developing a high profile media campaign to generate public support for quality growth is an essential objective. Because of its significance, a separate section in this toolkit is devoted to dealing with media outreach.
- *Lobbying public officials:* Local officials are elected to represent their constituents’ interests and the best interests of the community. The thing to remember is that elected officials like to think that they are taking positions on issues that their constituents want them to take. They also want to take positions that will benefit their communities. It is the coalition’s job to lobby them and communicate with them to let them know what the coalition wants them to do and why it is in the community’s best interests. When lobbying elected officials, it is important to weigh in with them both as a coalition and as individual citizens and business owners. The coalition demonstrates the broad base of support and gives it credibility; the individual gives a more sympathetic and personal face to the issue. Remember that the other side is working just as hard to make their voices heard.
- *Telephone calls, letters, faxes, and email:* The simplest way to communicate with local elected officials is by letter, fax, telephone, and email. Flood their offices with calls and correspondence in favor of quality growth initiatives. For example, explain to them that improving the existing road infrastructure will reduce congestion, help economic efficiency, and improve the quality of life for local

residents. Good communication should include an introduction and an explanation of why the official should listen, a statement of what you want the official to do, and a statement providing background and making the case that the proposal is in the community’s best interests.

- *Personal meetings:* Take a group of coalition members to meet personally with local elected officials. Think of the meetings as an opportunity to reinforce issues raised in written communications to their offices. The group should be representative of the coalition as a whole. At the meetings, allow everyone an opportunity to introduce themselves and to discuss briefly their position on the issue or project in question. Consider taking some written materials prepared by the group (for example, a letter to the official from the coalition or a policy paper) to leave with the official. The meeting can take place at the official’s office or invite them to meet at company or coalition headquarters. Politicians often relish the opportunity to come to a facility in their district to shake hands with employees. Remind the officials that employees are more than voters, they are also individuals whose futures depend upon the decision the official makes on these issues.
- *Public meeting presentations:* The local transportation planning process provides myriad opportunities for interested individuals to make their feelings about projects known by participating in public meetings. Seize this opportunity to become involved. Anti-growth groups frequently turn their members out in droves to pack these meetings. If those are the only voices heard by planners, those are the voices to which they will listen. Make sure the coalition’s voice is heard, too. Watch for announcements about meetings, attend them, and speak in favor of quality growth initiatives. Be sure to bring as many coalition members and like-minded citizens these meetings as possible. Numbers matter! Also, become familiar with the organization’s meeting procedures to determine whether there are any formalities for getting on the meeting agenda.
- *Intervention in lawsuits:* In recent years, anti-mobility groups have been filing lawsuits in

record numbers to halt construction projects around the country. By suing the government, these groups can force a settlement on terms favorable to their agenda—the no-growth, no-road agenda. If the coalition becomes involved with the litigation, then mobility interests will be represented in court and the judge and jury will hear the coalition’s side of the story. The coalition may have a role in designing the settlement or other outcome of the litigation, thereby mitigating the negative impact of the lawsuit.

- *Tracking of anti-growth lawsuits:* The anti-growth movement’s litigation efforts have drawn a great deal of media attention. Be on the lookout for reports about local anti-growth lawsuits and recognize that these actions can ultimately determine whether a project will proceed. Do not assume that someone else—least of all the government—will stand up to the anti-growth forces in court. At times, the governmental unit being sued may have actually encouraged the anti-road forces to launch their court action. It is up to the coalition and its allies to make sure that the mobility position is represented.
- *Hiring of counsel:* One key to success in intervening in mobility litigation is ensuring that mobility interests are represented by counsel with experience in transportation-related law. Find an attorney whose views are sympathetic to those of the coalition. An attorney with a background in local planning and environmental law issues is ideal. Determine whether the attorney has been involved in environmental litigation in the past or whether he or she has primarily acted as a counselor on environmental issues.
- *Publicity for the coalition’s case:* The anti-road agenda has attracted a good deal of media attention and, because their suits are often based on environmental laws, the media assumes that the no-growth forces are acting in everyone’s best interests. Make sure that the media know that there is another side to the story. Explain the merits of the coalition’s case to journalists and arrange for counsel to discuss the case with the media.
- *Rallies:* One of the most dramatic ways to draw attention to the issues is to stage a rally. Rallies are most effective when held prior to a vote or other relevant actions. Rallies serve several purposes: (1) they are a visible way of demonstrating support; (2) they attract media, which favors “visual” stories; (3) they serve as a focal point for the coalition and give members an opportunity to work and interact with each other; and (4) they provide a forum to articulate the coalition’s position on an issue. Rallies can include a march that ends with speeches in front of the state capitol, courthouse, or county office building, or it can be a series of speeches without a march. Coalition leaders, public officials, and supporters who have a story to tell should make speeches or public statements. The person designated as rally leader should be responsible for (1) determining the location, date, and time of the rally; (2) securing the necessary permit(s) from the police or other authorities to hold the event; (3) publicizing the rally and notifying the media; (4) making signs made with short, catchy slogans and getting a sound system or bullhorn so speakers can be heard; (5) determining the schedule and coordinating the lineup of speakers; and (6) thinking of ways to use the rally to help in future activities and the next step.
- *Toll-free telephone lines:* An effective way of making sure public officials hear mobility views on an issue, especially before a vote is taken or a decision is made, is to set up a toll-free telephone line to their offices. There is no charge to callers who use the line, since the coalition pays for the calls. Callers using the line usually: (1) hear a taped message providing them with the latest information about the issues; (2) hear “talking points” for use in their conversations with officials and staff; and (3) have their calls switched to the offices of their legislators or other officials. The recording on the toll-free line may ask callers to enter some information, such as a zip code, to determine who is their legislator. Vendors who set up toll-free lines usually charge a set-up fee and small per-call fee. The coalition should receive a daily log of the calls and a monthly bill from the vendor for the services.

**TRANSPORTATION PLANNING**  
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# TRANSPORTATION PLANNING

State and local transportation planning organizations set priorities for projects to be funded, determine how much money will go to which types of projects, and set standards that will determine how easily citizens can go where they want, when they want for decades to come. The coalition's participation in this planning process can make the difference between a mobile future or one in which the community is stuck in traffic.

Unfortunately, transportation planning has become a bewildering array of plans, such as the state implementation plan, long-range transportation plan, and transportation improvement plan; and alphabet-soup abbreviations, such as MPO, CAAA, NAAQS, MIS, FONSI, and ROD; and agencies, including the EPA, FHWA, FTA, state agencies, metropolitan planning agencies, transit agencies, and county and city road departments. This bureaucratic nightmare makes it difficult for anyone other than professional lobbyists to get involved in the process. Here we will identify critical points in the planning process where mobility advocates can have the greatest influence.

## The Planning Process

State and regional transportation planning must follow a process established by Congress. As designed, this process has given anti-mobility forces numerous opportunities to slant planning in their favor. While mobility advocates may face an uphill job in many cities, knowing how the process works and where they should focus their efforts can mean the difference between success and failure.

Initially, the federal government required only that planning be done by a metropolitan planning organization (MPO). The MPO's board

members represented all of the people in an urban area. Every urban area with an overall population of 50,000 or more must have a metropolitan planning organization, and some 400 such organizations exist. The original purpose of the MPO was to have a local board determining the distribution of funds among cities and counties in each urban area. However, under pressure from people who favored regional land-use planning, several MPOs have gained significantly greater powers than just the distribution of federal funds.

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*...participation in this planning process can make the difference between a mobile future or one in which the community is stuck in traffic.*

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The Clean Air Act Amendments of 1977 first tied transportation planning to the attainment of national air quality standards. However, the act did not define the planning process in detail. That was left for the Clean Air Act Amendments of 1990 and 1991 Intermodal Surface Transportation Efficiency Act (ISTEA).

The 1990 Clean Air Act Amendments required each state to prepare a state implementation plan (SIP) describing how the state will improve or maintain its air quality. States with serious air pollution problems were required to develop plans to improve their air quality, whereas states with marginal or no problems were required to maintain air quality.

Air pollution may come from major stationary sources, such as power plants; minor stationary sources (also called area sources), such as dry cleaners; and mobile sources, including cars, airplanes, and lawn mowers. The SIP sets pollution reduction targets for each of these categories. Pollution may be traded between categories, so if a major stationary source can easily reduce its emissions, it might be possible to raise the targets for mobile sources.

The highest level of emissions allowed from mobile sources is called the emissions budget.

Particularly in polluted regions, this budget becomes a major factor in the long-range transportation planning process.

Under ISTEA, a detailed transportation planning process was established that every state and urban area must follow to receive federal funds. Transportation planning and funding was tied to air quality standards, and regions with poor air quality had to go through more steps and had less flexibility in how they spent federal dollars. A number of modifications to ISTEA's planning were made by current law governing federal highway funding, the 1998 Transportation Equity Act for the 21st Century (TEA-21).

Both ISTEA and TEA-21 require states and metropolitan areas to prepare two types of plans. The long-range transportation plan has a 20-year planning horizon and identifies major road, transit, and other transportation improvements needed during that time. The plan must be constrained by available funding, though it may be accompanied by an alternative, unconstrained or "visionary" plan that shows any additional facilities and services that could benefit the region.

The transportation improvement program (TIP) has a three-year planning horizon and details exactly which projects are proposed for federal funding during each of those three years. The long-range plans must be revised at least every five years, and the TIPs must be revised at least every two years.

The total pollution generated by all of the projects in the long-range plan must be within the state or region's emissions budget. Federal funds will be withheld if the state and MPO cannot show that their transportation plans will meet the state's clean air targets. This is the conformity process: The MPO, state governor, and secretary of transportation must all agree that transportation plans conform to air quality plans.

State and regional planners must coordinate with each other and consult members of the public. In particular, the law specifically states that "freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transit, and other interested parties" must be given opportunities to comment on regional plans.

Planning does not stop with the TIP. Any major improvement called for by the plan, such as a new highway or adding new lanes to an existing highway, requires a major investment study. This study must consider alternatives and include an environmental assessment. The assessment determines whether the project is a major federal action significantly affecting the environment; if it is, then draft and final environmental impact statements must be written.

Many states have additional planning requirements. For example, Oregon requires all major cities to write transportation plans that aim to reduce per-capita driving by 20 percent. Most state planning rules are less burdensome, but some states have appeal procedures that allow citizens to challenge plans on such grounds as mobility and congestion reduction that the federal government would ignore.

## Getting Involved in Planning

Given unlimited resources, quality growth advocates should attempt to influence every stage in the planning process. Most quality growth groups, however, will not have the resources for such comprehensive coverage. Their efforts will be most effective if concentrated on three steps of the planning process: the regional transportation plan, the TIP, and major investment studies. Here are a few steps to get involved in the planning process:

1. Locate the relevant MPO. A complete list of MPOs by state can be found at

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*...quality  
growth advocates  
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<[www.bts.gov/tmip/MPOList/mpoindex.htm](http://www.bts.gov/tmip/MPOList/mpoindex.htm)>. The Transportation Model Improvement Program (telephone: 817.277.5503) also maintains a list of MPO addresses and telephone numbers.

2. Call the MPO to obtain a copy of the latest regional transportation plan and learn about the status of any plan revisions or updates. Request that the coalition be added to the public involvement mailing list so as to keep abreast of new documents, meetings, hearings, and other steps in the planning process. Typically, MPOs meet once a month.

3. Schedule a meeting with planning staff to learn about the planning process. Ask such questions as:

- What alternatives are being considered in the transportation plan?
- Are any rail projects under consideration?
- What major investment studies are in progress or being considered?
- What is the nature of the region's congestion management system?
- What estimates have been made of project benefits and costs?
- What models were used to develop those estimates?

4. Most MPOs are headed by a council representing various elected officials in the region. Find out who is on the local MPO's council and schedule a meeting with one of the council members, preferably one who represents

the relevant part of the metropolitan area or who may support quality growth goals. Ask such questions as:

- Does the council have a policy aimed at reducing or increasing congestion?
  - Has the council adopted any smart-growth policies?
  - Has the council adopted any policies regarding traffic calming?
  - Has the council adopted any travel reduction policies?
5. Find out the names of other quality growth supporters who are concerned about the regional transportation plan. One way is to obtain from the MPO a list of people who have testified at previous hearings on the regional transportation plan. Review their testimony to find out their views. Arrange to meet with leaders of some of the groups supporting quality growth.
6. Develop a public involvement strategy based on the information obtained in the previous steps. The strategy should identify:
- the coalition's goals (e.g., promoting quality growth, reducing congestion, stopping wasteful diversions of highway funds)
  - priorities in terms of who should be influenced (e.g., the planning staff, the council, elected officials, the general public)
  - meetings, public events, and other opportunities to influence planning officials or the planning process

**MEDIA TOOLKIT**  
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# MEDIA TOOLKIT

One of the most important and trickiest components of an effective grassroots campaign involves developing a positive relationship with the media that will enable the coalition to communicate its point of view. In developing a relationship and communicating with the media, always bear in mind that the other side is constantly approaching the media. It is most important, therefore, to be truthful and factual while, at the same time, presenting journalists with relevant information that will help deliver the message.

The guidelines that follow are designed to help groups organize themselves and conduct an ongoing public relations campaign. Much of the material needed to develop messages and goals mentioned in the guidelines are included as part of this *Quality Growth Toolkit*. We recommend that the media plan be in writing, primarily to establish a frame of reference so that everyone will know the coalition's goals, which messages will be communicated, and the tactics to generate media coverage.

## How to Develop a Media Plan

- *Define goal(s) and objectives and put them in writing:* Establish goals before proceeding to communicate with the media. Media goals should be specific and directly related to the broader goals of the quality growth campaign. For example, if the overall goal is to get a specific piece of legislation passed, then the media goal should be to generate media coverage that supports the legislation. Another general goal could be to generate ongoing media coverage to advance highway-based solutions to traffic congestion and projected future development in the community.
- *Determine the message:* Messages (many of which are included in this toolkit) can be

communicated in many ways, but it is most important to know what they are before approaching the media. Develop specific messages that apply to projects and circumstances in the area. Put these messages in writing and include them in the communication plan. Incorporate the following messages into the quality growth campaign:

- Americans are and should remain free to choose where they live and how they travel; public policies related to future growth should not limit those choices.
- Economic development and population growth are good for communities if the challenges associated with them are properly managed.
- Citizens should have an opportunity to participate in decisions affecting future growth in their community.
- Infrastructure investments should reflect public sentiment, and transportation improvements should accommodate, not stifle, projected growth in travel demand.
- As our nation continues to grow, environmental improvement and economic development must complement each other to grow healthy and vibrant communities.
- The best way to reduce traffic congestion is through a balanced, comprehensive approach that includes better traffic signals, a safer and more efficient transit system, and additional road capacity where appropriate.
- *Develop media lists:* After identifying goals and determining the desired messages, develop lists of media contacts for each of the media outlets in the region; use several contacts in a variety of media. For example, the media list for newspapers could include the following contacts: transportation writer, environmental writer, business writer, editorial

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*developing a positive relationship with the media ... will enable the coalition to communicate its point of view.*

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writer, and city editor. Radio is a little more limited, but be sure to include the news director and the producers of radio talk shows on which coalition speakers can appear. Put information about traffic congestion solutions in the hands of local traffic reporters in addition to contacting reporters themselves. For television, always include the news assignment editor and any reporters and anchors of personal acquaintance, as well as the producers of various local morning news programs. Do not overlook local cable television outlets; they often feature local talk shows and local programming.

- *Develop specific approaches to reach all of the various media outlets:* After identifying each of the media outlets and preparing a media list, write a scenario or way to reach each one of the outlets. For newspapers, start with an informal meeting with the reporter who is covering the issue. Another possibility is to meet with an editorial writer. Reporters look for news stories to write about; editorial writers seek to write opinion pieces that are based on news events. Do not forget to target different approaches to different writers—an environmental approach for the environmental writer and a business approach to the business writer. Smaller papers may not have some of these, but target the reporter who is covering the relevant area and the city editor in charge of assignments. For radio, target radio talk shows by developing an approach to talk with the producer of the shows and offer to have people appear on the show. Develop an approach and information for traffic reporters. For television, target an approach to pitch the assignment editors on a newsworthy story or call the producer and suggest a piece on how to solve traffic congestion. Offer to provide a guest (who is well versed in this area). Always think in terms of a visual for television—and it always helps to present newspapers with an idea for a photograph
- *Identify specific activities and approaches to generate news coverage in the various media:* Develop and list different activities that could be opportunities to get media coverage. Organize a media event around a significant

anniversary in the community; identify other news events (county council meetings, MPO meetings, legislative meetings) that are likely to be covered by the media; coordinate with other groups' activities to play off of to get in the news; localize a national story or organize a news conference on solutions to traffic congestion; and issue news releases in response to events. Also, testify before legislative groups, write op-ed pieces for local printed media, and conduct an active letter-writing campaign—all ways to generate media coverage.

- *Newsmaking opportunities:* Use these opportunities and events to generate media coverage for the coalition:
  - ✓ release a report
  - ✓ speak at events, especially if speaking to a government panel
  - ✓ commemorate anniversary events
  - ✓ announce formation of coalition
  - ✓ organize demonstrations
  - ✓ invite media to attend coalition meetings with speakers
  - ✓ localize a national story
  - ✓ comment on breaking state or national news affecting the community
  - ✓ illustrate a major point with anecdotes
  - ✓ issue statements in response to opposition's news event
- *Develop a timeline to carry out media activities:* The time line for media activities should be coordinated with the goals and objectives of the coalition's overall strategy. If the goal is to get specific legislation passed in January, for example, the timeline should include a series of media activities and dates leading up to the passage of the legislation at the targeted time. If there is a referendum up for vote, develop a string of media events leading up to the referendum, with a big media event coming close to the time of the referendum. Do not depend too much on just one major event. An effective plan should include a series of activities

throughout the year to keep quality growth issues in the news.

## How to Communicate Effectively with the Media

Now that the coalition has a plan with defined goals and messages, as well as targeted approaches for dealing with the media, begin developing ways to establish a relationship with the media and communicate with them.

- *Become aware of what the media are covering in the community:* To communicate effectively with the media, it is important first to understand what they are writing about or covering. When the coalition targets a newspaper writer, read his or her articles on an ongoing basis. Listen to targeted talk shows regularly. Note which topics have been featured on targeted television shows, and note who the guests were. Doing this will facilitate communication with reporters. It also will help to determine which of the media are likely to be fair in covering quality growth issues and which may not be as likely to give them a fair shake.
- *Set up informal meetings with reporters or drop notes to them containing useful information:* Most reporters are “hit on” for stories by groups with causes all of the time, so it is important to recognize that they always are going to be suspicious of the coalition’s motives. Because of this suspicion, it is best to be direct. One way to establish a relationship with print reporters is to become aware of what they are writing about, drop them notes commenting on their stories, and then try to set up an informal meeting with them over coffee or just at their offices. Another way to is attend meetings the reporter is covering and go up to him or her afterwards and provide them with a business card and suggest another meeting.
- *Become a resource for reporters: use fact sheets and research-based information to get the message across:* Once a connection has been established with a reporter, provide him or her with factually based information as

much as possible. The fact sheets in this toolkit are designed to help in that regard. It also could be useful to develop a fact kit about projects and transportation and infrastructure needs in the region.

## How to Organize a Press Conference

Another effective way to generate media coverage is to organize a press conference to address quality growth issues rather than relying on reporters to initiate contact and then write or air a story about the coalition’s efforts. Press conferences can be especially effective to saturate the news media with the same story, and they can be useful as a way of generating television and radio coverage that often is difficult to garner. When organizing a press conference, ensure that the event is newsworthy. If it is not, reporters are unlikely to attend and then they will start ignoring other attempts to get coverage.

Press conferences can be a good way of announcing the formation of a quality growth coalition. Include details about what the campaign is all about and the coalition’s vision is for quality growth for the region. Press conferences are a means for releasing a report or to announce the results of a poll. Consider doing an onsite news conference, which could target a project to help reduce traffic congestion.

The following tips will help organize a news conference:

- *Write a news release (see attached sample):* Be sure to make it newsworthy by including as much factual or event-oriented information as possible. The idea of a news release is to interest the media in covering the story. Most daily papers will not run the release as received, however, some weekly newspapers may. Concentrate on making points by using relevant statistics or facts (use fact sheets and index cards in the *Quality Growth Toolkit*) or calling attention to an upcoming event. Another vital component is getting the news release into the right hands. Develop a list of media contacts ranging from reporters to editors (for newspapers); news directors to talk show producers

(for radio), and assignment editors to anchors (for television).

- *Prepare a media advisory:* If conducting an event, write a media advisory describing what the event is all about and listing the location, time, place, and who will take part. Send the advisory to all newspaper calendars or daybooks. Fax or email it to news desks of all major media and follow up with pitch calls. Send the media advisory at least one day before an event, followed by pitch calls. It certainly does not hurt to provide media with an advance notice about a week beforehand, but remember the media exist from day-to-day and must be told of an event as close to the date as possible.

- *Pitch the media to cover the story:* It is always easier and better to pitch the media to cover an event or story if a relationship exists. There are a few guidelines to follow for “cold calls.” First, target the right person. Pitch the reporter and/or the editor, but do not try to play one against the other. Contact both of them; just be sure to tell the one that the other has also been contacted. For television, call the assignment desk. For radio, call the news director. Also, make the pitch concise and to the point: What is the story? Why should they cover it? Who is represented by the coalition? When is it? Where will it be? In the case of television, it can be helpful to fax or email the station ahead of time. Be aware that television is very event-oriented and that reporters usually want a visual to go with story. Radio also is event-oriented, but visuals are not necessary. Make speakers available for live or taped interviews with broadcast media (know the proper format of the show). For newspapers, it is helpful to serve as a resource by providing background information and referring them to other people to interview. If pitching a news conference, prepare and send a news advisory. Reporters should always be reminded as the event approaches.

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*Speakers should be succinct and deliver different points that help illustrate the message.*

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- *Conduct the event:* A critical component is having high-profile newsmakers speak at the event. The more diverse and prominent the speakers, the better the chances for news coverage. If a coalition has been formed, make sure all members are involved. In fact, it is best to have a coalition sponsor the news conference. Groups, such as AAA and chambers of commerce, often support quality growth initiatives. Include them in the news conference. Where possible or practical, include government officials if they are supportive of the initiative. Limit the number of speakers to five; three or four is ideal. When choosing a location, keep in mind the message being conveyed and select a location or a visual at the location that will help deliver the message.

Always think in terms of visuals to enhance the appeal for television and help generate newspaper coverage, too. For example, if the event centers around a traffic congestion issue, consider holding it near or close to the location where the congestion occurs if easily accessible. If an onsite location is not available, the simplest place to hold it is in a hotel conference room. If a government group is involved, consider holding it at the group’s location. If the report involves material dealing with a legislative body, hold the news conference at or near the facility. Speakers should be succinct and deliver different points that help illustrate the message. Messages and information delivered should be as factual as possible. Speakers should limit themselves to three to five minutes. If reporters need more details, they will ask for them. Allow time at the end for questions and answers. Remember, this often becomes the news-making part, so do not take it lightly. Answer questions as directly as possible, but remember to work in the message and major points. Repeat information and messages to ensure the audience has heard and understood them. The room for a news conference should be medium-sized, because only five to 10 members of the media are likely

to be present. Use a podium to establish an official presence. Present charts and pictures to help illustrate major points; make sure the visuals are big enough to be seen from a distance. Once decisions have been made about logistics, put the information in a media advisory

- *Prepare press kits.* Have a complete packet of information that can be inserted in a folder to present to media representatives at the news conference or to send out separately. The press kit should include the news release, a copy of the report or other relevant information being released, reproductions of any visuals displayed at the news conference, a one-page fact sheet listing relevant data and key messages, and a page or two of questions and answers to address anticipated questions. Also include information about the coalition and a brief background of the speakers.

## Other Media Strategies

*Editorial boards:* Editorial boards can be an important component of a grassroots campaign to help win the support of opinion leaders, but bear in mind when planning editorial board visits that the editors may decide to oppose quality growth initiatives. A visit could prompt them to

write a negative editorial. That being said, we recommend that such visits be conducted whenever possible. Editorial boards for major newspapers may consist of fairly large groups, including editorial writers and reporters covering the area. Smaller newspapers tend to have only a few people and some may have as few as one or two. Here are a few rules to follow: Be prepared with reports and statistics that help convey the message and major points. Always answer questions truthfully and use facts, reports, and polls to back assertions. Leave behind factually based materials for them. Bring a draft op-ed piece stating the coalition's point of view and ask them to consider running it. Limit yourself to two or three speakers to stay on message. If the editors appear to be adversarial, gently remind them that there are two sides to the story and that both sides deserve to be heard. If they do editorialize against the coalition's position, write an op-ed piece to counter it and ask them to run it. Make your points in a straightforward manner; do not insult an editor if he or she should take a different position. Simply ask that both sides be given a fair shake.

- *Writing and placing op-ed pieces:* See attached sample.

• *Letter to the editor:*

To the Editor:

Across the country, Americans are talking about the pace of growth and the questions raised about how to manage future development, accommodate traffic, maintain the quality of schools, preserve open space, and revitalize older urban and suburban neighborhoods. Today, more Americans are living the American dream by owning a home and benefiting from increased personal mobility afforded by automobiles. Yet, the benefits of these choices are under attack by anti-growth advocates.

Anti-growth advocates promote growth boundaries to limit development and promote high dense living (such as apartments and townhouses). In addition, this group wants to stop the expansion of existing roads and prohibit the building of new roads. Transit is promoted as the solution to reduce American's reliance on personal auto travel. All this, they believe will keep people in the nation's cities and make communities more "livable."

The facts demonstrate that limiting American's choices about where to live and how to get to work does not make a city or suburb more livable. Artificial boundaries drive up housing costs. Despite a 30-year investment in transit, ridership has decreased. Providing affordable housing, reducing congestion, and creating open, green space can all be achieved with a plan utilizing all the tools available to a community. Draconian zoning laws, limited, expensive housing choices, and large tracks of open land beyond the city do not provide a more livable community. A responsible approach to quality growth is what the community needs.

Sincerely,

[Insert Name and Address]

## Sample Speech

Sometimes, when politicians talk about the suburbs, I note that there is often just a hint of contempt in their tone of voice. That attitude carries over even to how they describe suburban neighborhoods and communities—they call it “sprawl.” Well, I don’t know about you, but where I’m from people don’t live in “sprawl”—they live in communities with their families and neighbors and friends.

Unlike some, I don’t view the creation of these communities and neighborhoods as cause for alarm. Rather, I believe that they are cause for celebration, because they represent people freely choosing to live where and how they want to live. And they represent people deciding to do what they think is right by their families.

At the same time, I recognize that the creation of new communities sometimes brings with it some challenges.

We need to make sure that we build our neighborhoods and communities in ways that make sense right now, as well as preserve what is best for the future. In doing this, we need to be guided by a few fundamental principles.

First, lifestyle and quality of life choices made by individuals and families need to be respected. We cannot support any approach that substantially limits the ability of Americans to choose where and how they want to live. I can imagine very few circumstances in which a government official is better equipped than an individual to make a choice about that person’s life, and certainly decisions about where and how to live need to be made by the individuals and their families.

Second, we need to continually improve our environment, and that includes our parks and other open spaces. Human beings need to be able to interact with nature and sometimes need a respite from the hustle and bustle of modern living. Consequently, local governments and private citizens need to work together to set aside those spaces that are valued by the individual community. For its part, the federal government needs to make sure that it does not have policies—such as the estate tax for farmers—

that encourage people to break up and sell large parcels of property.

Most Americans prize the open spaces nearest to them—their backyards and local playgrounds. They want to expand these types of open spaces for their own recreation and their local community’s recreation. Yet, Americans also value open spaces far from them, such as nature preserves and wildlife refuges, which help protect the environment and preserve its beauty for future generations.

Third, we should acknowledge that local people are usually best able to make decisions about land use. Few of us want to have federal or even state bureaucrats second-guessing decisions about how our communities choose to plan their future. Simply put, places like Aurora, Illinois, and Aurora, Colorado, face very different situations—the last thing they need is a cookie-cutter approach offered up by a federal bureaucracy in Washington.

Our fourth principle is that we need to address questions about traffic congestion using all the tools at our disposal. Some would reject that and say that we need to focus all our energy on transit. Some would say that we can’t build enough roads to relieve all the traffic congestion we face. Others go so far as to say that roads themselves cause traffic congestion in the first place.

I think there are dramatic flaws in those approaches.

First, let’s use some common sense. New roads don’t cause traffic—new houses, new businesses, more people cause traffic. The only thing new roads do is make sure that that traffic has somewhere to go. Even if we never built another road in this country, there would still be people who want to buy new homes, start new businesses, and, in general, create new traffic.

In fact, when designed right, new roads work to reduce congestion by drawing traffic from other, more burdened roads. If you think for a moment, I am sure that you can all think of a road project in your area that has worked to reduce traffic congestion.

Second, we don't know how much building new roads would affect traffic, because we haven't built many new roads in the last generation in the United States. It's true. Over the last 30 years, people have kept driving, with the amount of miles driven more than doubling since 1969. In that same time, we have only increased our roadways by about five percent.

I know that at first these numbers sound unbelievable, but according to the U.S. Department of Transportation, they are accurate. And if you think about your own experience for a moment, you can see that they are true. You and your family probably own more cars than you did 30 years ago, and you almost certainly drive much more. Yet the roads you travel on are pretty much the same—an extra lane at an intersection here or there, but essentially the same.

If you think about it for a couple of more seconds, you can probably think of at least a few road projects in your area that have been canceled in the last few years.

So when we talk about roads and traffic, let's be careful with the facts.

Don't misunderstand me. I don't mean to say that roads are the whole answer. Rather, we need a balanced approach that includes improving our public and private transit, improving

our current roadways, using them more efficiently, and, where appropriate, building new roads. We also need to use some creativity when thinking about congestion. We need to make sure that we are encouraging businesses to think aggressively when it comes to flextime, alternative work schedules, and telecommuting.

Our final principle is simple common sense—we should make sure that the remedies we adopt to address suburban development are not worse than the problem. For example, simplistic efforts to limit development in one place will simply direct development to other places, or, in the worse case, dramatically increase traffic congestion and real estate prices.

Guided by these principles, I am confident that we will continue to build communities and neighborhoods in ways that make sense to most Americans, in ways that limit traffic congestion, and in ways that preserve our green and open spaces in the best manner possible.

Thank you.

## Questions and Answers

**Q.** Why shouldn't we preserve open spaces by limiting development to where we already have infrastructure?

**A.** That's simple. If we allow development to be limited to areas in which infrastructure is already built, we are limiting families' choices about where and how they can live. I don't think the American people are willing to let their freedom to choose where to live be curtailed.

**Q.** Can government stop or substantially limit suburban development?

**A.** Suburban development has occurred as a result of the needs and wishes of the American people. The government needs to respond to those wishes as expressed through the ballot box. If Americans did not want to live in the suburbs, they would let us know by moving back into the cities. However, right now, we see no such desire.

More importantly, the "cures" we have been offered for suburban development are far worse than the disease. Proposals to limit development in wide swaths will only ensure that development occurs elsewhere and that traffic and real estate prices will both soar with the developed areas.

**Q.** Don't you think that the suburbs are sterile and soulless?

**A.** I think people who live in suburban communities are just like people everywhere. Some are friendly, know their neighbors, and are involved in their communities and neighborhood schools, and some are not. I don't think it has anything to do with living in the suburbs.

**Q.** Why shouldn't we favor increases in transit?

**A.** We favor improving the efficiency, convenience, and safety of transit, as well as creative approaches to enlist the help of companies in providing for the transit needs of their employees. Simply throwing money at the problem won't get the job done; we need to make sure that our investments work to improve the convenience and safety of transit systems.

**Q.** Can you build enough roads to substantially relieve traffic congestion?

**A.** We need to use all the tools at our disposal to improve transportation in this country; there is no single solution. Rather, we need a balanced approach to our transportation problems. Such an approach needs to include improving the efficiency of transit, improving the efficiency of our current roads, and, where appropriate, investing in new roads and bridges.

**Q.** Don't you think we've built enough roads already?

**A.** I think it is important that we give people the transportation improvements they need to reduce the time they spend on traveling. Obviously, the form of those investments depends on the local situation, and we believe that local governments are best able to make those kinds of calls.

At the same time, it is very important to recognize that, according to the U.S. Department of Transportation, while the number of miles driven has doubled in the last 30 years, the amount of new roads has increased by only five percent. This suggests that we need to consider enhancing our investments in roads.

## Talking Points

- Human creativity and ingenuity are our greatest resources. We need to make sure that all of the people affected by a decision have the opportunity to contribute their thoughts.
- We should use common sense and the best information available when making decisions. Too often, decisions are made by people who have little understanding of a problem and who are far removed from the effects of the decision. This is a recipe for disaster. We need to make sure that decisions are guided by simple common sense and a real familiarity with the facts of the situation.
- Generally speaking, local folks are best able to make decisions that affect local areas. This is especially true when it comes to decisions about land use and transportation. Who is best able to make decisions about your community—your county supervisor or a federal bureaucrat in Washington?
- People make all sorts of lifestyle choices about where to work and live. It is presumptuous of government officials to assume that they can make those choices better than the individuals themselves.
- It is important to preserve our open spaces, but we also need to protect the rights of American families to live in neighborhoods and communities of their own choosing. Government, especially the federal government, should not be involved in a family's decision about where to live, work, and raise their children.
- We need to be watchful of any planning and zoning approaches that would drive people into living in high-density housing against their will. The simple fact is that many people have decided that the suburbs provide a better quality of life for them. It would be wrong for the government to use its power to encourage people to live where they don't really want to live.
- Some people try to exaggerate the environmental effects of suburban development for their own political purposes.

We must not tolerate this. The simple fact is that air quality in the United States has improved for 25 years, despite the increasing number of suburban communities. If these folks are truly concerned about the environmental effects of suburban development, they should encourage companies to use flextime, alternative work schedules, and telecommuting from home.

- We do need to keep a close watch on our environmental progress when it comes to suburban development. The good news is that we have been making progress. In the last generation, despite massive increases in both population and the number of overall miles traveled in cars, we have made real strides in addressing air and water quality. Most of this improvement has come because cars and the fuel they use are now much cleaner.
- One of the challenges we face is preserving and improving our green and open spaces. Of course, the best way to do this is for private citizens and local governments to work together to set aside spaces valued by the individual community. For its part, the federal government needs to make sure that it does not have policies—such as the estate tax for farmers—that encourage people to break up and sell large parcels of property.
- With respect to traffic, we need a balanced approach to address congestion. Such an approach needs to include improving the convenience and safety of transit, using the roads we already have more efficiently, and, where appropriate, building new roadways. These simple, common-sense solutions will help improve everyone's lives by making it easier to get around and do things we need to do. Isn't that the point of a transportation network?
- Certainly traffic congestion is an annoying fact of modern life, and alleviating it will require a variety of solutions. We need to make sure that we continue to improve our currently existing roads and infrastructure. At the same time, we need to use the roads we do have in the most efficient way possible. Investing in smart-road technologies, such as synchronized traffic lights, computerized sys-

tems to route traffic around congested areas, reversible commuter lanes, and moveable barriers that add road capacity during peak hours of travel will help us do that. It is also important to make sure that we can build the new roads and bridges that people need and want.

- This entire argument over suburban development misses a fundamental point. The way people live has changed dramatically in the last generation or so. It is becoming increasingly more likely that people have a suburb-to-suburb commute rather than a suburb-to-urban-core commute. It is instructive

to note that there is now more office space in Northern New Jersey and Westchester than in Manhattan. Similarly, there is more office space in Northern Virginia than in downtown Washington, D.C. These edge cities are much more likely to define living and working patterns in the next generation than traditional core-suburb relationships. To talk about suburban development as if everyone commuted into downtown is just not that relevant anymore.

## Sample News Release

[PRINT ON YOUR LETTERHEAD]

**For immediate release**

**Contact: name**

**Month, date, year**

**telephone number and email**

### **NEW COALITION ANNOUNCES “QUALITY GROWTH” PLAN TO ADDRESS URBAN SPRAWL AND TRAFFIC CONGESTION**

[INSERT NAME OF CITY]—A group of business and civic leaders today announced the formation of a Coalition for *Quality Growth* (CQG) to promote their plan to combine economic development and environmental concerns to address urban sprawl and relieve traffic congestion.

The CQG, composed of (number and names of some of major members of group), released a blueprint at its news conference today to outline basic principles that will enable [INSERT NAME OF AREA] to manage growth in a positive way.

“The Coalition for *Quality Growth* has designed a plan that will improve the quality of life of our citizens for years to come,” said [INSERT NAME OF COALITION SPOKESPERSON]. “Our plan benefits everyone in our community by promoting economic prosperity, improving the environment and reducing traffic congestion.”

The major principles announced by the CQC are:

- Decisions about land-use planning and transportation policy should be made at local and regional levels and should include a long-term, comprehensive plan that is coordinated at the local and regional level.
- Policies affecting land use, the environment, and transportation should ensure that individuals retain their freedom to choose where they live and work and how they will travel.
- Economic development should be encouraged and promoted to provide jobs for our growing community while addressing environmental concerns at the same time.

- Community parks and open spaces should be provided within the community to improve our environment and to ensure a better quality of life for everyone.
- A comprehensive, balanced approach should be taken to relieve traffic congestion that includes improving public transit, better traffic signals, use of computer technology, and expanding and improving our road system, where it is appropriate to do so.

[ADD SPECIFIC LOCAL INFORMATION-IMPERATIVE TO MAKE THIS WORK AS A NEWS EVENT]

“The adoption of these principles will ensure that our neighborhoods and communities grow in a positive way that promotes the environment and ensures that individuals will have the ability to choose for themselves where they live and work and how they travel,” said [INSERT NAME OF LOCAL SPOKESPERSON].

The CQG plans to conduct a comprehensive public outreach campaign to educate the public about how to manage growth the right way, and the Coalition also will educate public officials about applying its recommended principles to help the [project].

[INSERT NAMES OF ALL COALITION MEMBERS]

## Sample Op-Ed Piece Smart Growth?

Across the country, Americans are talking about the pace of growth and the questions it raises how to manage future development, alleviate traffic congestion and overcrowding in schools, preserve open space, and revitalize deteriorated urban and suburban neighborhoods.

It is no wonder. During the last half of the 20th century, America has witnessed an unprecedented rise in home ownership and an equally dramatic boost in the average citizen's personal mobility. Today, over half the population lives in the suburbs, 40 percent of jobs are located there, and most workers commute from one suburb to another.

Both of these changes—the movement of people and jobs from core cities to suburbs and the increased personal mobility afforded by automobiles—are the result of choices by the American public, choices that have improved the quality of life for millions of Americans. Yet, those choices have also created challenges that many growing communities face today.

To address those challenges, some environmental advocates and politicians have advanced a livability agenda that they say will result in “smart” growth. They argue that the livability agenda will reduce traffic congestion, improve our quality of life, and make our communities more livable. But will it? Look at the details and you'll find that smart growth usually means erecting growth boundaries to limit suburban development, promoting high-density living (such as high-rise apartments and townhouses), limiting highway investments by prohibiting new road construction, and diverting road funds to rail transit and other transportation alternatives.

Unfortunately, the livability agenda does not fit the smart-growth rhetoric. Everyone wants cleaner air, more time with our families, revitalized neighborhoods, and less time on the road. Before joining the smart-growth chorus, concerned citizens and businesses should first look carefully at three fundamental problems with smart growth.

## Individual Freedom of Choice

Americans value their freedom to choose where to live and how to travel to work, to recreation and on errands.

Americans are choosing to buy and drive cars, sport-utility vehicles, and trucks. They choose a lifestyle that requires ever more trucks on the road to deliver fresh food and consumer products to their marketplace. Their lifestyle choices have banished commuting to a scant 20 percent of all trips by motor vehicle. Highway travel in the United States is growing and will continue to grow in the years ahead. Since 1970, our population has grown by 30 percent, but the number of licensed drivers has risen by 61 percent, the number of vehicles by 90 percent and total U.S. highway travel has grown by 130 percent!

Americans are choosing to drive, but they are also choosing the suburbs over the cities. Most Americans do not want to live in high-density, apartment-style housing preferred by proponents of smart growth. In a nationwide survey by the National Association of Home Builders (NAHB), 83 percent of respondents said they prefer detached, single-family suburban homes over equally priced urban townhouses located near work, shopping, and public transit. An overwhelming majority of Americans want the backyard, greater personal space, and perceived safety that come with their “dream home” in the suburbs.

## Affordability

Even if more Americans wanted to live in downtown apartments, the growth boundaries that smart-growth proponents would erect around cities would make those apartments unaffordable or at least significantly more expensive. That is because growth boundaries, by artificially limiting the supply of land, drastically drive up housing costs. The prime example of this supply-and-demand phenomenon can be found in Portland, Oregon, where growth boundaries have been in effect for over 20 years. Since the late 1980s, Portland has gone from one of the nation's most affordable cities to one

of the least affordable today, according to the National Association of Home Builders. In fact, in the past seven years, housing prices skyrocketed by 99 percent (the highest rate of increase in the country) compared to a national average increase of 35 percent.

## More Congestion, Not Less

Smart-growth advocates believe the livability agenda will reduce traffic congestion. “You can’t build your way out of congestion,” is the mantra chanted by many smart-growth advocates to buttress their case against additional road capacity and for increased spending on transit and other transportation alternatives. Yet, the lack of sufficient road capacity to meet growing travel demand is precisely the reason that congestion clogs so many urban freeways today. According to the U.S. Department of Transportation, the number of miles we drive has more than doubled in the past 30 years, but new road mileage has increased by only 5 percent—a recipe for gridlock.

Of course, congestion relief efforts should include as many transportation options as the public purse will support, but because more people are choosing to drive more cars more and more miles each year, any realistic plan to reduce congestion must include additional road capacity. In Washington, D.C., for example, local officials decided three decades ago to forego 13 planned new roads in and around the city in favor of constructing an extensive, first-rate transit system and a number of high-occupancy vehicle (HOV) lanes. Today, Washington’s transit system attracts the nation’s second highest share of commuters (12.8 percent) and its HOV use (16 percent) is far higher than that of any other U.S. city. Yet, because road capacity has remained static, the nation’s capital now suffers the second worst traffic congestion in the country.

The lesson of Washington is that you cannot afford not to build new roads. By removing road improvements from the list of congestion relief strategies, smart-growth proponents, in essence, condemn their communities to gridlock.

## Conclusion: What We Can Do

Smart growth does not seem so smart because its policies will not work, or if they did, most Americans would not like the results. So what is the answer? From our perspective, it is time for a little common sense. Communities need to take a balanced, sensible approach to addressing growth.

To fight traffic congestion, flexible work schedules and telecommuting would help. Transit, including private transit, such as vans that pick people up at home and drop them at their office door, can also make a difference. We can make our existing road systems more efficient, through such innovations as synchronized traffic lights, reversible commuter lanes, and computerized systems to route traffic around congested areas. Nevertheless, with highway capacity failing to keep pace with new business and housing development around the United States, we also need to add lanes or build new roads to accommodate the additional traffic.

To preserve open space, local governments and private citizens should work together to set aside undeveloped land that the community values. Tax policy, such as the estate tax for farmers, must be written so that it does not force families to sell parcels of undeveloped property. Equally important, however, local zoning laws should take into account most Americans’ desire to have their own open space in the form of a backyard or local playground.

As to land use planning, it is critical that we ensure that future generations will be able to pursue the American dream of affordable home ownership. Public officials must take into account local economic conditions, aesthetic values, and other quality-of-life issues when developing zoning laws. Efforts to regulate the pace of development in a community should be tempered with an understanding of the impact that zoning restrictions may have on housing and commercial prices.

Addressing the challenges of economic and population growth is important, and it is refreshing to see politicians focus on quality-of-life issues. Common sense, though, should lead public officials to policies that accommodate growth through infrastructure investments, rather than trying to stifle it.

**PART THREE:**  
**QUALITY GROWTH RESOURCES**  
**TAB HERE**

# **ELECTRONIC RESOURCES**

## **TAB HERE**

# ELECTRONIC RESOURCES

Everyone working on growth issues needs to learn and keep current with the latest research.

The following Web sites may be of interest.

## Quality growth advocates

- American Highway Users Alliance.  
<[www.highways.org](http://www.highways.org)>
- American Road & Transportation Builders Association. <[www.artba.org](http://www.artba.org)>
- Americans Against Traffic Calming.  
<[www.io.com/bumper/ada.htm](http://www.io.com/bumper/ada.htm)>
- Associated General Contractors of America.  
<[www.agc.org](http://www.agc.org)>
- Cascade Policy Institute.  
<[www.CascadePolicy.org](http://www.CascadePolicy.org)>
- Competitive Enterprise Institute.  
<[www.cei.org](http://www.cei.org)>
- National Motorists Association.  
<[www.motorists.org](http://www.motorists.org)>
- National Stone Association  
<[www.aggregates.org](http://www.aggregates.org)>
- Oregon Transportation Institute.  
<[www.hevanet.com/oti](http://www.hevanet.com/oti)>
- Pacific Research Institute.  
<[www.pacificresearch.org/action/action17.html](http://www.pacificresearch.org/action/action17.html)>
- Reason Public Policy Institute.  
<[www.rppi.org](http://www.rppi.org)>
- The Road Information Program.  
<[www.tripnet.org](http://www.tripnet.org)>
- Thoreau Institute.  
<[www.ti.org/urban.html](http://www.ti.org/urban.html)>
- University of California Transportation Center.  
<[socrates.berkeley.edu/uctc](http://socrates.berkeley.edu/uctc)>

## Smart growth advocates

- American Public Transit Association.  
<[www.apta.com](http://www.apta.com)>
- American Planning Association.  
<[www.planning.org](http://www.planning.org)>
- Congress on the New Urbanism.  
<[www.cnu.org](http://www.cnu.org)>
- Sierra Club.  
<[www.sierraclub.org/transportation](http://www.sierraclub.org/transportation)>
- Smart Growth Network.  
<[www.smartgrowth.org](http://www.smartgrowth.org)>
- Surface Transportation Policy Project.  
<[www.transact.org](http://www.transact.org)>

## Data sources

- Census data.  
<[venus.census.gov/cdrom/lookup](http://venus.census.gov/cdrom/lookup) 1990  
[lookup](http://lookup)>
- Congestion. <[mobility.tamu.edu](http://mobility.tamu.edu)>
- Highway Statistics. <[www.bts.gov/ntda/fhwa](http://www.bts.gov/ntda/fhwa)>
- National Transit Database.  
<[www.bts.gov/ntda/ntdb](http://www.bts.gov/ntda/ntdb)>
- National Transportation Statistics.  
<[www.bts.gov/ntda/nts](http://www.bts.gov/ntda/nts)>
- TEA-21. <[www.fhwa.dot.gov/tea21/index.htm](http://www.fhwa.dot.gov/tea21/index.htm)>
- Transit statistics.  
<[www.apta.com/stats/index.htm](http://www.apta.com/stats/index.htm)>

## Government agencies

- Census Bureau. <[www.census.gov](http://www.census.gov)>
- U.S. Department of Transportation.  
<[www.dot.gov](http://www.dot.gov)>
- U.S. Environmental Protection Agency.  
<[www.epa.gov](http://www.epa.gov)>
- U.S. General Accounting Office.  
<[www.gao.gov](http://www.gao.gov)>

**WORKS CITED**  
**TAB HERE**

American Petroleum Institute, *The Benefits of Road Travel and Transport*, 1998, Washington, D.C.

American Public Transit Association, *Transit Facts*, Washington, D.C.

Bureau of Transportation Statistics, *National Transportation Statistics 1998*, Washington, D.C.

U.S. Census Bureau, *1990 Census of Population and Housing*, Washington, D.C.

Cox, Wendell, *Demographic Briefs and Urban Policy*, [www.publicpurpose.com](http://www.publicpurpose.com).

U.S. Department of Transportation, *American Travel Survey*

U.S. Environmental Protection Agency, *National Air Quality and Emissions Report*, 1997, Washington, D.C.

Federal Highway Administration, *Highway Statistics 1997*, Washington, D.C.

General Accounting Office, *Community Development: Extent of Federal Influence on "Urban Sprawl" is Unclear*, <[www.gao.gov](http://www.gao.gov)>

Lave, Charles, "It Wasn't Supposed to Turn Out Like This: Federal Subsidies and Declining Transit Productivity," Access, University of California Transportation Center.

Metro, Region 2040 Recommended Alternative Technical Appendix, Portland, Oregon.

National Association of Home Builders, Housing Opportunity Index, First Quarter 1999, <[www.nahb.com](http://www.nahb.com)>

Newman, Peter, and Jeff Kenworthy, *Cities and Automobile Dependence: An International Sourcebook*, Brookfield, VT, Gower Technical, 1989.

Pisarski, Alan, *Commuting in America II*, Washington, D.C., Eno Transportation Foundation, 1996.

Reason Public Policy Institute, *A Critique of "Dollars and Sense: The Economic Case for Public Transportation in America"*, 1998, <[www.reason.org](http://www.reason.org)>

Richmond, Jonathan, "New Rail Transit Investments," Taubman Center for State and Local Government, John F. Kennedy School of Government, Harvard University, 1998.

Sierra Club, *The Dark Side of the American Dream: The Costs and Consequences of Suburban Sprawl*, [sierraclub.org](http://sierraclub.org).

Schulz, David, Northwestern University, comments made in article, "Congestion and Sprawl Pave Way for Debate," Chicago Tribune, Nov. 16, 1998.

Texas Transportation Institute, *Urban Roadway Congestion Annual Report 1999*, College Station, Texas, Texas, A&M, 1999.

Urban Transportation Center, *Highways and Urban Decentralization*, University of Illinois at Chicago, 1998.

**GLOSSARY AND INDEX OF TERMS**  
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# GLOSSARY

***Quality Growth:*** Quality growth is an approach to growth management that promotes quality urban development which respects the freedom of Americans to choose where they live, their preferred style of housing and how they travel. Quality Growth favors improving the entire transportation network, rather than focusing resources primarily on a single component. Quality Growth measures include additional road capacity, better traffic signalization and more efficient transit.

***Smart Growth:*** Smart Growth is an approach to growth management that focuses on revitalizing urban areas and retaining open space in rural areas rather than expanding suburban development. Smart Growth planning tools may include urban growth boundaries, increased housing density and transportation polices that invest more in rail transit and less in road improvements.

***Open Space:*** Open space is undeveloped or "green" land. It can be either a wooded area or farmland. Open space serves as a buffer between urban areas.

***Growth Boundaries:*** Growth boundaries are planning tools that aim to increase a city's population by artificially limiting the supply of developable land. They are used to restrict the creation of neighborhoods and communities in undeveloped areas, thus preserving open space.

***Infill Development:*** Infill development is a Smart Growth measure that locates new development within an urbanized area rather than on its fringes. Infill development results in higher urban densities and the preservation of rural open space.

***Urban Decentralization:*** Urban decentralization is the expansion of neighborhoods and communities into less developed or undeveloped areas. It is often denigrated as "sprawl."

***Mobility:*** Mobility refers to efficient and convenient transportation; the personal mobility enjoyed by Americans has been created by a modern and comprehensive transportation system. Automobiles play a central role in providing Americans with a high level of mobility.

***Traffic Calming:*** Traffic calming refers to a variety of measures used to slow motor vehicles in order to facilitate the movement of pedestrians and bicyclists. Traffic calming devices like speed bumps and narrow roads are intended to reduce the central role of automobiles on the transportation network, thereby increasing access for pedestrians and bicyclists. Yet these devices also reduce vehicular mobility, making it harder for emergency vehicles to respond to calls as quickly as possible.

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