Austin Cemeteries: A Comprehensive Business Analysis

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Executive Summary

This report focuses on industry and demographic trends, and the impact of those trends on Austin's cemeteries. The report also examines how well Austin is responding to these trends and investigates the existing contract with InterCare. The information presented in this report also includes analysis of historical and future cemetery demand.

Specific Findings Include:

The mid-range forecast of the cemetery and crematories industry overall and for the City of Austin indicates slightly declining demand.

City of Austin cemeteries deliver a "standard of care" appropriate for a municipal cemetery and with current pricing levels.

The cremation rate has a substantial impact on the number of families seeking traditional burial services. Cremation rates are trending higher. The cremation rate is currently 40 percent in Austin and at current trends will increase about two percent a year until a maximum rate of approximately 65 percent in 2021.

The City of Austin is one of three large cities in Texas that operate active cemeteries and is the only major city in Texas that contracts out maintenance.

Industry "standards of care" specific to local government cemeteries are typically general in nature. The standards of care outlined in the current contract with InterCare should effectively guide monitoring but there is no evidence that these guidelines are being used for this purpose.

Based on a rough comparison of job titles, InterCare employee salaries are higher than the industry average. However, these comparisons do not take into account actual job descriptions. InterCare's employees are highly qualified, experienced, and credentialed.

Using the average cost for plot, City of Austin fees are higher than municipal cemeteries state average. Taking into account median per capita income, Austin's cemetery fees are in line with other municipal cemeteries.

Raising fees to fund a variety of improvements (leveling monuments, removing tree ball moss, and preservation of the perpetual care fund) would price City of Austin cemeteries outside of the public sector mean and at the same level as private sector cemeteries.

There over 35,000 plots remaining for sale or available for development and sale. At the current average rate of 600 sales per year, this supply will be exhausted in 57 years or 2067. However when population, mortality rates, cremation rates are taken into account, 53 percent of the supply will still be available in 2040.

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Tables and Figures

Section 1: Overview of the Cemetery Industry

Section 1 outlines the major trends in the cemetery industry in the United States. The implications for these trends for City of Austin cemeteries are examined in Section 2.

1.1 Industry Trends

In 2009, the total market for Cemeteries and Crematories services was $2,957 million. While the market for cemeteries and crematories is considerable, the industry has not experienced significant growth since 2004. In fact, compared to 2008, 2009 market size declined by 1 percent. While a 1 percent decline does not indicate rapid decline, forecasts for the industry are modestly negative in terms of revenue growth.

Table 1: Market Size and Average Characteristics of Cemeteries and Crematories

Metrics	2004	2005	2006	2007	2008	2009
Market Size ($ millions)	$2,886	$2,823	$2,869	$2,951	$2,997	$2,957
Total Firms	4,516	4,414	4,349	4,307	4,230	$4,180
Total Locations (Headquarters and Branches)	5,806	4,414	4,349	4,307	5,438	4,180
Total Employees	38,051	36,416	35,417	35,099	34,893	34,112
Average Revenue Per Firm ($ thousands)	$639	$640	$660	$685	$708	$707
Average Employees Per Firm	8	8	8	8	8	8

Source: Analysis of US Census, Bureau of Labor Statistics reports 2004-2009.

The mid-term revenue forecast for cemeteries and crematories industry is modestly negative. Taking into industry trends, revenue is expected to decline slightly from $2.96 Billion in 2009 to $2.88 Billion in 2014.

Table 2: Mid-Range Revenue Forecast for Cemeteries and Crematories						
Forecast	2009	2010	2011	2012	2013	2014
Revenue ($ billion)	$2.96	$2.93	$2.92	$2.90	$2.89	$2.88
Growth Rate		-0.8%	-0.5%	- 0.5%	-0.5%	-0.2%
Source: AnythingReserach.com Economic Analysis						

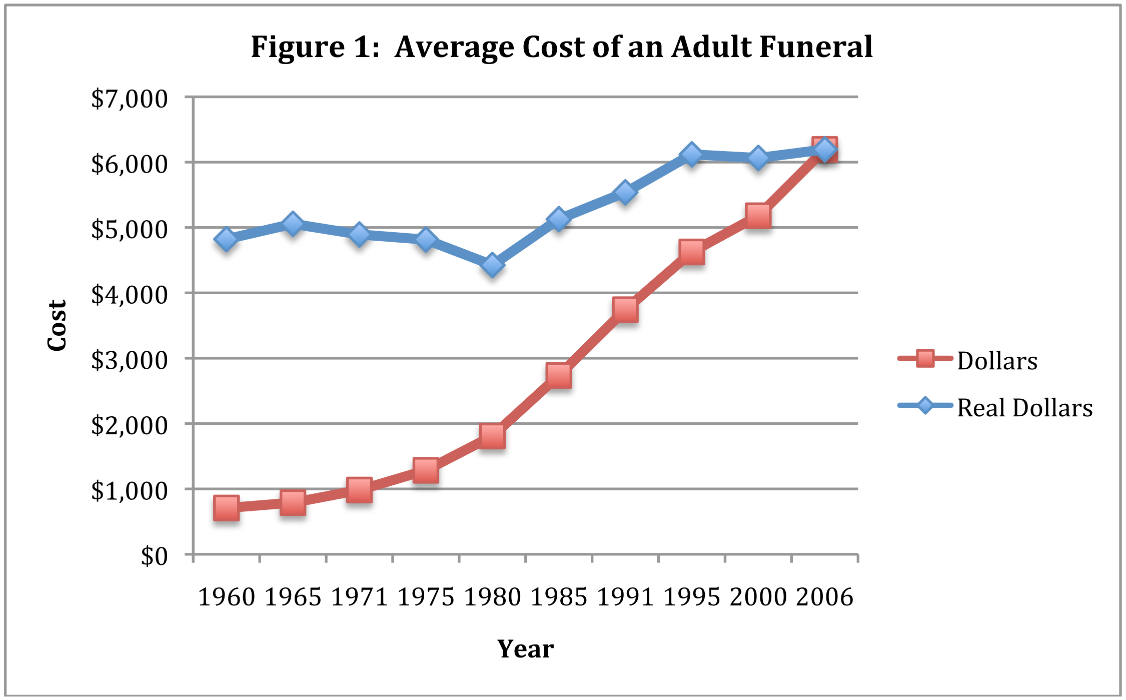
This trend is accounted for by several factors. The mortality rate is decreasing meaning that the number of people requiring cemetery services has remained stable even as the population ages. Another reason for the negative trend is increased choice of less expensive cremation options.

Despite the trends, cemeteries are still profitable enterprises. Table 3 presents the financial provide of the average cemetery firm. The financial profile serves as a rough benchmark for profitability. The average cemetery has a net profit of 8% of total revenue. The typical cemetery business' operating expenses are 63 percent of total revenue.

Table 3: Financial Profile of the Average Cemetery		
	Industry Average	**Percent of Sales**
Total Revenue	$707,481	100%
Operating Revenue	$678,604	96%
Cost of Goods Sold	$183,787	26%
Gross Profit	$494,817	70%
Operating Expenses		
Pension, profit sharing plans, stock, etc.	$3,077	0%
Repairs	$9,835	1%
Rent paid on business property	$63,680	9%
Charitable contributions	$388	0%
Advertising	$13,315	2%
Compensation of officers	$30,644	4%
Salaries and wages	$133,965	19%
Employee benefit programs	$10,132	1%
Taxes and licenses	$25,804	4%
Bad debts	$1,977	0%
Depreciation	$19,120	3%
Amortization	$7,417	1%
Other operating expenses	$124,850	18%
Total Operating Expenses	$444,191	63%
Operating Income	**$50,625**	**7%**
Non-operating Income	**$28,674**	**4%**
EBIT (Earnings Before Interest and Taxes)	$79,299	11%
Interest Expense	$16,105	2%
Earnings Before Taxes	**$63,194**	**9%**
Income Tax	$5,413	1%
Net Profit	**$57,781**	**8%**

1.2 Burial Costs Trends

A major trend driver is the increasing funeral and burial costs. As costs continue to rise, then individuals purchasing death services will be compelled to choose other ways to memorialize loved ones. The average cost of an adult funeral has increased from $708 in 1960 to $6,195 in 2006. In terms of inflation adjusted dollars, the cost of a funeral has increased from $4,822 in 1960 to $6,195 in 2006. The cost of a funeral in real dollars has been around $6,000 since 1995 even though the price is actual dollars has increased from $4,626 to $6,195 from 1995 to 2006 (National Funeral Directors Association, General Price List).



1.3 Industry Responses to Trends

Three responses to the trends can be logically linked to the increasing prices for an adult funeral and burial: (1) the increase in cemetery pre-sales, (2) increased use of cremation services, and (3) green burials. One of these responses (pre-sales) brings a potential revenue benefit to the cemetery industry and one represents a potential threat to revenue (cremation). Green burials are an attempt to grow the market by responding to increasing environmentalism.

Pre-Sales Trends

Pre-sales provide revenue in current years that can be used to address increases in costs to maintain a cemetery. Pre-sales also enable lower-income residents to pay for burial costs (cemetery plot) over time. Because of the unexpected nature of many deaths, low-income families experience considerable financial stress to pay for a cemetery plot in full prior to interment. With proper management pre-sales revenues can be used to help build a perpetual care fund.

An American Association of Retired Persons study found that 27.5 percent of people paid in advance for funeral and/or burial services. Pre-sales are often aggressively marketed by private-sector cemetery businesses. Aggressive marketing angers many people and pre-sales have a bad public image, but the increasing purchase of cemetery pre-sales suggests a need and demand. Municipal cemeteries, if they are to follow this industry trend, must more actively market pre-sales. Failure to clearly offer an attractive pre-sales program may lead families to choose private sector options even though they may be higher priced.

Cremation Rates and Trends

Another response to increasing funeral and burial costs is the trend toward cremation over traditional burial. Thirty-four percent of deaths resulted in cremation in the United States in 2006. In comparison, 24 percent of deaths in Texas in 2006 resulted in cremation. The cremation rate varies greatly across the US. Texas' cremation rate is low when compared with states such as Nevada and Washington that both report a cremation rate of 68% (See Figure 2).

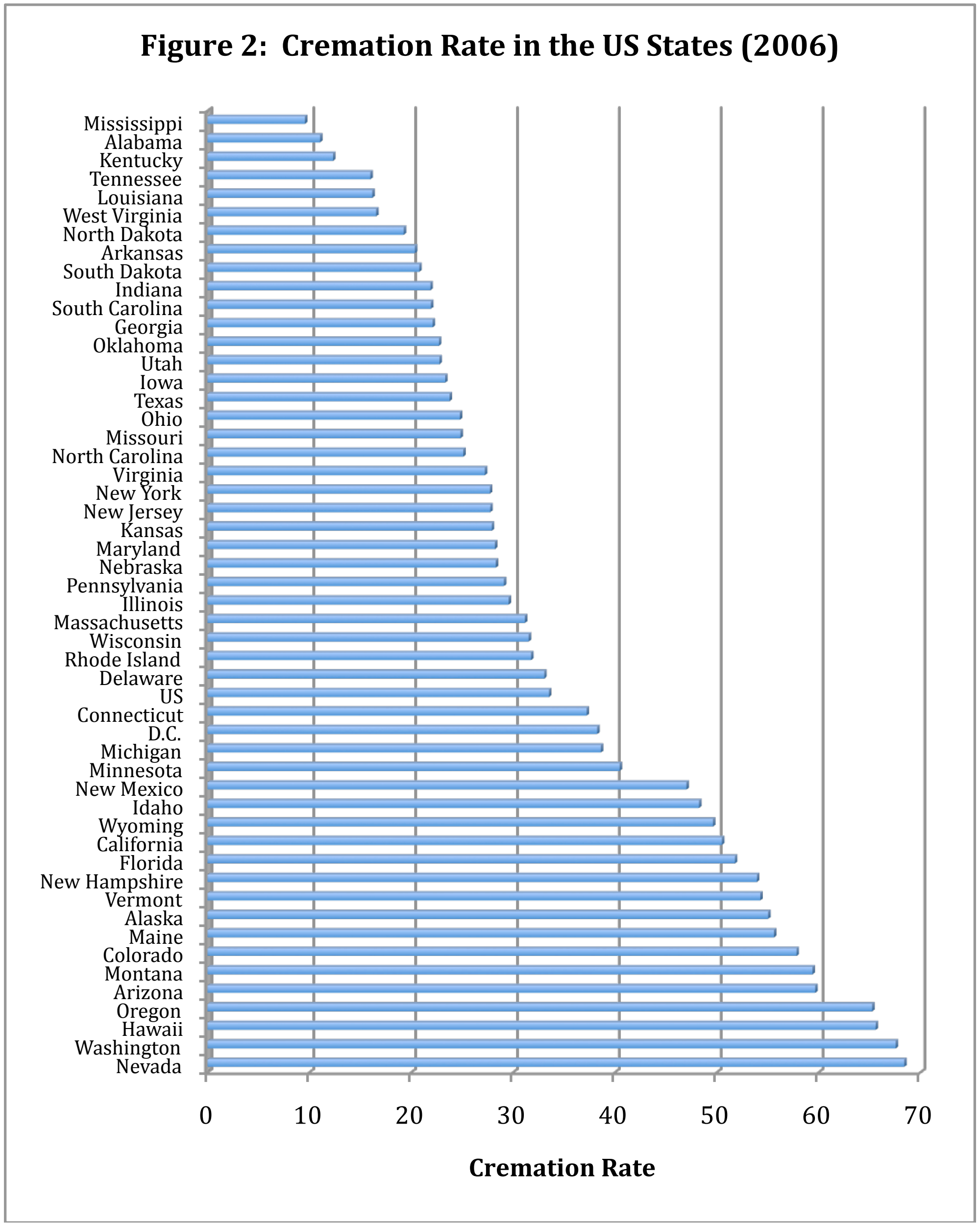


Figure 2: Cremation Rate in the US States (2006)
Mississippi
Alabama
Kentucky
Tennessee
Louisiana
West Virginia
North Dakota
Arkansas
South Dakota
Indiana
South Carolina
Georgia
Oklahoma
Utah
Iowa
Texas
Ohio
Missouri
North Carolina
Virginia
New York
New Jersey
Kansas
Maryland
Nebraska
Pennsylvania
Illinois
Massachusetts
Wisconsin
Rhode Island
Delaware
US
Connecticut
D.C.
Michigan
Minnesota
New Mexico
Idaho
Wyoming
California
Florida
New Hampshire
Vermont
Alaska
Maine
Colorado
Montana
Arizona
Oregon
Hawaii
Washington
Nevada
0
10
20
30
40
50
60
70
Cremation Rate

According to the Cemetery Association of America, 44 percent of deaths in the United States in 2025 will result in cremation. There are reasons to expect that the cremation rate will be much higher in communities like Austin (see forecast model below). The cremation rate will likely increase beyond 50 percent and over the next decade and eventually approach the 70 percent range.

Willingness to pay high costs will decline with increased acceptance of cremation. Without a doubt, there is increased choice of cremation over traditional casket burial. Fully understanding requires consideration of cultural, religious, and contextual factors.

For example, there are racial and religious differences in cremation rates. As a percentage of all cremations in the United States, 88 percent were White, compared to 6 percent African Americans, 3 percent Hispanics, and 3 percent Asians (Cremation Association of North America 1996/97 Cremation Container, Disposition and Service Survey). Based on this data, and taking into account the percent of total deaths across racial categories, Whites are slightly overrepresented in terms of cremation (the percent of deaths in 1991 that were white was 81% and the percent of cremations was 88%).

The assertion that minorities, Catholics, and other religious, racial, and ethnic groups are opposed to cremation should be carefully reexamined given its relevance to demand for cemetery services and the future demographic profile of the US and Texas. While there are observable ethnic and racial differences in creation rates, African Americans and Latinos may come to accept cremation as this option becomes the norm among the "dominant" community. This process of acculturation is powerful even on deeply embedded cultural and religious values. For example, nearly 100 percent of Japanese are cremated in Japan, whereas 50 percent of Travis County residents of Japanese ancestry are cremated (TDSHS Trends in Methods of Disposition). In Minnesota, ethnic differences in cremation rates present in 1990-1992 had essentially vanished by 2004-2006 (Minnesota Department of Health, Center for Vital Statistics, Minnesota Vital Signs April 2008, Vol 4, No. 1).

Approximately 46 percent of the cremated remains are disposed of by burial in a plot, placed in a columbarium, scattered on dedicated property, not picked up and stored in the cremation facility, or placed in a common grave. The remaining 54 percent of cremains are taken home or scattered on water or land (CANA 1996/1997). In other words, there is no way to generate revenue from around 54 percent of cremations.

Assuming 50 percent of families choose cremation and 50 percent of those individuals choose to take cremains home, 25 percent of all deaths will not consume cemetery services and the cemeteries will compete for the remaining 75 percent. Cemeteries, including municipal cemeteries, ignore this trend at their financial peril.

Green Burials

The green burial movement is, in part, a response to the trend of increasing costs as well as the cultural shift toward environmentalism. Green burial services represent another important industry trend that municipal cemeteries must address.

Green burials are conducted in ways that do not use toxic chemicals and non-biodegradable materials. This trend toward green burials has the potential to accelerate as people become increasingly environmentally conscious. According to a 2007 AARP survey 21 percent of Americans older than 50 stated they would prefer an "eco-friendly end of life ritual" (Dulai, June 15, 2010, Houston Chronicle). Younger Americans who have been socialized to be more environmentally conscious will likely express an even greater preference for green burials.

There has been some resistance to green burials. For example, some cities have passed ordinances banning green burials. This opposition is often couched in terms of public health concerns. However, there is no evidence that green burials are harmful to public health and advocates of green burials attribute political pressure from funeral and cemetery industry for anti-green burial sentiment (www.funerals.org).

Traditional burial does have a sizeable economic and environmental impact.   Americans spend $15 billon on death care services each year leading to burial of “enough embalming fluid to fill eight Olympic sized pools, more steel that was used to built the Golden Gate Bridge, and enough reinforced concrete to construct a two-lane highway from New York to Detroit.

All providers of cemetery services, especially local governments that are subject to political influence, must respond to this trend. The distinct role of local government provisions in cemetery services is addressed in the next section.

1.4 Types of Cemeteries

As with many services, cemeteries services are provided by the public, private, and nonprofit sectors. In this “mixed” economy, provision by multiple sectors occurs for reasons that can be identified in economic, political, and social theory. These theories inform and clarify local government’s role in cemeteries and maintain focus on the niche that publicly provided services occupy.

Private-sector cemeteries typically offer a higher service quality based on what people are willing to pay. In general, private-sector cemeteries tend to have higher standards of care, charge more, and fund perpetual care. Provision of goods and services at a particular service-level responds to market demands.

For a variety of reasons, the private-sector can fail to produce the goods and services demanded by consumers. For example, small communities without sufficient population or income to support a viable private sector cemetery would go un- or under-served by a private-sector cemetery.   This is an example of “market failure.” The public sector’s involvement is justified because of market failure—or the inability to provide a good or service at a price that consumers are willing to pay. Because of this higher price, government gets involved in the market.

Public involvement in cemeteries provides a subsidy for local residents. Public sector cemeteries are more responsive to citizen demands for free expression of bereavement because, as a public facility, users feel that they have rights as citizens as well as consumers. As a result, public-sector cemeteries are usually less restrictive in terms of rules and regulations than private sector cemeteries.

Memorializing the dead is a religious activity and as a religious activity there are many rituals associated with particular religions. In cases when there are particularistic community preferences, then non-profit sector organizations get involved due to "government failure." Government cannot respond to the particularistic preferences of the wide range of different groups to the extent that some narrow interests desire. For example, a Catholic nonprofit cemetery would be must more willing to allow for Day of the Dead celebrations with food, music, alters, candles, and other traditions than a public sector or private sector cemetery. Nonprofit cemeteries, because they can rely on volunteers and members of voluntary associations, can afford to provide services at much lower costs that public and private sector cemeteries.

There is no clear trend toward one method of service provision or another. While few—if any—large cities are contemplating initiating provision of cemetery services, there is nothing inherently outside of the logic of the market model that would prevent them from doing so. The key in this regard is that if a local government is currently in the cemetery business, it should attempt to fulfill their sector-specific role. A proper focus on sector-specific role is part of meeting best practices for municipal owned cemeteries.

1.5 Best Practices for Municipal-Owned Cemeteries

Best practices for municipal cemeteries include a strategic plan that addresses the market tends identified above. In addition, when local governments provide cemetery services, they must fulfill citizen expectations for service quality, transparency, and responsiveness. Local governments that provide cemeteries services have made use of technology to enhance transparency and developed commissions to facilitate direct citizen involvement in the monitoring of cemetery maintenance and other issues.

Transparency

Two cities in Texas have done a particularly effective job in using technology to enhance transparency. The City of Lubbock makes extensive information about cemetery operations readily available on the city website. For example, the City of Lubbock posts monthly sales data on the website. Rules and regulations, standard operating procedures and all forms are also posted. The City of Lubbock's level of information dissemination is no doubt partially a function of the fact that cemeteries operate as an independent department and the appointed officials are clearly responsible for cemetery operations. In this regard, an independent department, while not feasible in many cases, is a best practice as well. Lubbock provides an excellent service to citizens interested in purchasing cemetery plots and allow for people to monitor the management of the cemeteries on-line. These services are important given the mobility of the population.

The City of Grand Prairie sets the standard for best practices in two ways. First, their website is of the high quality and has the appearance of a private sector cemetery. In Grand Prairie, the cemetery appears to be an independent identity and the fact that Grand Prairie Memorial Gardens is city owned and operated is noted as an afterthought. The reasons that Grand Prairie can be seen as a best practice in transparence is that they offer a full range of products including a columbarium wall, mausoleum crypts, and cremation niches. There are also different pricing levels based on different sections of the cemetery. These different pricing levels are associated with what is allowed in terms of monuments and the aesthetic beauty of the area. The best practice of setting clearly service expectations is also a best practice in transparency.

Standards of Care

The best contracts include standards of care that allow for effective contract management. "Standards of care" use a "reasonable person" standard. The reasonable person standard is gauged in terms of professional norms and expectations.

Standards of care applied to a cemetery must take into account: (1) the age of the property; (2) the resources available or willing to be committed to the property; (3) the climate; and (4) the equipment available for maintenance.

Cemeteries avoid making clear statements regarding standards of care because the nature of public sector consumption of cemetery services would undermine these standards. For example, certain forms of memorialization undermine high "standards of care." Family members often place fences and benches in and around cemetery plots in clear violation of regulations. This practice creates the appearance that "standards of care" are not being met. In addition, these forms of memorialization are obstructions that make maintenance more costly and difficult and are barriers to a "high standard-of-care." A "reasonable person" standard suggests that these forms of memorialization associated with the grieving process must be balanced against the "standards of care."

Communicating standards of care in the context of a municipal cemetery is the key. For example, one city states that the "Town Council will maintain the highest possible standards of care and dignity, whilst at the same time respect the rights of the individual and not placing undue restriction on individual choices" (Bondmin, UK). A formal recognition of this balancing approach is an important best practice.

Cemetery Commission

Another best practice is citizen involvement in monitoring through a citizen advisory board. In cases when cemetery maintenance and other services are contracted out, citizen involvement is even more important. The City of San Marcos has a very active cemetery commission that gives voice to citizen concerns and preferences and communicates these preferences to both the city Parks Department and the contractor (InterCare).

Cemetery Commission members have a high level of interest and expertise in the area of cemetery management. In the case of San Marcos, the Cemetery Commission: (1) reports to the city council on the existing contract; (2) conducts monthly inspections with InterCare; (3) makes recommendations on fees; and (4) follows up on complains.

The cemetery commission also works with a nonprofit organization (Friends of the San Marcos Cemetery) that is focused on raising funds to support the preservation of the cemeteries. Because of this relationship, the over $20,000 is raised per year including a 5K run called "From Here to Eternity." This event included numerous corporate sponsors including banks and funeral homes.

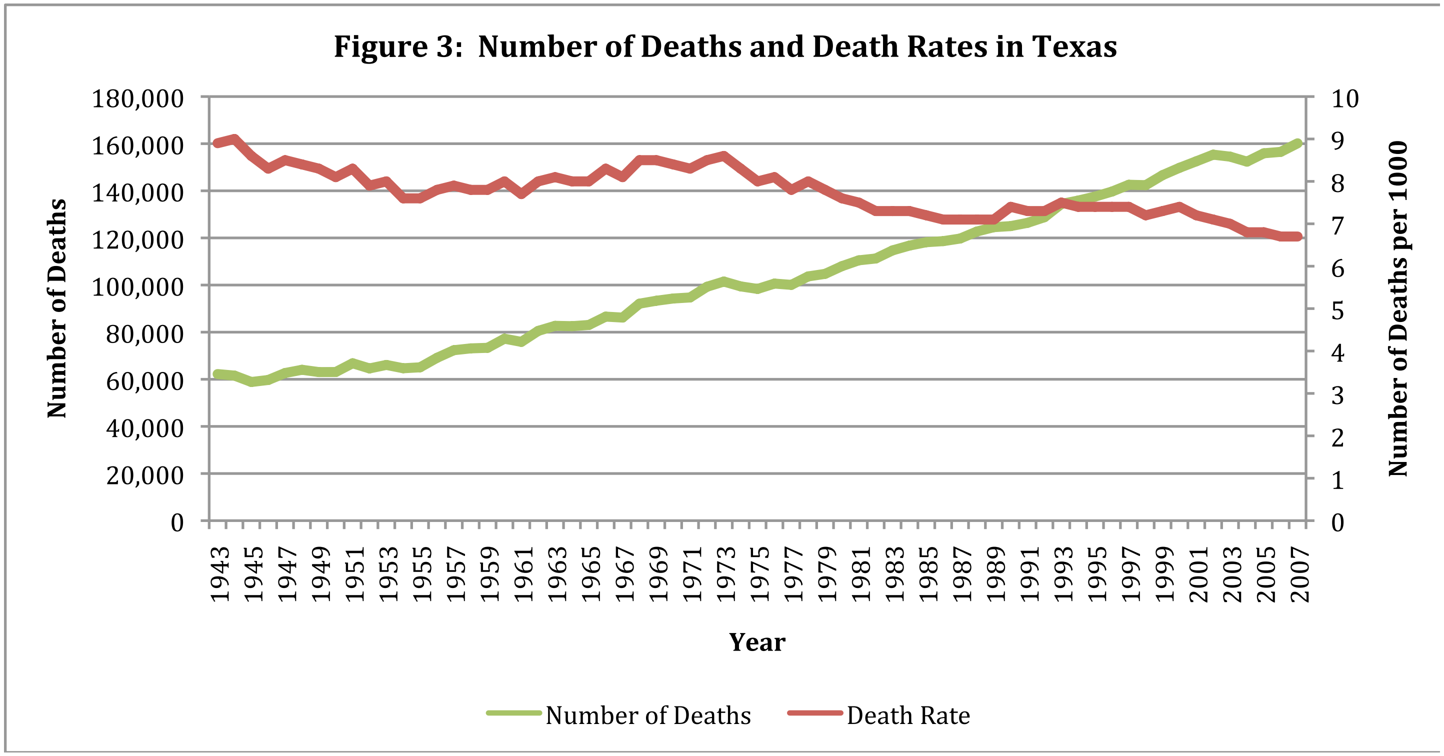
This level of citizen involvement is likely a result of this institutionalized link to cemetery management (the cemetery commission). Citizens are more likely to treat the cemeteries like a park or community amenity if they are involved in cemetery management.

Section 2: Regional Trends Facing City of Austin Cemeteries

This section applies trends and issues identified in Section 1 and discusses how the City of Austin has responded to the trends. Overall, there has been no response to these industry trends and best practices. This lack of a clear business strategy exposes City of Austin Cemeteries to considerable risk in terms of the financial soundness. Regional market trends also suggest declining revenues. As a result, the revenue model is also examined in this section.

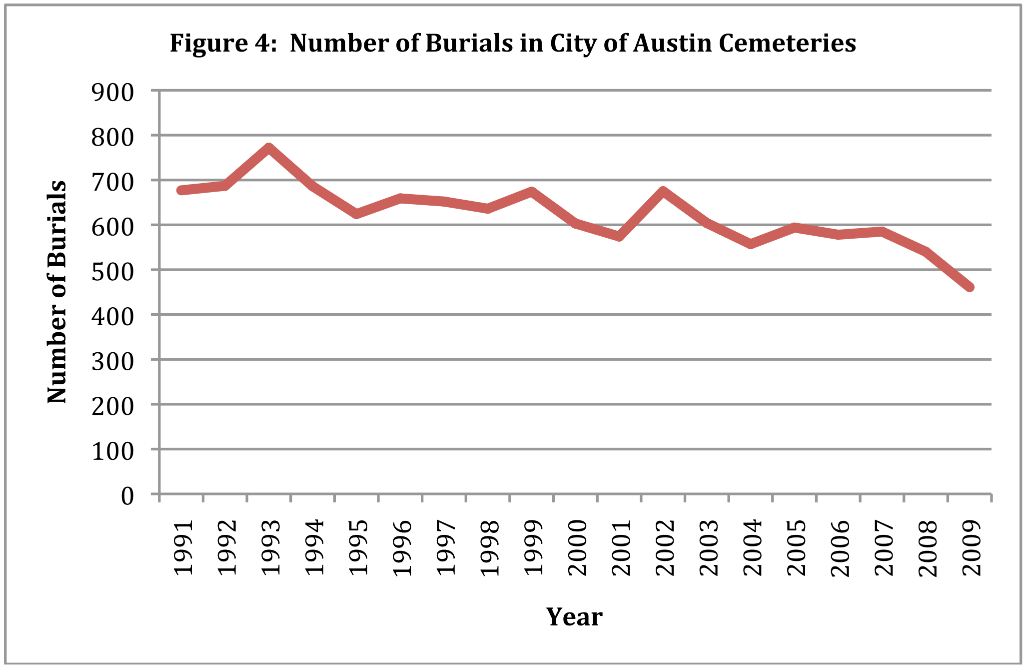
2.1 Regional Demographic and Interment Trends

In 2007, the mortality rate for the US overall was 803.6 deaths per 100,000 population (CDC deaths.htm) or a crude death rate of 8.0 per 1000 residents. Texas' death rate in 2007 was 6.7 per 1000. As can be seen in Figure 3, death rates have been steadily declining in Texas. However, given the increasing population the number of deaths has been steadily increasing.



In Travis County, the crude death rate in 2007 was 4.7 per 1000 or 4,468 deaths. Of the 4,468 deaths in Travis County, 3,674 were in Austin Texas.

Figure 4 presents the number of burials in City of Austin cemeteries over time. The city trends reflect the national trends of a slight decline in the number of cemetery burials. The number of burials in Austin cemeteries has declined from 677 in 1991 to 461 in 2009. This decline is likely due to the same trend drivers defined above—increasing funeral and burial costs are leading more families to chose cremation and other options.



Bi-variate regression analysis on burial data from 1991 to 2009, finds a statistically significant negative trend in the number of burials. Each year predicts a decrease of 10 burials each year. After ten years (2020), the forecasted number of burials would be 100 less or 361 [Y= 724 – 10X]. This relationship is statistically significant at the .01 level suggesting this declining trend is not occurring by chance. The R^2 is .69 which indicates that the factor of time accounts for 69 percent of the variation in the number of burials.

According to InterCare statistics, 585 people were buried in Austin cemeteries in 2007 and there were 4,468 deaths in Travis County is 2007. This indicates that the City of Austin cemeteries have a 13 percent market share assuming that all people who died received a traditional burial. When a cremation rate of 35 percent is assumed, then the City of Austin's market share of 2,904 potential burials is 20 percent.

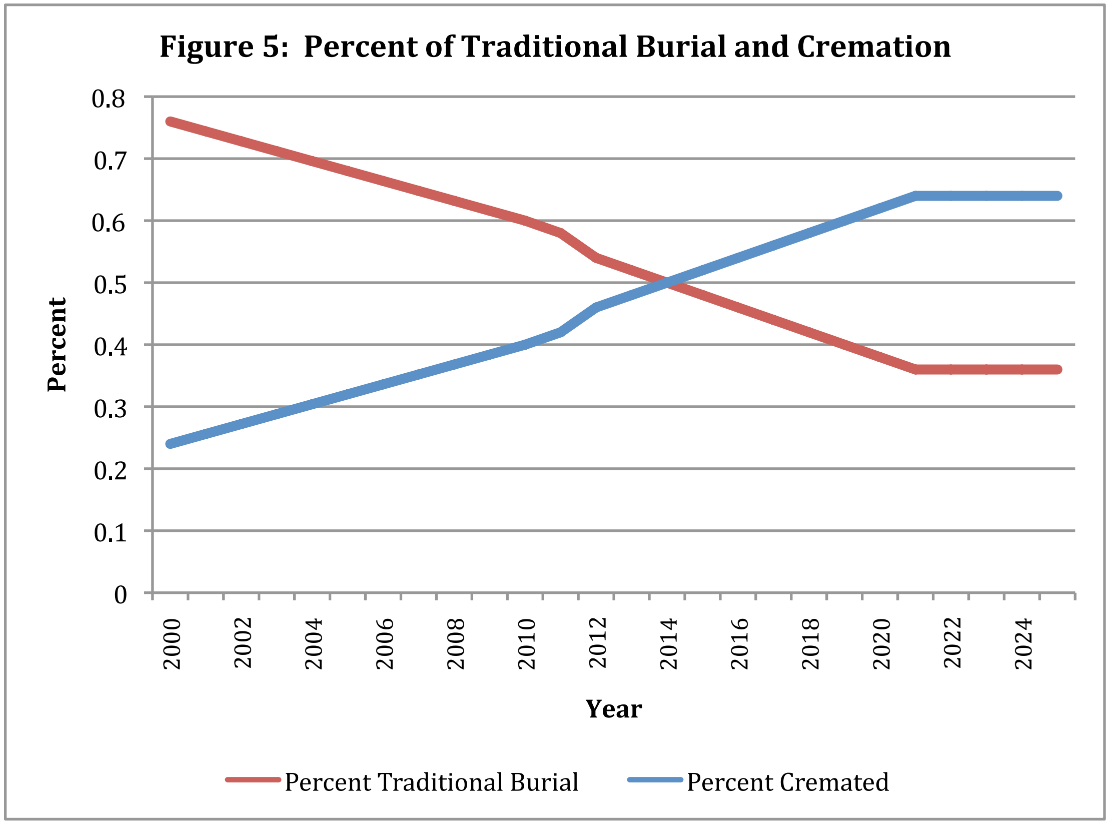
Cremation Rates in the Austin Metropolitan Area

The analysis above indicates that the cremation rate is an important regional trend driver for market share and potential revenue. This section explores cremation trends in the state and region.

In Texas, burial is the most frequent form of disposition of remains. African Americans are most likely to choose burial (91%), followed by Hispanics (84%), Whites (77%) and "Others" (56%) (TDSHS Trends in Methods of Disposition in Texas, 1989-2003).

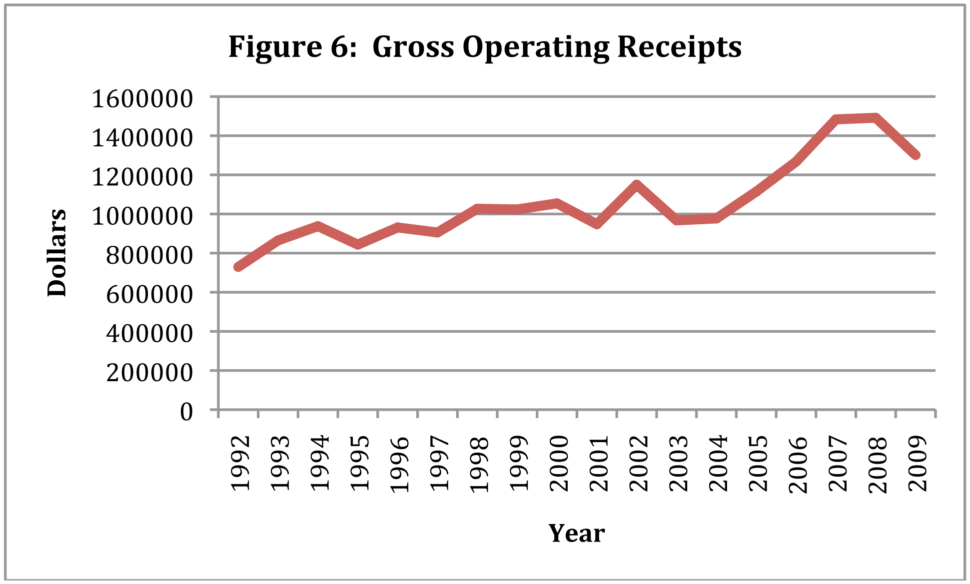
Based on available data, the cremation rate in Travis County was 24 percent in 1999 and 32 percent in 2003. An individual who works in the cremation industry in Travis County estimated the cremation rate is now approximately 40 percent. The cremation rate is assumed to have increased by 1.6 percent per year between 1999 and 2010. After 2010, the cremation rate is estimated to increase at a rate of 2 percent per year given the likelihood that the trend will accelerate given current economic conditions.

The cremation rate in Austin should steadily increase until the cremation rate reaches a maximum of between 60 and 70 percent observed in other states. Figure 5 presents a forecast model. If the cremation rate continues to increase about two percent per year the cremation rate in Travis County will be 50 percent in 2019 and 70 percent in 2029.

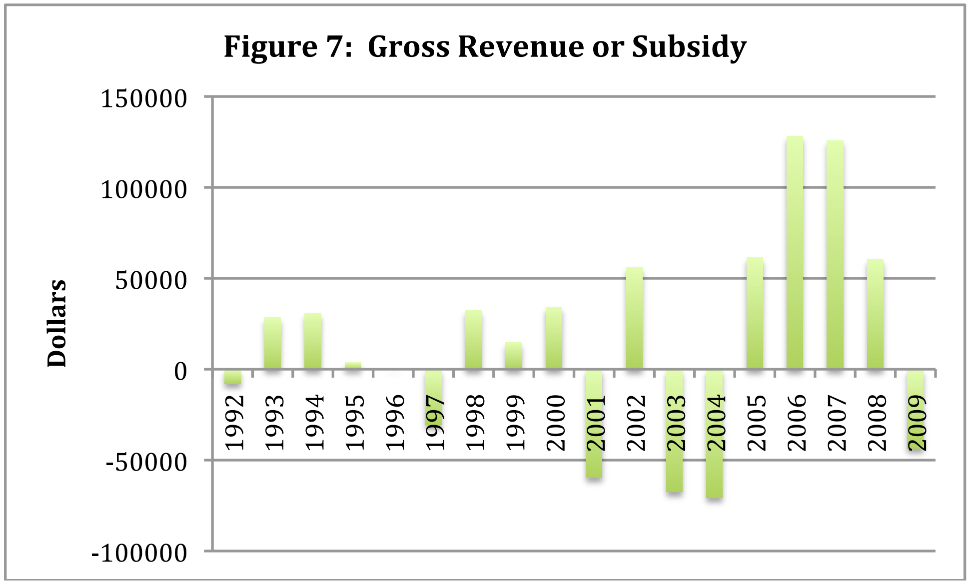


Annual Budget and Expenditure Trends

National and regional decreases in the number of burials suggest that the City of Austin may be facing future budget shortfalls. Figure 6 presents the budget data for the city of Austin Cemeteries from 1992 to 2009. Gross Operating Receipts have increased from $729,248 to $1,301,053 in 2009. The peak in GOR was $1,491,657 in 2008. The City of Austin has not seen a decline in revenues due to increases in fees associated with cemetery plots and other costs associated with burial. Some evidence of the slight decline in the number of burials can be seen after 2007, when revenues flattened and then declined. While, the last three years do not constitute a trend, there is potential for continuing declines in revenue.



The relevance of these trends for the City of Austin with respect to the contract is manifested in the amount the city receives as revenue from InterCare or pays as subsidy to InterCare. Figure 7 presents the amount of revenue or subsidy over the entire contract period. Net subsidy/revenue to city of Austin is not used because this amount is adjusted by the cost of the amount of additional services requested by the City of Austin.



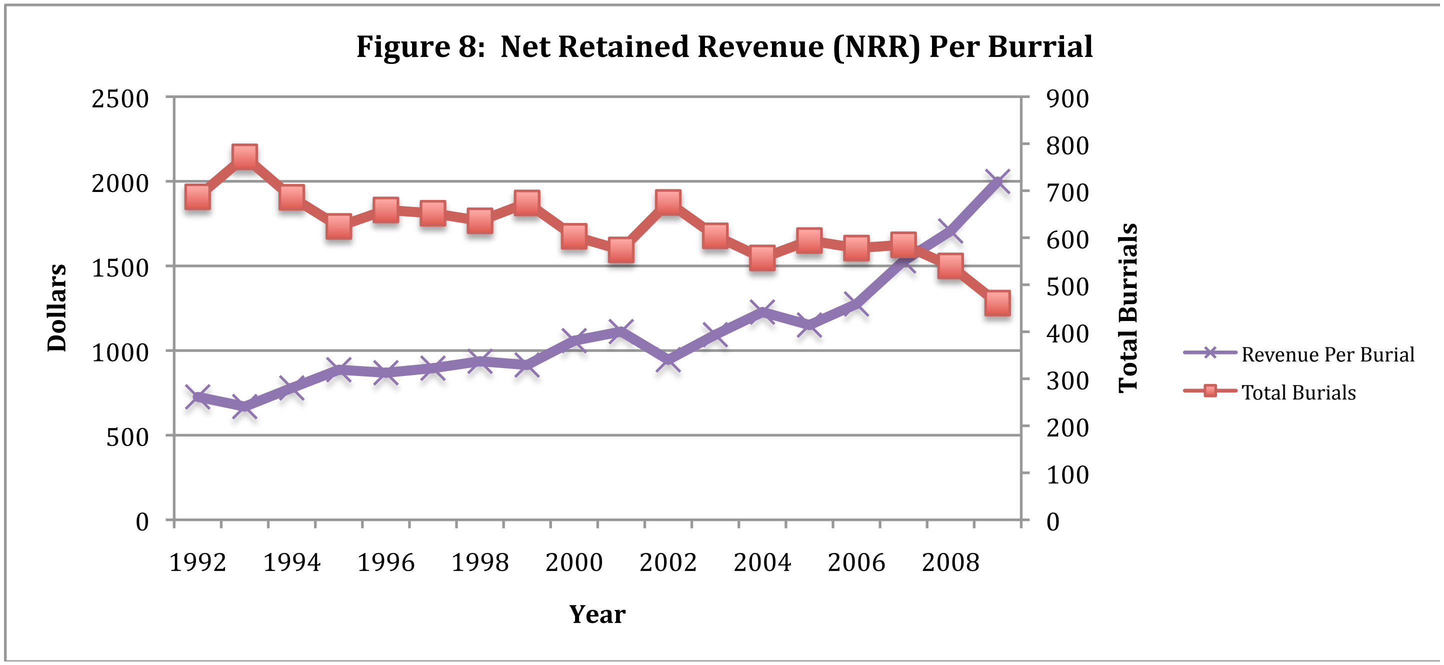
Over the lifetime of the contract, there has been $19,652,126 in gross revenue from the sale of cemetery services by InterCare. During this same period, the City of Austin has received a net of $196,218 in payments from InterCare or 1 percent of the total revenue. Assuming that InterCare's net profit margin is the same as the private sector average of 8 percent, then the city is receiving 12.5 percent of the net profits. [note: InterCare's actual profit margin was not made available]

The impact of a decline in the number of burials and GOR can be seen in 2009. Prior years included substantial payments to the City of Austin by InterCare ($93,970 average from 2005 to 2008), but 2009 indicated at $43,523 subsidy payment by the City of Austin to InterCare.

The contract with InterCare has prevented the city from spending thousands of dollars to subsidize cemeteries with public tax dollars. However, past performance and saving the city money does not automatically guarantee a mutually beneficial arrangement in the future. Given that the contract is fixed-

-but the demand for cemetery services is dynamic--there are a number of potential imbalances that might emerge.

The importance of this factor is highlighted in Figure 8. The city pays a set amount to InterCare for management of cemetery services regardless of the number of sales in a given year. This imposes a degree of risk to the City of Austin.



In effect, the City of Austin paid $726 per burial to InterCare in 1992. In 2009, the amount paid to InterCare increased to $1,999. The trend line after the 2006 contract can be clearly seen in Figure 8. The cause of this change in the trend line is in great part associated with the decline in the number of burials.

This analysis prompts an important question: What does the city get for $2000 per burial? This question is answered by review of the contract. The contract lists the following duties: (1) administration; (2) sales activities; (3) interment activities; (4) grounds maintenance; (5) monument installation. InterCare is also responsible for insurance, taxes, and purchase and maintenance of equipment. The City of Austin also benefits from InterCare's expertise and experience in the area of cemetery management and maintenance.

By contracting with InterCare, the City of Austin also "purchases" decreased risk of using the general fund to make up shortfalls. The City of San Antonio's Proposed FY 2010 budget is illustrative. City of San Antonio revenues for the city managed San Jose Burial Park fund total $532,303. This amount includes a $100,000 transfer from the general fund to supplement $432,303 in revenue from sales of lots, fees for interments, and other minor funding sources. The City of San Antonio's operating expenses total for the cemetery is $513,825 (City of San Antonio, FY 2010 Budget). San Antonio's current experience is representative of the circumstances that led the City of Austin to contract with InterCare in the early 1990s.

2.2 Management and Organizational Models for Municipal Cemeteries

Comparisons of the City of Austin's cemeteries are made with the models and practices found among the 10 largest cities in Texas. Only 2 of the 10 large Texas cities have an active municipal cemetery (Austin and San Antonio). Other Texas cities that have municipal cemeteries include Lubbock, Grand Prairie, Abilene, San Angelo, San Marcos, and New Braunfels. Except for Lubbock, these cities operate a cemetery out of a parks department . The City of Lubbock has a separate cemetery division responsible for management of the city cemetery (see Table 4).

Of the large cities that have cemeteries, only Austin contracts out operations. Smaller cities tend to be more likely to contract out including San Marcos, New Braunfels, and Lockhart that contract out with InterCare. San Angelo and Abilene operate municipal cemeteries but are considering contracting out maintenance and/or sales. Several cities that contract maintenance services have a cemetery commission or are considering establishing a cemetery commission.

Table 4: Municipal Cemeteries in Major Texas Cities (2010)			
City	Total Population	Public Sector Cemeteries	Responsible Department
Houston	1,953,631	City maintains "Founder's Cemetery" closed	Parks Department
Dallas	1,188,580	No city-owned cemetery	Not Applicable
San Antonio	1,144,646	San Jose Burial Park Cemetery Old City Cemetery (full)	Parks Department
Austin	676562	Austin Memorial Park Evergreen Oakwood Oakwood Annex Plummers (full)	Parks Department [Contract with InterCare]
El Paso	563662	No city-owned cemetery	Not applicable
Fort Worth	534694	No city-owned cemetery	Not applicable
Arlington	332969	Arlington Cemetery (full)	Parks Department
Corpus Christi	277454	Old Bayview Cemetery (full)	Call to verify
Plano	222030	No	No
Garland	215768	No	No

2.3 City of Austin's Use of Best Practices in Cemetery Management

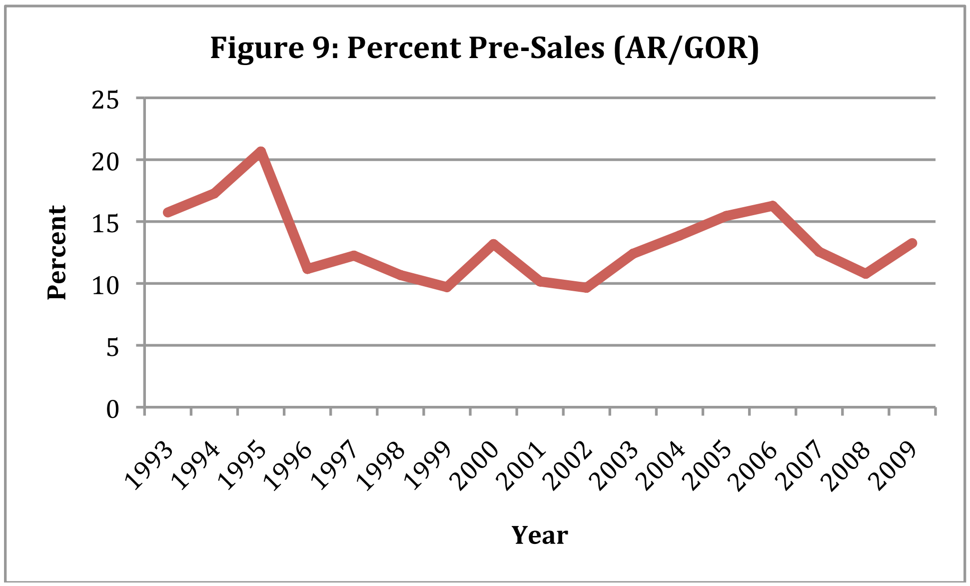
This section assesses the City of Austin's response to the industry and local trends identified above and makes recommendations for a more effective response. Table 5 summarizes the issues addressed in this section.

Table 5: City of Austin's Use of Best Practices in Cemetery Management		
Question	City of Austin's Response	Recommendations
Is the city offering pre-sales to capture more revenue?	**Somewhat:** The InterCare offers pre-sales but they are not actively marketed.	Actively market pre-sales in non-aggressive ways.
Is the city responding to the increased choice of cremation?	**No:** There are currently no areas tailored to the cremation market.	Build a columbarium wall and a scatter ground for memorialization of cremated remains.
Is the city offering green burial options?	**No:** There are currently no provisions for green burial options.	Pass an ordinance to allow for green burial and market this option.
Is the city clearly communicating the government sector's role in cemetery provision?	**No:** There is a great deal of confusion about the public sector's role in cemetery services.	Develop and post a statement that clearly indicates the need to balance standards of care and individual choice.
Is the city clearly communicating and managing appropriate "standards of care?"	**No:** The city has standards of care but they are not used to manage the contract. This issue is important given increased scrutiny of local government maintenance of cemeteries.	Develop an assessment tool that will guide regular inspection of cemetery facilities and document and distribute the results of these inspections.
Is the city managing the cemeteries transparently?	**No:** The Parks Department website includes minimal cemetery information.	Modernize and update the website, increase the visibility of the website and include documents following identified best practices.
Is the city fostering citizen involvement in cemetery management?	**No:** There is no cemetery commission or institutionalized relationship with citizens or citizen groups.	Establish a cemetery commission with clear roles and responsibilities.

Is the city offering pre-sales to capture more revenue?

The city's response is mixed and is somewhat responding to the pre-sales trend.

InterCare began offering time sales in 1993. Pre-sales are accounted for as part of Accounts Receivable. InterCare Accounts Receivable increased from $54,979 in 1993 to $98,117 in 2009. As a percentage of Gross Operating Receipts, the percentage of revenue from pre-sales has remained about the same (see Figure 9).



InterCare does not actively market pre-sales. Pre-sales typically occur when a family buys a new plot for a recently deceased family member and buys a neighboring space for a spouse and other family members.

The percentage of pre-sales peaked in 1995 at 21 percent but typically ranges between 10 and 15 percent and averages 13 percent. InterCare provided a rough estimate of around 50 time-sales spaces per year, or about 17 percent of total space sales in 2009.

Customers may be less likely to consider pre-sales from a municipal cemetery. However, pre-sales revenues significantly influence operating revenue. According to InterCare, there has been approximately $1.1 Million in pre-sales since 1994, which translates to between 550 and 600 spaces.

The city should consider marketing pre-sales with a better website (see City of Grand Prairie as an example) and in a way that avoids overly aggressive pre-sales marketing. Prior to attempting to increase pre-sales, a state of the art cemetery management information system must be implemented to keep track of ownership and maintain contact with owners of the cemetery plots (see, for example, CIMS—Cemetery Information Management System; www.1cims.com). Inaccurate record keeping of space ownership is an endemic problem in the cemetery business.

Is the city responding to the increased choice of cremation?

The city has not responded to the increased choice of cremation.

The City of Austin currently does not have any columbarium space or area dedicated to spreading of cremains. In order for the city to maintain the viability of its involvement in the cemetery business, the city should consider developing these types of facilities. Failure to do so means not competing for the 25 percent of the market that chooses cremation, but a dedicated property for disposition.

Is the city offering green burial options?

The city does not offer green burial options.

The City of Austin is not responding to the trend of green cemeteries. Our Lady of the Rosary Cemetery in Georgetown is the only recognized green cemetery in Texas. The City of Austin cemeteries should take into account the trend toward green burials and consider passing ordinances that allow and promote green burials. Green burials are more environmentally responsible and affordable and will advance the city's goals to serve the public.

Is the city clearly communicating the government sector's role in cemetery provision?

The city has done an especially poor job communicating the government sector's role in cemetery provision. During a three-hour focus group session with community residents, a number of issues emerged that can be linked to poor communication of sector role.

Participants compared city of Austin cemeteries to a wide range of for-profit and non-profit cemeteries for their basis of comparison. A number of participants favored rigid enforcement of cemetery rules even though this approach to cemetery management is inconsistent with the political nature of public provision of cemetery services. This confusion is in part the result of the passive approach to contract management on the part of the Parks Department. When government involvement in contract management is weak, viewing city cemeteries as a private sector business is a logical conclusion.

As noted above, a clear statement that acknowledges the need to balance standards of care with individual choice will improve the community's understanding of local government's role in the mixed economy.

Is the city clearly communicating and managing appropriate "standards of care?"

The City of Austin developed a four-mode classification system for the maintenance of city park facilities. These standards were included in the contract with InterCare. Mode I is deemed "ideal and preferred, but practicalities of fiscal restraints and conflicting priorities necessitate a compromise" (Contract for the Management and Operations of City of Austin Cemeteries).

Table 6: Mode Classification System for Austin Park Maintenance	
Mode	Maintenance Posture
Mode I	**State of the art maintenance level.** This level dictates a preventative posture in scheduling grounds maintenance activities. Associated with designate areas in highly used urban locations such as public buildings, administrative offices, library, museums, recreation/leisure centers, swimming pools, sports complexes and other select parkland.
Mode II	**High maintenance level.** This level of maintenance dictates a corrective posture in scheduling grounds maintenance activities. Associated with all non-select develop parkland, street medians and triangles, service center compounds, utility substations, and improved street right of ways.
Mode III	**Maintenance appropriate for minimally developed parkland**, city owned surplus properties, alleyways, unimproved street right-of-ways and drainageways, including retention/detention ponds. This level of grounds maintenance dictates a scheduled approach. Maintenance will be postponed until necessary resources are available i.e., materials and staff.
Mode IV	**Grounds maintenance appropriate for natural or undeveloped parkland** rural surplus city property and utility right-of-ways. Maintenance is very minimal and will typically be performed 1-2 times per year to address health and safety standards.

The City of Austin specified Mode II for all cemetery maintenance except for restrooms (Mode I) and undeveloped areas of the cemeteries (Mode III). There appears to be no documentation tracking levels of care based on the Mode service-level categories.

Based on interviews with InterCare, service quality is in Mode II. Visual inspection of cemeteries also suggests that Mode II is the overall maintenance quality level. Interviews with community stakeholders suggest lower maintenance levels approaching Mode III; however there is no evidence that InterCare maintains the cemeteries at Mode III.

Of the 12 standards in Mode III a plausible case can be made for litter debris removal, but the financial aspect of removing spoils makes it economically infeasible to remove spoils 3-4 times weekly. In addition, City of Austin water restrictions make it infeasible for the contractor to attain Mode I standards and would require the investment in new sprinkler system.

House Bill 2927 affirms the jurisdiction of a municipality over a public cemetery and requires that cities "maintain the cemetery in a condition that does not endanger the public health, comfort, or welfare. Specific responsibilities identified in HB 2927 include: (1) repairing and maintaining fences, walls, buildings, roads, or other improvements; (2) leveling or straightening markers or memorials; (3) properly maintaining lawns shrubbery, and other plants; (4) removing debris, including dead flowers and deteriorated plastic ornaments; and (5) promptly resorting gravesites following an interment.

The city should develop specific plans for the assessment of cemeteries based on the categories outlined in HB 2927 as soon as possible. The city should use these plans to document that progress is being made to meet the "standards of care" that a "reasonable person" would conduct given the limitation of resources and the existing condition of the facility. These reports should be made publically available. A neutral auditor with expertise in cemetery management, a nonprofit organization or consortium of non-profit organizations, or a cemetery commission should review these reports.

The City of Austin should also consider hiring a person responsible for collecting and disseminating information to the public in collaboration with the contractor. A commitment to data collection and dissemination will also promote more active monitoring and enable the city to more quickly identify changes in revenue and expenditure trends.

Is the city managing the cemeteries transparently?

The city does not manage cemeteries transparently.

The current website falls far below the best practices identified above. There is minimal information presented on the website. Citizens do not have sufficient information to make informed choices about using City of Austin cemeteries or to keep the city and contractor accountable for proper management practices and responsive to citizen preferences. This lack of information unnecessarily complicates and politicizes cemetery management.

Is the city fostering citizen involvement in cemetery management?

The City of Austin is clearly not following best practices for management of municipal cemeteries. There is no cemetery commission and minimal formal involvement of nonprofit groups.

The City of Austin should pursue active and sustained involvement from nonprofits interested in supporting the city's cemeteries. While nonprofit partners may not be a source of substantial financial resources or sustained voluntary involvement, they can communicate community preferences.

Section 3: Analysis of the InterCare Contract

The ability of the city to effectively respond to the industry and regional trends is influenced by the contract with InterCare. As currently structured, neither InterCare nor the City has a substantial incentive to improve the management of city cemeteries.

3.1 Number of Employees and Salaries

According to InterCare's 2005 Request for Proposals Response, InterCare employs 21 individuals including two officers. This total number of employees is greater than the average cemetery business that employs eight people. Given that InterCare is responsible for five facilities, this higher number of employees is understandable. In addition, many cemeteries are small family-owned facilities. If the number of InterCare employees is divided by the five cemetery locations, then the average number of employees per location is well below the industry mean.

Salaries and wages are the largest single expenditure category for the average cemetery business (19%). InterCare's salary and wage structure is compared with the national average cemetery business.

Table 7: Industry and InterCare Salary and Wages by Job Title

Title	Percent of Workforce	Bottom Quartile	Median	Upper Quartile	InterCare Salaries*
Management occupations	**21%**	**$40,810**	**$55,580**	**$74,710**	
Chief executives	0%	$74,060	$111,630	N/A	Not available
General and operations managers	2%	$57,010	$77,460	$110,420	**Superintendent of Operations: $55,000**
Building and grounds cleaning and maintenance occupations	**16%**	**$18,540**	**$23,310**	**$30,230**	**Supervisor: $35,000 Worker: $22,000**
Landscaping and grounds-keeping workers	12%	$18,410	$23,030	$29,420	
Office and administrative support occupations	**19%**	**$19,650**	**$25,030**	**$32,160**	**Office Manager: $45,000**
Secretaries, except legal, medical, and executive	5%	$20,760	$25,410	$31,590	
Office clerks, general	6%	$17,800	$22,360	$27,280	**Assistant Office Manager: $35,000**
Transportation and material moving occupations	**5%**	**$17,600**	**$21,480**	**$27,780**	

Bureau of Labor Statistics and InterCare RFP Response 2005. *Job classifications matched based on comparison of job titles. Not included: Regional Mechanic: $45,000

With two exceptions, InterCare appears to be in-line with average cemetery business. The office manager and the assistant office manager are higher than the upper quartile. Based on a discussion with InterCare, the dedicated office managers take on many tasks beyond narrowly defined office or clerical duties (sales, accounting, report writing, customer service, coordinating with funeral directors, etc). The office managers also have many years experience and one is a licensed funeral director with skills and expertise to work effectively with funeral homes and families.

Salaries and wages excluding officers for the industry average is 19 percent of total sales. InterCare's total salary and wages for the 14 individuals employees listed in the RFP response totaled $400,000 or 31 percent of Gross Operating Receipts in 2006 ($1,267,357).

3.2 Price Structure Analysis

Part of the response to regional industry tends is evaluated based on how City of Austin Cemeteries are priced compared to other providers of cemetery services and whether prices are set properly.

Making comparisons of cemetery fee structures is complicated by a number of factors. For example, some cemeteries require liners and others do not. Administrative costs vary and are sometimes built into the price and sometimes are not. Some cities price interment services based on different times of day and holidays while other cemeteries do not have these provisions or do not permit burials on holidays. Some cemeteries price plots based on location and surrounding amenities. Still others offer discounts to residents.

While imperfect, comparisons across sector and cemetery shed insight on how the City of Austin fits into the regional and municipal cemetery pricing. In cases when different pricing was found for the same cemetery, the average was chosen as the price. For example, the City of Austin charges $2,075 for Austin Memorial Park cemetery plot and $1,450 for a cemetery plot at Evergreen Cemetery. The City of Austin cemeteries are assigned an average value of a plot of $1,763 and this amount is used to make comparisons with pricing at other cemetery facilities.

Two burial are compared: (1) the cost to open and close a grave and (2) the average plot cost. Other fees are not compared. Data is drawn from two sources. Austin Memorial and Burial Information Society (AMBIS) conducted a cemetery survey in 2008. The AMBIS survey included data from 24 of over 200 public, private, and nonprofit cemeteries in five county region (Travis, Bastrop, Caldwell, Williamson, and Hays) and in this region five cities provide cemetery services (Austin, San Marcos, Georgetown, Bastrop, and Lockhart). In order to include better understand City of Austin pricing, data was collected from municipal cemeteries in other Texas cities with municipal cemeteries including San Antonio, Lubbock, San Angelo, and Abilene, and Grand Prairie. The final pool of cemeteries includes 31 cemeteries (45% nonprofit, 39% municipal, and 16% for-profit).

The average cost for a plot for all cemeteries in the pricing survey is $1,233 and the average cost to open and close a grave is $862. These means mask a considerable amount of variation. For example, the costs of opening and closing a grave range from $375 to $1,495 and the cost of a cemetery plot ranges from $100 to $3435.

Cemetery classification (perpetual care versus non perpetual care) and cemetery sector (public, private, or nonprofit) account for cost differences among the cemeteries included in the study. A cemetery is coded "perpetual care" based on self-reporting to AMBIS or based on information available from the pricing sheet or a customer service representative.

Perpetual care cemeteries charge more ($964) to open and close a grave compared to non-perpetual care cemeteries ($726). In terms of price per plot, perpetual care cemeteries charge $1,291 compared to non-perpetual care that charge $1,138 per plot.

The price to open and close a grave for the nonprofit, public, and private sector cemeteries are presented below. As expected, nonprofit cemeteries charge the least, followed by public and private sector providers. The differences in the sample means for the three sectors are statistically significant ($F = 6.58$; sig = .009) indicating that these differences are real and not due to statistical chance.

Table 8: Price to Open and Close a Grave by Sector			
Sector	Number of Valid Cases	Mean	Standard Deviation
Nonprofit	5	$520	$41
Public	8	$882	$83
Private	5	$1,171	$199

The price to open and close a grave in Austin is $850, $32 less than the public sector mean (4% less). San Angelo charges $1,100 to open and close a grave, but this includes a perpetual care fund contributions. The lowest public-sector open and close charge is $500 in San Antonio.

Price of a single cemetery plot for different sectors is presented in the next table. Again, as expected, nonprofit cemeteries charge the least for cemetery plots followed by public and private sector providers. These differences are statistically significant (F = 3.81; sig = .04).

Table 9: Price of a Cemetery Plot by Sector			
Sector	Number of Cases	Mean	Standard Deviation
Nonprofit	9	$844	$93
Public	11	$1,228	$669
Private	5	$1,942	$455

Austin has two available cemeteries--Austin Memorial Park and Evergreen. These two cemeteries serve different markets and there is a difference in the cost per plot ($2,075 versus $1,450). In both cases, Austin charges more per plot than the public sector average. Austin Memorial Park charges more than several private sector cemeteries in the region. The city of San Marcos charges $550 per plot and is the lowest in the region among public sector providers.

An increase prices will put Austin out of line with public sector cemeteries. Pricing and customer expectations are likely correlated. When Austin Cemetery customers pay as much as private sector cemeteries they may logically—perhaps inaccurately given the issues discussed above—expect the same standards of care. Raising more revenue by increasing the prices will place more pressure on the city to increase maintenance. Meeting these higher expectations would require raising more fees and prices, leading to more demands.

Any attempt to raise revenues by increasing prices and fees should be presented in a way that clearly signals to the buyer different standards or care and regulations associated with different prices and fees. For example, the city could charge more for a plot that allows placement of upright monuments, benches, and different forms of memorialization than for plots that are strictly regulated and only allow flush monuments.

3.3: Impact on Low-Income Families

Death has distributional effects on the incomes of U.S. households (Banks 1998:270). Unexpected death produces stress and poor decision-making. In addition, consumption of funeral and cemetery services is influenced by consumer preferences that are shaped by social and religious customs (Banks 1998: 272). As a result of these factors, demand for cemeteries and funeral services are inelastic. Inelastic demand means that people are willing to pay for these services regardless of the price. Non-consumption or delaying consumption of cemetery and funeral services is not an option.

Burial costs in the City of Austin cemeteries and other municipal cemeteries are examined in terms of income and race. Burial costs are examined separately as well as with total funeral costs to measure the impact of a death on family income.

The City of Austin charges more than all other municipal cemeteries with the exception of San Angelo. San Angelo includes a contribution to a perpetual care fund. However, the city of Austin's fees are lower when considered as a percentage of median household income. For example, while Lubbock charges only $1,495 for burial costs compared to $2,925 in Austin Memorial Park, the percent of these costs as a function of median household income are 18.0% and 17.5% respectfully. Higher costs, for example in Grand Prairie are associated with a higher level of service and lower prices are associated with a lower standard of care (e.g., San Antonio).

Table 10: Municipal Burial Costs and Median Income

City	Median Household Income 2008 (est.)	Families Below Poverty	Burial Cost (Plot and open/close fees)	Percent of Annual Household Income	Total Funeral Costs + all Burial Costs	Percent of Annual Household Income
Austin	$51, 004	12.0%	Evergreen: $2,300	4.5%	$8,300	16.3%
			AMP: $2,925	5.7%	$8,925	17.5%
Abilene	$39,130	13.3%	$1,733	4.4%	$7,733	19.7%
San Angelo	$38,864	13.2%	$3,600*	9.3%	$9,600	24.7%
Lubbock	$41,549	11.7%	$1,495	3.6%	$7,495	18.0%

Source: US Census and Cemetery Pricing Survey *includes perpetual care fund

The impact of a death on income by race is examined in detail for the City of Austin. Detailed data on median income by race is available from the 2000 Census. Median household income in Austin is $48,979 for Whites, $31,952 for African Americans, $35,632 for Hispanics (US Census 2000). It is clear from the standpoint of income, that minorities will pay a higher percentage of their annual income in funeral and cemetery services.

Table 11: Cost for Cemetery Service and Funeral by Median Income and Race					
	Median Family Income	Burial Costs (plot and open/close fees)	Percent of Annual Income	Total Funeral and burial costs	Percent of Household Income
White	$48,979	Evergreen: $2,300	4.7%	$8,300	16.9%
		AMP: $2,925	6.0%	$8,925	18.2%
African American	$31,952	Evergreen: $2,300	7.2%	$8,300	26.0%
		AMP: $2,925	9.2%	$8,925	28.0%
Hispanic	$35,632	Evergreen: $2,300	6.5%	$8,300	23.3%
		AMP: $2,925	8.2%	$8,925	25.0%
Source: US Census SF-3					

If the family chooses to use city of Austin cemeteries, the average White family pays an estimated 16.9 to 18.2 percent of their annual income in funeral and burials costs compared to between 26.0 and 28.0 percent of annual income the average African American family and between 23.3 and 25.0 percent of annual income for the average Latino family.

At the current pricing for cemeteries and the average total funeral costs, a substantial percentage of City of Austin residents are at risk for spending nearly 50% of their annual household income on funeral and burial costs (income less than $20,000). Twenty percent of all residents, 17 percent of whites, 29 percent of African Americans, and 24 percent of Hispanics are at risk for spending nearly 50% of their annual income in the event of a death in the family.

Table 12: Income Distribution by Race in Austin, TX (percent in each category)				
Income Category	Total Population	White (Not Hispanic)	African American	Hispanic
Less than $10,000	9.3	7.5	14.0	10.5
$10,000 to $14,999	5.5	4.6	7.9	6.8
$15,000 to $19,999	5.6	4.9	7.4	7.0
Total Percent Below $20,000	20.4	17.0	29.3	24.3
$20,000 to $24,999	6.7	5.7	8.5	8.5
$25,000 to $29,999	6.7	5.9	8.5	8.3
$30,000 to $34,999	6.7	6.3	7.5	7.9
$35,000 to $39,999	5.9	5.7	5.6	7.0
$40,000 to $44,999	5.6	5.4	6.1	6.3
$45,000 to $49,999	4.8	4.9	4.6	5.2
$50,000 to $59,999	9.1	8.9	8.8	9.4
$60,000 to $74,999	10.2	10.5	9.5	10.0
$75,000 to $99,999	10.3	12.2	6.0	7.4
$100,000 to $124,000	5.4	6.7	2.4	2.6
$125,000 to $149,999	2.9	3.7	1.3	1.3
$150,000 to $199,000	2.5	3.4	.7	0.8
$200,000	2.8	3.7	1.2	1.0
Number of Families	265,594	165,648	24,452	58,848
Source: US Census, 2000, Summary File 2				

3.4 Impact of Higher Prices and Fees

The desire to improve the maintenance of the cemeteries is motivated by a variety of factors. Regardless of the motivation, higher prices and fees will have larger percentage impact on lower income residents. Three major areas of improvement have been discussed in a variety of community forums and expressed by citizen groups: (1) leveling of monuments; (2) removal of ball moss; (3) preservation of the perpetual care fund.

InterCare has developed cost estimates for leveling monuments and removing ball moss from the trees. These cost estimated are used to determine the increase in fees that would be required to take into account the additional costs to the city to implement InterCare's recommendations.

The average cost to level a marker is approximately $168. Given the scope of the problem, the cost to level all monuments is estimated by InterCare to be $125,000. The city would be required to pay InterCare for this service as leveling monuments is beyond the scope of the contract. If the setting fee were increased from $.05 to $.15 per square inch, the increase in revenue for the average monument would be **$234** and, according to InterCare, would pay for a monument-leveling program.

Removing ball moss is estimated to cost an annual fee of $171,600 for year one and then on-going negotiated fees to the City of Austin. InterCare has also proposed no cost approaches to ball moss removal, but the removal would take place more slowly. If the city chooses a more aggressive ball moss removal program, then the city would be forced to impose additional fees to cemetery customers. A fee of **$57** would pay for tree maintenance.

A perpetual care fund of **$250** has also been proposed by a community stakeholder. Perpetual care funds are intended to fund future maintenance from the interest earned the fund. Replenishing and growing this fund would create a fund that could address other maintenance issues (fence repairs, road repairs, and other items).

Adding these fees would be required to maintain the cemeteries at a higher level of service quality without imposing additional costs on taxpayers. Adoption of these three fees would add **$541** to the costs of cemetery services in Austin Memorial Park. Each of these options is added to the current costs and the impact on the economics of death (see Table 13).

Table 13: Impact of Fee Increases by Race and Income						
	Median Family Income	All Burial Costs Including new fees of $541	Percent of Annual Income	Total Funeral and burial costs +$6,000	Percent of Household Income	
White	$48,979	Evergreen: $2,841	4.7%	$8,841	18%	
		AMP: $3,466	6.0%	$9,466	19%	
African American	$31,952	Evergreen: $2,841	7.2%	$8,841	28%	
		AMP: $3,466	9.2%	$9,466	30%	
Hispanic	$35,632	Evergreen: $2,841	6.5%	$8,841	25%	
		AMP: $3,466	8.2%	$9,466	27%	

As can be see, there is not a major impact on the percentage of income associated with increasing fees. However, increasing costs and fees may increase demands for higher standards of care and lead potential users of city cemeteries to choose other options. In both cases, the unintended impact of increasing prices fees may be higher costs and less revenue.

Section 4: Forecast Model of Viability of City of Austin Cemeteries

Once a cemetery no longer has spaces to sell, the cemetery will be a constant drain on city resources because of the commitment to customers and statutory obligations to maintain the cemetery. Available burial spaces represent financial viability. Some cemetery advocates have suggested expanding existing cemeteries to address this problem. The analysis presented below indicates that this expansion is likely not required. There is adequate supply to meet future demand as well as low-cost and space-saving ways to expand the supply in current facilities.

4.1 Supply and Demand for Total Potential Cemetery Plots

Supply

There are approximately 86 total acres in Austin Memorial Park. Of these 86 total acres, there are 30 acres available for future development. At the rate of 1000-1500 plots per acre, there are between 30,000 and 45,000 plots potentially available for future sale.

According to InterCare, the currently developed area is approximately 90% is sold out. In 2008, Block 5A has 325 spaces available, Block 5B has 940 spaces available, Block 6 has 3375 spaces available, and Block 11 has 865 spaces available. Evergreen Section K also has 250 spaces left for sale. Based on this more detailed calculation, there are 35,755 spaces available for sale.

Table 14: Total Estimated Potential Available Spaces	
Source	Number of Spaces
AMP Block 5A	325
AMP Block 5B	940
AMP Block 6	3375
AMP Block 11	865
AMP Undeveloped 30 Acres	30,000
Evergreen Section K	250
Total	35,755
Source: InterCare Estimates	

Over the last 20 years, the number of burials in the city of Austin has averaged 623 per year. If the number of burials per year remains approximately 623 per year, then the supply will be exhausted in 57 years or 2067. The reasons why this approach to projecting the life span of City of Austin cemeteries is inappropriate are discussed above and are examined in the next section.

Demand

Demand is a function of population growth, mortality rates, death care choices (traditional burial versus cremation), and the percentage of the market that chooses to bury family members in Austin Cemeteries. In order to develop an estimate of the future demand for the city of Austin's supply of cemetery plots, a forecast model was developed.

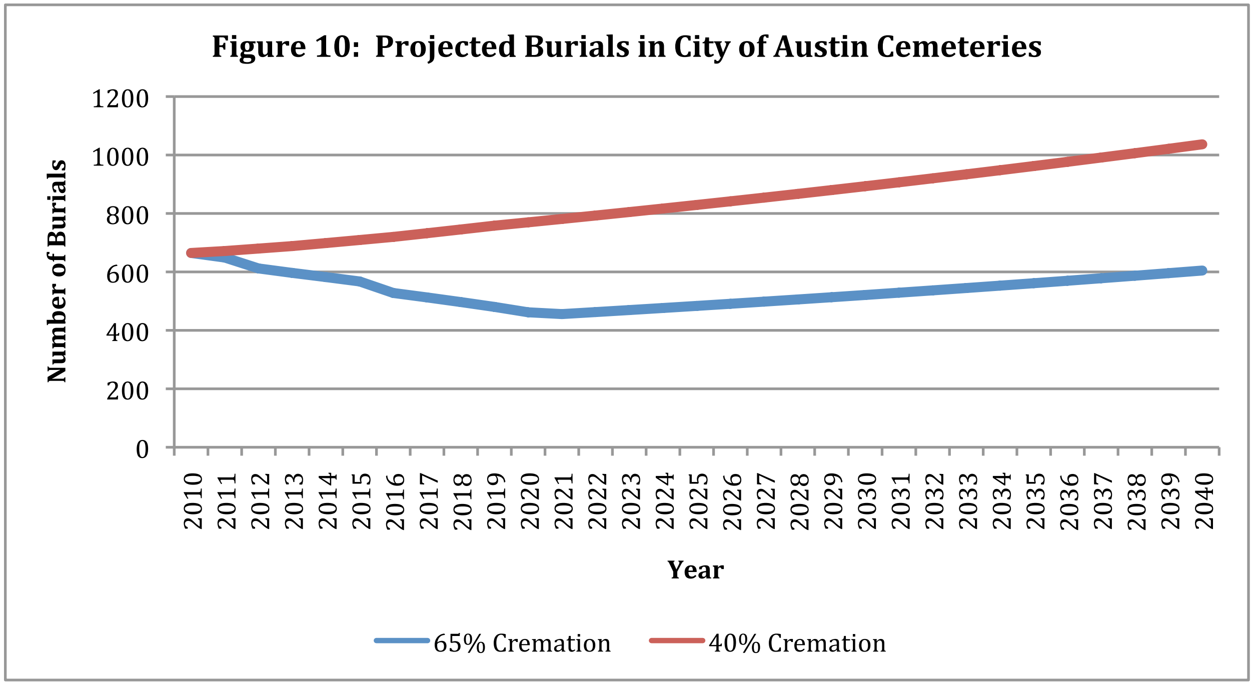
The assumptions of the forecast model include:

1. Total population forecast from the city of Austin demographer
2. Constant crude mortality rate of 4.7 per 1000 residents
3. Cremation rate increases by 2 percent per year and caps at 65%
4. Austin cemeteries maintain a 30 percent share of market for traditional burial plots

4.2 Supply Forecast Model

Based on these assumptions, after 10 years, the City of Austin can expect approximately 6,151 burials or 17 percent of the total potential supply. After 30 years, the estimated number of burials is 16,698 or 47 percent of the total potential supply.

The forecast model illustrates the importance of the cremation rate. The number of burials in Austin cemeteries declines until 2021. After 2021, when the cremation rate is assumed to be stable at 65 percent, then the population growth drives the increase in the number of burials in Austin cemeteries.



If a constant cremation rate of 40 percent is assumed, then after 10 years, the City of Austin can expect approximately 7,838 burials or 22 percent of the total potential supply. After 30 years, the estimated number of burials is 25,902 or 72 percent of the total potential supply.

Austin Memorial Park's supply can be extended well beyond 30 years if provisions are made to place more plots per acre and mandating or increasing the incentives to place two caskets in a single plot. A columbarium wall will also expand the life-span of City of Austin cemeteries. To build a columbarium space for 500 niches would cost between $100,000 and $175,000 (Architarium, Austin TX).

The City of Marble Falls has a columbarium wall and depending on the row and location, the price ranges from $1,300 to $1,600 per niche. Further research indicates that $1,500 is a common price. If the city of Austin sells these 500 spaces for $1,500 per niche on average, the total revenue to the city would be approximately $750,000. There is a tremendous potential for increased revenue to the City of Austin. As the cremation market grows it would take the city approximately five years to fill a columbarium wall with 500 spaces.