



Partnership
for the
Global Economy

An Economic Roadmap for the San Diego Region

A PUBLIC-PRIVATE PARTNERSHIP

Partnership for the Global Economy



Home to many of the 21st Century industries on which the *Partnership* focuses, The City of San Diego is dedicated to helping foster the region's economic base to improve the quality of life for its citizens.



San Diego Institute for Policy Research, LLC is a non-partisan organization that formulates and promotes high quality economic, policy, and public opinion research to improve the efficiency and effectiveness of local governments in San Diego County, and to improve the quality of life enjoyed by the region's citizens.




San Diego Regional Economic Development Corporation's core programs are in economic development and policy with a focus on innovation-driven industries and issues that affect the region's competitiveness.

The Partnership is supported by ...

AMN Healthcare
AT&T
Bank of America
Centre City Development Corporation
City of Chula Vista
County of San Diego
Gen-Probe Incorporated
Port of San Diego
San Diego Convention & Visitors Bureau
San Diego County Regional Airport Authority
San Diego Gas & Electric
San Diego Workforce Partnership
Solar Turbines Incorporated
The San Diego Union-Tribune
Union Bank of California
Wells Fargo Bank
Westfield Corporation, Inc.

CALL TO ACTION:

Overview of Findings and Recommendations



Partnership for the Global Economy convened more than 300 business and community leaders in a five-month dialogue from which two important areas of consensus emerged:

- **The region's future economic prosperity rests on three competitive factors: growth of high-wage industries, an expanding skilled workforce, and infrastructure to support a globally connected community. Our roadmap.**
- **Successfully following this roadmap will require a business community that proactively champions innovation and investment through a program of civic leadership.**

San Diego's greatest engines for future prosperity lie within our region: strong scientific and research institutions and globally respected technology industry clusters. These critical components of our economy are regularly recruited elsewhere and the San Diego region must earn their continued investment.

The competition is growing. From Silicon Valley and Research Triangle to Ireland and Singapore, other regions are following their own ambitious roadmaps and forging collaborations to improve their competitiveness. Many regions are emulating San Diego's strong base in science and research and working hard to attract and grow high-wage, innovation-driven industries.

As the *Partnership's* research clearly showed, global competitiveness demands a clear understanding of what business needs and a proactive agenda to respond. The *Partnership's* report outlines a roadmap for San Diego.

The roadmap highlights three major issue areas:

- **Corporate growth through *workforce* and *infrastructure* investments**
- **Innovation through industry *convergence***

Workforce

If prosperity rests on higher-wage jobs, then higher-wage jobs rest on a skilled workforce. The concentration of highly skilled individuals in San Diego has grown dramatically over the past 50 years – fueled in equal parts by individuals coming from California, other parts of the United States, and the rest of the world. Companies will locate and expand where the talent lives. Today, the region needs *more* skilled employees than are available – a deficit that must be addressed.

Infrastructure

Highways, energy, water, housing and open space impact our economy and our quality of life. As Governor Schwarzenegger has highlighted, California currently relies on investments that are decades old. So does San Diego. Continuing the momentum started by the extension of Transnet (2004) and approval of state infrastructure bonds (2006), the business community must champion investment that keeps our community and economy second to none.

Convergence

San Diego – with its cutting-edge research and leadership in science and technology-based industries – is in a unique position to build opportunities through integration of existing industry expertise and functions:

- Defense, security, technology
- Healthcare, information technology, life sciences
- Maritime
- Sustainability and cleantech

Resonating throughout the *Partnership* process was an urgent call for civic entrepreneurs: business leaders building specific proposals for a better community, and take responsibility to build the public consensus necessary to implement these proposals.

Around our three issue areas — Workforce, Infrastructure and Convergence — eight teams of civic entrepreneurs assembled to create action plans, which define bold, sustained and definitive initiatives to capitalize on opportunities and resolve challenges. Their implementations will take many forms, from policy recommendations to industry collaborations to new projects, and require innovation, investment and, of course, civic leadership.

This is your invitation to join the *Partnership*!

Leadership Trust

The *Partnership for the Global Economy* has been led by an esteemed group of regional leaders, who together form a Leadership Trust of nearly 70 civic entrepreneurs. The Leadership Trust is a cross-section of business leaders, government officials committed to nurturing a competitive climate for the growth and expansion of important industries, and partner organizations including trade associations and university-based business and research programs. Together, the Leadership Trust oversaw the Partnership's research data, launched Industry Cluster Forums to identify industry-specific issues and opportunities, defined three major issue areas around which eight Action Teams were convened, and now supports the implementation of priority recommendations.

The Leadership Trust is co-chaired by:



Honorable Jerry Sanders

Mayor, City of San Diego

Mayor Jerry Sanders is the 37th Mayor of San Diego, the second largest city in California, and the first under its “strong mayor” form of government, leading a strong agenda to reform a broken city government. In a long career of public service, Mayor Sanders served as Chief of Police for the City of San Diego

and later led turnarounds of both the United Way of San Diego County and the American Red Cross San Diego and Imperial County. Mr. Sanders was also founding partner and a consultant for local high tech start-ups involved with homeland security and infrastructure assessment. The City of San Diego is a partner in the *Partnership of the Global Economy*.



Honorable Cheryl Cox

Mayor, City of Chula Vista

As the City of Chula Vista's 39th mayor, Mayor Cox was elected on November 7, 2006. She served on the City's Charter Review Commission and the City's ad hoc Committee for Finance Reform, as well as served as a charter member of the City's independent Urban Development Committee. In over 35 years

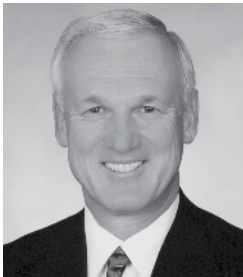
of public service, Mayor Cox has served as a teacher, school principal, and a school district administrator and education consultant. Until her election as Chula Vista's mayor, Mayor Cox served on the Sharp Healthcare Board as its president, and the board of trustees for both the Chula Vista Elementary School District and the Chula Vista Nature Center. The City of Chula Vista is a sponsor of the *Partnership*.



Steven Francis

Chairman, AMN Healthcare

Mr. Francis is the Founder, Chairman of the Board and a Director of AMN Healthcare Services, the largest temporary healthcare staffing company in the United States, a publicly traded company he co-founded in 1985 with his wife, Gayle Francis. Mr. Francis has been a director since 1985, and served as the company's Chief Executive Officer until May 2005. In 2006, Mr. Francis founded The San Diego Institute for Policy Research (SDI), a nonpartisan organization that formulates and promotes high quality economic, policy, and public opinion research. The San Diego Institute for Policy Research is a partner in the *Partnership for the Global Economy*.



Honorable Ron Roberts

Chairman, San Diego County Board of Supervisors

On January 9, 2007, Mr. Roberts was sworn in to serve his fourth term on the San Diego County Board of Supervisors and has served as Chairman of the Board for 2007. In 1987, the Berkeley-educated architect left his practice to serve two terms on the San Diego City Council, before being elected in 1994 to represent the multi-ethnic Fourth District on the San Diego County Board of Supervisors. In addition to the California Air Resources Board, he serves on the boards of the San Diego Association of Governments, Metropolitan Transit System, Service Authority for Freeway Emergencies, and the San Diego Workforce Partnership. He has been active in forging international relationships for the San Diego region, most notably with China. The County of San Diego is a sponsor of the *Partnership*.



Hank Nordhoff

Chairman, President & Chief Executive Officer, Gen-Probe, Inc.

Mr. Nordhoff has served as Chairman of the Board of San Diego-based Gen-Probe Incorporated since 2002 and as a director of the company, Chief Executive Officer, and President since 1994. Prior to joining Gen-Probe, he was President and Chief Executive Officer of TargeTech, Inc., a gene therapy company that was merged into Immune Response Corporation. Mr. Nordhoff served in senior executive positions at Pfizer, Inc. in Brussels, Seoul, Tokyo and New York. Mr. Nordhoff is also a member of the board of directors of Mannkind Corporation. Gen-Probe is a sponsor of the *Partnership*.



Dr. Daniel Sullivan

Executive Vice President, QUALCOMM, Inc.

Dr. Sullivan serves as Executive Vice President of QUALCOMM Incorporated, and is responsible for all human resources functions for the company's 8,000+ employees worldwide. Under the direction of Dr. Sullivan, QUALCOMM has earned a reputation as one of the nation's leading employers. For the past five years running, FORTUNE has named QUALCOMM one of the "100 Best Companies to Work for in America." QUALCOMM is a sponsor of the *Partnership*.

Partnership's Leadership Trust

Donna Alm, Centre City Development Corporation

Michael Bardin, Scripps Health

Paul Barnes, Shea Homes

Phil Blair, Manpower Temporary Services

Ted Bonanno, Heller Ehrman LLP

Daniel Bradbury, Amylin Pharmaceuticals, Inc.

Jonathan Bradhurst, Westfield Corporation, Inc.

Julia R. Brown, Amylin Pharmaceuticals, Inc.

Erik Bruvold, San Diego Institute for Policy Research

Malin Burnham, Burnham Real Estate

Joseph Campano, Merrill Lynch

Reo Carr, San Diego Business Journal

Constance Carroll, San Diego Community College District

Kevin Carroll, AeA San Diego

Richard Carter, National University System

Mike Chapin, GEOCON Inc.

David Cherashore, Evans Hotels

Marney Cox, SANDAG

Kelly Cunningham, San Diego Institute for Policy Research

Perry Dealy, Manchester Financial Group

Marcia Faller, AMN Healthcare

Andy Fichthorn, SeaWorld San Diego

Larry Fitch, San Diego Workforce Partnership

Alan Foster, SANYO Corporation

John Frager, Grubb & Ellis|BRE Commercial

Pete Garcia, San Diego Regional Economic Development Foundation

Jeff Gattas, UCSD

Salvatore Giametta, San Diego Convention & Visitors Bureau

Steve Gosselin, Solar Turbines Incorporated

Tracey Grose, Collaborative Economics

Dennis Guseman, California State University San Marcos

Katie Hansen, California Restaurant Association

Kevin Harris, ICW Group Insurance Services

Bruce Hollingsworth, Port of San Diego

David Hoppen, ICW Group Insurance Services

Greg Horowitz, Global CONNECT

Chris Jennewein, The San Diego Union-Tribune

Michael Jones, ProFinance Associates Inc.

Stephen Kapp, U.S. Green Building Council

Stath Karras, Burnham Real Estate

Mel Katz, Manpower Temporary Services

Tim Kelley, Imperial Valley EDC

Ed Kitrosser, Moss Adams LLP

Herb Klein, National Fellow of the American Enterprise Institute

Mark Leslie, AT&T

Lani Lutar, San Diego County Taxpayers Association

Magda Marquet, Althea Technologies

Kris Michell, City of San Diego

Mitch Mitchell, San Diego Gas & Electric

Rory Moore, CommNexus

Cathy Moran, Future CleanTECH Group

David Ohanian, Bank of America

Joe Panetta, BIOCOM

John Pettitt, Northrup Grumman Corporation

Sharon Rhodes, San Diego Community College District

Bruce Roberts, Cubic Corporation

Duane Roth, CONNECT

Sara Steinhoffer, UCSD Medical Center

Tom Sudberry, Sudberry Properties, Inc.

Daniel Sullivan, QUALCOMM, Inc.

Rock Swanson, Bull Moose Energy

Jim Umpleby, Solar Turbines Incorporated

Vince Vasquez, San Diego Institute for Policy Research

Reed Vickerman, Amylin Pharmaceuticals, Inc.

Judy Walsh, Time Warner Cable

Jim Waring, CleanTECH San Diego


Michael Watts, Gen-Probe Incorporated

Stephen Weber, San Diego State University

Randolph Ward, San Diego County Office of Education

Steve Wehn, AMN Healthcare

Tom Wornham, Wells Fargo Bank



San Diego's cutting edge industries can intersect to form whole new industries — clusters of opportunity.

PARTNERSHIP FOR THE GLOBAL ECONOMY:

Clusters of Opportunity

- ▶ Defense, Security
- ▶ Healthcare
- ▶ Information Technology
- ▶ Infrastructure & Commercial
Construction
- ▶ Life Sciences
- ▶ Visitor & Regional Experience

Clusters of Opportunity

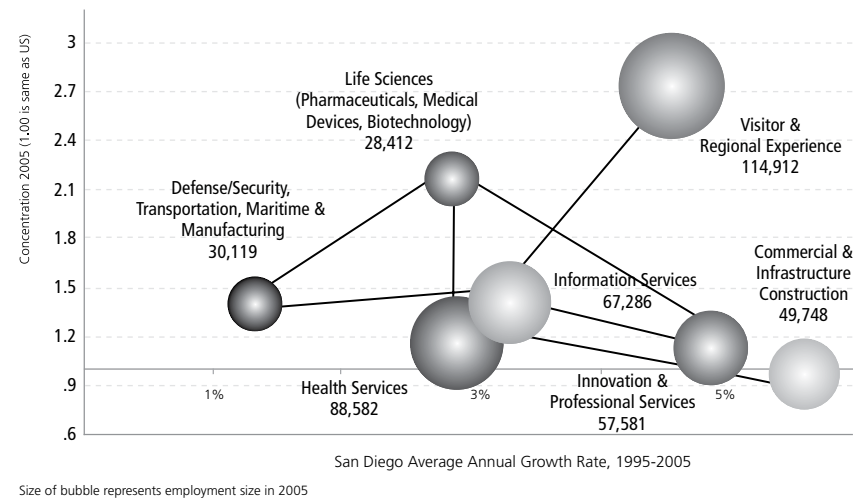
Six industry clusters were identified as critical to San Diego's economy and each was analyzed for growth potential, competitive advantages, challenges and emerging trends. Industry Cluster Forums convened to explore industry-specific issues and opportunities that, from a business perspective, the region must address to ensure its long-term economic prosperity.


Six Industry Cluster Forums:

- **Defense, Security**
Co-chairs: Bruce Roberts, Cubic Corporation, and Michael Jones, ProFinance Associates
- **Healthcare**
Co-chairs: Chris Van Gorder, Scripps Health, and Susan Nowakowski, AMN Healthcare
- **Information Technology**
Co-chairs: Doug Hutcheson, Leap Wireless, and Mark Leslie, AT&T
- **Infrastructure & Commercial Construction**
Co-chairs: Chris Day, Swinerton Builders, and Stath Karras, Burnham Real Estate
- **Life Sciences**
Co-chairs: Daniel Bradbury, Amylin Pharmaceuticals, and Magda Marquet, Althea Technologies
- **Visitor & Regional Experience**
Co-chairs: Andy Fichthorn, SeaWorld San Diego, and Ray Warren, San Diego Marriott Hotel & Marina

Our analysis covered a ten-year period, showing that the strong presence of these clusters is not a fleeting product of provisional economic prosperity — these clusters have been consistently growing, at an average annual growth rate of three to six percent. Shared characteristics as size, wages, and value, allowed these industries to flourish even in times of recession. Five of the six clusters are more concentrated in San Diego compared to the State of California and the nation. These clusters are both export- and population-driven and offer a range of career opportunities — roughly 40% of jobs at the mid-wage level.

Occupational Share by Wage Level 2006





San Diego's business leaders identified three critical areas for our region to address: Workforce, Infrastructure and Convergence. Eight Action Teams laid out a bold vision.

PARTNERSHIP FOR THE GLOBAL ECONOMY:

Action Teams

► **Workforce**

- **STEM**
- **Entry- and Mid-level Career Development**

► **Infrastructure**

- **Transportation, Energy, Water**
- **Workforce Housing**

► **Convergence**

- **Defense, Security, Technology**
- **Healthcare, IT, Life Sciences**
- **Maritime**
- **Sustainability**

Action Teams

Action Teams in three major issue areas were identified by the Industry Cluster Forums: Workforce, Infrastructure and Convergence.

Workforce

- **STEM** (Science, Technology, Engineering and Mathematics)
Chair: Mike Chapin, GEOCON Inc.
- **Entry- and Mid-Level Career Development**
Chair: Marcia Faller, AMN Healthcare

Infrastructure

- **Transportation, Energy, Water**
Chair: Perry Dealy, Manchester Financial Group
- **Workforce Housing**
Chair: Kim Kilkenny, The Otay Ranch Company

Convergence

- **Defense, Security, Technology**
Chair: Bruce Roberts, Cubic Corporation
- **Healthcare, IT, Life Sciences**
Chair: Ramesh Rao, CAL-IT2 at UCSD
- **Maritime**
Chair: Michael Jones, ProFinance Associates Inc.
- **Sustainability**
Chair: Rick Halperin, Advisory One

WORKFORCE:

STEM Action Team

Long-Term Goal

The San Diego region has a sufficient concentration of high-skilled, college-educated people with science, technology, engineering and math (STEM) expertise to support key industry clusters, including life science and health sciences, communications, defense, security, and other technology-driven industry clusters.

Specific Breakthrough Outcomes

Establish San Diego as a science and technology magnet.

Create a comprehensive program to showcase San Diego as a primary center of the STEM world, positioning high-profile awareness and support for STEM careers.

Strategies to Achieve Breakthrough Outcomes

San Diego sets a goal for STEM to meet or exceed national standards:

- Increase the percentage of 9th graders whom will get a BA/BS in STEM – today's figure is approximately 8%
- Increase the percentage of 9th graders who get an associate's degree in STEM
- Increase the quality and relevancy of K-12 teaching in STEM

Package all aspects of a program into a major marketable consortium, visible and promoted throughout all channels within the region, and to the extent possible, the state and nation:

- Foster collaboration among the leaders of our region's post-secondary education institutions and K-12 systems
- Emphasize a continuum from grade school through graduate school
- Encourage the development of bridges for STEM to complement outside fields

Build high-priority support from all governmental levels and constituencies.

Collaborate with CRMSE, ISAM, Cal Teach, BioBridge, San Diego County Office of Education and San Diego Science Alliance, among others, as well as other teacher training institutes to scale up efforts and make STEM programs more effective and broad reaching.

- Create programs – like Lawrence Livermore Laboratory's "Science on Saturday" – aimed at generating greater interest in science with students, parents, teachers and the San Diego community at large
- Enlist the assistance of the media to elevate our message for a greater concentration of STEM education

Implementation Requirements

Take advantage of every science and technology resource in the region via best practices and collaborations.

Collaborate and fund the County Office of Education to promote STEM education via their ITV network:

- Integrate K-12, post-secondary education and industry to align relevancy within curricula
- Establish baselines for teacher professional development as it relates to relevant STEM curricula

WORKFORCE:

Entry- and Mid-Level Career Development Action Team

Long Term Goal

San Diego meets its economy's need for high-demand entry- and mid-level workers in our region's industry clusters.

Specific Breakthrough Outcomes

San Diego substantially grows the number of workers entering the pipeline to sustain our region's industry clusters, with employers able to recruit strong new-hire candidates locally.

San Diego retains local talent in the pipeline by facilitating career transitions and advancements among clusters.

Strategies to Achieve Breakthrough Outcomes

Define the Pipeline (career opportunities across clusters in the region):

- Identify the bottlenecks
- Identify the specific needs and target numbers for workers based on our region's projected growth
- Identify roadmaps targeted at the current and future workforce to educate workers and students of career pathways and required transferable skill sets
 - K-16 Roadmap
 - Define and expose young people to career awareness and pathways at an earlier stage (upper elementary and middle school)
 - Outline required courses for each career pathway
 - Assess the relevancy of high school and community college curricula as it relates to industry clusters
 - Workforce Advancement Roadmap
 - Encourage industry and higher education interaction to effectively communicate the needs for relevant curricula and “workplace ready” skills
 - Work with Human Resources personnel to identify required skills
 - Identify expectations and pathways that define the “career ladders” for entry- and mid-level workers
- Develop a Public Information Campaign, including web-based tools, outreach programs for parents, teachers and counselors, and leverage the County Office of Education's television network

Implementation Requirements

Collaborate with trade associations and industry experts to assist with identifying career pathways across clusters.

Engage industry leaders to communicate what is needed from academia to prepare the future workforce.

Collaborate with Human Resources professionals to identify needed skill sets.

Design and launch a public information campaign, leveraging our relationship with media outlets and the County Office of Education ITV network.

Transportation, Energy, Water Action Team

Long-Term Goal

The San Diego region develops and implements an infrastructure investment strategy that builds and assures global access to people, markets, and resources necessary for increasing prosperity and quality of life and, by doing so, builds industry clusters around sustainable transportation, energy, and water technology.

Specific Breakthrough Outcomes

By 2010, the San Diego business community leads the implementation of an infrastructure improvement and funding program adopted by elected officials and voters, which may include transportation, energy, and water infrastructure.

San Diego is “best in class” in improving public infrastructure performance through innovation:

- Expanded use of market-based solutions, including RFP solution design, private financing, private ownership and operations, use of price signals to drive behaviors
- System design that is intermodal, netcentric, “smart growth-oriented” and mega-region centered

The San Diego region becomes a global center for “smart infrastructure” technologies, leveraging its competitive advantages in R&D, information technology and systems integration.

Strategies to Achieve Breakthrough Outcomes

Organize the business community to lead a unified 2010 infrastructure proposal, identifying priority investment areas, priority projects, recommended funding sources, and recommended system reforms.

Inaugurate “smart infrastructure” industry cluster incubation by evaluating San Diego region’s competitive advantages and opportunities in the smart infrastructure marketplace.

Create an action plan for industry sector incubation supported by the market assessment

- Create marketplace through “early adopter” policies
- Reform planning processes to accommodate private-sector solution design
- Establish a clearinghouse for public/private collaboration
- Build local capacity through R&D funding, engineering center and test bed

Implementation Requirements

Identify champions for smart infrastructure industry evaluation and cluster development.

Create a mechanism for business and community discussion of infrastructure issues.

Build or adapt a business organization capacity to implement the infrastructure plan, with expertise in planning, financing and system reforms, and capacity to carry out a public information campaign and to manage legislative/regulatory/ballot initiatives.

Workforce Housing Action Team

Long-Term Goal

The San Diego region establishes and maintains a sustainable balance between housing and job growth sufficient to recruit and retain a workforce with the skills and education necessary to assure the region's long-term economic prosperity.

Specific Breakthrough Outcomes

The San Diego region achieves an adequate and diverse supply of housing as measured by SANDAG's Regional Growth Forecasts.

State and local land-use policies and procedures are reformed to enable the marketplace to provide a reasonably priced and proximately located supply of housing sufficient to house San Diego's current and forecasted workforce.

The San Diego region, with equitable contributions from state and federal governments, funds and constructs public infrastructure necessary to adequately serve existing and new business and homes.

The San Diego business community becomes a champion for and advocate of public policy initiatives that establish and maintain a sustainable balance between housing and job growth necessary to recruit and retain a skilled and educated workforce.

Strategies to Achieve Breakthrough Outcomes

Land Use Policy: Develop and promote state and local land use policies and procedures to achieve an adequate and diverse supply of housing while balancing the efficient and sustainable use of San Diego's finite resources. Such limited resources include developable and re-developable land, sensitive habitats, water, energy, and the public's financial capacity. Strategies include: transit-oriented development, mixed-use development, efficiently sized and located redevelopment, infill development, and productive use of public lands.

Finance: Identify and promote innovative credit products and equity arrangements, and corporate alliances including equity investment vehicles between ownership and rental.

Infrastructure: Develop and promote state and local land use policies and procedures, fiscal reforms, public finance initiatives and budget decisions necessary to fund public infrastructure to adequately serve existing and new business and homes.

Public Policy Advocacy: Develop the organizational and resource capacity within the San Diego business community, including outreach programs and alliances, to impact public policy initiatives and decisions affecting workforce housing and requisite public infrastructure.

Implementation Requirements

Land Use: Participate or create an alliance of business and civic organizations to form an ongoing political climate necessary to support the establishment and maintenance of a sustainable balance between housing and job growth consistent with principles addressing conservation, efficient landforms, affordable housing, jobs and economy, design, public spaces, walkability, public facilities and services, mobility, fiscal policy, regional planning and a fair process.

Finance: Create a coalition of bankers, business executives and housing developers to explore innovative financing/equity products and deliver a set of recommendations.

Education/Advocacy:

- Initiate an ongoing process to evaluate and advocate for specific innovations that best advance an integrated approach to jobs, housing, and quality of life, including public education and outreach, public policy development and advocacy.
- Continue EDC's study of "Best Practices" in other regions with an emphasis on workforce housing and opportunities for San Diegans to learn about them.
- Educate and encourage/support San Diego workforce to become advocates for workforce housing and effective transit by launching an effective publicity campaign that communicates the understanding that everyone and every community has a responsibility to contribute their fair share to substantially increasing the housing supply.

CONVERGENCE:

Healthcare, IT and Life Sciences Action Team

Long-Term Goal

*San Diego is a global leader in
"smart" healthcare and wellness.*

Specific Breakthrough Outcomes

San Diego leverages its strengths in life sciences, healthcare, information and communications technology to become a leader in delivery of personalized healthcare.

Healthcare delivery in San Diego is transformed by R&D and early implementation of innovations in life sciences, healthcare, information and communications technology to become the highest quality of care for residents and a global center for health tourism, telemedicine and medical education.

San Diego is a global leader in the number of residents who take personal responsibility for their healthcare through lifestyle and access to technology and innovation, and the region enjoys better health and lower healthcare costs as a result.

Strategies to Achieve Breakthrough Outcomes

Create new vehicles for collaboration, including Life Science, Health Science, Information Technology and Healthcare (public and private):

- A “test bed” for IT applications such as medical records, diagnostics, care management, public health, telemedicine and information assurance, defining objectives, funding development, deploying commercial-scale applications, perhaps in coordination with NHRC at Balboa Hospital
- Specialized clinical trials done in San Diego (based on an objective market assessment), and accelerate the rate at which mid-sized companies’ therapeutics and devices enter and complete clinical trials
- A comprehensive healthcare information system
- Leadership in translational genomics
- Personalized healthcare clusters excelling in diagnostics, genetics and therapeutics that offer the highest potential return on investment at the intersection of healthcare, IT, biotechnology, and that enable real-time analysis of clinical data from remote sites including in-home care and broad use of telemedicine
- Early adopter of commercial applications

Develop a comprehensive financial strategy that supports innovation in healthcare delivery, including attracting of research and venture funding for translational genomics and regenerative medicine; reforming reimbursement policies to align with new technology; developing bold proposals on regional insurance; paying for wellness, not sickness.

Brand San Diego as a healthcare tourism mecca around clinical trials and cutting-edge therapies – preventive care, wellness, improved public health – and establish metrics to measure increase in tourism.

Implementation Requirements

Develop a clinical trials business plan.

Local IT companies and health care providers form a coalition to build at least one “test bed” partnership.

Collaborate on scientific site visits to the region.

Create an interdisciplinary healthcare education and practice program so that healthcare professionals are conversant with information technology, life sciences and business.

Expand the *biocomworkforce.org* website into a broader website on S&T careers in the region. Be able to describe professionals in S&T careers in 2020, where are they trained, and the interdisciplinary requirements.

CONVERGENCE:

Defense, Security and Technology Action Team

Long-Term Goal

To become one of the leading security centers in the world by integrating San Diego's military and security technology into new security markets (homeland security, law enforcement, commercial markets) through cutting-edge work in technology development and integration that validates security solutions.

Incubate, evaluate, validate!

Specific Breakthrough Outcomes

San Diego becomes a large-scale, internationally recognized regional "test bed" that integrates, evaluates, and publicizes innovations in the security field.

San Diego becomes internationally recognized for expertise and market presence in the growing field of information assurance.

Strategies to Achieve Breakthrough Outcomes

Attract applied research from public and private sources to evaluate, prototype and deploy advanced technology, creating new companies and jobs.

Establish a federally recognized entity (FFRDC, 501c3, academic organization); secure agreements from infrastructure institutions/agencies to host.

Leverage existing legal/IP framework to protect the intellectual property of companies that achieve breakthroughs in security technology test beds.

Build a mechanism to expand expertise of local venture capital firms and angel investors in security technology.

To attract technology to San Diego, explore an idea-based eBay-like marketplace model, to identify emerging technologies (as opposed to products), with a team that evaluates ideas and moves good ones rapidly into the marketplace.

Inventory San Diego assets in security field and benchmark against other regions.

Publicly launch and market San Diego as the nation's first large-scale test bed in the security field.

Implementation Requirements

Complete inventory and benchmarking.

Understand existing San Diego leadership in companies and technologies in specific areas: verification, infrastructure, IT integration, biotechnology, ISR, robotics, and other security-related areas.

Reform federal contracting requirements to permit greater pre-bid collaboration with contractors.

Lead public education campaign on the need for and benefits of homeland security technologies.

CONVERGENCE:

Maritime Action Team

Long-Term Goal

To promote the maritime industry in San Diego, and in particular, the maritime technology industry cluster so that San Diego is recognized as a leading center in the world in the maritime sector (“...from fresh water to blue water”).

Specific Breakthrough Outcomes

Sign collaborative agreements with leading maritime centers in other countries, starting with Canada and Mexico.

Target creation of 5,000 new jobs in five years.

Develop new medicines from research in the seas.

Strategies to Achieve Breakthrough Outcomes

Inventory public and private sector research labs, manufacturing and service capabilities.

Collaborate with universities and technical schools to promote research and seek grants.

Work closely with U.S. Navy and Marine Corps in San Diego County, as well as with state and federal agencies (NOAA, USGS).

Help facilitate access to fresh water and salt water testing facilities for researchers and companies, and ensure that maritime companies have access to business space on or near the water.

Promote business opportunities like aquaculture in southern California and Baja California.

Promote San Diego as an international destination for yachts and super-yachts, and promote the San Diego maritime industry around the world.

Hold an annual conference in San Diego focused on the maritime sector to facilitate collaboration with international partners.

Implementation Requirements

- Verification
- Infrastructure
- Consortium structure
- Integration with IT, biotech, defense and security industries
- Promote active participation of educational institutions
- International outreach to other maritime technology centers
- Explore role of CfMSS and the San Diego water technology industry

CONVERGENCE:

Sustainability Action Team

Long-Term Goal

The San Diego region is recognized as a global leader in the sustainable economy by achieving tangible green metrics and creating an innovative, profitable cleantech industry.

Specific Breakthrough Outcomes

The San Diego region's largest industry clusters gain competitive advantage because private industry and local government establish benchmarks and promote the early adoption of cutting-edge sustainable practices.

The San Diego region leads the larger mega-region of San Diego, Imperial County and Baja California to build a strong cleantech cluster by 2015, doubling the size of today's cleantech cluster in innovation-driven areas like building design, materials and construction, operating smart systems for energy, and water and waste management.

Strategies to Achieve Breakthrough Outcomes

Partner with CleanTech San Diego, San Diego Foundation, and others to:

- Integrate and leverage the collaborative efforts of business, government, education sectors, individual citizens, and other sustainability working groups in the San Diego region (including Imperial County and Baja California), to define sustainability/cleantech and to benchmark the region against others around the world.
- Leverage the strengths of the San Diego region's academic and intellectual resources, strong R&D background, cutting-edge IP/technology innovation, and a strong VC presence to develop the cleantech cluster in the region.
- Promote and market the San Diego region (including Imperial County and Baja California) as a cleantech center of excellence.

Implementation Requirements

Identify costs associated with implementation requirements and seek resources to fund activities (public and private).

Organize the meeting of business, government, educational, individual citizens and other sustainability/cleantech working groups and associations in the San Diego region to define “sustainable” as it relates to the San Diego region, noting strengths, barriers to growth, and other factors; Inventory sustainable/cleantech activities to create an “asset map;” define metrics for the San Diego region's success in developing the cleantech industry and establish milestones in achieving Breakthrough Outcomes; benchmark the San Diego region against other regions around the world; leverage proximity to Mexico for cleantech manufacturing and joint energy projects.

Work with companies, local government and educational systems (K-12 and higher education) to promote and educate others on sustainable practices.

- Identify companies/ local governments/educational systems in the San Diego region that have adopted sustainable business practices
- Build the business case (ROI) for sustainable policies and investments
- Create a forum for companies, local governments, and educational institutions to share their best practices and cost savings, including green building benefits that meet community needs and provide efficiency savings

Assist local governments in the development of public policies that promote the development of a cleantech cluster and encourage the adoption of sustainable industry practices and land use practices in the San Diego region.

- By the end of 2008, develop a strategy for attracting the cleantech cluster to the Chula Vista/Otay Mesa region, leveraging the mega-region of Baja California and Imperial Valley, as well as the National Energy Center for Sustainable Communities

Create a credible index to track cleantech investment in the San Diego region.

Create and fund a cleantech incubator.

Market the San Diego region as a place for sustainable/cleantech businesses by promoting both sustainable “Best Practices” and the cleantech cluster, as well as identifying both public and private sector champions.

Sustainability Initiative underwritten by Bank of America.



More than two decades ago, Bank of America began implementing business practices to support conservation and positive environmental practices because of their belief that healthy communities create good business opportunities. Bank of America Tower at One Bryant Park in Manhattan will be the world's most environmentally-sound sky scraper and closer to home, the bank recently opened the first LEED Platinum retail branch in Southern California. In 2007, the bank committed \$20 billion to support the growth of environmentally sustainable business activity to address global climate change. The ten-year initiative will encourage development of environmentally sustainable business practices through lending, investing, philanthropy and the creation of new products and services.

As a part of this initiative, Bank of America is proud to commit \$100,000 for the implementation of the Sustainability Action Plan developed through EDC's *Partnership for the Global Economy*.



PARTNERSHIP FOR THE GLOBAL ECONOMY:

About the Partnership and the Region

About the Partnership and the Region

San Diego Regional Economic Development Corporation, in partnership with the City of San Diego and the San Diego Institute for Policy Research, and with support from 17 sponsors, reprised its 1999 exercise of convening economic research and the region's business leaders to establish a blueprint for regional prosperity. The 1999 *Partnership for the New Economy* led to breakthrough outcomes in four major areas:

- **Technology Entrepreneurship and Management** — Grow the regional pool of technology industry managers who can transform promising ideas into business plans and start-ups and those who can manage the growth of existing technology companies, catalyzing the Rady School of Management at UCSD as well as initiatives at other universities.
- **Quality of Life** — Articulate the voice of technology employees and companies on quality of life issues: improved transportation mobility, airport infrastructure, affordable housing for the workforce in close proximity to employment centers, and balanced land use, leading to EDC's leadership role in the passage of Proposition A, the extension of the half-cent sales tax for transportation, and other transportation initiatives.
- **Access to Capital** — Improve the accessibility of growth capital for technology companies. Today, there are vibrant capital-formation initiatives at CONNECT and BIOCOM to attract investment capital to San Diego. Venture capital funding has skyrocketed and investment banks and venture arms of major companies are establishing offices here.

- **Educational Excellence** — Produce a workforce that meets the needs of the regional economy, including the growing technology sector and other sectors needing knowledge workers, leading to High Tech High and other mentoring and math-science programs like “Project Lead the Way.”

In 2007, the new partnership – *Partnership for the Global Economy* – was formally launched on July 9 by a **Leadership Trust** co-chaired by the Honorable Jerry Sanders, Mayor of San Diego; Steve Francis, Founder of the San Diego Institute for Policy Research; the Honorable Cheryl Cox, Mayor of Chula Vista; the Honorable Ron Roberts, Chairman, San Diego County Board of Supervisors; Hank Nordhoff, Chairman & CEO, Gen-Probe Incorporated; and Dan Sullivan, Executive Vice President, QUALCOMM Incorporated.

The *Partnership* began with economic research conducted by Collaborative Economics. Research showed that San Diego is increasingly integrated into a global economy, that our driving industry clusters are export-oriented and have a large percentage of high-wage jobs, that a significant percentage of the science and engineering workforce on which many of the clusters depend is foreign-born, that all six clusters in which San Diego enjoys a current competitive advantage are poised for growth, and that new opportunities exist in clusters like healthcare and cleantech and other areas where industry convergence can be a driver.

Some 233 executives met in the six Industry Cluster Forums and, in a facilitated discussion, coalesced around key issues and opportunities in the San Diego region for the growth and expansion of their industries. They universally agreed that other regions are continually lifting the competitiveness bar with initiatives to attract and retain companies, requiring focused and sustained efforts by the San Diego region to preserve and expand our competitive advantages:

- **Defense, Security**
- **Healthcare**
- **Information Technology**
- **Infrastructure & Commercial Construction**
- **Life Sciences**
- **Visitor & Regional Experience**

On October 5, the Leadership Trust met for a second time and was briefed by the co-chairs of the six Industry Cluster Forums. The Leadership Trust endorsed eight **Action Teams** in three major issue areas that were raised by the Industry Cluster Forums: **Workforce, Infrastructure, and Convergence**.

Workforce

STEM (Science, Technology, Engineering and Mathematics)
Entry- and Mid-Level Career Development

On December 12, a summary of the Action Team recommendations was presented to the Leadership Trust and EDC Board of Directors for endorsement.

Infrastructure

Transportation, Energy, Water
Workforce Housing

The *Partnership for the Global Economy* was undertaken with research, performed by Collaborative Economics, that presented a snapshot of today in the context of San Diego's history.

Convergence

Defense, Security, Technology
Healthcare, IT, Life Sciences
Maritime
Sustainability

San Diego's historical industry base included Defense and Military, Travel and Tourism, and Infrastructure and Construction. In the last 25 years, the regional economy successfully broadened its base to include two high-wage, export-oriented industry clusters: Life Sciences and Communications and Information Technology. These clusters and their support clusters are poised for growth through diversification, continued innovation, and industry convergence.

During the fall, the Action Teams have met in person and via conference call, and refined their recommendations to the Leadership Trust by defining:

- A clear **Long-Term Goal**
- A limited number of **Breakthrough Outcomes** that would define success
- **Strategies** to Achieve Breakthrough Outcomes
- **Implementation Requirements**

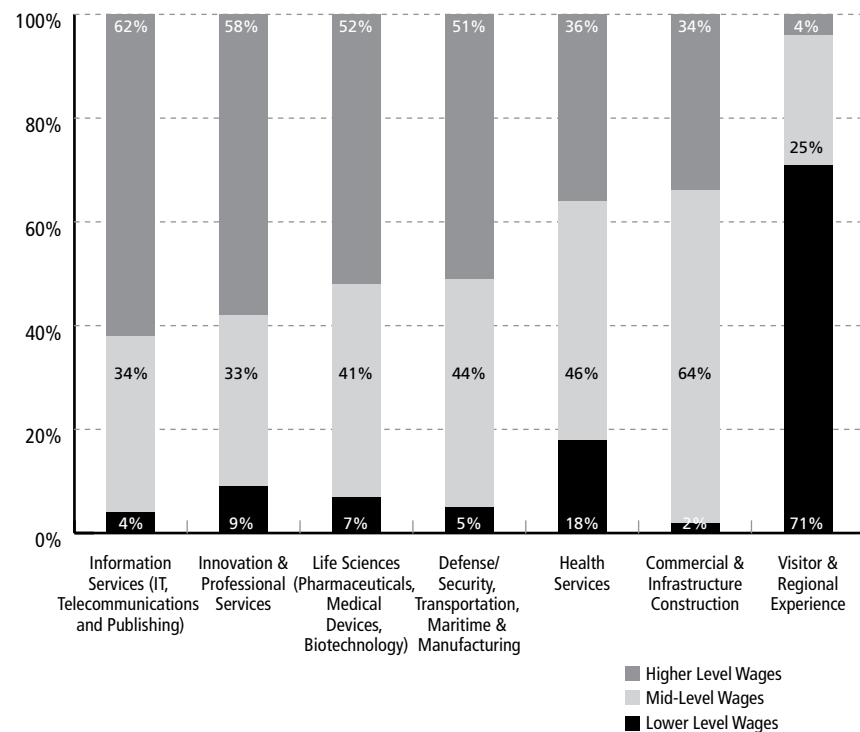
Research also showed that additional opportunity exists in two growing and emerging clusters: Healthcare and Sustainability, and Cleantech. The Healthcare industry has grown and shows opportunity for better-than-average future growth through industry convergence and demographic trends. The Cleantech industry cluster, while not yet well established in the region, appears to offer significant growth potential – leveraging regional strengths in research and new business incubation – and can potentially help the region meet its water and energy needs.

One significant factor in the region's growth – even since the 1999 *Partnership* – has been its expanding integration into the global marketplace, with some impressive statistics:

- *Global investment*– San Diego ranks 5th worldwide in attracting foreign venture capital – \$665 million between 2001 and 2006.
- *Co-patent relationships* – The volume of patents held with foreign partners – both in terms of the total number and percentage of patents granted – has shown continued increase.
- *Global workforce flow* – One in three members of the science and engineering workforce is foreign born – as is the non-science and engineering workforce.

San Diego's integration into the global marketplace also includes opportunities at all wage levels, with 40% of jobs in the six clusters in the middle income range, as shown in the following graph.

Occupational Share by Wage Level
2006



Understanding the percentage of high-, mid- and low-wage jobs in each industry is important because all industries have jobs at all levels. Identifying opportunities to raise the average wage of San Diegans is driven by:

- A high regional cost of living, reflected primarily in housing costs:
 - 41.3% of owners pay more than 30% of household income
 - 54.9% of renters pay more than 30% of household income
- Future quality of life, which rests on rising incomes
- A negative trend. San Diego's average per-capita income has fallen well below competitor regions and somewhat below the statewide average:
 - 34% below San Jose
 - 30% below San Francisco
 - 6.5% below Orange County
 - 4.5% below the State average

A more detailed ranking follows:

Per Capita Income: Leading Cities (2005)

1	San Jose	\$49,204
2	San Francisco	\$47,924
3	Boston	\$43,395
4	Washington, D.C.	\$43,310
5	Orange CA	\$39,259
6	Denver – Boulder	\$38,789
7	Seattle – Tacoma	\$38,710
8	Minneapolis – St. Paul	\$38,449
	California	\$36,890
9	San Diego	\$35,394
10	Raleigh – Durham	\$34,590
11	Dallas-Fort Worth	\$34,266
12	Atlanta	\$33,774
13	Miami – Fort Lauderdale	\$33,101
14	Portland-Salem	\$32,756
15	Austin	\$32,509
	United States	\$31,491
16	Sacramento	\$31,447
17	Tampa – St. Petersburg	\$29,888
18	Salt Lake	\$29,710
19	Phoenix	\$29,572

It is clear that other regions – including those that have or are aggressively seeking to attract the kinds of industries where San Diego enjoys a leadership role today – are lifting the competitiveness bar with bold initiatives to attract and retain businesses. The *Partnership* believes that San Diego requires focused and sustained efforts to preserve and expand our competitive advantages as identified by those who make decisions about where their companies will locate or expand.

The 1999 *Partnership for the New Economy* demonstrated that the business community can engage and help the region accomplish big things. The goal of the 2007 *Partnership for the Global Economy* is to do no less.



Partnership
for the
Global Economy

No Champions, No Initiatives

This is just the beginning. Accomplishing big things on behalf of our region will happen, as it did last time, with the active engagement of civic entrepreneurs – business leaders, partner business organizations and trade associations, and elected officials. People like you. This is a call to action. Get involved. Help our region be all that it can be – a vibrant place where business thrives and citizens enjoy the fruits of prosperity.

To join an initiative area that sparks your passion, please contact the San Diego Regional Economic Development Corporation at 619.234.8484 or log on to our website, www.sandiegobusiness.org, and click on the Partnership icon.



Partnership
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