

CONCEPTUAL MAP FOR SUSTAINABLE CITY-REGION DEVELOPMENT

SYSTEMS	COMPONENTS OF CITY-REGION DEVELOPMENT	DOMAINS FOR THEORY-BUILDING & PRACTICE	CHALLENGES OF SUSTAINABLE DEVELOPMENT <sup>(1)</sup>	RWBC PROJECTS	PLANNING & DECISION SUPPORT TOOLS <sup>(2)</sup>
<b>Environmental</b>	Hydrosphere (Water) Lithosphere (Land) Atmosphere (Air) Biosphere (Life)	Environmental Policy and Planning, Air Basin and Coastal Management, Watershed Planning, Fishery and Wildlife Management, Parks and Outdoor Recreation, Forestry, Landscape ecology, Solid and Hazardous Waste Management	<b>Environmental Stewardship</b> <ul style="list-style-type: none"> <li>Minimizing use/waste of non-renewable resources (fossil fuels, minerals, biodiversity)</li> <li>Sustainable use of renewable resources (aquifers, freshwater, wetlands, soils, biomass, human beings)</li> <li>Keeping within absorptive capacity of local, regional, global sinks (air, land &amp; water)</li> </ul>	<ul style="list-style-type: none"> <li>Water Quality (Toxics &amp; Watershed Management)</li> <li>Geomorphology and Ocean Floor Mapping</li> <li>Asian Brown Cloud, Aerosols</li> <li>Multiple Species Conservation Planning (MSCP)</li> </ul>	Environmental Informatics, Integrated Ecological Assessment, Cal(IT)2 Living Laboratory (Environment and Civil Infrastructure), 3D Terrain/Bathymetry Model, Panoram Theatre, RWBC
<b>Social and Cultural</b>	Civil Society Social & Human Capital, Cultural Diversity and Heritage	Social and Community Development (inc. dynamics of class, race & gender), Public Health and Human Services, Historic and Cultural Preservation, Education and Training	<b>Equity and Quality of Life</b> <ul style="list-style-type: none"> <li>Flourishing civil life in association with others</li> <li>Affordable health care &amp; adequate social safety net</li> <li>Access to affordable housing, including a secure, healthy environment with adequate basic services &amp; community facilities</li> <li>Fulfilling present generation needs without undermining the ability of future generations to meet their needs too</li> </ul>	<ul style="list-style-type: none"> <li>Community Collaboratives: Risk &amp; Preventative factors for Public and Environmental Health</li> <li>Redlining in San Diego</li> <li>Comparative Immigration</li> <li>Affordable Housing</li> <li>Colonia 10 de Mayo</li> <li>San Diego Historical Resources</li> <li>Student Mentoring/Training</li> </ul>	Quality of Life Indicators and On-line Interactive Mapping, Sociology Workbench, RWBC
<b>Economic (including infrastructure networks &amp; the built environment)</b>	Means of production, distribution and exchange (local, regional, global), Job markets, Systems of innovation, Networked infrastructures (transport, water, streets, telecommunications, energy), Housing and community facilities	Economic Development Corporate Environmental Management Public finance Labor force development Land Use Planning. Housing and Urban Design, Transportation Communications	<b>Economic Efficiency</b> <ul style="list-style-type: none"> <li>Efficiency in systems of production, distribution, exchange and consumption</li> <li>Adequately remunerated work</li> <li>Dealing effectively with spatial patterns of urban and regional growth</li> <li>Infrastructure for a “learning region” fostered by high quality education, workforce development, and knowledge-networking across digital divides</li> </ul>	<ul style="list-style-type: none"> <li>Industrial Ecology</li> <li>Industrial Clusters and Innovation as Collective Action</li> <li>Living Wage</li> <li>Water Supply and Infrastructure</li> <li>Digital Divide</li> </ul>	Cal(IT)2 Living Laboratory (Transportation and Telematics) SANDAG’s RIS RWBC
<b>Political</b>	Political Community, Legal and Institutional Organization, Means of Administration	Governance, Public Policy and Management, Regulation and Enforcement, Law and Criminal justice	<b>Good Governance and Regional Planning</b> <ul style="list-style-type: none"> <li>Participatory democracy and planning that is accountable, transparent, socially just and equitable, respectful of human rights and diversity)</li> <li>Environmental accords</li> <li>Intercity Collaborative Networks</li> </ul>	<ul style="list-style-type: none"> <li>Comprehensive Regional Planning and City-Region Governance</li> <li>Total Maximum Daily Loads (TMDLs) and Non-point source pollution regulation</li> <li>EMS and Regulatory Innovation</li> </ul>	Groupware and Collaboration Tools for Conflict Mediation, Negotiation, & Consensus Building SANDAG’s RIS RWBC

- (1). To integrate the challenges of Sustainable Development (3 Es + good governance), the RWBC draw together insights and tools from New Regionalism, Sustainability Science, and ICT.
- (2) The RWBC is developing a wide range of planning and decision support tools, including: Interactive web sites, Visualization, GIS, Simulation, Scenarios, Groupware and Collaboration Tools.