4.0 Evaluation of Alternatives

4.1 Evaluation Framework

Following the preparation of the three Development Alternatives and their presentation to members of the public at the Community Consultation Meeting, the Alternatives were evaluated against a multi-objective evaluation framework based on the GMSP Study's Guiding Principles. This evaluation resulted in the identification of an Emerging Preferred Development Alternative.

An evaluation framework was prepared to assess the performance of each Development Alternative relative to one another. The framework consists of objectives and indicators that are aligned to each of the four Guiding Principles (Figure 42).

Each objective further articulates the goal within its associated principle, and each indicator provides a qualitative or quantitative measure for identifying the level to which the objective is achieved by the Development Alternative. The Development Alternative that best achieves the objective is assigned a score of 3, the second best performing Alternative is assigned a score of 2, and the least well performing Alternative is assigned a score of 1 for that objective. Where all three Alternatives perform equally, a score of 0 is assigned to all three. The scores for each objective are totaled by Guiding Principle, and then across all four principles to produce a total score. Neither the individual objective scores nor the aggregate Guiding Principle scores are weighted.
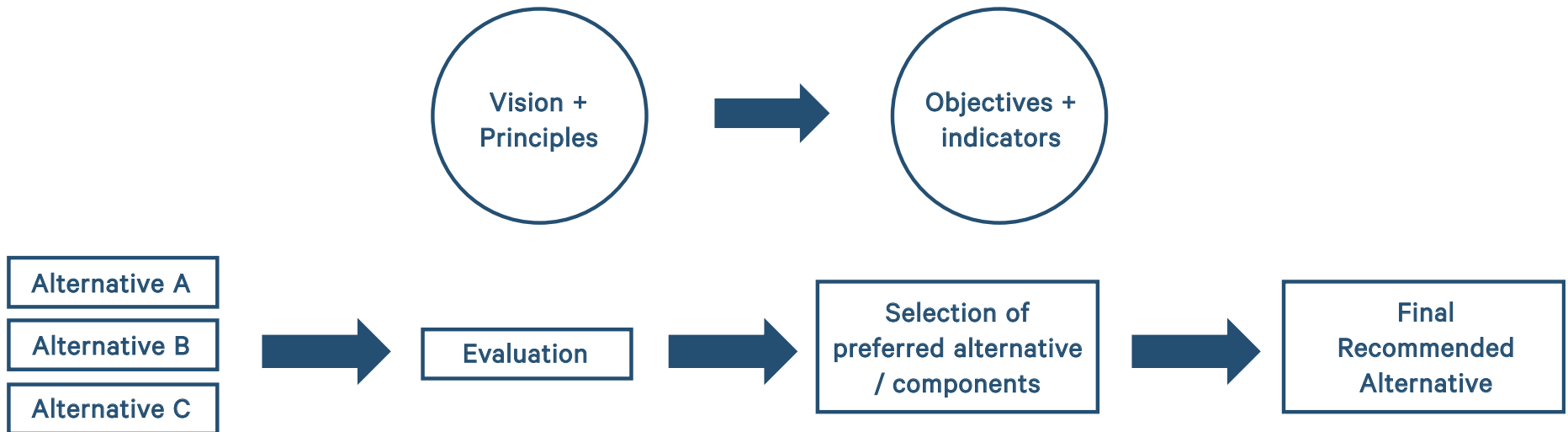

Figure 42 *Evaluation Process*

4.1 Guiding Principle 1 - Complete Community

Development Alternative 3 achieved the highest aggregate score for all objectives under the Guiding Principle of a Complete Community. This result was largely driven by its ability to achieve the greatest potential for character building and placemaking (based on the distribution of land use and built form in five transit nodes and a central hub), its ratio of developable lands to non-developable lands (based on a greater number

of internal connections), and its ratio of people to jobs (achieving the closest to equal balance between new residential and employment populations). Furthermore, Alternative 3 was the second best performing Alternative for all other objectives within this Guiding Principle (Figure 43).

#	Objective	Indicator	Development Alternatives		
			Alt 1	Alt 2	Alt 3
1.1	Pair growth with public investment in transit, the public realm and in services	Meet or exceeds Major Transit Station Area density target 160 people + job/ha	3	1	2
1.2	Create distinct and identifiable districts within Golden Mile	Number of districts with distinct identity	1	2	3
1.3	Within districts, balance new development with new streets, community facilities and open space	Ratio of developable lands to non-developable lands	2	2	3
		Ratio of population to open space	1	3	2
1.4	Encourage a mix of housing forms and ensure future housing is accessible	Range of housing forms (e.g. low, mid and high rise)	3	3	2
1.5	Encourage a mix of residential and employment uses	Ratio of people to jobs	1	2	3
1.6	Ensure that existing employment uses are supported and promote new employment uses as the area transitions over time	No net loss of employment GFA (Existing = 495,875 m2)	0	0	0
		Net gain of employment GFA (Existing = 495,875 m2)	3	1	2
		SUBTOTAL	14	14	17

Figure 43 Evaluation under Principle #1 Complete Community

4.2 Guiding Principle 2 - Connected Community

Development Alternative 2 achieved the highest aggregate score for all objectives under the Guiding Principle of a Connected Community. This result was a product of its best-performing scores in three objectives. First, it was the best performing Alternative for network congestion within the GMSP Study Area in terms of minimizing congested Vehicle Kilometres Travelled. Second, it was best at providing sufficient vehicular capacity in terms of minimizing screenline volume / capacity ratios. Third, it contained the greatest number of people and jobs within 200m of transit stops, indicating ease of pedestrian access between trip origins / destinations and transit stops (Figure 44).

The Guiding Principle of a Connected Community stands apart from the other four Guiding Principles in that it contains objectives that are almost exclusively associated with the transportation analysis of the three Development Alternatives. Further detail on the results of the transportation evaluation are provided in the sub-section that immediately follows below.

4.2.1 Transportation Evaluation and Results

Transportation analysis of the development alternatives was conducted to provide input to the analysis of the three Development Alternatives and selection of an Emerging Preferred Alternative. To assess future alternative transportation conditions, a multi-modal trip generation model was

#	Objective	Indicator	Development Alternatives		
			Alt 1	Alt 2	Alt 3
2.1	Provide multi-modal mobility choice to existing and future residents	Network congestion within GMSP study area (congested VKT)	2	3	1
		Sufficient vehicular capacity - Minimizes critical screenline volume/capacity (v/c) ratios	1	3	2
		Protecting surrounding neighbourhoods from through traffic	1	2	2
2.2	Ensure safe, green, convenient, comfortable and well-designed pedestrian connections	Amount of contiguous sidewalk (direct, convenient connections)	0	0	0
		Percentage of People and jobs within 200m of transit stops	1	3	2
2.3	Ensure strengthened connectivity to adjacent parks, ravines and open spaces	Connectivity to the Hydro Corridor, Victoria Eglinton Parkette, Craigton Court and Wexford Park	0	0	0
		SUBTOTAL	5	11	7

Figure 44 *Evaluation under Principle #2 Connected Community*

developed capable of providing a comparative analysis of the Development Alternatives. Details on the analysis are attached to this report in Appendix 2.

The transportation evaluation of the Development Alternatives comprises of three objectives that fit into the main principles. Figure 45 details the principles, objectives, indicators, and measures that were used for the transportation evaluation of the Development Alternatives.

Each of the two criteria is based on a quantitative performance measure. Each of these quantitative measurements provides a score for each alternative as follows:

- Most favourable Alternative score = 3; and

- Least favourable Alternative score = 0.

With an equal weighting for each criteria, the maximum score an alternative can achieve is twelve (12) while the minimum score is zero (0). The results of the transportation evaluation are contained in Figure 46. Based on this evaluation, Alternative 2 is the highest performing street and block network, achieving a maximum score of 10.5. Alternative 3B ranks second with a score of 7, and Alternative 3A has a score of 4.5. Alternative 1 performs very poorly with a score of 2. From a transportation evaluation perspective, Alternative 2 is recommended to be carried forward for consideration in as the Emerging Preferred Development Alternative.

4.3 Guiding Principle 3 - Responsive Community

Development Alternative 1 achieved the highest aggregate score for all objectives under the Guiding Principle of a Responsive Community. This result was derived entirely from a single objective that was measurable at this stage of the analysis. While all three Development Alternatives featured a general built form parameter whereby built form should not penetrate a 45 degree angular plan measured from lands designated as *Neighbourhoods,*

Principle	No.	Objective	Indicator	Measure
Connected	2.2	Provide well-designed, convenient, safe, and accessible connections between the new ECLRT stations and key destinations within the Golden Mile	Assessed based on the walkshed analysis to/from ECLRT stops and the percentage of streets that are walkable within the 200m radius (2.5 minute walk).	Ratio (linear/radial walkshed)
Responsive	3.2	Plan, phase, and build infrastructure and facilities in alignment with community need, market readiness and municipal resources	Service capacity of the vehicular transportation network will indicate whether the network has enough capacity to accommodate future demand. This will be calculated based on congested vehicle-kilometres travelled (VKT) and congested vehicle-hours travelled (VHT) for the GMSP study area. Service capacity of the transit network will indicate whether the existing service can accommodate future demand. This will be based on the volume-to-capacity (v/c) ratio	Total VKT (km) and total VHT (hrs) for Secondary Plan Study Area for vehicular service and v/c ratio for transit service
Prosperous	4.2	Ensure compatible land use and balance transportation needs with the existing industrial uses within and adjacent to the Golden Mile	Service capacity of the vehicular transportation network will indicate whether the network has enough capacity to accommodate future demand. This will be calculated based on congested vehicle-kilometres travelled (VKT) and congested vehicle-hours travelled (VHT) for the GMSP TMP study area.	Total VKT (km) and total VHT (hrs) for TMP Study Area

Figure 45 *Transportation Evaluation Criteria Indicators and Measures (source: HDR)*

| Alternatives | Criteria Score | | | | Total Score | Summary |
| | 2.2 | 3.2 | 3.2 | 4.2 | | |
	Walkshed	Congested VKT/VHT in GMSP Study Area	Transit v/c	Congested VKT/VHT in GMSP TMP Study Area		
1	0	2	0	0	2	Screen Out
2	3	3	3	1.5	10.5	Carry Forward
3A*	1.5	0	1.5	1.5	4.5	Screen Out
3B*	1.5	1	1.5	3	7	Screen Out

*Alternative 3A reflects the built form and street and block network presented previously in this report for Alternative 3. A test with the O'Connor Drive Realignment (consistent with the Emerging Preferred Street and Block Network) was conducted in Alternative 3B.

Figure 46 *Summary of Transportation Evaluation (source: HDR)*

there was no consistent built form parameter regarding angular planes measured from existing and proposed significant parks and streets. As such, the location of tall buildings in Alternative 1 away from Eglinton Avenue East, generally away from Golden Mile Boulevard, and away from the four major parks meant that it was least likely to have built form penetrating a 45 degree angular plane measured from these existing and proposed public realm components (Figure 47).

All three Development Alternatives were scored equally for the two other objectives in this Guiding Principle. This resulted from objective 3.1 already having been tacitly considered in selecting the Emerging Preferred Street and Block Network (see Section 2.3), and objective 3.3 being achieved through the consistent application of the cited built form parameters to all three Development Alternatives.

| # | Objective | Indicator | Development Alternatives | | |
			Alt 1	Alt 2	Alt 3
3.1	Plan, phase and build infrastructure and facilities in alignment with community need, market readiness and municipal resources	Impact of proposed streets on existing buildings and existing streets	0	0	0
3.2	Ensure transition in built form down to Neighbourhoods, Parks and Open Spaces and streets to minimize shadowing and overlook impacts	Built form does not penetrate 45 degree angular plane as measured from existing neighbourhoods and existing and proposed significant parks and streets	3	2	1
3.3	Ensure pedestrian comfort is achieved in terms of skyview, adjacent building height and setback and wind impact	Built Form meets and exceeds mid rise and tall building guidelines in terms of separation distance, pedestrian perception stepback, desired setbacks and wind analysis	0	0	0
		SUBTOTAL	3	2	1

Figure 47 *Evaluation under Principle #3 Responsive Community*

4.4 Guiding Principle 4 - Prosperous Community

Development Alternative 3 achieved the highest aggregate score for all objectives under the Guiding Principle of a Prosperous Community. It provided the greatest range of commercial floor plate sizes, the greatest net gain in retail gross floor area, and the greatest variety in scale of retail spaces. It also scored as high as Alternative 2 in its ability to maintain service capacity within the transportation system and water infrastructure (Figure 48).

#	Objective	Indicator	Development Alternatives		
			Alt 1	Alt 2	Alt 3
4.1	Leverage investment in public realm, infrastructure and transit in building the competitiveness, brand and reputation of Golden Mile as a place of opportunity, commerce and innovation in Scarborough	Ratio of m2 to jobs	3	1	2
4.2	Ensure compatible land use and balance transportation needs with the existing industrial uses within and adjacent to the Golden Mile	Responsiveness of built form to business needs: measured by size - small, medium, large (GFA requirements to commercial/industrial floor plates)	1	2	3
		Service capacity of transportation system (vehicles, transit) - Based on EMME congested VKT, VHT (vehicular analysis only) - at TMP study area level.	1	2	2
		Service capacity of water infrastructure	2	3	3
4.3	Continue the story of the Golden Mile as a key destination within the GTA	Net gain of retail GFA (Existing = 215,559 m2)	2	1	3
		Variety in scale of retail spaces	2	2	3
		SUBTOTAL	11	11	16

Figure 48 *Evaluation under Principle #4 Prosperous Community*

4.5 Combined Evaluation Results

Based on the aggregate score across all four Guiding Principles, Alternative 3 received the highest total score (Figure 49). This result largely derives from Alternative 3 scoring highest Guiding Principle 1 Complete Community and Guiding Principle 4 Prosperous Community and being the second highest scoring Alternative under Guiding Principle 2 Connected Community. Notwithstanding this, Alternative 3 did not perform as well as Alternative 2 under the detailed transportation evaluation and was in fact recommended to be screened out of further consideration. However, due to its superior performance under the land use and urban design-related objectives within nearly all Guiding Principles, and feedback from the Technical Advisory Committee and Local Advisory Committee (see Section 4.6 below), it was determined that a combination of Alternatives 2 and 3 should be brought forward as the Emerging Preferred Alternative, to be refined into a Preferred Alternative.

	Alternative 1	Alternative 2	Alternative 3
Total Score Across All Four Principles*	33	38	41
*In absence of weighting criteria (eg, transportation)			

| **Figure 49** *Total Score of Each Alternative*

4.6 Consultation Feedback

The results of the evaluation of the three Development Alternatives were shared with members of the City's GMSP Technical Advisory Committee (TAC) and GMSP Local Advisory Committee (LAC) in August and September 2018, respectively.

The TAC provided the following key points of feedback:

- A combination of Alternative 2 and Alternative 3 should be developed into the Emerging Preferred Alternative

- Include the street and block network from Alternative 2 with adjustments to better reflect the proposed redevelopments at the Golden Mile Plaza and Eglinton Square Mall

- Redistribute density from Warden Avenue to the western end of the GMSP Study Area and retain the transit node density concept

- Continue to integrate large format retail into potential redevelopment

- Realign Thermos Road to align with Sinnott Road

- Re-examine the total amount of office gross floor area and explore transit demand management to minimize impacts on the transportation network

The LAC provided the following key points of feedback:

- Redistribute density to the future LRT stations to incentivize all landowners to redevelop their lands.

- Redistribute density to large sites with extensive proposed roads to offset infrastructure costs associated with redevelopment

- Look to improve north-south pedestrian connectivity, safety and

comfort, particularly on existing north-south arterials, or provide alternative connections.

- Assess quantity and distribution of mid-rise built form in some of the alternatives and this may not be achievable given market and financial constraints associated with this typology. On larger blocks, there is an opportunity to locate and design tall buildings in a manner that would still provide a mid-rise feel at the street.

The above key points of feedback were taken into account to help select an Emerging Preferred Alternative and inform its refinement into the Preferred Alternative (Figure 50).

4.7 Towards a Preferred Alternative

Based on the results of the Development Alternative evaluation process and feedback from the TAC and LAC, a combination of Alternatives 2 and 3 was used as the basis for developing a Preferred Alternative (Figure 50). Specific revisions to the Emerging Preferred Street and Block Network, Emerging Preferred Parks and Open Space Network, and the land use and built form contained within the Development Alternatives were considered as follows:

Street and Block Network

- Adjust the O'Connor Drive extension through the Eglinton Square site

- Adjust the location of Golden Mile Boulevard through the Golden Mile Square site

- Realign Thermos Road to align with Sinnott Road

Parks and Open Space Network

- Retain three proposed large scale parks (west, central, east) and adjust the location of the south park

- Consider the scale and location of parks relative to land holdings within the GMSP Study Area to maintain the parks and open space emerging principles and big moves while also ensuring an equitable distribution of park by landowner

- Ensure existing and proposed parks are well-connected to one another through direct open space linkages and/or through enhanced green streetscape
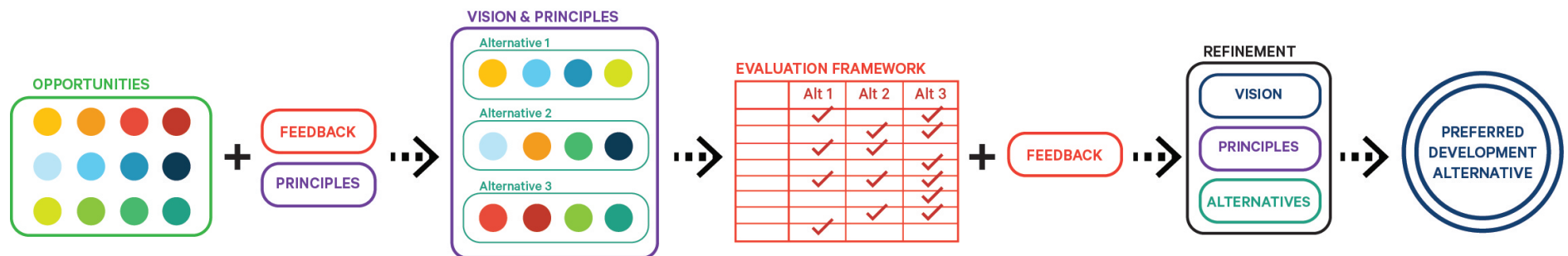

Figure 50 *Towards a Preferred Alternative Process*

Land Use and Built Form

- Concentrate density near or adjacent to ECLRT transit nodes and look to balance density in response to open space and corridor requirements

- Reduce the overall amount of office gross floor area to better reflect market conditions and improve transportation network performance by reducing PM peak trips leaving the study area.

- Provide opportunities for large format retail in mixed use developments

- Provide opportunities for low-rise buildings adjacent to *Neighbourhoods*, mid-rise buildings adjacent to parks, and high-rise buildings at transit nodes

- Apply 45 degree angular plane around significant parks and streets on:

  - South side of Golden Mile Boulevard

  - South side of East Park and Ashtonbee Reservoir Park

- Apply 80% ROW angular plane around significant parks and streets on:

  - East and/or west side of Central Park

  - East and/or west side of East Park

  - Provide for the full redevelopment of the Eglinton Square site to enable O'Connor Drive extension and treat site same as all other sites