

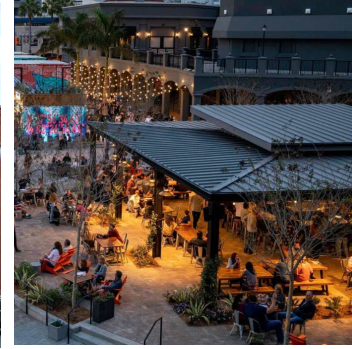
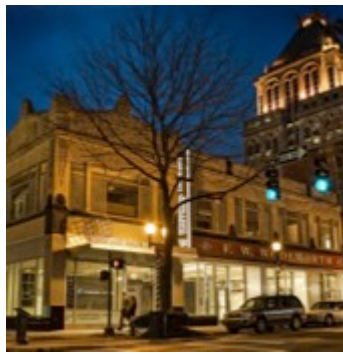
# Getting Started

## LEED v4.1 for Cities and Communities: Existing

---

*An introduction to the framework and certification program*

U.S. Green Building Council



# What is LEED for Cities and Communities?

LEED for Cities and Communities is the leading global rating system and certification program for evaluating the sustainability and quality of life in a city or community.

It takes a multi-stakeholder approach and serves as a catalyst and transformative tool toward more sustainable, equitable and resilient communities around the world.



## LEED v4.1 CITIES AND COMMUNITIES: EXISTING

April 2, 2019

U.S. Green Building Council

*Released April 2019*

# LEED v4.1 for Cities and Communities: Existing

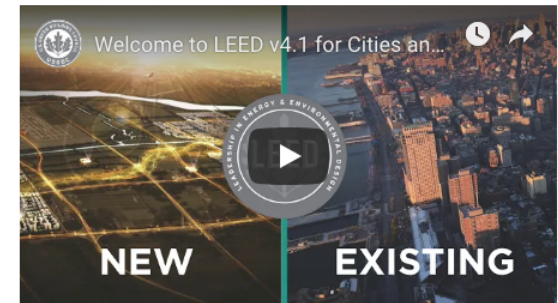
View the rating system and guide:

<https://www.usgbc.org/leed/rating-systems/leed-for-cities>

Additional resources available at [www.usgbc.org](http://www.usgbc.org) include:

- Education
- Project Directory
- Credit Library
- Overview Videos

LEED v4.1 Cities and Communities



# Opportunities for New and Existing Cities and Communities



Plan, Design & Develop



Operate & Manage



Continuously Improve

## New

Strategies for new and developing places

## Existing

Performance measures plus strategies for existing places

## Recertification

Performance pathway to recertification for all projects and places



Municipality or Local Government



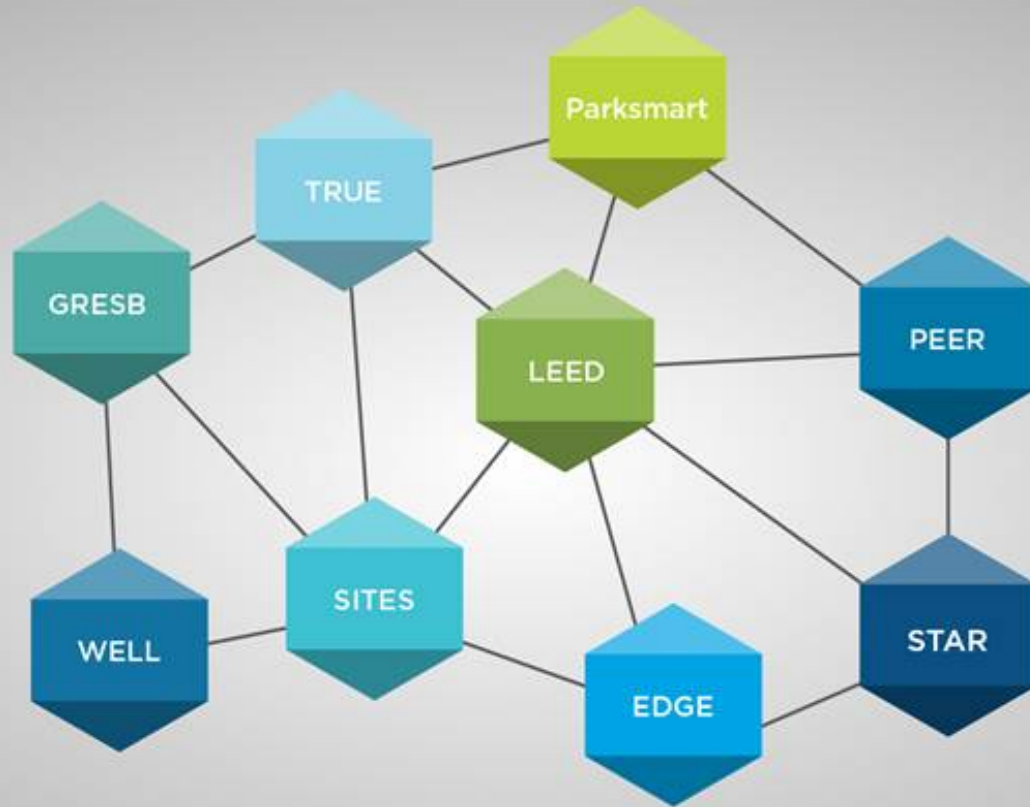
Neighborhood, District or Other Community

**SAFE  
HEALTHY  
INCLUSIVE  
SMART  
PRODUCTIVE  
EFFICIENT  
EQUITABLE  
SUSTAINABLE  
RESPONSIVE  
RESILIENT**





LEED FOR CITIES AND COMMUNITIES  
INCORPORATES OUR EXPERIENCES WITH  
GLOBAL CITIES AND COMMUNITIES



**LEED for Communities & Cities integrates complementary standards**



# LEED FOR CITIES IS ALIGNED WITH GLOBAL GOALS



**View our UN SDG alignment report**

<https://www.usgbc.org/articles/explore-how-leed-cities-and-communities-aligns-un-sustainable-development-goals>



## Core program values:

- Innovative and transformative
- Data driven and performance based
- Collaborative and stakeholder driven
- Globally applicable, locally relevant
- Holistically and equitably rooted in the triple bottom line
- Evidence based and continuously improving

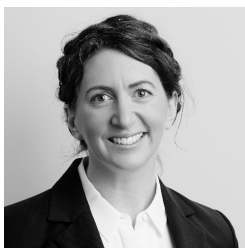
# INNOVATIVE AND TRANSFORMATIVE



# DATA DRIVEN AND PERFORMANCE BASED



# COLLABORATIVE AND STAKEHOLDER DRIVEN



...AND  
MORE

# GLOBALLY APPLICABLE, LOCALLY RELEVANT



# ROOTED IN THE TRIPLE BOTTOM LINE



# EVIDENCE BASED AND CONTINUOUSLY IMPROVING



Plan and Design

Develop

Measure

Improve



# LEED Program Goals for Cities and Communities

- Inspire leadership, transformation and innovation in urban sustainability.
- Protect biodiversity and regenerate ecosystem services.
- Meet and exceed net zero carbon, energy, waste and water.
- Achieve livability, choice and access for all, where people live, work and play.
- Raise the standard of living and quality of life for humans all around the globe.





# LEED for Cities and Communities: Existing

Project Checklist

Y ? N

Cities Communities

	0	0	0	<b>INTEGRATIVE PROCESS</b>	POSSIBLE: 5	POSSIBLE: 5
				Credit Integrative Planning and Leadership	1	1
				Credit Green Building Policy and Incentives	4	4

	0	0	0	<b>NATURAL SYSTEMS AND ECOLOGY</b>	POSSIBLE: 9	POSSIBLE: 9
				Prereq Ecosystem Assessment	REQUIRED	REQUIRED
				Credit Green Spaces	2	2
				Credit Natural Resources Conservation and Restoration	2	2
				Credit Light Pollution Reduction	1	1
				Credit Resilience Planning	4	4

	0	0	0	<b>TRANSPORTATION AND LAND USE</b>	POSSIBLE: 15	POSSIBLE: 15
				Prereq Transportation Performance	6	6
				Credit Compact, Mixed Use and Transit Oriented Development	2	2
				Credit Access to Quality Transit	1	1
				Credit Alternative Fuel Vehicles	2	2
				Credit Smart Mobility and Transportation Policy	2	2
				Credit High-Priority Site	2	2

	0	0	0	<b>WATER EFFICIENCY</b>	POSSIBLE: 11	POSSIBLE: 11
				Prereq Water Access and Quality	REQUIRED	REQUIRED
				Prereq Water Performance	6	6
				Credit Integrated Water Management	1	1
				Credit Stormwater Management	2	2
				Credit Smart Water Systems	2	2

	0	0	0	<b>ENERGY AND GREENHOUSE GAS EMISSIONS</b>	POSSIBLE: 30	POSSIBLE: 30
				Prereq Power Access, Reliability and Resiliency	REQUIRED	REQUIRED
				Prereq Energy and Greenhouse Gas Emissions Performance	14	18
				Credit Energy Efficiency	4	4
				Credit Renewable Energy	6	6
				Credit Low Carbon Economy	4	-
				Credit Grid Harmonization	2	2

Project Name

Project ID

Date

Y ? N

Cities Communities

	0	0	0	<b>MATERIALS AND RESOURCES</b>	POSSIBLE: 10	POSSIBLE: 10
				Prereq Solid Waste Management	REQUIRED	REQUIRED
				Credit Waste Performance	4	5
				Credit Special Waste Streams Management	1	1
				Credit Responsible Sourcing for Infrastructure	2	2
				Credit Material Recovery	1	-
				Credit Smart Waste Management Systems	2	2

	0	0	0	<b>QUALITY OF LIFE</b>	POSSIBLE: 20	POSSIBLE: 20
				Prereq Demographic Assessment	REQUIRED	REQUIRED
				Prereq Quality of Life Performance	6	6
				Credit Trend Improvements	4	4
				Credit Distributional Equity	4	4
				Credit Environmental Justice	1	1
				Credit Housing and Transportation Affordability	2	2
				Credit Civic and Community Engagement	2	2
				Credit Civil and Human Rights	1	1

	0	0	0	<b>INNOVATION</b>	POSSIBLE: 6	POSSIBLE: 6
				Credit Innovation	6	6

	0	0	0	<b>REGIONAL PRIORITY</b>	POSSIBLE: 4	POSSIBLE: 4
				Credit Regional Priority	4	4

<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>TOTAL</b>	<b>110</b>	<b>110</b>
----------	----------	----------	----------	--------------	------------	------------

40-49	50-59	60-79	80+ Points
CERTIFIED	SILVER	GOLD	PLATINUM



Integrative Process



Natural Systems & Ecology



Transportation & Land Use



Water Efficiency



Energy & GHG Emissions



Materials & Resources



Quality of Life



Innovation



Regional Priority



# Prerequisites

*Required*

## Base conditions

- Access and quality

## Performance score

- Benchmark-scored indicator

# Credits

*Optional*

## Outcomes

- Quantitative; measured at the city or community scale; trend lines or thresholds

## Strategies

- Qualitative; identified as best practices; reflect actions taken to achieve results

# Prerequisites

*Required*

## Base conditions

- Access and quality

## Performance score

- Benchmark-scored indicator

# Credits

*Optional*

## Outcomes

- Quantitative; measured at the city or community scale; trend lines or thresholds

## Strategies

- Qualitative; identified as best practices; reflect actions taken to achieve results

# Prerequisites: Base Conditions

Category	
Natural Systems and Ecology	Ecosystem Assessment
Water Efficiency	Water Access and Quality
Energy & GHG Emissions	Power Access, Reliability, and Resiliency
Materials and Resources	Solid Waste Management
Quality of Life	Demographic Assessment

# Prerequisites

*Required*

## Base conditions

- Access and quality

## Performance score

- Benchmark-scored indicator

# Credits

*Optional*

## Outcomes

- Quantitative; measured at the city of community scale; trend lines or thresholds

## Strategies

- Qualitative; identified as best practices; reflect actions taken to achieve results

# Prerequisites: Performance

Category	Performance Reported to Arc
Transportation	Vehicle Miles Traveled (daily per capita)
Water	Domestic Water Consumption (daily per capita)
Energy & GHG	Greenhouse Gas Emissions (annually per capita)
Waste	Municipal solid waste generated (annually per capita) Municipal solid waste diverted (% of total generated)
Human Experience / Quality of Life Category	
<ul style="list-style-type: none"> <li>Education</li> </ul>	<ul style="list-style-type: none"> <li>Population with (at least) a High School Degree</li> <li>Population with (at least) a Bachelor's Degree</li> </ul>
<ul style="list-style-type: none"> <li>Equitability</li> </ul>	<ul style="list-style-type: none"> <li>Median Gross Rent as % of Household Income</li> <li>Gini Coefficient</li> </ul>
<ul style="list-style-type: none"> <li>Prosperity</li> </ul>	<ul style="list-style-type: none"> <li>Median Household Income</li> <li>Unemployment Rate</li> </ul>
<ul style="list-style-type: none"> <li>Health &amp; Safety</li> </ul>	<ul style="list-style-type: none"> <li>Median Air Quality Index (AQI)</li> <li>Air Quality Days Unhealthy for Sensitive Groups</li> <li>Violent Crime</li> </ul>





# Credits

*Optional*

## Outcomes

- Quantitative; measured at the city or community-scale; trend lines or thresholds
- Example: Identify compact and complete centers then demonstrate % of population residing within CCC.

## Strategies

- Qualitative; identified as best practices; reflect actions taken to achieve results
- Example: Adopt a comprehensive housing policy; housing needs assessment; healthy housing standards



TR Credit: Compact, Mixed Use and TOD



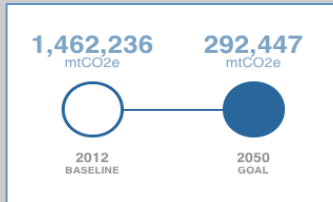
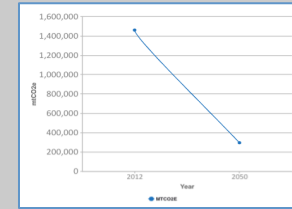
QL Credit: Housing and Transportation Affordability

# A holistic approach to performance



PERFORMANCE SCORE

+ IMPROVEMENT SCORE

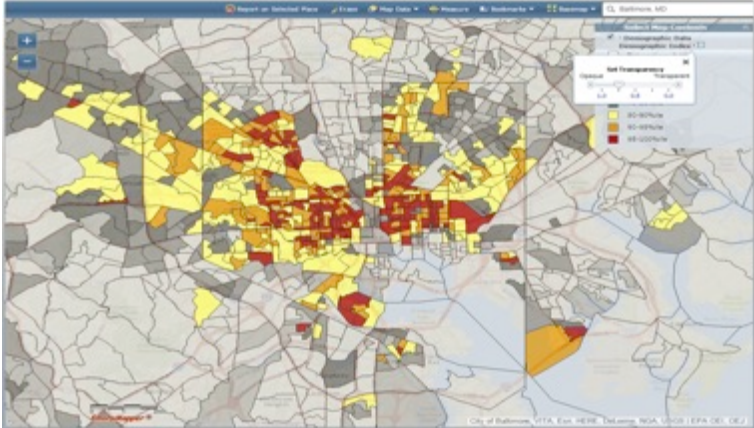


+ PERFORMANCE STANDARDS

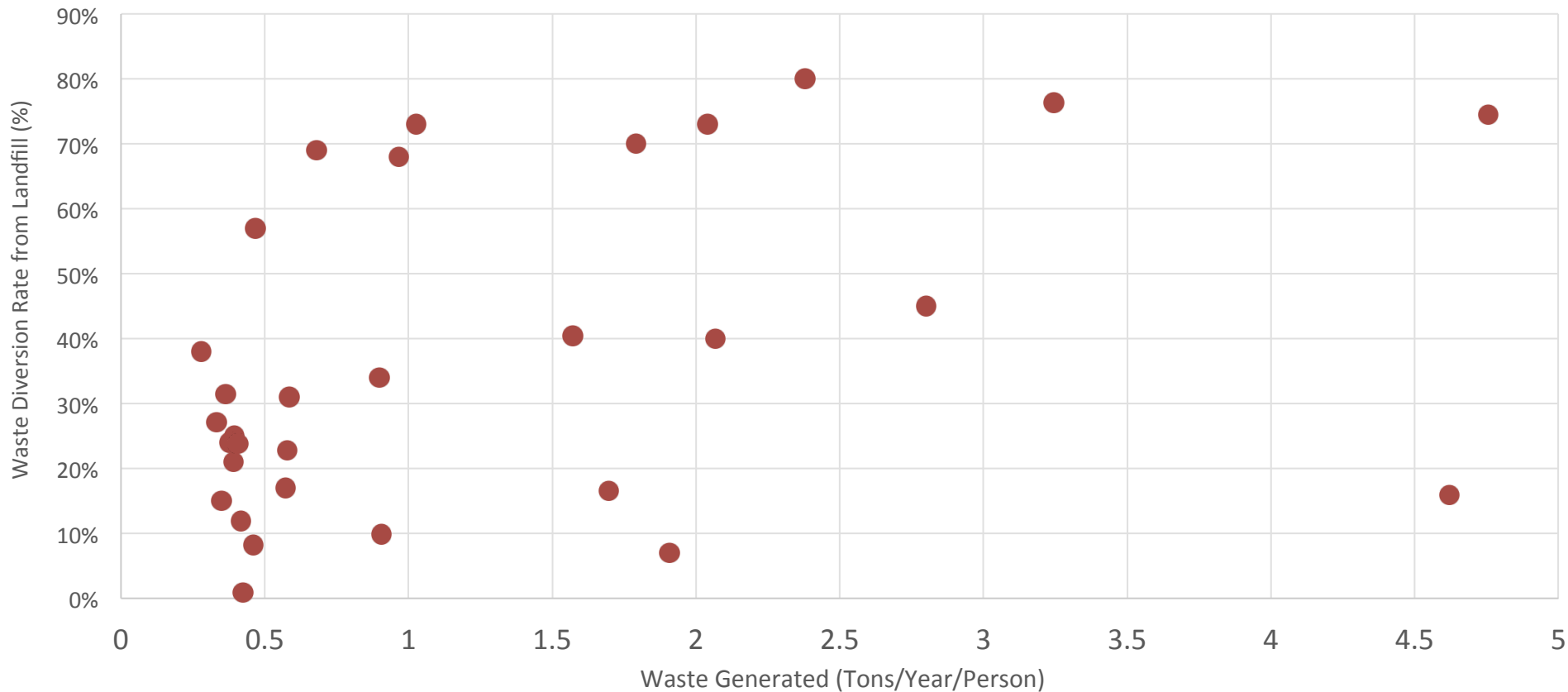
+ HIGH IMPACT STRATEGIES



# ✓ Evaluate local conditions



# ✓ Benchmark performance with peers



# ✓ Demonstrate progress



# Integrative Process



INTEGRATIVE PROCESS		Cities	Communities
Credit	Integrative Planning and Leadership	1	1
Credit	Green Building Policy and Incentives	4	4



5 points available

# Natural Systems and Ecology





NATURAL SYSTEMS AND ECOLOGY		Cities	Communities
Prereq	Ecosystem Assessment	REQUIRED	REQUIRED
Credit	Green Spaces	2	2
Credit	Natural Resources Conservation and Restoration	5	5
Credit	Light Pollution Reduction	1	1
Credit	Resilience Planning	4	4



12 points available

# Transportation and Land Use



TRANSPORTATION AND LAND USE		Cities	Communities
Prereq	Transportation Performance	6	6
Credit	Compact, Mixed Use and Transit Oriented Development	2	2
Credit	Access to Quality Transit	1	1
Credit	Alternative Fuel Vehicles	2	2
Credit	Smart Mobility and Transportation Policy	2	2
Credit	High Priority Sites	2	2



15 points available

# Water Efficiency



WATER EFFICIENCY		Cities	Communities
Prereq	Water Access and Quality	REQUIRED	REQUIRED
Prereq	Water Performance	6	6
Credit	Integrated Water Management	1	1
Credit	Stormwater Management	2	2
Credit	Smart Water Systems	2	2



11 points available

# Energy and GHG Emissions



## ENERGY AND GREENHOUSE GAS EMISSIONS

Cities

Communities

Prereq	Power Access, Reliability and Resiliency	REQUIRED	REQUIRED
Prereq	Energy and Greenhouse Gas Emissions Management	14	18
Credit	Energy Efficiency	4	4
Credit	Renewable Energy	6	6
Credit	Low Carbon Economy	4	-
Credit	Grid Harmonization	2	2



30 points available

# Materials and Resources

H O B O O K E N  
F O O D D E N  
S C R A P P S





## MATERIALS AND RESOURCES

Cities

Communities

Prereq	Solid Waste Management	REQUIRED	REQUIRED
Prereq	Waste Performance	4	5
Credit	Special Waste Streams Management	1	1
Credit	Responsible Sourcing for Infrastructure	2	2
Credit	Material Recovery	1	-
Credit	Smart Waste Management Systems	2	2



10 points available



# Quality of Life



QUALITY OF LIFE		Cities	Communities
Prereq	Demographic Assessment	REQUIRED	REQUIRED
Prereq	Quality of Life Performance	6	6
Credit	Trend Improvements	4	4
Credit	Distributional Equity	4	4
Credit	Environmental Justice	1	1
Credit	Housing and Transportation Affordability	2	2
Credit	Civic and Community Engagement	2	2
Credit	Civil and Human Rights	1	1



20 points available

Innovation



## INNOVATION

Cities

Communities

Credit

Innovation

6

6



6 points available

An aerial photograph of a city skyline at sunset. The sun is low on the horizon, casting a golden glow over the city and the sky. The sky is filled with large, dark clouds that are illuminated from below, creating a dramatic effect. In the foreground, a river flows through a lush green forest. A multi-lane bridge with several arches spans across the river. The city skyline in the background features several tall buildings, including a prominent skyscraper. The overall scene is a mix of natural beauty and urban development.

# Regional Priority

## REGIONAL PRIORITY

Cities

Communities

Credit    Regional Priority

4

4



4 points available

A photograph of a business meeting in progress. Two men are seated at a long wooden table, looking at a laptop. The man on the right is wearing a light-colored, patterned shirt and is pointing at the screen. The man on the left is wearing a blue checkered shirt. The table is cluttered with papers, a water bottle, and a glass. In the background, other people are seated at tables, suggesting a busy office or conference environment. A green semi-transparent box with white text is overlaid on the top center of the image.

How to get started



Register on  
LEED Online.

Receive  
access to  
rating system,  
tools and  
resources.



# LEED Online

Streamline your LEED project management experience, organize your work, and engage with your whole team.

Now available for LEED v4 and LEED 2009 projects.

[Terms of Use](#) [Privacy](#)

## LOG IN

Remember me

By clicking on "LOG IN" below, you affirm that you continue to abide by our [Cookie Statement](#), [Privacy Statement](#) and [Terms of Use](#) for the lawful use of this website, as these policies have recently been changed.

I accept the [End User License Agreement](#).

LOG IN



[Check System Requirements](#)

## NO USGBC ACCOUNT?

No problem—just fill in some basic information and a USGBC login will be yours in a flash.

CREATE AN ACCOUNT

Organize stakeholders in your process.  
Perform a gap analysis and roadmap.



# Gather and report data.

Category	Performance Reported to Arc
Transportation	Vehicle Miles Traveled (daily per capita)
Water	Domestic Water Consumption (daily per capita)
Energy & GHG	Greenhouse Gas Emissions (annually per capita)
Waste	Municipal solid waste generated (annually per capita) Municipal solid waste diverted (% of total generated)
Human Experience / Quality of Life Category	
<ul style="list-style-type: none"><li>• Education</li></ul>	<ul style="list-style-type: none"><li>• Population with (at least) a High School Degree</li><li>• Population with (at least) a Bachelor's Degree</li></ul>
<ul style="list-style-type: none"><li>• Equitability</li></ul>	<ul style="list-style-type: none"><li>• Median Gross Rent as % of Household Income</li><li>• Gini Coefficient</li></ul>
<ul style="list-style-type: none"><li>• Prosperity</li></ul>	<ul style="list-style-type: none"><li>• Median Household Income</li><li>• Unemployment Rate</li></ul>
<ul style="list-style-type: none"><li>• Health &amp; Safety</li></ul>	<ul style="list-style-type: none"><li>• Median Air Quality Index (AQI)</li><li>• Air Quality Days Unhealthy for Sensitive Groups</li><li>• Violent Crime</li></ul>

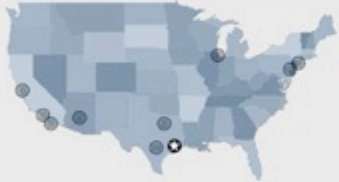


# Demographics



PLANNING & DEVELOPMENT DEPARTMENT

Source: 2013 American Community Survey, US Census Bureau  
Date: January 2015



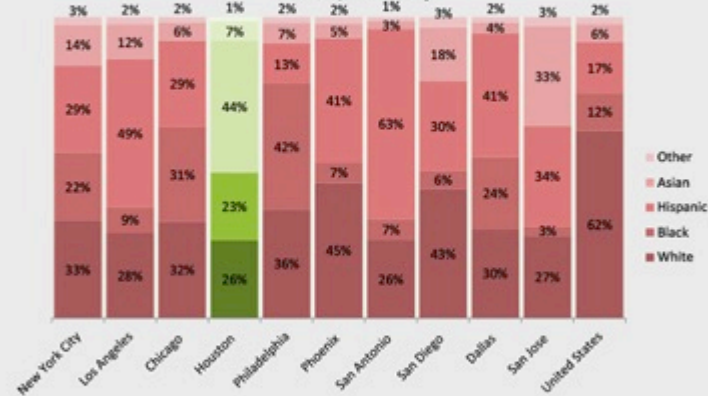
## How We Compare

Of the ten most populous cities in the U.S., Houston ranks fourth after New York, Los Angeles and Chicago. According to the U.S. Census Bureau, Houston experienced a 5% increase in population between 2010 and 2013. Houston's economy is strong with its positive economic indicators that include strong job growth, affordable housing, and lower cost of living.

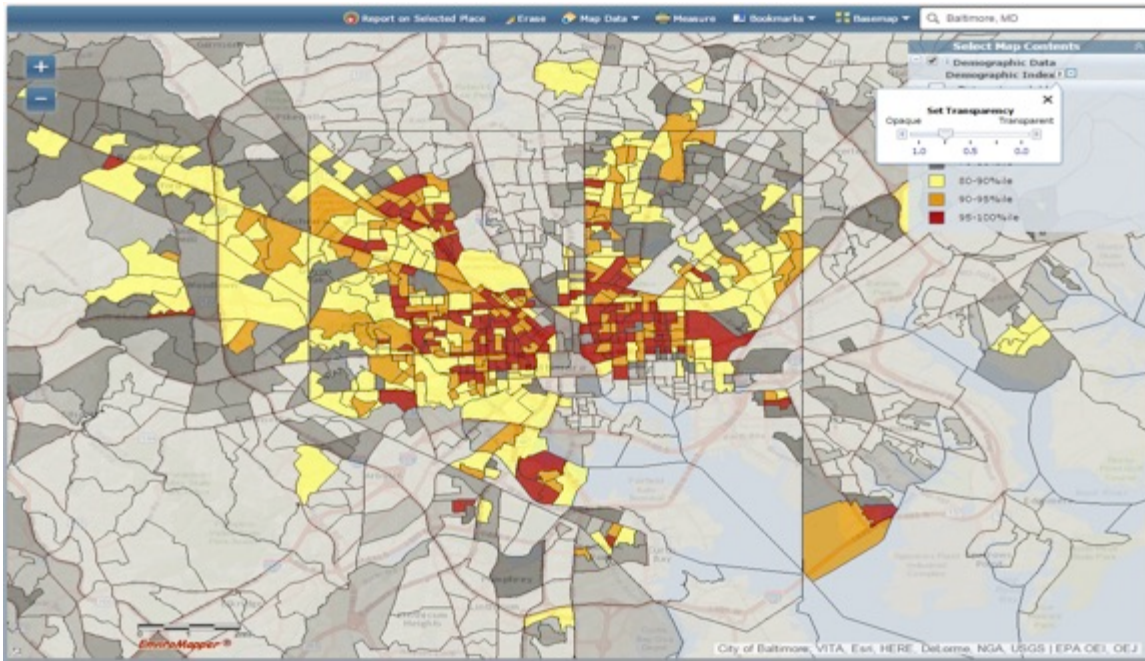
For most of the large cities, economic opportunity is the driving force for demographic and social changes. Opportunity cities have the ability to provide affordable housing and decent amenities at a reasonable cost to their growing populations. The charts shown below illustrate how Houston compares with the other large cities in the U.S.



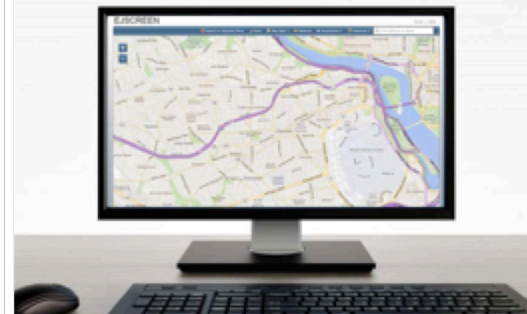
## Race / Ethnicity



Note: People of Hispanic origin may be of any race. "Asian" includes American Indian, Native Hawaiian and Pacific Islanders categories



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then, pursuing  
credits.

IP: Green Building Policy & Incentives

NR: Resilience Planning

TR: Compact, Mixed Use and TOD

WE: Stormwater Management

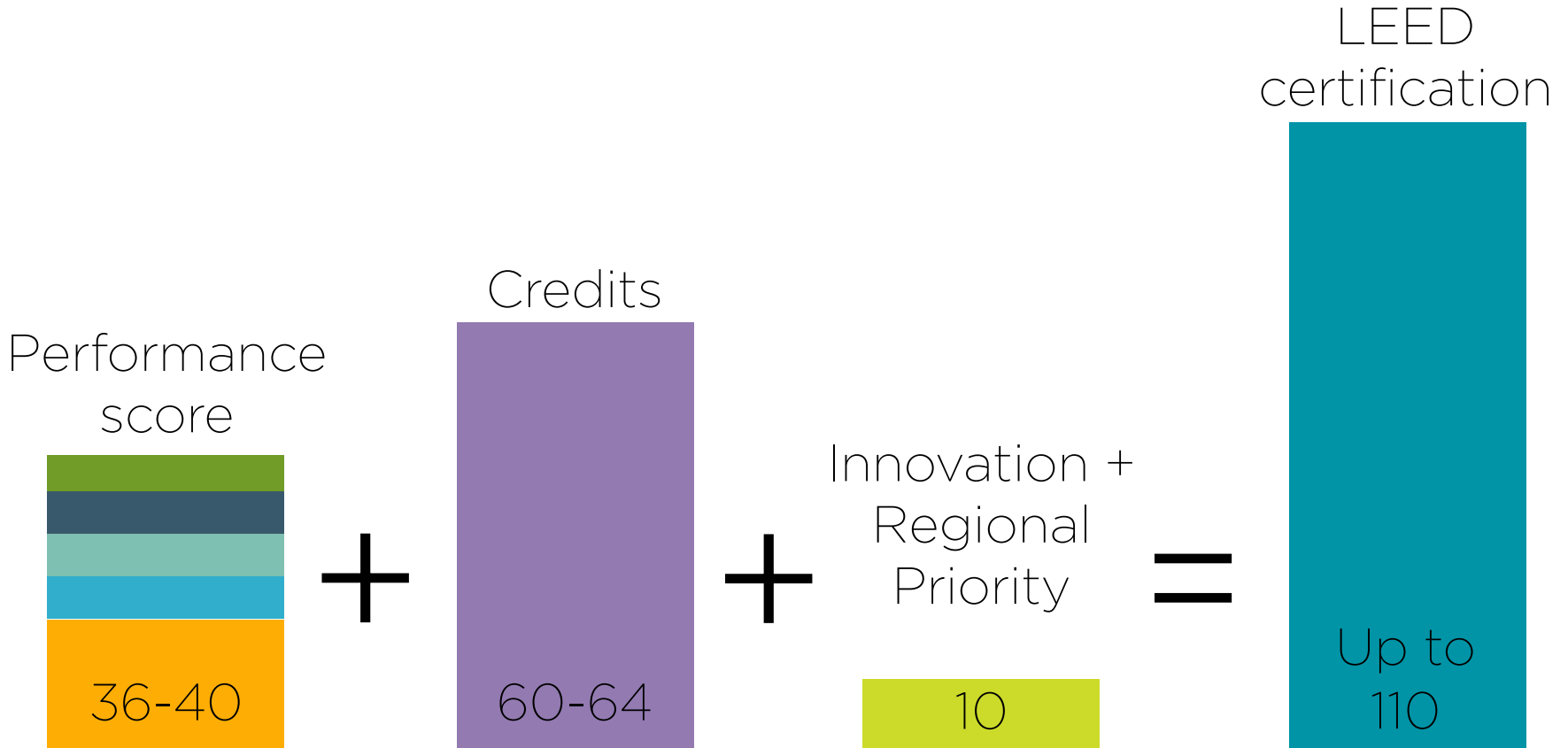
EN: Renewable Energy

QL: Distributional Equity

QL: Housing and Transportation  
Affordability

QL: Civic and Community Engagement

# Points and scoring



Submit for certification



40+  
CERTIFIED



50+  
SILVER



60+  
GOLD



80+  
PLATINUM

Celebrate and commit to continuous improvement.







More than 220 registered projects and  
120 certifications in 18 countries



# Beijing-Daxing International Airport Area

LEED Platinum



LEED v4.1 Cities:  
Plan + Design

# City of Orlando, FL

LEED Gold | November 18, 2019



*“Our vision is to become the most environmentally friendly, socially inclusive, and economically vibrant city in the Southeast...one of the most sustainable cities in the U.S.”*

*Mayor Buddy Dyer, City of Orlando*

# City of Cincinnati, OH

LEED Silver | November 18, 2019



LEED v4.1 Cities: Existing



Royal Oak, MI has earned  
LEED for Cities certification  
in recognition of its ongoing  
sustainability commitment.

**City of Royal Oak, MI** | Certified | April 15, 2020 | LEED v4.1 for Cities



# LEED FOR CITIES CERTIFICATION

---

## A Report on Sustainability

June 2020

### City of Santa Fe Environmental Services Division

1142 Siler Road, Building A  
Santa Fe, NM 87507

(505) 955-2200  
esd@santafenm.gov

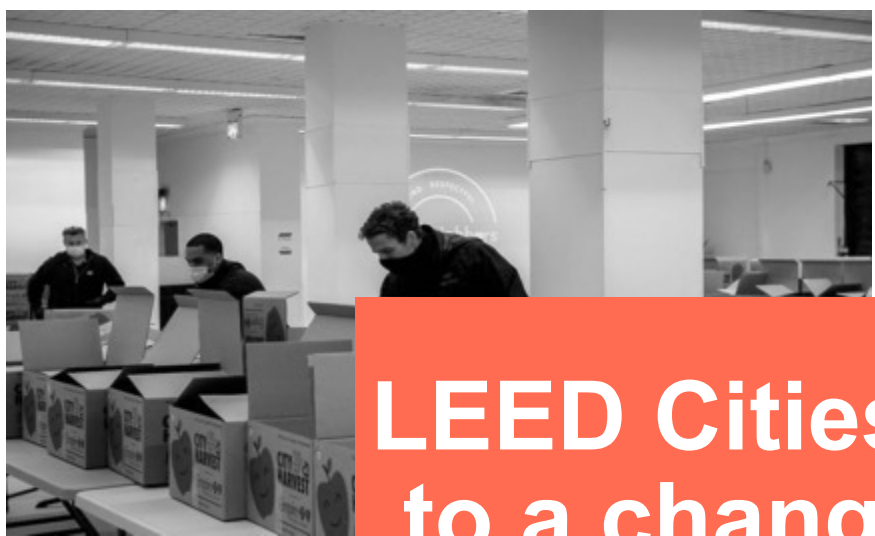


“All of us know how much sustainability means to Santa Fe and to our our way of life...this award speaks volumes about our community and the values we hold dear.” ~Mayor Webber

## City of Santa Fe, NM

LEED Gold | May 14, 2020

LEED v4.1 Cities: Existing



**LEED Cities are adjusting to a changing world and accelerating ambition.**



# LEED Cities are using data to drive decision making on climate, equity, health and sustainability.

## Census Tract 102, Block Group 5

Lake Eola Heights  
Demographic Profile Based on 2011-2015 American Community Survey

**Population:** 1143

Male: 55.6%  
Female: 44.4%

**Age:**  
Median age: 34.8  
18 years and over: 97.7%  
65 years and over: 10.5%

**Race:**  
White: 77.1%  
Black or African American: 7.9%  
American Indian and Alaska Native: 0.0%  
Asian: 4.0%  
Native Hawaiian and Other Pacific Islander: 3.8%  
Other: 7.3%  
Two or more races: 0.0%  
Hispanic or Latino (of any race): 17.0%

**Veteran Status:**  
Veterans: 8.1%

**Language Spoken at Home:**  
Population 5 years or over: 567  
English: 86.9%  
Spanish: 7.8%  
Other Indo-European Languages: 0.0%  
Asian and Pacific Island languages: 5.3%  
Other languages: 0.0%

**School Enrollment:**  
Population 3 years and over enrolled in school: 75  
Public nursery school, preschool: 0.0%  
Private nursery school, preschool: 0.0%  
Public kindergarten through high school: 34.7%  
Private kindergarten through high school: 0.0%  
Public college or graduate school: 48.0%  
Private college or graduate school: 17.3%

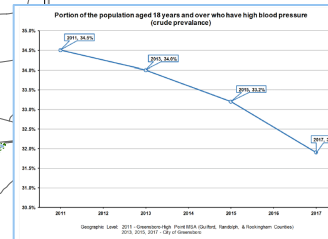
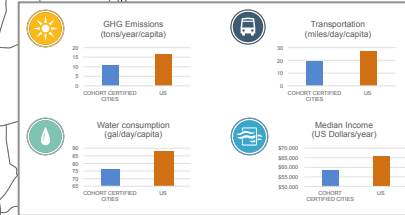
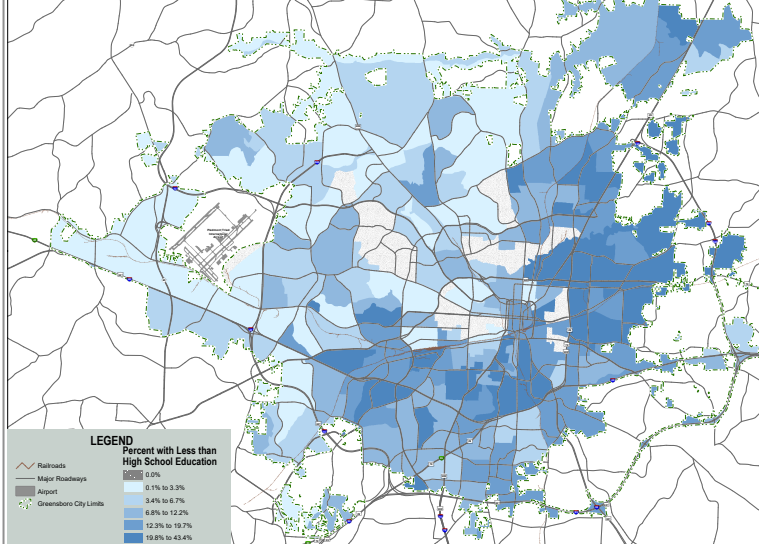
**Educational Attainment:**  
Population 25 years or over: 1010  
High school graduate or higher: 97.4%  
College graduate or higher: 52.0%

**Total Households:** 567  
Households with child under 18: 3.0%  
Householder living alone: 46.2%  
Other households: 50.8%  
Median Household Income: \$65,402  
Households below poverty: 5.3%



## Quality of Life (QL) - Demographic Assessment, Map 15

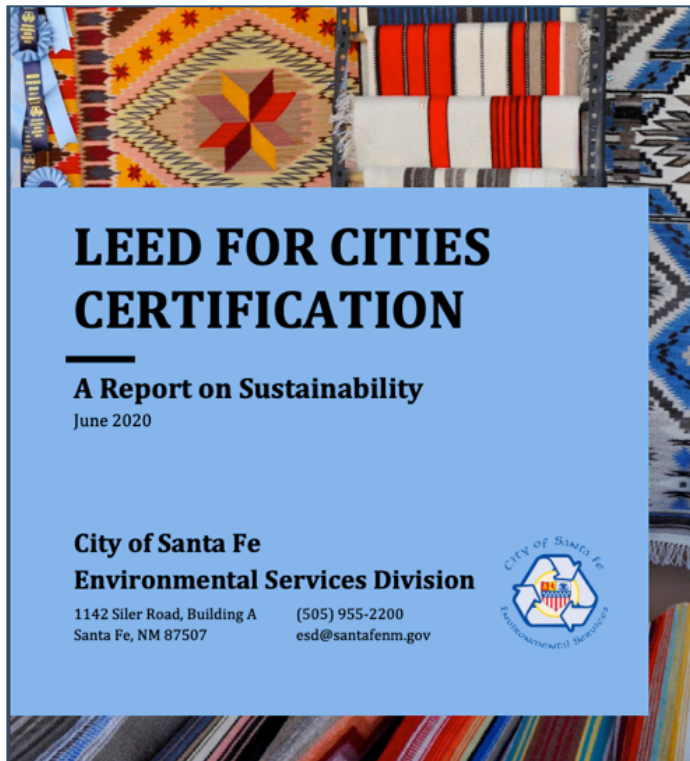
City of Greensboro  
2013 LEED for Cities and Communities Gold Program  
Demographic Indicator: Percent with Less than High School Education by Census Block Group



Academic Year Graduated	2012-2013			2013-2014			2014-2015			2015-2016			2016-2017		
	Entering 9th	Graduating	Percent	Entering 9th	Graduating	Percent	Entering 9th	Graduating	Percent	Entering 9th	Graduating	Percent	Entering 9th	Graduating	Percent
All Students	5,771	4,976	86.22%	5,763	5,102	88.53%	5,828	5,204	89.29%	5,948	5,320	89.44%	5,943	5,334	89.75%
Male	2,917	2,398	82.21%	2,876	2,482	86.30%	2,950	2,555	86.61%	2,997	2,627	87.65%	3,024	2,644	87.43%
Female	2,854	2,578	90.33%	2,887	2,620	90.75%	2,878	2,649	92.04%	2,951	2,693	91.26%	2,919	2,690	92.15%
American Indian	38	30	78.95%	30	30	83.33%	36	31	86.11%	36	30	83.33%	33	29	87.88%
Asian	369	308	83.47%	380	316	83.16%	389	344	88.43%	367	331	90.19%	390	366	93.85%
Black	2,394	2,000	83.54%	2,383	2,072	86.95%	2,360	2,078	88.05%	2,388	2,099	87.90%	2,454	2,155	87.82%
Hispanic	468	380	81.20%	458	478	82.53%	540	457	84.63%	620	497	80.16%	636	529	83.18%
Two or More Races	189	150	79.37%	183	155	84.70%	189	149	78.84%	196	180	91.84%	236	214	90.68%
White	2,306	2,103	91.20%	2,328	2,137	91.80%	2,295	2,127	92.68%	2,325	2,171	93.38%	2,188	2,036	93.05%



**LEED Cities are utilizing certification results** to identify gaps, prioritize investment and plan for the future.




**LEED FOR CITIES  
CERTIFICATION**

**A Report on Sustainability**  
June 2020

**City of Santa Fe  
Environmental Services Division**

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**CITY OF LAS VEGAS**

**2050 Master Plan**

A COMPREHENSIVE THIRTY-YEAR PLAN PREPARED FOR THE RESIDENTS AND BUSINESSES OF LAS VEGAS TO PROVIDE FOR THEIR HEALTH, SAFETY, PROSPERITY, SECURITY, COMFORT, AND GENERAL WELFARE

**DRAFT**



**LEED Cities are catalyzing action** more equitably and collaboratively than ever before.



# Safety First Pilot Credit

## Pandemic Planning

To prepare for, control and mitigate the domestic spread of a pandemic causing widespread disease and deaths that pose high risk to humans.

### REQUIREMENTS

- Convene and facilitate an interdisciplinary team
- Identify risk and vulnerabilities
- Assess pandemic preparedness and response
- Pandemic preparedness plan
- Education and training

# Safety First Pilot Credit

## Social Equity in Pandemic Planning

To systematically consider equity implications across all phases of the pandemic preparedness, planning and response process

### REQUIREMENTS

- Have in place a local equity officer
- Convene a Pandemic Community Advisory Group
- Public communications, outreach programs and educational campaigns
- Impact analysis on policy decisions and operational procedures
- Adopt supportive policies
- Provide emergency services, infrastructure and/or facilities to meet priority needs

# Demonstrate leadership

Benchmark performance against globally recognized standards

Improve **quality of life** and **standard of living**

Receive **national** and **global** recognition

Connect and learn with **peers** around the world

Develop a culture of **data-driven** decision making





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