

THOUGHT LEADERSHIP SERIES

THE GROCERY STORE EFFECT:

HOW NEW GROCERY STORES
IMPACT MULTIFAMILY RENTS
IN THE WASHINGTON
METRO AREA

MAY 2019

THE GROCERY STORE EFFECT

Amenities such as nearby grocery stores are key to attracting renters to available apartment units. There has been much speculation about the “Whole Foods effect”—the phenomenon that a new Whole Foods increases the value of surrounding real estate assets. But beyond just Whole Foods, having a new grocery store in a neighborhood is, in theory, a key amenity that allows nearby apartment owners to better market their properties. We wanted to examine this idea and see if the data supports the premise. Our primary goal was to see if being close to a *new* grocery store allows apartment properties to achieve higher rents and greater rent growth than the broader submarket in which the property is located. In addition, we analyzed these trends by substate area and submarket, by brand of store, by class of apartment, by type of retail real estate, and for grocery-anchored apartment projects.

To answer these questions, we compiled a data set of apartments with proximity (a half-mile radius in the District of Columbia and a one-mile radius in the suburbs) to 42 grocery stores that opened in the Washington metro area between the start of 2014 and the end of 2018. We looked at the average effective rents for these properties both at the time the store opened and at the time of this study and compared them to the submarket’s average effective rent during those periods. In addition, we analyzed the rent growth these properties experienced from the year before to the year after the store opened and compared it to the five-year average rent growth for that submarket. The following sections detail our findings and answer several questions multifamily owners and investors may have about the impact of grocery stores on apartment rents.

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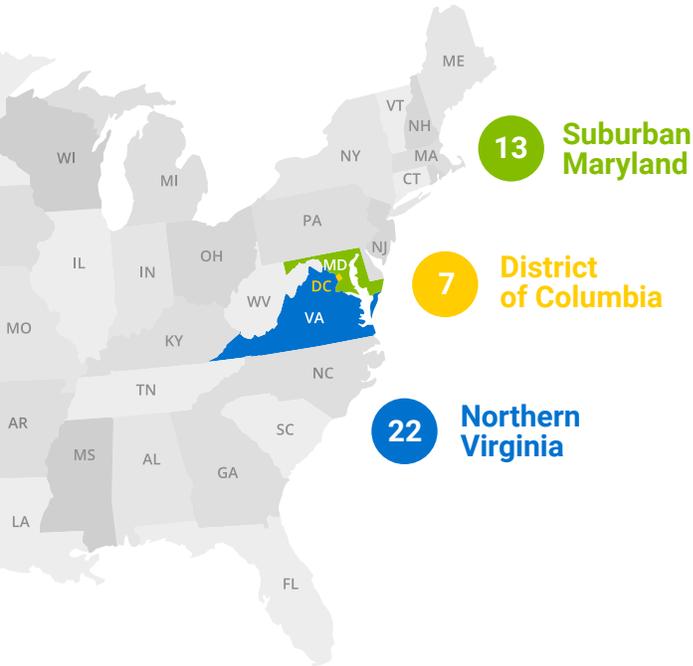
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KEY FINDINGS

- **Throughout the Washington metro area, proximity to a new grocery store correlates with a significant apartment rent premium over the submarket average rent.** Using a one-mile radius in Northern Virginia and Suburban Maryland and a half-mile radius in the District, we found that apartment properties within the radius of a new grocery store had effective rents that were 5.1% higher than the submarket average at the time of the store opening. Looking at the same set of properties as of the first quarter of 2019, the apartments that are proximate to new grocery stores retain a 3.8% rent premium over their submarket average effective rent.
- **Most of the properties within the defined distance of new grocery stores saw a rent increase correlated with the store's opening.** Measuring the average effective rents from 12 months before a store opening to 12 months after, rent growth for these properties in that time period averaged 76 basis points higher than the submarket's five-year average annual rent growth. To put that in perspective, if a submarket has averaged 2.00% annual rent growth over the past five years, the properties within the grocery radius experienced a rent increase of 2.76% from the year before the store opened to the year after.
- **Apartments surrounding grocery stores closer to new developments and public transportation tend to have higher rent premiums than those located in the more suburban, less dense areas of a submarket.** This suggests that while new grocery stores do appear to have an impact on apartment rents, they are just one of many relevant factors.
- **At the time of a store opening, apartments surrounding Whole Foods stores received the greatest rent premium out of the seven chains studied.** Apartments within the radius of Whole Foods stores had on average an 8.4% higher effective rent than the property's overall submarket at the time of the store opening. Whole Foods-proximate apartments' effective rent premium at opening was followed closely by apartments proximate to Safeway at 8.2% and Harris Teeter at 7.9%.
- **Apartments within the radius of grocery stores in mixed-use developments were able to elicit a rent premium much higher than those surrounding free-standing stores or stores located in shopping centers.** The effective rent premium for apartments within the radius of mixed-use grocery stores compared to the surrounding submarket was 7.9% at store opening and 6.4% today.
- **Just the announcement of a new grocery store opening in the future appears to have an impact on rent growth.** The apartments surrounding 13 grocery stores that were publicly announced for future opening had rent growth after the announcement that outpaced the submarket average by 140 basis points. This means if the submarket has averaged 2.0% annual rent growth since 2014, the apartments surrounding *future* new grocery stores saw an average of 3.4% annual rent growth from the year before the announcement to the year after, a significant premium.
- **Overall, grocery-anchored apartment properties enjoyed a 23.4% rent premium over their submarket average and a 13.7% rent premium over the rest of the apartment properties within a store's radius in the year after the grocery store opened.** Those premiums remain significant today, with the average rent premium for grocery-anchored apartments as of first quarter 2019 at 16.1% over the broader submarket and 9.7% over the rest of the properties within the store's radius.



ANALYSIS INCLUDES
42 GROCERY STORES
 OPENED IN THE REGION
 BETWEEN 2014-2018



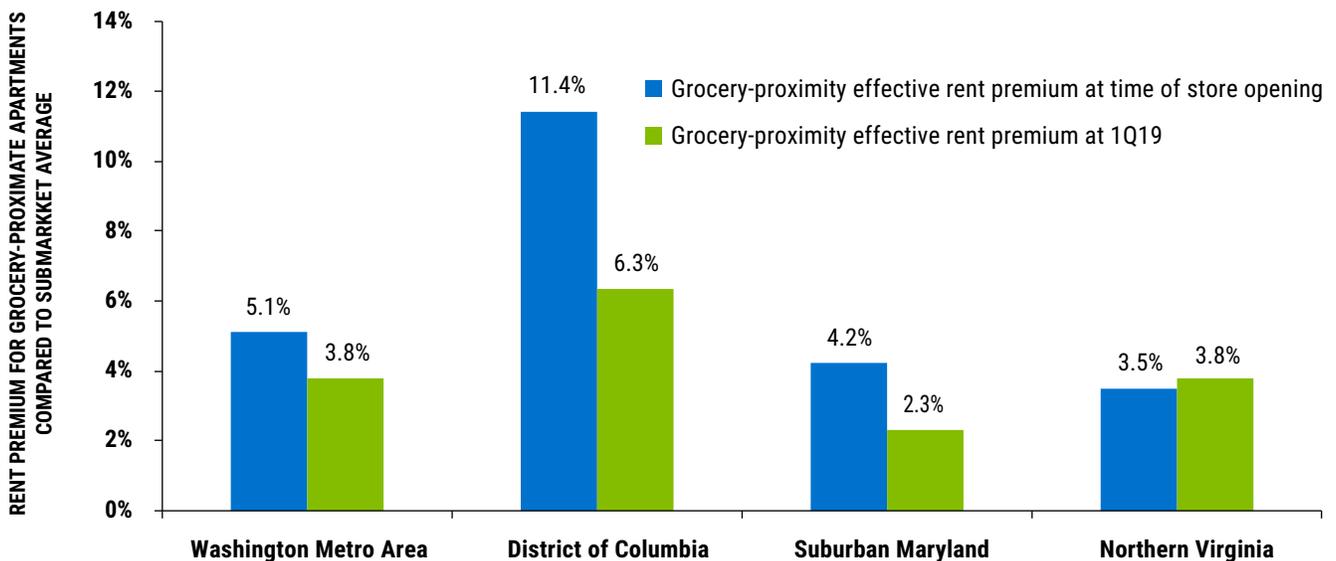
I. Do new grocery stores have more of an impact on apartment rents in one of the region's substate areas than in the others?

Of the 42 grocery stores we looked at for this analysis that opened between the start of 2014 and the end of 2018, seven are in the District of Columbia, 13 are in Suburban Maryland, and 22 are in Northern Virginia. Our analysis found that throughout the Washington metro area, proximity to a new grocery store correlates with a material rent premium over the submarket average. Using a one-mile radius in the suburbs and a half-mile radius in the District, we found that apartment properties within the radius of a new grocery store had effective rents that were 5.1% higher than the submarket average at the time of the store's opening. While having a new grocery store nearby seems to allow an apartment rent spike at the time of the store's opening, we also found that that rent premium is sustained in most cases. Looking at the same set of properties as of the first quarter of 2019, the apartments that are proximate to new grocery stores retain a 3.8% rent premium over their submarket's average effective rent.

Moreover, most of the properties within the radius of a new grocery store experienced a material rent increase around the store's opening. Measuring the average effective rents from 12 months before a store's opening to 12 months after, percentage rent growth for these properties in that time period averaged 76 basis points higher than the submarket's five-year average annual rent growth.

PROXIMITY TO NEW GROCERY STORES CORRELATES WITH EFFECTIVE RENT PREMIUM

RENT PREMIUM FOR PROXIMITY TO NEW GROCERY STORES COMPARED TO SUBMARKET AVERAGE
 BY JURISDICTION | AT TIME OF STORE OPENING AND AS OF FIRST QUARTER 2019



Source: Axiometrics, NKF Research; May 2019

To put that in perspective, if a submarket has averaged 2.00% annual rent growth over the past five years, the apartment properties within the grocery store's radius experienced a rent bump of 2.76% from the year before the store opened to the year after.

This trend is present region-wide but is even more prevalent in the District of Columbia. Apartment properties in the District that are within a half-mile radius of a new grocery store had effective rents that were an average of 11.4% higher than their submarket's average at the time of a store's opening. While other locational factors are likely at play—meaning these results show correlation but not necessarily causation—multifamily owners are able to market their proximity to a new grocery store, and that key amenity helps them get a premium over the average effective rent for their submarket. As of early 2019, District of Columbia apartments within the defined radius of new grocery stores maintain an effective rent premium of 6.3% over their submarket average. While there was a significant rent premium when a nearby grocery store was brand-new, a sizable premium has been retained.

In the District, most of the properties within the half-mile radius of new grocery stores also experienced higher than average rent growth surrounding a store's opening. Measuring the average rents from 12 months before a store's opening to 12 months after, percentage rent growth for these properties during that period was 100 basis points higher than the submarket's five-year average. The strongest example in the District is a Giant that opened at 3336 Wisconsin Avenue NW in 2014. The 13 properties within the half-mile radius that were stabilized at the time of the store's opening

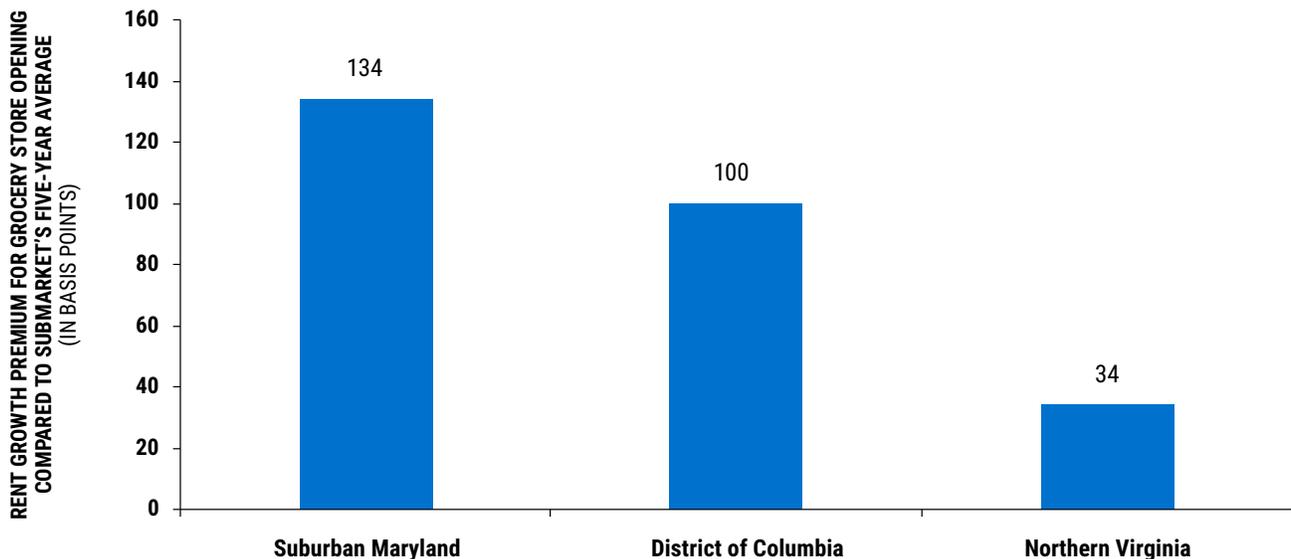
Most of the properties within the radius of a new grocery store experienced a material rent increase around the store's opening.

experienced a 6.1% annual effective rent increase from the 12 months before the Giant opened to the 12 months after. Effective rents for the 3,444 units within those buildings were 3.8% higher than for the entire Northwest DC submarket at the time of the store's opening, and rental properties there maintain a premium of 2.3% over the submarket's present average.

Apartments proximate to new grocery stores in the suburbs also see a significant rent premium. In Suburban Maryland, apartments within a one-mile radius of a new grocery store had a 4.2% rent premium on average over their submarket average effective rent at the time of a store's opening. Looking at those same properties today, they maintain a 2.3% effective rent premium over their submarket's average. One of the strongest examples in Suburban Maryland is a Safeway that opened on East-West Highway in Hyattsville in April 2016. The 3,066 stabilized units within a one-mile radius had effective rents 19.2% higher than the broader submarket when the store opened and maintain a 10.0% premium over the Hyattsville/Riverdale submarket average today. *It is certainly likely that other factors are at play, such as other non-grocery amenities that are close to these apartments, but the fact that the rent premium was so much higher when the store was brand-new provides evidence that the grocery*

OPENING OF A NEW GROCERY STORE SUPPORTS RENT GROWTH PREMIUM

RENT GROWTH FROM ONE YEAR BEFORE TO ONE YEAR AFTER STORE OPENING, MEASURED IN BASIS POINTS ABOVE SUBMARKET'S FIVE-YEAR AVERAGE PERCENTAGE RENT GROWTH | BY JURISDICTION



Source: Axiometrics, NKF Research; May 2019

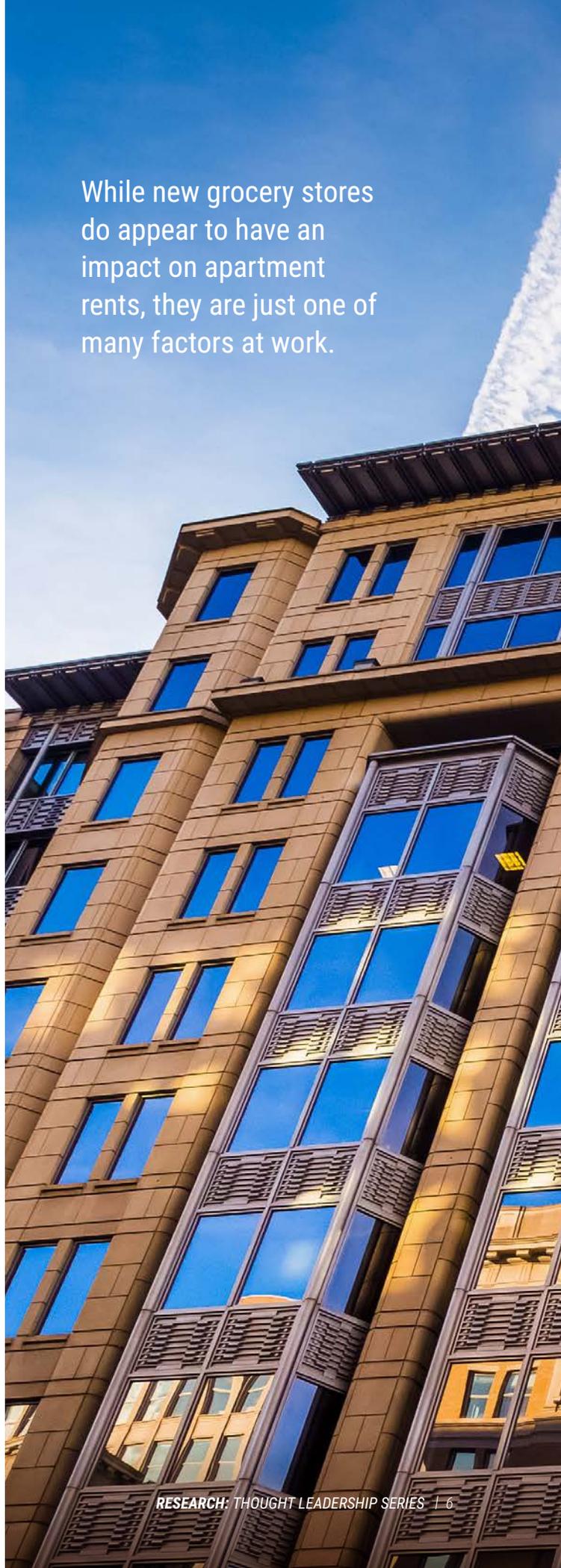
store did have a significant impact. Of the substate areas, Suburban Maryland had the highest apartment rent growth correlated with grocery store openings compared to the area's broader rent growth. Properties within one mile of a grocery store experienced a rent increase at store opening that outpaced the broader average rent growth by 134 basis points. *Most of the grocery stores that opened in Suburban Maryland were the only store to open in their submarket during the time period of this study, so it could be that having a new grocery store had more of an impact on rents since it was a relatively rare occurrence in that area.*

Northern Virginia apartment projects generally experienced a lesser (but still material) rent increase when new stores opened. The apartment rent growth from stores opening was still an average of 34 basis points higher than the store submarket's five-year average rent growth. One possible reason for a lesser increase in Northern Virginia than in Suburban Maryland or the District is that Northern Virginia has significantly more new grocery stores than the other two substate areas—22 new stores compared with only 13 in Suburban Maryland and seven in the District. Accordingly, perhaps the novelty of a new grocery store is subdued with so many new stores opening, yielding a lesser impact on rent growth. In fact, many of the Northern Virginia apartment properties that were part of this analysis fell within the one-mile radius of *multiple* new grocery stores.

In Northern Virginia, apartments within one mile of a new grocery store had an average 3.5% effective rent premium over their submarket's average rent at the time of a store's opening. Interestingly, in Northern Virginia, that premium is *even stronger* when looking at that same set of properties today, reaching a 3.8% premium over the submarket average. This also could be related to the fact that there have been so many new grocery stores opening in Northern Virginia. While having a new store is less of a novelty and thus elicits a smaller rent increase at the time the store opened, the wealth of nearby grocery amenities in Northern Virginia allows those multifamily asset owners to maintain their rent premium over the broader submarket. In short, those properties are well-amenitized, with abundant choices for renters.

II. Is there a difference in impact on apartment rents across submarkets?

When analyzing the grocery-proximate apartment data by submarket, the results are mixed, as the sample size for each submarket is small and some only recorded one store opening within the submarket during the period studied. Grocery-proximate apartments within the North Central DC submarket experienced the greatest effective rent premium compared to the rest of the submarket, at 18.4% in the year following the store opening. However, there was only one store included in this calculation, a Safeway in the Petworth area. This specific area of Petworth has seen an uptick in development and has become a more popular destination for renters over the past five



While new grocery stores do appear to have an impact on apartment rents, they are just one of many factors at work.



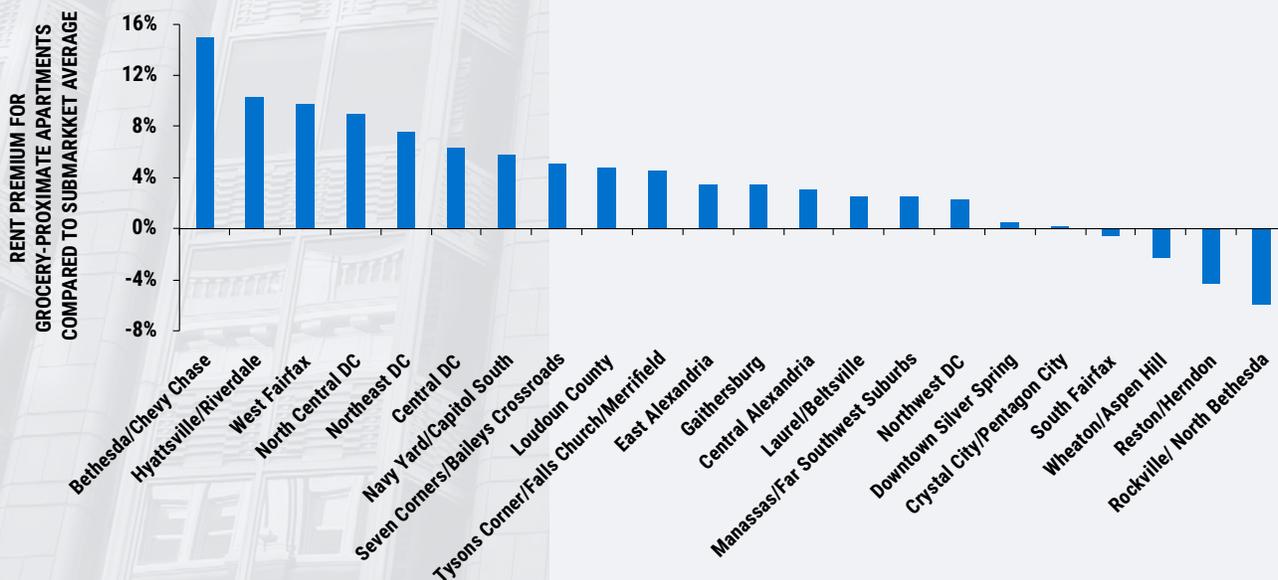
years, which likely was a factor in this large rent premium. The rent premium has since declined to 8.9% today. Although it is not as high as the 18.4% seen at opening, it remains a significant premium over the surrounding submarket average, and North Central DC is still in the top five submarkets for grocery rent premiums as of today.

With five new stores, Loudoun County had the most grocery store openings in the region over the past five years. The average effective rent for Loudoun County apartments within a one-mile radius of new grocery stores was 4.3% higher than the submarket average at store opening. This rent premium falls right in the middle of the pack when compared to the other submarkets in the data set. That Loudoun County premium today is slightly higher than it was when the stores opened, at 4.8%. This could be due to the increase in both commercial development—specifically data centers—and residential development around the forthcoming Silver Line and near Dulles International Airport. Three of the grocery stores in the Loudoun County submarket are in Ashburn and two are in Sterling.

Apartments in the Reston/Herndon and Rockville/North Bethesda submarkets are at the bottom in terms of grocery store rent premium at both opening and today. The effective rents of the apartments within the radius of new stores in the Rockville/North Bethesda submarket averaged 4.7% lower than the submarket average at opening and 5.9% lower than the submarket today. The three grocery stores that opened in the Rockville/North Bethesda submarket are

PROXIMITY TO NEW GROCERY STORES CORRELATES WITH EFFECTIVE RENT PREMIUM

RENT PREMIUM FOR PROXIMITY TO NEW GROCERY STORES COMPARED TO SUBMARKET AVERAGE
BY SUBMARKET | AS OF FIRST QUARTER 2019



Source: Axiometrics, NKF Research; May 2019



all in Rockville. North Bethesda historically has higher rents because of its closer proximity to the District than Rockville, which could explain the negative premium. The effective rents of the apartments within the radius of stores located in the Reston/Herndon submarket averaged 5.7% lower than the submarket average at opening and 4.3% lower than the submarket today. The same logic likely applies to the Reston/Herndon submarket. There was only one store opening in the submarket, a Giant on Centreville Road in Herndon. Apartment properties outside the store radius, in Reston, are closer to Washington, DC and have an open Silver Line station, factors that likely lead to higher

There seems to be a correlation between the price point of the grocery store and the rent premium.

rents there. Across the data set, there was a large spread in rent premiums across submarkets and no clear clustering by substate area. The District submarket premiums range from the top to the middle of the pack, both at the time of opening and today. Submarkets in Suburban Maryland and Northern Virginia show no clear pattern. The grocery-related rent premiums seem to be correlated more with where in each submarket a grocery store is located. Apartments surrounding stores closer to new developments and public transportation tend to have higher rent premiums than those located in the more suburban, less dense

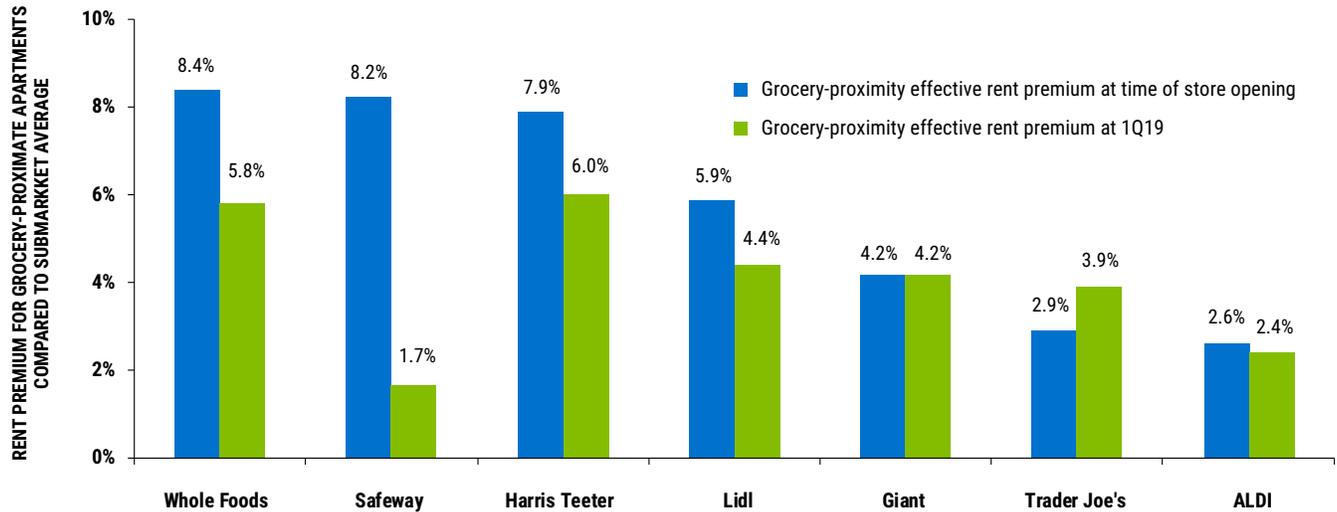
areas of a submarket. This provides further evidence that while new grocery stores do appear to have an impact on apartment rents, they are just one of many factors at work.

III. Does any particular grocery store brand have a greater impact on apartment rents than others?

Of the 42 grocery stores included in our analysis, the brand breakdown was as follows: 15 ALDIs, 8 Harris Teeters, 5 Giants, 4 Safeways, 4 Trader Joe's, 4 Whole Foods, and 2 Lidl's. (While we did include Wegmans stores in our initial research, none of the new Wegmans locations met the criteria for this section of the study, since they either are not yet open or do not have two stabilized apartment properties within their radius.) Our analysis found that while the apartments surrounding every brand of store generally had a rent premium—both at the time of a store's opening and at the time of this study—certain brands elicit a more significant rent premium than others. At the time of a store's opening, apartments surrounding Whole Foods stores experienced the most significant rent premium of the seven chains examined. Apartments within the defined radius of Whole Foods stores have on average an 8.4% higher effective rent than the broader submarket's average rent at the time of a store's opening. Whole Foods-proximate apartments' effective rent premium at a store's opening was followed closely by apartments proximate to Safeway stores, at 8.2%, and Harris Teeter stores, at 7.9%.

PROXIMITY TO NEW GROCERY STORES CORRELATES WITH EFFECTIVE RENT PREMIUM

RENT PREMIUM FOR PROXIMITY TO NEW GROCERY STORES COMPARED TO SUBMARKET AVERAGE
BY GROCERY STORE CHAIN | AT TIME OF STORE OPENING AND AS OF FIRST QUARTER 2019



Source: Axiometrics, NKF Research; May 2019

Looking at those same rent premiums today, they are still positive, but most chains saw a modest decline. Giant's effective rent premium stayed the same—it averaged 4.2% upon store opening and remains 4.2% for those stores today, relative to its submarket averages. Today, apartments within the defined radius of Harris Teeter stores have the highest effective rent premium at 6.0% over the surrounding submarket. Apartments surrounding Whole Foods stores follow closely behind at a 5.8% premium over the surrounding submarket. There seems to be a correlation between the price point of the grocery store and the rent premium. Harris Teeter and Whole Foods are known to have higher product pricing, and they correlated with the highest apartment rent premiums. Alternately, Trader Joe's and ALDI are known for their affordability, and they are correlated with the two smallest rent premiums of all seven chains at the time of store opening. This also could be due to ALDI and Trader Joe's choosing to open new stores in areas where apartment rents are not as high as in surrounding neighborhoods—to more effectively target their customer base. Trader Joe's is the only grocery store chain where the rent premium for surrounding apartments increased from the time the store opened until today. The average effective rent premium for apartments surrounding Trader Joe's stores at opening was 2.9% and

it has risen to 3.9% today. This could be due to Trader Joe's choosing to open in up-and-coming neighborhoods with stronger rent growth prospects than more established neighborhoods where the rent is already at a premium and flattening over time.

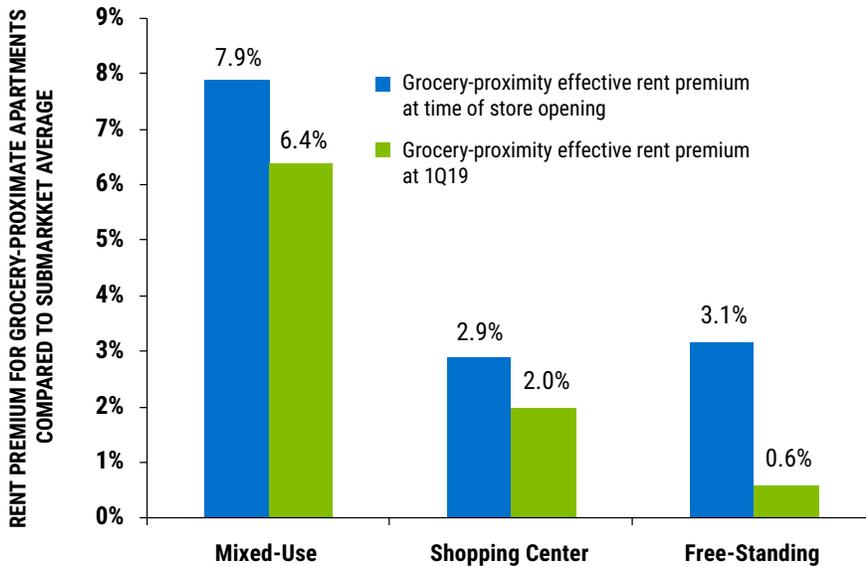
Apartments surrounding Safeway stores had a curious drop in their rent premium from the time of a store's opening to today. In digging into the data further, the apartments surrounding two of the Safeway stores (Rockville Pike in Rockville, MD and King Street in Alexandria, VA) actually had negative premiums in comparison to their broader submarket, while those apartments surrounding the other two Safeway stores (East-West Highway in Hyattsville, MD and Georgia Avenue in the District) had extremely strong rent premiums of 19.2% and 18.4%, respectively, at the time the stores opened. The negative rent premiums for apartments surrounding the former two stores are likely due to the stores being located in a portion of the submarket where rents are lower, as discussed in the previous section. While the rent premiums for apartments in the defined radius of all four stores moderated between the time of the stores opening and the time of this study, the negative rent premiums as of today for apartments surrounding the Rockville (-5.1%) and Alexandria (-7.1%) stores pull down the overall average.

Trader Joe's is the only grocery store chain where the rent premium for surrounding apartments increased from the time the store opened until today.



PROXIMITY TO NEW GROCERY STORES CORRELATES WITH EFFECTIVE RENT PREMIUM

RENT PREMIUM FOR PROXIMITY TO NEW GROCERY STORES COMPARED TO SUBMARKET AVERAGE
BY TYPE OF REAL ESTATE | AT TIME OF STORE OPENING AND AS OF FIRST QUARTER 2019



Source: Axiometrics, NKF Research; May 2019

IV. Do stores in mixed-use environments have more of an impact on apartment rents than free-standing stores or those in shopping centers?

Of the 42 grocery stores we analyzed, 21 were in shopping centers, 18 were in mixed-use developments and three were free-standing. Apartments surrounding grocery stores in mixed-use developments were able to charge a rent premium much higher than those surrounding free-standing stores or stores located in shopping centers. The effective rent premium for apartments within the defined radius of grocery stores located in mixed-use developments compared to the surrounding submarket was 7.9% at opening and is 6.4% today. These grocery stores are anchors of larger mixed-use developments and often include housing in the same building or directly adjacent. One possible reason for this rent premium is that mixed-use developments tend to be in highly-amenitized and easily-accessible areas. For example, apartments within a half-mile radius of the Harris Teeter in Capitol Riverfront recorded a 21.2% effective rent premium over the surrounding submarket when the store opened and today maintain an 8.0%

premium. This store is in a mixed-use development called The Yards, which also includes an upscale gym, an animal hospital, and two quick-serve restaurants. The Harris Teeter is the anchor of the development, but the additional amenities around it very likely contribute to its surrounding apartments having the largest effective rent premium of all the mixed-use stores in the data set.

Apartments surrounding free-standing stores had the second-largest effective rent premium at opening, at 3.1%, but that dropped to a 0.6% premium today. This drop could be because standalone grocery stores are usually located in less densely populated areas with more homeowners than apartment renters. All three of the free-standing grocery stores in the data set are in Northern Virginia. Apartments surrounding the free-standing Safeway at 3526 King Street in Alexandria had an average effective rent that was lower than the surrounding submarket. The rent premium for those properties was negative 2.3% at opening and negative 7.1% today. This is likely because the grocery store is located in a more suburban area, but the East Alexandria submarket also includes a denser area with newer apartment product and higher rents. Apartments surrounding grocery stores located in shopping centers saw the lowest effective rent premium at time of a store's opening, with effective rents averaging 2.9% higher than the submarket average. That premium is 2.0% as of today.



V. SPECIAL SECTION:

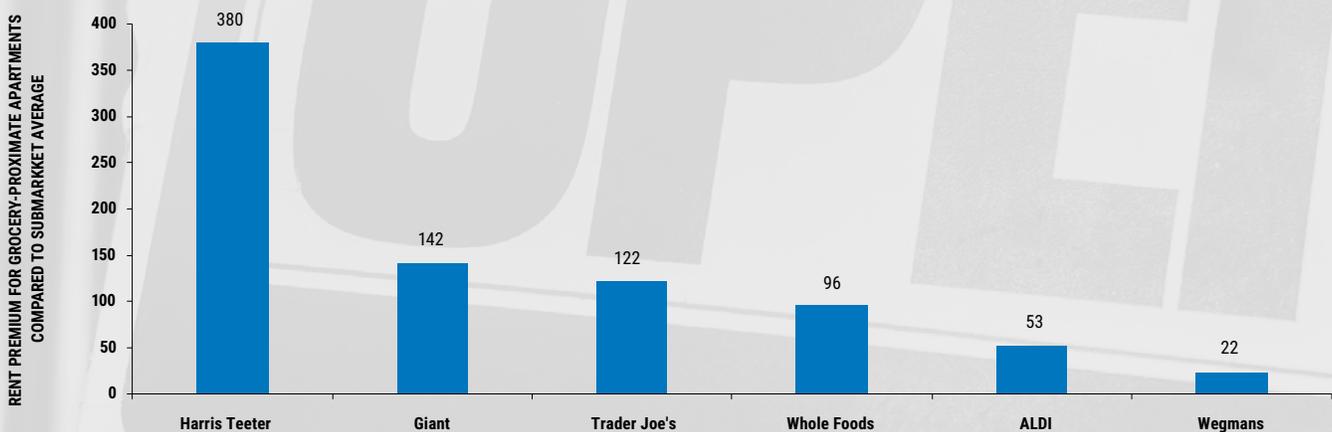
A. Does the *announcement* of a grocery store opening cause a rent spike?

While a new grocery store opening does appear to have an impact on apartment rents, we also examined whether just the *announcement* of a future store opening might have the same effect. For this analysis, we included 13 stores across the Washington metro area that are not yet open but for which an announcement has been made of a future opening on either the chain's website or via media channels. We then analyzed the rent growth for properties within the defined radius of these stores from the year before the announcement to the year after, and compared it to the five-year average rent growth for the submarket. Of the 13 announcements for future store openings, there were three Harris Teeters, three ALDIs, three Wegmans, two Whole Foods, one Giant, and one Trader Joe's. Apartments surrounding Harris Teeter stores are associated with the highest

rent growth premium in the year following the announcement, with effective rent growth an average of 380 basis points higher than the submarket's five-year average. As shown in the adjacent graph, apartments surrounding all six chains that announced a new store saw rent growth following the announcement that outpaced the submarket's five-year average. The average rent growth premium for apartments surrounding all 13 of the announced stores was 140 basis points. This means if the submarket has averaged 2.0% annual rent growth since 2014, the apartments surrounding future new grocery stores saw an average of 3.4% annual rent growth after the announcement—a significant premium for an amenity that does not yet exist.

ANNOUNCEMENT OF A NEW GROCERY STORE CORRELATES WITH RENT INCREASE

RENT GROWTH FROM ONE YEAR BEFORE TO ONE YEAR AFTER ANNOUNCEMENT OF NEW GROCERY STORES, MEASURED IN BASIS POINTS ABOVE SUBMARKET'S FIVE-YEAR AVERAGE PERCENTAGE RENT GROWTH



Source: Axiometrics, NKF Research; May 2019

B. Case study: How does the *closing* of a grocery store impact apartment rents?

While we have seen that a grocery store opening is correlated with a positive impact on rent growth, what happens to the surrounding apartments when a grocery store *closes*? For this case study, we analyzed the impact on apartment rents in the half-mile radius surrounding the former Whole Foods in Glover Park for the 12 months before and after its closure in March 2017. Annual average effective rents for the apartments in the Whole Foods store's defined radius declined 0.4% from the year before to the year after closure, 94 basis points lower than the submarket's five-year average annual rent growth of 0.5%. In the broader data set, apartments near new Whole

Foods stores demonstrated the highest rent premium over submarket average at opening (8.4%) and the second highest as of the time of this study (5.8%). It makes sense that a key amenity like a grocery store leaving the area would impact rents. This is especially true in the case of Glover Park because there is only one other grocery option within the immediate area, a Safeway. While this is just one example, the negative impact on rents with the closure of this store combines with the broader data set to suggest a strong correlation between the closing of a grocery store and apartment rent change in the surrounding area.

The negative impact on rents with the closure of this store combines with the broader data set to suggest a strong correlation between the closing of a grocery store and apartment rent change in the surrounding area.



VI. What is the impact of grocery stores on apartment rents at grocery-anchored properties?

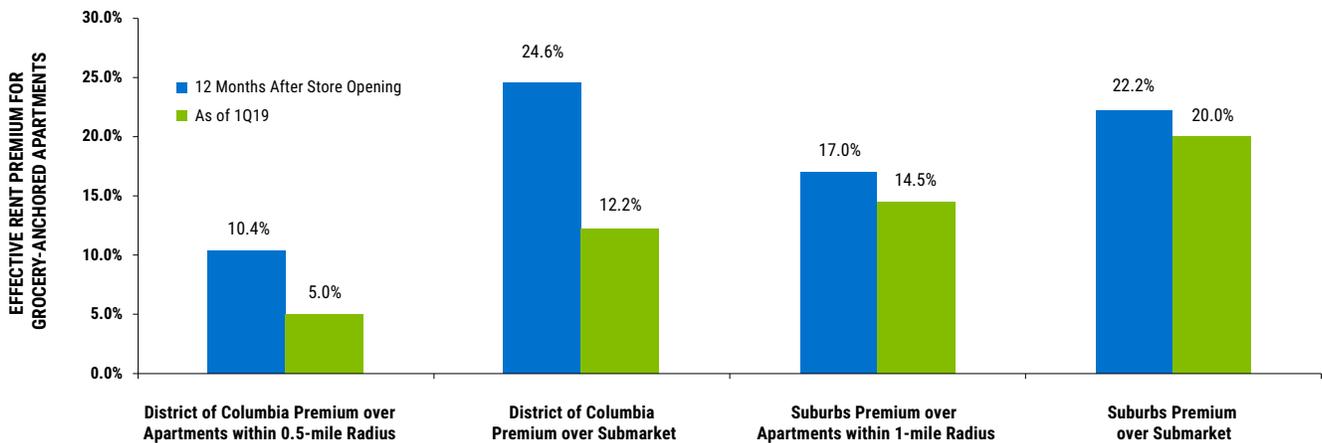
We have seen so far in this study that proximity to a grocery store is correlated with a rent premium, but what about those apartments that are *directly adjacent* to a grocery store? We analyzed 12 grocery-anchored apartment buildings as part of our data set and found that those properties have a significant rent premium over both the broader submarket and the remaining properties within the grocery store's defined radius. Overall, *grocery-anchored* apartment

properties enjoyed a 23.4% rent premium over their submarket average and a 13.7% rent premium over the rest of the apartment properties within the store's defined radius in the year after the grocery store opened. Those premiums remain significant today, with the average rent premium for grocery-anchored apartments as of first quarter 2019 at 16.1% over the broader submarket and 9.7% over the rest of the properties within the store's radius. As illustrated in the graph on page 15, the six grocery-anchored properties in our suburban data set maintain a higher premium over their submarket and defined radius today, but the premium is significant across the board.



GROCERY-ANCHORED APARTMENTS ACHIEVE HIGHER RENTS

EFFECTIVE RENT PREMIUM FOR GROCERY-ANCHORED APARTMENTS COMPARED TO SUBMARKET AVERAGE



Source: Axiometrics, NKF Research; May 2019



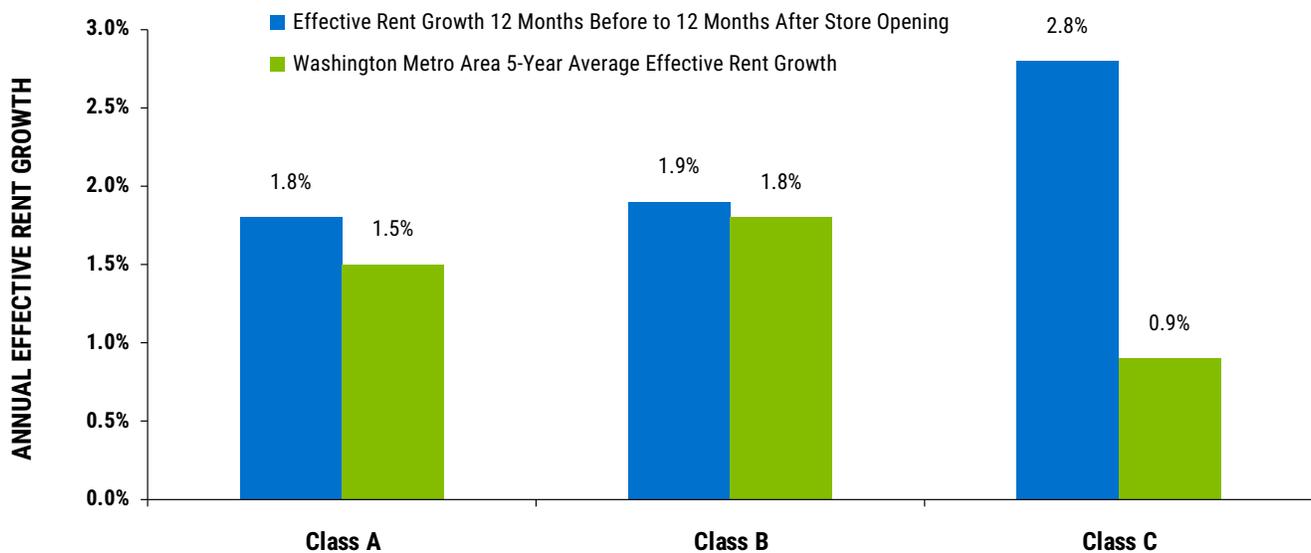
VII. Does the impact of grocery stores on apartment rents vary by the class of the apartment building?

In order to ensure our study's results were not skewed by class of property, we examined the results when segregated by class. Interestingly, for most of the grocery stores, there was cohesion among the apartment product that fell within the defined radii. That is, in most cases, all of the properties within a store's defined radius were of the same class, mostly Class B in the suburbs and mostly Class A in the District. In the overall data set, Class A properties within a store's radius experienced an average annual 1.8% effective rent increase from the 12 months

before to the 12 months after a store's opening; Class B properties experienced an average annual 1.9% increase; and Class C properties experienced an average annual 2.8% increase. As shown in the adjacent graph, these figures are all higher than the Washington metro area five-year average effective rent growth for these classes. The fact that the increase was strongest among Class C properties suggests that having a new amenity to tout—such as a brand-new grocery store—allows those owners to push rents more than Class A or Class B property owners are able to. The owners of Class A and Class B product may have already included the value of existing or coming amenities in their rental rates to an extent Class C product owners have not.

OPENING OF A NEW GROCERY STORE PROMPTS RENT GROWTH

RENT GROWTH FROM 12 MONTHS BEFORE STORE OPENING TO 12 MONTHS AFTER, COMPARED TO AVERAGE BY CLASS



Source: Axiometrics, NKF Research; May 2019

The fact that the increase was strongest among Class C properties suggests that having a new amenity to tout—such as a brand-new grocery store—allows those owners to push rents more than Class A or Class B property owners are able to.

VIII. Conclusion and action steps for apartment owners and developers

What does the influence of grocery stores on apartment rents mean for owners and developers of multifamily assets?

While many in the industry have long known that grocery stores are a valuable amenity for apartment renters, these figures show that apartment properties with proximity to new grocery stores can achieve higher rents and greater rent growth than their peers that are not as proximate. A reminder: This data does not prove causation. Importantly, there are other factors at work that could influence apartment rental rates. These factors may include other nearby non-grocery amenities; the specific location and quality of apartment product within the defined radius around a store compared to the broader submarket; supply and demand fundamentals within the submarket; and proximity to other key amenities such as Metrorail. Our data set alone is not enough evidence to say that the presence of a new grocery store raises apartment rents without further exploring those other factors, but it does show a strong relationship. Another factor to consider is the chicken-and-egg conundrum: Do apartments have higher rents because they are near a grocery store, or did the grocery store open in that location because it was near apartments with higher rents? It is likely a little bit of both—after all, the grocery chains use sophisticated demographic analysis in order to locate near shoppers with the targeted levels of income. **Ultimately, the reason for the rent premium is less important than the fact that the premium exists. In addition, the fact that this trend was present throughout the data set, with only a few exceptions, suggests that no matter what the cause of this relationship, a nearby grocery store is a strong indicator of superior rent fundamentals.**

Apartment developers would be well served to consider mixed-use and/or grocery-anchored apartments where appropriate, as the data clearly show a significant rent premium for this type of product over the others. While some submarkets and store brands did see stronger rent premiums and rent growth, the sample set may be too small to draw significant conclusions from that type of analysis. Overall, it appears the presence of a nearby grocery amenity of any brand has a positive impact on rent prospects.

IX. Methodology

Our initial data set included 55 stores that either have opened since January 2014 or are set to open within the next few years. The stores included were of the following brands that are prevalent in the Washington metro area: Aldi, Giant, Harris Teeter, Lidl, Safeway, Trader Joe's, Wegmans, and Whole Foods. In order to analyze the impact on rents from a store opening, we needed rent data from both the period before the store opened and the period after. For that reason, we excluded the stores that opened or are set to open in 2019 and later since there is not enough data from after the store opened to analyze. However, we did use this set of stores to analyze whether the *announcement* of a new store opening has an impact on effective rents.

The primary data set used includes grocery stores opened from 2014 through 2018 that have at least two stabilized apartment properties within a half-mile (District of Columbia) or one-mile (Northern Virginia and Suburban Maryland) radius. The analysis includes only apartment properties of 50 units or more that were stabilized at the time of store opening. These criteria yielded a data set of 402 apartment properties with a total of 123,331 units. Since the store radii overlapped in some cases, some apartment properties fell within the radius of multiple new stores.

Rent growth calculations take the 12-month average of the monthly effective rental rates for properties in the store radius for the 12 months before and after store opening or announcement. In order to control for monthly or seasonal fluctuations in rental rates, the average was taken over a 12-month period. Effective rent change then was calculated from those averages. Since the stores opened at different times over a five-year period, the effective rent change from store opening or announcement was compared to the five-year average effective rent change for the submarket in which the store opened.

Effective rent premiums at a store's opening were calculated by taking the average monthly effective rent for properties within the store's defined radius for the 12 months after the store opened and comparing that average to the submarket's average effective rent during the quarter in which the store opened. Effective rent premiums as of first quarter 2019 take the average effective rent for the properties within a store's radius as of February 2019 (the most current data available at the time of this study) and compare it to the submarket's average effective rent as of first quarter 2019.





SOURCES

Aldi

Axiometrics

Bisnow

CoStar

Curbed DC

Giant

Harris Teeter

Lidl

Safeway

Trader Joe's

Washingtonian

Wegmans

Whole Foods

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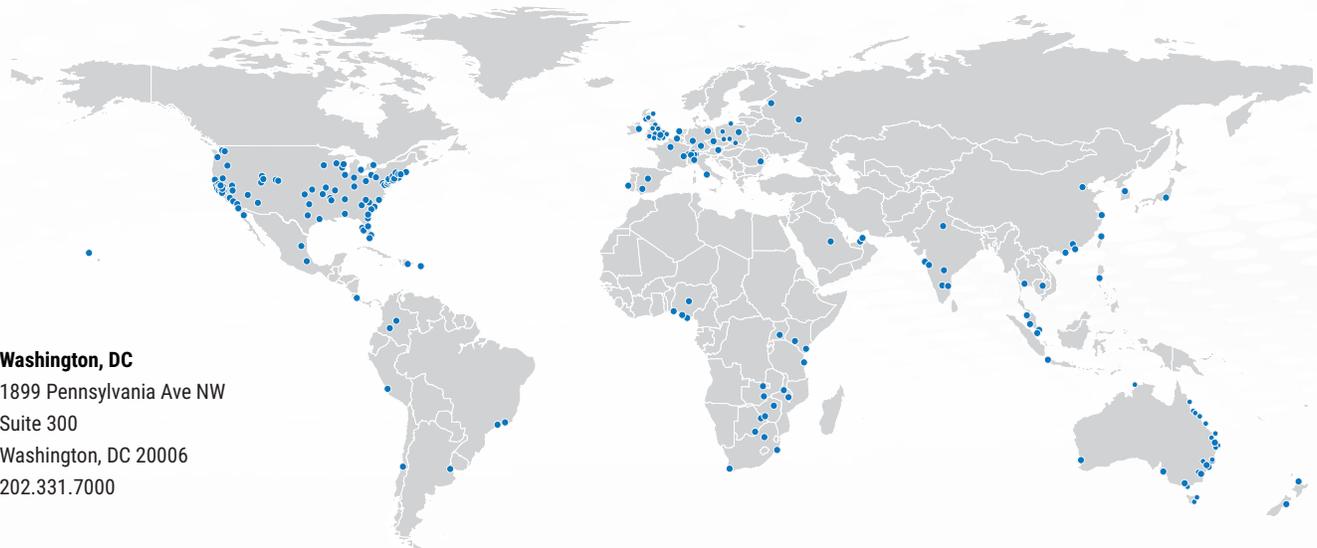
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