

Residential Development Trends Inside and Outside of Priority Funding Areas (PFAs), 1940-2012

The Planning Data Services Division within the Maryland Department of Planning has created a consistent geospatial database of improved single-family residential parcels of 20 acres or less from 1940 thru 2012. This database allows for the analysis of residential development patterns inside and outside of Priority Funding Areas (PFAs) for the entire 73-year time span.

PFAs are existing communities and places where local governments want state investment to support future growth. (See [Map 1](#).) PFAs are further broken out into PFA “no comment” areas and PFA “comment” areas. The PFA comment areas are locally, but not state certified, PFAs and thus are not looked upon as favorably from a statewide smart growth perspective.¹

Summary of Findings

Since the implementation of the Smart Growth Laws in 1999², there has been no overall increase in the statewide share of improved residential *parcels* located inside of PFAs until the last several years.³ In fact, the shares of improved residential parcels inside PFAs since 1999 are some of the lowest over the last 73 years before the upturn in the 2009-2012 period. Much of the increase in PFA share in the last four years may be a function of the effects of the Great Recession and its aftermath which fundamentally altered where development was taking place – away from the more sprawl oriented exurban/rural counties and towards the more urban inner and outer suburban counties.

There has been a generally downward share in the percentage of improved residential *acres* developed outside of PFAs since about 2004. Here, too, part of the reduction in the share of residential acres developed outside of PFAs in recent years may have been influenced by an increasing share of development occurring in the more central (and urban) counties and proportionately less development in the more rural counties which traditionally have larger lots.

Overall *average lot sizes* have shown sustained reductions over time (for all residential improved parcels both in and outside of PFAs) having been on a slowly declining path since 2004. This overall decrease in average lot size is due to smaller lot sizes outside of PFAs and may be due to rising costs and scarcity of buildable land. And, despite the decline in average lot sizes outside of PFAs, the average sizes of these improved parcels are still seven times as large as the average improved parcel inside of PFAs.

¹ PFA comment areas represent only a fraction of single-family residential development statewide, but are a significant share of residential development in three counties: Wicomico, Washington and Frederick counties.

² 1997 Priority Funding Areas Act, with implementation by 1999

³ All Analysis for inside PFA development excludes PFA comment areas. That is, development in PFA comment areas are added into “outside PFA” development activity.

Recent Trends

The advent of the Great Recession and the collapse of an increasingly over heated housing market, followed by a prolonged lackluster recovery, has had a significant effect on both the quantity and location of single-family residential development in Maryland.⁴ The number of single-family improved residential parcels was as high as 21,606 as recently as 2005, fell sharply by 2008 (10,380), the first full year of the Great Recession, and continued to plunge reaching 8,306 by 2011, (well after the Great Recession's official end date of June 2009), the lowest annual total in the data series in 65 years (since 1946). (See [Chart 1](#).) In 2012, the number of single-family improved residential parcels rose slightly, to 8,599, but this was the second smallest total (after 2011) since 1946.

At the same time that single-family residential development was sharply reduced, the share of this development built inside of PFAs had a small but significant increase. On average, 74.0 percent of single-family residential development over the last four years occurred inside PFAs, up from around 70.0 percent in the prior three years. Before this uptick over the last four years, the share of development inside of PFAs was trending downward. (See [Chart 2](#).)

Part of this increase in inside PFA development occurred because proportionately more of (the diminishing) number of improved residential parcels were in the four inner suburban and seven outer suburban counties, which typically have higher shares of their development inside PFAs, and proportionately less development was occurring in the exurban/rural counties which typically have smaller shares of their development inside PFAs. For instance, in 2006 before the advent of the Great Recession, the nine counties of the Eastern Shore Region and the three counties of the Western Maryland Region (which combined is being called the “exurban/rural area”) had 26.1 percent of all the improved residential parcel development in the state. By 2012, this share had been reduced to 11.3 percent, less than one-half of it pre-Great Recession peak. At the same time, the development share of the four inner suburban counties and Baltimore City had risen from a low of 39.8 percent in 2005 to a high of 47.8 percent in 2011 before declining slightly to 46.1 percent in 2012. The share of the seven outer suburban counties had grown from 31.9 percent in 2007 to 42.6 percent in 2012. (See [Map 2](#) and [Chart 3](#).)

Long-Term Statewide Perspective - Parcels

By decade, the highest share of single-family residential development inside PFAs occurred during the 1940s (90.2%) and the 1950s (90.1%). (See [Chart 4](#).) In the 1950s Maryland experienced its first wave of post WWII suburbanization, which chiefly involved out migration from the central cities (e.g. Washington, D.C. and Baltimore City) to the surrounding inner ring of suburbs (Montgomery and Prince George's counties in the case of Washington, D.C. and Baltimore and Anne Arundel counties in the case of Baltimore City).

The smallest share of single-family residential development inside of PFAs occurred during the 1970s (69.1%) and in the 2000's (70.6%). (See [Chart 4](#).) The 1970s were the beginning of the second major

⁴ The Great Recession lasted from December 2007 to June 2009, the longest recessionary period since the Great Depression of the 1930s.

wave of suburbanization in Maryland. In this case, the predominant migration path of residents was from the four inner suburban jurisdictions to an outer suburban ring, including Calvert, Charles, Howard, Carroll and Harford counties.

In the 2000s, out migration continued on this outward path, with increasing numbers of residents moving from the outer suburbs to a third tier of counties, including, Washington County in the Western Maryland Region and Cecil County in the Upper Eastern Shore Region. This “third wave” of out migration came to a screeching halt with the collapse of the housing market and the beginning of the Great Recession in December 2007. As a result of the effects of the Great Recession on the pace and location of development activity, the share of single-family improved residential parcels inside of PFAs increased to 74.1 percent in the last three years.

Despite the fact that continued “further out” out migration has been greatly curtailed by the Great Recession and the lackluster recovery which followed, the prior six decades of continued out migration from the central cities and inner suburbs has resulted in the *cumulative* percent of single-family improved residential parcels to continue to drop, going from nearly 90 percent in the 1950s to 78.2 percent by 2012. (See [Chart 5](#).) This cumulative percentage drop, however, has certainly been very small in the last three or four years.

Long-Term Statewide Perspective - Acres

Whereas the majority of single-family improved residential parcels are inside of PFAs, the overwhelming majority of acres associated with residential development are outside of PFAs. In 2012 for example, just under three-quarters (72.2%) of all acreage associated with single-family improved residential parcels developed in that year were located outside of PFAs, despite the fact that only 25.3 percent of improved parcels were located there. (See [Chart 6](#).) The acreage share has been mostly on a downward trend since 2004 when 78.9 percent of single-family residential acres were outside of PFAs. This recent decline is due to smaller lot sizes outside of PFAs (see the discussion below on average lot size).

By decade, the share of acreage for single-family improved residential parcels was lowest in the 1950s (39.0%) when development outside the PFA was at its lowest. From the 1980s, development outside of PFAs has encompassed at least three-quarters of all single-family residential acres, with the highest share (77.2%) from 2000 to 2009. Over the last three years, this share has declined to 73.6 percent. (See [Chart 7](#).)

As a result of generally increasing shares of single-family residential acres being developed outside of PFAs, the *cumulative* share of acreage developed outside of PFAs since 1940 reached 68.0 percent in 2012, compared to a low point of 40.4 percent in 1956. (See [Chart 8](#).)

Long-Term Statewide Perspective – Average Lot Size

There is a stark contrast in the average lot size for single-family improved residential parcels in and out of PFAs. In 2012, the average lot size outside of PFAs (1.51 acres) was nearly eight times the average lot size inside PFAs (0.20 acres). (See [Chart 9](#).) As large as this difference is, it has been larger in the past as the average lot size outside of PFAs has been slowly shrinking since the early 1980s. In the early

1980s, the average lot size outside of PFAs was 10 times the average lot size inside of PFAs. (See [Chart 10](#).)

By decade, average lot sizes outside of PFAs were smallest during the 1950s (1.39 acres) and largest in the 1980s (2.23 acres). During the 2000's, the average lot sizes outside of PFAs shrunk to just below two acres (1.99 acres) and since 2010 continued to fall to 1.56 acres. (See [Chart 11](#).)

Inside PFA lot sizes averaged just below a quarter-acre between 2000 and 2009, slightly above averages over the previous two decades, but then dropped to 0.20 acres over the last three years, the smallest in the data series. Inside PFA lot sizes peaked in the 1960s at one-third of an acre – a period of rapid suburbanization in the four inner suburban jurisdictions.

Despite the smaller average lot size outside of PFAs in the 2000 to 2009 period, the overall average lot size for all single-family residential parcels (in and out of PFAs) were higher (0.76 acres) than in any of the previous six decades. (See [Chart 12](#).) This was due mainly to the higher share of parcels developed outside of PFAs in the 2000 to 2009 period and to a lesser extent the slightly larger average size of inside PFA parcels. During the last three years, however, with smaller average lot sizes both inside and outside of PFAs, and an uptick in the share of development inside of PFAs, the average lot size of 0.55 acres is the smallest since the 1950s.

Pre and Post Smart Growth PFA Law

The 1997 Priority Funding Areas Act designated certain areas as Priority Funding Areas and set up criteria to establish future PFAs. PFAs are areas in which the overwhelming majority of growth was to occur and where the state would channel the bulk of its infrastructure dollars.

These PFA boundaries needed to be submitted by jurisdictions (counties and municipalities) by October 1, 1998 and be in place by the beginning of 1999. The following analysis compares single-family residential development activity during the 13 years in which the “Smart Growth Law” was in operation (1999 thru 2012) with the prior 13 years (1985 thru 1998).

The percent of single-family improved residential parcels developed inside of PFAs actually fell during the 13 years in which the Smart Growth PFA law was in effect compared to the prior 13 years. From 1999 thru 2012 only 71.1 percent of the improved single-family residential parcels were located inside of PFAs, while during the 1985 thru 1998 period just over three quarters (75.7 percent) of this type of development was located inside of PFAs. (See [Chart 13](#).) As mentioned above, however, beginning in 2009 there was a significant shift in the percent of single-family residential development which occurred inside of PFAs (74.0%).

Similarly for acreage, a higher share of the single-family improved residential acres was located outside of PFAs in the 1999-2012 period (77.0%) than in the prior 13 years (75.9%). (See [Chart 14](#), combining outside PFA and comment area data.)

The biggest change in lot size over the past 13 years has been outside of PFAs. During the 1999-2012 period, the average lot size outside of PFAs (1.96 acres) was about 12.5 percent smaller than in 1985-1998 (2.24 acres). Within PFAs, average lot sizes were slightly larger in the post Smart Growth PFA era

than in the prior period (0.24 acres vs. 0.23 acres). (See [Chart 15](#), combining outside PFA and comment area data.) Overall, because of the greater share of single-family improved residential parcels outside of PFAs, the overall average lot size increased slightly (from 0.72 acres to 0.735 acres) between the two, 13-year periods.

Pre and Post Smart Growth PFA Law: Jurisdiction Parcels

During the 1985 to 1998 period the share of single-family improved residential parcels developed inside of PFAs ranged from 13.2 percent in rural Garrett County to 94.3 percent in Prince George's County. (See [Chart 16](#) and [Map 3](#).) In general, the jurisdictions with the highest shares of developed residential parcels inside of PFAs were inner and outer suburban jurisdictions located in Central Maryland – Montgomery (87.3%), Howard (86.3%), Baltimore (83.8%), Harford (82.8%), and Anne Arundel (80.5%) counties. Jurisdictions with the lowest share of single-family improved residential parcels inside of PFAs were mostly rural counties such as Caroline (21.4%), Dorchester (24.5%), Wicomico (30.2%) and Kent (40.3%), but also included a few fast-growing counties – St. Mary's (35.6%), Cecil (38.1%), Queen Anne's (43.5%) and Calvert (47.0%) counties.

There were some similarities in the share of single-family improved residential parcels in the pre and post Smart Growth PFA Law era. During the 1999 to 2012 period, Garrett County (15.5%) still had the lowest share of residential development inside PFAs. Additionally, the largest shares were still in the suburban counties in Central Maryland and the lowest shares in the more rural counties on the Eastern Shore. (See [Chart 17](#) and [Map 4](#).)

However, there were a number of significant changes in PFA share in the latter 13-year period. In total, 12 jurisdictions showed increases in inside PFA development and 11 experienced decreases.⁵ The largest decline in the share of single-family improved residential parcels inside PFAs occurred in Prince George's County, which went from 94.3 percent in 1985 to 1998 to 77.2 percent in 1999 to 2012 - a drop of 17.2 percentage points. (See [Chart 18](#) and [Map 5](#).) Charles County, which showed explosive population growth during this period, fueled by significant in-migration from Prince George's County, had the second largest drop of 12.4 percentage points (from 68.7% to 56.4%). Following Charles County were the slow-growing/rural Allegany County (-7.7 percentage points) and the fast growing Howard (-7.4 percentage points) and Anne Arundel (-4.5 percentage points) counties.

Of the counties which had increased shares of inside PFA development, the largest gains tended to be in the more rural jurisdictions. These jurisdictions experienced a surge in residential development activity in the first half of the 2000 to 2010 decade that was much greater than in their recent past. This increased development activity was driven to a large extent by migration of homebuyers in Central Maryland looking for more affordable homes, or in some cases second/vacation type homes or homes which were viewed as investments in a period of rapidly rising home prices. Such was the case for the six counties with the largest increases in inside PFA development, including Caroline (+25.3 percentage points), Wicomico (+21.8 percentage points), Kent (+18.4 percentage points), Dorchester (+18.3 percentage points), Talbot (+18.2 percentage points) and Queen Anne's (16.7 percentage points) counties. Despite

⁵ All of Baltimore City is a PFA, so "inside PFA" development is 100.0 percent in both time periods.

these increases in inside PFA development, however, all but Talbot County still had total shares of single-family residential development inside of PFAs in the 1999-2012 period that were among the lowest in the state. Only Talbot County's share in the latter period (71.4%) was higher (and only slightly higher at that) than the overall statewide average (70.1%) during the latter 13-year period.

Jurisdiction Acres

The share of acres consumed outside of PFAs is mostly the opposite of the shares of parcels developed inside of PFAs. During the 1985-1998 period, nearly all of the improved single-family residential acres in Caroline (95.4%) and Garrett (95.2%) counties were outside of the PFAs, highest in the state, while Prince George's had by far the lowest share (35.2%). (Garrett County had the lowest share and Prince George's the highest share of improved residential parcels inside of PFAs for this period). In general, the largest share of acres developed outside of PFAs were in the rural counties on the Eastern Shore, while the smallest shares tended to be in Central Maryland's suburban jurisdictions, with a few exceptions (e.g., Allegany and Worcester counties). (See [Chart 19](#).)

In the post Smart Growth PFA Law period, Garrett County (96.1%) and Caroline County (92.2%) still remained at the top and Prince George's (51.1%) at the bottom of outside PFA acreage shares. (See [Chart 20](#).)

In all, 11 jurisdictions had increases in the share of single-family improved residential acres developed outside of PFAs in the 1999-2012 period, while 12 had declining shares. (See [Chart 21](#).) There is somewhat of a correlation between the change in the share of acres developed and the change in share of where parcels were developed. For example, 11 of the 12 jurisdictions which had a decrease in single-family residential *parcels* developed outside of PFAs in the 1999 to 2012 period also had a decrease in the share of *acres* developed outside of PFAs (The exception was Baltimore County which had a smaller share of acres consumed outside PFAs, but a larger share of parcels developed outside of PFAs). Prince George's, which had the largest percentage point increase in outside PFA single-family residential development, also had the largest increase in the share of single-family residential acres developed outside of the PFAs (from 35.2 percent for 1985-1998 to 51.1 percent for 1999 to 2012).

On the opposite end, Kent, Wicomico and Dorchester counties had the largest drops in their share of acreage developed outside of PFAs, corresponding to the second through fourth largest increases in shares of single-family residential parcels developed inside of PFAs in the state.⁶

Jurisdictions – Lot Size Inside of PFAs

Even inside PFAs, average lot sizes for single-family improved residential parcels can vary significantly among jurisdictions. The largest inside PFA lot size averages in the 1985-1998 period were in Somerset (1.01 acres) and Allegany (0.89 acres) counties, five or more times larger than the 0.17 acre average for

⁶ Caroline County had the largest increase in the share of improved single-family parcels developed inside PFAs between the two periods (+25.3 percentage points), while having the eighth largest decline in acres developed outside of PFAs (-3.2 percentage points).

the two suburban jurisdictions with the smallest lot sizes, Baltimore and Montgomery counties.⁷ (See [Chart 22](#).)

For the most part, the more rural counties have by far the largest single-family improved residential parcels inside PFAs, while the three inner suburban jurisdictions of Baltimore, Anne Arundel and Montgomery have the smallest average lot size.

Average lot sizes inside PFAs decreased in most jurisdictions in the 1999 to 2012 period compared to the prior 13-year period. (See [Chart 23](#) and [Chart 24](#).) The largest declines were in the rural jurisdictions of Garrett, Caroline, Kent, and Talbot which had much stronger residential development in the first half of the 2000 to 2010 period than was the case over the prior several decades.

Jurisdictions – Lot Size Outside of PFAs

Average lot sizes outside of PFAs also vary significantly among Maryland's jurisdictions. In the 1985 to 1998 period, the average lot sizes varied from a low of 1.34 acres in Wicomico County to a high of 4.24 acres in Allegany County. (See [Chart 25](#).) Unlike lot sizes inside PFAs, however, there is not much of a match between how developed a jurisdiction is and the average lot size. Both rural and suburban jurisdictions have relatively low and high average lot sizes outside of PFAs.

Average lot sizes outside of PFAs have been trending downward and this is reflected in the jurisdiction data for the 1999 to 2012 period, where 13 jurisdictions had at least some decline in average lot size. (See [Chart 26](#) and [Chart 27](#).) In seven out of the eight largest lot size declines, the share of improved residential parcels outside of PFAs increased during the 1999-2012 period, including in three jurisdictions with the most dramatic declines in average lot size, Howard (-1.32 acres), Charles (-0.93 acres) and Prince George's (-0.93 acres) counties. The tighter supply and rising cost of easily developable land outside of PFAs in a strong housing market – as occurred thru the mid-point of the 2000 to 2010 decade – were probable factors in the declining lot sizes for these jurisdictions.

In contrast, all but three of the 10 jurisdictions which had increases in average lot sizes outside of PFAs had declining shares of single-family improved residential development occur outside of PFAs, including the Frederick, which had the largest average lot size increase (+.24 acres).

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⁷ Baltimore City, which is totally inside a PFA, had an average lot size of 0.09 acres.