



City of Syracuse

12 Traits® of Sustainable Communities Rating

In 2010, the City of Syracuse teamed up with Greening USA, a Syracuse-based community sustainability advocacy group, to “Beta-test” their 12 Traits® of Sustainable Communities Rating System.

Greening USA developed this rating system to help communities measure their successes, shortfalls, recognize strengths and weaknesses, and to make sense of how to prioritize future initiatives towards becoming truly sustainable. The

City of Syracuse is utilizing the rating system among other tools to better understand its baseline sustainability metrics, create priorities for its Sustainability Plan and to benchmark future progress towards sustainability.

The 12 Traits® measures the sustainability of a community based on two distinct criteria, 1) measurable “Performance Data” and 2) progress on “Sustainability Initiatives.” It is structured to give credit for objective data that can be measured and tracked, as well as for the existence and progress of ongoing initiatives.

“Performance Data” is comprised of 36 distinct metrics. Each trait has three metrics, one for each of three categories of significance: environmental, economic, and social equity. Each of the 36 metrics is capable of earning a community a maximum of 100 points, 300 for the entire trait (See Figure 1, 2).

Scores are also awarded for “Sustainability Initiatives” for each of the 36 metrics in the “Performance Data” section. Each of the metrics is capable of earning a community a maximum of 40 points, 120 for the entire trait (see figure 4).

The 12 Traits are as follow:

1. Governmental Leadership in Sustainability
2. Local Economic Resilience
3. Land Use Planning & Resource Preservation
4. Sustainable Transportation & Mobility
5. Water Related Infrastructure Systems
6. Green Buildings and Housing
7. Energy from Non Fossil Fuels
8. Waste Material Management
9. Local Culture, Arts and Entertainment
10. Quality Public Education
11. Public Health and Safety
12. Community Engagement



The 12 Traits[®] and Categorized Sustainability Scoring Criteria Chart

Categories	A.) Local ENVIRONMENTAL Significance	B.) Local ECONOMIC Significance	C.) Local Social EQUITY Significance
Sustainability Traits			
1. Governmental Leadership in Sustainability by Executive, staff, and legislators.	Carbon Footprint / Greenhouse Gas Emissions Reduction	Community Bond Rating	Voter Registration Levels
2. Local Economic Resilience with diversified economic base.	Air Quality Index	Employment Mix	Level of Employment
3. Sustainable Land Use Planning and Resource Preservation that is integrated, balanced, and diversified.	Developed Area / Open Area	Sprawl Index	Owner Occupied Housing Units
4. Sustainable Transportation & Mobility Systems with numerous options.	Complete Streets	Commuting Options	Housing & Transportation Affordability Index
5. Water Related Infrastructure Systems addressing long and short term quantity and quality.	Potable Water Quality	Waste Water Processing	Community wide Green Infrastructure
6. Green Buildings and Housing that are environmentally and energy responsive.	Green Buildings per capita	Green Construction Jobs	Housing Affordability
7. Energy From Non-Fossil Fuels with localized and centralized sources.	Green Electrical Power	Green Energy Businesses	Energy Affordability through LIHEAP
8. Waste Material Management that is holistic and value based.	Landfill Diversion	Business Recycling	Public Place Recycling
9. Local Culture, Art and Entertainment that is well rounded and inclusive	Green Event Planning	Economic Impact	Diversity of venues and events
10. Quality Public Education that teaches sustainability	Environmental Education / Sustainability Curriculum	Public Sustainability Education	Graduation Rates
11. Public Health and Safety based on clean, safe, healthy, places.	Public Recreation Facilities	Health and Safety Workforce	Crime Rate
12. Community Engagement and participation by citizens.	Environmental Organizations	Business Engagement	Diverse Participation

Figure 1: 12 Traits[®] Metrics

Syracuse Achieves GreeningUSA Sustainable Community Recognition

The City of Syracuse collected data and scored its community rating using the 12 Traits[®] of Sustainable Communities Self Assessment Manual in 2010 and early 2011. Data was collected from multiple departments as well as through other local agencies, not-for-profits and local governments. Score worksheets were submitted to GreeningUSA along with a digital copy of all backup data substantiating scores. After review by GreeningUSA, the City of Syracuse was recognized as a “GreeningUSA Sustainable Community – 2010.”

Out of 5040 possible points in the rating system, the City of Syracuse scored 1512.9 out of 3600 for Performance Data, and 933.5 out of 1440 for Sustainability Initiatives, for a total of 2,446.4 points, or a 48.5% overall sustainability rating. A minimum of 40% is required for the distinction of “GreeningUSA Sustainable Community.”

Analysis from completion of the 12 Traits[®] Rating System has revealed that Syracuse performs strongest in Local Economic Resilience (267/420), Public Health and Safety (249/420), Waste Material Management (243/420), and Local Culture, Arts and Entertainment (241/420). Areas identified as needing most attention included Water Related Infrastructure (112/420), Community Engagement (139/420), Land Use Planning/Resource Preservation (148/420) and Energy from Non Fossil Fuels (160/420).

The analysis of both Performance Data and Sustainability Initiatives revealed that there are many “low-hanging-fruit” opportunities to be considered for future sustainability planning:

- Formalize greenhouse gas emissions reduction targets
- Create energy policy for municipal operations
- Create government green vehicle fleet policy
- Refine green purchasing practices
- Adopt Smart Growth and other sustainability principles in planning
- Explore green corridors for recreation and habitat
- Adopt Complete Streets Policy
- Improve bicycle and pedestrian infrastructure
- Strengthen green building legislation which currently covers only government buildings
- Support deconstruction
- Set up recycling in public spaces and at community events
- Make sustainability information available to the public through website and education
- Create district/regional approach to education for sustainability
- Create outreach programs for residents, businesses, employees
- Support businesses in adopting sustainability practices
- Adopt above measures in Sustainability Plan, track, measure and update

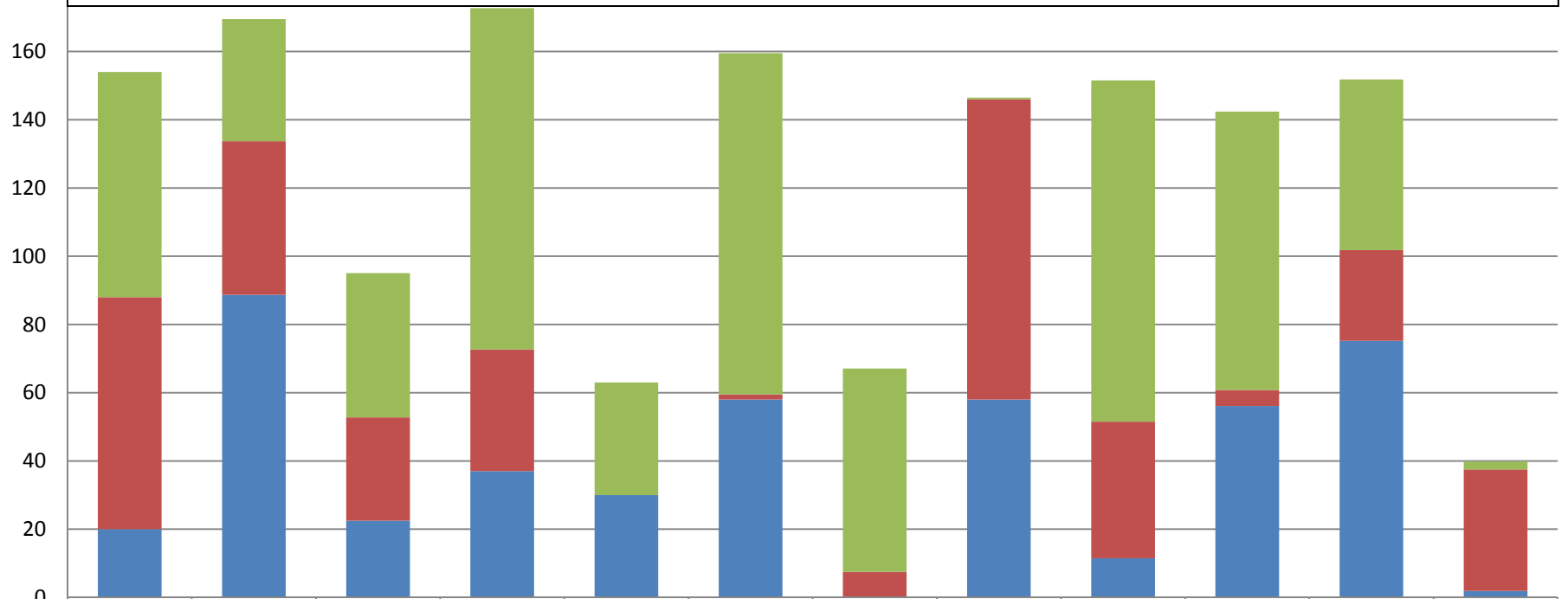
Currently the City is meeting with interdepartmental staff and community experts to develop the priorities and goals for the Sustainability Plan. A draft version of the plan will be available for public input in 2012.

GreeningUSA 12 Traits of Sustainable Communities

Performance Data Summary

This figure displays the Performance Data scores for all 12 Traits[®]. Each trait score is comprised of three metric scores representing three categories (environmental, economic, social equity) for each trait. Each metric score has a maximum of 100 points. The maximum score for each trait is 300 points. Scores are calculated based on raw data (see Figure 3). For example, under the voter registration metric, communities are rewarded one point for each percent of the population that is registered to vote. In this case, Syracuse was awarded 66 points for 66% voter registration. GreeningUSA uses a different calculation to create a score out of 100 for each metric. For more details on scoring or the rating system, contact GreeningUSA at www.greeningusa.org.

Trait Score Points (maximum 300)



	1. Governmental Leadership in Sustainability	2. Local Economic Resilience	3. Land Use Planning & Resource Preservation	4. Sustainable Transportation & Mobility	5. Water Related Infrastructure Systems	6. Green Buildings and Housing	7. Energy from Non Fossil Fuels	8. Waste Material Management	9. Local Culture, Arts and Entertainment	10. Quality Public Education	11. Public Health and Safety	12. Community Engagement
■ Social Equity	66	35.8	42.3	100	33	100	59.6	0.5	100	81.6	50	2.3
■ Economic	68	45	30.27	35.7	0	1.5	7.3	88	40	4.7	26.6	35.6
■ Environmental	20	88.7	22.5	37	30	58	0.2	58	11.5	56.1	75.21	1.9

Figure 2: 12 Traits[®] Performance Data Scores

City of Syracuse
12 Traits of Sustainable Communities Ratings 2010 Data

Metric	1. Governmental Leadership in Sustainability	
1	Greenhouse Gas Emissions Reduction	20%
2	Community Bond Rating	93.4% non debt, 6.6% debt ratio Baa Bond Rating
3	Voter Registration Levels	66%
	2. Local Economic Resilience	
4	Air Quality Index	89.6% Good 9.5% moderate 0.9% Unhealthy
5	Employment Mix	9 North American Industry Classification System codes greater than 1
6	Level of Employment	43% living wage
	3. Land Use Planning & Resource Preservation	
7	Developed Area / Open Area	94% - 7.5% Residential Density Factor 85.83 (17th)
8	Sprawl Index	16th most sprawling of 83 Mix of homes, jobs, & services 71.97 (11th)
9	Owner Occupied Housing Units	41% Strength of town centers/downtowns 124.92 (73rd)
	4. Sustainable Transportation & Mobility	Accessibility of street network 52.58 (2nd)
10	Complete Streets	37% Complete Streets - includes neighborhood streets
11	Commuting Options	65% Drive Alone 16% Carpool 11% Walk 8% Public Transportation
12	Housing & Transportation Affordability Index	Below 30% Housing Below 45% Housing & Transportation
	5. Water Related Infrastructure Systems	
13	Potable Water Quality	6 Instances exceeding health guidelines 14 Pollutants found EWG Drinking Water Quality Report
14	Waste Water Processing	12 Quarters non compliance EPA Enforcement & Compliance History Online (3yrs)
15	Community wide Green Infrastructure	11 Pts EPA scorecard on Green Infrastructure
	6. Green Buildings and Housing	
16	Green Buildings per capita	5.80% 4 LEED, 1706 Energy Star, 6302 Weatherized
17	Green Construction Jobs	1.50% 134 green construction/8695 construction jobs
18	Housing Affordability	26%
	7. Energy from Non Fossil Fuels	
19	Green Electrical Power	0.20% 4.3 million geen kWh/2,114 million kWh
20	Green Energy Businesses	7.30% 123 green energy/1680 energy jobs
21	Energy Affordability through LIHEAP	59.60% Percent of eligible receiving HEAP benefits
	8. Waste Material Management	
22	Landfill Diversion	88%
23	Business Recycling	88%
24	Public Place Recycling	2 public recycling locations out of approximately 400
	9. Local Culture, Arts and Entertainment	
25	Green Event Planning	3 of 26 Green Events
26	Economic Impact	\$72.4 Million
27	Diversity of venues and events	All represented
	10. Quality Public Education	
28	Environmental Education & Sustainability Curriculum	100% k-12, 10% College
29	Public Sustainability Education	5000 / year
30	Graduation Rates	81.6% high school, professional school, or college graduates
	11. Public Health and Safety	
31	Public Recreation Facilities	75% within 1/4 mile radius of park/center
32	Health and Safety Workforce	5.32 per capita
33	Crime Rate	500.2 National Average 319.2 (higher value indicates more crime)
	12. Community Engagement	
34	Environmental Organizations	0.72 organizations per 1000
35	Business Engagement	36% of businesses in member organizations
36	Diverse Participation	2.3 organizations per 1000

Figure 3: Performance Data Metrics

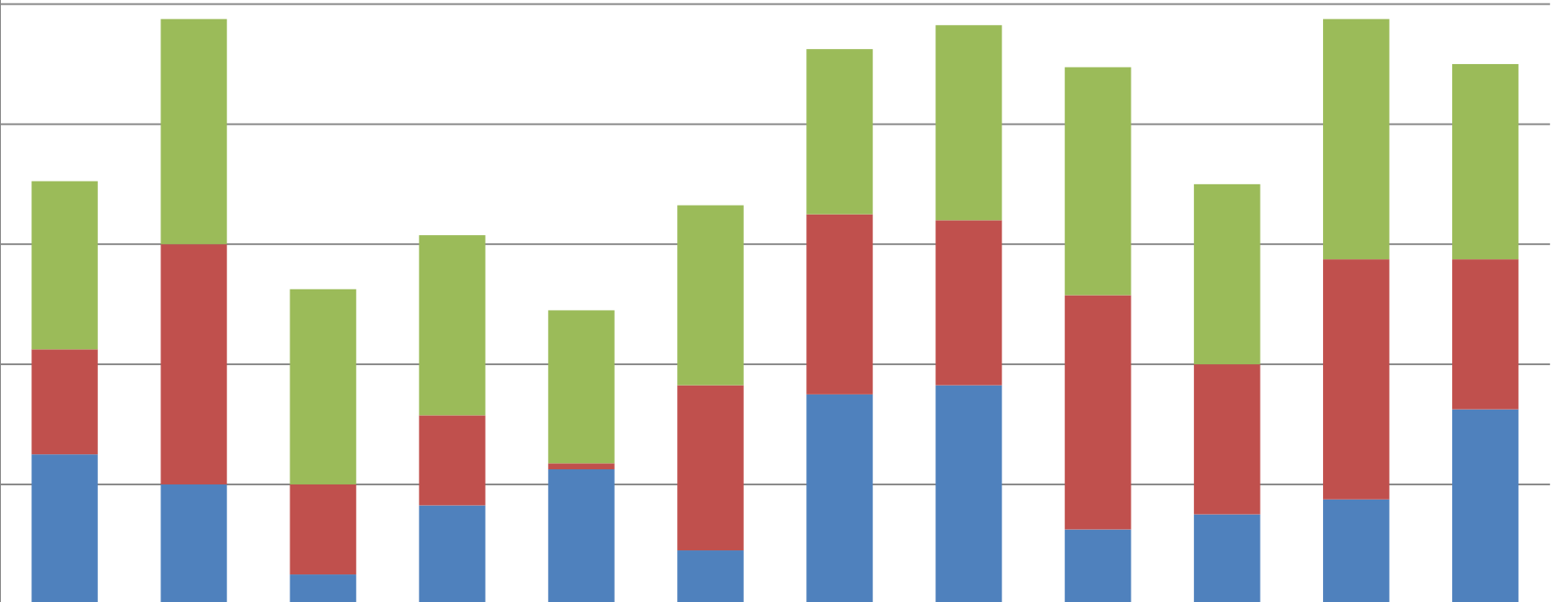
GreeningUSA Twelve Traits of Sustainable Communities

Initiatives Score Summary

Initiatives Score Points (maximum 120)

120
100
80
60
40
20
0

The Sustainability Initiatives section of the 12 Traits[®] assesses the level of implementation of initiatives that align with each of the 36 metrics measured in the performance data section of the tool. Each metric has four questions regarding initiatives. Scores for each initiative are awarded based on the presence of an initiative in the community (Yes=10 points), multiplied by the percentage that the initiative is being implemented. For example, under the first trait, Governmental Leadership, if a community can answer “yes” to the question, “Is there a formalized program to reduce the ‘carbon footprint’ or greenhouse gas output of the community?,” then the community would multiply 10 points times the percent that this formalized program is implemented. With a maximum total score of 10 for each question, the initiatives associated with any of the 36 metrics can have a maximum score of 40. With three metrics per trait, the maximum score for each trait is 120, and maximum overall score is 1440.



	1. Governmental Leadership in Sustainability	2. Local Economic Resilience	3. Land Use Planning & Resource Preservation	4. Sustainable Transportation & Mobility	5. Water Related Infrastructure Systems	6. Green Buildings and Housing	7. Energy from Non Fossil Fuels	8. Waste Material Management	9. Local Culture, Arts and Entertainment	10. Quality Public Education	11. Public Health and Safety	12. Community Engagement
■ Social Equity	28	37.5	32.5	30	25.5	30	27.5	32.5	38	30	40	32.5
■ Economic	17.5	40	15	15	1	27.5	30	27.5	39	25	40	25
■ Environmental	25	20	5	16.5	22.5	9	35	36.5	12.5	15	17.5	32.5

Figure 4: 12 Traits[®] Sustainability Initiatives Score