

Team Feasibility Study – Movie Theaters in Denton



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Table of Contents

Executive Summary	iii
Introduction to Movie Theater Feasibility Study.....	1
Methods of Evaluation	2
Options of Evaluation.....	2
Criteria of Evaluation	2
Rating Scale of Movie Theaters.....	2
Ticket Prices Across Movie Theaters	2
Food Prices Across Movie Theaters.....	3
Parking Availability Across Movie Theaters	3
Number of Show Times Across Movie Theaters.....	4
Cleanliness and Comfort at Movie Theaters	4
Location of Movie Theaters	5
Opinion Survey of UNT Students.....	5
Results of Evaluation	6
Comparison of Movie Ticket Prices	7
Comparison of Movie Food Prices.....	8
Comparison of Movie Parking Availability.....	9
Comparison of the Number of Movie Show Times.....	10
Cleanliness and Comfort of the Movie Theaters	11
Location of Movie Theaters	12
Movie Theater Survey	13
Conclusion.....	14
Analysis of Silver Cinemas	14
Analysis of Carmike 16	14
Analysis of Cinemark 14	15
Hypothesis and Conclusion of the Best Movie Theater	15
Recommendation	16

Executive Summary

College students on a budget seek cheap entertainment. We evaluated three different movie theaters closest to the University of North Texas campus in order to determine which one best suits UNT students. The theaters we chose to evaluate are:

- Cinemark 14
- Carmike 16
- Silver Cinemas

The criteria we used to evaluate each theater are:

- Ticket prices
- Food prices
- Number of showings per day
- Cleanliness and comfortableness
- Parking availability
- Location
- Opinion based survey.

We conducted the opinion-based survey in different college classrooms with 31 total participants. The methods section contains the processes we used to evaluate the three movie theaters. We went to the three movie theaters to collect data about the food prices, cleanliness and comfort, as well as used Google maps and the movie theater websites to determine location, parking amenities, ticket prices and the number of showings per day. The results section discusses the data we collected using the 7 criteria. Cinemark 14 ranked the highest in the opinion-based survey, cleanliness and comfort, and location. Carmike 16 ranked highest in the number of show times per day and parking amenities. Silver Cinemas ranked highest in food prices and ticket prices. The conclusion section contains the interpretation of the results. We conclude that Cinemark 14 is the overall best movie theater for UNT students. Carmike 16 ranks second in the overall rating, and Silver cinemas ranks the lowest. We recommend Cinemark 14 for UNT students.

Introduction to Movie Theater Feasibility Study

We performed an examination regarding three different movie theaters closest to the University of North Texas campus. We wanted to study which movie theater is the best for UNT students. The movie theaters were Cinemark 14, Carmike 16, and Silver Cinemas. Our examination follows up the feasibility study. We hypothesize that Carmike 16 is the best theater near the University of North Texas. UNT students may use this feasibility study as a resource when deciding which movie theater they should go to.

Methods of Evaluation

This section of the feasibility report contains the processes we used to evaluate three different movie theaters. We chose to conduct our study over Carmike 16, Cinemark 14, and Silver Cinemas. We chose seven different criteria to use as part of the evaluation process. This section contains all methods used to gather our data.

Options of Evaluation

This study includes the evaluation of three different movie theaters in the Denton area.

- Carmike 16
- Cinemark 14
- Silver Cinemas

Criteria of Evaluation

Our team evaluated these three theaters based on seven criteria.

- Ticket Prices
- Food Prices
- Number of Showings Per Day
- Cleanliness and Comfortableness
- Parking Availability
- Location (with respect to UNT campus)
- Opinion-Based Survey

Rating Scale of Movie Theaters

We created a 1-3 rating scale in order to effectively rate the three theaters. A 3 is the best rating for a movie theater and a 1 is the worst rating for a movie theater. A rating of 2 is an average rating for a movie theater.

Ticket Prices Across Movie Theaters

College students are always trying to find means of entertainment at a low cost. The ticket price of a movie plays an important role in deciding which theater to go to. We listed the general ticket prices for each age group and gathered the information from the websites of each movie

theater. We found ticket prices for Cinemark 14 at http://www.cinemark.com/theatre-detail.aspx?node_id=1597. We found ticket prices for Carmike 16 at <http://www.carmike.com/ShowTimes/city/Hickory%20Creek/TX>. We found ticket prices for Silver Cinemas at <http://www.silvercinemasinc.com/scshowtimes.aspx>.

Food Prices Across Movie Theaters

Going to the movie theater is a unique experience that most people are unable to enjoy everyday. Eating the classic movie theater food is part of the whole experience. As college students, we are on a budget and want to make sure we are getting the best deal possible. We gathered prices of three of the most popular movie theater foods: large popcorn, large drink, and a box of candy. We found this information by calling each movie theater and asking a movie theater employee. Maegan Garcia called these theaters on April 24, 2014 at 12:20pm. The telephone number for Carmike 16 is (940) 222-3021. The telephone number for Cinemark is (940) 535-2654. The telephone number for Silver Cinemas is (940) 387-2224.

Parking Availability Across Movie Theaters

After evaluating the other factors involved in choosing a movie theater such as cost and location, UNT students may consider the parking available at each theater in their decision process. Whether it be the number of handicap parking spaces or the entire parking lot in general, the availability of parking at each theater is another factor to consider when choosing where to watch a movie. We found the number of parking spaces at each theater by referencing the Satellite View on Google Maps. We found parking availability for Cinemark 14 at

<https://www.google.com/maps/place/Cinemark+14/@33.1760529,-97.0984116,173m/data=!3m1!1e3!4m2!3m1!1s0x864dcb3143652295:0xc5b51db01c59af0d>

We found parking availability for Carmike Cinemas 16 at <https://www.google.com/maps/search/carmike+cinemas+16/@33.124567,-97.0376114,172m/data=!3m1!1e3>

We found parking availability for Silver Cinemas at <https://www.google.com/maps/place/Silver+Cinemas+-+Golden+Triangle+Mall/@33.1914467,-97.1067925,173m/data=!3m2!1e3!5s0x864dcb275f6af143:0x9e8890cd49d87b08!4m2!3m1!1s0x864dcb273eab3591:0xc562e75b5409284e>

Number of Show Times Across Movie Theaters

The various show times offered by each movie theater can impact which theater we college students choose to attend. When movie theaters provide more show times, they provide us with a better opportunity to see the movies we want to see when we want to see them. If a movie theater has numerous show times throughout the day, the likelihood of a college student going to that theater increases as well.

We found show times for Cinemark 14 at

http://www.cinemark.com/theatre-detail.aspx?node_id=1597. We found

show times for Carmike 16 at

<http://www.carmike.com/ShowTimes/city/Hickory%20Creek/TX>. We

found show times for Silver Cinemas at

<http://www.silvercinemasinc.com/scshowtimes.aspx>.

Cleanliness and Comfort at Movie Theaters

Part of your enjoyment at a movie theater comes from the cleanliness and comfort of your environment. In order to compare the cleanliness and comfort of Cinemark 14, Carmike 16, and Silver Cinemas we had two people, one guy and one girl, go and visit each theater. Upon arrival, we explained that we were doing a project comparing Denton movie theaters to an employee and asked we could just peak in one of the theaters and make a few observations. All three theaters agreed and let us in. Once inside the screening area, we quickly looked around for any spilled popcorn, sticky floors, etc. Then we each sat in one of the seats for a minute to test the comfort. Afterwards, we each took a look into the restrooms and observed the cleanliness. Teresa Gaitan and a male friend visited:

- Cinemark 14 at 4:30 pm Saturday, April 26, 2004
- Carmike 16 at 4:50 pm Saturday, April 26, 2004
- Silver Cinemas at 5:30 pm Sunday, April 27, 2004

Location of Movie Theaters

In order to determine the locations of each theater and the distance each theater is from campus, Teresa Gaitan used Google Maps to search each movie theater and then got the directions from The University of North Texas to each movie theater. The calculations were done in terms of how many minutes it would take to get to each theater. This was done on April 28, 2014 at 3:00pm. The addresses of each movie theater are listed below.

- **Silver Cinemas** – 2201 Interstate 35 Frontage Rd., Denton, Tx
- **Cinemark 14** - 2825 Wind River Ln., Denton, Tx
- **Carmike 16** – 8380 Stemmins Fwy, Hickory Creek, Tx

Opinion Survey of UNT Students

This feasibility study is aimed to inform UNT students of the best movie theater in the Denton area. We asked (# of students) UNT students to choose what movie theater they prefer given the three options: Carmike 16, Cinemark 14, and Silver Cinemas. Each of our team members asked students in their classes to take the survey. Each team member kept a tally of the results. We then combined our results into a table, which is discussed in the results section of the study.

- Maegan Garcia asked 8 students in MATH 4550 at 10:50am on Friday April 25, 2014.
- Shomari Cotton asked 6 students in MATH 1710 at 10am on Wednesday April 23, 2014.
- Teresa Gaitan asked 7 students in ENGR 2302 at 2:30pm on Tuesday April 24, 2014.
- Zach Hair asked 7 students in ENGR 1304 at 4:50pm on Tuesday April 23, 2014, and 5 students in CSCE 1020 at 5:30pm on Wednesday April 23, 2014.

Results of Evaluation

This section of the study includes all results of the data we collected using the seven criteria discussed in the methods section. The survey of UNT students is also discussed in this section. We have organized this section of the study by criteria; each subsection lists and discusses the data collected for each criteria.

Comparison of Movie Ticket Prices

The price that a movie theater charges to see a movie is an important factor in choosing where to see a movie. Holding all other variables constant, you are more likely to choose a movie theater that offers lower prices. The data shows that Silver Cinemas offers the lowest ticket prices, while Cinemark 14 offers the highest prices. According to this criterion, Silver Cinemas is the best option and Cinemark 14 is the worst option. Table 1 lists the ticket prices from each movie theater.

- Rated 3 for ticket prices – Silver Cinemas
- Rated 2 for ticket prices – Carmike 16
- Rated 1 for ticket prices – Cinemark 14

Carmike 16	Price
Matinee	\$5.25
Child/Senior	\$5.25
Adult	\$7.25
Student	\$5.25
Silver Cinemas	
Matinee	\$2.00
Child/Senior	\$2.00
Adult	\$2.00
Student	\$2.00
Cinemark 14	
Matinee	\$6.50
Child/Senior	\$6.50
Adult	\$8.50
Student	\$6.50

Table 1: Chart showing each movie theater's ticket prices

Comparison of Movie Food Prices

Enjoying the movie theater experience usually involves enjoying the typical movie theater food. This portion of the study discusses the prices for three classic movie theater food items: popcorn, soda, and a box of candy. Carmike 16 has the highest food prices, while Silver Cinemas has the lowest food prices. Table 2 shows the prices of a large popcorn, a large drink, and a box of candy among the three movie theaters.

- Rated 3 for food prices – Silver Cinemas
- Rated 2 for food prices – Cinemark 14
- Rated 1 for food prices – Carmike 16

Carmike 16	Price
Large Popcorn	\$7.80
Large Drink	\$5.80
Box of Candy	\$4.50
Silver Cinemas	
Large Popcorn	\$7.50
Large Drink	\$4.75
Box of Candy	\$3.75
Cinemark 14	
Large Popcorn	\$7.60
Large Drink	\$5.10
Box of Candy	\$3.85

Table 2: Chart showing each movie theater's food prices

Comparison of Movie Parking Availability

The parking spots available at a movie theater are also important factors when deciding which theater to go to. All other variables aside, you are more likely to choose a movie theater that has a higher number of parking spaces available over one with limited parking. The data shows that Carmike 16 offers the most parking spaces, while Silver Cinemas offers the least amount of parking spaces. According to this information, Carmike 16 is ranked as the best option and Silver Cinemas is the worst option. Table 3 below lists the parking availability for each movie theater.

- Rated 3 for parking availability – Carmike 16
- Rated 2 for parking availability – Cinemark 14
- Rated 1 for parking availability – Silver Cinemas

Carmike 16	Number of Spaces
Regular	713
Handicap	20
Total	733
Silver Cinemas	
Regular	409
Handicap	5
Total	414
Cinemark 14	
Regular	615
Handicap	13
Total	628

Table 3: Chart showing each movie theater's parking availability

Comparison of the Number of Movie Show Times

The number of show times each theater has throughout the day impacts the likelihood that you will be able to see the movie you prefer in relation to your schedule. As college students, we all know how limited we can be on time which makes the number of show times at each theater an important factor. Below, Table 4 shows the total average of each movie theater's show times throughout the entire day. The numbers for this table were taken by averaging the total amount of show times over three days, Sunday, Monday, and Thursday, from each movie theater's website. According to these results, Carmike 16 is the best in this comparison and Silver Cinemas is the worst.

- Rated 3 for show times – Carmike 16
- Rated 2 for show times – Cinemark 14
- Rated 1 for show times – Silver Cinemas

Carmike 16	Number of Showings
Sunday	69
Monday	65
Thursday	65
Average	66/day
Silver Cinemas	
Sunday	24
Monday	20
Thursday	20
Average	21/day
Cinemark 14	
Sunday	65
Monday	57
Thursday	58
Average	60/day

Table 4: Chart showing each movie theater's average show times

Cleanliness and Comfort of the Movie Theaters

When attending a movie theater, the comfort and cleanliness of the movie theater can affect your movie watching experience. While sitting in a seat for at least 1-½ hours, you want a seat that is comfortable for the duration of the movie. As a viewer, you also may be concerned with the cleanliness of the theater. Sticky floors, spilled popcorn and candy can be a complete turn off during any movie watching experience. Even your experience using the restrooms can hinder your movie experience. Through the observations seen at each movie theater visit, Cinemark 14 proved to have the cleanest theater and restroom and even the most comfortable seats. Silver Cinemas showed to be the least clean in the screening area and in the restrooms, while also having fairly comfortable seating.

- Rank 3 – Cinemark 14
- Rank 2- Carmike 16
- Rank 1- Silver Cinemas

Cinemark 14	Excellent	Good	Fair	Poor
Cleanliness of theater	X			
Cleanliness of restroom	X			
Seat Comfort	X			
Silver Cinemas				
Cleanliness of theater	X			
Cleanliness of restroom	X			
Seat Comfort		X		
Carmike 16				
Cleanliness of theater			X	
Cleanliness of restroom				X
Seat Comfort			X	

Table 5: Chart showing each movie theater's average show times

Location of Movie Theaters

The location of a movie theater can be a huge factor in what theater you choose to go to especially as a student that lives on campus and may not have a vehicle. We determined the time it would take to get to each theater from The University of North Texas. Based on Google Maps calculations, Silver Cinemas is the closest to campus, while Carmike 16 is the furthest from campus.

- Rank 3- Cinemark 14
- Rank 2 – Silver Cinemas
- Rank 1- Carmike 16

Movie Theater	Number of Minutes away from UNT
Carmike 16	9
Cinemark 14	6
Silver Cinemas	7

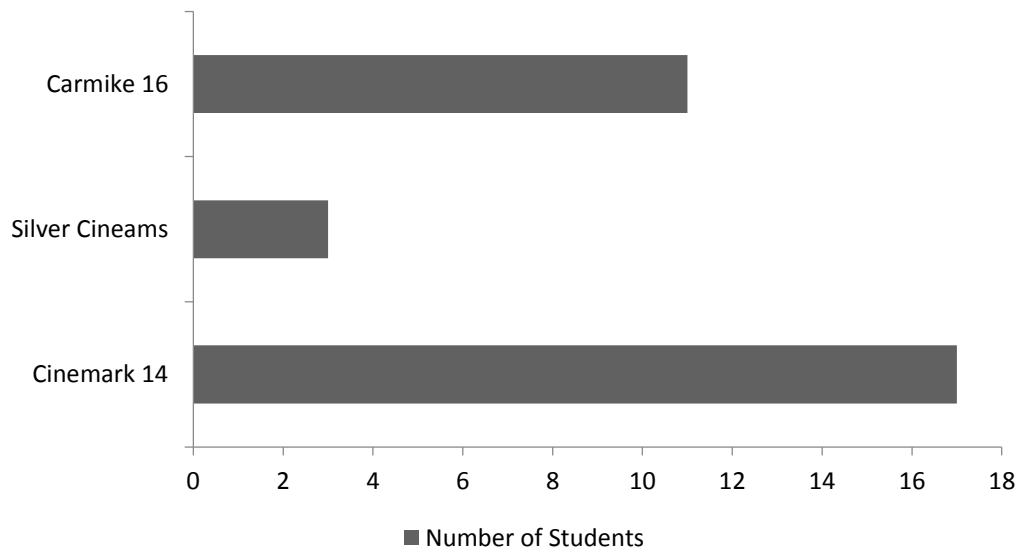
Table 6: Chart showing the number of minutes it takes to get to each theater from UNT

Movie Theater Survey

We asked UNT students which movie theater they preferred to go to. It is important to get an actual opinion from our target audience of the study. Most students voted for Cinemark 14. The least number of students voted for Silver Cinemas.

- Rated 3 for personal preference – Cinemark 14
- Rated 2 for personal preference – Carmike 16
- Rated 1 for personal preference – Silver Cinemas

Movie Theater Survey



Graph 1: Graph showing the number of students that prefer each movie theater

Conclusion

Analysis of Silver Cinemas

In our study of movie theaters surrounding the University of North Texas, we found Silver Cinemas to be the least popular among UNT students. Although the ticket and food prices were cheapest at Silver Cinemas, the quality of the theater in terms of cleanliness and comfort was significantly lower than Carmike 16 and Cinemark 14. When we evaluated the time spent driving to each theater, Silver Cinemas ranked 2nd, with Cinemark 14 being 1st with the shortest drive and Carmike 16 in 3rd with the longest travel time. In addition to student surveys ranking Silver Cinemas as the least popular, we also ranked it lowest in several of our rating categories. We found Silver Cinemas had the least number of show times per day and less parking availability compared to the other two theaters in our study. Silver Cinemas also lacked the newer movies common in the other two theaters, as they tended to play older movies. In addition to having the least amount of parking spaces, these spaces are also shared with the rest of the establishments at the Golden Triangle Mall where Silver Cinemas is located. We concluded that all of the factors above outweigh the benefit of cheaper ticket prices for UNT students as evident from the survey responses and the data we compiled.

Analysis of Carmike 16

Carmike 16 is a nice theater that ranked an overall 2 according to our ranking system. This means that it wasn't the worst, but wasn't the best either. Carmike 16 ranked best in parking availability and offered the most show times per theater. This is an advantage for students because of their ever-changing schedules. Many student work and their school schedules change each semester. However, Carmike 16 is farthest way from UNT and has the highest food prices and the second highest ticket prices. Students tend to stay closer to campus, so a movie theater that is far away could cause them to choose a closer theater, perhaps one closer to campus and other social hang outs. High food prices could also deter UNT students from choosing this theater. Enjoying movie theater food is part of the movie going experience, and if a box of candy costs \$4.50, a student may rethink enjoying that box of candy. Although the ticket prices were not the highest, they were much higher than Silver Cinemas. Specifically, Silver Cinemas student movie tickets are \$2.00 where Carmike 16 student movie tickets are \$5.25. In the opinion survey, Carmike 16 ranked 2, coming out above Silver Cinemas, but below Cinemark 14. Carmike 16 ranked well in cleanliness and comfort, but was not the best.

Analysis of Cinemark 14

Cinemark 14 is a great, well-rounded theater that ranked an overall 3 according to our ranking system. Cinemark 14 ranked the best over 3 criteria: the opinion-based survey, cleanliness and comfort, and location. Cinemark 14 ranked lowest in only one category: ticket prices. The ticket prices of Cinemark 14 are \$6.50 for students. This is only \$1.25 more expensive than the ticket prices of Carmike 16, which ranked an overall 2. Carmike 16 also had the most expensive food prices. Although Cinemark 14 has high ticket prices, it still ranks the overall highest because of its location to campus and its cleanliness and comfort factors. The theater's location and overall appearance of the theater makes up for the extra money spent on ticket prices. Students are willing to pay a little extra for good location and comfort of their movie going experience. Cinemark 14 ranked second in food prices, which means they are not the most expensive, but are not the least expensive either. Cinemark 14 is a close second when it comes to number of show times per day. Carmike 16 shows an average of 66 showings per day, where Cinemark 14 shows 60 showings per day. Cinemark 14 also ranked second in parking availability. Overall, Cinemark 14 is the best movie theater for UNT students.

Hypothesis and Conclusion of the Best Movie Theater

We hypothesized that the best movie theater would be Carmike 16; however, upon research, we discovered that the best option is Cinemark 14. We based our hypothesis on our own experiences, but according to our criteria and opinion-based survey, Cinemark 14 has the most to offer and the majority of students prefer Cinemark 14. Cinemark 14 ranked lowest in only one category: ticket prices. The other 2 movie theaters ranked lowest in multiple categories. For these reasons, Cinemark 14 is the best movie theater in the Denton area for UNT students.

Recommendation

We recommend Cinemark 14 to UNT students who are looking for the best movie theater experience.