



1200 King County Courthouse 516 Third Avenue Seattle, WA 98104

Legislation Text

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Clerk 04/26/2016

A MOTION requesting Metro Transit transmit a feasibility report for achieving a carbon-neutral or zero-emission fleet.

WHEREAS, public transportation is a crucial link to ensuring opportunity for all, providing affordable and safe connections to jobs, schools, housing, health care and grocery stores. Having adequate and robust public transportation has an enormous impact on our economy, our climate and our health. We must invest in public transportation in a manner that builds a county where all people can participate and prosper, and

WHEREAS, this motion has its foundation in the King County Strategic Plan. One of the eight goals of the Strategic Plan is to "promote opportunities for all communities and individuals to realize their full potential." The first objective listed toward achieving that goal is to "increase the number of healthy years that residents live." The second objective listed toward achieving that goal is to "protect the health of communities." The Strategic Plan also includes strategies to ensure the safety of food, air and water strategies to monitor and improve the environmental quality and reduce exposure to hazardous materials, and

WHEREAS, data from the National Equity Atlas shows that air pollution disproportionately affects communities of color and low-income communities in Washington, and

WHEREAS, even the cleanest hybrid diesel bus emits two kilograms of greenhouse gas emissions per mile and contributes particulate matter, carbon monoxide, nitrogen dioxide and other pollutants that have been linked to increased cases of asthma and lung disease, and

WHEREAS, transportation is the region's largest source of greenhouse gas emissions, accounting for nearly half of all greenhouse gas emissions, and

WHEREAS, King County plays an important role in reducing greenhouse gas emissions, as public transportation options directly and indirectly reduce greenhouse gas emissions, and

WHEREAS, public transportation in King County must continue to expand, as the King County Metro Transit 2015 Service Guidelines Report, which was accepted through Motion 14583, identified a shortfall of nearly 500,000 transit service hours each year, and

WHEREAS, the 2015 King County Strategic Climate Action Plan, adopted in Motion 14449, includes goals to double transit ridership by 2040, increase usage percentage of alternative fuels and expansion of transit service through 2020 with no increase in greenhouse gas emissions, and

WHEREAS, the transit division, also known as Metro Transit, has been a leader in reducing greenhouse gas emissions by deploying vehicles that utilize new technologies and reduce fuel use, and

WHEREAS, Metro Transit has one of the largest transit vehicle fleets and the largest public vanpool program in the nation, and

WHEREAS, Metro Transit has a goal of achieving an all-electric or hybrid transit fleet, by 2018, and WHEREAS, nearly seventy percent of Metro Transit's fleet is now comprised of either all-electric or hybrid-electric vehicles, and

WHEREAS, Metro Transit operates one of only five electric trolley systems in the United States and, in 2015, began updating its trolley fleet with vehicles designed to travel "off-wire" for limited distances with regenerative braking and improved energy efficiency, and

WHEREAS, Metro Transit was one of the first to move to hybrid electric buses in 2004, an early adopter that has made this technology common nationwide, and

WHEREAS, Metro Transit's electric trolley system is powered by carbon-neutral energy from Seattle City Light, and

WHEREAS, Metro Transit is testing its first all-electric battery-powered buses, and WHEREAS, according to data collected by other transit agencies operating battery buses, the battery-

powered vehicles have been shown to generate a cost savings of forty-nine percent per mile compared to a hybrid bus and a forty-percent savings over a diesel bus, and

WHEREAS, given its size Metro Transit's fleet purchasing decisions can influence and help grow the worldwide market for electric transit vehicles, and

WHEREAS, in March 2016, the city of Seattle announced "Drive Clean Seattle," a comprehensive strategy to transition the transportation sector to clean, carbon-neutral electricity, and

WHEREAS, King County and thirteen cities, including Bellevue, Burien, Issaquah, Kirkland, Mercer Island, Normandy Park, Redmond, Renton, Sammamish, Seattle, Shoreline, Snoqualmie and Tukwila, are collaborating through the King County-Cities Climate Collaboration ("K4C") to coordinate and enhance the effectiveness of local government climate and sustainability action, focusing on reducing greenhouse gas emissions, and

WHEREAS, the K4C's Joint County-City Climate Commitments include commitments for K4C partners to sustain and grow transit service in King County and to participate in programs promoting proven alternative technology solutions such as vehicle electrification, and

WHEREAS, Got Green and Puget Sound Sage published a March 2016 report on climate justice calling for people of color and communities with lower incomes to be at the decision-making table on climate policies, and

WHEREAS, Ordinance 17971 created the King County Metro transit carbon offset program to maximize the environmental benefits of transit;

NOW, THEREFORE, BE IT MOVED by the Council of King County:

- A. The King County council recognizes Metro Transit's achievements to date in converting nearly seventy percent of its transit fleet to either all-electric or hybrid-electric vehicles and expresses its support for Metro Transit's all-electric battery-powered bus pilot and all electric commuter vehicles.
 - B. The King County council expresses its support for Metro Transit achieving the goal of either a

carbon-neutral or zero-emission vehicle fleet in all of Metro Transit's service area as expeditiously as possible, so long as costs for such a system do not decrease service levels such that the service area experiences an increase in greenhouse gas emissions or transit access is not materially impacted.

- C.1. The executive is requested to develop and transmit a feasibility report that identifies and analyzes strategies for and barriers to achieving a carbon-neutral or zero-emission vehicle fleet, including the vanpool fleet. The report shall include but not be limited to:
- a. analysis and a recommendation on whether a carbon-neutral or zero-emission fleet should be the preferred goal for Metro Transit. The analysis should compare the costs and benefits of both goals. In considering the costs, the analysis should include the cost of greenhouse gas emissions, the health costs from tailpipe emissions, including their effect on low-income and communities of color, and potential impacts to bus routes and target service levels;
- b. an analysis and recommendation of a range of possible target dates for achieving the recommended goal in subsection C.1.a. of this motion. The analysis should identify opportunities for partnerships with cities and other stakeholders to implement pilot projects and build the electric vehicle infrastructure necessary to reduce emissions of greenhouse gases and criteria pollutants;
- c. an analysis of any changes necessary to the strategic plan for public transportation, or the long range plan in order to achieve the recommended goal in subsection C.1.a. of this motion and the recommended target date in subsection C.1.b. of this motion. The analysis shall also identify any conflicts with or implications to the goals in the 2015 Strategic Climate Action Plan, the Vision 2040 Plan or the Metro service guidelines;
- d. an evaluation of the battery bus pilot, including an analysis of the feasibility and timelines for transitioning the fleet to a carbon-neutral or zero-emission fleet. The evaluation should consider expanding the electric trolley fleet. The analysis should also identify the associated fleet and infrastructure needs for a carbon-neutral or zero-emission fleet;

- e. an analysis of how the King County Metro transit carbon offset program established in Ordinance 17971 can be implemented to achieve the goal identified in subsection C.1.a. of this motion;
- f. an analysis of any gaps in available technologies or products that would need to be addressed in order to meet the goal identified in subsection C.1.a. of this motion and the recommended target date identified in subsection C.1.b. of this motion; and
- g. an equity and social justice analysis of the goal identified in subsection C.1.a. of this motion, including maintenance of service levels and assessment of public health and air quality benefits to those communities most negatively impacted by poor air quality.
- 2. In drafting the report, the executive shall engage a group of no more than seven stakeholders to provide input into the proposed plan. Stakeholders shall include at minimum one representative each from groups focused on low-income communities, racial equity, public health, climate change and public transit. Stakeholder selection shall take into account geographic equity.
- 3. The executive shall transmit the feasibility report, and a motion adopting the report by March 1, 2017, in the form of a paper original and an electronic copy to the clerk of the council, who shall retain the original and provide an electronic copy to all councilmembers, the council chief of staff, the policy staff director and the lead staff for the transportation, economy and environment committee, or its successor. The executive may elect to prepare an implementation plan if that is deemed feasible and appropriate.