Metrolinx's Slide/Comment	SaveTPARK Questions	Metrolinx Responses
Page 3: Decision History – Summary	What supportive evidence does Metrolinx have for the overall timeline provided?	This timeline aligns with information in the Ontario Line Initial Business Case and the Ontario Line Preliminary Design Business Case - both are available on metrolinx.com. The site selection process ran through the back half of 2019, through all of 2020, and concluded in early 2021 with the "Hybrid option".
Page 3: Decision History – Summary – August 2019 to February 2020	Please confirm that to form the "long list of sites (9)", absolutely no site in the west met the criteria of "orientation, site access, proposed development, use and height of buildings, landscape and site character"?	Confirmed. See responses in relevant sections below. Of note, Exhibition Place was the only location that was large enough for the MSF on the west end, but was not factored into the long list given it was going to fail much of the criteria.
	What does Metrolinx define "use and height of buildings" to be?	Height and land use are used as two of many factors when determining population and employment density. This is cross-referenced with data in the City of Toronto Employment Survey.
Page 3: Decision History – Summary – Winter/Spring 2020	What does "advance design" mean? What support do you have to support Metrolinx worked on an "advance design"?	The word advance is in reference to progressing the design. During this time period the technical team progressed the design for the preferred MSF site at the time. At that stage Metrolinx consulted with engineers, architects and utility providers to identify the pros and cons of building the facility.
Page 3: Decision History – Summary – Spring/Summer 2020	Who specifically at the City of Toronto was consulted and what authority did they have to consult on this matter?	To ensure the City of Toronto's interests are reflected in transit expansion plans, the City established the Transit Expansion Office (TEO) division. The division is the City's single point of contact for all City divisions, the TTC, Metrolinx and other government bodies to coordinate transit expansion projects and transit-related processes. As part of the planning for the Ontario Line, Metrolinx meets regularly with TEO staff to review the benefits and challenges across the alignment, including options for the MSF site, and to

		receive input. There are provincial policies in place to protect lands designated as Core Employment or General Employment areas to accommodate for population growth and where new jobs will be located in Toronto, when planning developments, such as Ontario Line are contemplated. For more information, please refer to A Place to Grow: Growth Plan for the Greater Golden Horseshoe (Ontario's Growth Plan 2019) and the City of Toronto's "Our Plan Toronto". The TEO also connects Metrolinx with various other divisions of the City of Toronto such as planning, real estate, and Toronto Economic Development, that would have had line of sight into the MSF site selection. The decision on the "hybrid option" was made by Metrolinx alone, following the criteria outlined, but Metrolinx did factor in feedback received by other parties, such as the City of Toronto.
	Which large employers were consulted? How many do each employ?	The large employers in the Wicksteed area were consulted. If there was the ability to relocate them within the region, Metrolinx would have pursued that option, but after consultations it was determined there was too high a risk to job losses to pursue the option further.
	Who specifically at the City and the Province "agreed that job losses would be too severe if Wicksteed site is used"? What information was this decision based on?	Concerns were raised about potential job losses at Wicksteed by both levels of government, which was further confirmed by Metrolinx's consultation with those businesses. When Metrolinx looked at other options, those were discussed at working groups with City staff. Based on the analysis that was conducted by Metrolinx, consultants and City staff, the decision to proceed with the hybrid option was then formally escalated through joint leadership committees for endorsement. The decision was based on business and community

		impacts, as well as the feasibility, complexity and costs for each option.
	What is the estimated job losses at the Wicksteed option? Is the losses based on the estimated 800-900 listed in Option 1 – Wicksteed on page 8?	Using the Wicksteed site could cause a direct job loss of 800 to 1050 jobs (depending on the exact boundaries of the MSF) which are increased further as a result of the ripple effect in the manufacturing industry, resulting in additional indirect job losses in the Greater Toronto Area. The supply chain for the associated businesses at Wicksteed could have as much as a an 8x multiplier on indirect jobs.
	"Reached agreement" – who was this agreement with? With whom specifically? What existing and planned employment was taken into account?	This refers to an agreement within and between Metrolinx, Infrastructure Ontario and the City of Toronto to re-assess the MSF location. Existing/planned employment was estimated from various sources, including existing land use, the City of Toronto official plan, Transportation Tomorrow Survey (TTS), and the annual City of Toronto employment survey.
Page 3: Decision History – Summary – August 2020	Which options were costed? Please share costing analysis.	At the conceptual design stage, high level cost estimates were developed. The purpose of this exercise was to provide an order-of-magnitude comparison between options to flag any potential major cost differences/risks for the project should the option be selected.
Page 4: Determining the MSF Study Area	Are the criteria listed in order of priority?	No. The criteria are to be taken together in their totality that assisted Metrolinx in determining the viability of each site and ability to mitigate any negative impacts.

	Regarding land size needed, in your April 8th news release announcing the selection of the MSF site, Metrolinx stated that it needed a site that is 175,000 square meters. This size has been mentioned on numerous other occasions by Metrolinx. In your April 2021 presentation named "Ontario Line: Thorncliffe Park, Flemingdon Park and Science Centre", Metrolinx stated that a site of 140,000 square meters is needed. In both situations, Metrolinx stated the land size was equivalent to 24 soccer fields. BMO field is 7,140 square meters (24 = 171,360 square meters). Wembley is 7,245 square meters (24 = 173,880 square meters). Given that Metrolinx consistently has used 24 soccer fields, SaveTPARK has utilized 175,000 square meters. Please confirm the size needed? Please confirm, when long listing sites, what size criteria was used?	Metrolinx used 175,000 square metres as a baseline surface area, which represents an estimate of the size needed to house 44 trains at opening with expansion of 10 additional trains for future ridership growth. No site was ruled out because it was smaller or larger than that number because we first tested whether through creative design, we could accommodate the required 44 train capacity. The 24 soccer fields measurements, approximately 170,000 sqm, is representative of the approximate size required to meet long-term Ontario Line Fleet needs (54 trains), which protects for future line expansions. The previously quoted 140,000 is the minimum MSF site size needed for opening day (44 trains). Again, those are approximate numbers and that depending on the shape/configuration of a site, it may be able to be engineered to utilize less space. Note, a site's feasibility is also determined by the shape and location of the site, the type of design it can accommodate, the connection available to the mainline, and its designation for development by the City of Toronto (the City). For example, a site's size may make it appear to be a viable option, but it may not be feasible because the shape does not allow for the efficient storage and movement of the trains, or the grade may be too steep, or it may be located in an area designated by the City for economic or residential development. A preferred site should have a low (flat) grade, be rectangular in shape (as opposed to square-shaped sites, which require inefficient loops and switchbacks), and not be in an area designated by the City for economic or residential development. To create the longlist of potential sites, surface size was used as a proxy for the detailed layout and geometry considerations considered by technical staff.

		Area was reported in previous materials for reference only, with the understanding that design and geometry are important caveats when considering a site's suitability over another.
	"Impacts to planned residential" was avoided – was impacts to existing residential considered?	Existing and planned land uses of realistic and feasible MSF site options, including residential sites, were assessed and then a study area was identified to develop, evaluate, and refine more detailed MSF designs. The hybrid MSF location does not impact any current or planned residential units.
	What is the definition of "community impacts/benefits"? What is the definition of "environmental impacts"?	An environmental impact is any negative or positive change to the environment as a result of a redevelopment project. Community impacts or benefits may be assessed by looking at the social, economic or cultural impact or benefit of the project.
Page 5: Why not West End?	Are you confident that there are absolutely no options in the West End? What size criteria was used to filter sites? The Science Centre site was long listed in the North End and it only has a land size of 85,076 square meters. Are there no sites in the West End that fit the criteria that resulted in the Science Centre being long listed?	The west end is an example where the nearest potential MSF sites would be 5-10 kilometres away from the Ontario Line mainline. The connection track guideway from a west end MSF to the mainline would not be able to avoid direct impacts to high density residential uses protected by the City of Toronto's official plan.
	What is the definition of "already densely developed area"?	The area is characterized by some of the highest density uses (particularly high-density residential land uses) in the City outside the downtown core, along with narrow public rights-of-way.

Page 6: Why the North End?	What specific lands were considered "large tracts of land" in the North End?	"Large tracts of employment land near the mainline" refers to the areas on which the long list MSF site options are located; for instance, the Wicksteed, Overlea, Wynford, and Railside sites.
	Was land "zoned for employment" an important determinant?	Yes, land zoned for employment or institutional uses was given priority, as the project team wanted to avoid displacing residents.
	"Adjacent large properties that can be easily assembled" – please identify which large properties are being referred to here?	Properties in lands which are zoned for employment are typically larger in footprint than properties in residential or mixed-used zones; larger footprints allow side-by-side properties to be assembled (combined) more easily.
	How did you know at this stage that the opportunity to construct the connection track would be on the surface or elevated and hence reducing costs?	Metrolinx confirmed that the Ontario Line design would run on an elevated guideway through Thorncliffe Park in mid-2019, as documented in the Ontario Line Initial Business Case. Don Mills Road and Overlea Boulevard are unique along the corridor because their right-of-way width is very wide (30-36 metres vs 18-20 metres through other parts of the city that the Ontario Line will serve). Above ground tracks and stations are more cost effective and can be built more efficiently than tunnels, but they are only possible where the street can accommodate them without property acquisition.
	When comparing your comments on Page 5 to Page 6 – there was absolutely no option in the West End compared to the North End. Was there a predisposed bias to locate the MSF in the North End?	As mentioned, Exhibition Place was looked at, but quickly dismissed as it would not meet the criteria for a variety of reasons. No other sites in the west were deemed practical; the choice to locate the MSF in the North end was based on the criteria outlined to the community (Size, Proximity to transit line, land use, growth considerations, community impacts, environmental considerations, and property costs).
Page 7: Site assessed for size and nearness to new subway line	Please confirm the ideal size for the MSF. Is it 175,000 or 140,000 square meters?	The land sizes used for the screening process are only guidelines. Ultimately, each site has to be evaluated individually. Please refer to our earlier response regarding the importance of site layout and geometry in determining whether a potential MSF site can feasibly accommodate storage for the required

<table>
<tr><td></td><td></td><td>number of trains. Due to the requirement for an efficient layout and site geometry (i.e. site shape), as well as the nature of the yard's connection to the mainline, Metrolinx cannot give a single figure for ideal site size/surface area in square metres.</td></tr>
<tr><td>Page 8: Options</td><td>Based on measuring the geographical depictions by Metrolinx of Option 1 through Option 9 – the area for each option is as follows:
(See Appendix 2 on page 17 for Area Measurement)
If 175,000 square meters or 24 soccer fields is the ideal size, only 3 of the above long listed options meet this criterion.
Why is the Science Centre on the long list of sites when it is only approximately 85,000 square meters?
If the Science Centre made the long list of sites for the North End, are there no sites that could make the list from the West End?
<table><tr><th></th><th>Area (Square Meters)</th></tr><tr><td>Option 1 - Wicksteed</td><td>188,018</td></tr><tr><td>Option 2 - Overlea Blvd</td><td>147,420</td></tr><tr><td>Option 3 - Leaside</td><td>408,600</td></tr><tr><td>Option 4 - Flemingdon Hydro Corridor</td><td>124,680</td></tr><tr><td>Option 5 - Science Centre</td><td>85,076</td></tr><tr><td>Option 6 - Celestica</td><td>167,779</td></tr><tr><td>Option 7 - Wynford</td><td>168,970</td></tr><tr><td>Option 8 - Railside</td><td>349,795</td></tr><tr><td>Option 9 - Greenwood Yard</td><td>147,848</td></tr></table></td><td>Please refer to our earlier response regarding the importance of site layout and geometry in determining whether a potential MSF site can feasibly accommodate storage for the required number of trains. Due to the requirement for an efficient layout and site geometry (i.e. site shape), as well as the nature of the yard's connection to the mainline, Metrolinx cannot give a single figure for ideal site size/surface area in square metres.

Please refer also to our earlier comments regarding sites in the west end and why they are not suitable due to land use conflicts, narrower public rights-of-way, and distance from the mainline.</td></tr>
<tr><td>Page 8: Option 1 - Wicksteed</td><td>For this area, what is the supporting evidence for the 800-900 jobs?
Metrolinx noted that the Wicksteed option conflicted with various plans and studies
– why were these important for you adhere to?</td><td>The jobs figure was drawn from the City of Toronto Employment Survey (2019).

Metrolinx strongly prefers to adhere to the City of Toronto's land use planning policies, including its Official Plan vision for where development should and should not occur as well as area-specific policies such</td></tr>
</table>

		as the Laird in Focus study, whenever and wherever possible.
	Based on research, there are over 200 businesses that operate out of 40 Beth Nealson Dr storage location – were these businesses included in your analysis?	We used the City of Toronto Employment Survey to identify businesses operating out of the area. While some businesses may use storage space at 40 Beth Nealson, they are not considered to be headquartered there.
	Is "future train storage needs", referring to the additional 10 trains referenced on Page 7?	Yes, this is referring to the potential for 10 additional trains.
	The "removal of road connection between Thorncliffe and Leaside" was referenced as a concern – were underpasses considered?	Yes; however for the purposes of the evaluation, it was assumed that this wouldn't be feasible for cost, environmental, constructability, and potential safety issues for a 600-700m long road tunnel.
	Please provide the names of the "several large industrial employers"? Are these Canadian or Foreign companies? What assurances did Metrolinx receive from these companies that their jobs will stay long term?	The large industrial employers are listed on the site map on Page 8 of the presentation to the community.
	"Impact to goods movement corridor and rail crossing" was noted as a concern – is the Wicksteed site not 100% on the east side of the CP Rail line and therefore would not impact the CP Rail line?	The closeness of the MSF to the CP Rail line poses potential impacts to rail line operations both during construction and operation phases of the MSF. Additionally, during the short list refinement phase, concepts for the Wicksteed site required a portion to the west of the CP Rail line as well.
Page 9: Option 2 – Overlea Blvd	With the setbacks to hydro towers and height restrictions to power lines, not much can be built within a hydro transmission corridor. Therefore, it is not realistic to insinuate that the hydro transmission corridor will provide 62,000 square meters of space. It only provides approximately 20,000 square meters as measured in SaveTPARK in the Hybrid Option. Excluding the hydro transmission corridor, Option 2 - Overlea site area is 127,416 square meters – if the land size needed is 175,000	Tracks can be run under the hydro corridor, but there are limits on storage and permanent building structures required for the MSF. Therefore, the area was considered as a potential location for more flexibility in the design. See note on size, shape and connection above.

	square meters, how is Option 2 – Overlea Blvd large enough for the immediate and future train storage needs?	
	For this area, what is the exact supporting evidence for the 700-1100 jobs?	The jobs figure was drawn from the City of Toronto Employment Survey (2019).
	What expansion opportunities is Metrolinx referring to?	Metrolinx needs to plan for the future as the GTHA is expected to grow by nearly 10 million people by 2041. To accommodate for the projected growth, and to anticipate potential expansions or extensions of the Ontario Line in the future, Metrolinx was originally looking for a site that could be expanded in the future. With the Hybrid Option we have selected, there is no need for future expansion as it can accommodate future needs.
	What does “neutralize” mean to Metrolinx?	"Neutralize north side of Overlea Blvd" refers to the use of the entire north frontage of Overlea for MSF purposes, thus preventing potential future development of residential or commercial properties which could front onto Overlea.
Page 10: Option 3 – Leaside	For this area, what is the exact supporting evidence for the 400 -1,850 jobs? Which businesses were included?	The jobs figure was drawn from the City of Toronto Employment Survey (2019). Precise boundaries of MSF options within the overall "Leaside" area varied, leading to the range of jobs impacted reported.
	What are the feasibility challenges to crossing the CP rail? If the Ontario Line on Overlea Blvd is already elevated, why is it not feasible to cross over the CP tracks? Is surface crossing not feasible?	The challenges are mainly due to the location of the hydro corridor; the overhead hydro lines require the Ontario Line to be lower down, closer to ground level. This would have required the Ontario Line to cross underneath the CP corridor (rather than above) and at an angle, increasing the risk of soil settlement above the tunnel. The shallow depth of the CP crossing, unknown soil conditions (vs tunneling in rock downtown), and strict safety limits of settlement along rail lines make this option not feasible. Further, the

		corridor is under federal jurisdiction and therefore beyond the province's power to expedite an agreement in time. Surface or level crossing of the CP tracks with automated and unattended train operations is not possible as it would require the heavy rail operations to stop to accommodate the Ontario Line or alternatively delay the transit operations.
	If this area is 408,600 square meters, how does this land size lead to a "less ideal layout for train operations"?	The basic area requirement is met, but the connection track and shape (see notes above) are not ideal. The note on irregular shaped parcels is flagging a potential issue with the large, irregularly shaped land parcels that could make designing an efficient yard layout more challenging. Note that this option was picked for further evaluation at this phase in the assessment.
	If only 175,000 square meters is needed, why would the Canada Post distribution site be impacted?	Along the same lines as the earlier responses related to size, the area shown for Option 3 is indicative of a range of potential lands that an MSF could occupy at that site. As with Option 2, in the long list a much larger area was shown, but the final design was optimized to minimize community impacts and setback from the street (Overlea Boulevard for Option 2 and Laird Drive for Option 3). This optimized design for Option 3 would have impacted the Canada Post distribution site.
Page 11: Option 4 – Flemington Hydro Corridor	Why was this option contemplated? As previously stated, with the setbacks and height restrictions, not much can be built within a hydro transmission corridor. Was this site really an option given these challenges? It should be noted that the site area for this option is 124,680 square meters and Metrolinx has considered this site not large enough.	This option was originally included because its rectangular land shape and proximity to the Ontario Line mainline made it a potential candidate, but it did not pass beyond the long list phase and was screened out.

Page 12: Option 5 – Science Centre	Why was this option contemplated? The site area was only 85,076 square meters and the Science Centre is a tourist destination that would negatively impact students from across the GTA. This site should not count as an option.	This option was originally included because its zoning and proximity to the Ontario Line mainline made it a potential candidate, but it did not pass beyond the long list phase and was screened out.
Page 13: Option 6 – Celestica	Another positive aspect of this site, is that it is located at the end of the Ontario Line.	An end-of-line MSF is actually less desirable from an operations perspective. Each morning trains are dispatched throughout the 15.6 kilometre line to ensure a more even service during "ramp-up" and gives the operator more flexibility to take trains out of service in between peak periods. The TTC benefits from mid-line yard storage at their Wilson, Greenwood, and Davisville yards to achieve the same objectives. GO's Don and Willowbrook maintenance yards are similarly located to improve the efficiency of shifting from peak to off-peak service levels.
	The site area is 167,779 square meters – with this land size, why is this site not large enough for future train yard needs, especially when Option 2 – Overlea was considered large enough?	This is another example of where size isn't the only factor when determining capacity and operational efficiency. At this location, compared to Site 2 Overlea, the square shape of the site would result in a very inefficient use of space and it would be challenging to fit the opening day train storage needs, let alone futureproof for growth.
	It should be noted that the above does not depict entire Celestica site. It is 230,032.76 square meters based on Geowarehouse property database. Why was the entire Celestica site not contemplated Metrolinx's geographical outline?	The boundaries shown are indicative. The project team considered the site as a whole, taking into consideration the valley slope to the west of the site.
	Why was this site screened out and not short listed? Is it because it is owned by a wellconnected wealthy developer and political donor?	Locating an MSF on one of the four corners of what will be one of the busiest transit interchange stations in the country was not advisable from a planning perspective. It is estimated that by 2041, approximately 5,800 people will be using Science Centre Station during the busiest travel hour. Less than half of that number are transfers between Line 5 and Ontario Line, the majority being walk-ins from the neighbourhood and bus connections. The success of

		this project relies on supporting population growth at the station itself.
Page 14: Option 7 – Wynford	For this area, what is the exact supporting evidence for the 2,100 jobs? The land size is 168,970 square meters – why is this site not large enough for train yard needs? For the Celestica site, it was stated that that site was not large enough for future train storage needs but ok for existing train yard needs – option 7 is relatively equal to the Celestica site. Why the discrepancy?	The jobs figure was drawn from the City of Toronto Employment Survey (2019). As discussed in previous comments regarding MSF size versus layout and geometry, yard surface area/size is not the only determinant of whether a yard can feasibly accommodate the required fleet size. In the case of Wynford, the site geometry is highly irregular, leading to an inefficient layout that is insufficient to accommodate storage needs.
Page 15: Option 8 – Railside	For this area, what is the exact supporting evidence for the 1,600 jobs? Even though this site area is 349,795 square meters, the potential development along Lawrence will be neutralized? How does this make sense in context when only 175,000 square meters is needed?	The jobs figure was drawn from the City of Toronto Employment Survey (2019). The possibility for neutralization of development potential along Lawrence was dependent on final facility/yard layout.
	Why was this option carried forward and not Option 6 – Celestica? Given the distance from the mainline and associated costs, seems like this option does not make any sense.	As previously discussed, Option 6 - Celestica significantly reduces the potential for population growth in the immediate vicinity of one of the busiest transit stations in the country, and cannot be considered a sound planning decision. Although Option 8 - Railside poses additional costs due to distance from the mainline, the large size and rectangular shape of the site allow for flexibility in determining an efficient layout, as well as compatible land uses.

Page 16: Option 9 – Greenwood Yard	Was the train yard located in the community before or after residents? When is the TTC abandoning the Greenwood Yard? Noted that the Greenwood Yard is 147,848 square meters; however according to Metrolinx, will be constrained for future expansion.	Greenwood Yard was opened with Line 2 Bloor-Danforth in 1966. The community around the yard long preceded its construction. TTC currently has no plans to cease operations at Greenwood Yard and the cost to construct TTC a new replacement yard was included as one of the many reasons this site was not advanced beyond the short list.
Page 17: Long-list Screening Summary	In a previous Metrolinx documentation, it was stated that "sites 4 to 9 were removed on the basis of the professional judgement of the project's transit specialists" – what criteria and analysis was this professional judgement based on? Was any in depth analysis completed before this judgement call was made?	See rationale provided in the previous pages of the May 27 presentation and clarifications offered in this response. Sites 4 to 9 were removed on the basis of the site's ability to accommodate the required fleet size, its distance to the mainline, and land use considerations.
Page 17: Long-list Screening Summary – Distance from Mainline	How is Wicksteed option 190m from the mainline? Is it not adjacent?	When the long list was assessed, the mainline was travelling along Overlea for its entire length, consistent with the Initial Business Case (2019). The route was shifted to its current location after weighing the technical challenges of crossing the alignment under the Hydro corridor further east at Don Mills as well as assessing the additional community impacts east of Beth Nealson. The short list evaluation reflects the current mainline alignment.
Page 17: Long-list Screening Summary – Space for 10 Trains	Overlea is 147,420 square meters and it is stated that it has the space for 10 more trains. Celestica, Wynford and Greenwood Yard site area is equal or greater than Overlea and it is stated that these three locations do not have enough space for 10 more trains – how can it be summarized that Overlea has enough space when it is smaller than these three options?	See responses above regarding yard capacity considerations. Yard capacity is heavily influenced by site geometry and layout (shape), not solely on the basis of size.
Page 20: Shortlist Evaluation Summary – Strategic	Surface Transportation Impacts: Site 1 – Wicksteed – Are underpasses not feasible? The Ontario Line is already elevated in this area, why is it not feasible to cross over the CP tracks?	All MSF options are assumed to be at ground level with the mainline ramping down to grade. Site 1 would therefore require permanently closing the north leg of Beth Nealson and east leg of Wicksteed Ave. A 600-700 m road tunnel would be required which was not considered to be feasible for cost, safety, constructability, and pedestrian/cyclist experience

		reasons. The location of the hydro corridor and the overhead hydro lines require the Ontario Line to be lower down, closer to ground level. Therefore the Ontario Line would have to cross underneath the CP corridor (rather than above) and at an angle, increasing the risk of soil settlement above the tunnel. The shallow depth of the CP crossing, unknown soil conditions (vs tunneling in rock downtown), and strict safety limits of settlement along rail lines make this option not feasible. Further, the corridor is under federal jurisdiction and therefore beyond the province's power to expedite an agreement in time
	Business Impacts: How is the "8 fold indirect" multiple derived at for Site 1 - Wicksteed and Site 3 – Leaside? Is this number substantiated with an in depth analysis of each businesses vendors, customers, suppliers, etc.? It is arbitrary to apply a multiple in the absence of proper analysis. Site / Area (Square Meters) / Jobs per Metrolinx / Jobs When Equating Site Area to 175,000 Square Meters* Option 1 - Wicksteed / 188,018 / 900 / 838 Option 2 - Overlea Blvd / 147,420 / 1,100 / 1,306 Option 3 - Leaside / 408,600 / 1,900 / 814 Option 8 - Railside / 349,795 / 1,600 / 800 Option 9 - Greenwood Yard / 147,848 / - / - * calculated by 900 / 188,018 x 175,000 = 838	As noted earlier, additional analysis was undertaken to understand the "flight risk" of businesses that would be impacted by any one option. Prior to stakeholder outreach, the Project Team referred to the 2019 City of Toronto Employment Survey, which collects business name, sector, and employment numbers (full and part time) annually. The jobs impacted in the Wicksteed industrial area are mostly manufacturing involved in the production of specialized products. The high cost of land within Toronto and a dwindling supply of large lots zoned for heavy industry and close to highways presents a significant risk of permanent relocation of some or all of these businesses outside the region, province, or country. The 'employment multiplier' is an industry standard practice to quantify the ripple effect of employment lost by sector on the economy. For example, the closing of a manufacturing business and retail store, which each employ 100 people, would result in a direct job loss of 100 people from each facility. However, closing the manufacturing business would cause a higher indirect jobs lost (almost seven times greater than closure of the retail business) because

		manufacturing production has more linkages and would ripple more widely throughout the job market. Estimates vary by jurisdiction and research body but all hover around 1:8 ratio for 'durable' manufacturing such as those located in the Wicksteed industrial park. In contrast, retail job losses have a much smaller impact, in the range of 1:1 to 1:2.
	Why is there not a multiple not being applied to Site 2 - Overlea? Are there no indirect jobs to the businesses in Overlea?	Based on the 2019 Toronto Employment Survey, over 90% of employees potentially displaced by Option 2 are service or retail with a multiplier of less than 2. While the number of businesses that would need to be relocated are much higher than Site 1, the type and size of businesses impacted significantly reduces the risk of permanent closure. Further, Metrolinx has committed to assisting each and every business and service impacted by the Ontario Line in Thorncliffe Park to relocate within or near the community with appropriate compensation for any interruption in service.
	What site area are these jobs based on? Are all the employers listed in the geographical area accounted for?	Estimated employment impact based on the site boundaries identified in the preceding pages of the May 27 presentation using the City of Toronto Employment Survey (2019).
		Job numbers cannot be directly scaled up or down on a per-square-metre basis to compare sites. Job density

	In an attempt to equate the job numbers given the material variance in the site areas, the job numbers are as follows:	per unit area varies significantly on the basis of employment category (for instance retail, commercial office, commercial services, warehousing, manufacturing), building height, etc. We used real data in our calculations based on potential jobs impacted. Additionally, as previously discussed, the size of an MSF site cannot be fixed at any specific number of square metres for comparison, as the efficiency of a site also depends on its shape and the nature of its connection to the mainline.
	Community Impacts: What major impacts did you identify for Site 2 – Overlea?	As outlined on Page 9, this included major impacts to the neighbourhood, commercial businesses, institutions and industrial business as well as limitation to future commercial and residential development on the north side of Overlea Boulevard. Furthermore, as the site selection process advanced, the project team underwent a thorough socio-economic assessment to document the unique role the business community plays in the broader Thorncliffe Park neighbourhood. This was done to ensure that the decision-makers at Metrolinx were presented with the full picture of the challenges should Site 2 be selected, and the need to ensure mitigation strategies are implemented to minimize these impacts.

	Environmental Impacts: It is noted that Site 9 – Greenwood was a "former landfill site" and requires "extensive remediation" – 40 Beth Nealson Dr located in the Site 1 – Wicksteed was a former landfill site as well. Does it not require extensive remediation as well?	Yes, any former landfill site would require environmental remediation. However, the entirety of Site 9 - Greenwood was a former landfill site, as opposed to only a portion of Site 1 - Wicksteed (i.e. 40 Beth Nealson Dr), resulting in lower remediation costs as compared to Site 9.
Page 20: Shortlist Evaluation Summary – Financial	What does the triangle denote? Why does Site 9 – Greenwood have three triangles?	Triangles indicated an upward arrow representing the order-of-magnitude cost premium over the other alternatives evaluated. For Site 9 – Greenwood, this was largely due to the cost of relocating TTC maintenance operations to another site.
Page 20: Shortlist Evaluation Summary – Deliverability and Options	Constructability: For Site 2 – Overlea, what "additional hydro corridor crossings" is being referred to? What is the impact of "additional hydro crossings"?	This refers to the additional track crossings below the hydro corridor during regular operation of the MSF. While Metrolinx is not of the opinion that crossing electric trains under high voltage transmission lines poses a significant conflict to Hydro One's operations, each crossing requires close consultation and negotiation of access agreements, which pose a risk to the schedule of the Ontario Line construction.
Page 21: Refined Shortlist Options	What specific "additional design work" was undertaken?	To allow a more detailed assessment of the benefits and costs of Options 1 and 2 carried forward from the short list evaluation, the project team completed additional design work. This included laying out the internal track circulation, storage tracks, maintenance buildings, parking, access roads, fence, mainline connection, and the station in Thorncliffe Park. This was required to inform a deeper dive into the costs-benefits of each option – community impacts/benefits, business impacts, noise and vibration, cost, operational challenges, etc. – in order to support decision-makers.

	What “community and environmental impacts” were minimized?	Site 1: The internal layout was revised to pull back the MSF limits from the valley slope. This was based on new information received through geomorphological modelling completed by Metrolinx in consultation with the Toronto Region Conservation Authority (TRCA). Specifically, the findings indicated that the existing developed area abutting the east and north valley limits – which was assumed for the initial MSF design for Site 1 – were non-compliant with current TRCA regulations. This further constrained the site and partially explains why the "Revised Wicksteed Option" shows additional lands west of the CP corridor (for parking). Site 2: Following the findings from the short list evaluation, the project team underwent a multi-disciplinary design exercise with a focus on minimizing the impact to the community and improving the operational efficiency of the option. This resulted in the "hybrid" shown in the presentation that combines pieces of Sites 1 and 2. This was not an easy exercise as this required splitting up the MSF into three pieces, which presents operational challenges with few modern precedents. Adding to the complexity, the three pieces converge at a challenging meeting point with other infrastructure, specifically a 230 kV hydro corridor that serves most of Toronto's electricity, a sensitive valley ecosystem, a federally regulated CP rail corridor, not to mention a myriad of businesses and services with unique places in the community. While the resulting design still could not completely avoid Thorncliffe Park and Wicksteed businesses, it greatly reduced the impacts and provides a sizable buffer from Overlea Boulevard.
	What were the feasibility criteria?	This refers to design criteria, both Ontario Line-specific and general track design and MSF operation requirements. The design criteria specify, for example: the provision of redundancy (i.e. a second or third

		route for trains in/out/through the MSF in the event of a track blockage); maximum grades and turning radii of tracks; storage track length and separation; minimum maintenance facilities; and emergency vehicle/first responder access.
	Based on the geographical depiction, the Revised Wicksteed Option (named Option 10 for this analysis) is 227,897 square meters and the "Hybrid" Option (named Option 11 for this analysis) is 97,312 square meters. (See Appendix # on page ##)	The long rectangular shape of portions of the Hybrid Option MSF design results in a much more space-efficient layout.
	It is noted that the "Hybrid" Option includes, in addition to 1, 2, 4 Thorncliffe Dr and 36 Overlea Blvd, 18 Banigan Dr, 10 Banigan Dr and 4 Banigan. Are these contemplated future expropriations?	This was an earlier sketch for the hybrid option, through optimization of technical requirements the lands required for transit have been minimized since this analysis. That said, we are still confirming property requirements around the MSF site to facilitate timely completion of construction.
Page 22: Options Evaluation Summary	It is noted that the "Hybrid" Option as shown on page 21 includes, in addition to 1, 2, 4 Thorncliffe Dr and 36 Overlea Blvd, 18 Banigan Dr, 10 Banigan Dr and 4 Banigan. The Hybrid Option currently contemplated includes 1, 2, 4 Thorncliffe Dr and 36 Overlea Blvd. When combined with 40 Beth Nealson Dr equates to 111,361 square meters. Are there plans to expropriate more lands in the Hybrid Option?	Same as above.
	It has been stated that 175,000 square meters, equivalent to 24 soccer field is the land size needed. How is Metrolinx able to utilize an area with only 111,361 square meters? A site that is over 36% smaller.	Please refer to our earlier response regarding the importance of site layout and geometry in determining whether a potential MSF site can feasibly accommodate storage for the required number of trains. In particular, the long rectangular layout of portions of the hybrid MSF design result in a much more space-efficient layout.
Page 22: Options Evaluation Summary –	Is underpass not an option for the Revised Wicksteed Option?	Rather than an underpass, it would require a 600-700 metre road tunnel, which was not considered to be feasible for safety, cost, constructability, and pedestrian/cyclist experience reasons.

<table>
<tr><td>Transportation Impacts</td><td></td><td></td></tr>
<tr><td>Page 22: Options Evaluation Summary – Business Impacts</td><td>The Revised Wicksteed Option has a site area of 227,897 square meters compared to the Hybrid Option contemplated of 111,361 square meters. Given the site area discrepancy of these two options, are the jobs numbers comparable? Is the Revised Wicksteed Option job numbers overstated given the site area of 227,897 square meters is more than double the 111,361 square meters Hybrid Option Selected? What is the job number for the Revised Wicksteed Option when only 111,361 square meters of space is utilized?

When equating the site areas, the job numbers are as follows:

<table>
<tr><th>Site</th><th>Area (Square Meters)</th><th>Jobs per Metrolinx</th><th>Jobs When Equating Site Area to 175,000 Square Meters*</th></tr>
<tr><td>Option 10 - Revised Wicksteed Option</td><td>227,897</td><td>1,050</td><td>8</td></tr>
<tr><td>Option 12 - Hybrid Option Selected</td><td>111,361</td><td>700</td><td>1,1</td></tr>
<tr><td colspan="4">* calculated by 1,050 / 227,897 x 175,000 = 806</td></tr>
</table>

(See Appendix 3 on page 27 Area Measurement)</td><td>Job numbers cannot be directly scaled up or down on a per-square-metre basis to compare sites. Job density per unit area varies significantly on the basis of employment category (for instance retail, commercial office, commercial services, warehousing, manufacturing), building height, etc.

In particular, the types of employment primarily impacted by the revised Wicksteed and hybrid options differ significantly. Most jobs impacted by the revised Wicksteed option are industrial, as compared to primarily commercial services, retail, and institutional for the hybrid option.</td></tr>
<tr><td>Page 22: Options Evaluation Summary – Business Relocation Risks</td><td>In the Revised Wicksteed Option, is it not possible to relocate any of the businesses? Do these businesses employ people from within the immediate area?</td><td>Relocation of businesses located in the revised Wicksteed option was considered in Metrolinx's evaluation to be challenging, because of the difficulty in obtaining sufficiently-sized lands for a new industrial employer in the region, and either building new or retrofitting existing industrial facilities. Industrial employers are also sensitively dependent on their</td></tr>
</table>

		supply chain, including proximity to supplier businesses.
	In the Revised Wicksteed Option, is Metrolinx aware that 50 Beth Nealson Dr and 235 Wicksteed Ave recently sold with the transaction closing on May 5, 2021? Is Metrolinx aware that Parkhurst will be closing or relocating their business?	Yes, we are in discussions with the new landowner of 235 Wicksteed Avenue. We have not engaged Parkhurst as there are no requirements to relocate Parkhurst.
	Is Metrolinx aware that the entire lands that Tremco operates out of, within the last year, has been circulated to be sold?	Yes, we are aware. Tremco remains an occupant of these lands. We are in active conversation with Tremco as we are impacting a portion of their location with the selected MSF site.
	Are the Business Relocation Risk comparable when the Revised Wicksteed Option land size is 227,897 square meters compared to 111,361 square meters for the Hybrid Option?	The categories of jobs lost due to selection of the hybrid option site (primarily commercial services, retail, and institutional) are more feasible to relocate within the community as compared to the large industrial employers at the revised Wicksteed site.
Page 22: Options Evaluation Summary - Community Impacts	Is Metrolinx aware that there is strained relationship with the administration of the Mosque located at 4 Thorncliffe Park Dr and the community? The strained relationship commenced in 2017 when the administration purchased 20 Overlea Blvd and attempted to sell 4 Thorncliffe Park Dr. A significant number of members and people within the community disagreed that a functioning Mosque should ever be sold. Administration acquiesced and apparently decided to maintain 4 Thorncliffe Park Dr and 20 Overlea Blvd.	Metrolinx was not aware of the strained relationship you describe. However, through discussions with the administration, Metrolinx was aware that the Mosque currently operates out of both locations.

	Did Metrolinx study the impact of what this train yard placement will have on the economic and social foundation of this already vulnerable community? Is Metrolinx aware that over 30,000 residents, the entire population of Thorncliffe Park, live within 800 meters of the proposed train yard? Was consideration given to the mental and social health and cost of locating a train yard in close proximity to 30,000 people?	Metrolinx is aware that this a vulnerable and underserved community, and this was one of the main drivers outlined in the Ontario Line Initial Business Case to provide transit to this area. The planning principles used in the selection process account for economic and social impacts and the current project implementation process seeks to work closely with the community to ensure that the design and construction of both the MSF and the Ontario Line reduce these impacts.
Page 22: Options Evaluation Summary – Noise and Vibration	The train yard is within 800 meters from 30,000 residents – the entire population of Thorncliffe Park. What additional mitigations have been contemplated?	A comprehensive environmental assessment is underway, as part of the Ontario Line Environmental Impact Assessment Report (forthcoming, early 2022), that examines a wide range of environmental factors and identifies possible solutions for any potential impacts, including those associated with the MSF. We look forward to sharing the proposed solutions with the community in the coming months as we continue to advance our plans. We have been hearing that noise management is of particular interest to this community. A detailed noise and vibration impact assessment is being completed for the Ontario Line (including the MSF site) as part of the Environmental Impact Assessment Report to ensure that potential impacts are identified, and appropriate, site-specific solutions are in place. These commitments will be carried forward into construction and operations contracts. The detailed noise and vibration impact assessment builds upon the Noise and Vibration Environmental Conditions Report, which was completed in 2020 and is available on our website for review. This report

		identified preliminary construction/operations phase noise mitigation measures. Construction noise reducing measures may include, but won't be limited to, performing construction during daytime hours where possible, using equipment compliant with noise level specifications from the Ministry of Environment, Conservation and Parks, and siting construction vehicles and construction laydown and staging areas away from sensitive areas where possible. Other practical steps we take to reduce noise and vibration in residential areas include fitting construction equipment with muffling devices and coordinating construction schedules so that noisy operations do not occur simultaneously. Metrolinx is also designing the facility to meet stringent Provincial noise requirements. Operational noise mitigation measures may include, but won't be limited to, noise barriers and reducing noise at the source (e.g., rail dampers). These mitigation measures will be refined and updated as project planning progresses. To learn more about noise and vibration, please see the Ontario Line Noise and Vibration Info Sheet as well as the Ontario Line Final Noise and Vibration Environmental Conditions Report (Sections 2 and 3 of the report describe how the baseline noise and vibration conditions were determined).
	Was any light mitigation considered?	Potential impacts and mitigation measures relating to light will be included in our Environmental Impact

		Assessment Report. Tools to minimize light may include using visors/shields on light sources, adjusting mounting heights, decreasing source lumens, or dimming light sources so that the work area is safely lit, but changes to light levels in adjacent areas are minimized.
	What additional noise mitigation have been considered?	A detailed noise and vibration impact assessment is being completed for the Ontario Line (including the MSF site) as part of the Environmental Impact Assessment Report to ensure that potential impacts are identified and appropriate, site-specific solutions are in place. These commitments will be carried forward into construction and operations contracts. The detailed noise and vibration impact assessment builds upon the Noise and Vibration Environmental Conditions Report, which was completed in 2020 and is available on our website for review. This report identified preliminary construction/operations phase noise solutions. Construction noise reducing measures may include, but won't be limited to, performing construction during daytime hours where possible, using equipment compliant with noise level specifications from the Ministry of Environment, Conservation and Parks, and siting construction vehicles and construction laydown and staging areas away from sensitive area where possible. Other practical steps we take to reduce noise and vibration in residential areas include fitting construction equipment with muffling devices and coordinating construction schedules so that noisy operations do not occur simultaneously.

		Metrolinx is also designing the facility to meet stringent Provincial noise requirements. Operational noise reducing measures may include, but won't be limited to, noise barriers and reducing noise at the source (e.g., rail dampers). These tools will be refined and updated as project planning progresses. To learn more about noise and vibration, please see the Ontario Line Noise and Vibration Info Sheet as well as the Ontario Line Final Noise and Vibration Environmental Conditions Report (Sections 2 and 3 of the report describe how the baseline noise and vibration conditions were determined).
Page 22: Options Evaluation Summary – Natural Environment	For both options, was the impact that 40 Beth Nealson Dr is a former landfill site considered? Will there be extensive remediation as factored into Site 9 – Greenwood on Page 20? What is the impact to the Don Valley of disturbing a landfill site that has not been disturbed for over 40 years? Landfill sites are generally repurposed for parks and golf courses and other light uses. It would seem a heavy industrial use, such as an MSF, does not fall into this category.	As both sites would impact 40 Beth Nealson Drive, both would require environmental remediation of the former landfill sites to allow for the establishment of MSF facilities. The precedent for an MSF to be placed over a former landfill site exists in the form of the Greenwood TTC Yard.
Page 22: Options Evaluation Summary – Cost	Do you have a side by side comparison of the costs the Revised Wicksteed Option and the Hybrid Option?	A high-level cost estimate was conducted for all short-listed options. This was one of the various factors considered in the site selection analysis.

Page 22: Options Evaluation Summary – Constructability	Do you have a side by side comparison of the constructability of the Revised Wicksteed Option and the Hybrid Option?	A constructability analysis was conducted for the long and short list of sites in order to prepare the detailed site selection analysis.
	Will working within the hydro transmission corridor not present incremental constructability challenges with the Hybrid Option? "Additional hydro corridor crossings" was listed as a negative factor on page 20. Why not listed here?	At this phase of the assessment, Metrolinx had begun to advance the design of the short list candidates. With this information, Metrolinx met with Hydro One to present the design option and obtain better clarity on their requirements and any potential issues that would preclude one option over another. Through these discussions, it was determined that any impacts of the Hybrid Option could be solved through design.
	What precautions will be taken to ensure that important hydro transmission lines servicing a large population will be protected during construction?	Metrolinx is working closely with our partners at Hydro One to ensure the most stringent protocols are followed during construction under this critical component of the City's electricity supply. This is in keeping with the positive relationship Metrolinx has built over the years on other transit projects which interact with Hydro One infrastructure.
Page 23: Current MSF Design	This current design totals 111,361 square meters (See Appendix 4 on page 32 for Area Measurement). On numerous occasions, it was stated that 175,000 square meters or 24 soccer fields was needed. How is it that only 111,361 is needed in the current design?	Please refer to our earlier comment response regarding the importance of site layout and geometry in determining whether a potential MSF site can feasibly accommodate storage for the required number of trains. In particular, the long rectangular layout of portions of the current MSF design result in a much more efficient layout.
	Is Metrolinx doing a staged expropriation process? Are there plans for future expropriations?	Metrolinx acquires properties based on what is absolutely necessarily. Currently, we are focused on the Rolling Stock, Systems, Operations and Maintenance (RSSOM) procurement contract, which includes the MSF. Future property requirements for the Northern Civil, Stations and Tunnel (North Civil) procurement contract, which covers the main transit line, is under technical review and will be finalized at a later date. It's important to note that expropriation is only initiated as a last resort if an agreement will not be reached within the required timelines for the project. Metrolinx's preferred approach is always to negotiate

		directly with owners to reach amicable, mutually beneficial agreements.
	If only 111,361 square meters is needed in a "split site" that is "less efficient" according to Metrolinx, what other sites along the line have been overlooked under the premise that the land size needed to be 175,000 square meters?	Metrolinx has conducted an extensive research and evaluation process to identify potential MSF sites along the Ontario Line, focusing on accessibility from the mainline and compatible land uses. The figure of 175,000 square metres was not used to pre-emptively exclude any potential sites from consideration.
	"Further design work was undertaken to optimize the area to limit impact to commercial area" – what work was done to limit the social and mental impact to the 30,000 residents that currently and will continue live within 800 meters of the train yard?	The current design pulls the MSF's southern boundary away from the Overlea Boulevard frontage, minimizing potential noise and aesthetic impacts on the surrounding community. This also creates an opportunity for the community to grow, similar to other areas of the city with MSF sites such as the TTC Greenwood Yard, TTC Davisville Yard, and GO Willowbrook Rail Maintenance Facility.
Review of Shortlisted Options	Based on SaveTPARK Analysis of Metrolinx's Shortlist Evaluation – Summary, Option 2 – Overlea should have been screened out from being considered as part of the MSF (See Appendix 1 on page 15).	Similar to this analysis, Metrolinx's analysis had the Overlea option short-listed but not identified as a preferred option, which led to the development of the hybrid options.