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Rethinking Urban Cemeteries Today, Tomorrow, and Beyond

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An Analysis of Cemeteries in Queens, New York

Celeste Alsina, Maitri Pujara, and Megan Rosa

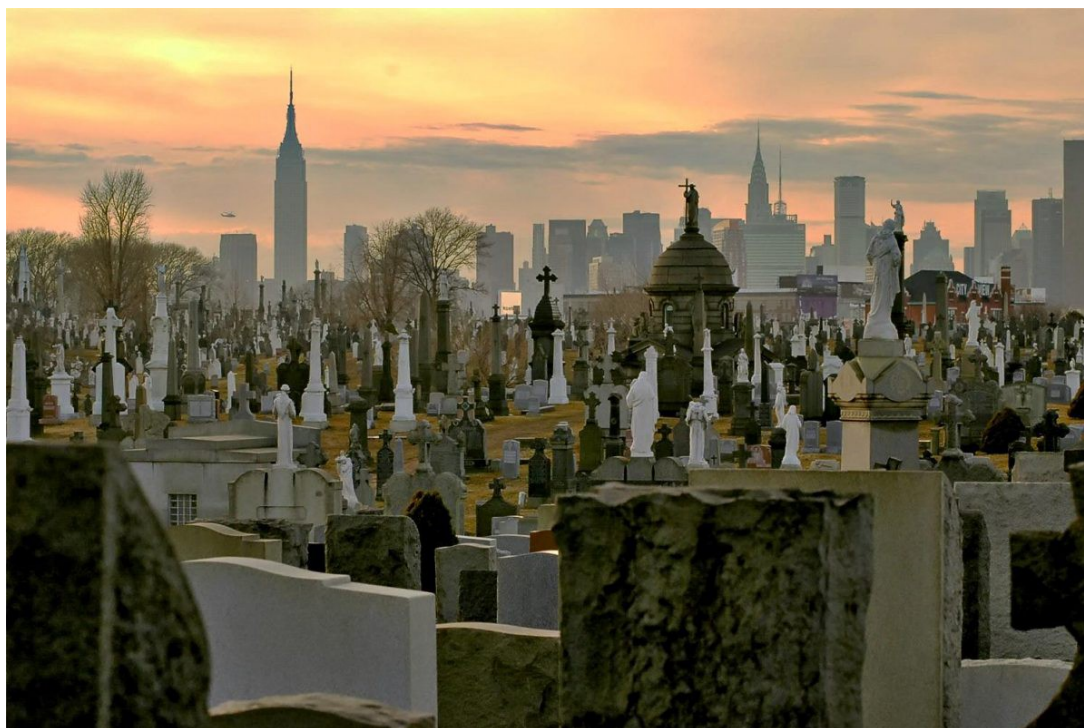


Photo courtesy of [6sqft](#)

As the world population continues to grow and more people aggregate in urban centers, we must start thinking more about the role of cemeteries in our cities. In New York City there are 35 privately owned cemeteries and dozens with many religious affiliations. By law, in New York State cemeteries must be nonprofit institutions ([Santora, 2010](#)).

Similar to the high real estate value on homes, real estate for afterlife comes at a price in New York City. Prices vary from cemetery to cemetery. At Woodlawn Cemetery in the

Bronx, a single-depth grave for one starts at \$6,995. A double-depth plot begins at \$7,995, and a family plot ranges from \$64,995 to \$1.575 million ([Santora, 2010](#)).

However, most New York City cemeteries are running out of room ([Santora, 2010](#)). Over the years there has been a shift away from traditional burial towards cremation. Families opting for cremations are often not purchasing plots of cemetery land, and instead choose to display an urn in their home or dispose of remains in natural habitats. This means potential sources of revenue for cemeteries are not expanding.

This analysis looks at the trends of burial and cremation over time, as well as basic costs of these services in Queens, New York. As people's preferences have changed over time and space has become limited and costly, we also look at how cemeteries can stay modern and provide value to the communities they encompass.

In New York City cemeteries are located across all five boroughs. The cemeteries in Figure 1 were identified using New York City's Department of Planning Primary Land Use Tax Lot Output dataset ([PLUTO](#)). Cemeteries are coded as land use number "09" or building class "Z8" in PLUTO. This graduated map illustrates the size of each cemetery based on tax lot area (sqft). Two of the largest cemeteries are Greenwood Cemetery in Brooklyn and Woodlawn in the Bronx. Queens, however, has the greatest number of tax lots associated to cemeteries. There are 82 tax lots coded as land use 09. Using PLUTO and RCloud Desktop we ran an analysis to find cemeteries make up about 3% of all lot area in Queens. The RCloud Desktop code for this analysis can be found in [Github](#) [here](#).

Location of NYC Cemeteries - 2019

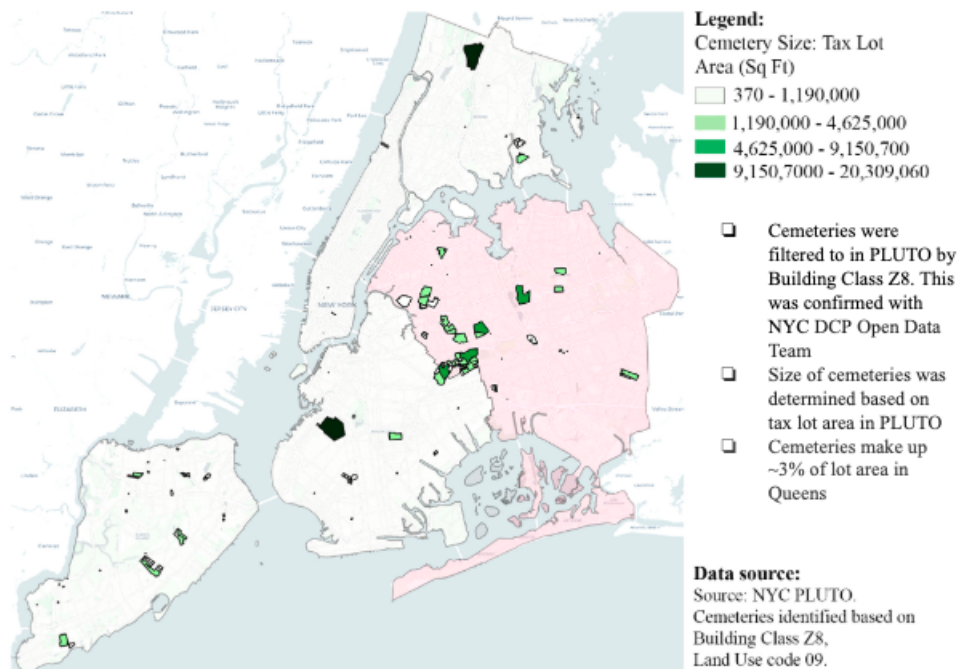


Figure 1. Location of NYC Cemeteries — 2019. Map documentation: [QGIS](#)

Since Queens has the greatest number of cemeteries in New York City this prompted us to investigate the number of deaths in Queens compared to other boroughs. We

analyzed data from [New York State Department of Health Vital Statistics](#) which consisted of two registration areas, New York City and the rest of the state. The data on New York City included the five counties of Bronx, Kings (Brooklyn), New York (Manhattan), Queens, and Richmond (Staten Island). We compared the number of deaths per county within New York City in Figure 2. The figure shows Kings County, also known as Brooklyn, has the highest number of recorded deaths in NYC, and Queens has the second-highest number of recorded deaths.

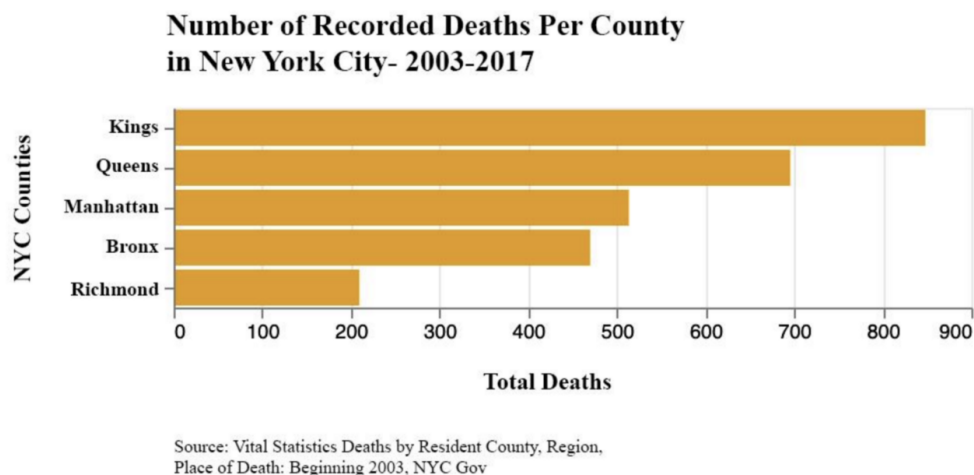
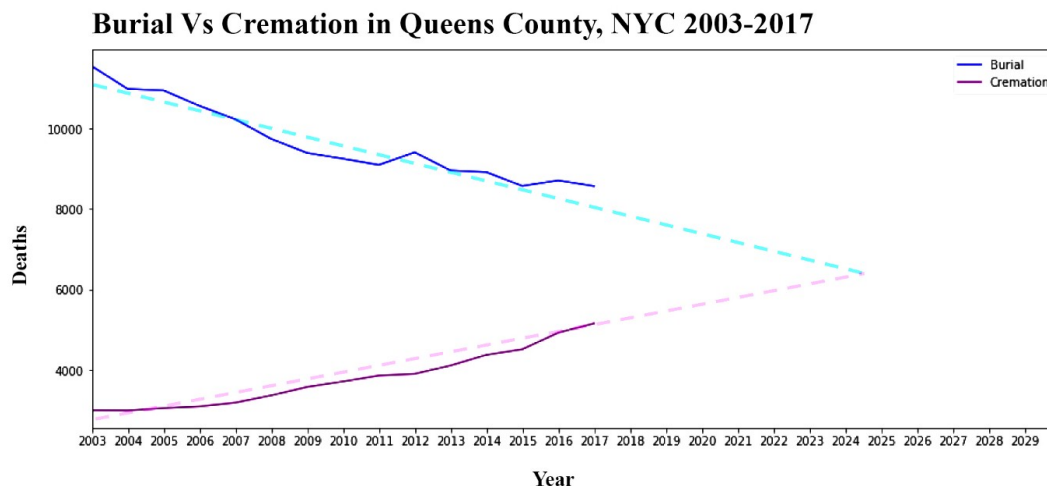


Figure 2. Number of Recorded Deaths Per County in New York City- 2003–2017. Code: [Burial vs. Cremation](#)

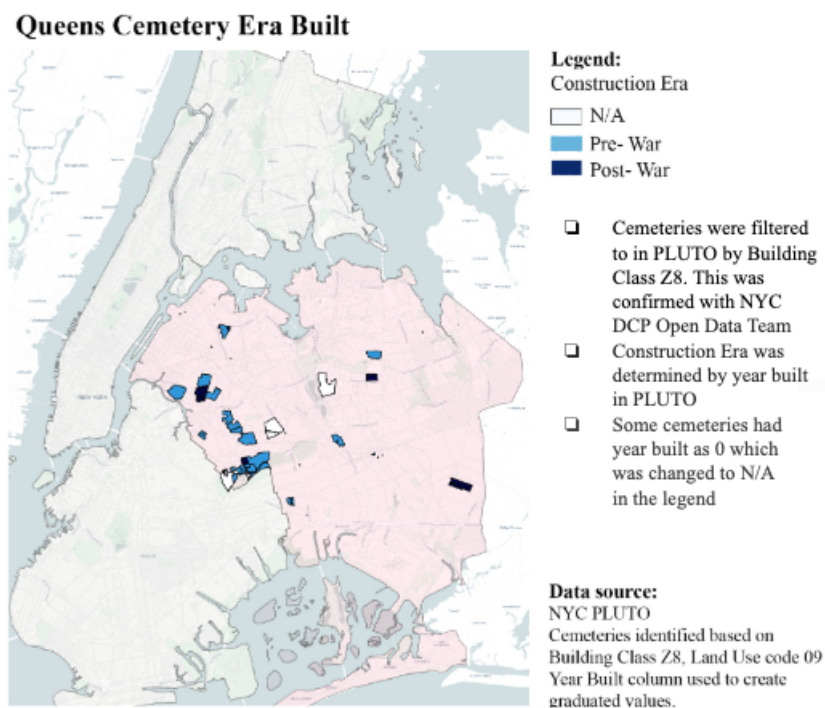
To understand more about Queens, we dug further into the [Department of Health Vital Statistics dataset](#) and analyzed the afterlife services residents have selected in recent years. We found the number of residents choosing burial services decreased from 2013 to 2017, while preference for cremation services has increased. These trends are depicted in Figure 3. From looking at this data we predict that in the year 2024 these two lines will intersect and the number of cremations and burials will be about the same.



Source: Vital Statistics Deaths by Resident County, Region, Place of Death: Beginning 2003, NYC Gov

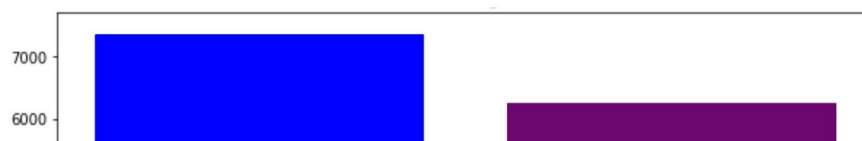
Figure 3. Burial Vs. Cremation in Queens County, NYC 2003- 2017. Code: [Burial vs. Cremation](#)

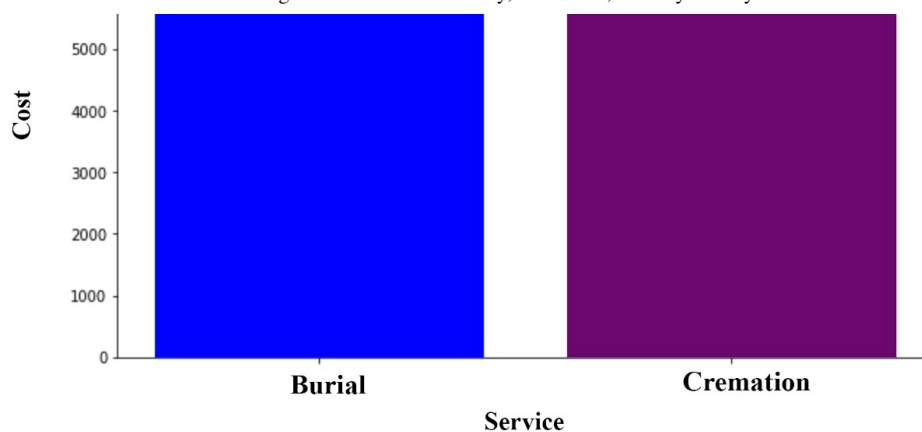
Associated with the rising trend of cremation, new cemeteries are not being built in New York City. According to the New York Department of State, there are no current plans to establish new cemeteries. If a person were to try and establish one, City Council approval is needed ([Williams, 2017](#)). The last cemetery to open in New York City was in 1980 in Staten Island known as Resurrection Cemetery ([Margolies, 2019](#)). As depicted in Figure 4, most cemeteries were built pre-war (pre-1945). This map was based on PLUTO records, which combined Department of Finance records, therefore some year built dates were not available.

Figure 4. Queens Cemetery Era Built. Map Documentation: [QGIS](#)

As we saw in Figure 3, cremations are becoming more popular in New York City. This change may be related to differences in cost between cremations and burials. In Figure 5 we see the cost of cremations is lower than burials in the United States: according to the National Funeral Directors Association ([NFDA](#)) the median cost of an adult burial with a funeral and a viewing in the U.S. is \$7,360. While the median cost of a cremation with funeral and a viewing is \$6,260. In comparing the cost of cremation and burials, it is evident that the lower cost of cremation services may be a factor in the increased preference for cremations.

Median Cost of Funeral with Viewing in USA : Burial vs Cremation - 2017



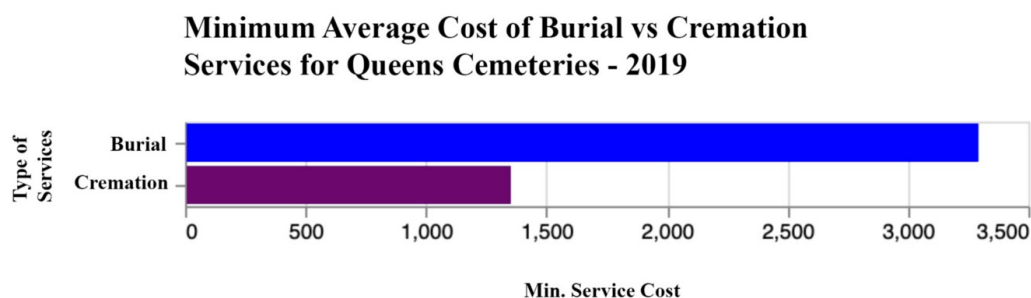


Source: Data retrieved from NFDA Statistics page under Cost

Figure 5. Median Cost of Funeral with Viewing in USA: Burial vs Cremation. Code: [Costs of Burial vs. Cremation](#)

We were interested in finding out what it would cost a Queens resident to organize burial or cremation services at a local cemetery, as well as how many available plots there were. This data is not readily available, so we called the cemeteries to collect the data. We contacted 25 privately owned cemeteries in Queens, and received responses from 12 cemeteries on burial services and 11 cemeteries on cremation services. Only a couple of the cemeteries were able to tell us the total number of plots in the cemetery, and none were able to provide the number of available plots.

However, we were able to collect data on the cost of services. For several of the cemeteries, the cost varied depending on if a customer wanted a tombstone, mausoleum, or if they wanted to have services on weekends versus weekdays. We took the minimum price from these ranges to perform our analysis in order to show what it would cost for a resident to receive the simplest option from the cemetery. We then calculated the average cost and our calculations are accessible via this [link](#). We found that there are stark differences between the national median presented in Figure 5 compared to the averages presented in Figure 6, but this does not necessarily mean that there is such a large difference between the cost in Queens and the national cost. The data we collected excludes additional after life services, such as working with a funeral home. Additionally, we would like to clarify, these are not necessarily the services a family would prefer, but the numbers can serve as a reference point.



Source: Created Dataset: Queens Cemetery Data Collection

Figure 6. Average Cost of Burial vs Cremation Services for Queens Cemeteries. Code: [Costs of Burial vs. Cremation](#)

The cost of organizing a burial with a cemetery in Queens is more than double the cost of cremation, as seen in Figure 6. The average cost of basic burial services is approximately \$3,293 compared to average cost for basic cremation services which is approximately \$1,352. We used this data to conduct an analysis of what proportion of Queen's residents' monthly household income would be needed to pay for basic services. We used Median Household Income dataset from the [Pratt Center Project: Neighborhood Data Portal](#) in order to calculate the proportions. Our calculations can be accessed via this [link](#). Figure 7 and 8 are maps of Queens divided by census tract.

Proportion of Monthly Household Income Needed to Pay for Basic Burial Services from Queen's Cemeteries

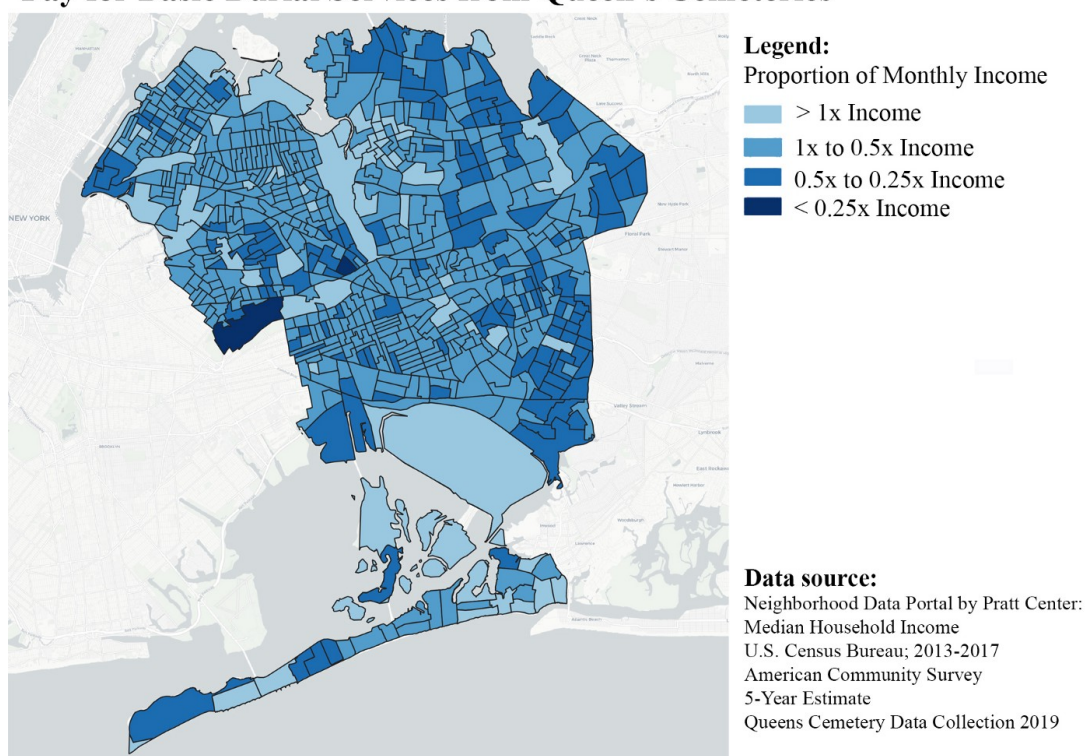
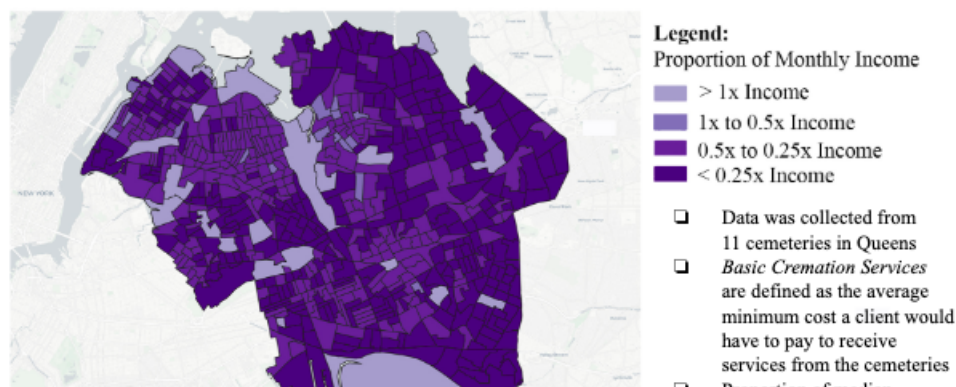


Figure 7. Proportion of Monthly Household Income Needed to Pay for Basic Burial Services from Queen's Cemeteries. Map Documentation: [QGIS](#)

Proportion of Monthly Household Income Needed to Pay for Basic Cremation Services from Queen's Cemeteries



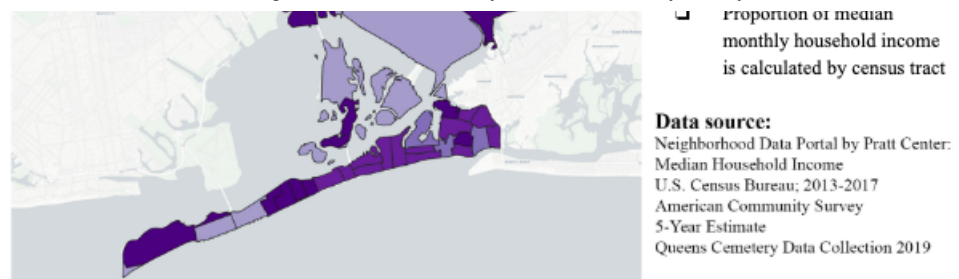


Figure 8. Proportion of Monthly Household Income Needed to Pay for Basic Cremation Services from Queen's Cemeteries. Map Documentation: [QGIS](#)

Figure 7 shows the proportion of monthly household income Queens' residents, within a particular census tract, would have to pay for basic burial services. Figure 8 shows the proportion of monthly household income Queens' residents, within a particular census tract, would have to pay for basic cremation services. We see that all but two census tracts would have to pay more than a quarter of their monthly household income for a burial. In comparison, far fewer households would have to contribute such a large portion of their monthly income towards cremation services. Although cremation services are less than burial services, sometimes death in the family is unplanned and having all of the funds prepared no matter the service needed can be difficult.

Looking Forward

Don't Build New Cemeteries

Our analysis of Queens demonstrates that the majority of residents would have to spend a large proportion of their monthly income to even use a cemetery for traditional purposes. Furthermore, seeing as demand for burials is decreasing and cost is high, our findings support New York City's decision to not build new cemeteries, as we saw in Figure 4.

Reconsider Land Use

The land cemeteries lie upon in New York City is of extreme value. In considering alternatives for land use, it is important to recognize the complex history of cemeteries and the emotional connection people have to these spaces. The evolving trends in after life services may call for New York City to not only reconsider the use of cemetery land, but also find ways to adapt and accommodate preferences. There are countries, such as South Korea, who are rapidly adapting to societal preferences: in recent years, the majority of the deceased in South Korea have been cremated ([Byeong-hak, 2018](#)). In response, the government has been creative in their reconsideration of traditional cemeteries. They have created forward thinking spaces such as library facilities with the ashes of the deceased housed in leather books, and forests for natural burials ([Byeong-hak, 2018](#)).

Rebrand Existing Cemeteries

The decrease in preference for burials and the high cost of services, brings into question whether cemeteries are truly serving the communities they are in. While, not all residents will have the opportunity to remain in the city after they have passed, we must find ways for existing cemeteries to provide value to local living residents. This would require the cemeteries as institutions to want to rebrand and position themselves as community destinations.

There are several cemeteries around the world, including Greenwood Cemetery in Brooklyn, that have brought the idea of cemeteries as a public park back. Greenwood allows the public to walk around, and it even hosts recurring tours and yoga classes. Other cemeteries across the nation have become inviting spaces by providing trails for biking and jogging, community gardens, and movie nights (Bry, 2019). While the public should be able to use cemeteries as green space, it will also be important to establish formalities to maintain respect of the space and the people who lay there. We believe New York City should partner with these privately owned cemeteries to open up the spaces to the public and make them more inviting. In New York City, where density is high, and green space is limited, cemeteries and the city should partner to find ways to modernize and provide value to all local residents.

Coding and QGIS Documentation:

- [Cemetery Land Use Makeup in NYC Github](#)
- [Burial vs. Cremation GoogleCollab Python](#)
- [Costs of Burial vs. Cremation GoogleCollab Python](#)
- [QGIS Documentation](#)
- [Queens Cemetery Data Collection](#)

References

Bry, John. "Public Life After Death: How Six Cemeteries are Reclaiming their Role as Public Spaces". *Project for Public Spaces*. October 25th, 2019.
<https://www.pps.org/article/how-six-cemeteries-are-reclaiming-their-role-as-public-spaces>

Byeong-hak, Lee. "[Reportage] New funeral culture taking hold in South Korea". *Hankyoreh*. April 15th, 2018.
http://english.hani.co.kr/arti/english_edition/e_national/840585.html.

Margolies, Jane. "Real Estate for the Afterlife". *The New York Times*. Real Estate. 15 March 2019. <https://www.nytimes.com/2019/03/15/realestate/real-estate-for-the-afterlife.html>

Santora, Mark. "City Cemeteries Face Gridlock". *The New York Times. Real Estate*. 23 August 2010. <https://www.nytimes.com/2010/08/15/realestate/15cov.html>

Williams, Keith. "Why the Brooklyn-Queens Border is Full of Dead People". *The New York Times*. April 27, 2017. <https://www.nytimes.com/2017/04/27/nyregion/why-the-brooklyn-queens-border-is-full-of-dead-people.html>

Death

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