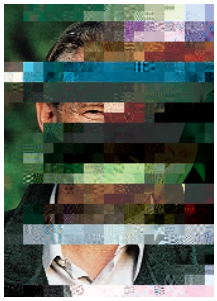


Dear Friend:

The Trust for Public Land is pleased to present

Acknowledgments

Many thanks to the following people who assisted
in the identification of materials relevant to this report.

Dale Allen, The Trust for Public Land

Mark Bannon, Bannon Engineering

John Barrett, Treasure Valley Futures

Kathy Baughman, The Trust for Public Land

Cathy Bechtel, Riverside County
Transportation Commission

Kathy Blaha, The Trust for Public Land

Eric C. Bruun, Transit Consultant

David Burwell, Surface Transportation Policy Project

David Carrier, American Planning Association

Jeff Casello, University of Pennsylvania

Robert Cervero, University of California—Berkeley

Don Chen, Smart Growth America

Elaine Clegg, Treasure Valley Futures

Elizabeth Conner, Treasure Valley Partnership

Dave Dickson, National Association of Local Government
Environmental Professionals

Michelle Garland Ernst, Surface Transportation
Policy Project

Marianne Fowler, Rails-to-Trails Conservancy

Erica Frenkel, Scenic America

Alan Front, The Trust for Public Land

Peter Harnik, The Trust for Public Land

Monroe Hite, Delaware Department of Transportation

Camille Hoelting, The Trust for Public Land

John Holtzclaw, Sierra Club

Rich Innes, Conservation Strategies

Carrie Jelsma, Conservation Strategies

Curtis Johnson, Vermont Agency of Transportation

Robert A. Johnston, University of California—Davis

Anjali Kaul, The Trust for Public Land

Nancy Keith, Mountains to Sound Greenway Trust

Kristi Kimball, Surface Transportation Policy Project

Kelly Kirkland, Mountains to Sound Greenway Trust

Howard Learner, Environmental Law and Policy Center

Todd Littman, Victoria Transport Policy Institute

Robert Lopresti, Western Washington University

Deron Lovaas, Natural Resources Defense Council

Jim McElfish, Environmental Law Institute

Kevin McGorty, Tall Timbers

Doug Miller, Virginia Department of Transportation

Charlie Niebling, Society for the Protection
of New Hampshire Forests

Karen Nozik, National Religious Partnership
for the Environment

Tom Pelikan, Scenic America

Cordelia Pierson, The Trust for Public Land

Nick Pratt, The Trust for Public Land

Russell Riggs, National Association of Realtors

Ken Rosenfeld, Rails-to-Trails Conservancy

Katherine Rowe, The Trust for Public Land

Marsha Runningen, The Trust for Public Land

Mary Kay Santore, United States Environmental
Protection Agency

Della Schweiger, Land Trust Alliance

Russ Shay, Land Trust Alliance

Charlie Strunk, Fairfax County Department
of Transportation

Ann Swanson, Chesapeake Bay Commission

Mayor Will Toor, City of Boulder

Vukan Vuchic, University of Pennsylvania

Trisha White, Defenders of Wildlife

Kent Whitehead, The Trust for Public Land

Tobey Williamson, American Farmland Trust

Executive Summary

As the web of highways and byways criss-crossing our nation has grown, small towns and urban centers alike have reaped the benefits, and experienced the pains, of growth. From the interstates to the back roads that flow into them, America's highway system facilitates commerce and economic expansion, connects people more and more easily to once-distant locations, and makes remote landscapes and communities more and more accessible. It also opens those previously less-traveled landscapes to increased development, accelerating the rise of land prices while laying claim to the ever-shrinking open spaces on which communities rely for recreation, for wildlife habitat, and for the scenic character and quality of life that define these areas.

Traditionally, transportation policy—based largely on state and local decision making, but fueled largely by federal funding through periodically reauthorized transportation bills—has taken into account the immediate impacts of highway construction, mitigating for wetland and habitat losses and other environmental impacts of the actual road-building process. But the broader issues of conflicting landuses, sprawl, and vanishing open space generally have not been accounted for; instead, these

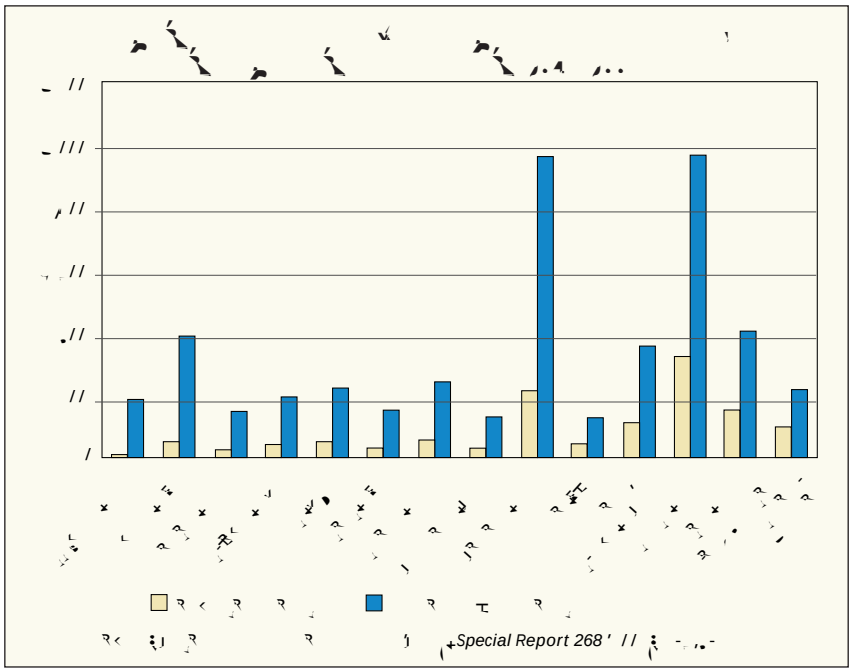
Increased traffic and demand for more roads put pressure on already limited open space. People in metropoli-

into their efforts to “preserve capacity” of existing transportation corridors and to extend the value of transportation investments already made;

- The Twin Cities of Minneapolis/St. Paul, Minnesota, where a large-scale planning effort weaves transportation and open space issues and funding sources together in an attempt to retain the area’s renowned special qualities;
- Riverside County, California, where open space and wildlife habitat concerns are cen-

Background: Highways and Land—Making the Connection

The modern highway is often taken for granted as a device for people to travel quickly from one place to another. Yet the highway is an integral component of today's modern infrastructure. Highways move people, freight, and goods, and provide a valuable resource for national security and emergency response systems. For residents in rural areas, highways are a means to overcome isolation, bring goods to market, and connect with more populated and developed areas. Highways have even become engrained in culture—the long stretch of highway synonymous with the familiar question, "Are we there yet?"



Special Report 268

Few countries depend upon highways for transportation like the United States. And no other country expends as large a percentage of its resources on highways and highway-related infrastructure. Many highway projects are conceived with the goal of improving mobility and reducing travel burdens. With the onset of suburbanization, countless highway projects have been approved with admirable goals of distancing homes from industrial pollution, providing less-crowded situations for children, and yielding more housing and yard for the money. Yet highway-construction projects also bring other unintended effects. Resulting traffic brings pollution closer to homes. More time is spent driving between home and places of work. Gradually, with every highway project, urban areas become sprawling cities and open spaces begin to disappear.

Certainly, as populations grow and cities evolve, expansion is inevitable. At the same time, land conservation issues are increasingly dominating discussions as open spaces become targets for development. There is an undeniable link between the issues surrounding land conservation and highway building. The construction of new highways affects the proliferation of sprawl, traffic patterns, and quality-of-life issues. Transportation decision makers have come to recognize that projects intended to ease congestion and provide access to remote areas can, paradoxically, result in environmental degradation and the elimination of valuable open spaces.

These connections highlight the inherent wisdom in coordinating the efforts of those leading federal highway initiatives and those managing local landuse. Planning and funding for new highways should anticipate long-term effects. Highway systems and the communities they serve can benefit enormously when planning and funding for new highways anticipate these long-term effects, and when land conservation needs, including scenic, recreational, and habitat lands, are considered alongside transportation and infrastructure needs. This report thus takes a look at the inextricable link between land conservation and highway

projects. Later studies also showed continued increases associated with further infrastructure investments, even after access had already been established. In the 1990s, a study of commercial property in San Diego showed that properties close to freeway on-ramps could charge higher rents. An ongoing examination of the effect of new toll roads in Orange County, California, also shows a strong relationship between home prices and new road construction. This study found that the Foothill Transportation Corridor Backbone (FTCBB) and the San Joaquin Hills Transportation Corridor (SJHTC), constructed in the 1990s, provided homebuyers with improved access that was reflected in increased home prices, which in turn has led developers to increase the pace of subdividing those corridors.[1]

Apart from these financial effects, highway-facilitated development takes a substantial toll on conservation and open space values. This subdivided countryside becomes less green, less scenic, and less valuable for wildlife and biodiversity. These losses are occurring at an ever-increasing rate. As suburban developments encroach on undeveloped lands, financial and landuse considerations pressure owners of neighboring farms and forests to consider development sales. According to the Department of Agriculture, in the 1990s Americans converted open space to developed land at a rate of 2.2 million acres per year or 251 acres per hour—a rate of conversion 50 percent greater than that of the 1980s.[2]

The consequences of sprawl on open spaces and adjacent waterways are manifold. Among the most noticeable impacts are the following:

- Wetlands. Wetlands are crucial for habitat, water quality, and aquifer recharge. Approximately 300,000 acres of U.S. wetlands are lost every year. Agricultural conversion only accounts for less than one-third of the wetland reduction.[3]
- Habitat. Plant and wildlife habitats are increasingly challenged by the pace of suburban and exurban development. According to the U.S. Fish and Wildlife Service, habitat loss is the primary hurdle to recovery of the nation's endangered and threatened species. As new residential neighborhoods and business districts spread through previously undisturbed landscapes, "habitat islands" are created, fragmenting plant and wildlife populations and cutting off migration routes.
- Recreation/Scenic Open Space. Open space secures places important to a community's identity and culture, and can bolster tourism economies with its scenic and historic beauty. Road building and the sprawling development it helps to generate have had a major impact on the reduction of open space for public use and enjoyment, including uninterrupted scenic vistas that once gave rise to the idea of "pleasure driving." The lack of open space hinders the development of playgrounds and fields for soccer, baseball, and other sports that help build a sense of community.
- Water Quality.

space is the National Scenic Byways Program. This program targets the maintenance and preservation of roads having outstanding scenic, historic, cultural, natural, recreational, and archaeological qualities. It is currently funded at a level of approximately $25 million per year.

Additionally, the Congestion Mitigation and Air Quality (CMAQ) program made a small but significant amount of funding available to regions that were noncompliant with federal Clean Air Act amendments. As approximately half of the nation's air pollution stems from transportation sources, ISTEA included a program that helped affected regions fund pollution reduction initiatives.[9] Transit improvements, sidewalks, improved traffic management techniques, and the encouragement of less- or non-polluting vehicles were all projects funded by CMAQ.

ISTEA was revamped in 1997–98 as the Transportation Equity Act for the 21st Century (TEA-21). While ISTEA's environmental and planning provisions were preserved, more funding was allocated for building roads. The Transportation Enhancements Program (TEP) was preserved, with expanded funding. New enhancement categories were added, including environment mitigation to reduce water pollution and projects to maintain habitat connectivity. Planning remained a potent tool for TEA-21. While the new policy maintained strong provisions for accountability, local control, and fiscal constraint, there was somewhat less focus on landuse planning and landuse impacts of highways. At the same time, however, the federal commitment to many of the programs in ISTEA was maintained, and even enhanced, and a new program with potential for the achievement of open space conservation was added.

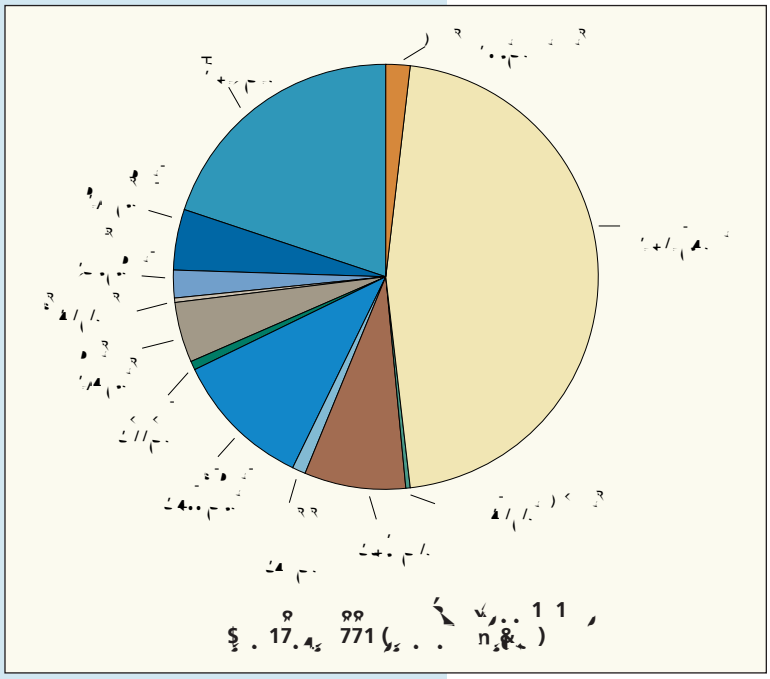
The Transportation and Community and System Preservation Pilot Program (TCSP) is an innovative program designed to help communities address the linkage between transportation, landuse, and quality of life. It encourages the involvement of nontraditional partners as part of the project team. The goals of the projects and planning efforts are to improve the efficiency of transportation systems, reduce transportation's environmental impacts, reduce the need for costly future public infrastructure investments, and plan for development. The innovative TEA-21 TCSP was originally authorized for $25 million of annual funding. Special appropriations in Congress have raised its funding by another $276 million for 2002.

Transportation Enhancements Program

- 10 percent set-aside of Surface Transportation Program (more than $2.4 billion since 1991)
- Funds twelve categories of projects
  - –Pedestrian and bicycle facilities
  - –Pedestrian and bicycle safety and education activities
  - –Acquisition of scenic or historic easements and sites
  - –Scenic or historic highway programs, including tourist and welcome centers
  - –Landscaping and scenic beautification
  - –Historic preservation
  - –Rehabilitation and operation of historic transportation buildings, structures, or facilities
  - –Preservation of abandoned railway corridors
  - –Control and removal of outdoor advertising
  - –Archaeological planning and research
  - –Mitigation of highway runoff and provision of wildlife undercrossings
  - –Establishment of transportation museums[6]

Transportation and Community and System Preservation Pilot Program (TCSP)

- Authorizes $120 million over six years, but actual funding since 1999, the first year of the program, has totaled almost $345 million
- Encourages participation by nontraditional partners in project teams
- Funds programs that:
  - –Improve the efficiency of the transportation system;
  - –Reduce the impacts of transportation on the environment;
  - –Reduce the need for costly future investments in public infrastructure;
  - –Provide efficient access to jobs, services, and centers of trade; and
  - –Examine development patterns and identify strategies to encourage private sector development patterns that achieve these purposes.[7]



National Scenic Byways Program

- Funded at about $25 million per year
- Directs the U.S. Department of Transportation to recognize "roads having outstanding scenic, historic, cultural, natural, recreational, and archaeological qualities by designating the roads as National Scenic Byways and All American Roads"
- States nominate roads that are already designated as State Scenic Byways
- Grants are provided to projects that protect the qualities of the scenic highway and adjacent areas[8]

Meeting the Challenge of Land Conservation

While highway planners have slowly been broadening their interests to address landuse, landuse planners are dealing with unprecedented interest in land conservation as an antidote to sprawl. Leading

One of the most interesting, and enduring, examples of growth management and open space protection has taken place in Oregon, particularly in the Portland metropolitan area. Leveraging civic concern, a favorable state policy climate, and federal transportation funding for transit, Portland has managed the development of highway infrastructure by designing its community around a powerful public transit system, shaping the metropolitan area around its city center, and avoiding the suburban sprawl endemic to so many other metropolitan areas. The transit program has been paired with an aggressive effort to plan, fund, and implement one of the nation's most ambitious regional land conservation programs.

Portland's Urban Growth Boundaries (UGBs), which promote urban-style higher densities, in tandem with greater protection of outlying landscapes, hsed*[317an-stli6utlying lan with the electorate and haed*[317withstood more than one ballot challenge, and several court challenges. Growth management planning has also been linked to the "Oregon Transportation Rule," which applies a gn-stli6uwth limit to vehicle miles traed*[31led (VMT), a commonly used indicator of traffic.

Portland's mo317away fn-stli6um the binge of freeway planning and construction prevalent in almost all U.S. metropolitan areas during the 1950s and 1960s eventually led to a focus on light rail. In the late 1980s, the "Western Bypass," a Beltway-like loop of I-5 through rural lands just outside the Urban Gr Boundary was proposed. A citizens' mo31-ment, "STOP," joined forces with the gr management advocacy organization, 1000 Friends of Oregon, to challenge the project.

Research, undertaken jointly by 1000 Friends and the U.S. Environmental Protection Agency, led to the creation of a planning model, LUTRAQ (Land Use Transportation and Air Quality), which compared two development scenarios for the same region. It found that combining clustered housing, a mixing of landuses, and ample public transit and walking and bicycling infrastructure created the least amount of traffic.

"…there has been a dramatic surge in both the creation and the enhancement of open space programs in the last 10 years…32 of 50 states have either created new programs or significantly enhanced funding for existing programs since 2001. Also, of these 32 states, 21 of them—66 percent—are ranked by the National Resources Inventory in 1997 as among the most rapidly urbanizing states in the nation in terms of land consumption."

Open Space Protection: Conservation Meets Growth Management[17]

Case Studies: Transportation and Land Protection

Decision makers face significant challenges when planning expansions or new roads. Transportation projects are often quite extensive and costly, and it is difficult to apply a set of standards given the federal, state, and local jurisdictions that are involved in the planning process. Without a policy in place directly integrating landuse concerns with transportation planning, it is almost inevitable that transportation and highway expansion projects will continue to affect sprawl development and its ensuing effects on the environment. A community that waits to address the problem of open space loss until after a road is built will find preserving open space much more difficult and expensive than if land conservation is taken into account early in the planning process.

The following case studies illustrate the evolution and application of recent transportation policy where open space preservation has been a consideration in planning and implementing transportation projects. Northern Virginia's Fairfax County Parkway, planned in the 1970s and 1980s, provides a good starting point for examining the old way of doing things, where transportation projects sought to accommodate rather then limit sprawl.

Planning the Fairfax County Parkway outside Washington, D.C., began in the mid-1970s. Public hearings began in 1981, and the bulldozers began rolling in the mid-1980s. The project would create an outer loop road paralleling the I-495 Beltway. The road would facilitate the flow of traffic between the major radial roads of I-95, I-66, U.S. 50, and the rapidly developing Dulles Airport-Herndon-Reston area in Northwest Fairfax County. The parkway was strongly supported by development interests, which helped finance segments of it to make holdings more accessible.

The final Environmental Impact Statement for the Fairfax County Parkway took careful note of the following:

- The existence of large amounts of rural land that were slated for development.
- The existence of large amounts of traffic generated by the existing suburban developments, hinting that the new road might help relieve some of that congestion.
- Population growth, which was thought to be manageable within the corridor at a rate of 4 percent to almost 6 percent. Most experts now agree that growth rates much over 2 percent become unmanageable.[18]

Parkway planners promised to account for a great deal of traffic growth. Unfortunately, traffic projections were inaccurate, and the region was quickly plagued by all the crowding problems the project set out to avoid. The parkway promised to alleviate traffic congestion throughout the corridor and have capacity to spare for growth through the year 2005. By 1997, many segments of the Parkway were

quickly approaching, or even exceeding, the projected 2005 capacity levels.

While efforts were made to construct an attractive road with bike and walking paths alongside, the Fairfax County Parkway was expected to facilitate a great deal of low-density development that would devour open space in the vicinity of the road. The location of existing parks in the parkway corridor was dutifully recorded in the plan. It was noted that the parkway would come close to many parks, but its judgment was that the parkway would not adversely impact them. The plan did not propose additional parkland. The amount of acreage in parkland and its adequacy for serving the huge amount of growth the parkway would facilitate were not analyzed, but were left to the county to address. Ignoring the issue of open space and land conservation, parkway plan maps compared agricultural and undeveloped lands

of the parkway has become a major recreational resource for county residents, but open space demand far outpaces this and other available park and trail opportunities. Voters and political leaders in the county have recognized that action needs to be taken to preserve remaining open space in the county, and the most recent $20 million park bond referendum passed with 71 percent approval. Another is planned for November 2002. In 2001, the county's Board of Supervisors created the Land Preservation Fund, to which citizens can voluntarily contribute money for land acquisition. Thus far, the willingness of taxpayers to contribute to this fund has far exceeded initial expectations. A request sent out with personal property tax bills in the spring of 2002 generated contributions from more than 3,200 individuals, when only a few hundred were expected to respond.

In many areas of the country, planners are beginning to move away from the old way of transportation planning. Some newer transportation and development projects are now being conceived with the intention of integrating transportation policy with responsible open space conservation as a way to address traffic, environmental, and quality-of-life issues.

• • •

Capacity Preservation—Traffic Solutions via Land Conservation

The fact that vehicle traffic on the Fairfax County Parkway exceeded expectations is not an unusual occurrence in the world of highway planning. Addressing capacity issues through adding lanes, or opening new roads, has long been a method for handling the issue of

slower the traffic, the more pressure to expand the road; and the more the roads expand, the greater the chance for sprawl.

Vermont's famed vistas are benefiting from federally funded scenic easements, which prevent development.

“We are fortunate in the Twin Cities area to have a vast network of parks, lakes, and natural areas, and a legacy of valuing and protecting open spaces.

Rather than leave environmental preservation to chance, we’ve FfhrcaepdV-

The Minneapolis-St. Paul region, contrary to the experience of other big cities in the Midwest, has experienced growth in recent years—along with the pattern of highway expansion and sprawl typical of fast-growing regions. Owing to strong regional growth, the Metropolitan Council—a seven-county regional planning agency working on transportation, utilities, and regional parks—has initiated a regionwide growth management effort.

In response to widely felt concerns about the extent of loss of agricultural land and open spaces, as well as the growth of traffic, the Metropolitan Council has undertaken a study of three different growth scenarios depicting how the region might accommodate an anticipated growth of 280,000 households, 580,000 additional residents, and 360,000 more jobs. The process was undertaken with extensive input from public workshops, local governments, business associations, and regional transportation policymakers. The scenarios provide important information for the development of the Metropolitan Council's regional plan, "Blueprint 2030." Seven objectives form the core of ks might accommodateld-97amaen24 33.0468 Tw THE FUTURE

- Current plans led to, at most, 25 percent of new development as walkable, compared with 57 and 70 percent, respectively, for the other two plans.
- Public input showed desired growth close to regional parks and trails.
-

RCIP intends to address general planning for housing and landuse, habitat and open space protection, and transportation.

The Multiple Species Habitat Conservation Plan (MSHCP), an element of RCIP, is designed to protect more than 150 species and conserve over 500,000 acres in Western Riverside County, where the most severe impacts of growth are expected. The MSHCP Planning Area encompasses approximately 1.26 million acres (approximately 1,966 square
the mandates of the 1992 California Natural Communities Conservation Planning Act, which was passed to facilitate a collaborative conservation planning effort among the public, businesses, and government, addressing future regionwide conservation needs.

The plan—one of the largest of its kind—covers multiple species and habitats within multiple jurisdictions. It encompasses a diverse landscape from urban areas to undeveloped foothills to desert and forests. The plan provides for a coordinated reserve system and implementation program that will facilitate the preservation of biological diversity as well as maintain the region's quality of life. The MSHCP will also address several federal and state mandates governing endangered species and habitat and wildlife conservation. Responsibility for implementing the MSHCP is shared among state, federal, and local governments, as well as private and public entities engaged in construction activities that potentially impact the species covered under the MSHCP. It is hoped that such an approach will be more effective, and ultimately less costly, than the previously engaged piecemeal approach of habitat conservation.

The part of the Riverside County Integrated

and highly engaged board has been one of the main keys to the success of MTSG.

Staff members from forestry companies and land management agencies are active on a Technical Advisory Committee that assures that the Greenway initiatives are integrated into town and agency plans along the corridor. Fundraising is helped by the presence of philanthropic individuals on the board. Government officials on the board can help advise the Greenway about the possibilities and obstacles it might face in regards to certain acquisition or public funding efforts. Environmental, development, and forestry interests can work out differences in an atmosphere more congenial than a courtroom. Such is the route to a successful regional coalition—and major project completion.

Today's greenway is a scenic and recreational asset and a working forest and wildlife ecosystem area. Public agencies along the corridor have cooperated with MTSG in the last ten years to seek funds and purchase lands for open space uses, parks, working forests, and historic landscapes. It has created new trails and connected existing parcels and trails. When the project is complete, citizens will be able to travel by foot or bicycle from Seattle's downtown waterfront, through revitalized neighborhoods in Central Seattle, across Lake Washington on the bicycle-pedestrian lanes of the I-90 bridge, through the eastern suburbs, across large state parks and forestlands, across dozens of streams protected from the pollution and degradation associated with inappropriate development, to the nationally designated Pacific Crest Trail, and finally, to rest at the Greenway's eastern terminus, the town of Thorp.

The MTSG was made possible, especially in its early days, by federal transportation funding through ISTEA and TEA-21. In 1992 the Northwest Region office of the Washington State Department of Transportation received an ISTEA planning grant for $250,000. Over the next four years, four planning volumes were published that were instrumental in the successful nomination of MTSG as a National Scenic Byway—the first segment of an interstate highway in the United States to attain such status. Other ISTEA and TEA-21 National Scenic Byways grants followed in subsequent years.

The Transportation Enhancements Program of ISTEA and TEA-21 have helped leverage funding for several historic and environmentally sensitive parcels, and several more in areas pressured by suburban development, as well as the design and construction of trail segments in Seattle and suburbs along the greenway. In the early days of greenway building, some parcels along the highway were seen as crucial to the success of the entire endeavor, acting as potential development dominoes. ISTEA and TEA-21 funds kept these parcels undeveloped, leveraging local, state, and other federal funding sources ranging from King County environmental programs to the federal Forest Legacy program.

Federal transportation planning and land acquisition funds enabled a vision that has created an awareness throughout the region of the value of enhancing I-90 with scenic and environmental protection. When talking about the greenway to public audiences, leaders point to the contrast between the forested beauty and sequence of undeveloped highway interchanges of I-90, and the preservation of small towns along the corridor with the development, billboards, and suburban sprawl that has taken over almost all of Interstate 5, Washington's main north-south corridor.

The Mountains to Sound Greenway is a prime example of civic involvement, public and private cooperation, and environmental and scenic protection efforts working in conjunction with federal programs to create transportation corridors surrounded by open space rather than sprawl.[28]

Protect, enhance, and make accessible scenic beauty, recreational opportunities, wildlife habitat, historic communities, and healthy economies in a multipurpose greenway along Interstate 90 from the shores of Puget Sound, over the Cascade Mountains, to the Kittitas Valley foothills.

1. Regarding highways and land prices, see Marlon G. Boarnet and Andrew F. Haughwout, *Do Highways Matter? Evidence and Policy Implications of Highways' Influence on Metropolitan Development* (Washington, D.C.: Brookings Institution, Center on Urban and Metropolitan Policy, 2000); and Marlon G. Boarnet and Saksith Chalermpong, "New Highways, House Prices, and Urban Development: A Case Study of Toll Roads in Orange County, CA," *Housing Policy Debate* 12, no. 3 (Fannie Mae Foundation, 2001): pp. 575–576. Several issue areas animating policy and research discussions about transportation, landuse, and environmental impacts are, unfortunately, beyond the scope of this report. For examples of the "chicken-and-egg" debate about the relationships between highways, traffic generation, and landuse/sprawl, see Robert Cervero, "Road Expansion, Urban Growth, and Induced Travel: A Path Analysis" (Berkeley: Department of City and Regional Planning, Institute of Urban and Regional Development, University of California, www.uctc.met/papers/520pdf, July 2001); Lawrence D. Frank, "The Impacts of Mixed Use and Density on the Utilization of Three Modes of Travel," Paper No. 940425 (Washington, D.C.: Transportation Research Board, 1994); Todd Littman, "Generated Traffic and Induced Travel: Implications for Transport Planning" (Victoria, B.C.: Victoria Transport Policy Institute, www.vtpi, November 2001); Surface Transportation Policy Project, "The Nation"s Road Capacity: How Fast Ilopalifornia, p69EI,9.77.771 Tf25.1200001 TcDeco.6(gaTto)19Tn vidence and P

1000 Friends of Oregon. *Making the Land Use, Transportation, Air Quality Connection (LUTRAQ)*. Portland, Ore.: 1000 Friends of Oregon, 1997.

Bank of America, Greenbelt Alliance, the California Resources Agency, and the Low Income Housing Fund. "Beyond Sprawl: New Patterns of Growth to Fit the New California." San Francisco: Bank of America, 1995.

Beach, Dana. *Coastal Sprawl: The Effects of Urban Design on Aquatic Ecosystems in the United States.* Arlington, Va.: Pew Oceans Commission, 2002.

Benfield, F. Kaid, and Michael Replogle. "The Roads More Traveled: Sustainable Transportation in America." *Environmental Law Review* 32, pp. 10633–10647 (June 2002), www.eli.org.

Benfield, F. Kaid, Matthew D. Raimi, and Donald D. T. Chen. *Once There Were Greenfields: How Urban Sprawl Is Undermining America's Environment, Economy and Social Fabric.* Washington, D.C.: Natural Resources Defense Council, 1999.

Boarnet, Marlon G., and Saksith Chalermpong. "New Highways, House Prices, and Urban Development: A Case Study of Toll Roads in Orange County, CA." *Housing Policy Debate* 12, no. 3 (Fannie Mae Foundation, 2001).

Boarnet, Marlon G., and Andrew F. Haughwout. *Do Highways Matter? Evidence and Policy Implications of Highways' Influence on Metropolitan Development.* Washington, D.C.: Brookings Institution, Center on Urban and Metropolitan Policy, 2000.

Böge, Stefanie. "The Well-Traveled Yogurt Pot: Lessons for New Freight Transport Policies and Regional Production." *World Transport Policy and Practice,* 1, no. 1 (1995): pp. 7–11, www.ecoplan.org/wtpp/wt_index.htm.

Brookings Institution. *A Region Divided: The State of Growth in Greater Washington,*

Resources

American Farmland Trust
1200 18th Street, NW
Suite 800
Washington, D.C. 20036
(202) 331-7300
www.farmland.org

American Planning Association
1776 Massachusetts Avenue, NW
Washington, D.C. 20036
(202) 872-0611
www.planning.org

American Rivers Council
1025 Vermont Avenue NW
Suite 720
Washington, D.C. 20005
(202) 347-7550
www.americanrivers.org

American Trails
P.O. Box 491797
Redding, CA 96049-1797
(530) 547-2060
www.americantrails.org/resources/feds/fedfun/TEAfundTNC.html

Chesapeake Bay Foundation
Philip Merrill Environmental Center
6 Herndon Avenue
Annapolis, MD 21403
(410) 268-8816
www.cbf.org

City of Tallahassee
300 South Adams Street
Tallahassee, FL 32301
(850) 891-8181
www.talgov.com

Delaware Department of Transportation
800 Bay Road
P.O. Box 778
Dover, DE 19903
(302) 760-2080
Dave Duplessis and Monroe Hite
Livable Delaware Implementation Plan
www.deldot.net/static/reports/livable_delaware/corridor_preservation.htm

Land Trust Alliance
1331 H Street, NW
Suite 400
Washington, D.C. 20005
(202) 638-4725
www.lta.org

Lincoln Institute for Land Policy
113 Brattle Street
Cambridge, MA 02138
(617) 661-3016
www.lincolninst.edu

Metropolitan Council
Minneapolis-St. Paul/Twin Cities Region
230 E. 5th Street
St. Paul, MN 55101
(651) 602-1000
www.metrocouncil.org

Mountains to Sound
Greenway Trust
Nancy Keith, Executive Director
1011 Western Avenue, Suite 606
Seattle, WA 98104
(206) 382-5565
www.mtsgreenway.org

National Association of Counties (NACo)

440 1st Street, NW
Suite 800
Washington, D.C. 20001
(202) 393-6226
www.naco.org

Natural Resources Defense Council
40 West 20th Street
New York, NY 10011
(212) 727-2700
www.nrdc.org

Rails-to-Trails Conservancy
1100 17th Street, NW
Washington, D.C. 20036
(202) 331-9696
www.railtrails.org

Riverside County Transportation Commission
Cathy Bechtel, Director of Planning and Programming
3560 University Avenue
Suite 100
Riverside, CA 92501
(909) 787-7141
www.rcip.org

Scenic America
801 Pennsylvania Ave., SE
Suite 300
Washington, D.C. 20003
(202) 543-6200
www.scenic.org

Smart Growth America
1100 17th Street NW, 10th Floor
Washington, D.C. 20036
(202) 715-2035
www.smartgrowthamerica.org

Subdivide and Conquer: A Modern Western (video)
Jeff Gersh and Chelsea Congdon
Bullfrog Films
P.O. 149
Oley, PA 19547
(800) 543-3764
www.bullfrogfilms.com

Surface Transportation Policy Project
1100 17th Street, NW
10th Floor
Washington, D.C. 20036
(202) 466-2636
www.transact.org

Tallahassee Chamber of Commerce
100 N. Duval Street
P.O. Box 1637
Tallahassee, FL 32302
www.talchamber.com

Thomas Jefferson Planning District Commission
Hannah Twaddell
300 East Main Street
P.O. Box 1505
Charlottesville, VA 22902
(434) 979-7310
www.tjpdc.org

Treasure Valley Futures
Elaine Clegg and John Barrett, Co-Executive Directors
800 S. Industry Way, Suite 100
Meridian, ID 83642
(208) 333-8066
www.tvfutures.org

Treasure Valley Partnership
Elizabeth Connes
Executive Director
P. O. Box 140176
Garden City, ID 83714
(208) 869-7298
www.treasurevalleypartners.org

United States Environmental Protection Agency
Office of Policy, Economics, and Innovation
Mary Kay Santore
1200 Pennsylvania Avenue, NW
MC 1808
Washington, D.C. 20460
(202) 260-8745
www.epa.gov/opei

Vermont Agency of Transportation
Curtis Johnson
1 National Life Dr.
Drawer 33
Montpelier, VT 05633-0001
(802) 828-0583
www.aot.state.vt.us

The Trust for Public Land

The Trust for Public Land (TPL) is a national nonprofit land conservation organization founded to protect land for public enjoyment. We believe that connecting people to land through parks, recreation areas, working lands, and natural open spaces is key to livable communities and a healthy environment.

TPL's experts in law, finance, real estate, fundraising, government, and public relations work nationwide to help citizens and government agencies identify lands they wish to see protected and then help them accomplish their land-saving goals.

National Office
116 New Montgomery Street, 4th Floor
San Francisco, CA 94105
(415) 495-4014
(415) 495-4103 (fax)

Federal Affairs Office
660 Pennsylvania Avenue, SE, Suite 401
Washington, D.C. 20003
(202) 543-7552
(202) 544-4723 (fax)

Mid-Atlantic Regional Office
666 Broadway, 9th Floor
New York, NY 10012
(212) 677-7171
(212) 353-2052 (fax)

Midwest Regional Office
2610 University Avenue, Suite 300
St. Paul, MN 55114
(651) 917-2240
(651) 917-2248 (fax)

New England Regional Office
33 Union Street, 4th Floor
Boston, MA 02108
(617) 367-6200
(617) 367-1616 (fax)

Northwest Regional Office
Waterfront Place Building, Suite 605
1011 Western Avenue
Seattle, WA 98104
(206) 587-2447
(206) 382-3414 (fax)

Southeast Regional Office
306 North Monroe Street
Tallahassee, FL 32301
(850) 222-7911
(850) 224-3755 (fax)

Southwest Regional Office
418 Montezuma Avenue

Santa Fe, NMl(Sae)1s

The Trust for Public Land conserves land for people
to improve the quality of life in our communities
and to protect our natural and historic resources for future generations.