



KING COUNTY
Signature Report

1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

February 9, 2016

Motion 14565

Proposed No. 2016-0093.1

Sponsors Dembowski

1 A MOTION relating to public transportation, approving a
2 work plan for assessing ridership impacts and customer
3 response to the University Link bus integration, as directed
4 by Ordinance 18133, Section 4.

5 WHEREAS, in October 2015, Ordinance 18133 approved the March 2016
6 University Link bus integration service changes, and

7 WHEREAS, Ordinance 18133, Section 4, requires the executive to transmit a
8 motion by January 29, 2016 for the approval of a work plan for assessing ridership
9 impacts and customer response to the University Link bus integration, and

10 WHEREAS, Ordinance 18133, Section 4 requires the work plan to:

11 1. Identify performance measures to assess ridership and customer satisfaction
12 with the existing Metro bus network and the new network integrated with the Central
13 Link light rail;

14 2. Include plans through which the division shall conduct a customer and resident
15 service assessment survey to be conducted by March 2017 to measure customer and
16 resident satisfaction before and following the service change;

17 3. Be coordinated with Sound Transit performance assessments to avoid
18 duplication of effort; and

19 4. Be modeled on past performance reports such as the C and D Line

20 Assessment, and

21 WHEREAS, the work plan includes a scope of work, tasks, schedule, milestones,

22 and budget, and

23 WHEREAS, Metro has compiled the required information and the executive has

24 transmitted the work plan for assessing ridership impacts and customer response

25 regarding the University Link bus integration as set forth as Attachment A to this motion

26 to the council;

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

28 The council hereby approves the King County Metro Transit Work Plan for

- 29 Assessing Ridership Impacts and Customer Response to the University Link Bus
30 Integration, Attachment A to this motion.
31

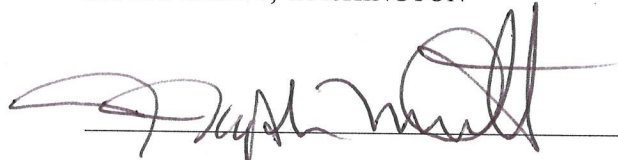
Motion 14565 was introduced on 2/1/2016 and passed by the Metropolitan King County Council on 2/8/2016, by the following vote:

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

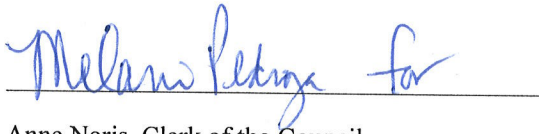
Excused: 0

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON



J. Joseph McDermott, Chair

ATTEST:



Anne Noris, Clerk of the Council

Attachments: A. King County Metro Transit Work Plan for Assessing Ridership Impacts and Customer Response to the University Link Bus Integration

King County Metro Transit

Work Plan for Assessing Ridership Impacts and Customer Response to the University Link Bus Integration

January 29, 2016

Prepared for:
King County Council

Prepared by:



**Department of Transportation
Metro Transit Division
Service Development Section
King Street Center, KSC-TR-0415
201 S Jackson St.
Seattle, WA 98104
www.kingcounty.gov/metro**

**Alternative Formats Available
206-477-3832 TTY Relay: 711**

Introduction

Ordinance 18133, adopted in October 2015, approved King County Metro's public transportation service changes to integrate with the Link light rail extension to Capitol Hill and the University of Washington. Metro will implement those changes in March 2016.

To ensure a full understanding of the ridership impacts and customer response to the bus integration, Section 4 of the ordinance requires a work plan that identifies customized performance measures for the routes and corridors affected by the restructure. Specifically the work plan will:

1. Identify performance measures to assess ridership and customer satisfaction with the existing Metro bus network and the new network integrated with the Central Link light rail;
2. Include plans through which the division shall conduct a customer and resident service assessment survey to be conducted by March 2017 to measure customer and resident satisfaction before and following the service change;
3. Be coordinated with Sound Transit performance assessments to avoid duplication of effort; and
4. Be modeled on past performance reports such as the C and D Line assessment.

This document is the work plan for the above research.

Scope of Work and Tasks

The assessment of ridership impacts and customer response to the University Link bus integration has multiple components and will be conducted over multiple time periods. Reports will be presented to Council by March 2017.

Ridership Assessment

Assessing ridership and other service elements is critical with all service restructures. The King County Metro Strategic Plan which was adopted by Council, as was a revision in 2013 (Ordinance 17143), identifies the following goals and objectives on page SG-12.

- Under all circumstances, whether adding, reducing or maintaining service hours invested, service restructures shall have a goal to focus service frequency on the highest ridership and productivity segments and to match service capacity to ridership demand to improve productivity and cost-effectiveness of service.
- In managing the transit system, service restructures shall have a goal of increasing ridership.
- Under service reduction conditions, service restructures shall have an added goal of resulting in an overall net reduction of service hours invested.
- Under service addition conditions, service restructures shall have added goals of increasing service levels and ridership.

Additionally, major restructures also undergo a review, based on the requirements of Title VI, USC, to assess the impacts of these changes on minority and low-income populations. Prior to implementation, Metro assesses whether or not the service change would have a disparate negative impact on minority

populations and/or would impose a disproportionate burden on low-income populations. This analysis also is in support of King County Ordinance 16948 and the implementation of the countywide strategic plan principle of "fair and just" in all the county does in order to achieve equitable opportunities for all people and communities. If this analysis determines the change will result in disparate negative impacts or disproportionate burdens on minority or low-income populations, Metro modifies the proposed restructure to make the changes more equitable.

With these goals and objectives in mind, Metro will analyze overall ridership in the U-Link area, and at the route level, segment level, and stop level. Ridership data is processed by Metro, and Link ridership data will be obtained from Sound Transit. Productivity (rides per hour), transfer data (from ORCA databases), and on-time performance of the affected bus routes will also be analyzed.

The report will be very similar to the August 2013 report, RapidRide C & D Line Implementation and Restructures, Ridership Assessment and Guidelines Analysis:

<http://metro.kingcounty.gov/am/reports/2013/rapidride-c-and-d-line-restructures-assessment-august2013.pdf>

Customer Analysis

To assess the impacts of major service changes, Metro regularly conducts on-board surveys before and after the changes. The purpose of these surveys is to obtain feedback about the service and any difficulties riders have with it, as well as to assess levels of satisfaction and gain insights on customer benefits or impacts as a result of the service changes. Over the course of many studies of this nature, Metro has refined the survey process to thoroughly capture rider experiences and feedback related to service changes and has developed performance measures to quantify this feedback.

Prior to the Service Change

In February and March 2016, Metro will conduct surveys on-board bus routes that will later have significant changes (or be eliminated) in the U-Link integration. Consultant staff will distribute self-administered questionnaires on Routes 8, 16, 25, 26, 28, 30, 43, 48, 49, 64-68, 71-76, 242, 316, 372, and 373. Surveys will be conducted on about 50 trips selected on these routes to provide an overall picture of customer response. Metro estimates about 1,300 completed surveys.

Questions will focus on the same performance measures as studied in previous research on service changes. Riders will be asked about their travel behavior, fare payment, and their satisfaction overall and with components of:

- Trip time
- Frequency and reliability
- Personal safety
- Coach attributes (cleanliness, seating availability, smoothness of ride, etc.)
- Bus stops
- Transferring

The questionnaire will be similar to that used in the 2012 research conducted for the C & D Line implementation, the model from which the research is based. That questionnaire is in the appendix of this work plan. As in the past, there will be versions of the questionnaires in languages other than English.

A new element to this research is asking respondents for phone numbers and or email addresses if they wish to participate in the “after” phase. That will enable Metro to capture data on current riders who may no longer ride after the service change.

Metro assisted Sound Transit with their on-board surveys in the Link corridor in October and November 2015. Many of the surveys were conducted on the same routes as the research outlined here. That study did not ask satisfaction questions, but did ask trip origin, destination, trip purpose, transferring, fare payment and demographics. Further, Sound Transit conducts a customer satisfaction survey on their routes every fall. The Sound Transit data collected in 2015 that is relevant to the U-Link integration analysis will be incorporated into the Metro research efforts.

After the Service Change

In October and November 2016, Metro will conduct a follow-up survey to assess customer response to the service changes. This will be more than six months after the service change, when riders will have had time to establish new travel patterns in response to the changes. As well, the University of Washington (UW) will be back in full session. Consultant staff will distribute self-administered questionnaires on Routes 8, 38, 43, 45, 48, 49, 62-65, 67, 71, 73-76, 78, 316, 372, and 373, as well as passengers boarding or deboarding Link light rail at the UW or Capitol Hill stations. Surveys will be conducted on about 50 weekday trips selected on these routes to provide an overall picture of customer response. Metro estimates about 1,300 survey responses will be completed.

The questionnaires will be similar to the ones used in the “pre” survey, with additional questions related specifically to the service change and any change in ridership habits since the change. Transferring between Metro bus routes or between Metro bus and Link light rail will be a major focus in the “after” phase. In addition, a telephone and/or internet survey will be conducted with about 400 respondents who provided contact information in the “pre” research described above. This will help to identify former riders who are not riding after the service change (or riding much less or much more). Metro will ask them the reasons for their change in transit ridership.

Metro and the marketing research consultant will analyze and report upon the findings.

Resident Service Assessment

The resident service assessment reflected in the March 2016 U-Link Service Change ordinance is a new component that has not been done in previous research on transit service changes. Many of the respondents to the customer satisfaction research described above will be residents of the areas around the service changes. The on-board research described above will capture riders in the area who no longer ride after the service change, and it will capture new riders in the area. The additional resident assessment is intended to gather information from residents who were not riders before the service change and continue to be non-riders after the service change.

Prior to the Service Change

Metro regularly conducts its Rider/Non-Rider Study. This is a statistically valid telephone survey of about 2,000 randomly-selected residents of King County. Riders are surveyed every year,

while non-riders are surveyed every other year. The two most recent non-rider surveys were conducted in fall 2013 and fall 2015. The 2015 study was still being conducted at the time this work plan was prepared, but Metro estimates that between the two studies about 250 non-riders in the zip codes within the service change areas will be interviewed.

The questions asked of non-riders that are relevant to a survey about the U-Link integration will focus on the performance measures below.¹

- Barriers to riding Metro – degree to which the following are barriers to riding: unfamiliarity, unreliability, infrequency, preference to drive alone, travel time, crowding, cleanliness, safety, security, need to transfer, buses not going to destination, weather barriers, image of riding the bus, distance to bus stop.
- Appeal of using Metro – to get to work/school/for personal travel.
- “Goodwill” of Metro and benefits from riding it – degree to which non-riders agree/disagree about various Metro attributes: respect and trust of the agency; expectations of quality; the riders’ ability to reduce travel costs, lower stress, and increase productive time; and environmental benefits, innovation, customer service, and social responsibility.
- Commute status – mode of travel, destination, distance and time, and availability and cost of parking.
- Demographics – gender, age, income,¹ ethnicity, etc.

To augment the rider/non-rider data, applicable data and information from other Metro sources (e.g., the public outreach surveys conducted as part of the U-Link service planning process, and customer feedback received through Metro Customer Communications group) will be analyzed. Also, Sound Transit produced a Sound Transit Market Share report in 2012. Data relevant to the research outlined in the work plan will be reviewed, mainly the demographics and travel modes of riders.

Metro will analyze and report upon the findings.

After the Service Change

The next non-rider survey is not scheduled until fall 2017, which is after the research discussed in this work plan is due to Council. Thus, we will conduct a separate, scientifically-valid non-rider survey in late fall 2016. The sample will have approximately 250 randomly-selected non-riders among the residents of the zip codes encompassing the U-Link bus integration.

The same questions from the “pre” non-rider surveys will be used and supplemented with focus on additional topic areas as we learn more about various impacts of the service changes in the course of the coming year. The additional questions will focus on non-riders’ awareness of transit opportunities and changes to transit, and identify any new barriers to transit unique to the service area or to the changes made in March 2016. Likewise, any questions from the 2012 Sound Transit market study that are directly relevant to U-Link bus integration will be asked again in this phase of the resident analysis.

¹ Some of these questions were not asked in 2015 to reduce costs, but more than half of the respondents will be from the longer 2013 survey.

Metro and the marketing research consultant(s) will analyze and report upon the findings.

Schedule

This research effort is a year-long undertaking. Below are key dates:

- **January 2016** – Notice to proceed with consultant to perform the on-board surveys
- **January 2016** – Submit work plan to the King County Council
- **February-March 2016** – Conduct on-board surveys prior to the service changes
- **October-November 2016** – Formal analysis of ridership from the March-September service period and ridership from before the service changes
- **November-December 2016** – Conduct on-board surveys after the service changes
- **November-December 2016** – Conduct residential assessment
- **January-March 2017** – Prepare and analyze report
- **March 2017** – Deliver report to the King County Council

Budget

The estimated cost for the consultant work is approximately \$117,000, and is broken out as follows:

- “Before” and “after” on-board data collection, data processing, and report: \$80,000 (total)
- Residential assessment and data processing: \$22,000
- Phone survey of “before” riders who agreed to be reached “after”, data processing, and report: \$15,000

In addition, this will take approximately 400 hours of staff time.

The costs will be primarily covered within the current 2015-2016 Metro operating budget earmarked for customer research. Some of the cost may need to be included in the 2017-2018 budget proposals.

Appendix A – Questionnaire from C & D Line Service Revisions Assessment



Rider Report Card

ID / QRC CODE

Please let us know how we are doing and how we can improve service on this route.

IMPORTANT INSTRUCTIONS:

If you would like to complete the survey online either: (1) use your camera to take a picture of the QR code to open the survey or (2) enter the following URL – www.ORCSurvey.com/metro3—and use the ID number printed above as your USERID.

Please use a blue or black pen. Mark your answers by placing an X inside the correct box .

When you are done, return your completed questionnaire to the survey worker onboard the bus. If you are unable to complete the survey while on the bus, please ask the survey worker for a postage-paid return envelope.

SATISFACTION WITH THIS ROUTE

Please check the box to show how satisfied or dissatisfied you are with route you are currently riding. Remember to **rate the route you are currently riding**, not other routes or Metro Transit in general.

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Q1. Trip Time on This Route					
How long my bus trip takes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Number of stops my bus makes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q2. Personal Safety on This Route					
Personal safety while on the bus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Behavior of other passengers on the bus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Personal safety while waiting for the bus during the day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Personal safety while waiting for the bus at night	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Behavior of other people at the waiting area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q3. Waiting Area/Bus Stop Where You Boarded the Bus for This Trip					
Being able to sit down while waiting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cleanliness of waiting area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amount of lighting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protection from the weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Having information available about routes and connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Convenience of bus stop to my home or where I started trip	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being able to see an oncoming bus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q4. Things About Buses on This Route					
Being able to get a seat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amount of lighting inside the bus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cleanliness of the bus interior	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bus is free of graffiti	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smoothness of the ride	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enough bike rack capacity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wide enough doors and aisles for loading and unloading	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enough bars/straps to hang onto while standing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q5. Frequency and Reliability of Buses on This Route					
The bus not leaving the stop early	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The bus not leaving the stop late	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The bus getting me where I'm going on time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often bus runs during peak hours (6-9 a.m.; 3-6 p.m.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often bus runs during midday hours (9 a.m. - 3 p.m.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often the bus runs in the evening/night	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often the bus runs on weekends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How early the bus runs in the morning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you make a transfer on This Route, please rate the items below. Otherwise continue on other side of page.

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Q6. Ease of Transferring to or from This Route					
The number of transfers I make	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The way buses are scheduled to make transfer connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Waiting time between transfers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helpfulness of drivers in ensuring transfer connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The bus coming on time when transferring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often the bus runs in the evening/night	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transfer information at the waiting area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Continue on other side.

Q7. Overall how satisfied are you with **This Route**?

Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q8. How many one-way rides have you taken on **This Route** in the last 30 days? (Count a round trip as 2 rides) Write Number in Box →

Q9. What is the purpose of the trip you take **most often** on **This Route**?

<input type="checkbox"/> To/from work	<input type="checkbox"/> Shopping/errands	<input type="checkbox"/> Appointments
<input type="checkbox"/> To/from school	<input type="checkbox"/> Fun/recreation/social	<input type="checkbox"/> Something else

Q10. When do you usually ride **This Route**? Please check all that apply.

<input type="checkbox"/> Weekdays before 6 a.m.	<input type="checkbox"/> Weekdays 9 a.m. to 3 p.m.	<input type="checkbox"/> Weekends
<input type="checkbox"/> Weekdays—AM peak (6-9 a.m.)	<input type="checkbox"/> Weekdays 6-9 p.m.	
<input type="checkbox"/> Weekdays—PM peak (3-6 p.m.)	<input type="checkbox"/> Weekdays later than 9 p.m.	

Q11a. Did you transfer **TO This Route** from another bus on this trip today?

No Yes → Which route?

Q11b. Will you transfer **FROM This Route** to another bus to reach your destination on this trip today?

No Yes → Which route?

Q12a. Prior to the September 2012 service change, which route did you take?

Enter route number in boxes below:

Q12b. How does **This Route** compare overall to the route you took before?

Better Not as Good ↓
 About the Same Why? _____

Q13. How long have you been a Metro rider?

<input type="checkbox"/> Less than 6 months	<input type="checkbox"/> More than 1 year but less than 5 years
<input type="checkbox"/> 6 – 12 months	<input type="checkbox"/> 5 years or more

Q14. How do you pay your fare? If you use an ORCA Card what product(s) do you have on your ORCA Card?

<input type="checkbox"/> Cash	<input type="checkbox"/> Pass
<input type="checkbox"/> Tickets	<input type="checkbox"/> E-purse / money on card
<input type="checkbox"/> Something else _____	<input type="checkbox"/> Both pass and an e-purse

Q15. What ONE THING would you recommend to improve **this route**?

Please answer the following demographic questions to help us with our evaluation.

Q16. Are you... Male Female

Q17. How old are you?

Q18. Do you consider yourself to be Hispanic? Yes No

Q19. Do you consider yourself to be White? Yes No

Q20. What is the primary language spoken in your home? English Other _____

Q21. How well do you speak English? Very well Not well
 Well Not at all

Q22. What is your total household income? Under \$20,000 per year \$20,000 up to \$35,000 \$35,000 or more per year

Q23. What is your home ZIP code?

Q24. What is your work ZIP code?

Or the nearest intersections to your work location. _____ and _____