



CITY OF DURHAM | NORTH CAROLINA

Date: January 11, 2012

To: Thomas J. Bonfield, City Manager
Through: Keith Chadwell, Deputy City Manager
From: Tobin Freid, City-County Sustainability Manager
Subject: Response to Council's Questions Regarding Electric Vehicle Charging Presentation at January 5, 2011 Work Session

In response to the City Council's request for more information on how the estimated number of electrical vehicles in the Triangle compares to the total number of vehicles in the fleet: In Durham and the Triangle, plug-in electric vehicles will make up less than 1% of the total fleet in 2015 and more than 10% by 2030. More detailed information is in the table below:

Total fleet PEV penetration, Medium adoption scenario (% of fleet)

County	2011	2015	2020	2025	2030
NC - Chatham	0.0%	0.8%	3.0%	7.0%	12.1%
NC - Durham	0.0%	0.6%	2.6%	6.2%	11.1%
NC - Orange	0.0%	1.1%	4.2%	9.1%	14.9%
NC - Person	0.0%	0.3%	1.4%	4.1%	8.2%
NC - Wake	0.0%	0.5%	2.3%	5.8%	10.5%
Triangle	0.0%	0.6%	2.6%	6.3%	11.1%

Cumulative PEV fleet (# vehicles), Medium adoption scenario

County	2011	2015	2020	2025	2030
NC - Chatham	13	334	1,440	3,699	7,091
NC - Durham	64	1,701	7,648	20,468	40,358
NC - Orange	67	1,774	7,160	17,204	31,294
NC - Person	3	81	477	1,502	3,252
NC - Wake	154	4,102	19,057	52,437	105,341
Triangle	301	7,992	35,782	95,310	187,336

Total Fleet Size (# vehicles)

County	2011	2015	2020	2025	2030
NC - Chatham	40,839	43,407	47,394	52,876	58,544
NC - Durham	255,974	271,551	295,761	329,762	365,032
NC - Orange	146,663	155,706	169,751	189,312	209,576
NC - Person	30,376	31,800	34,032	36,930	39,883
NC - Wake	706,068	749,194	816,213	910,109	1,007,470
Triangle	1,179,920	1,251,658	1,363,151	1,518,989	1,680,505

*Estimates provided by Electric Power Research Institute