



KING COUNTY

1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

Signature Report

April 27, 2016

Motion 14633

Proposed No. 2016-0200.3

Sponsors Dembowski and Kohl-Welles

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

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

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

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

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

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

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

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

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

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

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

41 WHEREAS, Metro Transit has a goal of achieving an all-electric or hybrid transit
42 fleet, by 2018, and

43 WHEREAS, nearly seventy percent of Metro Transit's fleet is now comprised of
44 either all-electric or hybrid-electric vehicles, and

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

49 WHEREAS, Metro Transit was one of the first to move to hybrid electric buses in
50 2004, an early adopter that has made this technology common nationwide, and

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

53 WHEREAS, Metro Transit is testing its first all-electric battery-powered buses,
54 and

55 WHEREAS, according to data collected by other transit agencies operating
56 battery buses, the battery-powered vehicles have been shown to generate a cost savings of
57 forty-nine percent per mile compared to a hybrid bus and a forty-percent savings over a
58 diesel bus, and

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

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

64 WHEREAS, King County and thirteen cities, including Bellevue, Burien,
65 Issaquah, Kirkland, Mercer Island, Normandy Park, Redmond, Renton, Sammamish,

66 Seattle, Shoreline, Snoqualmie and Tukwila, are collaborating through the King County-
67 Cities Climate Collaboration ("K4C") to coordinate and enhance the effectiveness of
68 local government climate and sustainability action, focusing on reducing greenhouse gas
69 emissions, and

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

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

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

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

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

84 B. The King County council expresses its support for Metro Transit achieving the
85 goal of either a carbon-neutral or zero-emission vehicle fleet in all of Metro Transit's
86 service area as expeditiously as possible, so long as costs for such a system do not
87 decrease service levels such that the service area experiences an increase in greenhouse
88 gas emissions or transit access is not materially impacted.

89 C.1. The executive is requested to develop and transmit a feasibility report that
90 identifies and analyzes strategies for and barriers to achieving a carbon-neutral or zero-
91 emission vehicle fleet, including the vanpool fleet. The report shall include but not be
92 limited to:

93 a. analysis and a recommendation on whether a carbon-neutral or zero-
94 emission fleet should be the preferred goal for Metro Transit. The analysis should
95 compare the costs and benefits of both goals. In considering the costs, the analysis
96 should include the cost of greenhouse gas emissions, the health costs from tailpipe
97 emissions, including their effect on low-income and communities of color, and potential
98 impacts to bus routes and target service levels;

99 b. an analysis and recommendation of a range of possible target dates for
100 achieving the recommended goal in subsection C.1.a. of this motion. The analysis should
101 identify opportunities for partnerships with cities and other stakeholders to implement
102 pilot projects and build the electric vehicle infrastructure necessary to reduce emissions
103 of greenhouse gases and criteria pollutants;

104 c. an analysis of any changes necessary to the strategic plan for public
105 transportation, or the long range plan in order to achieve the recommended goal in
106 subsection C.1.a. of this motion and the recommended target date in subsection C.1.b. of
107 this motion. The analysis shall also identify any conflicts with or implications to the
108 goals in the 2015 Strategic Climate Action Plan, the Vision 2040 Plan or the Metro
109 service guidelines;

110 d. an evaluation of the battery bus pilot, including an analysis of the feasibility
111 and timelines for transitioning the fleet to a carbon-neutral or zero-emission fleet. The

112 evaluation should consider expanding the electric trolley fleet. The analysis should also
113 identify the associated fleet and infrastructure needs for a carbon-neutral or zero-emission
114 fleet;

115 e. an analysis of how the King County Metro transit carbon offset program
116 established in Ordinance 17971 can be implemented to achieve the goal identified in
117 subsection C.1.a. of this motion;

118 f. an analysis of any gaps in available technologies or products that would need
119 to be addressed in order to meet the goal identified in subsection C.1.a. of this motion and
120 the recommended target date identified in subsection C.1.b. of this motion; and

121 g. an equity and social justice analysis of the goal identified in subsection
122 C.1.a. of this motion, including maintenance of service levels and assessment of public
123 health and air quality benefits to those communities most negatively impacted by poor air
124 quality.

125 2. In drafting the report, the executive shall engage a group of no more than
126 seven stakeholders to provide input into the proposed plan. Stakeholders shall include at
127 minimum one representative each from groups focused on low-income communities,
128 racial equity, public health, climate change and public transit. Stakeholder selection shall
129 take into account geographic equity.

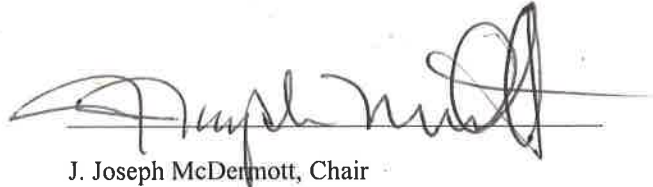
130 3. The executive shall transmit the feasibility report, and a motion adopting the
131 report by March 1, 2017, in the form of a paper original and an electronic copy to the
132 clerk of the council, who shall retain the original and provide an electronic copy to all
133 councilmembers, the council chief of staff, the policy staff director and the lead staff for

134 the transportation, economy and environment committee, or its successor. The executive
135 may elect to prepare an implementation plan if that is deemed feasible and appropriate.
136

Motion 14633 was introduced on 3/28/2016 and passed as amended by the
Metropolitan King County Council on 4/25/2016, by the following vote:

Yes: 9 - Mr. von Reichbauer, Mr. Gossett, Ms. Lambert, Mr. Dunn,
Mr. McDermott, Mr. Dembowski, Mr. Upthegrove, Ms. Kohl-Welles
and Ms. Balducci
No: 0
Excused: 0

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON



J. Joseph McDermott, Chair

ATTEST:



Anne Noris, Clerk of the Council

Attachments: None