## case study

## Market Feasibility Study: The hotel case of the city of Poplarville, MS

By Sungsoo Kim and Howook Chang

#### Introduction

The city of Poplarville is a small Mississippi town, located 107 miles south of Jackson, the state capital, and within Pearl River County, which includes the cities of Poplarville, Picayune, and Lumberton. Poplarville is easily accessible for visitors via air, rail, and highway, making it capable of drawing visitors from distant regions. For instance, Interstate 59 runs adjacent to Poplarville and connects the region to most major cities in the Southeastern and Midwestern United States, such as Hattiesburg, MS (50 miles), New Orleans, LA (100 miles), and Mobile, AL (150 miles). The Poplarville-Pearl River County Airport has a 4000-foot lighted runway and offers single-engine and ultralight jet service, while the Gulfport-Biloxi International Airport, located 46.9 miles south of Poplarville, offers daily direct flights to Charlotte Douglas International Airport (CLT), Dallas/Fort Worth International Airport (DFW), Hartsfield-Jackson Atlanta International Airport (ATL), and Houston George Busch International Airport (IAH). Additionally, daily passenger rail service is available with Amtrak's two closest stations in Picayune (26 miles south) and Hattiesburg (40 miles north), connecting to New Orleans through several cities or continuing to Chicago, IL.

### **Dilemma**

Due to this favorable location in the state of Mississippi, the city of Poplarville is now considering the addition of a new hotel that would be part of a larger community development plan. This new addition would boost revenues for the city of Poplarville through visitor's spending on hotels, restaurants, shopping, and additional revenue sources. However, this potential hotel will require a financial commitment by a hotel investment firm along with a management company to operate the new hotel.

The city of Poplarville must convince the principals involved that there is a viable need to add a new hotel in the region by providing a feasibility analysis. If this produces a positive result, then they also must decide what type of hotel they should develop in order to generate sustainable revenues, as well as meet local citizens' needs. This analysis will need to be determined and presented to the management company in advance of an upcoming city council meeting.

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### **Market Analysis**

According to the American Community Survey (2017), the population in Poplarville was 15,634, while the median household income of Poplarville was \$46,563, its median housing value was \$110,400, and the number of total housing units was 1,021. The city has a fairly small corporate presence, and the city's three largest employers are Pearl River Community College (220 employees), Pearl River Medical Complex (150 employees), and Pearl River County Sheriff Office (102 employees), which may generate potential demand for a new hotel in the city of Poplarville. In 2017, an estimated 2,915 people were employed in the city. The largest industry was Government, employing 1,754 people, and the next two largest industries were 'Accommodation' (335 people) and 'Food Service and Retail Trade' (211 people). In particular, an increase in employment was identified for 'Limited-Service Restaurants' (39 additional jobs), 'Colleges, Universities and Professional Schools' (35 jobs), and 'Site Preparation Contractors' (30 jobs) from 2016 to 2017.

Based on local market analysis, several key strengths and challenges for a potential new hotel in the city of Poplarville are identified. The strengths of the local market include:

- The population is projected to increase by 2.8% by the year 2025.
- The real median household income of the city of Poplarville (\$46,563) was higher than that of Pearl River County (\$40,997) and the State of Mississippi (\$39,464).
- Conveniently located in the Southern part of Mississippi, connected to the region's major cities, including Hattiesburg, MS, New Orleans, LA, and Mobile, AL.
- There is no mid-scale or upscale hotel in the city of Poplarville, which can accommodate guests, including visitors to various events and meetings.
- The presence of schools and Pearl River Community College may provide the demand necessary to help support a new hotel.
- · Affordability of destination.

On the other hand, some of the challenges as they relate to supporting a new hotel construction in the City of Poplarville include:

- Although the real median household income of the city (\$46,563) was higher than Pearl River County and the State, it is still lower than the national median income (\$53,482).
- The unemployment rates of the city of Poplarville (9.9%) ranked higher than Pearl River County (8.9%), the state (9%), and national (8.6%) averages in 2017.

Table 1.

Hotels within a 30-Mile Radius from the City of Poplarville

City & State	Class	Name of Establish- ment	Number of Rooms
	Economy Class	Traveler`s Rest Motel	74
	Economy Class	Budget Inn	25
Bogalusa, LA	Economy Class	Choctaw Motel	25
	Economy Class	Sportsman Inn Motel	50
	Economy Class	Del Mar Motel	21
Columbia, MS	Economy Class	Colonial Inn	67
	Economy Class	Dru`s Inn	31
Hattiesburg, MS	Economy Class	Northgate Inn	82
Lumbartan MS	Economy Class	Kings Arrow Ranch Inn	82
Lumberton, MS	Economy Class	Hotel Doyenne	51

Source: Trend Report - Smith Travel Research (2017)

Table 2
Performance Data from Hotels within 30-Miles Radius of Poplarville

Year	Occupancy Rate	ADR	RevPAR
2013	45.7%	\$59.37	\$27.13
2014	48.1%	\$58.98	\$28.37
2015	51.3%	\$58.47	\$30.00
2016	51.6%	\$53.86	\$27.79
Average	49.2%	\$57.67	\$28.37

Source: Trend Report - Smith Travel Research (2017)

Table 3

Performance Data from Hotels within 50-Miles Radius of Poplarville

Year	Occupancy Rate	ADR	RevPAR
2006	67.8%	\$67.18	\$45.58
2007	74.7%	\$83.26	\$62.19
2008	65.8%	\$77.85	\$51.26
2009	65.1%	\$81.41	\$53.00
2010	59.0%	\$79.22	\$46.74
2011	62.7%	\$79.50	\$49.87 \$46.70
2012	57.8%	\$80.86	
2013	61.3%	\$81.30	\$49.87
2014	56.7%	\$82.79	\$46.91
2015	56.4%	\$83.67	\$47.19
2016	55.4%	\$85.04	\$47.14
Average	61.4%	\$80.10	\$49.20

Source: Trend Report - Smith Travel Research (2017)

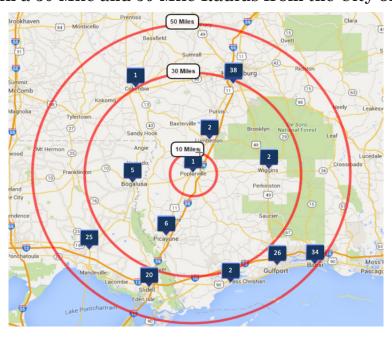
Table 4
Performance Data from Hotels in the Suburban and Small Town Category

Ye	ear	Occupancy Rate	ADR	RevPAR
	2016	51.6%	\$53.86	\$27.79
Poplarville	2017*	-	-	-
	Average	-	-	-
	2016	72.6%	\$105.11	\$76.30
Suburban	2017	70.5%	\$106.57	\$75.16
	Average	71.6%	\$105.84	\$75.73
	2016	60.6%	\$92.82	\$56.22
Small Town	2017	58.8%	\$94.35	\$55.52
	Average	59.7%	\$93.59	\$55.87
	2016	70.1%	\$122.55	\$85.93
U.S.	2017	68.1%	\$122.80	\$83.64
	Average	69.1%	\$122.68	\$84.79

Note) \*In 2017, hotels in Poplarville didn't report the occupancy rate, ADR, and RevPAR. As such, the average wasn't determined for Poplarville. Source: Trend Report - Smith Travel Research (2017)

Figure 1.

Hotels within a 30-Mile and 50-Mile Radius from the City of Poplarville



- Distance from major cities in the state of Mississippi and other adjacent states (e.g., more than a half-hour away, and each city provides various hotels for their own local demand).
- Regional airport accessibility for commercial (passenger) airlines within a 30-mile radius from the city of Poplarville.
- Lack of large corporate presence within the city of Poplarville
- and Pearl River County.
- Limited in traditional visitor amenities, including local attractions and events/festivals.

### **Market Competition Analysis**

This section provides a summary and analysis of competitive and comparable properties to a proposed new hotel in the city of Poplar-ville, which will be beneficial to understanding how similar markets are performing within current industry conditions, including hotel room capacities offered by competitors, and other characteristics that affect the potential demand for new hotel construction in Poplarville.

There are 20 lodging facilities within a 30-mile radius from the city of Poplarville. The majority of these properties are located either in Bogalusa, LA (20 miles) or Picayune, MS (25 miles). For example, there are currently five economy hotels and one upper-middle-class hotel in Picayune, MS. Table 1 shows a list of hotel properties, which provide a total of 935 rooms in the area, and the location of these hotel properties is provided in Figure 1.

Additionally, there are 179 hotel properties within a 50-mile ra-

dius from the city of Poplarville (see Appendix A). The top 4 cities with the most hotels include Hattiesburg, MS (38), Biloxi, MS (34), Gulfport, MS (26), and Slidell, LA (20). Figure 1 also shows their locations with a blue marker showing the number of hotel properties in that area. There are 595 hotel properties within a 100-mile radius from the city of Poplarville, MS. The top 3 cities with hotels are Mobile, AL (65), New Orleans (58), LA, and Baton Rouge, LA (51).

### **Performance Analysis**

As seen in Table 2, the average occupancy rate of the hotels within a 30-mile radius from the city of Poplarville was 49.2%, which is significantly lower than the national average (64.5%) (Trend Report, 2017). However, the occupancy rate had gradually increased since 2013. For instance, the occupancy rate in 2013 was 45.7%, and in 2016, 51.6%. This increase could have been the result of lower rates, as the average ADR of the hotels within a 30-mile radius from Poplarville had declined about 9% over 4 years, from \$59.37 in 2013 to \$53.86 in 2016. In addition, the average RevPAR was \$28.37. However, this is about \$47 lower than the national RevPAR average (\$75.37). More importantly, this RevPAR (\$28.37) was considerably lower than the national average when only considering the upper-midscale (\$80.93), midscale (\$52.78), and economy hotels (\$36.68), which are the types of hotels mostly available around the city of Poplarville. For a comparison purpose, besides, the average occupancy, ADR, and RevPAR for the U.S. hotels from 2013 to 2016 are provided in Appendix B.

Table 3 shows the trends of hotels in relation to their occupancy

rate, ADR, and RevPAR over the 10 year-periods. The average occupancy rate of the hotels within a 50-mile radius from Poplarville was 61.4%, which is about 12.2% higher than the average occupancy rate of the hotels within a 30-mile radius. The average ADR (\$80.10) and RevPAR (\$49.20) were significantly higher than those within a 30-mile radius. These trends occurred because there are more upscale hotels; 4 luxury, 18 upscale, and 41 upper-middle scale hotels within a 50-mile radius from Poplarville. In general, the average ADR and RevPAR for luxury hotels were \$320.78 and \$245.92, respectively, followed by upper-upscale hotels (\$183.46 and \$142.09), and upscale hotels (\$140.37 and \$109.70) (STR, 2017), which would increase the average ADR and RevPAR of hotels within a 50-mile radius from Poplarville.

Poplarville is classified as a small town or suburban area for comparison purposes. As seen in Table 4, the national average occupancy rate of the hotels in the small town and suburban areas category is 71.6% and 59.7%, respectively, which are higher than the occupancy rate (51.6%) of the hotels within a 30-mile radius from Poplarville. The national average ADR in the category of the small town and suburban areas is \$93.59 and \$105.84, while the RevPAR is \$55.87 and \$75.73, respectively. However, the average occupancy rate (51.6%), ADR (\$53.86), and RevPAR (\$27.79) of hotels within a 30-mile radius from the city of Poplarville were significantly lower when compared to the national average.

### **Demand Analysis**

Table 5 shows the types of travelers who frequented hotels within a 50-mile of Poplarville in 2017. These groups include Transient, Group, and Contract. The majority of demand for the hotels within a 50-mile radius from the city of Poplarville comes from the Transient segment (82%), followed by the Group segment (14%), with the Contract segment (4%) accounting for the smallest demand of the approximately 3.4 million total guests.

The largest revenue came from the Transient segment (\$2.4 Billion), followed by the Group segment (\$38 million) and the Contract segment (\$8.6 million). These numbers correspond to Table 5, where the Transient segment represented 82% of all guests for the year, which means that each Transient hotel guest spent an average of \$86.84 per day, including hotel room (\$80.10), food and beverage (about \$6.74), etc.

In addition, hotel guests (transient or group) can be categorized as educational, business, healthcare, and military market segments in the city of Poplarville. The educational market segment mainly consists of visitors to the Pearl River Community College, and secondly to US agricultural research services and USDA Southern horticulture lab. This segment may include visiting prospective students and their families, the families of present students, visiting faculty and research associates, guest speakers, various attendees at college meetings and events, including educational training and workshops. However, the

demand for this segment might not be consistent. For example, if there are commencements and athletic events at the college, higher demand (e.g., full occupancy) would be expected, while other college demand is dependent on the total number of visitations from prospective students and their families, as well as the total number of meetings and events hosted there.

The business market segment can be generated by top employers in Poplarville and Pearl River County, including Wal-Mart Supercenter, Huey Stock Still, and Home Depot, while the healthcare market segment consists of visitors to Highland Community Hospital and Pearl River Medical Complex. This segment can include patients and their families and relatives, vendors, recruits, and others. Also, the military market segment is comprised of visitors to Camp Shelby when the base can't accommodate all visitors. Although the distance from Camp Shelby to the city of Poplarville (38 miles) is not attractive, this military post could be a source of contract guests depending on a new hotel's marketing efforts. Lastly, other transient or group guests can be generated by local events, such as Blueberry Jubilee, which attracts about 10,000 visitors, the Annual Woman's Health Symposium (about 3,000 visitors), regional band competitions, and so forth. In addition, organized sporting tournaments/events, including youth, scholastic, and amateur level play, and collegiate level tournaments attract visitors within the 65-mile radius from the city of Poplarville, MS.

Based on the identified demand for a proposed hotel in the city of Poplarville, Table 6 provides a detailed list of the sources of demand concerning various market segments.

### **Your Task**

The basis for the case study is to learn about how to conduct a hotel market feasibility study, including the supply and demand analysis, to create a competitive new hotel in the city of Poplarville. With the details provided, including the tables and figures, your task is to determine whether or not there is an opportunity to build a new hotel in the city of Poplarville, MS. To begin analyzing the case study, a group of students must comprehend the local market analysis along with the given performance analysis. Additionally, students must consider the competitive and comparable hotels to a potential new hotel in the city of Poplarville.

Table 5.

### Demand and Revenue from Different Types of Guests within 50-Miles Radius of Poplarville

	Transient	Group	Contract	Total	
Demand	2,805,996	482,197	125,715	3,413,907	
Revenue	\$2,436,923,225	\$38,000,648	\$8,679,720	\$2,483,603,593	

Source: Trend Report - Smith Travel Research (2017)

# Table 6 Source of Demand by Market Segment

	Source of Demand (%)*	Market Segment	Estimated Source of Demand
		Educational Market	30%
Transiont		Business Market	20%
Transient	82.3%	Healthcare Market	20%
		Military Market	5%
		Others	7.3%
Group		Educational Market	3%
		Business Market	3%
	14.1%	Healthcare Market	3%
		Military Market	-
		Others	5.1%
Contract	3.6%	Military Market	3.6%
Total	100%		100%

Source: Trend Report – Smith Travel Research (2017)

# Specific Actions to Conduct the Demand and Supply Analysis

- Please calculate the most recent 12-month average occupancy rate of the most competitive hotels.
- Please calculate the composite growth rate of demand from various sources.
- Please calculate the additional rooms required year by year.
- Please calculate the future supply of rooms required in the city of Poplarville.

### **Discussion Questions**

The city of Poplarville is specifically wanting an insight into the following questions:

- What opportunities exist for a potential new hotel?
- What challenges does the city of Poplarville face concerning the development of a new hotel?
- What are potential target markets for a proposed new hotel?
- What strategies should the city develop in order to persuade the principals involved to make the decision to build a new hotel in the city of Poplarville?
- Do you recommend that a new hotel be built in the city? Why or Why not?
- If you recommend that a new hotel be built, what type of hotel should it be? What is your justification?
- Do vacation rentals (e.g., Airbnb) affect the decision of building a new hotel in the city of Poplarville?
- What additional facilities should the city of Poplarville should consider in order to support the development of a new hotel?

#### References

American Community Survey (2017). Retrieved from <a href="http://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/2017/">http://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/2017/</a>.

Bureau of Labor Statistics (2016). Retrieved from <a href="http://bls.gov">http://bls.gov</a>.

Federal Reserve Bank of St. Louis (2015). Retrieved from <a href="https://research.stlouis-fed.org/publications/review/2015/">https://research.stlouis-fed.org/publications/review/2015/</a>.

HOST Report. (2017). Finance Analysis for the hotels in the City of Poplarville, Smith Travel Research: Nashville, TN.

Jagels, M. G. (2007). Hospitality Managerial Accounting, 9th Edition, Hoboken, NJ: John Wiley & Sons, Inc.

Cullen, K. (2015). The Evolving Dynamics of Revenue management, 2nd Edition, HSMAI Foundation.

Sahlins, E. (2015). Hotel Development Cost Survey 2014/2015. HVS: San Francisco. CA.

Trend Report. (2017). Trend Analysis for the hotels in the City of Jackson, Smith Travel Research: Nashville, TN.

Pipeline Report. (2017). Pipeline Information for the hotels in the City of Jackson, Smith Travel Research: Nashville, TN.

### Appendix A.

## Hotels within 50-Mile Radius from the City of Poplarville

City / State	Class	Name of Establishment	Number of Rooms
Bay St Louis, MS	Economy Class	Motel 6 Bay St Louis	114
	Economy Class	Travelers Choice Motel	19
	Economy Class	Super 8 Bay St Louis	42
	Economy Class	Economy Inn	26
Biloxi, MS	Economy Class	Motel 6 Biloxi	113
	Economy Class	Super 8 Biloxi	200
	Economy Class	Balmoral Inn	10
	Economy Class	Flamingo Beach Inn	29
	Economy Class	Econo Lodge Biloxi Beach North	51
	Economy Class	Star Inn	72
	Economy Class	Bayfront Inn	40
	Economy Class	Broadway Inn Express	34
	Economy Class	Jubilee Inn	63
	Economy Class	Days Inn Biloxi Beach	54
	Economy Class	Red Roof Inn & Suites Biloxi	60
	Economy Class	Motel 6 Biloxi Ocean Springs	60
	Economy Class	Super 8 D'Iberville	47
Bogalusa, LA	Economy Class	Traveler's Rest Motel	74
	Economy Class	Sportsman's Inn Motel	50
	Economy Class	Choctaw Motel	25
	Economy Class	Del Mar Motel	21
	Economy Class	Budget Inn	25

Columbia, MS	Economy Class	Colonial Inn	25
	Economy Class	Rodeway Inn Columbia	56
Covington, LA	Economy Class	The Chateau Of Covington	59
	Economy Class	Super 8 Covington	61
D`lberville, MS	Economy Class	Suburban Extended Stay Hotel Biloxi North Area	131
Diamondhead, MS	Economy Class	Econo Lodge Inn & Suites Diamondhead	50
Gulfport, MS	Economy Class	WoodSpring Suites Gulfport	105
	Economy Class	Legacy Inn & Suites	50
	Economy Class	InTown Suites Gulfport	128
	Economy Class	Red Roof Inn Gulfport	112
	Economy Class	Motel 6 Gulfport	99
	Economy Class	Days Inn Gulfport	66
	Economy Class	Super 8 Gulfport Near Biloxi	95
	Economy Class	Econo Lodge Inn & Suites Gulfport	68
	Economy Class	Luxury Inn	152

### Appendix B.

### The Average Occupancy, ADR, and RevPAR for the U.S. Hotels

Year	Occupancy Rate	ADR	RevPAR
2013	62.3%	\$110.35	\$68.75
2014	64.4%	\$113.42	\$73.04
2015	65.6%	\$120.01	\$78.73
2016	65.5%	\$123.97	\$81.20
Average	64.5%	\$116.94	\$75.37
Sou	rce: Trend Report - Smi	th Travel Research (	(2019)

### Appendix C.

# Twelve Month Moving Average of Hotels within 30-mile Radius from the City of Poplarville

	January	February	March	April	May	June	July	August	September	October	November	December
Occupancy	41.50%	55.50%	56.10%	55.00%	53.80%	53.70%	59.40%	52.30%	51.10%	52.50%	46.80%	41.70%
ADR	\$54.51	\$53.85	\$54.96	\$54.61	\$54.19	\$53.89	\$54.59	\$53.29	\$51.89	\$53.18	\$54.49	\$52.76
RevPAR	\$22.62	\$29.89	\$30.83	\$30.04	\$29.15	\$28.94	\$32.43	\$27.87	\$26.52	\$27.92	\$25.50	\$22.00

Note) The data is based on Year 2016 Source: Trend Report - Smith Travel Research (2017)