# Plan

#### The United States federal government should provide transportation infrastructure investment for plastic reinforcement of highways in the United States.

# Contention 1: Roads

#### World economy fine now; US dollar strong.

KEYC, 9/14

(KEYC, World stocks jump on Fed pledge for US economy. Published September 14th 2012 [http://www.keyc.tv/story/19541675/asia-stocks-rally-on-fed-pledge-to-help-us-economy Accessed 9/19/12](http://www.keyc.tv/story/19541675/asia-stocks-rally-on-fed-pledge-to-help-us-economy%20Accessed%209/19/12) CSmith)

MILAN (AP) - World stock markets… 78.08 yen from 77.45 yen.

#### Corrosion is the primary source of concrete failure-fiber reinforced plastic solves

MDA No Date (Market Development Alliance, “Fiber-Reinforced Polymers (FRP) Composite Dowel Bars a 15 Year Study”, <http://aslanfrp.com/Aslan600/Resources/15yr%20Durability%20Study-MDA.pdf>, accessed 9/12/12, GU)

Corrosion of mild … bars with confidence.

#### American roads are falling apart

Gage 2010

(Deborah Gage, has written for the San Francisco Chronicle, Minnesota Public Radio, Baseline and various magazines and newspapers, “America’s Roads Are Falling Appart”, September 28th 2010,

California may be ….. materials and more preventive care.

#### Fiber Reinforced Plastics solves- can fully repair highways and bridges at a fraction of the cost, time and has already been tested in multiple states.

**Griffiths 11**

(Jennifer R. Griffiths, CSA Editor, Materials Business File/Business Alerts B.A. (Environmental biology), Smith College, Northampton, Massachusetts, Proquest, Plastic Highway Bridges Published November 2000, <http://www.csa.com/discoveryguides/bridge/overview.php>, Accessed 6-18-12)(CSmith)

Throughout the world, … bonding of the material to the column.

#### Roads are the internal link of all internal links to economy

Bragdon8 (Clifford R. Vice President for Strategic Initiatives and Executive Director of the Florida Tech Research Park at Florida Institute of Technology. Former Associate Provost and Dean of the University of Florida. Former Distinguished Professor and Executive Director of the Center for Intermodal Transportation Safety and Security, CITSS, (a consortium of all public universities in Florida), established and funded by the U.S. Congress. Former Director and Vice-President of the National Aviation and Transportation Center and Dean for the School of Aviation and Transportation at Dowling College, Long Island, New York. Transportation Security. 2008 Published by Elsevier-Academic and Butterworth Press)

Note that … 1995 (TSA. 2006).¶

#### AND The US is key to the global economy – they’re interlinked

Kohn6/26/08 (Donald L., PhD – Econ “Global Economic Integration and Decoupling” http://www.federalreserve.gov/newsevents/speech/kohn20080626a.htm)

Global …. traditional trade linkages.

#### **Economic decline sucks**

#### A. kills millions and sparks great power wars

Duncan, 12

(Richard Duncan, chief economist Blackhorse Asset Management former IMF consultant and financial sector specialist for the World Bank, “The New Depression: The Breakdown of the Paper Money Economy, 12, ebook)

The political ….killed approximately 60 million people**.**

#### B. Econ collapse leads to social differences escalating

Baldacci et al, 02 – Emanuele, Economists at the International Monetary Fund (“Financial Crises, Poverty, and Income Distribution”, The International Monetary Fund, 06/01/02, <http://people.ucsc.edu/~hutch/Lund/Financial%20Crises%20and%20Poverty%20FD%20June%202002.pdf)//> SKRG

This issue is important ….households, and wages and salaries.

#### And, Poverty is a structural violence that creates a cycle of oppression where certain lives are prioritized over others.

Gilligan, (Dept. of Psych. @ Harvard Med & Dir. of the Center for the Study of Violence) 1996

[James, Violence: Our Deadly Epidemic and its Causes p. 191-196]

You cannot work for …., as cause to effect.

#### C. Economic downturn increases creates a linchpin for terrorism

Nouraee, , 9

[Andisheh, staff writer-Finalist for the Society of Professional Journalists’ Excellence in Journalism Award“Is the global economic crisis going to lead to another world war?,” CL Atlanta News, <http://clatl.com/atlanta/is-the-global-economic-crisis-going-to-lead-to-another-world-war/Content?oid=1278564>, March 16, 2009]   
  
Unlike in the ….. potential hot spots until it’s too late.

#### And, terrorism leads to extinction

Morgan 09 (Dennis Ray Morgan, Hankuk University of Foreign Studies, Yongin Campus - South Korea Futures, Volume 41, Issue 10, December 2009, Pages 683-693,World on fire: two scenarios of the destruction of human civilization and possible extinction of the human race)

In a remarkable ….. suffering in a nuclear winter.

# Contention 2: Solvency

#### Concrete will be used for road construction now

**Portland Cement Association 12** (Portland cement Association. Pavements, Highways, Published 2012 <http://www.cement.org/pavements/pv_cp_highways.asp>, Accessed 6-19-12)(CSmith)

Concrete played a major ….. of its durability.

#### FRP’s have already been tested successfully and offer multiple advantages over conventional repair means, including resistance to corrosion. Stands up to earthquakes and are extremely quick to deploy meaning no traffic interruptions involved with other methods.

**Aref and Parsons 6/20**

(A.J. Aref, i.D. Parsons, a Department of Civil Engineering, The State University of New York, Department of Civil Engineering, University of Illinois at Urbana-Champaign. Science Direct, Design and performance of a modular fiber reinforced plastic bridge. Published June 2000. <http://ac.els-cdn.com/S1359836800000305/1-s2.0-S1359836800000305-main.pdf?_tid=2e00b93e4239dd23757f648d910df652&acdnat=1340218298_8b4a0dcc5d44f83894cb4881df8c1977>, Accessed 6-20-12)(CSmith)

A number ….. significant factor in designing bridges subjected to seismic activity.

#### The federal government is key to attract investors

Colorado Department of Transportation 2 (The Behavior of Fiber-Reinforced Polymer Reinforcement In Low Temperature Environmental Climates, December 2002, <http://www.coloradodot.info/programs/research/pdfs/2003/frp.pdf> , accessed 9/14/12, GU)

The government …… of a long-term market.

#### Plastic Highways are able to reduce the amount of plastic in landfills, can withstand harsh weather conditions, and make roads sturdier, India proves.

**Rai 2009** *(Saritha Rai, Writer for the Global Post, December 15th 2009, “Riding India’s plastic highway”,* [*http://www.globalpost.com/dispatch/india/091211/plastic-road,Global*](http://www.globalpost.com/dispatch/india/091211/plastic-road,Global) *Post, Accessed 9/4/12, JK)*

BANGALORE, India — The roads in …… It pays 12 rupees (about $0.25) for a kilogram of plastic collected.

**FRP resists corrosion, is stronger than steel, and results in better long-term** **savings**

Molded Fiber Glass Companies 3 (Designing with Fiber Reinforced Plastics/Composites, 2003, <http://www.moldedfiberglass.com/library/da/Composite_Tech&Tech.pdf>, accessed 9/13/12, GU)

FRP/Composites ….. more innovative applications for FRP/Composites.

# Contention 3: Framing

#### Now is key-economy is not resilient and action solves

MNI, 9/18

(Market News International, “Chicago Fed’s Evans: US Economy Simply Not Resilient Enough”, Forelive, 9/18/12, <http://www.forexlive.com/blog/2012/09/18/chicago-feds-evans-us-economy-simply-not-resilient-enough/>, KJ)

“Our economy ….. and vibrancy of the economy.”

#### **High risk means you evaluate econ collapse first**

Broward April 9, 2009

(“Will an Economic Collapse Kill You?”) http://newsflavor.com/opinions/will-an-economic-collapse-kill-you/ June 28, 2009)

Now its time …..21st century.

#### Global recession causes more deaths then a regional war-happens in a short time frame Business World 1/8/98

#### A global recession …… than the Mexican bailout, hints how urgent the situation is.

Growth is sustainable -- resource scarcity can be corrected by technology.

Haynes 2008 (Beth Haynes, Professor of Economics at Brigham Young University-Hawaii, “Finite Resources vs. Infinite Resourcefulness”, 8/19/08 http://wealthisnottheproblem.blogspot.com/2008/08/finite-resources-vs-infinite.html//Mkoo)

Our consumption is ….. been proven wrong.

**Prefer our authors-modern macroeconomic theory is backed with rationale**

DOUGLAS W. **HANDS 84** Department of Economics University of Puget Sound What Economics Is Not: An Economist's Response to Rosenberg Source: Philosophy of Science, Vol. 51, No. 3 (Sep., 1984), pp. 495-503 http://www.jstor.org/stable/187496

1. Economic Predictions. …… have us believe.