



Integrating Transportation and Environmental Infrastructure Objectives through Partnerships

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American Society of Highway Engineers
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Camp Hill, PA



A Different World:

- The Free World and the Global Market- [Global Economic Shift](#)
- New Global Demographics- [Demand Shift](#)
- An Import vs Export Nation- [Transportation from the Edges](#)





GATT poised to create new world order
Trade agreement could help U.S. double its exports

The pact's potential impact
Some examples of which exports and imports may in...

Merger frenzy follows largest in history

NAFTA JAM

Hitching a Ride in the Global Fast Lane

BusinessWeek
THE RISE OF INDIA
And what it means for America

MEXICAN MAKEOVER

Make room for a sea monster
Biggest container ship ever calls on Port of Charleston

GLOBAL ECONOMIES

UNION STATES
Experts forecast and...
Imports, exports and...
Imports, exports and...

ELEMENT
Experts: Chemicals...
Imports, exports and...

The Emergence of the Global Marketplace
The Post Cold War Era of Supply and Demand



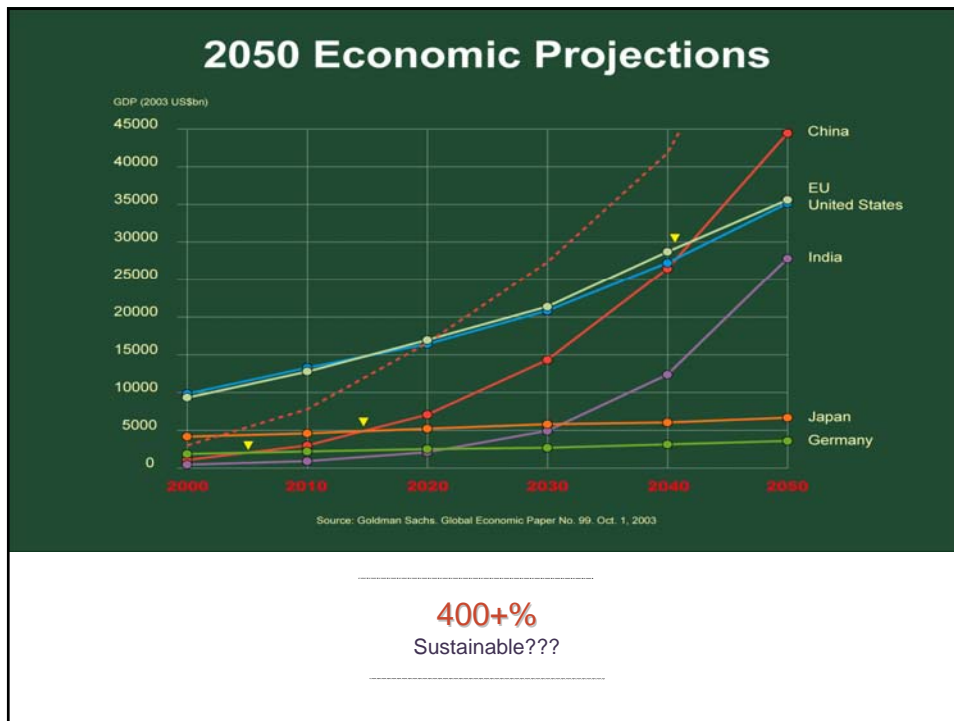
ECONOMIC IMPLICATIONS
A Question of Sustainability

The World Bank projects the world economy to grow 33% between year 2000 and 2010, increasing from \$30 trillion to \$40 trillion.

Reached \$41.3 trillion in 2004
\$49 trillion in 2007

The world economy could grow by over 400% by the year 2050, increasing from \$30 trillion to \$132 trillion (est.).

ECONOMIC DEVELOPMENT
A Question of Sustainability



BOTTOM LINE or BUZZ WORDS

“Sustainable” means to create and maintain conditions, under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations of Americans.

—Executive Order 13423

Goal

Sustain economic prosperity and a high quality of life for all while protecting the natural systems of the planet.

Key Components

- Economic
- Environmental
- Social

SUSTAINABLE; SUSTAINABILITY

Integrating Transportation and Environmental Infrastructure Objectives through Partnerships



PURPOSE -Beyond Sustainability

- Identification of Common Ground
- Moving Beyond Compliance
- Integrating Multi-scaled transportation, environmental, and land-use planning decisions for sustainable infrastructure and communities



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Identification of Common Ground

- Sustainable Development as a Platform for Action
- Cultural Creative's (A New Influence)
- Public and Media Attention

Beyond Compliance

- Role of Stewardship in Industry
- The Rewards of Early Adoption and Innovation
- Framework for Overcoming the Fear of Negative Implications

(Risk vs. Reward)



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What is the Green Highways Partnership???

Voluntary – Not Regulatory

Collaborative

–a “network of industry, trade, & environmental organizations, private sector (consultants & contractors), and government (local, state, & federal).

Public–Private Partnership



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BENEFITS



Opportunities for sustained protection and preservation of green infrastructure.

Streamlined and predictive regulatory efficiencies for transportation planning.

Integrated land use and environmental or natural resource planning in support of sustainable economies and communities.

Greater capability to define, align and achieve regional priorities.





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WHY PARTNER???

Public demand & expectations surrounding crumbling infrastructure and environmental impacts

Complexity of transportation & environmental problems
 Environmental & transportation problems not as simple as they used to be.

Economic cost of delay – for both building grey infrastructure & solving environmental problems

Shrinking Resources for All – Time To Leverage...

We need innovation, smart thinking & good government to address our common future!



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EPA FHWA and the Partners network, through support of the **Green Highways Partnership** is helping to position a collaborative outreach opportunity between public agencies, private industry and NGO's for advancing market driven approaches for meeting transportation, community and environmental goals.

The **Mid-Atlantic GHP** has elected to address issues in three focus areas and created three action teams for transportation related programs, products and solutions:

- Watershed Based Stormwater
- Conservation
- Recycling and Beneficial Re-use



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Seek to position cooperative partnerships to support environmental and sustainable development practices, products and technologies-

This involves the adoption of processes that:

1. Map the mission, personality and core competencies that must be brought to the table
2. Examines the context that defines the current operational mode and capabilities for establishing a framework from which to base the integration of environmental and transportation issues.
3. Supports the creation and growth of brand equity for the partnership approach and subsequent positioning of expertise and buy-in on the issues that go beyond the sustainability agenda.



Integrating Transportation and Environmental Infrastructure Objectives through Partnerships

An Industry View of the GHP

Programs propose and recognize the need for opportunities that:

- Incorporate improved creative solutions, products, practices and technologies that are practical and easy to execute.
- Provide for economically viable projects that face fewer regulatory related hurdles and delays.
- Recognize the impact of market pressures and realities on private sector companies,
- Desire to encourage new solutions and methods of participation in lieu of new forms of regulation.
- Programs are developed to foster partnerships
- Opportunities for incentives for innovation and practices lead to solutions that support streamlining.



Environmental program opportunities for product innovation and solutions related to highway and urban/municipal transportation markets include:

- Implementation of practices to improve design and delivery schedules
- Development of innovative and/or improved methods and practices
- Practical, low cost, effective “best practices” solutions that can be easily mimicked and/or adopted and included in specifications.
- BMP’s that help deliver easily implemented adaptive practices
- Assurances of fair practice that improves project economics and profitability
- Policies designed to increase industrial by-product utilization
- Improvement of practices for increased recycling of municipal solid waste
- Opportunities for integrating various environmental and educational missions
- Linking economic, environmental and physical infrastructure networks
- Ways for coordinating and improving communication of programs and practices to ensure technology transfer among partners
- Ways that encourage and improve community support



Integrating Transportation and Environmental Infrastructure Objectives through Partnerships

In summary, the effective partnership is organized to support:

- Opportunities that position innovative products and practices.
- A context-sensitive and low impact development approach to roadway and highway project planning, design and implementation.
- Consideration of case-specific community and economic benefits, environmental and social factors that include, new ways to finance projects, share best practices and cut through bureaucratic inaction.
- Long range transportation planning that is better integrated with other network wide resource management strategies including, regional economic and urban systems planning, housing, demographics, education, the environment, and conservation—in all areas.



The GHP Preferred Project Program and Process

The Preferred Project Program is based on a public/private collaborative to help drive smart approaches that accomplish "more" with "less," leveraging innovation, flexibility, economic incentives and other sustainable practices. It is structured around three areas of focus:

- Partnerships,**
- Recognition/Rewards, and**
- Opportunities.**

Within those areas, there are specific thematic subgroups, that include:

- Innovative Stormwater Management,**
- Materials Recycle/Reuse, and**
- Conservation/Ecosystem Protection.**



The Preferred Project Program

The Project Design Charrette and/or Case Study Workshop is where key public/private partners meet to identify and recommend:

- innovative, sustainable approaches,
- technologies,
- features, activities and actions,

that contribute to and support,

- environmental stewardship opportunities,
- effective transportation improvements,
- position the GHP principles of planning, design, construction for transportation projects.

Based on information developed and vetted in the Charrette/Workshop **recommendations** are developed and forwarded through the NEPA framework process for consideration, reviews, revisions and acceptance.

And, determining the appropriate mix for efficient and effective project streamlining and regulatory flexibility.



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The P in GHP

A program and approach for moving beyond traditional relationships to engage in a partnership opportunities where product and practice innovations and environmental streamlining become instrumental to the creation and implementation of a larger strategy for the transportation sector that includes:



Outcomes:

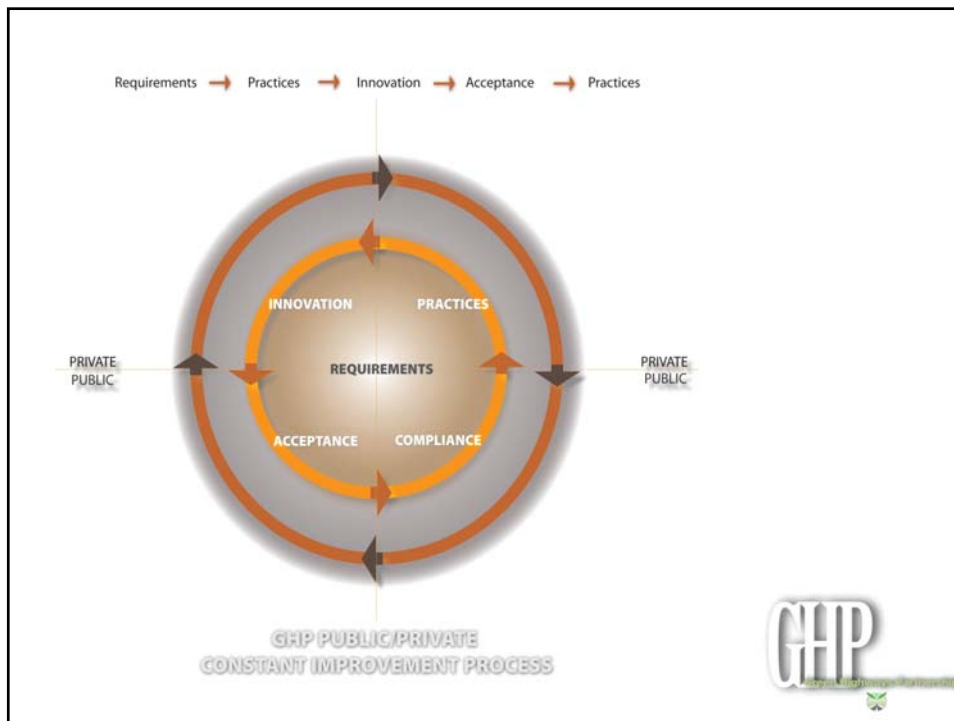
A Systems-Level, Multi-Scale Geospatial Transportation, Land Use, Environmental Decision-Support Process.

A new framework for aligning multi-jurisdictional, multi-scaled transportation, land-use and environmental decision-making to support sustainable transportation systems and improved environmental conditions.

Advanced knowledge and early integration of key resource agency priorities, including:

- rivers,
- streams,
- riparian corridors,
- wetlands,
- sensitive watersheds,
- forests,
- habitats and species (rare, threatened and endangered)

for conservation, restoration efforts in response to regional transportation and development scenarios.







Priority Outreach-

Industry and Trade Associations-

- 1.National Ready Mix Concrete Association
- 2.National Concrete Masonry Association
- 3.North American Steel Sheet Piling Association
- 4.National Asphalt Paving Association
- 5.Slag Cement Association
- 6.National Stone, Sand And Gravel Association
- 7.American Coal Ash Association *
- 8.Rubber Manufacturer's Association*
- 9.AASHTO
- 10.American Forest
- 11.National Slag Association
- 12.Rubber Manufacturers Association*
- 13.American Concrete Pipe Association
- 14.Asphalt Alliance
- 15.Concrete Promotions Council

Corporate and Materials Industry-

- 1.Lafarge, NA
- 2.Holcim
- 3.Lehigh Cement Co.
- 4.Esroc
- 5.Buzzi Unicem
- 6.WR GRACE
- 7.Koch Industries

Design Consultants, Contractors-

- 1.Bechtel International
- 2.HNTB

* Member of the Industrial Resource Council




PARTNERSHIP COMMUNITY

TRANSPORTATION



1. Transportation Regulatory and Standards Community
 - FHWA
 - State DOT's
 - AASHTO
2. Transportation Design & Consulting Community
 - Planners, Designers and Specifiers
 - Contractors
3. Transportation Related NGO's and Academic Community
 - Industry Trade Associations
 - Research and Standards Institutes and Foundations
4. Corporate & Civic Community
 - Products and Materials Companies and Organizations
 - Business and Financial Companies



PARTNERSHIP COMMUNITY

ENVIRONMENTAL-



1. Environmental Regulatory and Standards Community
 - EPA
 - State Compliance Organizations & Agencies
2. Environmental Consulting Community
 - Planners, Designers and Specifiers
 - Contractors
3. Environment Related NGO's and Academic Community
 - Industry Trade Associations
 - Research Centers and Foundations
4. Corporate Environmental Community
 - Products and Services
 - Business and Financial



PROJECT STREAMLINING AND FLEXIBILITY

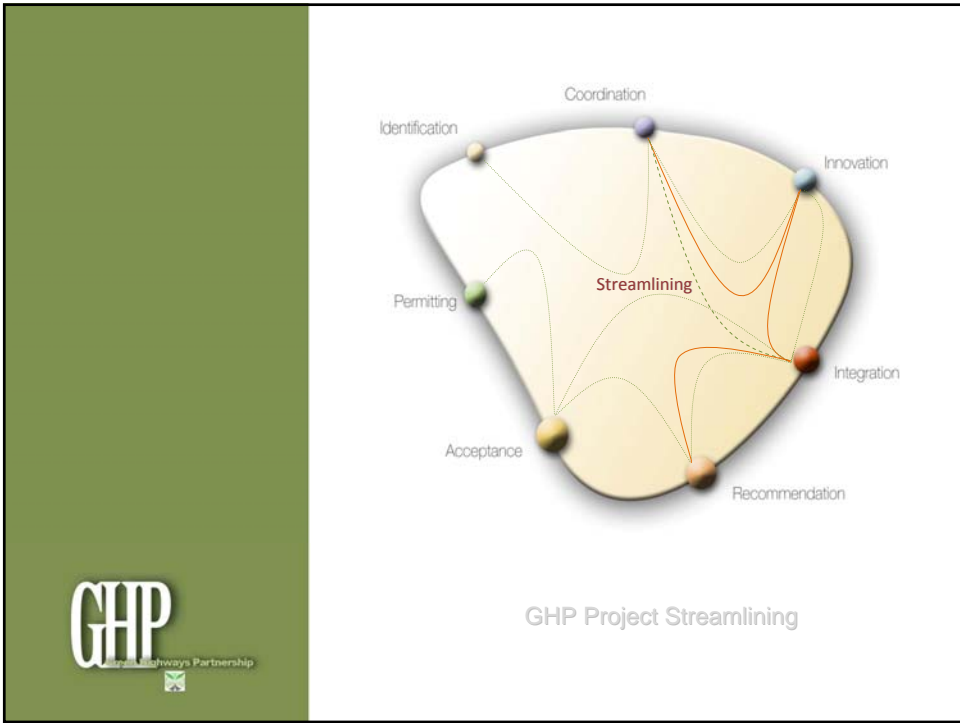
Streamlining is first and foremost a processes aimed at delivering improved efficiencies in highway program and project delivery.

NEPA, (National Environmental Policy Act) provides the framework through which this happens.

Through the preferred demonstration and pilot projects the GHP works through its partnerships to encourage and establish processes that provide for:

- timely evaluation, incorporation and integration of innovative products and best management practices into the projects, and works to deliver,
- incentives that recognize ideas and improve the process and outcomes for both the project and the environment,

In other words, support processes that make both “better than before.”



OUTREACH & DEVELOPMENT PROCESS-



- I. Organize, Assess and Define Available Information on Existing Stakeholders and Potential Participants.
- II. Sort, Segment and Prioritize the Partnership Communities
- III. Strategy Design for Structured Outreach and Visibility



What are the key benefits of participation?

As a public/private initiative, the Green Highways Partnership works to leverage public and private contributions as a means for developing programs, practices and products that support sustainable development and deliver relevant context sensitive and low impact solutions for environmental streamlining on "preferred" transportation infrastructure projects.



Key benefits for all participation levels includes:

- Discounted access to current Green Highways Design Guidelines and Solutions
- Discounted access to the latest Green/Low Impact Specifications
- Access to targeted education and training on sustainable products, practices and innovations through the GHP Educational Trust initiatives
- Access to password-protected project and resource sections of the GHP web –site
- Invitation to all annual GHP Conferences
- Flash alerts and e-mail notifications on industry and agency updates.

