City Council Policy/Business/Consent Agenda Q&A's September 26, 2022

Submitted	Agenda Item # and Questions	Answers/Considerations	
<u>By:</u>	Public Hearings Items		
Mayfield	7. Public Hearing and Decision on Cresswind Charlotte – Phase 9 Area Voluntary Annexation	The proposed development in both of these annexations will be homes for purchase.	
	8. Public Hearing and Decision on Orchard Creek Area Voluntary Annexation		
	Are the planned single-family houses to be for lease or for purchase?		
	Cons	ent	
Mayfield	23. Charlotte-Mecklenburg Government Center Parking Garage Electric Vehicle Charging Station Installations		
	How many charging stations do we currently have in CMGC deck and what is the current usage?	We currently have (4) dual-port and (1) single-port EV charging stations at the CMGC deck on the first floor. Two of those stations are reserved for fleet use only. The other three are publicly accessible. Based on our utilization data, the existing CMGC deck chargers are used daily, and are consistently occupied: - The average number of sessions per charger over the past 30 days was 35. (This average includes our ADA accessible charger which is a critical asset, but used less frequently. The average excluding that charger is 40.) - The average charging session length was 4 hours.	
		This project would add 25 stations, with a total of 49 ports on the top levels, meaning we can charge 49 vehicles at once. One of those is a fast charger that allows for fleet resiliency and the ability to respond in emergency situations because it can charge an electric vehicle in approx. 20 - 30 minutes. This is a cornerstone project that supports our SEAP goal to strive for a 100% zero carbon fleet by 2030, as our fleet is poised to double based on existing budget allocations for EVs, of which many are on order.	
	How are the increased electric usage and costs considered?	Increased electric usage is considered as a part of our transition to electric vehicles, as well as when we plan charging projects.	
		We recently worked with a consultant team to complete a comparison between the cost per mile for Conventional Internal Combustion Engine (ICE) vehicles and Electric vehicles incorporating maintenance, fuel and depreciation into the analysis.	

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		In all categories, light duty electric vehicles have a lower cost per mile. For example, a conventional ICE Pickup Truck costs \$0.40/mile compared to a cost of \$0.35/mile for an electric vehicle.
		In our charging projects, including this project, we bring Duke Energy on board in the beginning. We have been working with them on a rate structure that is most cost efficient, based on the time of use of the chargers. This process is underway.
		We will also be taking advantage of the Duke "Make Ready" credit. Under this program, Duke Energy provides a credit on our bill which will lower the electricity costs in the initial stages, as a way of defraying the cost of new infrastructure. This is a new incentive approved by the North Carolina Utilities commission to reduce the cost of deploying EV charging infrastructure and encourage EV adoption. The bill credit details are to be determined as we continue to work with Duke Energy.
	How we account for costs of new batteries for the vehicles?	The cost analysis mentioned above includes projections of maintenance, including battery maintenance. Right now, the battery replacement market is still emerging. We do have warranties on EV batteries that are standard around 8 years and 100,000 miles which covers a significant portion of the life of our vehicles.