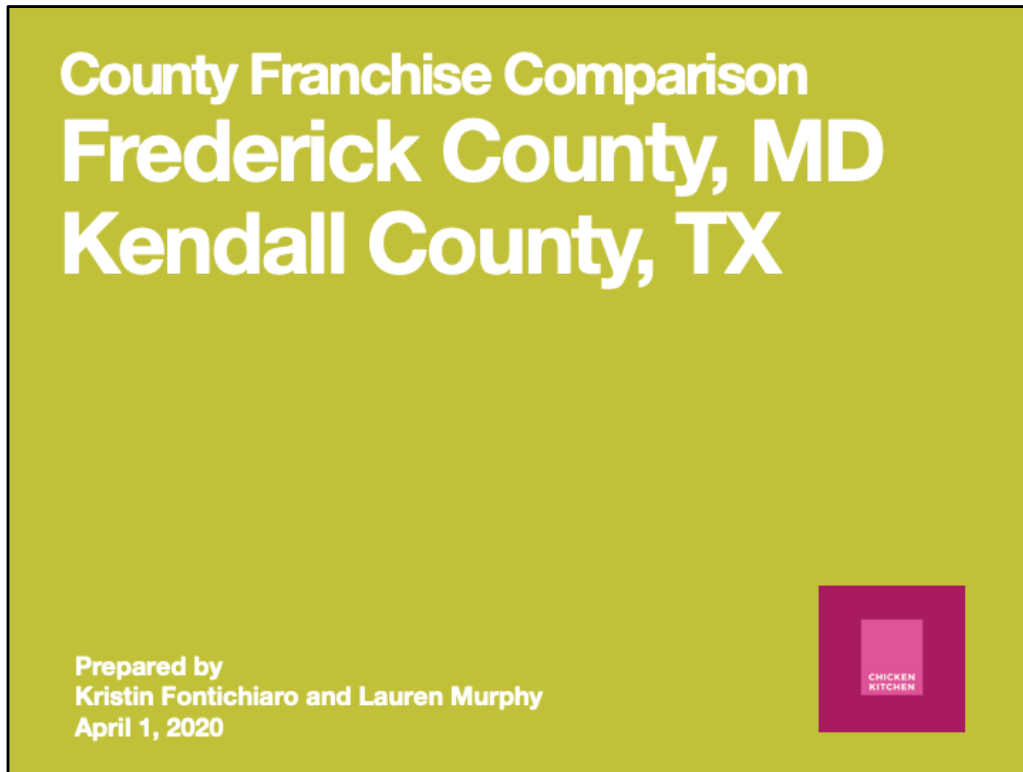


# Completed Technical Report with Annotations



- We based this template on Duarte's samples, which you can download for "free" (you have to give your email address). Their sample uses Arial as the key font; we use Helvetica Neue bold and Webly Sleek UI, a free download. Technically, this is a "cheat" to use two different sans serif fonts ... but I find that using a wide font like Helvetica/Arial as body text sometimes puts a limit on the amount of text I get. And my eyes like a slightly narrower font for body text – my eyes scan it more quickly.
- As you have seen throughout, the fact that Chicken Kitchen has brand standards that involve fuchsia posed a design challenge – it's VERY easy to have too much pink! So I used Canva's color wheel (<https://www.canva.com/colors/color-wheel/>) and ran through some color combinations until I found this one. (If you don't already know about Canva, it's another one of those "I'm not a graphic designer, but I want to make visually impressive materials" tools you might enjoy having in your toolkit. It even has some visualization tools.)
- You see that we've played with really oversized fonts here for the title of the report but also have put our names and the date on it so others in the

organization knows who to come to and can contextualize the report in the future against other documents created around the same time frame.

## **Table of Contents**

<b>3</b>	<b>Executive Summary</b>
<b>4</b>	<b>Methodology</b>
<b>5</b>	<b>Map of Frederick County, Virginia</b>
<b>6</b>	<b>Priority Locations in Frederick</b>
<b>7</b>	<b>Demographics</b>
<b>8</b>	<b>Personas: The Right Customers for Chicken Kitchen</b>
<b>9</b>	<b>Dining Behaviors and Expenditures</b>
<b>10</b>	<b>Peers and Competitors</b>
<b>11</b>	<b>Why Not Kendall County?</b>
<b>12</b>	<b>Next Steps and Conclusion</b>
<b>14</b>	<b>References</b>

- Table of contents – you’ll notice in Duarte’s slidedoc and sample templates that she sometimes hyperlinks her TOC. You can do that if you like, but it’s not required for this assignment and can sometimes add clutter when the document is so short, as this one is.
- Because of the limited text on this page, we decided to go whole hog on the pink here!

## Location Recommendation: Frederick County, MD

### Executive Summary

#### Background

Chicken Kitchen's Franchise Department was tasked with choosing its next franchisee. Applications were received from Frederick County, Maryland, and Kendall County, Texas. **The purpose of this report** is to evaluate the two locations based on the criteria specified and recommend the better county for expansion. Chicken Kitchen locations have the **highest profits** in communities with these traits:

- More recent development
- Higher overall income
- Younger population
- Access to highways
- More conservative voting trends
- Proximity to other upscale fast food restaurants

#### Recommended Action

Of the two locations, **Frederick County** is the more promising. The residents generally lean conservative. The area has experienced housing growth in the last twenty years (28,000 new homes since 2000) and a projected growth of 8.8% by 2022. Its median household income exceeds \$95,000, and nearly 60% of residents make \$75,000 or more a year. Two interstate freeways pass through the county, maximizing potential for **tourism and commuter traffic**. The city of Frederick, the largest in the county, has interstate access and a mixture of **peer upscale fast food restaurants**.

#### Rejected Option

Kendall County was strong in some of the criteria (conservative voting, high-income residents, similar median household income, large growth trajectory). However, the population trends **older** and there are 6x fewer households than in Frederick County at present. While the future growth is larger, **overall profits would be significantly lower** for years. Boerne, the largest city in the county, has budget but not upscale fast food like ours.

#### Next Steps

1. Select Frederick County and table Kendall County for review again in 3 years.
2. Focus on city of Frederick.
3. Initiate research about available land and cost.
4. Research Chick-Fil-A as competition.

We've talked about this slide before. ☺

---

## Methodology

### Demographic Data

To evaluate the two counties, we began by gathering demographic data from the following sources:

- U.S. Decennial Census: 2000 and 2010
- American Community Survey from the U.S. Census from 2018 via CensusReporter.org
- 2019 estimated and 2024 projected data from Gale Business DemographicsNow

### Consumer Data

Additionally, we considered a variety of sources to help us understand consumer behaviors and profiles. We used sites including:

- Simmons consumer data (via Gale Business DemographicsNow). These helped us gain understanding of how locals in each county spent money on food and entertainment, gave a sense of consumer behaviors and beliefs, and helped us determine fit.
- Mosaic Experian consumer profiles, which sort county households into personality "types" and provides insight about each type's behaviors, values, marketing preferences, and hobbies

### Economic and Other Government Data

We used the FRED economic data portal of the Federal Reserve Bank of St. Louis to analyze unemployment, SNAP benefits, and sub-prime credit information.

### Open Web Research

Additionally, we used openly-available content from sites including

- Waze app data for traffic patterns
- Yelp to gain insight on potential peer restaurants and competition, as well as mapped locations for existing restaurants
- Localconditions.com to evaluate traffic patterns in each county at various times of the day.

Here, we're talking about research methods. In our case, our methodology is basically, "We looked stuff up in lots of places," but if you were doing a design thinking process or deploying a contextual inquiry approach, you'd want to unpack how you went about finding interviewees, working through the processes, etc.

## Frederick County, Virginia

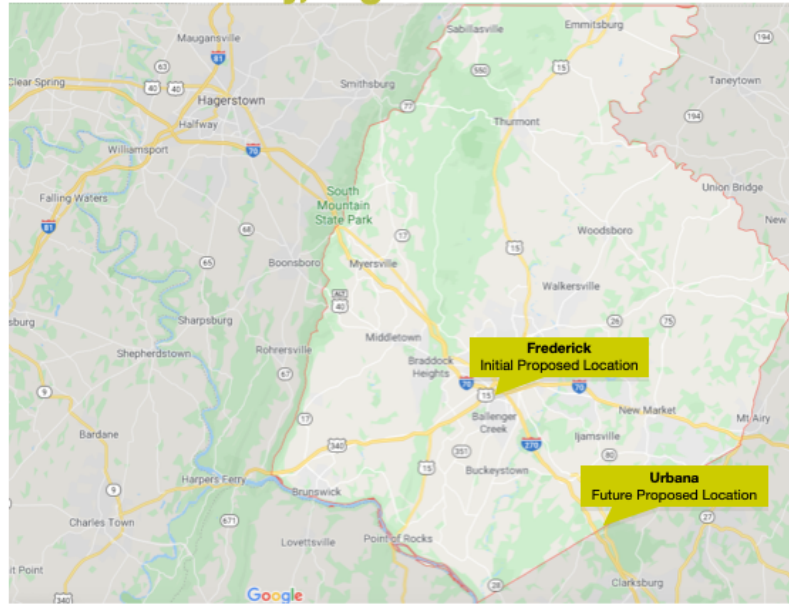


Image Source: Google Maps

| 5

- I like maps because they have built-in context. This one was grabbed from Google Maps, and I used the word bubble shapes in PowerPoint as pointers. Lauren tried white labels, then green labels. I tried pink (and instantly, there was TOO MUCH PINK). Finally, I toned it down to use green and saved the pink for the top line.

## Frederick Communities for Consideration

### Frederick County

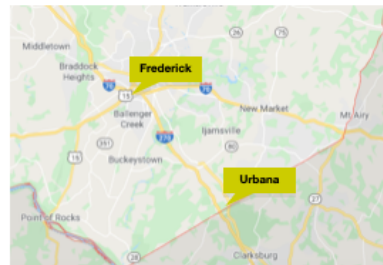
Frederick County is in an advantageous location. Frederick, as the largest city in the county, is just an hour drive from Baltimore, Washington, DC, and historic Gettysburg, PA. Frederick sits at the intersection of two interstates and two highways so residents from the surrounding areas largely need to pass through to go to the larger, nearby cities. We recognize that this provides Chicken Kitchen an opportunity to connect with not just residents, but those who pass through the town and who may want to take a break and relax mid-trip.

### Initial Proposed Location: City of Frederick

In addition to the convenient location for travelers, the city of Frederick hosts Hood College, a private liberal arts college situated in the heart of downtown Frederick, as well as Frederick Community College, a public college that sits closer to the edge of the city. Almost directly in between these two institutions sits the Army base and Fort that the city hosts.

### Future Expansion: Urbana

In the future, should Chicken Kitchen desire to expand within Frederick County, then Urbana may be the next ideal location. Similar to Frederick, Urbana is on the way to Washington, DC, for many residents in the surrounding area, is only 20 minutes out from larger suburbs such as Germantown, and sits astride one interstate and two highways making it a town often travelled through. In 2015, Urbana was ranked #35 in *Time Magazine's* Best Places to Live.



| 6

- Here, we walk through the county of choice and the advantages of two towns. Remember that we're asking you to research the county but that the county you choose should have two viable locations. We've repeated the map here not because having two almost-identical maps is awesome but to give you a sense of how a full-page map can add visual impact or serve as a section header. In this case, we probably could have deleted the full-page map and just had this one ... or used

## Demographics

### Growing Income

We found that Frederick County overall has had a significant increase in both median household income and median median home value between 2000 and 2010. Gale Business DemographicsNow predicts continued growth in both categories for the 2019 estimated value and in projections for 2024. In combination with steady rates of home ownership, this suggests that residents of the county are economically stable and well off, which fits with the company's desired demographics.

Frederick, MD	2000	2010	2019a (est.)	2024 (project.)
Median Household Income	\$60K	\$86K	\$92K	\$103K
Median Home Value	\$160K	\$317K	\$341K	\$390K

Population % Owner-Occupied	72.8%	71.4%	70.1%	70.1%
Total Population	196K	233K	260K	281K

Population Growth	--	19.5%	11.4%	8.1%
Housing Unit Growth	--	23.4%	12.5%	8.8%

Source: Gale Business DemographicsNow; Feb. 25, 2020

### Continued Population Growth

Additionally, the county has seen increased housing development within the last 20 years, with a boom of 23.4% between 2000 and 2010, and a projected growth of 8.8% by 2024. Proportionally, the population grew nearly 20% between 2000 and 2010 and is expected to continue to grow 8.1% by 2024. A Chicken Kitchen location could expect to see an increase in their consumer base and ROI in the coming years due to this growth.

| 7

- Here, you see the challenges of making data and text fit on one page! If you're feeling like you are cramming stuff, you do have the option of having a page just of text, and another just of visualizations (those standalone visualization pages don't count toward the page limit. We used color within the table to help keep various data rows distinct; later, we use it to highlight which choice is optimal (see slide 11).
- We left-justified the first column because my first instinct is always to left-justify chart data. But funnily enough, the remaining columns looked better centered. So I broke the rules. Do note how we're including the source of our data throughout on the page in which it appears. This is good practice because you will likely remix pages for various audiences, and if you cite at the page level, you won't get caught not remembering where data came from. It's also a good reminder to help you know how long that data has been sitting there and whether it needs a fresh update.



## Personas: The Right Customers for Chicken Kitchen

Personas are tools used to keep target audiences in mind, traditionally during the design process. Though they do not describe a specific person, they give a sense for who the target audience is – or is not. The following sample personas were created by Mosaic Experian, based on the demographic makeup of Frederick County.

### Background

Chicken Kitchen will find that the residents of Frederick to be well-educated, affluent and aspirational, conservative leaning, and mindful of their health in combination with their active, busy lifestyles.

The three most common personas in Frederick county are Booming with Confidence, Flourishing Families, and Singles and Starters.

### Booming with Confidence

Those who are Booming with Confidence are depicted as empty nesters, or with a few young adults still at home, who have sophisticated but conservative tastes. They have a busy lifestyle but with funds to spend.

### Flourishing Families

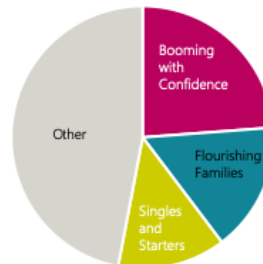
Flourishing Families are affluent, active, and family-oriented. While this group traditionally lives in a single family household with children of all ages, a significant portion who live in Frederick county live in multi-generational households.

### Singles and Starters

Singles and Starters are another active group, though not as conservatively minded as the other two. Singles and Starters are known for being aspirational workaholics, digitally savvy, and foodies.

### Summary

Making up 53% of the population, these personas suggest that residents will fit well within Chicken Kitchen's target audience.



The most common mistakes students make when talking about personas data are these:

1. They list the names of the personas but don't explain them.
2. They talk about the personas but not what makes each distinct AND relevant to the decision that is being made.
3. They stick Experian Mosaic PDFs in the Appendix instead of distilling them for the client.

As we did with some pie charts earlier, we didn't put the percentages in the pie chart. You could certainly add those to the labels (and notice that we put those labels inside the pie slices to reduce visual clutter surrounding the pie), but if you worked for a really detail-oriented boss, you'd probably want to add them. You could also leave the percentages out of the pie chart but mention them in the text.

## Dining Behaviors and Expenditures

Frederick County residents are *well-suited to Chicken Kitchen's healthy approach to fast casual*. According to the 2018 Simmons Entertainment, Leisure, Dining Summary Report, where 100 represents the behaviors of average Americans, Frederick residents rate above average for "I consider myself to eat very healthy" (7 above the average American) and "I like the trend towards healthier fast food" (11 above).

In addition, *many of our fast casual competitors are already thriving in Frederick*. Panera Bread, which prides itself on "clean" ingredients, has two stores here; Chipotle, which has promoted healthy dining options including vegetarian, has two as well. With two Burger King, Five Guys, and Roy Roger's franchises each scattered throughout the city, there is clearly a market here even for lower-quality fast food.

In fact, according to Gale Business DemographicNow's Consumer Expenditure Food, Beverage, Grocery Detail Summary Report, *the average Frederick household expenditure for eating out (\$5,458.86) was slightly more than their dine-in budget (\$5,129.90) in 2019, and 2024 projections show that this trend will continue*. This translates to a monthly restaurant expenditure of nearly *\$455/month per household or \$105/week* for a median

household size of 2.6 (2018 American Community Survey, via CensusReporter.org).

Chicken Kitchen's \$8.99 entrees, which are preservative-free and made with free-range chickens, are an *excellent match* for Frederick residents' wallets and dietary preferences.

### County residents well-suited to Chicken Kitchen's healthy, upscale model

Consumer Beliefs in Frederick County, MD



A score of 0 is equal to the national average; scores above zero represent that the county has a stronger affinity to a statement than the average American. Negative numbers indicate that the county's population is less likely than the typical American to identify with this statement.

Chart: Kristin Fortschuere - Source: Simmons Lifestyle Demographics Comparison, 12/18/2019  
- Created with Datawrapper

This is my favorite page of data. We found lots of interesting data about consumer behaviors by really drilling down into the available data in DemographicsNow (including, but not limited to, Simmons data). Like personas, this information can help us see whether there are likely buyers based on their spending habits and lifestyle behaviors. You have to be a little careful here in constructing your argument. If you go through a list of 100 lifestyle statements and are struggling to find any that match your argument, you probably need to backtrack and reconsider your decision or find other data. So be mindful about the difference between cherry-picking data and selecting the most relevant data.

We made this graphic at Datawrapper.de, a tool that requires no coding skills and has lots of customization options. Notice how we sort the data in descending order (LATCH: sorting by hierarchy!). One of the advantages of Datawrapper is that its Annotations page prompts you to include the data source, headers and subheaders, visualization creator, etc.). Datawrapper lets you download a completed graphic – easy! However, when I inserted this graphic into the report, I found that the text was just swimming around next to the body text. Adding the thin green border around the edge helped get me

some definition. With a paid Datawrapper account, you can get a transparent background, which you could lay over filled Shapes in PowerPoint, which would be another way of showing how all of the graphic's text was clustered together, but that's not necessary for this class. A more turbo-charged no-code, free visualization tool online you can try is Flourish. It also does animations (like the bar chart race that's hot right now), lets you sequence visualizations, and has some Hans Rosling complex animation features, but for this beginner class, Datawrapper is more straightforward.

Of course, you can make this graphic just as easily in Google Sheets or PowerPoint (pro tip: if you want the data to be displayed in DESCENDING order in a PowerPoint graph, you need to sort the data cells in ASCENDING order – apparently PowerPoint starts by graphing the bottom data point first!).

In any of these tools, you can grab the hex color codes from within PowerPoint that you've used in your template and apply them to all or some of a visualization. In an earlier version of this graphic, for example, I tried coloring the one negative bar green instead ... but it gave off the sense of, "Look at me! I used to be the least important thing on this list, but now I'm King of the Graph!" So I toned it down by keeping it a monochromatic palette. If, however, you were reporting out the international PISA scores for education, it might make sense to make the row for the U.S. a brighter color (maybe even graying out all the other colors, as Knaflic suggests in *Storytelling with Data*) because for a U.S. audience, their first instinct is, "How do we rank?" and you anticipate their question by using color to draw attention to what they're looking for.

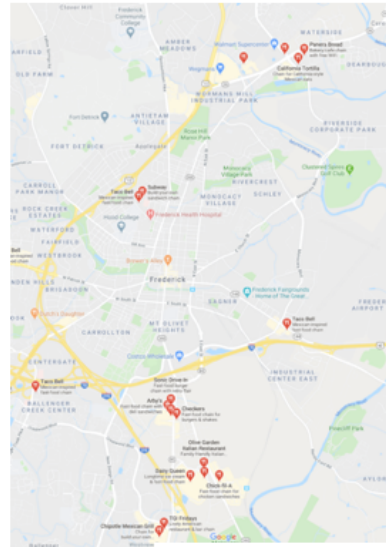
By the way, these data are index numbers – 100 is the score for the "typical" American. Rather than visualizing numbers like 157, which would make for very long and unwieldy bars in Datawrapper, we put all the numbers in a spreadsheet and then added a column that subtracted 100 from the given number. That made the image more compact, which helped it fit. That's also why there's so much explanatory text under the graphic – to keep us honest.

## Peers and Competitors

### Fast Casual Peers

Fast casual restaurants in Frederick are spread out through the town, primarily centered around interstate and highway intersections. This indicates that county residents are already accustomed to paying a dollar or two more for higher-quality ingredients. The town hosts a handful of national and regional chains such as Five Guys, Panera, Checkers, and Baja Fresh. These restaurants have between one and three locations spread throughout the town with the highest density found within shopping districts, as residents of the town and the surrounding areas are likely to travel to those locations and stay long enough to want or need a meal. Additionally, Chicken Kitchen will find some of their competitors already in the area. Chick-fil-A has two locations in town, one towards the south side and the other towards the north. Additionally, the southern shopping district contains both a Popeyes Louisiana Kitchen and a Kentucky Fried Chicken.

Though the Franchise Department indicated that a proximity to other upscale fast casual dining was desirable, there is an abundance of peers and competitors in the area. As such, more research will need to be conducted to determine whether the market has room for a Chicken Kitchen to be profitable.



Here, Lauren wanted to point out that Frederick, Virginia, is already served by a large number of budget (e.g., McDonald's) and fast casual (e.g., Five Guys, Panera, Chick-Fil-A, Baja Fresh) locations. This can be both an asset ("These people really eat a lot of food in places where they aren't waited on or leave a tip!") and a potential barrier to expansion ("So many restaurants already – do they need ours?"). One thing she didn't talk about here – but does mention in other documents for this course – was that she discovered that Kendall County, TX, the other applicant, *only* had budget options (McDonald's, Burger King, etc.). So the company would be charting new territory there, whereas it has at least the potential to ride the coattails of earlier fast casual companies in Frederick.

(In the lecture slides, I made a version of this about Ann Arbor, MI, mashing up this slide and the earlier one.)

Also, now would be a good time to remind you that you do not need to create a report in which you lockstep adopt the categories we've discussed here. For example, you'll see in Week 4 that we talked a lot about commuting time ... but downplayed it here. The data you find will help you determine what data is

represented here. Your goal in the report is to gather as much information as you can, then to draw out the most powerful arguments. So, for example, if Chicken Kitchen has a robust catering arm (and yes, you could make that up because it's not in the brief – you just can't make up your own reality that runs counter to what's in the scenarios), and your preferred location has way more churches than the average community, then you could end up with a slide called "Anticipated Catering Options" and talk about what percentage of the community are churchgoers and how they could be great clients for church potlucks.

If you're working on the hockey location, you might have pages that talk about other sports that are played there, existing sports venues and their capacity (which would hint at the potential size of ticketbuyers), whether there are enough bars and restaurants to support fans, a page about sporting good stores and locations as a proxy for local interest in sports, etc.

For the payday lending scenario, you might do more research with FRED to highlight and visualize data about unemployment, subprime credit scores, SNAP recipients, and other (decent) proxies for low, seasonal, or unpredictable income.

## Why Not Kendall County?

The alternative franchise application was received from Kendall County, Texas. Though Kendall County was strong in some criteria, in its current state it is less desirable than Frederick County.

The population leans more heavily Republican, has a comparable median household income, and has one interstate and one highway running through the county. The largest town in the county, Boerne, is a 45 minute drive from the center of San Antonio – similar to Frederick County citizens' commute to nearby city centers. In many ways, Kendall County and Frederick County are similar.

However, what lead to our conclusion is the fact that there are **six times as fewer housing units in Kendall than in Frederick**. In its current state, Kendall is likely to be a less lucrative investment. It is worth considering Kendall County for future locations, provided that it continues to grow as projected. Many of the current restaurants in the county are considered non-upscale fast casual restaurants or locally owned dine-in restaurants, so a Chicken Kitchen franchise would not find many peers in the area, as desired.

For an immediate return on investment, we would not suggest Kendall County, though growth and time may prove it to be an advantageous investment in the future.

	Commuting Time	Population Estimate	Median Household Income	Interstates in County	Competitors	% Republican
Kendall County, TX	31.2	40,306	\$81K	1	Cheaper brands	79.54%
Frederick County, MD	34.6	259,955	\$95K	2	Mid-level brands	52.88%

Sources: 2018 American Community Survey (commuting time, population estimate, median household income); Google Maps (interstates); Yelp (competitors); % Republican (county election boards)

Here's the space where you're anticipating the obvious question of your audience. Lauren discovered, in researching this comparison, that Kendall might be a just-right location but that this isn't the just-right time. Here, we use a comparison chart and highlight who the "winner" is in each comparison. Note that in this case, we right-justified the county names – when we left-justified that column (as I mentioned, that's my go-to whenever I'm trying to make a harmonious look), the text felt orphaned off to the side of the chart. I tried that with the other rows, and it just looked weirder than keeping it centered. Isn't design funny that way? Also notice how I tucked the citation under the colored bar of the table instead of left-justifying it with the beginning of the gray row. Again, it stuck out like a sore thumb when it was left-justified and looked so much better where it is now.

## Next Steps and Conclusion

As described in this report, we should select Frederick County, Maryland, for future exploration. Its population, high food budgets, commuting time, and cultural profile match well with Chicken Kitchen's clean ingredients and fast casual approach. However, it is not without challenges: real estate costs and existing fast casual options there require more research. We recommend the following next steps.

**1. Select Frederick County and table Kendall County for review again in 3 years.**

Frederick County, as part of the Washington, DC, metropolitan area, is well-populated but is projected to continue growing. Kendall County's rapid projected expansion, above-average income, and conservative community profile indicate that it is a prime site for us to monitor in the next 3-5 years, watching for competitors to enter the area.

**2. Focus on the city of Frederick as the initial proposed location.** Given how well-populated the landscape of both budget and fast casual restaurants is, the marketplace is primed for our price point and approach. We also believe there is room within the county for future expansion into Helena, perhaps with the same franchisee, which would pave the way to smooth growth there.

**3. Initiate real estate research.** However, proximity to Washington, DC, means that procurement of real estate may be disproportionately high comparable to our locations in newly-formed exurbs, and the ongoing costs associated with real estate should be investigated prior to moving forward.

**4. Research Chick-Fil-A as competitor.** The existing presence of this leading chicken restaurant in Frederick may be a concern. We recommend further market analysis to determine whether the market is saturated already.

| 12

- Whether you call this page action steps or next steps, this is the chance to think about the questions that your data did not answer. You can do this on the same page as a conclusion, or you can separate them. (I'm a stickler for making it clear with a conclusion – even if it's just a paragraph – that We. Are. All. Done. With. This. Report. – earlier generations subliminally look for that clue, and if it's not there, they can get confused by the abrupt ending.)



# **Rich History, Bright Future**

- Frederick County Web Page

- This page is totally optional! We wanted some graphic pow to mirror the table of contents we had earlier in the document. We thought it was fun to play with oversized fonts and thought that the phrase from the web page made a perfect coda to the report.



## References

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"Yelp." 2020. *Yelp*. Accessed April 1. <https://www.yelp.com/>.

Remember that your references (or works cited or bibliography – whatever term your citation choice supports) should be full citations in a style we would recognize as complete. This would not be a cool references page:

Yelp.com

Census.gov

FRED.stlouisfed.org

Some people like citation tools like EasyBib, but I find the free citation page at NoodleTools.com to be way more comprehensive and helpful. It does a better job *anticipating* what you might need to cite. You need a paid account for it to spit out a list instead of an individual citation at a time, but a subscription is only about \$10/year if you'd like that extra feature – and getting that means you get their expert help if you get a citation stumper!

You could leave the hyperlinks active here if you like – up to you. Just figure out how to display them so they don't visually take over your page (an underlined hyperlink is, after all, utilizing an preattentive attribute and draws attention!)

Got questions? Be sure to post to the Slack channel or drop by office hours.