

Nathan Giacalone

From: DEBORAH CROSSLEY
Sent: Wednesday, January 22, 2020 5:06 PM
To: Victoria Danberg; Alison M. Leary; Susan Albright; Pamela Wright; Joshua Krintzman; R. Lisle Baker; Holly Ryan; Maria Scibelli Greenberg; Andrea W. Kelley; Julia Malakie; Andreae Downs; Marc C. Laredo
Cc: Nathan Giacalone; Deborah J. Crossley; Jonathan Yeo
Subject: ZAP Agenda planning
Attachments: 200127_ZAP_AnnotatedBibliography_WhyContextBased.pdf; FAR Working Group Final Report (Jan11).pdf

[DO NOT OPEN links/attachments unless you are sure the content is safe.]

Dear ZAP Committee and Colleagues who attended the recent meeting,

Yesterday Councilor Danberg and I met with Planning Department staff to discuss the ZAP agenda, as we will be doing every two weeks. I had read the report and heard from Senior Planner Zachary LeMel about questions and concerns raised at the January 6 meeting about how to proceed with the zoning redesign effort.

Planning staff heard many questions about what is and why have we embraced the "context-based" approach. It seems we may need several meetings to find some common ground, and at least be talking the same language. Once we get there, we can work together to decide how to parse this large task, along with many other items that are and will come before us.

Zachary had done a lot of thinking since the meeting and assembled the following in response:

1. An annotated bibliography that lists the ZAP meetings where the committee learns, discusses, and eventually affirms the direction of a context-based approach in overhauling the existing Zoning Ordinance. The links to the memos and reports are embedded within the document, though each is summarized.
2. The FAR Working Group report from 2010, which as much as any document explains that a new approach is needed to solve the issues facing Newton, like tear-downs. I am not sure if this report is online so I am attaching a PDF here as well.

I thought it would be useful for you to have this information ahead of the Friday packet, as well as electronically, so you may link easily to the reports as you wish. All materials will as well be available in the packet.

I'm looking forward to joining you all on Monday.

Best,
Deb

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When responding, please be advised that the Secretary of the Commonwealth has determined that email may be considered a public record.

Annotated Bibliography, Context-Based Zoning

The Planning Department released the first draft of the new *context-based* Zoning Ordinance on October 19, 2018. The decision to develop a *context-based* approach, which fundamentally differs with Newton's existing Zoning Ordinance, began in spring 2015 following the completion of Zoning Redesign Phase I. Through consensus the Planning Department, Zoning and Planning Committee, City Council, Mayor, and the general public have affirmed this decision. Below represents a compilation of where, when, and how this occurred between 2015 and the present.

Zoning and Planning Committee

1) ZAP Meeting Memo and Report (Docket #6-15)

Date: April 13, 2015

Who:

- Committee Councilors – Johnson (Chairman), Yates, Baker, Sangiolo, Hess-Mahan, Leary, Danberg and Kalis
- Other Councilors Also Present – Laredo, Crossley and Albright
- Planning & Development Board – Scott Wolf (Chairman), Peter Doeringer, John Gelcich and Jonathan Yeo
- City Staff Present – James Freas (Acting Director, Planning & Development), Eve Tapper (Acting Associate Director, Planning & Development), Judith Menon (Community Development Program Manager), John Lojek (Commissioner, Inspectional Services), Marie Lawlor (Assistant City Solicitor), Maura O'Keefe (Assistant City Solicitor), Karyn Dean (Committee Clerk)

What: With the completion of Phase I the Zoning and Planning Committee undertook how to proceed with Phase II. This meeting is one of the first introductions and discussions on utilizing a *context-based* approach. The memo states what *context-based* zoning is, how a pattern book can be used as the foundation for such zoning, and provides examples of a *context-based* zoning ordinance and pattern books. The memo is a high-level document. The conversation that followed illuminated a divide within the Committee on whether the City can address the issues, laid out in the Zoning Reform Group Report and that arose from the completion of Phase I, by solely amending the current Zoning Ordinance or must the City develop a new framework entirely. The Planning Department recommended that the issues identified by the Committee and beyond required a new framework.

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David A. Olson, CMC
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2) City of Somerville Zoning [Presentation/Transcript](#) and ZAP [Report](#)

Date: June 8, 2015

Who:

- Committee Councilors – Johnson (Chairman), Danberg, Hess-Mahan, Leary, Yates Kalis, Sangiolo, Baker
- Other Councilors Also Present – Gentile, Ciccone, Norton, Brousal-Glaser, Rice, Blazar, Fuller, Lappin, Albright, Crossley
- Planning & Development Board – Scott Wolf (Chairman), Roger Wyner, John Gelcich and Jonathan Yeo
- City Staff Present – James Freas (Acting Director, Planning Dept.), Marie Lawlor (Assistant City Solicitor), Maura O’Keefe (Assistant City Solicitor), Karyn Dean (Committee Clerk), Maureen Lemieux (Chief of Staff/Chief Financial Officer), Dori Zaleznik (Chief Administrative Officer), Alex Valcarce (Deputy Commissioner of Public Buildings), Rafik Ayoub (Project Manager (Public Buildings Department), Alice Ingerson (Community Preservation Planner), Lisa Dady (Director of the History Museum), Elaine Gentile (Director of Environmental Affairs), Eve Tapper (Acting Associate Director of Planning), Liz Valenta (Housing Planner), Leo Brehm (Director of Information Technology; School Department), and David Wilkinson (Comptroller)

What: At the request of the Committee George Proakis, Planning Director for the City of Somerville, joined the meeting to discuss the experience that Somerville has had with their zoning reform process. At the time Somerville had released a draft *context-based* Zoning Ordinance and was going through the revision process to create an adoptable version, expected in 2016. The committee asked Mr. Proakis numerous questions that are all stated and answered within the transcript. The Planning Department suggested that Newton learn from Somerville’s experiences moving forward, which the committee found valuable as well.

3) ZAP Meeting [Report and Presentation](#) (Docket #6-15)

Date: June 16, 2015

Who:

- Committee Councilors – Johnson (Chairman), Danberg, Baker, Hess-Mahan, Yates, Kalis, Sangiolo and Leary

Zoning Redesign
Annotated Bibliography, Context-Based Zoning

- City Staff Present – James Freas (Acting Director, Planning & Development), John Lojek (Commissioner, Inspectional Services), Marie Lawlor (Assistant City Solicitor), Maura O’Keefe (Assistant City Solicitor), Karyn Dean (Committee Clerk)

What: At this meeting the Planning Department used its presentation, and subsequent discussion, to dive deeper into what George Proakis presented at the previous meeting. Through the discussion Councilors gained an understanding of the various tools used within a *context-based* approach, how they work conceptually, and how they can be applied in Newton through discussing real issues like tear-downs and snout houses. Following the discussion of tools the Planning Department, City Staff, and the Committee discussed a dual path forward (begin the data gathering process for the Pattern Book/*context-based* Zoning Ordinance while also amending the existing code for the most pressing issues). Commissioner Lojek and the Committee Chair strongly cautioned about this dual path because the current zoning is “broken” and that it would detract from the overall goal of comprehensive reform. **It should be noted the City did proceed with this dual approach and we have successes (accessory apartments) and failures (garage ordinance).**

4) ZAP Meeting [Report](#) (Docket #6-15)

Date: July 20, 2015

Who:

- Committee Councilors – Johnson (Chairman), Danberg, Hess-Mahan, Leary, Yates, Kalis, Baker
- Other Councilors Also Present – Albright, Crossley
- City Staff Present – James Freas (Acting Director, Planning Dept.), Marie Lawlor (Assistant City Solicitor), Maura O’Keefe (Assistant City Solicitor), Karyn Dean (Committee Clerk)

What: Most of the conversation focused on the draft RFP that the City eventually awarded to Sasaki for the Zoning Redesign Phase II work. Councilors explained how critical the RFP was because it establishes the road map forward, if the City does not ask for the right things then what is eventually produced will not help. **It was made clear that the RFP is directed towards producing a new zoning ordinance.** The Committee was divided on whether the RFP should move forward with requesting master plans or a pattern book, but the Committee did agree a choice needed to be made. The Planning Department stated they firmly agree with the pattern book approach. **The pattern book**

path was chosen, while simultaneously the Planning Department did undertake master planning projects in the form of Vision Plans and Comprehensive Plan updates.

5) ZAP Meeting [Report](#) (Docket #115-16)

Date: April 11, 2016

Who:

- Committee Councilors – Hess-Mahan (Chairman), Sangiolo, Danberg, Leary, Yates, Kalis, Baker, Albright
- Other Councilors Also Present – Fuller, Ciccone, Norton, Brousal-Glaser, Blazar, Lappin
- City Staff Present – James Freas (Acting Director, Planning Dept.), Maura O’Keefe (Assistant City Solicitor), Karyn Dean (Committee Clerk), Shawna Sullivan (Committee Clerk)

What: Following a joint meeting with the Finance Committee on March 28, 2016 the Zoning and Planning Committee voted to approve the funding for Zoning Redesign Phase II as laid out in the RFP (approved in fall 2015), which Sasaki successfully won.

6) ZAP Meeting [Memo](#) and [Report](#) (Docket #80-13)

Date: August 22, 2016

Who:

- Committee Councilors – Hess-Mahan (Chairman), Sangiolo, Leary, Yates, Kalis, Baker
- City Staff Present – Barney Heath (Director, Planning Dept.), James Freas (Deputy Director, Planning Dept.), Alice Ingerson (Community Preservation Manager), Marie Lawlor (Assistant City Solicitor), Lily Canan Reynolds (Community Engagement Manager), Karyn Dean (Committee Clerk)

What: This meeting formally introduced the consultants (Sasaki) to the Zoning and Planning Committee. Sasaki presented the work plan for Zoning Redesign Phase II and a discussion followed. It was clear that Phase II would consist of the comprehensive approach (pattern book and new *context-based* Zoning Ordinance) and interim solutions adopted into the existing Zoning Ordinance (accessory dwellings, inclusionary housing, signs, etc.). Building from the Committee approved RFP Sasaki defined Phase II success as “yield[ing] a *context-based* zoning ordinance that provides guidance and rules for the development and redevelopment of Newton’s neighborhoods and village centers...”

FAR Working Group

1) FAR Working Group Final Report (Docket #142-09)

Date: May 2010

Who:

- Working Group Members – K. Edward Alexander (AIA) , Chris Chu (architect), Henry Finch (architect), Thomas Greytak (homeowner), Treff LaFleche (architect), Peter Sachs (architect), Alan Schlesinger (attorney)
- Working Group Staff – Mike Kruse (Director, Planning Dept.), Candace Havens (Interim Director, Planning Dept.), Jen Molinsky (Principle Planner, Planning Dept.), John Lojek (Commissioner, Inspectional Services)

What: The FAR Working Group was appointed in June 2009 to the study floor area ratio (FAR) in the City of Newton and to propose amendments to the Zoning Ordinance designed to ensure that FAR regulations more accurately reflect current conditions, are easier to apply and enforce, and result in new construction that is in keeping with surrounding structures and the Newton Comprehensive Plan. Two critical findings that both the Zoning Reform Group and the Zoning Redesign efforts used to justify a new Zoning Ordinance format are:

- The City's existing residential zoning districts are too blunt to account for the range of neighborhood character, yet acknowledged the need, at present, to develop FAR recommendations that work within existing zones.
- That a number of elements of massing cannot be regulated by FAR limits, or indeed, by other dimensional controls, but that these nonetheless influence neighborhood character.

FAR Working Group Final Report

May 2010

Please note:

Since this report was prepared, the FAR limits proposed by the Working Group have been altered slightly. The currently proposed FAR limits and proposed zoning text can be found in the draft language for Petition #142-09(6), available at:

<http://www.ci.newton.ma.us/Aldermen/Agendas/ZoneAgenda.htm>.

In addition, since this report was prepared, the Planning Department has made further refinements to the model used to generate quantitative estimates of conformance with respect to FAR and estimates of developed and undeveloped capacity under various scenarios. Therefore, the tables presented within this report may differ slightly from those shown at the public hearing.

FAR Working Group Final Report

Executive Summary

The FAR Working Group was appointed in June 2009 to the study floor area ratio (FAR) in the City of Newton and to propose amendments to the Zoning Ordinance designed to ensure that FAR regulations more accurately reflect current conditions, are easier to apply and enforce, and result in new construction that is in keeping with surrounding structures and the *Newton Comprehensive Plan*.

The Working Group met 14 times from July 2009 to March 2010, including an interim presentation to the Zoning and Planning Committee of the Board of Aldermen. The group first conducted field work and data analyses to assess current, actual FAR in neighborhoods across the City, finding that 1) because FAR is in part a function of the definition of gross floor area (GFA), the exemption of certain features from the calculation of GFA allow significant residential living space to be built free from FAR; and 2) because FAR is in part a function of lot size, many homes on small lots, particularly those that are older and in need of updating, are particularly restricted from making even small additions.

From the findings of these efforts, the Working Group developed proposals to ensure the fairer application of FAR limits through the removal of existing exemptions in the definition of gross floor area, and to address the restricted development potential on smaller sized lots through a graduated system of FAR limits tied to lot size categories in each zone.

Members of the group and City staff, as well as architects from the Newton community, then tested these proposals to examine their potential impact on actual residential development in the City. The Working Group made modifications based on the testing results. The final proposals consist of two separate but related parts: a fairer and more inclusive definition of “gross floor area” and a sliding scale of FAR limits tied to lot size categories intended to give smaller lots a modest increase in FAR and reduce FAR nonconformities on these lots, while also keeping overall opportunities for expanded development in the residential neighborhoods of the City roughly consistent to what is possible today.

FAR Working Group Final Report

I. Residential FAR in Newton and Appointment of the FAR Study Group

Floor Area Ratio, or FAR, is the ratio of the gross floor area of a building to its lot size, and is a measure of building mass.¹ FAR limits were added to the dimensional controls in residential zoning districts in Newton in 1997 as a response to concerns about the demolition of smaller homes and their replacement with larger-scale dwellings that many felt were out of character with their surroundings. At the time FAR was adopted, FAR limits were made applicable to new residential construction and to residential construction when over 50% of an existing house was demolished.

In the years after the adoption of residential FAR limits, many public officials and citizens raised concerns that Newton's FAR limits were easily and lawfully exceeded when homeowners and developers took advantage of the numerous exemptions from FAR limits found in the definition of gross floor area and in what was informally referred to as the "50% demo provision" to maximize their development potential. The latter provision (previously located in Sec. 30-15, Table 1, Footnote 7) was particularly problematic: as long as less than 50% of an existing home was demolished, there was no FAR limit on what could then be built on the site, other than limits imposed by other dimensional controls. Though intended to facilitate the creation of small additions, such as mudrooms or bathrooms, in practice it allowed very large expansions of existing homes, often to sizes that significantly exceeded FAR limits for new construction in the zoning district.

In March 2009, the Board passed Ordinance Z-44, which deleted Footnote 7, including the 50% demo provision, in its entirety, thereby making FAR limits applicable to *all* residential development, including expansions of existing dwellings. As a result of this change, completely new homes as well as renovations of or additions to existing homes *both* have to comply with FAR limits.

In the wake of the adoption of Z-44, a number of homeowners who were planning to make small additions using the 50% demo provision learned that they would be unable to proceed without a special permit² because their homes either already exceeded FAR limits or would exceed them with their proposed additions. To aid homeowners in these situations, the Board then passed Ord. Z-51, which grants an FAR bonus of .05 to .07 for qualifying residential properties; this provision is set to

¹ Please see Attachment 1 for a graphic depiction of floor area ratio. An FAR limit of "1" means that on a 10,000 sq. ft. lot, a 10,000 sq. ft. building could be built; an FAR limit of .5 would allow a 5,000 sq. ft. building to be built on that same lot. In Newton, current residential FAR limits range from .2 to .4 depending on the zoning district and age of the lot.

² Under the City's Zoning Ordinance, an applicant may seek a special permit from the Board of Aldermen to exceed FAR, as long as the proposed structure is consistent with and not in derogation of the size, scale and design of other neighborhood structures (see Sec. 30-15(u)(4)).

sunset on July 31, 2010. In June of 2009, the Board also passed a resolution requesting that the Director of Planning and Development conduct a study of residential FAR in Newton to advise on how the zoning ordinance might be amended with regard to FAR limits.

As a result of this resolution, the “FAR Working Group” was appointed in June 2009 with the goals of assessing existing FAR limits in residential neighborhoods of the City and making recommendations for amending the zoning ordinance to ensure that FAR regulations more accurately reflect current usage and ensure that new construction is in keeping with surrounding structures and the *Newton Comprehensive Plan*. Members of the Working Group were appointed by the President of the Board of Aldermen and the Mayor. The members of the group, all residents of Newton, include:

- K. Edward Alexander, American Society of Architects, Emeritus
- Chris Chu, Architect (alternate member)
- Henry Finch, Architect
- Thomas Greytak, Homeowner
- Treff LaFleche, Architect
- Peter Sachs, Architect
- Alan Schlesinger, Attorney

The Working Group was staffed by Mike Kruse, Director of the Department of Planning and Development (until January 2010), Candace Havens, Interim Director (beginning January 1, 2010), and Jennifer Molinsky, Principle Planner. Commissioner of Inspectional Services John Lojek also participated in the work of the group.

II. Methodology & Analysis

The Working Group met 14 times from July 14, 2009 to March 16, 2010, including one presentation of its interim results to the Zoning and Planning Committee in September, 2009. In October, 2009, the group also shared draft proposals with a group of Newton architects in a meeting organized by members of the Working Group.

In reaching the conclusions presented in this report, the Working Group followed the following process:

- 1) Initial research and analysis
- 2) Development of preliminary proposals, testing, and
- 3) Formulation of final proposals

These stages, and the results of each, are described below.

Stage 1: Initial Research and Analysis

The Working Group first sought to assess how the existing fabric of residential development compares to the FAR limits in the Zoning Ordinance. The group aimed to understand the character and evolution of existing neighborhoods; to evaluate the actual FAR of the dwellings within these neighborhoods, including the variation in actual FAR within and among City neighborhoods; and to identify the locations where the actual FAR of the existing residential fabric already exceeds FAR limits (most likely because dwellings predated FAR limits).

To facilitate these analyses, the Planning Department used City Assessor's data to estimate³ the current FAR of every single-, two-, and three-family dwelling in the City in the Single-Residence (SR) 1, 2, and 3 districts and the Multi-Residence (MR) 1, 2, and 3 districts.⁴ This information was placed on 20 neighborhood maps (using neighborhood divisions created by the Assessing Department) whose color codes identified the extent to which each home fell below or exceeded FAR limits. Working Group members and staff then spent time in each of the residential neighborhoods, noting development patterns and comparing the FAR maps to the actual built environment, and then reconvened to share and discuss their findings. Staff also prepared a variety of analyses describing actual FAR in each residential zoning district. Finally, the Planning Department provided data on specific cases, and the Inspectional Services Department supplied information on the practical difficulties of implementation of FAR regulations, as well as evidence of how FAR rules have been manipulated to create dwellings that are larger than those in their surrounding areas.

The initial analyses led to the following findings and conclusions:

- ***The Working Group agreed that the purpose of FAR limits is to regulate above-grade building mass.*** Its role, therefore, is distinct from, but complementary to, the City's other dimensional controls, which include:
 - Height controls, story, ½ story regulations, which concern proportion;
 - Maximum lot coverage and minimum open space requirements, which concern open space;
 - Setback requirements, which regulate placement on site; and
 - FAR, which regulates mass.
- ***Exemptions of certain elements from the definition of gross floor area (and therefore from FAR calculations) have led to unintended design results and have provided incentives for creative manipulation of FAR rules.*** For example, the exemption of half stories from FAR calculations⁵ have

³ All figures in this document are best estimates based on Assessor's data.

⁴ Condominiums, as well as multifamily dwellings over three units, were excluded from the analysis, as were residences in the MR4 district (which applies only in one unique area in the City).

⁵ Until November 3, 2008, all half story spaces were exempted from FAR calculations, but Ord. Z-35 amended zoning so that half story spaces immediately above the first story are now included in FAR

encouraged the inclusion of half stories over garages and above the second floor to provide living areas “free” from FAR calculations. Other exemptions include those for above-grade basement areas (encouraging walk-out basements and basement garages, even where it has been necessary to carve out and terrace the landscape to make these possible) and detached structures (including large detached garages with living space above). Because of these exemptions, houses with equivalent FAR, as calculated by the City, may have very different actual floor areas.

- ***The Working Group’s field visits and review of the data confirmed that, in all zoning districts, there are a larger number of houses that are nonconforming with respect to FAR (i.e., they exceed FAR limits) on smaller lots than on larger lots, particularly on smaller lots that were created before 1953 when minimum lot size standards became stricter.*** For those houses that are at or over FAR limits, a small addition (e.g. a single room, a mudroom, or bathroom) would require a special permit, a process that is often perceived as costly and uncertain. As shown in the table below, typically, the nonconformity rate on larger lots is much lower and the potential to expand, even through significant building projects, is higher.

Parcels Nonconforming with Respect to FAR

Lot Size Category (sq. ft.)	SR1 Nonconforming with Respect to FAR		SR2 Nonconforming with Respect to FAR		SR3 Nonconforming with Respect to FAR	
	Number of Parcels		Number of Parcels		Number of Parcels	
ALL	1,600	25%	7,813	22%	6,243	14%
0-4999	2	100%	109	94%	438	53%
5000-6999	18	72%	655	67%	1,374	25%
7000-11999	202	60%	3,954	26%	3,520	8%
12000-14999	175	45%	1,360	9%	479	1%
15000-19999	490	26%	1,151	4%	265	0%
20000-24999	186	13%	308	1%	86	0%
25000+	527	0%	276	0%	81	0%

	MRI Nonconforming with Respect to FAR		MR2 Nonconforming with Respect to FAR		MR3 Nonconforming with Respect to FAR	
	Number of Parcels		Number of Parcels		Number of Parcels	
ALL	3,260	22%	1,023	38%	47	34%
0-4999	445	58%	373	72%	8	75%
5000-6999	906	37%	301	32%	12	50%
7000-11999	1,069	10%	243	9%	16	19%
12000-14999	610	2%	94	5%	10	10%
15000-19999	146	2%	12	0%	1	0%
20000-24999	54	0%	0		0	
25000+	30	0%	0		0	

calculations. Half story spaces in detached structures or above the second story are still exempt from FAR calculations.

- ***The Working Group found the City’s existing residential zoning districts too blunt to account for the range of neighborhood character, yet acknowledged the need, at present, to develop FAR recommendations that work within existing zones.*** The Group found that, as expected, Newton is distinguished by the richness of its residential architecture and also by the varied nature of its neighborhoods, which developed at different times and reflect unique histories, building styles, and densities. There is significantly less variation among the City’s zoning districts, however: all the City’s single-family neighborhoods are divided into only three Single Residence zoning districts. For example, much of Oak Hill Park, a neighborhood characterized by post-war ranches, many of which are well below FAR limits, is zoned SR2, as are the majorities of Newton Highlands and Newton Centre, where many older Victorian homes exceed FAR limits. Working within existing zoning designations presents challenges to preserving the character of each neighborhood.
- ***The Working Group found that a number of elements of massing can not be regulated by FAR limits, or indeed, by other dimensional controls, but that these nonetheless influence neighborhood character. These included quality of design, compatibility of design with neighboring structures, topography, and landscaping.***

Out of their research and the findings noted above, the Working Group coalesced around the goals of developing recommendations for zoning amendments that would:

- 1) ***Ensure a fairer application of FAR limits by more clearly defining what is included in the calculations of gross floor area and by eliminating exemptions to gross floor area; and***
- 2) ***Ensure a fairer distribution of massing to ensure that smaller lots have some opportunities for minor expansions that would be compatible with the existing character within their neighborhoods.***

Stage 2: Preliminary Proposals & Testing

With these goals in mind, the Working Group moved into its second stage of work, the development of preliminary proposals to revise the definition of gross floor area and FAR limits. This section briefly discusses the Working Group’s processes, while the final proposals are presented in Part III below.

Gross Floor Area Definition

The first proposal centered on amending the definition of gross floor area (GFA). The group focused particularly on 1) clarifying existing language and 2) removing

exemptions to the calculation of GFA, including exemptions for above-grade portions of basements, third floor space, enclosed porches, and detached structures. Once language had been drafted to amend the definition of GFA, the architects on the Working Group tested the proposed language on their own projects to assess how the new language, if adopted, would change FAR calculations for individual dwellings. City staff did the same, by assessing how amended language would have changed FAR calculations on recent applicants for special permits to exceed FAR limits. Finally, several Working Group members reached out to their colleagues in the architectural community and invited them to apply the draft language to their recent projects to assess the difference it would have on FAR calculations and design incentives. The testing process resulted in refinements to the draft language.

At the same time, City staff prepared analyses to show the estimated effect of the draft proposals on *all* dwellings in the City. Again using Assessor's data, the Group was able to see the average rise in actual FAR calculations that would result from eliminating many of the current exemptions in how FAR is calculated. By assuming that 25% of each home's basement would "count" toward FAR, the Group could see that across the City, the changes would result in a .05 rise in actual FAR, though for individual houses, the precise figure varied depending on how much square footage on the property was currently exempt from GFA calculations and would be counted under the proposal.

FAR Limits

The Working Group assessed FAR limits by incorporating a rise in all zones to account for the changes to the definition of GFA described above, and then examined how best to address the challenges on small lots. The Group considered simply raising FAR limits in each zoning district, but discarded the idea because it would open more development capacity on medium and larger sized lots, where high percentages of dwellings were already significantly below FAR limits (and, indeed, since FAR is based on lot size, the absolute expansion possibility on larger lots would increase significantly more than it would on smaller lots). The Working Group ultimately determined that the only way to address the limitations on small lots without opening development capacity on larger lots was to *tie FAR limits directly to lot size*. Staff then developed various prototypes of sliding scales, where FAR limits are higher for smaller lots and then fall as lot size increases. (It is important to note, that because FAR is itself a function of lot size, larger lots still have more absolute development capacity under all schemes the group considered.)

The Working Group used three main criteria to assess each iteration of the sliding scale:

- The scale's effect on a sample group of houses known to the architects;

- The scale’s effect on rates of nonconformity with respect to FAR, including overall rates, rates within each zone, and rates within each lot size category; and
- The scale’s effect on the amount of undeveloped capacity, including the average undeveloped capacity on each lot, within each district, and within each lot size category.

The Working Group’s final proposal for a sliding scale of FAR limits is proposed in Section III below.

Stage 3: Formulation of Final Proposals

The Working Group’s iterative process of analyses, testing, and refinement of proposals led to the final set of draft amendments that are presented in Section III.

III. Proposals

The Working Group’s proposals to change the definition of “gross floor area” and amend residential FAR limits, as well as to phase in the proposed changes, are presented below.

Gross Floor Area

The proposed definition of “floor area, gross” would remove existing exemptions for attic and half story space, above-grade portions of basements, some enclosed porches, and detached structures. The actual proposed language is included as Attachment 2 and includes amendments to the definition of “floor area, gross” as well as the addition of several new definitions for “porch,” “carport,” and “mass below first story.” The table below compares the elements included in the current definition of GFA to those in the Working Group’s proposal.

Elements of Gross Floor Area

	Current Definition of GFA	Proposed Definition of GFA
Basements	Excluded	Included: a percentage of "mass below first story," which may include basements, crawl spaces, and other above-grade features lying below the first story, that exceed a standard exemption for foundation walls. In no event can more than 50% of the floor area of an area below the first story be counted toward FAR.
First and second stories	Included	Included
Atria / other vertical spaces	Included	Included
Space above the second story	Excluded if space meets the definition of half story; included if it exceeds maximum space to be counted as a half story	Included if it meets the dimensional definition in the Building Code of a habitable room (70 sq. ft. or more, with min. ceiling heights of 7' on at least 50% of its area and 5' ceiling heights on remainder)
Enclosed porches	Included only if heated	Included
Open porches, carports, port cocheres	Excluded	Excluded
Attached garages	Included	Included
Detached garages and any space above the first floor with a ceiling height of 7 feet or more	Excluded	Included
Other detached structures	Excluded	Included, with one exemption for a detached shed or other structure less than 120 sq. ft.

FAR Limits

The Working Group is proposing a sliding scale of FAR limits for each of the three SR and MR districts it studied. As noted above, the scale takes into account the average rise in actual FARs resulting from the changes to the definition of gross floor area and also addresses the specific challenges faced by small lots, as well as the need to ensure that new development respects its surroundings.

In all residential zoning districts, the Working Group proposes that lots be divided by size into seven categories. FAR limits are set for the very beginning and very end of each category. For lot sizes falling in the between the two ends of a category, the FAR limit will vary smoothly, that is, linearly. This is the same approach used with the

federal income tax rates. It insures that a small difference in lot size does not give rise to a significant difference in allowed FAR. The proposed scales are shown below:

Proposed Sliding FAR Scale

	SR1	SR2	SR3
Lot Size Category (sq. ft.)	FAR Range for Lot Size Category	FAR Range for Lot Size Category	FAR Range for Lot Size Category
0-4999	.48 to .48	.48 to .48	.50 to .50
5000-6999	.48 to .45	.48 to .45	.50 to .50
7000-11999	.45 to .35	.45 to .40	.50 to .43
12000-14999	.35 to .33	.40 to .35	.43 to .40
15000-19999	.33 to .30	.35 to .35	.40 to .40
20000-24999	.30 to .28	.35 to .35	.40 to .38
25000+	.28	.35	.38

	MR1	MR2/MR3
Lot Size Category (sq. ft.)	FAR Range for Lot Size Category	FAR Range for Lot Size Category
0-4999	.60 to .60	.60 to .60
5000-6999	.60 to .55	.60 to .55
7000-11999	.55 to .50	.55 to .55
12000-14999	.50 to .50	.55 to .45
15000-19999	.50 to .45	.45 to .40
20000-24999	.45 to .40	.40 to .40
25000+	.40	.40

The table above shows that a 12,000 sq. ft. lot in an SR1 district would have an FAR limit of .35, while, at the other end of the lot size category, a lot of 14,999 sq. ft. would have an FAR limit of .3. The chart also shows that a 13,500 sq. ft. lot would have an FAR limit somewhere between these two numbers (it would actually be .33 according to the FAR calculator).

The Working Group considered how this system, which is more nuanced than the current single FAR per zoning district, can be made user friendly. The group suggests that a table of values of FAR limits at specific lot sizes can be given in the Zoning Ordinance text along with the statement that the FAR limits vary proportionately between these points. An online, user-friendly calculator for computing the exact FAR limit applicable to a particular lot can be made available on the City's website so that individuals can quickly figure their exact FAR limit.

The Working Group arrived at these new FAR limits based on their professional judgment about the amount of "mass above ground" that lots in each zoning district can support and still maintain the look and feel consistent with current development and with the *Newton Comprehensive Plan*. As a simple reality check, to see that the new limits would not make a major quantitative change within the city, the group

looked at the effect these changes would have on the nonconformity rate and the amount of allowed but unrealized floor space in the City.

As the following table reveals, the proposed sliding FAR scale reduces the nonconformity rates overall and particularly on smaller lots, so that more lots are now conforming with FAR limits. (Some lots may be *just* conforming; that is, their actual FAR may fall just under the limit, so conformity does not necessarily equal significant expansion potential.)

Percent Nonconforming with Respect to FAR, SR Districts

Zone	Lot Size Category	Total Number of Parcels	Current Nonconforming With Respect to FAR	Proposed Nonconforming With Respect to FAR
SR1	ALL	1,600	25%	20%
	0-4999	2	100%	100%
	5000-6999	18	72%	33%
	7000-11999	202	60%	30%
	12000-14999	175	45%	39%
	15000-19999	490	26%	25%
	20000-24999	186	13%	15%
	25000+	527	0%	5%
SR2	ALL	7,813	22%	13%
	0-4999	109	94%	72%
	5000-6999	655	67%	34%
	7000-11999	3,954	26%	13%
	12000-14999	1,360	9%	7%
	15000-19999	1,151	4%	7%
	20000-24999	308	1%	4%
	25000+	276	0%	1%
SR3	ALL	6,243	14%	9%
	0-4999	438	53%	37%
	5000-6999	1,374	25%	17%
	7000-11999	3,520	8%	4%
	12000-14999	479	1%	2%
	15000-19999	265	0%	0%
	20000-24999	86	0%	2%
	25000+	81	0%	0%

As noted above, the Working Group also looked at allowed but unrealized floor area capacity in each zoning district under the proposed scheme as well as current FAR rules. When assessing FAR limits, it is possible to consider the total development capacity under FAR limits not just for a particular lot, but for an entire district. There are two components of that capacity: the amount that has already been built (the “*developed capacity*”), and the as-of-yet unrealized development capacity that theoretically could be built in compliance with FAR, assuming other dimensional controls allowed (the “*undeveloped capacity*”). The table below shows the developed and undeveloped capacity that the Working Group estimates exists in the City under

the sliding scale proposals. It also compares the proposals to existing undeveloped capacity under current FAR regulations. As is shown in the final two columns, undeveloped capacity under current rules and the proposed sliding scale do not vary significantly overall, though some capacity has been redistributed to smaller lots.

Development Capacity, SR Districts

Zone	Lot Size	Total Number of Parcels	Proposed Developed Capacity (Square footage of existing buildings, calculated under proposed definition of GFA)	Amount Remaining Under FAR Limits Proposed Undeveloped Capacity	Total Capacity Proposed Under FAR Sliding Scale	Percent of Total Capacity Undeveloped Under Current FAR Rules	Percent of Total Capacity Undeveloped Under Proposed Sliding Scale
SR1	ALL	1,600	7,201,199	3,989,864	11,191,063	38%	36%
	0-4999	2	4,356	0	4,356	0%	0%
	5000-6999	18	40,709	9,835	50,544	5%	19%
	7000-11999	202	657,369	124,625	781,994	7%	16%
	12000-14999	175	656,729	106,486	763,215	13%	14%
	15000-19999	490	1,844,362	595,438	2,439,799	23%	24%
	20000-24999	186	875,349	320,674	1,196,023	31%	27%
	25000+	527	3,122,325	2,832,806	5,955,131	52%	48%
SR2	ALL	7,813	25,399,339	11,903,877	37,303,216	31%	32%
	0-4999	109	210,959	10,413	221,372	1%	5%
	5000-6999	655	1,618,298	238,135	1,856,433	4%	13%
	7000-11999	3,954	11,761,276	4,293,890	16,055,165	20%	27%
	12000-14999	1,360	4,625,994	2,180,589	6,806,584	32%	32%
	15000-19999	1,151	4,251,895	2,449,124	6,701,018	41%	37%
	20000-24999	308	1,405,883	980,567	2,386,450	47%	41%
	25000+	276	1,525,034	1,751,160	3,276,194	59%	53%
SR3	ALL	6,243	15,281,726	10,548,416	25,830,141	39%	41%
	0-4999	438	793,617	138,348	931,966	9%	15%
	5000-6999	1,374	3,077,973	1,039,192	4,117,166	18%	25%
	7000-11999	3,520	8,529,932	5,925,502	14,455,433	36%	41%
	12000-14999	479	1,394,616	1,233,662	2,628,277	50%	47%
	15000-19999	265	837,012	953,619	1,790,631	59%	53%
	20000-24999	86	320,805	415,606	736,411	62%	56%
	25000+	81	327,771	842,487	1,170,258	77%	72%

The results for the MR districts are shown below:

Percent Nonconforming with Respect to FAR, MR Districts

	Lot Size	Total Number of Parcels	<u>Current</u> Percent of Total Development Capacity that is NOT Currently Developed	<u>Proposed</u> Percent of Total Development Capacity that is NOT Currently Developed
MR1	ALL	3,260	22%	16%
	0-4999	445	58%	40%
	5000-6999	906	37%	24%
	7000-9999	1,069	10%	11%
	10000-14999	610	2%	2%
	15000-19999	146	2%	4%
	20000-24999	54	0%	0%
	25000+	30	0%	0%
MR2	ALL	1,023	38%	30%
	0-4999	373	72%	56%
	5000-6999	301	32%	24%
	7000-9999	243	9%	7%
	10000-14999	94	5%	6%
	15000-19999	12	0%	0%
	20000-24999	0		
	25000+	0		
MR3	ALL	47	34%	36%
	0-4999	8	75%	63%
	5000-6999	12	50%	58%
	7000-9999	16	19%	25%
	10000-14999	10	10%	10%
	15000-19999	1	0%	0%
	20000-24999	0		
	25000+	0		

Development Capacity, MR Districts

Zone	Lot Size	Total Number of Parcels	Proposed Developed Capacity (Square footage of existing buildings, calculated under proposed definition of GFA)	Amount Remaining Under FAR Limits Proposed Undeveloped Capacity	Total Capacity Proposed Under FAR Sliding Scale	Percent of Total Capacity Undeveloped Under Current FAR Rules	Percent of Total Capacity Undeveloped Under Proposed Sliding Scale
MR1	ALL	3,260	9,691,511	4,792,259	14,483,770	34%	33%
	0-4999	445	918,682	168,043	1,086,725	9%	15%
	5000-6999	906	2,439,163	660,320	3,099,484	16%	21%
	7000-11999	1,069	3,342,836	1,405,846	4,748,682	28%	30%
	12000-14999	610	2,087,926	1,445,963	3,533,890	43%	41%
	15000-19999	146	589,921	530,415	1,120,336	56%	47%
	20000-24999	54	200,686	306,957	507,642	69%	60%
	25000+	30	112,297	274,715	387,012	78%	71%
MR2	ALL	1,023	2,571,526	1,016,646	3,588,171	25%	28%
	0-4999	373	722,579	99,855	822,434	7%	12%
	5000-6999	301	790,054	226,961	1,017,015	18%	22%
	7000-11999	243	697,145	382,037	1,079,182	32%	35%
	12000-14999	94	317,411	265,906	583,317	44%	46%
	15000-19999	12	44,336	41,887	86,223	54%	49%
	20000-24999	0	0	0	0		
	25000+	0	0	0	0		
MR3	ALL	47	160,344	42,307	202,651	21%	21%
	0-4999	8	18,646	1,959	20,605	4%	10%
	5000-6999	12	37,829	3,600	41,429	6%	9%
	7000-11999	16	60,671	13,393	74,064	20%	18%
	12000-14999	10	38,391	21,411	59,802	37%	36%
	15000-19999	1	4,807	1,944	6,751	28%	29%
	20000-24999	0	0	0	0		
	25000+	0	0	0	0		

Phasing

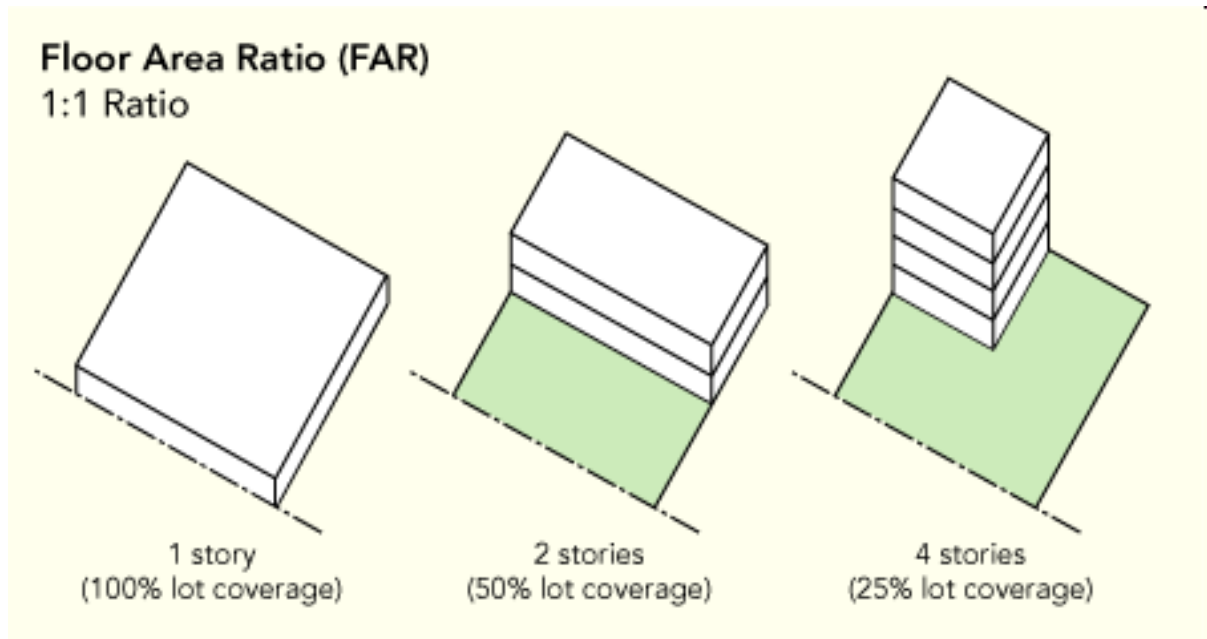
The Working Group's proposals represent a significant departure from current zoning. Despite much analysis and testing, some of the effects of the changes are unclear. This is particularly true of the basement calculation: the Working Group did not have access to data on existing grades in the City, and therefore could make only an informed judgment about the average percentage of a basement that would likely count toward FAR. Actual results will certainly vary by dwelling and neighborhood, but it is unclear if the overall average will also vary from the estimate.

Because of these uncertainties, the Group strongly recommends a period of phasing in of the proposed changes, for two reasons. First, a phase-in period will allow additional data to be gathered to further assess the amendments. Second, a phase-in period will also allow the public to become accustomed to the changes and to plan their construction projects accordingly.

Specifically, the Working Group recommends that the FAR "bonus" adopted last summer and set to sunset July 31, 2010, be extended another six months, through January 31, 2011. This six month period would give homeowners and those in the design and building professions adequate time to adjust to the new system. During this time, the Group also recommends that the City require FAR calculations be made according to both the existing and the new systems as a way to collect additional data on its likely impacts. The new system would go into effect February 1, 2011, and the Working Group has volunteered to reconvene in one year from this date to assess how well it is working and to recommend minor modifications if needed.

Attachment 1: Explanation of Floor Area Ratio

An FAR of “1” might look like any of the following:



In Newton, residential FAR limits range from .2 to .4, which translates to a maximum allowed gross floor area for a dwelling of 20% to 40% of lot size. FAR limits for each zoning district are given below:

Zoning District	FAR Limit
SR1	.25 (lots created before 12/7/53) .20 (all others)
SR2	.3
SR3	.35
MR1	.4
MR2	.4
MR3	.4

Graphic from http://www.lacity.org/lahd/curriculum/images/ch_far.gif

Attachment 2: Proposed Amendments to Section 30-1, Definitions

Add the following definitions to Sec. 30-1:

Carport: A one-story roofed structure permanently open on at least three sides and designed for or used for occupancy by a motor vehicle. For the purposes of this ordinance, a one-story port-cochere meets the definition of a carport.

Mass below first story: For the purposes of calculating gross floor area, any cellar, crawl space, basement, or other enclosed area lying directly below a first story in a residential structure.

Porch: A roofed projection that extends from the façade of a residential structure and that is neither heated nor air conditioned. A porch may share no more than two exterior walls with the residential structure. Railings or solid walls on the projecting facades of the porch may be no higher than 36" as measured from the finished porch floor; the remainder of these facades may be open to the elements or enclosed by mesh, glass, or similar material.

Porch, enclosed: A porch enclosed by either permanent or detachable glass or other similar material.

Amend the following definitions in Sec. 30-1:

Floor area ratio (proposals underlined):

- (a) For residential structures in residential districts, gross floor area of all buildings on the lot divided by total lot area.
- (b) For all others: Gross floor area of all buildings on the lot divided by total lot area. Any portion of a basement not used for storage, parking or building mechanicals shall be included in determining floor area ratio.

Floor area, gross:

- ~~(a) For residential structures in residential districts, the sum of the floor area within the perimeter of the outside walls of the building without deduction for garage space, hallways, stairs, closets, thickness of walls, columns, atria, open wells and other vertical open spaces, or other features exclusive of any portion of a basement as defined in this section. For atria, open wells and other vertical open spaces, floor area shall be calculated by multiplying the floor level area of such space by a factor equal to the average height in feet divided by ten (10). Excluded from the calculation are bays or bay windows which are cantilevered and do not have foundations and which occupy no more than ten (10) per cent of the wall~~

~~area on which they are mounted and any space in an attic or half story above the second story as defined in this ordinance.~~

(a) For residential structures and buildings accessory to residential structures in residential districts, the sum of the floor area of all principal and accessory buildings whether or not habitable, except as excluded below. Floor area measurements shall be taken within the perimeter of the outside walls of each building without deduction for garage space, hallways, stairs, closets, thickness of walls, columns, atria, open wells and other vertical open spaces, or other features as defined in this section.

a. Gross floor area shall include:

- i. First and second stories;
- ii. Any space above the second story, whether finished or unfinished, that meets all of the following criteria:
 1. Lies within the area of a horizontal plane that is five (5) feet above the floor and which touches the side walls and/or the underside of the roof rafters;
 2. Is at least seven (7) feet in any horizontal dimension, as measured within the area having a wall height of five feet or more;
 3. Has a minimum ceiling height of seven (7) feet on at least 50 percent of its required floor area; and
 4. Has a floor area of not less than 70 square feet as measured within the area having a wall height of five feet or more.
- iii. Atria, open wells, and other vertical open spaces, where floor area shall be calculated by multiplying the floor level area of such space by a factor equal to the average height in feet divided by ten (10);
- iv. Enclosed porches;
- v. Attached garages;
- vi. Detached garages and any space above the first story of a detached garage that has a ceiling height of 7' or greater;
- vii. Other detached accessory buildings, such as sheds or cabanas, except as exempted in (b)(iii) below.
- viii. A portion of mass below the first story, to be calculated as follows:

$X/Y * \text{Floor area of mass below first story}$

Where:

X = Sum of the width of those sections of exposed walls below the first story having an exterior height equal to or greater than four (4) feet as measured from existing or proposed grade, whichever is lower, to the top of the first floor

Y = Perimeter of exterior walls below first story

b. Gross floor area shall not include:

- i. Unenclosed porches;

- ii. Carports; and
- iii. One detached accessory building equal to or less than 120 square feet in size.

(b) For all others: The floor area within the perimeter of the outside walls of the building without deduction for hallways, stairs, closets, thickness of walls, columns or other features.