

PO Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

Item No. 5 Halifax Regional Council March 24, 2009

TO:

Mayor Kelly and Members of Halifax Regional Council

Paul Dunphy, Director of Community Development

DATE:

March 13, 2009

SUBJECT:

SUBMITTED BY:

HRMbyDesign: Demand, Capacity & Baseline Indicators Study

INFORMATION REPORT

ORIGIN

This information report introduces to Regional Council the <u>Demand, Capacity & Baseline Indicators</u> <u>Study</u> that was initiated by staff in response to questions raised during HRMbyDesign's public consultations.

BACKGROUND

During HRMbyDesign's public consultation program over the past two years, a broad crosssection of citizens have shared their vision for the future of downtown Halifax, and their recommendations on how to realize that vision. In all, thousands of HRM residents have participated in HRMbyDesign. As a result of this consultation and the ongoing work of the Urban Design Task Force, the following four important questions emerged:

- 1. How much future growth can be anticipated in downtown Halifax, and of what type?
- 2. How much future development capacity will the building rules proposed by HRMbyDesign (i.e. maximum height and massing) allow in downtown Halifax?
- 3. Does HRMbyDesign's development capacity reasonably accommodate future growth?
- 4. By what indicators will the success of HRMbyDesign in downtown Halifax be measured?

These questions set aside the qualitative aspects of HRMbyDesign and instead focus on the <u>quantitative</u> aspects of the Plan: the first three on the quantity of new growth, and the fourth on HRMbyDesign's metrics of success. The <u>Demand, Capacity & Baseline Indicators Study</u> was nitiated to answer these four questions.

DISCUSSION

The services of Turner Drake & Partners Ltd. were retained by HRM through a competitive tender to undertake an objective, independent assessment of the property market for the area of downtown Halifax covered by HRMbyDesign, and to comment on whether the HRMbyDesign Plan allows for an appropriate build-out capacity for projected, foreseeable demand in the study area. Based on Turner Drake's data analysis, the study concluded that over the next twenty-five years, there is sufficient capacity provided under the Plan's built form rules to accommodate demand. The study also recommended several indicators by which the success of HRMbyDesign can be measured in the coming years, which have been written into the proposed downtown plan.

This study is beneficial from a number of standpoints: firstly, it supports HRMbyDesign's built form rules as a means of accommodating sustainable growth in downtown Halifax; secondly, it provides a comprehensive snapshot of development levels in the downtown during "base case" time frames, including 1983 and 2008, in order to facilitate bench marking and comparisons; and thirdly, it provides useful information about current and future market trends that may inform possible courses of action or policy development in order to ensure that development of downtown Halifax occurs in a manner envisioned by HRM's Regional Plan.

A steering committee was convened to guide this study. It was comprised of representatives of the Urban Design Task Force, the Greater Halifax Partnership, and HRM Planning Services staff. The Steering Committee had concerns with some assumptions used by the consultant in arriving at projected future demand levels which yielded less demand for future growth than if more commonly accepted assumptions were used. However, given that the current economic slowdown will likely slow the demand for office space in the downtown in the immediate future, the Steering Committee felt that projected levels of demand in the report, and therefore the development capacity engendered in the Plan and By-law, are appropriate at least for the first five years the Plan would be in effect. After that, a scheduled review is expected to be undertaken. The Steering Committee concluded that, in order to further clarify the study findings, the intervening five year period should provide opportunity to review the assumptions used in the Turner Drake study.

Additionally, the Steering Committee felt that certain sections of the report were written in a subjective tone, characterized by editorial comments which serve only as a distraction from the analysis. Disagreement with the consultant on this issue contributed to a significant delay in bringing a final report forward. During this impasse, several requests were made by members of the Urban Design Task Force and the public to review the full report. Given these circumstances, the Steering Committee agreed to release the report as-is, subject to the following conditions:

- 1. That a cover memo outlining the steering committee's concerns be appended to all copies of the consultant's report;
- 2. That a peer review of the report be conducted within the next five years; and
- 3. That the words "Under Review" be stamped on all pages of the report.

Despite concerns about overall readability, tone and use of what may arguably be "conservative" assumptions which may underestimate future demand for office and other building space, the steering committee concluded that the report does in fact achieve its intended purpose. It clearly shows, through objective analysis, that the development capacity of HRMbyDesign's proposed Plan and By-law will accommodate future development demand in the foreseeable future.

BUDGET IMPLICATIONS

None

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ATTACHMENTS

Attachment 1:

Copy of the *Demand, Capacity & Baseline Indicators Study*, prepared by Turner-Drake and Partners, 2008.

A copy of this report can be obtained online at <u>http://www.halifax.ca/council/agendasc/cagenda.html</u> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by :

Andy Fillmore, Acting Supervisor, Heritage & Design, 490-6495

Report Approved by:

Austin French, Manager, Planning Services, 490-6717

R:\Planning & Development Services\REPORTS\Heritage & Design\HRMbyDesign_Demand Capacity Sutdy

1 -

n +

4

.



P.O. Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

M E M O R A N D U M

Subject:	Demand, Capacity and Baseline Indicators Study - "Turner-Drake Study"
Date:	March 9, 2009
From:	Andy Fillmore, Acting Supervisor, Heritage & Design Jim Donovan, Manager, Economic Development
Cc:	Paul Dunphy, Director, Community Development Stephen Dempsey, CEO, Greater Halifax Partnership Austin French, Manager, Planning Services
To:	Chair and members of the Urban Design Task Force

Background

As Urban Design Task Force members are aware, HRM is preparing a new Secondary Municipal Planning Strategy (Plan) and accompanying Land Use By-law (By-law) for Downtown Halifax. Together, the proposed Plan and By-law will establish maximum height and massing for all future buildings developed in downtown Halifax which will, in effect, determine the build-out potential of the downtown.

I^{*} important for the proposed Plan and By-law to provide reasonable accommodation for foreseeable with in the downtown. Consequently, a baseline analysis of anticipated growth and capacity was commissioned through a Request for Proposals (RFP) process, which posed the following questions:

- 1. Over the next twenty-five years, how much future growth can be anticipated in downtown Halifax, and of what type?
- 2. Over the next twenty-five years, how much future development capacity do the built form rules of the proposed Plan and By-law allow in downtown Halifax?
- 3. Does the built form capacity inherent in the proposed Plan and By-law reasonably accommodate anticipated growth?

The RFP process followed HRM's Procurement Policy and following evaluation of responding proposals, the successful respondent was Turner Drake & Partners Ltd. of Halifax.

To help guide preparation of the study, a project Steering Committee was formed which met regularly, guided the consultant's work and reviewed findings. The Steering Committee comprised:

- Bernie Smith, Urban Design Task Force
- Bill Hyde, Urban Design Task Force
- Frank Palermo, Urban Design Task Force
- Brad Smith, Greater Halifax Partnership
- John Lindsay, Jr., Eastport Properties, Private Developer, GHP investor Andy Fillmore, Project Manager, HRMbyDesign
- Jim Donovan, HRM Manager of Economic Development, Project Manager for Study

Discussion

In a draft report dated November 5, 2008, Turner Drake's analysis responded to the questions posed by the RFP concluding there is sufficient, though not excessive, capacity provided under the proposed Plan and By-law to accommodate future growth demand. This conclusion supports the approach taken by the HRMbyDesign project as embodied in the proposed Plan and By-law. Turner-Drake's executive summary of the November 5 draft report was provided to the Urban Design Task Force at a meeting held on December 12, 2008.

ľ.

A second draft of the report was reviewed by the Steering Committee on December 5, 2008 where committee members had concerns with some assumptions used by the consultant in arriving at projected future demand levels which yielded less demand for future growth than if more commonly accepted assumptions were used. However, given that the current economic slowdown will likely slow the demand for office space in the downtown in the immediate future, the Steering Committee felt that projected levels of demand in the report, and therefore the development capacity engendered in the Plan and By-law, are appropriate at least for the first five years the Plan would be in effect. After that, a scheduled review is expected to be undertaken. The Steering Committee concluded that, in order to further clarify the study findings, the intervening five year period should provide opportunity to review the assumptions used in the Turner Drake study.

Additionally, the Steering Committee felt that certain sections of the report were written in a subjective tone, characterized by editorial comments which serve only as a distraction from the analysis. Disagreement with the consultant on this issue contributed to a significant delay in bringing a final report forward. During this impasse, several requests were made by members of the Urban Design Task Force and the public to review the full report. Given these circumstances, the Steering Committee agreed to release the report as-is, subject to the following conditions:

- 1. That this memo be appended to all copies of the consultant's report;
- 2. That a peer review of the report be conducted within the next five years; and
- 3. That the words "Under Review" be stamped on all pages of the report.

Despite concerns about overall readability, tone and use of what may arguably be "conservative" assumptions which may underestimate future demand for office and other building space, readers of the report are reminded that the report does in fact achieve its intended purpose. It clearly shows, through objective analysis, that in the context of the above-noted concerns, the development capacity of the Plan and By-law will accommodate future development demand in the foreseeable future.

Best regards,

Andy Fillmore, Acting Supervisor, Heritage & Design Jim Donovan, Manager, Economic Development

MARKET SURVEY REPORT

MARKET SURVEY OF

DOWNTOWN HALIFAX (DEMAND, CAPACITY & BASELINE INDICATORS) HALIFAX NOVA SCOTIA

PREPARED FOR



ΒY

ECONOMIC INTELLIGENCE UNIT

TURNER DRAKE & PARTNERS LTD. HALIFAX - NOVA SCOTIA

URNER DRAKE & PARINERS

Real Estate Counsellors, Brokers & Valuers

A second device a device of the second dev

та стала стала Милана Милана

Table Breek Constant



Our Ref: 286948A:PT/MST Your Ref: RFP08-330 PO #2070409058

5 November 2008

Mr. J. Donovan Manager of Economic Development Halifax Regional Municipality Chief Administrative Office PO Box 1749 Halifax NS B3J 3A5

Dear Mr. Donovan:

Re: Downtown Halifax: Demand, Capacity and Baseline Indicators Study, Halifax, Nova Scotia.

In accordance with your request of the 10th October 2008, we have completed a Market Survey of the above area.

This report is intended to be utilised to determine whether the HRMbyDesign Plan appropriately designates sufficient design capacity to accommodate anticipated demand during the next 25 years; and to establish benchmarks against which to measure the success and effectiveness of the Plan. The report is intended to be utilised only by the Halifax Regional Municipality (HRM). Use of the report for other purposes or by other parties may invalidate the conclusions.

Scope of Work

We have reviewed the HRMbyDesign Plan, including the Downtown Halifax Secondary Municipal Planning Strategy (Downtown Halifax Urban Design Study Draft-2) and the Downtown Land Use By-Law & Design Manual (Downtown Halifax Urban Design Study Draft 2). We have also researched the property market and have investigated the physical and economic factors pertaining to office, retail, hotel, residential, institutional and parking garages in 1983 and 2008, in each of the nine precincts that are included in the HRMbyDesign Plan.

The foregoing was necessary in order to:

- (1) Forecast the future growth in the downtown area of Halifax, based on growth trends of the past 25 years, broken down by type of use;
- (2) Determine the capacity for growth in the downtown area of Halifax, based on land constraints, existing building inventory, and projected coonomic indicators,
- (3) Determine whether or not the HRMbyDesign Plan allows for an appropriate build-out capacity with respect to the projected foreseeable demand in the downtown area of Halifax;

...2

7

(4) Establish benchmarks against which the success and effectiveness of the HRMbyDesign Plan can be measured at five year intervals in the future.

Quality Standards

Turner Drake's quality assurance system, which covers the conduct of all of our operations, is registered to the ISO 9001:2000 standard. This assignment has been conducted in accordance with our quality assurance system.

Market Analysis

A general overview of the Halifax Regional Municipality, of which Downtown Halifax forms the commercial core, is contained in the Part Two (Factual Data) section of this report.

A general description of the Downtown Halifax property market as it existed in 1983, and as it exists today is contained in the Part Three (Analysis) section of this report.

Data Constraints

The inventory of office, retail, hotel, residential, institutional and parking garages for 1983 and 2008 was compiled from the following sources:

- (a) Our Resource Library contained a hard copy inventory of all major office buildings in the study area in 1983, and hardcopy information on major apartment buildings at that date. It also contained City of Halifax planning studies dating back to the 1970s.
- b) Our Map Library contained a hard copy inventory on all of the building floorplates in the study area dating back to the 1970s. We had on-line imagery of the 2008 maps.
- (c) Our Compuval[™] Aerial Photographic Database contained on-line aerial photographs of the study area dating back to the 1970s. We had on-line access to aerial and satellite imagery of the study area for 2008.
- (d) Our Compuval[™] Transactional Database had details of buildings in the study area dating from the 1960s to the curtent day.
- (e) Every six months we compile an inventory of every office building in the study area with a gross building area of 10,000 ft.² or greater, for the Federal Government (PWGSC). That information is captured in our Compuval[™] Supply and Demand Database, and was utilised in this report.

Where necessary we undertook ground truthing to verify or amplify the data for the 2008 survey. Since ground truthing was not possible for buildings that had been demolished since 1983 we drew upon the memories of two of our senior staff members who were active with our company at that date.

Conclusions:

Based on our data analysis it is our opinion that:

(1) If present trends persist Downtown Halifax will continue to decline as a business centre. It is metamorphosing into a place to "stay and play". Hotel and residential development will increasingly dominate activity in the area.

- (2) Over the next twenty five years demand, as projected under our Low, Medium and High Growth Scenarios, can be accommodated within the capacity available under HRMbyDesign's built form rules.
- (3) The HRMbyDesign plan will arbitrarily redistribute property values in Downtown Halifax severely penalising some property owners and retarding redevelopment, whilst benefiting others.
- (4) There is no evidence to support the assertion that there is a large pent-up demand for office space (a figure of 2.0 million ft.² has been quoted in the media). Although vacancy rates are at a historic low, so are office rents. Nor have we been able to locate much evidence of the substantial out of province demand so widely quoted by Nova Scotia Business Inc. (NSBI). Based on our conversations with property owners, developers, and brokers, active in Downtown Halifax, and information provided by NSBI, we calculate that such demand is probably in the region of 50,000 ft.².
- (5) The current divisive debate over the necessity to preserve heritage buildings, in which the two protagonists, The Heritage Trust and its supporters on one side, and the developers on the other, advance mutually irreconcilable positions, will continue to retard growth in Downtown Halifax until HRM Council adopts a Leadership role, rather than that of intermediary between two conflicting and correct opinions. In our opinion, a key driver of demand for all types of space in Downtown Halifax is its unique character ... which in turn is defined in large part by the heritage buildings and their relationship with the harbour. The environment thus created is Downtown Halifax's major competitive advantage which, once destroyed will never be reincarnated. However it is an economic reality that most heritage buildings are not the highest and best use for their site, and the broader community goal of preserving those buildings to secure the longer term economic and social value of Downtown Halifax, will not be bridged by the present debate. This is an economic, rather than a rhetorical issue, which can only be resolved by HRM Council taking a proactive role.

We have been asked for our recommendations on resolving this "heritage preservation versus developer dilemma". In doing so the author would like first to declare a potential, perceived conflict of interest since he and his spouse own two heritage buildings in the study area, one of which is a potential development site.

Heritage property owners are frequently faced with the following dilemma: renovation is not feasible economically but neither is the status quo since the present building is no longer financially viable. The owner therefore has to redevelop the site and run the gauntlet of a costly, time consuming, risky and arbitrary approval process, or wait out the twelve months and demolish the building. HRM does provide renovation grants but they are small; the process cumbersome, and the outgome uncertain. They have also designated preservation districts and made grants available from time to time. However the process is arbitrary and frequently fails to direct resources to the properties that need them most. We suggest that the foregoing could be replaced instead with an air-rights trading scheme in which owners of heritage properties could sell the air-rights which existed prior to the HRMbyDesign plan, to owners of development sites who wished to increase their density over that allowed by the HRMbyDesign plan. This solution does not entirely address the issue of buildings which require renovation, the cost of which cannot be justified from a financial perspective. Realty taxes are the property owner's single largest expense, after their mortgage payment. The increase in realty taxes that result from restoration frequently renders the process financially impractical. We recommend therefore that HRM consider freezing the reality taxes at the property's pre-renovation level to encourage restoration.

Page iv

- (6) Public ownership, especially by the province of Nova Scotia either directly, or through the Waterfront Development Corporation, has been a major impediment to the growth of Downtown Halifax. Prime land is utilised only for parking and is released for development in a leisurely fashion, or not at all. The lands fronting Halifax Harbour, the site at the foot of Sackville Street, and the former Halifax Infirmary property, are glaring examples of Provincial properties which, had they been in private ownership, would have been developed many years ago. HRM too continues to own property, whose underutilization sterilizes and retards the growth of the area. Examples include a prime site on Barrington Street (opposite Grand Parade) recently conveyed to the Province, and the parking lots at the rear of Spring Garden Road. The latter were identified as development sites 38 years ago.
- (7) The three most relevant indicators of HRMbyDesign's success are:
 - (i) The rental premium (gross rent per ft.²) paid for newly leased office space in 1801 Hollis Street, Halifax over the most comparable (quality and size) recently leased office space in the Burnside City of the Lakes Business Park, vis à vis the rental premium that existed prior to the implementation of the HRMbyDesign Plan. The rental premium is to be expressed in Canadian dollars, deflated to the base date by Statistics Canada's Halifax Consumer Price Index (base date = date HRMbyDesign Plan was first implemented). This indicator will measure the premium office tenants place on their downtown location.
 - (ii) The amount by which the office inventory (ft²) exceeds, or falls short of, the projections of office inventory compiled for this report under the Medium Growth Scenario. This indicator will measure the success of the HRMbyDesign Plan in, (1) attracting new office development (demand), and (2) providing capacity (supply) in an economically timely manner.
 - (iii) The amount by which the aggregate realty assessment in Downtown Halifax, expressed in Canadian dollars, deflated to the base date by Statistics Canada's Halifax Consumer Price Index (base date = date HRMbyDesign Plan was first implemented), exceeds the aggregate realty assessment at the base date. This indicator will measure the economic success of the HRMbyDesign Plan to Downtown Halifax's main stakeholder, HRM.

We trust that the foregoing is the information you require.

Acknowledgements:

We acknowledge and thank the following for their assistance and input with this Market Survey: Mr. J. Donovan (HBM Manager of Economic Development), the Steering Committee (Brad Smith, William Hyde, Bernard Smith, John Lindsay Jnr., Andy Fillmore, Frank Palermo, Kelly Denty), the Heritage Trust of Nova Scotia (Phil Pacey), and developers, managers and real estate brokers active in Downtown Halifax. The opinions expressed herein are our own.

Yours truly,

TURNER DRAKE & PARTNERS LTD.

MICHAEL S. TURNER resident

TABLE OF CONTENTS

Part One (Introduction)

Letter of Transmittal Table of Contents Frontispiece Statement of Limiting Conditions and Assumptions

Part Two (Factual Data)

Purpose of Market Survey Intended Use of the Report Intended Users of Report Effective Date of Survey Area Surveyed Property Surveyed Definitions of Terms Community Overview

Part Three (Analysis)

Downtown Precincts Map Market Demand Scope Methodology Analytical Overview Demand by Type of Use Demand by Time Demand by Floorplate Si Demand by Precinct Demand Synopsis Office Demand Key Demand Factors Demand Forecast Floorplate Size Retail Demand Key Demand Factors Demand Forecast Floorplate Size Hotel Demand Key Demand Factors Demand Forecast Floorplate Size **Residential Demand** Key Demand Factors Demand Forecast Floorplate Size Institutional Demand Kev Demand Factors Demand Forecast

Page v

Page

i

V

vii

viii

1

1

1

1

2

4

7

8

8

8

8

8

9

10

10

11

13

13

15

15

17

17

17

18

19

19

19

19

20

20

20

21

22

22

22

Page vi

Part Three (Analysis) cont'd

Parking Demand	23
Key Demand Factors	23
Demand Forecast	23
Floorplate Size	23
Total Demand Forecasts	25
Supply: HRMbyDesign Plan Capacity	26
Scope	26
Methodology	26
Procedural Overview	27
Supply Forecast	28
Heritage Versus Non-heritage Sites	28
Ownership Profiles	28
Potential Development Site Map	29
Assessment Per Ft. ² of Land Area Map	30
Supply and Demand Matrix	31
Conclusion	32
Benchmark Criteria	33
Certification	35

DOWNTOWN HALIFAX



- נואחבא סאסגב ג אסאנטבא רנט.-

Page vii

Page viii

LIMITING CONDITIONS AND ASSUMPTIONS

- (1) Information on the size of the various types of properties contained in this report was compiled from information furnished by property owners, the six monthly surveys we conduct for the Federal Government, our in-house Compuval[™] database, surveys and mapping services provided by the Provincial and Federal governments, aerial and satellite imagery. We did not measure any property specifically for this report.
- (2) The report, or any parts thereof may not be used for any purpose other than for which it was undertaken and is furnished for the exclusive use of the client. All liability to any party other than the client is hereby denied.

PURPOSE OF MARKET SURVEY

PURPOSE OF MARKET SURVEY

To provide information on the anticipated market demand, and the available supply under the constraints imposed by the HRMbyDesign Plan, over the next 25 years, together with benchmark criteria by which the objectives of the Plan may be measured.

- This report is intended to be utilised by the client to, (1) determine whether the capacity constraints imposed by the HRMbyDesign Plan are adequate to meet anticipated demand, (2) provide benchmarks by which the success of the Plan can be measured.

INTENDED USES OF REPORT

EFFECTIVE DATE OF SURVEY

AREA SURVEYED

INTENDED USE

PROPERTY SURVEYED

5th November 2008

Halifax Regional Municipality

Downtown Halifax (Precincts #1, 2, 3, 4, 5, 6, 7, 8, 9) Secondary Planning Strategy

All Office, Retail, Hotel, Residential, Institutional, Parking Garage space existing in 1983 and 2008.

DEFINITIONS OF TERMS

The following definitions are used in this report:

Gross Building Area (GBA)

As defined by the Building Owners and Managers Association (BOMA) Gross Building Area is the *total constructed area of a building* and includes elevator penthouses, underground parking garages, etc. It is often referred to as Gross Floor Area.

Space available for office use, i.e. it does not include retail, parking or storage space..

Space available for the sale of merchandise or services such as banking halls, restaurants, bars, etc. It is usually located at street level or in a shopping mall. This report includes entertainment facilities such as the Metro Centre in the definition of "retail".

Typically, an inner city facility offering lodging accommodation as well as a wide range of other services, convention facilities, meeting rooms, recreational facilities, commercial shops, and the like, positioned primarily to service the persons staying at the hotel.

Any property used as a dwelling by the occupant as their permanent residence. For the purpose of this report we have included condominium and rental apartments, unless they form part of premises licenced as an hotel; together with single and multiple family homes.

Property of a public character operated by non-profit organisations or the government, such as hospitals, orphanages, private and public educational facilities, correctional facilities, museums, churches and other places of worship. Office buildings owned and/or occupied by government organisations such as Halifax City Hall, have been included as "office" rather than "institutional", in this report.

A commercial facility where automobiles may be parked for a fee; may be owned by either a public or private enterprise.
Parking lots have been treated as urban fallow and are not included as a parking garage in this report.

- The geographic region from which 80% or more of the demand and competitive supply is drawn.

 The geographic area from which 60% to 80% of the demand and competitive supply is drawn.

Office

Retail

Hotel

Residential

Institutional

Broad Market Area

Parking Garage

Primary Trade Area

Secondary Trade Area

The geographic area from which the balance of demand and competitive supply is drawn. It is the Broad Market Area excluding the Primary Trade Area.

COMMUNITY OVERVIEW

Overview

The Greater Halifax Area encompasses the four former municipalities of Bedford, Dartmouth and Halifax, and the County of Halifax. It is the urban heart of the Halifax Regional Municipality (HRM) which was spawned by the amalgamation of the four municipalities in 1996. The 2006 census recorded a total population for HRM of 372,858 primarily located in an urban area covering 283 square kilometres. Halifax is the provincial capital and the largest city in Atlantic Canada. It is the Atlantic Region's financial and business centre, the Canadian Navy's East Coast base, and the location of many federal government offices and other facilities. HRM hosts six universities and as a result is home to a large concentration of educational, medical and research facilities.

HRM benefits from excellent air, rail, road and water linkages. Stanfield (Halifax) international Airport links the region with the remainder of Canada, and the world. The airport is the busiest airport in Atlantic Canada, handling in excess of 3,000,000 passengers and 80,000 flights per year. In December 2004, the airport was granted United States "pre-clearance" status, allowing travellers to clear US customs in Halifax. HRM is also well served by its highway network, which connects the area with the remainder of Atlantic Canada and the Northeastern U.S. Rail services to HRM provide a linkage with Central Canada and the Midwest U.S. The Port of Halifax is the focal point of the region's transportation network, handling 12.2 million metric tonnes of cargo in 2007. 176,000 cruise ship passengers visited HRM through the Port of Halifax in 2007. The Port is currently working to develop HRM's transload warehousing sector in an effort to position Halifax as the Atlantic Gateway for cargo coming to North America across the Atlantic Ocean.

The breakdown of employment in HRM by sector is as follows

	- Jack
Management	12%
Business, Finance & Administration	20%
Natural & Applied Sciences & Related	7%
Health	6%
Social Sciences, Government Services & Religion	4%
Education	4%
Arts, Culture, Recreation & Sport	3%
Sales & Service	28%
Trades, Transport & Equipment Operations	12%
Primary Industries	1%
Processing, Manufacturing & Utilities	2%

Overall Construction Activity

The following figures on construction activity, as evidenced by the number and value of building permits, were provided to us by Halifax Regional Municipality:

· · · · · · · · · · · · · · · · · · ·	2000	2001	2002	2003	2004	2005	2006	2007
(a) Total Construction Values								
(in \$ millions)								
- Residential	\$ 266,180	\$ 269,784	\$ 411,970	\$ 322,332	\$ 428,750	\$ 390,746	\$ 467,278	\$ 445,772
- Commercial/Industrial	\$ 182,205	\$ 141,459	\$ 102,692	\$ 131,779	\$ 184,896	\$ 201,652	\$ 223,844	\$ 203,409
- Institutional	<u>\$ 57,786</u>	<u>\$ 10,250</u>	<u>\$ 12,838</u>	<u>\$ 19,157</u>	<u>\$ 55,762</u>	<u>\$ 35,089</u>	<u>\$ 10,849</u>	<u>\$ 22,909</u>
Total	\$ 506,171	\$ 421,493	\$ 527,500	\$ 473.268	\$ 669,408	\$ 627,487	\$ 696,721	\$ 672,090
(b) Building Permits by Type								
- Residential	3,062	3,043	3,674	4,225	3,679	3,769	3,336	2,525
- Commercial/Industrial	696	576	622	735	646	669	647	630
stitutional	50	50	50	49	38	48	43	59
al	3,808	3,669	4,346	5.009	4,363	4,486	4,026	4,405

							F	Page 5
(c) New Dwelling			***					
Construction by type Single Family	1,402	1,436	2,055	1,300	1,571	1,310	873	1,165
Duplex	120	125	208	188	140	161	132	172
Row House	48	25	104	91	75	73	44	65
Apartment	1,223	<u> </u>	1,253	1,192	1,442	<u> </u>	1,064	853
Total	2,793	2,436	3,620	2,771	3,228	2,595	2,113	2,255
(d) Subdivision Approvals								
Application	442	513	725	756	841	883	N/A	N/A
Lots Approved	1,738	1,830	1,934	2,438	1,980	1,925		

With an estimated population of 391,258 (1st July 2008), the Halifax CMA has experienced an average growth rate of 1.03% during the years 2006-2008. The latest unemployment rate is 5.5% compared to a provincial average of 7.6% and a national rate of 5.8%. The average household income of \$71,000 (2008) is above that of other major centres in Atlantic Canada: Fredericton (\$69,100), Moncton (\$63,900), Saint John (\$63,700), Charlottetown (\$64,700); and St. John's (\$70,900). Retail sales are 8% below the national average.

Halifax CBD

Office rental levels continue to rise but have not attained the level necessary to stimulate new office development. Consequently there was no development in 2007 and no office buildings are presently under construction. Several buildings were converted from office use during the 1990s into hotel and apartment accommodation. The following major projects have been completed recently or are under construction:

- The Casino Nova Scotia opened in 2000 at a total cost of \$97 million. The development comprises 125,000 ft.² and includes a \$85 vehicle parking structure.
- The Four Points Sheraton hotel opened in 2001 at the corner of Hollis and Sackville Streets. The hotel comprises 178 rooms.
- The Residence Inn by Marriott opened in 2004 at the corner of Grafton and Sackville Streets. The hotel comprises 92 rooms.
- The seven level MetroPark (a fully automated parking garage) opened in 2002 at the corner of Granville and Salter Streets at a cost of \$10.3 million. The parking garage accommodates 570 vehicles.
- The former TexPark parking garage has been demolished at the corner of Hollis and Sackville. Streets. A large-scale combination hotel/condominium development is proposed for the site, comprising 700,000 ft.² in twin towers. A year and a half after it was first approved, the project received the final go-ahead from the Utility and Review Board last fall and has until fall 2011 to begin work in order not to be affected by the new height restrictions of HRM by Design. As yet, no start date has been announced.
- The former Halifax Infirmary has been demolished at the corner of Spring Garden Road and Queen Street. The site comprises approximately four acres, a portion of which is now in a long term lease to Dalhousie University for parking. The rest is presently under discussion as a possible site for the relocated Memorial Library.
- The north end of the Brewery Market has been redeveloped with an eight-storey, 125room Marriott hotel with 8,500 ft.² of restaurant and spa space, and a 35-unit one and two bedroom apartment building, Salter's Gate. There is a \$30 million proposal for a 21storey, 127 unit condominium complex for Keith's Hall, at the south end of the property, which is met with resistance from concerned interest droups but has now been approved.

A proposal to develop the Midtown Tavern site on Grafton Street was submitted to HRM. The development comprises a 17 storey hotel with 165 rooms, and a cost of \$10-\$20 million. Several groups appealed the development and there is currently disagreement among the developers regarding how to proceed. New HRM by Design height restrictions would cap the height of any building on this site at 89 feet; the proposed development is 167 feet.

An \$80 million mixed-use project has been approved for waterfront property located at the foot of Salter Street by Centennial Properties (Medjuck). The project would comprise a hotel and 88 suite apartment tower, as well as a shopping mall, commercial space and a park.

There has been a multitude of medium and high rise condominium buildings constructed in the past 3-4 years, with several still under construction.

A new sewage treatment plant has recently been completed on Upper Water Street, as part of a \$133 million harbour clean-up program.

In 2006, the two former Halifax Herald blocks, bounded by Market, Prince, Sackville and Argyle Streets and until recently leased by the former owners, were sold by Landmark Development to local developers for eventual redevelopment. (This land is now one of two possible sites shortlisted for the proposed convention centre)

The courthouse will eventually be relocated, potentially to what is now a parking lot on the corner of Sackville and Lower Water Streets.

The province and city announced in March that they are seeking a development proposal for a new convention centre to replace the World Trade and Convention Centre. Two sites have been shortlisted.

The Armour Group is proposing redeveloping the block of Duke, Hollis and Upper Water Streets with a 9-storey, 80,000 ft², LEED certified office building. The property would maintain the facades of the existing historic buildings on Upper Water Street. The proposal met with opposition from heritage groups because it would involve demolishing all but the façades of the heritage buildings. HRM Council recently rejected the proposal and the developer has appealed to the Nova Scotia Utility and Review Board.

CURNER DRAKE & PARCHERS LCD.



MARKET DEMAND

Scope

The objective of the demand part of this assignment is to estimate how much future growth can be anticipated in the study area over the next twenty five years, and of what type (office, retail, residential, institutional). During the course of our research we determined that two additional space types, hotels and garages, presented significant additions to the space inventory during the past twenty five years, so we included them too, in our scope of work.

Methodology

HRM's Request for Proposals mandated that the following methodology be employed.

- (1) Inventory the developed space in the downtown study area in 1983 and 2008. These two points in time were to be utilised to calculate the historic growth rate, which then was to be projected twenty five years into the future to establish reasonably foreseeable development demand.
- (2) The inventory is to be broken down by type of use, area (HRMbyDesign precinct) and general floorplate size (< 10,000 ft.², \ge 10,000 ft.², \ge 15,000 ft.² < 20,000 ft.², \ge 20,000 ft.²).
- (3) The future demand is to be broken down into 5 year, 10 year and 25 year projections.
- (4) The future demand is to be broken down by type of use, by area (HRMbyDesign precinct) and general floorplate size (< 10,000 ft.², \geq 10,000 ft.², \geq 15,000 ft.², \geq 15,000 ft.² < 20,000 ft.², \geq 20,000 ft.²).
- (5) The future demand is to be expressed in three different scenarios (low growth, medium growth, high growth).

Analytical Overview

(1) Demand by Type of Use

The "demand" inventory of built space in the study area, expressed as Building Floor Area, is shown in the following "Demand Inventory by Type of Use" table. The "demand" inventory is the total inventory, less vacant space i.e. it is the most practical surrogate for demand at the two points in time, 1983 and 2008. Landlords typically do not include space available for sub-lease, which may be physically vacant, in their vacancy rate because the tenant is still paying rent on the space. Our Demand Inventory therefore measures space on which the landlord expects to collect rent: it therefore slightly over estimates demand but since the objective of the exercise is to measure change in demand over the 1983 to 2008 time frame, any distortion is marginal. The inventory included owner occupied buildings. Where we had vacancy rates for rental accommodation in the same space type viz. office, retail, residential, we applied the same vacancy to the owner occupied space. In the case of the hotel, institutional and parking garages we assumed full occupancy at both dates (1983 and 2008).

The picture that emerges from the Demand Inventory by Type of Use Table is a significant reorientation of demand in Downtown Halifax from workplace to "staying place." Incremental demand, in terms of square footage, is greatest for residential space, followed by office and then hotels. This re-orientation is shown in the percentage allocation of space between the various types of use, for the two reference years (1983 and 2008).

Demand Inventory by Type of Use									
Type of Use	1983 GBA (ft.²)	2008 GBA (ft.²)	1983 (%)	2008 (%)	Average Annual Increase (ft. ²) 1983-2008				
Office	5,110,958	6,464,801	48.2%	42.5%	54,154				
Retail	1,255,028	1,694,302	11.8%	11.1%	17,571				
Hotel	746,821	1,657,654	7.0%	10.9%	36,433				
Residential	991,678	2,743,646	9.4%	18.0%	70,079				
Institutional	1,675,154	1,198,376	15.8%	7.9%	- 19,071				
Parking Garage	818,588	1,461,716	7.7%	9.6%	25,725				
Total	10,598,227	15,220,495	100.0%	100.0%	184,891				

Source: Turner Drake & Partners Ltd., November 2008.

The demand by Type of Use and Floorplate Size is shown in the following two tab

1983 Demand by Floorplate Size (GBA ft. ²)									
		≥ 10,000	≥ 15,000		\checkmark				
Type of Use	< 10,000 ft. ²	< 15,000 ft. ²	< 20,000 ft. ²	20,000 ft.3	Total				
Office	1,468,443	1,508,024	612,437 🏈	1,522,054	5,110,958				
Retail	444,673	118,401	71,626 🕅	620,328	1,255,028				
Hotel	94,566	85,218	30,194	536;843	746,821				
Residential	208,952	193,444	1,55,790	433,492	991,678				
Institutional	120,279	150,842	194,975	1,209,058	1,675,154				
Parking Garage			13,947	804,641	<u>818,588</u>				
Total	2,336,913	2,055,929	1.078,969	5,126,416	10,598,227				

Source: Turner Drake & Partners Ltd., November 2008.

		100 A 100	397							
2008 Demand by Floorplate Size (GBA ft. ²)										
Type of Use	< 10,000 ft. ²	210,000	♥≥ 15,000	≥ 20,000 ft. ²	Total					
		<15,000_ft, ²	< 20,000 ft. ²		1 - 1 - 1					
Office	1,357,741	1,952,538	1,462,783	1,691,739	6,464,801					
Retail	577,837	160,283	141,403	814,779	1,694,302					
Hotel	138,161	178,930	341,720	998,843	1,657,654					
Residential	458,648	944,742	626,842	713,414	2,743,646					
Institutional	185,224	122,632	221,648	668,872	1,198,376					
Parking Garage			13,947	1,447,769	1,461,716					
Total	2,707,611	3,359,125	2,808,343	6,335,416	15,220,495					

Source: Turner Drake & Partners Ltd., November 2008.

(2) Demand by Time

The age of the buildings is a good surrogate for disposition of the demand over time since buildings are constructed in response to market demand. As shown in the following two tables, "Current Inventory by Age", the youngest buildings are those providing residential and hotel accommodation. There has been insufficient market demand, at rental rates that would support new construction, for office space.

Current (2008) Demand Inventory by Age										
< 10 Years GBA (ft.²)	≥ 10 < 20 Years GBA (ft.²)	≥ 20 < 30 Years GBA (ft.²)	≥ 30 < 40 Years GBA (ft.²)	≥ 40 Years GBA (ft.²)	Total GBA (ft.²)					
26,274	449,638	1,764,391	2,470,138	1,754,359	6,464,800					
85,272	242,747	316,896	432,411	616,977	1,694,303					
253,737	235,738	624,195		533,984	1,657,654					
1,031,323	520,657	370,020	242,783	578,862	2,743,645					
		113,670	160,296	924,410	1,198,376					
188,100	213,313	418,696	641,607	***	1,461,716					
1,594,706	1,662,093	3,607,868	3,947,235	4,408,592	15,220,494					
	<10 Years GBA (ft.²) 26,274 85,272 253,737 1,031,323 188,100	< 10 Years	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$					

Source: Turner Drake & Partners Ltd., November 2008.

	Current (2008) Demand Inventory by Age (% of Total)								
Type of Use	< 10 Years GBA (%)	≥ 10 < 20 Years GBA (%)	≥20 < 30 Years GBA (%)	≥ 30 < 40 Years GBA (%)	≥ 40 Years GBA (%)	Total GBA (%)			
Office	0.4%	7.0%	27.3%	38.2%	27.1%	100%			
Retail	5.0%	14.3%	18.7%	25.5%	36.4%	100%			
Hotel	15.9%	14.2%	37.7%	0%	32.2%	100%			
Residential	37.6%	19.0%	13.5%	🔪 Š.8%	21.1%	100%			
Institutional	0%	0%	9.5%	[™] 13.4%	77.1%	100%			
Parking Garage	12.9%	14.6% 🖌	28.6%	43.9%	0%	100%			
Total	10.5%	10.9%	123.7%	25.9%	29.0%	100%			

Source: Tumer Drake & Partners Ltd., November 2008.

Demand by Floorplate Size

(3)

(4)

This RFQ mandates that we analyse the demand inventory in 1983 and 2008 by floorplate size to determine if there has been a shift in demand over the past twenty five years. The results of our analysis are shown in the "Demand Inventory by Average Floorplate Size" table below.

The data is not conclusive but demand appears to have shifted in favour of floorplates falling in the 15,000 ft.² to 20,000 ft.² range.

E N	v							
	Demand Inventory by Average Floorplate Size							
Floorplate-Size	1983	2008	1983	2008	Average Annual Increase (ft. ²)			
(ft. ²)	GBA (ft. ²)	GBA (ft. ²)	(%)	(%)	1983-2008			
< 10,000 ft 2	2,336,913	2,717,611	22.1%	17.9%	15,228			
≥ 10,000 ft. << 15,000 ft. ²	2,055,929	3,359,125	19.4%	22.1%	52,128			
≥ 15,000 ft.2 ≤ 20,000 ft.2	1,078,969	2,808,343	10.2%	18.5%	69,175			
≥ 20,000-ft; ²	5,126,416	6,335,416	48.4%	41.6%	48,360			
Total	10,598,227	15,220,495	100.0%	100%	184,891			

Source: Turner Drake & Partners Ltd., November 2008.

Demand by Precinct

The allocation of space demand by precinct is shown in the "Demand Inventory by Precinct" table below. Since residential (apartment) demand has been the largest generator of new construction during the 1983 - 2008 time period Precinct #8 Cogswell which benefits from its proximity to the Halifax Downtown core (Precinct #4 – Lower Central) but enjoys lower land values, has lead the pack in space creation. The Halifax Downtown core (Precinct #4 – Lower Central) but enjoys lower Central) is in second place thanks to a combination of office, hotel and institutional construction.

[Precinct		Demand	Inventory b	y Precinct	a fa sana an
#	Name	1983q GFA (ft.²)	2008 GFA (ft.²)	1983 (%)	2008 (%)	Average Annual Increase 1983-2008
1	South Waterfront	456,566	926,881	4.3%	6.1%	18,813
2	Barrington South Monuments	561,291	834,296	5.3%	5.5%	10,920
3	Spring Garden	2,228,456	2,732,667	21.0%	18.0%	20,168
4	Lower Central	2,367,623	3,228,610	22.3%	21.2%	34,439
5	Barrington Street Heritage	1,176,206	1,228,749	11.1%	8.1%	2,102
6	Upper Central	664,163	1,192,899	6.3%	7.8%	21,149
7	Historic Properties	455,193	539,365	4.3%	3.5%	3,367
8	Cogswell	2,543,274	4,391,414	24.0%	28.9%	73,926
9	North End Gateway	145,456	145,613	1.4%	1.0%	6
Total		10,598,228	15,220,494	100.0%	100.0%	184,891

Source: Turner Drake & Partners Ltd., November 2008.

(5) **Demand Synopsis**

The demand by type of use, precinct and year (1983 and 2008) has been captured in the following two tables:

	Precinct	1983 Demand by Type of Use (GBA ft. ²)							
#	Name	Office	Retail		Residential	Institutional	Parking Garage	Total	
1	South Waterfront	156,026	9,270	291,270	A D	0	0	456,566	
2	Barr. South Monuments	254,136	53,451	101,738	123,756	28,210	0	561,291	
3	Spring Garden	339,708	266,224	108,240	477,512	1,036,772	0	2,228,456	
4	Lower Central	1,761,030	237,857	XX/O	D 0	177,809	190,928	2,367,624	
5	Barrington Street Heritage	930,503	63,502	0	64,143	50,637	67,320	1,176,205	
6	Upper Central	371,742	181,559	× þ	23,892	86,970	0	664,163	
7	Historic Properties	148,815	144,615	Ŏ	0	161,763	. 0	455,193	
8	Cogswell	1,136,535	298.450	245,573	302,376	0	560,340	2,543,274	
9	North End Gateway	12,454	\wedge \checkmark \sim	0	0	132,992	0	145,456	
Total		5,110,958	1,255,028	746,821	991,678	1,675,153	818,588	10,598,228	

Source: Turner Drake & Partners Ltd., November 2008

[Precinct	1 All	1 and 1	2008 Dema	and by Type of	Use (GBA ft. ²)		aan in statel
#	Name 🔦	Office	Retail	Hotel	Residential	Institutional	Parking Garage	Total
1	South Waterfront	157,992	51,298	291,270	406,321	20,000	0	926,881
2	South Waterfront Barr. South Monuments Spring Garden	215,808	91,727	16,520	510,241	0	0	834,296
3	Spring Garden	504,190	456,830	78,046	1,196,829	496,772	0	2,732,667
4	Barr. South Monuments Spring Garden Lower Central	2,229,260	241,446	334,302	38,761	182,795	202,047	3,228,611
5	Barr. Street Heritage	844,470	134,729	0	131,592	50,638	67,320	1,228,749
6	Upper Central	504,467	219,715	229,943	65,095	153,416	20,263	1,192,899
7	Historic Properties	124,935	252,667	0	0	161,763	0	539,365
8	Cogswell	1,871,058	245,890	707,573	384,807	0	1,172,086	4,391,414
9	North End Gateway	12,621	0	0	0	132,992	0	145,613
Total		6,464,800	1,694,302	1,657,654	2,743.646	1,198,376	1,461,716	15,220,494

Source: Turner Drake & Partners Ltd., November 2008.

The demand by floorplate size, precinct and year (1983 and 2008) is shown in the following two tables:

	Precinct		1983 Demand by Floorplate Size (GBA ft. ²)							
#			≥ 10,000 ft.²	≥ 15,000 ft.²						
	Name	< 10,000 ft. ²	< 15,000 ft. ²	< 20,000 ft.²	≥ 20,000 ft.²	Total				
1	South Waterfront	0	0	156,026	300,540	456,566				
2	Barrington South Monuments	191,855	301,749	0	67,687	561,291				
3	Spring Garden	561,821	112,478	154,552	1,399,605	2,228,456				
4	Lower Central	730,868	659,658	289,198	687,899	2,367,623				
5	Barrington Street Heritage	310,714	198,515	18,175	648,802	1,176,206				
6	Upper Central	213,234	231,734	30,966	188,229	664,163				
7	Historic Properties	133,657	0	0	321,536	455,193				
8	Cogswell	135,160	551,797	412,920	1,443,398	2,543,275				
9	North End Gateway	59,604	0	17,131	68,721	145,456				
Total		2,336,913	2,055,931	1,078,968	√5,126,417	10,598,229				

Source: Turner Drake & Partners Ltd., November 2008.

	Precinct		2008 Demand by Floorplate Size (GBA ft. ²)						
			≥ 10,000 ft. ²	≥ 15,000 ft.⁄>					
#	Name	< 10,000 ft. ²	< 15,000 ft. ²	<.20,000 ft.2	∕∕a≥ 20,000 ft.²	Total			
1	South Waterfront	74,628	925	221,137	630,192	926,882			
2	Barrington South Monuments	223,027	416,523	107,364	87,382	834,296			
3	Spring Garden	654,512	585,497	420,955	1,071,704	2,732,668			
4	Lower Central	737,377	1,153,438	655,329	682,466	3,228,610			
5	Barrington Street Heritage	302,945	200,571	69,101	656,131	1,228,748			
6	Upper Central	285,450	349,071	179,217	379,161	1,192,899			
7	Historic Properties	212,230		🌮 0	327,135	539,365			
8	Cogswell	167,681	653,101	1,138,109	2,432,523	4,391,414			
9	North End Gateway	59,761		17,131	68,721	145,613			
Total		2,717,611	3.359,126	2,808,343	6,335,415	15,220,495			

Source: Turner Drake & Partners Ltd., November 2008.

Office Demand

(1) Key Demand Factors

The 1990 recession resulted in a systemic shift in the way office space is utilised in Canada; accessibility and flexibility assumed greater importance than a presence in the central business district. The growth of the Internet and mobile phone use during the 1990s gave workers greater mobility. An accessible location with on-site parking often outweighed the advantage of a downtown location. Shareholder concerns about lavish office space, which surfaced during the recession, resulted in a more Calvinistic attitude: firms that had previously sought prestige office space now preferred something less ostentatious and the rental premium previously captured by this type of space melted away. The rapid rise in energy costs in 2005 once again focussed tenants' minds on conservation; "green" buildings started to rise in prominence. Design requirements now favour unostentatious lobbies and a secure, pleasant working environment with natural light, fire protection, and climate control through heat pumps and/or windows that open. Broadly speaking, the older the building, the less likely it is to reflect these requirements. Buildings erected prior to 1990 in particular are unlikely to do so 93% of the office space in the study area is now more than 20 years old.

As previous studies of office demand have established that there are three key drivers, (i) growth in the provincial real (i.e. deflated) Gross Domestic product, (ii) the entry or departure of a large tenant in the marketplace, (iii) the availability of a suitably educated workforce.

(i) The growth in the provincial real GDP (expressed in millions of chained 2002 dollars) and the demand for office space in HRM as a whole, as revealed by the most recent Market Survey we completed for the Federal Government in June 2008 is as follows:

Year	Real GDP	Total HRM
	(Millions \$)	Space Demand (ft. ²)
2008	> N/A	9,091,149 ft. ²
2007	∕ \$29,042	10,131,234 ft. ²
2006	28,597 28	10,340,366 ft.²
2005	28,336	9,981,443 ft.²
< 2004	×27,836	9,712,830 ft. ²
2003	27,464	9,683,089 ft. ²
Sources; Tur	ner Drake & Partne	rs' Survey June 2008

Statistics Canada. In non-recession conditions 72% of the change in the demand for office space in HRM as a whole can be explained by changes in the real GDP. Whilst change in the real GDP is a predictor of change in office demand in HRM as a whole, it is no longer as useful for establishing demand in the study area. As alluded to earlier the 1990 recession produced a sea change in the demand for office space in Downtown Halifax. During the 1980s tenants were willing to pay a 25% rental premium (over net absolute rent per ft.²) to locate in Halifax downtown. The initial impact of the recession was to eliminate that CBD premium in its entirety as business sought to reduce operating costs by increasing their reliance on home

offices, back offices located in the industrial parks, or flexible office environments utilised by different workers at different times of the day. The strategy of cost reduction was lent impetus by advances in communication: mobile phones, the Internet and Internet based telephones. In an era of fiscal restraint, prestice accommodation in the CBD lost much of its allure. Although office rental rates collapsed throughout HRM, those in Halifax Downtown had further to fall. Rental rates started to recover in the mid 1990s. By June 2008, the Market Survey we conduct for the Federal Government, recorded net absolute rental rates of \$19.50/ft.² in Purdy's Wharf, HRM's signature office development. This is approximately where they were in 1989, before the property crash a year later. Yet inflation over the past 19 years has

sapped much of that buying power: rental rates would have to be \$30.39/ft.2 (in 2008 dollars) to match their 1989 buying power of \$19.50/ft.². Although our June 2006 survey indicates that the overall vacancy rate in the study area is now just 4.36%, a rate that in the 1980s triggered a 40% increase in the net absolute rental rate in a twelve month period, no such demand pressure is evident; the June 2008 Class A office net absolute rental rate was a modest 4.4% higher than a year earlier (Class A office vacancy is only 2.89%). Demand pressure is much weaker than it was during the 1980s due, in our view, to the sea change in business practice that resulted from the 1990 recession, coupled with the availability of a good supply of more modern office space in the suburbs. The developers and property managers we interviewed expressed confidence that they would be able to bring new office space to the market at net absolute rents of \$25/ft.². If space was available at this rental level, it would, in our view find a market, provided that provincial real GDP continues to grow. Unfortunately, the growing global financial crisis now casts a long shadow and has to be considered in allocating the timing of that office demand. During the 1970s and 1980s the recessions occurred approximately every five years and their impact lasted between 18 and 24 months. These business cycle recessions were caused by supply getting alread of demand. The 1990 recession was global in scope and financial in nature. The initial trigger was the collapse of the Thai batt and over-extended credit, primarily on commercial property. Although conventional economic wisdom places the life span of financial recessions at 4 years, the impact of the 1990 global recession was much more pronounced. Its impact on the property market in this region lasted for ten years: the various markets stirred to life in five to seven years but they did not really recover until 2000 Only today, eighteen years after the event, have office rents returned to their 1989, pre-recession level. At present, Canada is not in a recession. However, the global financial situation, and the fiscal health of the United States, our primary trade partner, continue to deteriorate For the purpose of our demand projections therefore we have assumed that Canada will go into a recession in 2009, the impact of which will last for seven years. Thereafter we have assumed that recessions lasting two years, will occur at five year intervals. A second major trigger of office demand is the entry, or departure of a large office tenant in the marketplace. The departure of the Chronicle Herald from downtown Halifax and its relocation to the Manufacturer's Life Complex on Joseph Howe Drive effectively removed 84,000 ft.2 of office demand in 2008. If the Federal government proceeds with its plans, a further 200,000 ft.2 of office demand will be bled from the downtown core. The proposed relocation of NSPC to their former power plant at the south end of Lower Water Street will not impact demand, since they will be relocating from and to buildings located in the study area.

The Provincial Nova Scotia Business Inc. (NSBI) has been active in luring businesses to the province with the aid of substantial subsidies based on the jobs they provide. Their activity has been widely quoted as a significant contributor to office demand in downtown Halifax and NSBI's press releases enumerate their successes in attracting firms to the area together with information on the jobs they are expected to create. In order to separate fact from the rhetoric we asked NSBI to provide us with base data (date and # of jobs created in study area) so that we could convert them into space demand. They provided us with some information. We also approached major property owners and developers as a second source to determine the demand created as a result of NSBI's efforts. The most positive response was that there is some evidence of two parties with a total demand for about 50,000 ft.². Other landlords reported no substantive evidence of pentup demand from NSBI's activity. NSBI's efforts have been focused on the Information Technology (Keane, Research in Motion, Versata) and financial sectors (Butterfield, Citco, Meridian, OC Financial Services, et al). Research in Motion did not locate in the study area and the financial sector globally is in hiatus. It is difficult therefore to base any long term demand projections on the data available. Based on the jobs created and anticipated, at a conversion rate of 200 ft.² per job, we estimate that NSBI may have created 15,000 ft.² to 45,000 ft.² of annual demand in the study area. Since these jobs were only lured to Halifax by government subsidy (by in effect taxing successful companies already here to support less competitive ventures) the question arises as to how long this type of program will be acceptable when the government changes. There is the

question too as to whether these "jobs" are net additions to the employment roll because they render existing firms, who are obliged to fund the subsidy through their taxes, less efficient: NSBI's efforts may be simply substituting one "bought" job for another that would otherwise be created by an existing enterprise. We have therefore only assumed a 33% probability that the type of program currently espoused by NSBI, or something similar, will continue for the twenty five year projection period, and have added 5,000 ft.² to 15,000 ft.² to our baseline demand.

(iii) The aggregate working age population (age 20 to 64) in the four Atlantic Provinces is declining and with it the demand for office space. However this has been counterbalanced by the migration of the workforce from rural areas to the cities. Thus, whilst the population of Nova Scotia has grown by just 11% during the period 1981 to 2008, and is expected now to decline, the working age population of HRM has increased by 54%. The table tells the tale:

Year	1981	1986	1991	1996	2001 2006	2008			
Halifax CMA Working Age Pop.	167,000	187,680	204,875	212,920		257,614			
Nova Scotia Total Pop.	857,600	879,600	896,600	907,600	947, 599 944,140	948,007			
Source: Einancial Poet Canadian Demographics 1981-2008									

Source: Financial Post Canadian Demographics 1981-2008.

We expect the migration from other parts of the province, and other parts of the Atlantic Region, to continue. To that extent therefore, a projection of demand based on the past twenty fire years is valid. However as the decline in the Region's aggregate working age population gathers pace the growth in HRM's working age population will slow down.

(2) Demand Forecast

We are required to forecast office demand at 5, 10 and 25 year intervals under low, medium and high growth scenarios using an extrapolation of the past twenty five years. We have taken as our High Growth Scenario office demand for the past twenty five years (54,154 ft.²/annum) plus our optimistic estimate of incremental demand occasioned by NSBI's efforts (15,000 ft.²/annum) plus aggregate pentup demand of 60,000 ft.². Our Medium Growth Scenario is based on office demand for the past twenty five years (54,154 ft.² annum) plus aggregate pentup demand of 60,000 ft.². Our Medium Growth Scenario is based on office demand for the past twenty five years (54,154 ft.² annum) plus pentup demand of 50,000 ft.². Our Low Growth Scenario recognises that space is utilised wastefully or is occupied by tenants who are located downtown because the tents are below market levels. Developers advise us that they can bring new space on stream at \$25/ft.² net absolute. Current rental levels are therefore about 78% of market: tenants are enjoying a 22% rental discount. Rental levels are rising and will continue to do so if we do not go into a deep recession. Many tenants, perhaps most, are captive to their location and will not move as rental levels rise. Our Low Growth Scenario therefore anticipates a modest 8% reduction from the historical annual pattern (54,154 ft.²) to 50,000 ft.² per annum with no initial pentup demand. The results are shown in the table below:

Bar Mile Caranada	Office Demand (ft. ²)						
Growth Scenario	2008	2013	2018	2033			
Low	6,464,801	6,614,801	6,864,801	7,714,801			
Medium	6,464,801	6,677,263	6,948,033	7,868,651			
High	6,464,801	6,722,263	7,068,033	8,243,651			

(3) Floorplate Size

As part of the scope of this RFQ we have to forecast demand by general floorplate size. It is apparent form our analysis (see Demand Inventory by Average Floorplate Size table) that there is a trend to larger floorplates. The trend is most evident in Burnside Industrial Park since the building floorplate size is not constrained by the site size, as is frequently the case in Downtown Halifax. Developers advise us that there is a trend back to open plan offices to minimise floor space per employee and reduce it from the current standard of 200 ft.² per person to 180 ft.² per

employee. Most of the newest buildings that are not site constrained have a floorplate in the 15,000 ft.² to 20,000 ft.² range, although we are advised that 25,000 ft.² is preferred. However this is also a function of land cost. When land costs are low, as is the case in Burnside Industrial Park, it is cheaper to capture the required space by erecting low rise buildings with large floor plates. When land costs are high, as is the case in Downtown Halifax, developers maximise their marginal utility by erecting high rise structures. The height of the building, if there are no View Plane or other restrictions, is dictated by the point at which the marginal cost of the floor equals the marginal value it adds to the property.

It is economically feasible to erect office buildings with floorplates as low as 10,000 ft.² in Downtown Halifax. The data however indicates a preferred floorplate size in the 15,000 ft.² to 20,000 ft.² range.

Retail Demand

(1) Key Demand Factors

Retail demand in the study area includes shops, restaurants, banking halls, bars, etc. This report includes entertainment facilities such as the Metro Centre in our "retail" definition. Retail demand in Downtown Halifax, because it is so diverse, is driven by generators throughout HRM and beyond. Halifax Peninsula is Downtown Halifax's Primary Trade Area: the balance of HRM is its Secondary Trade Area.

Key drivers of demand in the Primary Trade Area are, (1) nighttime population, (2) daytime population and (3) tourist population. The competitive position of Downtown Halifax vis a vis the remainder of Urban HRM is shown in the following table:

	Demand Generator	Halifax Peninsula	Remainder of Urban HRM	Halifax Peninsula As at % of Urban HRM
	¹ Total population	58,025	267,409	22%
	² Daytime population	116,990	337,318 🔌	35%
ŝ	Sources: 1Statistics Canada	2006 Census		

²Environics Analylics 2007.

Tourist figures are difficult to obtain but we are advised by the Nova Scotia Department of Tourism the number of visitors who sought advice from their downtown bureau declined by 6% in 2008.

A surrogate for daytime and nightime populations, and visitors, is the inventory of office, hotel and residential (occupied) space:

Occupied Space									
	1983	2008							
Type of Space 🕢	GBA (ft.²)	GBA (ft. ²)							
Office	5,110,958	6,464,801							
Residential	991,678	2,743,646							
Hotel 🔨 🔨 💟	746,821	1,657,654							
Total 🔨 🎾	6,849,457	10,866,101							
Retail (ft.*)	1,255,028	1,694,302							
Retail (%) Total)	18%	16%							

(2) Demand Forecas

Retail space is declining per square foot of total office, residential and hotel space. We have utilised the linear relationship, 1983 to 2008, and our twenty five year projection of office, residential and hotel demand to calculate retail demand over that same period. The results are shown in the following table:

	1	Retail Demand (ft. ²)				
Growth Scenario		2008		2013	2018	2033
Low		1,694,302		1,740,102	1,814,277	2,067,704
Medium		1,694,302		1,749,842	1,832,602	2,118,715
High		1.694.302	ļ	1.760.260	1,860,860	2.209.640

(3) Floorplate Size

As requested we have also analysed the trend in floorplate size. Market demand, as demonstrated by new building, is shown in the table below:

Year Built	Average Floorplate
1999 to 2008	20,603 ft. ²
1989 to 1998	55,874 ft.²
1979 to 1988	24,470 ft. ²
< 1979	23,481 ft. ²

Source: Turner Drake & Partners Ltd., November 2008.

Since retail space is usually located today on the ground floor of office buildings, but frequently occupies only a portion of that floor, no floorplate size trend is evident.

Hotel Demand

(1) Key Demand Factors

During the period 1983 to 2008 hotel demand, as measured by the amount of hotel inventory, increased at an average annual rate of 36,433 ft.². Of the total 910,833 ft.² added to inventory during that period, 499,475 ft.² was added during the past twenty years, an average of 24,974 ft.² per annum. During the past ten years the annual average increased to 26,373 ft.². A key driver of hotel demand is the state of the economy as indicated by the following table, as economic conditions soften business and tourist travel declines:

New H	otel Constructio		
Year Built	Total GBA	Annual GBA	State of the Economy
2000 to 2008	263,737 ft. ²	29,340 ft. ²	Recovery & Boom.
1990 to 1999	114,160 ft. ²	11,416 ft. ²	Bust.
1980 to 1989	745,773 ft. ²	74,577 ft. ²	Boom and Business Recessions.

Source: Turner Drake & Partners Ltd. November 2008.

(2) Demand Forecast

Of recent years hotels have faced competition from short term furnished apartment rentals such as Premier Suites; technological advances and cost reductions in communications which have reduced the necessity for business travel. Impediments to air travel such as time stealing airport security and escalating oil costs have also contributed to the rise of video conferencing, webinar and webinex over the Internet. In view of the foregoing we have adopted 36,433 ft.²/annum as our High Growth Scenario; 29,000 ft.²/annum as our Medium Growth Scenario; and 20,000 ft.²/annum as our Low Growth Scenario.

The results are shown in the table below-

		Hotel De	mand (ft. ²)	
Growth Scenario	2008	2013	2018	2033
Low	1 657,654	1,688,988	1,777,545	2,157,660
Medium 📢	1,657,654	1,703,089	1,831,494	2,382,654
High 🔬	1,657,654	1,714,734	1,876,052	2,568,482

(3) Floorplate Size

As requested, we have also analysed the trend in floorplate size. Market demand, as demonstrated by new buildings, is shown in the table below:

Year Built	Average Floorplate
1999 to 2008	15,500 ft. ²
1989 to 1998	15,027 ft. ²
1979 to 1988	40,090 ft. ²
< 1979	31,061 ft. ²

Source: Turner Drake & Partners Ltd. November 2008.

There is a trend to smaller hotels and hence smaller floorplates.

Residential Demand

(1) Key Demand Factors

Residential demand in the study area effectively means apartments (condominium and rental) rather than single or multiple family housing. Escalating land values are driving out the latter housing forms: the land is worth more for redevelopment than the value of the property in its existing use.

Our previous studies of apartment demand have established that the key drivers of demand in Downtown Halifax's Catchment Area are, (1) the price of alternate housing and, (2) the number of families without children. In addition a condominium specific demand driver is the 55 and over age population, since they are the main purchaser demographic. The rental apartment demand drivers are, (1) the under 30 age population, (2) location vis à vis educational and employment generators such as Universities and Hospitals, (3) household income in the Catchment Area. Downtown Halifax's Catchment Area is Halifax Peninsula: 80% of the demand for apartments originates from this geographic area.

In essence condominium apartment purchasers are primarily empty nesters aged 55 or more who want to stay in the area and are looking for accommodation that is no more expensive than their present dwelling. Apartment renters on the other hand are primarily income constrained singles or (as yet) childless couples, less than 30 years in age, who need to be located near their place of education or employment but cannot afford a single family home there. The study area appeals to both apartment purchasers and renters:

Potential Apartment-Occupiers			
Type of	Demographic Profile	Catchment	HRM (Urban
Occupier		Area	Area)
Purchaser	≥ 55 Age group.	24%	23%
	Average Price Single Family Home.	\$385,420	\$287,017
	% Families without children.	48%	40%
Renter	< 30 Age group	27%	15%
	Average Price Single Family Home.	\$385,420	\$287,017
	% Families without children.	48%	40%
<	Household income.	\$59,316	\$66,227

Sources: Statistics Canada 2006 Census.

Turner Drake & Partners Ltd. Compuval™ Database.

Demand Forecast

(2)

Aggregate residential demand was 1,751,968 (i.e. 70,079 ft.² per annum) during the period 1983 to 2008. However demand fell to 48,361 ft.² per annum during the period 1990 to 1999 (i.e. the recession and its aftermath), then escalated to 99,115 ft.² per annum during the recent boom years. We have taken aggregate demand of 1,751,968 ft.² (i.e. average 70,079 ft.²/annum) as our Medium Growth Scenario but have dropped it to 50,000 ft.² per annum during anticipated recessionary periods, and have increased it to 85,855 ft.² during anticipated boom times, over the next twenty five years. Our High Growth Scenario assumes that demand will be 15% higher than the Medium Growth Scenario to yield an annual demand of 99,115 ft.² during non-recessionary periods, concomitant with recent experience. Our Low Growth Scenario assumes that demand will be 5% lower than our Medium Growth Scenario and reflects the fact our population is aging and there is, and will continue to be, a trend for the over 55 age empty nesters to migrate to downtown living as they retire. The results are shown in the table below:

	Residential Demand (ft. ²)				
Growth Scenario	2008	2013	2018	2033	
Low	2,743,645	2,981,145	3,320,831	4,408,015	
Medium	2,743,645	2,993,645	3,351,210	4,495,615	
High	2,743,645	3,032,255	3,445,043	4,766,189	

(3) Floorplate Size

As requested we have also analysed the trend in floorplate sizes. Market demand, as demonstrated by new building, is shown in the table below:

	Year Built	Average Floorplate	
-	1999 to 2008	14,573 ft. ²	
	1989 to 1998	11,240 ft. ²	
	1979 to 1988	10,197 ft.²	
	< 1979	7,291 ft. ²	

Source: Turner Drake & Partners Ltd. November 2008

Whilst the same factors which constrain the floorplate size of office buildings, such as the size of parcels of land available for development, apply to apartment buildings too, there appears to be a similar trend to larger floorplates.
Institutional Demand

(1) Key Demand Factors

During the period 1983 to 2008, institutional demand, as measured by the amount of institutional inventory, decreased by an annual average rate of 19,071 ft.² as a result, primarily, of the demolition of the Infirmary Hospital on Queen Street. There had been no significant additions to inventory during that period. The Provincial Art Gallery expanded into the adjacent, government owned office building and NSCAD expanded into the old School Board Building at Brunswick and Sackville Streets. However NSCAD also moved part of its campus from Historic Properties out of the study area, to the Port of Halifax's facilities. NSCAD's new Port Campus is 70,000 ft.².

(2) Demand Forecast

Institutional demand is expected to remain static over the next twenty five years:

	Institutional Demand (ft. ²)					
Growth Scenario	2008	2013	2033			
Low	1,198,376	1,198,376	1,198,376			
Medium	1,198,376	1,198,376 1,198,376	1,198,376			
High	1,198,376	1,198,376 1,198,376	1,198,376			

Page 22

Parking Demand

(1) Key Demand Factors

During the period 1983 to 2008 parking garage demand, as measured by the amount of parking garage inventory, increased at an annual average rate of 25,725 ft.². Of the total 643,128 ft.² added to inventory during that period 401,413 ft.² was added during the past twenty years, an average of 20,071 ft.² per annum. During the past ten years the annual average decreased to 18,810 ft.². A key driver of parking garage demand is the daytime population. A surrogate for daytime population is the aggregate office, hotel and retail space. The demand for parking garage space as evidenced by the construction of new facilities is shown in the following table:

r			7
	New Par	king Garage Construct	tion (ft.²)
	Year Built	Total GBA	Annual GBA
	2000 to 2008	188,100 ft. ²	20,900 ft
	1990 to 1999	193,050 ft. ²	19,305 ft.2
	1980 to 1989	438,959 ft. ²	43,896 ft 2
	1970 to 1978	641,607 ft. ²	64,161 ft.2

Source: Turner Drake & Partners Ltd., November 2008

Office demand is a key driver of parking garage demand. During the period 1990 to 2008, no significant office construction took place but net parking garage construction added about 193,050 ft.² of space (after allowing for the removal of Texpark). Net accretion to demand was therefore 10,161 ft.²/annum during a period of little office construction. During the period 1980 to 1989, 2,114,289 ft.² of new offices were constructed, 211,429 ft.² per annum. During that same period 438,959 ft.² of parking garage was built, 43,896 ft.² per annum. Assuming that 10,161 ft.²/annum of parking garage was constructed to meet non-office demand, 337,349 ft.² of parking garage was built to service 2,114,289 ft.² of new office space, i.e. 0.16 ft.² of parking garage per 1 ft.² of office space. Assuming a "normal" 5% office vacancy, this would imply a ratio of 0.17 ft.² of parking per 1 ft.² of office demand (i.e. approximately one parking spot per 10 office workers). We have used this ratio, and our projections of office demand, to forecast parking garage demand resulting from office demand growth over the next twenty five years.

The 10,161 ft.²/annum of parking garage, constructed to meet non-office demand during the 1980 to 1989 period, was created primarily to service the 745,773 ft.² (74,577 ft.²/annum) of hotel space built during those years. It represents 0.14 ft.² of parking per 1 ft.² of hotel demand (i.e. approximately one parking spot per 3 hotel rooms). We have used this ratio, and our projections of hotel demand, to forecast parking garage demand (resulting from hotel demand growth) over the next twenty five years.

(2) Demand Forecast

Our projections of parking garage demand are shown in the table below:

		Parking Garag	ge Demand (ft. ²)	
Growth Scenario	2008	2013	2018	2033
Low	1,461,716	1,491,603	1,546,501	1,744,217
Medium	1,461,716	1,504,196	1,568,203	1,801,871
High	1,461,716	1,513,476	1,594,841	1,891,637

(3) Floorplate Size

As requested we have also analysed the trend in floorplate size. Mark demonstrated by new building, is shown in the table below:

Market demand, as

Year Built	Average Floorplate
1999 to 2008	25,283 ft. ²
1989 to 1998	24,216 ft. ²
1979 to 1988	59,856 ft. ²
< 1979	167,594 ft. ²

Source: Turner Drake & Partners Ltd. November 2008.

Parking garages are often located below hotels. Their floorplate matches that of the hotel.

Total Demand Forecasts

Our projections of total demand are summarised in the following table:

		Total Deman	d Inventory b	y Type of Use		a se a se
Growth Scenario	Type of Space	2008	2013	2018	2033	Average Annual Increase (ft. ²) 2008 - 2033
Low	Office	6,464,801	6,614,801	6,864,801	7,714,801	50,000
LUW	Retail	1,694,302	1,740,102	1,814,277	2,067,704	14,936
	Hotel	1,657,654	1,688,988	1,777,545	2,157,660	20,000
	Residential	2,743,645	2,981,145	3,320,831	4,408,015	66,575
	Institutional	1,198,376	1,198,376	1,198,376	1,198,376	0
	Parking Garage	1,461,716	1,491,603	1,546,501	1,744,217	11,300
	Sub-total	15,220,494	15,715,015	16,522,331	19,209,773	162,811
Medium	Office	6,464,801	6,677,263	6,948,033	7,868,651	56,154
	Retail	1,694,302	1,749,842	1,832,602	2118,715	16,977
	Hotel	1,657,654	1,703,089	1,831,494	2,382,654	29,000
	Residential	2,743,645	2,993,645	3,351,210	4,495,615	70,079
	Institutional	1,198,376	1,198,376	1,198,376	₹,198,376	0
	Parking Garage	1,461,716	1,504,196	1,568,203	1,801,871	13,606
	Sub-total	15,220,494	15,826,411	16,729,919	19,865,882	185,616
High	Office	6,464,801	6,722,263	7,068,033	8,243,651	71,154
-	Retail	1,694,302	1,760,260	1,860,860	2,209,640	20,614
	Hotel	1,657,654	1,714,734	1,876,052	2,568,482	36,433
	Residential	2,743,645	3,032,255	3,445,043	4,766,189	80,902
	Institutional	1,198,376	1,198,376	1,198,376	1,198,376	0
	Parking Garage	1,461,716	1]513,47ð	1,594,841	1,891,637	17,197
	Sub-total	15,220,494	15,941,364	17,043,205	20,877,975	226,299

SUPPLY

HRMbyDesign Plan Capacity

Scope

(2)

(3)

The objective of the supply part of the assignment is to estimate the potential development capacity over the next twenty five years under HRMbyDesign's proposed built form rules, contained in the HRMbyDesign Land Use By-Law and Design Manual.

Methodology

We adopted the following methodology to achieve the foregoing objective:

(1) Identify potential development sites that will support new development over the next twenty five years. Guidelines were established to ensure that potential sites are suitable firstly in terms of their **physical** configuration (i.e. they must be large enough to support the minimum floorplate required of new development) and secondly in terms of their **economics** (i.e. the land must be available at a price that makes development affordable). Existing buildings, therefore, which have a value well in excess of their underlying land value are unlikely to be redeveloped purely on economic grounds, whereas buildings which represent an underutilisation of the land they occupy (usually because of their size, age or condition) may be good candidates for redevelopment.

The two guidelines used to identify potential development sites were:

Minimum land size – the **optimum** floorplate-size is generally in the 15-25,000 ft.² range for all use types based on the results of the Market Demand Study, though it is economically feasible to build offices with a 10,000 ft.² floorplate in the downtown core. We have therefore adopted 10,000 ft.² as the minimum land size requirement for the supply study.

Maximum assessed value per sq. ft. - existing vacant sites in the downtown core are typically assessed **below** \$100 per sq. ft. of land area. They provide the current (short term) inventory of development land. Existing buildings which are also assessed below \$100 per sq. ft. of land area are also candidates for redevelopment, provide they meet the minimum 10,000 ft.² size requirement. They provide the short-to-mid term inventory. Beyond that we exercised judgement to identify other potential redevelopment sites based on the observed size, age and condition of existing structures. They provide the mid-to-long term inventory.

Calculate the allowable build-out for each potential development site according to the HRMbyDesign proposed built form rules. The results are expressed in terms of Gross Building Area (GBA) consistent with the Demand forecasts.

Separate forecasts are made for each of the following use types:

- 100% commercial, which assumes storey heights of 12 ft. (ground floor at 14 ft.).
- 100% residential, which assumes storey heights of 10 ft.
- Sites occupied by existing buildings were adjusted by deducting the GBA of the existing structures, thus capturing only the **incremental** capacity from redevelopment.

(4) There are several major development projects within the study area that are already approved to proceed.

Precinct #	Project	Proponent	GBA
1	The Alexander	Halkirk Properties	296,000 ft. ²
1	Salter Block	Centennial Properties	552,000 ft. ²
3	The Trillium	W.M. Fares	253,700 ft. ²
4	Twisted Sisters	United Gulf	561,750 ft. ²
8	International Place	Empire Group	450,000 ft. ²

Source: HRM.

These figures have been incorporated into our supply model. Most are mixed use and we have not attempted to convert them into 100% Commercial or 100% Residential.

- (5) The RFP requires separate forecasts for each of the three time frames: five (5) years, ten (10) years and twenty five (25) years.
 - 0 5 years Includes existing vacant sites.
 - 5 10 years
- ears Includes existing buildings where the assessed value falls below the guideline of \$100/ft.² of land area.
 - Also includes the Cogswell Interchange lands. (Developable land area of 6 acres provided by HRM).
 - 10 25 years Includes existing buildings with assessed values between \$100 \$200/ft.² (of land area) which are also considered suitable mid-long term redevelopment candidates.
- (6) Potential development sites which are occupied in whole or part by designated Heritage buildings have been separately identified in the supply forecast. In so doing we are able to measure whether the demand forecast can theoretically be met without disturbing Heritage buildings.
- (7) Although not required in the RFP, we have also measured the potential supply according to ownership to distinguish between public versus private ownership.

Procedural Overview

Potential development sites were identified using a combination of:

- (1) PID (property ownership) mapping compiled by the Province of Nova Scotia Property On Line. It was used to identify lot sizes, configurations and ownership profiles and tabulated according to PID #. Preclinct layers supplied by HRMbyDesign were added. This was the primary screening tool for lot sizes.
- (2) AAN (property assessment) mapping was introduced as an additional layer to show the 2008 assessment by individual account, expressed in terms of assessed value per sq. ft. of land area. It was used as a tool to establish relative price points within each precinct rather than the absolute market value of every individual property. Although assessments are market-value based, they must also adhere to the statutory principal of "uniformity", a mechanism which ensures consistency.

The assessment per sq. ft. of Land Area for all parcels in the study area are illustrated on the map following:

Supply Forecast

A total of 40 potential development sites were identified within the study area. They are illustrated on the Potential Development Site Map following. Collectively they generate the following new supply capacity over the next 25 years:

	Cumulative New Supply (ft. ² of GBA)						
Use Type	0 - 5 Yrs.	5 - 10 Years	10 - 25 Years				
100% Residential	8,282,660	13,168,886	13,555,719				
100% Commercial	6,689,616	10,003,217	10,281,313				

Heritage vs. Non-Heritage Sites

We have measured the supply capacity that will come from sites occupied by existing heritage buildings.

	0 - 5 Years	10 - 25 Years
Heritage sites	27%	30%
Non-Heritage sites	73%	70%
Total	100%	100%

Ownership Profiles

The site ownership for the short-term (0 - 5 years) supply capacity is as follows:







SUPPLY AND DEMAND MATRIX

This RFP requires that we develop a matrix for each of the three growth scenarios (low, medium and high) to indicate whether the build-out capacity possible under the HRMbyDesign plan is reasonable to meet the foreseeable demand in each of the three forecast timeframes (five, ten and twenty five years). During the course of undertaking this work it was agreed with the Steering Committee that no practical purpose would be served by attempting to allocate demand by precinct since the study area was too small and demand migrates to the sites that are available for development. It was agreed too that allocation by floorplate size is redundant since developers will not build if the site is too small, but will erect a building even if the optimum size site is unavailable, provided that is economically feasible to do so. There is also flexibility within the various property types: hotels for example are trending to smaller floorplates, whilst the trend for the other property types is towards larger floorplate sizes. We accommodated the floorplate restrictions therefore by utilising them in calculating supply, rather than by attempting to force them into the Supply and Demand Matrix.

Our estimate of projected demand; and the supply available having regard to; (1) Inventory which existed at the date of this report, and (2) inventory which could be developed under the constraints imposed by the HRMbyDesign plan and floorplate sizes; is shown on the following matrix:

			Supply	& Demand M	atrix 📉	° ⟨𝗨		
Year	2008 Projected Demand	2008 Available Supply	2013 Projected Demand	2013	2018 Projected	2018 Available Supply	2033 Projected Demand	2033 Avallable Supply
Low Growth Scenario				A	A starting and a start of the s			
Residential	2 743 645	11,114,080	2,981,145	16,000,006	320.831	16,387,139	4,408,015	16,387,139
Commercial	11,278,473	18,335,428	11,535,494	21,649,029	12,003,124	21,927,125	13,684,382	21,927,125
Institutional	1.198.376	1,198,376	1,198,328	1,198,376	1,198,376	1,198,376	1,198,376	1,198,376
Total	15,220.494		15,416,015		16,522,331		19,290,773	
Mixed Total	15,220,494	23,130,303	8,715,015	27,082,366	16.522.331	27,295,852	19,290,773	27,295,852
Medium Growth Scenario								
Residential	2,743,645 4	(h.1, H4 080/	2,993,645	16,000,306	3,351,210	16,387,139	_ 4,495,615	16,387,139
Commercial	11,278,478	18,035,428	11,634,390	21,649,029	12,180,332	21,927,125	14,171,891	21,927,125
Institutional	1.198.3705	1,198,376	1,198,376	1,198,376	1,198.376	1,198,376	1,198,376	1,198,376
Total	15.228 494	<u></u>	15,826,411		16,729,919		19,865,882	
Mixed Total	220,4	23,022,511	15,826,411	26,953,052	16,729,919	27,191,836	19,865,882	27,191,836
High Growth Scenario								
Residential	2 743,645	11,114,080	3,032,255	16,000,306	3,445,043	16,387,139	4,766,189	16,387,139
Commercial	11,278,473	18,335,428	11,710,733	21,649,029	12,399 786	21,927,125	14,913,409	21,927,125
Institutional	1,198.376	1,198,376	1,198.376	1,198,376	1.198.376	1,198,376	1,198,376	1,198,376
Total	15,220.494		15.941,364		17.043.205		20,877,975	
Mixed Total	15.220 494	23,003,021	15,941,364	26,897,006	17.043,205	27,127,518	20,877,975	27,127,518

Notes:

(1) Projected Demand

- (i) Residential and Institutional demand are taken from the Demand section of this report.
- (ii) Commercial demand is the aggregate of office, retail, hotel and parking garages as detailed in the Demand section of this report.
- (iii) Mixed Total is the aggregate demand for all space types.

(2) Available Supply

- (i) Residential supply is based on existing (2008) residential inventory plus all of the potential inventory available to be developed under the HRMbyDesign plan, i.e. it assumes that *all* of the latter capacity will be utilised for residential use.
- (ii) Commercial supply is based on existing (2008) office, retail, hotel and parking garage inventory plus all of the potential inventory available to be developed under the HRMbyDesign plan, i.e. it assumes that *all* of the latter capacity will be utilised for commercial use.
- (iii) Mixed total supply is based on the existing (2008), institutional, residential and commercial (office, retail, hotel, parking garage inventory) plus all of the potential inventory available to be developed under the HRMbyDesign plan ... on the assumption that the latter inventory will be allocated between residential and commercial use in the same proportion as the incremental projected demand.
- (iv) We have assumed that institutional supply will remain stable throughout the 25 year projection period concomitant with projected demand.

onclusion:

In order to test whether HRMbyDesign's supply capacity is adequate to meet projected demand it is necessary to compare the Mixed Total Available Supply with Mixed Total Projected Demand. If the former equals or exceeds the latter, there is adequate supply capacity. Such is the case.

BENCHMARK CRITERIA

Scope

This RFQ requires that we develop benchmark criteria against which the HRMbyDesign Plan can be measured at five year intervals over the next twenty five years; and provide a framework for adjustments as needed. To be effective these Baseline Indicators must be:

- (i) Objective.
- (ii) Quantifiable.
- (iii) Pertinent, i.e. be aligned with the objectives of the HRMbyDesign Plan. The desired outcomes, as defined on Page 15 of the RFQ are all economic (with the sole exception of the program of public realm improvements) and focus on increasing the economic viability of Downtown Halifax. Even the program of public realm improvements can be measured in monetary terms, since their success will be measured by the ability of the study area to attract renters, purchasers and visitors.

Benchmark Indicators

In our response to the RFQ we undertook to develop three benchmarks which were objective, quantifiable and pertinent. In our opinion the three baseline indicators which meet the foregoing criteria and best measure the success of the HRMbyDesign plan are the following;

(1) Rental Premium

(a) Rationale

The rental premium (gross rent per ft.² including cleaning, electricity, other operating expenses and realty taxes) paid for newly leased office space in 1801 Hollis Street, Halifax over the most comparable (quality and size) recently leased office space in the Burnside City of the Lakes Business Park vis à vis the rental premium that existed prior to the implementation of the HRMbyDesign plan. The rental premium is to be expressed in Canadian dollars, deflated to the base date by Statistics Canada's Halifax Consumer Price Index (base date = date HRMbyDesign plan was first implemented). This indicator will measure the premium office tenants place on their downtown location.

(b) 📣 Benchmark Calculation

Current (November 2008) Gross Rents:			
1801 Hollis Street, Halifax	\$	30.12	/ft.2
Park Place Centre 1, 238 Brownlow Ave., Dartmouth	<u>\$</u>	25.90	/ft.2
Rental premium (in November 2008 dollars)	\$	4.22	/ft. ²

(c) Framework

The rental information can be provided by real estate consultants, appraisers, real estate brokers or property managers.

The gross rent = net absolute rent + [operating expenses (including tenant cleaning and electricity) and real estate taxes].

Statistics Canada can provide the Halifax Consumer Price Index for the benchmark year.

Quantum of Office Demand (2)

(a) Rationale

The amount by which the office inventory (ft.2) exceeds, or falls short of, the projections of office inventory compiled for this report under the Medium Growth Scenario. This indicator will measure the success of the HRMbyDesign Plan in, (1) attracting new office development (demand), and (2) providing capacity (supply) in an economically timely manner.

Benchmark Calculation (b)

Medium Growth Scenario Office Inventory (ft.4)								
Type of Inventory	2008	2013	2018	2023	2028	2033		
Total Inventory GBA	6,694,764	6,914,784	7,195,185	7,514,843	7,856,933	8,148,551		

Framework (c)

Calculate the Total Inventory by computing the Net Office GBA added during the five years prior to the benchmark year. (Net Office GBA = New Office GBA - Office GBA Demolished or Changed to alternative use) The information can be provided by HRM's Building Inspectors, real estate consultants, appraisers, brokers or property managers. Add the Net Office GBA to the Total Inventory GBA of the previous benchmark year's total.

Increase in Assessed Values (3)

(a) Rationale

The amount by which the aggregate realty assessment in Downtown Halifax, expressed in Canadian dollars, deflated to the base date by Statistics Canada's Halifax Consumer Price Index (base date = date HRMbyDesign plan was first implemented), exceeds the aggregate realty assessment at the base date. This indicator will measure the economic success of the HRMbyDesign plan to Downtown Halifax's main stakeholder, HRM.

Benchmark Calculation

(b)

Current (November 2008) Aggregate Realty Assessment For Study Area is \$2,069,178,510.

Framework (c)

The Property Valuation Services Corporation can provide the assessment information for the benchmark year.

Statistics Canada can provide the Halifax Consumer Price Index for the benchmark year.

CERTIFICATION

Re: Market Survey, Downtown Halifax, Nova Scotia

I certify that, to the best of my knowledge and belief:

the statements of fact contained in this report are true and correct;

the reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions;

I have no present or prospective interest in the property that is the subject of this report other than an ownership interest in 5110 Prince Street and 1697 Brunswick Street, and no personal interest with respect to the parties involved;

I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment;

my engagement in this assignment was not contingent upon developing or reporting predetermined results;

my compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favours the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this report;

my analyses, opinions, and conclusions were developed; and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice (USPAP); and meets or exceeds the Canadian Uniform Standards;

I have not made a personal inspection of the property that is the subject of this report;

the following people provided significant professional assistance to the person signing this report: Lee Weatherby and Alexandra Baird Allen who compiled the HRMbyDesign capacity analysis; Anish Popat who compiled the 1983 and 2008 Demand Inventory; and Giselle Kakamousias who provided input on the realty and business occupancy tax component;

the reported analyses, opinions and conclusions were developed, and this report has been prepared, in conformity with the requirements of the code of professional ethics and the Standards of Professional Appraisal Practice of the professional institutes of which I am a member;

I certify that the use of this report is subject to the requirements of the professional institutes of which I am a member, relating to review by their duly authorised representatives;

as of the date of this report, I have completed the requirements of the continuing education programs of the professional institutes of which I am a member.

21 November 2008

MICHAEL S. TURNER, M.Sc., M.B.A., FRICS, MAI, CRE, AACI