
King County
METRO

King County
Metro Transit

# 2017 Strategic Plan Progress Report

June 2018

# King County Metro Transit
# 2017 Strategic Plan Progress Report

**June 2018**


**Department of Transportation**
**Metro Transit Division**
**King Street Center, KSC-TR-0415**
**201 S. Jackson St**
**Seattle, WA 98104**
**206-553-3000  Relay: 711**
**https://kingcounty.gov/metro**


Alternative Formats Available

206-477-3839  Relay: 711


051518/comm/as

## TABLE OF CONTENTS

# 2017 KING COUNTY METRO TRANSIT STRATEGIC PLAN PROGRESS REPORT

## EXECUTIVE SUMMARY

The Strategic Plan Progress Report is Metro's primary tool for showing the public and King County leaders how well we are moving toward the goals in our Strategic Plan for Public Transportation 2011–2021 (https://metro.kingcounty.gov/planning/strategic-plan). This 2017 progress report has data on 66 performance measures. While the majority of these show positive or stable trends, monitoring and managing performance remains an area of emphasis. Metro has developed a monthly business review process in which managers conduct a frequent, detailed review of a series of metrics related to service quality, service efficiency, service delivery, and employees in an effort to improve operations agency-wide.

- **Our ridership grew in 2017, reaching a new all-time high of over 122 million passenger trips.** Together, all transit agencies serving the area provided a record-high 177 million trips in King County. Among the 30 largest U.S. metropolitan areas, the Seattle area had the second-fastest ridership growth in 2017, and the fastest in 2016. Public transportation is helping our region accommodate a growing population and keep traffic congestion in check.
- **Over the past two years, we greatly increased the amount of service we provide.** Vehicle hours in 2017 were up 9.3% over 2015 as both Metro and the City of Seattle invested in more-frequent service, which improved on-time reliability and reduced crowding.
- **Our on-time performance improved in 2017.** We're now close to our target of 80% of trips being no more than five minutes late or one minute early.
- **Overall satisfaction with Metro grew 4% from 2015 to 2016, when 92% of riders said they were very or somewhat satisfied.** Starting in 2018, we'll do our Rider/Non-Rider Survey more frequently to capture more-timely customer feedback and make responsive improvements to our business practices that affect customer satisfaction.
- **Some of our safety and security scores worsened in 2017.** Preventable accidents per million miles increased by 12.8% from 2016 to 2017, and operator assaults increased from 83 to 89. Pedestrian accidents stayed about the same as in 2016, while physical disturbances among passengers decreased. Despite this, customer satisfaction with safety and security remained high.
- **Our energy use decreased in several areas.** The average miles per gallon for our diesel and hybrid bus fleets has increased nearly 5% since 2015. Total energy use at Metro facilities has decreased by 14% since 2014. We have already exceeded the 2015 King County Strategic Climate Action Plan goal of a 7.5% reduction by 2020.
- **About two-thirds of county residents (64%) live within a quarter-mile walk of a bus stop.** That number goes up to 71% for residents of low-income census tracts. In 2017, about half of all county residents lived within a half-mile of a stop with frequent bus service—a significant increase over 2015. This coverage makes Metro a competitive alternative to driving alone and accommodates the county's transit-dependent population.
- **More than three-quarters (78%) of jobs in King County are within a quarter-mile of a bus stop.** Metro's service footprint also contributes to economic growth and healthy communities throughout the county. Nearly half of those who work in downtown Seattle commute by transit. Among all workers who live in King County, that number is about one-eighth.
- **Our cost per hour went up by 7.4% in 2017,** driven by increases in the cost of diesel fuel, payments to King County for central services, higher vehicle maintenance expenses, and increases in labor costs led to a 7.4% increase over just the past year.
- **We maintain one of the highest farebox recovery ratios in the country among large bus agencies.** With 27.3% of our costs covered by fare revenues, we remain above our farebox recovery target despite a small decrease from 2016. Increased operating costs offset our record high total fare revenue.
- **Metro continues to engage the public for input on our efforts to improve transit service.** We found innovative ways to reach customers with social media as well as targeted communications with hard-to-reach populations.
- **Metro employees report being very satisfied with their jobs.** We're looking at new metrics that will help us add stability to our workforce in today's employment environment.

**SYMBOLS—intended to give a general indication of our performance over time relative to goals.**

- Improving
- Stable
- Opportunity to improve
- N/A, just one year of data, or trend not easily defined

| | MEASURES | TREND |
|---|---|---|
| **GOAL 1: SAFETY** | | |
| 1 | Preventable accidents per million miles | |
| 2 | Operator and passenger incidents and assaults | |
| 3 | Customer satisfaction regarding safety and security | |
| 4 | Effectiveness of emergency responses | |
| **GOAL 2: HUMAN POTENTIAL** | | |
| 1 | Population living within a quarter-mile walk to a transit stop | |
| 2 | Percentage of households in low-income census tracts within a quarter-mile walk to a transit stop | |
| 3 | Percentage of households in minority census tracts within a quarter-mile walk to a transit stop | |
| 4 | Number of jobs within a quarter-mile walk to a transit stop | |
| 5 | Percentage of households within a half-mile walk to a transit stop with frequent service | |
| 6 | Number of jobs within a half-mile walk to a transit stop with frequent service | |
| 7 | Number of students at universities and community colleges within a quarter-mile walk to a transit stop | |
| 8 | Average number of jobs accessible within 30 minutes countywide | |
| 9 | Average number of households accessible within 30 minutes countywide | |
| 10 | Average number of jobs and households accessible within 30 minutes from regional growth centers, manufacturing/industrial centers, and transit activity centers | |
| 11 | Vanpool boardings | |
| 12 | Transit mode share by market | |
| 13 | Student and reduced-fare permits and usage | |
| 14 | Accessible bus stops | |
| 15 | Access registrants | |
| 16 | Access boardings/number of trips provided by the Community Access Transportation (CAT) program | |
| 17 | Requested Access trips compared with those provided | |
| 18 | Access applicants who take fixed-route travel training | |
| **GOAL 3: ECONOMIC GROWTH AND BUILT ENVIRONMENT** | | |
| 1 | All public transportation ridership in King County | |
| 2 | Transit rides per capita | |
| 3 | Ridership in population/business centers | |
| 4 | Employees at CTR sites sharing non-drive-alone transportation modes during peak commute hours | |
| 5 | Employer-sponsored passes and usage | |
| 6 | Park-and-ride capacity and utilization | |
| 7 | Passenger miles traveled in HOV lanes | |

| | | |
|---|---|---|
| **GOAL 4: ENVIRONMENTAL SUSTAINABILITY** | | |
| 1 | Average miles per gallon of Metro's bus fleet | |
| 2 | Vehicle energy (diesel, gasoline, kWh) normalized by miles | |
| 3 | Vehicle fuel (diesel, gasoline, kWh) normalized by boardings | |
| 4 | Total facility energy use | |
| 5 | Energy use at Metro facilities: kWh and natural gas used in facilities, normalized by area and temperature | |
| 6 | Per-capita vehicle miles traveled (VMT) | |
| 7 | Transit mode share | |
| **GOAL 5: SERVICE EXCELLENCE** | | |
| 1 | Customer satisfaction | |
| 2 | Customer complaints per boarding | |
| 3 | On-time performance by time of day | |
| 4 | Crowding | |
| 5 | Use of Metro's web tools and alerts | |
| **GOAL 6: FINANCIAL STEWARDSHIP** | | |
| 1 | Service hours operated | |
| 2 | Service hours and service hour change per route | |
| 3 | Boardings per vehicle hour | |
| 4 | Boardings per revenue hour | |
| 5 | Ridership and ridership change per route | |
| 6 | Passenger miles per vehicle mile | |
| 7 | Passenger miles per revenue mile | |
| 8 | Cost per hour | |
| 9 | Cost per vehicle mile | |
| 10 | Cost per boarding | |
| 11 | Cost per passenger mile | |
| 12 | Cost per vanpool boarding | |
| 13 | Cost per Access boarding | |
| 14 | Fare revenues | |
| 15 | Farebox recovery | |
| 16 | ORCA use | |
| 17 | Asset condition assessment | |
| **GOAL 7: PUBLIC ENGAGEMENT AND TRANSPARENCY** | | |
| 1 | Public participation rates | |
| 2 | Customer satisfaction regarding Metro's communications and reporting | |
| 3 | Social media indicators | |
| 4 | Conformance with King County policy on communications accessibility and translation to other languages | |
| **GOAL 8: QUALITY WORKFORCE** | | |
| 1 | Demographics of Metro employees | |
| 2 | Employee job satisfaction | |
| 3 | Promotions and hires | |
| 4 | Probationary pass rate | |


RAPIDRIDE
6089
SOUTHCENTER
6089

## INTRODUCTION

The King County Council adopted Metro's Strategic Plan for Public Transportation 2011–2021 in July 2011 and approved updates in 2012, 2013 and 2015. The plan lays out a vision for the region's public transportation system; sets goals, objectives, strategies and quantitative performance measures; and establishes service guidelines. It builds on King County's strategic plan and reflects the recommendations of the 2010 Regional Transit Task Force.

The County Council also directed Metro to report on how we are meeting the strategic plan's goals and objectives. This is our fifth progress report. It covers five years whenever comparable data are available. In 2015, the County Council began a process of updating the Strategic Plan. As part of that process, they proposed that a number of new indicators be tracked. The current report includes three new measures in Goal 2: a) Average number of jobs accessible within 30 minutes countywide; b) Average number of households accessible within 30 minutes countywide; and c) Average number of jobs and households accessible within 30 minutes from regional growth centers, manufacturing/industrial centers, and transit activity centers.

The 66 measures in this report focus on many aspects of Metro's public transportation system, including how well we deliver on the key values of productivity, social equity, and geographic value. We are continuing to refine our performance measurement processes, and are in the process of defining performance targets for each of the eight goals in the strategic plan. We have developed preliminary measures and created a tiered approach that connects how the operation, maintenance, and planning of a transit system contribute to the goals. This approach ties everyday workplace activities to progress toward our strategic goals.

As part of our performance monitoring, we compare Metro with 30 of the largest motor- and trolley-bus agencies in the United States using data from the National Transit Database.


### METRO AT A GLANCE (2017)

| | |
|---|---|
| Service area | 2,134 square miles |
| Population | 2.15 million |
| Employment | 1.40 million |
| Fixed-route ridership | 122.2 million |
| Vanpool ridership: | 3.6 million |
| Access ridership: | 1.3 million |
| Annual service hours | 4 million |
| Active fleet | 1,552 buses |
| Bus stops | 8,011 |
| Park-and-rides | 136 |
| Park-and-ride spaces | 26,300 |

### SYMBOL KEY

**These symbols are intended to give a general indication of how well we're meeting our goals.**

- Improving
- Stable
- Opportunity to improve
- N/A, just one year of data, or trend not easily defined

# GOAL 1: SAFETY

1

Support safe communities.

## Objective 1.1: Keep people safe and secure.

*Intended outcome: Metro's services and facilities are safe and secure.*

Metro protects the safety and security of customers, employees, and facilities in a variety of ways, including planning, policing, facility design, operational practices, safety training, and collaboration with local jurisdictions and other agencies on safety-related matters.

Specific strategies include promoting safety and security in public transportation operations and facilities, and planning for and executing regional emergency-response and homeland-security efforts.

Our safety program for bus drivers emphasizes steps to raise safety awareness. Our Operator Assault Reduction Project includes a number of strategies and programs to increase the safety of both bus drivers and passengers.


### HOW WE'RE DOING: GOAL 1 OVERVIEW

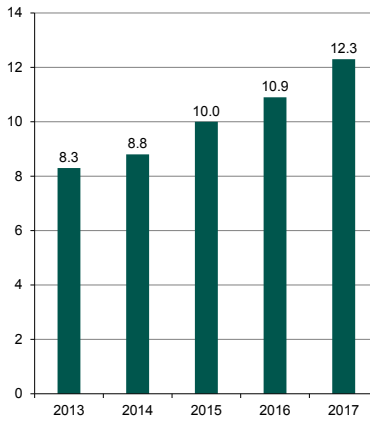
Safety and security are critical focuses for Metro. Unfortunately, our rates of preventable accidents and operator assaults increased in 2017. Pedestrian accidents stayed about the same as in 2016, while physical disturbances among passengers decreased. Customer satisfaction with safety and security remain high. We continue to focus on reducing accidents through driver training and customer education. Our Operator Assault Reduction Project has helped us achieve a long-term reduction in operator assaults.

| MEASURES | | TREND |
|---|---|---|
| 1 | Preventable accidents per million miles | ⊖ |
| 2 | Operator and passenger incidents and assaults | ⊖ |
| 3 | Customer satisfaction regarding safety and security | ⊖ |
| 4 | Effectiveness of emergency responses | ● |

### 1) Preventable accidents per million miles ⊖

Metro continues to focus on reducing accidents through driver training and customer education. The number of preventable accidents per million miles increased by 12.8% from 2016 to 2017. Pedestrian accidents remained the same in 2017 compared to 2016 after an increase of 14% from 2015 to 2016.

### 1) Preventable accidents per million miles



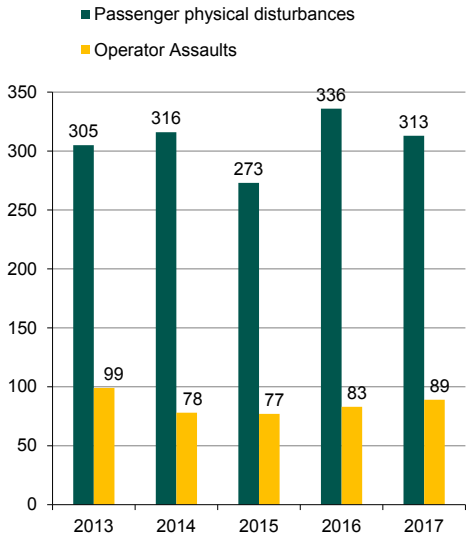
## 2) Operator and passenger incidents and assaults

The total number of operator assaults increased by 7.2% in 2017 compared to 2016. Our 89 operator assaults (0.68 per million transit boardings) in 2017 include those on Sound Transit bus service operated by Metro.

There were no felony aggravated assaults (defined as when the offender uses a weapon or displays it in a threatening manner, or the operator suffers severe or aggravated bodily injury) in 2017 and two in the first half of 2016. Our Operator Assault Reduction Program began in 2008. Despite a 17% growth in ridership from 2006 to 2017, operator assaults have been reduced by 53%. This has resulted in an increase in operator availability, a reduction in costs, and, most importantly, a safer work environment for transit operators. The success of our assault reduction program derives from three important components: (1) a philosophy of teamwork; (2) a commitment to a data-driven approach; and (3) employment of effective risk management.

Passenger vs. passenger physical disturbances fell 6.8% from 2016 to 2017. There were 313 disturbances, or 2.4 per million boardings. Passenger vs. passenger physical disturbances are incidents recorded by drivers that may or may not be criminal in nature and don't necessarily involve a victim, a suspect, a request for police, or the filing of a report.

## 2) Operator assaults and passenger physical disturbances

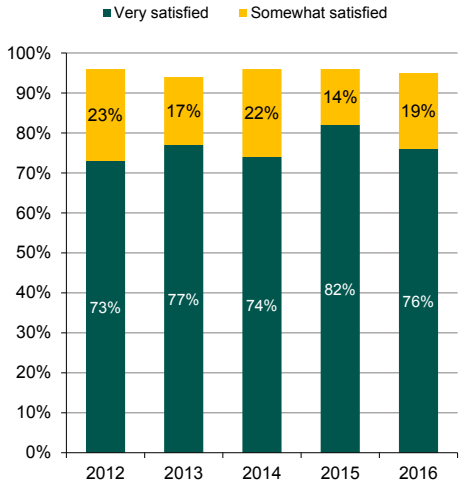



## 3) Customer satisfaction with safety and security

Every year, Metro's Rider Survey asks riders about their satisfaction with many attributes of our service. In the most recent survey, 76% of riders said they are "very satisfied" with the safe operation of the bus. (Most of the remainder said they are "somewhat satisfied.") The wording of the question changed slightly in 2015 to focus more on operators than on the operation of the bus.

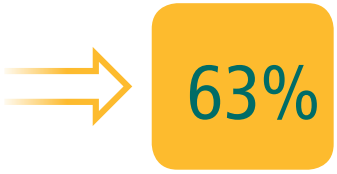
When asked about personal safety while riding the bus at night, 81% said they are very or somewhat satisfied, which is similar to the average for the previous four years.

## 3) Rider satisfaction with safe operation of the bus



### 4) Effectiveness of emergency responses

The Department of Homeland Security's Transportation Security Administration administers the Baseline Assessment for Security Enhancement (BASE) program, which establishes a security standard for transit system security programs and assesses progress. This voluntary, comprehensive review focuses on categories identified by the transit community as fundamentals for a sound transit security program, including an agency's security plans, security training, drills and exercise programs, public outreach efforts, and background-check programs.




The BASE audit was refined before it was done again at Metro in 2016, and we also changed the manner in which we assessed compliance. The resulting changes gave us a more honest and transparent look at our results. The audit completed in April 2016 gave us a score of 63% and highlighted several opportunities for improving our security standards and programs. We expect our next BASE audit to be done in early 2019, using the same process as that done in 2016, which will allow us to compare improvements on an "apples-to-apples" basis.

## Metro's Operator Assault Reduction Project

Metro instituted the Operator Assault Reduction Project in 2009 after a few years in which there were a high number of operator assaults. Despite a significant growth in ridership since the implementation of this project, the number of operator assaults have fallen, resulting in increased operator availability, reduced costs, and, most importantly, a safer work environment for our transit operators. We attribute this success to three important components:

**(1) A philosophy of teamwork**

The following stakeholder groups have made essential contributions to the project's success: Transit Operations, Bus Base Security Committees, Amalgamated Transit Union (ATU), management, Training, Transit Police, Communication Centers, and the Prosecutor's Office. Only through teamwork and collaboration among these groups could we realize and sustain reductions in operator assaults. Each group has brought distinct expertise to the overall effort of creating a safer environment for transit operators. While we're proud of our success, we're also committed to continue working together with the goal of making our coach drivers as safe as possible.

**(2) Commitment to a data-driven approach**

We've used a variety of reports to challenge our assumptions, adjust our operational decisions, and evaluate the success of our efforts. Empirical reporting derived from data sources is a powerful tool in communicating the scope and depth of these costly and damaging assaults. Data has been essential in maximizing our limited resources by focusing on specific locations, routes, and behaviors.

**(3) Employment of effective risk management**

Through careful identification and analysis of factors that increase threats to operators, we've sought to proactively address root causes. The resulting improved understanding of the risks have led to proactive and prevention-focused strategies. Through constant re-evaluation of our efforts, we've sought to refine our approach with the goal of getting ahead of the problem and preventing crimes.

This May, Metro Transit received a Certificate of Merit Award from the American Public Transportation Association for our efforts with this project.

## GOAL 2: HUMAN POTENTIAL

**2**

Provide equitable opportunities for people from all areas of King County to access the public transportation system.

### ▶ Objective 2.1 Provide public transportation products and services that add value throughout King County and that facilitate access to jobs, education, and other destinations.

*Intended outcome: More people throughout King County have access to public transportation products and services.*

Metro strives to make it easy for people to travel throughout King County and the surrounding region. We provide a range of public transportation products and services appropriate to different markets and mobility needs, working to integrate our services with others. Our fully accessible fixed-route system is complemented by services such as ridesharing, Dial-A-Ride Transit (DART), and Community Connections—partnerships to develop transportation solutions in less populated areas. In compliance with the Americans with Disabilities Act, we provide Access paratransit service to eligible people with disabilities. Our Community Access Transportation (CAT) program provides vans and support to community organizations that offer rides as an alternative to Access. CAT trips are less expensive and fill some service gaps.

Our travel training program helps people with disabilities use regular bus service. We also offer Jobs Access and Reverse Commute, a federal transportation program intended to connect low-income populations with employment opportunities.

*NOTE: In previous years, measures 1 to 3 included housing units within two miles of a park-and-ride in the totals. However, our 2015 Access to Transit study found that proximity to park-and-rides represents neither their true catchment area nor the ability of those households to access the transit system. The revised measures better reflect access. Metro continues to measure park-and-ride capacity and utilization in Goal 3, Measure 6.*

### HOW WE'RE DOING: GOAL 2 OVERVIEW

Nearly two-thirds of housing units in King County are within a quarter-mile walk from a bus stop. This is slightly less than we found in 2015. Just under 49% of new housing growth from 2015–2017 took place within a quarter-mile walk of a transit stop. The proportion of housing units in low-income and/or minority census tracts that are within a quarter-mile walk is higher than for the population as a whole, but also saw slight decreases as more low-income and minority residents are now living outside of areas with short walks to transit service.

Nearly half of all households are within a half-mile walk from a transit stop with frequent service. This is an increase over 2015, due in large part to growth in the frequent service network throughout Seattle and in parts of south King County. More than two-thirds of jobs in King County are within a half-mile walk from a transit stop with frequent service, also an increase over 2015. More than one in eight King County residents takes public transportation to work, up slightly over 2015. Almost half of people who work in downtown Seattle commute by transit. Metro continues to operate the largest publicly owned commuter van program in the nation, and vanpool ridership grew in 2017. Four out of five bus stops are wheelchair accessible, as are all of Metro's buses. Access ridership decreased slightly in 2017. The program provided all of the trips requested by qualified applicants with the exception of some missed trips. The contractual definition of a missed trip is any trip that is one hour or more late. There were 774 missed trips out of 958,439 total boardings in 2017. The Accessible Service team continues to provide instruction to help Access registrants use regular bus service, which also reduces costs.

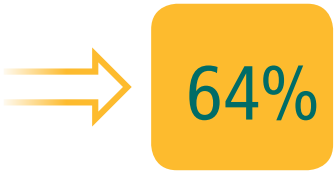
## GOAL 2: HUMAN POTENTIAL

| MEASURES | | TREND |
|---|---|---|
| 1 | Population within a quarter-mile walk of a transit stop | ⊖ |
| 2 | Percentage of households in low-income census tracts within a quarter-mile walk of a transit stop | ⊖ |
| 3 | Percentage of households in minority census tracts within a quarter-mile walk of a transit stop | ⊖ |
| 4 | Number of jobs within a quarter-mile walk of a transit stop | ⊕ |
| 5 | Percentage of households within a half-mile walk of a transit stop with frequent service | ⊕ |
| 6 | Number of jobs within a half-mile walk of a transit stop with frequent service | ⊕ |
| 7 | Number of students at universities and community colleges within a quarter-mile walk of a transit stop | ◐ |
| 8 | Average number of jobs accessible within 30 minutes countywide | ● |
| 9 | Average number of households accessible within 30 minutes countywide | ● |

| MEASURES | | TREND |
|---|---|---|
| 10 | Average number of jobs and households accessible within 30 minutes from regional growth centers, manufacturing/industrial centers, and transit activity centers | ● |
| 11 | Vanpool boardings | ⊕ |
| 12 | Transit mode share by market | ⊕ |
| 13 | Student and reduced-fare permits and usage | ◐ |
| 14 | Accessible bus stops | ● |
| 15 | Access registrants | ● |
| 16 | Access boardings/number of trips provided by the Community Access Transportation (CAT) program | ● |
| 17 | Requested Access trips compared with those provided | ◐ |
| 18 | Access applicants who take fixed-route travel training | ◐ |

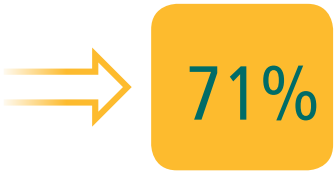
### 1) Population living within a quarter-mile walk to a transit stop ⊖

This basic access metric measures proximity to any transit stop. In winter 2017, 64% of King County housing units were within a quarter-mile walk to a transit stop—a slight decrease from 2015. The number of housing units within a quarter-mile walk of a transit stop increased from 563,781 to 598,534, but the total number of housing units in King County increased more, from 858,832 to 930,433. Just under 49% of new housing growth took place within a quarter-mile walk of a transit stop, so more than half of all new dwelling units were built in areas with diminished access to transit via walking.



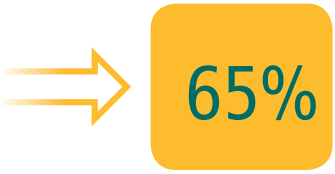

### 2) Percentage of households in low-income census tracts within a quarter-mile walk to a transit stop ⊖

To align with other Metro policies, this report now defines "low-income" as less than 200% of the federal poverty level. The 2014 American Community Survey found that 23% of King County residents have low incomes. To measure their access to transit, we define a census tract as low-income if more than 23% of its population is below 200% of the federal poverty level. About 71% of housing units in these low-income census tracts are within a quarter-mile walk to a bus stop. This is slightly less than in 2015 (73%), but higher than the countywide population as a whole. We attribute the 2017 decrease to shifts in demographics and the pushing of low-income populations farther out of population centers.



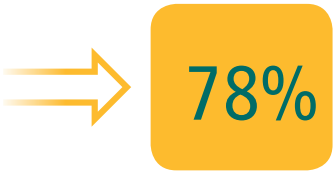
3) **Percentage of households in minority census tracts within a quarter-mile walk to a transit stop** ⊖

The 2016 American Community Survey found that 38% of King County residents belong to minority groups. We define a census tract as minority if more than 38% of its population belongs to a minority group. In these census tracts, 65% of housing units are within a quarter-mile walk to a bus stop, a decrease from 2015 (68%) but still slightly higher than for the county population as a whole.




4) **Number of jobs within a quarter-mile walk to a transit stop** ⊕

In winter 2017, 78% of jobs in King County were in locations within a quarter-mile walk to a transit stop—an increase of 2 percentage points over 2015. This indicates that more new jobs were created in areas within a quarter-mile walk of transit.

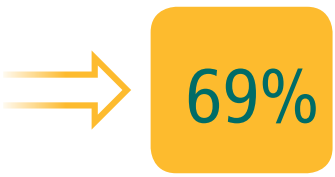



5) **Percentage of households within a half-mile walk to a transit stop with frequent service** ⊕

This measure looks at a household's proximity to any bus stop served by transit that operates all day at frequencies of 15 minutes or better. This includes all RapidRide lines, Link light rail, and places where two or more routes follow the same path and have a combined headway of 15 minutes or better. In 2017, 50% of households were within a half-mile walk to a transit stop with frequent service. This is an increase of 7 percentage points over 2015, due in large part to growth in the frequent service network throughout Seattle and in parts of south King County.

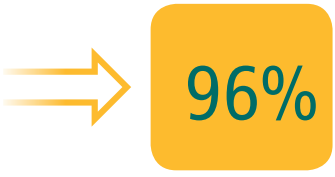

6) **Number of jobs within a half-mile walk to a transit stop with frequent service** ⊕

This metric is similar to the one above that measures households' access to frequent service. In 2017, 69% of jobs in King County were within a half-mile walk to a transit stop with frequent service. This is an increase of about 6 percentage points over 2015, consistent with the growth in our frequent transit network.




7) **Number of students at universities and community colleges that are within a quarter-mile walk to a transit stop** ⓘ

Twenty-nine of the 30 campuses of degree-conferring colleges and universities in King County are within a quarter mile walk to a bus stop. Only Bastyr University falls outside this proximity to a transit stop. Approximately 145,000 students attend classes in person at these 29 campuses.



8) **Average number of jobs accessible via transit within 30 minutes countywide**

This new measure is commonly referred to as "accessibility" or "access to opportunity" within the transit industry. It measures the number of jobs people can access via transit within a certain timeframe. For this report, we use 30 minutes. The measure combines two critical factors—transit service and how land is used—in order to quantify the value transit brings to a particular area. It is similar to WalkScore and TransitScore.

To derive a single figure for the entire county, thousands of calculations must be done in different places throughout the county and at different times. For this analysis, we've focused on the weekday commuting hour of 7-8 a.m. Since buses do not show up on demand, we take into account the time spent waiting for a bus. Each measurement begins at a particular place at a particular time; for each measurement, we count the number of jobs that could be reached. We then take the person-weighted average of these thousands of measurements to generate a countywide statistic.

In 2017, the average King County resident had access to about 135,200 jobs within 30 minutes on transit during the 7-8 a.m. hour. The average low-income resident had access to about 150,400 jobs, while the average person of color had access to about 134,000. By combining this jobs access measure with various demographic measures, we can identify populations of concern who lack transit service that takes them to a large number of opportunities.

9) **Average number of households accessible within 30 minutes countywide**

This new measure looks at "accessibility" in the reverse direction. Instead of determining the number of jobs a person can access, it quantifies the number of households that can reach a certain place—for instance, a job center. In practice, it has been referred to as "access to customers," as it measures how well people can travel to places like businesses.

On a worker-weighted basis, the average job site in King County can be reached by about 54,300 households within 30 minutes by transit between 7 and 8 a.m. This means that, on average, a single job site can be reached by about 6% of all households in the county in 30 minutes. Some businesses are reachable by more households; some by fewer households.

As Metro grows, these metrics will help us understand how well we are connecting people to jobs. On one hand, this tells us how well we're doing meeting peoples' commuting travel needs. But when "jobs" are also viewed as representative of "opportunities"—to shop, dine, see a movie, etc., because all of these things require jobs to deliver—these metrics also tell us how well we're doing at connecting people with the world of possible opportunities that exists in King County.

10) **Average number of jobs and households accessible within 30 minutes via transit from regional growth centers, manufacturing/industrial centers, and transit activity centers**

This new measure is directly related to the two previous measures, but it focuses the analysis on centers. As Metro grows, we'll be able to track how well transit enables people to travel to and from these centers. The "Households with Access Within 30 Minutes to Centers" in Appendix A shows the average number of jobs that can be reached from each center within 30 minutes, while the "Jobs Reachable Within 30 Minutes From Centers" in Appendix A shows the average number of households that can reach each center in 30 minutes. As with measure 9 above, this measure of transit accessibility is for an average weekday between 7 and 8 a.m.

## 11) Vanpool boardings

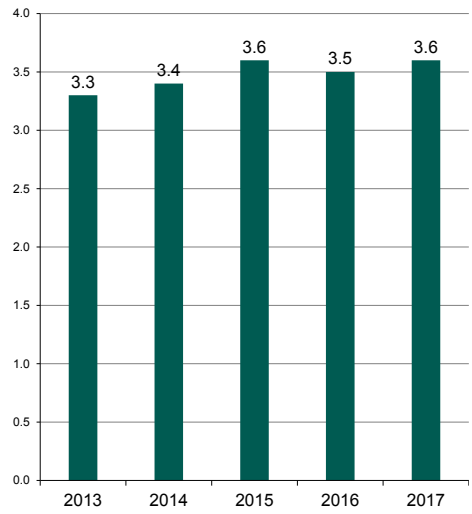
Metro continues to operate the largest publicly owned commuter van program in the nation, with more than 1,600 vehicles providing shared rides of 3.6 million passenger trips each year. The program helped the region use existing road space more efficiently and reduce environmental effects by eliminating more than 52 million vehicle miles traveled, saving 2.34 million gallons of fuel and reducing 20,254 metric tons of greenhouse gas (tailpipe) emissions in 2017. More than 96 of these vans provided first/last-mile solutions to commuters, allowing more than 500 of them each day to travel those last few miles to work from busy transit hubs.

In 2017, commuters in the region made more than 13,600 ridematches through the RideshareOnline.com platform managed by Metro's Rideshare Operations. More than 20,000 new registrants signed up for the Wheel Options network, with King County having the majority of the statewide cumulative registered user base of 237,500.

Vanpool customer satisfaction remains high with a 93% satisfaction rate. Commuter vanpools are highly valued by current and past participants, with more than 90% agreeing that the service helps reduce congestion and helps the environment. Thirty-five percent of our commuter van participants have been with the program for five or more years, and more than 5% have been with the program 15 or more years. In 2018 we'll mark the 40th "VANniversary" of public vanpooling in the state of Washington.

Our program continues to be a popular benefit offered by the largest employers in the region, many of whom pay most or all the vanpool fares for their employees, significantly cutting down on traffic and pollution in dense business neighborhoods. Our top 10 commuter van customers are Amazon, Microsoft, Boeing, Costco, Swedish, f5 Networks, University of Washington/ Harborview Medical Center, Expedia, RIO, and Genie Industries.

**11) Vanpool boardings** (in millions)




We modified our methodology for counting passengers in 2014. Previous years' data on this chart reflect estimated ridership using the new methodology.

## 12) Transit mode share by market

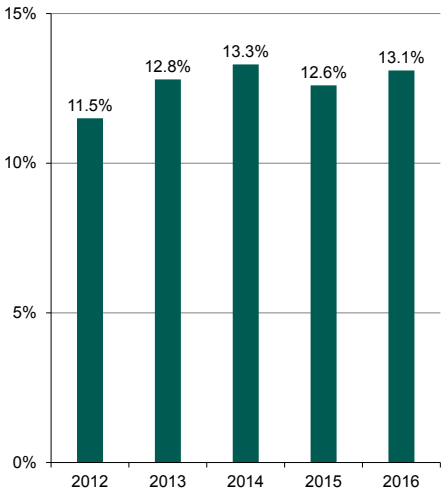
According to the 2016 American Community Survey, 13.1% of King County residents who work take public transportation to work, about the same as the past two years and up from 11.5% in 2012. Transit's share of commuters is even stronger for workers in downtown Seattle, with 48% taking transit (2017 Commute Seattle survey). This is up from the 2014 figure of 45%. No other mode-split data are readily available.

## 13) Student and reduced-fare permits and usage

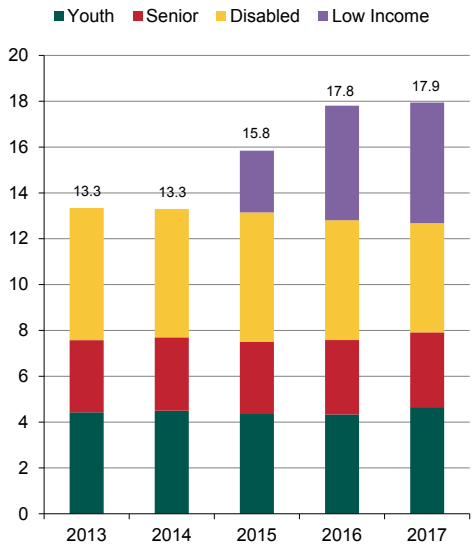
The Regional Reduced Fare Permit (RRFP) entitles senior riders (age 65 or older), riders with disabilities, and Medicare card holders to pay a reduced fare of $1. In 2017, RRFP trips made up 10% of all Metro ORCA trips. Many other RRFP riders pay their fares with cash; we are unable to measure these trips.

In addition to the RRFP, the ORCA Business Passport program has partnered with five school districts (Seattle, Bellevue, Highline, Lake Washington, and Mercer Island) to offer student transit passes. We sold more than 20,000 passes in the 2017–2018 school year. We expect more than 3.6 million boardings to be made with those passes, about a 5% increase over the 2015–2016 school year. In addition, many other schools and school districts buy Puget Passes for their students. Metro's groundbreaking ORCA LIFT reduced fare program, which began in March 2015, almost doubled from 2.7 million boardings in 2015 to 5.3 million in 2017.


**12) Transit share**




**13) Reduced fare ORCA trips** (in millions)



### 14) Accessible bus stops

The calculated number of accessible stops dropped from 2016 to 2017 after we converted our data to the improved stop-based scheduling structure. Also, 2017 data is based on Metro stops that serve customers. Earlier data included a couple hundred stops that are owned by other agencies or are just for bus layovers.

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| Accessible stops | 6,508 | 6,346 | 6,444 | 6,399 | 6,102 |
| All stops | 8,357 | 8,079 | 8,091 | 8,006 | 8,011 |
| Percent accessible | 78% | 79% | 80% | 80% | 80% |

### 15) Access registrants

At the end of 2017, there were 13,900 eligible registrants in the Access database—a 1.5% drop from 2016. Since January 2014, only riders with current certification have been counted as Access registrants. In previous years, individuals approaching the end of their eligibility who had not taken a trip on Access for a year were considered inactive, but were still listed as eligible even though their eligibility had expired.

### 16) Access boardings/number of trips provided by the Community Access Transportation (CAT) program

Access ridership decreased 0.3% in 2017, while the program still provided all of the trips requested by qualified applicants. There was also a 2.2% decline in boardings for the more cost-efficient CAT program, primarily due to a decrease in service from one Adult Day Health provider that resulted in some 1,200 fewer boardings in the last two months of 2017.

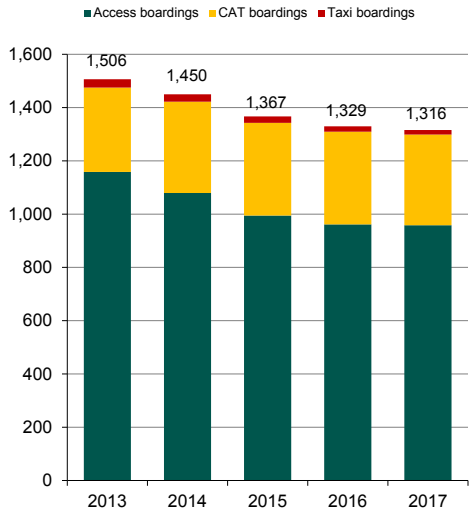
### 17) Requested Access trips compared with those provided

Per federal requirements, Metro's Access program provides a trip for every request by a qualified applicant, meeting the target of a 100% delivery ratio.

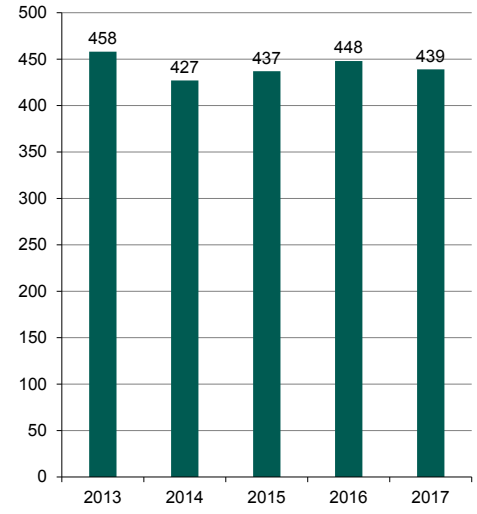
### 18) Access applicants who take fixed-route travel training

Travel training to help people with disabilities ride regular bus service gives those customers more transportation choices. It also contributes to Metro's cost-control efforts by diverting riders to a less-expensive mode of transportation. The number of riders trained increased 2.4% from 2015 to 2016, but dropped in 2017 due to a staffing shortage by the contractor in the last two months of 2017.

**16) Accessible service trips,** in 000s




**18) Access applicants who take fixed-route travel training**



# GOAL 3: ECONOMIC GROWTH AND BUILT ENVIRONMENT 3

Encourage vibrant, economically thriving and sustainable communities.

- **Objective 3.1 Support a strong, diverse, sustainable economy.**
  *Intended outcome: Public transportation products and services are available throughout King County and are well-utilized in centers and areas of concentrated economic activity.*
- **Objective 3.2: Address the growing need for transportation services and facilities throughout the county.**
  *Intended outcome: More people have access to and regularly use public transportation products and services in King County.*
- **Objective 3.3: Support compact, healthy communities.**
  *Intended outcome: More people regularly use public transportation products and services along corridors with compact development.*
- **Objective 3.4: Support economic development by using existing transportation infrastructure efficiently and effectively.**
  *Intended outcome: Regional investments in major highway capacity projects and parking requirements are complemented by high transit service levels in congested corridors and centers.*

*Burien Transit Center*

The Puget Sound Regional Council's regional growth strategy assumes a doubling of transit ridership by 2040 and emphasizes the need for an integrated, multimodal transportation system that links major cities and centers. Toward this end, Metro offers travel options that connect people to areas of concentrated activity and provide affordable access to jobs, education, and social and retail services. This in turn supports economic growth.

We work with other transit agencies to create an integrated and efficient regional transportation system, and we encourage the development of transit-supportive communities.

## HOW WE'RE DOING: GOAL 3 OVERVIEW

2017 was a year of record growth for Metro. Moreover, our regional ridership growth was second highest among the 40 largest Metro areas in 2017, and was highest in 2016.

We continue to work with our partners to encourage alternatives to driving alone for work and personal travel. Total regional revenue from business ORCA accounts in 2017 was nearly two-thirds of all ORCA revenue, and continues to grow. Nearly all of Metro's bus trips touch regional growth centers or manufacturing centers. About one-third of employees at Commute Trip Reduction work sites use buses, trains, carpools, or vanpools to get to work.

| | MEASURES | TREND |
|---|---|---|
| 1 | All public transportation ridership in King County | ⊕ |
| 2 | Metro Transit rides per capita | ⊖ |
| 3 | Ridership in population/business centers | ! |
| 4 | Employees at CTR sites sharing non-drive-alone transportation modes during peak commute hours | ⊕ |
| 5 | Employer-sponsored passes and usage | ⊕ |
| 6 | Park-and-ride capacity and usage | ⊖ |
| 7 | HOV lane passenger miles | ⊖ |

### 1) All public transportation ridership in King County (rail, bus, paratransit, rideshare)

The total number of boardings in King County on all services—including buses, rail, paratransit service, vanpools, and passenger-only ferries—grew to 177.2 million in 2017, a 3% increase over 2016 (and 8.4% over 2015). The greater Seattle area had the fastest growing transit ridership among large U.S. metropolitan areas in 2016, and the second-fastest in 2017. Metro bus ridership alone was 121.7 million in 2017, an increase of 0.6%, and accounted for 69% of the total. (See call out on page 21)

Ridership on the other services grew 8.8%, driven by the 22% gain by Link light rail with the opening of its University of Washington extension in early 2016.

### 2) Metro Transit rides per capita

Metro's ridership growth of 0.6% in 2017 was lower than King County's 2.3% population growth, so boardings per capita declined. However, much of the county's ridership growth is reflected in the growth of Link light rail after the opening of the Capitol Hill/University of Washington segment in March 2016. Total ridership growth on Metro buses and Link light rail (operated by Metro) from 2016 to 2017 was 3.5%, which outpaced population growth.

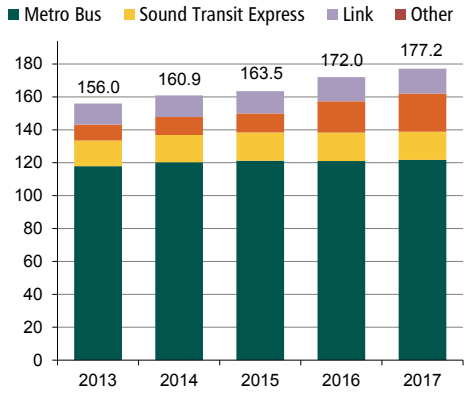
### 3) Ridership in population/business centers

In fall 2017, Metro provided 11,179 bus trips each weekday to, from, through, or between regional growth centers or manufacturing/industrial centers (as designated in the region's growth plan). This made up 98% of Metro's directly operated, non-custom, scheduled trips—so virtually all of the transit trips we provide serve one of these centers. This percentage has been about the same since 2014, and is a couple of percentage points higher than the previous years.

### 4) Employees at CTR sites sharing non-drive-alone transportation modes during commute hours

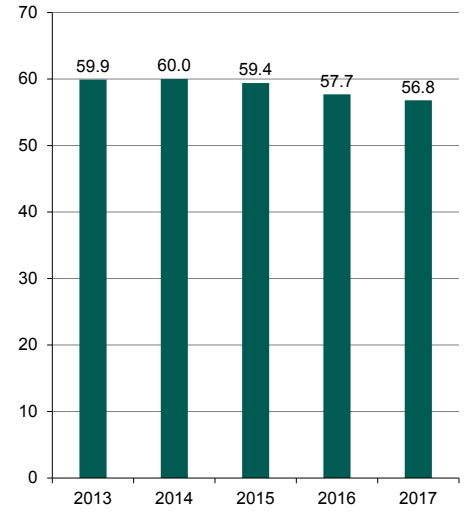
The non-drive-alone share of employee commute trips that serve Commute Trip Reduction (CTR) sites in King County has remained relatively stable since the 2011/2012 survey cycle. CTR sites have at least 100 employees who arrive at work between 6 and 9 a.m. About one-third of these commuters use buses, trains, carpools, or vanpools to get to work. The bus share is about the same, while the carpool/vanpool share decreased slightly and the train share increased slightly. (Data are not yet available from the 2017/2018 surveys.)

**1) Transit boardings in King County***
(in millions)

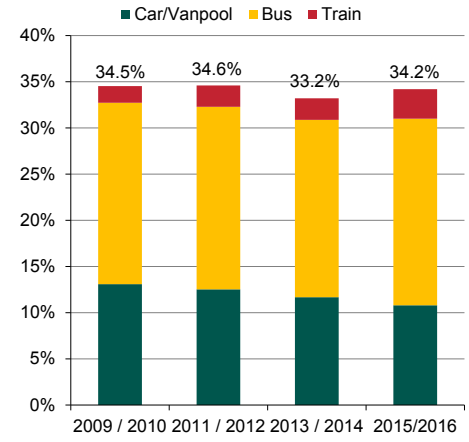



*Includes Sound Transit bus service operated by Community Transit and Pierce Transit, which was not included in previous reports.

**2) Metro transit rides per capita**



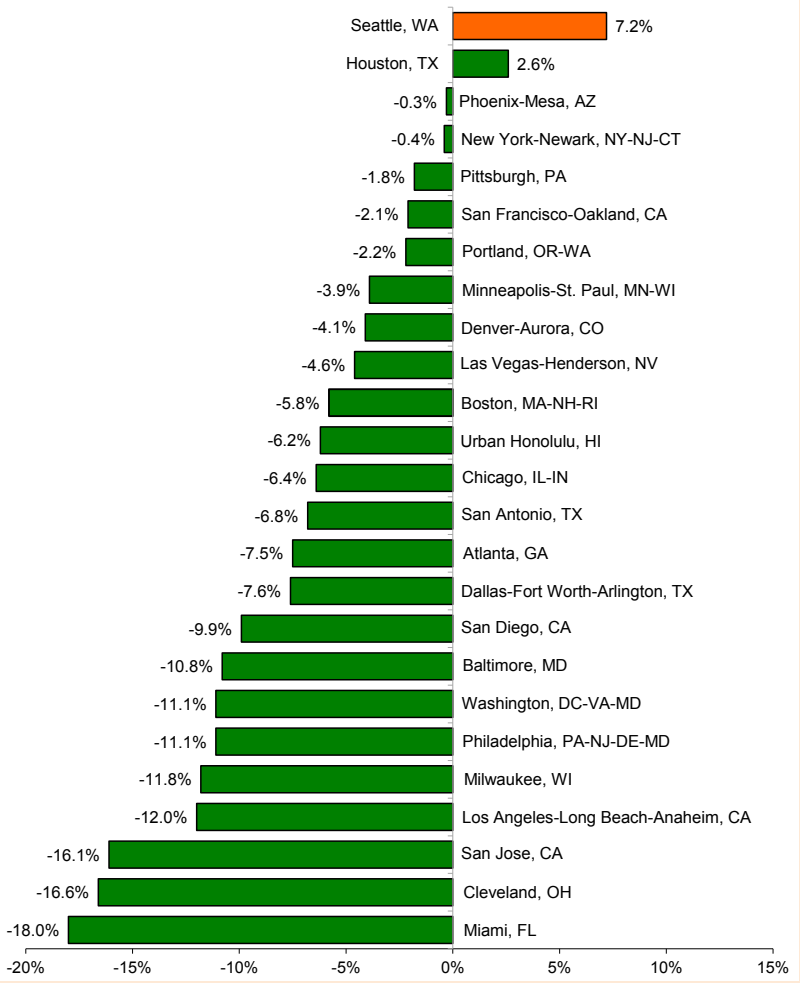

**4) Peak mode share at King County CTR sites**



According to the National Transit Databases monthly releases (as of March 2018), Metro had the third best annual ridership growth rate from 2015 to 2017 (seventh best in 2016, and second best in 2017). Further, the Seattle urbanized area (King, Pierce, and Snohomish counties) had the highest growth—7.2%—in this two-year period. The growth was driven largely by Link light rail, whose ridership doubled in this time as the line extended north to Capitol Hill and the University of Washington and south to Angle Lake. Metro reconfigured its bus system to integrate with Link and provide for most ridership between downtown Seattle and the University of Washington to be by light rail.

Nationally, ridership on public transit has been declining in the past few years. The major contributors appear to be the declining costs of automobile ownership and operation, increased telecommuting and condensed work schedules, and competition from transportation network companies such as Uber and Lyft. The Seattle area has bucked this trend by extending light rail and adding bus service to improve frequency and reliability. As the table to the right shows, this has allowed our region to be one of the few large ones to see ridership gains over the past two years.

**Regions of Metro's Peer Agencies**
**Change in Transit Ridership, 2015-2017**



### 5) Employer-sponsored passes and usage

The payment of fares with business account ORCA cards has increased dramatically as ORCA has matured. (ORCA is an electronic fare card adopted in 2009 by seven transit agencies in the region.) Total regional revenue from business ORCA accounts in 2017 was more than $159 million—nearly two-thirds of the region's $252 million in ORCA revenue. The largest of the products is Passport, a program in which employers purchase transit passes for their employees. There were 62.5 million regional boardings with Passport in 2017—8% more than in 2016—and revenue of $124 million. The University of Washington's U-Pass program brings in 23% of regional ORCA Passport revenue. Metro's ORCA Passport revenue was more than $75 million, a 7% increase over 2016.

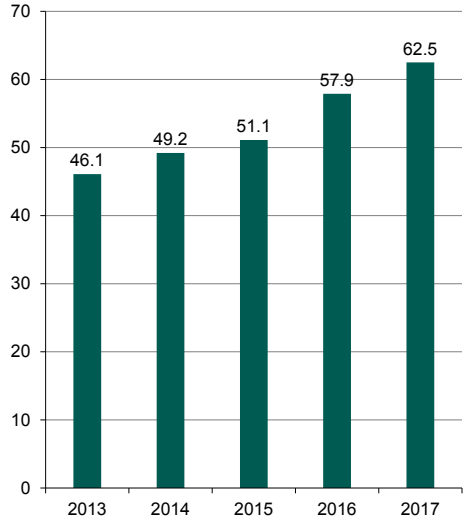
### 6) Park-and-ride capacity and utilization

The average number of spaces used at King County's 136 park-and-ride facilities fell slightly in 2017. Utilization of the 26,000 spaces at these facilities fell by about 2% from 2016. On typical weekdays in 2017, the lots were 76% full. Utilization varies greatly among the 136 lots, with many park-and-ride facilities operating near or at full capacity. For usage information on each lot, see the Park & Ride Usage tab on Metro's online Accountability Center (https://metro.kingcounty.gov/am/accountability).

### 7) HOV lane passenger miles

HOV (high-occupancy vehicle) lanes are considered fixed guideways, as defined by the Federal Transit Administration. Transit-only lanes and trolley wire are also in this category. Passenger miles on these lanes fell by 7.1% from the 2015 reporting period. This reflects the effect of Link light rail's extension in 2016. Bus service to the University of Washington on the I-5 express lanes was reduced, and some bus service was removed from the Downtown Seattle Transit Tunnel to allow room for more frequent Link service.

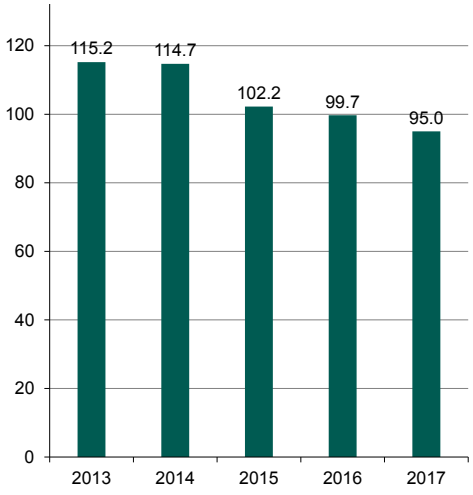
**5) Regional boardings with ORCA Passport passes** (in millions)




| Total park-and-ride spaces | | | |
|---|---|---|---|
| Year* | Capacity | Used | Utilization |
| 2013 | 25,397 | 19,485 | 77% |
| 2014 | 25,489 | 20,054 | 79% |
| 2015 | 25,468 | 19,600 | 78% |
| 2016 | 26,869 | 20,563 | 76% |
| 2017 | 26,253 | 19,976 | 76% |

*Fall service, September to February

**7) Passenger miles on transit-only and HOV lanes** (in millions)



# GOAL 4: ENVIRONMENTAL SUSTAINABILITY 4

Safeguard and enhance King County's natural resources and environment.

### ▶ Objective 4.1: Help reduce greenhouse-gas emissions in the region.

*Intended outcome: People drive single-occupant vehicles less.*

### ▶ Objective 4.2: Minimize Metro's environmental footprint.

*Intended outcome: Metro's environmental footprint is reduced (normalized against service growth).*

Metro plays a key role in reducing greenhouse gas emissions in King County per the 2015 King County Strategic Climate Action Plan. We provide travel options that increase the proportion of travel in King County by public transportation, and by increasing the efficiency of our services and facilities.

Every action Metro takes to make transit a more accessible, competitive, and attractive transportation option helps to counter climate change and improve air quality. We have also developed an agency-wide sustainability program to coordinate sustainability initiatives as part of planning, capital projects, operations, and maintenance. We are committed to green operating and maintenance practices, and we incorporate cost-effective green building and sustainable development practices in all capital projects. We continue to seek opportunities to improve energy efficiency and decrease energy use in our facilities and fleet.

## HOW WE'RE DOING: GOAL 4 OVERVIEW

In 2017, Metro continued to improve fleet efficiency and committed to transition to a zero-emission vehicle fleet powered by renewable energy.

After accounting for changes in facility size and outside temperatures, our overall facility energy use has decreased by 19% since 2014. We have surpassed our facility energy reduction targets set in the King County Strategic Climate Action Plan.

Survey results indicate that an estimated 33% of King County households have a member who rides Metro at least once per month—a 6 percent decrease from 2015.

| MEASURES | | TREND |
|---|---|---|
| 1 | Average miles per gallon of Metro's bus fleet | ⊕ |
| 2 | Vehicle energy (diesel, gasoline, kWh) normalized by miles | ⊕ |
| 3 | Vehicle fuel (diesel, gasoline, kWh) normalized by boardings | ⊕ |
| 4 | Total facility energy use | ⊕ |
| 5 | Energy use at Metro facilities: kWh and natural gas used in facilities, normalized by area and temperature | ⊕ |
| 6 | Per-capita vehicle miles traveled (VMT) | ⊕ |
| 7 | Transit mode share | ⊖ |

### 1) Average miles per gallon for Metro's bus fleet ⊕

Fuel economy for Metro's diesel and diesel-hybrid bus fleet continued to improve in 2017. Average miles per gallon increased to 4.11, an improvement of nearly 5% over 2015.

In recent years, the main factor affecting our fleet's average miles per gallon was the replacement of older diesel buses with new diesel-electric hybrids that consume less fuel. Hybrids now make up 72% of our diesel-fueled fleet.


### 2) Vehicle energy (diesel, gasoline, kWh) normalized by miles ⊕

Metro operates diesel, diesel-hybrid, and battery-electric motor buses as well as electricity-powered trolley buses. When diesel fuel and kilowatt hours are converted to the energy measure BTUs, Metro's energy consumption decreased by 1.1% between 2014 and 2017.

-1.1%

### 3) Vehicle fuel (diesel, gasoline, kWh) normalized by boarding ⊕

Vehicle energy use per boarding increased by 0.2% from 2014 and was up nearly 3% from 2015. The change results from an increase in miles traveled of more than 5% relative to the more modest increases in passenger boardings over the same time period.

+.2%

### 4) Total facility energy use ⊕

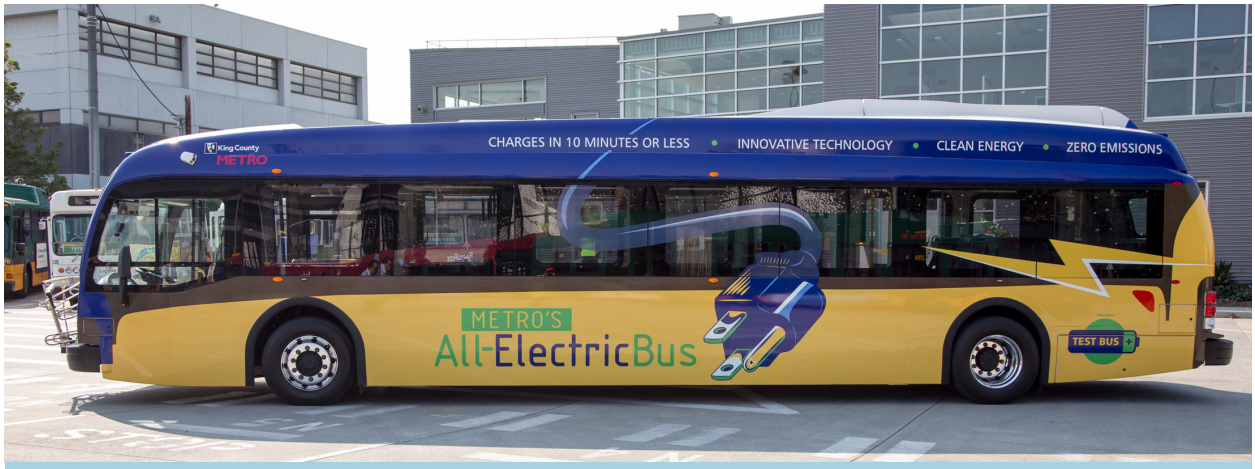
We now use a 2014 baseline year to measure our progress in energy efficiency. Since then, total energy use at all Metro facilities—which does not include the energy used to power buses—has decreased by 14%.

We attribute this reduction to conservation practices and the completion of numerous energy efficiency projects. We've already exceeded the 2015 King County Strategic Climate Action Plan goal of a 7.5% reduction by 2020.

-14%

**5) Energy use at Metro facilities (kWh and natural gas used in facilities normalized by area and temperature)** ⊕

Metro defined an updated set of baseline facilities in 2014 against which to compare future energy use and account for changes in the number and size of facilities over time. After also adjusting for weather variability and changes in square footage at the facilities, normalized energy use at these facilities decreased by approximately 19% between 2014 and 2017, thanks in part to investments in conservation measures such as LED lighting and HVAC system upgrades at various facilities.


## We're building a zero-emission fleet

King County is taking action to confront climate change, and Metro is playing a major role by reducing transportation-related greenhouse gas emissions. Metro was a national leader in adopting diesel-electric hybrid buses, and recently deployed a new fleet of zero-emission electric trolley buses.

Now we're taking the next step: transitioning to a zero-emission vehicle fleet powered by renewable energy.

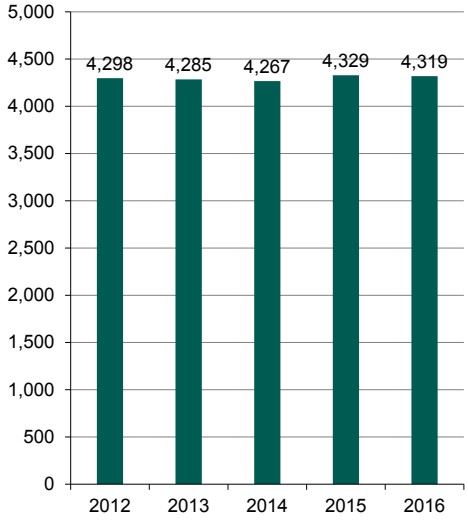
This commitment is based on a successful test of three battery-electric buses and an in-depth feasibility analysis.

Assuming that battery bus technology evolves to meet our transit system's needs, Metro will purchase only zero-emission buses starting in 2020. The transition to a zero-emission fleet could be completed as early as 2034, or by 2040 at the latest.

### 6) Per-capita vehicle miles traveled (VMT) ⊕

In 2016, vehicle miles travelled on state highways in King County was 9.1 billion. This works out to 4,319 VMT per capita per resident, a decline of 0.2% from 2015, and a decline of 2.6% since 2010. During this six-year span, per capita passenger miles on Metro buses increased 3.8%.

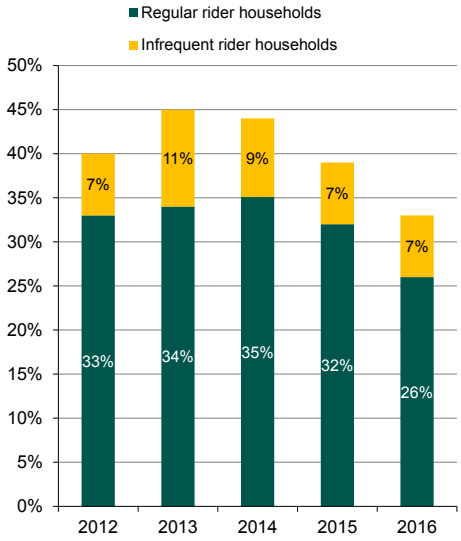
**6) Per capita vehicle miles traveled**




### 7) Transit mode share ⊖

Metro's 2016 Rider Survey found that 26% of King County households had at least one member who rode Metro five or more times in the previous month. Another 7% had a member who rode one to four times. The total of 33% is a 6% decrease from the 2015 survey. 2016 saw a higher proportion of regular riders, and the average number of reported trips per month increased slightly compared to 2015. The extension of Link to Capitol Hill and the University of Washington resulted in some bus riders moving to light rail.

**7) Transit mode share**



# GOAL 5: SERVICE EXCELLENCE

**5**

Establish a culture of customer service and deliver services that are responsive to community needs.

### Objective 5.1: Improve satisfaction with Metro's products and services and the way they are delivered.

*Intended outcome: People are more satisfied with Metro products and services.*

### Objective 5.2: Improve public awareness of Metro products and services.

*Intended outcome: People understand how to use Metro's products and services and use them more often.*

Metro is committed to giving our customers a positive experience at every stage of transit use, from trip planning to arrival at a destination. We strive to provide service that is reliable, convenient, easy to understand and easy to use. We emphasize customer service in both transit operations and workforce training. Our marketing and customer information efforts help customers understand what service is available and how to use it, and also raise awareness of the benefits of transit.

*Customer Communications and Services office.*

## HOW WE'RE DOING: GOAL 5 OVERVIEW

Customer satisfaction remains high, with 92% of riders saying they are satisfied with Metro service. Customer complaints increased slightly in 2017, following a larger increase the previous year. Complaints tend to spike with major changes in service.

On-time performance of our bus service improved slightly in 2017, as many of the investments in service focused on better reliability. There was less crowding on buses thanks to increases in the number of trips operated.

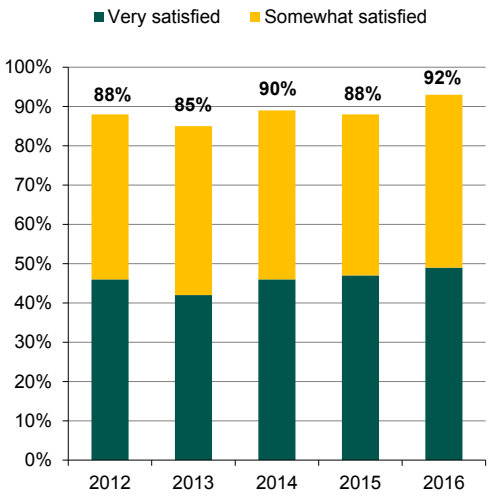
Customer visits to Metro's website and Trip Planner both decreased in 2017, as there are now various other tools available to help with transit trip planning. Transit Alerts and Twitter have proven to be an effective way to communicate in real time about service disruptions and issues related to adverse weather.

| MEASURES | | TREND |
|---|---|---|
| 1 | Customer satisfaction | ⊕ |
| 2 | Customer complaints per boarding | ⊖ |
| 3 | On-time performance by time of day | ⊕ |
| 4 | Crowding | ⊕ |
| 5 | Use of Metro's web tools and alerts | ● |

## 1) Customer satisfaction

Metro has achieved a customer satisfaction rate of around 90% over much of its history as measured in annual rider surveys. This was the case again in 2016. Responding to the question, "Overall, would you say you are satisfied or dissatisfied with Metro?" 92% of respondents said they are either "very satisfied" or "somewhat satisfied," an increase over the 88% satisfied in 2015. In 2018, Metro will switch to a quarterly Rider/Non-Rider Survey in order to elicit more comprehensive and more timely customer feedback. One key focus of the survey will be what barriers keep non-riders from becoming riders.

### 1) Overall rider satisfaction



## 2) Customer complaints per boarding

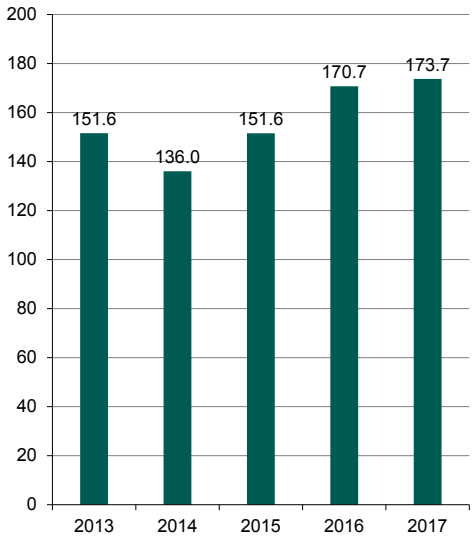
The number of customer complaints per million boardings increased 2% in 2017, following a 14% increase the previous year. Complaints tend to spike with major changes in service. Metro's C3 system for tracking customer comments, complaints, and requests for service came online in September 2015; this new tracking method may account for the increase.

## 3) On-time performance by time of day

In late September of 2017, we improved our methodology for measuring on-time performance by transitioning from a time-point-based system to a timestop-based system. With the new systems, measurements are taken closer to the points at which transit serves its passengers, providing for more accurate measurement of on-time performance. Metro has a target of at least 80% of bus trips being on time (between five minutes late and one minute early at key stops). In 2017, on-time performance was 77.4%, which was 0.5 percentage points above 2016. Much of the additional bus service purchased by the City of Seattle with funding from Proposition 1, approved by Seattle voters in November 2014, focused on reducing crowding and improving reliability. Metro also made investments in Seattle and around the county during this time.

In 2017, Metro's Service Guidelines analysis found that 35 routes need a total investment of 17,000 annual service hours to improve reliability. Subsequent investments of about 8,000 hours in schedules and additional investments to improve operator access to comfort stations decreased late arrivals system-wide by about two percentage points. For the routes that received investments, late arrivals dropped an average of more than four percentage points, with routes 190 and 269 and the B Line showing significant improvement. Our hot spot improvement and corridor improvement programs continue to work with cities to identify areas where transit slows down and implement solutions to keep buses moving.

### 2) Complaints per million boardings




### 3) On-time performance by time of day

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| 5 a.m. – 9 a.m. | 82.1% | 81.9% | 79.2% | 80.0% | 80.6% |
| 9 a.m. – 3 p.m. | 78.2% | 77.6% | 75.8% | 77.9% | 79.9% |
| 3 p.m. – 7 p.m. | 69.2% | 67.1% | 65.3% | 68.0% | 69.4% |
| 7 p.m. – 10 p.m. | 75.4% | 75.7% | 76.3% | 78.4% | 79.1% |
| After 10 p.m. | 82.6% | 83.7% | 83.8% | 83.7% | 83.7% |
| **Weekday average** | **77.6%** | **76.0%** | **74.3%** | **76.2%** | **77.1%** |
| Saturday | 76.6% | 76.5% | 75.9% | 78.6% | 78.2% |
| Sunday | 80.3% | 79.1% | 78.8% | 80.7% | 79.5% |
| **Total system average** | **77.7%** | **76.3%** | **74.9%** | **76.9%** | **77.4%** |

A bus is considered to be on time if it is between one minute early and five minutes late at key stops. In 2014, the time periods were slightly revised to be consistent with the Service Guidelines. The changes varied by about 15 minutes to an hour. The pre-2014 numbers in the table reflect the previous definitions.

### 4) Crowding

Following the significant investments in service in 2015 and 2016, we have seen a decrease in the percentage of trips with more riders than seats. Based on fall 2017 data, 4.9% of our trips had 20% more riders than seats, and 4.2% had 1-19% more riders than seats, for a total of 9.1%. This indicates that investments in service have outpaced ridership growth. It typically takes several years for ridership to respond to large, sudden increases in service.

Metro invests in service to reduce crowding in accordance with our Service Guidelines. A more detailed discussion of crowding can be found in Metro's annual System Evaluation (https://kingcounty.gov/~/media/depts/transportation/metro/accountability/pdf/2017/system-evaluation.pdf)

### 5) Use of Metro's electronic media tools and alerts

Metro has three major types of electronic media tools to help customers with their travel needs: the Metro Online and regional Trip Planner websites, Transit Alerts that are sent to subscribers via email and/or text messaging (which are also tweeted), and social media.

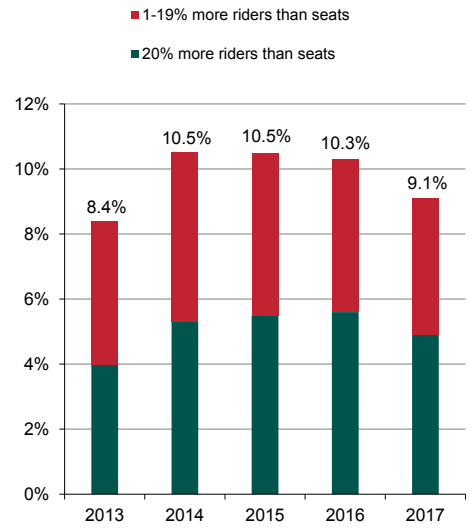
In 2017, total visits to Metro Online were 6.2 million and visits to the online regional Trip Planner or use of the app totaled 3.3 million. In January 2015, Metro launched the Puget Sound Trip Planner app for iOS and Android mobile devices. The app allows riders to see schedules and real-time predictions for bus arrivals and to plan trips across 11 public transportation providers in our region while on the move.

The drop in visits to Metro Online and the Trip Planner likely stems from the proliferation of other online tools offering similar services (e.g. Google Transit) and from the metrics and methodology Google uses to track online visits.

Transit Alerts and tweets have proven to be effective ways to communicate in real time about service disruptions and adverse weather issues. The number of subscribers has decreased somewhat from 2016, but the number of messages sent increased. In 2017, we sent 10,500 tweets and 3,300 bulletins to communicate important information to our subscribers.

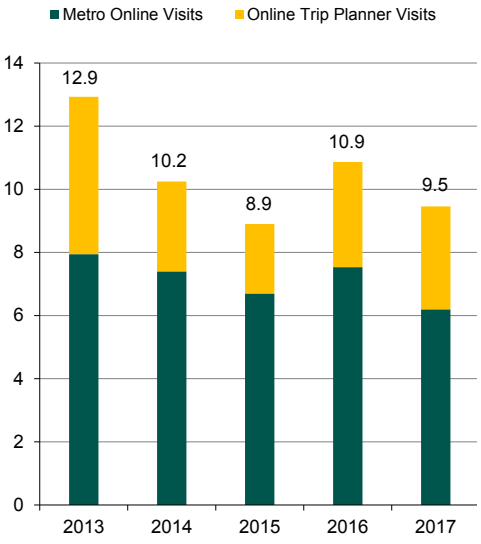
Find more information about Metro's use of electronic media on p. 38, under 3) Social media indicators.

**4) Bus trips with more riders than seats***




*A different methodology is used in this year's report and is applied retroactively to all five years.

**5) Visits to Metro Online and Trip Planner*** (in millions)



# GOAL 6: FINANCIAL STEWARDSHIP

## Exercise sound financial management and build Metro's long term sustainability.

**6**

### ▶ Objective 6.1: Emphasize planning and delivery of productive service.

*Intended outcome: Service productivity improves.*

### ▶ Objective 6.2: Control costs.

*Intended outcome: Metro costs grow at or below the rate of inflation.*

### ▶ Objective 6.3: Seek to establish a sustainable funding structure to support short- and long-term public transportation needs.

*Intended outcome: Adequate funding to support King County's short- and long-term public transportation needs.*

Metro strives to create a public transportation system that emphasizes productivity while promoting social equity and providing geographic value by serving centers throughout the county. Our focus on productivity supports regional and local growth and economic development and contributes to the financial sustainability of the transit system.

In the past few years, we've made significant investments in both service hours and the infrastructure necessary to deliver those hours. While these investments show up as increased costs and decrease some of our productivity measures in the short term, over the long term we expect the added service to increase our ridership and productivity.

A critical strategy for achieving financial sustainability is to control our costs. We continuously seek efficiencies in our administration and operation, including restructuring service according to our service guidelines to meet local needs more efficiently. While the past year saw an increase in cost per hour, the level is about the same as in earlier years after adjusting for inflation. Another vital step toward financial sustainability is to seek new, sustainable funding sources. Setting fare structures and fare levels that allow us to meet our revenue targets is another key strategy.

## HOW WE'RE DOING: GOAL 6 OVERVIEW

In the past two years, Metro increased the amount of service we provide. Our vehicle hours in 2017 were up 9.3% over 2015. In the same period, Link light rail expanded to Capitol Hill and the University of Washington. These improvements resulted in major changes in metrics that measure our effectiveness and efficiency. Two important measures in our System Evaluation Report declined: boardings per hour and passenger miles per mile. Experience shows that it takes a few years for significant ridership gains to occur in response to increased and restructured service, so we expect these measures to improve over time.

Our costs increased in 2017, driven by increases in the cost of diesel fuel, payments to King County for central services, higher vehicle maintenance expenses, and increases in labor costs. This resulted in higher costs for the various expense-related metrics, such as cost per hour and cost per boarding. Likewise, our farebox recovery (the proportion of costs covered by fares) decreased, even with a record high total fare revenue, although it is still above target.

The use of ORCA smart cards for fare payment continues to grow, which helps speed boarding and improve service efficiency.

## GOAL 6: FINANCIAL STEWARDSHIP

| MEASURES | | TREND |
|---|---|---|
| 1 | Service hours operated | ⊕ |
| 2 | Service hours and service hour change per route | ● |
| 3 | Boardings per vehicle hour | ⊖ |
| 4 | Boardings per revenue hour | ⊖ |
| 5 | Ridership and ridership change per route | ◐ |
| 6 | Passenger miles per vehicle mile | ⊖ |
| 7 | Passenger miles per revenue mile | ⊖ |
| 8 | Cost per hour | ⊖ |

| MEASURES | | TREND |
|---|---|---|
| 9 | Cost per vehicle mile | ⊖ |
| 10 | Cost per boarding | ⊖ |
| 11 | Cost per passenger mile | ⊖ |
| 12 | Cost per vanpool boarding | ⊖ |
| 13 | Cost per Access boarding | ⊖ |
| 14 | Fare revenues | ⊕ |
| 15 | Farebox recovery | ⊖ |
| 16 | ORCA use | ⊕ |
| 17 | Asset condition assessment | ⊕ |

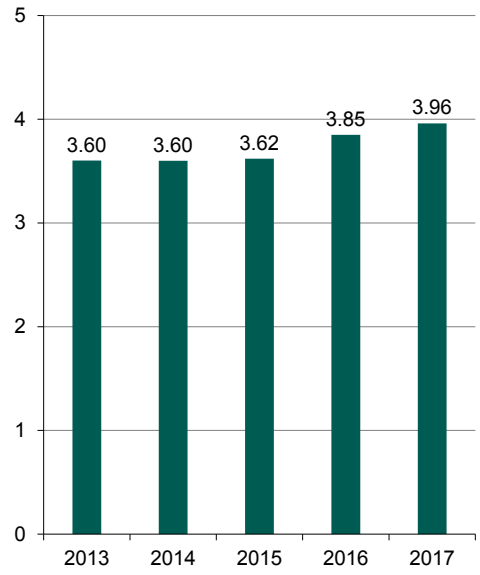
### 1) Service hours operated ⊕

Since 2015, we have significantly increased the number of bus vehicle hours we operate. The City of Seattle purchases bus service with funding approved by voters in November 2014. Likewise, Metro has added hours to increase service frequency, as well as to improve reliability by increasing layover time and allowing for increased traffic congestion in schedules.

### 2) Service hours and service hour change per route ●

A detailed table of hours and changes in hours for Metro's 200+ routes is in Appendix G of Metro's 2017 System Evaluation Report, available online at our Accountability Center (https://metro.kingcounty.gov/am/accountability).

**1) Hours operated** (in millions)




***Note:***

*We use the bus costs from Metro's submittal in the National Transit Database (NTD) to calculate financial ratios. This provides consistency among Metro's many publications. The NTD costs exclude such items as interest expenses, leases and rentals, and other reconciling items, which usually add less than 1% to the total costs. (The 2017 NTD report is not yet audited.)*

*The inflation rates used in this report are from the King County Office of Economic and Financial Analysis, and are based on the Consumer Price Index–Urban Wage Earners and Clerical Workers (CPI-W) for Seattle-Tacoma-Bremerton. In 2017 the rate was 3.0%. King County also uses a target measure to keep costs at the rate of inflation plus population. That would add another 2.3%, which is the Washington State Office of Financial Management estimate for King County population growth from 2016 to 2017. Total bus costs increased 10.4% during that time, and cost per hour increased 7.4%.*

### 3) Boardings per vehicle hour

Metro uses bus boardings per vehicle hour (called boardings per platform hour in our System Evaluation Report) to measure the productivity of transit service. This measure declined in 2016 and 2017, as Metro added many hours of service during this time. Ridership growth remained flat as Link light rail replaced many bus passenger trips to the University of Washington and Capitol Hill. Experience shows that it takes a few years for ridership to show significant gains in response to increased and restructured service, so we expect our boardings per hour to improve over time.

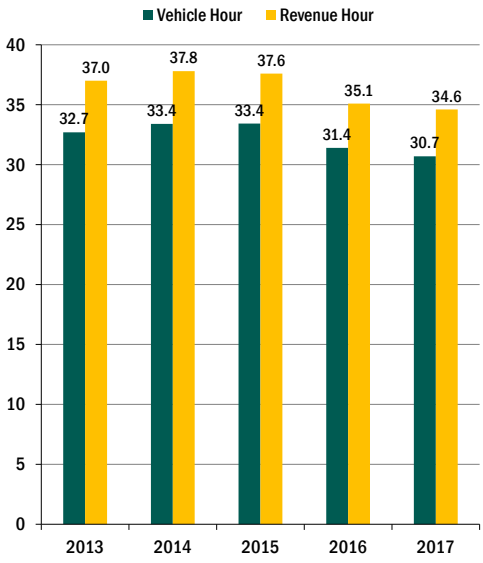
### 4) Boardings per revenue hour

As with boardings per vehicle hour, this measure showed declines in 2016 and 2017. However, this decline was not as great, due to our continued focus on increased productivity of revenue service through improved scheduling efficiency, reallocations of service hours from less-productive routes to more-productive routes, and restructuring of routes based on our System Evaluation.

### 5) Ridership and ridership change per route

Our 2017 System Evaluation Report contains a detailed table on ridership and ridership changes for Metro's 200+ routes in Appendix G.

**3 and 4) Boardings per hour**




## Service and financial statistics

Metro uses many service statistics and financial indicators to track our progress and to compare with peer agencies.

**Vehicle hours** and **vehicle miles** measure all the time and distance between the time a coach leaves the transit base and the time it returns to the base.

**Revenue hours** and **revenue miles** exclude the time and distance of deadheading—when a bus is traveling from the base to its first trip, when a bus has ended its last trip and is returning to the base, and the travel from the end of one trip to the start of another. Metro operates much peak-hour, one-directional service, so the return from the end of one trip back to the start of the next trip is part of deadheading. Revenue hours include layover time—the time between the end of one bus trip and the start of the next. Some of the measures discussed in this chapter remove these scheduled layover hours, resulting in an estimate of **in-service hours**.

**Boardings** are the number of passengers who board transit vehicles. Passengers are counted each time they board, no matter how many vehicles they use to travel from their origin to their destination. **Passenger miles** are the sum of the total distance traveled by all passengers.

Important financial ratios are based on total bus operating cost divided by the measures above. **Cost per vehicle hour** and **cost per vehicle mile** are *cost-efficiency measures* that gauge the cost inputs of a unit of service, as much of the cost is directly related to time and distance. **Cost per boarding** and **cost per passenger mile** are *cost-effectiveness measures* that show how economically we provide our core service, getting passengers to their destinations.

Finally, two productivity ratios are key indicators in our Service Guidelines. **Boardings per vehicle hour** are the number of passengers getting on a bus each hour. **Passenger miles per vehicle mile** works out to be the average number of passenger on a bus at any given time. We assess each route's performance by measuring its productivity in these ratios.

### 6) Passenger miles per vehicle mile

Another key measure of transit service productivity, this ratio is also a key statistic in Metro's service guidelines. It declined from 2015 to 2016, and again—but a little less so—in 2017. A number of factors contributed to this decline. We added both service miles and service hours to the system. Ridership gains were flat as riders moved to new segments of Link light rail. Our average trip length decreased as we reconfigured the bus system to connect with light rail, and some long bus trips became bus-rail trips with shorter distances by bus.

### 7) Passenger miles per revenue mile

This metric decreased along with measure 6, although at a slightly slower rate. We continue to focus on increasing productivity through scheduling efficiency and following our Service Guidelines.

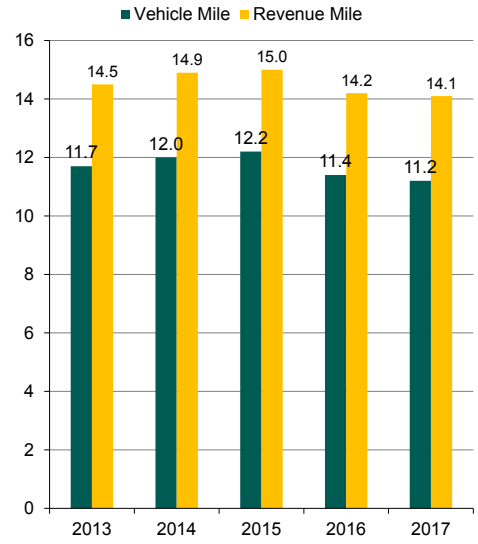
### 8) Cost per hour

In 2017, Metro's operating cost was $151.33 per vehicle hour. This was a 7.4% increase over 2016 and a 5.9% increase over 2015. After adjusting for inflation, our 2017 cost per hour was about the same as in 2013 and 2014. The decline in 2016 was largely due to adding more service hours. These hours were added at a marginal cost, and fixed costs were spread out over more hours. Several major factors drove the 2017 increase. We added more hours and the cost of diesel fuel increased. In 2017 diesel prices were still much lower than historical averages, but we did see a $0.80 per hour increase over 2016 prices. Our King County central services costs rose by about $2.40 per hour. These expenses are allocated to all county agencies and include central services such as IT, financial systems, and the support of the county's general fund. The Department of Labor issued a one-time penalty in 2017, increasing our costs by $1.80 per hour. An increase of about $3.20 per hour was due to salary and benefit increases for operators and higher vehicle maintenance expenses, which were largely driven by parts expenses associated with the maintenance of our growing fleet.

### 9) Cost per vehicle mile

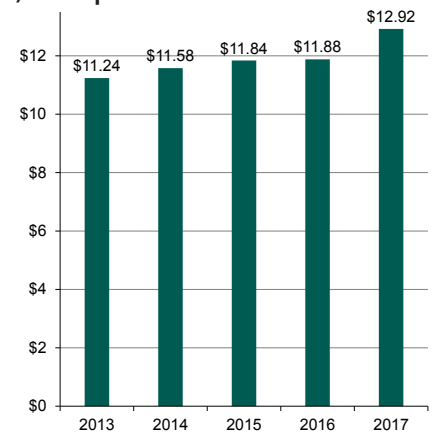
After barely increasing in 2016, our cost per vehicle mile increased 8.8% in 2017. This was driven by Increased traffic congestion, which meant our buses drove fewer miles per hour. Adjusted for inflation, this measure is 5.9% higher than in 2013.

**6 and 7) Passenger miles per mile**




**8) Cost per hour**


**9) Cost per vehicle mile**



## 10) Cost per boarding

Our cost per boarding increased 10% in 2017 to $4.93. Both cost per hour and the number of service hours we provide increased, and ridership increased slightly. We expect our boardings per hour to increase over time in response to recent service investments, which will improve the trend for this metric.

### 10) Cost per boarding


## 11) Cost per passenger mile

Similar to cost per mile, our cost per passenger mile increased 10.1% in 2017. Over the past couple of years, this cost increased more than cost per boarding because our average passenger trip length has decreased. The City of Seattle's investments focused on Seattle routes, which tend to be shorter. Also, more passengers are using Metro for shorter trips that connect with Link light rail.

### 11) Cost per passenger mile


## 12) Cost per vanpool boarding

Our expenses related to vanpool operations and administration increased 7% from 2016 to 2017. More than half of this increase is related to costs for maintenance and fuel. Gas prices increased 18% (from $1.96 to $2.31 per gallon), and maintenance expenses increased a penny per mile (from $0.137 to $0.147).

Our vanpool program has met its guideline for cost recovery in the past several years. The King County Code requires commuter-van fares to be reasonably estimated to recover the full operating and capital costs and at least 25% of the administrative costs of the program.

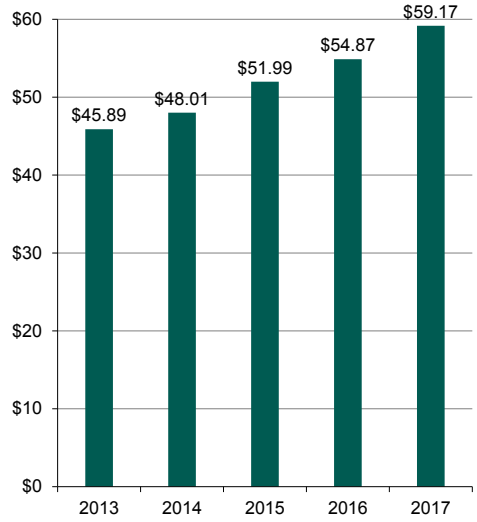
### 12) Cost per vanpool/vanshare boarding


Note: We changed to a new passenger counting method in 2014. If that method were applied to 2013, our cost per boarding would have been about $0.20 higher.

## 13) Cost per Access boarding

Metro's cost per Access boarding increased 7.8% to $59.17 from 2016 to 2017. During this same period, productivity dropped by 4.6% due to needed on-time performance adjustments, contributing to a higher cost per trip. In 2016, Access was struggling to meet its on-time performance goal of 90%. For the first 10 months of 2016, only 85.9% of Access trips were on time. In fall 2016, we used regional speed data from the Washington State Department of Transportation to analyze our scheduling system settings. We learned that we needed to substantially lower system speeds in the scheduling system, which required us to add service hours to compensate. This in turn lowered our productivity. We made these corrections in November 2016, so their largest impact showed up in 2017. By the end of the year, we had reached an on-time performance rate of 90.2%.

**13) Cost per Access boarding**




## 14) Fare revenues

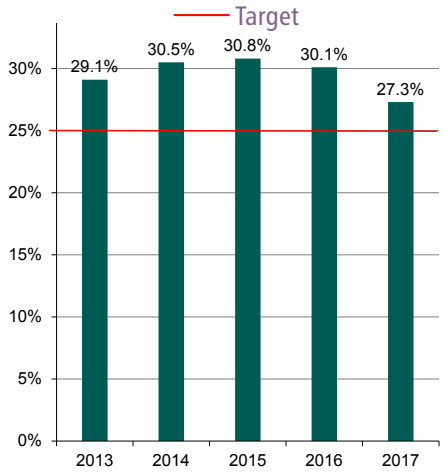
Metro's fare revenue has increased in each of the past five years, starting at $141.3 million in 2012 and reaching $163.4 million in 2017. This growth slowed a bit in 2017, when it moved at almost the same rate as ridership. Metro's last fare increase was in 2015, so we did not expect a significant change to our average fare per boarding in 2017.

**14) Fare revenues** (in millions)


## 15) Farebox recovery

Our fund management policies, adopted in November 2011, establish a target of 25% for farebox recovery—total bus fares divided by total bus operating costs. We exceeded this target every year from 2012 through 2017, reaching a record high of 30.8% in 2015. The ratio has declined in the past two years, not surprising since our last fare increase was in 2015 and costs have increased since then.

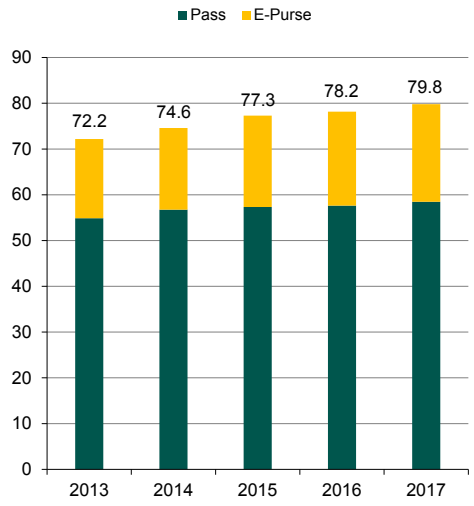
**15) Farebox recovery**



### 16) ORCA use

The use of ORCA fare cards has grown dramatically since their introduction in 2009. ORCA is used by seven Puget Sound agencies and provides a seamless fare medium for transferring among the systems. The use of smart card technology contributes to efficient operations and more-accurate revenue reconciliation among the regional agencies. Virtually all passes are now on ORCA, use of the ORCA E-purse has grown, and cash payments have declined, which helps speed up operations. ORCA use on Metro buses has more than doubled since 2010. Nearly two-thirds of Metro's weekday boardings are now paid with ORCA. The growing ORCA LIFT program helps drive the ORCA market share higher by offering low-income cash customers a cheaper ORCA-based alternative.

**16) ORCA taps on Metro Transit** (in millions)




### 17) Asset condition assessment

Metro maintains its fixed assets (buildings, systems, and infrastructure) using the State of Good Repair program. This allows us to determine the condition of assets and plan long-range investment strategies and funding requirements. In 2009, Metro worked with the Federal Transit Administration's Moving Ahead in the 21st Century Program to update our decision-making and implementation strategies for preserving fixed and other assets. In 2017, we began establishing measures and guiding policy documentation according to Transit Asset Management Final Rule 49 USC 625, which took effect in 2016.

Our 2017 assessment shows that our fleet requires frequent minor repairs and infrequent major repairs. The average age of Metro's buses decreased from 8.9 years in 2015 to 7.4 years in 2017. Metro placed 79 new buses into service in 2017. The resulting younger fleet changed total condition points from 64 (2015) to 67 (2017) on a scale of 1–100. As we continue to replace coaches over the next few years, we can expect the condition of our fleet to improve.

Metro assessed an additional body of fixed assets, including transit base and service support facilities. The summary report, which includes an update of previous findings, was published in 2016. We're using base asset condition data to develop our 2019/2020 capital investment plan for fixed assets.

*Bus maintenance shop*

## ▶ Objective 7.1: Empower people to play an active role in shaping Metro's products and services.

# GOAL 7: PUBLIC ENGAGEMENT AND TRANSPARENCY

7

Promote robust public engagement that informs, involves, and empowers people and communities.

*Intended outcome: The public plays a role and is engaged in the development of public transportation.*

### Objective 7.2: Increase customer and public access to understandable, accurate, and transparent information.

*Intended outcome: Metro provides information that people use to access and comment on the planning process and reports.*

Metro is committed to being responsive and accountable to the public. We uphold this commitment by involving the community in our planning process and making public engagement a part of every major service change or new service initiative. We also work to make our information and decision-making processes clear and transparent.

We reach out to customers and the public through a variety of forums and media channels, and make information available in multiple languages. We design outreach and engagement strategies to involve a representation of all our riders and let the public know their participation is welcome and meaningful. Each engagement process is tailored to the target audiences.


*Long-range plan open house*

Our online Accountability Center (https://kingcounty.gov/metro/accountability) has detailed information on dozens of measures of ridership, safety and security, service quality, and finances; these are updated monthly. The site also features a number of Metro reports.

## HOW WE'RE DOING: GOAL 7 OVERVIEW

Metro has a robust public engagement process. A major outreach in 2017 focused on fare simplification. We created a stakeholder advisory group, briefed and interviewed interested groups, and gathered two rounds of public feedback with more than 12,000 comments and 11,000 survey responses.

We work to improve our ability to deliver information on an ongoing basis. Customer surveys show declines in satisfaction with our communications. We continue to seek innovative ways to reach out to customers, including use of social media. To connect with hard-to-reach populations, we research demographics and partner with social service organizations to place information in ethnic media.

| MEASURES | | TREND |
|---|---|---|
| 1 | Public participation rates | ○ |
| 2 | Customer satisfaction regarding Metro's communications and reporting | ⊖ |
| 3 | Social media indicators | ⊕ |
| 4 | Conformance with King County policy on communications accessibility and translation to other languages | ⓘ |

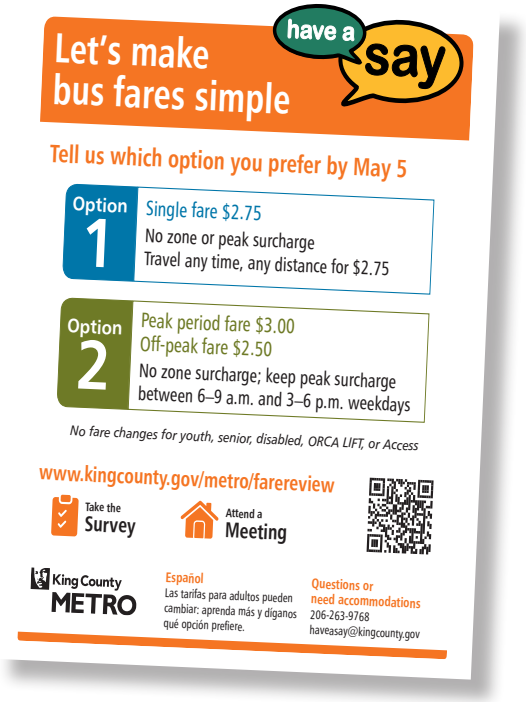
## 1) Public participation rates

### Fares outreach

Metro engaged the public in spring 2017 to inform a recommendation to the King County Executive for revising fares. We created a stakeholder advisory group, briefed and interviewed interested groups, and gathered two rounds of public feedback.

We worked with community-based organizations to reach out to diverse community members, people with low incomes, English language learners, and other populations less likely to respond to online surveys.

In our outreach with community-based organizations, we engaged more than 300 people who speak non-English languages, including Amharic, Arabic, Cambodian, Chinese, Dari, Ekirondi, English, Farsi, Khmer, Mam, Pashto, Punjabi/Hindu, Russian, Samoan, Somali, Spanish, Swahili, Tagalog, Tigrinya, Turkish, Twi, Ukrainian, Urdu, and Vietnamese.




### Outreach participation

We received a total of more than 12,000 comments.

About 4,500 people took our first survey. Most supported changing Metro's fare structure to make fares easier to use and understand, speed up boarding and travel times, help keep drivers and passengers safe by reducing fare disputes, and reflect the increasing number of riders who live in suburban areas outside the Seattle zone boundary.

About 6,600 took our second survey. Most preferred a single regular adult fare of $2.75 for travel at all times and for any distance within our service area.

### Feedback about our outreach

We asked participants if the information about how to participate was clear and welcoming. Ninety-seven percent of respondents to the first questionnaire and 95% of respondents to the second questionnaire said yes.

Asked if they were given enough time to provide meaningful feedback, 95% (first questionnaire) and 85% (second questionnaire) said yes.

Asked if they saw how public input shaped Metro's final proposal, 57% said yes, 10% said no, and 33% said they weren't sure.

### Fares Advisory Group

We formed a 20-member advisory group that represented various organizations with a stake in public transit. The group also reflects the diversity of Metro riders, including young people, older adults, people with disabilities, people with no or low incomes, commuters, and college and university students.

The group met four times in 2017 to help us think through the effects of various fare options and advise us on ways to make transit and ORCA more accessible. The group served in an advisory capacity only; it did not make any formal recommendations or decisions.

(See call out at bottom of page 42)

### Link Connections SR-520

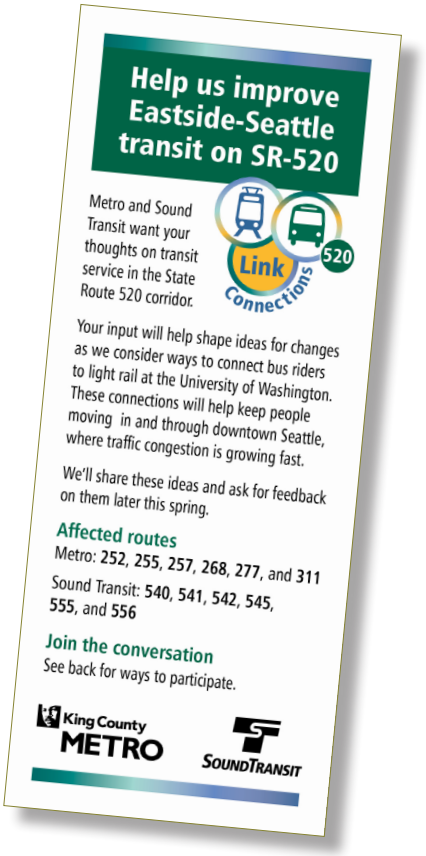
Metro and Sound Transit reached out to riders and the public in two phases of outreach in 2017 to get input on bus service in the State Route 520 corridor. We used that information to develop two service concepts and shared those concepts—plus details about what would happen with no changes—in June 2017. More than 4,500 people gave us input.

We let people know about the opportunity to participate in the following ways.

- "Street team" in-person outreach on buses (more than 4,000 information cards handed out)
- Electronic notifications to bus route subscribers (23,000 subscribers received the notice and 4,900 opened the message)
- Signs at bus stops (posted at 80 high-ridership stops along all potentially affected routes)
- Employer outreach (87 Eastside employers contacted through our Employee Transportation Partnership program)
- Coordination with 38 agencies, jurisdictions, employers, and organizations to promote the information through their communication channels (see stakeholder list below)

During two phases of outreach, we got feedback from riders, stakeholders, and the general public in the following ways:

- About 250 people attended a public meeting
- We made presentations to 15 stakeholder groups and employers and held community briefings and other in-person events
- Our two online surveys had a total of almost 4,500 responses
- Our 21-member sounding board met five times




### Route 3 and 4 Speed and Reliability

We did public and stakeholder outreach in June 2017 to gather feedback about a concept to change the alignment of routes 3 and 4 from James Street to Yesler Way between Third Avenue and 9th Avenue. This change would allow the route to avoid congestion near the I-5 ramps on James Street and improve its speed and reliability for 11,000 daily riders.

How we let people know about the opportunity to weigh in:

- Project website
- Multilingual signs at bus stops
- Transit alert to subscribers for Route 3, Route 4, and Access paratransit service
- Email to stakeholders
- Handout (translated into multiple languages)
- Media outreach
- Social media


How we collected feedback:

- Online survey (1,286 responses)
- Paper surveys (31 paper surveys received in Spanish, Amharic, Somali, Tigrinya, and Vietnamese)
- Five stakeholder briefings, including one at Yesler Terrace that was interpreted into multiple languages
- Email, phone, letters

## 2) Customer satisfaction with Metro's communications

In our most recent Rider/Non-rider Survey, 52% of riders said they were very satisfied with their ability to get information about Metro 's routes and schedules, and most of the remainder said they were somewhat satisfied. The "very satisfied" score was 10 percentage points lower than in 2015. This important service attribute may require efforts to maintain. When asked about the availability of information at Metro Online, 46% of respondents reported being very satisfied—down from 61% in 2015.

## 3) Social media indicators

We continue to seek new ways to reach out to our customers via social media. Below are some facts about four of our social media channels.

### Metro Matters Blog

(http://metrofutureblog.wordpress.com)

- 63,899 views in 2017 by 42,212 unique visitors.
- Steady growth of 3.3% in views and 6.4% in visitors.
- 84 posts published during the year (16 more than in 2016).
- The most popular post warned riders of upcoming May Day traffic concerns (7,044 views, our fourth highest ever).

### Facebook

(www.facebook.com/kcmetro)

- Followers increased 24% from 8,773 in 2016 to 10,855 in 2017.
- Our estimated reach was 1,124,339 through 497 posted stories and image updates about news, service disruptions, employment information, and opportunities for public participation and feedback.

### Twitter

(@kcmetrobus)

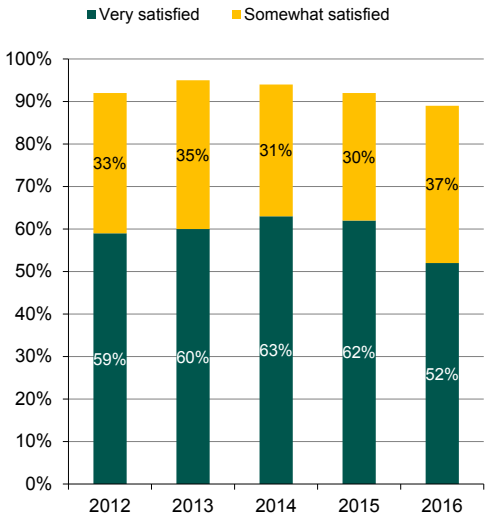
- Used for sharing news, transit disruptions, links, photos, and videos.
- Followers increased by 68% in 2017, from 72,683 to 122,134.
- We tweeted 10,528 times in 2017 and had 20,158 mentions, 327,900 profile visits, 31,800 link clicks, 7,308 retweets, 9,288 likes, and 8,397 replies.
- Our reported Twitter activity generated nearly 22 million impressions in 2017.

### Instagram

(@kcmetrobus)

- We posted 59 images and videos in 2017 promoting open houses and service improvements, supporting campaigns, and sharing rider experiences.

**2) Satisfaction with overall ability to get information about Metro**




### 4) Conformance with King County policy on communications accessibility and translation to other languages

To ensure that all voices are included in Metro's decision-making processes, we research demographics and design outreach strategies to reach people who are unlikely to learn about our process via mainstream channels. We comply with King County's executive order on translation, which mandates translation or accommodation where more than 5% of an affected population speaks a language other than English.

We reach historically underrepresented populations by partnering with organizations and making information available in a variety of forms and languages.

We have begun contracting with community-based organizations to to design and implement outreach approaches that are most effective at getting participation and meaningful input from the communities they serve. We work with organizations to be present at events that serve their clientele (for example, to help us staff information tables). We go door-to-door or board buses to reach people directly, work with ethnic media outlets and small community publications, make our materials and surveys available in large print, provide language telephone lines, and offer interpreters (including those for people who are deaf or deaf/blind). We document our outreach in public engagement reports for each project.

In 2017, we provided materials, hosted language lines, and did outreach activities in these languages:

- Amharic
- Arabic
- Cambodian/Khmer
- Chinese – Mandarin and Cantonese
- Hmong
- Korean
- Oromo
- Punjabi
- Russian
- Somali
- Spanish
- Tagalog
- Tigrinyan
- Ukrainian
- Vietnamese

In an effort to recruit and diversify King County's Transit Advisory Commission, we translated commission information and the application into Spanish and have begun a recruitment effort targeted to Spanish speakers.

## Fare simplification legislation

The King County Council unanimously approved steps that simplify Metro's complex fare structure to a flat $2.75 adult fare. This change eliminated a payment system that fluctuated according to time and distance, in which an adult rider (aged 19-64) could pay anywhere from $2.50 to $3.25 per ride. The new adult fare does not affect the roughly 1 in 3 Metro riders who pay ORCA LIFT—Metro's low income fare—or youth, senior, and disabled fares. The council also voted for additional funding to assist low income riders who are not covered by ORCA LIFT and directed Metro to increase efforts to enroll eligible adults into ORCA LIFT before new fares take effect in July 2018.

# GOAL 8: QUALITY WORKFORCE 8

Develop and empower Metro's most valuable asset, its employees.

### ▶ Objective 8.1: Attract and recruit quality employees.

*Intended outcome: Metro is satisfied with the quality of its workforce.*

### ▶ Objective 8.2: Empower and retain efficient, effective, and productive employees.

*Intended outcome: Metro employees are satisfied with their jobs and feel their work contributes to an improved quality of life in King County.*

Metro's products and services are a reflection of the employees who deliver them. Metro strives to recruit quality, committed employees and create a positive work environment. We value a diverse and skilled workforce and strive to support our employees, empower them to excel, recognize their achievements, and help them develop professionally.

To help us achieve our objectives, our Workforce Development Program focuses on the development and ongoing support of employees. The program's priorities include the following:

- Build a robust talent pipeline that attracts high-quality talent early in their academic or professional careers to consider employment at Metro.
- Ensure that Metro leaders can effectively engage, develop, and support staff members in being successful, productive, and committed to continuous improvement.
- Provide leaders with tools and processes to effectively manage performance.
- Facilitate staff and leader career development opportunities (both lateral and vertical).
- Implement meaningful selection and development processes to grow highly skilled talent that is capable of leading Metro into the future.
- Align all talent and workforce development activities with Metro's strategic priorities.

## HOW WE'RE DOING: GOAL 8 OVERVIEW

Metro considers the diversity of its workforce one of its key strengths. We follow an established outreach plan for advertising job opportunities to a diverse applicant pool.

Metro has also begun to measure hiring, promotion and attrition as part of a new "employee churn" metric in order to offer some stability to Metro's workforce within this competitive, dynamic and aging employment market.

| MEASURES | | TREND |
|---|---|---|
| 1 | Demographics of Metro employees | |
| 2 | Employee job satisfaction | |
| 3 | Promotions and hires | |
| 4 | Probationary pass rate | |

## 1) Demographics of Metro employees

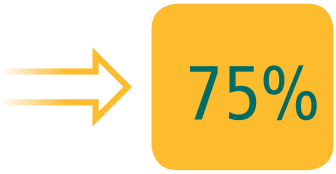
Metro strives to maintain a diverse workforce. The table at right shows the race and gender makeup of our workforce in 2017. The workforce does not differ significantly from year to year, and this demographic makeup is very similar to that of the past two years. Compared with the county's population as a whole, our workforce continues to be more male, less Asian, less Hispanic, and less white. Metro follows an established outreach plan for advertising job opportunities to a diverse applicant pool. These efforts include advertising in a variety of community publications, attending career fairs, working with community-based organizations, establishing relationships with apprenticeship and trade schools, and maintaining an internet presence that promotes Metro job openings.

### 1) Demographic of Metro employees

| | Male | Female | Total | |
|---|---|---|---|---|
| White | 2,058 | 579 | 2,2,637 | 53% |
| Black | 932 | 312 | 1,244 | 25% |
| Asian | 475 | 77 | 552 | 11% |
| Hispanic | 184 | 50 | 234 | 5% |
| American Indian | 50 | 22 | 72 | 1% |
| Pacific Islander | 63 | 9 | 72 | 1% |
| Multiple | 105 | 40 | 145 | 3% |
| Not Specified | 43 | 21 | 64 | 1% |
| **Total** | **3,910** | **1,110** | **5,020** | |
| **Percentage** | **78%** | **22%** | | |

## 2) Employee job satisfaction

In the 2017 King County employee survey, Metro's overall engagement score was 75%, with 73% of respondents recommending King County as a great place to work and 60% indicating they would stay at King County if offered a similar job with the same pay and benefits. We use this annual employee survey to identify the issues most important to employees, and are currently developing action plans at every level of our organization to address issues already identified.

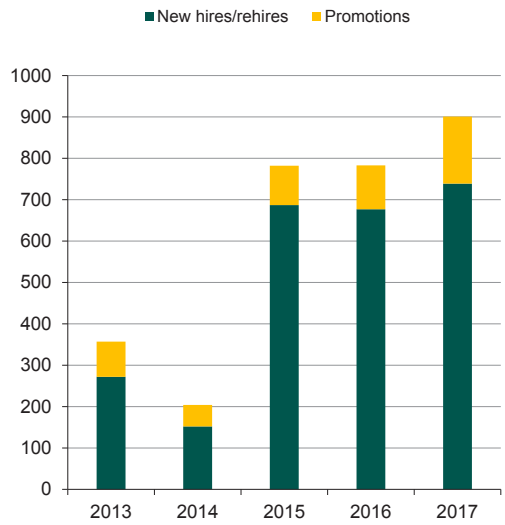



## 3) Promotions and hires

Metro continues to see increases in both hiring and promotions.

Jobs continue to be added as a result of service investments, and our workforce is experiencing increased attrition due to retirements resulting in promotion opportunities for internal staff members. (Promotions include career service, temporary, and term-limited temporary employees and part-time transit operators. They do not include voluntary transfers, rehires, or movement of operators from part-time to full-time.)

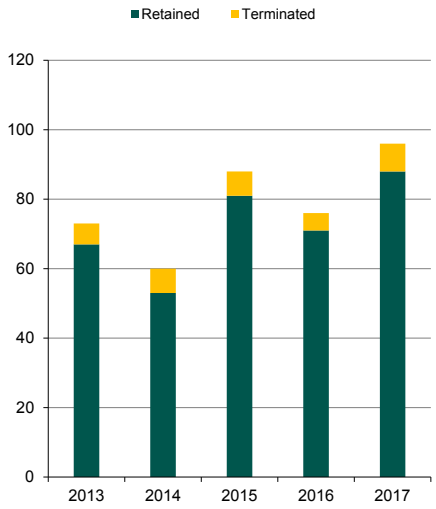
### 3) Promotions and hires



### 4) Probationary pass rate

Metro continues to maintain a low (6%) probationary turnover rate. Overall, we have a fairly low rate of employees being terminated during their probationary periods, and our training and onboarding efforts help us ensure that new employees acquire the knowledge and skills they need to become effective members of our team. (The "retained" and "terminated" categories do not include transit operators.) "Terminated" does not include people who leave during their probation periods for other reasons such as resigning or ending temporary employment.

### 4) Turnover rate of new hires




| Households with Access Within 30 Minutes to Centers | |
|---|---|
| Center | Number of Households |
| Seattle Downtown | 179,782 |
| Fremont Fremont Ave N/N34th St | 145,104 |
| SODO SODO Busway/Lander St | 139,776 |
| Seattle South Lake Union | 123,372 |
| Seattle University Community | 122,581 |
| Ballard Ballard Ave NW/NW Market St | 121,262 |
| Beacon Hill Station | 118,952 |
| Mount Baker Station | 118,116 |
| Seattle First Hill/Capitol Hill | 114,926 |
| Harborview Medical Center | 114,573 |
| Seattle Uptown | 105,819 |
| Wallingford Wallingford Ave N/N 45th St | 105,440 |
| Oak Tree Aurora Ave N/N105th | 101,849 |
| Ballard-Interbay | 100,116 |
| Crown Hill 15th Ave NW/NW 85th St | 96,111 |
| Central District 23rd Ave E/E Jefferson | 96,066 |
| Greenwood Greenwood Ave N/N85th | 93,586 |
| Roosevelt 12th Ave NE/NE 65th | 88,998 |
| Columbia City Station | 69,531 |
| Alaska Junction | 64,661 |
| Lake City | 64,639 |
| Mercer Island P&R | 63,288 |
| Othello Station | 55,947 |
| Rainier Beach Station | 55,342 |
| Seattle Northgate | 52,443 |
| SouthKirkland P&R | 52,009 |
| Childrens Hospital & Medical Center | 49,830 |
| Sand Point Sand Point Way/NE 70th | 49,634 |
| Tukwila International Blvd Station | 48,486 |

| Households with Access Within 30 Minutes to Centers | |
|---|---|
| Center | Number of Households |
| Bellevue | 42,955 |
| Crossroads | 42,329 |
| Duwamish | 41,931 |
| Lake Forest Park | 40,470 |
| Westwood Village | 38,234 |
| Redmond-Overlake | 37,364 |
| Kirkland Transit Center | 36,356 |
| Madison Park 42nd Ave E/E Madison St | 35,362 |
| Juanita 98th Ave NE/NE 116th | 34,892 |
| Kent east Hill 104th Ave SE/SE 240th | 34,578 |
| South Seattle Community College | 34,089 |
| Georgetown 13th Ave S/S Bailey | 33,266 |
| North City 15th Ave NE/NE 175th | 32,180 |
| Shoreline Community College | 31,451 |
| SeaTac | 31,232 |
| Eastgate P&R | 30,847 |
| Burien | 29,614 |
| Kirkland Totem Lake | 29,593 |
| Kenmore P&R | 29,543 |
| Aurora Village Transit Center | 29,284 |
| Factoria Factoria Blvd SE/SE Eastgate Wy | 27,524 |
| Highline Community College | 27,497 |
| Redmond Downtown | 24,802 |
| Federal Way | 24,731 |
| Renton Highlands NE Sunset/NE 12th | 22,916 |
| Valley Medical Center | 21,803 |
| Magnolia 34th Ave W/W McGraw | 21,430 |
| Kent | 21,192 |

| Households with Access Within 30 Minutes to Centers | |
|---|---|
| Center | Number of Households |
| LakeWashington Voch Tech | 19,879 |
| South Park 14th Ave S/S Cloverdale | 19,629 |
| Renton Tech College | 19,444 |
| Renton | 19,156 |
| Twin Lakes 21st Ave SW/SW 336th | 18,183 |
| Des Moines Marine View Dr/S 223rd | 17,325 |
| Newcastle | 15,556 |
| Issaquah Highlands P&R | 15,366 |
| Bothell UW Cascadia | 13,993 |
| Fairwood 140th Ave SE/SE Petrovitsky | 13,409 |
| Issaquah Transit Center | 13,326 |
| Tukwila | 13,308 |
| Auburn | 13,053 |
| Sammamish 228th Ave NE/NE 8th St | 12,531 |
| Covington 172nd Ave SE/SE 272 | 12,038 |
| Woodinville P&R | 9,531 |
| North Tukwila | 9,385 |
| Issaquah | 8,721 |
| Green River Community College | 7,444 |
| Maple Valley SR 169/Kent-Kangley | 7,311 |
| Enumclaw | 4,951 |
| South Mercer Island | 3,704 |
| Snoqualmie | 3,583 |
| Kent MIC | 2,780 |
| Duvall | 2,718 |
| North Bend | 2,653 |
| Vashon | 1,301 |
| Carnation | 908 |
| Black Diamond | 789 |

| Jobs Reachable Within 30 Minutes From Centers | |
|---|---|
| Center | Number of Households |
| Seattle Downtown | 404,059 |
| SODO SODO Busway/Lander St | 361,251 |
| Seattle First Hill/Capitol Hill | 342,606 |
| Seattle South Lake Union | 332,998 |
| Harborview Medical Center | 326,897 |
| Beacon Hill Station | 321,502 |
| Mercer Island P&R | 310,833 |
| Mount Baker Station | 303,732 |
| Fremont Fremont Ave N/N34th St | 290,808 |
| Seattle Uptown | 290,466 |
| Central District 23rd Ave E/E Jefferson | 256,714 |
| Seattle University Community | 255,081 |
| Columbia City Station | 238,255 |
| Roosevelt 12th Ave NE/NE 65th | 216,498 |
| SouthKirkland P&R | 206,322 |
| Othello Station | 204,709 |
| Ballard  Ballard Ave NW/NW Market St | 166,651 |
| Eastgate P&R | 161,441 |
| Wallingford Wallingford Ave N/N 45th St | 155,514 |
| Rainier Beach Station | 145,594 |
| Crossroads | 142,942 |
| Bellevue | 135,387 |
| Georgetown 13th Ave S/S Bailey | 113,098 |
| Oak Tree Aurora Ave N/N105th | 111,540 |
| Ballard-Interbay | 110,860 |
| Redmond-Overlake | 104,400 |
| Duwamish | 103,342 |
| Alaska Junction | 97,971 |
| Madison Park 42nd Ave E/E Madison St | 94,598 |

| Jobs Reachable Within 30 Minutes From Centers | |
|---|---|
| Center | Number of Households |
| Tukwila International Blvd Station | 93,925 |
| Kirkland Transit Center | 90,316 |
| Redmond Downtown | 88,841 |
| Seattle Northgate | 79,843 |
| Factoria Factoria Blvd SE/SE Eastgate Wy | 78,340 |
| Lake City | 73,922 |
| Greenwood Greenwood Ave N/N85th | 73,607 |
| Tukwila | 72,936 |
| Magnolia 34th Ave W/W McGraw | 67,154 |
| Crown Hill 15th Ave NW/NW 85th St | 66,866 |
| Issaquah Transit Center | 63,767 |
| Childrens Hospital & Medical Center | 56,588 |
| Kent | 52,534 |
| South Park 14th Ave S/S Cloverdale | 51,113 |
| Kent MIC | 48,871 |
| Valley Medical Center | 45,248 |
| Renton | 44,864 |
| SeaTac | 39,928 |
| Juanita 98th Ave NE/NE 116th | 35,595 |
| Kirkland Totem Lake | 32,945 |
| South Seattle Community College | 32,511 |
| Sand Point Sand Point Way/NE 70th | 31,942 |
| North Tukwila | 30,420 |
| Kent east Hill 104th Ave SE/SE 240th | 29,501 |
| Auburn | 28,818 |
| Federal Way | 28,197 |
| Burien | 26,874 |
| Aurora Village Transit Center | 26,565 |
| LakeWashington Voch Tech | 26,182 |

| Jobs Reachable Within 30 Minutes From Centers | |
|---|---|
| Center | Number of Households |
| Renton Tech College | 25,656 |
| Issaquah | 25,539 |
| Issaquah Highlands P&R | 24,881 |
| Renton Highlands NE Sunset/NE 12th | 24,796 |
| Woodinville P&R | 23,712 |
| Lake Forest Park | 22,044 |
| Bothell UW Cascadia | 21,427 |
| Highline Community College | 21,291 |
| Westwood Village | 21,286 |
| Kenmore P&R | 20,846 |
| Twin Lakes 21st Ave SW/SW 336th | 19,072 |
| Shoreline Community College | 19,060 |
| Des Moines Marine View Dr/S 223rd | 16,281 |
| North City 15th Ave NE/NE 175th | 15,150 |
| Newcastle | 9,640 |
| Covington 172nd Ave SE/SE 272 | 7,372 |
| Sammamish 228th Ave NE/NE 8th St | 7,247 |
| Fairwood 140th Ave SE/SE Petrovitsky | 5,716 |
| Green River Community College | 5,228 |
| Enumclaw | 4,723 |
| Snoqualmie | 4,222 |
| Maple Valley SR 169/Kent-Kangley | 3,793 |
| North Bend | 2,870 |
| South Mercer Island | 2,475 |
| Duvall | 1,663 |
| Vashon | 1,602 |
| Carnation | 460 |
| Black Diamond | 201 |

King County
METRO

# Peer Agency Comparison on Performance Measures

November 2017

Department of Transportation
Metro Transit Division
Strategy and Performance
King Street Center, KSC-TR-0412
201 S Jackson St
Seattle, WA 98104
www.kingcounty.gov/metro

## Introduction

Every year, King County Metro Transit compares its performance to that of peer agencies using data from the National Transportation Database (NTD). Metro compares itself to 29 of the other largest bus transit agencies in the U.S. (as defined by the number of passenger boardings). The comparisons include only the agencies' *bus* modes (motor bus, trolley bus, commuter bus, and rapid bus, as defined by the NTD).

The measures presented in this report are from 2016, with comparisons to previous years (2015, 2011, and 2006). NTD annual data are not available until late the following year, so the analysis is delayed by about one year. Other challenges to this peer analysis include the fact that only bus performance is measured, but many agencies also operate extensive rail systems around which bus networks are structured. This may affect performance on the measures compared.

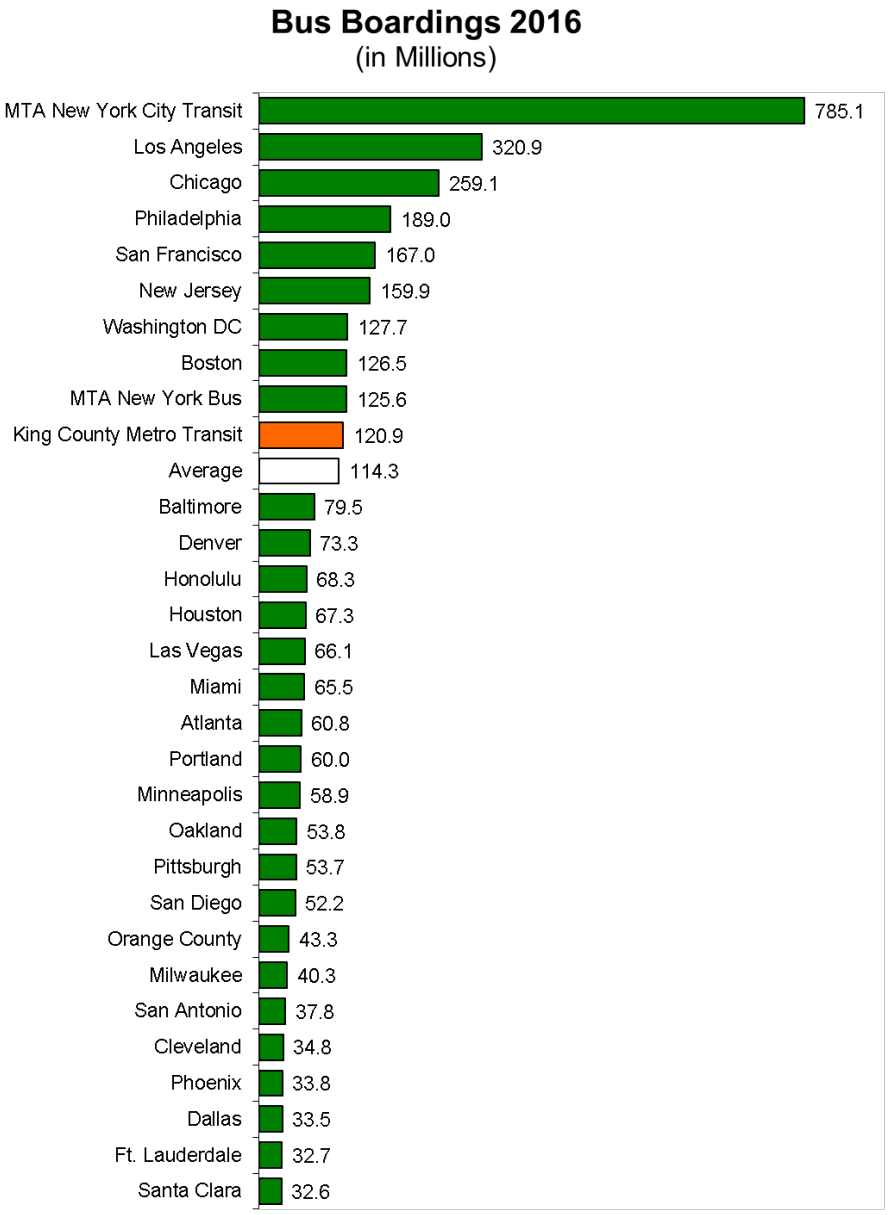
Also, it is not always clear what has been included and excluded in the NTD reports. In previous years, Metro's NTD submittals included Sound Transit bus service operated by Metro in some of the statistics. This peer analysis does not include Sound Transit service as part of Metro service, but the composition of other agencies' reports is uncertain. That is one reason Metro presents the averages for a robust cohort of 30 peers.

2016 saw major changes in Metro's service that are reflected in the measures in the following pages. Metro restructured bus service to connect with Sound Transit's extension of Link light rail to the University of Washington and Capitol Hill. Metro and the City of Seattle invested in new service hours to improve reliability and increase service frequency.

Over the years, Metro has done well on the *productivity* ratios (boardings per hour and passenger miles per vehicle mile), and has seen strong ridership growth. Metro had been about average in the *cost-effectiveness* ratios (cost per boarding and cost per passenger mile) but saw a dip in 2016 as investments were made in additional service that will grow ridership over time. Metro lags its peers in the *cost-efficiency* ratios (cost per hour and cost per mile), but these measures improved in 2016 as more service was added at a lower, marginal cost per hour and per mile.

| | 2016 | | | 1-year Annual Growth | | | 5-year Annual Growth | | | 10-year Annual Growth | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Metro | Rank | Peer Avg | Metro | Rank | Peer Avg | Metro | Rank | Peer Avg | Metro | Rank | Peer Avg |
| Boardings (mil) | 120.9 | 10 | 114.3 | -0.1% | 8 | -3.1% | 1.5% | 3 | -0.6% | 1.6% | 3 | -0.8% |
| Passenger miles (mil) | 518.8 | 6 | 412.1 | -2.8% | 18 | -1.2% | 1.6% | 12 | 0.5% | 0.7% | 11 | -0.1% |
| Boardings per hour | 31.4 | 11 | 31.4 | -6.1% | 18 | -4.6% | -0.2% | 7 | -1.8% | 0.5% | 5 | -1.2% |
| Pass. miles per mile | 11.4 | 11 | 10.2 | -7.0% | 22 | -3.3% | 1.1% | 10 | -0.3% | 0.2% | 16 | 0.0% |
| Cost per hour[1] | $140.86 | 20 | $131.37 | -1.4% | 8 | 2.5% | 1.7% | 16 | 1.7% | 2.6% | 14 | 2.7% |
| Cost per mile[1] | $11.88 | 21 | $11.28 | 0.3% | 11 | 2.1% | 3.0% | 22 | 2.1% | 3.1% | 17 | 3.2% |
| Cost per boarding[1] | $4.49 | 18 | $4.47 | 5.0% | 12 | 7.7% | 1.9% | 7 | 3.6% | 2.1% | 4 | 4.0% |
| Cost per pass. mile[1] | $1.05 | 14 | $1.13 | 7.9% | 22 | 6.0% | 1.9% | 12 | 2.5% | 2.9% | 16 | 3.2% |
| Farebox recovery[2] | 30.1% | 8 | 25.5% | -0.7% | 8 | -1.6% | 1.9% | 4 | -2.5% | 9.7% | 2 | -2.6% |

[1] For the financial ratios, the rank is from lowest cost to highest cost, so a lower number in the rank is better than a higher number for all measures.
[2] The change in farebox recovery is in total percentage point change. For instance, Metro's farebox recovery ratio was 30.1% in 2016 and 20.4% in 2006 – a 9.7 percentage point difference.




**Bus Boardings:** A boarding is an *unlinked* passenger trip. Passengers are counted each time they board a vehicle, no matter how many vehicles they use to travel from their origin to their destination.[3]

**2016 peer rank:** Metro had 120.9 million bus boardings in 2016 (peer rank: 10th highest).

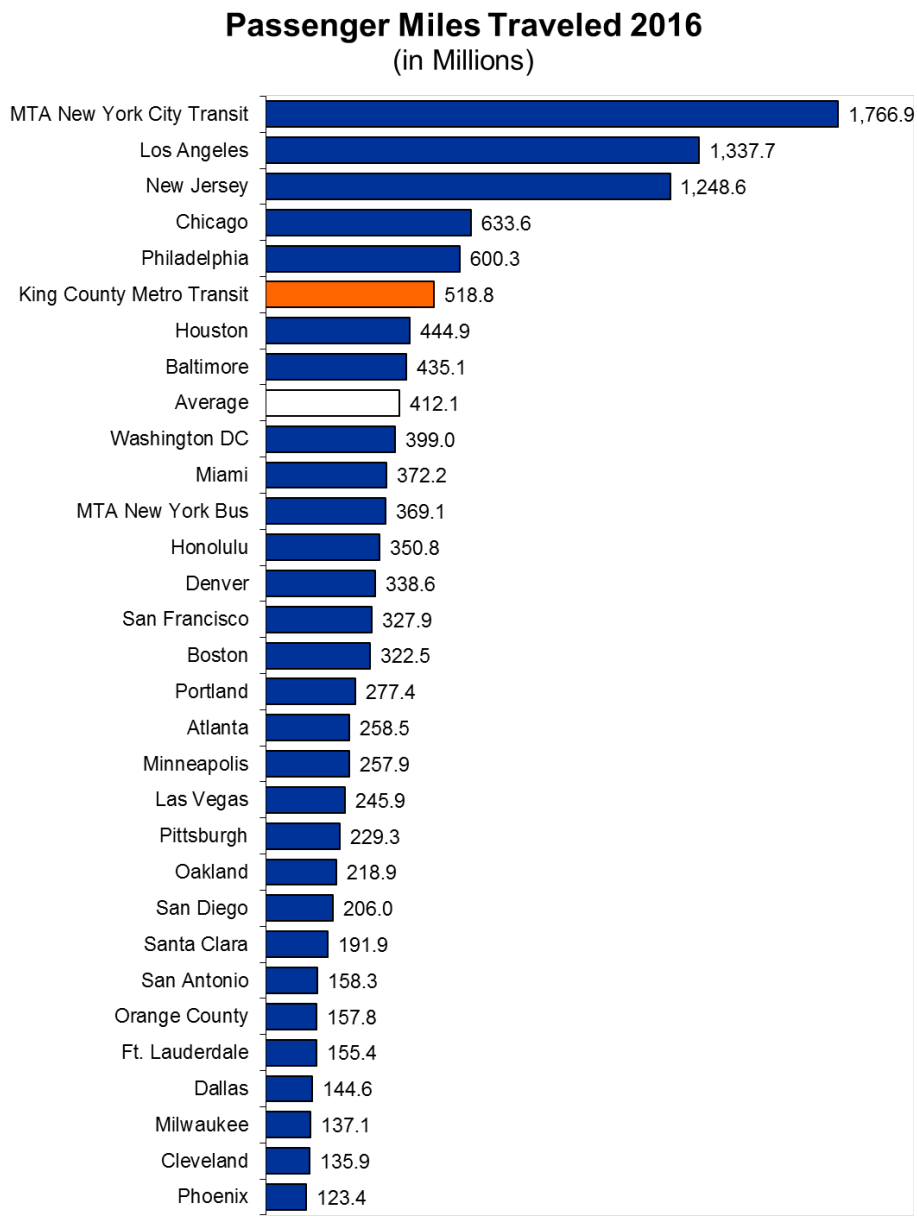
**Trends:** 2016 saw the extension of Sound Transit's Link light rail from downtown Seattle to Capitol Hill and the University of Washington. This new Link segment replaced very productive Metro bus routes. However, Metro's reconfiguration of the bus system to connect people with Link, plus the addition of new service, helped keep the bus ridership loss system-wide to 0.1%. (The combined growth in boardings on Metro bus and Link was more than 5%.)

Over the past several years, Metro has been bucking the national trend of declining ridership. Those declines are likely the result of low fuel prices that make automobile travel comparably cheaper.

| Annual Change | Metro | Rank | Peer Avg. |
|---|---|---|---|
| 1-year trend | -0.1% | 8 | -3.1% |
| 5-year trend | 1.5% | 3 | -0.6% |
| 10-year trend | 1.6% | 3 | -0.8% |

Metro had the third highest growth rate among the 30 peers over the past five and 10 years. Metro benefits from a strong local economy, which creates a higher demand for commute trips. Metro has invested in highly productive routes such as RapidRide, which have helped propel the longer-term growth. Metro has a very robust employer-provided pass program that has grown strongly over the years. Metro investments and purchases by the City of Seattle starting in 2015 helped offset ridership losses stemming from budget-driven service reductions in 2014.

[3] National Transit Database.

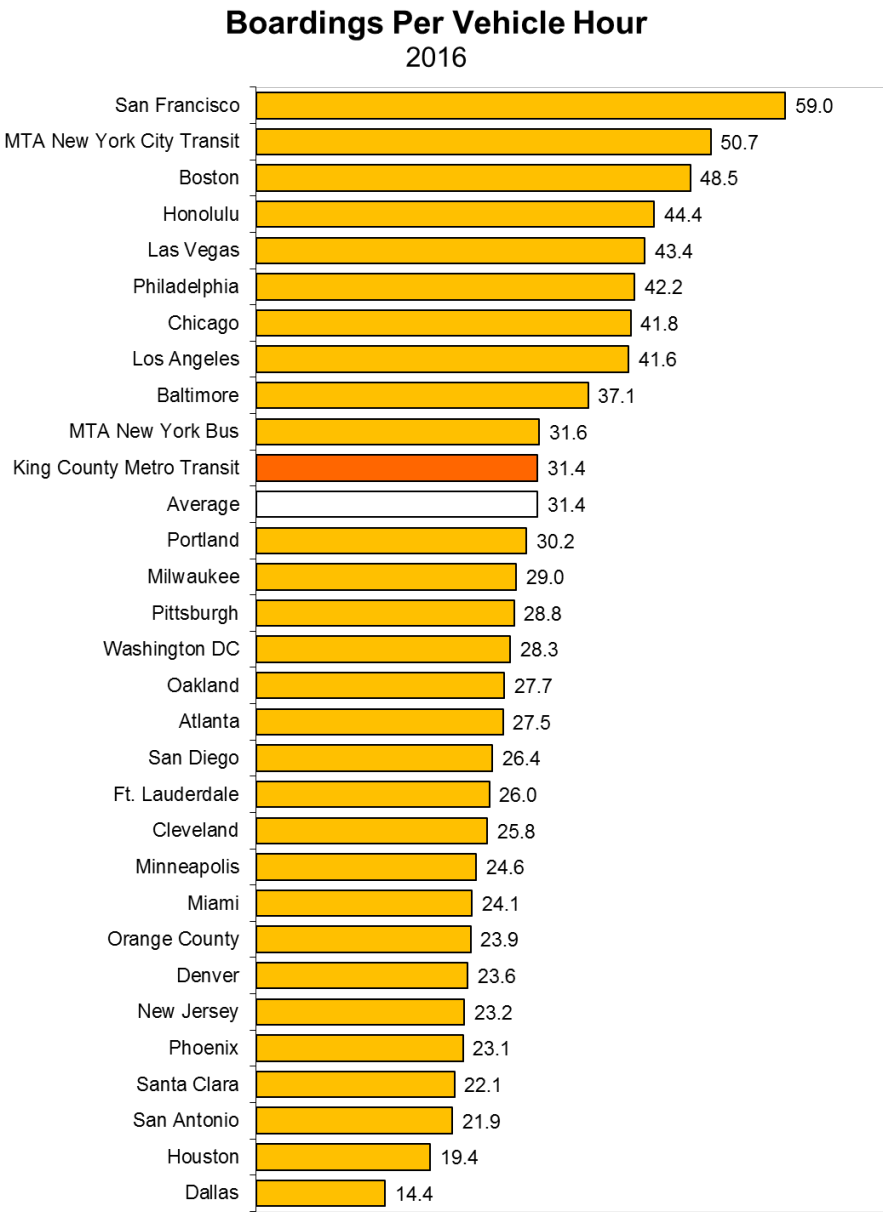



| Annual Change | Metro | Rank | Peer Avg. |
|---|---|---|---|
| 1-year trend | -2.8% | 18 | -1.2% |
| 5-year trend | 1.6% | 12 | 0.5% |
| 10-year trend | 0.7% | 11 | -0.1% |

**Passenger miles traveled:** Passenger miles are the cumulative sum of the distances ridden by all passengers. In some ways, this is a better indicator of total service provided than are boardings. A transit agency's core business is to move passengers over distances. A system that has many transfers between buses will see higher boardings but not a corresponding increase in passenger miles.

**2016 peer rank:** Metro had 518.8 million passenger miles traveled in 2016 (peer rank: 6th highest). The peer average was 412.1 million.

**Trends:** 2016 saw a 2.8% decline in Metro passenger miles, and over the past 10 years Metro's passenger miles grew more slowly than boardings. This trend is the result of a declining average trip length (passenger miles per boarding) – about 8% less than in 2006. This decline was driven largely by the introduction and expansion of Link light rail and changes in the composition of Metro's service. The advent of Link in 2009 replaced many long trips, particularly between downtown Seattle and Sea-Tac Airport. In 2009 and 2016, Metro reconfigured the bus system to connect riders with Link. Some long bus trips became bus-rail trips with shorter distances by bus. Further, Sounder commuter rail has been growing and replacing some long bus commutes. These impacts on Metro's average trip length were offset somewhat by the closing of the downtown Seattle Ride Free Area, the source of many short bus trips. Overall, though, Metro's average bus trip lengths have declined, so passenger miles have not grown as fast as boardings.




**Boardings per vehicle hour:** Vehicle hours are the hours that a vehicle travels from the time it pulls out from its garage to go into revenue service to the time it pulls in from revenue service.[4] The ratio of boardings to vehicle hours is a key productivity measure in Metro's Annual System Evaluation (formerly called the Service Guidelines Report).

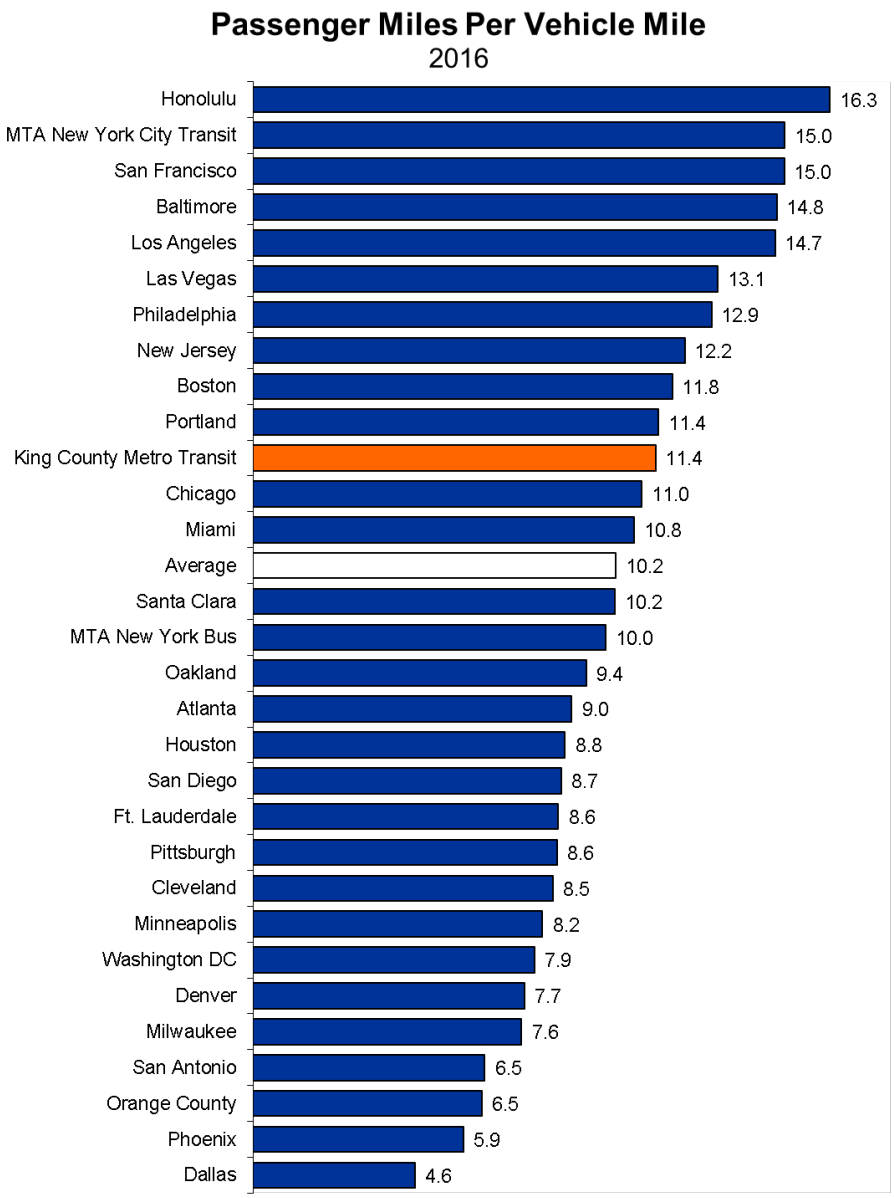
**2016 peer rank:** Metro had 31.4 boardings per hour in 2016 (peer rank: 11th highest). The peer average also was 31.4.

**Trends:** Metro had a 6.1% decline in boardings per hour in 2016. Metro and the City of Seattle added service hours to improve reliability and increase service frequency. Meanwhile, ridership growth remained flat as Link light rail replaced many bus passenger trips to the University of Washington and Capitol Hill. Experience shows that it takes a few years for significant ridership gains to occur in response to increased service, so we expect the boardings per hour to improve over time.

| Annual Change | Metro | Rank | Peer Avg. |
|---|---|---|---|
| 1-year trend | -6.1% | 18 | -4.6% |
| 5-year trend | -0.2% | 7 | -1.8% |
| 10-year trend | 0.5% | 5 | -1.2% |

Over the past five and 10 years, Metro has been among the leading agencies in changes in boardings per hour. In addition to the steps to increase ridership mentioned in the boardings discussion, Metro has increased productivity through improved scheduling efficiency, reallocations of service hours from less productive routes to more productive routes, and restructuring of routes based on our Service Guidelines.

[4] National Transit Database.



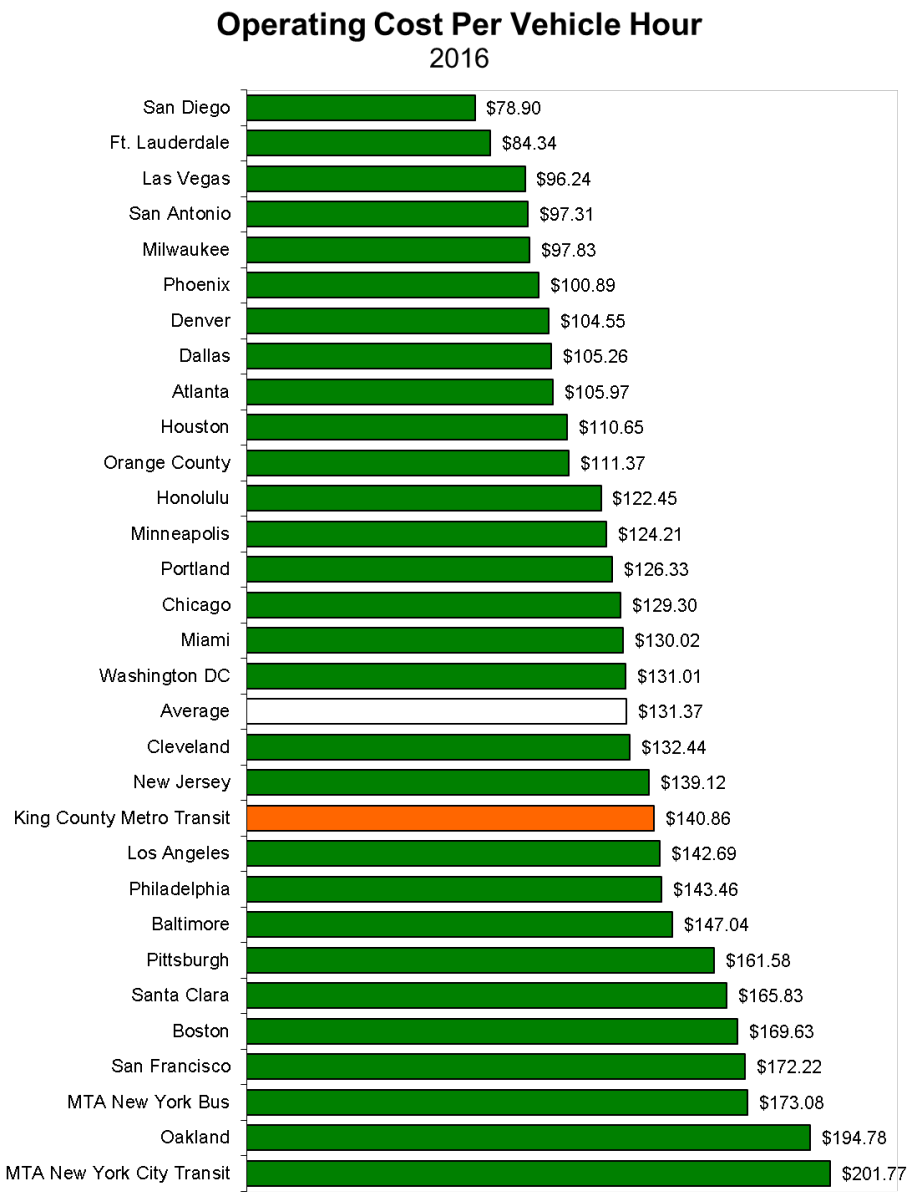

| Annual Change | Metro | Rank | Peer Avg. |
|---|---|---|---|
| 1-year trend | -7.0% | 22 | -3.3% |
| 5-year trend | 1.1% | 10 | -0.3% |
| 10-year trend | 0.2% | 16 | 0.0% |

**Passenger miles per vehicle mile:** Vehicle miles are the miles that a vehicle travels from the time it pulls out from its garage to go into revenue service to the time it pulls in from revenue service.[5] The ratio of passenger miles to vehicle miles is another key productivity measure in Metro's Annual System Evaluation.

**2016 peer rank:** Metro had 11.4 passenger miles per vehicle mile in 2016 (peer rank: 11th highest). The peer average was 10.2.

**Trends:** 2016 saw a 7% decline in this ratio. A number of factors contributed to this decline. Service miles were added to the system, as described previously. Ridership gains were flat as the result of the extension of Link light rail. Further, the average trip length declined as Metro reconfigured the bus system to connect with light rail, and some long bus trips became bus-rail trips with shorter distances by bus. Declines in average trip length and the addition of vehicle miles to the system has also slowed the growth of passenger miles per vehicle mile over the long term.

[5] National Transit Database.




**Operating cost per vehicle hour:** Cost is the total operating expense for bus service. Cost per vehicle hour is a cost-efficiency ratio. It gauges the cost inputs of a unit of service because much of the cost is directly related to time in service.

**2016 peer rank:** Metro's cost per hour was $140.86 in 2016 (peer rank: 20th lowest). The peer average was $131.37.

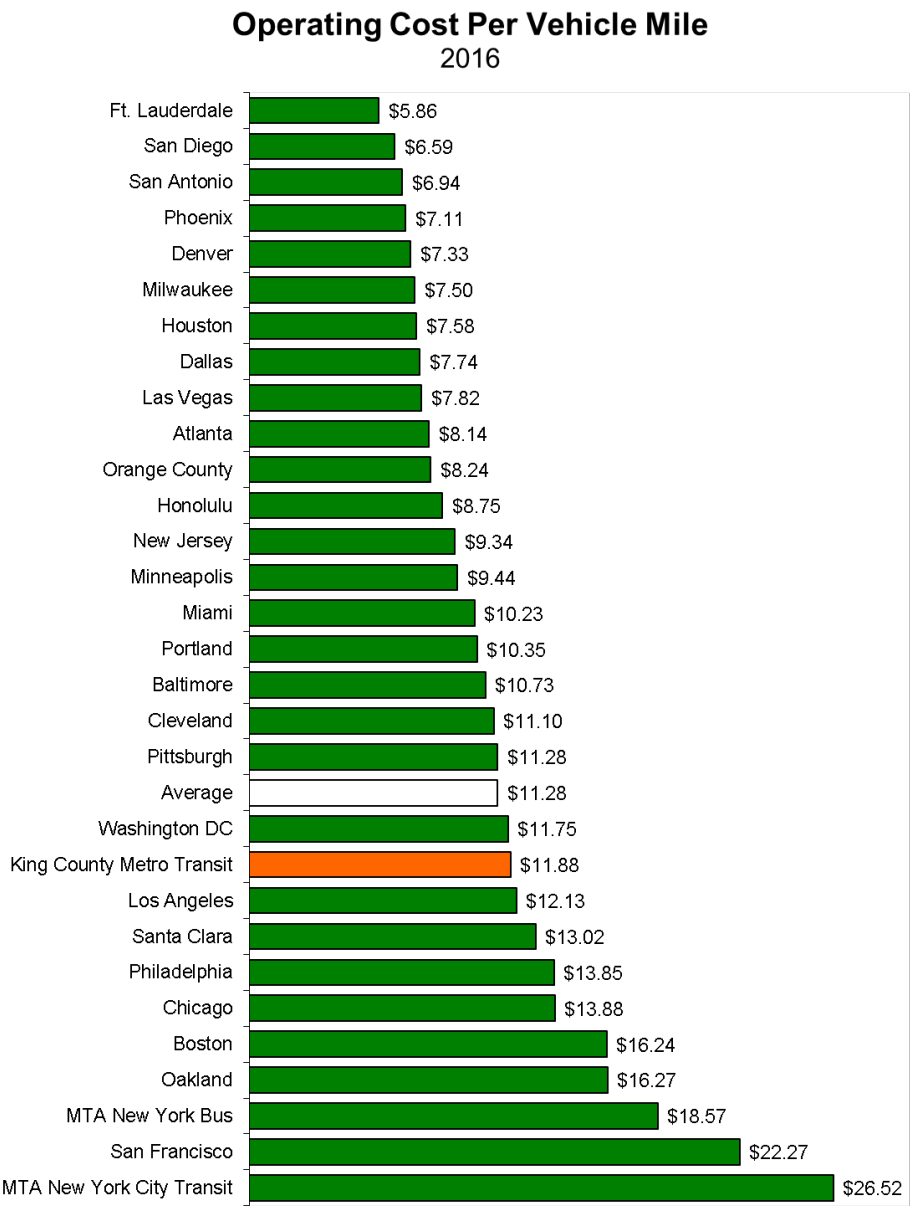
A number of factors affect Metro's operating costs. Seattle is one of the most expensive markets in the country, and Metro has costs that many other agencies do not have. For instance, the Downtown Seattle Transit Tunnel adds to cost per hour, but this facility supports efficient operation in the Seattle core, reducing the number of service hours needed.

Metro is part of King County government, and one of the county's Strategic Plan goals is to support economy vitality. Metro's 60-foot articulated buses contribute to this goal by providing a high level of commuter service during peak periods, but therse coaches cost more to operate than smaller coaches. Metro also maintains a large network of park-and-rides that add costs. Another County goal is to promote a healthy environment. Metro's electric trolley buses not only minimize air pollution, they also operate quietly and are well-suited for climbing Seattle's steep hills, but are more expensive to operate than diesel coaches.

| Annual Change | Metro | Rank[6] | Peer Avg. |
|---|---|---|---|
| 1-year trend | -1.4% | 8 | 2.5% |
| 5-year trend | 1.7% | 16 | 1.7% |
| 10-year trend | 2.6% | 14 | 2.7% |

**Trends:** In 2016, Metro's operating cost per hour decreased 1.4%, in part because the addition of service hours enabled fixed costs to be spread out. The five- and 10-year increases in costs per hour were about the same as the peer average. Metro's focus on cost containment was evident over the longer term as the increases in cost per hour were slightly lower than inflation over five years and slightly higher than inflation over 10 years.

[6] A lower-numbered rank means a lower increase in the cost ratio, so a lower number is better; first is the best rank.




**Operating cost per vehicle mile:** This ratio is another cost-efficiency measure. It gauges the cost inputs of a unit of service, since much of the cost is directly related to distance traveled.

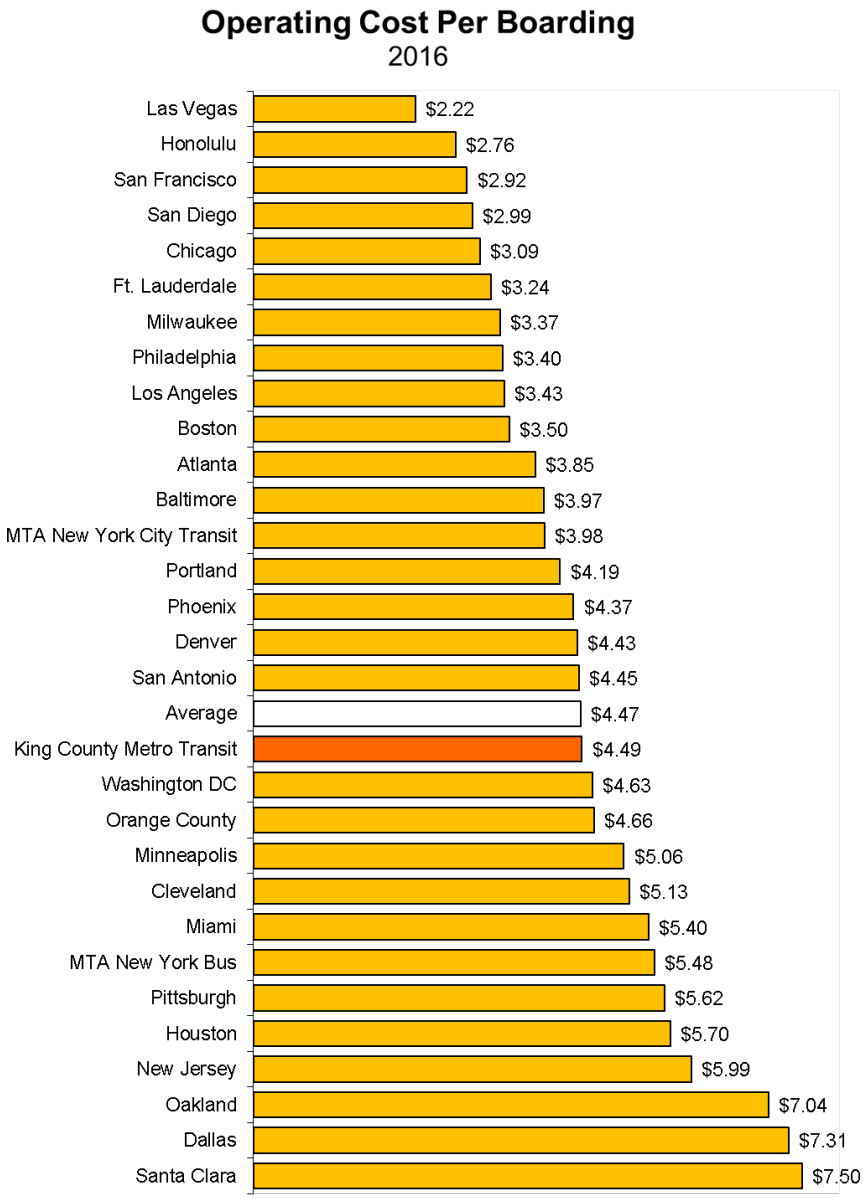
**2016 peer rank:** Metro's cost per mile was $11.88 in 2016 (peer rank: 21st lowest). The peer average was $11.28.

Cost per mile is affected by the geography and topography of Metro's service area. Puget Sound, Lake Washington, and the Ship Canal limit the street network, causing increased traffic congestion, and the region has steep hills along key travel corridors. These factors slow the travel speeds of Metro's buses. Since many costs accrue regardless of distance traveled, slower travel times mean higher costs per mile. Services in other congested cities (New York, Boston, Washington, D.C.) and in other cities with geographical constraints (San Francisco) are relatively expensive per mile. Cities with fewer such constraints are among the least expensive for transit operations, and many are also lower-cost metropolitan areas.

| Annual Change | Metro | Rank[7] | Peer Avg. |
|---|---|---|---|
| 1-year trend | 0.3% | 11 | 2.1% |
| 5-year trend | 3.0% | 22 | 2.1% |
| 10-year trend | 3.1% | 17 | 3.2% |

**Trends:** Even though Metro's cost per hour declined in 2016, its bus cost per vehicle mile increased 0.3%. The number of service miles in the system increased at a lower rate than the number of hours. Service investments by Metro and the City of Seattle generally were made in more congested areas where bus speeds are slower. Metro also added time between trips which allows for more reliable service. Over the longer term, congestion has increased throughout the service area, which also has slowed down service and resulted in faster increases in cost per mile than in cost per hour.

[7] A lower-numbered rank means a lower increase in the cost ratio, so a lower number is better; first is the best rank.




**Operating cost per boarding:** This ratio is a cost-effectiveness measure that gauges how economically Metro provides its core service—getting passengers to their destinations.

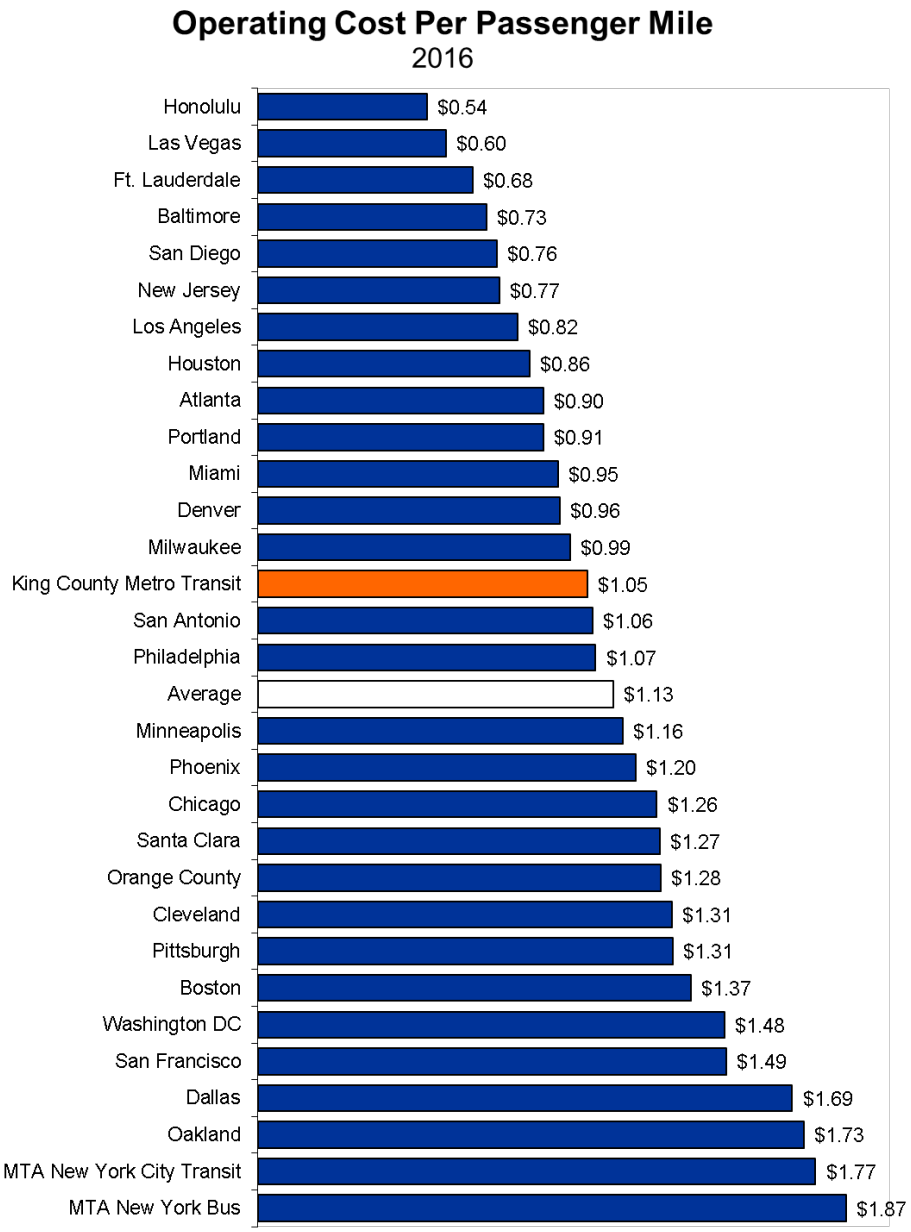
**2016 peer rank:** Metro's cost per boading was $4.49 in 2016 (peer rank: 18th lowest). The peer average was $4.47.

Many of the issues that make Metro's cost high on a per-hour and per-mile basis also drive Metro's cost per boarding. But Metro's high number of boardings per hour enables the agency to be close to the peer average.

**Trends:** Cost per boarding increased by 5% in 2016. While cost per hour declined, many service hours were added to the system. And as noted earlier, ridership growth was flat. Metro expects the new service will result in ridership growth over time. Over the past five and 10 years, Metro's increase in cost per boarding was among the best of the peers, as ridership growth and cost containment slowed the increases in this ratio.

| Annual Change | Metro | Rank[8] | Peer Avg. |
|---|---|---|---|
| 1-year trend | 5.0% | 12 | 7.7% |
| 5-year trend | 1.9% | 7 | 3.6% |
| 10-year trend | 2.1% | 4 | 4.0% |

[8] A lower-numbered rank means a lower increase in the cost ratio, so a lower number is better; first is the best rank.




| Annual Change | Metro | Rank[9] | Peer Avg. |
|---|---|---|---|
| 1-year trend | 7.9% | 22 | 6.0% |
| 5-year trend | 1.9% | 12 | 2.5% |
| 10-year trend | 2.9% | 16 | 3.2% |

**Operating cost per passenger mile:** This ratio is another cost-effectiveness measure. One could argue that cost per passenger mile is the most important cost ratio. A transit agency's core business is to move passengers over distances.

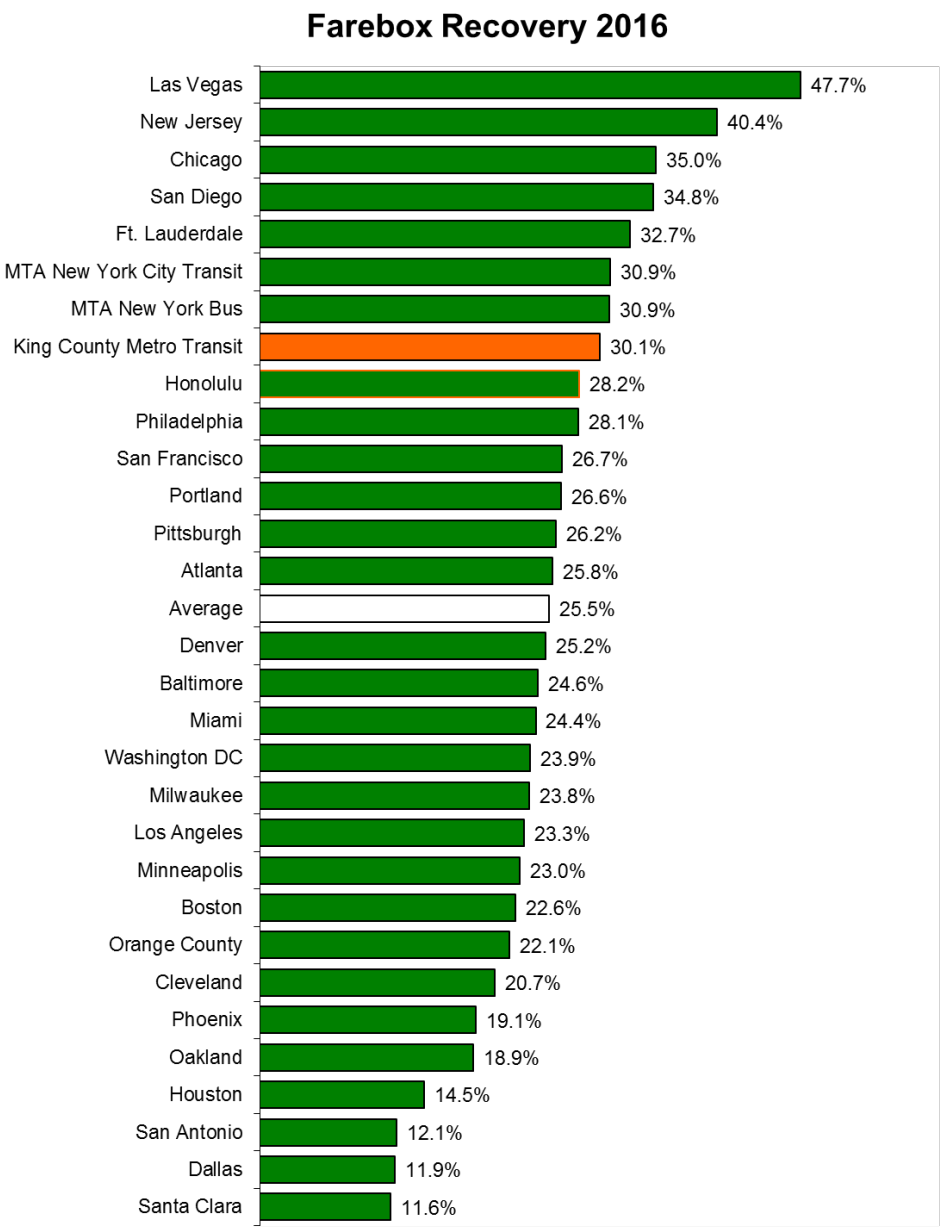
**2016 peer rank:** Metro's cost per passenger mile was $1.05 in 2016 (peer rank: 14th lowest). The peer average was $1.13.

The high number of passenger miles per vehicle mile enables Metro to be below the peer average in this cost ratio. Investments that raise the cost per hour, such as articulated coaches and the downtown transit tunnel, also help drive down the cost per passenger mile.

**Trends:** Metro's cost per passenger mile increased 7.9% in 2016. As noted earlier, cost per hour declined but many service hours were added to the system, ridership was flat, and passenger miles declined. Metro expects the new service will result in ridership and passenger-mile growth over time.

Over the past five and 10 years, the increase in cost per passenger mile was slightly lower than the peer average. This was driven by Metro's above-average growth in total passenger miles.

[9] A lower-numbered rank means a lower increase in the cost ratio, so a lower number is better; first is the best rank.




**Farebox recovery:** This is the ratio of bus fare revenue (passes, cash, E-purse, and tickets) to bus operating cost. A higher ratio means less contribution from other sources, mainly sales taxes.

**2016 peer rank:** Metro's farebox recovery ratio was 30.1% in 2016 (peer rank: 8th). The peer average was 25.5%.

**Trends:** Metro saw a decline in farebox revenue in 2016 (down 0.7 percentage points). Ridership was flat, total costs increased as the result of new service hour investments, and a growing number of rides were taken by customers using the reduced-fare ORCA LIFT fare card for people with low incomes.

The trend in farebox recovery has been more positive in the longer term. Metro's primary funding source, sales tax revenue, fell as a result of the Great Recession, and took a number of years to recover. To replace a portion of the lost sales tax revenue, Metro raised fares each year from 2009 through 2011, and again in 2015. These past fare increases, along with increased ridership and the containment of operating costs, drove an increase in farebox recovery. Metro's increase in the 10-year span was the second highest among the peers. (A fare adjustment is planned for 2018. This will create a flat adult fare of $2.75 instead of the current $2.50, $2.75, and $3.25 zone- and peak-fare structure. This will increase revenue slightly.)

| Total Change[10] | Metro | Rank | Peer Avg. |
|---|---|---|---|
| 1-year trend | -0.7% | 8 | -1.6% |
| 5-year trend | 1.9% | 4 | -2.5% |
| 10-year trend | 9.7% | 2 | -2.6% |

[10] This measure is shown as total changes in percentage points. For instance, Metro's farebox recovery went from 20.4% in 2006 to 30.1% in 2016, a 9.7 percentage-point gain.


Express
204 N MERCER IS
1104
METRO

King County
METRO