

***Moving Toward Sustainability: A New
Direction for the Community Redevelopment
Agency of Los Angeles***

S U S T A I N A B I L I T Y



F O R L O S A N G E L E S

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**The Sustainable Cities Program
At the University of Southern California**

The USC Environmental Sciences, Policy and Engineering *Sustainable Cities Program* is a multidisciplinary doctoral training and prepares doctoral students to confront, analyze and resolve the challenges posed by problems of urban sustainability.

The Program allows doctoral students to transcend disciplinary boundaries and acquire a profound understanding of how collaborative, interdisciplinary, policy-relevant research on major environmental problems should be conducted.

Three Convictions

1. Resolution of environmental problems demands contributions from natural scientist, engineers, social and behavioral scientists, and policy experts.

2. Such professionals must work productively with other environmental professionals, public administrators, political decision makers, and diverse interest groups.

3. Environmental science, policy and engineering practice is strengthened by inclusion of professionals with diverse backgrounds, political perspectives, and environmental philosophies.

The present study was conducted as a collaborative project within the frame of the course GEOG 611. This course was taught by Dr. Stephanie Pincetl. The following students participated:

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The USC Environmental Sciences, Policy and Engineering *Sustainable Cities Program*, a multidisciplinary doctoral training program funded by the National Science Foundation, prepares doctoral students to confront, analyze and resolve the challenges posed by problems of urban sustainability. The Program allows doctoral students to transcend disciplinary boundaries and acquire a profound understanding of how collaborative, interdisciplinary, policy-relevant research on major environmental problems should be conducted. The goal of the program is to produce superior scholars prepared for leadership positions in many domains - academic institutions, private sector firms, nongovernmental bodies, and public agencies - who are capable of top-quality research, who will think more flexibly, and who will set innovative goals for their careers. They will make their contributions not only within the confines of the research laboratory and peer-reviewed journals, but in the complex world of real environmental problem solving.

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Introduction

Despite a century of suburbanization, the United States remains an urban nation. Most Americans reside in urban areas – a proportion on the increase as our cities grow. It is also clear that questions of sustainability are more relevant today than ever before. Environmental problems such as air and water pollution are becoming acute, while congestion is recognized as a serious impediment to continued growth. Yet at the same time, residents of our largest cities are experiencing a housing shortage, which encourages residential overcrowding and drives living costs higher.

As a consequence, urban sprawl is an issue that has become increasingly important to Americans in the beginning of the twenty-first century. Growth-limiting ordinances are regularly approved in local elections and signal that urban sprawl, congestion, and pollution promise to become even more contentious issues in the future. Economic growth, social equity, and environmental preservation must be balanced if cities are to continue to grow in a sustainable fashion.

Clearly, cities cannot continue growing in the same fashion as today. The food, water, waste, transportation, and infrastructure systems, which support urban life, are linked. Transportation, for example, appears to be an intractable problem. The spatial mismatch between residence and place of employment encourages automobile commuting, which then places an increased burden on environmental systems and transportation infrastructure (Calthorpe et al.). These are problems endemic to growth, and portend a serious threat to the long-term sustainability of urban regions. If sustainability can be defined as the ability of an urban system to withstand additional stresses placed upon it, then sustainability planning must assume a comprehensive proactive approach to interrelated urban problems.

Rather than reactionary planning, what is needed is an outcome-oriented program that incorporates sustainability into its vision. The World Commission on Environment and Development (WCED) offers such a comprehensive, integrated approach to development that balances economic growth with social equity and environmental concerns. In their *Brundtland Report* (1987), WCED frames a context for the local implementation of sustainability principles within a program of economic development – an approach very much relevant to the mission of the Community Redevelopment Agency (CRA).

While recognizing that sustainability extends beyond the city, the WCED recognizes that intelligent planning for increased residential densities, affordable transportation, and equity in the distribution of growth impacts must be part of a sustainability agenda for economic development. Though sustainability is a large-scale regional and even global concern, the solutions are often local in nature and are best implemented on the municipal level. Working through consultation and consensus building, WCED incorporates civic, community, and business sectors into a cooperative program to formulate appropriate strategies and design solutions. The *Brundtland Report's* Local Agenda 21 principles (see appendix II) envision

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sustainability from the local to the national scales, while implementing the program at the city level to incorporate stakeholders into the process at the municipal level.

The WCED, by recognizing the need for local action within the global environment, represents a viable model for CRA economic development principles. WCED defines sustainability as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Our vision for the CRA integrates social equity into an economic development program to consider the importance of both economic and social factors in the urban environment. Local administration is the key to an effective program, which will integrate economic development on a project-basis within a broader sustainability agenda.

Though the CRA approaches economic development primarily through a *bricks and mortar* program to revitalize CRA project neighborhoods, we believe that a robust economy is only one concern in planning for healthy local communities. We have incorporated the *Brundtland Report* vision into a framework for the CRA, which embraces environmental and social equity concerns as a part of the sustainability program.

We believe that social opportunity that fosters equitable access, democratic participation, and social responsibility are necessary components of social sustainability. A true sustainability agenda seeks to improve economic well being while maintaining a balance with environmental and social needs. In keeping with this ideal, we have developed principles and goals, which operationalize development in economically depressed neighborhoods according to a social conception of sustainability. These principle and goals are intended as tools for an economic development program which ensures that the social resources of city residents in the future are an integral part of the CRA economic development program today. The vision, mission, principles, and goals developed for the CRA underscore such a program.

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The following sections Vision, Mission, and, Principles establish a working document intended to aid in the planning and implementation of CRA projects. It is intended that the use of this document will provide a landmark on the road to sustainable development. Adherence, to the best of the CRA's ability, to these Vision, Mission, and, Principles will lay the groundwork for sustainable prosperous communities that will continue to thrive now and into the future.

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Section I: Vision and Mission

The CRA Vision

The vision of the Community Redevelopment Agency of the City of Los Angeles (CRA) is for achieving sustainable development of livable communities to ensure equity, fairness, and opportunity for all residents while encouraging economic viability and environmental responsibility at the community, city, and regional levels.

Community is a function of both the opportunities afforded by the spaces of the city and the social development, which it contains.

CRA community redevelopment acknowledges that place matters. People create *places* for themselves from their everyday environment by finding opportunity where otherwise there is only empty space. Place making in turn shapes people by anchoring their lives and offering opportunities for self-actualization. Embracing the full range of human potentiality means making places, which allow for discovery and human fulfillment while ensuring equity, fairness, and opportunity for all.

Community redevelopment aims for livability and sustainability as dual objectives.

A livable community acknowledges that social and material needs of the community are important elements for a fulfilled life. Through the efforts of the CRA, Los Angeles will provide residents with a superior quality of life both at the local and regional levels based on social opportunity, environmental equity, ecological sustainability, and fairness.

Yet *sustainable community* means more: it offers residents achievement opportunities and the potential for a full and happy life without compromising tomorrow's opportunities. The sustainable community must meet today's needs without compromising the ability of future generations to meet their own needs through an emphasis on community self-reliance.

Rather than generating environmental and social externalities, which are then exported elsewhere, a sustainable community strives to reduce the consumption of resources and the production of waste. Quality of life *as well as economic viability* is the CRA's vision for Los Angeles as a sustainable city in spirit and in practice.

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The CRA Mission

The Community Redevelopment Agency of the City of Los Angeles is the prime entity responsible for devising and implementing geographically based action strategies, which arrest deterioration in LA's most troubled urban neighborhoods. The CRA remains prepared to assist troubled neighborhoods by integrating ecologically sustainable development practices while also working to reverse economic and physical deterioration. It is our commitment to the community to work in partnership to promote the long-term health, safety, and well-being for all residents by providing high-quality and affordable services to each and every resident.

A pragmatic concept for community development necessitates sustainability as an objective.

The CRA's economic viability strategy assumes a *bricks and mortar* approach to community redevelopment. *Sustainable* community development, however, means maximizing the use of innovative techniques and green building practices in order to minimize resource consumption. As a social process, it must also be mindful of the complex issues inherent in community building. CRA is an agenda-setting agency responsible for sustainable economic, ecological, and social redevelopment of the Los Angeles region.

A sustainable, *green building* program will be a strategic cornerstone to redevelop communities as both *livable* and *sustainable*. Local participation is an essential element of community development. Local Agenda 21 principles will inform the CRA's mission to ensure that businesses, organizations, and the resident community will have a voice in redevelopment decision-making. In accordance with the United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro in June 1992, "it is emphasized that all groups of society take part in the planning and implementation of measures."

Sustainability necessitates a scalar approach, which is sensitive to long-term environmental, economic, and social concerns. Adhering to Local Agenda 21 principles will ensure compliance and compatibility with sustainability initiatives beyond the local community. Recognizing the multi-dimensional needs of contemporary cities', the CRA will act sensitively regarding social and environmental issues on both local and regional scales in the way it directs investment for the pursuit of economic prosperity (see appendix II).

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Section II: Principles, Goals, and Objectives

Principles for the CRA

In government and business, people refer to the three E's to underscore the connection between efficiency, effectiveness, and economy. In sustainability literature, however, the three E's are defined as equity, environment, and economy. Efficiency and effectiveness are not forgotten as concepts for sustainability, but rather are considered an essential aspect of a healthy economy in balance with social and environmental needs.

We introduce sustainability terminology borrowed from the directives set forth in the Brundtland Report and the Local Agenda 21 principles to provide examples of the interconnectedness of the three E's as they relate to sustainability.

Sustainability Terminology

The world can be viewed as a series of overlapping ecological, geological, and human systems. Perhaps the most important aspect of this systems worldview is the idea that *social systems are embedded within environmental systems*. Ecological and geological systems range from an anthill 'microhabitat' to the regional biosphere of the Santa Monica mountains – and even the all-encompassing biosphere. Humans are an essential element in ecological systems, of course, forming human-oriented social systems which range from interactions between individuals to the larger scales of neighborhood, city, state, and region – ultimately as elements within a larger, interconnected global community.

While cities have historically represented humanity's struggle for ascendancy over nature (Gleeson and Low, 2000), urban fabric is woven from strands of naturally occurring systems; it does not exist apart from the natural environment. Though cities are places where goods are produced and resources are consumed, the built environment does not preclude nature and, in fact, cannot function apart from it. While we often speak of urban systems as if they function independently, we must recognize that they are reliant on a larger network of environmental systems. An urban ecological "footprint" reaches far beyond the city boundary.

A term commonly used in the discussion of sustainability is carrying capacity. *Carrying capacity* is defined as the maximum population of a species that an area can support without reducing its ability to support the same species in the future (Rees and Wackernagel, 1996). Although the carrying capacity for the earth remains unknown, it is important to understand that the earth will not support an infinite number of people given even current rates of resource consumption.

The *ecological footprint* measure was developed as one method for determining the carrying capacity of a given area. An ecological footprint is a planning tool that accounts for the flows of energy and matter to and from a defined economy. It emphasizes that humans are part of nature, human systems such as cities consume resources from far beyond their borders and with impacts, which may extend globally. Simply, phrased, it interprets these flows in terms of the larger area required to support it. The ecological footprint also approximates a carrying capacity

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corresponding to the land required by the population (Rees and Wackernagel, 1996). Acknowledging that resource limitations exist involves developing and implementing measurement tools that aid in assessing changing population levels, resource consumption, and waste production.

At the heart of social sustainability are the principles of equity and “distributive justice” as preconditions for a healthy environment and economy. *Equity* does not necessarily imply that everyone receives exactly the same resources for this is impossible. Equity does imply that within a sustainable network, the needs of different sectors of the population will be taken into consideration and that certain groups will not suffer disproportionately relative to other, perhaps more economically advantaged groups.

Sustainability often focuses on *intergenerational equity*, which states that the actions of present generations should not adversely affect the opportunities of future generations. Availability of resources is a common concern for intergenerational equity, particularly given our current reliance on non-renewable resources such as fossil fuels. While technology may serve to mitigate our dependence on non-renewable resources, there exists uncertainty as to whether technology will be able to address current or even increasing consumption levels.

Coupled with this unease about resource availability for future generations is the concern over resources for the present. This is *intragenerational equity*. Current disparities in wealth and social status within populations result in neither a sustainable or equitable system. Achieving sustainability necessitates equity within the social as well as environmental system.

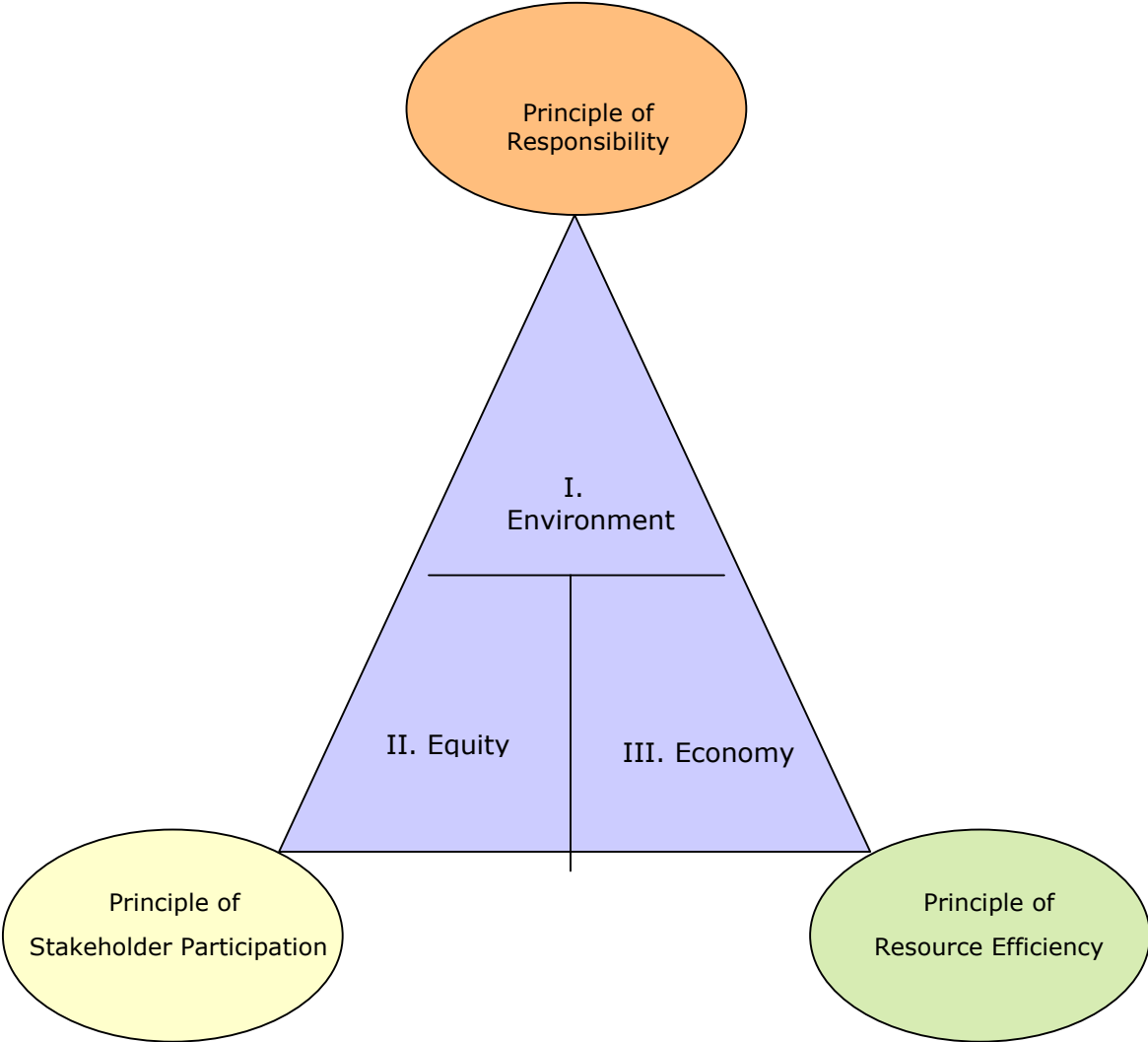
Consequently, operationalizing sustainability means developing effective principles through which the equitable allocation of resources and waste is distributed within existing societies and across generations. The Brundtland Report and Local Agenda 21 define decision-making principles and objectives, which embrace environmental consciousness, social equity, and economic viability.

Principles

The following principles provide holistic ecological and socially conscious guidelines for decision-making, which enhance sustainability. They recall the principles and objectives outlined in the Brundtland Report and Local Agenda 21. These principles provide merely one approach which the CRA may embrace in order to address the multifaceted ecological, environmental, and equity issues confronting redevelopment projects in the Los Angeles region. They can be viewed as guidelines for operationalizing sustainability at the local level while promoting the notion of a better quality of life for people globally.

The following diagram depicts the principles as organized according to the themes of environment, economy and equity. It is followed by a description of each principle and suggested goals and objectives for achieving them.

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Theme I: The Environment

Principle of Responsibility

The principle of responsibility recognizes the need to employ a balanced approach to development that takes into account the interdependence between humans and nature. This principle asserts a holistic approach that considers both human and non-human needs as necessary for achieving sustainability.

Historically, urban land use patterns have caused urban environmental problems since such developments have often depended on the destruction or depletion of natural resources (i.e., soil, water, air, life, and fuel) critical to human survival. To reduce such environmental externalities and to further the principle of responsibility, appropriate actions to mitigate unnecessary harm to both residents and the natural environment will be encouraged.

The principle of responsibility allows for the consideration of future impacts of redevelopment. The design and construction of development areas should be attentive to both social and environmental responsibilities within the boundaries of the project, while at the same time considering effects outside the boundaries. The region and its urban elements (the city and suburbs) can be conceived of as a unit, just as the neighborhood and its elements (housing, shops, open space, civic institutions, and businesses) should be designed as a unit (Calthorpe and Fulton, 2001). The principle of responsibility stresses the need to employ a balanced approach to development when human activities conflict with the needs of other organisms.

GOAL: Recognizing both human and non-human needs

The priority is to identify redevelopment projects that have the potential for resilience and longevity. The promotion of building practices which utilize indicators and benchmarks to measure environmental conservation and ecological health in construction will be a positive step towards urban sustainability (see section on *Methods for Evaluation: Performance Based Planning*).

In many neighborhoods, zoning for low-density land use has limited housing opportunities. Mixed-use development, on the other hand, offers new possibilities while integrating housing with redeveloped commercial areas. Recovering under-utilized urban lands means rehabilitating mall sites and finding productive use for what sustainability scholars such as Peter Calthorpe and Bill Fulton call “greyfields” – the urban space along the roads and freeways which unnecessarily divides rather than connect our communities (Calthorpe and Fulton, 2001). Creation and maintenance of open spaces can improve the environmental health and visual environment of the inner city. Tree planting, community gardening, and environmental land art projects should be an integral part of the sustainable community redevelopment process, which meets both human needs while supporting non-human life. “Blighted” neighborhoods can be reclaimed as potential links to a vast open space system; vacant lots, alleyways, cul-de-sacs, and rooftops can be adapted to serve as open space.

OBJECTIVES:

- *Promote mixed-use development*

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- *Reintroduce nature into the built environment*
- *Incorporate open-spaces into redevelopment projects*

Theme II: Social Equity

Principle of Stakeholder Participation

The principle of stakeholder participation necessitates local empowerment for understanding the needs of those who live and work in development areas and fosters a more efficient and equitable allocation of resources. It promotes grassroots participation by including the people who are affected, insisting a level playing field for community residents.

As the Vision statement suggests, a livable community acknowledges that both material *and* social elements are important for a fulfilled life. Local Agenda 21 offers a blueprint for sustainable development in the 21st century. Signed by 179 governments, the document is aimed at providing a high quality environment and healthy economy for people by eradicating poverty and reducing disparities in living standards across the world.

According to Local Agenda 21, problems and solutions pertaining to sustainability “have their roots in local activities.” The CRA will build on this objective by recognizing the value of human and social capital. Social capital is defined as the norms and networks of social relations that build trust and mutual reciprocity among community residents, social organizations and civic institutions. Social capital is a prerequisite for building a healthy, sustainable community and is a critical factor determining the rise and decline of communities (Putnam, 1993). The participation of all stakeholders is essential to effective planning and sustainable development, and the CRA is already working toward this objective.

By incorporating principles of sustainability, the CRA will honor the objective of creating a healthy environment concurrent with rehabilitating the local economic community and thus ensuring a higher quality of life for residents, employees, and visitors within its re-development areas but also the region as a whole.

GOAL: *To Nurture Participatory Democracy*

Participatory democracy involves providing opportunities for residents to participate directly in the community decision-making process. Neighborhoods are empowered through increased resource allocation that facilitates self-representation and promotes self-directed leadership.

OBJECTIVES:

- *Make communication between the CRA and the local community open and transparent.*
- *Assure cultural diversity is represented in public forums.*
- *Support and grow local entrepreneurial activity.*
- *Inventory community assets to work with what is already there and further promote indigenous leadership.*

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Theme III: The Economy

Principle of Resource Efficiency

The Principle of Resource Efficiency minimizes resource costs and waste impacts on the natural environment while increasing efficiency and ensuring long-term durability. It seeks to promote green living through innovative building practices and protection of human and ecological health.

Offering guidance for development reform, William McDonough emphasizes that “new construction, when necessary, should be seen as an extension of the present built fabric, not as independent, self-contained development (“Hannover Principles”, 2000). Promoters of Industrial Ecology, such as Braden Allenby (1999), offer similar concepts for design in terms of a systems approach – models based on the idea that everything is connected. McDonough and Allenby provide examples of how sustainability can be incorporated into design and development, serving to increase efficiency, minimize impacts to the natural environment and draw from the natural cycles that sustain life regardless of human activity.

Cost efficiency is also important under this principle. Green building standards, as illustrated by the United States Green Building Council’s (USGBC) LEED rating system allow for long-term cost efficiency (www.usgbc.org). The integration of green building standards in development projects can be achieved by following the LEED rating system -- a self-assessment system designed for rating new and existing commercial, institutional, and high-rise residential buildings. It evaluates environmental performance from a “whole building” perspective: taking into account a building’s life cycle and thereby providing a project-based definitive standard for what constitutes a green building.

Resource efficiency is both economically and environmentally advantageous. It can reduce cost and waste as well as reduce reliance on non-renewable resources that are shared globally. Wastes such as carbon dioxide transcend project boundaries. Mitigating such waste is a commitment to everybody at the regional and global levels. Towards this end, the CRA will endeavor to utilize materials and energy sources with the highest possible efficiency by incorporating the use of renewable energy and materials sources.

The utilization of low-energy systems and the adoption of environmentally-friendly, climate-sensitive designs are but two means for achieving energy efficiency insuring responsibility to both the CRA project stakeholders and those outside the project boundary. Resource use in construction can either be minimized or “greened” by readapting existing structures wherever possible or using recycled building materials. The incorporation of energy efficiency designs and ‘green’ building standards underscores a responsibility to the stakeholders while being responsible to those at a regional and global level.

Above all, the CRA’s responsibility is to foster the development of community systems that are capable of responding to present and future needs while evolving toward the highest quality of life for CRA project residents and neighbors.

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GOAL: Integrate human health and green building standards into all redevelopment projects

This goal involves identifying renewable energy resources that best fit the needs of the CRA development area. For example, buildings that recycle water into the soil instead of the street; vegetation appropriate to the environment may be planted to reduce grounds maintenance fees while minimizing a reliance on pesticides, water, and other resources which are both toxic and costly. Such approaches emphasize designing in accordance with, rather than against, nature.

In an effort to minimize costs, increase efficiency, and mitigate impacts to the natural environment, the CRA will consider awarding contracts or financial incentives and/or subsidies to firms, which incorporate renewable energy technologies in their business practices and/or their products. Examples of renewable energy include solar, wind or water sources. By setting standards that promote sustainability, protect human health, and foster economic efficiency within the redevelopment project, the CRA has the opportunity to serve as a model agency for sustainable redevelopment at the local as well as regional scales.

OBJECTIVES:

- *Support projects that encourage the use of the right renewable for the right situation*
- *Design with nature rather than against it*
- *Give preference to contractors or vendors who provide renewable technologies in their products*
- *Maintain legitimacy within the community for the redevelopment process by ensuring local accountability*

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Planning for a sustainable future is an ongoing activity that requires periodic evaluation. It also requires continued openness to refinement, recommitment, and new ideas. This can best be achieved by the use of indicators. The following section Performance Based Planning: Methods for Evaluation consists of examples for measuring progress on the path to sustainable development. This is by no means a comprehensive list, but provides some examples and starting points for CRA projects.

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Performance Based Planning: Methods for Evaluation

As emphasized throughout this document, recognizing that social, environmental, and economic systems are interconnected is the first step toward *understanding the concept of sustainability*. Humans are embedded in nature, and adopting a set of principles, goals, and objectives, which recognize this is the next step toward *implementing sustainability in practice*. Towards this end, performance based planning involves using a set of indicators to systematically and regularly measure the progress and impacts of programs, policies, and actions related to development.

Achieving sustainability involves creating such a system, which provides feedback on current conditions in order to assess the states of the environment, social system, and economy. Monitoring systems are increasingly being used to measure performance and aid in long-term decision-making. Performance based planning requires setting benchmarks for measuring whether goals are being met. Indicators provide greater insight into overall social, environmental, and economic trends occurring in the community.

The development of progress indicators is a means to understanding how planning practices impact specific neighborhoods and the region as a whole. A variety of indicators may be used to measure impacts on the natural and social systems. *Natural services indicators* measure the use of natural resources and the corresponding effects on the natural environment. *Social indicators* assess environmental equity, livable communities, mobility, and safety, among other factors. *Economic indicators* examine the effectiveness of programs and policies and can be used as a tool for measuring an efficient and equitable allocation of resources.

By condensing complex data, *indicators* help educate citizens, inform decision-making and promote direct action. Performance based planning uses such indicators to provide both qualitative and quantitative feedback mechanisms. *Feedback mechanisms* help us to recognize the movement away from sustainability and guide the necessary action for a system to attain a level of sustainability. Indicators and feedback mechanisms work together to gauge progress towards community sustainability (Larkin, 1999).

Developing appropriate sustainability indicators means identifying citizen concerns by involving them in the redevelopment process as highlighted under the principle of stakeholder participation (See Section II: Equity). By seeking community input, indicators can be used to underscore linkages between social, environmental, and economic dimensions; examine the distributional equity; and guide decision-making toward sustainability.

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The following table provides examples of indicators:

Nature Services	Social Indicators	Economic Indicators
<ul style="list-style-type: none"> • Park Space per Capita • Number of trees in public spaces • Energy Use- Renewable and Non-renewable Sources • Tons of Solid Waste Generated and Recycled • Air and Water Quality 	<ul style="list-style-type: none"> • Population density and growth • Crime Rate • Voter Participation • Proximity (miles/blocks) to public transportation • Community Service Activity • Number of Day care facilities • Number of public and private schools • Mobility (individual) • Proximity of residences to Parks and Open Space • Literacy • Health 	<ul style="list-style-type: none"> • % of residents living at and below poverty • Average wage per resident • Health care expenditures • Unemployment rate • % employed by various industry

The indicators listed in the table above are examples that have been drawn from various resources focusing on community sustainability (See Appendix I for a detailed list of community resources on sustainability indicators). They serve as a general introduction and are just a few of many possible measurement tools. While criteria for choosing the appropriate indicators is incorporated into current literature on sustainability (See *Toward Community Environmental Sustainability Indicators for Oakland*), each community must decide how they define quality of life and choose indicators that reflect that definition. While *quantitative indicators* measure systems performance, they can require extensive data collection. *Qualitative indicators*, however, can serve to provide a general assessment of community progress and needs when faced with limited resources.

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Conclusion

Urban America is at a turning point: the American dream is changing. The future is no longer simply an extension of past practices, which determined a profound transformation in our physical environment (Wolch et al). The question of sustainability no longer concerns solely brick and mortar but rather project design -- its scale, mixture of uses, and connection with the surrounding city. *Design determines quality of place*. It is a concept for sustainability, which must be answered by a vision for a community, which incorporates a sustainability mission governed by principles, defined by goals, and measured through indicators.

Taking the Community Redevelopment Agency of the City of Los Angeles as a case study, we have attempted to show that there are multifaceted ecological and environmental equity consequences associated with the *bricks and mortar* model of urbanization. We have equally demonstrated that the principles of sustainable development as presented in this document are not isolated concepts merely imposing mandate on local authorities.

The basic tenets of sustainable development in terms of equity, environment, and economy are the condensation of the principal canons of development policies outlined in the U.N. sponsored World Commission on Environment and Development (WCED) of 1987 (Brundtland Commission) and the Local Agenda 21 Earth Summit held in Rio de Janeiro, 1992. The 1987 Brundtland Commission report defines sustainable development as a comprehensive, integrated, systemic development approach that balances the dimensions of economic growth, social equity and environmental sustainability for healthy communities. More specifically, the report calls for "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

The Brundtland and Local Agenda 21 reports are guided by vision, mission, principles and indicators which call upon local authorities to save land, use investment efficiently, reduce pollution, create more inclusive human habitats, support social equity and to create beauty in human made environment. In support of these sustainability tenets, we have formulated visions, missions, principles, goals and indicators as guidelines for the CRA in order to implement sustainable development practices in redeveloping depressed neighborhoods of the city.

Sustainable development is not intended as a utopian construct. However, the underlying principles, if implemented, are quite different from what would emerge under current growth patterns. Furthermore, it is not an imperative mandate that we start all over again in creating utopian communities. On the contrary, the report and accompanying guidelines build on the reality of existing communities with all its complexities and contradictions. This is based on the recognition that there is no absolute road map suitable for all communities, neighborhoods and cities. Each context (place and time) calls for a different process and a different combination of policies, designs and regulation. The principles for sustainable development as presented in this document are pragmatic strategies to rehabilitate our existing urban environment rather than creating new places.

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A major challenge confronting local authorities is for implementing policy, which integrates environmental and social equity concerns with the imperatives of economic growth in depressed communities. A new policy architecture that integrates *bricks and mortar* issues with social equity and environmental sustainability in communities is called for. We hope that this document provides an opportunity for the CRA to overcome current fragmented environmental, social and economic policies in favor of a more holistic approach to urban development in Los Angeles.

The CRA has the unique opportunity to implement the infrastructure necessary for a sustainable future. However, as we have tried to emphasize, place making provides an infrastructure for sustainable communities in both social and ecological terms. The CRA is in the business of creating places. Given that sustainability is by definition related to time, both inter-generational and intra-generational, the CRA has the unique capability of implementing long-term projects that transcend the abilities of most private enterprises in terms of public service. The CRA of the City of Los Angeles is truly at the heart of the sustainability problem *and* solution.

Los Angeles remains one of the fastest growing and culturally diverse cities in the world. More importantly, Los Angeles is one of the largest resource consuming cities on the entire planet while also maintaining social and economic inequalities. What the CRA chooses to do at a specific site in one Southern California city can have a truly global and long-term impact on the world.

It was also our intention to demonstrate that environmental sustainability is the sum total of social and ecological sustainability. This document lists principles and goals that can be integrated into regular operations of the CRA. It is our intention that these principles demonstrate that economic development is an environmentally and socially sensitive matter that should be responsive to the canons of sustainability.

These principles are intended as working guidelines for the purposes of planning and redevelopment at the local and regional level. The real world difficulties that can arise in attempts to implement these principles are acknowledged. However, it is our belief that over time operationalizing sustainability provides a better quality of life for the stakeholders, increased efficiency, and an overall better environment that stimulates and maintains long-term economic health.

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APPENDICES

Appendix I: Indicators for Sustainability Resources

The Sustainable Seattle 1993: Indicators of Sustainable Community, A Report to Citizens on Long-Term Trends in Our Community. Presented by Sustainable Seattle, December, 1993.

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Appendix II. Agenda 21 Principles

REPORT OF THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT

(Rio de Janeiro, 3-14 June 1992)

RIO DECLARATION ON ENVIRONMENT AND DEVELOPMENT

The United Nations Conference on Environment and Development, having met at Rio de Janeiro from 3 to 14 June 1992, reaffirming the Declaration of the United Nations Conference on the Human Environment, adopted at Stockholm on 16 June 1972, and seeking to build upon it, with the goal of establishing a new and equitable global partnership through the creation of new levels of cooperation among States, key sectors of societies and people, working towards international agreements which respect the interests of all and protect the integrity of the global environmental and developmental system, recognizing the integral and interdependent nature of the Earth, our home, proclaims that:

Principle 1: Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.

Principle 2: States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

Principle 3: The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.

Principle 4: In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.

Principle 5: All States and all people shall cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world.

Principle 6: The special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable, shall be given special priority. International actions in the field of environment and development should also address the interests and needs of all countries.

Principle 7: States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The

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developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.

Principle 8: To achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies.

Principle 9: States should cooperate to strengthen endogenous capacity-building for sustainable development by improving scientific understanding through exchanges of scientific and technological knowledge, and by enhancing the development, adaptation, diffusion and transfer of technologies, including new and innovative technologies.

Principle 10: Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.

Principle 11: States shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply. Standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries.

Principle 12: States should cooperate to promote a supportive and open international economic system that would lead to economic growth and sustainable development in all countries, to better address the problems of environmental degradation. Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade. Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. Environmental measures addressing transboundary or global environmental problems should, as far as possible, be based on an international consensus.

Principle 13: States shall develop national law regarding liability and compensation for the victims of pollution and other environmental damage. States shall also cooperate in an expeditious and more determined manner to develop further international law regarding liability and compensation for adverse effects of environmental damage caused by activities within their jurisdiction or control to areas beyond their jurisdiction.

Principle 14: States should effectively cooperate to discourage or prevent the relocation and transfer to other States of any activities and substances that cause severe environmental degradation or are found to be harmful to human health.

Principle 15: In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or

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irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

Principle 16: National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.

Principle 17: Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.

Principle 18: States shall immediately notify other States of any natural disasters or other emergencies that are likely to produce sudden harmful effects on the environment of those States. Every effort shall be made by the international community to help States so afflicted.

Principle 19: States shall provide prior and timely notification and relevant information to potentially affected States on activities that may have a significant adverse transboundary environmental effect and shall consult with those States at an early stage and in good faith.

Principle 20: Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development.

Principle 21: The creativity, ideals and courage of the youth of the world should be mobilized to forge a global partnership in order to achieve sustainable development and ensure a better future for all.

Principle 22: Indigenous people and their communities and other local communities have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development.

Principle 23: The environment and natural resources of people under oppression, domination and occupation shall be protected.

Principle 24: Warfare is inherently destructive of sustainable development. States shall therefore respect international law providing protection for the environment in times of armed conflict and cooperate in its further development, as necessary.

Principle 25: Peace, development and environmental protection are interdependent and indivisible.

Principle 26: States shall resolve all their environmental disputes peacefully and by appropriate means in accordance with the Charter of the United Nations.

Principle 27: States and people shall cooperate in good faith and in a spirit of partnership in the fulfilment of the principles embodied in this Declaration and in the further development of international law in the field of sustainable development.

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Appendix III. The Hannover Principles, William McDonough (1992)

1. Insist on rights of humanity and nature to co-exist in a healthy, supportive, diverse and sustainable condition.
2. Recognize interdependence. The elements of human design interact with and depend upon the natural world, with broad and diverse implications at every scale. Expand design considerations to recognizing even distant effects.
3. Respect relationships between spirit and matter. Consider all aspects of human settlement including community, dwelling, industry and trade in terms of existing and evolving connections between spiritual and material consciousness.
4. Accept responsibility for the consequences of design decisions upon human well being, the viability of natural systems, and their right to co-exist.
5. Create safe objects of long-term value. Do not burden future generations with requirements for maintenance of vigilant administration of potential danger due to the careless creation of products, processes or standards.
6. Eliminate the concept of waste. Evaluate and optimize the full life cycle of products and processes, to approach the state of natural systems, in which there is no waste.
7. Rely on natural energy flows. Human designs should, like the living world, derive their creative forces from perpetual solar income. Incorporate the energy efficiently and safely for responsible use.
8. Understand the limitations of design. No human creation lasts forever and design does not solve all problems. Those who create and plan should practice humility in the face of nature. Treat nature as a model and mentor, not an inconvenience to be evaded or controlled.
9. Seek constant improvement by the sharing of knowledge. Encourage direct and open communication between colleagues, patrons, manufacturers and users to link long term sustainable considerations with ethical responsibility, and re-establish the integral relationship between natural processes and human activity.

The Hannover Principles should be seen as a living document committed to the transformation and growth in the understanding of our independence with nature, so that they may adapt as our knowledge of the world evolves.