



# Quarterly Performance Report

## 2022 4th Quarter Report

(Oct., Nov., Dec.)

## High Quality Service through Continuous Improvement 2022 4th Quarter (Oct., Nov., Dec.) Performance Report

TriMet Board Meeting, April 2023

Quality is a never-ending quest and continuous improvement is a never-ending way to discover and eliminate the root causes of problems. It accomplishes this by using sustainable, incremental improvements rather than implementing one large change. It is a way of looking at how we can do our work better.

Key performance indicators are performance measurements that identify the level of progress toward attaining stated objectives and are defined for fixed-route service (Bus, MAX, and WES) as well as for LIFT paratransit service.

### APPROACH

Focus on TriMet's three primary areas for improvement:

#### 1. Vehicle and System Reliability

**Goal:** Reduce service disruptions through effective preventive maintenance and asset management.

**Key Performance Indicators:**

*Fixed Route* - Preventive maintenance schedule compliance, mean distance traveled between mechanical failures, and maintenance employee attendance.

*LIFT* - Miles between road calls.

#### 2. Service Delivery

**Goal:** Ensure efficient service delivery by creating staffing levels and reporting structures that increase the ability to respond quickly to service and customer needs. Improve route design and service delivery through ongoing line reviews.

**Key Performance Indicators:**

*Fixed Route* - On time performance (OTP), operator attendance, and boarding rides per revenue hour.

*LIFT* - On time performance (OTP) and boarding rides per revenue hour.

#### 3. Operator Support

**Goal:** Improve safety and customer service through customized training programs for operators and supervisors.

**Key Performance Indicators:**

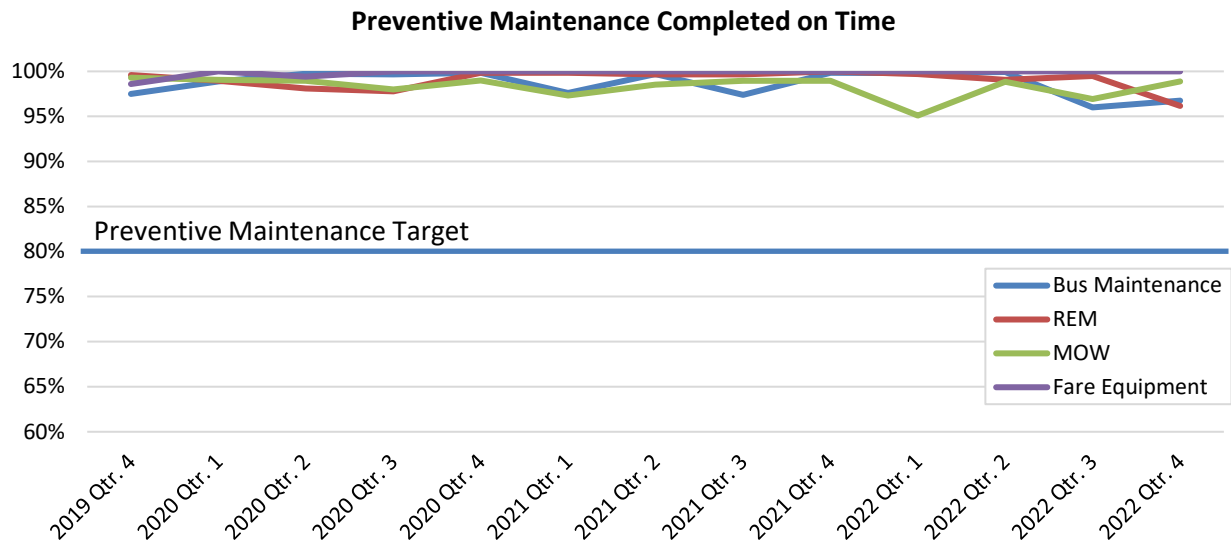
*Fixed Route* - Collisions, commendations, complaints, and rail rule violations.

*LIFT* - Collisions, commendations, complaints, and call center hold times.

**Preventive Maintenance Completed on Time**

Preventive maintenance (PM) compliance for all disciplines was 97% or higher, exceeding TriMet's preventive maintenance target of 80%.

	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
<b>Bus Maintenance</b>	96.8%	96.0%	99.8%	-3.1
<b>REM</b>	96.2%	99.5%	100.0%	-3.8
<b>MOW</b>	98.9%	96.9%	99.0%	-0.1
<b>Fare Equipment</b>	100.0%	100.0%	100.0%	0.0

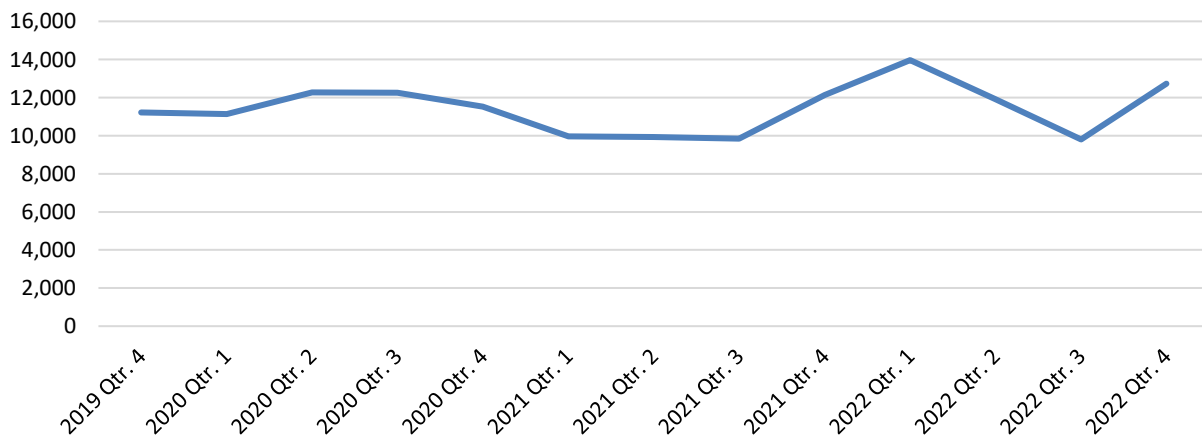


**Mean Distance Between Failures (MDBF)**

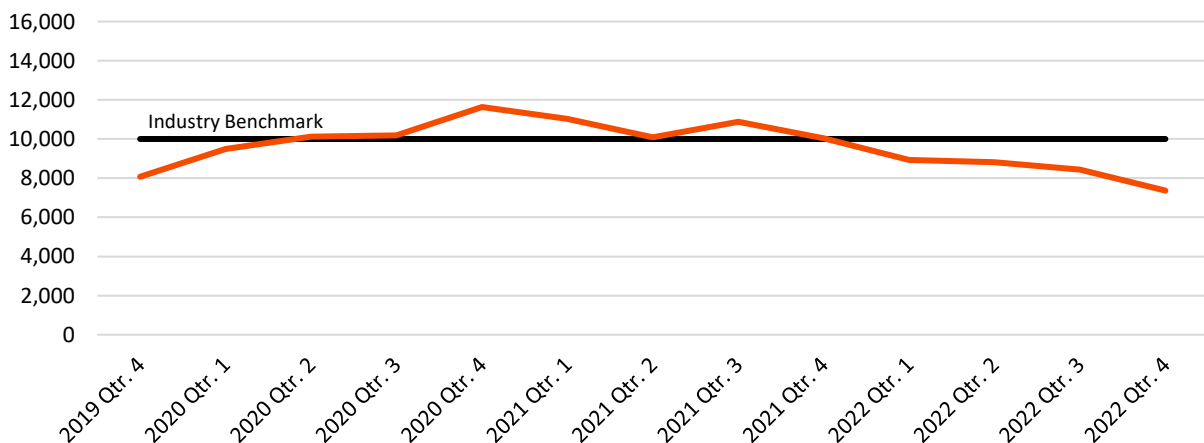
- MAX light rail mean distance between failures (MDBF) at 12,731 miles represents an increase of 602 miles compared to this period last year. Propulsion failures continue to be a common failure followed by door and bridge plate failures. Wet weather in the fall contributed to the increased in bridge plate and door failures during 2022 Q4.
- Fixed route bus MBDF decreased 2,668 miles on the prior year to 7,365. Engine failures account for the largest number of failures. Cooling systems failures had the largest decrease due lessons learned from hot weather in 2021.

	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
<b>MAX Light Rail</b>	12,731	9,802	12,129	602
<b>Fixed Route Bus</b>	7,365	8,440	10,033	-2,668

**MAX Light Rail MDBF - Lost Service**



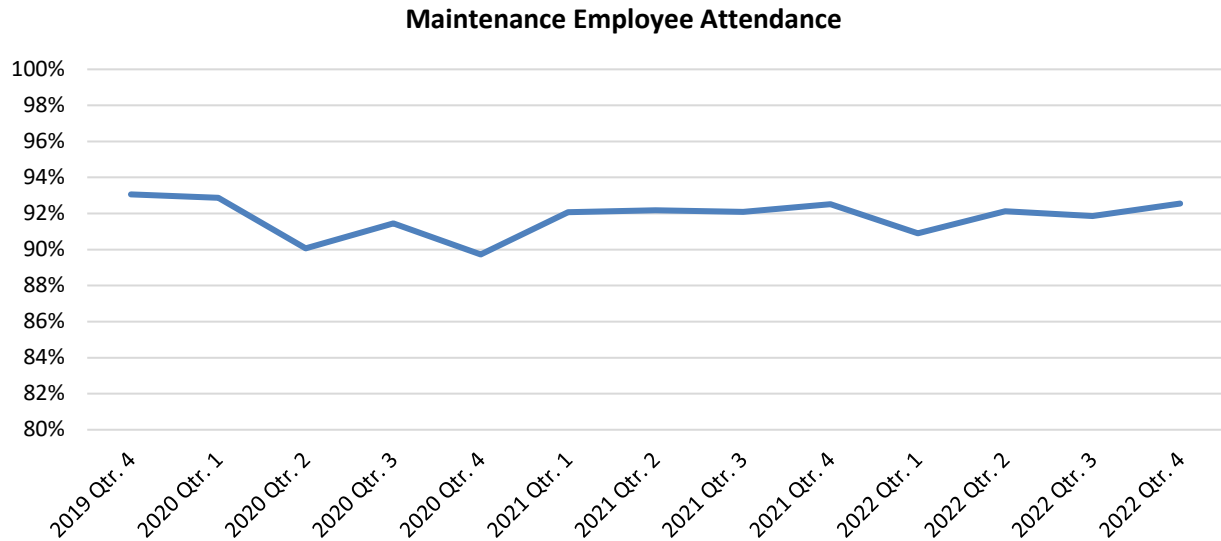
**Fixed Route Bus MDBF - Lost Service**



**Maintenance Employee Attendance**

Maintenance attendance remained the same compared to the preceding year at 92.5%.

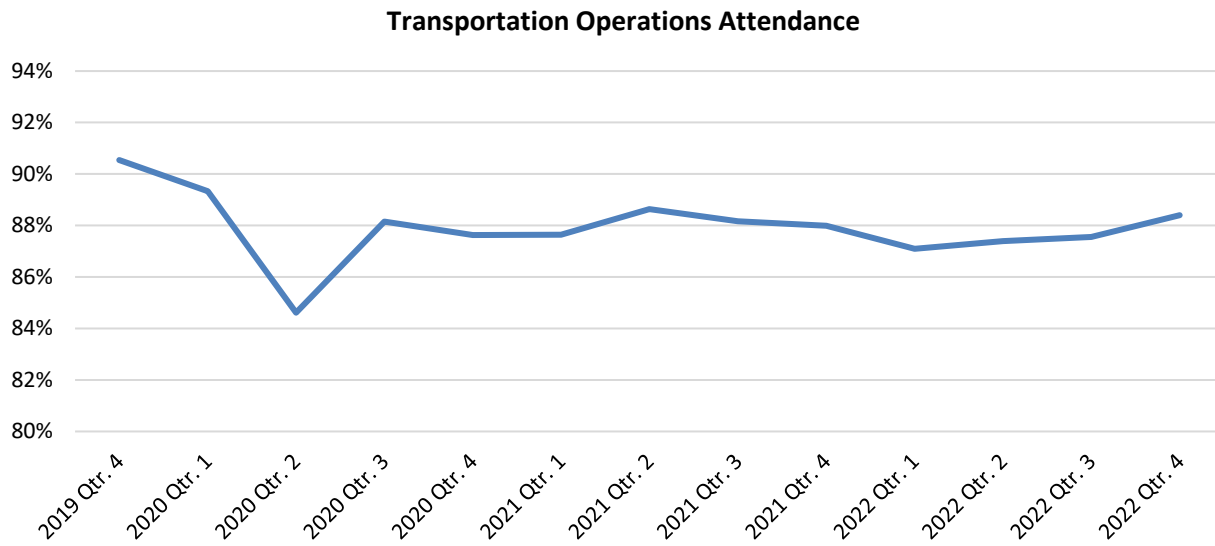
	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
Maintenance	92.5%	91.9%	92.5%	0.0



**Transportation Operations Employee Attendance**

Transportation employee attendance increased slightly to 88.4%, a change of 0.4 percentage points from the prior year.

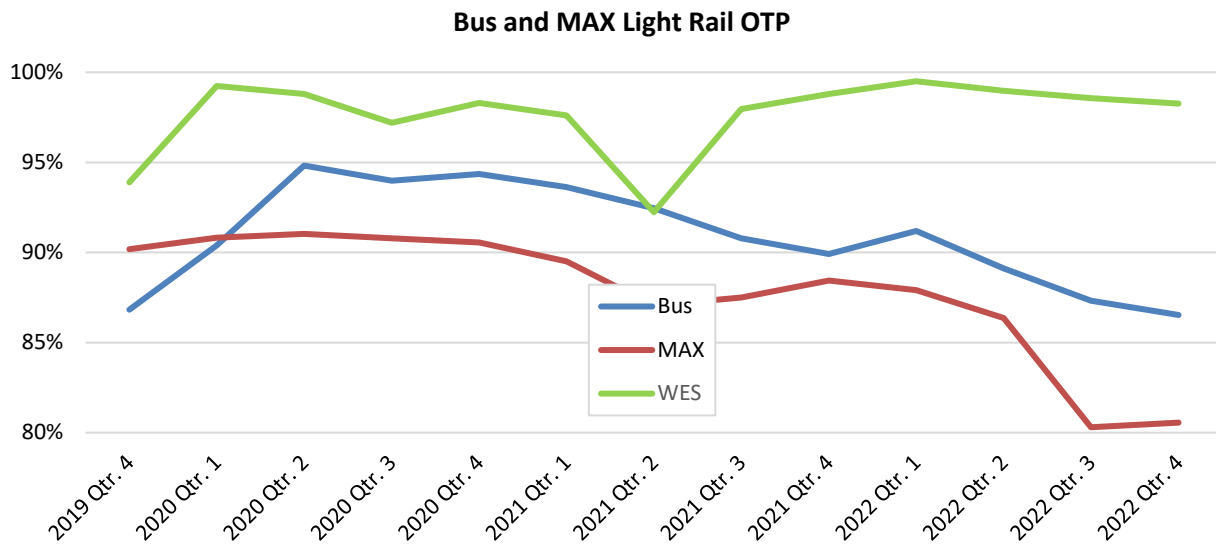
	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
Transportation Operations	88.4%	87.6%	88.0%	0.4



**On Time Performance (OTP)**

- Bus in-service OTP declined to 86.5% compared to the previous year; this is slightly below the target of 87.0% on time.
- MAX OTP declined to 80.6% this quarter compared to a year ago; this is below the target of 89.0% on time.
- WES OTP decreased to 98.3% this quarter compared to a year ago.

	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
<b>Fixed Route Bus</b>	86.5%	87.3%	89.9%	-3.4
<b>MAX Light Rail</b>	80.6%	80.3%	88.4%	-7.9
<b>WES Commuter Rail</b>	98.3%	98.6%	98.8%	-0.5



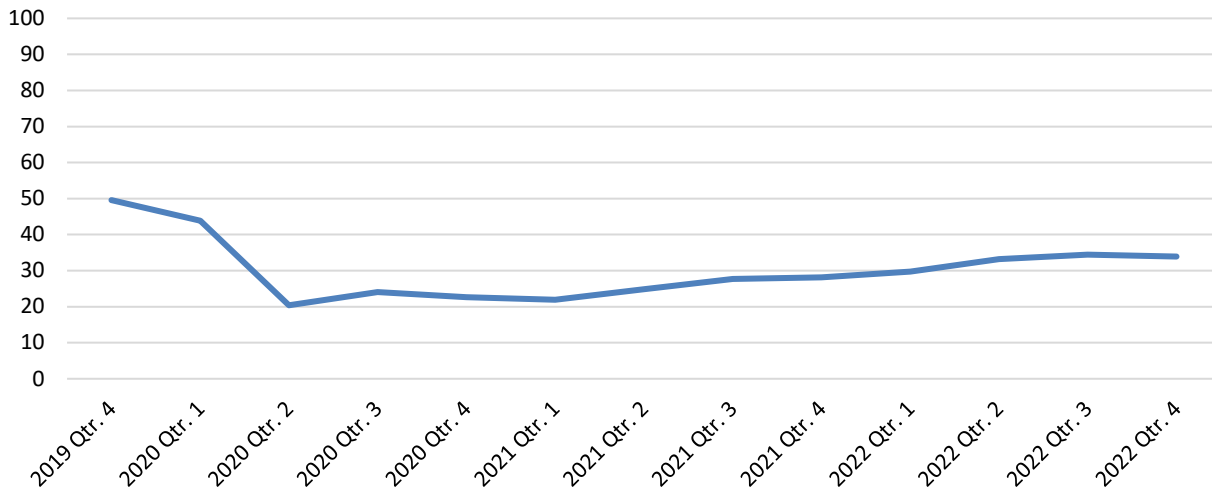
**Boarding Rides Per Revenue Hour**

Total fixed route boarding rides per revenue hour increased by 5.8 compared to the same period last year.

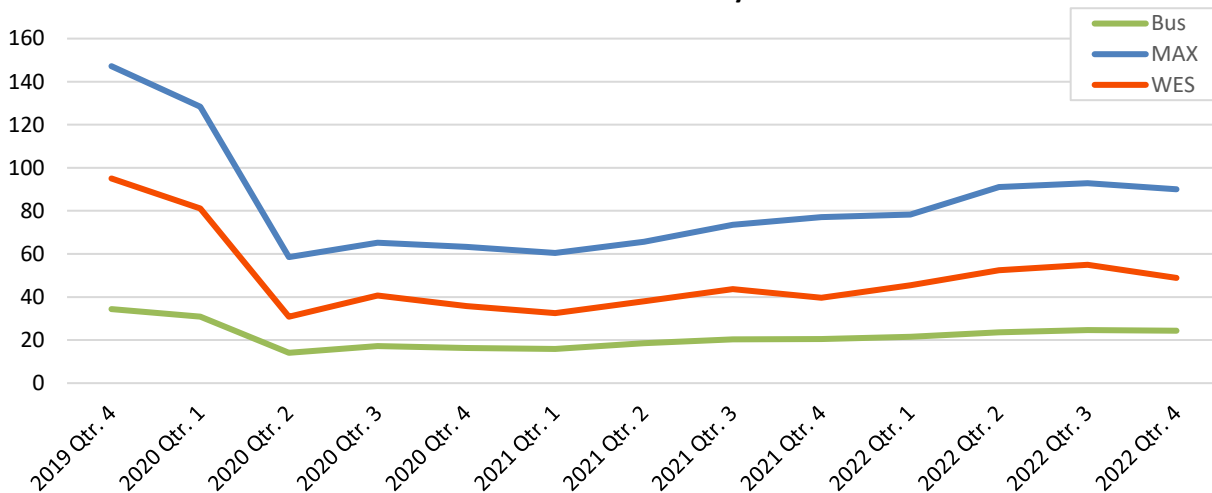
- Fixed route bus boardings per revenue hour were up by 3.8 compared to the previous year.
- MAX boardings per revenue hour were up by 12.9 compared to the previous year.
- WES boardings per revenue hour were up by 9.3 compared to the previous year.

	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
<b>Total</b>	33.9	34.5	28.2	5.8
<b>Fixed Route Bus</b>	24.4	24.6	20.6	3.8
<b>MAX Light Rail</b>	90.0	92.9	77.2	12.9
<b>WES Commuter Rail</b>	48.9	54.9	39.6	9.3

**Total Fixed Route Rides Per Revenue Hour**



**Rides Per Revenue Hour By Mode**



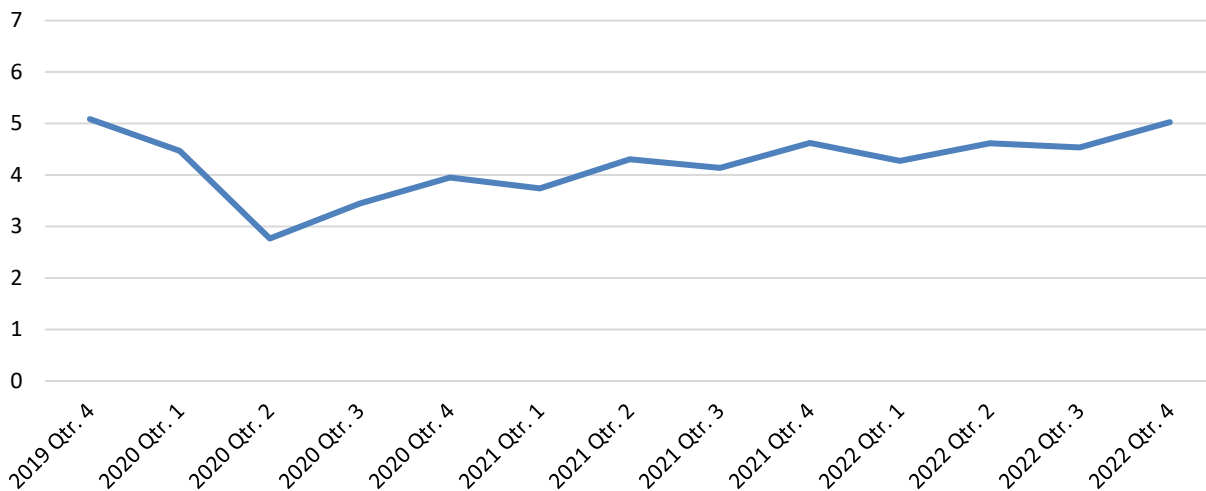


**Fixed Route Bus Collisions per 100,000 Miles**

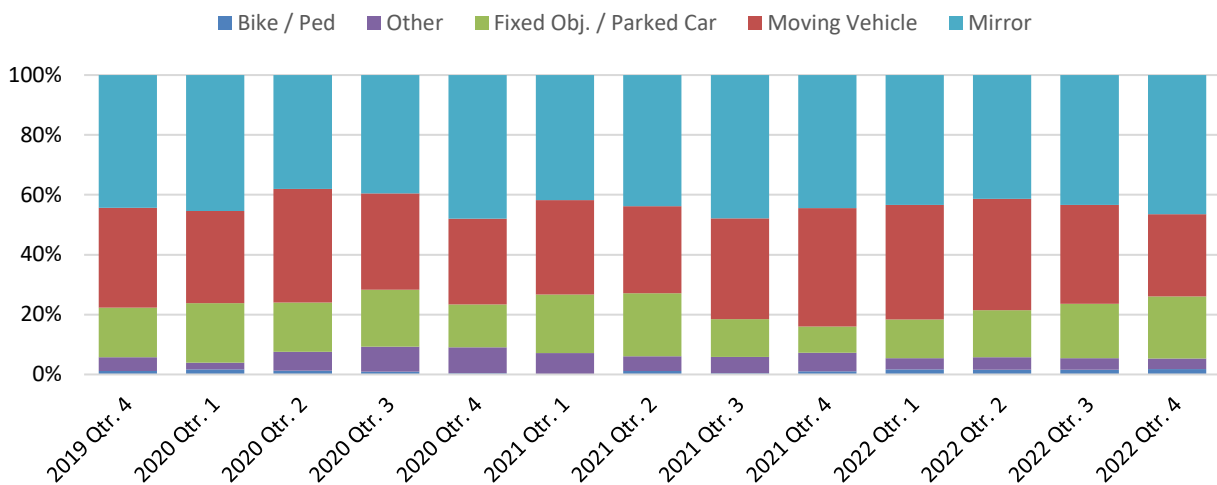
Total bus collisions per 100,000 miles increased by 0.4 compared to last year. Mirror strikes (46%) and collisions with other vehicles (27%) accounted for just over 73% of all collisions.

	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
<b>Total</b>	5.0	4.5	4.6	0.4
<b>Moving Vehicle</b>	1.4	1.5	1.8	-0.4
<b>Fixed Object/Parked Car</b>	1.0	0.8	0.4	0.6
<b>Bike/Pedestrian</b>	0.1	0.1	0.0	0.0
<b>Other</b>	0.2	0.2	0.3	-0.1
<b>Mirror</b>	2.3	2.0	2.1	0.3

**Total Bus Collisions per 100,000 Miles**



**Bus Collision Type by Share of Total**

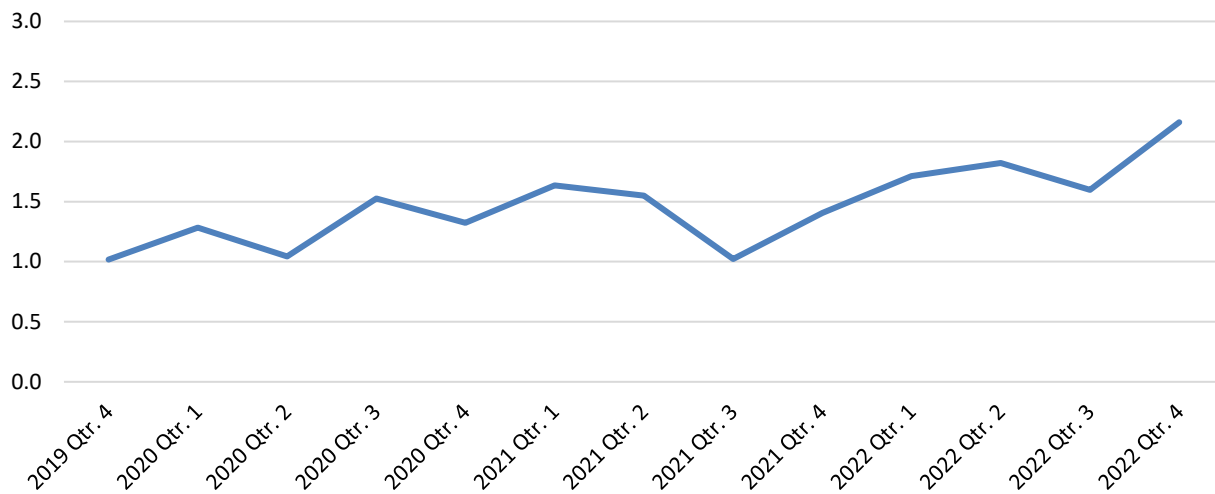


**MAX Light Rail Collisions per 100,000 Miles**

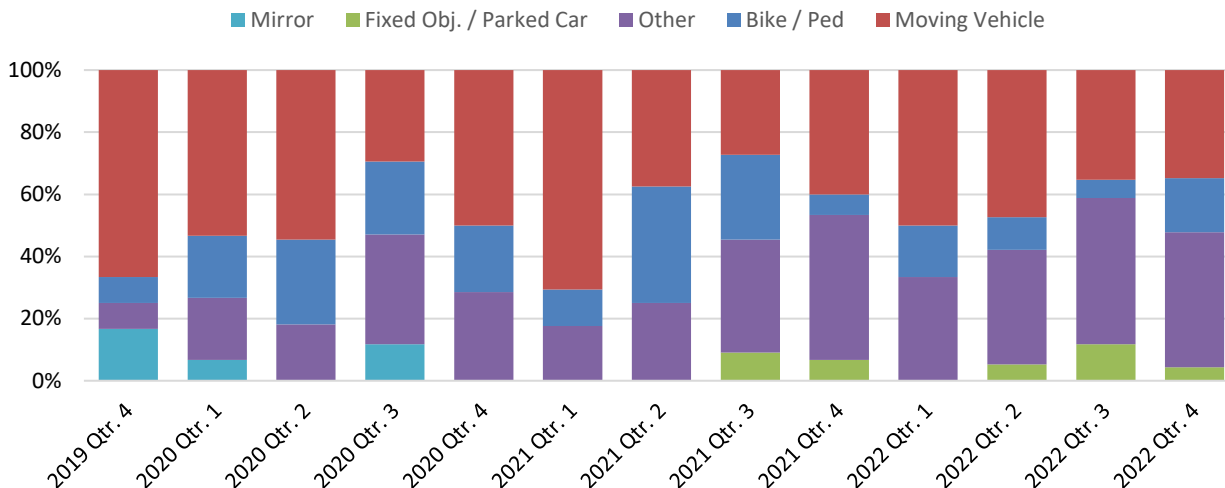
MAX had an average of 2.2 collisions per 100,000 service miles, an increase of 0.8% from the prior year; the target rate is less than 1.0 per 100,000 service miles. "Other" collisions include those with objects that don't fit the other categories, such as shopping carts.

	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
<b>Total</b>	2.2	1.6	1.4	0.8
<b>Moving Vehicle</b>	0.8	0.6	0.6	0.2
<b>Fixed Object/Parked Car</b>	0.1	0.2	0.1	0.0
<b>Bike/Pedestrian</b>	0.4	0.1	0.1	0.3
<b>Other</b>	0.9	0.8	0.7	0.3
<b>Mirror</b>	0.0	0.0	0.0	0.0

**Total MAX Light Rail Collisions per 100,000 Miles**



**MAX Collision Type by Share of Total**

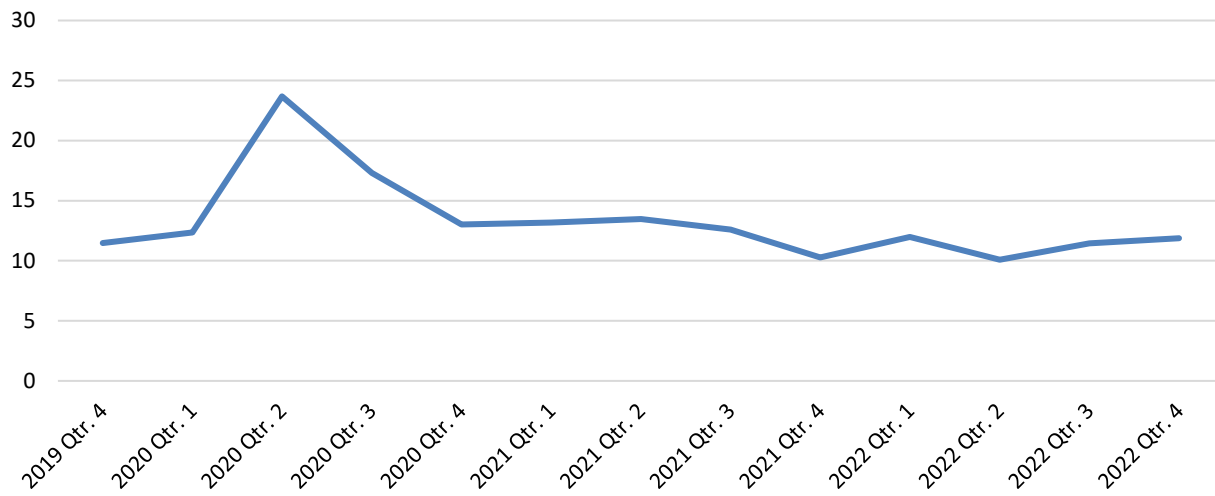


**Fixed Route Bus Complaints Per 100,000 Boarding Rides**

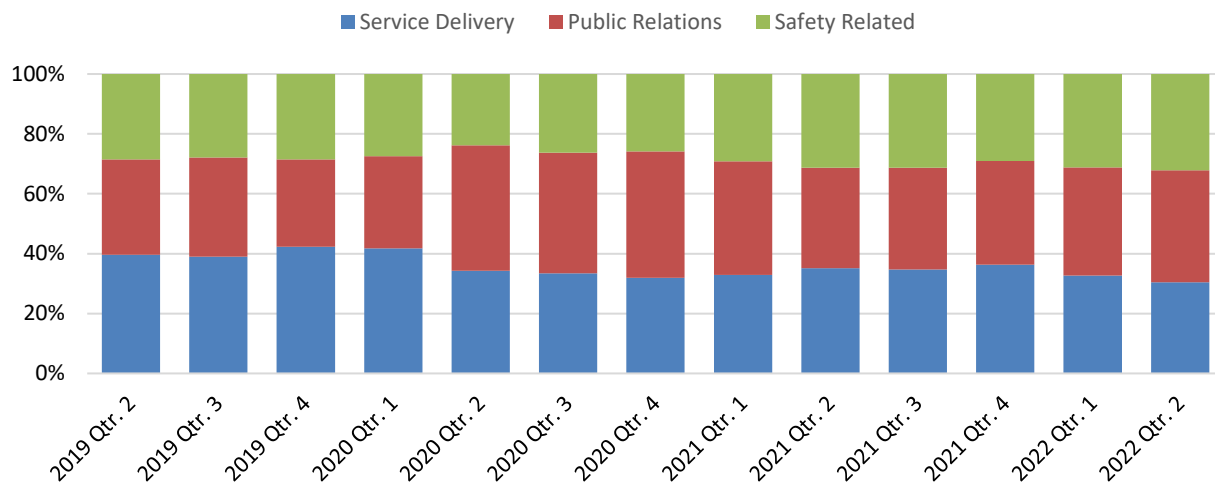
The number of bus operator complaints per 100,000 boarding rides increased 16% compared to the past year from 10.3 to 11.9 per 100,000 boarding rides. Service Delivery complaints decreased from 3.7 to 3.3; Public Relations complaints increased from 3.6 to 4.7; and, Safety Related complaints increased from 3.0 to 3.9 complaints per 100,000 boarding rides compared to the same quarter a year ago.

	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
<b>Total</b>	11.9	11.4	10.3	1.6
<b>Service Delivery</b>	3.3	3.5	3.7	-0.5
<b>Public Relations</b>	4.7	4.1	3.6	1.1
<b>Safety Related</b>	3.9	3.9	3.0	1.0

**Total Bus Operator Complaints Per 100,000 Ons**



**Bus Operator Complaint Type by Share of Total**

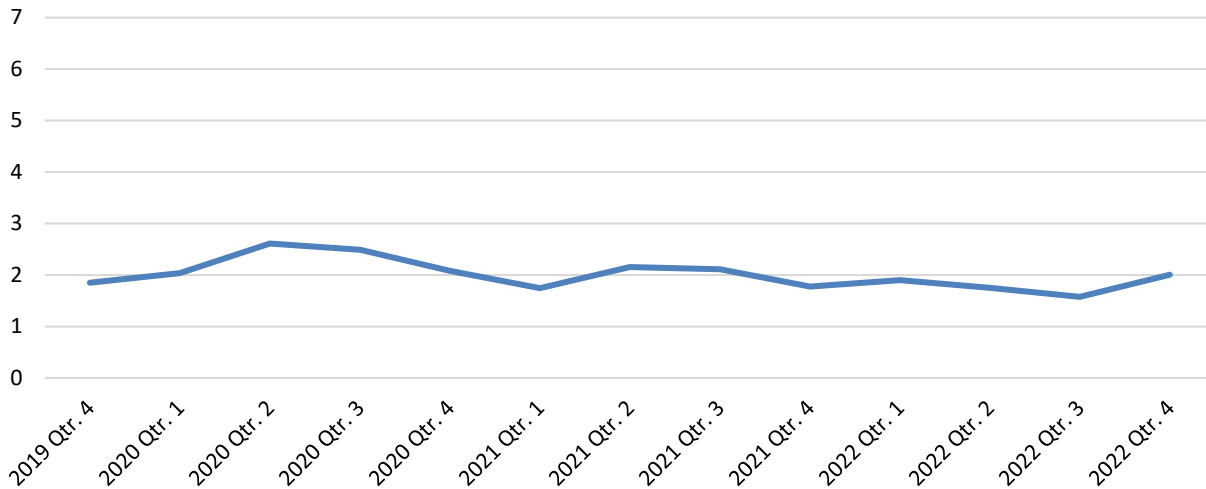


**MAX Light Rail Complaints Per 100,000 Boarding Rides**

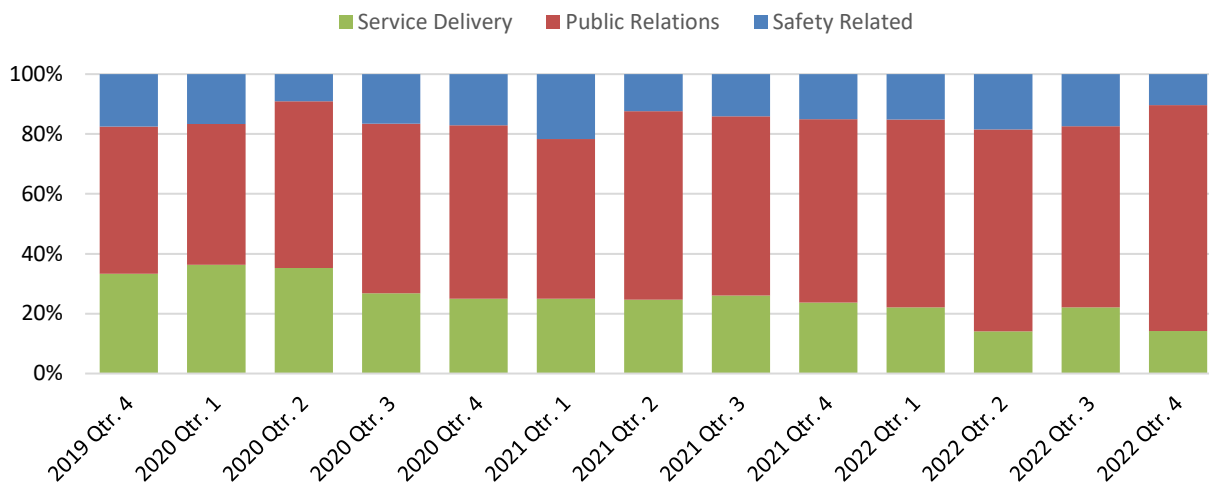
Total MAX operator complaints per 100,000 boarding rides increased 11% 1.8 to 2.0 complaints per 100,000 boarding rides compared to the same period last year. Service Delivery and Safety Related complaints each declined, while Public Relations increased from 1.1 to 1.5 complaints per 100,000 boarding rides. All categories remain relatively small overall.

	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
<b>Total</b>	2.0	1.6	1.8	0.2
<b>Service Delivery</b>	0.3	0.3	0.4	-0.1
<b>Public Relations</b>	1.5	1.0	1.1	0.4
<b>Safety Related</b>	0.2	0.3	0.3	-0.1

**Total MAX Operator Complaints Per 100,000 Boarding Rides**



**Type of Operator Complaints Per 100,000 Boarding Rides**

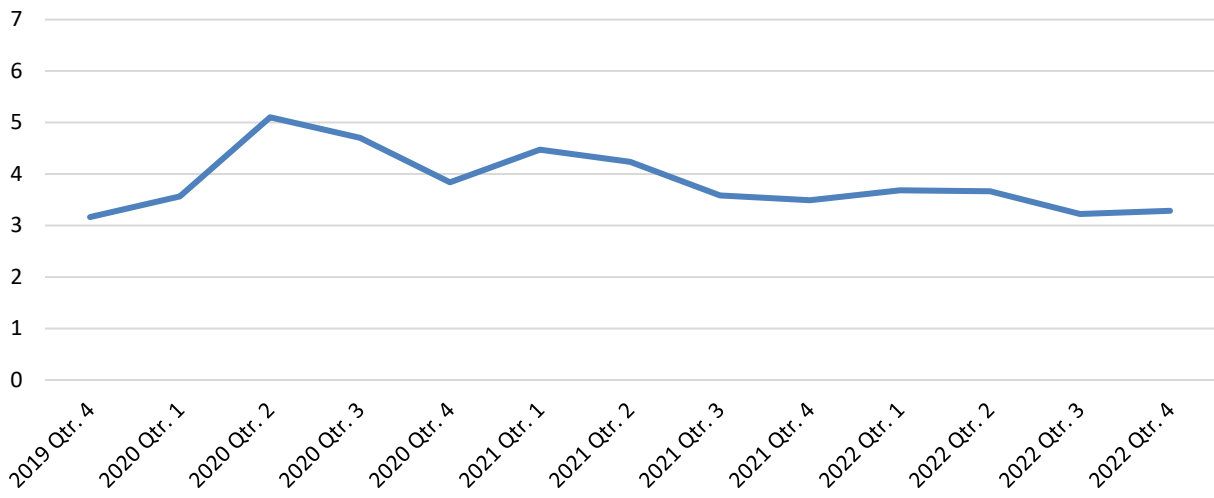


**Fixed Route Bus and MAX Light Rail Commendations**

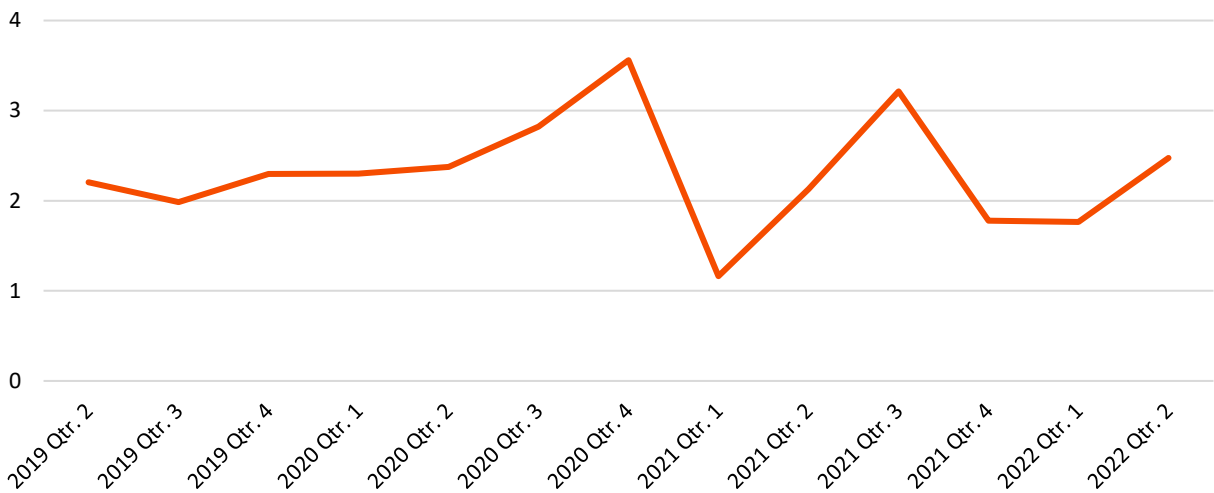
Commendation rates for Fixed Route Bus decreased by 0.2 per 100,000 boarding rides and increased by 1.2 per 100,000 boarding rides for MAX Light Rail.

	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
<b>Fixed Route Bus</b> Per 100,000 Boardings	3.3	3.2	3.5	-0.2
<b>MAX Light Rail</b> Per Million Boardings	3.0	2.4	1.8	1.2

**Total Bus Operator Commendations Per 100,000 Boarding Rides**



**Total MAX Light Rail Commendations Per Million Boarding Rides**

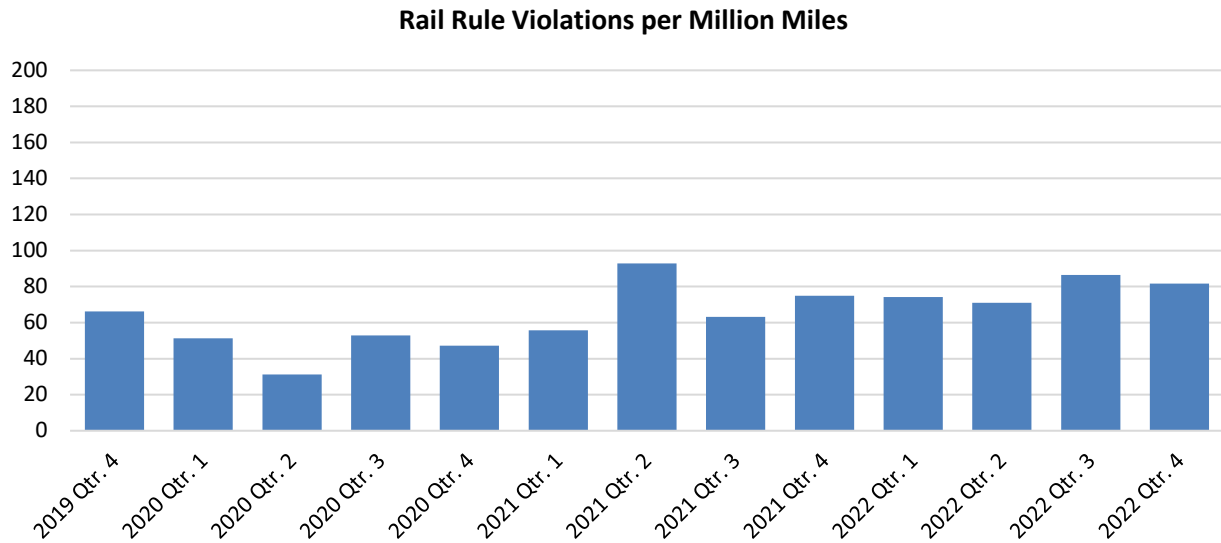


**Rail Rule Violations per Million Miles**

MAX rule violations per million miles increased by 6.7 per million miles compared to Q3 2021.

The majority of the rail rule violations are for Automatic Train Stop Signal Trips and Other violations.

	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
<b>Rail Rule Violation Rate</b>	81.7	86.4	75.0	6.7



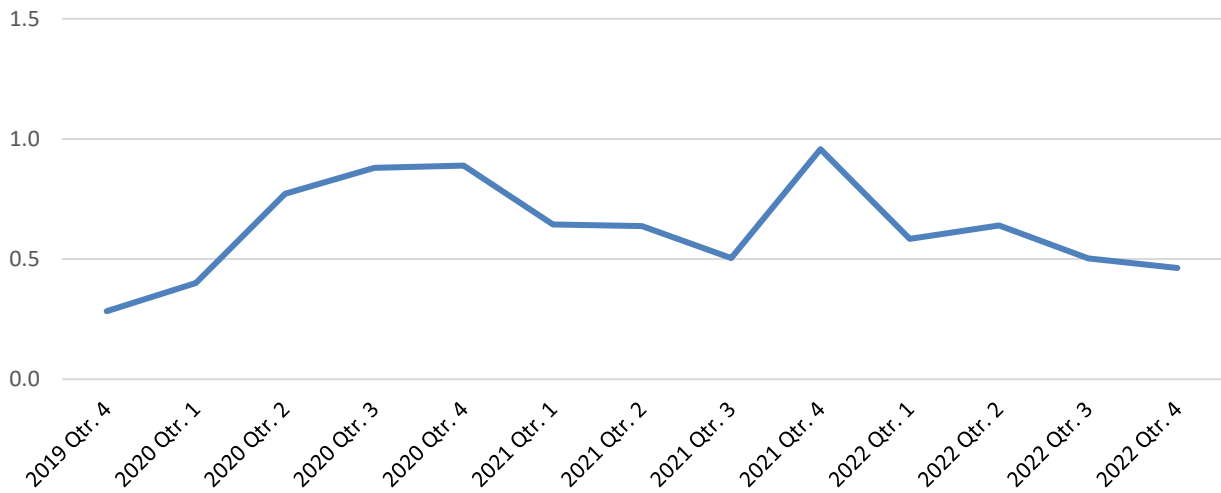
**Fixed Route Bus and MAX Light Rail Employee Safety Incidents**

Employee Safety Incidents for Fixed Route Bus decreased by 0.5 per 100,000 boarding rides and decreased by 0.1 per 100,000 boarding rides for MAX Light Rail.

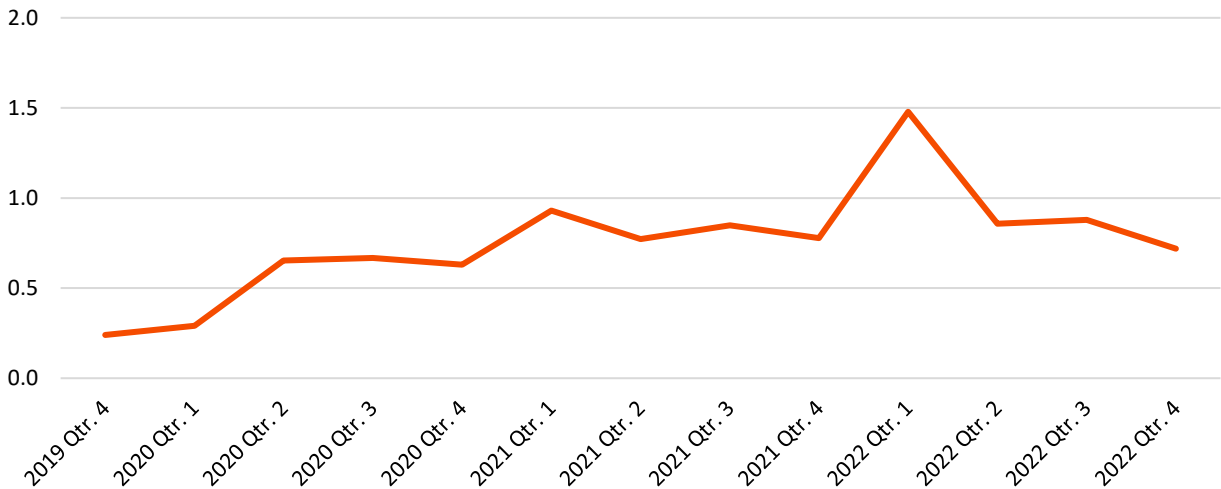
	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
<b>Fixed Route Bus</b>	0.5	3.2	1.0	-0.5
<b>MAX Light Rail</b>	0.7	0.9	0.8	-0.1

Per 100,000 Boardings

**Fixed Route Bus Employee Safety Incidents Per 100,000 Boarding Rides**



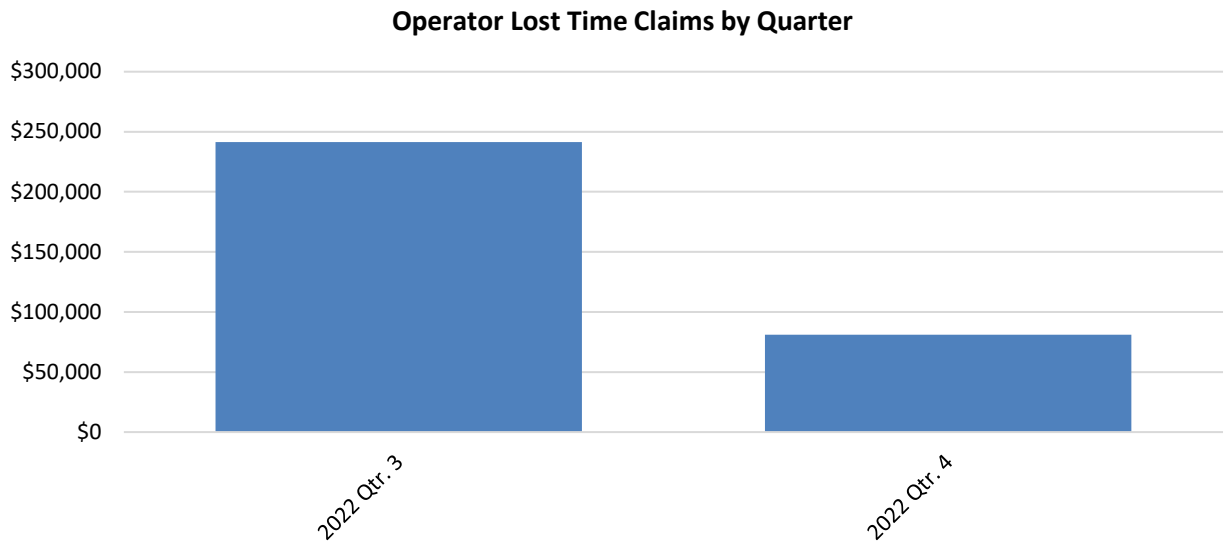
**Total MAX Light Rail Employee Safety Incidents Per 100,000 Boarding Rides**



**Operator Lost Time Claims**

The amount spent on lost time claims decreased \$160,260 between 2022 Q3 and Q4.

	2022 Qtr. 4	2022 Qtr. 3	Q3-Q4 Change
<b>Total</b>	\$ 81,030	\$ 241,290	-\$160,260



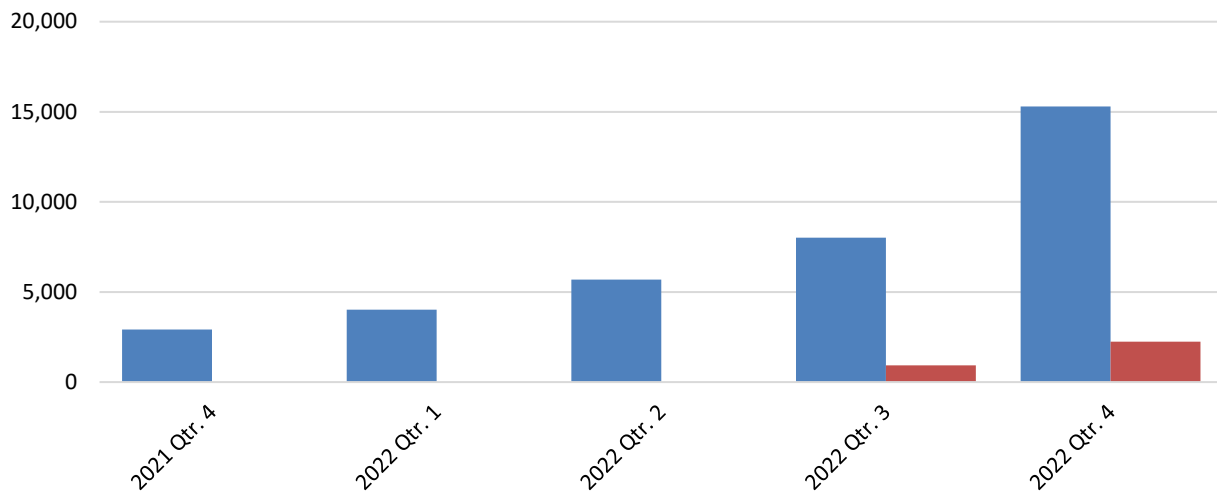


**Systemwide Safety Response Team Activity**

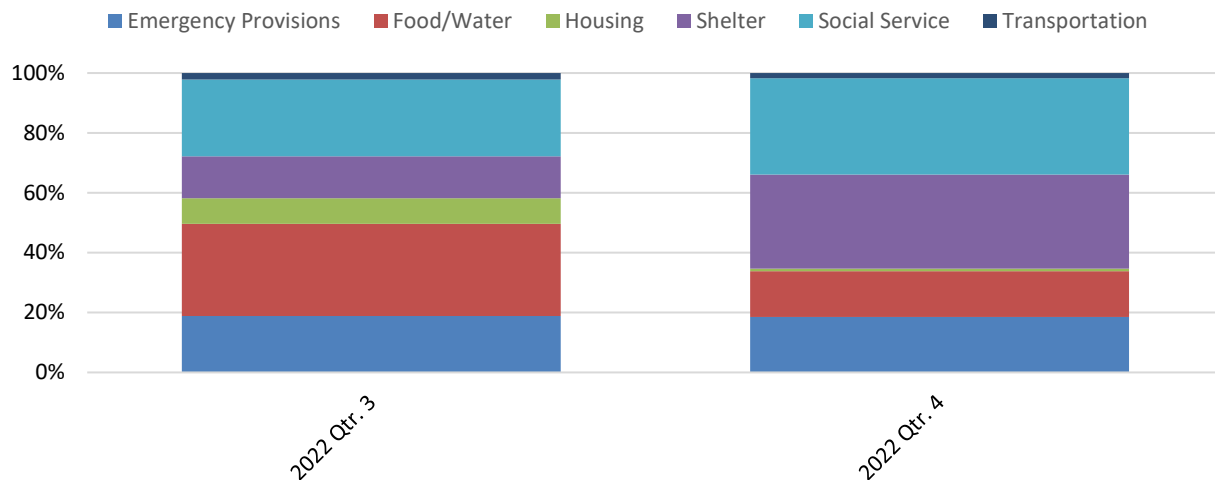
The number of calls received by Safety Response Team increased in 2022 Q4 compared to 2022 Q3. In Q3 of 2022, the Safety Response Team program began to refer to services based on request type.

	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
<b>Total requests</b>	15,290	8,010	2,920	12,370
<b>Total referrals</b>	2,250	920	0	

**Safety & Security Calls and Responses by Quarter**



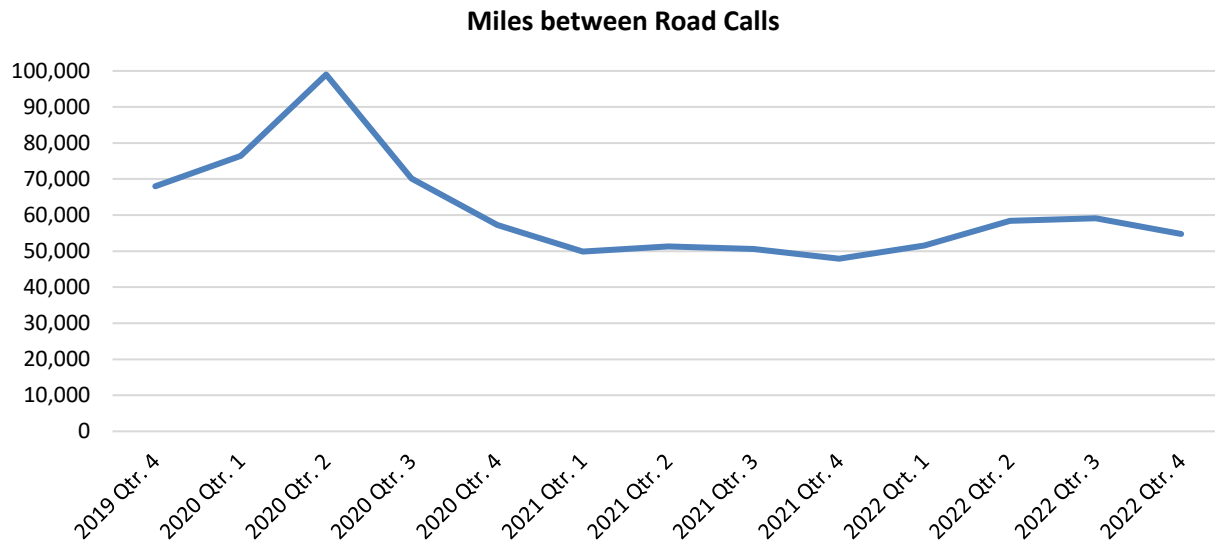
**Type of Safety Response by Quarter**



**Miles between Road Calls**

LIFT miles between road calls increased by 6,831 miles from the previous year to 54,737. This increase can be attributed to the elimination of COVID-19 capacity restrictions, which previously required LIFT to use larger but older vehicles in order to maintain a safe distance between passengers and operators. With this requirement no longer in place, LIFT is able to use our newer Ford Transit Vans in service more frequently, which is leading to fewer mechanical problems. LIFT will begin replacing their oldest vans starting FY24.

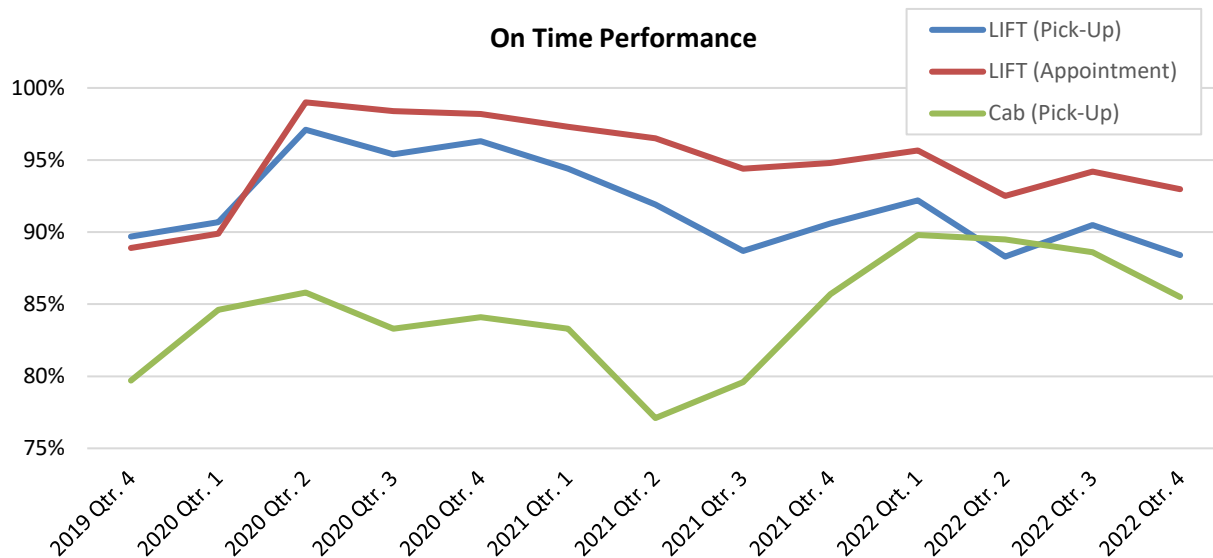
	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
LIFT	54,737	59,136	47,906	6,831



**On Time Performance**

LIFT OTP decreased from prior year for trips where riders elected to designate a pick-up window and for trips where riders specified an arrival time for appointments at 88.4% and 93.0% respectively. Taxicab pick-up OTP also decreased to 85.5%. LIFT has been working with Broadway Cab to return trips to TriMet that they cannot provide service for in a timely manner. This has led to Broadway Cab prioritizing TriMet trips to maximize revenue.

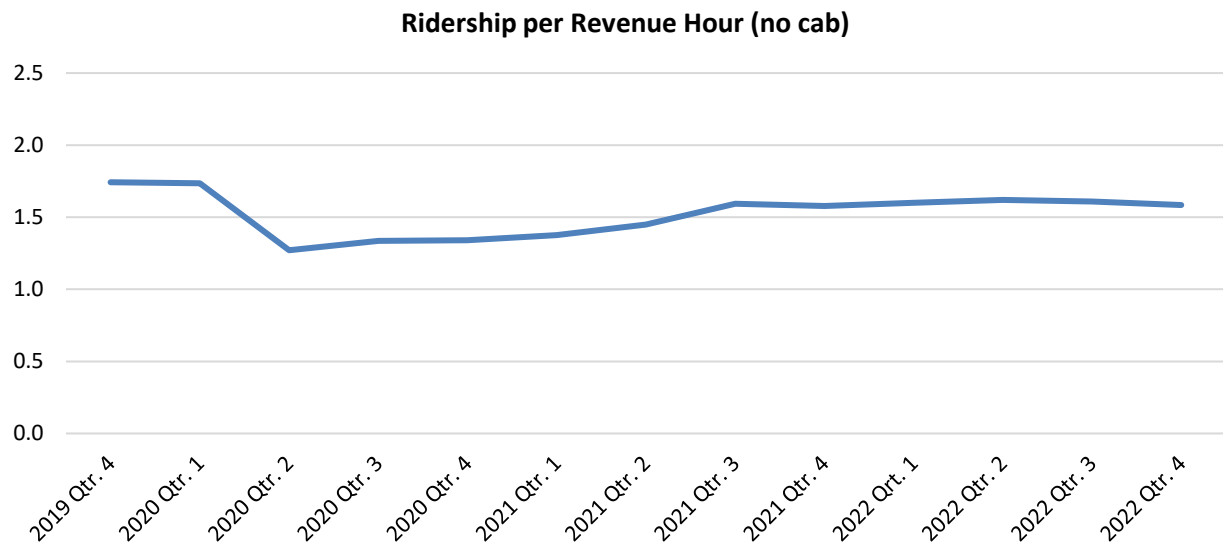
	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
<b>LIFT (Pick-Up)</b>	88.4%	90.5%	90.6%	-2.2
<b>LIFT (Appointment)</b>	93.0%	94.2%	94.8%	-1.8
<b>Cab (Pick-Up)</b>	85.5%	88.6%	85.7%	-0.2



**Ridership per Revenue Hour (no cab)**

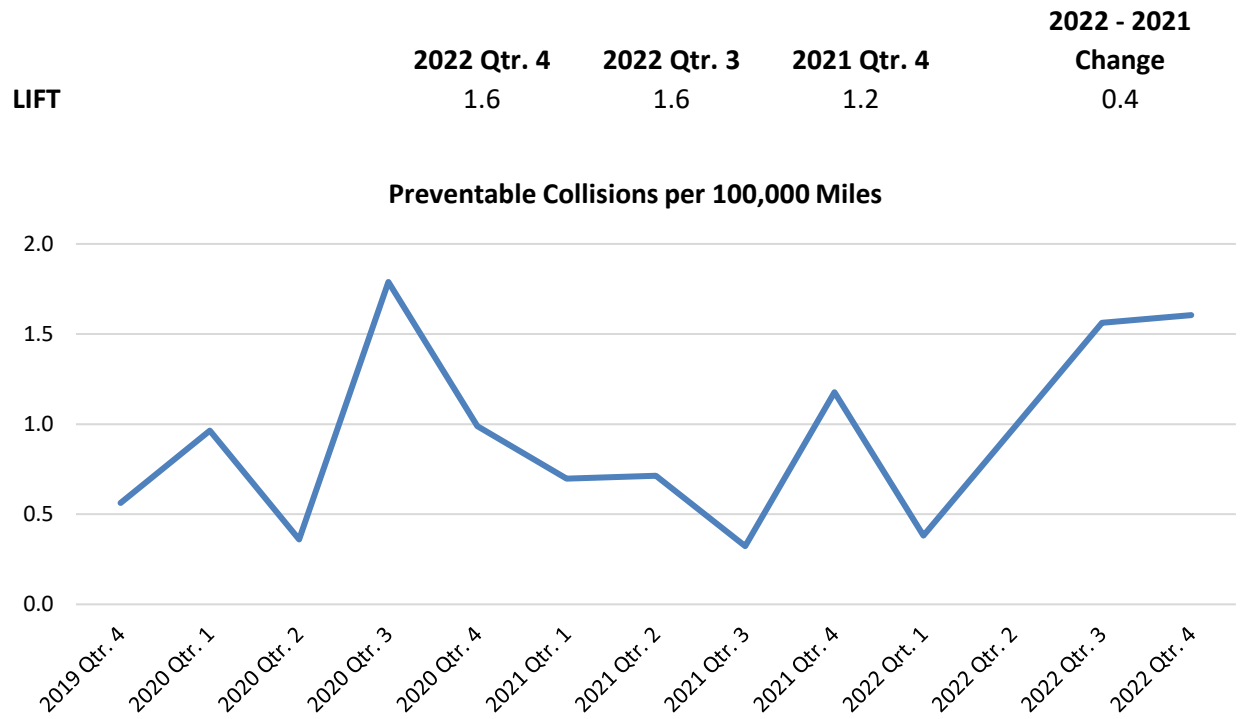
LIFT ridership per revenue hour (excluding riders served by cabs) remained the same compared to a year ago at 1.6 rides per revenue hour. Decline in demand due to COVID-19 pandemic has been balanced with levels of service.

	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
LIFT	1.6	1.6	1.6	0.0



**Preventable Collisions per 100,000 Miles**

LIFT preventable collisions increased by 0.4 per 100,000 miles from the prior year.

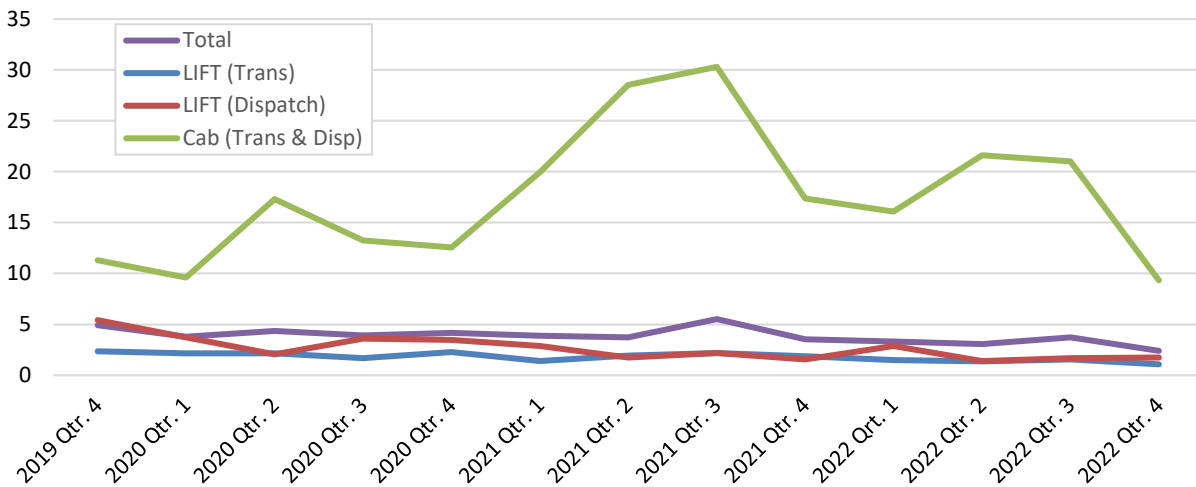


**Total Complaints per 1,000 Rides**

Total LIFT complaints per 1,000 rides decreased to 2.4 from 3.6 the prior year. The complaint rates decreased for Dispatch, Cab, and Transportation.

	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
<b>Total</b>	2.4	3.7	3.6	-1.2
<b>LIFT (Trans)</b>	1.1	1.6	1.9	-0.8
<b>LIFT (Dispatch)</b>	1.7	1.7	1.6	0.2
<b>Cab (Trans &amp; Disp)</b>	9.3	21.0	17.4	-8.0

**Total Complaints per 1,000 Rides**

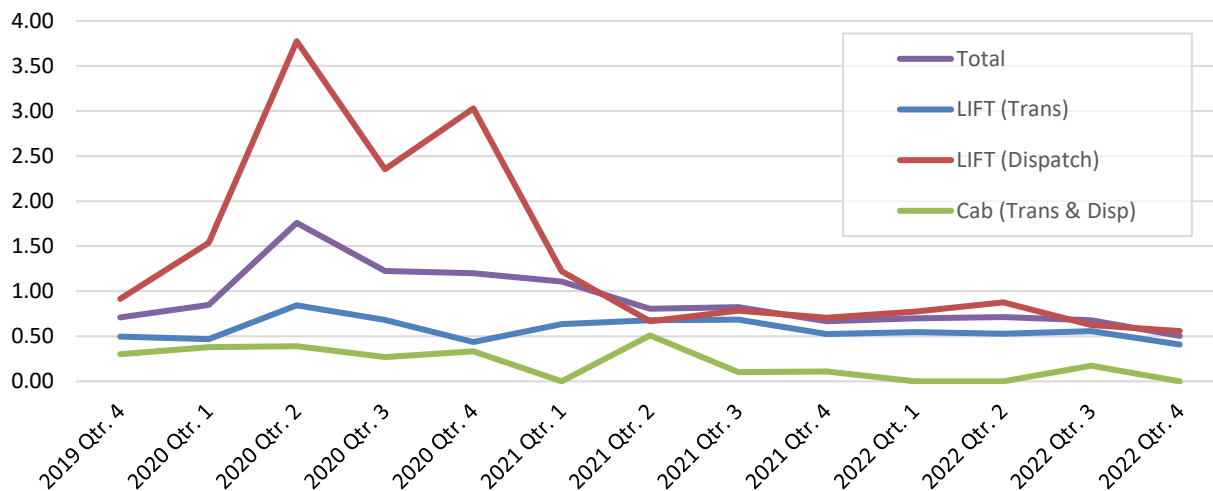


**Total Commendations per 1,000 Rides**

Total LIFT commendations per 1,000 rides decreased to 0.5 compared to 0.7 last year.

	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
<b>Total</b>	0.5	0.7	0.7	-0.2
<b>LIFT (Trans)</b>	0.4	0.6	0.5	-0.1
<b>LIFT (Dispatch)</b>	0.6	0.6	0.7	-0.1
<b>Cab (Trans &amp; Disp)</b>	0.0	0.2	0.1	-0.1

**Total Commendations per 1,000 Rides**



**Call Center - Percent of Calls Answered within 5 Minutes**

The percentage of Call Center calls that were answered within five minutes remains high, above 99% for Reservations, Dispatch, and Customer Service.

	2022 Qtr. 4	2022 Qtr. 3	2021 Qtr. 4	2022 - 2021 Change
<b>Reservations</b>	99.6%	99.6%	97.3%	2.3
<b>Dispatch</b>	99.1%	99.5%	99.2%	-0.1
<b>Customer Service</b>	99.3%	99.0%	99.6%	-0.3

