



LEED v4.1 for Cities and Communities: Existing Cities

City of Grand Junction, Colorado

Project ID: 1000175337

Date: May 02, 2024

FINAL REVIEW REPORT



LEED Certification Review Report

This report contains the results of the technical review of an application for LEED® certification submitted for the specified project. LEED certification is an official recognition that a project complies with the requirements prescribed within the LEED rating systems as created and maintained by the U.S. Green Building Council® (USGBC®). The LEED certification program is administered by Green Business Certification Inc. (GBCI®).



SILVER Certified

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

City of Grand Junction, Colorado

Project ID: 1000175337
Rating System & version: LEED v4.1 Cities and Communities:
Existing Cities
Project Registration Date: April 04, 2023

LEED v4.1 CITIES: EXISTING



ATTEMPTED: 58, NOT AWARDED: 00, PENDING: 00, AWARDED: 58 OF 110 POINTS



INTEGRATIVE PROCESS 01 OF 05

Integrative Planning and Leadership	1/1
Green Building Policy and Incentives	0/4



NATURAL SYSTEMS AND ECOLOGY 05 OF 09

Ecosystem Assessment	Y
Green Spaces	1/2
Natural Resources Conservation and Restoration	2/2
Light Pollution Reduction	0/1
Resilience Planning	2/4



TRANSPORTATION AND LAND USE 04 OF 15

Transportation Performance	2/6
Compact, Mixed Use and Transit Oriented Development	0/3
Safe, Multimodal Accessibility	0/2
Clean Transportation	1/1
Mobility Management	0/2
Priority Sites	1/1



WATER EFFICIENCY 08 OF 11

Water Access and Quality	Y
Water Performance	5/6
Integrated Water Management	1/1
Stormwater Management	0/2
Smart Water Systems	2/2



ENERGY AND GREENHOUSE GAS EMISSIONS 18 OF 30

Power Access, Reliability and Resiliency	Y
Energy and Greenhouse Gas Emissions Performance	12/14
Energy Efficiency	1/4
Renewable Energy	4/6
Net Zero Carbon and Climate Action	1/4
Grid Harmonization	0/2



MATERIALS AND RESOURCES 01 OF 10

Solid Waste Management	Y
Waste Performance	0/4
Special Waste Streams Management	1/1
Responsible Procurement	0/1
Material Recovery	0/3
Smart Waste Management Systems	0/1



QUALITY OF LIFE 11 OF 20

Demographic & Social Equity Assessment	Y
Quality of Life Performance	5/6
Social Services & Infrastructure	1/3
Economic Growth & Opportunity	0/3
Environmental Justice	0/1
Housing and Transportation Affordability	2/2
Public Health	2/3
Educational Opportunity & Attainment	1/1
Civil and Human Rights	0/1



INNOVATION 06 OF 06

Innovation	6/6
------------	-----



REGIONAL PRIORITY 04 OF 04

Regional Priority	4/4
-------------------	-----

CREDIT DETAILS

USGBC POPULATION CALCULATOR

EXISTING PRELIMINARY REVIEW

The documentation sufficiently describes the population of the city.



Integrative Process

Integrative Planning and Leadership

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, NOT AWARDED: 0, PENDING: 0, AWARDED: 1

EXISTING PRELIMINARY REVIEW

Awarded

Green Building Policy and Incentives

Not Attempted

POSSIBLE POINTS: 4



Natural Systems and Ecology

Ecosystem Assessment

Awarded

EXISTING PRELIMINARY REVIEW

Awarded

Green Spaces

Awarded: 1

POSSIBLE POINTS: 2

ATTEMPTED: 1, NOT AWARDED: 0, PENDING: 0, AWARDED: 1

EXISTING PRELIMINARY REVIEW

Option 2. Urban Forest Cover:

Awarded

Natural Resources Conservation and Restoration

Awarded: 2

POSSIBLE POINTS: 2

ATTEMPTED: 2, NOT AWARDED: 0, PENDING: 0, AWARDED: 2

EXISTING PRELIMINARY REVIEW

Option 2. Natural Resource Conservation and Restoration Plan:

Awarded

Light Pollution Reduction

Not Attempted

POSSIBLE POINTS: 1

Resilience Planning

Awarded: 2

POSSIBLE POINTS: 4

ATTEMPTED: 2, NOT AWARDED: 0, PENDING: 0, AWARDED: 2

EXISTING FINAL REVIEW

Option 2. Resilience Plan:

Awarded

EXISTING PRELIMINARY REVIEW

Option 1. Vulnerability and Capacity Assessment:

Awarded

Option 2. Resilience Plan:

1. The supporting documentation 'Narrative about resilience plan.docx' provides information on the adaptation and mitigation strategies addressing the top two natural hazards identified for the city of Grand Junction. However, information on the adaptation and mitigation goals addressing the top two man-made hazards could not be found.

Provide updated documentation of the resilience plan providing information on the adaptation and mitigation goals addressing the top two man-made hazards identified for the city of Grand Junction.

Note the following:

I. This documentation is being accepted for the current submission only. Provide updated resilience plan for the city of Grand junction including metrics to guide monitoring and evaluation of adaptation and mitigation strategies for all future submissions.



Transportation and Land Use

Transportation Performance

Awarded: 2

POSSIBLE POINTS: 6

ATTEMPTED: 2, NOT AWARDED: 0, PENDING: 0, AWARDED: 2

EXISTING PRELIMINARY REVIEW

Awarded with a transportation performance score of 55.

Compact, Mixed Use and Transit Oriented Development

Not Attempted

POSSIBLE POINTS: 3

Safe Multimodal Accessibility

Not Attempted

POSSIBLE POINTS: 2

Clean Transportation

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, NOT AWARDED: 0, PENDING: 0, AWARDED: 1

EXISTING PRELIMINARY REVIEW

Option 2. Electric Vehicle Charging Facilities:

Awarded

Mobility Management

Not Attempted

POSSIBLE POINTS: 2

Priority Sites

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, NOT AWARDED: 0, PENDING: 0, AWARDED: 1

EXISTING PRELIMINARY REVIEW

Option 1. Historic Preservation:

Awarded



Water Efficiency

Water Access and Quality

Awarded

EXISTING FINAL REVIEW

Stormwater Quality:

Awarded

EXISTING PRELIMINARY REVIEW

Water and Sanitation Access:

Case 1. Water and Sanitation Access to All Buildings:

Awarded

Drinking Water Quality:

Awarded

Treated Wastewater Quality:

Awarded

Stormwater Quality: Pending

1. Information on the quality of stormwater discharged from the city and its compliance with U.S. EPA's National Pollutant Discharge Elimination System (NPDES) permit program for stormwater pollution prevention from construction and industrial activities and municipal sources or local, state, or national equivalent could not be found in the supporting documentation.

Provide updated documentation mentioning information on the quality of stormwater discharged from the city and its compliance with U.S. EPA's National Pollutant Discharge Elimination System (NPDES) permit program for stormwater pollution prevention from construction and industrial activities and municipal sources or local, state, or national equivalent could not be found in the supporting documentation.

Water Performance

Awarded: 5

POSSIBLE POINTS: 6

ATTEMPTED: 5, NOT AWARDED: 0, PENDING: 0, AWARDED: 5

EXISTING FINAL REVIEW

Awarded with a water performance score of 84.

Note the following:

I. Upon recalculation, the total per capita daily water consumption value for the city found to be different. Given that the slight difference in the total per capita daily water consumption value for the city does not impact the score already achieved by the project, this documentation is being accepted for this submission only. Ensure that calculations should be correct and consistent at all places in the documentation in future submissions.

EXISTING PRELIMINARY REVIEW

1. Upon recalculations, following errors were found in the supporting documentation 'WE Prerequisite – Water Performance.docx' -

- a. Total per capita daily water consumption value has been estimated inaccurately using total water consumption data of the year 2022 and permanent population value of the year 2021.
- b. Total water consumption value includes both residential and commercial water consumption data. However, only permanent population for the year 2021 has been used to estimate total per capita daily water consumption value for the city.

Provide updated calculations for the per capita daily water consumption value of the city using uniform data of the latest year within the past five years. Ensure to consider same year data for the water consumption and population while estimating the total per capita daily water consumption or domestic per capita daily water consumption value for the city.

Note the following:

- I. The per capita water consumption value of the city should be calculated using uniform data of the latest year within the past five years using either residential water consumption and permanent population OR total water consumption and total population value of the city.

Integrated Water Management

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, NOT AWARDED: 0, PENDING: 0, AWARDED: 1

EXISTING PRELIMINARY REVIEW

Awarded

Stormwater Management

Not Attempted

POSSIBLE POINTS: 2

Smart Water Systems

Awarded: 2

POSSIBLE POINTS: 2

ATTEMPTED: 2, NOT AWARDED: 0, PENDING: 0, AWARDED: 2

EXISTING PRELIMINARY REVIEW

Option 2. Water Audit and Automation:

Awarded



Energy and Greenhouse Gas Emissions

Power Access, Reliability and Resiliency

Awarded

EXISTING PRELIMINARY REVIEW

Access:

Case 1. Electricity Access:

Awarded

Reliability Performance Monitoring:

Awarded

Power Surety and Resiliency:

Awarded

Energy and Greenhouse Gas Emissions Performance

Awarded: 12

POSSIBLE POINTS: 14

ATTEMPTED: 12, NOT AWARDED: 0, PENDING: 0, AWARDED: 12

EXISTING FINAL REVIEW

Awarded with an energy performance score of 91.

EXISTING PRELIMINARY REVIEW

1. The sum of scope 1 and scope 2 emissions, for estimating the per capita emissions of the city, indicated in the supporting documentation 'Calculations for Annual Per Capita Emissions.docx', appears to be incorrect.

Provide updated calculation for per capita GHG emissions. Revise the value in ARC, if necessary.

Energy Efficiency

Awarded: 1

POSSIBLE POINTS: 4

ATTEMPTED: 1, NOT AWARDED: 0, PENDING: 0, AWARDED: 1

EXISTING PRELIMINARY REVIEW

Option 1. Energy Audit and Energy Conservation (Building Performance Disclosure):

Awarded

Renewable Energy

Awarded: 4

POSSIBLE POINTS: 6

ATTEMPTED: 4, NOT AWARDED: 0, PENDING: 0, AWARDED: 4

EXISTING PRELIMINARY REVIEW

Option 1. Renewable Energy in Electricity Supply

Awarded

Note the following:

I. The supporting narrative does not clearly describe the credit option being attempted by the city. Since the supporting documentation indicates that 42.3% of the electricity supply is met by renewable energy sources, the review has been done based on option 1.

Net Zero Carbon and Climate Action

Awarded: 1

POSSIBLE POINTS: 4

ATTEMPTED: 1, NOT AWARDED: 0, PENDING: 0, AWARDED: 1

EXISTING FINAL REVIEW

Option 3. Reduction in Carbon Intensity:

Awarded

Note the following:

I. The updated documentation continues to meet the credit compliance.

EXISTING PRELIMINARY REVIEW

Option 3. Reduction in Carbon Intensity:

Awarded

Note the following:

I. The carbon intensity for 2021 has been estimated using the total annual GHG emissions for the year 2018. However, only scope 1 and scope 2 emissions for the same reporting year should have been used. Given that upon recalculation using the scope 1 and scope 2 emissions for the same reporting year as the GDP, there is decrease in carbon intensity from 2018 to 2021, this is being accepted for this submission only. Ensure all calculations are correct and accurate for all future submissions.

Grid Harmonization

POSSIBLE POINTS: 2

Not Attempted



Materials and Resources

Solid Waste Management

Awarded

EXISTING PRELIMINARY REVIEW

Access:

Case 1. Waste Management Services to All Buildings:

Awarded

Solid Waste Management Plan:

Awarded

Waste Performance

Awarded

POSSIBLE POINTS: 4

ATTEMPTED: 0, NOT AWARDED: 0, PENDING: 0, AWARDED: 0

EXISTING PRELIMINARY REVIEW

Alternative Compliance Path: Waste Diversion Trend Improvement:

Awarded

Note the following:

I. It is unclear from the supporting documentation how the per capita municipal solid waste generation intensity and diversion rate values for the year 2021, as entered on the ARC, have been determined for the city. However, this documentation is being accepted for this submission only as the further response on the per capita municipal solid waste generation intensity and diversion rate values would not impact the score already achieved by the city. Ensure to provide detailed calculations for the per capita municipal solid waste generation intensity and diversion rate values for all future submissions.

Special Waste Streams Management

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, NOT AWARDED: 0, PENDING: 0, AWARDED: 1

EXISTING PRELIMINARY REVIEW

Awarded

Note the following:

I. The supporting documentation 'MR Credit – Special Waste Streams Calculations.docx' mentions diverted waste quantities for hazardous waste streams and two other special waste streams (e-waste & pre-consumer food waste) from the county. However, apportioned data on waste generated and diverted through hazardous waste, e-waste and pre-consumer food waste from the City of Grand Junction could not be found in the supporting documentation. This documentation is being accepted for this submission only as the apportioned diversion rate value is not going to be change significantly for the city. Ensure to provide apportioned data for the hazardous waste streams and any two special waste streams for the City of Grand Junction in future submissions.

Responsible Procurement

POSSIBLE POINTS: 1

Not Attempted

Material Recovery

POSSIBLE POINTS: 3

Not Attempted

Smart Waste Management Systems

POSSIBLE POINTS: 1

Not Attempted



Quality of Life

Demographic and Social Equity Assessment

Awarded

EXISTING PRELIMINARY REVIEW

Awarded

Quality of Life Performance

Awarded: 5

POSSIBLE POINTS: 6

ATTEMPTED: 5, NOT AWARDED: 0, PENDING: 0, AWARDED: 5

EXISTING FINAL REVIEW

Awarded with a quality of life performance score of 90.

Note the following:

I. It appears from the supporting documentation that the project team has changed the reporting year and the corresponding values for all the quality-of-life parameters in Arc. The review has been done based on the updated documentation provided for this credit.

II. The value for the *Median Air Quality Index* indicated in the supporting documentation 'annual_aqi_EPA.xlsx' does not match with value found in the [data source](#) provided for the same. Given that the variation is quite small (about 1%), and this variation does impact the overall credit points, this documentation is being accepted for this submission only. For future submissions, ensure that all data provided is consistent and correct.

III. The supporting documentation 'Quality of Life Performance – Education; Equitability; Prosperity; and Health and Safety Indicators.docx' indicates that 1-year American Community Survey (ACS) data for *Median Gross Rent as a % of Household Income* has been used for the city. However, 5-year ACS estimates must be used for this credit. Given that the variation does not impact the credit points, this documentation is being accepted for this submission only. For future submissions, ensure to provide 5-year ACS estimates for all the quality of life performance parameters.

EXISTING PRELIMINARY REVIEW

1. The data for the violent crime (475) indicated in the supporting documentation 'PerCapita2022-5YearCrime&Traffic.pdf' indicates violent crime per 100,000 population per year for the year 2022. However, the same value has been entered in Arc as violent crime per capita per year without converting it into per capita.

Provide updated calculations for violent crime per capita per year for the project. Update the values in Arc, as necessary.

2. The reporting year for the violent crime data indicated in the supporting documentation 'PerCapita2022-5YearCrime&Traffic.pdf' is 2022. However, the same value has been entered into Arc for the year 2019.

Update the correct reporting year for the violent crime data in Arc, as necessary.

Note the following:

I. The value for the Median Household Income indicated in the supporting documentation 'Prerequisite Quality of Life ACS data for ARC.xlsx' does not match with value found in the data source provided for the same. Given that the variation is quite small (about 1%) and this does impact the overall credit points, this documentation is being accepted for this submission only. For future submissions, ensure that all data provided is consistent and correct.

Social Services & Infrastructure

Awarded: 1

POSSIBLE POINTS: 3

ATTEMPTED: 1, NOT AWARDED: 0, PENDING: 0, AWARDED: 1

EXISTING PRELIMINARY REVIEW

Option 1. Community Needs Assessment:

Awarded

Economic Growth & Opportunity

Not Attempted

POSSIBLE POINTS: 3

Environmental Justice

Not Attempted

POSSIBLE POINTS: 1

Housing and Transportation Affordability

Awarded: 2

POSSIBLE POINTS: 2

ATTEMPTED: 2, NOT AWARDED: 0, PENDING: 0, AWARDED: 2

EXISTING PRELIMINARY REVIEW

Option 1. Comprehensive Housing Policy:

Awarded

Option 4. Affordable Rental Housing Preservation:

Awarded

Public Health

Awarded: 2

POSSIBLE POINTS: 3

ATTEMPTED: 2, NOT AWARDED: 0, PENDING: 0, AWARDED: 2

EXISTING FINAL REVIEW

Option 1. Public Health Metrics:

Mortality measures: Number of low-birth-weight infants:

Awarded

EXISTING PRELIMINARY REVIEW

Option 1. Public Health Metrics:

Mortality measures: Number of low-birth-weight infants:

1. The [link](#) provided as the data source for the *number of low-birth-weight infants* was not accessible during the review.

Provide a functioning link or supporting documentation clearly highlighting the data points for the number of low-birth-weight infants.

Health risk factors: Percentage of population with tobacco use:

Awarded

Access to healthcare: Percentage of people covered under health insurance:

Awarded

Option 3. Protect Air Quality:

Awarded

Educational Opportunity & Attainment

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, NOT AWARDED: 0, PENDING: 0, AWARDED: 1

EXISTING FINAL REVIEW

Option 3: Assistance and support programs:

Awarded

Note the following:

I. This credit has been attempted during the final review.

Civil and Human Rights

Not Attempted

POSSIBLE POINTS: 1



Innovation

Innovation

Awarded: 6

POSSIBLE POINTS: 6

ATTEMPTED: 6, NOT AWARDED: 0, PENDING: 0, AWARDED: 6

EXISTING PRELIMINARY REVIEW

Innovation 1. Community Access to Government Services:

Awarded

Innovation 2. Internal Sustainability Action Team:

Awarded

Innovation 3. Nature Based Vegetation Management:

Awarded

Innovation 4. Resilient Fleet Fuel Sources:

Awarded

Innovation 5. Urban Landscape Change for Water Use Reduction:

Awarded

Innovation 6. Environmental Education and Outreach:

Awarded



Regional Priority

Regional Priority

Awarded: 4

POSSIBLE POINTS: 4

ATTEMPTED: 4, NOT AWARDED: 0, PENDING: 0, AWARDED: 4

EXISTING FINAL REVIEW

Option 1. Regional Priority

Strategy 2. Water Performance:

Awarded

EXISTING PRELIMINARY REVIEW

Option 1. Regional Priority

Strategy 1. Renewable Energy:

Awarded

Strategy 2. Water Performance: Pending

1. The project has identified WE Prerequisite: Water Performance as a regional priority. However, WE Prerequisite: Water Performance is pending.

See the review comments for WE Prerequisite: Water Performance and update the credit documentation as necessary. GBCI will revisit this credit during the final review depending on the final review status WE Prerequisite: Water Performance.

Option 2. Innovative Regional Priority

Strategy 3. Arts and Culture:

Awarded

Strategy 4. Riverfront Corridor Initiative:

Awarded