

designnovation

Design Innovation Institute

research
education
museum
foundation

501(c)(3) non-profit organization
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www.designinnovationinstitute.org

BEHIND
THE
DESIGN
SCENES

WELCOME TO
TRANSITIONS
flying on the ground



Graphic recording by Joe@SterlingInsights.com 619-659-1234



TRANSITIONS
g e t t h e r e , f a s t e r

High Speed Transit Forum

Thursday, November 12, 2009 6-8 PM

Design's Impact on High Speed Rail, Maglev

Brown Chapel, Point Loma Nazarene University

Trains and Personal Rapid Transit

San Diego, California

\$8 fare (before Oct. 30, 2009)

Tickets & Information: 619.299.0433 x13

33300mph
flying on the ground

www.designinnovationinstitute.org

BEHIND THE DESIGN SCENES

TRANSITION*s* flying on the ground

“It is a pleasure to extend my greetings to all who have come together for [Design Innovation Institute’s] High Speed Transit Forum. Thank you for being a part of the growing dialogue about the need for high-speed rail in our Golden State. Thank you for your hard work, your ideas and your efforts to uphold California’s tradition of advancing technology that changes the world”.

- **Arnold Schwarzenegger, Governor of California**

“Design plays a vital role in our society, including how we travel. I congratulate the Design Innovation Institute for encouraging the discussion of design as we evaluate our high speed rail options”.

- **Ron Roberts, San Diego County Board of Supervisors, 4th District**

“Nissan Design America would like to congratulate and encourage the TRANSITIONs - High Speed Transit Forum - and applaud the panelists who bring their years of knowledge and insight to this eye-opening event. The larger subject of transportation is one of the most talked about topics in our world today . . . The “Joy of moving people - efficiently” can be applied to all aspects of this important social need.”

- **Bruce Campbell, Vice President, Design; Nissan Design America**

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designnovation

Design Innovation Institute

The Design Innovation Institute (Dii) is a 501(c)(3) non-profit organization with the objective of fostering interdisciplinary collaboration between traditional and non-traditional areas of design. Dii is helping to guide the way towards understanding and celebrating nature in design and enabling pathways towards responsible design, as cultivated through Dii’s educational programs, innovative research, and non-traditional museum for the future. Our continuing Speaker Series, upcoming sustainable design workshops, Behind the Design Scenes programs, DesignCamp, and scholarly cross-disciplinary research projects will continue to encourage alliances among the most talented minds in the region. For updates go to www.designinnovationinstitute.org.

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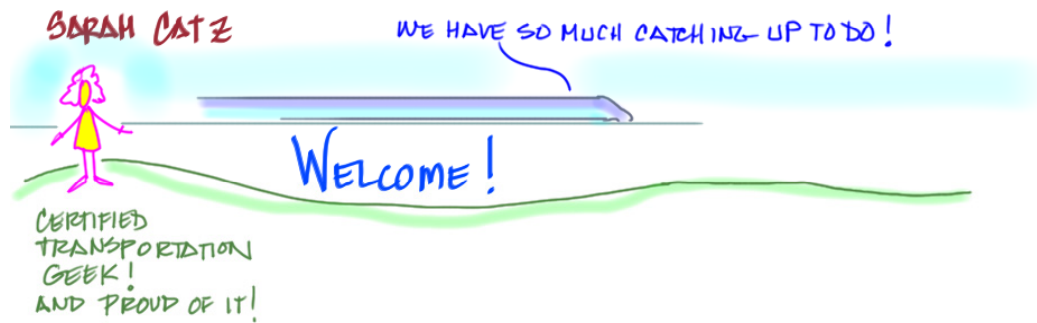
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BEHIND THE DESIGN SCENES

Speakers & Panelists



Moderator

Sarah Catz is a California transportation leader. Ms. Catz is Director of the Center for Urban Infrastructure at the University of California at Irvine. A former acting Secretary of Transportation for the state of California, she has played a key role in major transportation projects in the state for the past fourteen years. She is a former chairperson of the Orange County Transportation Authority and was instrumental in the development of Metrolink in California.



Eric Anderson is a senior project manager and landscape architect at the firm of Parsons Brinckerhoff in Orange, California. His focus has been on large scale infrastructure and transportation planning as well as design. Mr. Anderson served as a project manager for the New Denver Union Station Multi Modal Hub. Recently, he took on management responsibility for PB at the Anaheim Regional Transportation Intermodal Center (ARTIC) project. Eric Anderson holds a Bachelor of Science degree from Iowa State University in Landscape Architecture and is a member of the American Society of Landscape Architects.



M. Neil Cummings is head of the American Magline Group (AMG). The Group is a consortium leading the effort to build a magnetic levitation train along the I-15 corridor from Las Vegas, Nevada to Anaheim, California. Mr. Cummings is a graduate of The Hastings College of Law and The United States Navy Academy. He is a principal at the law firm of M. Neil Cummings & Associates.

Speakers & Panelists



Keynote Speaker Richard Farson is a psychologist, author, and educator. Long interested in the field of design Dr. Farson was founding dean of the School of Design at the California Institute of the Arts. He is a former president of the International Design Conference in Aspen. Richard Farson has served on the American Institute of Architects Board of Directors and is a Senior Fellow of the Design Futures Council.

In *The Power of Design*, Farson asserts a deeply engaging premise: Design can transform the world. It can put right what is wrong in our communities. It can address society's most intractable ills. Properly mobilized, he argues, design could make a whopping impact on deep-rooted dilemmas such as the ravages of poverty, the miserable state of the American education system, and the failure of criminal justice. It could do nothing short of move mountains.



Rich Flierl is an urban designer and landscape architect. Mr. Flierl is the founder of The Center for Connective Architecture, a multi-disciplinary think tank in the national spotlight for its exceptional work on urban redevelopment, new town planning and transit oriented projects. He is a principal at Cooper Carry where he currently guides downtown planning efforts in Atlanta, Georgia, Jackson, Mississippi, and Raleigh / Greensboro, North Carolina.



Dr. Alan Gin is a professor of economics at the University of San Diego. Professor Gin's research interests include public finance, urban transportation and the economy of San Diego. In that regard, he is best known for developing and publishing the monthly University of San Diego's Index of Leading Economic Indicators for San Diego County.



James McJunkin is a transportation designer. Mr. McJunkin led a design team at Rohr Industries Inc. in the early 1970's that worked on advanced concept transportation and prototype vehicles. The projects included a monorail Mag-Lev vehicle, a ground rail Mag-Lev vehicle, the San Francisco BART light rail vehicle, and a high speed-air cushion supported vehicle. He was a founding partner of the Pogue McJunkin consultancy in design and design manager for Nissan Design America in San Diego.



Harry Watkins is professor of strategy and sustainability at the Fermanian School of Business at Point Loma Nazarene University. Dr. Watkins has actively integrated triple bottom line principles - e.g. balancing objectives of profitability, social responsibility and environmental sustainability into his teaching and research. He holds a doctorate in strategic marketing from the University of Oregon.

Program

- 5:30 pm Doors Open
- 6:00 pm Program Begins:
Existing Rapid Transit Systems Video
Mr. Calvin Woo, Co-Founder and Executive Director
Design Innovation Institute Welcoming Remarks
Keynote Address by Dr. Richard Farson
TrenItalia High Speed Rail Video, London Heathrow PRT Video
- 6:30 pm Panel Discussion Led by Ms. Sarah Catz
- 7:30 pm Audience Q & A Segment
- 7:55 pm Drawing: Result Announced
Calvin Woo Closing Remarks
- 8:00 pm Program Concludes

Dr. Farson will be available to sign his book, *The Power of Design*, in the lobby after the program.



HIGH SPEED RAIL IS IMPORTANT TO CALIFORNIA!

Opening Remarks

WELCOME!



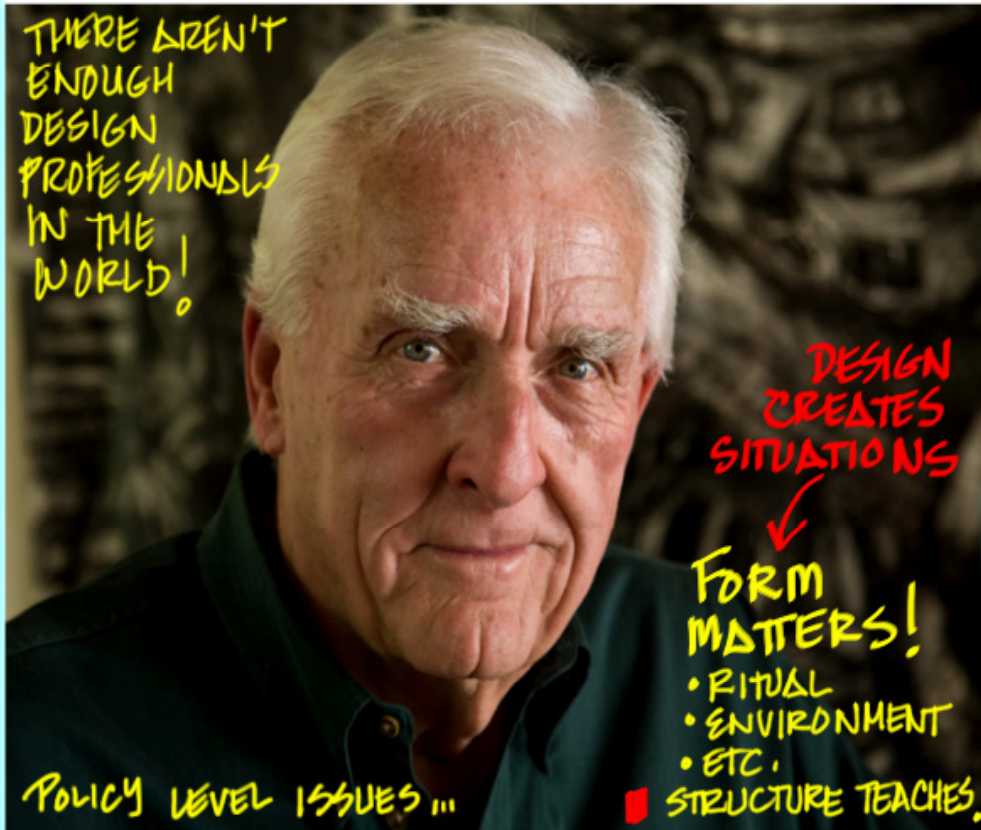
CALVIN WOO

THANKS TO EVERYONE FOR ALL THE GREAT WORK TO GET US HERE. WELCOME TO OUR SPEAKERS!

APPLIED
RESEARCH
POLICY MAKING } DESIGN
EYES IN FRONT
BODY FOR MOVING FORWARD
WE ARE THE PERSONIFICATION
OF THE BULLET TRAIN
INNOVATION
GET SMARTER IN HOW WE
SHIFT & FIT IN OUR CHANGING WORLD... JUST LIKE ALL
THINGS IN NATURE,



DESIGN MASTERS!



RICHARD FARSON

DESIGN:

- SPACES FOR CREATIVITY
 - PATHWAYS FOR INCLUSION (ADA)
 - SAFE TRAVEL
- LIBERATION
COMMUNITY
COLLABORATION
HEALTH
LOVE

AMERICAN PROBLEMS:

JUSTICE/CRIME
HEALTHCARE
EDUCATION
TRANSPORTATION

THERE IS A LOT OF BAD DESIGN OUT THERE!

DESIGN & SUSTAINABILITY GO HAND IN GLOVE.

AUTOMOBILES



STARTED AS A GREAT HELPING INNOVATION

NOW THEY ARE A GREAT VILLAIN!

WE NEED TO GO BEYOND SUSTAINABILITY

FROM PARENTHOOD TO PARENTING

DESIGN IS SO IMPORTANT

FOR ADULTS

FOR CHILDREN!

1. SEE YOURSELF AS A LEADER

2. COLLABORATE

DESIGN OF THE THERAPEUTIC MOMENT

SELF DIRECTED THERAPY GROUPS

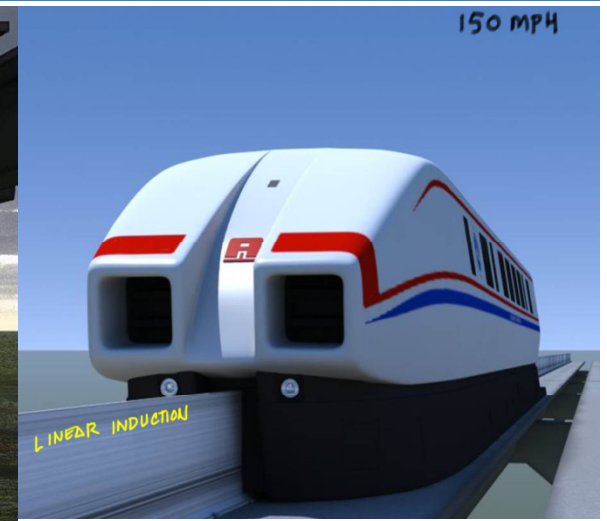
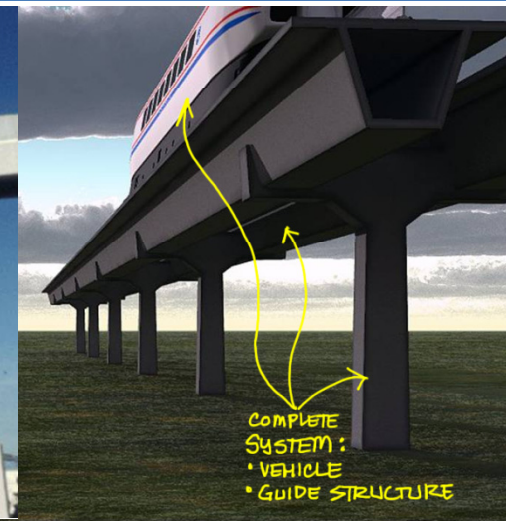
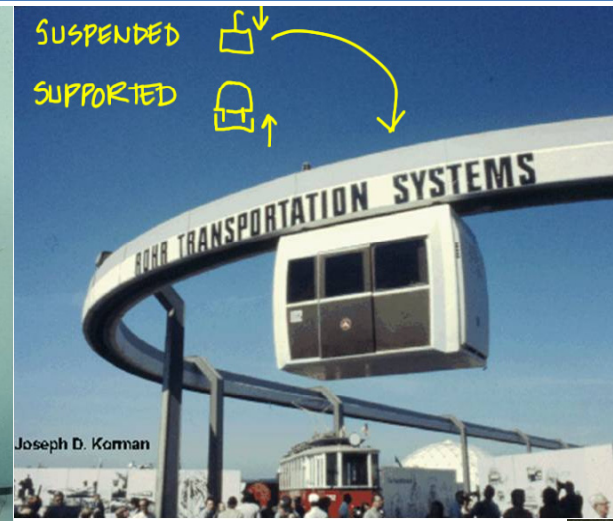
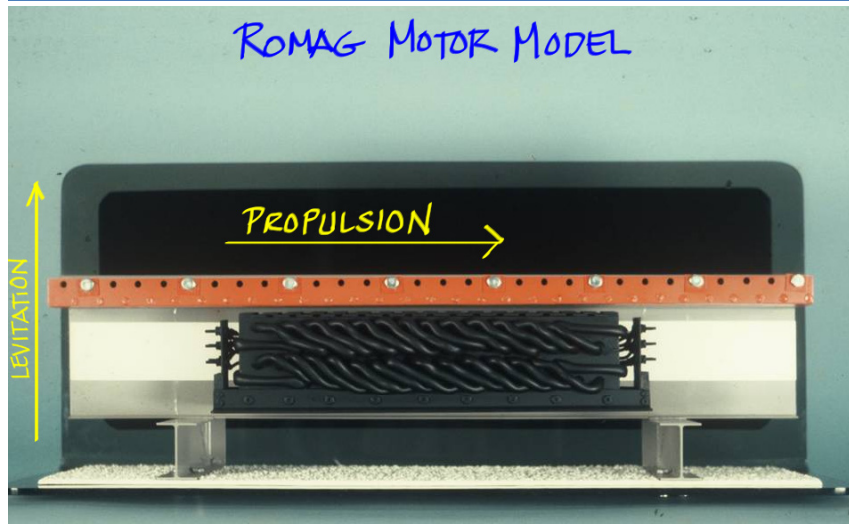
VERY SUCCESSFUL

META-PROFESSIONS

EX-CONS DESIGN ROBBERY PROOF 7-11s

REDUCED ROBBERIES BY 40%

Panelist: Jim McJunkin



Transit Development in San Diego '70s Who Knew??



WHAT HAPPENED SINCE THE 70s

SCHOOL
DETROIT?
SAN DIEGO
ROHR INDUSTRIES
JIM MCJUNKIN
* DESIGN FOR
• TRANSPORTATION
• AUTOS
* LOOK FWD.
BACK TOO!

General Atomic Mag Lev '04



THANKS!

Harry Watkins, PLNU, Fall 2009

THOUGHTS ON DESIGN AND HUMAN TRANSPORT

TECH
SUST. BIZ
PRACTICES
DESIGN

"Design is a signal of human intention, so...
What is our intention as a human species?"

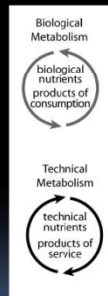
William McDonough
* CRADLE TO CRADLE *

Cradle to Cradle Concepts

TAKE — MAKE — WASTE

Basics of Eco-Effectiveness:

- Waste = Food
- Use current solar income *VS. PETROLEUM*
- Life creates conditions for life
- Biologic vs. technical metabolisms
- Ecology, Economy, Equity
TRIPLE BOTTOM LINE



Cradle to Cradle in Practice:

- Entire system design ~ *INTEGRATED*
- Toxicity sort of raw material inputs for:
 - Human health
 - Environmental impacts
- Design for recovery
 - Keep biologic and technical components separate
 - Design for disassembly and recovery
 - Design reverse channels of distribution
- Design for low (and renewable) energy inputs.

DESIGN FOR HEALTH

Biomimicry:

Learning from The Master Designer

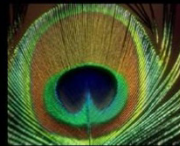
3,2 BIL. YEARS OF R&D,

Why should we emulate nature?

Organisms in nature face the same challenges we do, but they meet them *sustainably*.



- Handle forces
- Distribute energy safely
- Glue things together
- Move water
- Create color



© The Biomimicry Institute 2008

SP ZOO-BIOMIMICRY

How Does Nature Cut Resistance?



NO BOOM PLEASE!

NO SPLASH



concentrations of substances extracted from the earth's crust

e.g. heavy metals, mercury, lead, cadmium; fossil fuels



concentrations of substances produced by society

e.g. 70,000+ chemicals; dioxins, PCBs, flame retardants



degradation by physical means

e.g. forests, fisheries, farmlands



people's needs are met worldwide

e.g. air, water, food, shelter, quality of life

THIS IS THE END STATE
TO WORK BACK FROM...



WHAT IS THE GOAL?

In a Sustainable Society...

Nature is not subject to systematically increasing...

... and in that society ...

How Would Nature Design a City?

EFFICIENT

Emulating ecosystem

• Interconnected and interdependent

• Waste = Food



Hartberg Ecopark



www.biomimicryinstitute.org

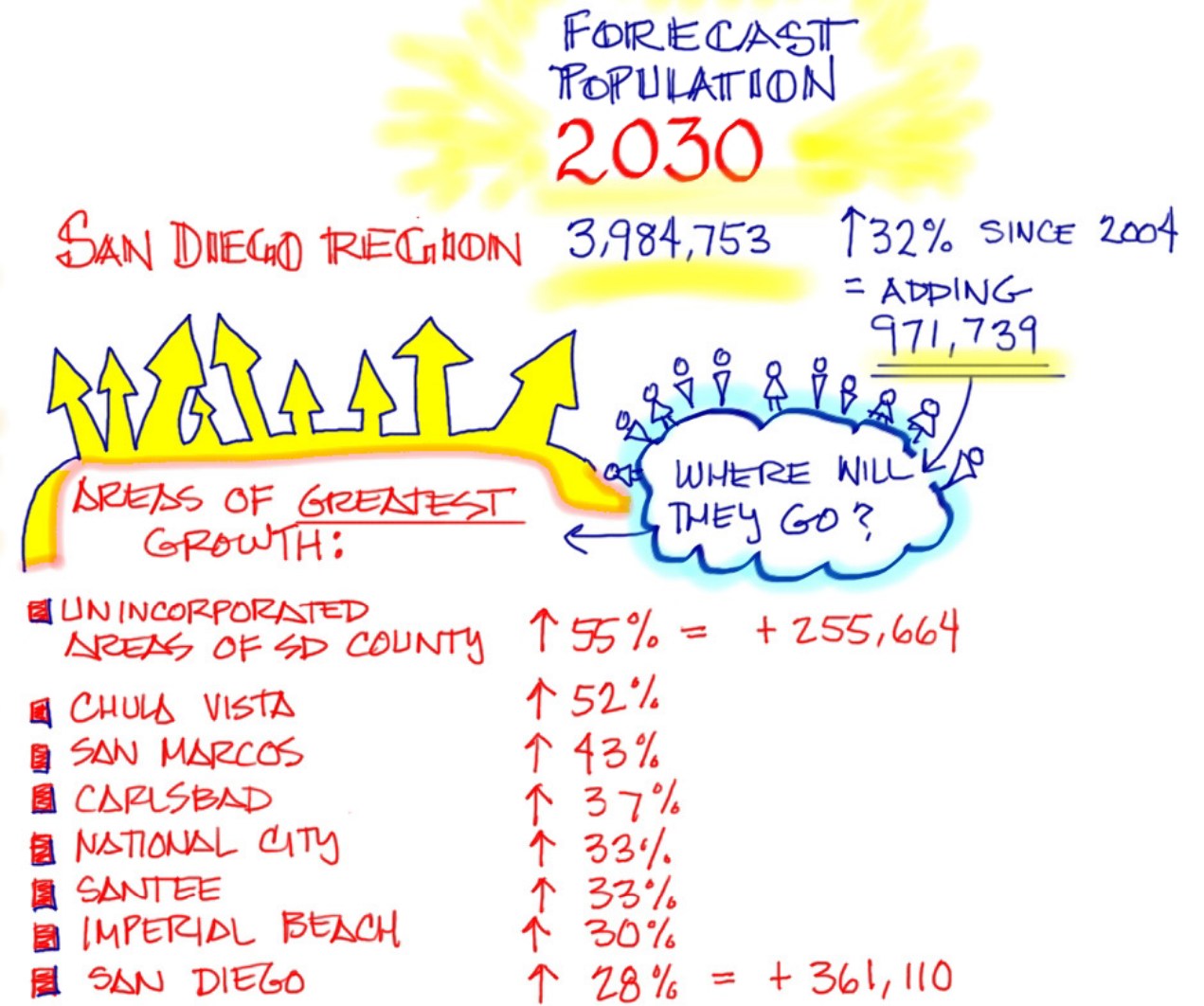
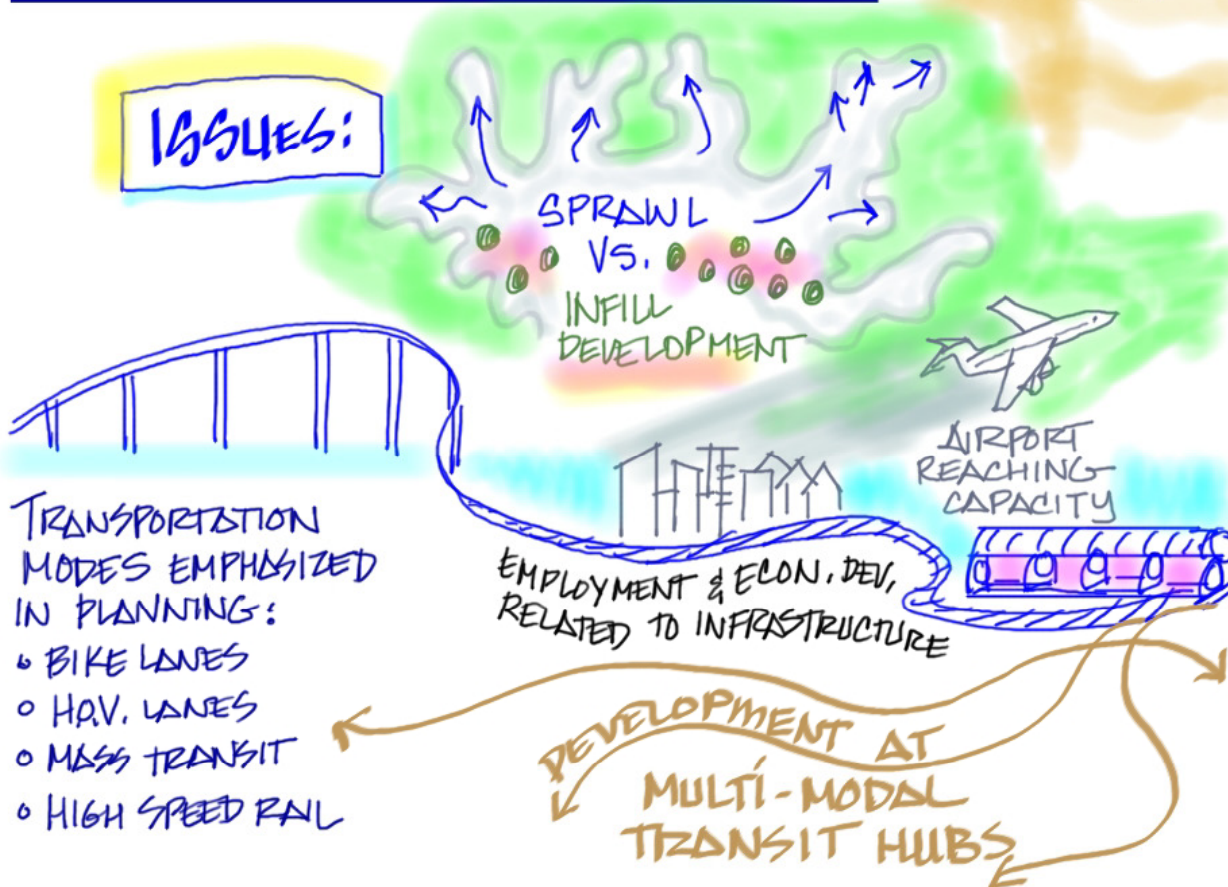
BEHIND
THE
DESIGN
SCENES

SD INDEX OF ECON. INDICATORS

San Diego Regional Transportation Issues

Alan Gin
Associate Professor of Economics
School of Business Administration

University of San Diego



ERIC ANDERSON

TRANSITIONS
High Speed Transit Forum
November 12, 2009

The New Multimodal Hub

Eric J. Anderson, ASLA
Parsons Brinckerhoff



Denver Union Station



Anaheim Regional Transportation Intermodal Station (ARTIC)

ARTIC

- WORLD CLASS
- TRANSPORTATION CENTER
- HUB

• BUSES • PRIVATE VEHICLES.
METRO LINK • AMTRAK • OCTA & BRAVO BRT • RESORT TRANSIT • SHUTTLES • TAXIS

TOURISTS,
SPORTS,
ENTERTAINMENT

POPULATION
INCREASE

- VISIONARY
- MODERN

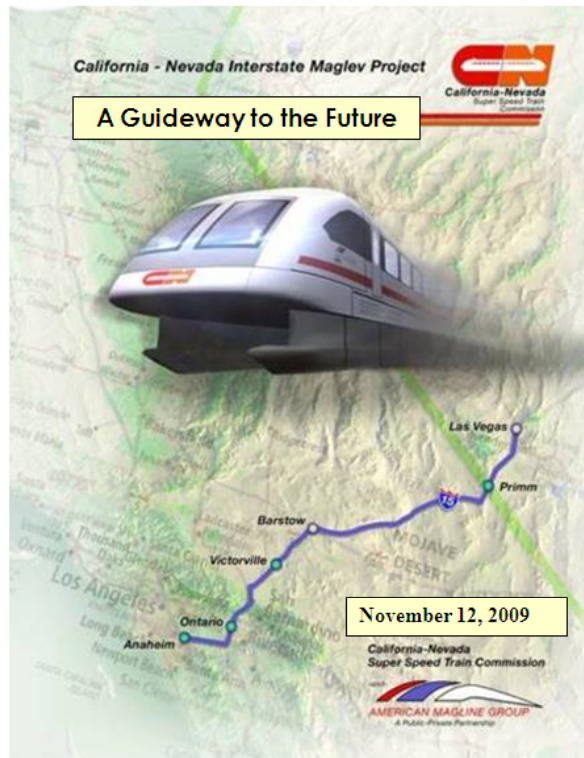
• ANTICIPATES FUTURE NEEDS & MODALITIES

• ROOTED IN OUR TRADITIONS AND LEED PLATINUM GOAL

DESIGN ATTRIBUTES: SOARING OPEN SPACE • TIMELESS • LIGHT FILLED • ENERGY EFFICIENT



NEIL CUMMINGS



MAGLEV FROM VEGAS TO ANAHEIM

- WE'VE BEEN AT THIS FOR OVER 30 YRS
- GERMANY'S RUNNING MAGLEV FOR 20 YEARS
- VERY GREEN
 - NO EMISSIONS
- LASTS LONGER
 - 80 YRS W/OUT AS MUCH MAINTENANCE
- COSTS ABOUT THE SAME AS A TRADITIONAL RAIL

California-Nevada Project

- History and Commission
- Public-Private Partnership in Place
- Shanghai Maglev - Proven System

Las Vegas-Anaheim System (100% Local Support)

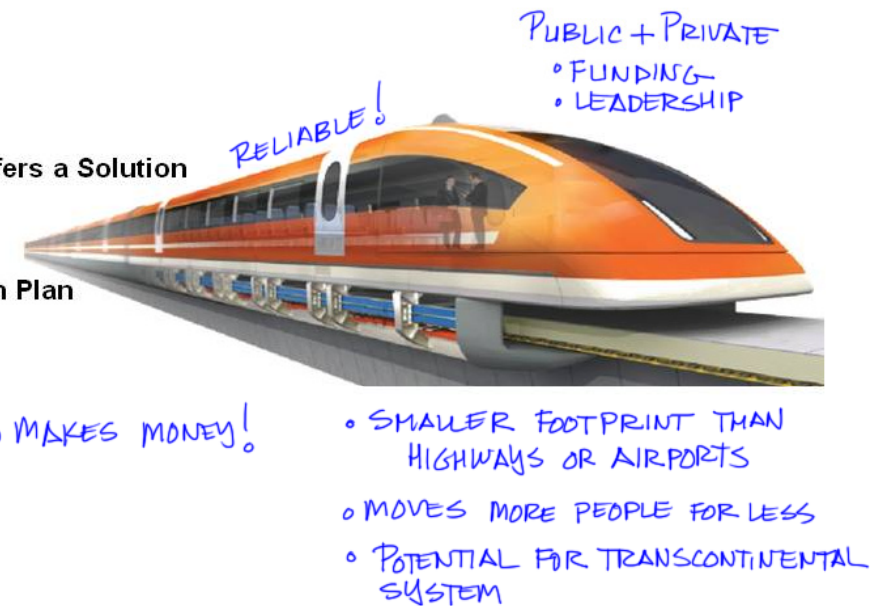
I-15/Airports in Crisis

- Airports
- I-15

Maglev Technology Offers a Solution

SAFETEA-LU Funding

Project Implementation Plan



RICH FLIERL



IS THE AMERICAN DREAM OVER?

THIS IS OVER

- GROW UP
- NICE HOUSE ON A CUL DU SAC
- CAR ≠ SUBURBIA

WHAT HAPPENS WHEN \$100 BI. OIL IS AN EVERY DAY REALITY?

DEVELOPERS ARE CONFLICTED!

IS THE FREEDOM OF YOUR CAR WORTH A LIFE STUCK IN TRAFFIC?

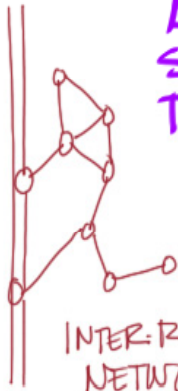
CONTEXT DRIVEN SUSTAINABLE

"LAW OF THE INDIES"

- WALKABLE
- CONNECTED
- ALL THE PARTS FOR A SUSTAINABLE PLACE ARE IN A WALKABLE RANGE

DO YOU LIVE IN A TRANSIT CONNECTED PLACE?

- THERE ARE NO SILVER BULLETS
 - MALLS
 - BALLPARKS
 - ETC.



INTER-REGIONAL NETWORK

ARE YOU STUCK IN TRAFFIC?



BIG IS THE NEW SMALL

SMALL IS THE NEW BIG

THIS A NECESSITY FOR MANY PEOPLE

AGENCIES HAVE FAILED US

