



GENERAL SERVICES

CITY OF DURHAM

City of Durham Sustainability Roadmap

February 2018

Defining Sustainability



Sustainable Cities:

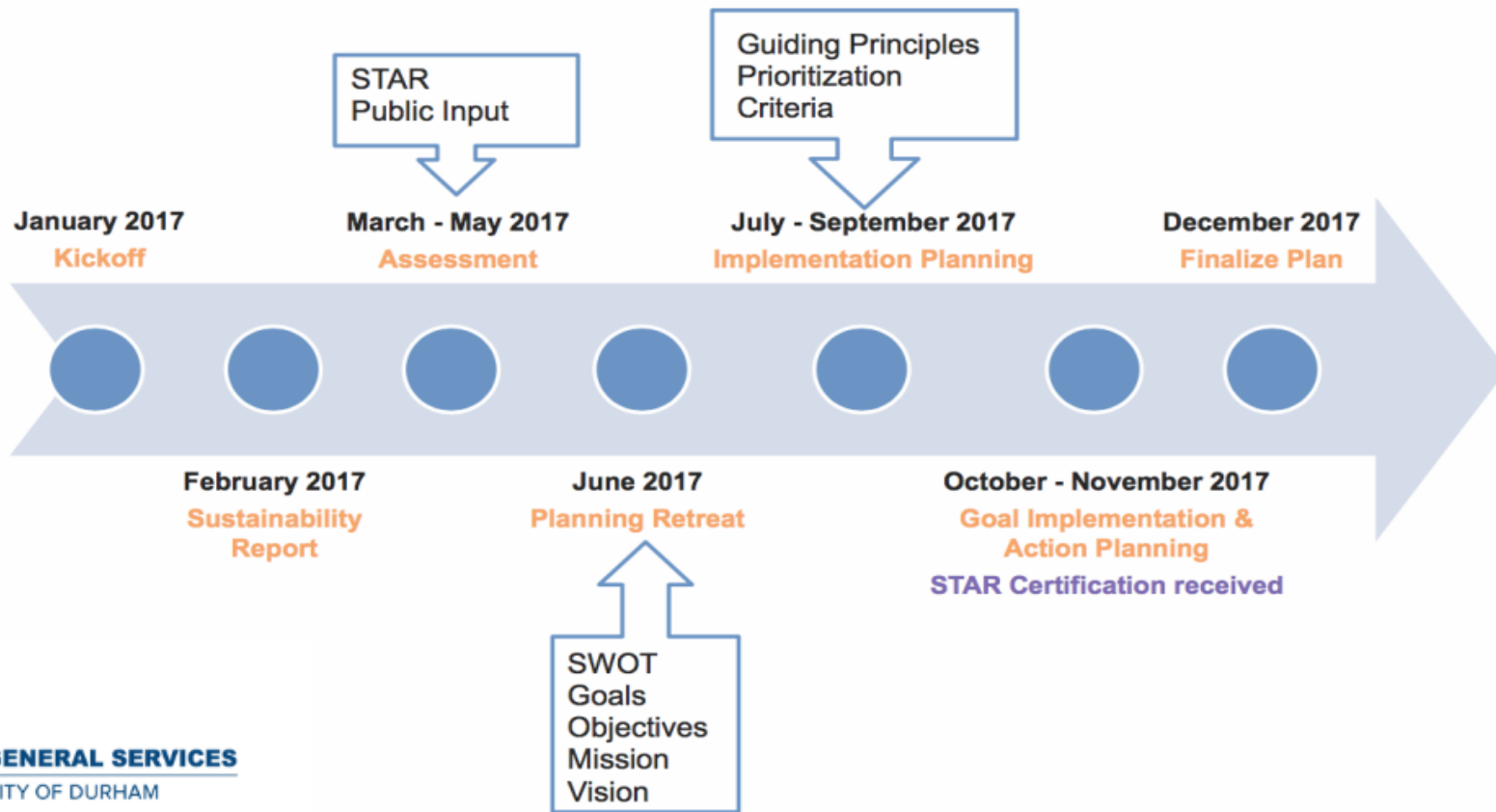
“cities [that] work towards an environmentally, socially, and economically healthy and resilient habitat for existing populations, without compromising the ability of future generations to experience the same.” - [ICLEI Local Governments for Sustainability](#)

Sustainability Planning

- I. Assessment: Where are we now?
 - Sustainability Report
 - STAR Community Certification
- II. Visioning: Where do we want to be?
 - Sustainability Planning Retreat
 - Prioritization Matrix
 - Guiding Principles
- III. Action Planning: How do we get there?
 - Outcome Measures & Targets
 - Brainstorming & Prioritizing Strategies
- IV. Implementation & Reporting



City of Durham Sustainability Roadmap Project Timeline



Where are we now?

City of Durham
2017 Sustainability Report

July 2017

CITY OF DURHAM: Sustainability



Introduction

City of Durham Sustainability Report

The purpose of this report is to communicate the City of Durham's sustainability story to date and to inform a strategic path forward.

The report includes a timeline of major environmental milestones, key indicators, and accomplishments across City departments. Taken together, these components tell a story of how Durham is becoming a better, more sustainable community for its current population and future generations.

In addition to shedding light on Durham's recent accomplishments, the information in this report will help inform a comprehensive Sustainability Plan for the City of Durham. The plan, under development in 2017, will assist the City in meeting objectives put forth in Goal 5 of the Sustainability Plan: stewardship of physical and environmental assets. It will identify several overarching

Sustainability Report

Baseline Indicators

2017



Sustainability Report

Timeline of Durham Sustainability

2017



Built Environment	Climate & Energy	Economy & Jobs	Education, Arts, & Community	Equity & Empowerment	Health & Safety	Natural Systems	Innovation & Process
BE-1: Ambient Noise & Light	CE-1: Climate Adaptation	EJ-1: Business Retention & Development	EAC-1: Arts & Culture	EE-1: Civic Engagement	HS-1: Active Living	NS-1: Green Infrastructure	IP-1: Best Practices & Processes
BE-2: Community Water Systems	CE-2: Greenhouse Gas Mitigation	EJ-2: Green Market Development	EAC-2: Community Cohesion	EE-2: Civil & Human Rights	HS-2: Community Health	NS-2: Biodiversity & Invasive Species	IP-2: Exemplary Performance
BE-3: Compact & Complete Communities	CE-3: Greening the Energy Supply	EJ-3: Local Economy	EAC-3: Educational Opportunity & Attainment	EE-3: Environmental Justice	HS-3: Emergency Management & Response	NS-3: Natural Resource Protection	IP-3: Local Innovation
BE-4: Housing Affordability	CE-4: Energy Efficiency	EJ-4: Quality Jobs & Living Wages	EAC-4: Historic Preservation	EE-4: Equitable Services & Access	HS-4: Food Access & Nutrition	NS-4: Outdoor Air Quality	IP-4: Good Governance
BE-5: Infill & Redevelopment	CE-5: Water Efficiency	EJ-5: Targeted Industry Development	EAC-5: Social & Cultural Diversity	EE-5: Human Services	HS-5: Health Systems	NS-5: Water in the Environment	
BE-6: Public Parkland	CE-6: Local Government GHG & Resource Footprint	EJ-6: Workforce Readiness	EAC-6: Aging in the Community	EE-6: Poverty Prevention & Alleviation	HS-6: Hazard Mitigation	NS-6: Working Lands	
BE-7: Transportation Choices	CE-7: Waste Minimization				HS-7: Safe Communities		

STAR Community Framework



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Durham Certified as a 4-STAR Community

November 2017

Goal	Approved Final Score	Total Points Possible	Percent Achieved
Built Environment	63.10	100	63%
Climate & Energy	54.37	100	54%
Economy & Jobs	59.73	100	60%
Education, Arts & Community	69.82	100	70%
Equity & Empowerment	59.55	100	60%
Health & Safety	61.14	100	61%
Natural Systems	71.28	100	71%
Innovation & Process	25.00	50	50%
TOTALS -->	464.00	750	62%



Where do we want to be?

Sustainability Planning Retreat

June 2017



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How do we get there?

- **Guiding Principles**
- **Prioritization Matrix**
- **Action Teams**

August 2017





Sustainability Guiding Principles

- We believe in **open communication**, therefore we seek input and share goals, initiatives, and progress with all stakeholders, including coworkers, departments and the Durham community.
- We believe in **collaboration** within the City, among City residents, and externally, therefore we focus on meeting multiple interests rather than individual positions when making decisions and seeking opportunities to form partnerships.
- We believe in **equity**, therefore we will:
 - Evaluate access, consider impacts, and ensure benefits across all demographics, generations and geographies when making decisions.
 - Design and implement programs, initiatives, policies and procedures that enhance Durham's social, physical and capital assets.
- We believe in **innovation**, therefore we will utilize data, research, and best practices to develop creative, cutting edge ideas and solutions to inform and implement sustainable services, policies and practices.
- We believe in being **good stewards of public assets**, which includes public funds and staff time, therefore we will consider all relevant lifetime costs and benefits when making decisions.



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Prioritization Matrix

Criteria	
	High-Medium-Low
	High-Medium-Low
	High-Medium-Low
	Yes- No
	High-Medium-Low

Action Planning: How do we get there?



Seven cross-departmental action teams met September – November of 2018

Action Teams

September – November 2018

- Developed Goal Statements
- Established Outcome Measures & Targets
- Brainstormed & Prioritized Strategies



Sustainability Goals

Arts & Community: Advance and reinforce opportunities that celebrate #DURM culture

Built Environment: Achieve equitable access and choice to infrastructure that supports a high quality of life for all residents and enhances the environment

Climate & Energy: Lead the way in addressing climate change by minimizing energy use and increasing community and local government resource efficiency

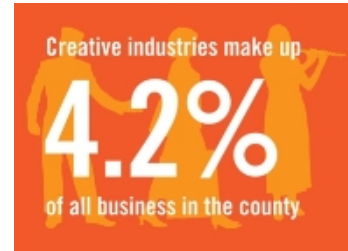
Economy & Jobs: Maximize equitably shared prosperity for local small and diverse businesses and inclusive access to quality jobs with fair livable wages

Natural Systems: Protect and restore Durham's natural resources and ecosystem

Equity & Empowerment: Advance equity, inclusion, and equal access to opportunities and services to engage and empower residents

Innovation: Embrace a culture of innovation to ensure a more sustainable community

Measuring Success



Outcome Measures & Targets

Specific, quantifiable targets that measure the accomplishment of our goals in the short-term (2020) and long-term (2040)

Examples:

Arts & Community Outcome Measure:

Creative industries represent 4.6% of all businesses in Durham according to the Local Arts Index by 2020, and 5% by 2040

Built Environment Outcome Measure:

Reduce daily vehicle miles traveled per capita to 34 by 2020 and 30 by 2040

Developing & Prioritizing Strategies

Strategy ideas came from:

- Best practices identified in the STAR community certification process
- Feedback from residents in the online survey and public events
- Departmental liaisons who are internal subject matter experts in their respective fields
- Current city-wide and departmental strategic plans

Strategies were prioritized for inclusion based on pre-determined criteria (prioritization matrix)

A	B	C	D	E	F	G	H
	Prioritization	Potential Strategy	Impact	Public Input	Alignment w/ Guiding Principles	Cost Effective	Operational Feasibility
1	*	Establish regular, ongoing opportunities for elected officials and/or senior government staff to meet with residents to answer questions and listen to concerns	Medium	Yes	High	High	Medium
2		Create an office or interdepartmental working committee within the local government to guide and support environmental justice activities	Medium	Yes	High	High	Medium
3		Establish an Environmental Justice subcommittee of the Environmental Affairs Board (or separate Environmental Justice Collaborative Group) that provides research, strategies, and recommendations to ensure no neighborhoods or populations are overburdened by environmental pollution.	Medium	Yes	High	High	Medium
4		Establish a cross-department task force to review and implement recommendations from advisory board that make our processes, policies, services, communications, and programs more inclusive and identify work to remove barriers to entry.	Medium	Yes	High	High	Medium
5		Establish an equity and empowerment advisory board comprised of residents and community stakeholders to inform how the City can meet goals to advance equity, inclusion, and equal access	Medium	Yes	High	High	Medium
6	*	Research best practices of other municipalities related to equity and empowerment	Medium	No	High	High	High
7	* merge with strategy 3 and 5	Adopt inclusive public engagement guidelines for local government agencies and departments	Low	Yes	High	High	Medium
8		Partner with business, civic, nonprofit, and neighborhood organizations to increase and promote community engagement in local decision-making	Medium	Yes	High	Medium	Medium
9		Adopt policies or amend the jurisdiction's charter to specifically protect the civil and human rights of all	Low	Yes	High	High	Medium



Arts & Community

Advance and reinforce opportunities that celebrate #DURM culture

Measuring Success:

- Demonstrate that City hiring for staff and leadership positions reflect the diversity of the community by 2025
- Creative industries represent 5% of all businesses in Durham according to the Local Arts Index by 2040

Example Strategies:

- ✓ Develop partnerships with local organizations focused on business recruitment and retention of creative industries in Durham
- ✓ Offer training and workshops around entrepreneurial skills to expand capacity of local artists
- ✓ Develop a City Diversity Recruitment Plan to ensure equitable representation of minorities and females in specific job roles within local city government

Measuring Success:

- Reduce daily vehicle miles traveled per capita to 34 by 2020 and 30 by 2040
- Create or preserve 500 affordable housing units by 2020 and demonstrate that an average low-income household earning 80% AMI would spend less than 45% on housing and transportation costs combined by 2040
- Demonstrate that 65% of residents live within a ten-minute walk (½ mile) to public parkland by 2020 and 70% by 2040

Built Environment

Achieve equitable access and choice to resilient infrastructure that supports a high quality of life for all residents and enhances the environment

Example Strategies:

- ☑ Conduct an Affirmatively Furthering Fair Housing Assessment to analyze challenges to fair housing choice and inform goals and priorities to address fair housing barriers
- ☑ Support a communitywide public bike share program
- ☑ Utilize GIS to inform where to invest and acquire land for future parks
- ☑ Analyze public transit access and transportation costs for neighborhoods with housing affordable to low- and moderate-income households to inform future affordable housing and transit investments

RIGHTLEA
SQUARE



Climate & Energy:

Lead the way in addressing climate change by minimizing energy use and increasing community and local government resource efficiency

Example Strategies:

- ✓ Develop sustainable building guidelines
- ✓ Develop enforcement strategies to ensure that the employee idle reduction policy is widely and consistently adhered to
- ✓ Install recycling bins in public places
- ✓ Establish a Water Use Baseline for local government facilities

Measuring Success:

- Develop a fundable action plan by 2020 to reduce the amount of energy use intensity in City owned buildings by 30% by 2040
- Achieve a 5% increase in fuel economy (MPG) of City fleet* by 2020, and 1% increase each year after by 2040
- Reduce the per household amount of residential solid waste that goes to the landfill by 10% by 2020; and total residential solid waste that goes to the landfill by 50% by 2040
- Reduce potable residential per capita water use by 10% by 2040
- Update the Green House Gas Reduction plan by 2020, creating a fundable action plan towards carbon neutrality in City operations by 2040

Economy & Jobs

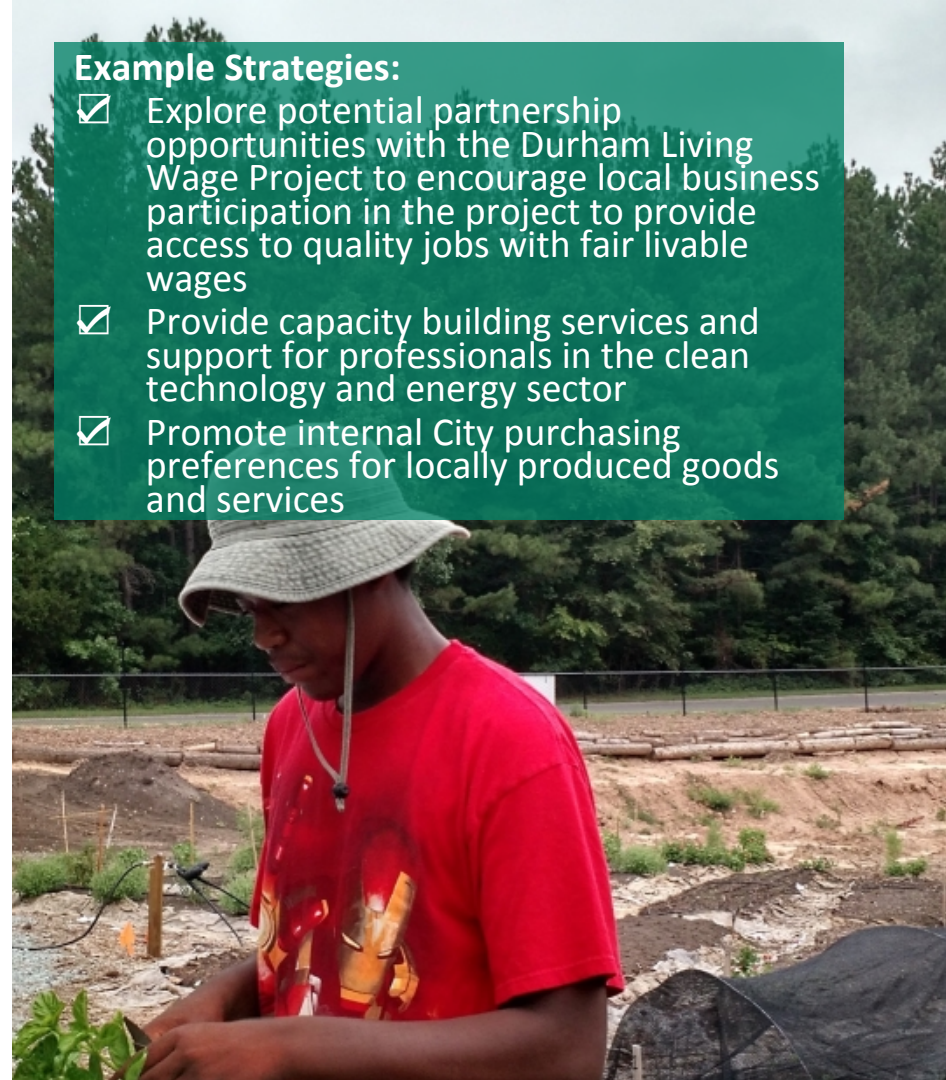
Maximize equitably shared prosperity for local small and diverse businesses and inclusive access to quality job with fair livable wages

Measuring Success:

- Increase total employment in the clean technology and energy sector by 20% by 2040
- Demonstrate that 75% of City funds expended on professional services contracts \$100,000 or less and construction contracts \$500,000 or less will go to Certified City of Durham Small Local Businesses by 2020 and 95% by 2040
- Achieve and maintain the minimum wage for all full-time City employees in accordance with the Livable Wage Ordinance by 2018

Example Strategies:

- ✓ Explore potential partnership opportunities with the Durham Living Wage Project to encourage local business participation in the project to provide access to quality jobs with fair livable wages
- ✓ Provide capacity building services and support for professionals in the clean technology and energy sector
- ✓ Promote internal City purchasing preferences for locally produced goods and services





Measuring Success:

- Achieve and maintain a city-wide tree canopy coverage of 55% by 2040
- Demonstrate a decrease of 10% in the annual average ozone and particulate matter (PM 2.5) by 2040
- Increase square footage of public and private land converted to habitat suitable for pollinators by 1,000 square feet, on average, each year by 2040
- Achieve and maintain a water quality index (WQI) of at least 75 for Clean Water Act streams with EPA approved Total Maximum Daily Loads by 2040

Natural Systems

Protect and restore Durham's natural resources and ecosystem

Example Strategies:

- ✓ Establish guidelines for sustainable, site-appropriate landscaping for city-owned properties
- ✓ Allocate \$50,000 per year to the development or maintenance of green infrastructure, increasing to \$250,000 within 5 years including partner matching funds
- ✓ Expand forestry programs aimed at increasing the jurisdiction's tree canopy through active planting, care, and management in partnership with local businesses, civic groups and non-profit organizations
- ✓ Partner with local volunteer groups and neighborhood associations to restore priority natural systems areas by planting pollinator friendly habitat

Equity & Empowerment

Engage and empower residents to advance equity, inclusion, and equal access to opportunities and services

Measuring Success:

- Demonstrate a Resident Engagement Index score of 7 or greater by 2020 and 9 or greater by 2040



Example Strategies:

- ✓ Conduct an environmental justice assessment
- ✓ Expand and improve equity and empowerment training for employees across all departments and at all levels of the organization
- ✓ Adopt inclusive public engagement guidelines that include considerations for language translation and interpretation services

Innovation

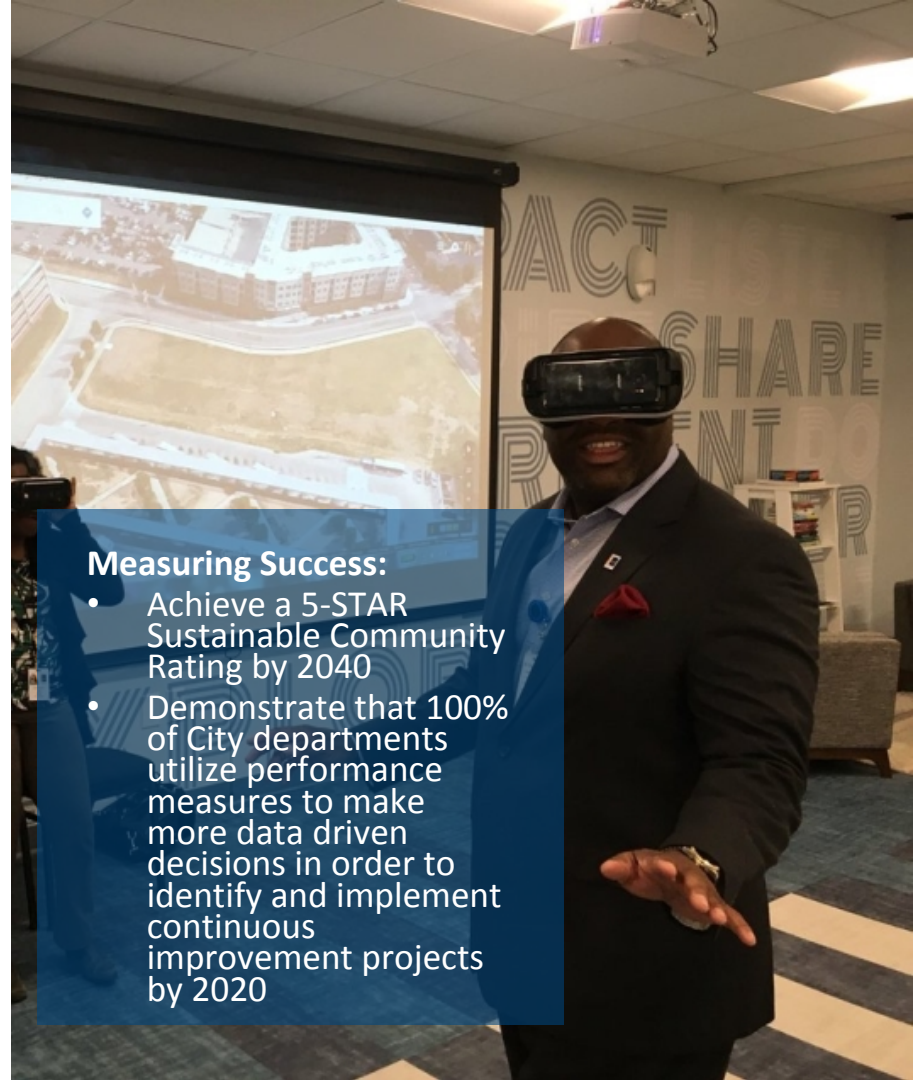
Embrace a culture of innovation to ensure a more sustainable community

Example Strategies:

- ✓ Establish professional development opportunities for City employees that encourage skill-sharing and peer-teaching/learning across departments
- ✓ Develop creative strategies that encourage innovation, continuous improvement, and risk taking among local government employees to improve City services and outcomes
- ✓ Expand City performance management system, creating more opportunities focused on regularly utilizing high-quality data to inform process improvement and operational decisions



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Measuring Success:

- Achieve a 5-STAR Sustainable Community Rating by 2040
- Demonstrate that 100% of City departments utilize performance measures to make more data driven decisions in order to identify and implement continuous improvement projects by 2020

Public Engagement Process



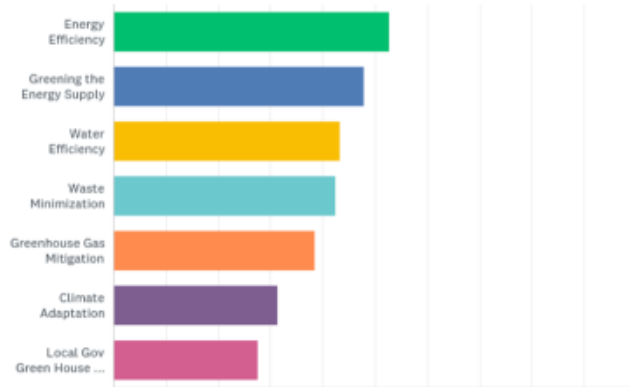
August – November 2017

- Over 1,300 residents provided input via:
 - Online Survey (Spanish & English versions)
 - 4 Stakeholder Interviews
 - 8 Public Events
 - Review of 9 Previous Public Input surveys



Q2: What is most important to you about Climate & Energy? (#1 being the most important)

Answered: 637 Skipped: 27



Example of Online Survey Results

Online Sustainability Survey

August - November 2017



What we heard from Durhamites:

- Residents overwhelmingly mentioned the need for focused attention on **affordable housing**
- Engaging youth** in sustainability initiatives was a common theme
- Investing in building **energy efficiency** and transitioning to **clean, renewable energy**
- Protecting open space** and promoting connectivity of our green spaces, parks, and trails
- Improved access and connectivity of **bicycle and pedestrian facilities**
- A greater consideration for **environmental justice**, such as working towards a more equitable distribution of tree canopy coverage, air, water, and soil quality across all socioeconomic groups
- Expanding our **waste reduction** options (public recycle bins, offering composting service, addressing plastic bags and Styrofoam etc.)
- Offering more **workforce training** and access to quality jobs that provide fair, **livable wages**
- Providing **equitable access to services**- especially for Spanish speaking, minority, and low-income residents

Implementation & Reporting

- Outcome measures and priority strategies are used to guide 2018 Strategic Plan and Departmental Plan updates
- Sustainability Progress Report published on a biennial basis
- Sustainability Roadmap updated every 4 years in alignment with STAR re-certification timeline
- Sustainability Team meets quarterly to review progress and ensure implementation. This team is lead by Strategic Plan Goal 5 Champion



Please direct questions to:
General Services Department
Sustainability & Energy Management
919-560-4197



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