

Alternatives Evaluation

After obtaining public feedback on the alternatives, the next step will be to evaluate the alternatives using evaluation criteria that identify how well each alternative addresses the Regional Planning goals and objectives.

What is Alternatives Evaluation?

The evaluation process will help describe the strengths and weaknesses of each alternative. It will also compare how each alternative performs relative to each other and to what would happen if we continue to grow as we have been. The evaluation process does not include the selection of an alternative, but will help the public and Regional Council make an informed decision about how HRM will grow over the next 25 years.

What are Evaluation Criteria?

Most evaluation methods use criteria to compare each alternative because criteria, particularly quantitative criteria, provide specific results, and a consistent and an objective method of evaluation. To provide comprehensiveness, the criteria should generally represent or relate to the adopted Regional Planning principles and goals.

To be useful in the evaluation process, criteria selection should be predicated upon:

- the availability of **reliable data**,
- the ability of criteria to **forecast the data** for each of the alternatives,
- the **comprehensiveness** of a criteria (e.g. the criteria addresses several goals and objectives), and
- the ability of criteria to help **identify differences among the alternatives**.

How is an evaluation criterion different than a performance indicator?

A performance indicator, or monitoring measure, monitors the success of the adopted Regional Plan over time. Performance indicators, such as:

- “*average household income*” cannot be reliably projected into the future, or
- the “*number of visitors to libraries*” which may be forecasted but might not be distinguishable among different alternatives.

As result, these indicators would not be useful alternative evaluation criteria, but may be excellent methods to measure successful Regional Plan implementation. These indicators, in addition to others, will be further identified later as part of the Implementation Strategy.

How are the evaluation criteria results used?

Because most criteria are quantitative, the results can be summarized in a table for each alternative. In some cases, these results can then be “scored” to add meaning to each alternative, although scoring is only a guide and not a formula for determining a preferred alternative.

Draft Evaluation Criteria

The following table provides the draft evaluation criteria for the regional planning alternatives. The goals and objectives applicable to each criterion are referenced by number in the second column of the table. (Goal reference numbers are in bold.) The final list of criteria will be selected from this draft list and include only the most essential criteria necessary to describe each alternative.

DRAFT Summary of Regional Plan Alternatives Evaluation Criteria (13May2004)

Evaluation Criteria	Goal, Objective #	Source/Method
Environment and Open Space		
• Assimilative capacity of surface waters.	1.1, 1.2, 1.2.A, 1.2.B, 1.5	On-Site Wastewater Mgt Study
• Fecal coliform concentrations in surface waters.	1.1, 1.1.B	
• Hectares of shellfish harvesting closure areas.	1.1, 1.1.B	GIS
• Hectares of designated habitat areas.	1.1.C, 1.4	GIS
• Service capacity per capita.	1.1.C	ISS, population forecasts, Greenfield Study
• Cost of servicing per capita.	1.1.C, 5.2.B, 7.1	Cost of Serving Model
• Vehicle emissions per capita.	1.2, 6.1, 6.1.A	Travel demand model. (QRSII)
• Impervious surface areas within watersheds.	1.2.A, 1.5, 1.5.B	GIS, Watershed mapping
• Hectares designated for natural economic resource uses.	1.2.C, 1.4, 4.7	GIS
• Hectares designated for open space.	1.3, 1.3.C, 1.6.C, 1.7.C, 1.8, 1.10	GIS
• Residential land consumption per capita and per household.	1.3, 1.3.A, 5.2.C	GIS and Residential Development Pattern Book.
• Hectares of “in-fill” development.	1.3.B	GIS
• Kms of connected pedestrian and bike links.	1.3.C, 3.4.E	GIS, Alternatives maps.
• Hectares of development designated for environmentally sensitive areas.	1.4.A, 1.7, 2.1.E, 5.7	GIS
• Hectares of natural recharge areas maintained.	1.5, 1.5.B	GIS, Watershed mapping.
• % population located on suitable soils for on-site septic systems.	1.5	On-Site Wastewater Mgt Study
• Hectares of wetlands maintained.	1.6	GIS
• Hectares designated for riparian buffers.	1.6.A, 1.7.C	GIS

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<ul style="list-style-type: none"> • Hectares designated for development on steep slopes. • Hectares of designated park space per capita. • Kms of protected beaches • Kms or hectares of connected open space. • Population within __kms of designated open space areas. • Kms designated for a open space corridor network. • Kms of designated recreational trails and greenways. • Cost of park land acquisition. • Eco-tourism employment. • Rural sector employment. 	<p>1.6.C</p> <p>1.8</p> <p>1.8, 2.2</p> <p>1.8.F</p> <p>1.9. 1.9.A</p> <p>1.9, 1.9.A</p> <p>1.9.B</p> <p>1.9.D</p> <p>1.9.D, 4.7</p> <p>1.9.D. 4.7</p>	<p>GIS</p> <p>GIS</p> <p>GIS</p> <p>GIS</p> <p>GIS</p> <p>GIS</p> <p>GIS</p> <p>GIS</p> <p>Employment forecasts.</p> <p>Employment forecasts.</p>
<p>Cultural Heritage</p> <ul style="list-style-type: none"> • Hectares mapped for cultural landscape. • # of potential and known archeological sites designated for development. • Hectares designated as conservation land. • # of compact development nodes (centres) in rural areas. • # of properties/sites designated for heritage preservation/registration. • # of designated heritage conservation districts. • # of designated natural history sites. 	<p>2.1, 2.1.A, 2.1.B</p> <p>2.1.D</p> <p>2.2</p> <p>2.2</p> <p>2.3, 2.3.F, 3.4.B</p> <p>2.3</p> <p>2.3.F</p>	<p>GIS</p> <p>GIS</p> <p>GIS</p> <p>GIS, Alternatives maps.</p> <p>GIS, Alternatives maps.</p> <p>GIS</p> <p>N.S. Dept. Env. & Labour</p>
<p>Capital District</p> <ul style="list-style-type: none"> • Employment in Capital District. • Reinvestment in public facilities. 	<p>3.1, 3.1.A, 3.1.B</p> <p>3.1.A, 3.2</p>	<p>Employment forecasts.</p>

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<ul style="list-style-type: none"> • Economic impact from clustering of arts and entertainment facilities. • # of tourists. • Increase in pedestrian activity. • # of dwelling units in Capital District. • Pedestrian modal share • # of dwelling units by type. • Income spent on housing accommodation. 	<p>3.1.A</p> <p>3.2, 3.4.D</p> <p>3.2</p> <p>3.3</p> <p>3.3</p> <p>3.3.A</p> <p>3.3.A</p>	<p>Tourism revenue forecasts.</p> <p>Tourism forecasts.</p> <p>Forecast?</p> <p>GIS, dwelling unit forecasts.</p> <p>Forecast?</p> <p>Dwelling unit forecasts.</p> <p>Housing Affordability Study, Statistics Canada.</p>
<p>Economy</p> <ul style="list-style-type: none"> • # of jobs. • Average annual increase in jobs. • Annual absorption rates of industrial, commercial and institutional property. • Population added within existing service areas. • Cost of new infrastructure per capita. • Commercial tax rate required to support infrastructure investment. • # of sites preserved for “vital” harbour-based activities. • Population within 1 km of centre cores. • Hectares designated for mixed use. • Natural resource employment. • Hectares designated for agriculture. 	<p>4.1</p> <p>4.1</p> <p>4.1.D</p> <p>4.2</p> <p>4.2, 4.2.A</p> <p>4.2.C</p> <p>4.4</p> <p>4.6</p> <p>4.6, 5.6, 5.6.A</p> <p>4.7, 4.7.B</p> <p>4.7</p>	<p>Employment forecasts.</p> <p>Employment forecasts.</p> <p>NS Dept. of Finance, Input/Output model (GDP growth by sector.)</p> <p>GIS, population forecasts.</p> <p>Cost of servicing model.</p> <p>GIS, Harbour Plan.</p> <p>GIS</p> <p>GIS, Alternatives maps.</p> <p>Employment forecasts.</p> <p>GIS</p>

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<p>Settlement</p> <ul style="list-style-type: none"> • Hectares of land in a designated centre. • Percent of population within centres. • Kms of piped services added. • Road kms added. • Kilotonnes of CO₂ generated for travel by residents. • Population within 1 km of public transportation. • Population added within existing service areas. • Impacts on neighbourhoods. • # of dwelling units added within urban core. • # of dwelling units within 1 km of Capital District. • Hectares designated for development in floodplains. • Annual vehicle emissions. 	<p>5.1</p> <p>5.1, 5.1.D</p> <p>5.2</p> <p>5.2</p> <p>5.2, 5.8, 5.8.C, 5.9</p> <p>5.3, 5.3.C, 6.9.A</p> <p>5.4</p> <p>5.4</p> <p>5.4.B</p> <p>5.4.C</p> <p>5.7</p> <p>5.9</p>	<p>GIS</p> <p>Population forecasts.</p> <p>GIS</p> <p>GIS</p> <p>Travel demand model (QRSII).</p> <p>GIS</p> <p>GIS, population forecasts.</p> <p>Qualitative assessment.</p> <p>Dwelling unit forecasts.</p> <p>GIS, dwelling unit forecasts.</p> <p>GIS/Aerials/Contour Maps</p> <p>Travel demand model (QRSII).</p>
<p>Transportation</p> <ul style="list-style-type: none"> • Estimated reduction in GHG per capita and total. • Average vehicle commute distance to work. • # of centres which interchange between major public transportation routes. • Population within 500 metres of public transportation. • Population within 1 km of high quality transit service. • # of employment centres within 1 km of public transportation. • High quality transit ridership. 	<p>6.1, 6.1.A, 6.1.B</p> <p>6.1</p> <p>6.2, 6.4.B</p> <p>6.6</p> <p>6.6</p> <p>6.6</p> <p>6.7</p>	<p>Travel demand model (QRSII).</p> <p>Travel demand model (QRSII).</p> <p>Alternatives maps.</p> <p>GIS, population forecasts.</p> <p>GIS, population forecasts.</p> <p>GIS</p> <p>TOD/HCT Study.</p>

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• # of centres with high quality transit service.	6.7	GIS, alternatives maps.
• Bike network kms added.	6.7	GIS
• Pedestrian network kms added.	6.7	GIS
• # of nodes designated for integrated bike, pedestrian and transit facilities.	6.7, 6.7.A	GIS, alternatives maps.
• Public transportation route kms added.	6.8	GIS
• Total transit route kilometres operating in reserved right-of-way.	6.8	GIS
• Transportation cost per capita.	6.9	Greenfield and TOD/HCT Studies.
• Point-to-point travel times.	6.1	Travel demand model (QRSII).
• Travel costs per capita.	6.1	
• # of centres providing basic transit or paratransit services.	6.1	Alternatives maps.
• Lane kms of new roads.	6.11	GIS
• Ratio of capacity added to new facilities.	6.11	Travel demand model (QRSII).
• Kms of road with v/c ratios > 1.0.	6.12	Travel demand model (QRSII).
• # of HOV lane kms added.	6.12	GIS
• total # of peak-period trips.	6.12	Travel demand model (QRSII).
• # of major commercial nodes with fast, frequent transit service.	6.14, 6.14A	GIS, Alternatives maps.
Decision-making		
• Population designated on brownfield sites.	7.1.A	Population forecasts.



Alternatives Evaluation Questionnaire

To fill out this questionnaire online, [click here](#).

Which criteria do you think are the most essential?

Please comment.

Are there other criteria that would be useful but are not on the list?

Please comment.
