

Attachment B – Status of Environmental Stewardship Strategic Plan Goals

Subsequent to the completion of the Local Climate Action Planning Process (LCAPP) in 2011, the Board of Supervisors adopted an Environmental Stewardship Strategic Plan, which included operational objectives intended to reduce carbon emissions associated with Albemarle County's buildings and fleet of vehicles. On September 6, 2017 – through the adoption of a resolution – the Board expressed its interest in developing a more comprehensive and community-wide climate action strategy.

As the Environmental Stewardship Strategic Plan is supplanted by an effort to develop a Climate Action Plan, this document serves as a final summary of progress made towards the more tangible Plan goals.

Buildings

Objective: Reduce total energy use in County buildings by 40% from the calendar year 2005 (CY 05) baseline by CY 17.

The chart below represents total energy usage during the 12-month period ending September 30, 2017 compared to the CY 2005 baseline for the three County office buildings. A negative percent equals reduction in use and a positive percent equals higher usage as compared to baseline amounts. The most significant progress was made at the McIntire building – likely due to the building having more potential for improvements and the former General Services Department (now Facilities and Environmental Services) having most control. The increased use of natural gas at 5th Street COB is likely the result of having to operate the HVAC system boiler year-round, instead of seasonally. This operations change was made at the recommendation of our HVAC contractor to control humidity within the building.

	Electricity	Natural Gas	Total Energy
McIntire COB	- 37%	- 49%	- 42%
5 th Street COB	- 14%	+19%	- 7%
Court Square	- 9%	- 14%	- 11%
Combined	- 24%	- 10%	- 17%

County Fleet

The absence of a centralized fleet management program has hindered the ability to enact new policies and the collection and analysis of information. The following goal updates reflect what data is available at this time.

Objective: Reduce total fuel consumption by 20% by FY 17.

Only limited data was available regarding fuel use. Countywide fuel use declined over the three CY periods, but only slightly. Given that the number of vehicles in the County fleet has increased about 17% (see overall numbers below), a decrease of fuel total consumption can be viewed as a minor victory.

Department	Fuel Use (gallons)		
	CY 2014	CY 2015	CY 2016
Community Development	1,026	1,101	1,358
Emergency Communications Center	551	605	563
Facilities & Environmental Services	2,036	2,319	3,863
Fire & Rescue	19,906	15,268	9,856
Housing	448	441	426
Inspections	8,713	8,888	9,087
Parks & Recreation	5,957	7,665	8,152

Police Department	164,542	166,543	161,886
Real Estate Assessor	959	755	709
Sheriff's Department	20,516	20,049	19,638
Social Services	3,755	4,149	4,205
Pool Vehicles - All Employees	461	459	2,016

All Departments	228,869	228,242	221,758
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Comparison to 2014 Baseline		
CY 2014	CY 2015	CY 2016
	-0.27%	-2.83%

Objective: 25% of fleet operate on alternative fuel by 2020.

Disregarding public safety vehicles, the County currently has nine hybrid vehicles out a total fleet of 85 (74 departmental vehicles and 11 pool vehicles). In addition, a portion of the non-hybrid vehicles are flex-fuel vehicles, which can run on either gasoline or gasoline-ethanol blends of up to 85% ethanol. Note that the goal was exceeded for those vehicles over which Facilities and Environmental Services had control.

	# hybrid vehicles	# total vehicles	% hybrid
pool vehicles	4	11	36%
department vehicles	5	74	7%
total non-public safety	9	85	11%

Objective: Increase average fuel rating of traditional vehicles to 28 mpg.

Based on the available data, there was an approximately 5% improvement in fleet mileage between CY 13 and CY 17 (year-to-date). Despite the improvements, the overall rating remaining significantly below the goal. The primary challenge in meeting this goal is the need for powerful vehicles (police and fire rescue) and heavy trucks (parks and recreation).

Department	Miles Per Gallon				
	CY 2013	CY 2014	CY 2015	CY 2016	YTD 2017
Community Development	15.44	14.27	15.96	16.52	17.50
Emergency Communications Center	12.82	13.63	14.70	13.64	14.04
Facilities & Environmental Services	15.46	15.53	16.77	14.68	14.51
Fire & Rescue	11.61	11.49	13.23	13.90	13.47
Housing	14.40	21.14	21.42	20.86	21.35
Inspections	17.75	17.89	18.79	19.45	19.12
Parks & Recreation	14.52	11.67	11.49	11.24	11.44
Police Department	13.23	13.15	13.67	13.84	13.81
Real Estate Assessor	21.18	20.53	20.43	20.77	19.37
Sheriff's Department	15.60	16.24	16.75	16.80	15.98
Social Services	24.46	23.79	23.19	22.53	22.36
Pool Vehicles - All Employees	23.96	25.15	22.30	24.03	24.72
All Departments	13.91	13.94	14.58	14.80	14.66

Percent Improved (2013 Baseline)				
	CY 2014	CY 2015	CY 2016	YTD 2017
	0.25%	4.83%	6.45%	5.39%

* Balance average rating unavailable. Figures shown reflect actual mpg.

Objective: Reduce the County fleet 25% from the 2010 baseline by fiscal year 2017.

The total number of County vehicles has actually increased from 2010. This is due – almost entirely – to an increase in the number of staff by 15%. The number of vehicles per person has remained essentially the same.

Department	FY 2011 (Baseline Year)			FY 2017		
	Employees	Vehicles	Veh/Emp	Employees	Vehicles	Veh/Emp
Community Dev./Inspections	60	16	0.27	72	19	0.26
Facilities and Environmental Services	32	17	0.53	35	12	0.34
Finance	50	9	0.18	56	9	0.16
Fire/Rescue	80	30	0.38	109	57	0.52
Housing	7	2	0.29	6	1	0.17
Parks & Recreation	20	14	0.70	20	14	0.70
Police	148	170	1.15	164	199	1.21
Sheriff	23	33	1.43	23	39	1.70
Social Services	103	18	0.17	117	13	0.11
Pool Vehicles - All Employees	0	10	N/A	0	11	N/A
Total All Departments	523	319	0.61	602	374	0.62
Goal - 20% Reduction	-64					
Net Increase	55					