

## **Wellfleet's housing by NLA**

The information contained here is about the Net Living Area (NLA) as gathered from the Town's Assessors Office. As noted in my BP study, Wellfleet's NLA is very similar to Eastham's "Site Coverage" definition, and as such is a very useful calculation to get a broad yet accurate perspective of Wellfleet's complete housing stock and its sq. ft. sizing with respect to living space as Eastham's site coverage SPR process looks at.

As quoted from Eastham's Zoning By-Laws (pg. 15), their definition of "site coverage" is as follows:

"Site Coverage: The sum of the gross horizontal area of the floors of a dwelling used or intended to be used for living, sleeping, cooking or eating purpose, excluding cellar, attic, farmers porch and basement area not devoted to residential use, plus the square footage of any roofed permanent accessory structure or garage and screened porch or covered deck."

From the research I performed on Wlft's Building Permits (including reviewing well over 100 individual "assessment card" pdf files), in conjunction with the information attained from our Town's Assessors' Office on what is referred to as "Net Living Area," and in discussions with Nancy Vail and Bob Nazarian of the Assessors Office about this matter, it is clear to me that Wlft's Net Living Area definition is virtually the same as Eastham's Site Coverage definition, with only the following differences:

Whereas Eastham includes covered garage spaces, whether in-built/attached or detached, Wellfleet's NLA does not. Nor are roofed decks or screened porches included. However, any enclosed/roofed porch or "sunroom" type area that is heatable or deemed as usable year-round is included.

Wlft's "Single Family Dwelling" (SFD) NLA also does not include any permanent separate accessory structures (e.g. any unheated studio or cottage); yet assessment cards still show such structures and their sq. footage. Usually such structures, especially if determined they likely constitute a separate dwelling, means that the property is classified as "multiple housing." At present this study refers only to Single Family Dwellings and their NLA as explained above.

[Only more recently did I get the multi-dwelling information from the assessment office, with which I plan to update this report. There are only 171 of these multi-dwelling (m-d) classified properties, and shouldn't materially alter the information herein.]

Overall, despite these discrepancies, the SFD NLA information I attained from the Assessors Office is revealing of information that I consider relevant to the Town's, and our Planning Board's, deliberation of zoning by-law amendments.

I asked for and attained from the Assessor's Office a listing of all of Wlft's SFDs NLA figures, delineated within the following parameters:

- 1/4 or less of an acre
- 1/4+ to 1/2 acre
- 1/2+ to 3/4 acre
- 3/4+ to 3 acres
- all 3+ acres

These five separate acreage configured lists, ordered by Net Living Area (from lowest to highest), contain within them a set of 4 "Quartiles" or four virtually equal slices of the total number of sfd's involved (apparently this is just the way the assessor's software is programmed). For instance, out of 312 sfd's on lots under 1/4 of an acre, it broke down that total number into four quartiles of 78, 78, 79, and 77 each.

Each quartile contains a listing of each individual NLA, say from 1,188 to 1,560, and then calculates a "median" for that quarter set. (The term *median* denotes the midpoint value, such that there is an equal probability of falling above or below it. In practical matters, average house prices almost always use the median calculated value for the average, because the median denotes the mid point value of the ordered range of numbers.)

These **medians** are reported below for each quartile for each acreage set.

However, in an effort to distill these four median values into one, I added up these four medians into one sum, and divided it by 4, as a way of calculating the "arithmetic mean" or average of the four medians. (arithmetic mean: the average of a set of numerical values, calculated by adding them together and dividing by the number of terms in the set.)

These **mean** calculations *of the four medians* are also given below.

[Note: When dealing with number sets and matters of calculation to attain what is often referred to as an "average," one must be clear about one's methods and the use of them. Depending upon how many numbers there are as well as any deviations or statistical outliers can fundamentally alter the result if one is not careful with or honest about the type of methods used to calculate a so-called "average."

I have tried to be both honest and careful in my use of these methods and the presentation of these statistical valuations, and in doing so believe that they are worthy representations of relevant information to our needs of greater understanding. Others however may wish to dispute them as such, and any interpretation I might offer of them. None the less, I do vouch for the figures offered herein as true and accurate as described. See End Note 1 for more information on all this.]

With that formality out of the way, it is my opinion that these "mean" calculations of the four medians are as decently true a set of mathematical *averages* that I could conceive of arriving at from information readily available to use, and as such they are of valuable significance to understanding where we stand as a town with our housing stock and its overall typical *averages* of Net Living Area size and scale.

Furthermore, I believe this Net Living Area formulation very relevant to this town's deliberation of how to amend our zoning by-laws; and how to best do this in a way that is simple to understand and perceived as fair -- in that it would not cause undue hardship upon allowing for reasonable redevelopment or expansion of a substantial majority of our homes -- while also offering to empower the town with some reasonable manner and degree of both oversight and flexibility to address private property development projects that can and do offend our community sensibilities and responsibilities.

To this last regard, I also want to stress that in undertaking these studies I have come to see first hand that the expressions of renewed concerns about our community sensibilities and responsibilities is not just a matter reserved to the CCNS district, but is one too that threatens the environs of Wellfleet itself too. As presently arranged our zoning by-laws are allowing for housing projects to proceed that offer no means of relief against affronts that are day by day, month by month, and year after year, accumulating around us and eroding away at "the general welfare of its inhabitants" and the qualities of place that comprise our Town character, all of which make it so desirable, and sought after, as a wonderful place to reside.

All of this is already under threat, and the time to act is now before it is any later than it already is.

With all this in mind I respectfully submit my findings.

Griswold "Gooz" Draz

Town wide NLA means of single family dwellings

arranged by:	NLA mean <i>of the 4 medians</i> :
• Under 1/4 acre: (out of 312 sfd properties)	<b>1,235</b>
• 1/4+ to 1/2 acre: (out of 856 " " )	<b>1,522</b>
• 1/2+ acre to 3/4 acre: (out of 824 " " )	<b>1,865</b>
• 3/4+ to 3 acres: (out of 903 " " )	<b>2,049</b>
• 3+ acres: (out of 97 " " )	<b>1,889</b>
Total number of SFDs in Wlft: 2992	

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<u>Acreage Set Details</u>		
under 1/4 ac		312 total s.f.d's
Quartile 1 (448 to 788 nla)	median 672	(out of 78)
Quartile 2 (792 to 1186 nla)	median 967	(out of 78)
Quartile 3 (1188 to 1560 nla)	median 1360	(out of 79)
Quartile 4 (1563 to 3434 nla)	median 1944	(out of 77)

$672 + 967 + 1360 + 1944 = 4943 / 4 = \mathbf{1235.75}$  mean NLA *of the 4 medians*

[Note: By adding up each individual NLA assessment figure = 389,848;  
Then dividing it by (the total property count of) 312 = 1249.5 mean NLA;  
For a deviation of 14 from the highlighted mean calculation *of the four medians*.

I performed the above exercise, a tedious one at that, to show what the difference is between my method of using the 4 medians to reach a mean average, and using a straight arithmetic mean method.

I did this for the "3+ acres" data as well, but I think you can understand why I didn't do so for the other three acreage sets, as that would have involved a lot more time and effort than I have already expended on this project as is.

The 3+ acreage deviation is 50 from the mean calculation *of the four medians* given below. I suspect the other three categories would fall into between these two deviations, but at the very least, it shows that my methodology is feasible as one that is decently representative of an "average" that can suit our needs.]

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1/4+ to 1/2 acre 856 total s.f.d's

Quartile 1 (225 to 1120 nla)	median 896	(out of 214)
Quartile 2 (1123 to 1503 nla)	median 1314	(out of 214)
Quartile 3 (1504 to 1914 nla)	median 1680	(out of 213)
Quartile 4 (1916 to 5213 nla)	median 2298	(out of 215)

$896 + 1314 + 1680 + 2298 = 6088 / 4 = \mathbf{1522 \text{ mean NLA of the 4 medians}}$

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1/2+ to 3/4 acre 824 total s.f.d's

Quartile 1 (312 to 1414 nla)	median 1,152	(out of 207)
Quartile 2 (1416 to 1778 nla)	median 1,590	(out of 205)
Quartile 3 (1779 to 2262 nla)	median 2,016	(out of 206)
Quartile 4 (2266 to 5982 nla)	median 2,702	(out of 206)

$1152 + 1590 + 2016 + 2702 = 7460 / 4 = \mathbf{1,865 \text{ mean NLA of the 4 medians}}$

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3/4+ to 3 acres 903 total s.f.d's

Quartile 1 (264 to 1509 nla)	median 1,190	(out of 225)
Quartile 2 (1512 to 1944 nla)	median 1,728	(out of 226)
Quartile 3 (1946 to 2537 nla)	median 2,224	(out of 226)
Quartile 4 (2540 to 11,119 nla)	median 3,057	(out of 226)

$1190 + 1728 + 2224 + 3057 = 8199 / 4 = \mathbf{2,049 \text{ mean NLA of the 4 medians}}$

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3+ acres 97 total s.f.d's

Quartile 1 (288 to 1411 nla)	median 900	(out of 24)
Quartile 2 (1434 to 1698 nla)	median 1552	(out of 24)
Quartile 3 (1699 to 2286 nla)	median 2088	(out of 24)
Quartile 4 (2292 to 5715 nla)	median 3016	(out of 26)

$900 + 1552 + 2088 + 3016 = 7556 / 4 = \mathbf{1,889 \text{ mean NLA of the 4 medians}}$

Note: Adding up every NLA figure = 188,118 divided by 97 = 1939.3 mean NLA  
[deviation of 50 from above]

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Single Family Dwellings with NLA above 3k by range:

over 10k NLA: 1  
7 to 8k NLA: 1  
6 to 7k NLA: 4  
5 to 6k NLA: 9  
4 to 5k NLA: 39  
3 to 4k NLA: 168

Total SFDs over 3k NLA: 222 out of 2992 SFDs.

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### **NLA Summary Comments**

Presently, Wellfleet's "average" SFD housing stock comes in well below 3,000 sq.ft. of NLA. Typically, about 1,000 to 1,500 sq. ft. below it.

In my opinion the mean NLA values given above are not just insightful, but highly suggestive of an understanding from which we as a community can make an informed choice. One that would allow for a substantial majority of Wellfleet's present home owners to make expansions upon their homes, either of relatively significant or less so kind, that would not *typically* trigger a 3,000 sq. ft. NLA/Eastham Site Coverage definition type SPR process.

[Note: This 3k SC trigger level should, like Eastham, include covered garage spaces whether in-built or detached, any other permanent accessory structures on site, as well as roofed screened in porches/sunrooms. Any other features worth consideration can be proposed if deemed necessary, either as part of the SC calculation or as separate trigger mechanisms. (I.e., my BP study suggestion for a 2k trigger if it entails a 2 car garage.)]

I firmly believe what would be triggered are those projects of significantly vaster scale, size and mass that can have, and are known to have, a deleterious effect upon our neighborhoods, sensitive zone areas or districts, and our community as a whole.

As noted at the top of this page, only 222 of 2992 Wellfleet's s.f.d's are above 3,000 sq. ft. of Wellfleet's Net Living Area assessment, and 2/3rds of these between 3 to 4k. Even if one were to include all the town's s.f.d's garage spaces, I suspect that this new total would not amount to a significant change of overall percentage, which is under 10% of our total number of single family dwellings without including garages (which approximately amount to about 625 extra sq.ft. per two car garage).

In short, a 3k SC trigger threshold need not be feared as being set at too restrictive or burdensome a level for a majority of our home owners. Most of them should be able to make expansions without being subject to SPR. And of those cases where they may do so by only a few odd s.f. the draft SPR by-law provisions provide for waiver of SPR if the SPR Board should see fit to do so.

Nor would it be accurate to portray this threshold as saying a home owner can't or won't ever be allowed to go above 3k NLA/SC either. A 3k SC threshold will however at least provide for *a review process* of these home projects that are in fact beyond a large majority of our housing stock averages, and *typically* more massive all around, which can prove and is provable as being disruptive of qualities worth protecting.

With this information I think any questions regarding what an appropriate Site Plan Review trigger threshold might be is provided right here. A 3,000 sq.ft. Site Coverage trigger for SPR is as good as it gets.

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### **Conclusions**

Between this study and the one on Building Permits, I can only conclude that a Site Plan Review process, one based upon a 3,000 sq.ft. Site Coverage trigger threshold, could readily serve the needs and desires of the Town of Wellfleet and its citizens to amend our zoning by-laws for the betterment of us all.

All that remains to be accomplished is the drafting of a SPR zoning by-law that our Planning Board can accept as feasible and fair minded, and one that the town as a whole can adopt at Town Meeting.

To further that end, by adopting the formalities of SPR drafts already put forth by the Planning Board, I have conceptualized a SPR zoning by-law proposal that I believe is a worthier template than any so far being bandied about. See Attached SPR draft by-law.

As I conceive it, this SPR draft by-law proposes to address a number of the problems that have so far proven vexing. Furthermore, I believe this conceptual draft has the potential to be widely accepted at Town Meeting as we now have some sound information based knowledge at hand to work with, to reassure our fellow citizens that such an adoption will not prove either draconian or needlessly burdensome to most of them at all.

We also can look for inspiration not just from Eastham, but numerous other Massachusetts towns, like Bolton, Stow, Weston, Douglas, West Boylston, Hingham, Raynham, East Longmeadow, Ipswich, and Lincoln, all of whom have adopted SPR for their own purposes, needs, and benefit.

The real wonder of Site Plan Review is how it can be adopted and wielded by any town according to its own special yet basically similar needs and concerns. I firmly believe that Wellfleet is just as capable as any of these other towns to use it wisely and for our own benefits.

In my mind, the only question remaining is whether or not the present configuration of Planning Board members can accept and adopt such a SPR zoning by-law change as I've conceived it, and the new paradigm of discretionary responsibility that it would bring to bear.

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**NLA Means** or "average" for the CCNS

arranged by:	<i>NLA mean of the 4 medians:</i>
• Under 1/4 acre: (out of 41 sfd properties)	<b>876</b>
• 1/4+ to 1/2 acre: (out of 42 " " )	<b>1,266</b>
• 1/2+ acre to 3/4 acre: (out of 23 " " )	<b>1,500</b>
• 3/4+ to 3 acres: (out of 75 " " )	<b>1,645</b>
• 3+ acres: (out of 41 " " )	<b>1,741</b>

Total number of SFDs in CCNS: 222 [+ m-d: 251 total]

[Note: Although SFD properties within the CCNS are contained within the town wide information sets, I also asked for and attained printouts by the same parameters just for the CCNS properties as well to better isolate and present them.]

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**CCNS sfd's Acreage set Details**

under 1/4 acre	(41 total properties)	
q1 (468 to 640 nla)	median 586	10
q2 (655 to 786 nla)	median 700	10
q3 (810 to 1056 nla)	median 874	9
q4 (1152 to 2475 nla)	median 1344	12

$586 + 700 + 874 + 1344 = 3504 / 4 = \mathbf{876 \text{ mean of the four medians}}$

zero 3k+ homes; one 2k+ home

1/4+ to 1/2 acre (42 total)

q1 (368 to 830 nla)	median 724	10
q2 (834 to 1218 nla)	median 1076	11
q3 (1230 to 1620 nla)	median 1472	10
q4 (1670 to 3058 nla)	median 1792	11

$724 + 1076 + 1472 + 1792 = 5064 / 4 = \mathbf{1266}$  mean of *the four medians*

one 3k+ home  
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1/2+ to 3/4 acre (23 total)

q1 (601 to 968 nla)	median 720	5
q2 (1062 to 1360 nla)	median 1221	6
q3 (1366 to 1755 nla)	median 1546	6
q4 (2164 to 3624 nla)	median 2516	6

$720 + 1221 + 1546 + 2516 = 6003 / 4 = \mathbf{1500.75}$  mean of *the four medians*

two 3k+ homes  
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3/4+ to 3 acres (75 total)

q1 (264 to 960 nla)	median 758	14
q2 (1006 to 1555 nla)	median 1260	19
q3 (1560 to 1008 nla)	median 1768	19
q4 (2016 to 5516 nla)	median 2795	19

$758 + 1260 + 1768 + 2795 = 6581 / 4 = \mathbf{1645.25}$  mean of *the four medians*

one 5k+ home; one 4k+ home; six 3k+ homes  
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3+ acres (41 total)

q1 (267 to 1023 nla)	median 690	10
q2 (1230 to 1580 nla)	median 1487	10
q3 (1606 to 2268 nla)	median 1799	10
q4 (2297 to 5715 nla)	median 2991	11

$690 + 1487 + 1799 + 2991 = 6967 / 4 = \mathbf{1741.75}$  mean of *the four medians*

four 3k+ homes; one 5k+ home

Sixteen total sfd's with a NLA over 3,000 sq. ft. in the CCNS

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Miscellaneous info:

By **Net Living Area** the top ten Single Family Dwelling homes (and lot sizes) are:

1 • 11,119	1.9 ac	
2 • 7277	1.43 ac	
3 • 6941	0.92 ac	
4 • 6557	2.43 ac	
5 • 6288	1.39 ac	
6 • 6220	1.35 ac	
7 • 5715	4.36 ac	ccns
8 • 5709	1.12 ac	
9 • 5676	1.23 ac	
10 • 5516	1.71 ac	ccns

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Within the CCNS the top ten NLAs (and lot sizes) are:

1 • 5715	4.36 ac
2 • 5516	1.71 ac
3 • 4432	1.90 ac
4 • 3780	3 ac
5 • 3688	1.08 ac
6 • 3578	5.45 ac
7 • 3555	3.45 ac
8 • 3445	1.10 ac
9 • 3316	1.56 ac
10 • 3256	4.37 ac

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All SFD properties with 3/4+ to 3 acres: 903

" " " with 3+ to 10 acres: 91

" " " with 10+ to 25 acres: 4

" " " with 25.5 acres: 1

" " " with 41 acres: 1

Total non-resident SFDs: 2360 [I.e. owner listed with permanent address elsewhere]

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End Note 1:

An example of how using an arithmetic mean to try and get an average can be misleading is as follows: Suppose 19 paupers and 1 billionaire are in a room. Everyone removes all the money from their pockets and puts it on a table. Each pauper puts \$5 on the table; the billionaire puts \$1 billion there. The total is then \$1,000,000,095. If that money is divided equally among the 20 people, each gets \$50,000,004.75. That amount is the *mean* amount of money that the 20 people brought into the room. But the *median* amount is \$5, since one may divide the group into two groups of 10 people each, and say that everyone in the first group brought in no more than \$5, and each person in the second group brought in no less than \$5. In a sense, the median is the amount that the *typical* person brought in. By contrast, the mean is not at all typical, since nobody in the room brought in an amount approximating \$50,000,004.75.

All of which I suspect has to do with why our Assessor's data base software is configured to use a *median* method of calculation as opposed to the *mean* method. It better offers to smooth out statistical deviations that can cast askew averaging.

In general, the larger the set of numbers one has to work with and that most of them fall somewhere in a middle range of value, along with a fairly equal number at both margins and of similar deviation from the norm, than by and large one is going to come up with a more accurate "average" value.

I think this general rule applies to our Town's assessed NLA figures and ranges, and thus the valuations given herein as both *median* and *mean* are as good as it gets.