

FEBRUARY 27, 2018

Report to Council

1



Outside view of a MV-1 vehicle.



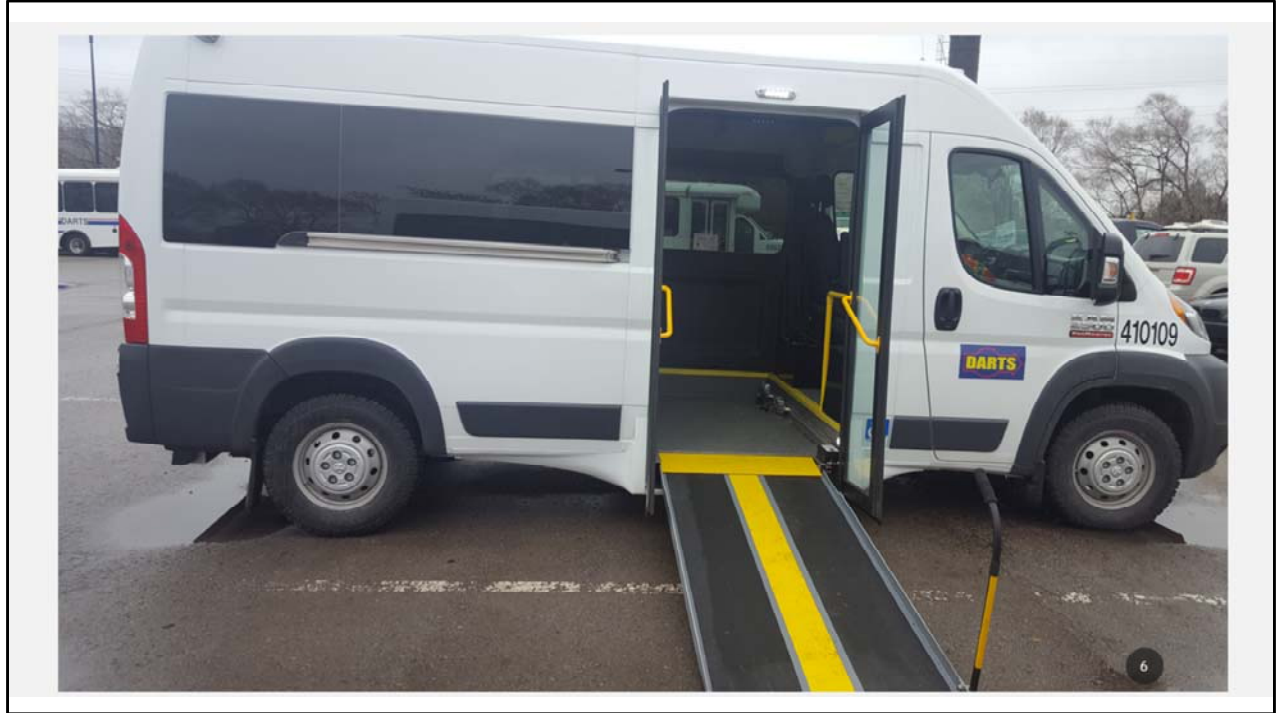
MV-1 with the ramp extended.



Inside the MV-1 looking at the bench seat towards the back of the MV-1. Shows the position of the three bench seats in the MV-1.



Inside the MV-1 vehicle looking forward. Shows the position of the one wheelchair spot in the front passenger position.



Outside the Promaster with the ramp extended.



Inside the Promaster showing the three bench seats on the far wall of the vehicle.



Inside the Promaster showing the floor space for the 2 wheelchairs. Also shows the two seats that are elevated on the back wheel hubs. These are the seats that the travelling public has issue with.



The door of the Promaster showing the floor space for two wheelchairs.



DARTS van showing the installed step (these are on both sides of the vehicle) to assist seniors with entering the van.



Showing the back seats of the DARTS vans.



ARBOC bus with the ramp extended.



Inside the ARBOC bus looking towards the back. The very back seats can flip up to expose two wheelchair spots.



Inside the ARBOC bus standing at the back looking forward. Note the space for wheelchairs and the greater width of the floor space relative to the Promaster.

EARLY DAYS OF DARTS

1980 - Provincially Co-Funded

- Joint Governance with the Province
- Difficult for Region to control access to service
- Growth is much faster than other municipalities

1994 – Regional Funded Service Only

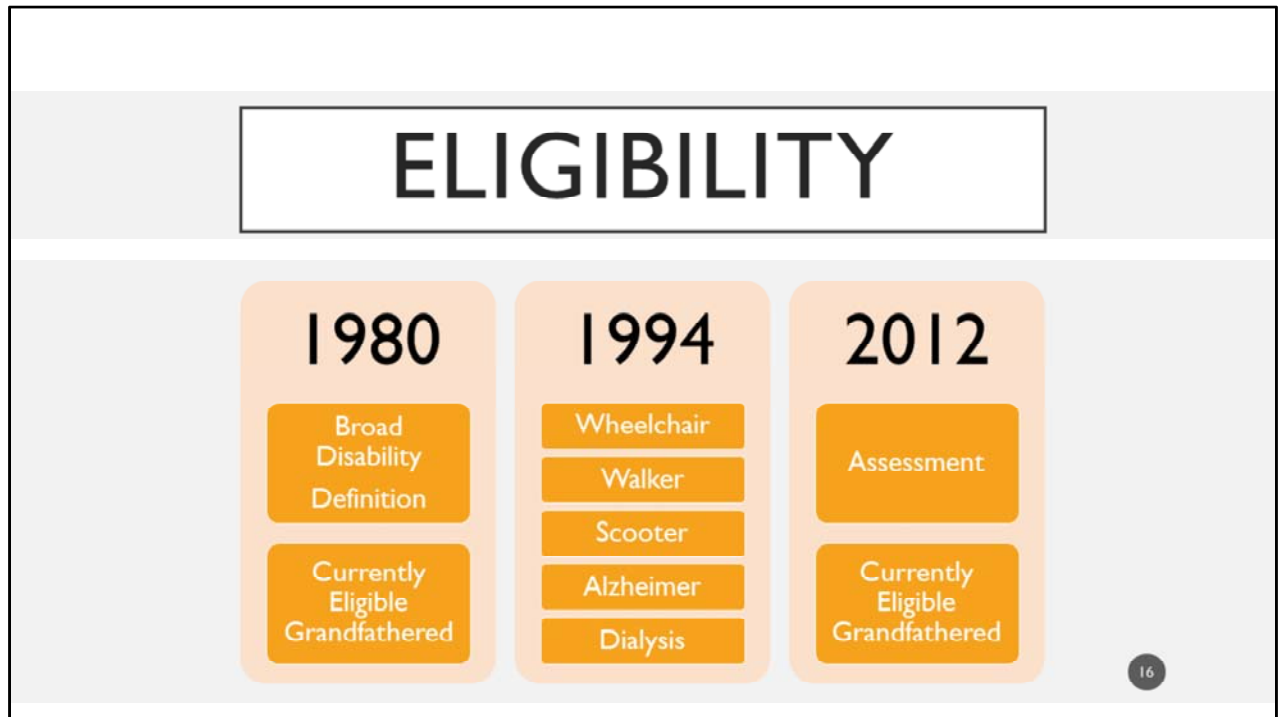
- Urban and Rural Service
- Now only required to match fixed route service

2001 – Region becomes City

- DARTS is a Regional Service – Now covers Urban and Rural Hamilton
- Not just 1 km beyond the Urban Boundary as with other Municipalities

15

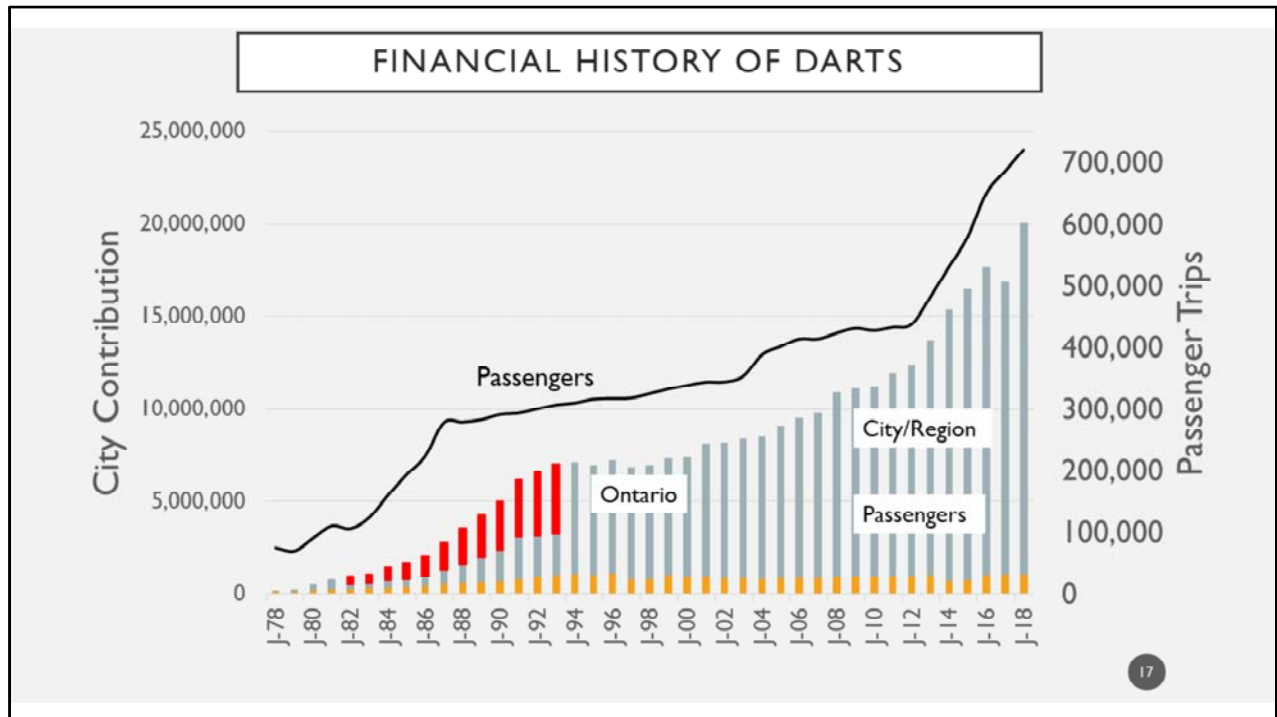
DARTS was set up over 40 years ago. Over the years, various agencies have funded DARTS and contributed to the eligibility/access to DARTS. In every case the existing users were grandfathered. The switch from the Region of Hamilton Wentworth funding DARTS, to the City of Hamilton, caused DARTS to service both the rural and urban areas of the City of Hamilton. Transit is only required to operate one km beyond the urban boundary. The AODA mandate is that accessibility for Ontarians should match the fixed transit system. This does not include the rural areas of municipalities.



The control over eligibility criteria mirrored the reduction in provincial funding in 1993-94. The eligibility criteria in 1994 acknowledged that the fixed transit fleet was not fully accessible in 1993. Note that ambulatory passengers, including the visually impaired, were no longer eligible in 1993-94.

In 2012 the fleet was accessible and the eligibility was changed to “inability to access the HSR service”. This caused an increase in frail elderly ambulatory that were previously ineligible for DARTS. Existing users were grandfathered.

This is the reason for the increase in ridership in 2012-2018.



Contribution of funders of DARTS by year based on the annual reports. Shows the funding of DARTS from 1978 to present day.

Note the province funded DARTS from it's beginning until 1993-94.

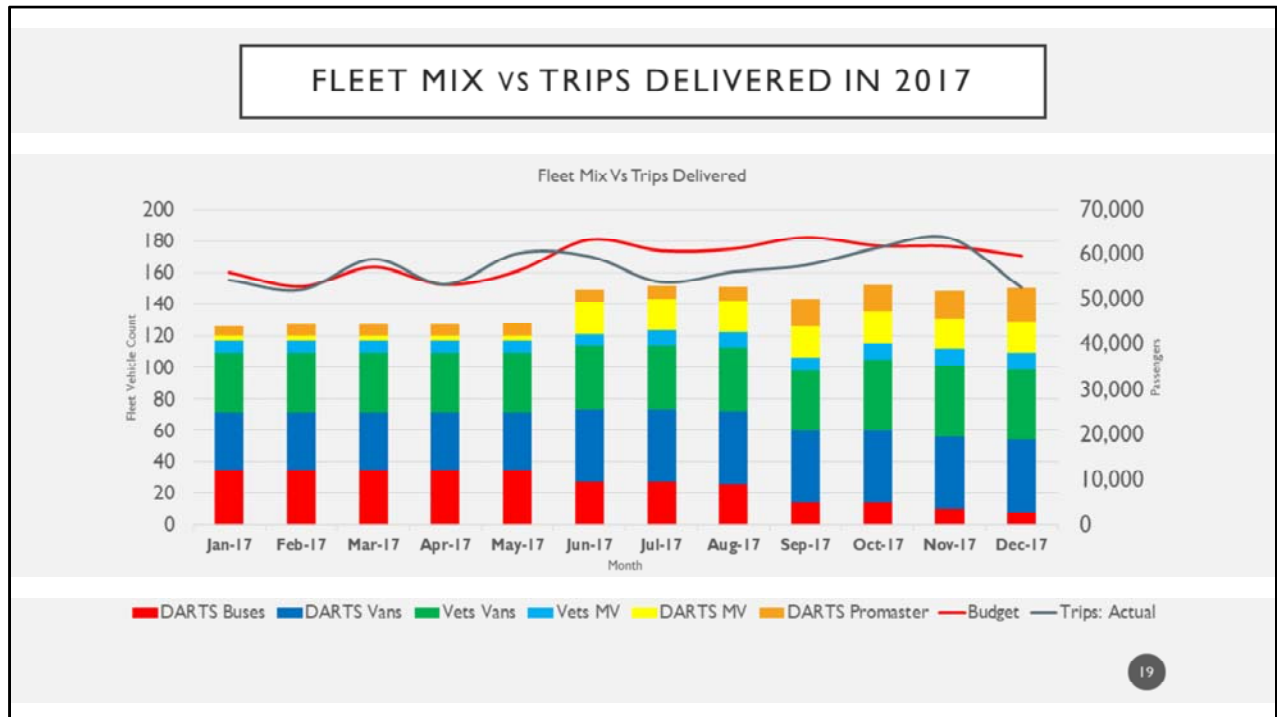
The black line are the number of passengers carried for each year. The change in eligibility and the grandfathering of exiting passengers in 2012 greatly increase the ridership on DARTS.

GROWTH IN SERVICE LEVELS



18

Wheelchair and non ambulatory service load has flat-lined since this is no longer an eligibility criteria. Ambulatory service has increased by approximately 45% since 2012.



From January 2017 to December 2017:

Bus count has gone from 35 to 10.

Darts vans from 36 to 46.

Vets vans from 38 to 45.

Vets MVs from 8 to 10.

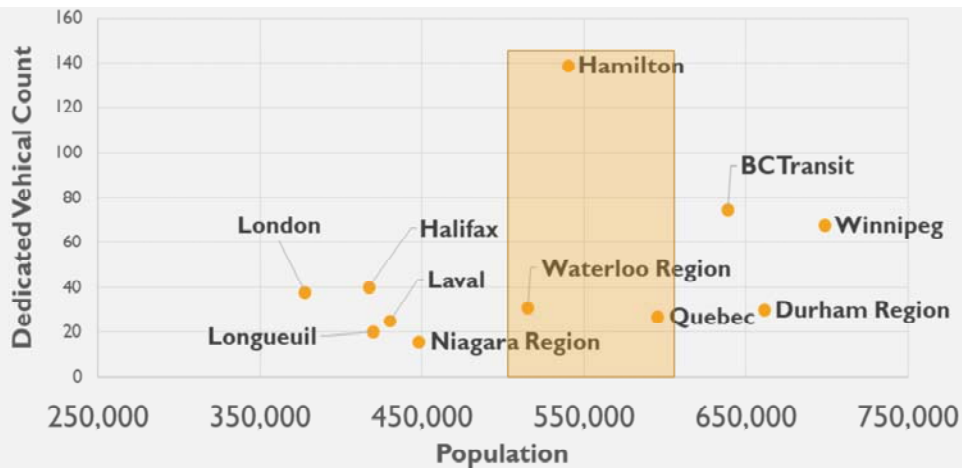
DARTS MVs from 3 to 20.

DARTS Promaster's from 6 to 21.

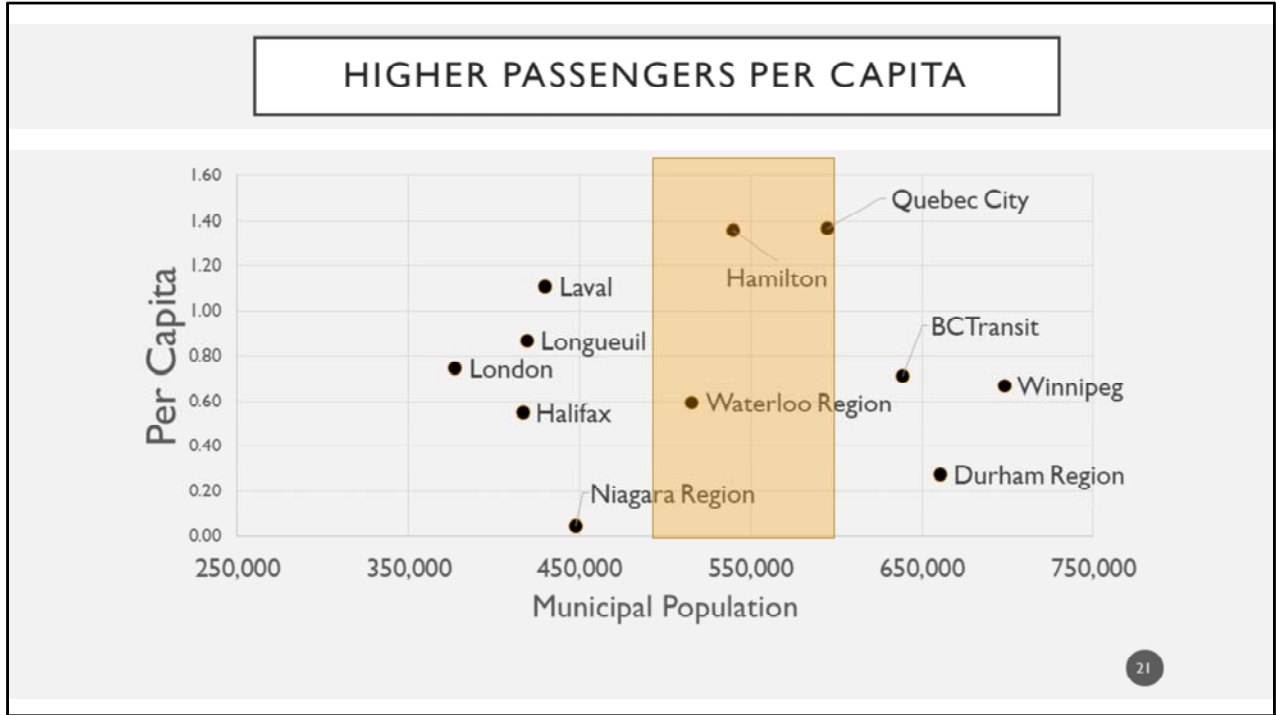
DARTS budget (red line) overestimated the demand (black line) for service in the summer and underestimated the load November and March.

The result was a shortfall of about 25,000 trips in 2017.

HIGHER DEDICATED VEHICLE COUNT

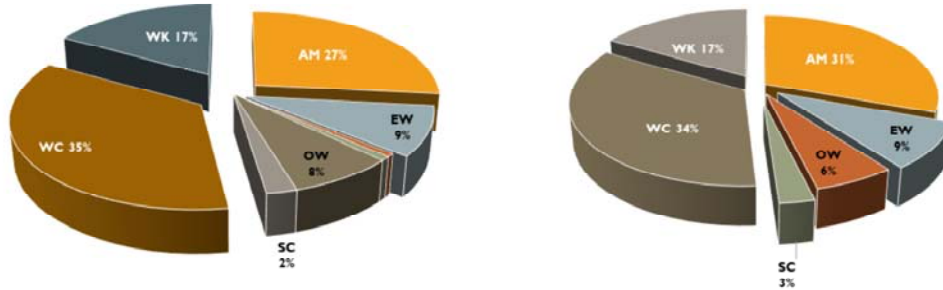


DARTS has significantly more dedicated vehicles than do other municipalities in the population range of 500,000 to 600,000. This is probably due to the history of DARTS and the early funding of the service by the province.



DARTS also has a much higher utilization rate of the service, relative to other cities of similar population in Canada.

2017 PROMASTER VS BUS

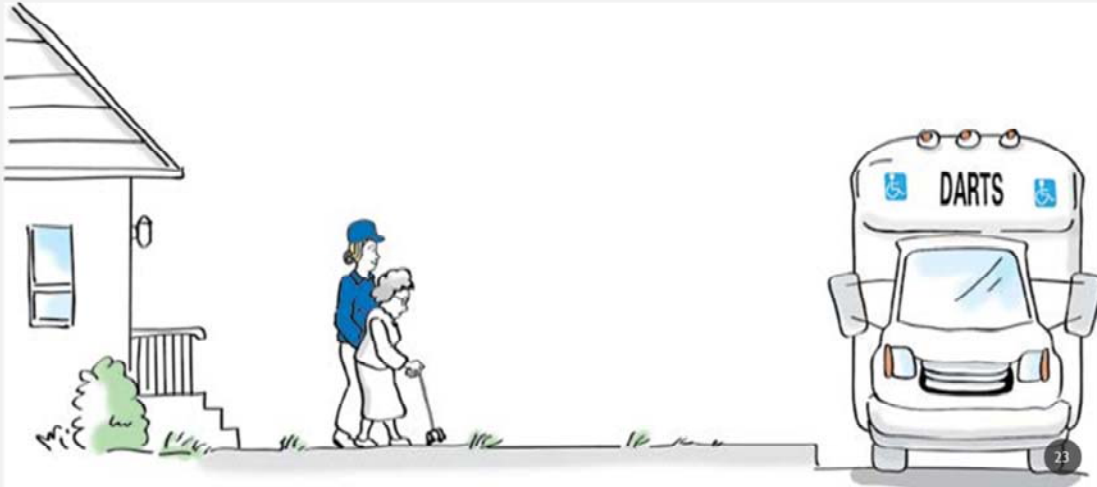


22

The Promaster carried the same relative numbers of non ambulatory/ambulatory as did buses. The Promaster pie chart is on the left and the bus is on the right.

The Promaster however, is not as efficient in loading as the bus resulting in a much lower productivity overall in 2017.

SITE DWELL TIMES



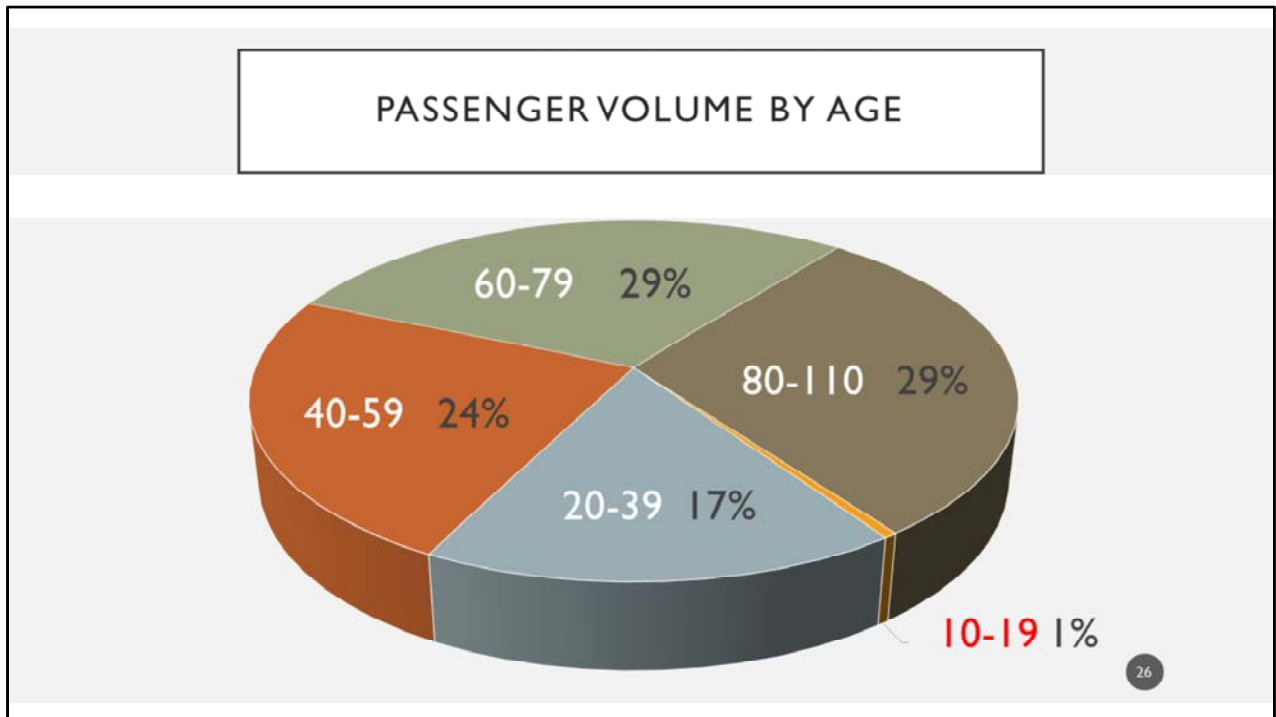
The smaller paratransit vehicles (Promaster and MV-1) are more difficult to load than are the buses, resulting in longer dwell times and lower productivities.



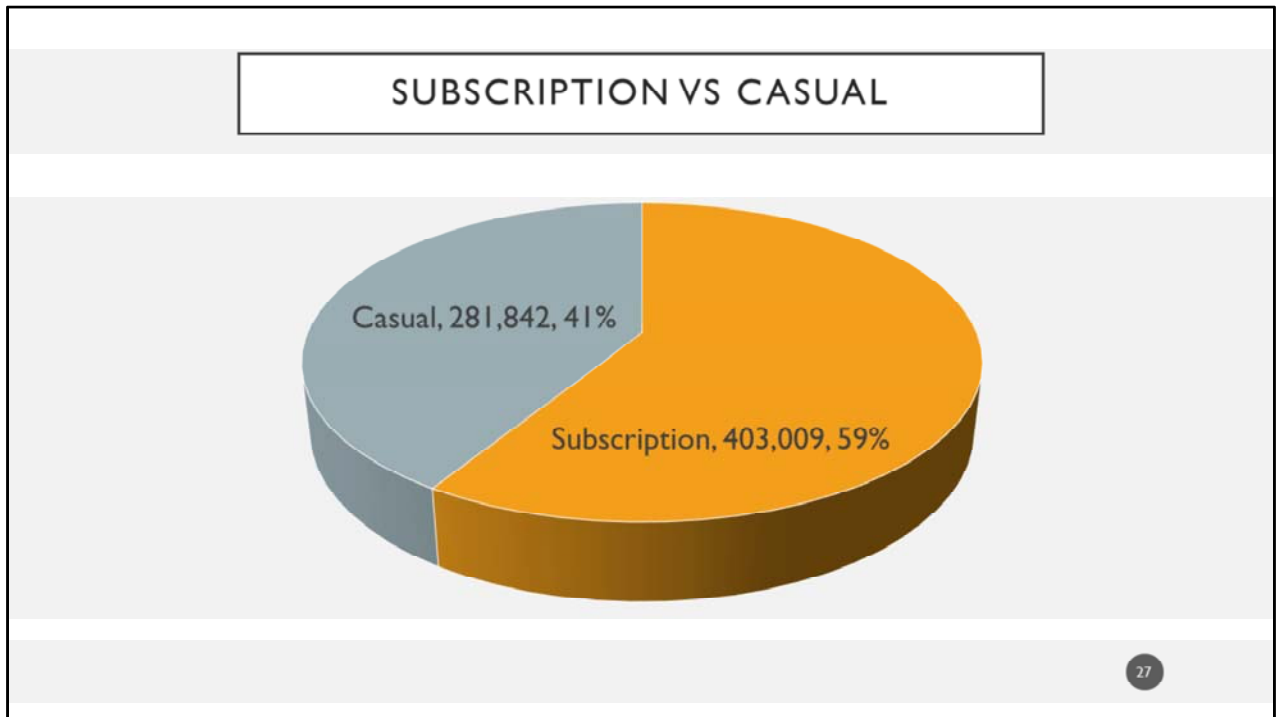
Note the increase floor space on buses making it easier to navigate when loading and unloading multiple passengers in wheelchairs.



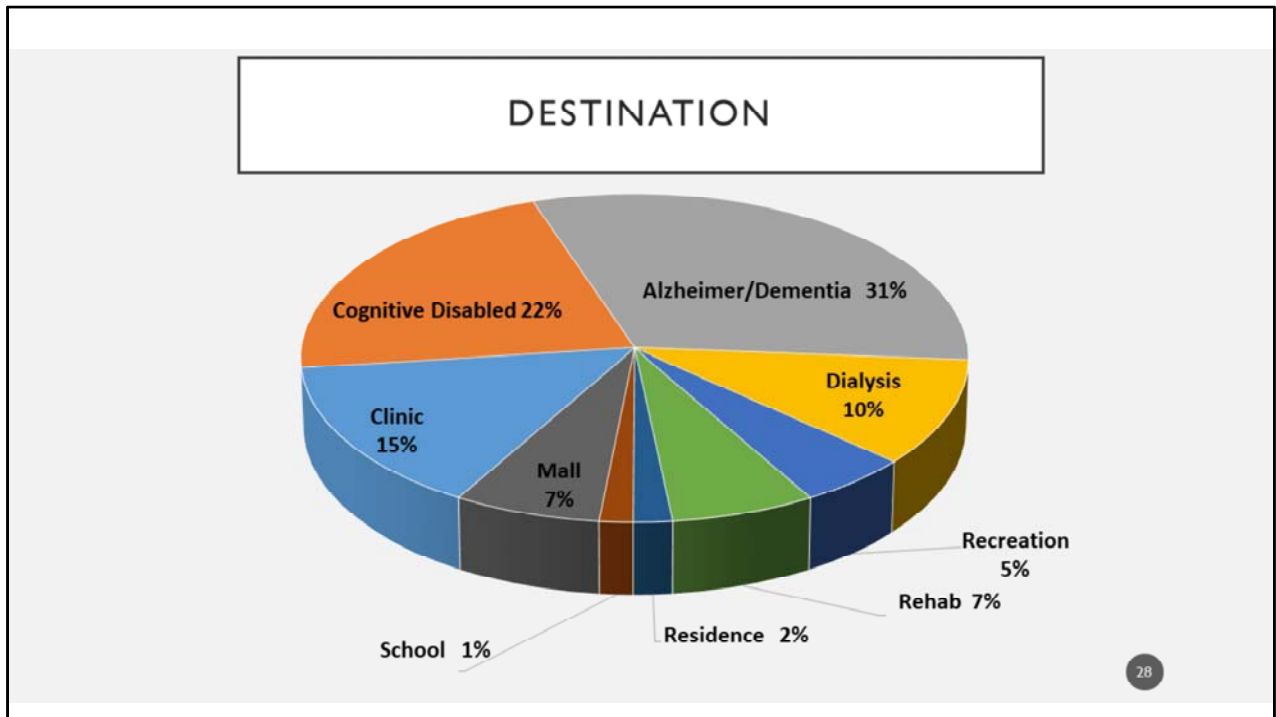
Much smaller area in the Promaster relative to the bus (in the previous slide).



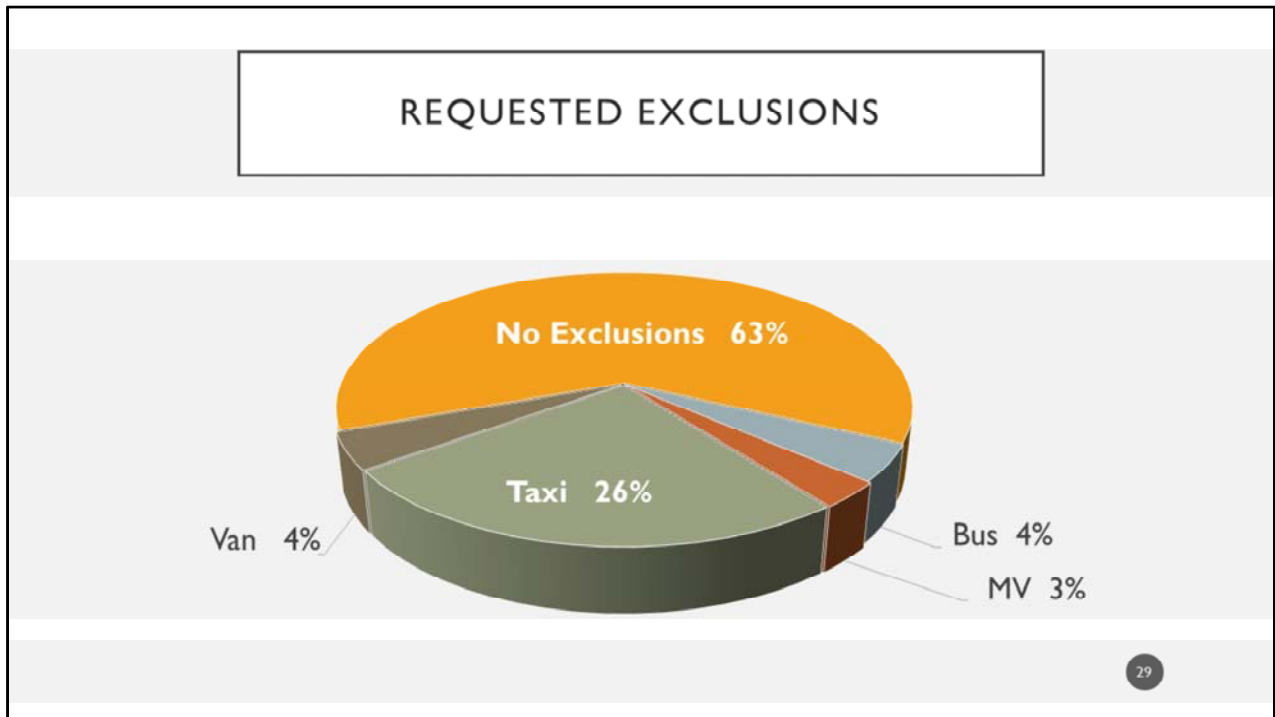
Only 1% of the passengers carried in 2017 were under 20.
Seniors over 60 accounted for 58% of the service in 2017.
Seniors over the age of 80 (golden age pass) accounted for 29% of the passenger rides.



41% of passengers were casual riders (use the call centre to book rides).
59% of passengers were travelling regularly to a program.

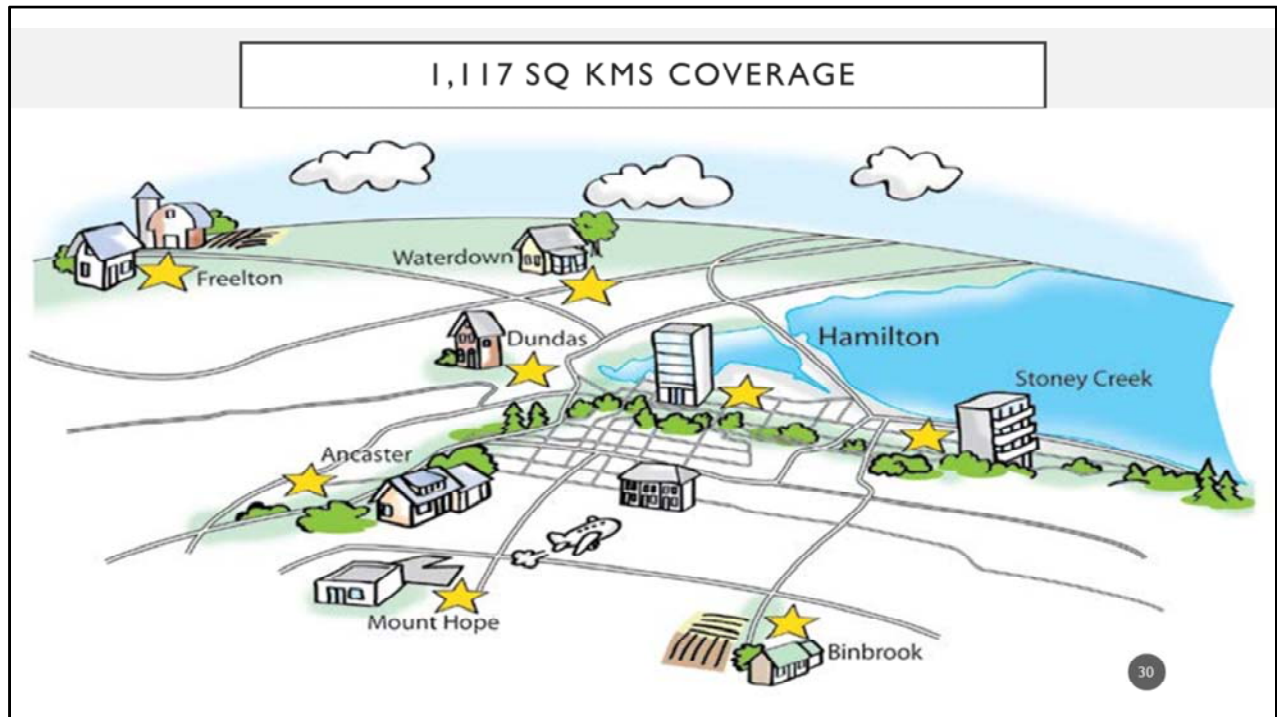


By looking at the function of the location that is the passenger's destination we can determine the various volumes of rides by purpose.



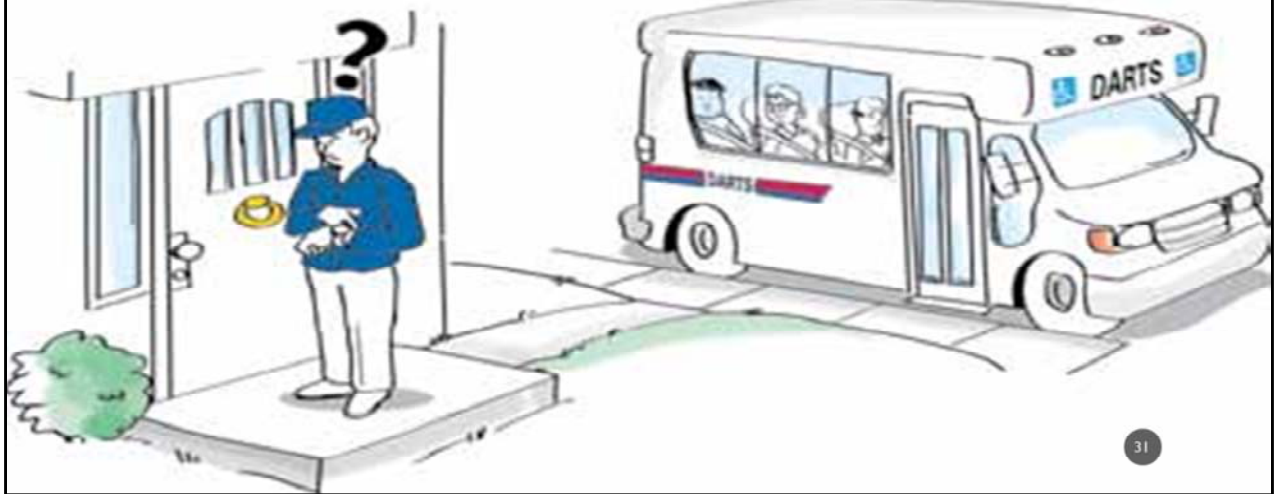
Passengers exclude themselves from various vehicles for sometimes trivial reasons, making it more difficult for DARTS to schedule rides for these passengers should the only vehicle available be the one they have excluded themselves from.

Exclusions should be tightly controlled with medical rationale to avoid issues of no rides available for these passengers.



DARTS covers over 1000 sq kms of service area.
Long trips are difficult to carry out productively.
Passengers are also often on board for more than hour if involved in a cross region trip.

LATE CANCELLATIONS



Drivers are required to wait 5 minutes at all locations for passengers. If a passenger no-shows, this adds to the travel time of passengers waiting on the bus and the wait time of passengers waiting for the bus down the road.

There really is no reason for a passenger not to at least call DARTS to cancel the ride as these types of cancellations are a waste of service.

REAR - END ACCIDENTS



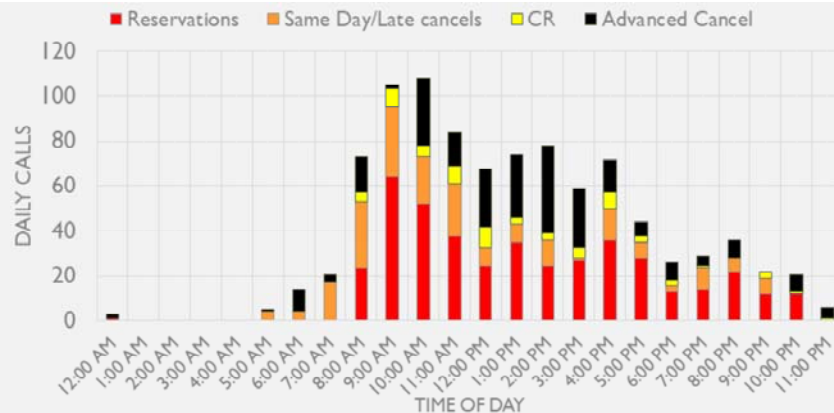
DARTS vehicles are often rear-ended as DARTS vehicles stop at railway tracks and yellow lights (5-6/month).

Accidents with passengers on board require EMS to attend to ensure that the medical condition of the passenger is recorded. This often makes passengers on board late for appointments.

DARTS vehicles travel approximately 3.5 million kms a year of city streets.

Our CVOR rating is currently 18.

REDUCE CANCELLATION CALL TRAFFIC



33

The red bars are new reservation calls.

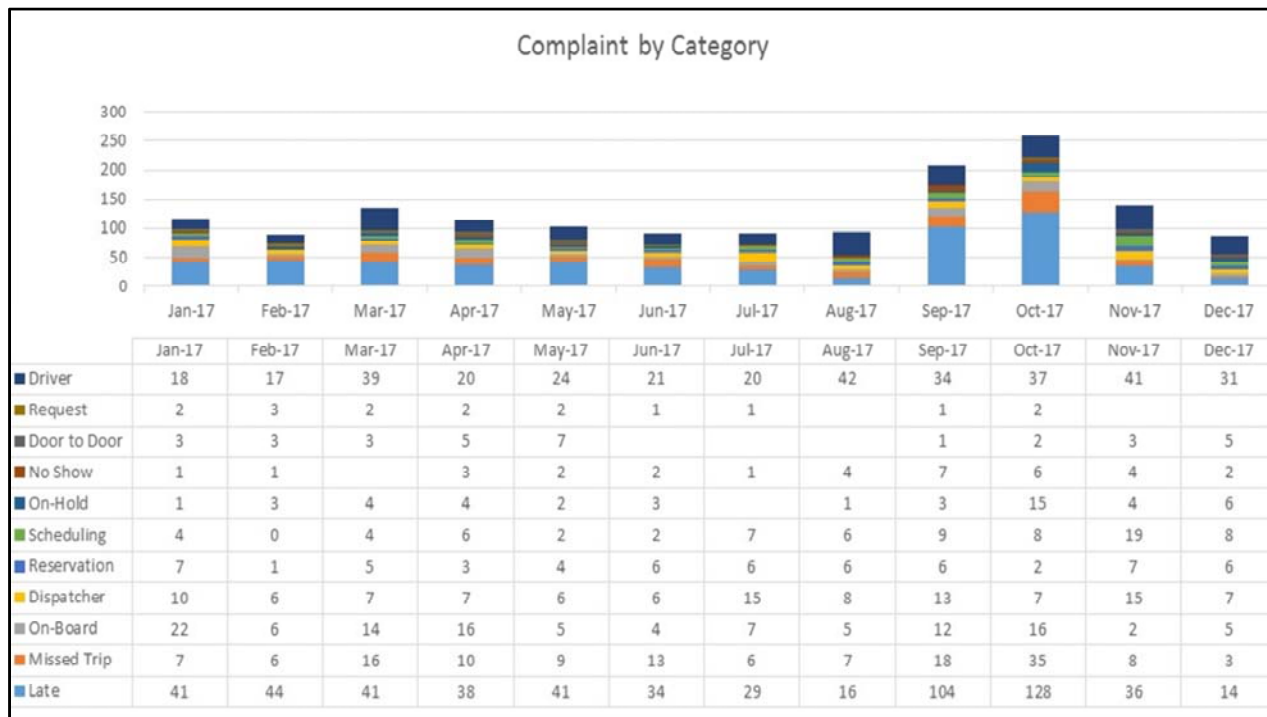
The peach coloured bars are for calls to cancel trips on the day of service.

The yellow bars are late cancel calls and same day trip modifications. The black are advance cancellation calls.

Reducing the late cancellation calls will reduce the demand on the call centre.

Assuming the reason that people are cancelling is caused by a change in plans, we want to reduce the time between booking and service time to as small a period as possible.

To do this people have to have the confidence that they will not be put on a waiting list when they call. This is our goal. To reduce long term booking by ensuring there is enough service to meet demand



This is a slide of the complaint spectrum for 2017. Note the highest levels are with drivers and late rides.

DARTS had a service upset in late September with a malfunctioning database server that caused complaints to double in October.

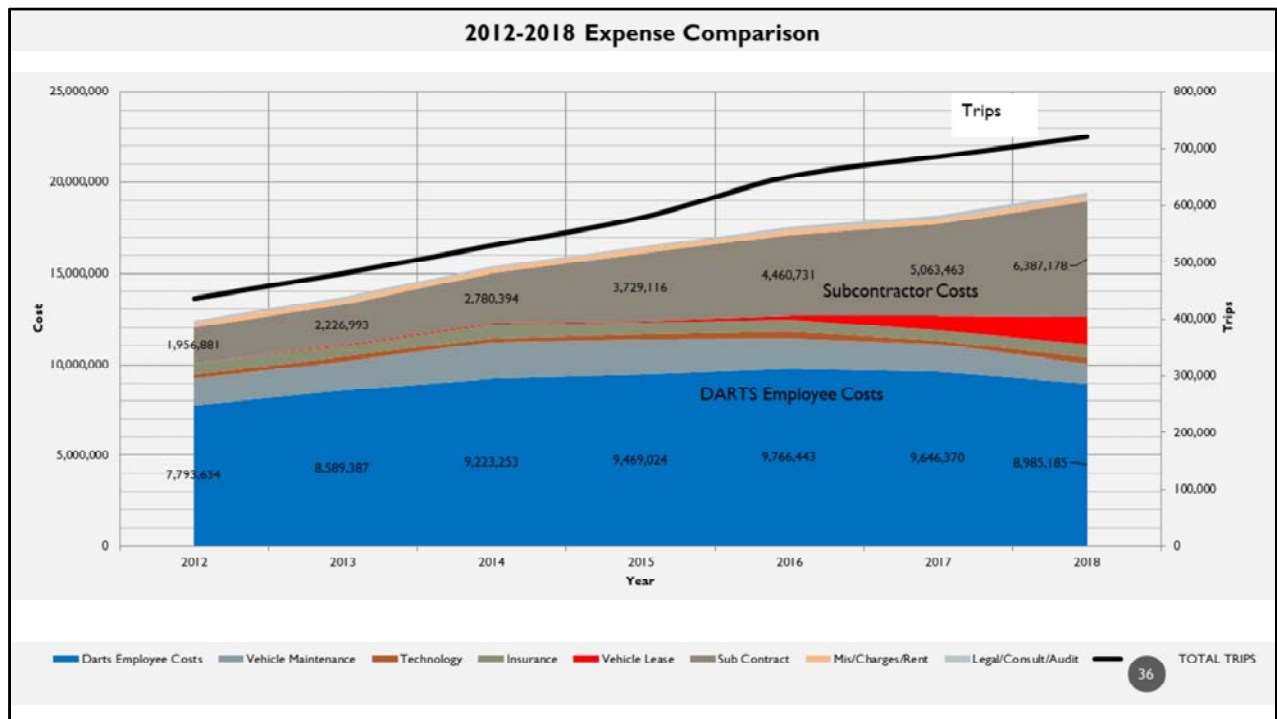
Complaint levels have since recovered to about 2.2 Complaints per 1000 passenger trips.

ADDRESSING 2017-2018 COST PRESSURES

- Lease transfer to DARTS - 1.2 million
- Lease terms shortened to 3 years from 5 years – higher lease costs
- Bill 148 impact on subcontractors/DARTS
 - 20% increase in sub contractor wage
 - Sick days for DARTS
- CUPE Contract – Reduction of bus hours/Increase in van hours
- MV/Promaster Vs Bus productivity –Dwell times
- Requested 5 % service increase

35

This is a summary of the active issues at DARTS with respect to the cost of the service.



Expense Issues/Changes:

- Note the transfer of vehicle assets from the city to DARTS since 2015 (red).
- DARTS employee costs have declined with the reduction of buses in the fleet.
- DARTS subcontractor costs have increased with the increased use of subcontractors.
- Maintenance costs have reduced with the reduction of the higher maintenance bus fleet.

VEHICLE PRODUCTIVITY RATES			
Bus	Promaster	MV	Van
<ul style="list-style-type: none"> • 2.33 - 2017 • 2.35 - Request • 2.35 - Proposed 	<ul style="list-style-type: none"> • 2.03 - 2017 • 2.25 - Request • 2.05 - Proposed 	<ul style="list-style-type: none"> • 1.84 - 2017 • 2.20 - Request • 2.00 - Proposed 	<ul style="list-style-type: none"> • 2.30 - 2017 • 3.00 - Request • 2.50 - Proposed

- The city is requesting that we perform the requested trips based on unrealistic productivity levels given the issue with passenger load/dwell times experienced in 2017.
- Above are the more realistic load times proposed by DARTS.
- If required to attempt to perform these requested productivity levels, DARTS will have a significant variance at the end of 2018.

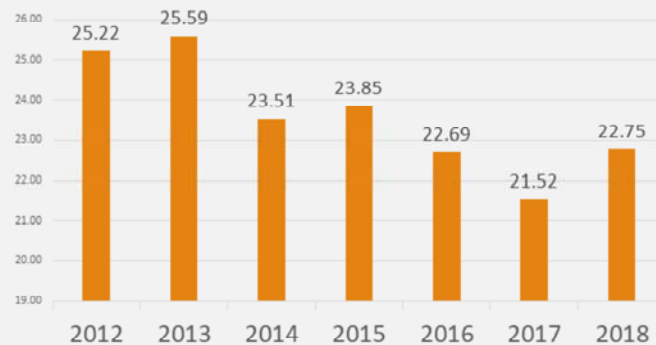
COST PER TRIP



38

With the reduction in bus fleet and the increased use of smaller vehicles, DARTS cost per trip is lower than the cost experienced 6 years ago (2012).

Driver Average Hourly Wage



Different vehicles have different wage rates – Fewer buses/more vans at lower wage rates

39

There are different wage rates for the various vehicles.

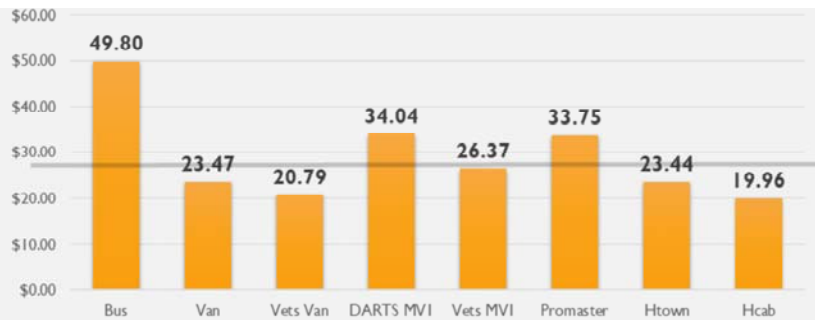
- In 2017, Promaster and bus drivers were paid \$24.65/hr
- In 2017, MV-1 driver wage was \$20.05
- In 2017, the van wage was \$17.80

The switch to smaller vehicles and the reduction in the bus fleet impacted the average DARTS driver 2017 wages negatively.

To see the effect, the total hours worked for the various years, divided by the total wages paid in that year, shows an average driver wage has gone down from a high in 2013 of \$25.59 to a 2017 average of \$22.75.

The effective reduction in wages has substantially impacted the morale of the DARTS driver workforce.

• 2017 Choice of Provider/Vehicle Trip Cost



40

- Shown here is the average cost per trip in the 2017 budget of the various DARTS and subcontractor trip costs.
- Note the high of \$49.80 for bus and the low \$23.47 for Darts Van

2018 WORK PLAN

- Reach a Collective Agreement
- Reduce denials to zero
- Improve on-time statistics
- Reduce passenger reliance on advance booking
- Reduce time in reservation queue < 5 minutes
- Hardware/software upgrades – system security and performance
- Work with HSR-Reduce chronic late cancelations

Above are the action items outlined in the 2018 draft version of the DARTS Business Plan.