



SUBWAY SERVICE IMPROVEMENTS – OCTOBER 2014

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We will improve the way we manage the existing service.

- ✓ Improve end terminal operations – decrease blocking back
- ✓ Improve train throughput - decrease regulating across the line
- ✓ Improve end to end journey times – decrease service changeovers



SCHEDULE CHANGES



End Terminal Improvements

- New schedule includes double step backs in peak periods at Kennedy, Kipling, and Finch, and Downsview in the PM peak (AM peak at Downsview is single step back)
- Keeping deadheads away from the terminals by removing trains from service at Pape (AM post-peak), Lawrence (AM post-peak) and Wilson (AM and PM post-peak)

Capacity Improvements

- Add two trains to AM and PM peak on Lines 1 and 2

Adjust Running Time

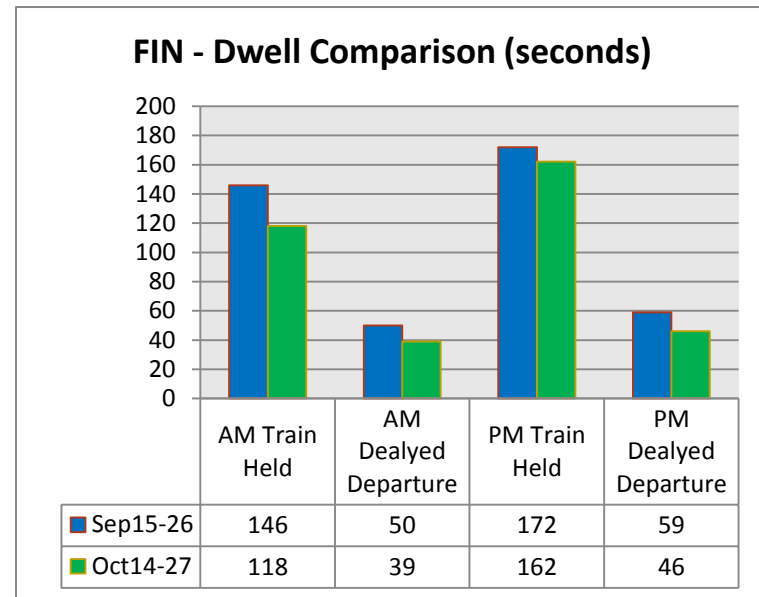
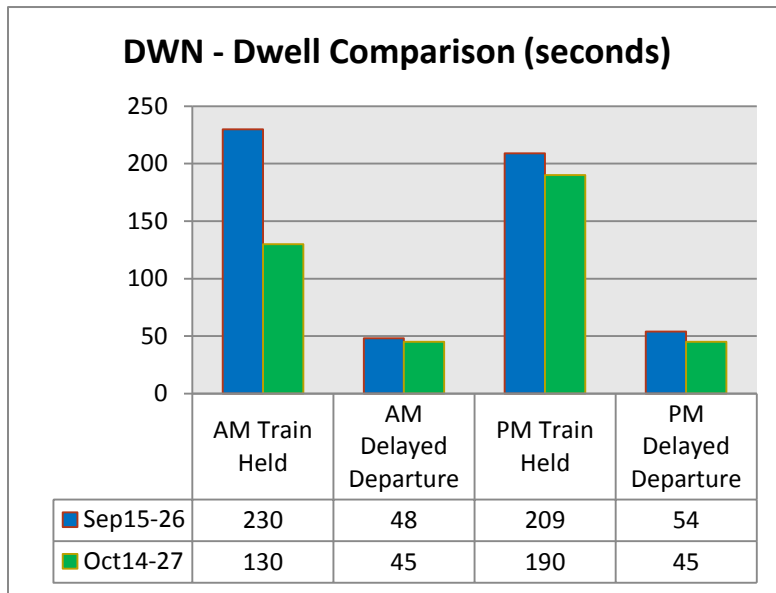
- Increase round trip running time by 4:42 in AM and PM peaks



INITIAL RESULTS – REDUCING CONGESTION



- ✓ Decrease End Terminal Congestion – Line 1



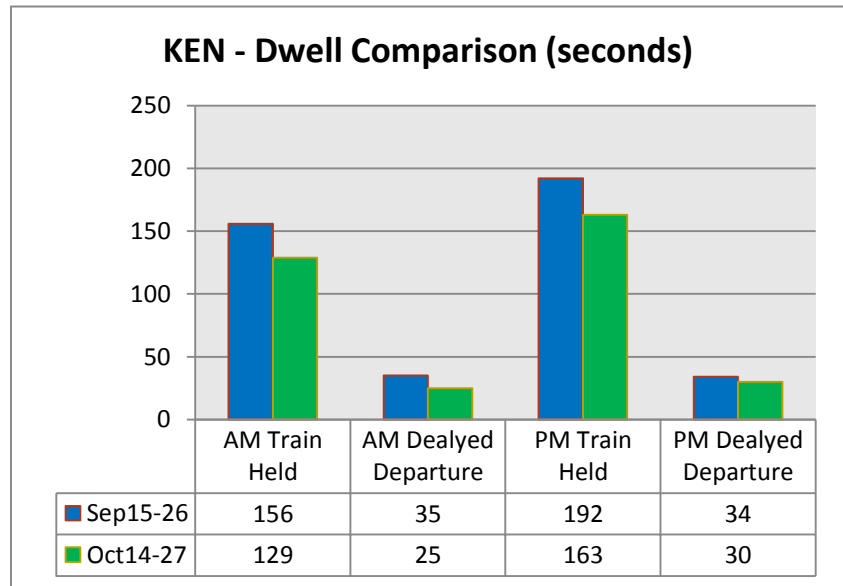
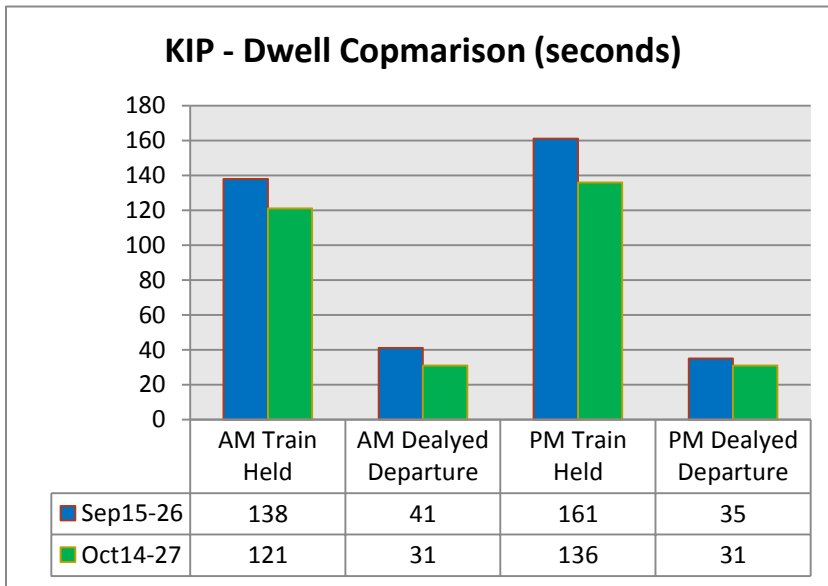
- ✓ Dwells improved by 37% (AM) and 11% (PM) at Downsview
- ✓ Dwells improved by 20% (AM) and 10% (PM) at Finch



INITIAL RESULTS – REDUCING CONGESTION



- ✓ Decrease End Terminal Congestion – Line 2



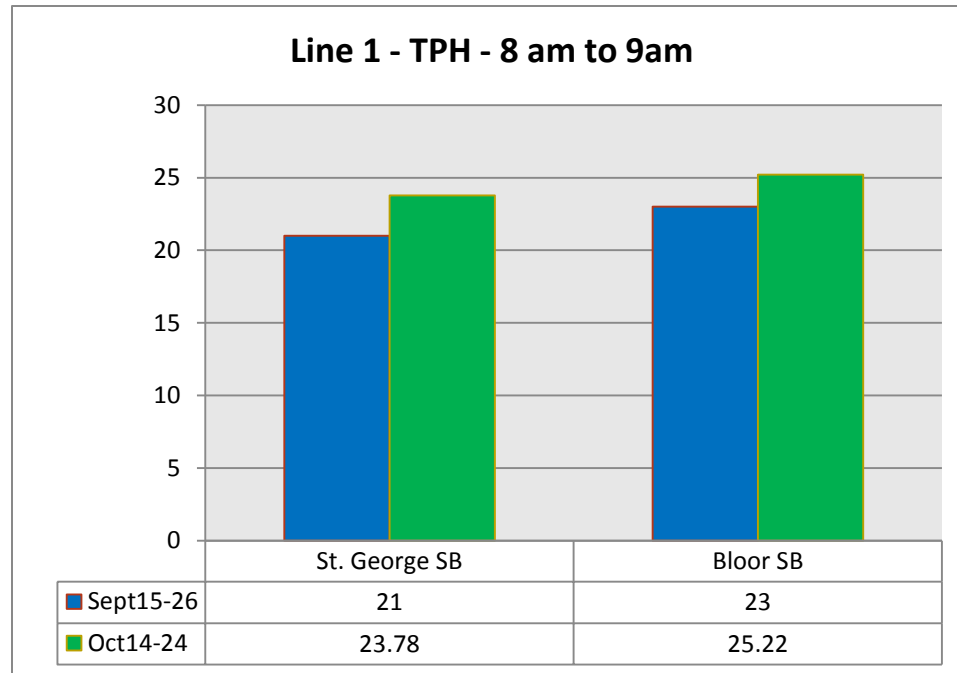
- ✓ Dwells improved by 15% (AM) and 15% (PM) at Kipling
- ✓ Dwells improved by 19% (AM) and 15% (PM) at Kennedy



INITIAL RESULTS – IMPROVE CAPACITY



- ✓ Improve Line Capacity (TPH) Peaks – Line 1



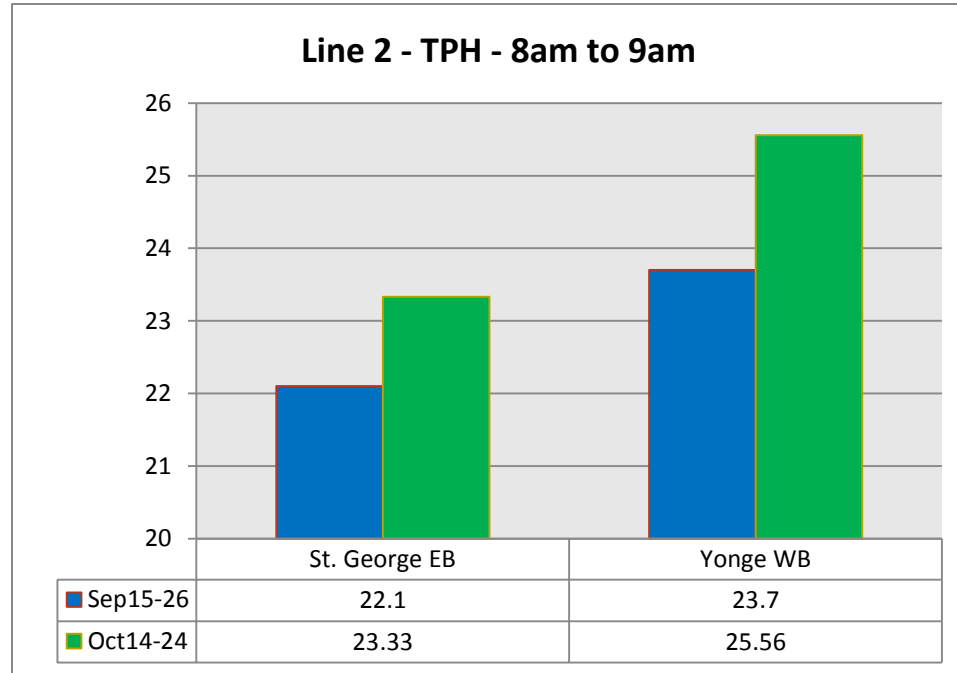
- ✓ Average throughput improved by 2.2 trains per hour or 10% at Bloor SB. This is an improvement of approximately 2640 customers per hour.
- ✓ Average throughput improved by 2.8 trains per hour 13% at St George SB. This is an improvement of approximately 3360 customers per hour.



INITIAL RESULTS – IMPROVE CAPACITY



- ✓ Improve Line Capacity (TPH) Peaks – Line 2



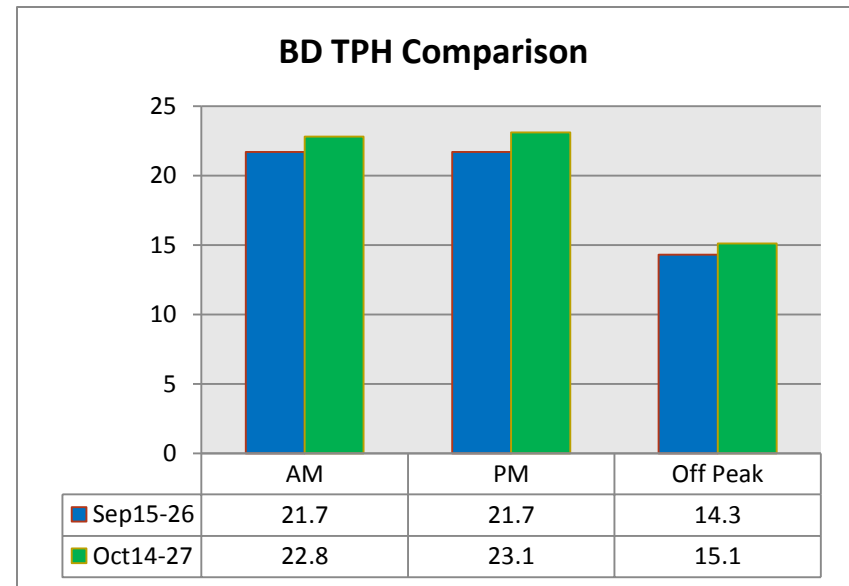
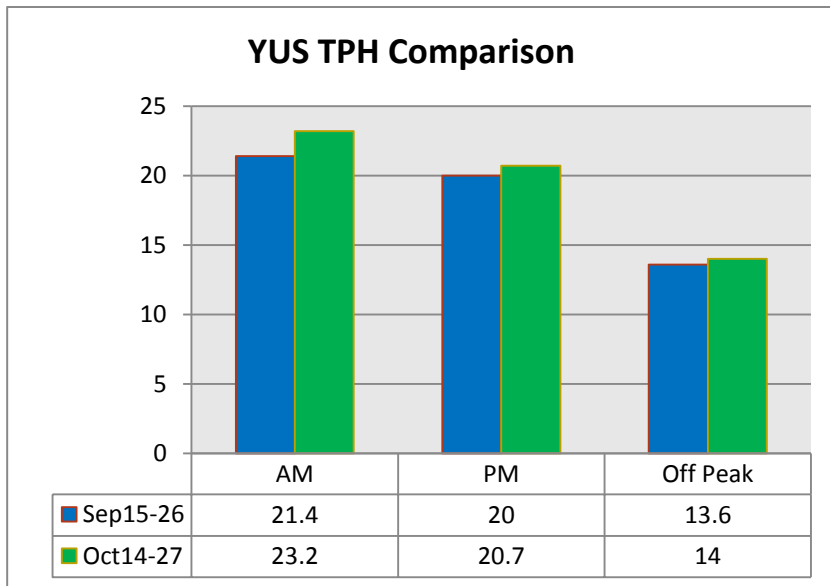
- ✓ Average throughput improved by 1.2 trains per hour or 6% at St George EB. This is an improvement of approximately 1200 customers per hour.
- ✓ Average throughput improved by 1.9 trains per hour or 8% at Yonge WB. This is an improvement of approximately 1900 customers per hour.



INITIAL RESULTS – IMPROVE CAPACITY



- ✓ Improve Overall Line Capacity (TPH) – Line 1 and Line 2



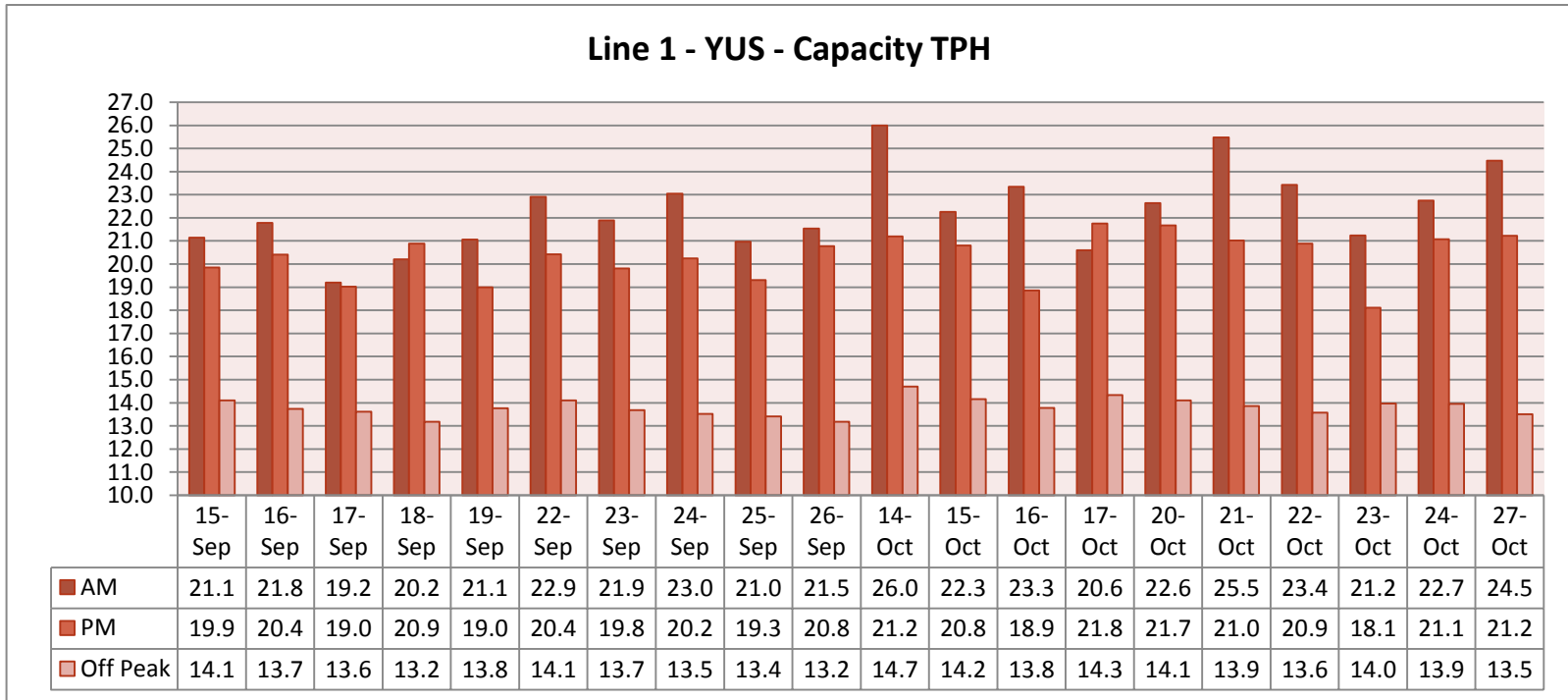
- ✓ Average throughput improved by 8% (AM) and 4% (PM) on Line 1
- ✓ Average throughput improved by 5% (AM) and 6% (PM) on Line 2



INITIAL RESULTS – IMPROVE CAPACITY



- ✓ Improve Line Capacity (TPH) – Line 1



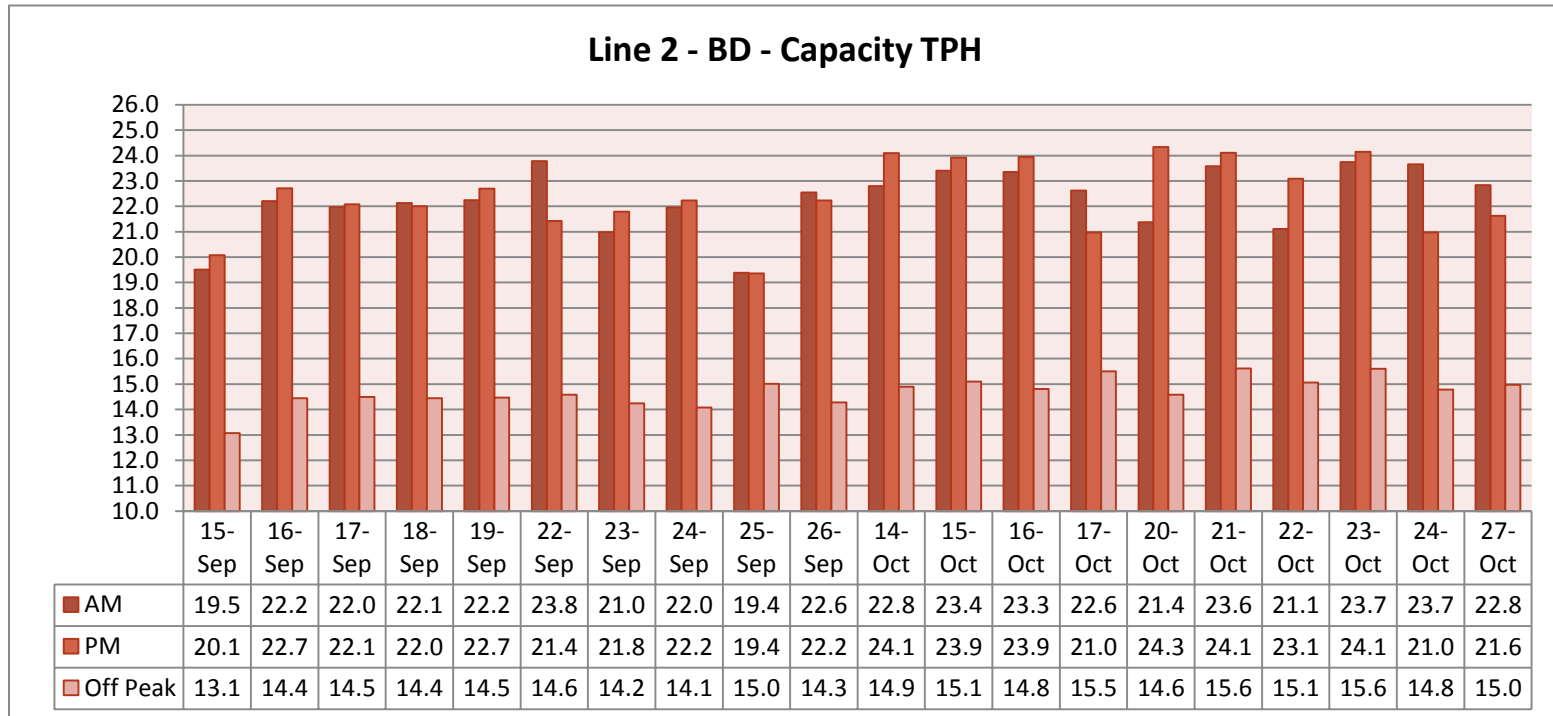
- ✓ Highest AM average TPH in sample period was 23 – exceeded that 5 times in 10 days on new schedule.



INITIAL RESULTS – IMPROVE CAPACITY



- ✓ Improve Line Capacity (TPH) – Line 2



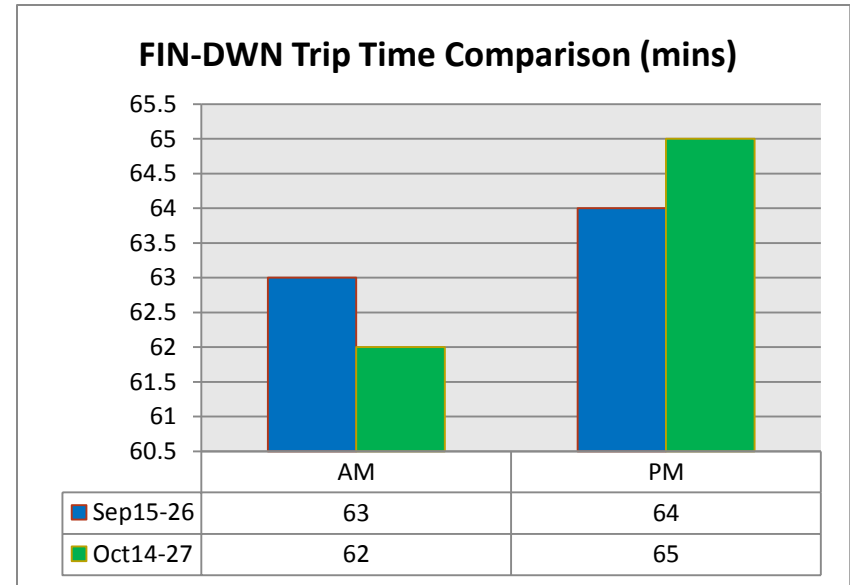
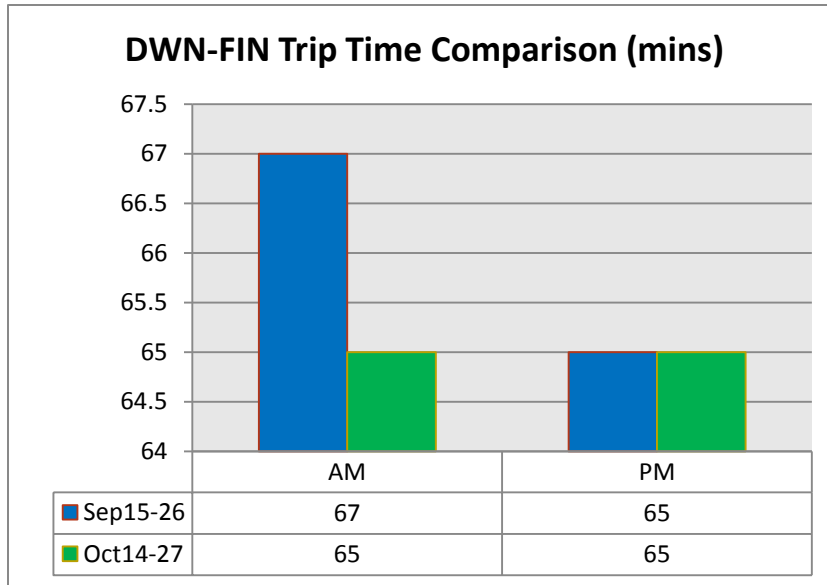
- ✓ Highest PM average TPH in sample period was 22.7 – exceeded that 7 times in 10 days on new schedule.



INITIAL RESULTS – DECREASE TRIP TIME



- ✓ Improve Trip Time –Line 1



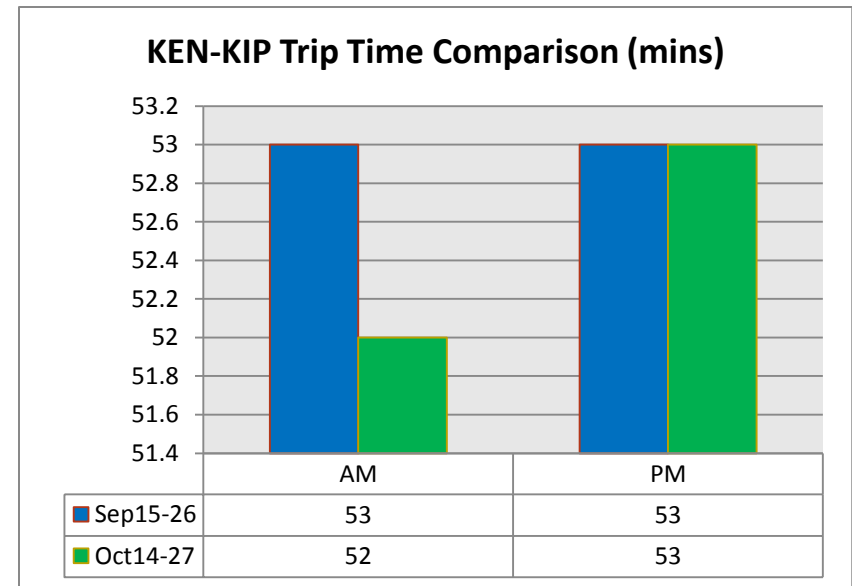
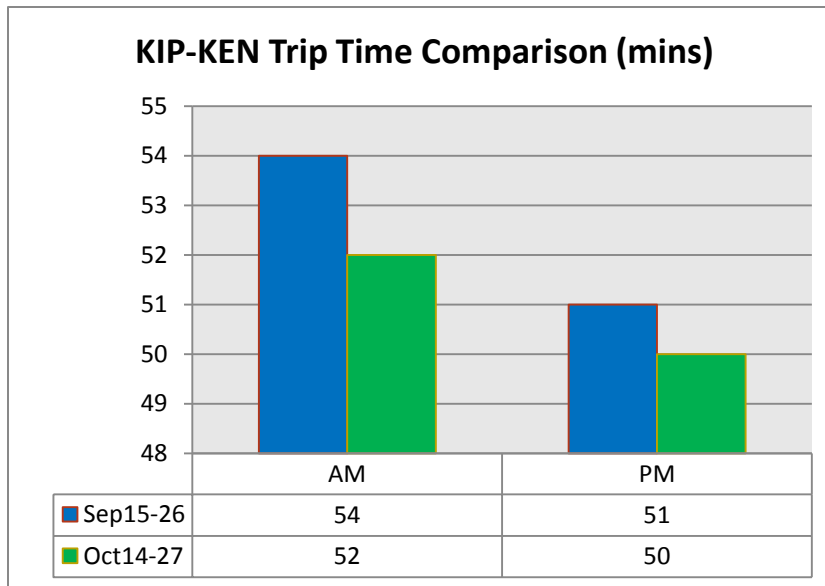
- ✓ Trip time improved by 2 minutes or 3% in AM and remained unchanged in PM for Downsview to Finch
- ✓ Trip time improved by 1 minute or 2% in AM and increased by 1 minute or 2% in PM for Finch to Downsview



INITIAL RESULTS – DECREASE TRIP TIME



- ✓ Improve Trip Time –Line 2



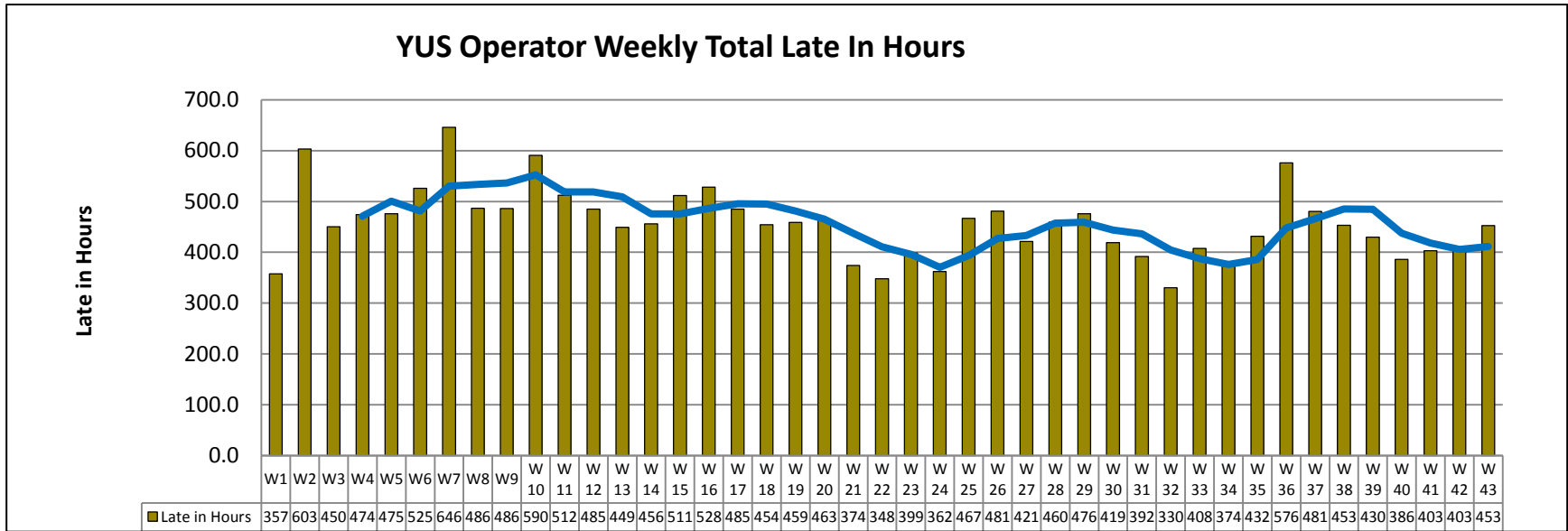
- ✓ Trip time improved by 2 minutes or 4% in AM and 1 minute or 2% in PM for Kipling to Kennedy
- ✓ Trip time improved by 1 minute or 2% in AM and remained unchanged in PM for Kennedy to Kipling



BENEFITS - LATE-IN OVERTIME



- ✓ Decrease Late Running – Reduce Service Changeovers – Reduce Overtime Costs



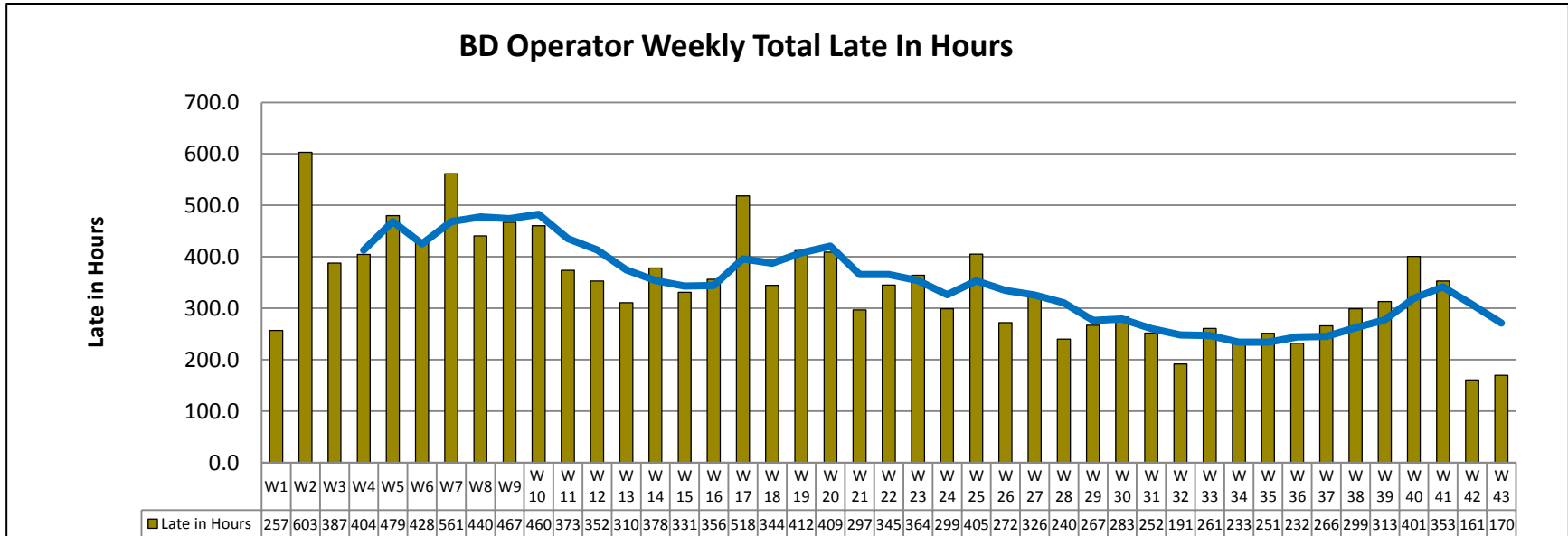
- ✓ Wilson late-in overtime for weeks 42 and 43 was 403 and 453 hrs, only down an average of 13.5 hours from sample period, but below the year-to-date average of 456 per week.



BENEFITS – LATE-IN OVERTIME



- ✓ Decrease Late Running – Reduce Service Changeovers – Reduce Overtime Costs



- ✓ Danforth late-in overtime for weeks 42 and 43 was 161 and 170 hrs, down an average of 190.5 hours – average weekly overtime savings of \$12 203.43



ANTICIPATED FURTHER BENEFITS



- ✓ Customer satisfaction will increase
 - ✓ Less full line changeovers
 - ✓ Less blocking back towards end terminals
 - ✓ Less regulation along the line

- ✓ Operator morale
 - ✓ Extra step back in peaks gives operators another couple of minutes
 - ✓ Finishing late has consistently been one of the biggest complaints

- ✓ Reduction in signals passed at danger incidents (decreased traffic towards end terminals)
 - ✓ Initial results are favourable, but still too early to tell if trend will hold





Identify further opportunities for service improvements for February 2015 boards

- Further enhancements to Line 1 schedule
- Improve off-peak weekday service levels and service resilience
- Improve Saturday and Sunday service levels

