

**Developing a Nighttime Transportation Service for Seniors:
Assessment of Needs and Recommendations**

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EXECUTIVE SUMMARY

Transportation needs of seniors are not well understood. At some point, a person's ability to drive at night or at all will not be an option because of the aging process. What does a person do then? Will taking the bus or light rail be an option? Is this realistic or practical? Seniors are often treated as a homogeneous group but the research shows that there are various needs for each group of seniors. There are young seniors and old seniors and each group has special transportation needs.

Mobility is crucial in maintaining connections to society. Many people prefer to age in place in their own homes, but there are few transportation alternatives to support this desired lifestyle when people reach an age that makes it difficult or impossible to safely drive.

When people have developed a lifestyle of using the car as their primary means of transportation, making the transition from using a car to using other transportation methods is difficult because of the lack of flexibility and convenience. What complicates the problem is that very few alternatives exist for nighttime transportation. Further, many people live in the suburbs where it is difficult to use a fixed-route bus or light rail system.

Maintaining safe roads and safe drivers will be a major concern in the future as seniors advance in age. It is important for policy makers, transit agencies, and city governments to start developing programs now to meet the growing need of seniors who will need transportation assistance in the future when they will no longer be able to drive themselves. Sandi Rosenbloom points out that "communities are far from meeting the transportation needs of the elderly today and are less likely to do so in the next three decades when the population of older people doubles."¹

In the first time in our history, many people are living longer and are healthier. The baby boomers is such a huge group that will become seniors in the near future. But, the baby boomers will also present an opportunity for transit agencies and city governments to develop transportation services that will both meet their needs and will potentially generate revenue. Understanding the characteristics of this generation and their nighttime transportation needs is the first step in developing effective and attractive nighttime transportation services for seniors.

This study is unique in that it takes a marketing approach to solve the social problem of not having adequate nighttime transportation services for people who are unable to drive safely at night or who no longer drive. Marketing is defined as the planning and implementation of the conception, pricing, promotion, and distribution of services to create exchanges that satisfy the customer's and organization's goals.² Conducting marketing research for a special segment of society is a luxury that many transit agencies and city governments may not be able to do because of lack of resources. One of the goals of this study is to determine where seniors travel at night and how they prefer to travel. The results of this study are intended for transit agencies, city governments and smaller organizations, like senior housing centers, to consider when designing nighttime transportation services for seniors.

This study first summarizes the findings of other research on the transportation needs and preferences of seniors. Nighttime transportation needs of seniors from the perspective of two transportation professionals will be discussed as well as the barriers to developing a nighttime transportation service. A report on where seniors travel, how they prefer to travel at night, and what they envision a nighttime service to be will follow. Finally, recommendations will be given including ways to structure a transportation service for seniors and recommendations on ways to structure funding so that it is more effective.

CHAPTER ONE

DEFINING THE PROBLEM

INTRODUCTION

Adequate transportation alternatives do not exist in many western societies, partly because of a lack of understanding of the needs of the elderly.³ In a study performed by the National Academy of Sciences in 1988, they found that there were insufficient transportation resources for those who could not drive.⁴ Lack of transportation for seniors is not a new problem. It was recognized as a problem thirty years ago. In 1971, the first White House Conference on Aging reported that there was a lack of transportation services for the elderly.⁵

Since the topic of transportation services for seniors is very broad, this paper will be limited to nighttime transportation services for seniors. For the purposes of this paper, nighttime travel will be defined as travel after sunset. This study will examine the transportation needs of seniors for nighttime travel and will provide information for transit agencies, city governments, and senior housing complexes to incorporate into their transportation services.

BACKGROUND

The demographics of America will change because of three phenomena: the senior boom, the birth dearth and the aging of the baby boomers.⁶ The senior boom refers to the phenomenon that Americans are living longer when they are compared to their counterparts in previous decades.⁷ The second phenomenon is that there is a lower birth rate that will cause the percentage of seniors to increase.⁸ Finally, the baby boomers are aging. By 2050, it is predicted that one in four Americans will be over 65.⁹

To give a better picture of the predicted growth, in 2000, 35 million Americans or 12.4 percent of the total U.S. population were over 65 and 4.5 million or 1.6 percent were over 85.¹⁰ By 2030, it is predicted that the number of older Americans will double, and the smaller group, people who will be over 85, will total an estimated 9 million.¹¹

Because of this change in demographics, more people will need to have transportation alternatives when they are no longer able to drive themselves at night or at all. More elderly people are driving cars than before.¹² There may be more elderly drivers because there are more elderly people who have driver's licenses, who are healthier and more active, who have more disposable income, and who do not want to change their transportation mode when they reach retirement.¹³ Even people who used to use public transportation when they were working, switched to using the car upon retirement.¹⁴ The preferred mode of travel for 65-75 age group is the automobile, either as driver or passenger.¹⁵

Many people begin to limit their driving as they age. Older drivers tend to avoid congested areas, left hand turns, peak period travel, nighttime travel and travel on unfamiliar roads and in poor weather.¹⁶ Night driving is a problem that increases due to age.¹⁷ According to a study by AARP Public Policy Institute, 17% of the respondents age 75 to 79 reported driving at night as a

large problem compared to 23% of the respondents age 80 to 84 and 24% of respondents 85 and older.¹⁸ The number of seniors who will demand for nighttime travel may increase as well because some seniors may not want to drive at night but still make trips at night.

The preferences and needs of seniors concerning transportation are not well understood. According to Sandra Rosenbloom, there is a misconception that seniors fall into two categories. Either they drive and have all of their mobility needs met, or they do not drive and have substantial unmet needs.¹⁹ There are many seniors who fall in between and who have complex needs. For example, there are seniors who could drive during the day, but could use some assistance with night travel.

What is probably more damaging are the myths about the mobility needs of seniors. Sandra Rosenbloom discusses several myths that are common and may need to be unlearned before effective transportation policies to serve the elderly can be developed.²⁰

The first myth is that there is a misunderstanding of the progression. One misconception is that as people age, they first lose their ability to drive and then they use public transportation. When they no longer can use public transportation, they walk. When they no longer can walk, they use special transit services.²¹ According to Rosenbloom, driving is the easiest form of transportation for the elderly people. They will be able to drive but they may not be able to walk to a bus stop or board public transit.²²

Another related point is that there is an assumption that adequate transportation services are available for seniors whether they are public transit or special services. But, many seniors do not live close to existing bus lines, even in urban areas.²³ In addition, there are few transportation alternatives to public transit.

Another related point is that many elderly people are ineligible for special transit services like paratransit. Transit operators are very selective of whom they serve because the costs to the transit operator to provide the service are expensive.²⁴ Many seniors are ineligible for paratransit services because their disability is not severe enough. Not being able to drive or having a minor disability rarely qualifies a senior to use paratransit.²⁵ There is a need to develop transportation services for the elderly because the current bus and light rail systems and paratransit do not adequately meet their needs.

The second myth is that older people who drive do not have mobility barriers.²⁶ But, since many older people limit their driving at night, there must be some impact of this self-imposed limitation. Long before they cease driving, people begin to adjust their travel patterns to address personal limitations by, for example, not driving at night or to congested areas.²⁷

The third myth is that the loss of mobility skills is static.²⁸ The reality is that mobility needs of older persons is complex. People may stop driving for a period of time after a heart attack, for example, and begin driving when they are better.

Though seniors in general will likely face mobility problems, there are certain groups among the seniors that are at greater risk. People who reach 80 years old, women over 85, and elders of minority groups will face greater risk of not having their mobility needs met.

Loss of mobility becomes more prominent as people reach 80 years of age because of lower income, lower car ownership and greater physical limitations.²⁹ In addition, older drivers face more risk of being in an accident. Drivers who are 85 years or older are 9 times as likely to die in a crash compared to drivers 26 to 69 years old.³⁰

Women over the age of 85 years are at risk. These women will likely face mobility constraints with little help from their family because some never married, or became widowed or divorced.³¹ Many women over the age of 85 will be living alone. In addition, older women of an ethnic minority background cannot afford to buy transportation services. Over half of older Hispanic women who lived alone had incomes below the poverty line.³²

There are different travel patterns of the elders of minority groups when compared to their Caucasian counterparts. Black, Asian, and Hispanic elders make fewer and shorter trips than white elderly and less often in a car.³³ This piece of research is important because there is likely to be more acceptance of a new transportation service for these segments because they tend not to rely on the car.

If older people cannot drive themselves, they usually ask others to drive for them and usually the one who provides the ride is also a senior.³⁴ This arrangement becomes problematic when the person who provides the ride can no longer drive or can no longer carry a driver's license because not only does the person driving need transportation assistance, but so does everyone to whom that person provided rides. The drawbacks of people getting rides from family or friends are that there is a reluctance to impose on others for rides and the ride is not always available when needed.³⁵

If seniors cannot drive or get rides, what are the alternatives? Are the current fixed-route bus and light rail systems adequate to serve the needs of seniors for nighttime travel?

Though he did not study nighttime travel needs specifically, Joseph Coughlin in his study on the perceptions and preferences of older persons found that most people chose driving a car or riding in a car as the preferred travel mode.³⁶ Using public transit, taxis, senior vans or walking are less attractive.³⁷ Since older persons did not prefer using other means of travel besides the car, it remains questionable if other means would be used.

In addition, the existing fixed-route bus and light rail system is not meeting the needs of seniors. In 1995, the elderly made 2.2 percent of all trips by transit, but between 1995 and 2001, there was a 50% decrease, and only 1.3 percent of trips were made by transit.³⁸ Use of transit by the elderly is decreasing when it was expected to increase as the number of elderly needing transportation assistance increased.

So much can be done to provide special transportation services for the elderly, but funding is an issue. The only funding that is part of TEA-21 that provides funding for transportation services

for seniors is Section 5310 formula grants and loans for special needs of the elderly and people with disabilities.³⁹ But the authorized amount is too small to be effective. The amount authorized is \$456 million or about 1.1 percent of the total transit authorization.⁴⁰

There will likely be more seniors in the future and an increased demand for transportation services, including travel at night. Since these seniors of the future will likely have been drivers or passengers in cars for most of their lives, their preferences for travel will likely be important to know in order to attract them to new types of services. There are currently few transportation alternatives available to the car and coping strategies, like getting rides from friends, may be ineffective. There are also seniors who are at even greater risk of losing their mobility: women over 85 and seniors from ethnic minority groups.

CHAPTER TWO

PROJECT DESIGN

PURPOSE

The purpose of this study is 1) to determine the demand for nighttime transportation services for seniors from the perspective of transit professionals, 2) to determine the urgency of this problem, 3) to determine what the barriers are to developing a nighttime transportation service for seniors, 4) to determine the effectiveness of existing nighttime transportation services from the perspective of seniors and to determine their coping strategies, 5) to determine the specific nighttime needs of seniors and to determine their transportation preferences 6) to find successful models to follow, and 7) to give recommendations.

METHODOLOGY

Interviews were conducted with a transit professional and a paratransit broker to determine the demand for nighttime transportation for seniors and what the barriers are to starting a program.

In person interviews were conducted with 14 seniors from three different seniors centers: Hank Lopez Senior Center, Iola Williams Senior Center, and Yu-Ai Kai in San Jose and two senior housing complexes: Fuji Towers and Cypress Gardens in San Jose. The senior centers were chosen to try to attract lower-income seniors who have the most need for alternative transportation services and as well as a chance to interview seniors from ethnic minority groups. Personal interviews were chosen as the mode over focus groups in order to get specific information about the places that seniors wanted to travel at night and what their preferences were for nighttime travel.

The interviewer worked with a person from each of the organizations to find potential interviewees and set up interviews at the senior center or at the housing complex. The assistance of each representative was invaluable in helping the interviewer. The interviewer did set up meetings with a few of the organizations prior to conducting interviews in order to generate interest. A flyer that described the project was used to post and to distribute at the various sites (Appendix A). At the Hank Lopez Senior Center and the Iola Williams Senior Center, the interviewer made presentations to seniors to briefly describe the project and to encourage seniors to participate. In order to show an appreciation for the interviewee's time, the interviewer gave a package of cookies to those who participated. For those who could not eat sugar, sugar-free cookies were appreciated.

Interviews were also conducted to determine the qualities of successful transportation models to follow in developing a nighttime transportation service for seniors. Interviews were conducted with the North Jeffco Senior Recreation Center in Colorado and the City of Palo Alto regarding the Crosstown Shuttle. A list of questions was faxed to Fuji Towers regarding the recent addition of their own van.

Finally an interview was conducted with a transit professional to determine the current FTA Section 5310 requirements in order to develop potential ways to strengthen its effectiveness for nighttime travel for seniors.

The interviewer prepared questions ahead of time and took notes during the interviews. After the interview, a transcript was prepared and mailed to the interviewee for review and for making corrections. An interviewer agreement (Appendix B) was signed by each interviewee to allow the information to be used in the study. A tape recorder was not used to document the interviews because the interviewer did not want to intimidate the interviewees, especially the seniors, and discourage them from interviewing.

CHAPTER THREE

PERSPECTIVES FROM TRANSPORTATION PROFESSIONALS ON NIGHTTIME TRANSPORTATION NEEDS OF SENIORS

SANTA CLARA VALLEY TRANSPORTATION AUTHORITY

Jim Unites, Service and Operations Planning Manager of the Santa Clara Valley Transportation Authority (VTA) was interviewed about the demand for nighttime transportation services. The demand for nighttime travel of seniors has not been studied. The agency does offer bus and light rail service at night, but many seniors do not like to wait in the dark. Many seniors tend not to go out at night.

The services available to seniors for nighttime travel are bus, Outreach [the agency's paratransit broker], and taxi. The agency did have a program called Dial-a-Ride up until 1997, but it became too expensive to operate.

According to Mr. Unites, in order to start a new type of service, it would be important to have a champion to sponsor it.⁴¹ For example, senior management may come up with the idea or a council member may suggest an idea to the general manager.

If he were to start a new service, he would probably design a nighttime transportation service in-house and find out from others who have done similar types of programs. He would also contact seniors programs run by cities for information.

OUTREACH

Bill Schwarz, Vice President, Operations, of Outreach was also interviewed about the demand for nighttime travel of seniors. Outreach is VTA's paratransit broker. Outreach provides many of the rides for people with disabilities. He said that there is little activity after 10:00 o'clock for Outreach.⁴² This may be the time that disabled persons may not want to travel, but it is uncertain if this is the time that non-disabled persons may want to travel.

He did indicate that seniors did express a need for some transportation assistance. Many people say that they cannot use the Outreach service. A lot of people do not feel safe in the evening or cannot drive at night because of vision problems. There is a demand for transportation services for non-disabled seniors who may want to go downtown or to visit someone. Some may reduce the number of trips. He did indicate that there is a need for a transportation program just for seniors.

He also indicated that funding a door-to-door transportation service for seniors would be difficult because of the high demand.

If he were to start a program, he would do a pilot program and conduct a six-month study. Seniors could call for a ride and pay a nominal fee. The purpose of the study would be to determine trip purposes, age, and ability to pay.

Most seniors now get a 15% discount for using the taxi but many do not know that it is covered by the City of San Jose ordinance.⁴³ Volunteer drivers would not work because of insurance purposes. He would suggest marketing to encourage people to take the bus at night.

SUMMARY

From the information gained through the interviews, there does seem to be a need for more transportation services for seniors overall but it is not certain if it is needed at night. There is not a sense of urgency to provide transportation services for seniors at night, but, as Mr. Schwarz pointed out, there needs to be transportation services designed for seniors, especially the non-disabled ones. The first step in developing a nighttime transportation service would be to do a study on the demand for nighttime service and then to find a champion and a funding source or several funding sources like transit districts and city governments. Providing a specialized transportation service is no easy task. In the interview with Mr. Schwarz, he pointed out that it is not very clear which agency is the most appropriate one to take the lead on designing transportation services for seniors.⁴⁴ Is it the responsibility of the transit agency, the city government, the council of aging, or the federal government or all of the above to ensure that there are adequate transportation services for seniors?

Providing a specialized service for seniors for nighttime travel has many barriers including lack of funding, a lack of information about demand, nighttime travel destinations and trip purpose, the ability to pay, and an agency to take the lead on the issue.

CHAPTER FOUR

NIGHTTIME TRANSPORTATION NEEDS OF SENIORS

DESCRIPTION OF SENIORS WHO WERE INTERVIEWED

Fourteen seniors were interviewed from several places in San Jose, California, in March and April of 2004 using an interview outline (Appendix C). The interviewees were from two City of San Jose senior programs: Iola Williams Senior Program and Hank Lopez Senior Center. In order to gain more interviews, seniors were interviewed at Yu-Ai Kai, a Japanese American Community Senior Service in San Jose and two housing centers, Fuji Towers and Cypress Gardens.

The following is a list of seniors who were interviewed.

Hank Lopez Senior Center

Harold Hagaman
Carlos Quinonez

Iola Williams Senior Program

Conchita Geronimo
Ana Hernandez
George Patrick

Yu-Ai Kai

Robert Iso
Jean Lamar
A woman who wishes to be unnamed

Cypress Gardens

Hee Soon Lee
Su Pong Tan
Yong Sin Kim and Yong Ae Kim (son-in-law and daughter of Su Pong Tan)

Fuji Towers

Nelba Cole
Terry Goto
Seiko Miyake
Akiko Nakagawa

The assistance of Yong Sin Kim and Yong Ae Kim in translating Su Pong Tan's answers from Korean to English was invaluable. Yong Sin Kim and Yong Ae Kim are the son-in-law and daughter of Su Pong Tan.

The ages of seniors in the study ranged from 71 to 89. A total of 10 women and 4 men were interviewed. There were 4 Japanese women, 2 Korean women, 1 Hispanic woman and 1

Caucasian woman in the study. Of the men, there was 1 Japanese man, 1 Black man, 1 Caucasian man, and 1 Hispanic man. Three of the four men are able to drive but only two of the men are able to drive at night. None of the women in the study were able to drive during the day or during the night. Only two of the women in the study had driven a car previously but were not driving at the present time.

WHERE SENIORS TRAVEL AT NIGHT

Seniors interviewed have different travel patterns at night. Eight said that they traveled at night and six said that they did not. Below is a summary of trip purpose, destination, and mode of travel for various nighttime trips.

Table 1 Description of Trips Made at Night

Purpose	Destination	Mode of Travel
Baby-sit	Family's home	Family provides rides
Bingo	Oak Grove	Light Rail/Walk
Christmas	Family's home	Family provides rides
Dance	American Legion	Get a ride from a friend
Dinner and Dance	Filipino Community Senior Center	Husband drives
Evening service	Holy Trinity	Husband drives
Funeral	San Jose Buddhist Church	Motorized chair
Ice skating show, Mexican bands	Arena	Son or husband drives
Meeting	Disabled American Veterans (Los Gatos)	Friend drives his car
Meeting	Masonic Lodge Eastern Star Amaranth	Drives himself
Restaurants	Not mentioned	Daughter drives
Restaurants	Fresh Choice, Mexico Lindo Restaurant, In-N-Out Burgers	Family provides rides.
Restaurant	Live Oak	Friend drives his car
Sports events	San Jose Arena	Drives himself

From interviews conducted.

Several of the interviewees mentioned going to restaurants at night and usually they were with their families. In family outings, usually there is a ride provided by a family member. Trips that were not made by the family included bingo, meetings, and sports events. These activities are significant because they are likely made without a family member. Designing transportation services at night to serve these trip purposes may be useful, especially when a person no longer can drive himself or herself or get a ride.

Another activity that may generate regular travel demand at night is going to evening church services. This area would be interesting to further investigate because there are likely a group of people who would like to go to church but cannot because of lack of transportation.

LEVEL OF SATISFACTION

Three of the seniors interviewed said that they do not need nighttime transportation because they do not travel at night. They are happy to stay at home and watch television, read a book, or talk on the telephone. Su Pong Tan said that she does not need to go out at night because she is able to go out during the day. The three seniors who said that they were content not going out are all Asian women who are 75 years or older.

Four of the interviewees in the study expressed dissatisfaction with not having their nighttime transportation needs met. Conchita Geronimo, George Patrick, Nelba Cole, and Terry Goto all said that their nighttime transportation needs were not met. What is common among these interviewees is that they used the car in some way, either as a driver (or former driver) or a passenger. The ages these seniors who expressed dissatisfaction range from 81 to 84. It is interesting that age does not seem to be a limiting factor in the person's desire to travel at night.

Conchita Geronimo states that she and her husband used to go to the Filipino Community Senior Center at night to a dinner and dance once a month. But, lately, they have not been going because it is too difficult for her husband to drive at night. She states that she really misses it.

Nelba Cole and Terry Goto both state that they miss going to the shopping malls at night, just to look around. Both used to drive themselves, but now, driving is not a viable option for them and they have no other means of getting to the mall at night. Even though Nelba Cole gets rides from her family to baby-sit, she feels badly that her family has to come and pick her up at Fuji Towers.

One interviewee is happy getting rides from her son or her husband, but she says there is a need for nighttime transportation. The rest of the interviewees were satisfied with their present mode of travel at night.

ASSESSING MODES OF TRAVEL AT NIGHT

In order to get an idea of what modes of travel seniors would prefer to use at night, they were asked to assess several modes. Below is a list of selected comments for each mode.

Table 2 Assessing Modes of Travel at Night

Mode	Comments
Driving your car	"I don't drive at night." "I don't like to drive at night."
Riding with a Friend	"Try not to ask, unless going to the same place" "Socialize, news." "My friends are my age, and they do not drive at night."
Riding with a Family Member	"No problem." "Family members don't drive." "It works. I am not very active." "Sometimes my daughter is busy." "It usually works, but I feel bad."
Public Transportation	"Inconvenient." "No bus service after 8:00 o'clock." "Difficult to board." "None." "I don't use public transportation." "Not safe. Not even during the day. . .The bus is full of kids." "Seldom use." "Never rode. Nowhere to go."
Taxi	"Cost" "Too high." "Charge too much." "Expensive."
Outreach	"Good for motorized chairs." "Waiting is not a problem." "Cram four people in a sedan. Not enough room." "Van is more comfortable." "Long trips." "I want to try that." "Maybe when I won't be able to drive." "I spend too much time waiting to come home." "I am not eligible."
Walking	"No."

From interviews conducted.

Driving at night was either not done at all or was not desirable. Riding with a friend is good in that the person could socialize, but it had other problems, like not wanting to impose. One interviewee brings up a good point; you may have friends, but they may not be able to give you a ride at night because they may be in the same predicament.

For some interviewees, asking a family member for a ride was more acceptable than asking a friend. But, some interviewees did not want to ask a family member for a ride because the family member was busy.

Though many of the interviewees took the bus during the day, none of them took the bus at night mainly because it was not safe. What is even more surprising is that one interviewee even thought that riding the bus during the day was not safe. The problem with taking a taxi was the high cost.

Five of the interviewees in the study use Outreach. Overall, the service is satisfactory. But, not everyone was satisfied. Akiko Nakagawa says that she prefers using the van at Fuji Towers and not use Outreach because she spends too much time waiting.

An interesting comment came from a person who did not use Outreach. One interviewee said that he may want to consider using the service if he could no longer drive. This comment is very useful in determining what kind of service would be desired. A nighttime transportation service may look something like Outreach.

WHAT SENIORS ENVISION

Seniors were asked to complete this sentence, “If only I could have a nighttime transportation service that _____, I would be happier.” George Patrick said that he wanted it to take him to church to attend nighttime services. He drives only during the day and is unable to drive at night. When he was asked which church that he would like to attend at night, he replied, “It wouldn’t matter. I attend Methodist, Baptist . . .”⁴⁵ Getting out at night to attend any church event is a priority for him. He said that he would like to visit friends at night, too.

Conchita Geronimo said that she would like a transportation service that would allow her to attend other senior centers where they have a dinner and dance at night. Nelba Cole said that she would go out to eat dinner with a friend. Terry Goto said that she would like to see musicals around Christmas time.

When interviewees were asked about what price they would pay for a nighttime service, the fee ranged from \$2 to \$12, round trip.

ANALYSIS

When people were asked where they traveled at night, at first many of them said that they did not go out at night. Many people interviewed considered “traveling at night” the same as “going out,” like for teenagers or for young adults. When they were asked if they went to family gatherings, many said that they usually got a ride from a family member. The trips that many

people make at night are infrequent but they do go out occasionally, especially to a family event. In many of the trips that involved some kind of family involvement, a family member provided the transportation. Trips that did not involve the family were not always made because transportation was not always available. Most of the trips made during the night were not regular, with the exception of the meetings (once a month), evening church services (once a week), and bingo (every night). This irregularity may contribute to the difficulty in capturing demand for nighttime travel. What was not studied was whether the irregularity of trips is actually due to a lack of transportation. If there were more transportation services at night, would more trips be made?

Many people who did travel at night got a ride from a family member or friend or drove themselves. One night trip by the interviewee and her husband was made by light rail and walking. In another night trip, the motorized chair was used to get to the church, which is a few blocks away. No one took the bus at night in this study.

The trip destinations are important. The San Jose Arena was mentioned several times as a destination for several types of events including sports events, ice shows, and special cultural performances. To find demand for night travel, it may be useful to consider any of the events that occur at the San Jose Arena. People who play bingo may be another potential group to consider for regular nighttime travel. Restaurants of all types came up at least three times. Though it may be difficult to take people to different restaurants, this type of activity may be attractive for seniors. Church activities were mentioned twice. In determining demand for nighttime travel, asking churches about the demand for nighttime transportation to evening services may be a possibility.

What was surprising is that none of the interviewees mentioned shopping as a destination for nighttime travel. It is not certain if shopping is not as popular or that there is no convenient way of getting to the store. One person said that she did her shopping online or her daughter bought clothes for her.

The lifestyle of the person was a determining factor. Those who were used to driving a car and who used to go to the shopping malls at night, for example, missed doing those activities when driving oneself was not a viable means to get to those destinations. Some did not know anyone who could give them a ride. Compounded to this was that even if they had family members nearby, they felt bad getting rides. Nelba Cole gets a ride to and from her home to her daughter's home to baby-sit, but she said that she felt badly that they had to pick her up and drop her off. When seniors were asked if they had a van that would take them to the shopping mall and back, they said that they would consider making the trip.

Three considerations must be given for designing a transportation system for seniors. One is that the price of the trip cannot be too expensive. Rides at Fuji Towers and Yu-Ai Kai to Safeway and Long's cost only a donation of \$1. The cost of Outreach was reasonable to many. Currently, the cost of an Outreach ride is \$3 and a round trip costs \$7. Another consideration is that many wanted to go with someone to the mall for safety reasons. When people reached later years, like 80 years old, they feel very vulnerable and would like the protection of having

someone else there in case he/she did not feel well. Finally, there needs to be a way to get back early, if he/she does not feel well.

When people were asked where would they like a nighttime transportation service to take them, there were a variety of destinations. Many wanted to go some event that was social in nature and church events came up frequently. One person from Yu-Ai Kai stated that she would use the service to go to a party, restaurant, someone's house, theater, movies, ice shows and sports event at the Arena. She did not need to go to grocery stores because there is a transportation service at Yu-Ai Kai that provides rides to Safeway and Long's every other Thursday and Monday. She also can walk to Dobashi Market, if she has an emergency.

AREAS NEEDING FURTHER INVESTIGATION

An area that appears to need more research is to determine what the upper age limit is to using bus and light rail. Some of the interviewees in the study used the bus when they could, but walking to the bus and boarding the bus were barriers to using the system. Several interviewees had arthritis and had problems with walking. Even if bus and light rail routes were created to serve the destinations that seniors desired, these modes may not be usable by seniors because of their physical limitations. One interviewee said that the doors on the bus close so fast. It made it hard for her to use the bus to do her grocery shopping.

There needs to be a better understanding of whether a senior chooses not to use transit or cannot use transit because of physical limitations. Such distinctions are important because if the transit agency uses the strategy to educate seniors about the existing bus and rail systems available, it may not be very effective. It would be more effective to first determine which seniors are likely to use the bus and light rail during which hours and for what purposes.

Another area that needs more research is what is the emerging trend of seniors' preferences? Are the most recent seniors wanting more nighttime services to be able to make trips to nighttime events or are they more inclined to stay home, watch television, go to bed early, or read a book? Are these coping mechanisms to deal with no viable transportation means at night? What will the seniors of the future be like?

CHAPTER FIVE

WHAT WOULD THE IDEAL NIGHTTIME TRANSPORTATION PROGRAM LOOK LIKE?

INTRODUCTION

There is no existing model for a nighttime transportation service for seniors, except for door-to-door paratransit service, but there are three existing services that give useful insights in developing such a service. The first is called The Crosstown Shuttle that was developed by the City of Palo Alto Transportation Division to meet transportation needs of seniors. The shuttle travels on a fixed route. The second are the North Jeffco Senior Recreation Center day trips that are designed for seniors. The third is a van service provided by Fuji Towers, a senior housing center.

THE CROSSTOWN SHUTTLE

Since there were no nighttime services for seniors, the closest model would be one that is developed for daytime travel. Gayle Likens, Transportation Project Manager, of the City of Palo Alto Transportation Division was interviewed on The Crosstown Shuttle that was designed for seniors and schoolchildren. The Crosstown Shuttle runs every half hour from 7 am to 6 pm along a fixed route. What is unique is that this route serves low-density areas like residential neighborhoods, senior residences, schools, libraries, recreation centers and the train station. The Crosstown Shuttle serves four major senior centers and three senior housing complexes, including the Stephenson House, Lytton Gardens, and Channing House. The route serves Terman Middle School, Jordan Middle School, and Gunn High School. The Crosstown Shuttle began in 1999 as an outgrowth of the City's Comprehensive Plan Update. One of the goals of the shuttle was not to duplicate the bus routes of the VTA.

This route serves not just one group but two: seniors and students. Perhaps this is a good strategy to use in trying to attract enough riders to make the program feasible. One of the issues that remains unknown is the comfort level of the two types of customers riding the same vehicle? According to Ms. Likens, there were some complaints from seniors that the students were too rowdy, but the complaints happened only in the first six months of the program.⁴⁶

As Jim Unites pointed out in his interview, there needs to be a champion for the program.⁴⁷ In the case of The Crosstown Shuttle, there was a city council member who championed the shuttle program. What also may have helped is that there was an existing shuttle called the Stanford Marguerite Downtown Express Shuttle. This shuttle mainly serves students attending Stanford.

The bus used for the Crosstown Shuttle is a 22-passenger bus that was inherited from the Arts and Wine Festival. The advantages of a smaller bus, according to Ms. Likens, is that people feel more comfortable and residents would prefer to have a small bus travel down their street.

The type of vehicle used is important. A smaller bus is certainly more acceptable to residents whose streets will be used for the service. A smaller bus may be more acceptable to the rider because it is different from the regular city bus.

The bus is not necessarily easy to board but they do have wheelchair lifts. Many seniors in the study said that they did not like to ride the bus because it was difficult to board. It seems that this shuttle is attracting seniors to ride, even if it may be a little difficult to board.

In designing the shuttle program, Nelson/Nygaard, a consulting firm, met with community groups, senior housing centers and the business community. They also conducted a demographics study. The consulting firm asked whether the City wanted frequent service in a high-density development or service that focused on a surface coverage route for low-density development. The City chose the surface coverage route for low-density development. The concept plan included five different routes, including The Crosstown Shuttle.

In starting a new program, it would be beneficial to seek the advice of a consulting firm and to allow money in the budget to pay for the services.

The Crosstown Shuttle is successful. There are 99,000 riders a year and 550 riders a day.⁴⁸ Ridership has been going up. People get on and off at different places. The recession has not affected the ridership levels on The Crosstown Shuttle, but there has been decreased ridership on the Embarcadero Shuttle that serves mostly commuters. Riders on both shuttles ride free.

It was interesting that the ridership on the Crosstown Shuttle was not affected by the recession. Perhaps transit agencies could provide a variety of transportation services to serve non-commuters so as to generate a more reliable revenue stream that is not dependent upon the economic swings of the area. It is not known, however, if the ridership would be the same had there been a fee charged.

The only reason a fee is not charged is that the costs of collecting fares would be more than the fare collected.⁴⁹

Marketing strategies were used to sell the service to potential riders. A graphics designer created a logo to place on the bus. The bus with its logo did the marketing for the service as it traveled around the town. Another strategy that was used was that an insert was placed in the city utility bills and was successful. Ms. Likens said that people actually read the insert instead of just throwing it in the recycling bin.⁵⁰

Allowing money in the budget for marketing is a must to generate interest and awareness of a new service. This would be important for policymakers to know in designing transportation funds and allowing these funds to go toward marketing efforts to promote a service. Another interesting strategy was to place ads in the utility bills.

NORTH JEFFCO SENIOR RECREATION CENTER

To address the occasional rides needed by seniors for social events at night, special trips can be organized through the city parks and recreation department or even senior housing centers to local restaurants and attractions like the ones provided by the Senior Recreation Center in North Jeffco, Colorado. The trips are set up so that people sign up for them in advance. The trips can be cancelled if there are not enough riders to make the trip. The sign up procedure ensures sufficient demand for the service. The trips are about three to eight hours long and usually involve a stop at a restaurant. Another feature of these trips is that there is a “Level of Exertion Scale” (LOE) that tells the participant how strenuous the trip is. This is beneficial for participants in deciding whether a trip is suitable for them. Another benefit is that there is an escort that goes along. The escort helps seniors feel more secure when making a trip.

The costs of the trips range from \$13 to \$46. Many of the trips do not include the price of the meal. The participant basically pays for the transportation. Packaging the ride and turning it into a special trip makes the cost of the ride more acceptable and even desirable. Interviewees in the study were willing to pay from \$2 to \$12 for a nighttime transportation service. It is not certain if all seniors can afford to pay the rates like the ones listed in the North Jeffco activities guide, but it may seem more appealing if the trip is packaged as a special event. Perhaps some of the FTA Section 5310 money can be designated to programs like these. Or, perhaps these trips can be designed so that relatives of seniors can purchase some of the trips and give them as a gift and get a tax deduction.

Lynn Specht, Recreation Coordinator of the North Jeffco Senior Recreation Center, was interviewed. A 23-passenger bus is used to transport people to different locations. They have one paid driver and one volunteer driver. There is no differentiation between which trips the drivers do. Lunch is usually covered for the driver. Escorts for the program are all volunteers. She usually has five escorts, and she does not have trouble finding them. The escort’s job is to make sure that everyone is actually signed up for the trip and that everyone stays together. The driver can focus on driving, while the escort watches the passengers. For longer trips, they have used a charter bus, but because of lack of funds, they have not done longer trips.

The trips usually fill up with an average of 15 to 18 per trip.⁵¹ Some restaurants and museums cover the cost of the driver’s meal or the cost of admission. In some cases, it is less expensive for everyone if the group pays the restaurant before the trip. Many of the trips to restaurants are planned so that the group comes at a non-peak time for the restaurant.

The “level of exertion” rating that is included on all trips has been helpful in helping potential riders to determine if they are able to make the trip. Ms. Specht says, “Sometimes we have to walk a long ways or we have stairs to climb.”⁵² Including some level of exertion rating for trips would be beneficial when trying to cater to seniors, considering many may have difficulty walking long distances or up and down stairs.

In response to the question, “What is it that you want them to get out of the trip?” she said that she wants people to get out and meet new people. According to Ms. Specht, “A lot of seniors are

stuck sitting at home.’⁵³ According to the interviewees in this study, many would not go out by themselves, so this arrangement would be effective.

An interesting occurrence is that many times seniors will sign up friends whose husbands recently died. According to Ms. Specht, “They look out for each other.”⁵⁴ Perhaps this is an indication of how valuable this program is; if other seniors are signing others up for trips, then it must be serving social needs as well as transportation needs. The effectiveness of a transportation program may be rated by how many customers actually sign up others to go on the trips.

Another strategy is to seek restaurants or businesses that will offer a discounted meal or discounted admission price to encourage seniors to come. Perhaps restaurants can earn more money during less crowded times during the week if they could attract seniors to come in a van or a small bus. Restaurants will also gain publicity through participating in a program like this.

Another reason that these trips are attractive is that they are designed so that other seniors or friends could go together. Many of the interviewees said that they would be willing to make a trip to a restaurant if there was a discount offered, but only if they could go with someone. Such a program would be good for a person who had to relocate from a home to a senior housing complex in another town. A few of the interviewees in the study did not know very many people who could provide rides because they had moved from another town to the senior housing complex. Such a program would also be good for widows and widowers.

These organized trips are very suitable for senior travelers because they are guided and are designed for them. The vehicles are also handicapped accessible.

The recreation coordinator crafts trip descriptions that would make anyone want to go on them. Here are excerpts from the North Jeffco Winter/Spring Activities Guide (2004):

Beauty and the Beast – Nomad Theatre

This beauty of a show is the original French tale that inspired the 1946 Jean Cocteau film. The entire theatre is transformed into the Beast’s enchanted castle, replete with magic and special effects throughout the lobby and auditorium. Grandparents may bring a grandchild (7 and older please.) Fee includes transportation & admission to the play.

LOE: mild

Res. Discount Fee: \$30 (non-res. \$39) per person

127501-TR Sun. 1-5 pm Jan. 11

Lunch at Maggiano's

Enjoy the fine Italian cuisine of one of Denver's newest restaurants. The outside looks like a castle and the inside feels like Italy. Delicious choices and generous portions will please all tastes and appetites. Fee includes transportation and escort. LOE: mild

Res. Discount Fee: \$12 (non res. \$16)
127502-TR Wed. 11 am-2 pm Jan. 14

Behind the Scenes at the Colorado Historical Society

Only a small fraction of this museum's collection is currently on exhibit. The remaining millions of historic artifacts, photographs and documents are stored in giant "closets" in the basement. This guided tour takes you to the collection's storage area. Fee includes transportation, escort and admission to the museum. LOE: mild (much of tour can be spent seated).

Res. Discount Fee: \$15 (non-res. \$19)
127506-TR Tue. 1-4 pm Feb. 10⁵⁵

These trip descriptions paint wonderful images and elevate the trips to exciting adventures. Many of these trip descriptions are explicit, appealing to all of the senses, and make the price more palatable or perhaps even reasonable. The Beauty and the Beast trip even lets a grandparent to bring a grandchild which would make the event also a fun way to share time with a family member.

One of the disadvantages of this program is that it does not provide transportation to and from the senior's home and the recreation center. To get to the recreation center, other transportation services may be needed. Perhaps the center could offer taxi vouchers for those who need rides home.

FUJI TOWERS

Virginia Ramos, General Manager of Fuji Towers, provided information regarding the development of a van service for the residents. She noticed that many residents depended upon public transportation and Outreach (paratransit) to get to appointments and to run errands. These means were not fitting needs of frail seniors and such modes of transportation are time-consuming. According to Ms. Ramos, “Sometimes it takes the whole day for them to go to and come from a doctor’s appointment using public transportation.”⁵⁶

Since she had worked in a facility that had a van, she decided to obtain one for Fuji Towers. She began a year-long fundraiser with a goal of \$40,000.⁵⁷ In addition, Fuji Towers obtained a \$25,000 grant from the Buddhist Churches of America and money from other sources.⁵⁸

Fund-raising efforts will continue to fund the service. They have started a Friday dinner program for the residents in which they prepare dinners and sell it to the residents. They make \$20 to \$50 each Friday.⁵⁹ Another source of revenue are the fees charged for one-day trips.

Residents use the van for various trips, including doctor’s appointments, grocery shopping, and going to the bank. They have used the van for one-day trips to Sausalito, Monterey and Carmel.

One of the rewards of the van service is the joy it brings to residents. According to Ms. Ramos, “They enjoy it tremendously, as they get a chance to see these places they haven’t seen in years.”⁶⁰

In answer to the question, “Are nighttime services planned?” she responded that there may be a possibility, depending on whether the driver is available. She states, “I think it will be nice to take them to see a play in San Francisco or San Jose.”⁶¹

The costs to operate the van are not expensive as the brand-new van has not even had its first maintenance service. The expenses incurred to date are the driver’s salaries, fuel, insurance, worker’s compensation, and payroll taxes. Insurance was found on their own with some recommendations from other facilities.

Though the van service is free for residents for trips other than one-day trips, they do collect donations of whatever each resident wishes to contribute in a locked tip box in the van.

The van has helped residents take care of their activities and doctor’s appointments. The van certainly supports Fuji Tower’s mission statement to improve the quality of life of the residents. Even more, the van service provides transportation for residents who would otherwise have no means of transportation to certain destinations. According to Ms. Ramos, “If a facility can take them out once in awhile to places they cannot go without transportation, it’s well worth it seeing their happy faces.”⁶²

Perhaps encouraging senior complexes to purchase their own vans to provide transportation to residents is a way to meet nighttime travel needs of seniors. One advantage is that the driver does not have to drive around to pick up the residents because they all live at the same place.

Certain trips can be set up in advance so that residents can sign up for them. Demand for travel can be managed. The van service also may be a source of revenue to fund the service if it charges for one-day trips and has a donation system for regular trips to the store, for example.

Another advantage is that the transportation service provided by the senior complex may decrease the demand for door-to-door paratransit service that is provided by the transit agency. Currently, for every paratransit trip that a transit agency provides through its broker, a certain amount of money is charged to the agency. For example, in Santa Clara County, the transit agency pays \$27 per trip provided through Outreach, its paratransit broker.⁶³

CHAPTER SIX

FTA SECTION 5310

Funding a transportation program is not easy. One of the federal funds that is designed for the elderly and disabled is the Federal Transit Administration's (FTA) Section 5310 program. But, because of the way it is structured, it may not be as effective.

Three recommendations to consider in improving the effectiveness of these funds are to allow money to be spent on equipment to collect fares; to encourage smaller organization to develop transportation programs; and to allow transit agencies more discretion.

The Crosstown Shuttle that was mentioned earlier does not collect fares because it is too expensive to collect fares. It may be beneficial to allow these funds to cover fare collection equipment to help fund small transportation services. With the improved technology, it may even be possible to use some kind of transponder that passengers can wave as they enter the bus or van instead of giving the driver money. Financing a way to allow an organization to collect fees to help sustain it may be helpful.

One of the disadvantages of the FTA Section 5310 funds is that it tends to favor larger agencies rather than smaller ones. The consequence of this is that if there is a large agency that serves the elderly and disabled populations, the transit agency will likely incur more costs.

According to an interview with David Ledwitz of the Accessible Services Division with VTA, private agencies need to be encouraged to provide transportation services because it will decrease the financial burden for the transit agency.⁶⁴ For example, for each ride that VTA provides through Outreach, its paratransit broker, it costs the agency \$27 per ride.⁶⁵ The alternative would be for more smaller organizations to receive the funding and provide the rides instead of relying on Outreach. There will likely be less demand and less expenses for the agency if a private organization were to receive funding.

Further, there is no funding to cover the operating costs of the paratransit program. FTA Section 5310 funds only cover 80% of capital purchases, like vehicles and equipment.⁶⁶ In addition, transit agencies are not encouraged to apply for it. If a transit agency does apply for it, it has to make a declaration in the newspaper of its intent to pursue FTA Section 5310 funds and send out notices to local, private non-profit agencies.⁶⁷

The FTA Section 5310 funds favor larger agencies rather than smaller ones. Currently the funding is distributed based on an appraisal of the application. The more people an agency serves, the more likely it will receive funding. The disadvantage of this process is that smaller organizations may not have a chance to get any funding if there is a large agency that handles a transit agency's paratransit customers.

Mr. Ledwitz suggested FTA Section 5310 money be distributed to transportation planning agencies based on a formula. Mr. Ledwitz states:

“Another idea that might deserve more thought would be for the State to allocate the expected Section 5310 funds (between \$10 and \$11 million per year) to the local transportation planning agencies based on a formula . . . distributed by the number of persons with disabilities, residential density, and other factors within their jurisdictions. To mitigate the concerns of rural agencies, a rural funding baseline level could be established.”⁶⁸

Currently, the application process is long, taking up to two years and is burdensome for the applicant. Several agencies are involved in the process. It may be more efficient to allocate money to the transportation planning agencies directly.

CONCLUSION

The demand for more transportation services for seniors will likely increase as the population ages and becomes more demanding as well. The baby boomers will likely have a large impact in shaping the future's transportation services. Developing nighttime transportation services for seniors is a challenge because of special security needs, of various degrees of demand, of lack of information of specific destinations, and of lack of resources. Successful models of other transportation services for seniors include cooperative relationships. The North Jeffco Senior Recreation Center showed cooperative relationships between a senior recreation center and volunteers and businesses. The Crosstown Shuttle Program demonstrates a cooperative relationship between a city transportation division and a transit agency. Transportation funding is a major barrier to providing more services. Since funding structures determine what will happen in the future, more flexibility in the funding of transportation services for seniors may encourage other organizations and businesses to develop their own transportation services. Allowing other organizations and businesses to provide specialized transportation services will likely ease the demand on transit agencies and would likely provide better service.

APPENDIX A

<p>Graduate Student Conducting Research on the Nighttime Transportation Service Needs of Seniors</p>
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Melina Takahashi is a graduate student at the Mineta Transportation Institute and is conducting research on the nighttime transportation service needs of seniors. She is seeking seniors who do not drive at night and who rely on other transportation modes besides driving oneself. The purpose of the study is to assess the existing modes of nighttime transportation services and to determine what the preferences are of seniors.

If you are interested in being interviewed for this project, please contact Melina at (408) 260-2533.

APPENDIX B

Interviewer Agreement

Mineta Transportation Institute
210 North Fourth Street
Fourth Floor
San Jose, CA 95192-0219
(408) 924-7570

Interviewer Agreement

I, _____, in view of the historical and scholarly value of the information contained in the interview(s) with Melina Takahashi (student conducting research for the Capstone project) knowingly and voluntarily permit the Mineta Transportation Institute the full use of this information, the transcripts and all other material in the accession, and hereby grant and assign to the Mineta Transportation Institute all rights of every kind pertaining to this information, whether or not such rights are now known, recognized, or contemplated. I understand that my comments may be incorporated into a Capstone paper that may be posted on the web. I understand that I will be provided with a transcript of this interview and will have an opportunity to clarify any information before it is published.

APPENDIX C

Questions for seniors

1. Can you tell me how old you are?
2. Where do you travel at night? (Meetings, social events, family, friends, church, stores)?
How many miles do you usually travel? How often?
3. How do you travel at night?
4. Are your nighttime transportation needs met? Why or why not?
5. Complete this sentence: If only I could have a nighttime transportation service that, I would be happier.
6. Are there times that you could travel by bus or light rail, but you need to get a ride getting back home?
7. What is the most you would pay for a nighttime transportation service?
8. Would you consider making the trip to a restaurant using a nighttime transportation service, if the restaurant offered a discounted meal?
9. When traveling at night, what are the pro's and con's of each?
 - a. Driving your car (if applicable)
 - b. Riding with a Friend
 - c. Riding with a Family Member
 - d. Public Transportation
 - e. Taxi
 - f. Outreach
 - g. Walking
10. Is there anything else you would like to add?

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- ⁷ Ibid.
- ⁸ Dychtwald and Flower, Age Wave, 11.
- ⁹ Ibid., 21.
- ¹⁰ Rosenbloom, "The Mobility Needs," 1.
- ¹¹ Ibid.
- ¹² Alsnih and Hensher, "The Mobility and Accessibility," 4.
- ¹³ Ibid.
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- ¹⁹ Rosenbloom, "The Mobility Needs," 12.
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- ²⁴ Ibid., 12.
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- ³⁵ Coughlin, "Transportation and Older Persons: Perceptions and Preferences; A Report on Focus Groups" (Washington, D.C: AARP, 2001): 15.
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- ³⁸ Rosenbloom, "The Mobility Needs," 4.
- ³⁹ Rosenbloom, "The Mobility Needs," 14.
- ⁴⁰ Rosenbloom, "The Mobility Needs," 14.
- ⁴¹ Interview with Jim Unites, January 29, 2004.
- ⁴² Interview with Bill Schwarz, May 5, 2004.
- ⁴³ Interview with Bill Schwarz, May 5, 2004.
- ⁴⁴ Interview with Bill Schwarz, May 5, 2004.
- ⁴⁵ Interview with George Patrick, April 7, 2004.
- ⁴⁶ Interview with Gayle Likens, May 14, 2004.

- 47 Interview with Jim Unites, January 29, 2004.
- 48 Interview with Gayle Likens, May 14, 2004.
- 49 Interview with Gayle Likens, May 14, 2004.
- 50 Interview with Gayle Likens, May 14, 2004.
- 51 Interview with Lynn Specht, May 11, 2004.
- 52 Interview with Lynn Specht, May 11, 2004.
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- 55 North Jeffco Winter/Spring Activities Guide, p. 22.
- 56 Questionnaire completed by Virginia Ramos, May 21, 2004.
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