

APPENDIX C

PROGRAMS REFERENCED IN THE UTICA MASTER PLAN

What is Slow Food?

Slow Food is an idea, a way of living and a way of eating. It is a global, grassroots movement with thousands of members around the world that links the pleasure of food with a commitment to community and the environment.

From Plate to Planet

In the United States, members of Slow Food USA's 200 chapters celebrate the amazing bounty of food that is available and work to strengthen the connection between the food on our plates and the health of our planet. Our members are involved in activities such as:

- Raising public awareness, improving access and encouraging the enjoyment of foods that are local, seasonal and sustainably grown
- Caring for the land and protecting biodiversity for today's communities and future generations
- Performing educational outreach within their communities and working with children in schools and through public programs
- Identifying, promoting and protecting fruits, vegetables, grains, animal breeds, wild foods and cooking traditions at risk of disappearance
- Advocating for farmers and artisans who grow, produce, market, prepare and serve wholesome food
- Promoting the celebration of food as a cornerstone of pleasure, culture and community
- Learn about Good, Clean and Fair

Mission:

Slow Food USA seeks to create dramatic and lasting change in the food system. We reconnect Americans with the people, traditions, plants, animals, fertile soils and waters that produce our food. We work to inspire a transformation in food policy, production practices and market forces so that they ensure equity, sustainability and pleasure in the food we eat.

What is Mixed-Income Housing?

A **mixed-income housing development** can be defined as a development that is comprised of housing units with different levels of affordability, typically with some market-rate housing and some housing that is available to low-income occupants below market-rate. The “mix” of affordable and market-rate units that comprise mixed-income housing developments differ from community to community, and can depend, in part, on the local housing market and marketability of the units themselves. One of the challenges in developing mixed-income housing is determining a mix of incomes that can be sustained over time. In practice, there is no single formula, or standard definition, of mixed-income housing.

Communities and developers around the country must evaluate local market conditions, and develop locally supported concepts and characteristics of the mixed-income development.

While it is unclear exactly when communities began making a conscious effort to promote mixed-income housing, evidence of *planned*, economically integrated communities dates back to the 1960's when Federal, state and local governments employ a wide variety of methods to support the development of mixed-income housing. Participating Jurisdictions (PJs) and their housing partners can design approaches that take maximum advantage of many previously-established government incentive programs.

PJs can design mixed-income housing in a number of ways to meet a range of housing needs, such as:

- Develop a section of smaller, affordable units within a complex of larger market-rate units. This design supports buyers who might eventually “graduate” into larger units in the same subdivision.
- Subsidize some number of low-income families with second mortgages in an otherwise market-rate development.
- Mandate a set-aside of a certain number (typically 20 to 60 percent) of units for low-and moderate-income households in market-rate developments.

What is the HOME Program?

HOME Program Summary

HOME is authorized under Title II of the Cranston-Gonzalez National Affordable Housing Act, as amended. Program regulations are at 24 CFR Part 92. The HOME program final rule is available electronically. Additional information about the HOME program can be found by visiting the HOME program web pages.

HOME provides formula grants to States and localities that communities use-often in partnership with local nonprofit groups-to fund a wide range of activities that build, buy, and/or rehabilitate affordable housing for rent or homeownership or provide direct rental assistance to low-income people.

Purpose

HOME is the largest Federal block grant to State and local governments designed exclusively to create affordable housing for low-income households. Each year it allocates approximately \$2 billion among the States and hundreds of localities nationwide. The program was designed to

reinforce several important values and principles of community development:

- HOME's flexibility empowers people and communities to design and implement strategies tailored to their own needs and priorities.
- HOME's emphasis on consolidated planning expands and strengthens partnerships among all levels of government and the private sector in the development of affordable housing.
- HOME's technical assistance activities and set-aside for qualified community-based nonprofit housing groups builds the capacity of these partners.
- HOME's requirement that participating jurisdictions (PJs) match 25 cents of every dollar in program funds mobilizes community resources in support of affordable housing.

Types of Assistance

HOME funds are awarded annually as formula grants to participating jurisdictions. HUD establishes HOME Investment Trust Funds for each grantee, providing a line of credit that the jurisdiction may draw upon as needed. The program's flexibility allows States and local governments to use HOME funds for grants, direct loans, loan guarantees or other forms of credit enhancement, or rental assistance or security deposits.

Eligible Grantees

States are automatically eligible for HOME funds and receive either their formula allocation or \$3 million, whichever is greater. Local jurisdictions eligible for at least \$500,000 under the formula (\$335,000 in years when Congress appropriates less than \$1.5 billion for HOME) also can receive an allocation. Communities that do not qualify for an individual allocation under the formula can join with one or more neighboring localities in a legally binding consortium whose members' combined allocation would meet the threshold for direct funding. Other localities may participate in HOME by applying for program funds made available by their State. Congress sets aside a pool of funding, equivalent to the greater of \$750,000 or 0.2 percent of appropriated

funds, which HUD distributes among insular areas.

Eligible Customers

The eligibility of households for HOME assistance varies with the nature of the funded activity. For rental housing and rental assistance, at least 90 percent of benefiting families must have incomes that are no more than 60 percent of the HUD-adjusted median family income for the area. In rental projects with five or more assisted units, at least 20% of the units must be occupied by families with incomes that do not exceed 50% of the HUD-adjusted median. The incomes of households receiving HUD assistance must not exceed 80 percent of the area median. HOME income limits are published each year by HUD.

Eligible Activities

Participating jurisdictions may choose among a broad range of eligible activities, using HOME funds to provide home purchase or rehabilitation financing assistance to eligible homeowners and new homebuyers; build or rehabilitate housing for rent or ownership; or for "other reasonable and necessary expenses related to the development of non-luxury housing," including site acquisition or improvement, demolition of dilapidated housing to make way for HOME-assisted development, and

payment of relocation expenses. PJs may use HOME funds to provide tenant-based rental assistance contracts of up to 2 years if such activity is consistent with their Consolidated Plan and justified under local market conditions. This assistance may be renewed. Up to 10 percent of the PJ's annual allocation may be used for program planning and administration.

HOME-assisted rental housing must comply with certain rent limitations. HOME rent limits are published each year by HUD. The program also establishes maximum per unit subsidy limits and maximum purchase-price limits.

Some special conditions apply to the use of HOME funds. PJs must match every dollar of HOME funds used (except for administrative costs) with 25 cents from nonfederal sources, which may include donated materials or labor, the value of donated property, proceeds from bond financing, and other resources. The match requirement may be reduced if the PJ is distressed or has suffered a Presidentially declared disaster. In addition, PJs must reserve at least 15 percent of their allocations to fund housing to be owned, developed, or sponsored by experienced,

community-driven nonprofit groups designated as Community Housing Development Organizations (CHDOs). PJs must ensure that HOME-funded housing units remain affordable in the long term (20 years for new construction of rental housing; 5-15 years for construction of homeownership housing and housing rehabilitation, depending on the amount of HOME subsidy). PJs have two years to commit funds (including reserving funds for CHDOs) and five years to spend funds.

Application

Program funds are allocated to units of general local government on the basis of a formula that considers the relative inadequacy of each jurisdiction's housing supply, its incidence of poverty, its fiscal distress, and other factors. Shortly after HOME funds become available each year, HUD informs eligible jurisdictions of the amounts earmarked for them. Participating jurisdictions must have a current and approved Consolidated Plan, which will include an action plan that describes how the jurisdiction will use its HOME funds. A newly eligible jurisdiction also must formally notify HUD of its intent to participate in the program.

What is the Community Development Block Grant Program (CDBG)?

The Community Development Block Grant (CDBG) program is a flexible program that provides communities with resources to address a wide range of unique community development needs. Beginning in 1974, the CDBG program is one of the longest continuously run programs at HUD. The CDBG program provides annual grants on a formula basis to 1209 general units of local government and states.

About the Program

The CDBG program works to ensure decent affordable housing, to provide services to the most vulnerable in our communities, and to create jobs through the expansion and retention of businesses. CDBG is an important tool for helping local governments tackle serious challenges facing their communities. The CDBG program has made a difference in the lives of millions of people and their communities across the Nation.

The annual CDBG appropriation is allocated between States and local jurisdictions called "non-entitlement" and "entitlement" communities respectively. Entitlement communities are comprised of central cities of Metropolitan Statistical Areas (MSAs); metropolitan cities with populations of at least 50,000; and qualified urban counties with a population of 200,000 or more (excluding the populations of entitlement cities). States distribute CDBG funds to non-entitlement localities not qualified as entitlement communities.

HUD determines the amount of each grant by using a formula comprised of several measures of community need, including the extent of poverty, population, housing overcrowding, age of housing, and population growth lag in relationship to other metropolitan areas.

Citizen Participation

A grantee must develop and follow a detailed plan that provides for and encourages citizen participation. This integral process emphasizes participation by persons of low or moderate income, particularly residents of predominantly low- and moderate-income neighborhoods, slum or blighted areas, and areas in which the grantee proposes to use CDBG funds. The plan must provide citizens with the following: reasonable and timely access to local meetings; an opportunity to review proposed activities and program performance; provide for timely written answers to written complaints and grievances; and identify how the needs of non-English speaking residents will be met in the case of public hearings where a

significant number of non-English speaking residents can be reasonably expected to participate.

Eligible Activities

Over a 1, 2, or 3-year period, as selected by the grantee, not less than 70 percent of CDBG funds must be used for activities that benefit low- and moderate-income persons. In addition, each activity must meet one of the following national objectives for the program: benefit low- and moderate-income persons, prevention or elimination of slums or blight, or address community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community for which other funding is not available.

Program Areas

Entitlement Communities

The CDBG entitlement program allocates annual grants to larger cities and urban counties to develop

viable communities by providing decent housing, a suitable living environment, and opportunities to expand economic opportunities, principally for low- and moderate-income persons.

State Administered CDBG

Also known as the Small Cities CDBG program, States award grants to smaller units of general local government that carry out community development activities. Annually, each State develops funding priorities and criteria for selecting projects.

108 Loan Guarantee Program

CDBG entitlement communities are eligible to apply for assistance through the section 108 loan guarantee program. CDBG non-entitlement communities may also apply, provided their State agrees to pledge the CDBG funds necessary to secure the loan. Applicants may receive a loan guarantee directly or designate another public entity, such as an industrial development authority, to carry out their Section 108 assisted project.

HUD Administered Small Cities

The HUD Honolulu Office directly administers the CDBG program for non-entitlement communities in the State of Hawaii.

Insular Areas

The Insular Areas CDBG program provides grants to four designated insular areas: American Samoa; Guam; Northern Mariana Islands; and the Virgin Islands.

Disaster Recovery Assistance

HUD provides flexible grants to help cities, counties, and States recover from Presidentially declared

disasters, especially in low-income areas, subject to availability of supplemental appropriations.

Neighborhood Stabilization Program

HUD provides grants to communities hardest hit by foreclosures and delinquencies to purchase, rehabilitate or redevelop homes and stabilize neighborhoods.

Colonias

Texas, Arizona, California, and New Mexico set aside up to 10 percent of their State CDBG funds for improving living conditions for colonias residents.

Renewal Communities/ Empowerment Zones/ Enterprise Communities (RC/EZ/EC)

This is a program that uses an innovative approach to revitalization, bringing communities together through public and private partnerships to attract the investment necessary for sustainable economic and community development.

Brownfields Economic Development Initiative (BEDI)

BEDI is a competitive grant program used to spur the return of brownfields to productive economic reuse. BEDI grants must be used in conjunction with a new Section 108 guaranteed loan. Both Section 108 loan proceeds and BEDI grant funds are initially made available by HUD to public entities approved for assistance.

What is **New York State Division of Coastal Resources (NYSDOS)?**

The **Division of Coastal Resources** works in partnership with community groups, non-profit organizations, state and federal agencies, and local governments to make communities better places to live, work and visit.

The Division of Coastal Resources is involved in a wide variety of programs and initiatives that help revitalize, promote and protect New York's communities and waterfronts. Over the past 20 years, the Division has worked with hundreds of local governments and communities to prepare Local Waterfront Revitalization Programs that define a local vision for the waterfront, and has provided technical and financial assistance to hundreds more communities for plans and projects that have expanded public access, reinvigorated urban waterfronts, restored habitats, and strengthened local economies.

The Division is continuing to expand collaborative relationships through numerous statewide and regional initiatives to assure that the quality of life for New

Yorkers continues to flourish, both within and beyond the coastal area. Prominent among these initiatives are: Quality Communities Community Center Revitalization Committee, an interagency work group created to show communities how they can enhance their downtowns and community centers; Heritage Areas Advisory Commission; New York State Scenic Byways Advisory Board; New York State Soil and Water Conservation Committee; Canal Recreationway Commission; Hudson River Valley Greenway; and New York State Bird Conservation Area Program Advisory Committee, to name a few.

About NYSDOS Activities

The Division of Coastal Resources employs both traditional and innovative techniques to advance communities' use and enjoyment of their waterfronts and waterways. The Division works with partners in the public, business and non-profit sectors to foster appropriate use of these important resources. We provide timely technical and

financial assistance to New York's communities, to help them respond to their Implementing the State's Waterfront Revitalization of Coastal Areas and Inland Waterways Act - how the Division goes about this is outlined in the State's implementing regulations. The State's Waterfront Revitalization of Coastal Areas and Inland Waterways Act includes the State's traditional coastal areas, such as Long Island, New York City, the Hudson River Estuary, and the Great Lakes, as well as "Designated Inland Waterways".

changing waterfronts. The Division is involved in a wealth of activities. Designated Inland Waterways are major lakes, rivers and streams designated by the State Legislature as significant because of value as natural, scenic, recreational, historic, and/or economic resources. Any municipality (town, village, city or county) adjacent to a Designated Inland Waterway is eligible for funding from the Department of State for a broad range of projects through the Environmental Protection Fund Local Waterfront Revitalization Program.

- **Developing Local Waterfront Revitalization Programs and Harbor Management Plans with over 200 municipalities**
- **Planning and technical assistance for redevelopment of brownfields, abandoned buildings and deteriorated urban waterfronts**
- **Revitalizing community centers**
- **Regional planning for the Long Island Sound shore and the South Shore Estuary Reserve**
- **Protecting water quality through intermunicipal watershed planning**
- **Developing and applying remote sensing and Geographic Information Systems technology**
- **Interpreting coastal resources and promoting tourism**
- **Planning for the prevention and mitigation of coastal hazards**
- **Protecting and restoring coastal habitats**
- **Planning for the preservation of historic resources, maritime heritage, and scenic resources**
- **Implementing New York's coastal policies through consistency review**
- **Investing in improvements to waterfront areas through state and federal grant programs**

What is RAFT?

Renewing America's Food Traditions (RAFT)

There is an urgent need to maintain the incredible food diversity of North America because of the important ecological, culinary, cultural, and health benefits of biodiversity.

Have you ever eaten a meal rich with juices, flavors, and fragrances that have taken centuries to develop? A delicate, dark red strawberry that was the backbone of the U.S. berry industry, an oily fish that built trade routes in the Northwest, a hot pepper that tells the story of Minorcan immigration to Florida—these are the stories of North American traditions that lie hidden within our foods. Yet many of these foods have been rapidly disappearing from our tables.

With these losses come a decline in traditional ecological and culinary knowledge, and declines in the food rituals that link communities to place and cultural heritage. If these culinary delights persist only in our history books, we will have lost an important cultural legacy and future generations will be deprived of the nutrition

and exquisite flavors found in these heritage foods.

Ecological Benefits

Plant and animal diversity sustains healthy ecological relationships and sustainable agricultural practices. This diversity also encourages resistance to pests and diseases, ensuring our food security.

Culinary Benefits

Inherent in a diversity of foods is a variety of aromas, textures, and flavors that increase pleasure and help us along in our pursuit of happiness.

Cultural Benefits

Our daily meals come from the strong hands and creative minds of individuals in food-producing communities. Traditional agricultural and culinary knowledge is passed from one practitioner to the next. This knowledge about how to harvest and

cook the plants and animals around us is key to our survival as a species and worth documenting and celebrating.

Health Benefits

Getting nutrients from whole foods that are adapted to the regions in which we live and work helps our resistance to disease, particularly diabetes and heart disease

What are Complete Streets?

Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from train stations.

Creating complete streets means transportation agencies must change their approach to community roads. By adopting a Complete Streets policy, communities direct their transportation planners and engineers to routinely design and operate the entire right of way to enable safe access for all users, regardless of age, ability, or mode of transportation. This means that every transportation project will make the street network better and safer for drivers, transit users, pedestrians, and bicyclists – making your town a better place to live. The National Complete Streets Coalition has

identified the elements of an ideal Complete Streets policy to help you write one for your town.

What does a “complete street” look like?

There is no singular design prescription for Complete Streets; each one is unique and responds to its community context. A complete street may include: sidewalks, bike lanes (or wide paved shoulders), special bus lanes, comfortable and accessible public transportation stops, frequent and safe crossing opportunities, median islands, accessible pedestrian signals, curb extensions, narrower travel lanes, roundabouts, and more.

A complete street in a rural area will look quite different from a complete street in a highly urban area, but both are designed to balance safety and convenience for everyone using the road. Check out our ‘Many Types of Complete Streets’ slideshow to see examples from across the country.

Why do we need Complete Streets policies?

Incomplete streets – those designed with only cars in mind – limit transportation choices by making walking, bicycling, and taking public transportation inconvenient, unattractive, and, too often, dangerous. Changing policy so that our transportation system routinely includes the needs of people on foot, public transportation, and bicycles means that walking, riding bikes, and riding buses and trains will be safer and easier. People of all ages and abilities will have more options when traveling to work, to school, to the grocery store, and to visit family.

Making these travel choices more convenient, attractive, and safe means people do not need to rely solely on automobiles. They can replace congestion-clogged trips in their cars with swift bus rides or heart-healthy bicycle trips. Complete Streets improves the efficiency and capacity of existing roads too, by moving people in the same amount of space. Just think of all the people who can fit on a bus or streetcar versus the same amount of people each driving their own car. Getting more productivity out of the existing road and public transportation systems is vital to reducing congestion.

Complete Streets are particularly prudent when more communities are tightening their budgets and looking to ensure long-term

benefits from investments. An existing transportation budget can incorporate Complete Streets projects with little to no additional funding, accomplished through re-prioritizing projects and allocating funds to projects that improve overall mobility. Many of the ways to create more complete roadways are low cost, fast to implement, and high impact. Building more sidewalks and striping bike lanes has been shown to create more jobs than traditional car-focused transportation projects.

What are some of the benefits of Complete Streets?

Complete streets can offer many benefits in all communities, regardless of size or location. The National Complete Streets Coalition has developed a number of fact sheets, which are available through our website.

Complete Streets improve safety. A Federal Highways Administration safety review found that streets designed with sidewalks, raised medians, better bus stop placement, traffic-calming measures, and treatments for disabled travelers improve pedestrian safety. Some features, such as medians, improve safety for all users: they enable pedestrians to cross busy roads in two stages, reduce left-turning motorist crashes to zero, and improve bicycle safety.

Complete Streets encourage walking and bicycling for health. The Centers for

Disease Control and Prevention recently named adoption of Complete Streets policies as a recommended strategy to prevent obesity. One study found that 43% of people with safe places to walk within 10 minutes of home met recommended activity levels; among individuals without safe place to walk, just 27% were active enough. Easy access to transit can also contribute to healthy physical activity: nearly one third of transit users meet the Surgeon General's recommendations for minimum daily exercise through their daily travels.

Complete Streets can lower transportation costs for families. Americans spent an average of 18 cents of every dollar on transportation, with the poorest fifth of families spending more than double that figure. In fact, most families spend far more on transportation than on food. When residents have the opportunity to walk, bike,

or take transit, they have more control over their expenses by replacing car trips with these inexpensive options. Taking public transportation, for example, saves individuals \$9,581 each year.

Complete Streets foster strong communities. Complete Streets play an important role in livable communities, where all people – regardless of age, ability or mode of transportation – feel safe and welcome on the roadways. A safe walking and bicycling environment is an essential part of improving public transportation and creating friendly, walkable communities. A recent study found that people who live in walkable communities are more likely to be socially engaged and trusting than residents of less walkable neighborhoods. Additionally, they reported being in better health and happier more often.

What is Crime Prevention through Environmental Design (CPTED)?

Crime prevention through environmental design, or CPTED, is a multi-disciplinary approach to reducing crime and increasing perceived safety. CPTED relies upon the influence of offender behavior. It seeks to dissuade offenders from committing crimes by manipulating the physical environment in which those crimes occur. As a result, it relies upon an understanding of what about the environment influences offenders.

CPTED is most effective when involving environmental designers (e.g., Architects, landscape architects), land managers (e.g., Park managers), community action (e.g., Neighborhood watch groups), and law enforcement. If any of the four defender groups are removed it is likely that a CPTED strategy will be less effective than it might otherwise be.

Does CPTED Really Prevent Crime?

In hindsight, C. Ray Jeffery may sometimes wish he had opted to title his 1971 book "Crime deterrence through environmental

design". It is clear from almost three decades of research that offenders cannot with absolute certainty be prevented from committing crimes. This is especially true when one considers that CPTED relies upon changes to the environment that will cause an offender to make certain behavioral decisions. Those changes are crafted so as to encourage offenders, and thus they deter rather than conclusively "prevent" behavior.

Understanding the deterrence potential of CPTED can be related to the layers of a sandwich. The more layers of tasty ingredients that go into a sandwich, the more flavorful the end result. With CPTED, the more diverse layers of deterrence strategies that are employed the more likely that an offender will be persuaded to change his or her plans.

Isn't CPTED Another Form of Target Hardening?

While CPTED can include so-called target hardening, it is more than just that. Target hardening is best applied to a target that an

offender attempts to enter (e.g., a building). It is less useful in open spaces such as parks where entry points are myriad. Target hardening is also an "overt" tactic. It does not place much emphasis on affecting offenders subtly or subconsciously. For example, an alarm system is often announced through stickers on windows or other common entry points. This explains to the offender that 1) a step has been taken to prevent the crime, 2) what that step was, and 3) potentially the degree of difficulty that defeating the step will entail (i.e., the quality of the alarm's manufacturer).

Is CPTED Only for Police?

No. In fact, one might argue that CPTED is not meant for police to so much as it is for environmental designers. The fact that police have knowledge of offenders and are relied upon to fight crime, coupled with the dearth of designers who understand or

practice CPTED, has meant that law enforcement is usually the main (if not the only) group utilizing the approach.

Who Uses CPTED?

CPTED is used by a variety of groups. Mostly they fall into one of four categories: environmental designers (e.g., architects, landscape architects), land managers (e.g., park managers), community action groups (e.g., neighborhood watch groups), and law enforcement groups (e.g., park rangers, metropolitan police). However each group is not equally equipped to apply CPTED. Instead, each has a unique knowledge base that makes it an important information source for creating effective CPTED strategies. Combined these groups can develop holistic plans that influence offender behavior yet do not neglect other considerations such as preservation of historic landscapes.

What are Dark Sky Lighting Principles?

Dark Sky Lighting Principles are quite straightforward; light when you need it, where you need it, and no more. Anything more than this is wrong for myriad reasons. Light pollution is the popular name for sky glow - a brightening of the night sky caused by artificial light being scattered by small particles in the air such as water droplets and dust.

What is light pollution and why is it important?

It is the pale-yellow foggy quality in our skies that often blocks the view of stars and other celestial bodies. Light pollution affects us everyday in ways that we have become accustomed to. It is not limited just to big cities, from outer space it is common to see millions of webs of light streaming across the continents, even areas not lit! It is a concern beyond astronomers and dark sky enthusiasts. You experience light pollution when you can't sleep at night because of your neighbor's outdoor porch light, when a driver's headlights are too intense for your dark adjusted eyes and the glare becomes

blinding, and when all of the wild life from your rural area have vanished without a trace. You even experience light pollution when your children ask you where the big dipper is and you cannot locate it.

All that light up in the sky is wasted unnecessary energy. A light should be regulated to its specific task. It is often forgotten that light refracts and that it comes in different wavelengths and intensities. Although you may only see one beam, light is actually refracted from nearly any solid object that comes into contact with it. An over-lit shopping center can easily direct that familiar yellow haze to places it was never intentioned to light.

The Dark-Sky Movement is a campaign by people who want to reduce light pollution so people can see the stars, to reduce the effects of unnatural lighting on the environment, and to cut down on energy usage.

The movement started with professional and amateur astronomers alarmed that

nocturnal skyglow from urban areas was blotting out the sight of stars. For example, the Griffith Observatory in Los Angeles is useless for astronomy, because of daytime smog and nighttime light pollution, while world-famous Palomar Observatory is threatened.

The movement has since spread with groups like the International Dark-Sky Association, as other concerns have been raised. For example, nocturnal animals can be harmed by light pollution.

The dark-sky movement works to encourage the use of full-cutoff fixtures that cast little or no light upward in public areas and generally to encourage communities to adopt lighting regulations.

Energy Waste and Pollution

Today, we recognize that our energy resources are limited and pollution is an increasing problem. Inefficient outdoor lighting contributes to excessive consumption of fossil and nuclear fuels. This increased consumption causes a corresponding increase in air, water and soil pollution due to processes such as mining,

drilling, refining, accidents during transport, combustion (fossil fuels) and waste disposal.

Reduced Visibility

Facilities that are too brightly lit (over lighting) may prevent passing motorists from seeing vehicles or pedestrians exiting the facility. Glare from poorly shielded or misaimed fixtures also contributes to this problem. In addition, motorists exiting the facility suffer a temporary reduction in visual acuity.

Light Trespass

Light spills into areas where it is not needed or wanted, creating neighbor relation problems.

Higher Utility Bills

Inefficient outdoor lighting uses excessive energy to achieve the desired level of illumination; and often, illumination levels are higher than needed.

What is a Sustainable Highways Program?

The Federal Highway Administration (FHWA) views sustainable highways as an integral part of sustainable development. A sustainable highway should satisfy life cycle functional requirements of societal development and economic growth while striving to enhance the natural environment and reduce consumption of natural resources. The sustainability characteristics of a highway or roadway project should be assessed and considered for implementation throughout its lifecycle, from conception through construction, operations, and maintenance.

Sustainability in Highways should be addressed with the understanding that highways are one part of transportation infrastructure, and transportation is one aspect of meeting human needs. In addition to addressing environmental and natural resource needs, the development of a sustainable highway should focus on access (not just mobility), moving people and goods (not just vehicles), and providing people with transportation choices, such as

safe and comfortable routes for walking, cycling, and transit.

Sustainable transportation may be described or defined in many ways that broadly address environmental, social and economic impacts, safety, affordability, and accessibility of transportation services. Transportation agencies address sustainability through a wide range of initiatives, such as ITS, livability, smart growth, recycling, planning and environment linkages, and addressing requirements of the National Environmental Policy Act (NEPA).

Transportation planning processes that incorporate these values and integrate the **elements of sustainability** should be the foundation from which to implement sustainability decisions as a project moves forward. Measures of project success include a wide range of indicators, such as travel performance, gains achieved through material selection, and construction methods.

Highway and road projects are built and operated for many different reasons and are designed to accomplish many different goals. Sustainability can be thought of as encompassing the multiple goals of effective transportation projects. Safety, mobility, environmental protection, livable communities, asset management and many other objectives all have a place in sustainability. It is an important lens through which to view a transportation project, and enables transportation agencies and project sponsors to make decisions that benefit the future as well as the present.

Transportation Demand

Management is a criteria considered under the Sustainable Highways Program. The original concepts of travel demand management (TDM) took root in the 1970s and 1980s from legitimate desires to provide alternatives to single occupancy commuter travel to save energy, improve air quality, and reduce peak period congestion. Today, managing travel demand has broadened to encompass the desire to optimize transportation system performance for commute and non-commute trips and for recurring as well as non-recurring events.

The availability of information about transportation services and conditions has been shown to influence travel demand. Information affects demand by influencing

the choices that people make about how, when, where, whether, and which way they travel to their destinations. In the 21st century, the need to deliver information to help manage transportation demand will grow and be supported by Intelligent Transportation Systems (ITS).

Today, the concept of TDM takes on a broader set of transportation goals due to greater need to manage demand in multiple situations and conditions as well as the influence of information and the technologies to deliver it. A more contemporary model of TDM is emerging. Managing demand can no longer stop at encouraging travelers to change their travel mode from driving alone. Real-time information systems can now let travelers make better decisions about how they travel (mode), when they travel (time), where and whether they travel (location), and which route they travel (path).

Multimodal Network planning is an aspect of the Sustainable Highways Program. A multimodal transportation system allows people to choose to walk, bicycle, use transit, or drive according to the type of trip they wish to make. Short trips can be made by foot or bicycle, while transit and driving options exist for longer trips or those involving heavy loads. Such a system helps promote choice, ensures equitable access to transportation, and reduces

societal reliance on a single mode of transportation. Creating such a multimodal system challenges planners and decision makers to create innovative solutions to current transportation problems. These strategies, such as telecommuting and ridesharing, can go beyond traditional infrastructure investments.

A multimodal system must also be intermodal.

Intermodalism integrates all forms of transportation, such as highways, public transit systems, sidewalks, and bicycle facilities, into one seamless system. In an intermodal system, two or more distinct modes of travel are coordinated so that people can reach their

destinations by transferring quickly and easily from one mode to the next. For example, for a public transit system to be a viable transportation alternative, it must provide frequent connections to an extensive network of accessible sidewalks and shared-use paths.

The trend toward more integrated, multimodal transportation systems has improved transportation options for people with disabilities, especially those who do not drive automobiles. The additional requirement that all new construction must comply with the ADA to the fullest extent possible has brought about an overall increase in the number of accessible pedestrian and public transit facilities.

What is Leadership in Energy and Environmental Design (LEED)?

Leadership in Energy and Environmental Design (LEED) is a widely used green building certification system which was developed by the U.S. Green Building Council (USGBC). LEED provides building owners and operators with a framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions. LEED utilizes a rating system which relates environmental and health performance of buildings to a specific rating.

Construction in accordance with LEED goals will ultimately assure that a new building provides high performance related to: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality.

The LEED system is applicable to both commercial and residential buildings throughout the entire building lifecycle: design, construction, operations and maintenance, and redevelopment.

LEED promotes a whole-building approach to sustainability by recognizing performance in key areas:

Sustainable Sites: Site selection and development are important components of a building's sustainability. The Sustainable Sites category discourages development on previously undeveloped land; seeks to minimize a building's impact on ecosystems and waterways; encourages regionally appropriate landscaping; rewards smart transportation choices; controls stormwater runoff; and promotes reduction of erosion, light pollution, heat island effect and construction-related pollution.

Water Efficiency: Buildings are major users of our potable water supply. The goal of the Water Efficiency category is to encourage smarter use of water, inside and out. Water reduction is typically achieved through more efficient appliances, fixtures and fittings inside and water-conscious landscaping outside.

Energy & Atmosphere: According to the U.S. Department of Energy, buildings use 39% of the energy and 74% of the electricity produced each year in the United States. The Energy & Atmosphere category encourages a wide variety of energy-wise strategies: commissioning; energy use monitoring; efficient design and construction; efficient appliances, systems and lighting; the use of renewable and clean sources of energy, generated on-site or off-site; and other innovative measures.

Materials & Resources: During both the construction and operations phases, buildings generate a lot of waste and use large quantities of materials and resources. The Materials & Resources category encourages the selection of sustainably grown, harvested, produced and transported products and materials. It promotes waste reduction as well as reuse and recycling, and it particularly rewards the reduction of waste at a product's source.

Indoor Environmental Quality: The U.S. Environmental Protection Agency estimates that Americans spend about 90% of their day indoors, where the air quality can be significantly worse than outside. The Indoor Environmental Quality category

promotes strategies that improve indoor air as well as those that provide access to natural daylight and views and improve acoustics.

Locations & Linkages: The LEED for Homes rating system recognizes that much of a home's impact on the environment comes from where it is located and how it fits into its community. The Locations & Linkages category encourages building on previously developed or infill sites and away from environmentally sensitive areas. Credits reward homes that are built near already-existing infrastructure, community resources and transit – in locations that promote access to open space for walking, physical activity and time outdoors.

Awareness & Education: The LEED for Homes rating system acknowledges that a home is only truly green if the people who live in it use its green features to maximum effect. The Awareness & Education category encourages home builders and real estate professionals to provide homeowners, tenants and building managers with the education and tools they need to understand what makes their home green and how to make the most of those features.

Innovation in Design: The Innovation in Design category provides bonus points for projects that use innovative technologies and strategies to improve a building's performance well beyond what is required by other LEED credits, or to account for green building considerations that are not specifically addressed elsewhere in LEED. This category also rewards projects for including a LEED Accredited Professional on the team to ensure a holistic, integrated approach to the design and construction process.

Regional Priority: USGBC's regional councils, chapters and affiliates have identified the most important local environmental concerns, and six LEED credits addressing these local priorities have been selected for each region of the country. A project that earns a regional priority credit will earn one bonus point in addition to any points awarded for that credit. Up to four extra points can be earned in this way."

In general, a LEED-certified building will provide the following advantages:

- Lower operating costs
- A reduction in waste sent to landfills
- Conservation of energy and water
- Provide a healthier and safer building for occupants
- A reduction in harmful greenhouse gas emissions

Additionally, the new building may qualify for tax rebates, zoning allowances and other incentives not available to a non-LEED building.

What is **BROWNFIELD** **OPPORTUNITY AREA (BOA)** **PROGRAM?**

The **Brownfield Opportunity Areas Program**, sponsored by the New York State Department of State (NYS DOS), provides municipalities and community based organizations with assistance to complete revitalization plans and implementation strategies for areas affected by brownfield sites. The Brownfield Opportunity Areas Program enables communities to put strategies in place to return dormant sites and areas back to productive use and simultaneously restore environmental quality. The Brownfield Opportunity Areas Program enables local governments and community based organization to:

- address a range of problems posed by multiple brownfield sites.
- build consensus on the future uses of strategic or priority brownfield sites.
- establish the multi-agency and private-sector partnerships necessary to leverage

assistance and investments to revitalize neighborhoods and communities the Brownfield Opportunity Areas Program is the result of the Governor's signing of the Superfund/Brownfield Law in October 2003.

Program Purpose

The program's purpose is to establish a community based revitalization plan and implementation strategy to achieve brownfield redevelopment in a proactive and systematic way.

- By participating in the program, communities will develop locally driven revitalization plans and implementation strategies to improve neighborhoods or portions of communities that have been affected by multiple brownfield sites.
- The types of areas this program may be applied to may include but are not limited to: residential, commercial, industrial and manufacturing areas or corridors, waterfronts, or downtowns.

- The program's aim is to address problems caused by the presence of multiple brownfield sites rather than deal with a singular brownfield site in isolation.

Funding Preferences

The Law directs the program's funding to areas having one or more of the following characteristics:

- Established partnerships or expressed support between municipalities and community based organizations to pursue an area-wide plan.
- Areas with concentrations of brownfield sites.
- Areas with indicators of economic distress including low resident incomes, high unemployment, high commercial vacancy rates and depressed property values.
- Areas with brownfield sites presenting strategic opportunities to stimulate economic development, community revitalization or to site new public amenities.

Program Steps

Communities may apply to enter the program at the most appropriate of the three program steps described below leading to New York State's designation of the Brownfield Opportunity Area.

Step 1: Pre-Nomination Study

– The Pre-Nomination Study provides a basic and preliminary analysis of the area affected by Brownfield sites including: a description and justification of the study area and associated boundaries; a basic description and understanding of current land use and zoning; the inventory and description of existing Brownfield sites and other underutilized properties; and a description of the area's potential for revitalization.

Step 2: Nomination

– The Nomination provides an in-depth and thorough description and analysis, including an economic and market trends analysis, of existing conditions, opportunities, and reuse potential for properties located in the proposed Brownfield Opportunity Area with an emphasis on the identification and reuse potential of strategic sites that are catalysts for revitalization. The Nomination concludes with a description of key findings and recommendations to advance redevelopment of strategic sites and to revitalize the area.

Step 3: Implementation

Strategy – The Implementation Strategy provides a description of the full range of techniques and actions, ranging from actions and projects that can be undertaken immediately to those which have a longer

time-frame, that are necessary to implement the area-wide plan and to ensure that proposed uses and improvements materialize. Site assessments on strategic Brownfield sites may be eligible for funding if environmental data is required.

PROGRAM BENEFITS

Benefits to communities include:

Establishes a Community Vision and Strategy for Revitalization - A community based revitalization plan and implementation strategy is established to spur investment in distressed areas by establishing clear priorities for redevelopment and other actions for community renewal and improved quality of life. The plan provides a proactive and systematic way to address brownfields and to return them to productive use.

Provides a Remediation Strategy for Catalyst Sites - By conducting site assessments, to determine the nature and extent of contamination, on strategic brownfield sites expected to catalyze redevelopment, communities can better understand options and costs for remediation and redevelopment.

Provides Site Inventory - an accurate and clear inventory and description

of brownfield sites and other underutilized properties to serve as a basis for identifying strategic redevelopment opportunities.

Defines Future Uses and Businesses - New uses and businesses that are desired by the community for strategic brownfield sites will be clearly defined, a key for the successful redevelopment of brownfields.

Increases Predictability - For those who are looking to invest in the area, the program provides increased predictability in terms of community acceptance by giving developers a clear indication of uses and businesses that the community wants, and does not want, as expressed in the plan.

Fulfills Community Development Needs - Communities will be able to work more effectively with developers to transform brownfields from liabilities to assets by establishing new uses and businesses that are clearly desired by the community and will contribute to the community in a beneficial way, generating jobs and revenues.

Improves Environmental Quality - Environmental quality improves by cleaning up contaminated properties, removing eyesores, and implementation of

other environmental and public improvement projects identified in the community driven revitalization plan.

Fosters Partnerships With State Agencies - The program is designed to establish a working partnership between communities and state agencies to address a variety of issues related to community planning and zoning, brownfield clean-up and redevelopment, economic renewal, improving transportation systems and infrastructure, and improving environmental quality.

BOA DESIGNATION

With a community supported BOA plan in place, communities will increase their competitiveness to leverage funds from a variety of sources to make brownfields ripe for private investment and for projects to implement their plan. Designated areas shall receive priority and preference from DEC's Environmental Restoration and Environmental Protection Fund Programs. Designated areas may also receive priority and preference when considered for other state and federal programs.