REDCAR

Rethinking Urban Transportation: New Strategies for Mobility

REDCAR Colloquium

California College of the Arts – Innovation Incubator Project 004 Interim Report

Friday, August 27, 2010

Innovation Incubator Project 004 Interim Report

Status

The Innovation Incubator Project 004, "LA REDCAR SF" was accepted into the San Francisco Chapter of the AIA "Architecture and The City Festival 2010" which is scheduled to take place during the month of September under the theme of "Investigating Urban Metabolisms." The yearly festival is a popular event in San Francisco and will hold a number of tours, events, lectures, and special programs that take an in-depth look at hidden and emergent systems that generate form, movement, growth and entropy in the city.

The LA REDCAR SF innovation and incubator project will culminate in an exciting colloquium that is freely open to the public. The colloquium is entitled, "Rethinking Urban Transportation: New Strategies for Mobility" and will take place on September 25, 2010 from 12:30 pm to 5:30 pm at the California College of the Arts in San Francisco. The colloquium will earn AIA members 3.5 LU's (Learning Units) for their continuing education in additional to engaging content by a exciting roster of moderators and speakers that are local and nationally involved in the development of public space, sustainable practices in the built environment, urban design, San Francisco City Government Transportation, and engineering and transportation disciplines.

The colloquium is the first of its kind where a moderated discussion with panelist will examine innovative transportation solutions in a systemic manner so as to address the reality of a typical North American polycentric metropolitan area that has been based mostly on a outdated, and unsustainable dependence on an petroleum driven economy, infrastructure, and planning of cities, suburban, and towns in the United States. Instead of examining solutions that apply to idealize (but non-existent) urban centers, this colloquium embraces the contemporary condition – the messy, chaotic, politically and socially balkanized, poly-centric metropolis. By exploring current technologies, as well as those which have reached a high degree of feasibility, this interdisciplinary colloquium will explore the potential of an ubiquitous self-regulating system that can cope with and adapt to the unpredictability of a mobile society that moves away from dependence on the current paradigm of transportation systems. The output of this colloquium

is to condense the discussion, audio, and video into a publication that can spur potential focus and discussion on the topic.

The following material has been developed where the colloquium event on September 25, 2010 will be the results of the Innovation Incubator Project 004.

Venue secured:

The California College of the Arts

Preparations for Venue:

The following are in final stages of completion coordination for site overall planning and event structure to entail: audio and video recording of colloquium including technical support, lighting, and professional editing of recording for free electronic distribution (Provided by CCA); reserved seating and seating for event participants; presentation equipments including laptops and podium microphone (Contribution from CCA); Timken Lecture Hall as the presentation and moderation space (Contribution from CCA); Sign-in and refreshment tables, tablecloths, and chairs (Contribution from CCA); Potential overflow area for more than 120 participants to the colloquium (Contribution from CCA); Morning session food and beverages (Contribution from CCA); Recycling waste bins (Contribution from CCA); Participant parking and bike parking availability for colloquium; Graphics work from speakers and REDCAR team for colloquium exhibition; and additional fundraising efforts in progress.

Expectations:

The event has currently sold out to an attendance of 100 persons on August 27th, 2010. Capacity for the event has been raised to 200 participants effective immediately. There are now preparations for overflow rooms to be setup to contain those persons who will be able to view the colloquium via live monitors.

11x17 Poster for the Event: http://dl.dropbox.com/u/7780004/REDCAR/REDCAR%20POSTER_100825_11x17.pdf

Launch of Colloquium Website: http://www.mobilityandthecity.com/

Event Registration: http://ac10laredcarcolloquium.eventbrite.com/ Event is part of the Architecture and the City Festival hosted by the San Francisco chapter of the American Institute of Architects:

http://www.aiasf.org/Programs/Public_Programs/Architecture_and_the_City/lectures.htm

Festival Booklet:

http://www.aiasf.org/archandcity/2010/ACGuide_2010.pdf

Marketing 'Skyscraper' banner on the right-hand side of the Architect's Newspaper - you may have to a refresh as we are on an alternate cycle with a competition from SCI-ARC in LA: http://www.archpaper.com/

Request

REDCAR requests additional funding from the Innovation and Incubator initiative to aid in fundraising for the colloquium to cover the cost the cost of speaker fees, their travel expenses and costs related to publicity material. The amount of the request is to be a maximum of \$5,000.00. Please note that this is a not-for-profit event and is free to the public. All attendees that are American Institute of Architecture members will receive 3.5 learning units for their continuing education. REDCAR is also pursuing 501c3 non-profit status with the IRS as well.

The following documents are the exhibits of the progress to date:

Abstract

Rethinking Urban Transportation: New Strategies for Mobility

2010 SF AIA "Architecture-and-the-City" Colloquium

12:30 pm – 5:30 pm, Saturday, September 25th, 2010

Timken Lecture Hall, CCA SF Campus, 1111 8th Street, San Francisco, CA

Background

Many metropolitan areas continue to experience rapid growth, with some like Los Angeles receiving up to 500 new residents each day. One of the current challenges for expanding cities is the design of a flexible transportation infrastructure that can respond to an ever increasing demand on resources and systems; one that is contained within the vision of a socially equitable and sustainable society. This mode of infrastructural response necessitates a rethinking of traditional personal mobility strategies.

We see four potential areas of research:

- [1] Most mass transit systems are designed around a centralized urban core and do not address the emerging polycentric organization of contemporary North American cities.
- [2] Suburban population dispersion over a wide geographic area, with resulting reduced densities, does not optimize a centralized transportation system.
- [3] Traditional mass transit systems are predicated on a top-down "fit-the-user-to-the-technology" methodology, which ignores user preferences (i.e. autonomy) and usage patterns (omni-directional), requiring a culture-shift for users which can at best be hoped for, but in reality is seldom seen.
- [4] Current ride sharing scenarios have limitations because firstly it can only accommodate one or two additional riders per one-car unit. Secondly, in our current cultural climate, sharing rides with strangers raises perceived safety issues amongst segments of the population.

Concepts to Be Examined

The intent of the colloquium is to examine innovative transportation solutions in a systemic manner so as to address the reality of a typical North American polycentric metropolitan area. Instead of examining solutions that apply to idealized (but non-existent) urban centers, this colloquium embraces the contemporary condition -- the messy, chaotic, politically and socially balkanized, poly-centric metropolis. By exploring current technologies, as well as those which have reached a high degree of feasibility, this interdisciplinary colloquium will explore the potential of a ubiquitous self-regulating system that can cope with and adapt to the unpredictability of a mobile society.

To advance the evolution of personalized ubiquitous and autonomous transportation, the los angels REDCAR concept is used as a starting point (an alternative transportation proposal linking existing infrastructure with P2P communication) as an armature, bringing together the leading researchers for each of its hardware and software components within the context of a complete system.

As an invisible extension of the physical and social realms, this can best be described as a singular opportunistic system, combining multiple processes and programs with a mobile embedded information

technology platform that incorporates existing transit infrastructure elements (streets, freeways, bus, rail, METRO/BART), wireless/mesh communication networks, personal communication devices and social software. It builds on the inherent 'autopia' culture, by leveraging current social software, P2P and wireless technologies as a means of promoting identity and connectivity. The social networking application builds on similar applications already in use by FEDEX routing processes or amazon.com preferences, and similar to facebook, works through an AI profiling structure, linking friends, transport type and special interests. This system explores the possibility of a distributed transportation overlay utilizing existing street and freeway infrastructure, along with the P2P communications networks, to address the reality of a poly-centric metropolitan area such as Los Angeles or the San Francisco Bay Area, with the goal of reversing the current top-down "fit-the-user-to-the-technology" approach of traditional public transit.

The colloquium format encourages an open discussion amongst the panelists in two interrelated sessions, the first being the system technology and the second, the social and environmental overlay. We have listed a few questions for your consideration, as an introduction to the second session discussion, and invite the presenters from the first session to actively participate in the second:

What would such a ubiquitous system look like and what would it mean to have activity nodes emerge from user interests or social networks in contrast to current centers, which respond to fixed, centrally planned infrastructure?

If an activity or development area emerges organically in response to evolving and ever changing social patterns, what does that mean for urban planning and our sense of place?

Structure: The colloquium will be divided into two interrelated sessions

SESSION ONE: THE SYSTEM

Session 1 – the system – looks at coupling smart P2P (person to person) communication technologies with the anticipated progression of smart, clean automated vehicles to augment existing transportation networks providing a sustainable and socially networked solution to mobility for urban contexts.

This session will present an overview of the latest research in transportation engineering technologies. It will focus on the "hardware" components of the concept, principally the reinvented ecologically sustainable automobile, running on an automated adaptation of existing

freeway infrastructure, as well as an autonomous vehicle guidance system allowing safer navigation of the existing street systems.

SESSION TWO: THE OVERLAY

Session 2 – the overlay – explores the possibilities of how the urban realm will be transformed and how urban planning and infrastructure will react/respond. The extent of this exploration would include the varying effects to the built realm, social networks, real estate speculation, architectural response, and morphing of infrastructure.

This session will discuss the design implication of autonomous transit on the built & social environments. Urban development will naturally emerge around social activity hotspots. The overlay of route-processing software upon the physical realm will cause serendipitous social and transit "hot-spots" to emerge thus creating an organic evolution of true TODs. With "REDCAR-like" applications downloadable to personal communication devices, transit options will be integrated into and tailored to users' personal daily tasks and social interactions. Transit will adapt you and not the other way around.

Proposed Schedule:

- 12:30 1:00pm Registration / Networking
- 1:00 1:10pm Introduction: REDCAR Colloquium Background & Goals (Tierney & Berman)
- 1:10 1:25 pm Keynote speaker (Chris Borroni-Bird)
- 1:30 3:00 pm Session 1: "The System" (Berman)

Automated Highway Systems (Misener): 15 mins

Autonomous vehicle guidance systems (Beiker): 15 mins

Ultra-small vehicle / new vehicle design (Borroni-Bird): 15 mins

Interconnected system concept (Goldberg): 15 mins

30 minute for discussion and questions

3:15 - 5:00 pm Session 2: "The Overlay" (El Khafif)

Application of social networking (Tierney): 15 mins

	Mapping social hotspots (Outram): 15 mins	
	Urban design implications (Greenberg): 15 mins	
	Organic vs. Deterministic (Simon): 15 mins	
	Reality check (Albert): 15 mins	
	30 minute panel discussion with input from Session 1 panelists as appropriate	
5:30 pm	Conclusion: What have we learned? (Berman)	

Speaker/Participant Background:

Ila Berman / CCA: moderator – Session 1

Dr. Ila Berman, Director of the School of Architecture at the California College of the Arts, is an architect and architectural theorist who holds a doctorate from Harvard University's Graduate School of Design. Berman is the recipient of many awards and honors including the Lieutenant Governor's Medal for Design, Social Sciences and Humanities Research Council of Canada Fellowships and the President's Award at Tulane University, where she was the Associate Dean of the School of Architecture until December 2007. Ila Berman was also the founding director and Principal Investigator of URBANbuild—an outreach architectural and urban design program for which she received a \$300,000 HUD/URAP grant, the work of which was exhibited at the Ogden Museum and recently published in her book URBANbuild Local Global (co-authored with Mona El Khafif). Berman has served on many boards, panels and design juries including those for the Pan American Biennale, and the AIA and ACSA design awards. She served on the Urban Design Committee of the Mayor's BNOB Commission in New Orleans after Katrina, and during that time, completed with Joan Busquets and Felipe Correa, the collaborative book published by Harvard University: New Orleans: Strategies for a City in Soft Land. Berman's design research and additional publications include: From Grid to Matrix, a theoretical analysis of shifting paradigms in late 20th century architectural practice; Bodyworks-a project and exhibition series published in PRAXIS; "Synthetic Nature" in Projects and their Consequences, a forthcoming monograph on the work of Reiser + Umemoto; "Amphibious Territories" in AD: Territory: Architecture Beyond Environment, "Regenerative Returns" (Cornell Architectural Journal), "Folds + Crystalline Fractures." in Next AEDS (a book series

on global emergent practices in the field of digital, multi-media and net-based architectural design); and "Machinic Matters" in *Intricacy: Art, Architecture and New Media.*

Since becoming the architecture director at CCA, Berman has founded three project-based R+D labs on urbanism, ecology, and digital, interactive and interdisciplinary media to expand networks for architectural research, design and practice. These labs have been involved in numerous research and design projects including the exhibition *FLUX: Architecture in a Parametric Landscape* (publication forthcoming) that opened in conjunction with the international Smart Geometries conference in March of 2009, the *10x10 Cities* project on urban sustainability for San Francisco in collaboration with AIASF for the 2009 AIA national convention, the *Sustainable Skyscrapers: Vertical Ecologies and Urban Ecosystems* publication, and the *Networked Urban Sensing* research project. She was also responsible for bringing the *Cities of the Future* panel and exhibition to CCA in February 2008. In addition to her design installations at the Contemporary Art Center, the Ogden Museum, and the Perloff Gallery among others, Berman also created *New Orleans: Urban Mappings for a Future City*, an exhibition in the U.S. Pavilion at the 2006 International Architectural Biennale in Venice, Italy. She is currently working with Mona El Khafif on two research and design publications for the CCA URBANIab: *Transformative Land* on the San Francisco Waterfront and *Jerusalem Divided City/Common Ground*.

• Jim Misener /UCB PATH, Automated Highway System: Can we get it to work?

Jim Misener is the Executive Director of University of California's Institute of Transportation Studies (ITS) California Partners for Advanced Transit and Highways (PATH). Established in 1986, California Partners for Advanced Transit and Highways (PATH) is administered by the Institute of Transportation Studies (ITS) at the University of California, Berkeley, in collaboration with Caltrans. PATH is a multi-disciplinary program with staff, faculty, and students from universities statewide, and cooperative projects with private industry, state and local agencies, and non-profit institutions. Areas of investigation include: Traffic Operations Research, focusing on advancing the state-of-the-art in traffic management and traveler information systems, and producing results that can be implemented in the field; Transportation Safety Research, mainly in vehicle-highway cooperation and communication, and "science of driving" investigations on driving behavior; Modal Applications Research, which investigates new concepts, methods, and technologies for innovating, enhancing and improving transit solutions.

• Sven Beiker / Stanford CARS, Autonomous vehicles: What are they and how will we react? Sven Beiker is the Executive Director of the Center for Automotive Research at Stanford - CARS. CARS is dedicated to re- envision the automobile and so is Sven as the program's manager. His motivation is to bring academia and industry together to shape the automotive future. Since spring 2009 he has been lecturing the Stanford class "The Future of the Automobile" to educate students in interdisciplinary automotive thinking and to get students involved with the industry early on.

Before joining Stanford University, Sven used to work at the BMW Group for more than 13 years. Between 1995 and 2008 he pursued responsibilities in technology scouting, innovation management, systems design, and series development.

Chris Borroni-Bird / Director GM Advanced Technology Vehicle Concepts Personal Urban Mobility

Dr. Christopher Borroni-Bird is Director of Advanced Technology Vehicle Concepts at General Motors and has led GM's "Reinvention of the Automobile" program, which include the first vehicles designed from a clean sheet around electrification (AUTOnomy, Hy-wire and Sequel).

Most recently, he has extended this work to include connectivity and urbanization and is leading GM's Personal Urban Mobility and Accessibility (PUMA) initiative. He is also the co-author of the book "Reinventing the Automobile: Personal Urban Mobility for the 21st Century" to be published by MIT Press in March 2010 (with MIT Professor William Mitchell and Dr. Larry Burns, former VP of R&D and Strategic Planning at GM).

Ken Goldberg / UCB CITRIS, Robotics interface: Interconnected systems

Ken Goldberg is a professor at UC Berkeley. He holds the craigslist Distinguished Chair in New Media, and is Professor of Industrial Engineering and Operations Research, with secondary appointments in Electrical Engineering and Computer Science and in the School of Information. Goldberg received his PhD in Computer Science from CMU in 1990 and studied at the University of Pennsylvania, Edinburgh University, and the Technion. From 1991-95 he taught at the University of Southern California, and in Fall 2000 was visiting faculty at MIT Media Lab.

Goldberg directs the Berkeley Laboratory for Automation Science and Engineering where he and his students pursue research in Geometric Algorithms for Robotics and Automation, Networked Robots, and Medical Robotics. Goldberg and his students have published over 150 refereed research papers and edited four books. In 2004, Goldberg co-founded the IEEE Transactions on Automation Science and Engineering and served as Founding Chair of its Advisory Board. Goldberg was named National Science Foundation Young Investigator in 1994 and NSF/Whitehouse Presidential Faculty Fellow in 1995. Goldberg was elected to two terms as Vice-President of Technical Activities for the IEEE Robotics and Automation Society. He is the recipient of the Joseph Engelberger Award (2000), the IEEE Major Educational Innovation Award (2001) and was elected IEEE Fellow in 2005.

Mona El Khafif / CCA: moderator – Session 2

Dr. Mona El Khafif is an Associate Professor of Architecture and Urban Design and Project Coordinator of the new CCA URBANIab. She holds a professional architecture degree from the RWTH in Aachen, Germany, and a doctorate in urban design from the TU in Vienna. El Khafif worked in architectural offices in Cologne before settling in Vienna 1997, where she was involved in several important Viennese design projects including: the BUSarchitecture pilot Homeworkers project which received the Otto Wagner Urban Development Prize in 1998, and the Ortner & Ortner Museumsquartier Vienna, one of the world's ten largest cultural urban districts. In 2001, Dr. El Khafif founded the interdisciplinary architecture, a platform for the development of contemporary architecture in Vienna. She has extensive experience in the organization and direction of international urban workshops and in developing collaborative cooperation programs with universities in such countries as Germany, Turkey, Iran, and the United States.

After teaching in the core studios for the urban design program at the Institute of Urban Design/TU Vienna from 2000–06, Dr. El Khafif joined the URBANbuild program at Tulane University in New Orleans in 2006 to support studios at the urban and architectural scales in the aftermath of Hurricane Katrina. She is also a co-author of *URBANbuild: Local/Global* and has recently published *Staged Urbanism: Urban Spaces for Art, Culture and Consumption in the Age of Leisure Society* in Germany. Her current research operates at multiple scales, examining the interdisciplinary aspects of urban regeneration strategies and urban ecologies. At CCA Dr. El Khafif leads the urban design curriculum and teaches urban research seminars, large scale urban and architectural design studios, and international programs. Her recent projects completed through the CCA URBANlab include the research and design projects (and forthcoming publications): *Transformative Land: Envisioning Baylink Pier 70, Jerusalem: Divided City/Common Ground*, and *Agropolis*, as well as the two exhibitions: *10x10 Cities: Green Facts Challenges, Futures* and *CitySpaceShare: (OP)space* an exhibition for the 2010 ZERO1 San Jose Biennial.

Therese Tierney /UIUC, Understanding the public realm: Application of Social Networking

Therese Tierney is an Assistant Professor of Architecture with a Designated Emphasis in New Media at the University of Illinois Urbana Champaign. As the co-founding director of URL: Urban Research Lab, her research explores the intersection between emerging technologies and the built environment. She has been a pre-doctoral researcher at the MIT media lab, and a participant in University of California's Berkeley Center for New Media, directed by Ken Goldberg. Tierney is the author of "Abstract Space: Beneath the Media Surface" (2007) and "Network Practice: New Strategies for Architecture + Design" (2007).

Christine Outram / MIT, SENSEable City, The New Mapping: Planning Implications

Christine Outram's research focuses on tackling problems of sustainability and livability in inner urban areas through harnessing the power of emerging technologies and distributed computing. She is currently a Research Associate with MIT's SENSEable City Lab where she is project leader for The Copenhagen Wheel - a wheel that turns ordinary bikes into electric hybrids with regeneration and real-time environmental sensing capabilities. This work debuted at the COP15 United Nations Climate Conference during December 2009 and will go commercial in 12 months time. Prior to her research role at SENSEable City Lab, she received her SMArchS Architecture and Urbanism degree at MIT and her Masters of Architecture degree in Sydney, Australia. She has practiced in both architectural and urban design offices.

• Ken Greenberg / Greenberg Consultants, Urban Design Implications: Will it work?

Ken Greenberg is an architect, urban designer, teacher, writer, former Director of Urban Design and Architecture for the City of Toronto, founding partner of Urban Strategies Inc., and now Principal of Greenberg Consultants. For over three decades he has played a pivotal role on public and private assignments in urban settings throughout North America and Europe, focusing on the rejuvenation of downtowns, waterfronts, neighborhoods and on campus master planning, regional growth management, and new community planning. Cities as diverse as Toronto, Hartford, Amsterdam, New York, Boston, Montréal, Washington DC, Paris, Detroit and San Juan Puerto Rico have benefited from his advocacy and passion for restoring the vitality, relevance and sustainability of the public realm in urban life. He applies a holistic approach to city building, crossing traditional boundaries and working in team settings collaborating with many talented professionals from a variety of disciplines.

He is the recipient of the 2010 American Institute of Architects Thomas Jefferson Award for public design excellence and is currently working on a book on cities with Random House. Ken is a frequent lecturer and teacher in both North America and Europe, inspiring professionals and students in thinking about the demographically diverse, post-industrial city. He has been the Charles Moore Visiting Professor of Architecture at the Taubman School at the University of Michigan and taught Masters studios in urban design at the Harvard Graduate School of Design, the University of Toronto, L'Université de Montréal, UC Berkeley and the University of Pennsylvania. He is a frequent contributor to the Mayor's Institute for City Design. He is a Fellow of the Royal Canadian Institute of Architects, the Toronto Society of Architects and the Institute for Urban Design as well as a frequent participant in the Mayors Institutes. His work has garnered awards from the Canadian Institute of Planners, Progressive Architecture, the City of Toronto, the Canadian Architect, the American Planning Association and the American Institute of Architects.

• Cathy Simon / Perkins+Will, Organic vs. deterministic: Do we loose control?

Cathy Simon leads Perkins+Will's the San Francisco office Civic, Corporate + Commercial Market Sector, which encompasses everything from mixed-use buildings to housing to civic institutions, from the reinvention of historic structures to large-scale urban design projects. Perkins+Will San Francisco's portfolio includes award-winning work around the Bay Area, across the U.S., and around the world. Cathy's focus on transformative design is evident at all scales. Her larger-scale work is best exemplified by San Francisco's Ferry Building, a once-disused relic reborn as a public marketplace and the site of the nation's most highly-regarded farmer's market, as well as a place of vibrant community.

Cathy's design philosophy and expertise have made her a natural spokesperson for the burgeoning revitalization of post-industrial waterfronts worldwide. Along the San Francisco waterfront, besides the Ferry Building, she has been responsible for dramatic work refashioning multiple piers and new neighborhoods including Mission Bay and Treasure Island, and the current work of crafting Mission Rock, the new district at Seawall Lot 337. She is much in demand as a speaker and teacher on issues of urbanization, revitalization, and the ways and means of creating these vibrant places that nurture the growth of community.

• Peter Albert / SF MTA, Reality Check: Hey this is my town you're talking about!

Peter Albert is the Deputy Director of Planning at the San Francisco Municipal Transportation Agency, and oversees planning for all modes of transportation. This includes the Bicycle Program and Pedestrian program, which support the Shape Up program by making walking and bicycling an every-day part of life in San Francisco.

Peter came to SFMTA in 2006 after seven years at BART. A major focus of his work was to ensure walk-able communities around transit stations. Prior to BART, Peter managed the development of the Countywide Transportation Plan with the San Francisco County Transportation Authority, and worked as an architect, urban designer and transportation planner for 11 years at the San Francisco Planning Department. Peter earned a Bachelor of Architecture degree from Cal Poly San Luis Obispo and the University of Montréal, and a Masters of Urban and Regional Planning from San José State University in 1991.

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REDCAR questions

Posted on August 25, 2010 by gerry

Question: I am struggling to understand in simple terms what the "redcar" concept is, how it would work and how it differs from what we currently have. Would people still own their own vehicles? Or is it like a bike share system. What about storage? Who is driving? All very basic questions. Is there a relatively simple explanation somewhere that you could share?

• The intent is that people would not own their own car but would have ready access to a vehicle (individually or shared) similar to Zipcar "car-share" program with the fee / user cost being based upon a shared (cheapest) option through to an individual (most expensive) option. However we don't prohibit individuals from potentially using their cars but they would be hit with the highest premium use charge.

• The intent is that the "redcars" would, during the day and evening anyway, be constantly in use through sharing. However realizing that there would be peak hour demands greater than the average day or evening demand some storage location ("car barn" if you will) will be required but that can be remotely located as cars would be travelling on the road on an "on-demand" basis only. Also, with a redesigned urban vehicle the space required for car parking would be significantly reduced from the current 110 sf minimum footprint of a typical car.

• The vehicles would be self-driving, in that they could use the autonomous vehicle guidance system currently under development by the Volkswagen Group in conjunction with Stanford CARS program (Sven Beiker of Stanfords CARS may talk to that point), or if they're on the freeway they could use the Automated Highway System demonstrated by UCB's PATH program down on I-15 in San Diego (Jim Misener of UCB's PATH may talk to that) and they would be self-aware and spatially interconnected similar to the work done by both VW and GM (se Chris Borroni-Bird's work on this).

 Per issues of culture, safety, economics and practicality – the answers may be a bit more nuanced and create very interesting discussion. Our interests ultimately lie in achieving: 1) more people in fewer cars that 2) move in a more efficient manner 3) take up less space in the urban realm (either parked or in motion.) The issue of whether the cars are driverless and whether private ownership is permitted are ones that we initially discussed at length. In the end, we are found that there is rational for maintaining both and, especially considering the immediate implementation of this concept, there would have to be exceptions. For example, even if the car is driverless, there may be a need to have a "driver" – just to ease the social/cultural and safety concerns.

• The second scheduled session – "the overlay" – will deal with issues which have been less explored than the first phase of our investigation. These issues & amp; impacst include the impacts to the urban realm and opportunities of freed space (by consolidation of vehicles, "road diet" etc.) and the new nodes that emerge from shared social interests. New conversations including the changes to regulatory structure and lending patterns to promote these nodes have recently surfaced and trigger various outcomes. I believe herein lies the types of discussions that will be most interesting as part of the colloquium.

Posted in Uncategorized | Leave a comment

Welcome

Posted on August 22, 2010 by team redcar

It's taken a lot of work to get this point, so thanks to everyone who helped out making the site and organizing the conference.

Posted in Uncategorized | Leave a comment

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Concept

Background

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Donations

Why are we fundraising?

We extend an invitation for you to help us in fundraising to cover the cost of speaker fees, their travel expenses and costs related to publicity material. This is a not-for-profit event and is be free to the public. Your gracious support will only be used to support the operation of the colloquium as we want everyone to have the opportunity to attend free of charge.

Please click on the "DONATE" button to contribute and help make this a successful event for all. Once you click on the button, our website will direct you to a secure donation which provided by PayPal. You may use your credit card or bank account where available. A login to PAYPAL is not required. Please note we cannot refund any donations. Once you have made your donation, PAYPAL will offer you a link that will bring you back to our website so that you may explore the rest of its content.



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REDCAR Colloquium | Rethinking Urban Transportation: New Strategies for Mobility

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Event Details

REGISTER NOW

Date

Saturday, September 25th, 2010

Structure: The colloquium will be divided into two interrelated sessions

SESSION ONE: THE SYSTEM

Session 1 – the system – looks at coupling smart P2P (person to person) communication technologies with the anticipated progression of smart, clean automated vehicles to augment existing transportation networks providing a sustainable and socially networked solution to mobility for urban contexts.

This session will present an overview of the latest research in transportation engineering technologies. It will focus on the "hardware" components of the concept, principally the reinvented ecologically sustainable automobile, running on an automated adaptation of existing freeway infrastructure, as well as an autonomous vehicle guidance system allowing safer navigation of the existing street systems.

SESSION TWO: THE OVERLAY

Session 2 – the overlay – explores the possibilities of how the urban realm will be transformed and how urban planning and infrastructure will react/respond. The extent of this exploration would include the varying effects to the built realm, social networks, real estate speculation, architectural response, and morphing of infrastructure.

This session will discuss the design implication of autonomous transit on the built & social environments. Urban development will naturally emerge around social activity hotspots. The overlay of route-processing software upon the physical realm will cause serendipitous social and transit "hot-spots" to emerge thus creating an organic evolution of true TODs. With "REDCARlike" applications downloadable to personal communication devices, transit options will be integrated into and tailored to a users' personal daily tasks and social interactions. Transit will adapt you and not the other way around.

Schedule

12:30 - 1:00 pm	Networking	
1:00 - 1:10pm	Introduction: REDCAR Colloquium Background & Goals (Tierney & Berman)	
1:10 – 1:25 pm	Keynote speaker (Chris Borroni-Bird)	
1:30 – 3:00 pm	Session 1: "The System" (Berman)	
	Deploying an Automated Highway System (Misener): 15 mins	
	Autonomous driving (Beiker): 15 mins	
	Ultra-small vehicle / new vehicle design (Borroni-Bird): 15 mins	
	Design Innovation (Goldberg): 15 mins	
	30 minute for discussion and questions	
3:15 – 5:00 pm	Session 2: "The Overlay" (El Khafif)	
	Application of social networking (Tierney): 15 mins	
	Mapping social hotspots (Ratti): 15 mins	
	Urban design implications (Greenberg): 15 mins	
	Organic vs. Deterministic (Simon): 15 mins	
	Reality check (Albert): 15 mins	
	30 minute panel discussion with input from Session 1 panelists as appropriate	
5:30 pm	Conclusion: What have we learned? (Berman)	

Address

California College of the Arts – San Francisco Campus located at 1111 Eighth Street, between Hooper and Irwin.

Map





Directions

CCA Directions

Parking Information

There are three visitor spaces located in the parking lot of the CCA Student Center at 80 Carolina Street. Visitors may receive a parking permit from the Enrollment Services Office (second floor). The parking permit is good for one and a half hours.

Street parking is also available on the streets surrounding the campus and on the weekend is easily accessible.

Google Map

View CCA Campus Locations in a larger map

Email

info@mobilityandthecity.com



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AIA East Bay 2009 AIA East Bay Unbuilt Design Awards

The AIA East Bay Unbuilt Design Award: A program hosted by the American Institute of Architects to recognize, "on the drawing board" projects for their creativity and design excellence. Reviewed in 2009 by Anne Fougeron, Richard Thompson, and Mark Anderson, the LA REDcar received an Honor Award with comments from the judges to continue evolving and morphing the project to investigate new solutions for future infrastructure.



Published in part with the generous support of the City of Los Angeles' Department of Cultural Affairs, the 156-page book documents the results of the SCI-Arc's inaugural Future Initiatives competition. The competition was inspired by LA County Measure R—a half cent sales tax that promises up to \$40 billion in transit funding in coming decades. It drew 75 proposals from architecture firms and students throughout the U.S. and from four other countries.

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Speakers



Ila Berman / CCA: moderator - Session 1

Dr. Ila Berman, Director of Architecture at the California College of the Arts (CCA), is an architect and architectural theorist who holds a doctorate from Harvard University. Dr. Berman is the recipient of many awards including the Lieutenant Governor's Medal for Design, SSHRC Fellowships and the President's Award at Tulane University, where she was the Associate Dean of the School of Architecture until 2007 and founding Director of URBANbuild. Berman's design work and publications on architectural and urban territories include URBANbuild local global; New Orleans: Strategies for a City in Soft Land—by Harvard University focused on river edge development, and From Grid to Matrix, an analysis of shifting paradigms in late 20th century architectural practice. Additional publications are included in the AD Territory:

Architecture Beyond Environment, Next AEDS—part of a book series on global emergent practices in the field of digital, multi-media and net-based architectural design, Intricacy: Art, Architecture and New Media, and Sustainable Skyscrapers: Vertical Ecologies and Urban Ecosystems, as well as PRAXIS, JAE, Cityscape, APPENDX, and c3Korea among others. Since becoming the Director of Architecture at CCA, Berman has founded three project-based R+D labs on urbanism, ecology, and digital, interactive and interdisciplinary media to expand networks for architecture in a Parametric and 10×10 Cities—a collaboration with AIASF focused on urban sustainability for San Francisco. In addition to her exhibitions at the Contemporary Art Center, the Ogden Museum, the Perloff Gallery and many other public and private institutions, she also created "New Orleans: Urban Mappings for a Future City," an exhibition in the U.S. Pavilion at the 2006 International Architectural Biennale in Venice, Italy, that was recently toured in Bangkok, Panama City and Los Angeles.



Jim Misener /UCB PATH – Towards Deploying an Automated Highway System: Practical Steps for a Practical Solution?

Jim Misener is currently an Executive Advisor for Booz Allen Hamilton but is the former Executive Director of University of California Partners for Advanced Transit and Highways (PATH). Established in 1986, California Partners for Advanced Transit and Highways (PATH) is administered by the Institute of Transportation Studies (ITS) at the University of California, Berkeley, in collaboration with Caltrans. PATH is a multidisciplinary program that focuses on Intelligent Transportation Systems (ITS). PATH became well known in 1997 when, in

collaboration with Federal, State and private sector partners, eight cars showing a prototype Automated Highway System was demonstrated in San Diego on I-15. Since then, Jim's work has focused on deployment issues, to include the recent proliferation of wireless technologies and mobility and safety services in transportation delivered over the air.



Sven Beiker / Stanford CARS, Autonomous Driving – When technology is not enough?

Sven Beiker is the Executive Director of the Center for Automotive Research at Stanford – CARS.

CARS is dedicated to re- envision the automobile and so is Sven as the program's manager. His motivation is to bring academia and industry together to shape the automotive future. Since spring 2009 he has been lecturing the Stanford class "The Future of the Automobile" to educate students in interdisciplinary automotive thinking and to get students involved with the industry early on.

Before joining Stanford University, Sven used to work at the BMW Group for more than 13 years. Between 1995 and 2008 he pursued responsibilities in technology scouting, innovation management, systems design, and series development.



Chris Borroni-Bird / Director GM Advanced Technology Vehicle Concepts Personal Urban Mobility – Ultra-small vehicle design

Dr. Christopher Borroni-Bird is Director of Advanced Technology Vehicle Concepts at General Motors and has led GM's "Reinvention of the Automobile" program, which include the first vehicles designed from a clean sheet around electrification (AUTOnomy, Hy-wire and Sequel).

Most recently, he has extended this work to include connectivity and urbanization and is leading GM's Personal Urban Mobility and Accessibility (PUMA) initiative. He is also the co-author of the book "Reinventing the Automobile: Personal Urban Mobility for the 21st Century" to be published by MIT Press in March 2010 (with MIT Professor William

Mitchell and Dr. Larry Burns, former VP of R&D and Strategic Planning at GM).



Ken Goldberg / UCB CITRIS - Innovation in Design

Ken Goldberg is an acclaimed artist and a professor at UC Berkeley. He holds the craigslist Distinguished Chair in New Media, and is Professor of Industrial Engineering and Operations Research, with secondary appointments in Electrical Engineering and Computer Science and in the School of Information. Ken's art installations have been exhibited internationally at venues such as the Whitney Biennial, Pompidou Center in Paris, Buenos Aires Biennial, and the ICC in Tokyo. Goldberg received his PhD in Computer Science from CMU in 1990 and studied at the University of Pennsylvania, Edinburgh University, and the Technion. From 1991-95 he taught at the University of Southern California, and in Fall 2000 was visiting faculty at MIT Media Lab.

Goldberg directs the Berkeley Laboratory for Automation Science and

Engineering where he and his students pursue research in Geometric Algorithms for Robotics and Automation, Networked Robots, and Medical Robotics. Goldberg and his students have published over 150

refereed research papers and edited four books. In 2004, Goldberg co-founded the IEEE Transactions on Automation Science and Engineering and served as Founding Chair of its Advisory Board. Goldberg was named National Science Foundation Young Investigator in 1994 and NSF/Whitehouse Presidential Faculty Fellow in 1995. Goldberg was elected to two terms as Vice-President of Technical Activities for the IEEE Robotics and Automation Society. He is the recipient of the Joseph Engelberger Award (2000), the IEEE Major Educational Innovation Award (2001) and was elected IEEE Fellow in 2005.



Mona El Khafif / CCA: moderator - Session 2

Mona El Khafif is an Associate Professor of Architecture and Urban Design and Project Coordinator of the CCA URBANIab, who holds a doctorate in urban design from the TU Vienna. El Khafif worked in architectural offices in Germany and Vienna, on projects which received important urban design awards including the Otto Wagner Urban Design Award for the BUSarchitecture Homeworkers project and the Ortner & Ortner Museumsquartier. After teaching at the Instutute for Urban Design and Landscape Architecture at the TU in Vienna from 2000-2006, El Khafif joint the URBANbuild program at Tulane University in New Orleans to support studios at the urban and architectural scales in the aftermath or Hurricane Katrina from 2006-2008. El Khafif is a founding principal of phase 1 Fox El

Khafif_Nuhsbaumer, a co-author of URBANbuild local global, and has recently published Staged Urbanism: Urban Spaces for Art, Culture and Consumption in the Age of Leisure Society with VDM Publisher, 2009 in Germany.



Therese Tierney /UIUC – Understanding the public realm: Application of Social Networking

Therese Tierney is an Assistant Professor of Architecture with a Designated Emphasis in New Media at the University of Illinois Urbana Champaign. As the co-founding director of URL: Urban Research Lab, her research explores the intersection between emerging technologies and the built environment. She has been a pre-doctoral researcher at the MIT media lab, and a participant in University of California's

Berkeley Center for New Media, directed by Ken Goldberg. Tierney is the author of "Abstract Space: Beneath the Media Surface" (2007) and "Network Practice: New Strategies for Architecture + Design" (2007).



Christine Outram / MIT SENSEable City Lab

Christine Outram's research focuses on tackling problems of sustainability and livability in inner urban areas through harnessing the power of emerging technologies and distributed computing.

She is currently a Research Associate with MIT's SENSEable City Lab where she is project leader for The Copenhagen Wheel – a wheel that turns ordinary bikes into electric hybrids with regeneration and real-time environmental sensing capabilities. This work debuted at the COP15 United Nations Climate Conference during December 2009 and will go commercial in 12 months time.

Prior to her research role at SENSEable City Lab, she received her SMArchS Architecture and Urbanism degree at MIT and her Masters of Architecture degree in Sydney, Australia. She has practiced in both architectural and urban design offices.



Ken Greenberg / Greenberg Consultants – Urban Design Implications: Will it work?

Ken Greenberg is an architect, urban designer, teacher, writer, former Director of Urban Design and Architecture for the City of Toronto, founding partner of Urban Strategies Inc., and now Principal of Greenberg Consultants. For over three decades he has played a pivotal role on public and private assignments in urban settings throughout North America and Europe, focusing on the rejuvenation of downtowns, waterfronts, neighborhoods and on campus master planning, regional growth management, and new community planning He is the recipient of the 2010 American Institute of Architects Thomas Jefferson Award for public design excellence and is currently working on a book on cities with Random House. Ken is a frequent lecturer and teacher in both North America and Europe, inspiring professionals and students in thinking about the demographically diverse, post-industrial city. He has been the Charles Moore Visiting Professor of Architecture at the Taubman School at the University of Michigan and taught Masters studios in urban design at the Harvard Graduate School of Design, the University of Toronto, L'Université de Montréal, UC Berkeley and the University of Pennsylvania. He is a frequent contributor to the Mayor's Institute for City Design. He is a Fellow of the Royal Canadian Institute of Architects, the Toronto Society of Architects and the Institute for Urban Design as well as a frequent participant in the Mayors Institutes. His work has garnered awards from the Canadian Institute of Planners, Progressive Architecture, the City of Toronto, the Canadian Architect, the American Planning Association and the American Institute of Architects.



Cathy Simon / Perkins + Will – Organic vs. deterministic: Do we loose control?

Cathy Simon leads Perkins + Will's the San Francisco office Civic, Corporate + Commercial Market Sector, which encompasses everything from mixeduse buildings to housing to civic institutions, from the reinvention of historic structures to large-scale urban design projects. Perkins + Will San Francisco's portfolio includes award-winning work around the Bay Area, across the U.S., and around the world. Cathy's focus on transformative design is evident at all scales. Her larger-scale work is best exemplified by San Francisco's Ferry Building, a once-disused relic reborn as a public marketplace and the site of the nation's most highly-regarded farmer's market, as well as a place of vibrant community.

Cathy's design philosophy and expertise have made her a natural

spokesperson for the burgeoning revitalization of post-industrial waterfronts worldwide. Along the San Francisco waterfront, besides the Ferry Building, she has been responsible for dramatic work refashioning multiple piers and new neighborhoods including Mission Bay and Treasure Island, and the current work of crafting Mission Rock, the new district at Seawall Lot 337. She is much in demand as a speaker and teacher on issues of urbanization, revitalization, and the ways and means of creating these vibrant places that nurture the growth of community.



Peter Albert / SF MTA - Reality Check: Hey this is my town you're talking about!

Peter Albert is the Deputy Director of Planning at the San Francisco Municipal Transportation Agency, and oversees planning for all modes of transportation. This includes the Bicycle Program and Pedestrian program, which support the Shape Up program by making walking and bicycling an every-day part of life in San Francisco.

Peter came to SFMTA in 2006 after seven years at BART. A major focus of his work was to ensure walkable communities around transit stations. Prior to BART, Peter managed the development of the Countywide Transportation Plan with the San

Francisco County Transportation Authority, and worked as an architect, urban designer and transportation planner for 11 years at the San Francisco Planning Department. Peter earned a Bachelor of Architecture degree from Cal Poly San Luis Obispo and the University of Montréal, and a Masters of Urban and Regional Planning from San José State University in 1991.

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GERRY TIERNEY_510 Collective [sciARC_ANI, WPA2.0, AIAEB Unbuilt, REDCAR colloquium]

Gerry Tierney's 30 years of experience in architecture have been focused primarily on housing. This has ranged from market-rate to affordable housing, serving the needs of families, single adults, students, and seniors.

The unique demands created by each of these housing segments has helped develop a flexibility in design as well as an extensive knowledge base that allows for the best of each type to inform and enhance the other. Gerry brings this flexibility and experience to each new project, creating individual housing designs tailored to the specific needs of the client, user and site, and recognizing that there are no "cookie-cutter" solutions to housing.

Projects have included: Treasure Island + Yerba Buena Island Mixed-Use Development, San Francisco, California | Seavvall Lot 337: Mixed-use Commercial, Retail + Housing Development, San Francisco, California | Parcel L Housing, Southeast Federal Center, Washington, D.C. | Panama Pacifico Mixed Use, Panama City, Panama | The Sierra, Oakland, CA | Liquid Sugar Lofts, Emeryville, California | Elevation 22 Housing, Emeryville, California | City Limits, Emeryville, California | Zephyr Gate Housing, Oakland, California



DINESH PERERA_format design studio [sciARC_ANI, WPA2.0, REDCAR_colloquium]

With a professional background in architecture and construction, Dinesh defines his design process by incorporating emergent digital fabrication tools with traditional practices in the artist's studio. A fine arts foundation and continuing education in both architecture and studio glass blowing equip him to realize spacial experiences through analog and digital processes.



BEN FELDMANN 510 Collective [sciARC ANI, REDCAR colloquium]

Ben Feldmann is an urban designer and landscape architect who seeks out design solutions that are true to context and enable synergies between built and natural systems. Carrying over ten years of experience, his methodology of design examines issues at varying scales to best approach alternatives that take in consideration for social, economic, physical, and environmental realms.



THERESE TIERNEY_TT Studio [sciARC_ANI, REDCAR_colloquium]

Therese Tierney is an Assistant Professor of Architecture with a Designated Emphasis in New Media at the University of Illinois Urbana Champaign. As the co-founding director of URL: Urban Research Lab, her research explores the intersection between emerging technologies and the built environment. She has been a pre-doctoral researcher at the MIT media lab, and a participant in University of California's Berkeley Center for New Media, directed by Ken Goldberg. Tierney is the author of

"Abstract Space: Beneath the Media Surface" (2007) and "Network Practice: New Strategies for Architecture + Design" (2007).



KATIE HANDY_format design studio [sciARC_ANI, WPA2.0, AIAEB Unbuilt, REDCAR colloquium]

With professional experience in multiple scales of design including architecture, furniture fabrication, graphic and urban design, Katie's wide range of design skills equip her to produce innovative solutions for the many competitions and publications she is involved with.

As a co-founder of format design studio, she dedicates her time to exploring a fluent connection between digital and analog in both her design process as well as her built work. She aims to create experiences that not only respond to the rapidly changing social and ecological environment, but offer a more synergetic relationship with its surroundings.



TYRONE MARSHALL_510 Collective [sciARC_ANI, REDCAR_colloquium]

Tyrone Marshall has strong interest in advanced computational design and performative strategies in the built environment. He has 8 years experience in architecture and a recent graduate of the California College of the Arts architecture program. Recent printed work is an article entitled, "Hygroscopic Climatic Modulated Boundaries: A Strategy for Differentiated Performance Using a Natural Circulative and Energy Captive Building Envelope in Hot and Moisture Rich Laden Air Environments." The article explores a theoretical building envelope that enables innovative energy and water production and presents conceptual components that draw water vapor out of the air to deliver new sources of water, generate electrical energy, and lower indoor

humidity below the outside air in hot and humid climates.

NED REIFENSTEIN_510 Collective [REDCAR_colloquium]

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Unveiled> Harpa Concert Hall and Conference Centre

Olafur Eliasson and Henning Larsen team up for a

multifaceted, multifunctional project in Reykjavik

Crit> Brooklyn Bridge Park 08.25.2010

There is a balance between brilliant and boring in NYC parks, and Thomas de Monchaux finds this one almost gets it right



COURTESY MVVA



Who Wants To Wheel Away A Lautner? 24 Aug 2010 Dressing Up For John Chase (now with fashion pix!!) 24 Aug 2010

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EAST FEATURED SECTION



Lower Manhattan Shaping Up For our 6th annual Developer's Issue, we focus







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Cameron Sinclair (1.5 LUs)

September 2, 6:00 pm Networking & Refreshments: 6:00 PM Lecture and Q & A: 7:00 PM \$20 AIA + AIGA Members | \$30 Nonmembers | \$15 Students Adobe San Francisco, 601 Townsend Street, San Francisco NOW



In 1999, Cameron Sinclair co-founded Architecture for Humanity, which seeks architectural solutions to humanitarian crises and brings design services to communities in need. Currently the organization is working in a dozen countries on projects ranging from health centers in Sub-Saharan Africa, community centers in Southeast Asia to low-income housing on the Gulf Coast of the United States, Cameron is a recipient of the ASID Design for Humanity award and the Lewis Mumford Award for Peace and was named one of three winners of the TED Prize, which honors visionaries from any

Cameron Sinclair

field who have shown they can "positively impact life on this planet."



The Art of Patience: Meet Architect Mark Jensen (1 LU) LICK HERE September 9, 7:00 pm

Free.

The Exhibition Pavilion, located at the intersection of Storey Avenue and Ralston Avenue.

For directions, click here.

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Water for a Sustainable City: Historic Hetch Hetchy Water and Power System Presentation (1.5 LUs)

HERE September 23, 6:00 pm

\$15 AIA Members | \$25 Nonmembers

AIA San Francisco, 130 Sutter Street, Suite 600, San Francisco



Join San Francisco City Attorney Josh Milstein for a historic overview of the Hetch Hetchy Water and Power System. The presentation will provide a intriguing overview of the building of the Hetch Hetchy Water and Power System, including the construction of the 67-mile long Hetch Hetchy Railroad and hydropower house developed to create the O'Shaughnessy Dam. For more information, click on the Exhibitions page.

© Robin Scheswohl



Los Angeles REDCAR Colloquium | Rethinking Transportation: A Strategy for Integrating the System with the Person (3.5 LUs) September 25, 1:00-5:00 pm

Free; registration required.

CCA, 1111 Eighth Street, San Francisco



This colloquium will discuss the impact of emerging digital and self-aware technologies on personal and transportation choices and our interaction with the public realm. It will specifically look at notions of emergent nodes in the urban fabric where development naturally emerges in response to socially active "hot-spots" triggered by the dynamics in physical space, transportation capacity, and the swing of social network

demands. Featuring experts from academic institutions, the colloquium will present new technologies, problem solving methods, and innovative solutions for transportation infrastructure as well as distributed modes of transport that synthesizes personal communications, emergent nodes, autonomous social spaces, and the notion of a self-aware urban space to create a different way of thinking about how transportation systems can overlay and connect to existing systems present in the reality of a poly-centric metropolitan area such as the San Francisco Bay Area.



Closing Night Event + Party! GOOD Design Bay Area (1.5 LUs) September 30, 6:00 pm

\$25 General Admission; \$10 Overflow Simulcast Seating SPUR Urban Center, 654 Mission Street, San Francisco Presented by AIA San Francisco, GOOD magazine and SPUR



Good design can solve everyday problems. Join the brightest minds from the vast and varied Bay Area design community as they present simple solutions to some of the region's most pressing issues, selected by the urban leaders who can help launch them into action. The fast-paced event, which highlights multiple design solutions that are relevant to the festival theme of Investigating Urban Metabolisms, will conclude with a reception and more conversation.

Need more information? Contact us here.

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PRESENTERS



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FESTIVAL TEAM

Erin Cullerton Assistant Director + Festival Curator

Jaime Wong Public Programs Assistant + Graphic Designer

Helen Wong Director of Communications

Laura Song Sponsorship Coordinator

Margie O'Driscoll, Hon. AIACC Executive Director

William Roger, AIA President, AIA San Francisco

Brett Terpulek President, Center for Architecture +Design **Welcome** to the seventh annual Architecture and the City festival, the nation's largest architectural festival showcasing tours, films, exhibitions, lectures and more. Whether you are looking to become involved with the local architecture and design community or simply want to learn more about the city in which you live, Architecture and the City offers an unparalleled opportunity to experience San Francisco.

This year's festival promises several new and exciting ways to engage in conversation about our city. The theme **Investigating Urban Metabolisms** explores the notion of the city as a living, breathing organism that is as multi-layered, intricate and in flux as the human body. With a strong emphasis on how the city is organized, programming will look at information systems, ecological systems, building systems, transportation systems, surveillance systems, life cycle systems, natural systems, and more.

Festival programming will also explore the nuanced ways architects and designers thoughtfully impact our communities and reflect ever-important issues of sustainability. For the third year in a row, the festival will offer architectural programming for the whole family, tours of evolving San Francisco neighborhoods and a unique opportunity to enjoy our local culinary arts with the food tours series.

Throughout the festival, participants will also have the opportunity to discover the best in residential architecture during the San Francisco Living: Home Tours weekend, which returns September 11-12; take in films that examine the relationship between architecture and celluloid; partake in architectural runs and bicycle rides; and enjoy lectures by renowned architects and designers.

It is our privilege to announce that Mayor Gavin Newsom has once again officially proclaimed September "Architecture and the City month."

We hope you enjoy the festival!

Erin Cullerton Festival Curator ecullerton@aiasf.org

2010 FESTIVAL THEME

"For even as your brain, nerves, heart, lungs and stomach are hidden from view, so it is with the city."

-Harry Granick, Underneath New York, 1947

This year's theme, **Investigating Urban Metabolisms**, has proved to be our most curious yet, provoking many a raised eyebrow and eliciting numerous questions about its definition. Upon looking at the vast array of programming, however, we hope it becomes clear that our goal was simply to ask: how does the city work? By investigating the varied systems that our city depends on to survive—be they information systems, ecological systems, building systems, transportation systems or life cycle systems—we sought to create dialogue around this vast tapestry of interconnected parts, identifying how each one makes up part of the whole. Our hope is that it encourages all of us to look at our city anew, appreciating with fresh eyes the urban metabolisms so central to this place we call home.

Read how several of this year's participants interpreted the theme:



Metabolisms are adaptive systems that run on information and operate on a multitude of feedback loops. This workshop will cast a wide net to the urban fabric and engage all participants to imagine a data-rich future, where the city is equipped with a nervous system that improves the management of the city, enables behavior change and improves quality of life.

-Tracing Information: Urban Informatics Workshop (page 55)

The alleys of San Francisco that have historically supported urban life and shaped urban form have themselves changed over time. Once providing alternate transportation and utilities, then later privatized and vacated as targets of redevelopment, they have recently become a focus of pedestrian improvements.



-Alleyways of San Francisco: A Pedestrian Experience (page 34)

Our existing buildings are the bones of our urban metabolism. The next century will be a period of looking back at what we have built, of restoring our relationship to our city buildings, and improving ourselves in the process.

-San Francisco Old Mint (page 26)



Tracing the underground water systems and future shorelines is a perfect example of a hidden system— we will literally follow the water that is buried below the streets and pavement, which generates urban growth and form.

-Run the Rise (page 28)

September 2010

don't miss the opening night party! AUGUST 27, $6PM_{pg. 14}$



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LECTURES

register at www.aiasf.org/archandcity/lectures

Cameron Sinclair (1.5 LUs)

September 2, 6:00 pm \$20 AIA + AIGA Members | \$30 Nonmembers | \$15 Students Adobe San Francisco, 601 Townsend Street, San Francisco

In 1999, Cameron Sinclair co-founded Architecture for Humanity, which seeks architectural solutions to humanitarian crises and brings design services to communities in need. Currently the organization is working in a dozen countries on projects ranging from health centers in Sub-Saharan Africa, community centers in Southeast Asia to low-income housing on the Gulf Coast of the United States. Cameron is a recipient of the ASID Design for Humanity award and the Lewis Mumford Award for Peace and was named one of three winners of the TED Prize, which honors visionaries from any field who have shown they can "positively impact life on this planet."

The Art of Patience: Meet Architect Mark Jensen (1 LU) September 9, 7:00 pm

Free. For more information, see page 42 Presidio, Log Cabin, 1299 Storey Avenue, San Francisco

Architect Mark Jensen will discuss his Presidio Habitats installation Patience, featuring dramatically austere yellow chairs that afford visitors a unique perspective on the Presidio's Great Blue Herons.

Caterpillar: Dynamic Solutions to Energy Efficient Residential Design (1.5 LUs) September 14, 6:00 pm

\$15 AIA Members | \$25 Nonmembers AIA San Francisco, 130 Sutter Street, Suite 600, San Francisco Sponsored by Weiland Sliding Doors and Windows, Inc.

The Caterpillar Residence was the first to earn the distinction of LEED Platinum for Custom Homes on the Central Coast. As such it presents the opportunity to discuss environmentally conscious design decisions including water catchment, solar

PV panels, rammed earth walls, passive solar heating and cooling on a spectacular site located within the Santa Lucia Preserve near Carmel. In a discussion moderated by Amanda Dameron, Digital Content Director for Dwell magazine, Jonathan Feldman, Architect; Michael Heacock, LEED consultant; David Easton, Rammed Earth Works; and David Knight, Monterey Energy Group will present the challenges and opportunities available to residential architects and homeowners who seek sustainable solutions in new construction.

Parkmerced: An Integrated Urban Ecology (1.5 LUs)

September 16, 6:00 pm \$15 AIA Members | \$25 Nonmembers SOM, One Front Street, Suite 2500, San Francisco

Parkmerced is a pioneering neighborhood revitalization effort that defines new standards of environmental sustainability and neighborhood livability. This pedestrian-focused community will establish a productive network of open space, apply evolving environmental technologies to reduce energy and water usage, and resolve automobile dependency by realigning public transit. Parkmerced's proposed design creates a new vision for 21st century urbanism based on the responsive synthesis of ecological biosystems with urban infrastructure networks. The multi-disciplinary panel, including members of the client and design teams, will introduce a diversity of perspectives on this topic. Panelists will offer specific metrics about the reduction of carbon emissions and energy and water consumption in large-scale developments. They will also detail enlightened planning, design, transportation, and landscape practices within the context of a diverse and socially vibrant new San Francisco neighborhood. Conversation led by SOM Design Director Leo Chow.

Tracing Information: An Urban Informatics Workshop (1.5 LUs)

September 21, 6:00 pm \$15 AIA Members | \$25 Nonmembers Arup, 560 Mission Street, 7th Floor, San Francisco

Metabolisms are adaptive systems that run on information and operate on a multitude of feedback loops. This presentation and workshop will first introduce the concept and precedences for urban metabolisms, and then collaboratively cast a wide net onto the urban metabolisms of San Francisco's mid-Market District. The outcome will be a series of viable near-future visions that have the potential to improve the management of the city, enable behavior change and improve quality of life for all citizens. The workshop will be facilitated by Engin Ayaz and Mayra Madriz.

Water for a Sustainable City: Historic Hetch Hetchy Water and Power System Presentation (1.5 LUs)

\$15 AIA Members | \$25 Nonmembers AIA San Francisco, 130 Sutter Street, Suite 600, San Francisco For more information, see page 39.



Los Angeles REDCAR Colloquium | Rethinking Transportation: A Strategy for Integrating the System with the Person (3.5 LUs) September 25, 1:00-5:00 pm

Free; registration required. CCA, 1111 Eighth Street, San Francisco

This colloquium will discuss the impact of emerging digital and self-aware technologies on personal and transportation choices and our interaction with the public realm. It will specifically look at notions of emergent nodes in the urban fabric where development naturally emerges in response to socially active "hot-spots" triggered by the dynamics in physical space, transportation capacity, and the swing of social network demands. Featuring experts from academic institutions, the colloquium will present new technologies, problem solving methods, and innovative solutions for transportation infrastructure as well as distributed modes of transport that synthesizes personal communications, emergent nodes, autonomous social spaces, and the notion of a self-aware urban space to create a different way of thinking about how transportation systems can overlay and connect to existing systems present in the reality of a poly-centric metropolitan area such as the San Francisco Bay Area.

Closing Night Event + Party!

GOOD Design Bay Area (1.5 LUs) September 30, 6:00 pm

\$25 General Admission; \$10 Overflow Simulcast Seating SPUR Urban Center, 654 Mission Street, San Francisco Presented by AIA San Francisco, GOOD magazine and SPUR

Good design can solve everyday problems. Join the brightest minds from the vast and varied Bay Area design community as they present simple solutions to some of the region's most pressing issues, selected by the urban leaders who can help launch them into action. The fast-paced event, which highlights multiple design solutions that are relevant to the festival theme of **Investigating Urban Metabolisms**.



54 ARCHITECTURE + THE CITY FESTIVAL GUIDE

REDCAR

Colloquium

Rethinking Urban Transportation: New Strategies for Mobility California College of the Arts September 25th, 2010 12:30 pm to 5:30 pm