3.1 INTRODUCTION

What is Sustainability?

The word “sustainability” has become synonymous with “green” or energy conservation, but a community’s sustainability is much more. Two common definitions of sustainability are:

1. Conservation/optimization of resources: The use of resources to meet the present needs without compromising the ability of future generations to meet their needs.

2. Comprehensive system success: Actions or strategies that provide the maximum collective benefit to environmental, social, and economic systems.

A sustainable community has a housing stock where individuals and families want to live year after year with pedestrian and vehicular mobility to the surrounding thriving businesses. These factors contribute to the quality and resources of the community’s schools. These systems are interconnected, which is why it is so important to address sustainability in this plan. Indicators that Valparaiso is working towards sustainability include:

- Housing that maintains its value;
- Local employment opportunities and a local workforce qualified to fill them;
- Schools and other services that attract residents; and
- A “self-supportive” fiscal structure in which revenues consistently and predictably cover the costs of service provisions.

The liveliness of downtown Valparaiso for the past century is an example of a sustainable area. The area “sustains” or operates on its own, supporting the upkeep of the surrounding neighborhoods and overall quality of life. Reliance on recurring reinvestment and attention from the city to survive is not sustainable, as seen at the large shopping centers on the Calumet Corridor that are in need of redevelopment less than 30 years after construction.
Sustainability can include a vast array of practices. In fact, the known impacts of any decision or action can be measured against sustainable goals based on the environmental, social, and economic benefits.

Sustainability and the Comprehensive Plan

A sound plan inherently promotes sustainability. It provides the following benefits to the City:
2. Objectives aimed at realizing the benefits of future decisions.
3. A structure of policies, programs, and projects for the community to act upon and implement.

While Envision Valparaiso incorporates sustainable principles throughout, this chapter identifies key issues for the City to consider, objectives for achieving long-range goals, and an action plan for implementation.

Partners for a Sustainable Valparaiso

Sustainability is a local and regional, as well as a global objective. As shown in Figure 3.1, Partners in Sustainability, involvement of all parties is needed to ensure Valparaiso is a sustainable community. A sustainable community is shaped by:

- Government policies;
- Codes & ordinances;
- Business development and employment practices;
- Involvement of community institutions and service providers; and
- Personal and community behavior patterns.

The City and its surrounding region have already taken actions that reflect sustainable thinking, including developing the following:

- Policy and regulations integrated into the Unified Development Ordinance (UDO) that contribute to the City’s future viability.
- Environmental programs like the 49 percent landfill diversion, co-mingled recycling program, plastic bag recycling, LED traffic signals, tree inventory/replacement program, bio-diesel and the water conservation task force.
- Valparaiso University campus LEED-certified buildings.
- Salt Creek Conservancy.

“Housing Opportunities” organization, which operates the Affordable Housing Program and Housing for the Homeless and partners with Indiana Association for Community Economic Development.

3.2 KEY ISSUES

This section describes the current state of the City with regard to sustainability and its guiding principles. Each question focuses on a general topic that is essential for creating a sustainable community. As described below, Valparaiso is already doing a lot to become a healthy city. However, there are several areas where either greater effort must be focused or where enhanced coordination can create positive impacts that are greater than each individual component.

1. **Energy: What should the City do to foster low cost, reliable energy production?**

The City receives its power from the Northern Indiana Public Service Company (NIPSCO). Service is fairly steady; however, as with much of the area in this part of the country, electrical service can become unreliable during snow and ice storms. High winds may also periodically interrupt service.

To date, the City has facilitated renewable energy at the individual level by allowing solar panels and turbines on residential and nonresidential lots as accessory uses. Wind farms are permitted in the heavy industrial district.

Valparaiso’s economic health is intrinsically impacted by energy costs. As many areas of the country are seeking alternatives to nonrenewable sources, the City could consider supporting and facilitating a community and regional wind industry.

2. **Local Food: What should the City do to promote area food production, sales, and consumption?**

At this time, Valparaiso does not play an active role in facilitating grass roots businesses that grow and sell food, but it also has not created any impediments. However, it is questioned whether individual cultivation of produce on a residential lot would be permitted as the UDO is presently silent on this issue. The City could further study additional programs and/or policies to facilitate local food production.

3. **Environmental Conservation: What should the City do to safeguard our ecosystems, trees, soil, and water resources?**
The Valparaiso UDO contains several resource preservation provisions. Its performance-based residential development standards further enhance the protection results by allowing density bonuses in exchange for increased open space. It also incorporates “best management practices”, some of which relate to preservation of existing natural resources as an alternative to installation of mitigation structures. Other considerations include:

a) Allowing and incentivizing rainwater harvesting;
b) Incentivizing the installation of rain barrels; bioswales, and raingardens (both on new development and retrofit of existing development);
c) Facilitating the installation of cisterns;
d) Providing public education for proper installation and maintenance of such systems.

4. Development: How should the City guide and promote development so that buildings and neighborhoods incorporate sustainable features?

In addition to environmental conservation provisions (see No. 3, above), the Valparaiso UDO provides for:

a) Protection of neighborhoods through:
i. “Neighborhood Conservation” district that removes obstacles for improving residential properties; and
ii. Performance standards (operational and site development standards) for commercial properties near neighborhoods that remove the potential for negative impacts.

b) Housing choice through:
i. The “Traditional Neighborhood Development” concept that rewards innovative design by allowing a greater mix of housing products within a development by right and thereby reduces application processing time;
ii. The Mixed Use Development concept, which is similar to the “Traditional Development” concept but allows a greater mix of uses by right;
iii. Regulations that require a mix of housing types and variable lot sizes; and
iv. Allowing live-work townhomes in certain areas.

c) Creative development design through density bonus for increased open space that allows for more creative, sustainable developments.

d) Pollution prevention through requirements for structural “best management practices” to cleanse storm water runoff.

e) Adequate tree cover through protection of hardwood trees that are 10” or larger in diameter, with replacement requirements when a protected tree is removed.
Additional regulatory considerations that are pro-sustainability include:

a) Shared parking;
b) Required bicycle parking – parking incentives for high-quality facilities for employees;
c) Incentives for bicycle facilities, lockers, and showers;
d) Pedestrian connectivity;
e) Street connectivity;
f) Street design for “Traditional Neighborhood” developments;
g) LEED and similar considerations and incentives;
h) Buffering between districts – minimizing impacts;
i) Control of infill development to avoid homes that are much larger or smaller than their neighboring homes;
j) Cottage development option/co-housing;
k) Outdoor lighting provisions;
l) Specimen tree preservation for all trees;
m) Parking maximums;
n) Limitations on front yard parking;
o) Allowance of pervious pavement/pavers; and,
p) “Complete Streets” requirements.

5. Atmosphere: What should the City do to reduce our contribution to global warming and minimize air pollution?

Similar to local food production, the City does not have specific programs or policies that are intended to address this issue, but it also does not stand in the way of individual efforts. Future considerations should include the following City initiatives:

a) Replacing staff fleet vehicles with more efficient vehicles, such as hybrids or electric powered vehicles;
b) Creating incentives for Energy Star homes;
c) Continuing to pursue high-capacity commuter transport options to/from Chicago;
d) Adopting requirements for new public buildings to meet LEED certification; and
e) Reducing congestion and work travel times by providing flexible work hours and work-from-home capabilities.
6. **Managing Waste:** What should the City do to promote consumer product awareness, increase recycling rates, and reduce the amount of substances entering landfills?

The City of Valparaiso’s Public Works Department provides trash and curb-side recycling to single family homes that are on public streets. Other uses and those residences on private roads receive collection services offered by private companies.

An important aspect of managing waste is education. Citizens must be made aware of existing programs and investments in waste reduction and recycling. This will demonstrate the City’s commitment and perhaps catalyze individual involvement.

7. **Strong and Healthy Community:** How should the City continue to protect its citizens from disease, promote healthy living, civic engagement, cultural and ethnic diversity, while partnering with others to provide these activities?

The City provides extensive opportunities for indoor and outdoor recreation. It sponsors the annual Popcorn Festival and the County Fair. It hosts the Chicago Street Theater, and is home to the Memorial Opera House, Brauer Museum of Art, Old Jail Museum, and the Indiana Aviation Museum. The City has five golf courses, an extensive parks system with well-connected bike/pedestrian trails, and is close to Indiana Dunes and the Taltree Arboretum and Gardens.

In order to maximize the benefit of public amenities that enhance public health, two components must be considered. The first is education so that residents understand the benefits of these amenities and how they play a role in a healthy citizenry and community. Secondly, the community must be structured to allow citizens to easily take advantage of their amenities. For example, a teenager should not have to rely on a parent to drive them to a park for a sporting event. Instead, neighborhood blocks, proximity of services, and adequate neighborhood infrastructure must be in place to provide the opportunity for independent mobility that enhances individual health and reduces reliance on automotive use, thereby creating multiple benefits. This can be accomplished through the coordination of development regulations and public works standards that result in locally proximate services that are universally accessible.

8. **Balanced Transportation:** How should the City increase mobility choices by enhancing other forms of transportation besides that for automobiles? How can transportation infrastructure be designed efficiently, safely, with the environment in mind, and be connected to other local and regional networks?
The City brought its own bus service on-line four years ago – called the V-line. It provides service between Downtown, Valparaiso University, shopping centers, and the northern neighborhoods, as well as express service to the Indiana Dunes. The City also offers commuter service to Chicago on the ChicaGo Dash. It operates out of a former train depot in Central Place, on the west end of Lincolnway.

The location for the bus station was chosen in order to have a multi-modal connection between it planned commuter train service to Chicago. However, thus far studies have shown the commuter service to be infeasible due to a low projection of ridership.

Investment in a comprehensive bicycle and pedestrian network is vital to several items already discussed. This demonstrates the relevance of multi-mobility to the success of a truly sustainable urban environment. Future considerations should include:

   a) Continue working to improve bicycle/pedestrian connections;
   b) Continue to improve commuter bus service through ChicaGo Dash; and,
   c) Take advantage of future changes that will eventually make commuter rail more feasible than it is today.

9. **Sense of Place: What should the City do to improve its uniqueness within the region so that it becomes a place whose imagery is widely known?**

Visitors of Valparaiso can immediately distinguish it from “Anyplace, USA”:

   a) Its entrances from the north are through the pristine, wooded Valparaiso Moraine;
   b) One of its principle arteries, Lincolnway, takes visitors straight to its quaint Downtown;
   c) It has an unusually high percentage of neighborhood areas that are historically intact;
   d) Its newer neighborhoods have been creatively developed; and,
   e) Many of its shopping centers and nodes are well-designed.

The City has been augmenting these qualities through sound urban planning. Implementation efforts on the public side include the establishment of Tax Increment Financing Districts and the Façade Improvement Program. This work is accomplished through the Redevelopment Committee.

On the private development side, the City has adopted design standards for the Signature Corridor, Downtown, Eastgate, and the Campus Districts in its Unified Development Ordinance. Over time, as sites in these areas become developed or redeveloped, the regulations are intended to result in highly imageable places.
These efforts have gone a long way toward elevating the impression that the City makes on its visitors. However, there are still many residents that live in the area that do not know of its many qualities. Future considerations include:

a) Continue with efforts to secure grant funding to implement the recently adopted U.S. 30 Corridor Master Plan within the public right-of-way;
b) Develop a program to implement the site improvement concepts that are included in the U.S. 30 Corridor Master Plan;
c) Explore additional options to protect the entrance-ways into the City from the north;
d) Continue to work through the TIF districts to improve the visual quality of existing commercial developments;
e) Enforce all current development regulations that apply to special areas;
f) Study and implement stronger roadway connections between U.S. 30 and Lincolnway; and,
g) Develop a program to implement the Central Place concept (further detailed in Chapter 2, Land Use and Community Character) to create a place where people live, work, and play.

10. **Responsible Government:** *What should the City do to provide good government and cost-effective services, meet the needs of our citizens, protect the environment, and cooperate with other governments?*

The City has made obvious efforts in the past to have a proactive approach when it comes to urban planning. This could not have been possible without strong leadership on the part of decision makers, City staff, and grass-roots leadership. Citizens are highly involved and engaged in a myriad of initiatives. Officials at the City also have strong professional relationships with Porter County leaders and the mayoral offices of surrounding cities.

The Valparaiso Economic Development Corporation (VEDC) plays a strong role in providing a healthy economic environment. The Chamber of Commerce achieves many successes by forming and maintaining strong public/private partnerships. It works to advocate for adequate infrastructure (both utility and technological), assist and train local business owners, and coordinate with the Porter County Economic Development Alliance.

During the kick-off meetings for this Comprehensive Plan, community leaders met in stakeholder groups. Participants agreed that they had good professional relationships with each other, but many stated that additional communication would yield greater results.
Further considerations include:

a) Create a “Community Agenda,” which includes topics that reach across disciplines and interests;
b) Facilitate leadership dialog by hosting meetings;
c) Implement the Economic Development policies and actions that are included in Chapter 4, Opportunity; and,
d) Continue to maintain professional relationships.

### 3.3 SUSTAINABILITY OBJECTIVES

Valparaiso must establish a clear set of objectives that bridge the gap between existing characteristics of growth and the community, and its vision for a sustainable future. Sustainability is not simply addressed through one policy or strategy. Instead, it takes careful and deliberate coordination to ensure that the way the community behaves is in concert with its local resources.

The American Planning Association (APA) has established a series of sustainable policies that should guide future investment in Valparaiso’s people, environment, and development. This chapter builds off of those policies, and customizes them to meet the specific contextual challenges of the City and region. Generally, APA identifies four primary goals for sustainable growth:

1. Reduce dependence upon fossil fuels, extracted underground metals, and minerals;
2. Reduce dependence upon chemicals and synthetic substances;
3. Reduce activities that encroach upon nature; and,
4. Meet human needs fairly and efficiently.

This section sets forth a series of objectives that aim to achieve these goals. The objectives are categorized to correspond to the other chapters in this plan. It is imperative to note that several objectives are relevant in many different categories. This demonstrates not only the broad applicability of sustainability, but also the necessity to address it comprehensively in order to create policies and strategies that actually affect positive long-term change. For example, economic development decisions should not be made simply to meet the objectives of sustainable economic development without meeting the objectives of a sustainable environment. Decisions must aim to align with all the objectives listed below to the greatest extent possible.

#### 1. Sustainable Land Use, Character, & Design Objectives:

a. Encourage compact development that maximizes investment in infrastructure and minimizes the need to drive.
b. Integrate local neighborhood uses — housing, shops, workplaces, schools, parks, civic facilities — within walking or bicycling distance.

c. Create human-scaled development that is pedestrian-friendly.

d. Encourage more intense development oriented around public transit.

e. Permit home-based occupations and work that reduce the need to commute.

f. Permit local food production and agriculture that reduces need for long-range transport of food.

g. Guide development to areas with existing or readily available infrastructure and minimize development in outlying, undeveloped areas.

h. Maintain a well-defined "edge" around the community that is permanently protected from development.

i. Remediate and redevelop brownfield sites and other developed lands that suffer from environmental or other constraints.

j. Promote regional and local designs that respect the regional ecosystems and natural functions which support human communities.

k. Reduce vehicle trips and vehicle miles traveled through compact, infill, and mixed use development.

l. Design local streets that encourage pedestrian and bicycle use and discourage high speed traffic.

m. Design streets that support/enhance access between neighborhoods and to neighborhood-based commercial developments.

n. Encourage solar-oriented design in development.

o. Select building materials with low "embodied energy," which require less energy-intensive production methods and long-distance transport.

p. Use chemical-free and toxic-free building materials.

q. Adopt landscape design standards that minimize the use of irrigation as well as pesticides and herbicides.

r. Encourage compact and clustered residential development, including reduced minimum lot sizes.

s. Remove regulatory obstacles to using recycled materials for building.

T. Require responsible stormwater management that reuses and restores the quality of on-site run-off.

u. Reduce or eliminate impervious paving materials.

v. Use "cradle-to grave" (life cycle) analysis in decision-making for materials and construction techniques.

w. Encourage communities and housing developments that are socially cohesive, reduce isolation, and foster community spirit and sharing of resources.

x. Use local materials and native plants in facility design to reduce transport distances and maintenance.
y. Provide funding for open space acquisition in strategic or critical areas.
z. Preserve wilderness areas.
   aa. Encourage urban/community gardens.
   bb. Permit on-site composting of organic waste.
   cc. Create systems of green spaces within and among neighborhoods.
   dd. Encourage development patterns that respect natural systems, such as watersheds and wildlife corridors.
   ee. In order to preserve nighttime “dark skies,” review and expand where appropriate the anti-glare provisions of the Unified Development Ordinance to strengthen outdoor lighting standards that reduce glare, light trespass, and sky glow.

2. Sustainable Economic Development Objectives:
   a. Create financial and regulatory incentives for infill development.
   b. Promote or incentivize the adaptive reuse of existing buildings, where possible, as an alternative to new construction.
   c. Use "cradle-to grave" (life cycle) analysis in decision-making for materials and construction techniques.
   d. Maximize the use of a locally-based or home-based workforce, reducing or eliminating the need to commute.
   e. Actively seek ways to minimize the use of toxic manufactured substances.
   f. Meet or exceed clean air standards.
   g. Minimize or reduce use of chemicals and employ proper disposal and recycling mechanisms.
   h. Use agricultural methods that reduce or minimize use of pesticides, herbicides, and manufactured fertilizers.
   i. Use byproducts of other processes or whose wastes can be used as the raw materials for other industrial processes.
   j. Use recycled or by-products of other businesses, minimizing the use of virgin raw materials.
   k. Prevent activities that emit waste or pollutants into the environment.
   l. Use agricultural approaches that build up rather than deplete topsoil, and conserve or minimize water use.
   m. Fulfill local employment and consumer needs without degrading the environment.
   n. Promote financial and social equity in the workplace.
   o. Create vibrant community-based economies with employment opportunities that allow people economic self-determination and environmental health.
   p. Encourage locally-based agriculture, such as community supported agriculture, providing a nearby source of fresh, healthy food for urban and rural populations.
3. Sustainable Transportation & Mobility Objectives:
   a. Encourage more intense development oriented around public transit.
   b. Reduce vehicle trips and vehicle miles traveled through compact, infill, and mixed use development.
   c. Use alternatives to the single-occupant automobile, including walking, bicycling, and public transit.
   d. Use vehicles powered by renewable fuel sources.
   e. Design local streets that encourage pedestrian and bicycle use and discourage high speed traffic.
   f. Design streets that support/enhance access between neighborhoods and to neighborhood-based commercial developments.
   g. Provide affordable, efficient transportation alternatives for everyone, especially low-income households, elders, and others that cannot or do not own cars.

4. Sustainable Housing & Neighborhood Objectives:
   a. Integrate local neighborhood uses — housing, shops, workplaces, schools, parks, civic facilities — within walking or bicycling distance.
   b. Promote regional and local designs that respect the regional ecosystems and natural functions which support human communities.
   c. Eliminate disproportionate environmental burdens and pollution experienced by historically disadvantaged communities.
   d. Reduce waste materials and promoting recycling by residents.
   e. Encourage compact and clustered residential development, including reduced minimum lot sizes.
   f. Encourage communities and housing developments that are socially cohesive, reduce isolation, and foster community spirit and sharing of resources.
   g. Clean, conserve, and reuse wastewater at the site, neighborhood or community level, reducing the need for large, expensive collection systems and regional processing facilities.

5. Sustainable Energy & Environment Objectives:
   a. Maintain a well-defined “edge” around the community that is permanently protected from development.
   b. Remediate and redevelop brownfield sites and other developed lands that suffer from environmental or other constraints.
   c. Promote regional and local designs that respect the regional ecosystems and natural functions which support human communities.
   d. Eliminate disproportionate environmental burdens and pollution experienced by historically disadvantaged communities.
   e. Use regenerative energy heating and cooling source alternatives to fossil fuels.
   f. Reduce waste materials and promote recycling by residents.
g. Adopt water conservation measures to minimize environmentally destructive side effects of developing new water sources.

h. Require responsible stormwater management that reuses and restores the quality of on-site run-off.

i. Reduce or eliminate impervious paving materials.

j. Use recycled building materials, helping to minimize the mining of virgin materials.

k. Recycle building construction waste materials and appropriate deconstruction techniques.

l. Use regenerative energy alternatives to fossil fuel, or that are working to reduce dependence on fossil fuel.

m. Do not use, or reduce the use of, cadmium, lead, and other potentially toxic metals and minerals that can accumulate in the biosphere.

n. Actively seek ways to minimize the use of toxic manufactured substances.

o. Meet or exceed clean air standards.

p. Maintain natural terrain, drainage, and vegetation, minimizing disruption of natural systems.

q. Re-use processed water.

r. Adopt landscape and park maintenance standards that minimize use of equipment powered by fossil fuels.

s. Use alternatives to chemical pesticides and herbicides in park and facility maintenance.

t. Preserve wilderness areas.

u. Restore damaged natural systems through regenerative design approaches.

v. Develop responsible alternatives to landfilling of solid waste.

w. Promote facilities that employ renewable energy sources, or reduce use of fossil fuel for their operations and transport needs.

x. Promote treatment facilities that remove or destroy pathogens without creating chemically-contaminated byproducts.

y. Encourage design approaches and regulatory systems that focus on pollution prevention, re-use, and recycling.

z. Promote innovative sewage and septic treatment that discharges effluent meeting or exceeding federal drinking water standards while minimizing or eliminating the use of chemicals.

aa. Remove regulatory barriers to composting and graywater reuse systems.

bb. Clean, conserve, and reuse wastewater at the site, neighborhood or community level, reducing the need for large, expensive collection systems and regional processing facilities.

cc. Adopt appropriate development and population growth policies linked to carrying capacity of natural systems and community facilities.
dd. Encourage development patterns that respect natural systems such as watersheds and wildlife corridors.
ee. Preserve and enhance water quality.
ff. Reduce the use of water.
gg. Recharge groundwater basins.
hh. Use flood control and stormwater techniques that enhance and restore natural habitats.
ii. Prevent wetlands destruction and restore degraded wetlands.
jj. Encourage the development of renewable energy sources.
kk. Discourage the use of products that utilize packaging derived from non-renewable, non-degradable resources.
ll. Promote the recycling of waste materials derived from non-renewable, non-degradable resources.
mm. Promote the preservation and planting of trees and other vegetation that absorb carbon dioxide and air pollutants.

3.4 IMPLEMENTING SUSTAINABILITY

The role of this Comprehensive Plan is to bring the issue of sustainability to the table as a consideration for public policy and regulation. As is the case with other urban characteristics, such as land use, transportation, environment, etc., it is essential that sustainability is seen as an element intrinsic to other aspects of urban development. The previous section includes a comprehensive list of sustainable objectives for Valparaiso. However, in order to provide clear guidance for decision-makers, residents, businesses, and investors, the objectives must be discussed in more detail in order to create a clear and actionable action program. The following recommendations facilitate this outcome.

Community Education Initiative on Sustainability

One of the many challenges in creating a sustainable community is being able to describe what the term means. Many citizens may value the notion of a sustainable community, but few understand their role in helping to create one, more or less the role of their local government, business community, or institutions. The City should establish a Community Education Initiative on Sustainability. This initiative would serve two primary purposes; 1) it will make residents aware of the immediate actions they currently have available to them, and 2) it will make residents aware of larger policies and strategies that should be considered in order to empower a broader cross-section of stakeholders to participate in sustainable behavior. The initiative should focus on the following actions:

1. Integrally involve local residents in setting the vision for and developing plans for the community and region.
2. Establish avenues for meaningful participation in decision-making for all citizens and in particular, historically disadvantaged people.

3. Provide for equitable educational opportunities for all members of the community.

4. Encourage and enable people to use transport other than gasoline-powered vehicles.

5. Educate citizens and public servants about both short- and long-term risks associated with the use and disposal of hazardous materials.

6. Educate citizens on how to reduce levels of consumption and waste generation at the household and community levels.

**Adopt a Local and Regional Sustainability Plan**

This plan identifies the core objectives to create a sustainable community. However, in order to be properly applied, a more detailed effort should be undertaken to identify specific actions and measurable goals for creating such a community. In partnership with local and regional stakeholders and planning entities, the City should spearhead the drafting of a Local and Regional Sustainability Plan. The plan should address the following:

- What is the Valparaiso Region’s definition of sustainability?
- How do our actions at various scales – lot, neighborhood, city, and region – impact us and our neighbors?
- What are our local priorities in creating a sustainable community?
- What data do we have available, and what additional data is needed, to help us assess factors related to future decisions?
- What specific measurable goals or indicators will we establish as benchmarks towards attaining a sustainable city and region?
- What specific actions (i.e. policies, strategies, programs, etc.) are needed to help us attain these goals?
- Who will be responsible for carrying out specific actions?
- How will we adjust our plan over time to respond to attained goals, new technologies, or enhanced knowledge of our environment?

**Align Local Partners**

Everyone has a role in creating a sustainable city and region. Urban systems are so inherently linked that any shortcoming can compromise the ability to attain long-term stability and health. It is essential that stakeholders at every scale understand their role in advancing this initiative. The following table describes how various stakeholders are involved in attaining a sustainable community. As policies, programs, and projects are considered, each
stakeholder should be engaged as early as possible in order to maximize the benefit of the individual action and overall sustainability objective.

<table>
<thead>
<tr>
<th>Stakeholder Category</th>
<th>Role in Promoting Sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Citizens</strong></td>
<td>advocate for sustainable policies and practices within local and regional government.</td>
</tr>
<tr>
<td></td>
<td>Take advantage of programs that encourage infill, reuse, and sustainable design.</td>
</tr>
<tr>
<td></td>
<td>Participate in educational and local programs (i.e. recycling, energy efficiency grants, etc.) at the residential level.</td>
</tr>
<tr>
<td></td>
<td>Incorporate sustainable design practices into residential construction.</td>
</tr>
<tr>
<td></td>
<td>Create and maintain neighborhood-based gardens and open spaces.</td>
</tr>
<tr>
<td><strong>Local &amp; Regional Government</strong></td>
<td>Adopt codes that foster sustainable growth and behavior.</td>
</tr>
<tr>
<td></td>
<td>Modify local building and infrastructure standards to align with sustainable development goals.</td>
</tr>
<tr>
<td></td>
<td>Incorporate sustainable government administration principles.</td>
</tr>
<tr>
<td></td>
<td>Establish local programs (i.e. incentives, tax abatements, etc.) that encourage sustainable decisions by residents, businesses, and institutions.</td>
</tr>
<tr>
<td></td>
<td>Create partnerships with the development community to foster investment that aligns with the community’s vision for sustainability.</td>
</tr>
<tr>
<td></td>
<td>Provide educational resources about sustainability.</td>
</tr>
<tr>
<td></td>
<td>Provide community services and amenities at a local scale that maximizes accessibility and benefit.</td>
</tr>
<tr>
<td></td>
<td>Use capital improvements as a way of fostering responsible growth.</td>
</tr>
<tr>
<td></td>
<td>Incorporate sustainable design principles into civic facilities, infrastructure, and services (i.e. LEED-certified government buildings or natural gas transit vehicles).</td>
</tr>
<tr>
<td></td>
<td>Where possible, invest in local facilities and infrastructure for recycling, waste management, and alternative energy.</td>
</tr>
<tr>
<td><strong>Businesses Community</strong></td>
<td>Advocate for policies that enable sustainable business practices.</td>
</tr>
<tr>
<td></td>
<td>Incorporate sustainable business management principles into operations and administration.</td>
</tr>
<tr>
<td></td>
<td>Establish partnerships with other businesses to create efficiencies with services and resources.</td>
</tr>
<tr>
<td></td>
<td>Identify opportunities to use business byproducts and resources elsewhere within the community.</td>
</tr>
<tr>
<td></td>
<td>Partner with local educational institutions to establish curricula that produce a locally relevant work force.</td>
</tr>
<tr>
<td></td>
<td>Incorporate sustainable design principles into capital investments.</td>
</tr>
<tr>
<td></td>
<td>Establish product and service lines that utilize and produce sustainable resources and products.</td>
</tr>
<tr>
<td><strong>Development Community</strong></td>
<td>Partner with local governments and non-profits to maximize investment in projects that provide the greatest benefit to sustainability.</td>
</tr>
<tr>
<td></td>
<td>Incorporate sustainable practices into site development.</td>
</tr>
<tr>
<td></td>
<td>Incorporate sustainable design principles and building materials into development projects.</td>
</tr>
<tr>
<td>Stakeholder Category</td>
<td>Role in Promoting Sustainability</td>
</tr>
<tr>
<td>------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Policies</td>
</tr>
<tr>
<td></td>
<td>Programs</td>
</tr>
<tr>
<td></td>
<td>Projects</td>
</tr>
<tr>
<td>Institutions &amp; Non-Profits</td>
<td>• Advocate for policies and codes that advance sustainability at the local and regional scales</td>
</tr>
<tr>
<td></td>
<td>• Incorporate sustainable business management principles into operations and administration</td>
</tr>
<tr>
<td></td>
<td>• Partner with local and regional governments to enhance education on sustainability</td>
</tr>
<tr>
<td></td>
<td>• Partner with local governments to incentivize sustainable development practices</td>
</tr>
<tr>
<td></td>
<td>• Provide resources to residents, business owners, and developers who want to understand their role in sustainability</td>
</tr>
<tr>
<td></td>
<td>• Incorporate sustainable principles into facilities and capital projects</td>
</tr>
<tr>
<td>State and Federal Governments &amp; Agencies</td>
<td>• Align state and federal regulations with local sustainability goals</td>
</tr>
<tr>
<td></td>
<td>• Work with local governments to establish criteria for federal or state grants and subsidies</td>
</tr>
<tr>
<td></td>
<td>• Continue funding programs that encourage sustainable neighborhood development and economic development</td>
</tr>
<tr>
<td></td>
<td>• Invest in traditional infrastructure in such a way that encourages sustainable growth</td>
</tr>
<tr>
<td></td>
<td>• Invest in new types of infrastructure, such as renewable energy, regional and state-wide waste management, and innovative modes of public transportation</td>
</tr>
<tr>
<td></td>
<td>• Incorporate sustainable design principles into state and federal facilities</td>
</tr>
</tbody>
</table>