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#NoNewCops #ServiceHike: Governor's Police Money Could Also Hike Train Service 15%

\$249 million could increase midday and weekend subway frequency by 15%, saving millions of riders valuable time, cutting crowding, and making the subway a more effective way for New Yorkers to access their city

In September 2019, Governor Cuomo [announced](#) that the MTA would hire 500 additional MTA police officers deployed to New York City Transit. The Citizens Budget Commission [estimated](#) **the police hire would cost more than \$56 million in the first year**. In November, the MTA projected a new expense of \$249 million for police officers over its four-year budget cycle.

Concerned about how this unnecessary outlay would impact the city's nearly 6 million daily straphangers, the Riders Alliance, New York's grassroots organization of public transit riders, prepared an analysis of how much additional subway service the MTA could run for the same price. **The governor's police money could pay for a 15% increase in midday and weekend subway service.**

To arrive at this conclusion, we first assumed the additional service would run outside of the traditional rush hours, which are Monday through Friday, 6:30 am to 9:30 am and 3:30 pm to 8 pm. During rush hours, nearly all subway trains are in use and therefore adding more service would most likely require major capital investments.

For the purposes of this analysis, the Riders Alliance therefore looked at the cost of increasing service during weekdays between rush hours, what the MTA calls "midday," from 9:30 am to 3:30 pm Monday through Friday. We also looked at the cost of increasing weekend service, between the hours of 6 am and 8 pm on Saturday and Sunday. We did not examine increases in evening or overnight subway service at any point during the week, between 8 pm and 6 am, nor did we study bus service.

After establishing our time parameters, we moved to estimate the cost of off-peak subway service. We extrapolated a 5-day-per-week subway roundtrip cost of \$206,250 from a 2018 subway service increase when the MTA [added](#) (pdf p. 186) 16 additional weekday subway roundtrips at a cost of \$3.3 million. By that metric, \$56 million could pay for 271 additional 5-day-per-week subway roundtrips.

Next, we used data [aggregated](#) from current MTA timetables to determine existing off-peak subway service frequencies. See Table 1 below (tph = trains per hour).

TABLE 1 - Current Midday and Weekend Subway Frequencies

Line	Midday tph	Weekend tph	Line	Midday tph	Weekend tph
1	10	10	D	6	6
2	8	7.5	E	8	8
3	7	7.5	F	8	8
4	8	7.5	G	6	6
5	7	7.5	J/Z	6	6
6	15	7.5	L	10	10
7	12	12	M	6	6
A	6	8	N	6	6
B	6	N/A	Q	6	6
C	6	6	R	6	6

Then we increased the MTA's official midday and weekend train frequencies by 15%. Doing so would require an additional 257 roundtrip equivalents. Each midday roundtrip is based on five-day-per-week service for the weekday off-peak period. Each weekend roundtrip we counted as 2/5 of an equivalent weekday roundtrip because each weekend roundtrip runs two days per week not five. See Tables 2 and 3 below for total and additional trains per hour.

Table 2 - Total Midday and Weekend Subway Service Frequencies With 15% Increase

Line	Midday tph	Weekend tph	Line	Midday tph	Weekend tph
1	11.5	11.5	D	6.9	6.9
2	9.2	8.625	E	9.2	9.2
3	8.05	8.625	F	9.2	9.2
4	9.2	8.625	G	6.9	6.9
5	8.05	8.625	J/Z	6.9	6.9
6	17.25	8.625	L	11.5	11.5
7	13.8	13.8	M	6.9	6.9
A	6.9	9.2	N	6.9	6.9
B	6.9	N/A	Q	6.9	6.9
C	6.9	6.9	R	6.9	6.9

Table 3 - Additional Midday and Weekend Trains Per Hour With 15% Increase

<u>Line</u>	Midday tph	Weekend tph	<u>Line</u>	Midday tph	Weekend tph
1	1.5	1.5	D	0.9	0.9
2	1.2	1.125	E	1.2	1.2
3	1.05	1.125	F	1.2	1.2
4	1.2	1.125	G	0.9	0.9
5	1.05	1.125	J/Z	0.9	0.9
6	2.25	1.125	L	1.5	1.5
7	1.8	1.8	M	0.9	0.9
A	0.9	1.2	N	0.9	0.9
B	0.9	N/A	Q	0.9	0.9
C	0.9	0.9	R	0.9	0.9

Calculating the Cost of Additional Subway Service Equivalent to the Cost of New Police

- 1) Total additional midday trains = new midday trains per hour (22.95) * 6 hours = **137.7**

Note 1: Midday hours = Monday through Friday 9:30 am to 3:30 pm

- 2) Total additional weekend trains = new weekend trains per hour * % * 14 hours = **118.86**

Note 2: Weekend trains are multiplied by % because the known cost of additional subway roundtrips is for weekday roundtrips that run five times each week while weekend roundtrips run only twice each week.

Note 3: Here, weekend hours = Saturday and Sunday 6 am to 8 pm

- 3) Midday trains (137.7) + Weekend trains equivalent to weekday trains (118.86) = **256.56**

- 4) 256.56 roundtrips * \$206,250 per roundtrips = \$52,910,000 < \$56,175,825 (for police)

Finally, the Riders Alliance analyzed the benefit for riders, in terms of increased frequency of service, or by how much running 15% more trains would reduce the typical wait time between trains.

See Tables 4 and 5 below, where 'tbt' = time between trains. Old frequencies on the left reflect current service levels. New frequencies on the right are what the governor's police money could pay for in terms of subway service.

Table 4 - Comparison: Current Midday Frequencies vs. Midday Frequencies with Increased Frequency

Line	Old midday tbt	New midday tbt	Line	Old midday tbt	New midday tbt
1	6	5.25	D	10	8.5
2	7.5	6.5	E	7.5	6.5
3	8.5	7.5	F	7.5	6.5
4	7.5	6.5	G	10	8.5
5	8.5	7.5	J/Z	10	8.5
6	4	3.5	L	6	5.25
7	5	4.5	M	10	8.5
A	10	8.5	N	10	8.5
B	10	8.5	Q	10	8.5
C	10	8.5	R	10	8.5

Table 5 - Comparison: Current Weekend Frequencies vs. Weekend Frequencies with Increased Frequency

Line	Old weekend tbt	New weekend tbt	Line	Old weekend tbt	New weekend tbt
1	6	5.25	D	10	8.5
2	8	7	E	7.5	6.5
3	8	7	F	7.5	6.5
4	8	7	G	10	8.5
5	8	7	J/Z	10	8.5
6	8	7	L	6	5.25
7	5	4.5	M	10	8.5
A	7.5	6.5	N	10	8.5
B	N/A	N/A	Q	10	8.5
C	10	8.5	R	10	8.5

Conclusion

More frequent trains would reduce crowding and enable the subway to carry more passengers. With each and every train capable of carrying 1,000 - 1,500 riders, the 15% increase in service studied here could potentially carry over 300,000 additional riders every day. With such high volumes of subway riders, each minute saved in transit multiplies very quickly.

By reducing crowding, more frequent service would also make subway travel much more comfortable for existing riders, who all too often put up with packed trains not just during rush hours, but between them and on the weekend as well. And more frequent trains, with shorter wait times and less crowding will make the subway system safer for New Yorkers too.

In sum, Governor Cuomo faces a stark choice between hiring 500 new police officers OR significantly improving service on New York's subway system. A 15% boost in subway service would save precious minutes for millions of riders, reduce chronic overcrowding, and make the subway a safer and more effective way to get around.