

HFX Draft Centre Plan

MIRCS Institute Submission

01 December, 2016

The *Draft Centre Plan* was released on 26 October, 2016, and there is a provision to receive public comments on this document until 02 December, 2016. We submit these comments under that provision.

1. Comments about the Growth Target

The document is ambitious in scope and design intent. Commendably, it is the result of some considerable efforts made to encourage public input and review. Given the speculative free-for-all among developers that is currently underway, the approval of almost any standard would be an improvement on the current situation.

Nevertheless, the *Draft Centre Plan* must be assessed as taking a very aggressive approach to encouraging a 'developer-led' strategy of land-use development in the Centre-district of Halifax-Dartmouth. Indeed, our assessment of the 'urban structure' policies is that the proposed zoning changes are much more dramatic for the Halifax peninsula, than they are for the Dartmouth centre.

There are three key assumptions behind the population growth targets of the *Draft Centre Plan*:

(a) Accommodating population growth of up to 33,000 people:

In a Memorandum (Item No. 8.1.4) dated 19 Aug, 2016 to the Community Design Advisory Committee, Jacob Ritchie, the Urban Design Program Manager, outlined the basis of the calculation. We attach a table as Appendix 'A' which details that calculation with different residential absorption scenarios. In this calculation, we use the 0.94% growth rate for the period 2011-2015 which Ritchie notes in his Memorandum, down slightly from the 1.0% which he used but doesn't justify. Assuming that the *Draft Centre Plan* is approved by the middle of next summer, 2017,¹ the population growth that is in play, *in terms of the Plan*, would be for the period 2017-2031, being fourteen years. The critical question, then, is what absorption rate to use. The Regional Plan specifies a minimum of 25%. The *Draft Centre Plan* suggests an upper range of 40% (p.19). Ritchie's goal of 33,000 is 45.8% of his projected population increase. There is no justification offered of why the plan should be pitched to maximize the amount of residential absorption, and there are some strong reasons why maximizing new development is problematic. One source of evidence for what might be a reasonable target is the historical rate of absorption in the Centre-district. Table 2.5 of the Stantec Quantification Study shows that total population growth in HRM over the ten year period 2001-2011 was 30,985 persons, but that the Centre-district only grew by 642 persons out of that total. This is a 2.1% absorption rate. On what basis, then, is it rational to set a goal of 45.8% when the historical absorption rate has been 2.1%, particularly when the resulting plan will lead to radical changes across much of the urban structure of the Centre-district, changes that would particularly affect the Peninsula. A more reasonable goal for mid-growth scenarios

¹ Statistics Canada estimates are taken from the mid-year point.

(25%-32.5%) would be projecting an additional 15,000-20,000 people, already wildly above historical rates. At the current Centre-district ratio of 2.04 persons per dwelling, these mid-growth scenarios would require some 7,000-10,000 units.

(b) Setting a reasonable absorption rate:

While it is possible to set any arbitrary rate for population growth, one must ask whether there is any basis to suggest what is reasonable for a particular geography to absorb? An inflow of Ritchie's 33,000 people would overwhelm a small town like Wolfville, for instance, but would be a drop in the bucket for a city like Toronto. So, what would a reasonable absorption rate be?

Surely, in part, it must be how much change should be imposed on those who already live there. How radically should existing forms of life and interaction be disrupted within the Centre-district before the whole proposal must be regarded as something no longer done for the benefit of the people, but is something imposed by the municipal apparatus for corporate objectives that no longer serve the common good.

In 2011, there were 97,190 residents in the Centre-district of Halifax-Dartmouth. Ritchie's goal of 33,000 new residents is, thus, 34% of that existing population. By any measure, that rate of aggressive change, where one in four persons would be a new resident, is alienating and disruptive, 'creative destruction' run amuck.

Also relevant to this question is the source of the population inflow. Much of the inflow which has happened in recent years is not new to the province, but is inflow from the rural areas of the province, which are being, rather steadily, emptied of population. In this respect, the population ambitions of Halifax run counter to the "rural sustainability" movement in Nova Scotia. It is no kind of a strategy to be borrowing from Peter to

pay Paul. Short of completely closing down entire regions of the province, it also means that the large migration of population from the rural areas to Halifax may have been a one-time shift, with little further room left for large movements.

In short, a more reasonable goal for population growth than the high-growth and ultra-high-growth scenarios of Mr. Jacobs, would be more modest mid-growth scenarios (25%-32.5%). As detailed in our Appendix 'A', this would mean targeting an additional 15,000-20,000 people, something already wildly above historical rates. At the current Centre-district ratio of 1.99 persons per dwelling,² these mid-growth scenarios would require some 7,000-10,000 additional units.

(c) Achieving projected growth with developer-led new construction:

Greatly expanded building heights are provided for across many of the new zones which are proposed. The assumption is that existing building heights will not accommodate the needed growth. Yet Stantec's Quantification Study (Table 3.6) indicated that, for the period 2009-2031, a total of 34,965 additional housing units could be constructed in the Centre-district within the existing land-use rule structure, and a further 6,370 units, if "the addition of one accessory flat or extra unit would be permitted for each existing single detached dwelling in R-1 and R-2 zoned areas", something already proposed in the *Draft Centre Plan*. Using Stantec Table 3.3 to reduce the existing capacity for the period 2009-2016, a generous reduction given that much of the recent addition to housing in the Centre-district has been granted densities in excess of the existing rules, it yields a remaining balance available of 13,000-20,000 dwelling units under the existing lower height rules. And this to satisfy a demand of perhaps 7,000-10,000 units in

² Housing and Homelessness Partnership, "Halifax Housing Needs Assessment, Final Report", (Halifax Regional Municipality, 2015); "Housing Needs Assessment: Project Overview", (Halifax Regional Municipality, 2016).

the mid- growth (25-32.5%) scenarios. The fact is that because the required residential absorption in the mid-growth scenarios can be accomplished with relatively small-scale buildings, the supply can be satisfied by builders. It is only with the high-growth scenarios (40-50% absorption) that the medium height buildings (6-8 stories) and the highrises (8 plus stories) are of a scale that require a strategy of developer-led new construction. The case, therefore, for radically changing the land-use structure of the Centre-district is really, therefore, an argument about why very high absorption ratios are possible and desirable.

2. Comments about the Significance of *Plan Goals*

What then might be the reasons to consider pursuing a high or ultra-high population absorption strategy for the Centre-district. One reason, of course, would be increasing the revenue stream for City staff to spend and for Council to direct, but although this is a common reality of political life, self-aggrandizement is never legitimate. Another reason would be to capitalize on the existing infrastructure that is already in place in the Centre-district, and reduce the urban sprawl that is so characteristic of the Halifax Metropolitan area, but while it is one good, efficiency is not the only good, and would need to be weighed against the other goods that are part of life in the Centre-district. Yet another reason would be a moral failure of Council, willing to sacrifice the common good for commercial and material expansion. This is why there has been a call for eliminating development money from the election campaigns, with some Councillors campaigning on that basis, and has been a motivation for one of the community groups to do a statistical analysis between councillor voting patterns and development approvals. But is there really an argument needed for why a mentalité that knows the price of everything and the value of

nothing should not be an aspiration? And, lastly, a fourth reason would be the 'free market' philosophy which has dominated economic and political policy in Canada for the last thirty-five years. There are many people who can't distinguish between 'private goods' and 'public goods', some of our city fathers among them. But the harvest of that intellectual failure, and the political populism that it has generated, is now all too evident. Each of these four reasons does play some role in the impetus to pursue a high or ultra-high population absorption strategy for the Centre-district, but we think they are, in the end, secondary factors. The most important reason, in our view, is not any of these reasons, but some remaining difficulties in the resolution and definition of *Plan* goals.

We think there has been a significant achievement in the formulation of the Plan goals, but an achievement that is still incomplete. The most notable feature of the *Draft Centre Plan* is that the goals are represented in a series of not-fully-compatible statements: the vision statement, the core concepts, and the theme area goals are each somewhat different versions of a unified goal declaration. Assuming that the particular objectives of the 'General Policies' and 'Urban Structure Policies' are intermediate and explanatory bridges between the goals and the land-use bylaws, then our attention can remain focussed on the general goals of these three elements as together constituting the goal statement of the *Plan*.

The goal statement plays a critical role in establishing the rule of law for land-use development in the community. The City of Halifax, as an organization, is given the executive task of interpreting the degree-of-fit between particular applications and the development rules. When a proponent makes an application in which there is not an adequate fit, City Council must make a judgement about whether the benefits of the development exceed the costs. This is not a discretionary

decision of the Council, though, not a matter of the will of Council, but a matter of assessing whether a change in the particular rules for that proponent would still satisfy the general goals of the *Plan*. This is to say that the goals of the *Centre Plan* provide the standard against which the assessment of costs and benefits are made. In this assessment process, the Council is like any other organization: they operate under the rule of law. The goal statement of the Plan, therefore, plays a critical role in ensuring the integrity of community development in the Centre-district.

What is noticeable about the three different goal statements is that the 'vision' and the 'theme area goals' are flaccid and uninspiring, something that one might find in any plan in any municipality in Canada. To the credit of the planners, though, the four core concepts, as currently formulated, are lively, substantive, and direction-filled statements.³

In our view, there needs to be some significant work on consolidation of these three elements into a single statement, and we recommend that the core of that unified statement would be built upon the foundation of the 'core concepts'. In this Submission, our comments will, therefore be addressed to the adequacy of the core concepts as the central goal statement of the *Draft Centre Plan*. We provisionally rate the core concepts, in their present form, with the following grades:

Human Scale	B+
Pedestrian First	A-
Complete Communities	B
Strategic Growth	F

³ Our understanding is that the 'vision' and 'theme area goals' were prepared first, and that the 'core concepts' emerged more organically from within the planning and consultation process.

3. Comments about the Particulars of the *Plan* Goals

(a) Human Scale Goal

The statement is very rich, but needs some additional elements.

We recommend that the statement would benefit from some reference to the 'unexpected', and 'intimate'. One of the central problems with larger-scaled developments is that they necessarily reduce the unpredictability and intimacy of space. They may have lots of building articulation, be appropriately scaled relative to their neighbours, provide different textures, match the speed which people move around cities, achieve an integration with trees and street elements, and yet still reduce that element of discovery, unpredictability, and intimacy that can come with an aggregation of small buildings under separate ownerships, designed by different people over what may be considerable periods of time, yielding a mix of the historic and the new that juxtaposes surprising interfaces all jumbled together. An example of this change is Westwood's 'Doyle Street Development'. Much of the previous architecture in that block was uninspiring, parts of it didn't work at all, and the intensity of uses in the overall site was relatively low, but there was also a jumble of buildings with some wonderfully imaginative adaptations that led to serendipitous surprises. While the massing and height of the approved building is too great for the site, in our view, it nevertheless goes some distance to satisfying the goal for human scale, as the statement is presently written. All that said, there will be, nevertheless, a net reduction in the element of discovery, unpredictability, and intimacy as a result of the development. Adding some reference to the value of the unpredictable and intimate found in small-scale development would deepen the value of this statement.

The value concerning the element of discovery, unpredictability, and intimacy of space points to a larger question about the function of 'human scale'. What is it about 'human scale' that makes it valuable, what is it actually promoting? In our view, the deeper value of 'human scale' is the value of human interaction. When humans feel comfortable and 'at home' in a neighbourhood, they are more receptive to starting conversations and forming relationships with their neighbours, watching over the safety of the children playing road hockey on the sidestreet, or watering the neighbour's front garden when they are away. The kind of rich human interaction that 'human scale' supports evolves as a social ecology of relationships, not as a matter of contracted cost-benefit. Because that social ecology is so vulnerable, authentic development occurs with a combination of small, old and new buildings, preserving the best-loved inheritances of the past while adding new development that makes an improvement over what was already there. Good development in existing neighbourhoods is not about the demolition of the past in order to build new, but about making improvements to what is already there. Part of the reason that the existing bylaws are such a patchwork of different heights was the desire to protect those properties which had achieved some excellence, and providing an opening for development on those properties which most needed to be improved. The model for most of our developers, however, is 'greenfield development', which in the Centre-district results in demolition and replacement of existing buildings. What existing neighbourhoods need, though, is a much more fine-grained property-by-property design, keeping the best intact, adding to those which are a little weaker, and replacing only the worst. The present disposition to accumulate small properties for eventual demolition and 'greenfield development' necessarily results in medium and high-rise structures to offset the demolition cost of so much existing building asset. In short, what commends itself for the already thick neighbourhoods of

the Centre-district is largely horizontal, not vertical, development.

The statement needs to have a summary sentence formulated as a goal.

(b) Pedestrian First Goal

The statement is very rich, but needs some strengthening of the existing elements.

The values that are specified identify the pedestrian-first environment as supporting (i) walking as a convenient and viable transportation choice, (ii) a reduction in emissions, and (iii) improved public health. There should be a stronger incorporation of the 'public spaces and places' and 'sustainability' themes into this statement, and, in order to do so, the statement needs to point to the pedestrian goods that go beyond the purely utilitarian ones indicated.

It is true that supporting walking as part of an 'active living' lifestyle is a positive public health value, but the 'pedestrian first' goal becomes an enjoyment with an 'urban forest' canopy, pocket parks and green spaces, community gardens, flower beds, and the outdoor recreational uses that are part of good urban design. Opportunities to add such spaces can be provided as redevelopment of existing properties is initiated. The City should partner with community organizations and the private redeveloper to transfer small spaces into the public domain at these moments.

While walking does need to be a convenient and viable transportation choice, if for no other reason than to reduce the volume of vehicles on the streets in the Centre-district, it should be made more explicit that walking as transportation is also part of a commitment to sustainability. The current

General Policy on Sustainability is oddly silent on the role of transportation. However, most of the interesting experiments and progress in sustainable development, at least in North America, are being made at the level of the city, and the concern with low-density urban sprawl, and the high energy costs which are related to it, are likely to become an ever greater focus for municipal policy and reform. The 'Pedestrian First' core concept needs to move more strongly in this direction.

While the examples of pedestrian-oriented design elements are good, street widths should be specifically mentioned. Where streets are more than two traffic lanes (ie not counting aisles for parking spaces), pedestrian islands or medians should be introduced. While four lane routes exist in the Centre-district, such as Connaught, parts of Robie, parts of Cunard, etc., these boulevards should be restricted to those arterial routes indispensable for satisfactory traffic flow, and it should be made explicit that there are no circumstances where the five or six traffic lane option is justified in the Centre-district (Chebucto between Mumford and Connaught, or Robie between Almon and Young, for instance).

Another pedestrian-oriented element – interpretative information – should also be indicated, something already underway in different parts of the Halifax and Darmouth centres. This is a modest, but important, step to introduce cultural and heritage values right into the design of our streets and sidewalks. The conservation of the community's cultural and heritage assets can be secured through a much deeper education in the stories about, and significance of, those people, both rich and poor, who contributed to making this a great city. Building rich storyboards of interpretative information into each neighbourhood at the pedestrian level can anchor this work.

The statement needs to have a summary sentence formulated as a goal.

(c) Complete Communities

This statement hits some of the key ideas, but needs improvement in order to stand as a good statement of the complete communities concept.

As is commonly the case with professionals involved in planning and development, this statement is conceptualized largely around physical elements. While it is true that the land-use bylaws are tools that are primarily focussed on physical conditions, it is still the case that physical conditions have social and economic implications: the cost of a residential building, which includes some variables that are discretionary and unrelated to safety or public welfare considerations, and, therefore, directly affects who can afford to live there and the access of different social classes and family formations have to the housing which they need. Accordingly, this statement should be considerably broader in intent. Currently, the statement refers to “a variety of lifestyle choices” and enabling “people of all ages and abilities” as the only constituents and definition of the range of people which constitutes a community. The identification of these age and ability classes is positive, but this definition needs to be expanded to provide explicitly for people from a complete range of social classes, economic strata, and occupational groups, different family formations, including families with children, and those of different ethnic and cultural backgrounds.

The range of activities indicated for a complete community are summarized as “to live, work, shop, learn, and play”. This list needs to also include worship, a ‘fundamental freedom’ of everyone in Canada under the Charter.

In short, the present focus of the Complete Communities statement is primarily on the complete 'supply-side' of the equation. The statement needs to be expanded to include what we might call, using parallel language, the complete 'demand-side'. It should indicate an openness and support for all people, all ages, all creeds – that “all of God's children, black men and white men, Jews and Gentiles, Protestants and Catholics, will be able to join hands” – and an intent to use the tools of the *Plan*, in tandem with other resources of the City government, working with the great variety of civil society and private organizations therein, to achieve that.

The statement needs to have a summary sentence formulated as a goal.

(d) Strategic Growth

This statement is severely inadequate and needs to be completely rewritten. There are two principal problems with the present statement.

Firstly, right at the outset, the concept of 'strategic growth' is mistaken. The purpose of the Plan is to establish a rule – a framework of law – to guide the Council in its executive capacity (a) to make routine approvals of development proposals which satisfy the rules, and (b) to compare development proposals which don't fit the particular rules against the standard which the Plan provides by virtue of its goals. Council's assessment of the benefits and costs of non-conformance are made in terms of an abstract and general standard which is specified as a set of goals in the Plan. There cannot, therefore, be a goal which is an undefined standard when its very purpose is to set the standard. If the goal is defined as strategic growth, what standard is there in that concept to tell the Council whether the non-conforming use

constitutes strategic growth or does not constitute strategic growth. The concept of strategic growth is simply a boondoggle allowing any Tom, Dick, or Harry to advise Council that their proposal is strategic. It is an undefined concept.

The second problem relates to the earlier criticism that we raised that land-use planners have an inevitable tendency to think in terms of physical planning, in the case of 'strategic growth', to think in terms of quantitative population growth. What this means, though, is that the core functions of the city of Halifax, as spelled out in other sections about the vision and theme area goals, are missing from this statement:

- "the political, cultural, and economic heart"
- "home to many major institutions ..."
- "a strong retail presence"
- "office development ... an indicator of the larger economy"
- "integration of multiple different transportation modes"
- "many communities ... with their own distinct character"
- "established neighbourhoods, cultural landscapes"
- "historic architecture", "national landmarks"
- "regional importance, economic hub, capital district",
- "educational centre, health focus, cultural heart"

This goal, then, is the big one, the one that is most encompassing of all of those discrete parts in the themes that aren't encompassed by the other three core concepts just discussed. Although the current statement refers to "economically and environmentally responsible growth" in the first line, all of the remainder of the statement – the other nine lines – refers to the accommodation of population growth with residential housing.

The question we raised earlier, though, was whether the present statement, even if it incorporated those wider values and elements which are now present in other parts, would then

constitute a lively, substantive, and direction-filled statement about these core functions. We think not.

The brunt of our criticism of the statement revolves around the inadequate position taken on the economic location of the Centre-district. The Draft Centre Plan notes the population and jobs in the Centre-district relative to those in HRM and in the Province, but has not incorporated that understanding into its central goal structure. The ratios (*Plan*, p. 14) are as follows:

Geographic Unit	Population	Jobs
HRM Centre-district	10.3%	26.1%
HRM Suburb & Rural	32.1%	23.6%
Rest of Nova Scotia	57.6%	50.3%
Total	100.0%	100.0%

HRM generates about half of all of the jobs in Nova Scotia, and half of those – that is a quarter of all the jobs in Nova Scotia – are generated in the Centre-district. Without even looking at the composition of those jobs, it is clear that the Halifax Centre-district is the economic engine of the province. In fact, this is true of cities throughout the western world, and, if we accept the position of Jane Jacobs, Benjamin Barber, and Bruce Katz,⁴ it has always been true. This economic engine is the central fact about the growth of the Centre-district, not housing.

We want to point to the work of Bruce Katz and his associates at the Brookings Institution on “Innovation Districts”.⁵ The key

⁴ For a short synthetic lecture, see the 2015 “Ted Talk” by Bruce Katz, author of *The Metropolitan Revolution*: <<https://www.youtube.com/watch?v=8ou-bkgjVN4>>

⁵ Bruce Katz and Julie Wagner, “The Rise of Innovation Districts: A New Geography of Innovation in America.” (Metropolitan Policy Program, Brookings Institution, 2014). See also: Richard Florida et al., “The City as Innovation Machine.” (Working Paper 2016-MPIWP-002, Rotman

point that this literature underlines is that the role of the Halifax Centre-district as the economic engine of Nova Scotia is not accomplished by the fact of its government workers, or the large number of lawyers, doctors, or professors, or the engineers at the shipyards, or any other purely quantitative measure of population. Quantitative growth in population, *per se*, has a relatively low economic value. Rather, the preservation and expansion of the Centre-district is accomplished through the innovation and job creation that connect and are produced through the networks of expertise that exist, found where workers live together in neighbourhoods, share ideas and knowledge at coffee shops and late night bars, at church, and in the community association, during walks at the park, or while showing visitors around the city, while they talk to the advertising agency, or negotiate a deal with a competitor, communicate with associates in other countries, or bring back information from distant conferences, all while they create improvements in the goods and services which are produced for the art of living. Moreover, there is some evidence that the optimum size of the city in terms of innovation performance is not that high – perhaps 600-700,000 people.

Let us consider the Gladstone Ridge Apartment development between North and Almon. It has certainly increased population density in that neighbourhood, but it does nothing to improve the position of the Peninsula as the centre of innovation and economic growth in the province. In terms of this goal, Gladstone Ridge is an utter failure. We need to expect more. Right now, the largest physical development opportunity in HRM's Centre-district is actually in the Dartmouth core, where the gap between the mix of concentrated expertise and jobs embedded in complete communities that are human

scale and pedestrian-oriented is larger than on the Halifax peninsula. We need to do better there than we have been doing with developer-led new construction on the Halifax Peninsula.

What should be clear, in any case, is that without a goal which puts the economic role of the Centre-district front and centre, it would be very easy to kill the goose that lays the golden egg. This could be summed up as saying that the kind of population growth needed in the Centre-district is more workers and less retirees, more inexpensive housing for the graduates of our universities cobbling together their first job and less of the expensive housing for lawyers and government workers, more places for young families and less for those with an empty nest. More thinking about Halifax's function as the engine of the provincial economy and less about quantitative expansion without purpose or direction.

The statement needs to have a summary sentence formulated as a goal, and the title is so problematic that it needs to be renamed.

4. Conclusion

We have not focussed attention on the Policy Objectives or the Urban Structure. We have confidence that the planners are able to formulate the needed mechanisms of implementation with appropriate policies and bylaws to achieve the goals which the community sets. As a result, we have addressed these comments to the problems and limitations of the goals as presently drafted, and our recommendations for changes in the goals will naturally have implications for the Policy Objectives and Urban Structure.

We have indicated that, given the current written material in the document, there needs to be a rationalization and integration of the goals, and have highlighted the four Core Concepts as constituting the most direct, elegant, and forceful language in the document, and the best base on which to build a rationalized goal statement.

We then made a series of suggestions for improvements in the goal statements using these Core Concepts. These suggestions ranged from the relatively minor to major reconstruction. Our criticisms are such that without changes of the kind we suggested, the present plan puts the Centre-district at considerable risk from a very aggressive agenda. The current population absorption targets at 45.8% are much too high and the proposed development trajectory is quantitative expansion which is almost guaranteed to impair the central economic function of the Centre-district.

The great work of this planning process is an intellectual one, understanding the current state and dynamics of the city ecology, accumulating the best ideas about how to support and propel appropriate development forward, all within a dialogue of consultation, reflection, and revision. Much has been accomplished to date. The Draft Centre Plan already has much to be proud of. In this penultimate round of reflection and revision, though, the screw can be turned again a few more turns to further advance and reformulate a plan which can set the Centre-district on a path that can truly serve the interests of the people.

Submitted,



Paul Armstrong, President
MIRCS Institute

APPENDIX 'A'

HFX Centre Plan Analysis

Population Estimates and Absorption Scenarios

Population Base: Statistics Canada, Table 051-0056: Estimates of Population by Census Metropolitan Area

<http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=0510056&tabMode=dataTable&srchLan=-1&p1=-1&p2=9>

Growth Rate: Jacob Ritchie Letter, Item No. 8.1.4, 19Aug2016

Year	Updated Estimates Stats Canada	Population 2011 Base Growth=.94%	Minimum-Growth Scenario 25% of Growth		Mid-Growth Scenario 32.5% of Growth		High-Growth Scenario 40% of Growth		Ultra-High-Growth Scenario 50% of Growth	
			Per Year	Accumulated	Per Year	Accumulated	Per Year	Accumulated	Per Year	Accumulated
2011	402,433	402,433								
2012	406,748	406,216	946	946	1,229	1,229	1,513	1,513	1,891	1,891
2013	409,996	410,034	955	1,900	1,241	2,470	1,527	3,041	1,909	3,801
2014	413,554	413,889	964	2,864	1,253	3,723	1,542	4,582	1,927	5,728
2015	417,847	417,779	973	3,837	1,264	4,988	1,556	6,138	1,945	7,673
2016		421,706	982	4,818	1,276	6,264	1,571	7,709	1,964	9,637
2017		425,670	991	5,809	1,288	7,552	1,586	9,295	1,982	11,619
2018		429,672	1,000	6,810	1,300	8,853	1,601	10,895	2,001	13,619
2019		433,711	1,010	7,819	1,313	10,165	1,616	12,511	2,019	15,639
2020		437,787	1,019	8,839	1,325	11,490	1,631	14,142	2,038	17,677
2021		441,903	1,029	9,867	1,337	12,828	1,646	15,788	2,058	19,735
2022		446,057	1,038	10,906	1,350	14,178	1,662	17,449	2,077	21,812
2023		450,249	1,048	11,954	1,363	15,540	1,677	19,127	2,096	23,908
2024		454,482	1,058	13,012	1,376	16,916	1,693	20,820	2,116	26,024
2025		458,754	1,068	14,080	1,388	18,304	1,709	22,528	2,136	28,160
2026		463,066	1,078	15,158	1,401	19,706	1,725	24,253	2,156	30,317
2027		467,419	1,088	16,247	1,415	21,120	1,741	25,994	2,176	32,493
2028		471,813	1,098	17,345	1,428	22,548	1,757	27,752	2,197	34,690
2029		476,248	1,109	18,454	1,441	23,990	1,774	29,526	2,218	36,907
2030		480,725	1,119	19,573	1,455	25,445	1,791	31,317	2,238	39,146
2031		485,243	1,130	20,703	1,469	26,913	1,808	33,124	2,259	41,405
Revised Growth Estimates: 2015-2031		67,464	16,866	16,866	21,926	21,926	26,986	26,986	33,732	33,732
Goal for Absorption: 2017-2031		59,573		14,893		19,361		23,829		29,787